Summary Report

Machine-Assisted Phase I(c) Archaeological Survey

Warwick Sewers
Longmeadow Segment
Warwick, Rhode Island

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Submitted to:

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Introduction

The Warwick Sewer Authority is planning and coordinating the construction of sewer lines within the Bayside community of the City of Warwick, Rhode Island, situated on northeastern Warwick Neck (Figure 1). The funding for the Warwick Sewer projects includes federal monies. Accordingly, the undertakings are subject to Section 106 of the National Historic Preservation Act of 1966, as amended, and subject to review by the State Historic Preservation Officer (SHPO). The firm of Gordon R. Archibald, Inc, (GRA) contracted with PAL for archaeological survey to identify potential Historic Properties within the undertaking's Area of Potential Effect (APE), pursuant to requirements under Section 106 of the National Historic Preservation Act. PAL completed Phase I(a) Archaeological Assessment survey in March 2006. Areas of high and moderate sensitivity have been identified across the Bayside I, Bayside II, and Longmeadow sewer segments as a result of the March 2006 reconnaissance survey (see Figure 1). PAL recommended Phase I(c) archaeological survey of representative sections within the Longmeadow sewer segment to sample areas of assigned sensitivity, refine the assigned sensitivity if necessary, and determine the presence/absence and range of features and site types that may exist within the planned sewer easements. Because the sewer lines will be constructed beneath existing roadways, the proposed survey includes excavations with a flat-bladed backhoe. This summary report details the results, interpretations, and recommendations for the Longmeadow sewer segment.

Native American Context

The first Europeans arrived in Warwick between 1638 and 1640. They encountered at least four major subdivisions of the larger Narragansett tribe: Shawmets, Potowomuts, Cowesetts, and Pawtuxets. Each group was led by a sachem. Pomham ruled the Shawomets, Taccoman ruled the Cowesetts and Potowomuts, and Saconoco presided over the Pawtuxets. Native American settlement at the time of European contact focused upon near-coastal and coastal confluences of rivers and streams. Relatively large concentrations of dwellings were surrounded by a network of fields and collecting territories. The importance of waterways in Native landscape perspectives is

reflected in their use as territorial and boundary markers as lands were transferred from Native to European possession.

The Native American settlement and subsistence patterns observed by arriving Europeans can be traced archaeologically to at least the Transitional Archaic Period (3,800- 2,800 B.P.[years before present]), when pre-contact populations began to optimize marine resources and focus occupations and exploitative forays within the coastal margin of Narragansett Bay. Occupation as early as 8,000 years ago is suggested by bifrucated projectile points found in Apponaug, at the multi-component Sweet Meadow Brook Site (Fowler 1956). Stark-like and Neville-like points, chronologically diagnostic of the Middle Archaic Period (7,000-5,500 B.P.), have also been found along western Narragansett Bay. Local Native American land use prior to the Transitional Archaic Period is characterized by relatively limited occupations and activities that focused on inland-based floral and faunal resources along river and stream drainages. Evidence of PaleoIndian (10,000-8,500 B.P.) occupation is rare, but interpretation of the limited data indicates a focus on glacial lake shores that once existed in the present-day Wickford Cove area, long since inundated by rising sea levels following glacial retreat.

Excavations in Warwick along Potowomut, and at the Maskerchugg Site, Lambert Farm, Sweet Meadow Brook, Locust Spring, and Greenwich Cove indicate long-term semi-permanent, perhaps seasonal, settlements along the near-interior and coast, with significant populations occupying them. Sites include evidence of domestic structures, processing and storage areas, individual and collective burial locations, and lithic processing workshops. Surface finds at numerous locations along the coast (Goddard Park, Nausauket) and along near-interior bodies of water (Gorton Pond, Three Ponds) indicate the intensity of site densities along this section of the Bay. Fishing supplemented hunting, collecting, and planting with particular population concentrations at the falls (Pawtuxet) of rivers during spring fish runs. Inland and coastal ponds were fished in the winter while shell fish beds in sheltered coves could be exploited year-round. Archaeological evidence of campsites, habitations, and burials has been found throughout Warwick, and confirmed through survey within other sewer segments.

State site files housed at the RIHPHC record numerous Native American archaeological sites within or in immediate proximity to the Bayside sewer segment. These include rockshelter and shoreline sites within the former Rocky Point Amusement Park, RI 1584, on Old Mill Creek, to the north. Late Archaic and Woodland Period cultural materials including projectile points and several pottery fragments were collected from the site. Furthermore, a Middle Archaic radiocarbon date of 7170±205 B.P. was produced from charcoal collected from the site. Native American cultural materials have also been collected from the Elkhound Site (RI 1718) located nearby, on Warwick Neck. Lithic debitage and Late Archaic Squibnocket triangle projectile points were recovered, and radiocarbon analyses on charcoal collected from the site produced Late Woodland dates of 600±80 and 710±130 radiocarbon years B.P. Similar Late Archaic Squibnocket Complex and Woodland Period occupations were recently identified at the Wickes Site situated along the north side of West Shore Road between Oakland Beach Avenue and Warwick Avenue (Leveillee and Waller 2001). Native American chipping debris was collected south of the Conimicut West Sewer System project area from the Warner Homestead Site, located west of West Shore Road between Buckeye Brook and Sandy Lane (Waller and Leveillee 2002). Remnants of a seventeenth-century Narragansett Indian burial ground have been rediscovered in the Horse Neck section of the city (Leveillee 2001).

Historic Context

Historically, Warwick includes the original Shawomet Purchase lands, executed in January 1642 (43?) between Samuel Gorton and eleven followers and the Narragansett Indian sachem Miantonomi, with the sub-sachem Pomham witnessing the deed. Shortly after the Shawomet Purchase, William Arnold and other Pawtuxet settlers attempted to drive Gorton and his followers from the area, and convinced Pomham to place his lands under the jurisdiction of the Massachusetts Colony. Massachusetts sent troops to seize the cattle of the Gortonists, arrested Gorton and six followers, and took them to Boston for trial on counts of heresy and sedition. After being put in irons and forced to work in various towns throughout the colony for a winter Gorton and his followers were set free, but were banished from all territory under the jurisdiction of the Massachusetts and Plymouth Colonies. Gorton lived briefly on Aquidneck Island, and in 1644-45 sailed to England to petition Parliament to secure his Shawomet lands. In 1646 Massachusetts was ordered by Parliament to reinstate the Shawomet purchasers their lands and was barred from further attempts to exercise jurisdiction over them. In gratitude Gorton changed the name of the settlement to Warwick, commemorating the supportive Earl of Warwick.

During the time that Gorton was being held prisoner in Massachusetts, the Narragansett Sachem Miantonomi was murdered by rival Mohegans, probably with the support of Massachusetts Colony political factions. When the Narragansetts saw that Gorton was freed by Massachusetts they believed he had powerful allies in England and placed themselves under the"protection of the English", seeking relief against Massachusetts Colony. Pomham however, remained allied with Massachusetts and refused to leave his Shawomet territory, located at today's Warwick Neck. He asked Massachusetts for assistance against the Gortonists and protection from the Narragansett Indians, fearing reprisals from them for his role in the killing of Miantonomi. Massachusetts Colony sent eleven men to help Pomham erect a fort. Today's Paine Street and Fort Street intersection is the reputed site of the fortification, known historically as Pomham's Fort.

In 1665, after constant conflicts between the Shawomets and the Gortonists, the King's Commissioners ordered that Pomham and his people remove themselves. They remained however until more widespread hostilities broke out during the King Philip's War (1675-76).

In July 1676, a force of approximately 80 Narragansetts, who had joined King Philip's struggle against the English, were camped on Warwick Neck, awaiting coordination for an attack on Newport. A force of 300 Colonial soldiers and Indian auxiliaries marched under the leadership of John Talcott and killed or captured 67 of the Narragansetts. By August of 1676, Philip had been killed and the Native attempts to regain their former holdings had ceased. In the spring of 1677, Gorton and his followers returned to Warwick Neck.

Warwick grew quickly in the years following King Philip's War. Without the threat of Indian attack, settlers moved to the more remote parts of the town. In Buttonwoods, James Greene, Jr., of Potowomut, built a two-room farmhouse, between 1687 and 1710, with a brick-end chimney. The bricks are said to have been made on the premises from Warwick Cove clay and mortared with shells burnt to produce lime (D'Amato1992). The house still stands as one of the oldest in the city. By 1715, a school house stood at the southwest corner of West Shore Road and Sandy Lane. The Quakers built a meetinghouse on West Shore Road opposite Warwick Neck Avenue in 1716. Mills were built along the Pawtuxet River and in Apponaug through the late seventeenth century, and Inns and taverns were established along Post Road.

During the Revolutionary War, fortifications were set up at the head of Brush Neck Cove near Tuskatucket Brook on present day West Shore Road (D'Amato 1992:76).

The nineteenth century was an era of industrial expansion throughout much of Warwick, particularly in the western sections, along the Pawtuxet (today's West Warwick). By the late nineteenth century, the Bayside area was sparsely populated with isolated farms (Beers Atlas 1870). In the last half of the nineteenth century, Rocky Point became Rhode Island's premiere summer resort and amusement park, following a national trend of beach and coastal leisure time activity. It operated through the nineteenth century and into the last decades of the twentieth, becoming regionally famous as an amusement park and shore dinner hall. The Rocky Point property changed hands several times with new owners adding attractions to the resort and park. By the end of the century, many of Rhode Island's mills would close for two weeks in the summer and provide transportation to Rocky Point to their employees, for what Warwick historian Don D'Amato describes as "the most enjoyable day of the year" (1992:76). In 1883, a fire destroyed the hotel, the shore dinner hall, boathouse, and much of the amusement park. The property changed owners in 1888, and Col. Randall A. Harrington rebuilt the park through the first two decades of the twentieth century. It continued to grow and prosper until September 1938, when the region was devastated by one of the most severe hurricanes of the century. After the storm swept through the state, the *Providence Journal* reported that "Rocky Point, the Mecca of politicians and shore dinner consumers, fell like a house of cards before the southeast fury. The roller coaster was shattered, the great dining hall ...was a soggy mass of lumber.... and the oldest and most famous shore resort of the state was no more" (D'Amato 1992:140). The resort was rebuilt through the middle twentieth century, and was again reduced by Hurricane Carol in 1954. It remained a smaller-scale amusement park, dining hall, and local recreational center until its permanent close in the last decades of the twentieth century.

The building of electric trolley lines through Warwick, between 1892 and 1910, opened Warwick to residential development. The automobile then transformed what had been agricultural land and resort communities into suburbs of greater Providence.

The Longmeadow Segment is planned within residential neighborhoods east of West Shore Road, south of Mill Cove, and north of Rocky Point. The neighborhoods are characterized as a twentieth-century residential community. The dwellings along the streets in the greater project area include mid to late-twentieth century modest contemporary single family dwellings, apartments, light industry and commercial centers, punctuated by isolated remnant late nineteenth and early twentieth farm houses.

Predictive Statement Prior to the Phase I(c) Survey

As noted in the contexts above, the coast and near-interior of Warwick have been focal points of human activity for over 5,000 years. It was an area rich in shellfish, attracting Native Americans beginning in the Late Archaic Period and continuing into the seventeenth century. The Sweet Meadow Brook Site, immediately west of the West Shore Road and Long Street junction in Apponaug, was a large multi-component site, and a core of population, possibly a village, in the Late Woodland Period. The Gallo Collection, from Nausauket Point Beach, contains projectile points from the Laurentian, Susquehanna, and Small Stemmed lithic traditions. Archaeological investigations of sewer-related work in the Horse Neck section of the city resulted in the

identification of a 17th Narragansett burial ground. Archaeological survey of the Bayside I sewer segment, in 2006, resulted in the identification of the Mill Cove Brook Site, a Native American Archaic and Woodland period site focused on the Mill Cove Brook drainage. Known sites cluster along Parsonage Brook in the western limits of the Longmeadow sewer segment.

In the historic period, the greater project area has supported agricultural subsistence farms, residential subdivisions, light industry, and commercial growth as the landscape character shifted from historic farms to suburbs. It was considered likely to encounter archaeological evidence resulting from all of the land uses that occurred here. The principal question will be the integrity of the deposits. It will be a goal of the assessment survey to determine the likely places where disturbances are minimal and recommend further action for those sections which are determined likely to retain good stratigraphic integrity and are likely to have archaeological sites within meaningful contexts.

Overall, the majority of the project area was assessed as archaeologically sensitive. It exhibits environmental conditions (distances to fresh and salt water and wetlands, generally level terrain, well-drained sandy sediments) that correlate with reported pre-contact Native American archaeological sites. Those areas that are assessed as highly archaeologically sensitive are those situated within areas of fine sandy outwash along Parsonage Brook, Old Mill Creek, and Knowles Brook in the Longmeadow, Riverview, and Bayside sections of the city, areas adjacent to the Narragansett Bay shoreline, and those areas that border interior freshwater wetlands such as those west of Palmer Avenue. Furthermore, the Longmeadow, Bayside, and Riverview sections of the city correlate with the area of expected Shawomet Indian occupation during the early to mid seventeenth century and post-contact period Native American sites could be expected in these areas as well. Areas of post-contact period EuroAmerican archaeological sensitivity are those that are situated near concentrated late nineteenth/early twentieth century development along Cady, Grove, Longmeadow, and Samuel Gorton avenues.

Phase I(c) Survey Results

PAL recommended machine-assisted Phase I(c) investigations within a representative sample of areas assessed as moderately and highly sensitive to contain archaeological deposits in good contexts along sections of the following streets:

Draper Avenue

Crystal Avenue

Chester Avenue

Samuel Gorton Avenue

Grove Street

Figure 1 also illustrates the streets within the Longmeadow Sewer Segment that were subject to machine-assisted survey. Investigation included the machine-assisted removal of road surfaces, and excavation to below the roadbed/soil interface to search for archaeological materials and/or

features. Eight machine trenches were dug. Trenches within the Longmeadow section ranged from between 35 and 75 feet in length, and were approximately 6' in width. This method has been successfully employed in other sewer segments throughout the city (Warwick Vets, Conimicut West, Warwick Cove, Bayside I).

The goal of the machine trenching within the sewer easements along the identified representative sections of roadways was to determine the presence/absence of features associated with archaeological sites that may have survived beneath, or immediately adjacent to the existing road and utility disturbances. In each trench, a flat-bladed backhoe was used to remove the asphalt and topsoil strata. The topsoil/subsoil interface was exposed to determine the presence/absence of features and anomalies. Any exposed features or suspected features were further investigated by hand, and when confirmed they were documented in plans and photographs.

Machine Trench 1 was dug along Draper Avenue. The lower part of the B1subsoil horizon was intact, and the soil was a silty sand. No features or artifacts were present within this trench.

Machine Trench 2 was dug in the western section of Crystal Drive beginning near West Shore Road. This trench contained fill to depths exceeding one meter on the south end, and to depths of approximately 60 cmbs on the north end. The underlying soil was of wetland character with a silty black A and gleys beneath it. The water table extended into the bottom of the trench (1m) (Figure 2). Based upon the stratigraphic profile, this road was place above a former drainage / wetland. The fill strata atop the wetland included both Native American and historic period cultural materials that had been displaced from original contexts and transported to this location in the fills. Pre-contact materials noted included chipping debris, a quartz biface, and core. Post-contact materials included fragments of redware, stoneware, brick, and kaolin clay pipe stems. No in-tact subsoils were in this trench. Consequently, no in-situ evidence of features or cultural materials in meaningful contexts existed in Machine Trench 2.

Machine Trench 3 was dug along the sewer line easement in front of houses 37 to 49 Crystal Avenue. This trench contained intact, B subsoils soils starting at 27cmbs, but no features or cultural material were observed in this trench.

Machine Trench 4 was dug along the sewer easement in front of houses 96-97 on Crystal Avenue. Similar to the results in Trench 3, excavations of Trench 4 revealed intact B subsoils at a depth of approximately 27 cmbs but no features or cultural material were exposed in plan.

Machine Trench 5 was dug along Grimshaw Place. This trench contained natural soils at 87 cmbs, but their texture was characterized as very rocky. No cultural material was recovered.

Machine Trench 6 was dug along Chester Avenue. The soils of this trench were similar to Trench 5. Intact soils were located at 36 cmbs but the soil was extremely rocky and devoid of features and cultural material (Figure 3).

Machine Trench 7 was dug along the planned sewer easement on Samuel Gorton Ave. Similar to trenches 5 and 6 a natural soil stratum was encountered at 39 cmb. Soils here were very rocky. Low density post-contact period materials (coal, white ware, and brick) were noted in remnant plow scars in this unit.

Machine Trench 8 was dug in the sewer easement in front of the home at 332 Grove Street. Soils within this trench had been disturbed by an old utility trench running down its entire length. Fragments of ash, cinder, and copper wire were included in the utility trench fill. Natural soils were encountered at 30 cmbs when not disturbed by the utility trench. No pre-contact cultural material was observed or recovered from Machine Trench 8.

Interpretations and Recommendations

The results of machine-assisted Phase I(c) archaeological survey in representative areas of the Longmeadow sewer segment are in stark contrast to the neighboring Bayside 1 and Bayside 2 segments, where evidence of a significant site (the Mill Cove Brook Site) were pervasive. There was a complete lack of features within machine trenches dug across the Longmeadow sewer segment, and no in-situ material culture deposits were observed.

The negative results may be attributed, in part, to landscape modifications and relatively recent utility and road construction. Excavations along Crystal Avenue revealed that this section had likely been a wetland basin of lower elevation prior to the nineteenth and twentieth centuries. The wetland had been filled, and the existing road was built atop the fill. When natural undisturbed subsoils were noted in machine trenches (along Grimshaw Place, Chester Avenue and Samuel Gorton Avenue) they were described as course-textured and rocky; glacial till deposits. Cultural features in other sewer segments (Bayside 1 and 2, in particular) have been found in predominately fine sandy (outwash) subsoils. In the case of Machine Trench 8, the unit was dominated by a previously disturbed utility trench.

A second possible factor in the disparity of results between the Longmeadow segment and the Bayside 1 segment is the presence of the Mill Cove Brook drainage within the Bayside 1 segment, around which there is a demonstrated concentration of Native American features and materials. Furthermore, Bayside 1 is in more immediate proximity to the coastal margin, with Longmeadow slightly more inland, however both segments are sufficiently proximal to coastal features to make the difference between them almost negligible.

Given the negative results of machine trenching within the Longmeadow sewer segment, we recommend that no further archaeological investigations are warranted as a planning element of sewer installations in this segment. We do however recommend that protocols for unanticipated discovery be included as the sewer line construction phase is initiated. This recommendation is based upon the discovery of high densities of features, and suspected burials, in the adjacent Bayside 1 and Bayside 2 segments.

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Figure 1. Location of the Longmeadow Sewer Segment, Sensitivity, and Machine Trench Locations, Warwick Neck.

Figure 2. Machine Trench 2 on Crystal Drive.

Figure 3. Machine Trench 6 on Chester Avenue.