

**Proposal to Conduct an
Intensive (Locational) Survey
For The
Plymouth Transportation and Visitors Services Center Project**

Introduction

The University of Massachusetts Archaeological Services (UMAS) has been requested to submit a proposal by Fennick McCredie Architecture, Boston, for the proposed Plymouth Transportation and Visitors Services Center Project, Plymouth, Massachusetts. The area of potential effect (APE) is located at the existing Plymouth Visitors Center and Memorial Park parking lot which is bounded on the east by Water Street, on the west by Plymouth Memorial Hall, and lying between Memorial Drive and South Park Avenue. The proposed development will include a Transportation and Visitors Center and a 310-space parking garage at the site of the existing Memorial Park parking lot.

At present the Memorial Park parking lot is a paved surface with the existing Plymouth Visitors Center structure located on Water Street at the easterly end of the APE. The overall dimensions of the APE in the existing parking lot is approximately 36 m (117 ft) northwest to southeast by 107 m (350 ft) from northeast to southwest.

From 1998 to 1999 UMAS conducted studies which documented archaeological and historical resources on the historic Plymouth waterfront at the Pilgrim Memorial State Park, and included the location of the proposed development at the existing Memorial Park parking lot.

Previous UMAS Projects in Plymouth

In 1998 UMAS conducted archaeological investigations at the State Pier, Pilgrim Memorial Park, in Plymouth (Donta et al. 1998). During the construction for a comfort station historic timbers were encountered. At that point the Massachusetts Historical Commission requested that an archaeological investigation be conducted prior to further construction. Background research indicated that the area was in use from approximately 1850 onward as part of the maritime industry. Excavations located two probable construction episodes, one dating from the 1850s and another from the 1890s. A crib wharf structure was found neat the center of the proposed building foundation lying on the sterile harbor bottom. This was presumably the earliest feature at the site, related to the initial construction of a wharf here around 1850, primarily to create a platform for use as a shipping lumberyard. A second wooden bulkhead was found to the exterior side of the first feature, dating to a reconstruction ca. 1896-1899.

In 1999 UMAS was contracted by the Massachusetts Department of Environmental Management to conduct a cultural resources inventory, analysis, and preservation plan for the Pilgrim Memorial State Park and adjacent lands within Plymouth town center. This study included the Memorial Park parking lot at the present APE, and the results of were presented in three reports. The first report presented the results of a sensitivity assessment and Phase 1 testing for development actions previously under consideration in Pilgrim Memorial State Park (Donta et al. 1999). The second report presented a cultural landscapes inventory of the Plymouth waterfront, and traced the evolution of different landscapes there during the historic period (Binzen et al. 1999). The third report offered a preservation approach and treatment plan for known or potential cultural resources indentified in the park (Donta and Binzen 1999).

Background

Extensive research of the historic maps, and documents conducted during the previous UMAS studies for the Memorial Park parking lot study area determined that the APE has remained substantially free from development over the past four centuries.

The APE location has previously been described as being on a level well-drained landform, with a gradual slope down towards Plymouth Harbor (Donta et al 1999:44). Soils at the APE are designated as unclassified urban area. The nearest classified soils are located approximately 229 m (750 ft) to the southeast, and consist of Carver coarse sand (CaB).

Plymouth Harbor lies within 30 m (100 ft) of the APE. The nearest source of fresh water to the APE had been First Brook, which historically bordered the southern side of the Memorial Park parking lot. As depicted on the Plymouth USGS 1898 map, the brook flowed eastward through the uplands to the west, crossed Court Street, bordered the northern side of Memorial Drive (historic Hedge Place), crossed Memorial Drive near it central part, and emptied into Plymouth Harbor. The now culverted mouth of First Brook currently outflows into the harbor opposite the present visitors' center. Approximately 518 m (1700 ft) to the north of the APE was Second Brook, which paralleled the course of First Brook into Plymouth Harbour.

The previous study included research of existing archaeological records determined that there are no pre-Contact Native American sites are known within the APE, however two previously recorded sites lie within 300 m (1000 ft) to the north and northwest (Donta et al 1999:44), and at least 10 more sites within a 1-mile radius.

The Plymouth historian William Thomas Davis conducted extensive deed research for his two volume, "Ancient Landmarks of Plymouth" published in 1883. In Part I Davis describes a 1630 deed from Stephen Dean to Robert Hicks of land "lying on the north side of the towne between the first and second brook" (Davis 1883:211). Later, Davis records a deed of 9 acres in 1639 from Edward Winslow to George Bower located "On the north side ... of Plymouth on eich side the first brook", and further the deed stipulates Winslow "shall come and build upon the two

furthermost of the nine acres and dwell upon them himself". Davis then states, "It is probable", that Winslow in 1644 after becoming governor had, "built and occupied a house on the land in question" (Davis 1883:222). Davis's research indicates the possibility for Winslow's, or other early owner of this property, homestead site to be in the vicinity of the APE.

As mentioned above, the previous UMAS background research determined that the APE remained undeveloped land during the eighteenth and nineteenth centuries, with no construction until it became a parking area during the twentieth century. In the early nineteenth century nearby land was purchased for a ropewalk (Davis 1883:224), and this ropewalk is depicted south of the APE on the 1830 Bourne map of Plymouth, and later with a line manufactory nearer the APE on the 1832 Macher map. Maps from the 1840's onward depict buildings bordering the northern side of the APE, currently where buildings are located along the southern side of South Park Avenue. The Memorial Hall, bordering the western side of the APE, was constructed in 1921. Sanborn Insurance maps from 1885 to 1927 specifically mark the APE as "Vacant" land. The 1927 Sanborn map does depict a "Comfort Station" at the eastern end of the APE, and at the location of the existing visitors' center.

Limited subsurface testing was conducted as part of the 1999 UMAS study of the Memorial Park parking lot study area. The subsurface testing consisted of the excavation of five 50-x-50 cm test pits arranged along the grassy strip bordering the southern side of the parking lot and adjacent to the northern side of Memorial Drive. Each of the five test pits encountered multiple fill levels, with no natural subsoil horizons observed at the maximum depth excavated from 90 cm to 1 m ((Donta et al 1999:45). Materials recovered from the fill deposits consisted primarily of twentieth century artifacts, with lesser amounts of nineteenth and eighteenth century artifacts. The earlier historic artifacts included sherds of stoneware, redware, creamware, pearlware, porcelain, yellowware and whiteware, a clay pipe fragment, a clay marble, bottle glass, and architectural materials.

No pre-Contact Native American cultural materials were recovered from the previous limited testing adjacent the APE.

Conclusions

As stated in the 1999 UMAS summary for this study area, the Memorial Park parking lot is remarkable for its lack of cultural development so close to an area utilized for many thousands of years, and intensively so by European-Americans for nearly 400 years (Donta et al 1999:46). Historic maps indicate no development at the APE until it had been paved for a parking lot in the twentieth century. In addition, the APE is located within close proximity to over a dozen previously recorded pre-Contact Native American sites.

Given the lack of historic development, the APE for the proposed Plymouth Transportation and Visitors Services Center is likely to retain undisturbed natural soil stratigraphy beneath the

paved parking lot and graded fill and has a high potential to contain archaeological resources (Donta et al 1999:46).

In conclusion, the 1999 UMAS study recommended an intensive archaeological survey for any planned construction at the Memorial Hall parking lot (Donta et al 1999:48).

Proposed Intensive Survey

As a result of the 1999 UMAS study it is recommended that an intensive (locational) Phase 1 survey be conducted at the Memorial Hall parking lot project area for the prior to the construction of the proposed Plymouth Transportation and Visitors Services Center.

In order to conduct the Phase 1 survey at the existing paved parking lot UMAS proposes to utilize the assistance of a backhoe in order to excavate trenches that will remove modern-era overburden to the depth of undisturbed stratigraphy or any archaeological resources that may be encountered as a result.

The proposed machine trenches will be placed at regular intervals in a pattern designed to intersect archaeological resources and maximize sampling within the APE. Furthermore, the layout of the trenches will be oriented 45-degrees to the alignment of the adjacent streets, which will increase the percentage of identifying historic structural remains that would also have been oriented perpendicular to the nearby streets and roads.

The machine assisted trenches will measure 7.6 m (25 ft) in length and will be approximately 1.5 (5 ft) wide at their base. The trenches will be excavated to the surface of undisturbed soils, or to a maximum depth of 1.2 m (4 ft) below the ground surface. Requisite to OSHA regulations, the walls of each trench will be sloped back to an angle of repose and their ends will be ramped, which will allow personnel to enter the trench. In addition, step ladders will be used to allow egress and ingress.

At the point of encountering either undisturbed stratigraphy or the 1.2 m (4 ft) maximum depth, it is proposed that two shovel test pits be excavated into the stratigraphy within the base of each trench.

To accomplish the intensive Phase 1 survey at the Memorial Hall parking lot a total of 15 machine assisted trenches be excavated across the APE. Trenches will be fenced and within the trenches a total of 30 shovel test pits are proposed. Each trench location will be restored and capped with an asphalt patch.

References

Binzen, Timothy L., Peggy Kelly, and Angele Smith

1999 Cultural Landscape Inventory And Analysis For The Cultural Resources Inventory, Analysis And Preservation Plan, Pilgrim Memorial State Park, Plymouth, Massachusetts. UM-267b. University of Massachusetts Archaeological Services, Amherst

Davis, William Thomas

1883 Ancient Landmarks of Plymouth: Part I, Historical Sketch and Title of Estates. M. H. Mallory & Co., New York.

Donta, Christopher L., Thomas L. Arcuti, and Mitchell T. Mulholland

1998 Archaeological Investigations of Plymouth Comfort Station, Plymouth, Massachusetts. UM-263. University of Massachusetts Archaeological Services, Amherst

Donta, Christopher L., Mitchell T. Mulholland, and Thomas L. Arcuti

1999 Archaeological Field Survey And Assessment For The Cultural Resource Inventory, Analysis, And Preservation Plan, Pilgrim Memorial State Park, Plymouth, Massachusetts. UM-267a. University of Massachusetts Archaeological Services, Amherst

Donta, Christopher L., and Timothy L. Binzen

1999 Preservation Approach And Treatment Plan For The Cultural Resources Inventory, Analysis, And Preservation Plan, Pilgrim Memorial State Park, Plymouth, Massachusetts. UM-267c. University of Massachusetts Archaeological Services, Amherst