

\$21,000

Community Preservation Act Committee- Proposal Request Form for FY 2020

Project Title: Archeology at the Amherst Historical Society and Museum

CPA funding category: Check all that apply

<input type="checkbox"/>	Community Housing
<input type="checkbox"/>	Open Space
<input checked="" type="checkbox"/>	Historic Preservation
<input type="checkbox"/>	Recreation

Amount of CPA Funds Requested: \$ 21,000

Submitting Entity: Amherst Historical Society and Museum

Contact Person: Georgia Barnhill

Phone: 413 835-0870

Email: gigi.barnhill@comcast.net

Please complete this form in its entirety and include the following in your proposal.

Overview of Proposal: Please describe your project and your feasibility analysis

The archeological project will build on the work by the University of Massachusetts Archeological Services undertaken in the summer of 2016 funded by a CPA grant. During that project, a complete survey of the property at 67 Amity Street was accomplished with ground penetrating radar and several sites were selected for an initial investigation. The new project will re-excavate three areas previously dug expanding them vertically and horizontally. As a result of the initial excavations, a variety of artifacts were discovered including a clay pipe, an early glass bottle, and some artifacts from the twentieth century, including a coin and a container for Three-in-One Oil. UMass proposes to excavate several new areas for the first time based on data from the ground penetrating radar study done in June 2016. The current project proposes the excavation of a total of 9-10 square meters. Attached to this proposal is a detailed plan prepared by the University of Massachusetts Archeological Services. Further information is available upon request.

Describe how your request meets the CPA criteria:

By conducting additional excavation of the yard, UMass Archeological Services will find additional artifacts that will add to our cumulative knowledge about the property. Archeological studies are certainly part of historic preservation. The excavations done in 2016 yielded over 2,000 artifacts that help interpret the use of the land surrounding the Simeon Strong House. Archeological research has the potential to reveal a great deal about the daily lives of the inhabitants of the property from the construction of the house in 1759 (that date has been established by the dendrochronological study undertaken by William Flynt and funded by CPA funds) to the present.

1. Description of funding needed, including:

a. Documentation of cost estimates, budget

The University of Massachusetts Office of Grants and Contracts is responsible for the creation of the budget. Their total cost for additional intensive survey, including the permit application, subsurface testing, artifact analysis and curation, completion memorandum and final report is \$19,993. An additional \$1,000 has been added for any expenses of the public dig day and the Founders Day Lecture.

b. Other sources of funding, e.g., grants, self-funding, fund-raising

No other sources of funding. Any funds that the Historical Society raises are required for the maintenance of the Simeon Strong House and grounds, energy costs, insurance, staffing, and programs. Board members will assist with the public program.

c. Timeline on how CPA funds would be spent, including over multiple years

We believe most of the funds will be expended during the summer of 2019, although the final report will not be ready until the first half of 2020 when the final payment will be due.

2. Urgency of the Project, if any.

The Historical Society does have designs for some changes to the parking area that routinely floods during rainstorms. Any archeological work in that area should be done before drainage is corrected. Also, we do not know what impact the construction at the Jones Library will have on the Society's front yard. Any construction vehicles will compact the soil layers.

3. Estimated timeline from receipt of funds to Project completion.

Twelve months. Although the excavations would be done during the summer, several months are required before a final report will be completed. I estimate that the final report would be prepared by June of 2020.

4. Acquisition or preservation of threatened resources.

The artifacts are not so much threatened as unknown. Artifacts found during this project will be preserved by the University.

5. Population(s) to be served by the Project.

This project will serve the entire community as the history of this significant property is revealed. In addition, there will be a community outreach and education component. On one of the fieldwork days, the public will be invited to visit the site, talk with the archeologists, and even participate in the excavation. A mobile field lab would be brought to the property so visitors could help clean objects. Archeologists would also explain the meaning of the profiles of the trenches. Each layer is significant in its own way. We hope that the Historical Society's Founders Day Lecture at the Historical Society's annual meeting in February of 2020 will be devoted to this project.

6. How will the CPA investment in your property, facility or project be maintained over time?

The artifacts will be stored at the University of Massachusetts and will be available for study.

7. Which relevant Town committees and/or commissions are you working with?

Historical Commission

8. Other information regarding the Project deemed necessary for CPAC.

Please see the attached proposal from Archeological Services. An email attachment of the following text includes maps and plans.

**PROPOSAL TO CONDUCT ADDITIONAL INTENSIVE (LOCATIONAL)
ARCHAEOLOGICAL SURVEY AT THE STRONG HOUSE PROPERTY
FOR THE AMHERST HISTORICAL SOCIETY AND MUSEUM, AMHERST,
MASSACHUSETTS**

Presented to:

Georgia Barnhill

Amherst Historical Society and Museum 67 Amity Street, Amherst, MA 01002

Presented by: Archaeological Services 240 Hicks Way University of Massachusetts
Amherst, MA 01003

Eric S. Johnson, Ph.D., Director December 2016

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Introduction

Archaeological Services at the University of Massachusetts Amherst (UMAS) proposes to conduct additional intensive (locational) archaeological survey of the Strong House at 67 Amity Street in Amherst, Massachusetts (Figures 1-4). The Strong House presently serves as the offices and museum of the Amherst Historical Society. The purpose of the archaeological study is to examine cultural features located but not excavated during a survey conducted in the spring of 2016, and to continue to ground truth ground penetrating radar (GPR) anomalies identified during the previous survey. The Amherst Historical Society has requested these studies in order to provide effective stewardship for those archaeological resources. At present there is no specific development project that is likely to affect archaeological resources that may be located on the grounds of the Strong House. The archaeological surveys are designed to provide timely and efficient compliance with MGL c. 9, ss. 26-27C (950 CMR 70-71).

Figure 1. Town of Amherst in Hampshire County, Massachusetts

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Project Area

Figure 2. Project Area shown on USGS Mt Toby Quadrangle (2000)

Project Area Boundary

Figure 3. Strong House Property Boundary Shown on Map of Amherst Center (Source: Town of Amherst GIS, <http://www.amherstma.gov/400/Amherst-Maps-Property-Info>)

Figure 4. Strong House Property Shown on Aerial Photo of Amherst Center (Source Google Maps 2015)

Authority

UMAS conducts archaeological investigations in compliance with Federal and State legislation. Procedures are in compliance with legislation and regulations concerning the impact to archaeological properties from federally-funded or permitted activities. These include the National Historic Preservation Act of 1966 amended 1992 (PL 89-665, 16 USC 470), the National Environmental Policy Act of 1969 (PL 91-990, 42 USC 4321), Executive Order 11593, 1971 (16 USC 470), Procedures for the Protection of Historic and Cultural Properties (36 CFR 800), and the Archaeological and Historic Preservation Act of 1974 (PL 93-291). State legislation dealing with the protection of historic and archaeological resources includes Massachusetts General Laws Chapter 9, Sections 26-27C, and the Massachusetts Environmental Policy Act (MGL, Chapter 30, amended by Chapter 947 of the Acts of 1977). Projects involving the discovery of human remains or cemeteries are conducted in compliance with Massachusetts General Laws Ch.9 ss.26-27C (950 CMR 70 and 71), Ch.18, s.6B and Ch.7, s.38A. Massachusetts archaeological permit regulations are outlined in 950 CMR 70.00.

Project Area Description

The Strong House is located in Amherst at the top of the hill that comprises the town center. The house is listed on the National Register of Historic Places and the Inventory of Historic Assets of the Commonwealth (MHC #AMH.1000). The Strong House was constructed c. 1754 and is currently one of the oldest surviving houses in the town of Amherst. It serves as the offices and exhibit space for the Amherst Historical Society. The property is bordered on the south by Amity Street, a major east-west route through the town center, on the west by North Prospect Street, on the north by a paved parking lot, and on the east by the property boundary with the Jones Library. The 0.76-acre lot is dominated by an eighteenth-century house set well back from Amity Street and surrounded by lawn, gardens, and several large trees, with a garage behind (north of) the house.

Physical and documentary research conducted by Stachiw et al (2002) have traced ownership, structures, and landscape for the Strong House property from the construction of the first house here after the land was acquired by William Boltwood in 1754 from his father. By 1761 it had a house and was under the ownership of the Strong family. The original house was remodeled over the succeeding decades until it reached its present two-story gambrel-roofed form and exterior appearance in the 1790s. Landscape research has documented the presence of several barns on the property and a long-lived garden plot located to the east-northeast of the house (Stachiw et al 2002:I.2).

Soils in the project area, and most of Amherst center, are classified as Paxton-Charlton-Urban land complex, 3-15% slopes. This is a well-drained soil, not prime farmland but suitable for residential and commercial construction (Soil Survey Staff 2015).

Previous Research

In 1990, UMAS conducted an archaeological survey of a construction easement for a proposed addition to the Jones Library, directly east of the project area. The easement ran along the property line, very near the southeast corner of the Strong House. Eight trenches measuring 2m x 50 cm were excavated along the easement (Figure 5). Results indicated that the eastern boundary of the Strong House property had been disturbed by the construction of the library, but a piece of intact early-nineteenth-century sheet refuse deposit was identified in Trench 2, which suggested that the east yard of the Strong House was likely to retain archaeological deposits and features (Garman 1990).

In 2002, J. Edward Hood conducted an archaeological assessment of the Strong House property drawing on documentary and architectural research, research into homelot land use in the eighteenth and nineteenth centuries, as well as the limited results of the 1990 subsurface testing. Hood made several valuable observations and inferences. Noting that the Strong House is set unusually far back from the street, he suggested that there may have been a barn and/or other outbuildings in what is now the front yard of the property, or that this area may have been used for gardens and/or orchards (Hood 2002:I.6.12). In the rear of the house, in between and around the two ells, Hood expected that there would be features and deposits representing a wide range of household activities and infrastructure including food preparation, kitchen gardens, and pens and/or barns for livestock. As a working farm, the dwelling would certainly have been surrounded by fences, gardens, barns, wells, sheds, special activity areas (e.g., a place for firewood processing and stacking), and a back kitchen, all of which are mentioned in a probate document from 1805. The homelot itself was much larger during the late eighteenth and early nineteenth centuries; consequently at least some of these features are likely to be outside the present 3/4-acre property. The rear ells of the house, which were added later in the century, may have been built over earlier additions to the rear of the house. Traces of these earlier architectural features may yet remain (Hood 2002:I.6.13-15).

Simeon Strong owned the house between 1761 and his death in 1805, and practiced law out of an office attached to the west side of the house. This office addition was moved to the rear to become the west ell when North Prospect Street was constructed in 1846 (Lynch 2016). A second house, belonging to John Emerson Strong, appears on maps in the mid nineteenth century and may have been located inside the present lot.

Archaeological evidence of these structures may be located at their prior locations (Hood 2002:I.19; Lynch 2016).

In 2011, Brian Jones directed limited excavations in portions of the yard as part of an archaeology program aimed at Middle School students (Figure 5). Five shovel test pits (STP) yielded numerous artifacts, most from the early nineteenth century, in the east side yard and between the ells (Jones 2013).

In the spring of 2016 UMAS conducted a ground penetrating radar study and an intensive (locational) archaeological survey of the Strong House. The purpose of these archaeological studies was to locate and identify potentially significant archaeological sites and/or features on the Museum grounds. A total of six (6) square meters were excavated. Subsurface excavations

consisted of twelve 50-x-50 cm STPs, four 50 cm-x-1 m exploratory trenches, and one 1-x-1 m excavation unit (Figure 5). The subsurface archaeological survey was designed to systematically test areas of high archaeological potential, and to “ground truth” ground penetrating radar anomalies.

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Figure 5. Strong House site map generated on an aerial photograph showing archaeological test units from work in 1990 (shown in blue), 2011 (shown in green), 2016 (shown in yellow), and reported GPR anomalies (shown in red and black).

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A total of 34 GPR anomalies were identified; 9 shaft features, 14 geometric anomalies, and 11 potential structures or structural elements. Archaeological testing took place at 11 of these anomaly locations, as well as areas containing no GPR anomalies. Three cultural features were recorded, one at a location identified as a shaft feature during the GPR study. Testing at other GPR anomaly locations yielded ambiguous results. Feature 1 was identified as a possible historic utility (drainage pipe and well), Feature 2 was identified as a shaft feature and left unexcavated, and the third feature was identified a trash pit and also unexcavated during this survey.

A total of 14 fill deposits were recorded at the site, as well as B and C-horizon subsoils. Stratigraphic sequencing was not consistent across the museum property, however depositional patterns were observed. Fill deposits were generally consistent across the south (front) yard, but varied significantly in the north (rear) and east (side) yards. A total of 2076 artifacts were recovered from the property dating from the early eighteenth century through to the modern era.

Artifact density was highest in the north yard in relation to other areas of the property, and likely a combination of the kitchens being located in the rear of the house and various construction phases including both east and west ells. The east yard also contained a high density of artifacts. The greatest amount of early twentieth century material on the museum property was located to the rear of the east yard. The remainder of the yard contained eighteenth-nineteenth century material that was likely related to known gardens and possible outbuildings. Artifact density was lowest in the south yard which seems consistent with a front yard intended to be an entrance to the house rather than a work area. A single Native American flake was recovered from a fill deposit in the south yard, but no other evidence of pre-Contact occupation was observed.

Additional Intensive (Locational) Survey Testing Strategy

UMAS has identified a number of interesting features during the archaeological survey conducted in the spring of 2016. The GPR study conducted in conjunction with this survey also yielded interesting results. So many GPR anomalies were detected that UMAS could not ground truth (investigate through subsurface excavation) them all. This scope of work and cost estimate proposes to continue ground truthing GPR anomalies and further investigate the features identified last spring. A total of 9-10 square meters of subsurface excavation is proposed.

UMAS recommends re-excavating three previously dug units in order to expand upon them vertically and horizontally. This will allow for a closer inspection of strata and/or features identified during the previous survey. Recommendations include re-excavating 50 cm-x-1 m TR- 3 in the south yard then expanding the excavation vertically and

horizontally. TR 3 was placed in the center of a GPR anomaly (GA-13) presumably buried between 75-150 cm below ground surface (bgs). 2016 excavations extended only to 80 cm bgs within B-horizon subsoil. A very compact C-horizon was documented in other units excavated in the south yard at locations of identified GPR anomalies (Lynch 2016). Expanding TR 3 should reveal whether or not GPR anomaly GA-13 is also hardpan C-horizon or a hypothesized buried structure. The hardpan C-horizon will be the limit of excavation if encountered.

In the east yard EU1, a 1-x-1 m unit, is also proposed to be re-excavated and expanded in order to investigate Feature 2, a deposit possibly filling in a shaft feature (SF-02) that could indicate a

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well or privy. Re-excavating and expanding TR 4 is also recommended. This unit revealed a pipe and drainage feature designated Feature 1. Feature 1 may be associated with a shaft as well and further examination is recommended.

Additionally, units are proposed for areas that have not yet been excavated. Two 50 cm-x-1 m units are also proposed for the edges of GPR anomaly GA-13; one in an area without other GPR targets and one in an area of multiple GPR targets (GA-13, & LBS-01). Finally, a 2-x-2 m unit is proposed for the northeastern portion of the property in the vicinity of 2016 STPs 11 and 12. These STPs were about 5.5 m (18 ft) apart and recorded different stratigraphy. A possible shaft feature (SF-04) and building footprint (GA-05) were identified during the GPR study in this general area. The proposed 2-x-2 m unit will investigate the possible shaft feature, and encompass the edge of the possible buried structure. The different stratigraphy recorded in STPs 11 and 12 are hypothesized to reflect the difference between “inside” and “outside” a structure. Subsurface testing will be completed in a total of five working days, and is expected to yield numerous artifacts. The proposed testing locations for 2017 are shown in Figures 6 and 7. The proposed testing for this survey is focused in the south and east yards.

Figure 6. Areas of proposed 2017 testing in the south yard of the Strong house including the re- excavation of TR 3 and investigation of GPR anomalies GA-13, LBS-01, and LBS-02.

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Figure 7. Areas of proposed 2017 testing in the east yard of the Strong house including the re- excavation of TR 4 and EU 1; and investigation of GPR anomalies SF-02, GA-08, SF-04, and GA- 05.

UMAS is also happy to consult with museum personnel to revise this testing strategy. The recommended testing locations can be altered to suit the Museum’s needs. Units will be hand excavated and every effort will be made to excavate to the depth of culturally sterile soil. Vertical control will be maintained in 10-cm arbitrary levels within observed natural or cultural soil horizons or deposits. Backfill from the 2016 units will be carefully removed as a single deposit before expanding upon previously excavated units. Soil profiles will be observed and recorded using the ARDVARC2 data management system. All archaeological features will be drawn and photographed in the field and samples will be collected for flotation in the laboratory. Historic fill deposits will be excavated and recorded individually, and treated as discrete cultural horizons. All soil will be passed through one-fourth-inch mesh screen to assure the recovery of artifacts.

Appropriate soil features may be screened using one-eighth-inch mesh in order to retrieve small artifacts and botanicals.

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References Cited

Garman, James C.

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Hood, J. Edward

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Soil Survey Staff

2015 Natural Resources Conservation Service, United States Department of Agriculture. Web

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Stachiw, Myron, Claire W. Dempsey, J. Edward Hood, Thomas Paske, and Nan

Wolverton 2002 *Historic Structure and Landscape Report and Conditions Assessment of the Strong*

House, located at 67 Amity Street, Amherst, Massachusetts. Report prepared for the Amherst Historical Society.

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Scope of Work

The proposed tasks to be performed by UMAS conform to MHC guidelines (950 CMR 70) and will consist of the following:

- *Application for a Massachusetts State Archaeologist's permit:* The Principal Investigator will apply for an excavation permit from the Massachusetts State Archaeologist.
- *Recommended subsurface testing:* UMAS recommends 9-10 square meters of subsurface excavation. This would include the re-excavation and expansion of TR 3 to further examine GPR anomaly GA-13, TR 4 to investigate Feature 1, and EU 1 to investigate Feature 2. Additional units placed in the south yard at the edge of GPR anomaly GA-13 and a cluster of GPR anomalies (GA-13, LBS-01, and LBS-

02) and a 2-x-2 m unit in the east yard to intersect GPR anomalies SF-04 and GA-05 are also proposed. The 2-x-2 m unit may determine if the difference between stratigraphic profiles from STP 11 and STP 12 excavated during the 2016 survey reflect the presence of a structure. Subsurface testing will be completed in a total of five working days, and is expected to yield numerous artifacts.

- *Completion memorandum:* A memorandum summarizing the fieldwork findings and making recommendations will be submitted to the sponsor within five business days of the completion of subsurface testing. After review by the sponsor, a copy of this memorandum will be sent to the Massachusetts Historical Commission for review.
- *Processing, analysis, and curation of artifacts and documents:* Any artifacts or cultural material recovered during the archaeological survey will be processed and stored at the laboratory of UMAS. Documents pertaining to the research and fieldwork will also be curated at the UMAS lab.
- *Draft and Comprehensive final report:* A draft report final report will be prepared presenting the results of the archaeological survey and making recommendations for future property management. Upon approval by the sponsor, the draft report will be sent to the Massachusetts Historical Commission for review. Upon receipt of comments from the MHC, UMAS will prepare a final report for the sponsor. Copies of the final report will also be provided to the Massachusetts Historical Commission.

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Cost

The total cost for additional intensive (locational) survey at the Amherst Historical Society and Museum property, including the permit application, subsurface testing, artifact analysis and curation, completion memorandum, and draft and final comprehensive report is **\$19,993**.

Type of Contract: The project will be conducted under a fixed-price contract.

Review and Completion Period: The project will remain active and the University account will remain open for a period of one year after the start date (the date of execution of the contract). This will permit UMAS to respond to draft review comments by the sponsor and Massachusetts Historical Commission; allow the curation of artifacts; and to meet payroll for the work completed. The performance period remaining open is crucial to our ability to meet project deadlines effectively and has no effect on the schedule of deliverables.

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