

Concluding/Summary State Historic Preservation Office/American College of the Buildings Arts/Circular Congregational Church Matching Grant update:

September 2018-September 2019 (Submitted November 2019)

Compiled by Christina R. Butler (ACBA faculty) for Brad Sauls (SHPO)

Update outline:

- A. Summary of workshop activities, May 2019
- B. Summary of grant funded expenditures
- C. Summary of documentation and website; with dissemination overview
- D. Summary of conservation/preservation work undertaken by ACBA students and faculty at ACBA (excluding activities from May 2019 workshop)
- E. Ongoing/continued work post-grant cycle:
 - Site scanning and 3-D documentation at CCC graveyard
 - Dissemination documents update and future plans
 - Ongoing ACBA class work for Fall semester

A. Summary May Workshop Activities (May 22-25, 2019)

Attendees were exposed to the following activities:

- safe cleaning techniques and philosophical discussions with experts about the aesthetics of deterioration and levels of preferred cleaning and repair
- Resetting single stones (both damaged and intact)
- Resetting multi-level stone and creating new foundations and support bases
- Assessing and reconstructing multi-piece monuments
- Reaffixing fragments; pinning and epoxy protocols, including discussions of tinting epoxies and their efficacy and acceptable uses
- Identifying failures including stone delamination and sugaring
- Resetting large monuments with rigging systems and professional gantry cranes
- Accurate stone infill
- sympathetic mortars

Breakdown of preservation/conservation work completed during the workshops:

Cleaning:

- Cleaned 6 box tombs
- Clean 3 multi-tier upright monuments
- Cleaned one toppled stone
- Cleaned 18 upright markers

Resetting:

- large two-part marble monument
- six slate tablets

- 5 upright marble tablets
- Reset a four part monument and created new brick and mortar base; lifted with gantry crane
- 1 obelisk

Resetting in new carved base:

- Removed a crooked marble tablet into new limestone

Epoxy and mortar work

- Brick and mortar base for reset four-part monument
- brick and mortar base for a slate reset tablet
- Pinned and epoxied a marble upright monument (demonstrating epoxy tinting)
- Created a new mortared and brick base and reset a tall marble tablet



Resetting monuments

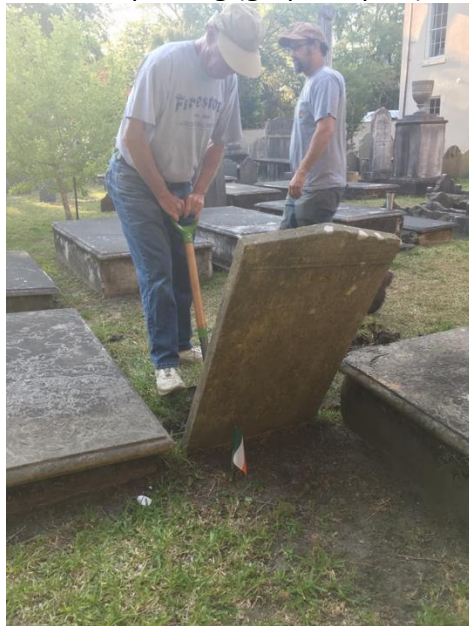


Workshop attendees reset a series of settling/crooked monuments, working with line levels and plumb lines

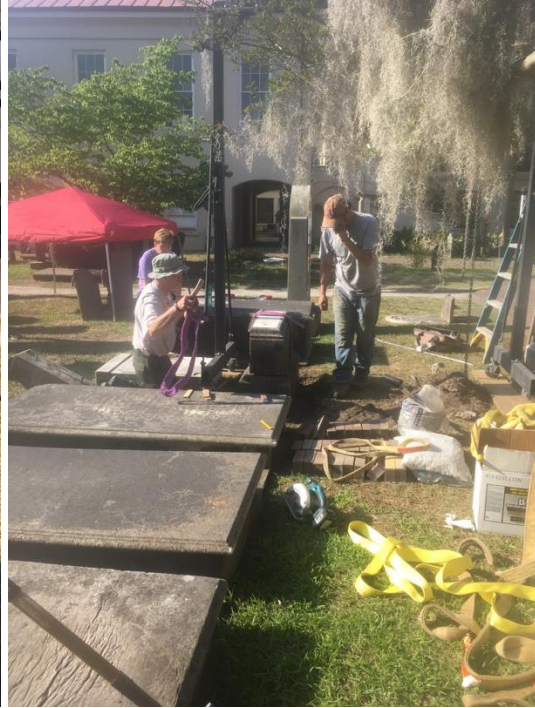




Repinning (graphite pins) and epoxy repair demonstrations



Resetting work, on gravel and with mortared brick below grade independent foundations.



Resetting a large, multi-stone monument: lifting with gantry crane, levelling and creating new foundation, working with traditional NHL mortar mixes, and resetting.

B: Summary of Grant Funded Expenditures

*** See attached spreadsheet document with full breakdown of line items

C: Dissemination overview:

The gravestone cleaning, documentation, and repair sheets will be disseminated through the following modes:

- Digital copies provided to SHPO to circulate as desired
- Hard copies in the ACBA Library, which is open to the public
- Linked into Circular Church Graveyard Documentation website (currently behind administrator login view while site is under development)
- Potentially, linked to ACBA website

Completed protocol sheets:

- Gravestone preservation bibliography
- Headstone cleaning protocol
- Single stone repair and resetting protocol
- May 2019 Graveyard preservation workshop overview document, with photographs
- Compiled notes from workshop discussions with John Appel, Simeon Warren, and Moss Rudley
- Multiple stone monument resetting protocol¹
- Revised cemetery monument condition assessment sheet
- Repinning monuments and epoxy mortars *
- Overview of building a new base with sympathetic mortar and brick *

Website progress:

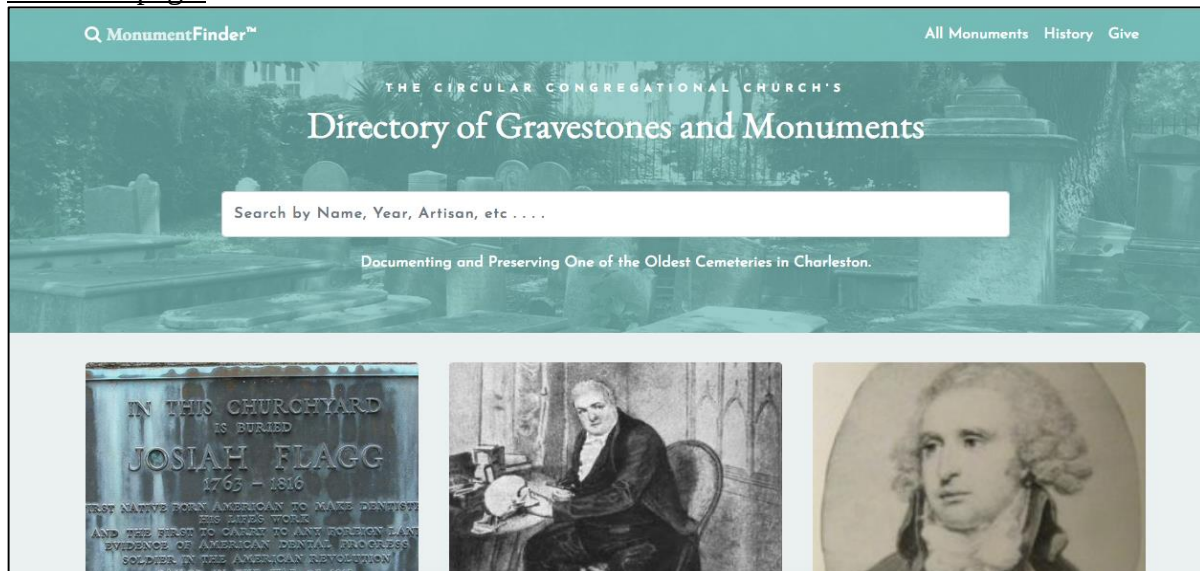
Jackie Urgo, a stone carving alumnus of ACBA, has input the first of 6 binders of headstone data compiled by CCC in the 1990s; these include photographs of the stones from that time (prior to a circa 1996 cleaning campaign with a pressure washer that lead to accelerated erosion of the faces and deterioration of the lettering), inscription transcriptions, and general condition notes. Urgo is currently uploading new photographs of the stones in 2019, and the condition assessments compiled by volunteers and ACBA students, with repair protocol sheets linked. She has completed around 60 new entries.

Overview of repair and assessment data on the website:

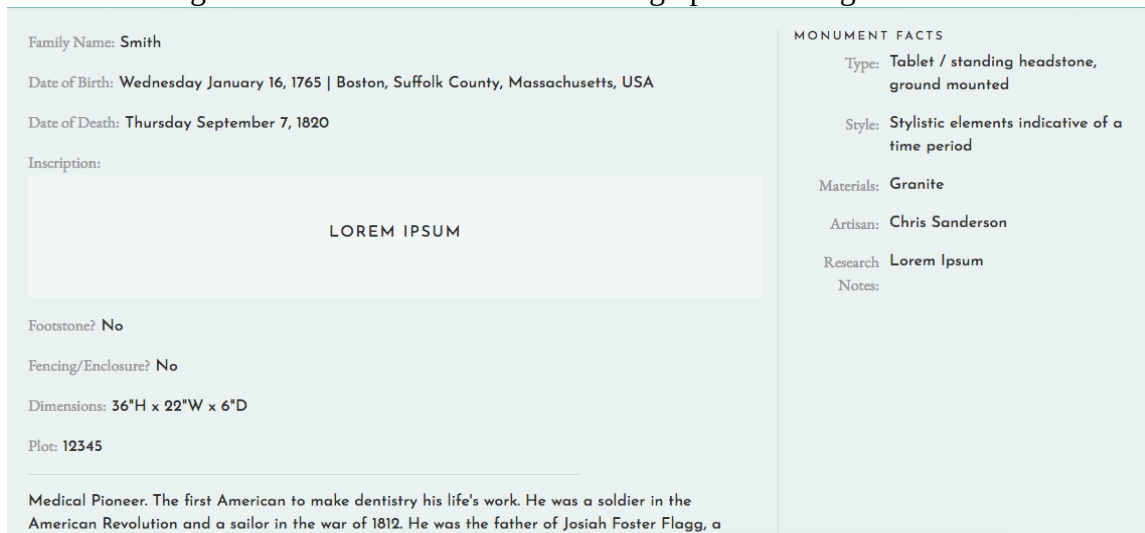
The condition assessments for each stone will be tied to three tiers or suggested remediation: Volunteer (with linked how-to documents); Preservation professional (with linked repair protocol to be used as guidelines to consulting with preservationists); Trade professional (with linked description of what work would entail, but intended as a guideline to allow the site/graveyard steward to make an educated decision on how to hire a professional).

¹ The protocol created as a result of the workshops will expound upon methods that are discussed very generally in NPS Preservation Brief 48: Grave Markers. Some repairs- such as resetting stones or carving detailed replacement pieces- should not be carried out by volunteers or novice conservators. These sheets will describe best practices so as to educate stewards and beginning conservators as to when to contact a professional, and what the professional work entails; i.e., to create an informed site manager or volunteer.

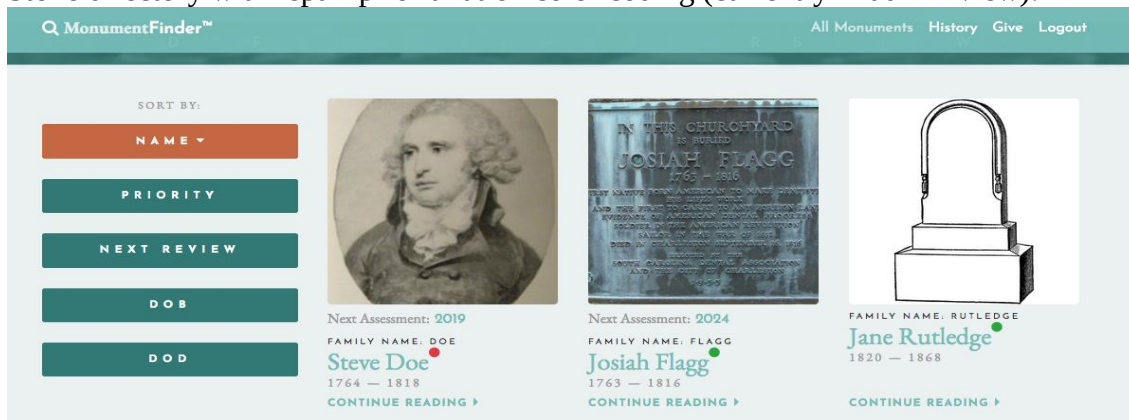
Site main page:



Screenshot of general information under stone/biographical listing:



Stone directory with repair prioritization color coding (currently in admin view):



Protocol summary linked under individual stone (admin view):

MAINTENANCE STATUS

Priority: **Long term / monitor** ●

Date of Next Assessment: **Monday July 1, 2024**

Environmental and Site Description:
Shaded by the corner of the church.

Current Condition(s): **Vegetation Efflorescence**

Previous Repairs: **Sandblasting**

Suggested Repairs:

Cleaning

View Protocol ▼

Mortar repair/repointing

View Protocol ▼

EDIT
MONUMENT

Cleaning protocol drop down linked to a stone (admin view):

HEADSTONE AND MONUMENT CLEANING PROTOCOL ONE

Skill Level:
Easy; applicable project for volunteers and parishioners

Materials & Tools:

- Soft bristle brush with wooden or plastic handle; Tampico or natural bristles recommended
- D/2 brand or similar historic-masonry approved organic cleaner
- Hand pump sprayer or hose
- Clean water source for rinsing
- Soft plastic spatula



Monuments page, searchable by name or priority:

Q MonumentFinder™

All Monuments History Give Logout

SORT BY:

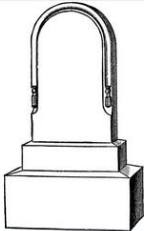
NAME ▼

PRIORITY

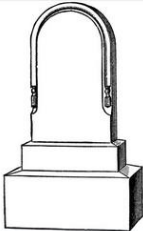
NEXT REVIEW

DOB

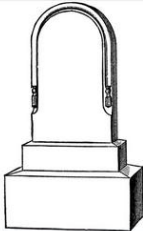
DOD



FAMILY NAME: ADDISON
Mrs Mary Aiken Addison
1771 — 1808
[CONTINUE READING ▶](#)



FAMILY NAME: ASH
Richard Cochran Ash
1723 — 1770
[CONTINUE READING ▶](#)



FAMILY NAME: ASH
Caroline Matilda Ash
1791 — 1822
[CONTINUE READING ▶](#)

D: Summary of ACBA Faculty and Student work a ACBA, Spring and Fall 2019 Semester

Simeon Warren and his upper level masonry students have completed several repairs at CCC utilizing tools and materials supplied with the grant, including:

- repairing historic box tombs, including disassembling, creating new sympathetic foundations, repairing damaged pieces of stone, and rebuilding the above grade stone tombs.
- pinning a badly damaged marble upright stone and installing a sympathetic marble backer for stabilization
- Slate repair on the Hutson monument/slab (core drill was utilized for this repair)
- Repairing two cracked eighteenth century slate tablets (including resetting, cleaning, and reattaching damaged pieces, and fixing structural cracks)



The box tomb after initial stabilization in May 2019.

E: Post Grant Cycle: Ongoing Activities

Site Scanning and 3-D documentation:

Morris “Marty” Hylton, director of the Preservation Program with the University of Florida, has been selected to carry out 3-D mapping/site documentation at Circular Churchyard (paid for with matching grant from CCC). This will allow for the physical documentation of the stones in situ, as they appear texturally in three dimension. The mapping will also identify their exact locations in the churchyard, which will be included in the CCC documentation website. Hylton is scheduled to do the site scanning in late November 2019.

Continued condition assessment and documentation:

- Sophomore preservation students in Fall semester have each been assigned a stone to assess using the documentation assessment sheet prepared as part of the dissemination portion of this project
- Senior stone students will also continue to photo document and create condition assessments for additional stones
- Senior stone students will then train with Will Bullock to input the data into the website.

Continued dissemination:

Planned dissemination lectures, open to the public, to share the workshop findings and to discuss the documentation and preservation work at CCC. Butler and Warren will share the findings from the workshops and will provide attendees with repair protocol worksheets

- Report and presentation of website at Circular Congregational Church and ACBA, dates TBA
- Early February, lecture at St. Stephen’s Episcopal Church