



CPA Full Grant Application FY26

Project Information

Project Name: Construction Phase of Veterans Memorial Cemetery & Monuments

Project Location: 1330 Broadway & additional citywide monument sites

Please indicate the primary category that applies to this project: Historic Preservation

If this project addresses multiple CPA program areas, please select all that apply: Open Space / Recreation Historic Preservation

CPA Funding Request \$306,250

Please select the description that best matches your request: This application requests additional money to complete a scope of work that was previously awarded CPA funds.

Applicant Information

Is the City of Somerville the primary applicant? Yes

Is this application for a property or asset owned by the City of Somerville? Yes

Does another organization or entity own the property or hold an interest in the property? (Including a condominium association) No

Primary Contact Person: Jerome Thomas, Director of Veterans' Services

Email nblanchard@somervillema.gov

Narrative Questions

Please respond thoroughly to each of the questions below

Description:

This project seeks to preserve, restore, and rehabilitate the Somerville Veterans Memorial Cemetery at 1330 Broadway to include:

- WWII Monument
 - 69 Bronze flat grave markers
 - Lt Logan Bust/Statue
 - Korean Memorial Marker
 - Vietnam Memorial Marker
 - fence assembly and entrance post
- as well as additional historic veterans' monuments located throughout the city:
- WWI Monument -Union Square
 - Civil War Monument -Milk Row Cemetery
 - Magoun WWII plaque
 - East Somerville Memorial at E. Somerville Library
 - Honor Roll Wall at City Hall (WWII, Korean, Vietnam)

These sacred sites serve as solemn places of remembrance for Somerville's veterans and are central to civic traditions, including Memorial Day ceremonies and other public commemorations.

The proposed scope of work includes:

Conservation of headstones, plaques, and memorial structures

Restoration of monument surfaces, inscriptions, and hardscape features

Landscape rehabilitation to improve accessibility, safety, and visual integrity

Installation of interpretive signage to enhance public understanding and engagement

Together, these improvements reflect the City's commitment to honoring military service, preserving cultural heritage, and ensuring these sites remain dignified, safe, and accessible for future generations.

Status:

Significant planning and groundwork have been completed to prepare this project for implementation. A comprehensive Conditions Assessment and Preservation Survey, conducted by Daedalus Preservation in September 2025, documented the physical condition of the cemetery and monuments, prioritized treatment needs, and outlined recommended preservation approaches.

Based on this professional assessment, the following priorities were established:

Somerville Veterans Memorial Cemetery (1330 Broadway) – Top priority, including all interior features such as headstones, plaques, monuments, and landscape rehabilitation. Fence treatment is noted but considered secondary.

World War I Monument (Union Square) – Second priority for preservation work.

Civil War Monument (Milk Row Cemetery) – Third priority, requiring stabilization and conservation.

Magoun Square and Library Monuments – Next in sequence for preservation efforts.

Honor Roll – Identified for closer evaluation to determine an appropriate treatment plan.

Additionally, the City submitted an Eligibility Determination Form (EDF) during the initial CPA application round, detailing the project's goals, scope, and alignment with CPA priorities. Input has also been gathered from city departments, veterans' organizations, and preservation professionals, confirming community support and readiness to advance into the construction phase.

While routine maintenance, minor repairs, and landscape care have been carried out over the years, no comprehensive preservation effort has ever been undertaken. This phase represents a critical opportunity to stabilize, restore, and enhance the cemetery and monuments for long-term stewardship.

Project Scope:

CPA funds will be used for the preservation, restoration, and rehabilitation of the Somerville Veterans Memorial Cemetery at 1330 Broadway and prioritized historic monuments throughout the city. Based on the Conditions Assessment completed by Daedalus Preservation in September 2025, the following tasks will be carried out with CPA support:

Conservation of memorial features – cleaning, stabilization, and preservation of bronze grave markers, headstones, plaques, and inscriptions.

Monument restoration – treatment of the World War II Memorial, Logan Memorial, and related structures within the cemetery.

Landscape rehabilitation – improvements to accessibility, pathways, and surrounding grounds to ensure public safety and dignity of the site.

Priority work beyond the cemetery – phased treatment of city monuments, beginning with the World War I Memorial in Union Square and the Civil War Memorial at Milk Row Cemetery.

If non-CPA funding becomes available, it will be applied to secondary tasks such as fence assembly and interpretive signage, or used to accelerate later phases (Magoun Plaque, East Somerville Memorial, and Honor Roll at City Hall).

The overall project budget is based on the detailed cost estimates provided by Daedalus Preservation. CPA funds will be used for the priority preservation and restoration tasks, while non-CPA funding may cover certain components, such as the fence assembly, if the City of Somerville (through DPW) is able to complete and fund that portion. The total CPA request will be reduced accordingly if the City assumes responsibility for the fence work.

Cost Estimate:

The project budget is based on detailed recommendations and line-item cost estimates provided in the Daedalus Conditions Assessment. These estimates reflect the conservation, treatment, and rehabilitation needs of each site, organized by priority. The report identifies the Veterans Cemetery as the highest priority, with associated costs of approximately \$221,000 for memorial and marker treatments, plus \$120,000 for fence assembly.

Additional monuments citywide are estimated at \$2,000–\$15,000 each.

Subtotal minus contingency is \$245,000

This estimate may be reduced if the City of Somerville, through DPW, undertakes the fence assembly portion of the project.

All numbers will be further broken down in the attached CPA Budget Form, including soft costs (study/design), direct construction, and a recommended contingency of 25% (\$61,250) recommended by OSPCD

Funding Sources:

At present, the Somerville Veterans' Services Department is applying for CPA funds as the primary funding source. The department is also exploring potential supplemental support through:

State-level veterans' preservation or cemetery grant programs.

Partnerships with local veterans' organizations and civic groups for in-kind labor and community volunteer support (such as landscape maintenance).

Philanthropic or commemorative donations designated for historic veterans' memorials.

To date, no outside funding has been secured. Previous attempts have not been made for these specific projects, as the CPA process is the first comprehensive funding pathway pursued.

Anticipated Future Funding:

If full CPA funding is not awarded in FY26, the project may be phased by priority:

1. Veterans Cemetery (highest priority)
2. World War I Memorial (Union Square)
3. Civil War Memorial (Milk Row)
4. Secondary monuments (Magoun Plaque, East Somerville Memorial)
5. Roll of Honor (City Hall) – requires further study

In the event of partial funding that would require the project to be phased over multiple years, the overall cost of the project will increase because the conditions of the cemetery and monuments will continue to deteriorate. Based on industry-standard cost escalation for preservation and construction projects, we anticipate an approximate 7% increase per year to account for continued deterioration as well as inflation in materials and labor. In that scenario, we would need to request additional CPA funding to complete the project.

Timeline:

The project is anticipated to begin in early 2026, following the CPA funding award and contracting process. Based on the Conditions Assessment and discussions with Daedalus Preservation, the Veterans Cemetery restoration work will require approximately 3–4 months to complete once work is underway.

A specific timeline is critical, as the City aims to complete the project in advance of Memorial Day 2026. This will ensure that the annual Memorial Day ceremony can be held at the Somerville Veterans Memorial Cemetery in a restored and dignified setting, while also commemorating the 250th anniversary of both the founding of Massachusetts and the nation.

Projected schedule:

January–February 2026: Contract execution, final scope confirmation, mobilization.

March–May 2026: Implementation of restoration and rehabilitation work at Veterans Cemetery, including conservation of memorials, repair of grave markers, and landscape improvements.

By Memorial Day 2026: Project completion and rededication during the annual public ceremony.

Future phases for additional monuments identified in the Conditions Assessment will be planned as separate funding requests in subsequent CPA rounds.

Project Feasibility:

The project is considered highly feasible due to prior planning, completed assessments, and city support. The Conditions Assessment and Preservation Survey conducted by Daedalus Preservation provides a detailed roadmap for the restoration and rehabilitation work, allowing for accurate cost estimates, prioritization, and sequencing of tasks.

Potential barriers to on-time commencement and completion are minimal but include:

- Weather or seasonal constraints affecting outdoor conservation work (spring implementation is planned to mitigate this).
- Coordination with contractors and vendors, which will require ongoing communication to ensure scheduling aligns with project milestones.
- Site access and security, particularly for monuments located in publicly accessible areas; coordination with city departments and property managers will address this.

Required approvals and compliance measures:

- All work will comply with City of Somerville regulations and preservation standards.
- No additional zoning variances are anticipated for the Veterans Cemetery; work is limited to restoration and rehabilitation within existing public spaces.
- Environmental or permitting requirements are minimal, as the work does not involve significant ground disturbance or new construction. Any unforeseen requirements will be addressed in coordination

with city staff and relevant agencies.

The project is ready to advance into the construction phase, with all necessary planning, assessments, and departmental coordination in place to ensure timely completion by Memorial Day -Monday, May 25th 2026.

Attachments

General

* Budget Form

Plans and Reports (if available)

Report or condition assessment by a qualified professional describing the current condition of the property, if available

**Somerville Community Preservation Act
Grant Application Budget Form**

Project Name: Construction Phase of Veterans Memorial Cemetery & Monuments

Applicant: Somerville Department of Veterans' Services

Please list your sources of funding for this project

SOURCES OF INCOME

Source	Amount	Secured? (Yes/No)	Status of Funding Source
CPA Request FY26	\$306,250.00	No	Application submitted
City Operating funds via DPW*	-\$120,000.00	No	Request submitted for capability and funds
TOTAL	\$186,250.00		

Please explain your project costs and explain where CPA grant funds will be used

USES / EXPENSES*

	CPA Grant Funds Budget	Non-CPA-Funded Project Costs	Total Project Costs	Section Total
Soft costs line items (design and non-construction costs)				
Study, analysis or design				
Project Management (May not exceed 15% of grant award.)				
Subtotal				\$0
Building/Construction line items				
Veterans Cemetery (Phase 1) WWII Monumen	15,000		15,000	15,000
Bronze Grave Markers	70,000		70,000	70,000
Bronze Sculpture/ Lt Logan Bust	12,000		12,000	12,000
Granite Vietnam and Korean Markers	4,000		4,000	4,000
*Iron Fence & Gate Assembly		120,000	120,000	120,000
WWI Memorial Union Square	5,000		5,000	5,000
Civil War Monument -Milk Row Cemetery	15,000		15,000	15,000
Magoun Plaque WWII -Trum Field	2,000		2,000	2,000
East Somerville Memorial -East Somerville Library	2,000		2,000	2,000
Honor Roll Wall (WWII, Korean, Vietnam) City Hall				
Subtotal				\$245,000
Other				
	\$61,250			\$306,250
Contingency (25% contingency is strongly recommended for all construction projects.)**				
**25% INSTEAD OF 15% AS RECOMMENDED BY OSPCD				
Subtotal				\$306,250
TOTAL	\$186,250.00	\$120,000.00	\$245,000.00	

PLEASE NOTE:

- Please round numbers and do not use cents
- Your budget must be specific to your project.
- All CPA grant funds must be spent on the scope of work you have defined in this budget.
- If using an estimate from a contractor, please breakdown your estimates by line item. Do not submit a lump sum line item on this form.

The above reflects:

Phase 1 (Veterans Cemetery), per Daedalus' priority list.

Secondary monuments (Magoun Plaque, WWI Union Square, Civil War Milk Row, East Somerville, and City Hall Honor Roll) are not included in this phase's CPA request but are identified in the Conditions Assessment for future funding rounds.

City may support signage and smaller-scale repairs outside CPA scope.



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Preservation Survey

Objects: Veterans Memorials & Veterans Cemetery Objects in the City of Somerville Ma

Materials: Various types of stone & metal

Prepared For: Somerville Veterans Services

Contact: Nancy Blanchard

As Requested, Daedalus will supply the City of Somerville, Office of Veterans Services with a **Preservation Survey** for the historic monuments, markers and architectural ornament which honor those who served this nation.

The survey will include the following (From approved 2024 Proposal)

- Detail the **current condition** of the comprised elements of the Veterans Cemetery (PAGE 3) this important, historic and powerful site which was built in gratitude for the extreme sacrifices made by our ancestors. The site incorporates a variety of objects made from different materials, each requiring a unique plan for treatment. These elements include:
 - The Bronze Grave Markers
 - The Bronze Plaques
 - The Bronze Sculpture/Bust
 - The Granite Memorials
 - The Entrance Posts and Iron Fence & Gate

- In addition, the following Veterans Memorials across the city will be included in the survey:
 - Magoun Plaque @ Trum Field (PAGE 39)
 - WW 1 Memorial @ Union SQ(PAGE 44)
 - East Somerville Memorial @ E. Somerville Library (PAGE 50)
 - Civil War Memorial @ Som. Ave Cemetery (PAGE 55)
 - WW2/ Korean Memorial @ City Hall (PAGE 66)



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Approach for survey

- The conditions will be documented by describing the way the objects were fabricated and noting the environmental circumstances which have caused the degradation. The report will include photographs which will help illustrate the written descriptions
- Recommend **treatment procedures**, methods and materials to be used for the cleaning and surface repairs of each of the elements listed.
- Treatment procedures proposed will follow the Secretary of Interiors Standards of Restoration (title 36/ Section 68) as well as the Guidelines for Treatment of Historic Works set by the American Institute for Conservation. Each treatment procedure proposed (approach) will be justified with a description of why the treatment is needed (reason).
- Provide the owners with a range of **anticipated costs (PAGE 84)** for the hands- on treatment of the objects which can be performed by Daedalus as requested.
- This survey should be used as **a guideline** for approaching treatment.
- This survey will be an important snap-shot of the condition of the site which can be added to the historical record and used by future generations to help guide their preservation efforts.



Part One: Veterans Cemetery/ Broadway

Overview

The Veterans Cemetery site contains multiple historic objects which pay tribute to the citizens of Somerville who served our country since World War Two.

- The central point of the cemetery hosts an art-deco styled World-War Two Memorial fabricated in granite. The memorial is comprised the three steps leading to a platform. Atop on the platform are two main elements. At the front a sculpted heroic size (8' tall) female figure holding a laurel branch and a sword stands on decorated base (4' tall). Behind the figure a decorative granite panel holds a bronze plaque (4' x 6') which lists the names of those who made the supreme sacrifice in World War Two. The lower sections of the panel have carved emblems for each military branch.
- The burial section of the cemetery houses graves marked with bronze plaques. The plaques are 24" x 12" and list the Name, Rank, Conflict, DOB & DOD of each of the individuals.
- A memorial to Lt. James Logan sited behind/ proper right of the WW 2 Memorial. It is comprised of bronze bust of the airman and bronze plaque (2' x 4') which details his acts of bravery which lead to the award of a purple heart. The bust and plaque are affixed to an undecorated granite pedestal.
- On the periphery of the burial section, there are two granite dedication markers (each about 4'x 3'x 8" set upon a granite pedestal):
 - A Marker to those who served, suffered or died in Vietnam (1963-1973)
 - A Marker to those who were missing in action or died at Sea during WW 2 & Korea
- The cemetery is surrounded by a cast/wrought iron fence system (250' feet). There are four granite posts which support the fence at the Broadway entrance. The two inner posts have a bronze plaques (*Somerville Veterans Memorial Cemetery*) affixed to them.

Overall, the cemetery appears well maintained. Many of the conditions noted and subsequent treatment recommendations are consistent with degradation found in historic elements in urban settings.

The intermingling of a functional green space and historic hardscape elements is always a challenge to maintain for public works staff. In some instance, the care for one element can



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lead to damage of another. Also, well-meaning attempts at care can also lead to unintended degradation and surface appearance which are not in line with the intended appearance of the objects.

All of these factors have been observed on the cemetery elements in this survey.

The following materials have been used to fabricate the objects which are included in this survey:

Granite

- Granite is a coarse-grained igneous rock composed mostly of quartz, feldspar, and plagioclase. Granite is a siliceous stone, meaning it is rich in silica. Granite is stone commonly used to make memorials, markers and monuments. It is also used as a building stone found in foundations, walls and curbs. Granite is quarried in large blocks and cut to size and shapes. Sculpted elements may have originally designed by artists in clay or plaster models by artists and then copied (and enlarged) by skilled stone carvers.

Mechanisms of Decay

- Exposure to acidic outdoor environment (disaggregation of surface)
- The build-up of bio-growth on surface (disaggregation of surface)
- Moisture, rain, snow getting trapped between mortar or blocks during freeze-thaw cycles (displacement, cracking)
- The use of sodium chloride based ice-melt on adjacent surfaces
- External impacts (vehicles, lawn care equipment, trees)

Bronze

- Bronze is an alloy the is comprised of mostly copper (upwards of 90%) with tin, lead and zinc in the mixture. The casting process for the plaques likely involved pouring the molten mixture into a sand mold (which had the lettering and details on place). For the sculpted elements, the casting process involves pouring the molten mixture into molds (which are taken from the artist's model). The cast sections are fit together with a series of internal tenons and splints and external brazed fills. Once the bronze has formed, the surface is chased to remove imperfections in the casting and joinery. A color (called a patina) is then added to the surface of the bronze using a series of oxidizing chemicals and then sealed with a wax or a coating. Generally, the plaques from this era where patinated to a warm brown background with the lettering highlighted to create a contrast to the background. Sculptures& busts would have been patinated to a warm brown.



Mechanisms of Decay

- Exposure of bare metal to an acidic environment will lead to surface corrosion
- Degradation of surface coating will lead to filiform corrosion; water becoming trapped between coating a surface
- Over cleaning surfaces (abrasive blasting, acid washing) will lead to loss of original surfaces

Cast/Wrought Iron

- Cast iron is primarily an alloy of iron and carbon, with silicon, manganese, and other elements present in smaller amounts. The elements which make up the fence were cast in molds and likely assembled on-site using mechanical techniques.

Mechanisms of Decay

- Many of iron's properties make it an ideal material to make decorative architectural ornamentation such as fences. It is strong, easy to cast and easy to machine. However, it is not stable in outdoor urban environments. If not coated (painted) it will begin to degrade immediately (rust).
- Corrosion products types are classified in numerous ways and they are a reaction to different environmental conditions. The main types of corrosion we observed are:
- **Filiform Corrosion:** This type of corrosion occurs when moisture gets beneath the painted surface. It can start as small failures and build upon itself. This appears to be main catalyst for the losses, delamination, and exfoliation observed.
- **Fretting Corrosion:** This type of corrosion can occur at points where sections are attached together mechanically (with bolts, screws, etc.) and these connection points become stressed due to load or movement. This type of corrosion can also start small a lead to larger losses, delamination and exfoliation.
- **Microbial influenced corrosion:** This type of corrosion formed in pits beneath biological matter. It can create a micro-climate where corrosion can accelerate and build upon itself.



Object 1:1 World War Two Memorial

Elements

The Memorial's base is comprised of a five sided three stepped platform comprised of thirteen stone blocks. The platform is about 16' x 10' at its longest points and rises about 2' from the asphalt path. There is likely a concrete foundation below middle of the platform.

The allegorical figure (8'tall) representing war & peace, is a robed female holding a sword and laurel branch, it is fabricated from a single stone. The figure is mounted a three stone pedestal comprised of a die section (3' high) with carving of a stylized eagle and the text " City of Somerville/ World War Two Memorial, a mid-block (>1' high) with the dates 1941-1945 set between floral motifs and an undecorated base which rests on the platform. This assembly sits in the front of the platform.

At the rear of the platform is a stylized U-shaped granite panel (4' high) fabricated from a single stone. When looked at from a distance the panel gives the illusion of being part of the figure's pedestal, but it is set back about 2'. The lower corners of the panel have carved emblems of the military branches and the sides have a fluted decoration. The back of the panel houses a bronze plaque (4'x 6') with names of approximately 300 service members who died during World War Two.

Condition Notes

The granite elements are covered with a layer of soiling and accretions (carbon staining, biological growth). There is a yellow hue on the surface which is likely the result of the dissolution of iron ions in the stones matrix. There is some disaggregation of the stone's surface which has led to a loss of the crispness from when the memorial was fabricated. These conditions are typical of the type of surface decay found on outdoor granite elements from this era.

There is layer of thicker dark accretions (efflorescence) on edges of the blocks at the intersections on the bottom of the pedestals and the top of the platform. This is likely a calcium sulfate crust formed as the mortar in the joints degraded.

The majority of the mortar between the blocks of granite has degraded leaving open joints. The remaining mortar in the joints is cracked and failing.



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There is some minor displacement of several of the stair elements. The memorial sections have remained square. There is likely an additional foundation below the platform.

There is a crack and subsequent loss on the lower proper right corner of the decorative panel. There are several small chips and losses on other locations.

The bronze panel appears to have been treated relatively recently. The bronze is covered with a layer of reddish/brown coating (paint/wax) which is failing (flaking, chalking) making the names and inscriptions difficult to read. The colors and toning are not in line with the original pallet and styling. It is likely that applied paint is covering a layer of corrosion products which are noticeable on the other bronze elements in the cemetery.



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Image from
1953



Image from
2025



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Overall



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Overall





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Loss/Crack
proper left
side





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Gypsum
Crust

Loss/Crack
proper right
side



Displacement
of blocks/
open joints



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Displacement of
Blocks/ Open
Joints



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Bronze Plaque- chalked paint/
illegible letters



Treatment Recommendations

Granite

Cleaning Soiling & Accretions

The **reason** for cleaning is to remove accretions which take away from the original intended surface appearance, improve the overall aesthetic and remove bio-growth which is actively damaging the stone surfaces.

A cleaned surface will allow for better identification of areas of distressed surfaces.

The **approach** is to use the gentlest (i.e. limiting surface loss) techniques/materials that will be effective. Having an overall surface that is clean and consistent with limited loss of surface detail is more desirable than having a surface which is completely cleaned by removing layers of surface.

- Heavy build-up of bio-growth should be removed mechanically using plastic scrapers as needed.
- The surface should be washed with a quaternary ammonium cleaner (biocide), applied at the highest allowable dilution per manufacture's recommendations.
- The surface should be rinsed using a pressure washer at psi no greater than 800 using a fan tip at an even distance greater than 12" away from the surface.
- If staining is visible, this process can be repeated.
- If additional cleaning is needed, other pH neutral masonry cleaners can be tested.
- Once the surface is cleaned overall, the cracks should be flushed with a small steam cleaner or water-pick as needed.
- The efflorescence should be removed mechanically if feasible. If needed a non-acidic Efflorescence remover could be used locally (applied per manufacturers recommendations)



Repair of damaged stone elements

The **reason** for repairing losses is to restore the visual continuity of the form as well as to fill the voids in the stone. Filling the voids will limit the pooling of water, snow, ice in the matrix of the stone.

The **approach** is to stabilize the break by the injecting the voids with adhesive and grouts formulated for on historic stone element and fill the losses with appropriate repair mortars

New repairs which match the tone and texture of the stone will help restore the intended visual experience. Surface fills should follow the original forms with precision.

Products may include:

- custom repair mortars from companies such as Edison, Cathedral Stone or Limeworks.
- custom repair mortar made on-site by conservation firm comprised of colored sands and binders.

Raking & Repointing Mortar Joints

The degraded mortar between the blocks of stone should be raked and re-pointed with a mortar appropriate for use on granite and limestone, respectively.

The **reason** for removing damaged mortar and repointing the joints is to repair the visual appearance and fill the joint with a material that will help to reduce debris and water infiltration between the stone blocks.

The **approach** is to carefully remove degraded mortar and replace with a mortar which is appropriate in color and composition.

- Mortar should be removed from the joints between the blocks using hand chisels or small grinding wheels (4")
- Granite should be re-pointed with a mortar mix that is close to a type S mixture which matches the historic nature of the original mortar.



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Bronze Plaque

The Surface should be cleaned of the coating applied during the last treatment campaign, re-patinated as needed, and re-coated.

The **reason** for treatment is that the coating applied is past it's expected life span. Once the coating begins to break down it can trap moisture and damage the original surface. Older coatings become chalked and lose the intended surface appearance.

The **approach** is to remove degraded coating and corrosion products with techniques and materials that will not damage the bronze surface, and to restore the intended surface finish using traditional coloring methods.

- The surface should be cleaned of coating using water from a hot-water pressure washer and organic solvents as needed.
- Once the coating is removed the patina should be re-integrated using traditional patina solutions applied using heat from a torch
- The lettering should be highlighted by lightly brushing the high points with a bronze brush and/or fine grit abrasive pads
- The surface should be coated with a at least three coats (1 mil) of Incralac (or approved equal) applied using an HVLP spray system.



Object 1:2 Flat Bronze Grave Markers

Elements

The flat bronze grave markers are aligned in six rows. There are a total of 69 markers.

The majority of the markers memorialize those from World War Two/Korea. The eastern most row memorializes those lost in Vietnam (11).

The elements appear to be standard issue markers which were provided by the VA. You can find the information about them [here](#).

Condition Notes

Many of the markers are sunk into the grass, several inches below grade.

We carefully excavated the soil adjacent to couple of markers (Row 2 & 3). The markers appear to be set on concrete pedestals which are at least 8" in depth. There is no indication that the markers were intended to be set higher than the grass line.

There are only a few instances of nicks and scrapes from lawn care equipment. Which was a pleasant surprise based on the location. During one of our site visits I had a conversation with the one of the DPW staff tasked with caring for the cemetery. The system they have in place for mowing around the markers is working well.

However, the bronze surfaces have degraded as a result of exposure to an outdoor urban environment. There is a loss of original surface coloration and areas of active corrosion products on the surface.



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Flat Grave Marker: Bronze

The flat bronze grave marker is 24 inches long, 12 inches wide, with 3/4 inch rise. Weight is approximately 18 pounds. Anchor bolts, nuts and washers for fastening to a base are furnished with the marker. The government does not furnish a base.



Flat Bronze Grave Marker

Information from VA web-site:
Intended Appearance



2025 Example Current
Condition



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Markers in Rows



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Excavation
to determine
mounting
system





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Treatment Recommendations

The Surface should be cleaned of the old coating and corrosion, re-patinated, and re-coated.

The **reason** for treatment is that the coating applied is past it's expected life span. Once the coating begins to break down it can trap moisture and damage the original surface. Older coatings become chalked and lose the intended surface appearance. Corrosion products on the surface are disfiguring; active corrosion continues to degrade original surfaces.

The **approach** is to remove degraded coating and corrosion products with techniques and materials that will not damage the bronze surface, and to restore the intended the surface finish using traditional coloring methods.

- The surface should be cleaned of coating using water from a hot-water pressure washer and organic solvents as needed.
- Once the coating is removed the patina should be re-integrated using traditional patina solutions applied using cold patina.
- The lettering should be highlighted by lightly brushing the high points with a bronze brush and/or fine grit abrasive pads
- The surface should be coated with a at least three coats (1 mil) of Incralac (or approved equal) applied using an HVLP spray system.

Note: There is no need to re-set the grave markers as there is no official standard for how the markers should be set. The current configuration allows the markers to be viewed properly and allows for the DPW staff to care for the adjacent green spaces without damaging the markers



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Object 1:3 Memorial to Lt. James Logan

Elements

Sited behind/ proper right of the WW 2 Memorial. The memorial comprised of bronze bust of the airman and bronze plaque (2' x 4') which details his acts of bravery which lead to the award of a purple heart. The bust and plaque are affixed to an undecorated granite pedestal.

Condition Notes

The bronze surfaces are covered with a thin layer of copper corrosion products intermingled with a degraded coating. Additionally, there are large deposits of bird guano stuck to the upward facing surfaces of the bust.

Untreated bronze elements exposed to an urban environment will corrode due to exposure to acidic precipitation (snow, rain, humidity). When a bronze corrodes it is actively losing its original surface layer and overtime the sculpted forms will become compromised. The green build-up on the surface are corrosion products. It is not known when treatments were performed during the sculptures history, but based on the current condition (we observed that some of the edges of the pitting has been smoothed slightly), it is possible that sculpture may have been blasted or sanded with hard abrasives.

External Conditions

The plaque is partially blocked by plantings.



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Plantings
obscuring text

Overall &
Close up of
figure



Bird guano



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Treatment Recommendations

The Surface should be cleaned of the old coating and corrosion, re-patinated, and re-coated.

The **reason** for treatment is that the coating applied is past it's expected life span. Once the coating begins to break down it can trap moisture and damage the original surface. Older coatings become chalked and lose the intended surface appearance. Corrosion products on the surface are disfiguring; active corrosion continues to degrade original surfaces.

The **approach** is to remove degraded coating and corrosion products with techniques and materials that will not damage the bronze surface, and to restore the intended the surface finish using traditional coloring methods.

- The surface should be cleaned of coating using water from a hot-water pressure washer and organic solvents as needed.
- Once the coating is removed the patina should be re-integrated using traditional patina solutions applied using heat from a torch
- The lettering should be highlighted by lightly brushing the high points with a bronze brush and/or fine grit abrasive pads
- The surface should be coated with a at least three coats (1 mil) of Inctalac (or approved equal) applied using an HVLP spray system.

Note: The plantings in front of the plaque should be cut back so the plaque is not obscured.



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Object 4: 1 Upright Memorials

A Marker to those who served, suffered or died in Vietnam (1963-1973)

A Marker to those who were missing in action or died at Sea during WW 2 & Korea.

Elements

Each marker is comprised of two sections of granite. The Inscription block (~4x 3 x 8") are each set on undecorated base which extends about 6" wide of each side. There is mortar joint between the inscription block and the pedestal.

Condition Notes

The granite elements are covered with a layer of soiling and accretions (carbon staining, biological growth). There is some disaggregation of the stone's surface which has led to a loss of the crispness from when the memorial was fabricated. These conditions are typical of the type of surface decay found on outdoor granite elements from this era.

There are some minor chips on the edges of each of the blocks. There are scratches and ferrous stains on the pedestals which is consistent with damage from lawn care equipment.

The WW2/Korea Memorial appears not to be securely pinned to the pedestal- the marker moves when pushed on the top.

The Vietnam Memorial appears to be more securely mounted.



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Vietnam
Marker





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WWII & Korean
Marker



Degradation or
lack of internal
support which
holds the marker
to base



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Treatment Recommendations

Cleaning Soiling & Accretions

The **reason** for cleaning is to remove accretions which take away from the original intended surface appearance, improve the overall aesthetic and remove bio-growth which is actively damaging the stone surfaces.

The **approach** is to use the gentlest (i.e. limiting surface loss) techniques/materials that will be effective. Having an overall surface that is clean and consistent with limited loss of surface detail is more desirable than having a surface which is completely cleaned by removing layers of surface.

- Heavy build-up of bio-growth should be removed mechanically using plastic scrapers as needed.
- The surface should be washed with a quaternary ammonium cleaner (biocide), applied at the highest allowable dilution per manufacture's recommendations.
- The surface should be rinsed using a pressure washer at psi no greater than 800 using a fan tip at an even distance greater than 12" away from the surface.
- If staining is visible, this process can be repeated.
- If additional cleaning is needed, other pH neutral masonry cleaners can be tested.

Securing markers to pedestals

The World War Two Inscription Tablet should be lifted from the pedestal. If no existing holes connection system is observed, two holes should be drilled into the bottom of the marker which correspond to the top of the base. If an existing system is observed, it should be augmented to make a stable connection.

Marker should be re-mounted using stainless steel pins and setting mortar.



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Object 5:1 Fence Assembly

Elements

The cemetery is surrounded by a cast/wrought iron fence system (250' feet). There are four granite posts which support the fence at the Broadway entrance. The two inner posts have a bronze plaques (*Somerville Veterans Memorial Cemetery*) affixed to them.

Condition Notes

Ferrous alloys will degrade (rust, scale, delaminate, loose original surface) when exposed to the elements found in an outdoor urban environment. This means that the paint is tasked with being both an aesthetic component and a functional component. Even the most durable paints tend to fade and chalk very quickly in an outdoor urban environment; this makes it difficult to blend new paint when small areas get nicked, scratched, or vandalized.

In general, the iron fences and gate appear stable, however, some concerning conditions were observed in isolated areas, they include:

- Extensive flaking and scaling below painted layers
- Repairs made with welds which are trapping moisture and may not be structurally stable
- Necking of fence posts and upper and lower connections

The granite fence posts are covered with a layer of particulates and metallic staining. The mortar in the joints between the blocks is mostly cracked and no longer forms a seal.

The bronze panels appears to have been treated relatively recently. The bronze is covered with a layer of reddish/brown coating (paint/wax) which is failing (flaking, chalking). The colors and toning are not in line with the original pallet and styling. It is likely that applied paint is covering a layer of corrosion products which are noticeable on the other bronze elements in the cemetery.



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Entrance/ Post,
Plaques and
Fencing



Degraded Mortar on Post



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Damage to
fence posts





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Incongruent
Repairs



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Filiform
corrosion- paint
over rusted
elements





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Treatment Recommendations

Iron Fence

Removal of degraded paint, rust and scaling

Reason: Removing the degraded paint and surface corrosion will allow for the next phases of treatment to be accomplished. As noted, one of the main issues effecting this fountain is the filiform corrosion and this will be addressed starting with this process.

Approach: The degraded layers of paint should be removed mechanically with hand pads and with a rotary tool/ sanding disks. The paint removal process should be performed using with vacuum with a HEPA filter attached to the tools.

Painting

Reason: The painted surface will re-create the original intended appearance of the fence. The painted surface offers the best protection for the cast iron which will actively corrode in an outdoor setting if left un-coated.

Approach: The surface should be primed and painted with a system formulated for use in an out-door environment. There are some considerations that need to be discussed with owner in terms of the paint system. There are two schools of thought regarding painted outdoor ferrous surfaces: The first approach is using a more durable paint that is more difficult to maintain (a catalyzed paint system) the second approach is to use a less durable that is more easily maintained (an emulsion paint system). These options should be addressed/discussed with owner as the process moves forward.

Granite Posts

Raking & Repointing Mortar Joints

The degraded mortar between the blocks of stone should be raked and re-pointed with a mortar appropriate for use on granite.

The **reason** for removing damaged mortar and repointing the joints is to repair the visual appearance and fill the joint with a material that will help to reduce debris and water infiltration between the stone blocks.

The **approach** is to carefully remove degraded mortar and replace with a mortar which is appropriate in color and composition.



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- Mortar should be removed from the joints between the granite & limestone using hand chisels or small grinding wheels (4")
- Granite should be re-pointed with a mortar mix that is close to a type S mixture which matches the historic nature of the original mortar.

Bronze Plaques

The Surface should be cleaned of the coating applied during the last treatment campaign, re-patinated as needed, and re-coated.

The **reason** for treatment is that the coating applied is past it's expected life span. Once the coating begins to break down it can trap moisture and damage the original surface. Older coatings become chalked and lose the intended surface appearance.

The **approach** is to remove degraded coating and corrosion products with techniques and materials that will not damage the bronze surface, and to restore the intended surface finish using traditional coloring methods.

- The surface should be cleaned of coating using water from a hot-water pressure washer and organic solvents as needed.
- Once the coating is removed the patina should be re-integrated using traditional patina solutions applied using heat from a torch
- The lettering should be highlighted by lightly brushing the high points with a bronze brush and/or fine grit abrasive pads
- The surface should be coated with a at least three coats (1 mil) of Incralac (or approved equal) applied using an HVLP spray system.



Part Two: Magoun Plaque @ Trum Field

Overview

The memorial is comprised of four sections of granite- three stepped blocks which act as the base and die section (6' x 4') where a bronze plaque (2' x 4') listing the names of 35 service members who served in WW2 and a 5 sided bronze star (8") are mounted. There an additional inscription on the middle block of base block

Elements

Granite

- Granite is a coarse-grained igneous rock composed mostly of quartz, feldspar, and plagioclase. Granite is a siliceous stone, meaning it is rich in silica. Granite is stone commonly used to make memorials, markers and monuments. It is also used as a building stone found in foundations, walls and curbs. Granite is quarried in large blocks and cut to size and shapes. Sculpted elements may have originally been designed by artists in clay or plaster models by artists and then copied (and enlarged) by skilled stone carvers.

Mechanisms of Decay

- Exposure to acidic outdoor environment (disaggregation of surface)
- The build-up of bio-growth on surface (disaggregation of surface)
- Moisture, rain, snow getting trapped between mortar or blocks during freeze-thaw cycles (displacement, cracking)
- The use of sodium chloride based ice-melt on adjacent surfaces
- External impacts (vehicles, lawn care equipment, trees)

Bronze

- Bronze is an alloy the is comprised of mostly copper (upwards of 90%) with tin, lead and zinc in the mixture. The casting process for the plaques likely involved pouring the molten mixture into a sand mold (which had the lettering and details on place). For the sculpted elements, the casting process involves pouring the molten mixture into molds (which are taken from the artist's model). The cast sections are fit together with a series of internal tenons and splints and external brazed fills. Once the bronze has formed, the surface is chased to remove imperfections in the casting and joinery. A color (called a patina) is then added to the surface of the bronze using a series of oxidizing chemicals and then sealed with a wax or a coating. Generally, the plaques from this era where patinated to a warm brown background with the



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lettering highlighted to create a contrast to the background. Sculptures& busts would have been patinated to a warm brown.

Mechanisms of Decay

- Exposure of bare metal to an acidic environment will lead to surface corrosion
- Degradation of surface coating will lead to filiform corrosion; water becoming trapped between coating a surface
- Over cleaning surfaces (abrasive blasting, acid washing) will lead to loss of original surfaces

Condition Notes

The granite surface are covered with a layer of bio growth and accretions consistent with exposure to an outdoor urban environment.

The coating on bronze plaque is in good condition; there is layer of particulates covering the surface. A star bolt cover is missing from the proper left side lower corner.



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Missing
star bolt
cover



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Treatment Recommendations

Granite

Cleaning Soiling & Accretions

The **reason** for cleaning is to remove accretions which take away from the original intended surface appearance, improve the overall aesthetic and remove bio-growth which is actively damaging the stone surfaces.

The **approach** is to use the gentlest (i.e. limiting surface loss) techniques/materials that will be effective. Having an overall surface that is clean and consistent with limited loss of surface detail is more desirable than having a surface which is completely cleaned by removing layers of surface.

- Heavy build-up of bio-growth should be removed mechanically using plastic scrapers as needed.
- The surface should be washed with a quaternary ammonium cleaner (biocide), applied at the highest allowable dilution per manufacture's recommendations and/or anionic detergent.
- The surface should be rinsed using a pressure washer at psi no greater than 800 using a fan tip at an even distance greater than 12" away from the surface.
- If staining is visible, this process can be repeated.
- If additional cleaning is needed, other pH neutral masonry cleaners can be tested.

Bronze

Cleaning Surface

Reason: to restore intended appearance of surfaces.

Approach: The bronze plaque should be washed with a solution of anionic detergent in water and rinsed with water from a garden hose.

A new star bolt cover should be installed at location where the original is missing.



Part Three: World War One Memorial Union Square

Overview:

The memorial (1920) is comprised of decorated granite obelisk (8' x 4') which sits atop a two part granite pedestal. The middle block is inscribed on all sides.

Granite

- Granite is a coarse-grained igneous rock composed mostly of quartz, feldspar, and plagioclase. Granite is a siliceous stone, meaning it is rich in silica. Granite is stone commonly used to make memorials, markers and monuments. It is also used as a building stone found in foundations, walls and curbs. Granite is quarried in large blocks and cut to size and shapes. Sculpted elements may have originally been designed by artists in clay or plaster models by artists and then copied (and enlarged) by skilled stone carvers.

Mechanisms of Decay

- Exposure to acidic outdoor environment (disaggregation of surface)
- The build-up of bio-growth on surface (disaggregation of surface)
- Moisture, rain, snow getting trapped between mortar or blocks during freeze-thaw cycles (displacement, cracking)
- The use of sodium chloride based ice-melt on adjacent surfaces
- External impacts (e.g. vehicles, lawn care equipment, falling trees, bird guano)

Condition Notes

The granite elements are covered with a layer of soiling and accretions (carbon staining, biological growth). There is a yellow hue on the surface which is likely the result of the dissolution of iron ions in the stone's matrix. There is some disaggregation of the stone's surface which has led to a loss of the crispness from when the memorial was fabricated. These conditions are typical of the type of surface decay found on outdoor granite elements from this era.

There is an additional level of grease/ urban grime on the lower surfaces which are likely stains from people spilling food and drinks on the surface.

There is heavy build-up of bird guano on the upper sections of the memorial.



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Site Condition

It is apparent that over the past 100 years the monument has been encroached upon by the city's infrastructure. A concrete sidewalk has been poured around the base, a bus stop and restaurant with outdoor dining are located within about twenty-five feet of the monument. These are certainly understandable conditions in a highly congested urban center.

However, there are also a group of trash receptacles which have been sited about five feet from the monument.

From a conservation perspective, this is concerning because:

- There is greater likelihood of people depositing trash and debris on the surface of the memorial which will stain the surfaces
- Overflowing trash barrels attract pigeons whose guano is damaging to the stone.

As a citizen, it seems rather disrespectful to have these receptacles located so close to a memorial dedicated to those who perished in service of our country. It feels like there are alternative places to put the trash cans.



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Bird Guano

Yellow & Black accretions are consistent with exposure to an urban out-door environments

Food/drink stains

Overall



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Another place to locate these seems doable



Treatment Recommendations

Cleaning Soiling & Accretions

The **reason** for cleaning is to remove accretions which take away from the original intended surface appearance, improve the overall aesthetic and remove bio-growth which is actively damaging the stone surfaces.

A cleaned surface will allow for better identification of areas of distressed surfaces.

The **approach** is to use the gentlest (i.e. limiting surface loss) techniques/materials that will be effective. Having an overall surface that is clean and consistent with limited loss of surface detail is more desirable than having a surface which is completely cleaned by removing layers of surface.

- Heavy build-up of bio-growth should be removed mechanically using plastic scrapers as needed.
- The surface should be washed with a quaternary ammonium cleaner (biocide), applied at the highest allowable dilution per manufacture's recommendations.
- The surface should be rinsed using a pressure washer at psi no greater than 800 using a fan tip at an even distance greater than 12" away from the surface.
- If staining is visible, this process can be repeated.
- If additional cleaning is needed, other pH neutral masonry cleaners can be tested.

Raking & Repointing Mortar Joints

The degraded mortar between the blocks of stone should be raked and re-pointed with a mortar appropriate for use on granite and limestone, respectively.

The **reason** for removing damaged mortar and repointing the joints is to repair the visual appearance and fill the joint with a material that will help to reduce debris and water infiltration between the stone blocks.

The **approach** is to carefully remove degraded mortar and replace with a mortar which is appropriate in color and composition.

- Mortar should be removed from the joints between the blocks using hand chisels or small grinding wheels (4")
- Granite should be re-pointed with a mortar mix that is close to a type S mixture which matches the historic nature of the original mortar.



Part Four: East Somerville Memorial

Overview:

The Memorial (1961) is comprised of two sections of granite- a decorated inscription block (6' x 4') set upon base (1' high). The Memorial faces Broadway and is on the grounds of the East Somerville Library.

Elements

Granite

- Granite is a coarse-grained igneous rock composed mostly of quartz, feldspar, and plagioclase. Granite is a siliceous stone, meaning it is rich in silica. Granite is stone commonly used to make memorials, markers and monuments. It is also used as a building stone found in foundations, walls and curbs. Granite is quarried in large blocks and cut to size and shapes. Sculpted elements may have originally been designed by artists in clay or plaster models by artists and then copied (and enlarged) by skilled stone carvers.

Mechanisms of Decay

- Exposure to acidic outdoor environment (disaggregation of surface)
- The build-up of bio-growth on surface (disaggregation of surface)
- Moisture, rain, snow getting trapped between mortar or blocks during freeze-thaw cycles (displacement, cracking)
- The use of sodium chloride based ice-melt on adjacent surfaces
- External impacts (e.g. vehicles, lawn care equipment, falling trees, bird guano)

Condition Notes

When observed in August 2025, the front of the memorial was completely obscured by plantings. It may be a different viewing experience during the winter months.

The surface is covered with a layer of bio growth and assorted stains and accretions consistent with exposure to an urban setting.



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View of Marker
from the
sidewalk
& Fence





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View of Marker
from inside
fence



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View of Marker
with plantings
pulled away



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View of Marker
from rear/ Library
entrance



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Treatment Recommendations

The plantings in front of the memorial should be cut back or removed prior to cleaning.

Cleaning Soiling & Accretions

The **reason** for cleaning is to remove accretions which take away from the original intended surface appearance, improve the overall aesthetic and remove bio-growth which is actively damaging the stone surfaces.

A cleaned surface will allow for better identification of areas of distressed surfaces.

The **approach** is to use the gentlest (i.e. limiting surface loss) techniques/materials that will be effective. Having an overall surface that is clean and consistent with limited loss of surface detail is more desirable than having a surface which is completely cleaned by removing layers of surface.

- The surface should be washed with a quaternary ammonium cleaner (biocide), applied at the highest allowable dilution per manufacture's recommendations.
- The surface should be rinsed using a pressure washer at psi no greater than 800 using a fan tip at an even distance greater than 12" away from the surface.
- If staining is visible, this process can be repeated.
- If additional cleaning is needed, other pH neutral masonry cleaners can be tested



Part five: Civil War Memorial

Overview:

The Memorial was fabricated in 1863. It is comprised of six sections of marble, set upon a granite base. It features an elaborately carved inscription block, a tapered shaft and is capped by an eagle.

The following is a description of the memorial and snippet about its important history from Haskell's Historical Guide to Somerville

"In the central part of the cemetery on Somerville avenue, on a slight elevation of land, stands a soldiers monument, fifteen feet in height, resting upon a base forty-five inches square. Much of historic interest is associated with this monument, the claim being that it is the first memorial shaft erected by citizens as a public tribute to those "fallen heroes" who gave their lives in the service of their country during the civil war.

The monument was placed in position during the summer of 1863. At the apex of the shaft is a representation of an American eagle, with outspread wings. On the top stone is wrought military emblems surmounted by the letter B, the enlisted men of the town forming Co. B, 5 the Regiment. Inscribed on the base is the following: S.L.I. Incorporated A.D. 1853 There are tablets on three sides, bearing the names of Somerville soldiers who died or were killed in the war. On the front is a tablet with this inscription: "Their warfare is over, they sleep well." Erected by the Somerville light infantry with the balance of a fund generously contributed by their fellow citizens in aid of the company on entering the United States service for three months, April 19th, 1861, in memory of all from the town who have fallen in the service of their country"

[From Haskell's Historical Guide to Somerville, Massachusetts](#) (link to more information from the Somerville Museum

Marble is a calcareous stone, meaning it is primarily made of calcium carbonate. It has been chosen by artists, architects and craftspeople for millennia to create exquisite objects & architectural forms. Marble is easier than most stones to carve resulting in crisp clean lines and the uniform light color accentuates the quality of the carved forms. However, stones with a calcareous binder are susceptible to damage caused by exposure to urban outdoor environments. Though other factors contribute, the main **mechanism of decay** is how the stone reacts with acids found in the rain & the snow & the air which are a part of our local ecosystem. Acids will dissolve the calcium carbonate binder and open up pathways for freeze-thaw cycling and bio growth and the formation of gypsum crusts.



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Image of Memorial
circa 1900



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Condition Notes

It appears that the sculpture was conserved within the last ten years (2015). A short video which details this campaign from the Somerville Preservation Commission is linked [here](#).

For this report we do not have access to the record of treatment, but based on the appearance of the monument, and some memory of this campaign (Daedalus involved in repairing some of the other artifacts in Milk Row the third phase of this project-2016) it seems likely the monument was cleaned, re-pointed and consolidated.

There is a considerable amount of surface loss on the memorial, but it is in-line with what one would expect to observe on a marble sculpture which has withstood over 150 years of exposure in the metro Boston area.

There are some isolated areas of biological growth on the surface. There appears to be loss of some of the mortar used to fill the joints and the micro cracks. Both of these conditions are in-line with what we expect to see ten years after treatment.

While on-site the DPW staff indicated that was an issue with rats burrowing in the areas adjacent to monument. There is no indication that this is causing damage to the monument itself, but it is important to monitor all conditions. If the monument is to be treated in the future, those caring for it should be informed of this site-condition.



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Degraded fills
and in cracks
and joints



Build up of
biological
accretions



Treatment Recommendations

Cleaning Soiling & Accretions

The **reason** for cleaning is to remove accretions which take away from the original intended surface appearance, improve the overall aesthetic and remove bio-growth which is actively damaging the stone surfaces.

A cleaned surface will allow for better identification of areas of distressed surfaces.

The **approach** is to use the gentlest (i.e. limiting surface loss) techniques/materials that will be effective. Having an overall surface that is clean and consistent with limited loss of surface detail is more desirable than having a surface which is completely cleaned by removing layers of surface.

- The surface should be washed with a quaternary ammonium cleaner (biocide), applied at the highest allowable dilution per manufacture's recommendations.
- The surface should be rinsed using a pressure washer at psi no greater than 800 using a fan tip at an even distance greater than 12" away from the surface.
- If staining is visible, this process can be repeated.
- If additional cleaning is needed, other pH neutral masonry cleaners can be tested.

Filling cracks

The **reason** for filling the cracks is to restore the visual continuity of the form as well as to fill the voids in the stone. Filling the voids will limit the pooling of water, snow, ice in the matrix of the stone.

The **approach** is to use materials to fill the voids that are similar to the original in composition.

- Once the cracks are cleaned of degraded fill material, they should be injected with injection grout which is appropriate for use on historic calcareous stone.
- Once cracks are injected, the surface should be filled using the materials described in the filling loss section.



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Raking & Repointing Mortar Joints

The degraded mortar between the blocks of stone should be raked and re-pointed with a mortar appropriate for use on granite and limestone, respectively.

The **reason** for removing damaged mortar and repointing the joints is to repair the visual appearance and fill the joint with a material that will help to reduce debris and water infiltration between the stone blocks.

The **approach** is to carefully remove degraded mortar and replace with a mortar which is appropriate in color and composition

- Degraded Mortar should be removed from the joints between using hand chisels
- The joints should be pointed with a mortar mix containing natural hydraulic lime as the cement/binder and the sand should match the tone of the stone surface.



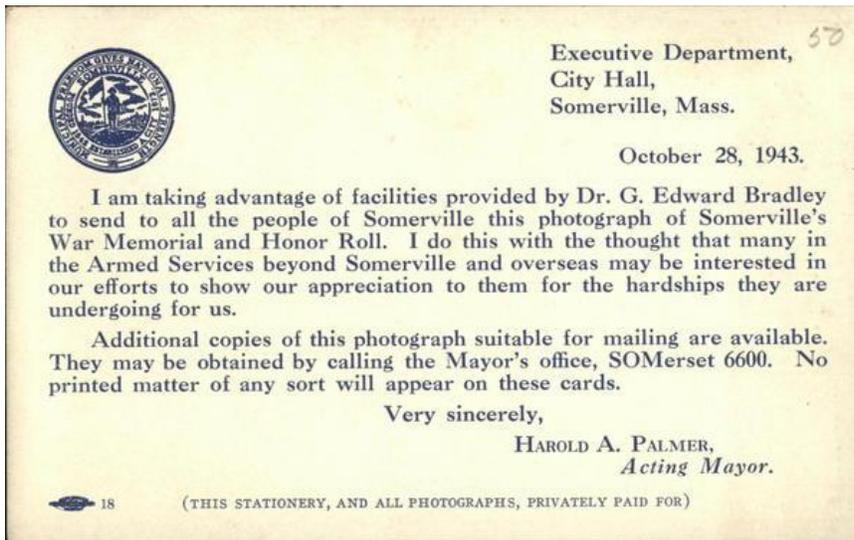
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Part Six: Honor Roll@ City Hall

Overview

The Honor Roll is sited in front of City Hall. This unique artifact was fabricated **during** World War Two to honor the citizens of Somerville who were serving. Having a memorail of this complexity made in the midst of a conflict is very uncommon. The following images are from a postcard dated October 28, 1943.





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There have been numerous changes to the Roll of Honor since 1943, we found evidence of one documented repair campaign. An article about the 1991 restoration can be found [here](#). The “face-lift” describes repairs to name enclosures, but no description of additions or reconstruction, which is apparent when comparing the 1943 image to a current image.

The memorial has definitely changed in size and likely in materials since the original incarnation. It is possible that the 1943 Memorial was taken down and completely re-built, salvaging some parts. More research should be done to determine the history of the memorial, but for the purposes of this survey we will focus on what the current condition and assembly.



The monument pictured in 1943 has some major differences to what is currently onsite





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The Memorial is comprised of 15 cases- enclosed (glass) panels/ framed with aluminum. Each enclosure is about 3'x 6'. The panels house the names of those who served. Each name is comprised of individual plastic letters (font about ½"), the letters are meticulously set onto support wall, likely with small pins. The structure which holds the panels in fabricated from brick and limestone, set upon a concrete foundation. Four concrete steps lead to the internal plaza where flagstone is set on the foundation. There is a painted iron flag pole sited in the middle of the plaza.

Additionally, there is a copper flashing cap that sits on the top of the limestone structure. The copper cap appears to be attached to wood plank on the back and is folded over the limestone edge on the front. On top the copper cap, there is an electrical conduit that spans the entire roof level, several junction boxes, red light in the middle of the structure and two modern light fixtures on each of the front corner. It is assumed the red-light is used for some type of emergency system. This entire grouping appears to have been added after this structure was built. There is also an array of holiday lights hanging from the copper flashing along with two extension cords. There is a large tree branch intermingled with loose electric wire on the proper left side of the memorial.

It is important to have a discussion within the city about meaning of this memorial. The question we have is- is this artifact still viewed as a memorial or is it part of the hardscape which serves other purposes (i.e red light on top, loose extension cords, decorative & functional lighting)?. If we view through the lens of historic preservation the addition of these objects is not in line with standard practice. To some it could be a violation of [General Law - Part IV, Title I, Chapter 272, Section 73](#)

Major Elements

Limestone

Limestone is a hard sedimentary rock composed primarily of calcite, a calcium carbonate mineral with a chemical composition of CaCO_3 .

It appears that the limestone on the Honor Roll is at type of limestone quarried in the mid-west (USA) that is colloquially referred to as *Indiana Limestone*. This type of limestone is found in numerous types of architecture & sculpture in the Boston area.

Though other factors contribute, the main **mechanism of decay** is how the stone reacts with acids found in the rain & the snow & the air which are a part of our local ecosystem. Acids will dissolve the calcium carbonate binder and open up pathways for freeze-thaw cycling and bio growth and the formation of gypsum crusts.



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Brick & Mortar

Brick is comprised mainly of clay and sand. The clay/sand mixture is turned into a slurry and put into molds allowed to dry in the sun and then eventually fired in a kiln.

The areas between the bricks is filled with mortar (sand, lime, cement). The mortar is an adhesive a water repellent and an aesthetic detail.

Mechanisms of Decay: Brick

Clay bricks are quite durable when properly assembled and maintained.

Some conditions that may cause damage to brick structure include:

- Exposure to acidic outdoor environment (disaggregation of surface)
- The build-up of bio-growth on surface (disaggregation of surface)
- Moisture, rain, snow getting trapped between mortar or blocks during freeze-thaw cycles (displacement, cracking)
- The use of sodium chloride based ice-melt on adjacent surfaces
- External impacts & human interaction.
- At connection points between ferrous elements and brick
- Errors in structural design/damaged foundations



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Condition Notes

A more detailed survey/ discussion is needed to fully assess the condition of this memorial as there are some structural and use issues which should be cleared up. Without have access to the upper sections of the memorial which are covered with a cap and electrical conduits we are limited in what can understand about the nature of the conditions and how to approach a comprehensive treatment recommendations. Some of our concerns about the structural conditions should be reviewed by a structural engineer who may ask for additional testing which is outside of our field of expertise.

The following are some of the issues which need more study:

- Displacement of the limestone blocks above the panel boxes
- Displacement of the iron and rusting of supports above the panel boxes
- Cracks in the concrete foundation
- Cracks which run the entire length of the brick

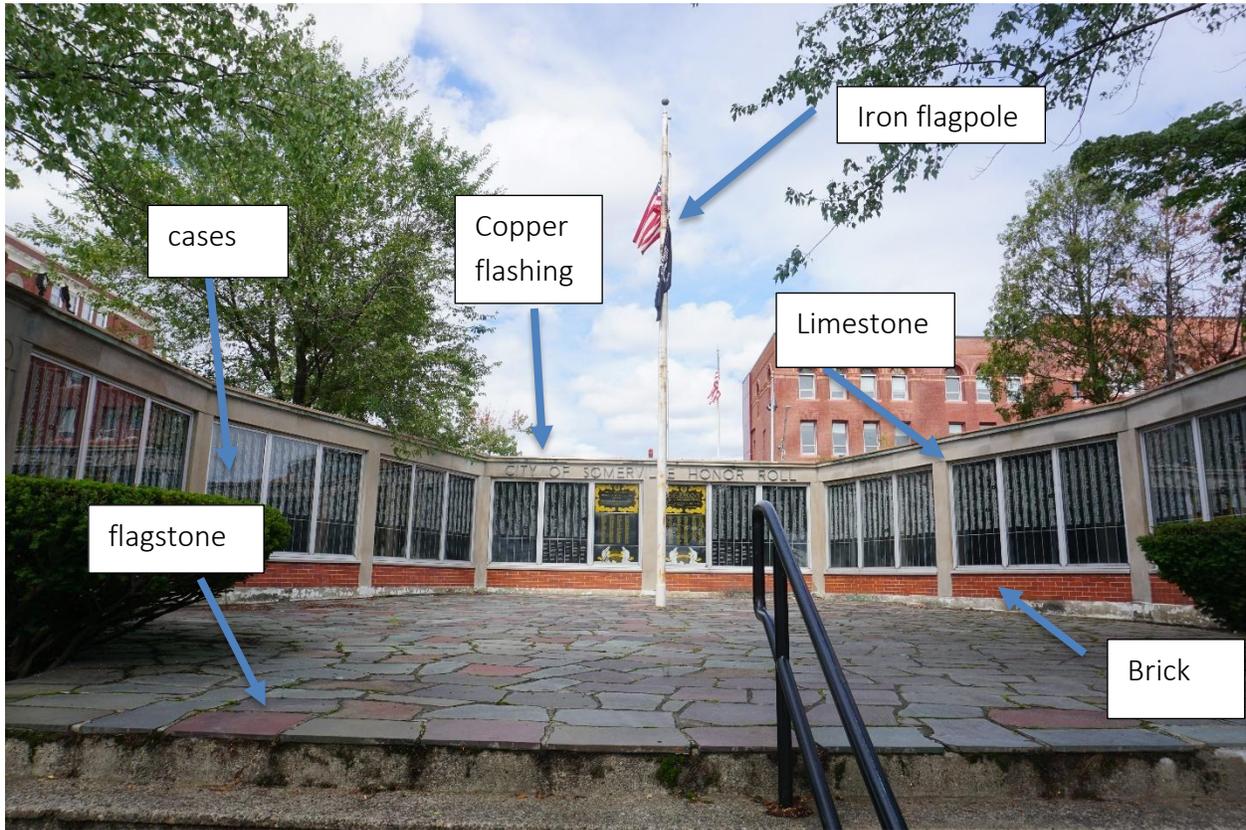
Other issues noted in the following images include:

- Losses in mortar between the limestone blocks
- Metallic staining on the limestone (from the cap)
- Rusted surface/ degraded paint on the flagpole
- Missing lettering on the panels.



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White efflorescence could indicate water infiltration into brick



Wood block holding flashing



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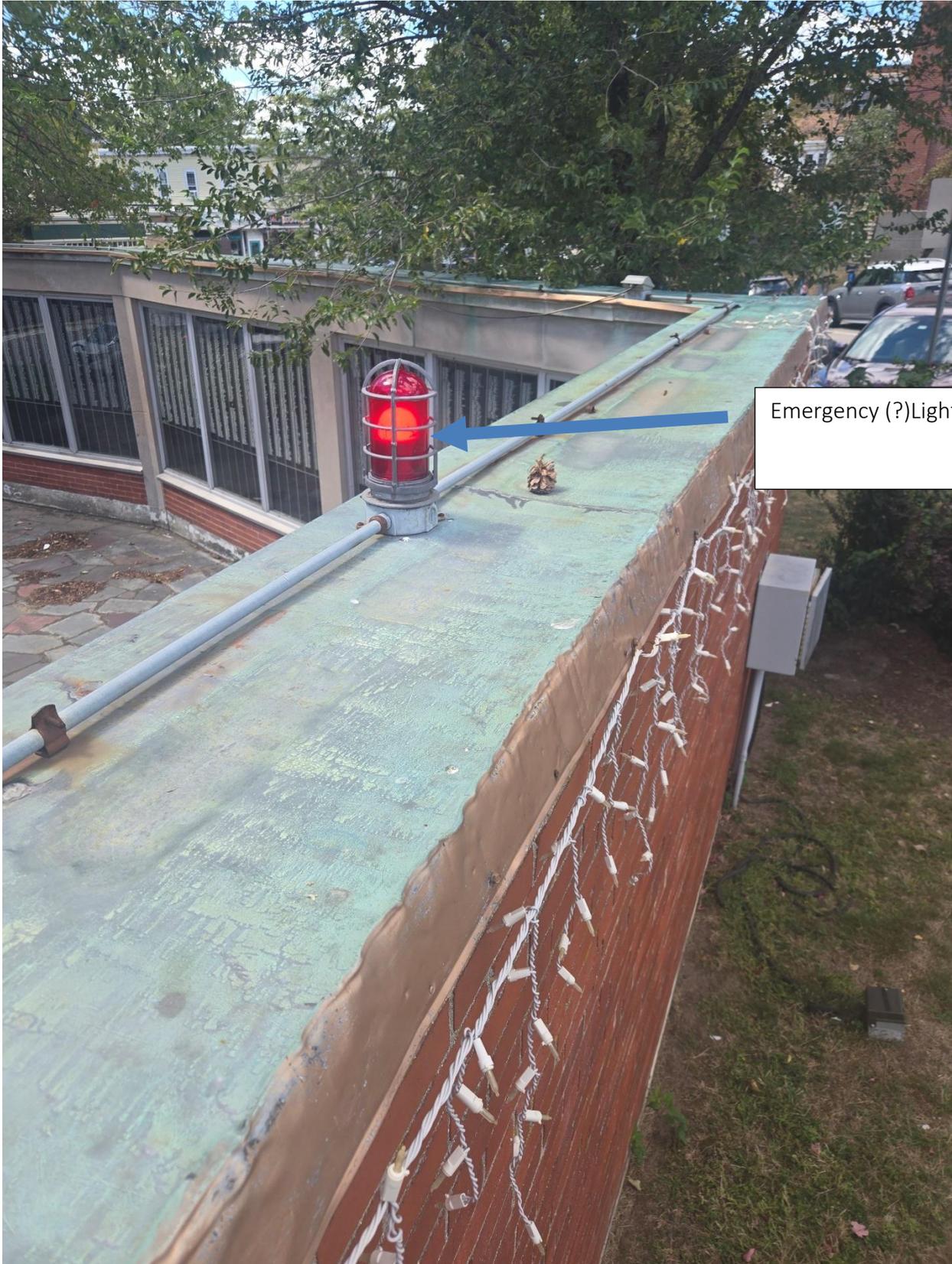
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Emergency (?)Light



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Lighting, junction boxes



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Heavily rusted
ferrous support



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Crack in Brick



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Crack in
foundation



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Treatment Recommendations

Further study and conversations are needed in order to propose treatments which do not put only *band-aids* on the problem and could potentially cause more harm to the structure.

The first step should be coming to an understanding about what this structure is expected to be used for.

Once that has been established a plan for a more comprehensive survey should be conducted which will include professionals from other disciplines.

We are happy to be available to be involved in the beginning of this process as part of this survey.



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Estimated Costs for Treatment

Part One: Veterans Cemetery

- WW 2 Memorial: \$15,000
- Bronze Grave Markers: \$70,000
- Logan Memorial: \$12,000
- WW2/Vietnam Markers: \$4,000
- Fence Assembly: \$120,000

Part Two: Magoun Plaque @ Trum Field: \$2,000

Part Three: WW 1 Memorial @ Union SQ: \$5,000

Part Four: East Sommerville Memorial @ E. Somerville Library: \$2,000

Part Five: Civil War Memorial @ Som. Ave Cemetery: \$15,000

Part Six: Honor Roll @ City Hall: TBD

Josh Craine

Principal/ Daedalus Conservation

9/5/2025

Re: Letter of Support for Veterans Memorial Cemetery Preservation Project

From Thomas Considine <thomasconsidine88@gmail.com>

Date Wed 10/15/2025 3:24 PM

To Nancy Blanchard <nblanchard@somervillema.gov>

 4 attachments (71 KB)

Outlook-mxvifyng; Outlook-if0bhnke; Outlook-if0bhnke; Outlook-mxvifyng;

Dear Somerville Community Preservation Committee,

I am writing to express my wholehearted support for the Somerville Veterans Memorial Cemetery & Monuments Preservation Project. As a citizen with deep roots, on both my mother and father's sides, in Somerville and someone who has personally benefited from the dedication of individuals like Nancy Blanchard, Tommy Gorman and the rest of the Veterans Committee, I am deeply committed to ensuring that our veterans' memorials are preserved for future generations.

The Somerville Veterans Memorial Cemetery and the historic veterans' monuments across our city are not just landmarks; they are sacred spaces that honor the sacrifice and service of those who have defended our freedoms. These sites serve as a constant reminder of the courage and dedication of our veterans, and they are integral to our community's identity and heritage.

I have a personal connection to this cause, as my grandmother, Mary MacDougall Considine, was the first woman of WW2 to receive a memorial square in Somerville. Additionally, they assisted in honoring my uncle Jimmy Loveless, a Vietnam Era Veteran who later became a firefighter and responded to the 9/11 attacks. These personal connections make the preservation of our veterans' memorials even more meaningful to me. The committee's help in establishing these squares to their service and sacrifice is deeply appreciated, and is something I will be forever indebted to. Which is why I am speaking right now in support of these folks who put in tireless efforts for the veterans of Somerville and their families.

Somerville had its role in establishing our nation long, long before my family came around though. General George Washington ordered the Grand Union Flag to be raised over Prospect Hill for the first time on January 1, 1776, making it a significant Revolutionary War location. Paul Revere's famous midnight ride passed through the area that is now Somerville. Nathan Hale spent his last year before his execution training in a military tent on Winter Hill. During the Siege of Boston, Prospect Hill was a key strategic point for the Continental Army.

Maintaining these sites is crucial for several reasons. First, they provide a place for reflection and remembrance for families and friends of veterans. Second, they offer an educational opportunity for younger generations to learn about our history and the sacrifices made by those who came before us. Lastly, preserving these monuments ensures that the legacy of our veterans is not forgotten and that their contributions are forever etched in the heart of our community.

I am fully supportive of the application for FY26 Community Preservation Act (CPA) funding to restore and rehabilitate these important sites. The work Nancy and her team are doing is invaluable, and I am grateful for your tireless efforts in this endeavor. I am confident that with the support of the community, this project will be a resounding success, and the veterans' memorials will continue to stand as a testament to their service and sacrifice.

Thank you for your dedication to preserving the memory of our veterans. Please let me know if there is anything else I can do to support this important cause.

Warm regards,

Thomas P. Considine

(No subject)

From Michael Considine <michael56considine@yahoo.com>

Date Wed 10/15/2025 10:13 PM

To Nancy Blanchard <nblanchard@somervillema.gov>

Dear Members of the Veterans Service Commission,

I hope this message finds you well. My name is Michael Considine, and I am writing as the proud son of Mary MacDougall Considine, who holds the distinction of being the City of Somerville's first World War II female veteran to receive a dedication square.

I am reaching out to express my wholehearted support for the Somerville Veterans Memorial Cemetery & Monuments Preservation Project and to emphasize the critical importance of fully funding this initiative.

My mother's service, like that of so many veterans from our community, represents a legacy of sacrifice, courage, and dedication to our nation. The recognition she received through her dedication square was not merely an honor for our family—it was a powerful testament to Somerville's commitment to remembering and honoring those who served. These memorials, monuments, and sacred spaces are more than stone and bronze; they are living connections to our history and enduring reminders of the debt we owe to our veterans.

It is essential that we continue this tradition of recognition and respect. The preservation of our veterans' memorials and the maintenance of the cemetery where many of our heroes rest is not optional—it is our solemn responsibility. These sites must be preserved with the dignity and care that reflects the honor of those they commemorate.

I strongly urge the Commission to advocate for complete and adequate funding for this preservation project. Our veterans gave everything for our freedom and our future. The very least we can do is ensure that their memory is preserved, their monuments maintained, and their final resting places kept in a condition befitting their service.

I stand ready to support this effort in any way I can and would welcome the opportunity to discuss how we can work together to ensure that every veteran in Somerville receives the lasting recognition they deserve.

Thank you for your dedication to our veterans and for your consideration of this vital matter.

With deepest respect and gratitude,

Michael Considine
Son of Mary MacDougall Considine
WWII Veteran
Sent from my iPhone

Somerville Veteran Monuments and Memorials

From Joe Lynch <hendersonhouse10@gmail.com>

Date Thu 10/16/2025 9:11 AM

To Nancy Blanchard <nblanchard@somervillema.gov>

Greetings,

I write to you today to express my enthusiastic support of the requested project funding for the Somerville Veteran Monuments and Memorials by the CPC.

While all of the submitted components are of equal import to me, my attention is drawn to the City Hall Honor Roll item. At last count, I have over 16 members of my extended family whose names appear on the Honor Roll. It would bring me and other members of my extended family great joy and solace to see this dedicated space in our City receive the requested and much needed restoration and enhancements.

Thank you for your time and consideration.

Joseph P. Lynch, Jr.
USAF - 1971 - 1979
10 Henderson Street
Somerville, MA 02145