

City of Muskegon Request for Proposals

Muskegon Historic District Monument Conservation Project

Posted: April 1, 2024

GENERAL DESCRIPTION OF WORK

The City of Muskegon seeks to secure proposals from qualified individuals and/or organizations to complete necessary conservation work on seven (7) historic bronze/granite monuments containing eleven (11) total bronzes located in Hackley Park (350 W. Webster Avenue, Muskegon, MI 49440), Hackley Square (349 W. Webster Avenue, Muskegon, MI 49440), and Kearny Park (1040 Peck Street, Muskegon, MI 49440).

The City of Muskegon plans to have the conservation of the monuments completed in the Spring of 2024 and concurrently work with the selected contractor to train City staff in the appropriate techniques needed to clean and wax the monuments in the future on a scheduled and routine basis.

BACKGROUND INFORMATION

The goal of this project is to complete professional conservation on the five historic monuments which comprise the collection that is installed in Hackley Park, a contributing property to the Muskegon Historic District which is listed in the National Register of Historic Places. The park was dedicated in 1890, and the bronze/granite monuments were dedicated 1892-1900. The statuary of Hackley Park had its last significant and comprehensive conservation treatment in 1998. Since then, informal, and basic cleaning and waxing was performed locally by staff from the Lakeshore Museum Center in 2016 and again in 2018-2019.

The project also includes professional conservation of two other historic monuments – one across W. Webster Avenue from Hackley Park at Hackley Square which was dedicated in 1902, and the other a short distance away at Kearny Park which was dedicated in 1901 (map provided in Exhibit A).

An initial conservator's report from 2021 (Exhibit B) cites issues of structural integrity needing minor repairs and replacement of missing parts, bronze disease, oxidation, corrosion, bubbling in the existing wax layers, and organic material build-up.

PROJECT SCOPE OF WORK

Professional conservation work – including in-depth cleaning, structural repairs as needed, and waxing – is to be completed on:

1. The 76'-tall Soldiers and Sailors Monument at the center of Hackley Park which itself contains five bronzes, as well as the park's four perimeter monuments: Abraham Lincoln Monument at the southeast corner, David G. Farragut Monument at the northwest corner, Ulysses S. Grant Monument at the southwest corner, and William Tecumseh Sherman Monument at the northeast corner.
2. The President William McKinley Monument at Hackley Square which contains a large granite base and one bronze
3. The General Philip Kearny Monument at Kearny Park which consists of a granite base and one bronze.

Equipment rental – including 20’ and 80’ lifts, ladders, and rolling scaffolding will be provided, as needed, by the City of Muskegon – the costs of which should not be included in bid proposals.

The seven monuments will have the following work completed:

1. Document each monument before, during, and after treatment in written and photographic methods.
2. Wash with a power washer, followed by water washing with 1% detergent and synthetic bristle brushes to remove dirt, dust, grime, and accretions, followed by thorough water washing. Power washing pressure must be appropriate for the material and shall not cause any damage. Materials not intended to be power washed must be protected from overspray.
3. Perform minor structural repair and patching, as well as toning of previous fills if they have degraded.
4. Remove wax completely on each monument with appropriate solvents.
5. Wash monuments with distilled water to ensure previous soaps applied to the monuments are removed or deactivated.
6. Excavate areas of bronze disease.
7. Perform minor patina correction with potassium sulfide for unsightly and heavily oxidized areas. For each:
 - a. Areas will be rinsed with distilled water, the surface will be heated, and potassium sulfide will be applied.
 - b. Testing will be performed to determine the timeline upon which the potassium sulfide should be rinsed with distilled water.
8. Treat each monument overall with benzotriazole, a corrosion inhibitor.
9. Hot-wax each monument with an appropriate wax.
10. Clean granite bases as needed using the gentlest means possible.
11. Train City of Muskegon staff in the appropriate techniques needed to clean and wax the monuments in the future on a scheduled and routine basis.

This project is partially funded by a Certified Local Government (CLG) grant from the Michigan State Historic Preservation Office (SHPO). Any proposed changes to the scope of work must be approved by the City of Muskegon and the SHPO prior to proceeding. All work shall be completed in a satisfactory manner and shall be consistent with the U.S. Secretary of the Interior’s Standards and Preservation Briefs.

PROJECT WORK TIMELINE

Generally, all conservation work should be completed in the spring of 2024, when weather permits to, ideally, no later than June 2024 due to Hackley Park’s busy summer event schedule. All work must be completed no later than September 1, 2025. A specific schedule will be established with the selected contractor.

BID GUARANTEE / PERFORMANCE AND PAYMENT BOND

The project shall require a bid bond from each bidder in the amount of five percent (5%) of their bid. The bond will secure the bid. The bond will be released upon award of the contract by the City Commission for unsuccessful bidders and upon execution of the contract for the successful bidder.

The project shall require a performance and payment bond from the successful bidder for the full amount of the contract. This bond will be written in such a manner to ensure satisfactory completion of the

project. The bond shall be in effect for one full year after completion of the project. The bond will be released only after the project is properly completed and one year has elapsed.

CONTRACTOR QUALIFICATIONS

- Proof of applicable licenses and certifications.
- Proof of insurance in the amount of \$1,000,000, naming the City of Muskegon as additional insured.

LOCAL PREFERENCES AND GOALS

Attention is called to the fact that the City of Muskegon requires that the selected contractor employ local trades and laborers insofar as possible; that 14% minority and 7% female are the goals established for participation in each trade; that the contractor must ensure employees and applicants for employment are not discriminated against based upon their race, creed, color, religion, sex, national origin, handicapped condition nor veteran background; and that all pertinent regulations must be complied with.

The City Commission may give preference to vendors paying Davis Bacon wages on other projects by awarding contracts when the lowest qualified prevailing wage bid/price is within 1% or less of the lowest qualified non-prevailing wage bid. When applicable, the 1% preference can be added to the local preference up to a 3% or \$100,000 differential, whichever is less.

The City of Muskegon reserves the right to reject any or all proposals or to waive any informalities or irregularities in the proposals.

PRE-PROPOSAL QUESTIONS AND PRE-WORK SITE VISIT REQUESTS

Please direct all questions to Jamie Pesch prior to April 15, 2024 by emailing jamie.pesch@shorelinecity.com. A project Question and Answer document will be assembled and added to the City's online bid posting page for this project: <https://muskegon-mi.gov/category/bid-postings/>

All monuments included in this work are publicly accessible at all times. If a lift is needed to inspect any of the monuments during a pre-work site visit, scheduled use of the lift must be coordinated with Jamie Pesch prior to April 15, 2024. If any requests for use of a lift are received prior to that date, a 45' articulating lift will be made available the week of April 22, 2024.

PROPOSAL DEADLINE AND AWARD PROCESS AND CRITERIA

Proposals are due by 2:00p.m. local time on Tuesday, April 30, 2024. They must be sealed and delivered to: Muskegon City Hall, City Clerk's Office, 933 Terrace Street, P.O. Box 536, Muskegon, MI 49443. Proposal envelopes should be marked "Muskegon Historic District Monument Conservation Project". Proposals must clearly state the name, address, phone number, and email address of the contractor. Complete proposals will include the following information:

- A brief history of the company and summary of past conservation experience with similar resources.
- Itemized cost for all services provided. Costs for conservation of the five monuments in Hackley Park must be priced separately for grant reporting purposes.

- Total firm, fixed price for all services provided. The price must include all costs associated with performance of the services specified, including materials, supervision, labor, insurance, transportation, and other such related costs. Cost-plus, time and materials, and other such bids are not allowed.
- Estimated project timeline noting start/finish dates and City staff training opportunities. Note that all project activities must be completed by September 1, 2025.

Proposals will be evaluated and reviewed by staff, based upon the criteria required in the RFP and how well the response to the criteria meets or exceeds the services required.

Public opening of sealed bids will occur on Tuesday, April 30, 2024 at 2:00p.m. local time at Muskegon City Hall, City Clerk's Office 933 Terrace Street, Muskegon, MI, 49443.

FEDERAL FUNDING CREDIT AND LEGAL NOTICE

This project is funded in part by a Certified Local Government grant through the Michigan State Historic Preservation Office. This project is subject to a grant agreement between the State of Michigan and the City of Muskegon. All parties have the responsibility to review the terms of the grant agreement and assure compliance with all applicable state and federal requirements. Prospective bidders take notice that:

The activity that is the subject of this project has been financed in part with Federal funds from the National Park Service, U.S. Department of the Interior, through the Michigan Strategic Fund, State Historic Preservation Office. However, the contents and opinions herein do not necessarily reflect the views or policies of the Department of the Interior or the Michigan Strategic Fund, State Historic Preservation Office, nor does the mention of trade names or commercial product herein constitute endorsement or recommendation by the Department of the Interior or the Michigan Strategic Fund, State Historic Preservation Office.

FINANCIAL ASSISTANCE DISCLAIMER

This program receives Federal financial assistance for identification and protection of historic properties. Under Title VI of the Civil Rights Acts of 1964, Section 504 of the Rehabilitation Act of 1973, and the Age Discrimination Act of 1975, as amended, the U.S. Department of the Interior prohibits discrimination on the basis of race, color, national origin, disability, or age in its federally assisted programs. Michigan law prohibits discrimination on the basis of religion, race, color, national origin, age, sex, marital status, or disability. If you believe you have been discriminated against in any program, activity, or facility as described above, or if you desire further information, please write to:

Chief, Office of Equal Opportunity Programs
United States Department of the Interior
National Park Service
1849 C Street, NW, MS-2740
Washington, DC 20240

NONDISCRIMINATION

The selected consultant/firm shall sign a Certification of Nonsegregated Facilities statement and a Civil Rights Assurance of Compliance statement. This statement must be posted in conspicuous places

around the selected consultant/firm's office or facility that states in part that Federal and State law prohibits discrimination on the basis of religion, race, color, national origin, age, sex, marital status, or disability.

EXHIBIT A

PROJECT MAP



Search by PIN/Address/Ow



60ft
-86.254 43.233 Degrees



Search by PIN/Address/Ow



Kearny (price separately)

-86.241 43.234 Degrees

All rights reserved



EXHIBIT B

CONSERVATOR'S REPORT

Visit Date September 22nd to 23rd, 2021
Revision Date November 15th, 2022
Submitted By
Anna Weiss-Pfau, AIC-PA, Principal Conservator 630.308.0390
3rdcoastconservation@gmail.com
L.Liparini Studio ♦ Third Coast Conservation, LLC (LTC)

To
Brenda Nemetz, Collections Manager
Lakeshore Museum Center
231-724-5532
brenda@lakeshoremuseum.org

Project

Conservation & Maintenance Assessment of City of Muskegon
5 Hackley Park Bronze Sculptures and 2 Additional Bronzes

Conservation & Maintenance Assessment of Sculptures within the City of Muskegon



Scope

Third Coast Conservation was asked to assess 7 sculptures in Hackley Park in Muskegon, Michigan, 1 cannon, and 5 bronze sculptures, and 7 additional sculptures within the city.

This **Site Visit Report & Proposal Part 1** will cover the assessment, treatment proposals, and associated costs to conserve 7 Hackley Park Bronze Sculptures and cannon.

Part 2 will include maintenance and treatment recommendations for the additional sculptures.

Hackley Park Sculptures

1.

Civil War Monument – Aka “Soldiers and Sailors Monument”

Joseph Carabelli 1889 Bronze / Granite

Dimensions of Monument:	80' (H)	30' (W)	30'(W) (estimated)
<i>Liberty</i>	12'		
<i>4 Figures</i>	7'	1'10"	1'10" (average)

This monument includes the *Liberty* sculpture at the top, with 4 other sculptures on the lower portion including an *Artilleryman*, *Infantryman*, *Calvaryman*, and *Sailor*. More in-depth descriptions are featured in the 1994, and 1997-1998 reports.

The monument was examined from a 60' articulated mobile elevated work platform. It was not sufficient to get very close to the *Liberty* statue. The use of a zoom lens on the DSLR camera was able to aid in the examination. Also note that the sculpture was examined in the rain, and so some areas of the sculptures may appear dark where they are wet. Some areas of the sculptures were dry and thus able to be properly examined.

Previous Treatment

The previous treatment in 1997-1998 included both the bronze and the stone. The bronze was washed to remove loosely adhered corrosion products, chemically patinated with hot potassium sulfide, and hot waxed. The granite was considered in excellent condition aside from a vertical crack on the stone that liberty is mounted to and washed.

A Cleaning Report report from 2016 was provided and staff indicated that another maintenance likely occurred in 2018-2019. This includes details of condition issues. It was noted that 1 can of wax was used, and ¼ cup of detergent was used. It is not noted what type of wax or detergent was used.

General Conditions pertaining to all 5 sculptures

All 5 sculptures appear in good condition from afar. Up close, blue-green oxidation has begun to form in a spotted appearance, notably in areas of bolts, along the bottom edges of the base, high points/edges of elements including the bottoms or folds in pants, on top of each of the heads. This spotty appearance does seem consistent throughout each of the sculptures. When the sculpture is examined completely dry, there may be areas with more significant oxidized areas that may be unsightly. If this were the case, localized patination might be possible, but otherwise since it is mostly evenly oxidizing, simply waxing may be appropriate.



An unusual spotted and sometimes bubbling has appeared in areas where wax is often heavily applied. This may be because of a heavy application of wax in that area or a reaction due to a residue of a soap.

All sculptures have soiling and insect residues and nests.

The 2016 Cleaning Report indicates that the caulk is missing for several of the sculptures. It may be possible that the conservators in the 1998 treatment never applied caulk in order to provide for drainage of water.



Notable is that each sculpture was never given an Incralac coating. This was likely chosen because it appears the previous work was performed from a lift or scaffolding and incralac is difficult to spray appropriately in-situ. Additionally, it must be replaced when it begins to fail every 7 years, and this may be difficult for the city to manage. Each sculpture was hot waxed during the 1998 treatment.

Stone

The monument's stone (granite) was mostly in good condition. The most notable issue was that the stone, along with all of the other stone monuments appeared to have an uneven shades of yellow discoloration. This was not mentioned in the 1997 treatment report or 1994 Outdoor Sculpture Condition Survey. This phenomenon might appear in images in the 1994 survey, however it is difficult to discern because the pdf is a photocopy.

On the side between the infantryman and the calvaryman there is a substantial amount of spalling on the side of the stone that is not present in the 1994 images. It is the conservator's opinion that this yellow discoloration may have been slowly forming over time and is much more noticeable now than it was in 1994-1998. It is likely from a consolidation or water repellent treatment that is ageing, and it may have begun to cause spalling in certain areas, including that mentioned above. The original lead jointing and the crack on the stone top that were repaired in 1997-1998 appear in good condition.

Liberty

The Liberty sculpture was only examined from 60', as the wrong lift size was delivered.

Structurally, the sculpture appears in good condition. The dark line along the back of the proper right arm that was mentioned in 1994, was repaired in 1997-1998 treatment, and it appears to still be holding strong.

In the 2016 cleaning report, it was noted that the eagle was corroded on top and bottom; unfortunately this could not be seen during this examination.

Spots of crusts forming in crevices is evident. There are more significant areas of oxidation forming in bright green spots, including a yellow-green, likely from bird droppings.

Sailor (west)

Structurally the sailor appears in good condition. It was noted in the 1997-1998 treatment that the sailor's cutlass (sword) was replaced. This was not present in the 2016 report it was noted that a replacement is in the museum's storage until a conservator is hired to reattach it.

As mentioned in the general conditions, the sailor's neckerchief has spots of bubbling in the wax layer. The hat also has extensive green corrosion formation.

Artilleryman (south)

It was noted in the 2016 cleaning that there is a large spot of corrosion where the water drips on the statue from the granite above. This area may require patina correction, as it has become green/blue.

Infantryman (east)

The back of the infantryman's hat appears heavily oxidized, and this may be an area that requires some patina correction. There is also extensive wax build up as well in crevices, which has also been previously noted.

Cavalryman (north)

Conditions consistent with the above and previous reports, including the missing nut on the back of the base.

Treatment Questions

1. How much would the city like us to address oxidation (blue-green spotting)? Would a wax removal and replacement with a tinted wax be sufficient, or just a spot treatment of more substantial oxidized areas, or full re-patination? Full repatination would be a much more substantial operation, including scaffolding or the deinstallation of the figures. A lacquer layer would also protect them further. The conservators would suggest the spot treatment, with a tinted wax at this time, as they have not completely oxidized and from the ground the oxidation is hard to see, but this may be a consideration for the future.

Treatment Proposal

Setup needs: 1 x 80' lift and 1 x 40-60' lift or scaffolding

1. Document before, during, and after treatment in written and photographic methods
2. Wash with a power washer, followed by water washing with 1% Orvus (detergent) and synthetic bristle brushes to remove dirt, dust, grime, accretions, followed by thorough water washing.
3. Come prepared to perform minor structural repair and patching, as well as toning of previous fills if they have degraded.
4. Remove wax completely on the entire sculptures with appropriate solvents.
5. Wash sculptures with distilled water to ensure any previous soaps applied to the sculptures is removed or deactivated.
6. Excavate areas of bronze disease (light powdery green corrosion). This was not seen in the examination but it will likely be present in small areas, especially on the *Liberty* sculpture.
7. Perform minor patina correction with potassium sulfide for more unsightly and more heavily oxidizing areas.
 - i. Area will be rinsed with distilled water, surface heated with a blow-torch, potassium sulfide applied. Testing will be performed to determine the timeline upon which the potassium sulfide should be rinsed with distilled water.
8. Treat the sculpture overall with benzotriazole (BTA) a corrosion inhibitor for bronze 3% in ethanol.
9. Hot-wax sculptures with Butcher's Bowling Alley Wax.

2.

Abraham Lincoln

Charles Henry Neihaus 1899 Bronze / Granite
Dimensions: Estimated 5' (H) x 4' (W) with 7' tall base

Condition

Object is in good condition overall.

On the surface there is red paint on the top of the base near the feet in small areas.

There is significantly more oxidation over several surfaces and areas than the other sculptures in Hackley Park. This sculpture may be interacted with more often with the public, as it is much more climbable.

The oxidation is along both of his legs, cloak, upper folds of his clothing and hair, the top surface of the base.

The wax layer appears to be becoming cloudy overall by most significantly along the back of the chair.

Review of the 2016 report does not indicate any major changes.

Stone

There appears to be the same yellowing of the stone as the Civil War Memorial, including some areas of spalling on the base.



Treatment Proposal

Setup needs: 1 x 40-60' lift, ladders

1. Document before, during, and after treatment in written and photographic methods

2. Wash with a power washer, followed by water washing with 1% Orvus (detergent) and synthetic bristle brushes to remove dirt, dust, grime, accretions, followed by thorough water washing.
3. Remove red paint with appropriate solvents.
4. Come prepared to perform minor structural repair and patching as needed.
5. Remove wax completely on the entire sculpture with appropriate solvents.
6. Excavate areas of bronze disease (light powdery green corrosion). This was not seen in the examination but it will likely be present in small areas.
7. Perform patina correction with potassium sulfide for more unsightly and more heavily oxidizing areas including on Lincoln's cloak and legs, top surface of the base.
 - i. Area will be rinsed with distilled water, surface heated with a blow-torch, potassium sulfide applied. Testing will be performed to determine the timeline upon which the potassium sulfide should be rinsed with distilled water.
8. Treat the sculpture overall with benzotriazole (BTA) a corrosion inhibitor for bronze 3% in ethanol.
9. Hot-wax sculpture with tinted Butcher's Bowling Alley Wax.

3.

Ulysses S. Grant

J. Massey Rhind 1899 Bronze/Granite

Dimensions: Estimated 7' (H) with 7' tall base

Condition

Good condition. More areas of oxidation including on the strap, along the perimeter of the base. None disfiguring. Pooling on top of the base in oxidized iron, so there is likely an area of steel exposed that is causing this pooling; this was noted to have been growing in the 2016 notes. Same issues with the base.

It was noted in the 2016 notes that the sword tip and ring from the sword strap were missing, and these on file in the Museum until a conservator can reattach them. No other new condition notes visible.

Stone

The same issues as noted for the other stone however this stone appears more significant drip-like yellow discoloration, as well as from the ferrous oxidation, and a blue/green along the top edge of the stone.

Additionally, noted in 2016 was a white crystalline material along the edge. This should be tested for salts or lead.

Treatment Proposal

Setup needs: 1 x 40-60' lift, ladders

1. Document before, during, and after treatment in written and photographic methods
2. Test white crystalline material for lead or salts.
3. Wash with a power washer, followed by water washing with 1% Orvus (detergent) and synthetic bristle brushes to remove dirt, dust, grime, accretions, followed by thorough water washing.
4. Come prepared to perform minor structural repair and patching as needed if the city would like the missing elements reattached.
5. Remove wax completely on the entire sculpture with appropriate solvents.
6. Excavate areas of bronze disease (light powdery green corrosion). This was not seen in the examination but it will likely be present in small areas.
7. Excavate area of ferrous corrosion and treat with tannic acid.
8. Perform patina correction with potassium sulfide for more unsightly and more heavily oxidizing areas if necessary.



- i. Area will be rinsed with distilled water, surface heated with a blow-torch, potassium sulfide applied. Testing will be performed to determine the timeline upon which the potassium sulfide should be rinsed with distilled water.
- 9. Treat the sculpture overall with benzotriazole (BTA) a corrosion inhibitor for bronze 3% in ethanol.
- 10. Hot-wax sculpture with Butcher's Bowling Alley Wax.

4.

William Tecumseh Sherman

J. Massey Rhind 1899 Bronze/Granite
 Dimensions: Estimated 7' (H) with 7' tall base

Condition

This sculpture is in good condition. The wax is ageing around the base, but this layer seems in otherwise good condition. There is more insect activity with this sculpture, including spider webs, growth and white spots. Highpoints exhibit some oxidation but not as significantly as other sculptures in this group. Corrosion particularly significant along the bottom edges where the sculpture meets the base.

Stone

The same issues as noted for the other stone however this stone has substantially more biological growth on it compared to the others. May suggest washing with D2 to kill the biological growth. The yellowing is more drip-like, as well as from the ferrous oxidation, and a blue/green along the top edge of the stone.

Treatment Proposal

Setup needs: 1 x 40-60' lift, ladders

1. Document before, during, and after treatment in written and photographic methods
2. Wash with a power washer, followed by water washing with 1% Orvus (detergent) and synthetic bristle brushes to remove dirt, dust, grime, accretions, followed by thorough water washing.
 - a. This treatment would also include the base, followed by the use of D2 biological solution to try to reduce the biological growth on the base.
3. Come prepared to perform minor structural repair and patching as needed.
4. Remove wax completely on the entire sculpture with appropriate solvents.
5. Excavate areas of bronze disease (light powdery green corrosion). This was not seen in the examination but it will likely be present in small areas.
6. Excavate area of ferrous corrosion and treat with tannic acid.
7. Perform patina correction with potassium sulfide for more unsightly and more heavily oxidizing areas if necessary. This is not likely as no areas were particularly distracting, but it will be prepared for.
 - a. Area will be rinsed with distilled water, surface heated with a blow-torch, potassium sulfide applied. Testing will be performed to determine the timeline upon which the potassium sulfide should be rinsed with distilled water.
8. Treat the sculpture overall with benzotriazole (BTA) a corrosion inhibitor for bronze 3% in ethanol.
9. Hot-wax sculpture with Butcher's Bowling Alley Wax.



5.

William McKinley

Charles Henry Niehaus/Joseph Carabelli

1899

Bronze/Granite

Condition

Structurally stable.

Small areas of oxidation beginning in crevices, as well as significant biological growth particularly along the interior of the jacket.

The sculpture overall exhibiting significant deterioration in a previously applied wax layer, as it appears to be blooming throughout, particularly the jacket.

White oxidation running down the side of the jacket along the arm. Proper left shoulder may have an additional darkening phenomenon occurring, potentially a biological growth or a past treatment.

Stone

The stone base is in good condition and had just been power washed when the conservator arrived.

This sculpture was not maintained by the city or museum in previous years.

Treatment Proposal

Setup needs: ladders, rolling scaffold – this sculpture is located on top of a stone monumental base platform with a flower bed immediately behind the platform, so a lift would likely not be desired. Conservators will attempt the work with a rolling scaffold with outriggers and ladders from the front

1. Document before, during, and after treatment in written and photographic methods
2. Wash with a power washer, followed by water washing with 1% Orvus (detergent) and synthetic bristle brushes to remove dirt, dust, grime, accretions, followed by thorough water washing.
3. Come prepared to perform minor structural repair and patching as needed if the city would like the missing elements reattached.
4. Remove wax completely on the entire sculpture with appropriate solvents.
5. Excavate areas of bronze disease (light powdery green corrosion). This was not seen in the examination but it will likely be present in small areas.
6. Perform patina correction with potassium sulfide for more unsightly and more heavily oxidizing areas if necessary. This was not visible but conservators will be prepared if needed.
 - i. Area will be rinsed with distilled water, surface heated with a blow-torch, potassium sulfide applied. Testing will be performed to determine the timeline upon which the potassium sulfide should be rinsed with distilled water.
7. Treat the sculpture overall with benzotriazole (BTA) a corrosion inhibitor for bronze 3% in ethanol.
8. Hot-wax sculpture with Butcher's Bowling Alley Wax.



6.

General Philip Kearny

Henry Kirke Brown 1901 Bronze/Granite

Located in Pocket park

Dimensions: Estimated 7' (H) on 7' tall stone base

Condition

Object viewed in the rain.

Object is in generally good condition. Oxidation was more significant along edges and highpoints, as well as corrosion along the base of the bronze around the pedestal.

As noted in the 2016 notes, there is a missing sword strap.

This wax appears in better condition, and may not require the wax to be completely removed, but it may be required when able to be viewed up close in drier conditions.

Treatment Proposal

Setup needs: ladders, rolling scaffold with outriggers

1. Document before, during, and after treatment in written and photographic methods
2. Wash with a power washer, followed by water washing with 1% Orvus (detergent) and synthetic bristle brushes to remove dirt, dust, grime, accretions, followed by thorough water washing.
3. Come prepared to perform minor structural repair and patching as needed if the city would like the missing elements reattached if they have the strap.
4. Remove wax completely on the entire sculpture with appropriate solvents.
5. Excavate areas of bronze disease (light powdery green corrosion). This was not seen in the examination but it will likely be present in small areas.
6. Treat the sculpture overall with benzotriazole (BTA) a corrosion inhibitor for bronze 3% in ethanol.
7. Hot-wax sculpture with Butcher's Bowling Alley Wax.



7.

Admiral Farragut

Charles Henry Niehaus 1899 Bronze/Granite

Dimensions: Estimated 7' (H) on 7' tall base

Condition

Good condition overall. Areas of oxidation appearing on the proper left leg, as well as other high points like the cloak's edge and top of binoculars.

The strap on the back appears to be hanging inappropriately and has damaged part of the cloak. This should be checked against historic images to see if this is to be reassembled in a different way. Part of that strap is scratched as well and has a green oxidation forming.

Bright green, likely bronze disease (bright green corrosion) forming under the back of the hair.

Conservator does not see a rusty area on the back as noted in 2016 but it could be the lighting and should be examined further once a lift is procured.

Stone

Same yellow discoloration phenomenon on the base as the other monuments.

Treatment Proposal

Setup needs: 1 x 40-60' lift, ladders



1. Document before, during, and after treatment in written and photographic methods
2. Wash with a power washer, followed by water washing with 1% Orvus (detergent) and synthetic bristle brushes to remove dirt, dust, grime, accretions, followed by thorough water washing.
3. Come prepared to perform minor structural repair and patching as needed if the city would like the missing elements reattached if they have the strap.
4. Remove wax completely on the entire sculpture with appropriate solvents.
5. Excavate areas of bronze disease (light powdery green corrosion). This was not seen in the examination but it will likely be present in small areas.
6. Treat the sculpture overall with benzotriazole (BTA) a corrosion inhibitor for bronze 3% in ethanol.
7. Come prepared to do additional patina work but likely not necessary.
8. Hot-wax sculpture with Butcher's Bowling Alley Wax.

Images

Images are available for download from the following Google Drive link. The link will expire in 2 months from the date of this report.

<https://drive.google.com/drive/folders/1jya7eFaEv273u8hb3ZjC1GeOWXsW-hdT?usp=sharing>

Estimate

City to provide quick coupler and water hookup for Hackley Park.

Equipment & Rental Requirements

Object #	Object Name	Treatment Proposed	Major Equipment Needed	Rental Costs
1	Civil War Monument	Wax removal, minor corrosion treatment and patina correction, hot wax	Scaffolding or 80' lift rental	Provided by city
2	Abraham Lincoln		20' Lift Rental	Provided by city
3	Ulysses S. Grant			
4	William Tecumseh Sherman			
7	Admiral Farragut			
5	William McKinley		Ladders/rolling scaffolding	Provided by city
6	General Philip Kearny			
			Total	\$0

Project Costs

Trip 1 – Treatment: 4 perimeter Hackley park sculptures
 Equipment: City will provide 2 x 34' lifts, ladders, water hookup

Daily Rate	\$920/per	4 people	5 days	18,400
Transportation, 2-3 vehicles	408 miles	\$0.58/mile	2 cars	480
Administration/reports/documentation				900
Per Diem	\$60	4 people	5 days	1200
Hotel	\$250	4 nights	4 rooms	4000
			Total 1/3	\$21,680

Trip 2 – Treatment: Civil War monument with other crew
 Equipment: City will provide bring baker scaffolding with outriggers and 1 x 34' lift (or 2 lifts), ladders, water hookup

Daily Rate	\$920/per	3 people	5 days	13,800
Transportation, 2-3 vehicles	408 miles	\$0.58/mile	2 cars	480
Administration/reports/documentation				900
Per Diem	\$60	4 people	5 days	900
Hotel	\$250	4 nights	3 rooms	3000
			Total 2/3	19,080

Trip 3— Treatment: Civil war monument
 Equipment: City will provide 1 x 80' lift and 1 x 34' lift, or full monument scaffolding, water hookup

Daily Rate	\$920/per	4 people	5 days	18,400
Transportation, 2-3 vehicles	408 miles	\$0.58/mile	2 cars	480
Administration/reports/documentation				900
Per Diem	\$60	4 people	5 days	1200
Hotel	\$250	4 nights	4 rooms	4000
			Total 3/3	\$21,680

TOTAL: Hackley Park Sculptures: \$62,440

Trip 4— Treatment: McKinley and Kearny
 Equipment: City will provide 1 x 80' lift and 1 x 34' lift, or full monument scaffolding, water hookup

Daily Rate	\$920/per	3 people	5 days	13,800
Transportation, 2-3 vehicles	408 miles	\$0.58/mile	2 cars	480
Administration/reports/documentation				900
Per Diem	\$60	3 people	5 days	900
Hotel	\$250	4 nights	3 rooms	3000
			Total 3/3	\$19,080

EXHIBIT C

EQUAL OPPORTUNITY CLAUSE

**FOR THE CITY OF MUSKEGON
HACKLEY PARK MONUMENT CONSERVATION PROJECT**

EQUAL EMPLOYMENT OPPORTUNITY CLAUSE

The applicant hereby agrees that it will incorporate or cause to be incorporated into any contract for construction work, or modification thereof, as defined in the regulations of the Secretary of Labor 41 C.F.R. Chapter 60, which is paid for in whole or in part with funds obtained from the Federal Government or borrowed on the credit of the Federal Government pursuant to a grant, contract, loan insurance, or guarantee, or undertaken pursuant to any Federal program involving such grant, contract, loan insurance, or guarantee, the following equal opportunity clause:

During the performance of this contract, the contractor agrees to the following:

1. The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The contractor will take affirmative action to ensure the applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, or national origin.
2. The contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.
3. The contractor will send to each labor union or representative of workers with which the contractor has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of the contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
4. The contractor will comply with all provisions of Executive Order 11246 of September 24, 1965 (the "Executive Order"), and of the rules, regulations, and relevant orders of the Secretary of Labor.
5. The contractor will furnish all information and reports required by the Executive Order, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to all books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and others.
6. In the event of the contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts or federally assisted construction contracts in accordance with procedures authorized in the Executive Order, and such other sanctions may be imposed and remedies invoked as provided in the Executive Order, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.
7. The contractor will include the portion of the sentence immediately preceding paragraph (1) and the provisions of paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulations, or order of the Secretary of Labor issued pursuant to section 204 of the Executive Order, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including

sanctions for noncompliance; provided, however, that in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency, the contractor may request the United States to enter into such litigation to protect the interests of the United States.

The applicant further agrees to be bound by the above equal opportunity clause with respect to its own employment practices when participating in federally assisted construction work; provided, that if the applicant so participating is a State or local government, the above equal opportunity clause is not applicable to any agency, instrumentally, or subdivision of such government which does not participate in work on or under the contract.

The applicant agrees to assist and cooperate actively with the administering agency and the Secretary of Labor in obtaining the compliance of contractors and subcontractors with the equal opportunity clause and the rules, regulations, and relevant orders of the Secretary of Labor, to furnish the administering agency and the Secretary of Labor such information as they may require for the supervision of such compliance, and to otherwise assist the administering agency in the discharge of the agency's primary responsibility for securing compliance. The applicant further agrees to refrain from entering into any contract or contract modification subject to the Executive Order, with a contractor debarred from, or who has not demonstrated eligibility for, Government contracts and federally assisted construction contracts pursuant to the Executive Order and will carry out such sanctions and penalties for violation of the equal opportunity clause as may be imposed upon contractors and subcontractors by the administering agency or the Secretary of Labor pursuant to Part II, Subpart D of the Executive Order. In addition, the applicant agrees that failure or refusal to comply with these undertakings may cause the administering agency to take any or all of the following actions: cancel, terminate, or suspend in whole or in part this grant, contract, loan, insurance, guarantee; refrain from extending any further assistance to the applicant under the program with respect to which the failure or refusal occurred until satisfactory assurance of future compliance has been received from such applicant; and refer the case to the U.S. Department of Justice for appropriate legal proceedings.

EXHIBIT D

CERTIFICATION OF NON-SEGREGATED FACILITIES

CG23-456

**FOR THE CITY OF MUSKEGON
HACKLEY PARK MONUMENT CONSERVATION PROJECT
CERTIFICATION OF NONSEGREGATED FACILITIES**

[Applicable to federally assisted construction contracts and related subcontracts exceeding Ten Thousand Dollars (\$10,000.00) which are not exempt from the Equal Opportunity clause.]

The federally assisted construction contractor certifies that he/she does not maintain or provide for his/her employees any segregated facilities at any of his/her establishments, and that he/she does not permit his/her employees to perform their services at any location, under his/her control, where segregated facilities are maintained. The federally assisted construction contractor certifies further that he/she will not maintain or provide for his/her employees any segregated facilities at any of his/her establishments, and that he/she will not permit his/her employees to perform their services at any location, under his/her control, where segregated facilities are maintained. The federally assisted construction contractor agrees that a breach of this certification is a violation of the Equal Opportunity clause in this contract. As used in this certification, the term "segregated facilities" means any waiting rooms, work area, rest rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive or are in fact segregated on the basis of race, creed, color, or national origin, because of habit, local custom, or otherwise. The federally assisted construction contractor agrees that (except where he/she has obtained identical certifications from proposed subcontractors for specific time periods) he/she will obtain identical certifications from proposed subcontractors prior to the award of subcontracts exceeding Ten Thousand Dollars (\$10,000.00) which are not exempt from the provisions of the Equal Opportunity Clause, and that he/she will retain such certifications in his/her files.

Signature

Date

Name and Title of Signer (Please type or print)

NOTE: The penalty for making false statement in offers is prescribed in 18 U.S.C. § 1001.