

Memorandum

To: William Lee, Gowanus Environmental Remediation Trust #2

From: Michael Audin, RPA & Scott Warnasch, RPA

Date: July 20, 2022

RE: Memo # 22 – End of Fieldwork Results of Level 1 Cultural Resource Review Debris Staging at Clean Earth – Claremont RTA-1 Dredging, Level 1 Monitoring Gowanus Canal Remediation Project Brooklyn, Kings County, NY

This memorandum presents the findings of Archaeology & Historic Resource Services, LLC's (AHRS) review of screened sediments at the Clean Earth Claremont Facility in Jersey City, New Jersey (Clean Earth) from Level 1 Monitoring. The screened sediments are from the dredging of RTA1 conducted between April 13 through May 11, 2022 at the Gowanus Canal Superfund Site in Brooklyn, New York. The purpose of this memorandum is to present recommendations for the items retained from sediment screening at Clean Earth and then reviewed by an AHRS archaeologist between April 28 and May 11 of 2022.

INTRODUCTION

The dredge material was processed according to the Level 1 Archaeological Monitoring protocol outlined in the draft Cultural Resource Monitoring Plan (revised September 2020). This protocol calls for dredged soft sediments to be screened over 4" bars on a vibrating platform. Items recovered during the screening process are then sorted. Items of potential interest (possible artifacts or objects of local interest), as described in the draft Cultural Resources Monitoring Plan (CRMP) (revised September 2020), were placed in a separate stockpile and photographed daily for AHRS archaeologists to review and then placed in a holding area for AHRS to inspect weekly.

RESULTS

AHRS archaeologist Scott Warnasch conducted scheduled site visits between April 28 and May 11, 2022 to review the recovered items in person with the assistance of a Clean Earth machine and operator to sort through stockpiled items. Photographs were taken of stockpiled items at Clean Earth. Recovered items are designated as artifacts, objects of local interest or debris according to section 4.3 of the CRMP and described below.

<u>Artifacts</u>

Artifacts are defined as meeting all of the following criteria:

- Identifiable by type, function, material and time period;
- Has an identifiable association with a specific building, site, event, or person along the Gowanus Canal during the canal's period of significance (1853 to 1965); and
- Confirms previously unconfirmed archival information along the canal or reveals new information that changes our understanding of the history/development of the area.

Objects of Local Interest

Objects of Local Interest are defined as meeting all of the following criteria:

- Identifiable by type, function, material and/or time period;
- Has a general association with the area, but not with a specific site, event, or person along the Gowanus Canal during the canal's period of significance (1853 to 1965); and
- Does not confirm previously unconfirmed archival information along the canal or reveal new facts that changes our understanding of the history of the area.

<u>Debris</u>

Debris is defined as any other item recovered from excavation/dredging, including unidentifiable objects, objects with no apparent association with the local area, construction debris, objects made after 1965 and natural items (such as trees, brush, rocks, etc.).

As per section 4.10.4 of the CRMP, objects of local interest may include small, non-porous objects of local interest that can potentially be turned over to interested parties for display or for their collection, subject to cleaning/decontamination procedures to be established. A determination regarding the appropriateness of such an action must be made by the United States Environmental Protection Agency (USEPA); an agreement among all interested parties (including, at a minimum, the GCERT and the interested party) will likely be required.

A total of 10 items of potential local interest were retained for cleaning, research and assessment from the monitoring, consisting of an industrial sized metal ladle and nine partial sections of wooden wagon or cart wheels.



Items Recommended for Retention

Artifact 1 – Industrial-sized Metal Ladle.

This item was likely used for pouring molten liquids into a receptacle or mold (Photograph 1). Research was conducted around the dredge area where the item was recovered, as per Memo 20 provided with Weekly Report 92 submitted to USEPA by the Trust on June 1, 2022. The presence of heavy industry is well documented along the Gowanus Canal in the late-19th and early-20th centuries. While not one of the primary industries, ironworking and iron casting could be found in many of the factories as workshops for machine maintenance and repair. A review of the 1886 and 1915 Sanborn maps in this area of the Gowanus Canal depict blacksmith shops connected to a number of lumber yards, brickyards and factories. In 1886, a smithy was located between the Fulton Municipal Gas Company and the Adam's Lime, Brick and Lath Yard on Sackett Street to the east of the Canal. There were another two smithies on Nevins Street between Union Street and Carroll Street east of the Kenyon and Newton's Lumber Yard. These shops allowed for in-house repairs and production of replacement parts for factory equipment. Although we are unable to determine which of these locations this particular metal ladle is associated, it is most likely associated with one of these locations, reflecting the industrial nature of the area. See Figure 1 for an example of a smaller similar type of casting ladle.



Photograph 1 – Industrial Metal Ladle.





Figure 1 – Example of smaller version of a casting ladle. Image obtained from (https://laurelleaffarm.com/).

Items Not Recommended for Retention.

The following nine items were retained and documented; however, none of the items can be directly associated with a particular property or business. Due to the porous, wooden construction, they will require considerable conservation efforts. A better example of these types of objects was retained from the previous recovery effort and described in End of Field Work memo #14 submitted to USEPA on January 19, 2022. Based on the dimensions of the individual items, it is likely that some of the wheel sections may represent parts of the same wheel.

These undated items were typical of the 19th and early 20th centuries and represent the industrial, shipping and storing character of the area and are most likely associated with the Gowanus Canal's commercial, industrial and transportation activities. The dimensions of the wheel segments clearly represent different styles and sizes of wagons and carts; however, none of the items are complete enough to get a sense of their particular use. The wood portions are porous and are difficult or impossible to decontaminate and should therefore be discarded.



Item for Discard 1 – Wagon Wheel Rim.

This item appears to be a section of a wooden wagon wheel rim (Photograph 2). Based in its wide arch and thin construction, it may have been part of a light wagon or carriage.



Photograph 2 – Wooden wagon wheel rim.



Item for Discard 2 – Wooden Wagon Wheel Segment with Rim and Five Spokes.

This item appears to be a section of a wooden wagon wheel comprised of one section of rim and five spokes (Photograph 2). Based on its relatively small circumference, it may have been part of a small wagon or hand cart.

Measurements Rim:	Length 38"	Height 1.5"	Width 1.75"
Measurements Spokes:	Length 8.5"	Height 1.5"	Width 1.5"



Photograph 3 – Wooden wagon wheel segment with rim and five spokes.



Item for Discard 3 – Wooden Wagon Wheel Segment with Metal Hub and Partial Spokes.

This item appears to be a section of a wooden wagon wheel with metal hub and the remnants of ten spokes. (Photograph 4). Based in its metal hub, the item was likely part of a heavy-duty wagon.

Measurements: Spoke Measurements:	Length 27" Length 10"	Hub Diameter 6" Height 1.5"	Hub Width 5.5" Width 1.75"
аналандар дана и дана 2 2 3 4 4 5 6 7 8 9 101 2 3 4 5 6 7 8 9 201	1'9' 1 70' 1' 71' 20 ' 13' 14' 15' 2 3 4 5 6 7 8 9 301 2 3 4 5 6 7 8 9	0 17 16 17 20 21 22 2 0 1 2 3 4 5 6 7 8 9 50 2 3 4 5 6 7	T 23 1 42 1 25 1 26 27 26 29 5 1 5 5 501 2 5 1 5 9 9 7 9 9 9 (01 2 3 4 5 5

Photograph 4 – Wooden wagon wheel segment with metal hub and four spokes.



Item for Discard 4 – Wooden Wagon Wheel Segment with Wooden Hub, Two Spokes and Rim.

This item appears to be a section of a wooden wagon wheel with partial wooden hub, rim and two spokes. (Photograph 5). Based in its construction, it may have been part of a wagon or a cart.

Measurements:	Length 30"		
Hub Measurements:	Length 13.25"	Height 5"	Width 3"
Spoke Measurements:	Length 20"	Height 2.5"	Width 3"
Rim Measurements:	Length 20"	Height 3"	Width 2.75"



Photograph 5 – Wooden wagon wheel segment with wooden hub with two spokes and rim.



Item for Discard 5 – Section of Wood Wagon Wheel Rim with One Spoke.

This item appears to be a section of a wooden wagon wheel rim with one spoke (Photograph 6). Based in its construction, it may have been part of a wagon or a cart.

Measurements:	Length 25"		
Spoke Measurements:	Length 22"	Height 2"	Width 2.75"
Rim Measurements:	Length 20"	Height 3"	Width 2.75"



Photograph 6 – Wood wagon wheel rim with one spoke.



Item for Discard 6 – Section of Wood Wagon Wheel Rim.

This item appears to be a section of a wooden wagon wheel rim (Photograph 7). Based in its construction, it may have been part of a wagon or a cart.



Photograph 7 – Section of wood wagon wheel rim.



Item for Discard 7 – Section of Wood Wagon Wheel Rim with One Spoke.

This item appears to be a section of a wooden wagon wheel rim with one spoke (Photograph 8). Based in its construction, it may have been part of a wagon or a cart.

Rim Measurements:	Length 20.5"	Height 3.25"	Width 2"
Spoke Measurements	:Length 22"	Height 2.5"	Width 3"



Photograph 8 – Section of Wood Wagon Wheel Rim with One Spoke.



Item for Discard 8 – Section of Wood Wagon Wheel Rim with One Spoke.

This item appears to be a section of a wooden wagon wheel rim with one spoke (Photograph 9). Based in its construction, it may have been part of a wagon or a cart.

Rim Measurements:	Length 20.5"	Height 3.25"	Width 3"
Spoke Measurements:Length 22"		Height 2.5"	Width 3"



Photograph 9 – Section of Wood Wagon Wheel Rim with One Spoke.



Item for Discard 9 – Single Wooden Wagon Wheel Spoke.

This item appears to be a single wagon wheel spoke (Photograph 10). Based in its construction, it may have been part of a wagon or a cart.



Photograph 10 – Single Wooden Wagon Wheel Spoke.

All nine of the recovered wheel components may represent nine different wheels; however, based on the dimensions of some of the wheel sections, it is likely that a few items may be part of the same wheel. Based on rim and spoke dimensions, and spoke spacing, it is possible that items 6, 4 and 7 may be part of the same wheel (Photograph 11). The same criterium suggests that items 5 and 9, may be part of a different wheel (Photograph 12).

The distinctive dimensions of Items 1, 2 and 3 (Photographs 2, 3 and 4) suggest that they represent individual wheels.





Photograph 11 – Composite of items #6, #4, and #7.



Photograph 12 – Composite of items #5 and #9.



CONCLUSIONS AND RECOMMENDATIONS

Considering that sections of the canal were dredged in the 1970s, it is possible that the items observed, regardless of their age, are fairly recent additions to the canal deposit. With no other context besides being in the canal, the historical information gleaned from such items is minimal. However, some of the items do represent aspects of the canal's past and are items of interest to area residents or canal enthusiasts.

AHRS concludes that 1 of the 10 items observed during the sediment screening at Clean Earth is an artifact and the other 9 are objects of local interest that are generally associated with the commercial, industrial and transportation activities of the canal. The metal industrial ladle is most likely an artifact associated with one of a couple of industries in the area of where it was found. However, the nine wooden wheel components, although representative of the canal's industrial past, are contaminated to a point that remediation would most likely be impossible or burdensome. The retention of the nine objects of local interest is at the discretion of the USEPA and the willingness of any interested parties as stated in the Results section above. Per the draft Cultural Resource Monitoring Plan, AHRS recommends that the nine objects of local interest identified above as contaminated and reviewed by the AHRS archaeologist at the Clean Earth facility as of 6/1/2022 be disposed of.

