Test Pit Monitoring Report, Former Naval Yard Annex, Brooklyn Navy Yard, Brooklyn (Kings County), New York NY SHPO No.: 13PR00424; NYC LPLC No.: Empire State Development Corp / 15ESD001K

Prepared for:

New York State Office of Parks, Recreation and Historic Preservation
Albany, New York

City of New York – Landmarks Preservation Commission
New York, New York

and

BNY Campus Associates, LLC
Brooklyn, New York

Prepared by:

Leah Mollin-Kling, M.A., R.P.A.
Chrysalis Archaeological Consultants, Inc.

Edited by:

Christopher Ricciardi, Ph.D., R.P.A.
Chrysalis Archaeological Consultants, Inc.

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July 2017
## MANAGEMENT SUMMARY TABLE

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<thead>
<tr>
<th>NY SHPO Project Review Number:</th>
<th>13PR00424</th>
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| Involved State/Federal Agencies:       | New York State – Office of Parks, Recreation and Historic Preservation  
City of New York – Landmarks Preservation Commission |
| Phase of Survey:                       | Phase IB (Monitoring) |
| Location Information:                 | Brooklyn Navy Yard, Brooklyn, Kings County, NY |
| Survey Area:                          | less than one acre |
| USGS 7.5 Quad Map:                    | Kings Quadrangle, 2013 |
| Archaeological Survey Overview:       | less than 0.5 acres |
| Results of Archaeological Survey:     | Potential concrete foundation supports and/or road beds were revealed in the 2 archaeologically monitored test pits and the 2 recorded Test Pits |
| Recommendation:                       | Continued monitoring in the areas of archaeological sensitivity |
| Results of Architectural Survey:      |                     |
| Buildings within Project Area:        | 1 |
| Buildings adjacent to Project Area:   | n/a |
| Previous N/R Buildings:              | n/a |
| Eligible N/R Buildings:               | 1 |
| Report Authors:                      | Leah Mollin-Kling, M.A., R.P.A. |
| Report Editor:                       | Christopher Ricciardi, Ph.D., R.P.A. |
| Date:                                 | July 2017 |
BNY Campus Associates, LLC (BNY CA) is the developer, on behalf of Steiner NYC, of the former Brooklyn Navy Yard - Naval Hospital Annex and plans to complete a large-scale infrastructure project to support its development in the future. Chrysalis Archaeological Consultants, Inc. (Chrysalis) has been retained as the archaeological contractor for the Phase IB Cultural Resource Management/Archaeological investigation of the overall project.

Prior to commencement of the future project, a series of Test Pits were excavated to assist in determining the locations of existing below grade infrastructure and potential obstructions in order to inform the design of new infrastructure, which will support the redevelopment of the site. The Test Pits are not being excavated to determine an archaeological testing pattern or strategy for the future project.

In 2015, the New York State Office of Parks, Recreation and Historic Preservation (NY SHPO) in a Letter of Resolution (LOR), determined that any excavation work within fifty feet of the former hospital building and an on-site cemetery would require some form of archaeological monitoring/testing prior to construction activities. Therefore, based on the LOR, the 50 foot boundaries around both features are considered the Archaeological Area of Potential Effect (APE). Although a total of 29 Test Pits were excavated as part of this project, only 4 fell within the 50 foot buffer zone requiring monitoring. Of the four proposed Test Pits, only two were archaeologically monitored due to changing site conditions. Two other Test Pits were recorded based on the Unanticipated Discoveries Plan. All other Test Pits, outside the 50 foot buffer zone, followed an Unanticipated Discoveries Plan that was developed for this phase of the project.

The purpose of this Phase IB investigation was to: 1) determine whether the APE contained significant historic resources, 2) determine if additional archaeological work would be needed to further mitigate resources that may be impacted by the proposed activities, and 3) document/catalog any resources that may be identified during the investigation.

All subsurface excavations within the areas approved for Archaeological Monitoring were outlined in the combined Archaeological Monitoring, Unanticipated Discoveries and Human Remains Protocol plan, which was coordinated and approved by the project proponent, The New York City Economic Development Corporation (NYC EDC), NY SHPO and the City of New York – Landmarks Preservation Commission (NYC LPC). All work was conducted in accordance with the National Historic Preservation Act of 1966, as amended, and the Advisory Council on Historic Preservation’s “Protection of Historic and Cultural Properties” (36 CFR 800); NY SHPO’s and NYC LPC’s Guidelines for Archaeological Projects. Alyssa Loorya, M.A., MPhil., R.P.A., served as Principal Investigator for this project, and Leah Mollin-Kling, M.A., R.P.A., served as Field Director. The report was edited by Christopher Ricciardi, Ph.D., R.P.A.
Based on the results of the archaeologically monitored test pits and the information from the two test pits where unanticipated discoveries were made, the area contains the potential for the recovery of early twentieth century historic resources associated with the hospital and Naval complex. It is recommended that archaeological monitoring continue in the areas determined to be potentially sensitive.
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ACKNOWLEDGEMENTS

Chrysalis Archaeological Consultants would like to thank Peter Erhartic and Benjamin Tressler from BNY Campus Associates, LLC for the opportunity to assist with this project.

Thanks always to Philip Perazio of the New York State Office of Parks, Recreation and Historic Preservation and Amanda Sutphin, Director of Archaeology at the City of New York – Landmarks Preservation Commission for their counsel throughout this process.
I. INTRODUCTION

BNY Campus Associates, LLC (BNY CA) is the developer, on behalf of Steiner NYC, of the former Brooklyn Navy Yard - Naval Hospital Annex and plans to complete a large-scale infrastructure project to support its development in the future. Chrysalis Archaeological Consultants, Inc. (Chrysalis) has been retained as the archaeological contractor for the Phase IB Cultural Resource Management/Archaeological investigation of the overall project.

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In 2015, the New York State Office of Parks, Recreation and Historic Preservation (NY SHPO) in a Letter of Resolution (LOR), determined that any excavation work within fifty feet of the former hospital building and an on-site cemetery would require some form of archaeological monitoring/testing prior to construction activities. Therefore, based on the LOR, the 50 foot boundaries around both features are considered the Archaeological Area of Potential Effect (Map 03). Although a total of 29 Test Pits were excavated as part of this project, only 4 fell within the 50 foot buffer zone requiring monitoring. Of the 4 proposed Test Pits, only two were archaeologically monitored due to changing site conditions. All other Test Pits, outside the 50 foot buffer zone, followed an Unanticipated Discoveries Plan that was developed for this phase of the project.

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Map 02: Project area map (NYCityMap 2015).
II. PROJECT DESCRIPTION

The current project calls for the excavation of 29 Test Pits. The dimension of each test pit is going to be approximately 1.5m (5’) square by up to 4.6m (15’) deep. The purpose of the test pits is to obtain information regarding existing utilities; potential obstructions, such as old foundations and abandoned utility lines, and current soil conditions. The size and location of the Test Pits have been determined by the Project’s civil engineer, who is designing the infrastructure package to support the redevelopment of the site. The depth of the Test Pits are to expose potential bearing strata for geotechnical study. This information will be used to help guide the infrastructural improvements as part of the overall project. This infrastructural work will occur after this initial testing is completed.

All existing infrastructure at the Naval Annex is in varying states of disrepair and much of it is completely unsalvageable. BNY CA is in the process of designing new roads, curbs, and sidewalks; water, sewer, gas, and electric distribution; stormwater detention structures etc. that will facilitate the redevelopment of the Site. This infrastructure package includes rebuilding of roads and running portions of new utility loops in front of the Hospital building and adjacent to the cemetery boundaries, largely within the footprint of existing roads. These portions of the infrastructure package are essential to complete the road and utility loops that will serve rehabilitated and future new buildings on Site. It should be noted that this current or any future plan will not call for test pits or infrastructure improvements within the cemetery directly.

Area of Potential Effect

NY SHPO determined the Area of Potential Effect (APE) in the Letter of Resolution (2015) (Appendix A). They defined any excavation within 50 feet of the former Naval Hospital building and the on-site cemetery would require some form of cultural resource action. For this project, although 29 Test Pits were excavated, only 4 fell within the confines of the 50-foot buffer zone, of which two were actually excavated, thus requiring Archaeological Monitoring.

Phase IA Results

There have been several cultural resource projects undertaken at the Brooklyn Navy Yard. For this project the most relevant action was a Phase IA (Geismar 1996).

Prehistoric Sensitivity

Geismer, in her 1996 Phase IA documentary study of the Brooklyn Navy Yard Annex, determined that the likelihood of prehistoric artifacts and features remaining intact in the area was very small. A previous archaeological assessment of the area contended that the prehistoric sensitivity of the Annex was high based solely on the topography of the area (BEC 1994). Instead, she argues that, even though the Annex is situated on a plateau overlooking the East River, the landform is not natural as it has been continually modified via construction, leveling, and in-filling over the past 200 years. Though this does not negate the presence of prehistoric sites, it does minimize the probability of finding intact deposits in the Brooklyn Navy Yard. No known prehistoric sites have ever been found. In addition, locating deeply buried intact soils and sediments at depths that may contain prehistoric sites was not within the scope of this project.
Historic Sensitivity

The potential for historic materials, sites, and features, on the other hand, is very high. Europeans have occupied the Annex since at least 1654 and the area became a United States military facility in 1833 (Geismer 1996:10,15). Most of the historic potential Geismer cites in her report relates to the military buildings and installations on the property, though it is possible that some of the structures and features relating to Martin Schenck’s late-eighteenth and early-nineteenth century farm or the remains of the Revolutionary War-era British encampment could still exist. The most significant and likely historical features that might be uncovered are: outdoor toilet facilities; remnants of the original copper-piped sewer system, cisterns, cesspits, and other waste water components; foundations from outbuildings to the east of the hospital; and either burials or fragmentary skeletal remains from the hospital’s adjacent cemetery.

The Naval Hospital was built between 1833 and 1838 and is an official New York City Landmark, as is the adjacent Surgeon’s House (Geismer 1996:i). Above ground historical resources are abundant in the Brooklyn Navy Yard Annex, though not the focus of this project. Documentary evidence indicates that a number of large, brick buildings were built in the area between the hospital and the cemetery at the end of WWI, though they were destroyed at some point in the twentieth century.

The cemetery was active between 1834 and 1910 and all burials were supposed to have been disinterred and moved in 1926 (Geismer 1996:24). However, as Geismer’s documentary research notes, the number of re-interments does not equal the number of original burials, thus indicating the possibility that human remains still exist in the Annex (Geismer 1996:iv). Almost all of the recorded burials were of sailors and marines who perished in the hospital. However, some have speculated that the cemetery and Annex could also contain the graves of Americans that died aboard British prison ships during the Revolutionary War; African-American burials, like that of the African Burial Ground in lower Manhattan; and the remains of a private cemetery from early property-owners. However, Geismer has found no evidence that any of these remains are likely to exist in the Brooklyn Navy Yard.

Archaeological Monitoring Plan

A Phase IB Monitoring Plan, Unanticipated Discoveries Plan and Human Remains Protocol (Appendix B) was developed and approved by the NY SHPO and NYC LPC in May 2017 (Appendix C).

The Plan called for Archaeological Monitoring of four Test Pits that were slated for excavation within the 50 foot buffer zone boundary of the two archaeologically sensitive features (Map 03).

All other Test Pits would be subject to the Unanticipated Discoveries Plan and the Human Remains Protocols.
Map 03: APE and four archaeologically monitoring Test Pit locations – based on NY SHPO LOR 2015
III. FIELD RESULTS

Phase IB Archaeological Monitoring in the Brooklyn Navy Yard Annex, Brooklyn, Kings County, New York, NY, was undertaken in June 2017. Based upon the excavation plan proposed by the BNY CA, detailed in the Monitoring Plan and approved by NY SHPO and NYC LPC, four test pits were identified as requiring archaeological monitoring as they fell within the 50-foot buffer zone surrounding the former hospital and on-site cemetery. However, only two of the original four test pits, Test Pit 1/Trench 29\(^1\) and Test Pit 2/Trench 20, were excavated. The other two test pits in the original proposal were not excavated on the determination of the project’s civil engineer. The first unexcavated trench was located at the southwest corner of the hospital and was deemed superfluous as Test Pit 1/Trench 29 would yield similar information. The other, located in an intersection near the northwest corner of the on-site cemetery, was not excavated because it would have hampered vehicular movement in the area. Archaeologists will need to be on-site if these two locations are excavated in the future.

However, two additional test pits necessitated archaeological assessment as per the requirements in the Unanticipated Discoveries Plan that was approved for this phase of the project. Unmonitored excavation of Test Pit 3/Trench 30 and Test Pit 4/Trench, both of which fall outside of the 50-foot buffer zone, uncovered the remains of two concrete structural foundations in or near the Annex’s football field. Following the Unanticipated Discoveries Plan, these two additional Test Pits were recorded to determine their potential historical significance.

\(^1\) It should be noted that Test Pit numbers are the designations by the archaeological team and the Trench Numbers are the designations by the BNY CA civil engineer. Both are provided in this report.
The first exploratory trench was located approximately 7.62m (25’) north of the northwest (NW) corner of the hospital in an intersection laying just east of the Surgeon’s House (Image 01). The trench’s dimensions were supposed to have been 1.5m (5’) squared and excavated to a depth of 1.5m (5’) below ground surface (bgs). However, the backhoe uncovered an unanticipated gas line and thick layer of concrete immediately beneath the blacktop at .15m (.5’) bgs. As the equipment on hand could not excavate through thick concrete without damage, the trench was instead widened in a number of directions in order to see how far the concrete extended. The blacktop was pulled back approximately 6.1m (20’) to the south, 1.5m (5’) to the west, and .9m (3’) to the east, exposing additional concrete throughout.
Two different concrete-filling episodes were identified in the trench, which also bisected the roadway (Image 02). In photos, this bisection appears as a distinct seam running through the middle of the road (Image 01). The eastern portion of concrete was the harder of the two and could not be broken up by the backhoe. The western concrete portion was slightly softer, allowing the machine to scrape off the top inch or so. However, no significant depth could be attained in either concrete section. Further consultation of historic WWII-era maps of the area, by BNY CA, revealed that much of the Annex’s roadways are or underlying previous roadways.

Test Pit 1/Trench 29 was 1.5m (5’) by 2.7m (9’) and excavated to a depth of .98m (3.2’) bgs. The harder concrete was .24m (.8’) thick and was preceded by a 10 YR 2/1 black silty sand, which is possibly a weatherproofing layer, to a depth of .56m (1.8’) bgs (Image 03). Two reddish-brown fill layers were found beneath the concrete and black layers. The first was a 7.5 YR 3/2 dark brown silty sand that terminated at .73m (2.4’) bgs. The second was a 7.5YR 4/3 brown silty sand that terminated at the bottom of the trench at .98m (3.2’) bgs. The softer concrete was slightly less thick at .15m (.5’) and sat atop the 7.5 YR 3/2 dark brown fill. A section of metal pipe, possibly part of the old gas line, was pulled up by the backhoe during excavation of the trench. No significant archaeological materials or intact soils were uncovered.
Table 01: Stratigraphic Profile of the South Wall of Test Pit /Trench 29.

<table>
<thead>
<tr>
<th>STRAT</th>
<th>DEPTH (bgs)</th>
<th>MUNSELL</th>
<th>SOIL TYPE</th>
<th>COMMENTS</th>
</tr>
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<tbody>
<tr>
<td>I</td>
<td>0 – .15m</td>
<td></td>
<td>Blacktop</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(.0’ – .5’)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>II</td>
<td>.15 – .24m</td>
<td>10 YR 2/1</td>
<td>Concrete</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(.5’ – .8’)</td>
<td>Black</td>
<td></td>
<td></td>
</tr>
<tr>
<td>III</td>
<td>.24 – .56m</td>
<td>SiSa</td>
<td>10 YR 2/1</td>
<td>Possible weatherproofing layer</td>
</tr>
<tr>
<td></td>
<td>(.8’ – 1.8’)</td>
<td>Black</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IV</td>
<td>.56 – .73m</td>
<td>SiSa</td>
<td>7.5 YR 3/2</td>
<td>Fill: brick</td>
</tr>
<tr>
<td></td>
<td>(1.8’ – 2.4’)</td>
<td>Dark Brown</td>
<td></td>
<td></td>
</tr>
<tr>
<td>V</td>
<td>.73 – .98m</td>
<td>SiSa</td>
<td>7.5 YR 4/3</td>
<td>Fill</td>
</tr>
<tr>
<td></td>
<td>(2.4’ – 3.2’)</td>
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Image 03: Test Pit1/Trench 29’s south wall profile.
**Test Pit 2/Trench 20**

The second trench excavated was located just south and within the 50-foot buffer zone of the Annex’s on-site cemetery. The trench was placed in a blacktop-filled parking lot equidistant between the cemetery’s southern fence line and a loading dock to the south. The project’s civil engineer, in an effort to determine whether the same concrete layer that appeared under the blacktop in Test Pit 1/Trench 29 existed at this location, requested that a narrow 4.6m (15’’) long trench be opened running from close to the cemetery’s fence towards the loading dock to the south (Image 04). No concrete was found underneath the blacktop in the narrow trench and excavation was discontinued at .15m (.5’’) bgs in this location.

![Image 04: Location of Test Pit2/Trench 20, looking northwest towards the cemetery.](image)

Test Pit 2/Trench 20, a deeper, 1.5m (5’) by 2.4m (8’) rectangular trench, was opened to a depth of 3.65m (12’) bgs at the south end of the narrow trench (Image 05). At .06m (.2’’) bgs, a .15m (.5’’) thick stratum of rebar-enforced, chunky cement emerged from underneath the blacktop. The cement in Test Pit 2 is not the same as that found in Test Pit 1/Trench 29. Test Pit 2’s cement is very chunky with small quartz cobble inclusions. The rebar in the location is also very thin. It was postulated that the cement was placed in this area to reinforce the loading dock area. The soil was primarily a 7.5 YR 4/3 brown silty fine sand fill with small cobbles (Image 06). No significant archaeological materials or human remains were recovered in Test Pit 2/Trench 20.
Image 05: Excavation of Test Pit 2/Trench 20, looking southeast towards the loading dock.

Table 02: Stratigraphic Profile of the West Wall of Test Pit 2/Trench 20.

<table>
<thead>
<tr>
<th>STRAT</th>
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<th>SOIL TYPE</th>
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<tbody>
<tr>
<td>I</td>
<td>0 – .06m</td>
<td></td>
<td>Blacktop</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0’ – .2’)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>II</td>
<td>.06 – .21m</td>
<td></td>
<td>Cement</td>
<td>Rebar-reinforced</td>
</tr>
<tr>
<td></td>
<td>(.2’ – .7’)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>III</td>
<td>.21 – 3.66m</td>
<td>7.5 YR 4/3</td>
<td>SiSa w/small cobbles</td>
<td>Fill: brick</td>
</tr>
<tr>
<td></td>
<td>(.7’ – 12’)</td>
<td>Brown</td>
<td></td>
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</table>
Concrete foundations were uncovered in two Test Pits located outside of the 50-foot buffer-zone. As per the requirements laid out in the Unanticipated Discoveries Plan, the archaeological team returned to the site to assess and record the foundational elements.

**Test Pit 3/Trench 30**
Test Pit 3/Trench 30 was located in an open field in-between two football uprights, approximately 9.14m (30’) west of the adjacent street and over 15.24m (50’) west of the on-site cemetery (Image 07). The field is relatively flat and is covered in hay. The trench’s dimensions are 2.7m (9’) by 3.96m (13’) and was excavated to a depth of 1.7m (5.7’) bgs. The concrete foundation emerged at 1.13m (3.7’) bgs along the east wall of the trench (Image 08). Heavy rains over the previous weekend caused a significant amount of over-wash to fall into the test pit, impacting the integrity of the stratigraphic profile.
The visible portion of the foundation is 1.6m (5.3’) long and runs north to south (Image 09). The wall is made of concrete and is covered in some parts a thin, black, degrading lining. The foundation wall appears to take a 90 degree turn in the southern part of the trench, forming a “L” shape. The wall appears to extend north beyond the open trench. The full extent of the foundation was not exposed during trenching.

Pieces of ceramic and metal pipes littered the ground around the trench. Besides a thin layer of topsoil, the stratigraphy was one deep and continuous layer of 7.5 YR 4/3 brown silty sandy loam fill with demolition materials: bricks, unidentified metal, bottle glass, mortar, concrete, and porcelain ceramics.

Table 03: Stratigraphic Profile of the East Wall of Test Pit 3/Trench 30.

<table>
<thead>
<tr>
<th>STRAT</th>
<th>DEPTH (bgs)</th>
<th>MUNSELL</th>
<th>SOIL TYPE</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>0 – .1m (0’ – .33’)</td>
<td>10 YR 4/3 Brown</td>
<td>SiSaLo</td>
<td>Organic topsoil</td>
</tr>
<tr>
<td>II</td>
<td>.1 – 1.13m (.33’ – 3.7’)</td>
<td>7.5 YR 4/3 Brown</td>
<td>SiSaLo</td>
<td>Fill: demolition materials, bricks, mortar, concrete, ceramics, glass</td>
</tr>
<tr>
<td>III</td>
<td>1.13 – 1.74m (3.7’ – 5.7’)</td>
<td></td>
<td></td>
<td>Cement Foundation</td>
</tr>
</tbody>
</table>
Numerous artifacts exposed in Test Pit 3/Trench 30’s backdirt pile support an early twentieth century construction date for the foundation, four of which are pictured here for reference (Image 10): a fragment of a thick, amber glass bottle; a piece of a porcelain base; a hexagonal porcelain tile; and an aqua-colored glass bottle base\(^2\). However, none of the artifacts were recovered in situ or in intact strata, lessening their analytical value, nor were they considered significant by themselves. All artifacts were noted and redeposited back in the Test Pit.

\(^2\) Note that the quarter pictured in the artifact picture is for scale reference only and was not recovered with the material remains.
Image 10: Representative sample of artifacts recovered from Test Pit 3/Trench 30’s backdirt pile. Clockwise from the top: a fragment of a thick, amber glass bottle; a piece of a porcelain base; a hexagonal porcelain tile; and an aqua-colored glass bottle base.
Test Pit 4/Trench 21

Test Pit 4/Trench 21 is located south of the southernmost football upright in a flat, though overgrown field (Image 11). The Bristol-Meyers Squib laboratory lies approximately 15m (50’) to the east and the hospital is over 15m (50’) to the west of the trench. The cement foundation in Test Pit 4/Trench 21 is much larger and more robust than that found in Test Pit 3/Trench 30, although this could be the result of the methods used during demolition and/or the depth attained during trenching. The foundation extends past the open portion of the trench and continues for an unknown length to the west and east. The trench was excavated to a depth of 2.6m (8.5’) bgs.
The visible part of the foundation wall runs 3.5m (11.5’) east to west and is 1.8m (6’) deep (Image 12). The wall is .52m (1.7’) thick and features two steps: one emerging .76m (2.5’) below the top of the wall and the other at 1.2m (4’) below the top of the wall. The stratigraphy in the area was the same as Test Pit3/Trench 30: thin topsoil layer followed by 7.5 YR 4/3 brown silty sandy loam with demolition fill. A thin horizon of dark sediment or soil appeared near the eastern edge of the visible portion of the foundation and followed it on a diagonal to the northeast bottom of the trench. The layer is probably related to the foundation’s construction, although this cannot be ascertained without further excavation.

Table 04: Stratigraphic Profile of the North Wall of Test Pit 4/Trench 21.

<table>
<thead>
<tr>
<th>STRAT</th>
<th>DEPTH (bgs)</th>
<th>MUNSELL</th>
<th>SOIL TYPE</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>0 – .1m (0’ – .33”)</td>
<td>10 YR 4/3 Brown</td>
<td>SiSaLo</td>
<td>Organic topsoil</td>
</tr>
<tr>
<td>II</td>
<td>.1m – .76m (.33’ – 2.5’)</td>
<td>7.5 YR 4/3 Brown</td>
<td>SiSaLo</td>
<td>Fill: demolition materials, bricks, mortar, concrete, ceramics, glass</td>
</tr>
<tr>
<td>III</td>
<td>.76 – 1.06m (2.5’ – 3.5’)</td>
<td>10 YR 3/2 Very Dark Greyish Brown</td>
<td>SiSa</td>
<td></td>
</tr>
<tr>
<td>IV</td>
<td>.76 – 2.6m (2.5’ – 8.5’)</td>
<td></td>
<td></td>
<td>Cement Foundation</td>
</tr>
</tbody>
</table>
A couple of artifacts were found in the backdirt pile that could help to date the construction, use, and/or destruction of the foundation’s structure. As with the previous Test Pits, the artifacts were not recovered from an in situ context, nor were they considered significant. All artifacts were recorded and redeposited back into the Test Pit. The first is the neck of a clear glass bottle with some patination (Image 13). The neck features a crown cap followed by a continuous, small-mouth external thread (also known as a screw-top) and a string-rim (also called a “bead”) with no visible seams. The bottle was probably machine-produced and, with all of the elements taken together, is of late nineteenth century manufacture, at the earliest.

Image 13: Glass bottle recovered from Test Pit 4/Trench 21’s backdirt pile.

The second artifact is an almost intact brick with a weathered and broken frogged maker’s mark along one of its faces (Image 14). The maker’s mark probably says “M B Co”, although the brick breaks off before the whole mark can be read. As a result, is not easily dated or associated with a specific manufacturer. A few other similar bricks with broken-off and unidentifiable maker’s marks were found and fragments of unmarked bricks suffused the backdirt pile.
Image 14: Brick with maker’s mark found in Test Pit 4/Trench 21’s backdirt pile.
IV. CONCLUSIONS & RECOMMENDATIONS

The purpose of excavating test pits in the Brooklyn Navy Yard Annex was to obtain below-ground information regarding existing utilities, obstructions, and soil conditions in order to assist engineers with designing and implementing the project’s infrastructural improvements. The four test pits monitored or assessed, Test Pit 1/Trench 29, Test Pit 2/Trench 20, Test Pit 3/Trench 30 and Test Pit 4/Trench 21, provided information for the future construction project, although they did not provide significant archaeological resources.

The most important discovery with the potential to impact future improvements was the extensive cement layer found underneath the blacktop in Test Pit 1/Trench 29. The presence of the cement prompted additional documentary research by the project, which indicated that the United States military had paved the majority of the roads within the Annex with cement. The breadth of the cement layer, if it is indeed found across the site, may influence the scope, and budget, of the future project.

Archaeologically, the most significant discovery was of the two cement foundations in Test Pits 3 and 4. Based on historical maps of the area, these foundations were probably the remains of large, brick buildings built behind the naval hospital to the east sometime at the end of World War I. Artifacts found in each test pit’s backdirt pile supports an early twentieth century construction date. While it is not known exactly when the buildings were destroyed, the fact that the foundation in Test Pit 3/Trench 30 was found in a football field suggests that it was sometime before the Annex was abandoned. No above ground remains of any of the brick buildings in the area east of the hospital were visible. It is unlikely, given their placement and construction, that the foundations in Test Pits 3 or 4 are part of the outdoor toilet facilities mentioned by Geismer as potentially significant in her 1996 report. Any additional trenching or work in the fields to the east of the hospital will probably yield additional foundation elements or demolition debris.

The stratigraphy of each of the four test pits indicates that the Brooklyn Navy Yard Annex has been extensively in-filled and modified over the years. No human remains were recovered in Test Pit 2/Trench 20, which was the only trench excavated within the 50-foot buffer-zone around the cemetery. No outbuildings, privies, waste-water systems, cisterns, cesspits, garbage dumps, or any other features associated with the historic hospital complex were found in Test Pit 1/Trench 29, which was the only trench excavated within the 50-foot buffer-zone surrounding the hospital. The harder concrete layer found in the eastern half of the roadway in Test Pit 1/Trench 29 may have been laid as extra support for the hospital’s foundation.

Information provided by BNY CA indicates that concrete was uncovered in several of the Test Pits throughout the loop road. The concrete ranged in thickness from 20 cm (8”) to 40 cm (16”). Site plans from the 1940s, in the collection of BNY, indicate that concrete was the material used for roadways throughout the hospital area. Therefore, it is assumed that the concrete uncovered from these locations are most likely part of that roadway system.
Although the Test Pits did not reveal information that would be deemed significant, it is recommended that the project continue to follow the directive of the LOR regarding the continuation of the cultural resource management process. In addition, it is further recommended that the areas outside of the LOR continue to be subject to an Unanticipated Discoveries Plan as there remains the potential to recover information and materials from the late nineteenth to early twentieth century periods.
V. REFERENCES

Baystate Environmental Consultants, Inc.

Chrysalis Archaeological Consultants, Inc.

City of New York – Landmarks Preservation Commission.

Geismar, Joan.

New York Archaeological Council.


United States Geological Survey.
Appendix A:

New York State Office of Parks, Recreation and Historic Preservation’s

Letter of Resolution – Brooklyn Navy Yard Annex Site
LETTER OF RESOLUTION
AMONG
THE NEW YORK STATE URBAN DEVELOPMENT CORPORATION
D/B/A EMPIRE STATE DEVELOPMENT,
BROOKLYN NAVY YARD DEVELOPMENT CORPORATION,
The New York State Office of Parks, Recreation and Historic Preservation,
And
BNY Campus Associates, LLC
Regarding
The Brooklyn Navy Yard Naval Annex
Brooklyn, Kings County

WHEREAS, the proposed project is the rehabilitation of the 18-acre Brooklyn Navy Yard Naval Annex (Naval Annex) into a Media Campus and other development to expand Steiner Studios' campus in the Brooklyn Navy Yard (the "Project") by the project sponsor, BNY Campus Associates, LLC, with funding from the New York State Urban Development Corporation d/b/a Empire State Development (ESD);

WHEREAS, the Naval Annex is located within the State/National Registers of Historic Places (S/NRHP)-listed Brooklyn Navy Yard Historic District, includes the S/NRHP-eligible Naval Hospital Archeological Site and is adjacent to the S/NRHP-eligible Naval Hospital Cemetery Site;

WHEREAS, the ESD funding would facilitate the rehabilitation inside the Naval Annex of 180,000 sf of historic structures and development of 170,000 sf of new construction to serve a variety of uses, including offices for film and television production and post-production, animation, digital media, general media and academic uses, to complement Steiner Studios, the largest film and television studio on the east coast, which expansion will allow Steiner Studios to serve more forms of media in one location, offering efficiency not easily obtained in New York City as well as significant job creation;

WHEREAS, the ESD funding would facilitate the development of a new entrance to the Brooklyn Navy Yard at Kent Avenue and Wilson Street and a 70,000 square-foot "Backlot", and the project sponsor may seek to construct a 250,000 square-foot Parking Garage proximate to Kent Avenue, in areas of the Brooklyn Navy Yard located outside the Naval Annex;

WHEREAS, the State (through ESD) would contribute funds for the construction of key infrastructure improvements, including provision of up-to-date power, gas, water, sewer, and teledata services to allow the development of the Media Campus and the new entrance to the Brooklyn Navy Yard on Kent Avenue, without which the Project would be cost-prohibitive, and the project sponsor may seek additional ESD funding in the future in order to construct the Parking Garage;
WHEREAS, the Project would have an overall positive effect on historic resources by maintaining and/or rehabilitating for reuse 21 architectural resources that contribute to the significance of the S/NRHP-listed Brooklyn Navy Yard Historic District, most notably the Naval Hospital (R95) and the Surgeon's House (R1), which are also landmarks designated by the New York City Landmarks Preservation Commission (LPC), and by overall rehabilitating the campus setting of the Naval Annex;

WHEREAS, when the Naval Annex was conveyed by the U.S. Navy (Navy) to the City of New York, the Navy and New York State Office of Parks, Recreation and Historic Preservation (which is commonly known as the New York State Historic Preservation Office (NYSHPO)) entered into a Programmatic Agreement (PA), including a standard historic preservation covenant as Attachment 4 to the PA, to guide proper treatment of the Naval Annex in accordance with the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings, and the conveying language in the quitclaim deed between the federal government and the City of New York incorporated the historic preservation covenant from the PA as Item VI under Notices, Covenants, Conditions, Reservations, and Restrictions, and the PA also included a standard archeological covenant as Attachment 2, which relates directly to the Naval Hospital Archaeological Site (#A04701.014975) within the Naval Annex;

WHEREAS, under the Project, BNY Campus Associates, LLC would enter into a 47-year lease with five (5) ten (10) year options to renew with the Brooklyn Navy Yard Development Corporation (BNYDC) to develop the Naval Annex into the Media Campus;

WHEREAS, ESD is the lead agency in the preparation of an Environmental Impact Statement (EIS) under the State Environmental Quality Review Act (SEQRA) for the Project;

WHEREAS, a number of contributing resources to the S/NRHP-listed Brooklyn Navy Yard Historic District, including the Tennis Courts (R464 and R474), Greenhouse Remnants (R448), Film Exchange (Building 311), and Quarters No. 2 & 3 (R2 and R3) have been proposed for demolition as part of the Project;

WHEREAS, all prudent and feasible alternatives have been explored for the preservation and/or reuse of the contributing resources proposed for demolition;

WHEREAS, the NYSHPO has determined that the demolition of the aforementioned contributing resources would constitute an Adverse Impact;

WHEREAS, the archaeological assessment prepared for the EIS concludes that the proposed construction of a new infrastructure loop under the Project has the potential to impact potential archaeological resources within the Naval Hospital
Archaeological Site (#A04701.014975 [see Appendix A - Figure 1 for Naval Hospital Archaeological Site]);

WHEREAS, ESD, in consultation with NYSHPO, has determined that the Project may have an Adverse Impact upon the following Historic Resources in the project area:

1. S/NRHP-listed Brooklyn Navy Yard Historic District
2. S/NRHP-eligible Naval Hospital Archaeological Site (#A04701.014975)

WHEREAS, the purpose of this Letter of Resolution (LOR) is to ensure that appropriate mitigation measures are taken to address the identified Adverse Impact due to the demolition of the contributing resources, and to avoid any construction-related damage on historic and archaeological resources;

NOW, THEREFORE, as referenced in the EIS and in accordance with Section 14.09 of the New York State Parks, Recreation and Historic Preservation Law, ESD, BNYDC, BNY Campus Associates, LLC, and NYSHPO agree that the Project may proceed subject to the Stipulations specified below:

**STIPULATIONS**

1. The project sponsor will prepare a standard documentation package of contributing and non-contributing resources to be rehabilitated or retained and non-contributing resources to be removed, including:

   a) High-resolution digital photographs documenting the Naval Annex portion of the S/NRHP-listed Brooklyn Navy Yard Historic District and the setting and exteriors of contributing and non-contributing buildings and structures that would be rehabilitated or retained, and non-contributing buildings and structures that would be removed within the Naval Annex, as indicated in Table 1 in Appendix B.

   Prior to digital photography, buildings and structures should be cleared of foliage and other obstructions that prevent clear views, or photographs should be taken during periods when foliage is not in bloom.

   The photographic documentation will be prepared and submitted in accordance with the National Park Service digital photography standards for NRHP nomination documentation in effect at the execution date of this Letter of Resolution.

   b) If available, historic photographs of buildings and structures, photographed with high-resolution digital photography as specified in Item a.
c) If available, existing or historic drawings of buildings and structures, photographed with high resolution digital photography as specified in Item a, or reproduced at original size on Mylar.

d) A site plan to which the photographs in Item a have been numbered and keyed with arrows to identify the location and view depicted.

e) Written data, including brief physical descriptions of the overall Naval Annex setting, and exteriors of buildings and structures; brief historic context and statement of significance regarding the overall Naval Annex; and information about the Project.

2. The project sponsor will prepare a Historic American Buildings Survey (HABS) Level II documentation package of contributing buildings and structures within the Naval Annex to be removed, including:

a) Large-format black-and-white archival photographs of setting and exteriors and interiors of contributing buildings and structures slated for removal as indicated in Table 1 in Appendix B.

Prior to large-format photo-documentation, buildings and structures should be cleared of foliage and other obstructions that prevent clear views, or photographs should be taken during periods when foliage is not in bloom.

b) Written data on buildings and structures, including exterior physical descriptions and interior physical descriptions; brief historic context, statement of significance; and information about the Project prepared under Item 1.e will also be included.

c) If available, historic photographs of buildings and structures, photographed with high-resolution digital photography as specified in Item 1.a.

d) If available, existing or historic drawings of buildings and structures, photographed with high resolution digital photography as specified in Item 1.a., or reproduced at original size on Mylar.

e) A site plan to which the photographs in Item a have been numbered and keyed with arrows to identify the location and view depicted.

3. The Standard and HABS Level II documentation packages will be provided for NYSHPO review in draft form. Once final format and content have been agreed to, the project sponsor will prepare four hard and electronic copies of each package and provide them to the organizations listed below. Hard copies of the packages will be made available to the public at these
organizations. In addition, the organizations may opt to have the electronic versions of the packages downloadable from their websites. The organizations include:

a) New York State Division for Historic Preservation
   Peebles Island Resource Center
   Delaware Avenue
   Cohoes, NY 12047

b) Building 92
   Brooklyn Navy Yard
   63 Flushing Avenue
   Brooklyn, NY 11205

c) Brooklyn Historical Society
   128 Pierrepont Street
   Brooklyn, NY 11201

d) Brooklyn Public Library
   10 Grand Army Plaza
   Brooklyn, NY 11238

e) New York Public Library
   5th Avenue at 42nd Street
   New York, NY 10018

4. The project sponsor will prepare a Construction Protection Plan (CPP) to protect contributing resources to be rehabilitated or retained at the Naval Annex during the demolition of existing structures and construction of new structures. The CPP will be developed in coordination with the NYSHPO and professional engineers that will work with the project sponsor. Elements of the plan for preserving the historic integrity of the resources will include the following:

a) Existing foundation and structural condition information for the buildings to be reused.

b) Identification of interior and exterior historic character-defining features to be preserved.

c) Protection from falling objects.

d) Monitoring during construction using tell-tales, and horizontal and lateral movement scales.
e) Means and methods plan for how the demolition and construction would proceed.

5. New construction will be undertaken in a context-sensitive manner. In accordance with the covenant in the PA and quitclaim deed, ongoing consultation with the NYSHPO regarding new construction will occur among the project sponsor, BNYDC, ESD, and NYSHPO. [see Appendix C for PA and quitclaim deed]

6. Based on the archeological covenant and continuing consultation with NYSHPO, no disturbance of the ground surface shall be undertaken or permitted to be undertaken within 50 feet of the S/NRHP-eligible Naval Hospital Archaeological Site and/or the identified Naval Hospital Cemetery [see Appendix A - Figure 1 for Naval Hospital Archaeological Site and Appendix C for a legal description of Naval Hospital Cemetery (found in Exhibit B of quitclaim deed)] without the express prior written permission of NYSHPO, signed by a fully authorized representative thereof.

7. The project sponsor will detail the archaeological activities to be undertaken to mitigate the potential Adverse Impact to the S/NRHP-eligible Naval Hospital Archaeological Site prior to project implementation. A Phase II archaeological survey will be conducted in areas of proposed ground disturbance that lie within 50 feet of the S/NRHP-eligible Naval Hospital Archaeological Site. The results of the Phase II survey will be reviewed by NYSHPO, and NYSHPO will be consulted with respect to whether a Phase III data recovery excavation is warranted.

Any party to this LOR may propose to ESD that the LOR be amended, whereupon ESD shall consult with the other parties to this LOR to consider such amendment. Any amendment must be agreed upon in writing by all parties to this agreement.

This LOR shall take effect on the date it is signed by the last signatory and will remain in effect until the Stipulations have been met.
NEW YORK STATE OFFICE OF PARKS, RECREATION AND HISTORIC PRESERVATION

BY: [Signature]  DATE: 6/17/15

TITLE: Deputy Comm. for Historic Preservation
BNY Campus Associates, LLC

BY: [Signature] DATE: 6/17/15

TITLE: MANAGER
APPENDICES
### Appendix B

Table 1: Brooklyn Navy Yard Historic District Contributing and Non-Contributing Resources within the Naval Annex and Type of Recordation Proposed

<table>
<thead>
<tr>
<th>Resource Number</th>
<th>Resource Name</th>
<th>Year Built</th>
<th>Historic District Classification</th>
<th>Type of Recordation</th>
</tr>
</thead>
<tbody>
<tr>
<td>R1</td>
<td>Surgeon's House</td>
<td>1863</td>
<td>Contributing</td>
<td>Standard Documentation</td>
</tr>
<tr>
<td>R4</td>
<td>Quarters No. 4; also referred to as Lab Director's House</td>
<td>1864; 1900; 1917; 1947</td>
<td>Contributing</td>
<td>Standard Documentation</td>
</tr>
<tr>
<td>R5</td>
<td>Infectious Disease Quarters; also referred to as Bungalow</td>
<td>1915</td>
<td>Contributing</td>
<td>Standard Documentation</td>
</tr>
<tr>
<td>R6</td>
<td>Infectious Disease Quarters; also referred to as Bungalow</td>
<td>1915</td>
<td>Contributing</td>
<td>Standard Documentation</td>
</tr>
<tr>
<td>R7</td>
<td>Infectious Disease Quarters; also referred to as Bungalow</td>
<td>1915</td>
<td>Contributing</td>
<td>Standard Documentation</td>
</tr>
<tr>
<td>R8</td>
<td>Bachelor Officers' Quarters</td>
<td>1926</td>
<td>Contributing</td>
<td>Standard Documentation</td>
</tr>
<tr>
<td>R9</td>
<td>Bachelor Officers' Quarters</td>
<td>1926</td>
<td>Contributing</td>
<td>Standard Documentation</td>
</tr>
<tr>
<td>R95</td>
<td>U.S. Naval Hospital</td>
<td>1830-1838</td>
<td>Contributing</td>
<td>Standard Documentation</td>
</tr>
<tr>
<td>R103</td>
<td>Carriage House</td>
<td>ca. 1900</td>
<td>Contributing</td>
<td>Standard Documentation</td>
</tr>
<tr>
<td>R109</td>
<td>Stable</td>
<td>ca. 1872</td>
<td>Contributing</td>
<td>Standard Documentation</td>
</tr>
<tr>
<td>R103A</td>
<td>Garage</td>
<td>ca. 1947</td>
<td>Contributing</td>
<td>Standard Documentation</td>
</tr>
<tr>
<td>Resource Number</td>
<td>Resource Name</td>
<td>Year Built</td>
<td>Historic District Classification</td>
<td>Type of Recordation</td>
</tr>
<tr>
<td>-----------------</td>
<td>---------------------------------------------------</td>
<td>------------</td>
<td>----------------------------------</td>
<td>---------------------------</td>
</tr>
<tr>
<td>R104</td>
<td>Guard House and Gate Keeper Lodge</td>
<td>1850</td>
<td>Contributing</td>
<td>Standard Documentation</td>
</tr>
<tr>
<td>R426</td>
<td>Lumber Shed; also referred to as Morgue</td>
<td>1909</td>
<td>Contributing</td>
<td>Standard Documentation</td>
</tr>
<tr>
<td>RD</td>
<td>Medical Supply Depot; also referred to as Lab Building</td>
<td>1910</td>
<td>Contributing</td>
<td>Standard Documentation</td>
</tr>
<tr>
<td>RG</td>
<td>Nurses' Quarters; also referred to as Unmarried Officers' Club</td>
<td>1919; addition ca. 1980</td>
<td>Contributing</td>
<td>Standard Documentation</td>
</tr>
</tbody>
</table>

**Resources To Be Retained**

<p>| No number | Flagstaff                                      | ca. 1921 | Contributing                     | Standard Documentation    |
| No number | Naval Hospital Cemetery                        | 1831-1910 | Contributing                     | Standard Documentation    |
| 999        | Barrier Forts Monument                         | 1858; relocated to hospital campus in 1979 | Contributing | Standard Documentation    |
| No number | Sun Dial                                       | ca. 1945 | Contributing                     | Standard Documentation    |
| No number | Bird Bath                                      | ca. 1945 | Contributing                     | Standard Documentation    |
| No number | Structure - Stone Wall and Gates, Flushing Avenue | ca. 1850 | Contributing                     | Standard Documentation    |
| No number | Structure - Chain-Link Gate and Fence, Williamsburg Street and Williamsburg Place | No date | Non-contributing | Standard Documentation    |</p>
<table>
<thead>
<tr>
<th>Resource Number</th>
<th>Resource Name</th>
<th>Year Built</th>
<th>Historic District Classification</th>
<th>Type of Recordation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proposed for Removal</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R2</td>
<td>Quarters No. 2</td>
<td>1905</td>
<td>Contributing</td>
<td>HABS Level II</td>
</tr>
<tr>
<td>R3</td>
<td>Quarters No. 3</td>
<td>1905</td>
<td>Contributing</td>
<td>HABS Level II</td>
</tr>
<tr>
<td>311</td>
<td>Motion Picture Exchange</td>
<td>1942</td>
<td>Contributing</td>
<td>HABS Level II</td>
</tr>
<tr>
<td>R448</td>
<td>Greenhouse remnants</td>
<td>ca. 1928</td>
<td>Contributing</td>
<td>HABS Level II</td>
</tr>
<tr>
<td>R464 and R474</td>
<td>Tennis Courts</td>
<td>ca. 1920</td>
<td>Contributing</td>
<td>HABS Level II</td>
</tr>
<tr>
<td>No number</td>
<td>Structure – Brick Wall West, North, and East side of Hospital Grounds</td>
<td>ca. 1850</td>
<td>Contributing</td>
<td>HABS Level II</td>
</tr>
<tr>
<td>671</td>
<td>Pool</td>
<td>1978</td>
<td>Non-contributing</td>
<td>Standard Documentation</td>
</tr>
<tr>
<td>672</td>
<td>Pool Bathhouse</td>
<td>1978</td>
<td>Non-contributing</td>
<td>Standard Documentation</td>
</tr>
<tr>
<td>X31</td>
<td>Pool Shed</td>
<td>1978</td>
<td>Non-contributing</td>
<td>Standard Documentation</td>
</tr>
<tr>
<td>X32</td>
<td>Steam Reducing Station</td>
<td>ca. 1980</td>
<td>Non-contributing</td>
<td>Standard Documentation</td>
</tr>
<tr>
<td>X33</td>
<td>Gazebo</td>
<td>ca. 1980</td>
<td>Non-contributing</td>
<td>Standard Documentation</td>
</tr>
<tr>
<td>X34</td>
<td>Chicken Coop</td>
<td>No date</td>
<td>Non-contributing</td>
<td>Standard Documentation</td>
</tr>
</tbody>
</table>
Appendix C – Programmatic Agreement and Quitclaim Deed
[insert Appx C]
Appendix B:
Archaeological Monitoring Plan, Unanticipated Discoveries Plan and Human Remains Protocol
To: New York State Office of Parks, Recreation and Historic Preservation
   City of New York - Landmarks Preservation Commission
   Brooklyn Navy Yard – Steiner Studios
   BNY CA


Re: Phase IB Archaeological Monitoring Plan, Unanticipated Discoveries Plan and Human
    Remains Protocol for the Brooklyn Navy Yard – Naval Annex (Naval Hospital Area)
    Project (Test Pits)

Date: May 25, 2017

INTRODUCTION

BNY Campus Associated, LLC (BNY CA) is the developer of the former Brooklyn Navy Yard -
Naval Hospital Annex and plans to complete a large-scale infrastructure project to support its
development in the future (Maps 01 and 02). Chrysalis Archaeological Consultants, Inc.
(Chrysalis) has been retained as the archaeological contractor for the Phase IB Cultural Resource
Management/Archaeological investigation of the overall project.

Prior to commencement of the future project, a series of Test Pits will be excavated to assist in
determining the locations of existing below grade infrastructure and potential obstructions in order
to inform the design of new infrastructure, which will support the redevelopment of the site. The
Test Pits are not being excavated to determine an archaeological testing pattern or strategy for the
future project.

As per the Letter of Resolution (LOR) regarding the Brooklyn Navy Yard Naval Annex executed
in June of 2015 (Appendix A), only excavations within 50 feet of the existing former hospital
structure and the cemetery boundaries require archaeological monitoring/testing. Therefore, based
on the LOR, the 50 foot boundaries around both features are considered the Archaeological Area
of Potential Effect (APE) (Map 03).

This document consists of three components: the Archaeological Monitoring Plan, the
Unanticipated Discoveries Plan, and the Human Remains Protocol for the Test Pit portion of the
project. It only outlines the plans and procedures for work during the excavations of the Test Pits.
Prior to commencement of the future project the project will coordinate with NY SHPO and NYC
LPC the specific plans and proposals for work during that future phase of the project.
Naval Annex - Test Pit Map
This plan is provided to the New York State Office of Parks, Recreation and Historic Preservation (NY SHPO) and the City of New York – Landmarks Preservation Commission (NYC LPC) for review and approval prior to implementation. It describes the tasks and procedures to be performed and what is to occur in the event that cultural resources and/or human remains are exposed when the project archaeologist is not on site.

The purpose of the overall cultural resources project guided by the Archaeological Monitoring Plan, Unanticipated Discoveries Plan and Human Remains Protocol is to: 1) determine whether excavations within the Project area contain significant cultural resources (i.e. National Register Eligibility, etc.) and/or human remains; 2) develop a historical and archaeological context(s) for the interpretation and evaluation of any potential cultural or archaeological resources that may be present within the Area of Potential Effect (APE); 3) recover potentially significant buried cultural resources; 4) detail protocols to be followed in the event that either fragmentary or in situ human remains are discovered; 5) outline the lines of communication and protocols that will be employed throughout the process; 6) detail what steps will be taken in the event that significant unanticipated archaeological remains, including, but not limited to human remains, are uncovered; 7) outline the laboratory process to be followed, if required; and 8) provide all necessary services related to the cultural resource process during the Project.

The archaeological tasks required as part of the Test Pit portion of the Project include:

1. Preparation and development of an Archaeological Monitoring Plan, Unanticipated Discoveries Plan, and a Human Remains Discovery Plan and Protocol based on the current Scope of Work provided by BNY CA.

2. Outline procedures and protocols to be followed by BNY CA and its contractors if significant material or human remains are exposed during the course of the project, including in areas where archaeological monitoring is not required. The Human Remains Protocol Plan pertains to all project areas;

3. Conduct Archaeological Monitoring of any Test Pits within 50’ feet of the Hospital and Cemetery;

4. Conduct laboratory analysis of any material remains recovered (i.e. cleaning, cataloging, and creation of a database of the remains);

5. Documentation and analysis of any human skeletal remains discovered throughout the course of the project.

6. Produce a draft and final report of the results.

7. Based on the results of what is uncovered in the field, develop a Phase II Testing Plan, if needed.
8. Provide all additional related cultural resource management services that may arise, including participation in project delivery team meetings and consultation with review agencies and interested parties.

PROJECT DESCRIPTION

The current project calls for the excavation of 29 Test Pits. The dimension of each test pit is going to be approximately 5’ feet square by up to 15’ deep. The purpose of the test pits is to obtain information regarding existing utilities; potential obstructions, such as old foundations and abandoned utility lines, and the current soil conditions. The size and location of the Test Pits have been determined by the Project’s civil engineer, who is designing the infrastructure package to support the redevelopment of the site. The depth of the Test Pits are to expose potential bearing strata for geotechnical study. This information will be used to help guide the infrastructural improvements as part of the overall project. This infrastructural work will occur once this initial testing is completed.

All existing infrastructure at the Naval Annex is in varying states of disrepair and much of it is completely unsalvageable. BNY CA is in the process of designing new roads, curbs, and sidewalks; water, sewer, gas, and electric distribution; stormwater detention structures etc. that will facilitate the redevelopment of the Site. This infrastructure package includes rebuilding of roads and running portions of new utility loops in front of the Hospital building and adjacent to the cemetery boundaries, largely within the foot print of existing roads. These portions of the infrastructure package are essential to complete the road and utility loops that will serve rehabilitated and future new buildings on Site. It should be noted that this current plan, nor will any future plan, call for test pits or future infrastructure improvements within the cemetery directly.

Two Test Pits will be excavated within 50 feet of the existing cemetery (Map 03). This test pit is necessary because future plans call for an in-kind replacement of the existing roadway and this area is within the footprint of the road.

CULTURAL RESOURCE REGULATIONS

For cultural resources and structures, the National Historic Preservation Act (NHPA) and the Advisory Council on Historic Preservation (ACHP) define, under ‘Section 106 Regulations’, that federal agencies (and other governmental agencies using federal funds) must consider the effects of their actions on any properties listed on, or determined eligible for listing on, the National Register for Historic Places (NR). Likewise, the State Historic Preservation Act (SHPA) and the (New York) City Environmental Quality Review Act (CEQRA) require that agencies must consider the effects of their actions on any properties listed on, or determined eligible for listing on, the State and City Register for Historic Places. The proposed work will be conducted in accordance with the National Historic Preservation Act of 1966, as amended, and the Advisory Council on Historic Preservation’s “Protection of Historic and Cultural Properties” (36 CFR 800) as well as the aforementioned NY SHPO and NYC LPC guidelines.
PHASE IB ARCHAEOLOGICAL PLAN PROTOCOLS

Phase IB fieldwork is designed to ascertain the presence/absence, type, and extent of archaeological resources within a site. Its goal is to determine whether significant (i.e., National Register [NR] eligible) resources that could be adversely affected by project activities are extant within the APE.

The following sets forth the plan for Phase IB archaeological monitoring and investigation for the excavation of test pits in anticipation of the larger project. It describes additional mitigation measures that will be undertaken should archaeological resources be encountered during the archaeological investigations, including artifact analysis such as laboratory work, written reports, and further documentary research, if necessary.

ARCHAEOLOGICAL MONITORING

Archaeological monitoring is defined as “the observation of construction excavation activities by an archaeologist in order to identify, recover, protect and/or document archaeological information or materials” (NYAC 2002:2).

All monitoring activities will be in compliance with NYC LPC’s Guidelines for Archaeological Work in New York City (LPC 2002) and NYAC’s Guidelines for the Use of Archaeological Monitoring (NYAC 2002). The archaeologist(s) will maintain drawings, photographs, and descriptions of all encountered resources as well as an up-to-date log of all monitoring activities, including the date, time, and duration of all monitoring episodes, accompanied with a description of the activity being monitored.

Archaeological Monitoring will occur during excavation of all Test Pits that are within 50’ of the Hospital Building or the Cemetery (Map 03). Based on current plans and the LOR, it is anticipated that four Test Pits will be monitored. Excavation will be undertaken by mechanical means by a construction contractor. Monitoring will occur until the final construction depths are reached or until the archaeological monitor determines the excavation to have reached sterile soil (i.e. sterile with regard to potential archaeological deposits and resources).

In the event that archaeological deposits are encountered, the archaeologist(s) will be permitted to temporarily halt excavation to examine the soil and potential resource(s) in the trench more closely. The archaeologist will be permitted to halt excavation for a period of up to 4 hours to allow time for photography, drawing of plan views and profiles, screening of soil for artifacts, removal of soil samples, hand excavation, and any other actions deemed necessary to determine the nature, extent, and potential significance of the discovery. The archeologist will coordinate their investigation of potential artifacts with BNY CA in advance of their work. The archaeologist will determine the level of documentation needed for each discovery.

If more than 4 hours is required to document a deposit, then the archaeologist will notify and consult with the BNY CA Resident Engineer (RE) of the additional time needed. Additional documentary research may be also necessary in order to further understand the potential significance of deposits.
If work stoppages occur, the construction contractor may relocate to an area or task where archaeological monitoring is not required. However, if excavation is to occur in another potentially sensitive area, the archaeological team will provide additional staff, within a minimum mutually agreed upon notification period for staffing changes, to monitor this additional area while work documenting the discovery occurs.

In the event that potentially significant archaeological stratigraphic and/or physical remains are uncovered below 5 feet during Test Pit excavation, the Test Pit excavation will be halted immediately, the Test Pit will be back-filled, including proper in situ protection if human remains are involved, and, if necessary, a new Test Pit will be located away from the “positive” test pit excavation. If it is determined, after completion of the Test Pit Phase, that the area of the positive results below 5 feet will be part of the general construction project, the archaeological remains will be fully documented during this future phase of the project.

If the resources encountered are deemed significant, it will be necessary to consult with NY SHPO and NYC LPC.

If the resources encountered do not appear potentially significant, the on-site professional archaeologist will notify the appropriate construction personnel, and construction may resume.

**General Methodology**

During all excavation, the construction contractor will provide assistance to the archaeological team, as needed. This may include, but is not limited to, pumping water from excavation areas, providing additional shoring to trenches, meeting all OSHA regulations, and machine excavation of non-sensitive levels to further reveal resource(s). Construction personnel will allow the archaeologist access to the excavation area at a maximum of 60-minute intervals, as requested, to enter and observe soils and stratigraphy within the excavation area.

If excavation depths extend below 1.5 meters (5 feet), archaeologists will observe the excavation from the street level and may request specific soil deposits be temporarily piled beside the excavation in order to more closely examine them. It may be necessary to temporarily halt excavation to enter the construction excavation area in order to observe deeper deposits.

In the event that archaeological deposits are encountered, professional standards for excavation, screening, recording of features and stratigraphy, labeling, mapping, photographing, and cataloging will be applied. If intact deposits are identified below 1.5 meters (5 feet), all health and safety concerns will be addressed prior to the archaeologists entering the confined space to examine the deposits.

Documentation of archaeological deposits may require soil sampling or the hand excavation of features, cultural layers or test units. Screening of soils from the excavation will be based upon the judgment of the archaeologist. Soils will be screened through ¼ inch-mesh screen and excavated by natural strata or in pre-determined controlled levels. Soils will be described using the Munsell color system and standard texture classifications. All artifacts recovered during screening will be
retained, with the exception of bulk materials such as concrete rubble, brick, large metal objects, ash coal, cinders, and slag. In the case of such materials, a sample will be described from each provenience and the remainder will be quantified and discarded in the field. Recovered artifacts will be bagged according to their unique provenience and transported to the laboratory for processing and analysis. An artifact catalog, recording the depth and location of each recovered artifact, will be created. Soil profiles, cultural features, etc. will be described, photographed in digital format and illustrated by measured drawings in metric or Engineers scale in plan and vertical perspective, as appropriate.

If potential NRHP-eligible archaeological resources are identified during construction monitoring all work will cease in the area of the discovery until NR eligibility evaluation (Phase II) and, if necessary, mitigation through data recovery (Phase III) is completed. A scope of work for the potential Phase II and/or III work will be developed in consultation with NY SHPO and NYC LPC and implemented prior to further construction to retrieve significant information before all or part of the site is impacted by construction. Preparation of a scope of work for potential Phase II and/or Phase III investigation may cause a delay in construction, given the requirement for agency review and approval prior to initiating those tasks.

The project will provide a protected area within the project site or field office to temporarily store equipment and/or material remains recovered from the excavation trenches. Materials remains may require temporary storage prior to transportation to Chrysalis’ laboratory facility. Notwithstanding any methodology contained herein, all archeological investigations shall be limited to the soils exposed during general excavation and shall not extend beyond the limits of the area of work except as may be necessary to determine the NRHP eligibility of any discoveries.

**IF SIGNIFICANT ARCHAEOLOGICAL DEPOSITS ARE FOUND**

If archaeological resources are encountered that the on-site archaeologist determines to be potentially significant, e.g. appearing to meet eligibility criteria for listing on the National Register of Historic Places (NR-eligible), the archaeologist will notify all project shareholders, including, but not limited to: BNY CA, and NY SHPO and NYC LPC.

NY SHPO and NYC LPC will be consulted to determine if further archaeological field-testing and/or mitigation is necessary. If no additional testing is required, the archaeologist will notify the construction contractor/manager that work may resume once documentation of the resource(s) has been completed. The specific time required for the documentation effort will be coordinated with the project team. The construction contractor should plan, schedule, and execute their work in a manner such that work stoppages will not result in a total shutdown of any construction work.

**LARGE SCALE DISCOVERIES**

In the event of a significant large-scale discovery, defined as a significant discovery containing a large volume of burials, materials and/or features that will require additional archaeological excavation for data recovery, all project shareholders including BNY CA, NY SHPO and NYC LPC, will be consulted to develop a path forward meeting the needs of the potential discovery. Following this consultation it may be recommended that additional archaeological measures and
resources be employed. This may include, but is not limited to, additional staffing, specialist consultants and expanded archaeological testing/excavation such as Phase II data recovery.

The ability to bring in a larger or additional archaeological staff and additional resources would allow for a more expeditious approach toward the recovery and documentation of any large-scale discoveries.

In the event of a large-scale discovery the following procedures will be followed:

1. Upon discovery, Chrysalis will halt excavation and notify BNY CA. Chrysalis will then notify NY SHPO and NYC LPC.

2. A meeting will be held to discuss how to best address the discovery. If NY SHPO and NYC LPC determines that additional excavation and recovery are required (i.e. Phase II or Phase III Mitigation), Chrysalis will develop a SOW for the specific tasks outlined at the meeting, to include time and budget, within ten business days. The SOW will be provided to BNY CA for approval.

3. The SOW will then be provided to NY SHPO and NYC LPC for concurrence.

4. Upon written approval from BNY CA, Chrysalis will bring in the additional resources required to complete the specific task(s).

5. Once the agreed upon tasks of the SOW are completed, any additional resources and services will no longer be required unless further along in the project additional large-scale discoveries are made.

**Human Remains**

Special consideration and care is required if human remains are uncovered. Any action related to the discovery of human remains is subject to the statute law as defined in the *Rules of the City of New York*, Title 24 - Department of Mental Health and Hygiene, specifically Title 24, Title V, Article 205. In addition, the NYC LPC regulations regarding human remains and the New York Archaeological Council’s (NYAC) policy on the discovery of human remains and items of cultural patrimony as defined by Section 3001 of the Native American Graves Protection and Repatriation Act (NAGPRA) will be taken into consideration – providing they do not conflict with the City of New York statute regulations. The protocols to be implemented in the event that human remains are discovered are more fully detailed in the Human Remains Protocol.

At any time, if human remains are recovered, the project will immediately halt excavation, enact the Human Remains Protocol and begin the coordination process with all relevant entities.
Artifact Analysis and Curation

All artifacts will be cleaned, catalogued and stored in archival safe materials. Pre-contact and historic artifacts will be analyzed in terms of material type, form, function, and temporal attributes (e.g., Noël Hume 1969, South 1977, Miller 1991). Detailed analysis will include the identification of the Terminus Post Quem (TPQ) of artifacts for each context and generation of mean beginning and end dates for assemblages. This information will be used to establish context and to determine whether such assemblages represent primary or secondary deposits.

Any artifacts removed from the project site will be the property of the project site owner, in accordance with NY SHPO and NYC LPC guidelines.

It is the responsibility of BNY CA to arrange for the long-term curation of the collection in an appropriate facility.

Report Results

A report documenting the results of the monitoring, analysis, and any other background and/or documentary research will be prepared according to NY SHPO and NYC LPC standards. In addition, the report will include recommendations regarding the potential National Register eligibility of any artifact deposits and/or features documented and recommendations for additional investigation or mitigation, as necessary. A digital, preliminary draft report will be submitted to BNY Campus for initial review. Upon approval, the formal draft report will be submitted in printed form to NYC LPC and digital form to NY SHPO. Upon the approval of NY SHPO and NYC LPC, two printed copies will be provided to NYC LPC for their records. Digital copies will be provided to all other parties unless printed copies are requested.

Archaeological Awareness Orientation

Due to the sensitivity and nature of the site, construction personnel will be relied upon to work with the archaeological team in the identification of archaeological resources and deposits as well as human remains. There will also be areas that are not subject to archaeological monitoring but may still contain archaeological materials or human remains.

Chrysalis will provide an Archaeological Awareness Orientation for all project and construction personnel. This orientation will include historic and archaeological background of the area and the site as well as information regarding the types of resources that may be encountered during this project and how to recognize those resources. This orientation must occur prior to the commencement of any construction excavation activities to ensure the construction contractor understands the nature of the archaeological significance of the area and the procedures of this combined Archaeological Monitoring Plan, Unanticipated Discoveries Plan, and Human Remains Protocol.
UNANTICIPATED DISCOVERIES PLAN

The Archaeological Unanticipated Discoveries Plan is to be used as a guide for construction personnel throughout the duration of the project for all areas that are not covered by Archaeological Monitoring. Currently, it is projected that at least 25 of the 29 Test Pits will not be archaeologically monitored and therefore be covered under the Unanticipated Discoveries Plan (Map 03).

Unanticipated Discoveries are defined as any cultural resources, including human remains, found during construction in any portion of the project site not monitored by the archaeologist. Cultural resource discoveries that require immediate reporting and notification to the archaeological team and the construction coordinator include, but are not limited to, human remains and recognizable, potentially significant concentrations of artifacts, features, or other evidence of human occupation. All project team members and construction foremen should be made aware of this plan.

BNY CA will coordinate with the professional archaeologist for implementation of the Unanticipated Discoveries Plan. The BNY CA RE will obtain, review, and file on site this Unanticipated Discoveries Plan. The BNY CA RE will initiate implementation of the Unanticipated Discoveries Plan by convening an awareness session with the archaeologist, on-site construction management personnel, equipment operators, and laborers.

Cultural resource discoveries that require reporting and notification to the BNY CA RE include (but are not limited to):

1. Any human remains including coffins, burial vaults or other evidence of burials.
2. Any recognizable, potential concentrations of artifacts, features, faunal material (animal bones) or other evidence of human occupation.
3. Unanticipated, potentially contributing building or other structural foundations, unless identified foundations are from “non-contributing” 20th century structures in which case no monitoring/testing would be required.

In the event that unanticipated archaeological resources are found during construction in any portion of the project site, the following procedures will be followed:

1. If an unanticipated discovery of artifacts, as defined above, occurs during construction, all work will immediately stop in the area of the find to protect the integrity of the find. Work may not resume in the area of the find until the archaeologist and the BNY CA RE has granted clearance. Work may, however, continue in areas of the Site not immediately surrounding the discovered artifacts.
2. The construction foreman will immediately notify the designated on-site BNY CA RE of the find. The BNY CA RE will instruct the construction foreman to flag and fence off the area of the discovery to ensure safety and avoidance of impacts.
3. The BNY CA RE will immediately notify the archaeologist of the find. The notification will include the specific location of the discovery within the area of the project site and the nature of the discovery. The BNY CA RE will identify the location and date of the discovery on the project plans.

4. The archaeologist will coordinate an on-site archaeological consultation to evaluate the find. A reasonable amount of time must be given to the archaeologist to not only arrange to arrive to site (generally within 24 hours, but not more than 48 hours) but to complete the assessment of the discovery (generally within 24 of arriving on site). These timeframes may vary based on the nature of the discovery (i.e. size, complexity, etc.).

5. The archaeologist will conduct an on-site assessment of the find. If necessary, the archaeologist will coordinate with the BNY CA RE to direct the contractor to further flag or fence off the archaeological discovery location and direct the contractor to continue work in another portion of the project area. The contractor will not restart work in the area of the identified archaeological resource until the BNY CA RE has granted clearance, after receiving notification from the archaeologist that the archaeological resource has been fully examined.

6. The archaeologist will notify the BNY CA RE of the preliminary significance, if any, of the find.

If the discovery is determined to lack potential significance by the archaeologist, the BNY CA RE will grant clearance to the contractor to resume work.

If the unanticipated find is determined to be potentially significant, the following procedures will be followed:

1. The archaeologist will promptly notify BNY CA, NY SHPO and NYC LPC of the find. This notification will explain why the archaeologist believes the resource to be significant and define a Scope of Work (SOW) for further evaluating the significance of the resource and project effects on it. All work to evaluate significance will be confined to the area of potential effect.

2. The archaeologist will conduct a more detailed assessment of the discovery’s significance and the potential effect of construction on the discovery.

3. The archaeologist will document the find in accordance with all existing City, State and Federal guidelines for Archaeological Research.

4. BNY CA will notify other parties, as directed by NY SHPO and/or NYC LPC, or as indicated by City/State law.
5. If the find is determined to be significant, and continuing construction may damage more of the resource, then the archaeologist and BNY CA will consult with NY SHPO and NYC LPC, regarding further mitigation and appropriate measures for recovery and/or appropriate measures for site treatment. These measures may include:

   i. Formal archaeological evaluation of the site
   ii. Visits to the site by NY SHPO and/or NYC LPC and other parties
   iii. Preparation of a mitigation plan for approval by NY SHPO and/or NYC LPC
   iv. Implementation of the mitigation plan
   v. Approval to resume construction following completion of the fieldwork component of the mitigation plan

6. If the find is determined to be isolated or completely disturbed by previous construction activities, the archaeologist will consult with the BNY CA RE, NY SHPO and NYC LPC and will request approval to resume construction, subject to any further mitigation that may be required by NY SHPO or NYC LPC.

7. The BNY CA RE will notify the Construction Contractor of clearance to resume work.
HUMAN REMAINS PROTOCOL

Special consideration and care is required if human remains are uncovered. Any action related to the discovery of human remains is subject to the statute law as defined in the Rules of the City of New York, Title 24 - Department of Mental Health and Hygiene, specifically Title 24, Title V, Article 205. In addition, the NY SHPO and NYC LPC regulations regarding human remains and the New York Archaeological Council’s (NYAC) policy on the discovery of human remains and items of cultural patrimony as defined by Section 3001 of the Native American Graves Protection and Repatriation Act (NAGPRA) will be taken into consideration – providing they do not conflict with the City of New York statute regulations (Appendix B and C).

There is an existing National Register Eligible cemetery within the confines of the Brooklyn Navy Yard. In consideration of the site history, this Human Remains Protocol has been drafted to provide a clear process for all project participants to follow in the event that human remains are encountered. Due to the proximity of the cemetery the project has the potential to expose partial or fragmented human skeletal remains, intact or in situ human skeletal remains or burials, and burials contained within coffins. This Protocol is applicable to all instances when potential human remains are exposed, both when the archaeological team is on site and when the archaeological team is not on site.

As per New York City law (Title 24, Title V, Section 205.1 (a)) a burial is defined as a “means (of) interment of human remains in the ground or in a tomb, vault, crypt, cell or mausoleum, and includes any other usual means of final disposal of human remains other than cremation” (Rules of the City of New York 2015). For the purposes of this project and as per New York City law (Title 24, Title V, Section 205.1 (c)), human remains are defined as “any part of the dead body of a human being but does not include human ashes recovered after cremation” (Rules of the City of New York 2015). This includes any bone fragments, a single bone or tooth, partial skeleton, etc.

As per New York City law (Title 24, Title V, Section 205.7) a permit must be obtained for the disinterment of any human remains. A funeral director must obtain this permit. No human remains may be removed from the ground, from the area where they are first exposed, until this permit has been obtained. No construction work can occur in this area while the permit is being obtained and until the archaeologist, in consultation with NY SHPO and NYC LPC, gives clearance for work to proceed.

In any area that human remains are discovered, the BNY CA RE and/or the on-site Construction Foreman or Supervisor will flag or fence off the area of the discovery, taking all practical measures to protect the discovery from damage and disturbance.

The Construction Contractor should plan to move to another location if human remains are exposed, as work will need to be temporarily halted in the area of the remains. If the contractor moves to an area that requires archaeological monitoring, additional archaeological personnel will be required on site.
**Initial Protocol**

- If suspected human remains are exposed, the archaeologist in conjunction with the BNY CA RE and/or the on-site Construction Foreman or Supervisor will immediately halt all work in the area of the discovery. Work may continue, however, in areas of the Site not immediately surrounding the discovered remains.

- If suspected human remains are exposed in an area that has not been previously identified for archaeological monitoring, i.e. if the archaeologist is not on site, the BNY CA RE and/or the on-site Construction Foreman or Supervisor will immediately halt all work in the area of the discovery and notify the archaeologist. The archaeologist will return to site within 24 hours of notification. The BNY CA RE and/or the on-site Construction Foreman or Supervisor will cover and protect the discovery from any further disturbance.

- The archaeologist, once on site, will enter the construction area to inspect the discovery. Chrysalis’ Forensic Anthropologist may be called to site to make a determination if the skeletal remains are human or not.

- If the identified skeletal material is not human, the archaeologist will inform the BNY CA RE and/or the on-site Construction Foreman or Supervisor that work may continue.

- If the skeletal material is human, the archaeologist will inform the BNY CA RE and/or the on-site Construction Foreman or Supervisor that work must cease in the area, and the full remainder of the human remains protocol will be implemented.

**Human Remains Protocol**

At all times, human remains must be treated with the utmost dignity and respect. The following procedures will be followed once it is confirmed that human remains have been exposed:

1. The BNY Associates, LLC RE will notify the Project. The archaeologist will notify NY SHPO and NYC LPC.

2. The BNY CA RE will immediately notify the New York City Police Department (NYPD) and Chrysalis will notify the Medical Examiner's office (OME) of the find. The project will cooperate with the OME and NYPD, providing access to the site if required.

3. Once the NYPD and OME have determined they have no concerns regarding the discovery\(^1\), the BNY CA RE will direct the archaeological team to proceed with an initial assessment of the remains, including if the remains represent an intact burial, multiple burials, or partial skeleton or fragmentary skeletal remains, and the potential effect of construction.

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\(^1\) NYC Department of Health requires that this be obtained in writing.
4. Chrysalis will draft a Memorandum to NY SHPO and NYC LPC detailing the discovery, including recommendations as to how to proceed.

5. It is the preference of NY SHPO and NYC LPC that human remains be left in situ. However, due to the nature and location of the project, it removal of the human remains may be necessary. Permits from the City of New York Department of Health and Mental Hygiene (DOH) are necessary for the disinterment and disposition of any human remains. Permits are required for intact burials, partial burials, and fragmentary remains.

6. Only a funeral director can obtain the permits from DOH. Chrysalis will contact and coordinate with the Funeral Director to obtain all necessary permits.

7. The BNY CA RE will notify any parties, including next of kin, if known, as directed by the NY SHPO and/or NYC LPC or as indicated by City/State law.

8. Once the proper permits have been obtained, the archaeological team will proceed as appropriate depending on the context of the discovery and based on consultation with NY SHPO and NYC LPC.

Protocol for Fragmentary Human Remains

If the exposed skeletal remains are determined to be fragmentary and do not represent a partial or intact skeleton, the following procedures will be implemented:

1. Chrysalis will begin a detailed archaeological assessment of the discovery. This may include photography, scaled drawings and eventual removal of the remains. Only the archaeologist or Forensic Anthropologist may excavate identified human remains.

2. Once this is completed and the fragmentary remains have been removed, the archaeologist will further investigate the area to assess if any additional remains are present.

3. If no further human remains are present, the archaeologist will notify the BNY CA RE that work may continue.

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2 The permit requires that the descendant of the deceased or descendant organization be identified. Additional research may be required to identify the descendant organization prior to obtaining the permit.
Protocol for Partial Burials or Intact and in situ Human Remains

If it is determined that intact interments are present and may be disturbed by continuing construction, the archaeologist will consult with the NY SHPO, NYC LPC, and the project regarding additional measures to avoid or mitigate further damage. The following protocol will be followed:

1. Chrysalis’ Forensic Anthropologist will further assess the burial and begin documentation. Only the archaeologist or Forensic Anthropologist may excavate human remains that have been identified.

2. Chrysalis will consult with NY SHPO and NYC LPC and the project regarding potential additional mitigation measures;

3. Chrysalis will prepare and submit a mitigation plan for the disinterment, documentation and analysis of the human remains. This will be submitted to NY SHPO and NYC LPC for approval.

4. Any disinterment will be conducted by and/or under the supervision of the Forensic Anthropologist following the procedures detailed in the mitigation plan.

5. Depending on the scale of the discovery, additional archaeological personnel may be required to assist with archaeological tasks on site.

6. If any burials are to remain in situ, the project will assist as necessary in ensuring they are protected.

Once an area has been documented and cleared of human remains that are to be disinterred or any burials to remain in situ are appropriately protected, the archaeologist and the BNY CA RE will inform the project that construction may resume.

All human remains will be brought to Chrysalis’ laboratory facility in Brooklyn, New York for further documentation. Final disposition of the remains following conclusion of the project will be arranged with the project.
Contact Information:

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REFERENCES

City of New York

City of New York – Landmarks Preservation Commission.

New York Archaeological Council.


New York State Office of Parks, Recreation and Historic Preservation.
Appendix A:

Letter of Resolution
LETTER OF RESOLUTION
AMONG
THE NEW YORK STATE URBAN DEVELOPMENT CORPORATION
D/B/A EMPIRE STATE DEVELOPMENT,
BROOKLYN NAVY YARD DEVELOPMENT CORPORATION,
THE NEW YORK STATE OFFICE OF PARKS, RECREATION AND HISTORIC
PRESERVATION,
AND
BNY CAMPUS ASSOCIATES, LLC
REGARDING
THE BROOKLYN NAVY YARD NAVAL ANNEX
BROOKLYN, KINGS COUNTY

WHEREAS, the proposed project is the rehabilitation of the 18-acre Brooklyn Navy Yard Naval Annex (Naval Annex) into a Media Campus and other development to expand Steiner Studios’ campus in the Brooklyn Navy Yard (the “Project”) by the project sponsor, BNY Campus Associates, LLC, with funding from the New York State Urban Development Corporation d/b/a Empire State Development (ESD);

WHEREAS, the Naval Annex is located within the State/National Registers of Historic Places (S/NRHP)-listed Brooklyn Navy Yard Historic District, includes the S/NRHP-eligible Naval Hospital Archeological Site and is adjacent to the S/NRHP-eligible Naval Hospital Cemetery Site;

WHEREAS, the ESD funding would facilitate the rehabilitation inside the Naval Annex of 180,000 sf of historic structures and development of 170,000 sf of new construction to serve a variety of uses, including offices for film and television production and post-production, animation, digital media, general media and academic uses, to complement Steiner Studios, the largest film and television studio on the east coast, which expansion will allow Steiner Studios to serve more forms of media in one location, offering efficiency not easily obtained in New York City as well as significant job creation;

WHEREAS, the ESD funding would facilitate the development of a new entrance to the Brooklyn Navy Yard at Kent Avenue and Wilson Street and a 70,000 square-foot “Backlot”, and the project sponsor may seek to construct a 250,000 square-foot Parking Garage proximate to Kent Avenue, in areas of the Brooklyn Navy Yard located outside the Naval Annex;

WHEREAS, the State (through ESD) would contribute funds for the construction of key infrastructure improvements, including provision of up-to-date power, gas, water, sewer, and teledata services to allow the development of the Media Campus and the new entrance to the Brooklyn Navy Yard on Kent Avenue, without which the Project would be cost-prohibitive, and the project sponsor may seek additional ESD funding in the future in order to construct the Parking Garage;
WHEREAS, the Project would have an overall positive effect on historic resources by maintaining and/or rehabilitating for reuse 21 architectural resources that contribute to the significance of the S/NRHP-listed Brooklyn Navy Yard Historic District, most notably the Naval Hospital (R95) and the Surgeon’s House (R1), which are also landmarks designated by the New York City Landmarks Preservation Commission (LPC), and by overall rehabilitating the campus setting of the Naval Annex;

WHEREAS, when the Naval Annex was conveyed by the U.S. Navy (Navy) to the City of New York, the Navy and New York State Office of Parks, Recreation and Historic Preservation (which is commonly known as the New York State Historic Preservation Office (NYSHPO)) entered into a Programmatic Agreement (PA), including a standard historic preservation covenant as Attachment 4 to the PA, to guide proper treatment of the Naval Annex in accordance with the Secretary of the Interior’s Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings, and the conveying language in the quitclaim deed between the federal government and the City of New York incorporated the historic preservation covenant from the PA as Item VI under Notices, Covenants, Conditions, Reservations, and Restrictions, and the PA also included a standard archeological covenant as Attachment 2, which relates directly to the Naval Hospital Archaeological Site (#A04701.014975) within the Naval Annex;

WHEREAS, under the Project, BNY Campus Associates, LLC would enter into a 47-year lease with five (5) ten (10) year options to renew with the Brooklyn Navy Yard Development Corporation (BNYDC) to develop the Naval Annex into the Media Campus;

WHEREAS, ESD is the lead agency in the preparation of an Environmental Impact Statement (EIS) under the State Environmental Quality Review Act (SEQRA) for the Project;

WHEREAS, a number of contributing resources to the S/NRHP-listed Brooklyn Navy Yard Historic District, including the Tennis Courts (R464 and R474), Greenhouse Remnants (R448), Film Exchange (Building 311), and Quarters No. 2 & 3 (R2 and R3) have been proposed for demolition as part of the Project;

WHEREAS, all prudent and feasible alternatives have been explored for the preservation and/or reuse of the contributing resources proposed for demolition;

WHEREAS, the NYSHPO has determined that the demolition of the aforementioned contributing resources would constitute an Adverse Impact;

WHEREAS, the archeological assessment prepared for the EIS concludes that the proposed construction of a new infrastructure loop under the Project has the potential to impact potential archaeological resources within the Naval Hospital
Archaeological Site (#A04701.014975 [see Appendix A - Figure 1 for Naval Hospital Archaeological Site]);

WHEREAS, ESD, in consultation with NYSHPO, has determined that the Project may have an Adverse Impact upon the following Historic Resources in the project area:

1. S/NRHP-listed Brooklyn Navy Yard Historic District
2. S/NRHP-eligible Naval Hospital Archaeological Site (#A04701.014975)

WHEREAS, the purpose of this Letter of Resolution (LOR) is to ensure that appropriate mitigation measures are taken to address the identified Adverse Impact due to the demolition of the contributing resources, and to avoid any construction-related damage on historic and archaeological resources;

NOW, THEREFORE, as referenced in the EIS and in accordance with Section 14.09 of the New York State Parks, Recreation and Historic Preservation Law, ESD, BNYDC, BNY Campus Associates, LLC, and NYSHPO agree that the Project may proceed subject to the Stipulations specified below:

STIPULATIONS

1. The project sponsor will prepare a standard documentation package of contributing and non-contributing resources to be rehabilitated or retained and non-contributing resources to be removed, including:

   a) High-resolution digital photographs documenting the Naval Annex portion of the S/NRHP-listed Brooklyn Navy Yard Historic District and the setting and exteriors of contributing and non-contributing buildings and structures that would be rehabilitated or retained, and non-contributing buildings and structures that would be removed within the Naval Annex, as indicated in Table 1 in Appendix B.

   Prior to digital photography, buildings and structures should be cleared of foliage and other obstructions that prevent clear views, or photographs should be taken during periods when foliage is not in bloom.

   The photographic documentation will be prepared and submitted in accordance with the National Park Service digital photography standards for NRHP nomination documentation in effect at the execution date of this Letter of Resolution.

   b) If available, historic photographs of buildings and structures, photographed with high-resolution digital photography as specified in Item a.
c) If available, existing or historic drawings of buildings and structures, photographed with high resolution digital photography as specified in Item a, or reproduced at original size on Mylar.

d) A site plan to which the photographs in Item a have been numbered and keyed with arrows to identify the location and view depicted.

e) Written data, including brief physical descriptions of the overall Naval Annex setting, and exteriors of buildings and structures; brief historic context and statement of significance regarding the overall Naval Annex; and information about the Project.

2. The project sponsor will prepare a Historic American Buildings Survey (HABS) Level II documentation package of contributing buildings and structures within the Naval Annex to be removed, including:

a) Large-format black-and-white archival photographs of setting and exteriors and interiors of contributing buildings and structures slated for removal as indicated in Table 1 in Appendix B.

Prior to large-format photo-documentation, buildings and structures should be cleared of foliage and other obstructions that prevent clear views, or photographs should be taken during periods when foliage is not in bloom.

b) Written data on buildings and structures, including exterior physical descriptions and interior physical descriptions; brief historic context, statement of significance; and information about the Project prepared under Item 1.e will also be included.

c) If available, historic photographs of buildings and structures, photographed with high-resolution digital photography as specified in Item 1.a.

d) If available, existing or historic drawings of buildings and structures, photographed with high resolution digital photography as specified in Item 1.a., or reproduced at original size on Mylar.

The Standard and HABS Level II documentation packages will be provided for NYSHPO review in draft form. Once final format and content have been agreed to, the project sponsor will prepare four hard and electronic copies of each package and provide them to the organizations listed below. Hard copies of the packages will be made available to the public at these
organizations. In addition, the organizations may opt to have the electronic versions of the packages downloadable from their websites. The organizations include:

a) New York State Division for Historic Preservation
   Peebles Island Resource Center
   Delaware Avenue
   Cohoes, NY 12047

b) Building 92
   Brooklyn Navy Yard
   63 Flushing Avenue
   Brooklyn, NY 11205

c) Brooklyn Historical Society
   128 Pierrepont Street
   Brooklyn, NY 11201

d) Brooklyn Public Library
   10 Grand Army Plaza
   Brooklyn, NY 11238

e) New York Public Library
   5th Avenue at 42nd Street
   New York, NY 10018

4. The project sponsor will prepare a Construction Protection Plan (CPP) to protect contributing resources to be rehabilitated or retained at the Naval Annex during the demolition of existing structures and construction of new structures. The CPP will be developed in coordination with the NYSHPO and professional engineers that will work with the project sponsor. Elements of the plan for preserving the historic integrity of the resources will include the following:

a) Existing foundation and structural condition information for the buildings to be reused.

b) Identification of interior and exterior historic character-defining features to be preserved.

c) Protection from falling objects.

d) Monitoring during construction using tell-tales, and horizontal and lateral movement scales.
e) Means and methods plan for how the demolition and construction would proceed.

5. New construction will be undertaken in a context-sensitive manner. In accordance with the covenant in the PA and quitclaim deed, ongoing consultation with the NYSHPo regarding new construction will occur among the project sponsor, BNYDC, ESD, and NYSHPo. [see Appendix C for PA and quitclaim deed]

6. Based on the archeological covenant and continuing consultation with NYSHPo, no disturbance of the ground surface shall be undertaken or permitted to be undertaken within 50 feet of the S/NRHP-eligible Naval Hospital Archaeological Site and/or the identified Naval Hospital Cemetery [see Appendix A - Figure 1 for Naval Hospital Archaeological Site and Appendix C for a legal description of Naval Hospital Cemetery (found in Exhibit B of quitclaim deed)] without the express prior written permission of NYSHPo, signed by a fully authorized representative thereof.

7. The project sponsor will detail the archaeological activities to be undertaken to mitigate the potential Adverse Impact to the S/NRHP-eligible Naval Hospital Archaeological Site prior to project implementation. A Phase II archaeological survey will be conducted in areas of proposed ground disturbance that lie within 50 feet of the S/NRHP-eligible Naval Hospital Archaeological Site. The results of the Phase II survey will be reviewed by NYSHPo, and NYSHPo will be consulted with respect to whether a Phase III data recovery excavation is warranted.

Any party to this LOR may propose to ESD that the LOR be amended, whereupon ESD shall consult with the other parties to this LOR to consider such amendment. Any amendment must be agreed upon in writing by all parties to this agreement.

This LOR shall take effect on the date it is signed by the last signatory and will remain in effect until the Stipulations have been met.
EMPIRE STATE DEVELOPMENT

BY:  [Signature]  DATE:  6/16/15

TITLE:  VP, Planning & Environmental Review
BROOKLYN NAVY YARD DEVELOPMENT CORPORATION

BY: Allen Pek DATE: 6/17/15
TITLE: SVP Development & Planning
NEW YORK STATE OFFICE OF PARKS, RECREATION AND HISTORIC PRESERVATION

BY: [Signature] DATE: 6/17/15

TITLE: Deputy Comm. for Historic Preservation
BNY Campus Associates, LLC

BY: [Signature] DATE: 6/17/15

TITLE: MANAGER
APPENDICES
## Appendix B

### Table 1: Brooklyn Navy Yard Historic District Contributing and Non-Contributing Resources within the Naval Annex and Type of Recordation Proposed

<table>
<thead>
<tr>
<th>Resource Number</th>
<th>Resource Name</th>
<th>Year Built</th>
<th>Historic District Classification</th>
<th>Type of Recordation</th>
</tr>
</thead>
<tbody>
<tr>
<td>R1</td>
<td>Surgeon's House</td>
<td>1863</td>
<td>Contributing</td>
<td>Standard Documentation</td>
</tr>
<tr>
<td>R4</td>
<td>Quarters No. 4; also referred to as Lab Director's House</td>
<td>1864; 1900; 1917; 1947</td>
<td>Contributing</td>
<td>Standard Documentation</td>
</tr>
<tr>
<td>R4</td>
<td>Infectious Disease Quarters; also referred to as Bungalow</td>
<td>1915</td>
<td>Contributing</td>
<td>Standard Documentation</td>
</tr>
<tr>
<td>R6</td>
<td>Infectious Disease Quarters; also referred to as Bungalow</td>
<td>1915</td>
<td>Contributing</td>
<td>Standard Documentation</td>
</tr>
<tr>
<td>R7</td>
<td>Infectious Disease Quarters; also referred to as Bungalow</td>
<td>1915</td>
<td>Contributing</td>
<td>Standard Documentation</td>
</tr>
<tr>
<td>R8</td>
<td>Bachelor Officers' Quarters</td>
<td>1926</td>
<td>Contributing</td>
<td>Standard Documentation</td>
</tr>
<tr>
<td>R9</td>
<td>Bachelor Officers' Quarters</td>
<td>1926</td>
<td>Contributing</td>
<td>Standard Documentation</td>
</tr>
<tr>
<td>R95</td>
<td>U.S. Naval Hospital</td>
<td>1830-1838</td>
<td>Contributing</td>
<td>Standard Documentation</td>
</tr>
<tr>
<td>R103</td>
<td>Carriage House</td>
<td>ca. 1900</td>
<td>Contributing</td>
<td>Standard Documentation</td>
</tr>
<tr>
<td>R109</td>
<td>Stable</td>
<td>ca. 1872</td>
<td>Contributing</td>
<td>Standard Documentation</td>
</tr>
<tr>
<td>R103A</td>
<td>Garage</td>
<td>ca. 1947</td>
<td>Contributing</td>
<td>Standard Documentation</td>
</tr>
<tr>
<td>Resource Number</td>
<td>Resource Name</td>
<td>Year Built</td>
<td>Historic District Classification</td>
<td>Type of Recordation</td>
</tr>
<tr>
<td>-----------------</td>
<td>--------------------------------------------------------------</td>
<td>------------</td>
<td>----------------------------------</td>
<td>----------------------------</td>
</tr>
<tr>
<td>R104</td>
<td>Guard House and Gate Keeper Lodge</td>
<td>1850</td>
<td>Contributing</td>
<td>Standard Documentation</td>
</tr>
<tr>
<td>R426</td>
<td>Lumber Shed; also referred to as Morgue</td>
<td>1909</td>
<td>Contributing</td>
<td>Standard Documentation</td>
</tr>
<tr>
<td>RD</td>
<td>Medical Supply Depot; also referred to as Lab Building</td>
<td>1910</td>
<td>Contributing</td>
<td>Standard Documentation</td>
</tr>
<tr>
<td>RG</td>
<td>Nurses' Quarters; also referred to as Unmarried Officers' Club</td>
<td>1919; addition ca. 1980</td>
<td>Contributing</td>
<td>Standard Documentation</td>
</tr>
<tr>
<td><strong>Resources To Be Retained</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R463</td>
<td>Flagstaff</td>
<td>ca. 1921</td>
<td>Contributing</td>
<td>Standard Documentation</td>
</tr>
<tr>
<td>No number</td>
<td>Naval Hospital Cemetery</td>
<td>1831-1910</td>
<td>Contributing</td>
<td>Standard Documentation</td>
</tr>
<tr>
<td>999</td>
<td>Barrier Forts Monument</td>
<td>1858; relocated to hospital campus in 1979</td>
<td>Contributing</td>
<td>Standard Documentation</td>
</tr>
<tr>
<td>No number</td>
<td>Sun Dial</td>
<td>ca. 1945</td>
<td>Contributing</td>
<td>Standard Documentation</td>
</tr>
<tr>
<td>No number</td>
<td>Bird Bath</td>
<td>ca. 1945</td>
<td>Contributing</td>
<td>Standard Documentation</td>
</tr>
<tr>
<td>No number</td>
<td>Structure - Stone Wall and Gates, Flushing Avenue</td>
<td>ca. 1850</td>
<td>Contributing</td>
<td>Standard Documentation</td>
</tr>
<tr>
<td>No number</td>
<td>Structure - Chain-Link Gate and Fence, Williamsburg Street and Williamsburg Place</td>
<td>No date</td>
<td>Non-contributing</td>
<td>Standard Documentation</td>
</tr>
<tr>
<td>Resource Number</td>
<td>Resource Name</td>
<td>Year Built</td>
<td>Historic District Classification</td>
<td>Type of Recordation</td>
</tr>
<tr>
<td>-----------------</td>
<td>---------------------------------------------------</td>
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<td>-----------------------</td>
</tr>
<tr>
<td>R2</td>
<td>Quarters No. 2</td>
<td>1905</td>
<td>Contributing</td>
<td>HABS Level II</td>
</tr>
<tr>
<td>R3</td>
<td>Quarters No. 3</td>
<td>1905</td>
<td>Contributing</td>
<td>HABS Level II</td>
</tr>
<tr>
<td>311</td>
<td>Motion Picture Exchange</td>
<td>1942</td>
<td>Contributing</td>
<td>HABS Level II</td>
</tr>
<tr>
<td>R448</td>
<td>Greenhouse remnants</td>
<td>ca. 1928</td>
<td>Contributing</td>
<td>HABS Level II</td>
</tr>
<tr>
<td>R464 and R474</td>
<td>Tennis Courts</td>
<td>ca. 1920</td>
<td>Contributing</td>
<td>HABS Level II</td>
</tr>
<tr>
<td>No number</td>
<td>Structure – Brick Wall West, North, and East side of Hospital Grounds</td>
<td>ca. 1850</td>
<td>Contributing</td>
<td>HABS Level II</td>
</tr>
<tr>
<td>671</td>
<td>Pool</td>
<td>1978</td>
<td>Non-contributing</td>
<td>Standard Documentation</td>
</tr>
<tr>
<td>672</td>
<td>Pool Bathhouse</td>
<td>1978</td>
<td>Non-contributing</td>
<td>Standard Documentation</td>
</tr>
<tr>
<td>X31</td>
<td>Pool Shed</td>
<td>1978</td>
<td>Non-contributing</td>
<td>Standard Documentation</td>
</tr>
<tr>
<td>X32</td>
<td>Steam Reducing Station</td>
<td>ca. 1980</td>
<td>Non-contributing</td>
<td>Standard Documentation</td>
</tr>
<tr>
<td>X33</td>
<td>Gazebo</td>
<td>ca. 1980</td>
<td>Non-contributing</td>
<td>Standard Documentation</td>
</tr>
<tr>
<td>X34</td>
<td>Chicken Coop</td>
<td>No date</td>
<td>Non-contributing</td>
<td>Standard Documentation</td>
</tr>
</tbody>
</table>
Appendix C – Programmatic Agreement and Quitclaim Deed
[insert Appx C]
Appendix B:

New York State Office of Parks, Recreation and Historic Preservation – Human Remains Protocol
In the event that human remains are encountered during construction or archaeological investigations, the New York State Historic Preservation Office (SHPO) recommends that the following protocol is implemented:

- At all times human remains must be treated with the utmost dignity and respect. Should human remains be encountered work in the general area of the discovery will stop immediately and the location will be immediately secured and protected from damage and disturbance.

- Human remains or associated artifacts will be left in place and not disturbed. No skeletal remains or materials associated with the remains will be collected or removed until appropriate consultation has taken place and a plan of action has been developed.

- The county coroner/medical examiner, local law enforcement, the SHPO, the appropriate Indian Nations, and the involved agency will be notified immediately. The coroner and local law enforcement will make the official ruling on the nature of the remains, being either forensic or archaeological.

- If human remains are determined to be Native American, the remains will be left in place and protected from further disturbance until a plan for their avoidance or removal can be generated. Please note that avoidance is the preferred choice of the SHPO and the Indian Nations. The involved agency will consult SHPO and appropriate Indian Nations to develop a plan of action that is consistent with the Native American Graves Protection and Repatriation Act (NAGPRA) guidance. Photographs of Native American human remains and associated funerary objects should not be taken without consulting with the involved Indian Nations.

- If human remains are determined to be non-Native American, the remains will be left in place and protected from further disturbance until a plan for their avoidance or removal can be generated. Please note that avoidance is the preferred choice of the SHPO. Consultation with the SHPO and other appropriate parties will be required to determine a plan of action.
Appendix C:

The City of New York – Landmarks Preservation Commission

Human Remains Protocol
The City of New York -
Landmarks Preservation Commission

Human Remains Discovery Protocol*

7.0 Burials and Human Remains

Human remains should be treated with great care and respect. Human remains are encountered as primary burials or as fragmentary remains. Primary burials are burials which have not been disturbed since interment or which have been only potentially disturbed. They may contain remains of coffins, complete skeletons, and artifacts associated with the burial such as shroud pins, buttons, or jewelry. Disarticulated bones, and fragments of bones, are considered to be fragmentary remains. Whenever proposed work will occur in an area, such as the African Burial Ground or in a cemetery, where human remains are likely to be encountered, the LPC should be contacted as early as possible in the planning stages so that an appropriate project specific protocol governing the work can be developed. Projects requiring Federal or State review must contact the OPHRP. They should also be contacted for questions about the Native American Graves Protection and Repatriation Act (NAGPRA).

7.1 Preservation of Primary Burials in Place

As a general policy, the LPC recommends that primary burials be left in place and that projects be redesigned to avoid disturbing them. The project must be planned in a manner that attempts to avoid disturbing primary burials. In the Scope of Work, the archaeologist must document the location of known graves, whether marked or unmarked, using such references as the plans of the cemetery, historic descriptions, photos, and other sources. In cases where documentation does not exist, remote sensing technology may be warranted.

7.2 Professional Archaeological Oversight

Professional archaeological staff must be present for all phases of excavation in an area that may contain human remains. Areas with potential for graves must be hand excavated by the archaeological staff; all construction work within an area that may contain human remains should be at least monitored.

7.3 Use of a Physical Anthropologist

A physical anthropologist must be available to come to the field as needed to identify and appropriately treat any human remains that may be encountered as defined in the Scope of Work. This individual should have a graduate degree in a relevant field and significant research experience with human remains found in archaeological contexts. The LPC maintains a list of physical anthropologists and will provide it upon request. The LPC will review the qualifications of any individual who is not on the list to ensure that he/she has sufficient experience. Note, that there are some individuals who may be both a qualified archaeologist and a physical anthropologist. In this instance, only one such professional is needed for the project. In all others, at least two professionals, the archaeologist and the physical anthropologist will be needed. The Scope of Work must describe the type and extent of physical anthropological study. It must also define the reporting obligations of the archaeologist and the physical anthropologist. The physical anthropologist should submit a scope for analysis to the LPC after fragmentary human remains
have been found. This analysis should, when possible, identify the minimum number of individuals these bones may represent, sex, age, cause of death, pathology, etc. The Commission recommends that these remains be reinterred in consultation with descendent communities and interested parties.

7.4 Disposition of Human Remains
The projects’ Scope of Work must include the applicant’s protocol for temporary and permanent disposition of human remains found in the course of the project. The protocol should designate how and where remains will be temporarily stored, what the consultation process with descendent communities and interested parties will be, plans for curation, and for permanent disposition (e.g., reburial on or off the site). Applicants should note that LPC will need to review and approve any proposal to put an exterior marker or memorial in a designated historic district, scenic landmark, or individual landmark.

7.5 Memorandum of Agreement
The Scope of Work should also include an MOA between the contractor and the archaeologist(s) which outlines the rights and obligations of each party in regard to stopping the excavation, completing the fieldwork in a timely manner, making changes in the construction work, maintaining workplace safety, and notification.

7.6 Unanticipated discovery of human remains
When human remains are unexpectedly found in the City, the New York Police Department (“NYPD”) and Medical Examiner’s Office (“ME”) must be contacted immediately. They will determine the appropriate action. If the human remains are found on a project which has been reviewed by the LPC, the LPC must be notified as well as the NYPD and ME.

*Taken from:

Appendix C:

NY SHPO and NYC LPC Approval of Testing Plan
May 30, 2017

Ms. Soo Kang  
Senior Planner, Planning & Environmental Review  
Empire State Development  
633 Third Avenue  
New York, NY 10017-6754

Re: ESDC  
Brooklyn Navy Yard Steiner Studios Master Plan  
Borough of Brooklyn, Kings County, NY  
13PR00424

Dear Ms. Kang:

Thank you for requesting the comments of the Division for Historic Preservation of the Office of Parks, Recreation and Historic Preservation (OPRHP). We have reviewed the submitted materials in accordance with the New York State Historic Preservation Act of 1980 (section 14.09 of the New York Parks, Recreation and Historic Preservation Law). These comments are those of the Division for Historic Preservation and relate only to Historic/Cultural resources.

OPRHP has reviewed the revised version of the proposed archaeological monitoring plan - Phase IB Archaeological Monitoring Plan, Unanticipated Discoveries Plan and Human Remains Protocol for the Brooklyn Navy Yard – Naval Annex (Naval Hospital Area) Project (Test Pits) (Chrysalis Archaeological Consultants, 25 May 2017). We have the following additional comments.

Page 5 – Regarding point 7, the results of this stage of monitoring do not represent a full Phase IB investigation and, by themselves, may not provide sufficient information on which to design a Phase II investigation, if needed. This comment also pertains to page 9.

Page 8 – If human remains are encountered at any depth (i.e. above or below 5 feet), excavation should immediately be halted and the human remains protected, as described. No additional work at that location shall be undertaken without consultation with OPRHP and LPC.

With these caveats, OPRHP recommends that the proposed monitoring of the test pits may be allowed to proceed. If you have any questions please don’t hesitate to contact me.

Sincerely,

Philip A. Perazio, Historic Preservation Program Analyst - Archaeology Unit  
Phone: 518-268-2175  
e-mail: philip.perazio@parks.ny.gov  
via email only

cc: Peter Erhartic, Steiner NYC; Shani Leibowitz, Brooklyn Navy Yard Development Corp.; Alyssa Loory & Chris Ricciardi, Chrysalis; Benjamin Tressler, Steiner NYC; Daniel Pagano, Gina Santucci, & Amanda Sutphin, LPC;
ARCHAEOLOGY

Project number:  EMPIRE STATE DEVELOPMENT CORP / 15ESD001K
Project:  STEINER STUDIOS MEDIA CAMPUS
Date received:  5/25/2017

Comments:  as indicated below. Properties that are individually LPC designated or in
LPC historic districts require permits from the LPC Preservation department.
Properties that are S/NR listed or S/NR eligible require consultation with SHPO if
there are State or Federal permits or funding required as part of the action.

This document only contains Archaeological review findings. If your request also
requires Architecture review, the findings from that review will come in a separate
document.

Comments: The LPC is in receipt of the revised, "Phase 1B Archaeological
Monitoring Plan, Unanticipated Discoveries Plan and Human Remains Protocol for the
Brooklyn Navy Yard- Naval Annex (Naval Hospital Area) Project Test Pits," prepared
by Chrysalis Archaeological Consultants and dated May 25, 2017. We note that the
requested changes have been made. Please notify LPC when work begins and keep
us updated on the progress.

cc: NYSHPO

Amanda Sutphin, Director of Archaeology

File Name: 29838_FSO_ALS_05262017.doc
Appendix D:
Additional Site Images
Image 15: Looking east from Test Pit 1/Trench 29, the seam in the concrete continues.

Image 16, Opening of Test Pit 1/Trench 29, looking north.
Image 17: Gas line found immediately underneath the blacktop, Test Pit 1/Trench 29.

Image 18: Machine breaking up concrete, Test Pit 1/Trench 29, looking north.
Image 19: Location of Test Pit 2/Trench 20, the loading dock is to the left and the cemetery is to the right, looking west.

Image 20: Test Pit 2/Trench 20, looking southeast.
Image 21: Concrete foundation in Test Pit 3/Trench 30, looking north.
Image 22: Concrete foundation, Test Pit 3/Trench 30, looking southwest.

Image 23: Close up of concrete foundation, Test Pit 4/ Trench 21, looking northeast.
Image 24: Close up of the steps in the concrete foundation, Test Pit 4/Trench 21, looking east.
Appendix E:
Resume of Key Personnel
Ms. Loory is founder and president of Chrysalis Archaeological Consultants. For nearly twenty years she has worked in cultural resource management and public education devoted to preserving cultural resources and communicating their value to local communities. She has completed over sixty technical and academic reports and has delivered dozens of presentations concerning preservation compliance, New York City historical development, and educational curricula. Her extensive experience lends itself to her roles in developing and executing research and excavation plans, project management, regulatory compliance and report production.

SELECTEED PROJECTS

Project undertaken on behalf of the City of New York – Department of Design and Construction for infrastructure improvements have included:

Beekman Street, New York, NY, Phase IA, IB – 2005
City Hall Park, New York, NY, Phase IB, II – 2010-2013
Downtown Brooklyn Water Mains Project, Brooklyn, NY – Phase IB – 2011
The High Bridge, New York, NY, Phase IB – 2012-2015
Washington Square Park, New York, NY – Phase IB – 2015 to present

Project’s undertaken on behalf of the City of New York – Department of Parks and Recreation at historic houses have included:

Chambers Street, New York, NY, Phase I, 2005
City Hall Park, Fuel Cell Project, New York, NY, Phase IB, 2013
City Hall Park, New York, NY, Phase IB, II, 2012
City Island Bridge, Bronx, NY, Phase IB, 2014
Columbus Park, New York, NY, Phase I, 2007
Dyckman Farmhouse; New York, NY, Phase IB, 2007
Gravesend Cemetery; Brooklyn, NY, Phase IB, 2002
High Bridge, New York, NY, Phase IB, 2014
John Bowne House, Queens, NY, Phase IB, 2014
Pieter Claesen Wyckoff House; Brooklyn, NY, Phase IB, 1997, 2004
Queens County Farm Museum; Queens, NY, Phase IB, 2004
Roger Morris Park, New York, NY, Phase IB, 2005
Rufus King Park, Queens, NY, Phase IB, 2006, 2007
Van Cortlandt Park, Bronx, NY (Dog Run), Phase IB, 2015

AREAS OF EXPERTISE

National Historic Preservation Act
Section 106 Compliance
Material Collections Analysis
Archaeological Survey and Excavation
Public Outreach

EDUCATION

Ph.D candidate, Anthropology and Archaeology: CUNY Graduate School.
Expected graduation 2016
M.Phil, 2000 Anthropology and Archaeology: CUNY Graduate School
M.A., Anthropology: 1998, Hunter College

CERTIFICATIONS

Register of Professional Archaeologists
10-Hour OSHA Construction Safety
30-Hour OSHA Construction Safety
40-Hour OSHA HAZWOPER
SWAC - Secure Worker Access Consortium

PROFESSIONAL EXPERIENCE

2001-Present: Chrysalis Archaeological Consultants
2006-2010: URS Corporation, Principal Investigator
2007-2010: Gray & Pape, Supervisory Consultant

CONTACT INFORMATION

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Rhode Island Regional Office
One Richmond Square – Suite 121F
Providence, RI 02906-5139
Phone: 401.499.4354
Leah Mollin-Kling, M.A., R.P.A.  
Field Director

Ms. Mollin-Kling ...

SELECTED PROJECT EXPERIENCE BY STATE

**Delaware**

**Harrington-Bridgeville Power Project – Phase IB (2015)**  
**Sussex County, DE**  
Performed shovel testing at locations of proposed utility pole replacements to identify potential prehistoric or historic sites.

**New Jersey**

**Hamilton – Phase IB (2015)**  
**Mercer County, NJ**  
Performed shovel testing at the site of a proposed warehouse to identify potential prehistoric or historic sites.

**Interstate – Phase IB (2015)**  
**Middlesex County, NJ**  
Performed shovel testing at the site of a proposed warehouse to identify potential prehistoric or historic sites.

**New York**

**Washington Square Park – Phase IB (2015)**  
**New York, NY**  
Monitored replacement of utility lines in archaeologically sensitive areas surrounding the park.

**World Trade Center PHR Recovery Project (2010 & 2013)**  
**Staten Island, NY**  
Used archaeological techniques to sift through debris from the World Trade Center site searching for human remains and personal effects as part of Phases III and IV of the recovery efforts

**Van Alst Cemetery – Phase IB (2015-16)**  
**Queens, NY**  
Served as on-site forensic anthropologist monitoring ongoing construction work on the former site of a 17th & 18th century cemetery. Monitored the excavation of test trenches dug with a hydraulic excavator to determine potential for discovery of human remains. Monitored all removal of soil within the historic boundaries of the cemetery to ensure no burials

AREAS OF EXPERTISE

Archaeological Survey and Excavation  
GIS Analysis  
Forensic Archaeology

EDUCATION

M.A., Biological Anthropology: 2014  
New York University

B.A., Archaeology: 2009  
Boston University

CERTIFICATIONS

8-Hour Annual HAZWOPER Refresher Course (2015)

10-Hour OSHA Construction Safety Training (2015)

40-Hour HAZWOPER Safety Training (20014)

PROFESSIONAL EXPERIENCE

2017-Present: Chrysalis Archaeological Consultants

2014-2016: John Milner Associates


2015: Black Hills National Forest

2010, 2013: NYC Office of Chief Medical Examiner

CONTACT INFORMATION

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remained on site.

**Pennsylvania**

**Museum of the American Revolution Project – Phase II & III (2014)**
Philadelphia, PA
Excavated historic structures & features in Old City, Philadelphia. Monitored construction equipment to identify features as they were uncovered.

**Pennsylvania Rapid Bridge Replacement Project – Phase IB (2015)**
State-wide, PA
Performed shovel testing in advance of bridge improvements in various locations around the state for the Pennsylvania Department of Transportation.

**P1410 Truck Lane Project – Phase IB (2015)**
Westmoreland County, PA
Performed shovel testing in advance of expansion of S.R. 356 to identify potential historic and prehistoric sites.

**West Oak 3 – Phase II (2015)**
Chester County, PA
Excavated test units to investigate the extent of a previously identified prehistoric site in advance of a proposed expansion of a nearby Calpine oil pipeline

**Wyoming**

**Bearlodge Ranger District Seasonal Archaeology Technician, Black Hills National Forest (2015)**
Crook County, WY
Performed pedestrian surveying to identify and record historic and prehistoric sites within the district. Relocated & monitored or updated previously identified sites. Performed shovel tests and test units to assess subsurface deposition at new sites and during in course of site updates. Performed literature reviews in support of upcoming district projects and timber sales.

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**PUBLICATIONS**

R2015020300331 Scott-Hardy Spring Dam Repair (internal report for the Bearlodge Ranger District, Black Hills National Forest)
R2015020300302: Dean Unit 47 Skid Trail (internal report for the Bearlodge Ranger District, Black Hills National Forest)
Examination of Age-Related Changes of the Auricular Surface Using Geographic Information Systems Analysis (master’s thesis)