Proposed Micron Semiconductor Fabrication Project:

Micron Campus

TOWNS OF CLAY AND CICERO; ONONDAGA COUNTY, NEW YORK

Phase 1B Archaeological Investigation Work Plan

SHPO Project Review Number 23PR05779

Prepared for:

Micron New York Semiconductor Manufacturing LLC (Micron)
6360 South Federal Way
Post Office Box 6
Boise, Idaho 83716

Prepared by:

AKRF, Inc.
440 Park Avenue South, 7th Fl
New York, NY 10016
212-696-0670

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[redacted]

Phase 1B Archaeological Work Plan

1. PROPOSED PROJECT

Micron New York Semiconductor Manufacturing LLC (Micron), a Delaware limited liability company and wholly owned subsidiary of Micron Technology, Inc., is proposing to acquire the approximately 1,400-acre White Pine Commerce Park site, located at 5171 New York State (NYS) Route 31, in the Town of Clay, Onondaga County, New York, from the Onondaga County Industrial Development Agency (OCIDA) at latitude and longitude: 43.190792, −76.157056. Micron's proposed semiconductor manufacturing facility campus ("Micron Campus") will be built over an approximately 20-year period. It will consist of the construction of four approximately 160-foot-tall (approximately 1.31-million-square-foot) memory fabrication facilities ("fabs"). Each fab location would be supported by additional structures, including central utility buildings; warehouse space; product testing space; electrical substations; water and wastewater pre-treatment and storage buildings; and gas storage. Access to the Micron Campus would be from NYS Route 31, Caughdenoy Road, and a secondary access from NYS Route 11. An approximately 38.24-acre parcel on the west side of Caughdenoy Road (Town of Clay Tax Parcels 046.-02-03.2 and 046.-01-19.1) (the "Rail Spur Site") would be used to deliver construction aggregate to the Micron Campus by rail spur and overhead conveyance system. Micron will also construct an employee healthcare center, childcare center, and recreation center and an athletic field at an approximately 30.2-acre parcel at 9100 Caughdenoy Road (Town of Clay Tax Parcel 042.-01-13.0, the "Childcare Site"). Collectively, the above actions are considered the Proposed Project (see **Figure 1**).

ENVIRONMENTAL REVIEW

The CHIPS Program Office (CPO) within the National Institute of Standards and Technology (NIST) of the United States Department of Commerce is serving as the lead for Section 106 of the National Historic Preservation Act (Section 106). This Phase 1B Work Plan has been revised to reflect comments on an earlier draft as issued by SHPO on December 13, 2024 and by the Onondaga Nation on December 19, 2024.

A Programmatic Agreement will be executed by all involved parties to document the commitments to completing all future phases of cultural resources analysis, including archaeological testing. The Programmatic Agreement will also describe the measures that would be carried out to assess, identify, and treat any identified archaeological sites, as well as any unanticipated discoveries during construction.

2. AREA OF POTENTIAL EFFECTS

The Area of Potential Effects (APE) is defined as "the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if such properties exist," (36 CFR § 800.16[d]). The APE for historic properties has been defined to include the areas in which the Proposed Project may directly affect archaeological resources. The

definition of the APE is a required step in the Section 106 process. An APE is influenced by the scale and nature of an undertaking and, in general, adverse effects on historic properties may include both direct physical effects—demolition, alteration, or damage from construction—and indirect effects, such as the introduction of visual, audible, or atmospheric elements that may alter the characteristics of the historic property that qualify it for inclusion in the National Register of Historic Places in a manner that would diminish the integrity of the property's significant historic features.

The APE for the Proposed Project has been developed based on proposed work activities and their potential to affect archaeological sites. The APE as defined herein has been determined as a result of consultation with SHPO, the Indigenous Nations, and other consulting parties pursuant to Section 106. The portion of the archaeological resources APE included in this Phase 1B Archaeological Work Plan includes the proposed Micron Campus as depicted on **Figure 2**, including all areas that would be subject to subsurface impacts as a result of the construction, operation, and maintenance of the proposed project, including construction access and staging.

3. BACKGROUND INFORMATION AND SENSITIVITY DETERMINATION

CURRENT SITE CONDITIONS

The Micron Campus (see **Figure 1**) is a large area divided into several residential properties, wooded areas, and wetlands. A number of 19th and 20th century residences are located within the APE, with the majority located along the roads that extend around the APE and Burnet Road, which extends into the campus's east half. Many of the houses currently within the APE were demolished in the fall of 2023 and are no longer extant. Wetlands are present throughout the APE that appear to have been modified as a result of agricultural activities in the 19th and 20th centuries.

PRECONTACT PERIOD ARCHAEOLOGICAL SENSITIVITY

[redacted]

HISTORIC PERIOD ARCHAEOLOGICAL SENSITIVITY

[redacted]

4. RESEARCH DESIGN

The objective of the Phase 1B Archaeological Investigation of the Micron Campus is to determine the presence or absence of historic and precontact period archaeological deposits within the undisturbed portions of the Micron Campus. If present, the Phase 1B Archaeological Investigation will make an assessment as to whether the resources are in sufficient quantity/concentration and of sufficient research value to determine if a Phase 2 Archaeological Survey/Evaluation is required to further delineate the boundaries of the archaeological site and to evaluate its potential significance. The determination of an archaeological site's significance is largely dependent on the types of potential archaeological resources that could be encountered within the Micron Campus and on the specific research questions that can be answered through the analysis of those resources. A professional, modern archaeological investigation could produce valuable data about the precontact occupation of the area that could be compared and contrasted with previously collected data. This could produce new data and add to existing knowledge of life in the vicinity of what is now Onondaga County during the historic and precontact period.

5. ARCHAEOLOGICAL TESTING PROTOCOL

Although documentary research determines archaeological potential, excavation for the purposes of archaeological testing is required to determine if resources are *actually* present on a site. Therefore, this Archaeological Work Plan addresses Phase 1B presence/absence testing and includes a contingency for the evaluation for National Register eligibility (e.g., a Phase 2 Archaeological Survey/Evaluation), which may become necessary. The Phase 1B Archaeological Investigation will be conducted in accordance with the "Phase 1 Archaeological Report Format Requirements" as issued by SHPO in 2005, and with the "Standards for Cultural Resources Investigations and the Curation of Archaeological Collections in New York State" as issued by the New York Archaeological Council (NYAC) in 1994 and adopted by SHPO in 1995.

Archaeological testing within the Micron Campus will take place within the areas of archaeological sensitivity identified in the Phase 1A Study as shown on **Figure 2**, including in areas that were included within the study area of a previous archaeological investigation completed in 2013 that tested a limited portion of the current APE and that was not completed pursuant to Section 106. Those areas that were tested in 2013 will not be retested but testing will be completed within all untested areas that are accessible and undisturbed. Subsurface testing will primarily consist of hand-excavated shovel test pits (STPs). The testing strategy outlined in this protocol may be altered based on conditions observed in the field, including previously unforeseen obstructions.

A representative from the Onondaga Nation will be retained to oversee the archaeological testing to determine if sacred objects or other items of cultural importance are encountered. The monitor will be compensated for their work at an hourly rate to be determined in coordination with the Onondaga Nation. In the event that the Oneida Indian Nation or other Indigenous Nations request to have an on-site monitor present during the archaeological testing, such requests will be accommodated. The Onondaga Nation will be engaged to discuss suggestions for a local archeological firm or a firm with local experience to be included in the investigation team with staff members that have local expertise and a history of and capacity to work closely with Indigenous Nation monitors and Section 106 representatives. The archaeological firm should have expertise in Haudenosaunee and Onondaga culture and artifacts and should demonstrate their respect for and ability to work with Onondaga Nation representatives.

SUBSURFACE TESTING

Testing has been recommended throughout undisturbed and accessible portions of the entire Micron Campus. No testing is proposed in visibly disturbed areas, paved areas (if any), areas with standing water. If any portions of the APE will not be impacted by the Proposed Project, those areas may be excluded from the testing program. The Micron Campus would be constructed in four phases over a 16-year period, from west to east across the site. In total, approximately 997 acres of the approximately 1,400-acre site would be disturbed. These are identified as Construction Phase 1A, Phase 1B, Phase 2A, and Phase 2B in **Figure 3**. The area comprising Construction Phase 1A would be tested prior to the start of construction in November 2025. The remaining three construction phases (Construction Phases 1B, 2A, and 2B) may be tested concurrently within one to two years after testing of the Construction Phase 1A area is complete.

STPs will be excavated at intervals of approximately 50 feet (15 meters) across a grid to sample enough of the area to determine if intact precontact resources or an intact buried ground surface are likely to be present. The 50-foot (15-meter) interval is established as the preferred interval for subsurface shovel testing as outlined in the NYAC archaeological guidelines as issued in 1994 and adopted by SHPO in 1995. In locations where physical conditions suggest heightened archaeological sensitivity are observed (e.g., in areas where soil drainage is better; where surficial indications or vegetation suggesting prior disturbance are absent; where artifacts are observed on exposed/cleared ground surfaces; or where STPs are positive for archaeological resources), the interval may be narrowed to 25 feet (7.5 meters). In the event that submerged soils or areas of visible disturbance are present, STPs may be excavated at an interval of 100 feet (30 meters) to confirm the limits of disturbance or certain soil types. STPs will be placed along linear transects or along established grids depending on the landscape of the area being tested. If mature trees, large soil/fill deposits, slopes greater than 10 percent, or other obstructions are present, STPs may be offset from the grid or skipped, depending on the discretion of the archaeological consultant.

Inundated wetland areas that may have been dry, inhabitable land in the past will be tested where possible. Disturbed or saturated soils may be tested at a 100-foot (30-meter) interval to confirm the limits of saturated soils as identified by the USDA soil survey. Additional STPs may be judgmentally placed in areas deemed testable by the archaeological team. These areas where testing may be possible may include isolated elevated or dry areas within otherwise inundated wetlands. In the event that wetland areas are present that cannot be physically tested in the manner described previously, alternative means of documentation may be considered that include, but are not limited to, monitoring during construction. A plan for further examination of submerged areas will be determined based on observations made in the field regarding the viability of testing submerged areas.

Each STP will be approximately 16 to 18 inches in diameter and excavated to a depth of approximately 2 to 3 feet, or until sterile subsoil is encountered. The exact number of STPs will depend on the extent of visible disturbance/obstructions observed in the field. If isolated precontact archaeological deposits are identified in the STPs placed along the 50-foot-grid or transect, additional STPs will be excavated at closer intervals—one each at a distance of 3 feet and 10 feet to the north, south, east, and west, or eight radial STPS total—in the vicinity of the find to determine the horizontal and vertical extents of potential artifact deposits. Radial STPs will not be excavated when two of more precontact artifacts are found in consecutive shovel tests along the 50-foot grid.

Hand-excavated soils in areas where intact, natural soils are identified will be screened through quarter-inch steel mesh. Fill materials and disturbed soils will not be screened. Artifacts will be systematically collected from hand-excavated soils and will be placed in labeled plastic bags.

In addition to the excavation of STPs, where feasible, testing may involve the use of plowing and disking. In the event that this method is pursued as part of the testing plan, the surface survey will follow the protocols outlined in SHPO's *Phase I Archaeological Report Format Requirements* issued in 2005. Plowed areas will be a minimum of 10 feet (3.3 meters) in width and will be spaced a maximum of 50 feet (15 meters) apart in areas with 70 percent visibility at a minimum. Systematic pedestrian transects will be spaced at the dimensions mentioned above within plowed areas.

All artifacts recovered through screening will be placed in labeled plastic bags according to stratigraphic level.

IDENTIFICATION OF ARCHAEOLOGICAL FEATURES

Precontact archaeological features can include hearths, arrangements of postholes, or other evidence of camps or occupations sites. Historic features can include shaft features (e.g., privies, cisterns, or wells), foundation remnants, or middens. Precontact or historic features or buried ground surfaces encountered during testing would be sufficiently sampled so as to indicate if further testing (e.g., a Phase 2 Archaeological Survey/Evaluation) is necessary (see Contingency Tasks, below). If a Phase 2 Archaeological Survey/Evaluation is determined necessary, no further work would be completed as part of the Phase 1B Archaeological Investigation pending further coordination with CPO, SHPO, and the Indigenous Nations, and any open test units or STPs will be backfilled to protect the archaeological site. At that time, the archaeological consultant will coordinate with CPO, who will coordinate with SHPO, Indigenous Nations, and other Consulting Parties to establish the scope of work for a Phase 2 Archaeological Survey/ Evaluation Work Plan ("Phase 2 Work Plan"). Depending on the number of features or sites present within the Micron Campus, the Phase 2 Work Plan may include a sampling strategy developed in coordination with CPO, SHPO, the Indigenous Nations, and other Consulting Parties, which will determine the extent to which each feature is excavated and documented. The feature or features will then be re-excavated for the Phase 2 Archaeological Survey/Evaluation.

AVOIDANCE PLAN

In the event that archaeological sites are identified within the Micron Campus that are potentially significant but that would not be impacted by the Proposed Project, an "Avoidance Plan" may be prepared after completion of the Phase 1B Archaeological Investigation. The avoidance plan will describe how the project will successfully avoid and protect areas of archaeological sensitivity (e.g., agreements to mark and post sensitive areas to prevent disturbance from heavy machinery or staging activities, etc.). Should an Avoidance Plan be necessary, CPO will coordinate with SHPO, Indigenous Nations, and other Consulting Parties to develop the plan and to established the protocols for its finalization and approval.

HEALTH AND SAFETY PLAN

Testing completed as part of this Phase 1B Archaeological Investigation is not expected to exceed a depth of 4 feet below grade in most locations. In the event that such deep excavation will occur, a Health and Safety Plan (HASP) may be required in compliance with the standards of the United

States Department of Labor's Occupational Safety and Health Administration (OSHA) pertaining to safe excavation practices.

6. CONTINGENCY PLAN FOR PHASE 2 ARCHAEOLOGICAL SURVEY/EVALUATION AND ADDITIONAL SITE PROTECTION MEASURES

As stated previously, the Phase 1B Archaeological Investigation testing will be designed to determine the presence or absence of archaeological resources, not to fully expose or document any encountered resources. A Phase 2 Archaeological Survey/Evaluation ("Phase 2 testing") occurs only if the Phase 1B Archaeological Investigation uncovers a site or evidence of a site that will need to be evaluated according to the National Register criteria for eligibility. Phase 2 testing is used "to obtain detailed information on the integrity, limits, structure, function, and cultural/historical context of an archaeological site sufficient to evaluate its potential National Register eligibility" (NYAC 1994: 4). It involves detailed research beyond that done in the first phase, greater sampling of the property, a greater variety in the types of testing units (i.e., including larger testing units and/or shovel test pits at closer intervals), and closer analysis of artifacts. If Phase 2 testing is necessary, it would be undertaken in consultation with CPO, SHPO, the Indigenous Nations, and other Consulting Parties. The Phase 2 Survey and Evaluation will then determine if additional archaeological analysis (e.g., Phase 3 Mitigation/Data Recovery) is warranted in the event that the project cannot be redesigned to avoid significant archaeological sites. In the event that Phase 2 testing is required, a separate Work Plan will be prepared at that time for submission to CPO, SHPO, the Indigenous Nations and other Consulting Parties as described above.

7. SITE DOCUMENTATION

Professional standards for testing, screening, recording features and stratigraphy, labeling, mapping, and photographing any identified archaeological resources will be applied during the Phase 1B Archaeological Investigation. Soil profiles including colors—recorded using Munsell soil color charts—and texture/inclusions will be recorded in field notes. Soil profiles will be included in the final report in tabular form supplemented by photographs and drawings as appropriate. Testing locations will be recorded in field notes and field maps. All on-site testing will be recorded relative to an on-site datum and converted to the North American Vertical Datum of 1988 (NAVD88). The on-site datum will be calculated using existing site surveys or estimated using existing Lidar data. Where possible, testing locations will be recorded digitally using GIS software. The North American Datum of 1983 (NAD83) will be used as a permanent horizontal datum. The testing will be recorded using digital photography and videography as appropriate throughout the field effort.

8. LABORATORY PROCESSING

Following each stage of work, archaeologists will clean, stabilize, and inventory all cultural material removed from the Micron Campus. During the course of the investigation, the archaeological consultant will retain custody of all recovered artifacts, which will not be stored on-site. All laboratory activity will be conducted in compliance with the aforementioned guidelines and with those established by the United States Department of the Interior/National Park Service for the Curation of Federally-Owned and Administered Archaeological Collections (*36 CFR 66* and *79*). Artifact washing will begin immediately after transfer of the collection to the laboratory. Trained technicians will process the artifacts using standard archaeological techniques. Artifacts will be washed with a mild, non-ionic detergent using soft-bristle brushes and after washing they will be air dried on racks. Fragile artifacts and those with non-stable surfaces will be washed separately without

brushing. Artifact bags will be labeled in waterproof ink with all relevant provenience information. After they have been cleaned and dried, the artifacts will be placed in archivally stable polyethylene zipper-top bags for permanent storage. The provenience information will be written on the outside of the bags using a permanent, waterproof marker.

An artifact catalog recording the depth and location of each recovered artifact will be created. To the extent possible, recovered artifacts will be identified as to material, temporal or cultural/chronological association, function, and style following the standard archaeological references. Detailed analysis would include the identification of the *Terminus Post Quem* (TPQ) of artifacts for each context and the generation of mean beginning and end dates for assemblages. This information could be used to establish the contemporaneity of contexts and strata, and to determine which assemblages represent primary or secondary deposits. If deemed significant and in consultation with CPO, SHPO, the Indigenous Nations, and other Consulting Parties, artifacts that are recovered from the site will be curated according to the regulations of the Department of the Interior/National Park Service *356 CFR 79*.

IDENTIFICATION OF AN ARTIFACT REPOSITORY

Any artifact collection removed from the Micron Campus would be the property of the owner of the land at the time of the testing. In the event that objects of cultural significance to the Indigenous Nations are encountered, the investigators will immediately notify CPO, who will coordinate with SHPO, the Indigenous Nations, and other Consulting Parties regarding documentation and repatriation pursuant to Section 106 and any other relevant legislation. In the event that significant archaeological resources are encountered within the APE that require permanent curation, efforts will be necessary to locate a repository that is capable of accepting and curating the collection. Upon the completion of field testing, if significant resources are found, a repository will be identified and selected in conjunction with CPO, who will further coordinate with SHPO, the Indigenous Nations, and other Consulting Parties to determine a suitable long-term curation plan. If the artifact collection is determined to have no research value, it will be returned to the site owner or discarded at their discretion within one year of the completion of fieldwork. The site owner may then choose to retain and store the collection or may seek out alternative methods of disposal.

9. REPORTING

Following the completion of field testing and laboratory processing and analysis, a detailed Phase 1B Archaeological Investigation report will be prepared for each stage of work. In the event that the Micron Campus is tested in two stages (first for Construction Phase 1A and later for Construction Phases 1B, 2A, and 2B), two separate reports will be prepared for the Phase 1B Archaeological Investigations of each of the two portions of the Micron Campus. Each final report will document all methodologies used during the course of the investigation and will discuss all findings that emerge from the recovered data, maps, plans, drawings, photographs, and/or other relevant images will be incorporated into the body of the report as needed to illustrate project findings. The reports will include a site map showing the location of all resources identified, as well as a complete inventory of any recovered artifacts. The reports will be prepared according to the guidelines and standards issued by SHPO and NYAC. If the testing locates features *in situ*, the documentation of those features will be incorporated into the Work Plan of all necessary Phase 2 Archaeological Survey/Evaluations.

Each final technical report will include the following information:

- Description of the portion of the APE included in that investigation;
- Relevant documentation/background research;

- Research design;
- Field studies as actually implemented, including any deviation from this Work Plan and the reason for those changes;
- Field observations;
- Analyses and results, illustrated as appropriate with maps, photographs, tables, charts, and graphs; and
- Recommendations for further archaeological work, if necessary.

A draft of each technical report will be submitted to CPO, who will further coordinate with SHPO, the Indigenous Nations, and other Consulting Parties pursuant to Section 106. If necessary, a final version of reports will be prepared to address comments, which CPO will circulate to the SHPO, Indigenous Nations and other Consulting Parties for concurrence.

10. PROJECT COORDINATION AND MANAGEMENT

Prior to each stage of testing, the archaeological consultant will notify CPO, who will further coordinate with SHPO, the Indigenous Nations, and other Consulting Parties when testing is scheduled to begin and will retain the services of a monitor from the Onondaga Nation and any other nations that may request to be present. If requested, the archaeological consultant will assist in arranging a site visit for representatives of CPO, who will coordinate the participation of SHPO, the Indigenous Nations, and other Consulting Parties as necessary and appropriate during the course of the Phase 1B Archaeological Investigation. However, during the field testing, the archaeological team will distribute a summary of work completed to date on a weekly basis (including number/location of tests completed and relevant finds) to CPO, SHPO, the Indigenous Nations, and other Consulting Parties.

It is possible that the field testing will not reveal any potentially significant archaeological features, deposits, or intact soil strata. If that is the case, no further archaeological consideration would be warranted, and a report to that effect would be prepared. In the event that archaeological resources are encountered, CPO on a weekly basis will further consult with SHPO, the Indigenous Nations, and other Consulting Parties. In either case, a final report on the field investigation will be submitted to CPO, SHPO, the Indigenous Nations, and other Consulting Parties for review and comment, indicating a presence or absence of archaeological features.

11. PROTOCOL FOR THE UNANTICIPATED DISCOVERY OF HUMAN REMAINS

There is no indication that human remains are present within the Micron Campus. However, in the unlikely event that human remains or suspected human remains are encountered within the APE, the SHPO Human Remains Discovery Protocol and the Haudenosaunee Policy on Human Remains (reproduced below) would be implemented in consultation with CPO. All requests from the Indigenous Nations to modify this protocol will be honored in consultation with CPO and SHPO. As the project is subject to Section 106, the project is not subject to the *New York State Unmarked Burial Site Protection Act* (NY EXEC § 171, the "Act"), which went into effect on August 1, 2023 and requires consultation with the New York State Archaeologist in the event that undocumented human remains are encountered in New York State. In the event that human remains are determined to be Indigenous, all relevant legislation (e.g., the Native American Graves Protection and Repatriation Act [NAGPRA]) would apply. All graves, funerary objects, and soils surrounding graves will be protected

and treated with the utmost dignity and respect. As per the policies reproduced below, no photography or analysis of Indigenous remains would occur as part of the archaeological investigation unless specifically requested by the Indigenous Nations.

SHPO HUMAN REMAINS DISCOVERY PROTOCOL (JANUARY 2021)[1]

> *In the event that human remains are encountered during construction or archaeological investigations, SHPO recommends that the following protocol is implemented:*
>
> - *Human remains shall be treated with the utmost dignity and respect. Should human remains or suspected human remains be encountered, work in the general area of the discovery shall stop immediately and the location shall be secured and protected from damage and disturbance.*
> - *If skeletal remains are identified and the archaeologist is not able to conclusively determine if they are human, the remains and any associated materials shall be left in place. A qualified forensic anthropologist, bioarchaeologist or physical anthropologist shall assess the remains in situ to help determine if they are human.*
> - *If the remains are determined to be human, law enforcement, the SHPO, the appropriate Indian Nations, and the involved state and federal agencies shall be notified immediately. If law enforcement determines that the burial site is not a criminal matter, no skeletal remains or associated materials shall be removed until appropriate consultation takes place.*
> - *If human remains are determined to be Native American, they shall be left in place and protected from further disturbance until a plan for their avoidance or removal is developed. Please note that avoidance is the preferred option of the SHPO and the appropriate Indian Nations. The involved agency shall consult SHPO and the appropriate Indian Nations to develop a plan of action. Photographs of Native American human remains and associated materials should not be taken without consulting with the involved Indian Nations.*
> - *If human remains are determined to be non-Native American, the remains shall be left in place and protected from further disturbance until a plan for their avoidance or removal is developed. Please note that avoidance is the preferred option of the SHPO. The involved agency shall consult SHPO and other appropriate parties to develop a plan of action.*
> - *The SHPO recommends that burial information is not released to the public to protect burial sites from possible looting.*

HAUDENOSAUNEE POLICY ON HUMAN REMAINS

The policy on human remains was extracted from *Polishing the Silver Covenant Chain: Building Relationships Between Federal, State Agencies and the Haudenosaunee* as issued by the Grand Council of the Haudenosaunee in 2002 (see Parts 4.1, 4.2, and 4.7).

[1] https://parks.ny.gov/documents/shpo/environmental-review/HumanRemainsProtocol.pdf

HAUDENOSAUNEE BELIEFS

We have been taught that we bury our dead into the ground so that their bodies can become part of the sacred Earth. We believe that we come from the Mother Earth and that the human remains that rest within the Earth are an important spiritual connection to the spirit of the Earth. The Earth is enriched by the dead as our flesh becomes part of the soil.

The souls of the dead have a path of destiny that they must follow. We refer to this as their journey after life. in this way, we feel that the dead are around us and hover over us as we hold ceremonies or dances. We believe that the dead have power and it is dangerous to neglect the spiritual needs of the dead.

The protection of the human remains and associated graves, sacred burial sites and related objects from the graves of the Haudenosaunee are the responsibility of each generation of Chiefs, Clan mothers, and Faithkeepers. We believe that the remains, the associated burial objects and the actual soil in which they rest is sacred. There is no acceptable excuse to justify the desecration of this sacred burial.

VIOLATION OF OUR SPIRITUAL RIGHTS

Removing the remains from their eternal resting place is a great desecration to both the dead and the living. The disturbance, destruction, and theft of the dead is a violation of the religious and spiritual welfare of the Haudenosaunee.

As long as the human remains are disturbed, there will be spiritual consequences to our people. The desecration of the graves of our ancestors, no matter what the age of the burial, is a violation of our religious freedom.

Permits issued by the State of New York or any other local government, to allow anyone to violate the sanctity of the graves of our ancestors can no longer be tolerated. In the past, our ancestors buried many objects along with the body with the belief that in the afterlife, you will need all of those things that you need in this life.

All types of objects have been associated with burials, including decorated clothing, glass beads, shell beads, silver combs, tools and weapons, ceramic and metal cooking pots, wampum belts, strings of wampum, and a variety of personal items. The removal of these objects from the grave is a theft from the dead.

VIOLATION OF OUR HUMAN RIGHTS

The remains of our deceased relatives are not "archaeological resources" that are subjects of study. They we human beings who once lived on this land. They had real lives and feelings. They had spiritual expectations about their final resting places. To look at Native Peoples as objects rather than as human beings is a gross violation of our human rights.

All graves and burial sites, Native or not, deserve respect. Our dead relatives deserve the basic human right to a dignified burial. We do not believe in the use of permanent headstones to mark graves of our ancestors and state law makes a difference between cemeteries and unmarked burials.

Our burial sites deserve to be considered hallowed ground, whether they are marked or not. There has been double standard in dealing with our people and non-Native

remains. Non-Native grave sites are often afforded more protection then Native burials.

Despite the efforts of state agencies to identify Native grave locations, construction permits are issued nonetheless. Our dead deserve the same right to an eternal resting place as all other races and religions.

VIOLATION OF OUR TREATY RIGHTS

The unearthing of the remains of our ancestors from their eternal resting pace is also a violation of the promises made to the Haudenosaunee under the terms of the Canandaigua Treaty of 1794. By that treaty, the United States, including the State of New York, promised not to "disturb" the Haudenosaunee in the free use and enjoyment of their lands.

We have been on record protesting the desecration of our graves. The continual destruction of Native graves, the stealing of Native remains and the looting of burial objects causes us serious mental, emotional, and spiritual harm.

Our people are continually upset by these events and we have been forced to adjust our spiritual traditions to accommodate outside developments. The desecration of the graves violates the mutual respect promised by the United States as they pledged a firm and permanent friendship between our peoples.

The treaty also promised to remove the cause of complaint that upsets our peace. We therefore make it clear that the desecration of the graves of our ancestors causes great harm to our people and the United States and State of New York have an obligation to protect the general welfare of our people as promised in the legally binding treaties.

Protocol for Handling Discovery of Human Remains [As published by the Onondaga Nation in 2002]		
	Known Burials	***Unidentified Burials***
When to contact?	***Intentional excavation**: At the earliest time in decision-making process*	***Inadvertent Discovery**: Upon discovery*
Which Nation to contact?	*If the fine is within existing Nation boundary, contact that Nation's Cultural Resource representatives. If the find is within the traditional land use area (fifty mile radius from the current nation territory), contract the closest Nation's Cultural Resource Representative. If the find is within the aboriginal territory of each nation, as shown on the attached map [note: not included here], contact the Nation within that territory. For finds located within fifty miles on either side of the boundary lines shown on the map, contact the Cultural Resource Representatives of both Nations.*	
Who to contact?	*Haudenosaunee Cultural Resource representatives (HSCBRR)*	*Haudenosaunee Cultural Resource representatives (HSCBRR)*
How to contact?	*Contact list is provided [note: not included here]*	
Information Required	*Brief description of the find or potential find; site map and any information on the known cultural history of the area and summary of nearby archaeological findings.*	
	Nation will send a representative to review the site.	*Company must hire a Native American on-site observer. No remains shall be removed.*
Next Steps	***Non-disturbance of burials is preferred**. If after proper consultation, the remains must be removed, we prefer to have them reburied close to their original location as possible, provided the future sanctity of the grave can be assured. **No remains should be removed without proper cultural protocols**. If no safe local burial ground can be offered, the Haudenosaunee will reclaim the remains for reburial at an undisclosed location. The local government/state agency/developer must pay for all of the costs for such reburial. All objects associated with the original burial must be reburied as well. All of the soil in the immediate area of the burial should also be placed in the new grave.*	

Source: General Council of the Haudenosaunee (2002)

12. REFERENCES CITED

AKRF, Inc.
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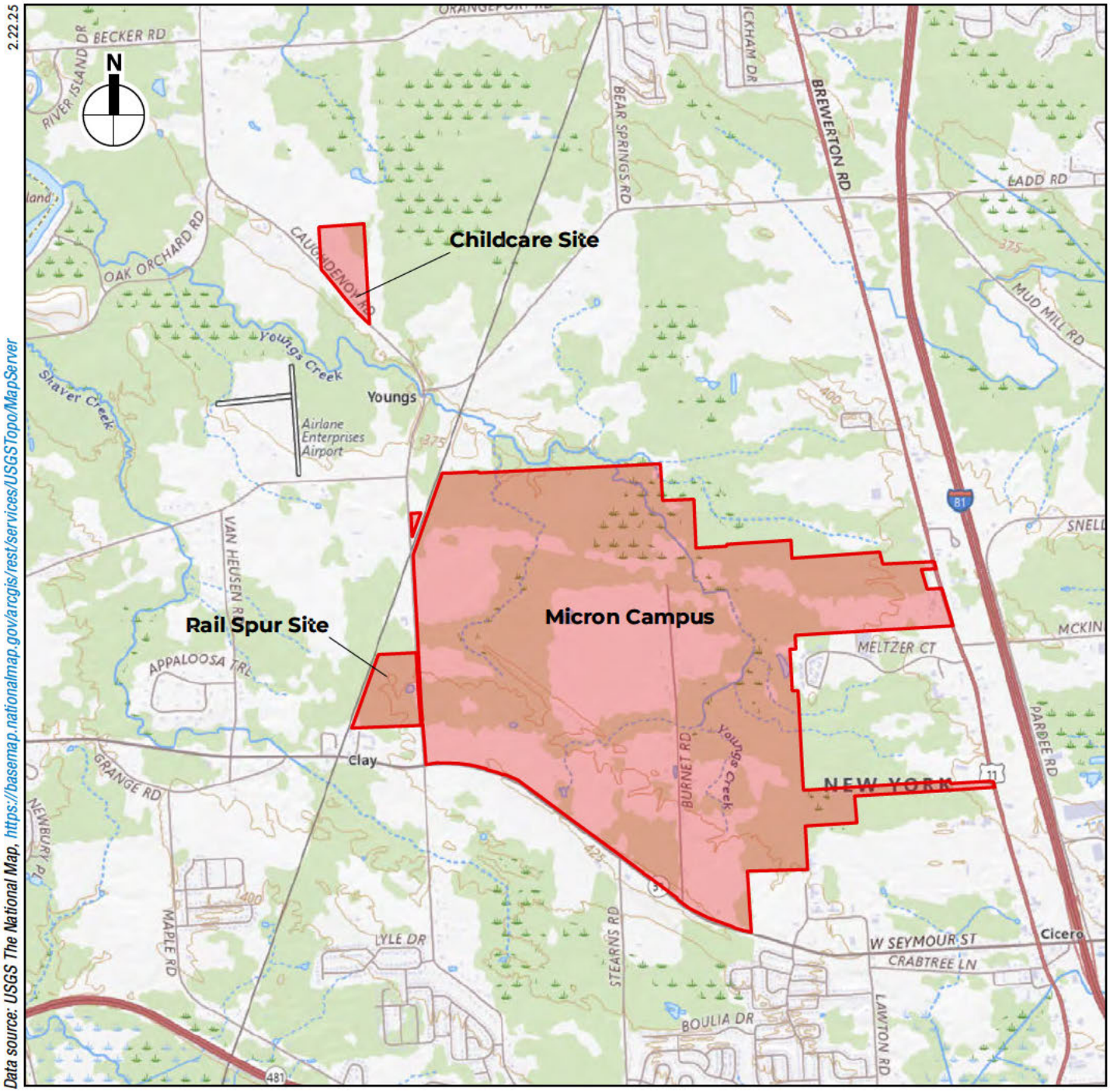

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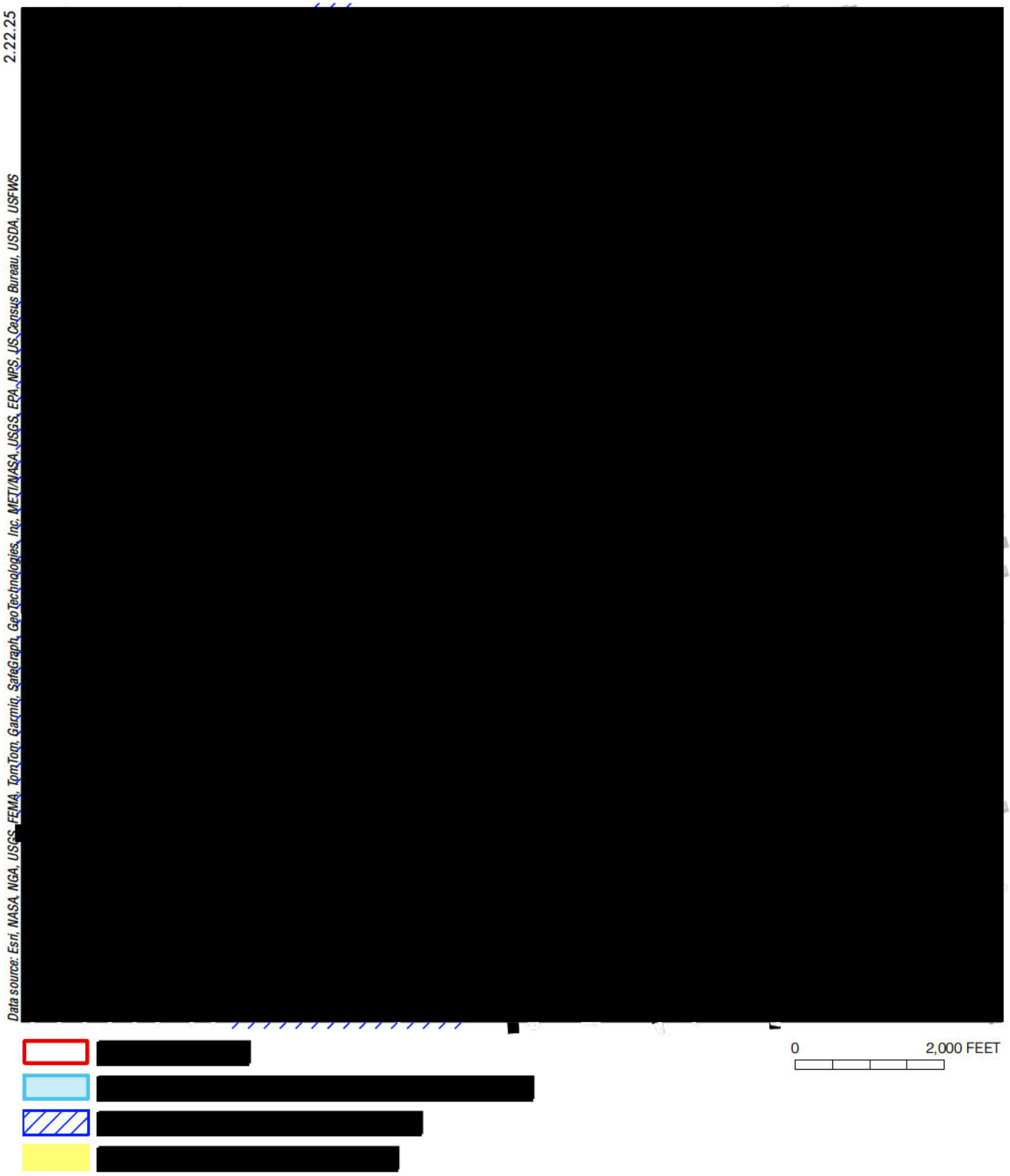
USGS Topographic Map –
Brewerton and Cicero Quadrangles

Figure 1



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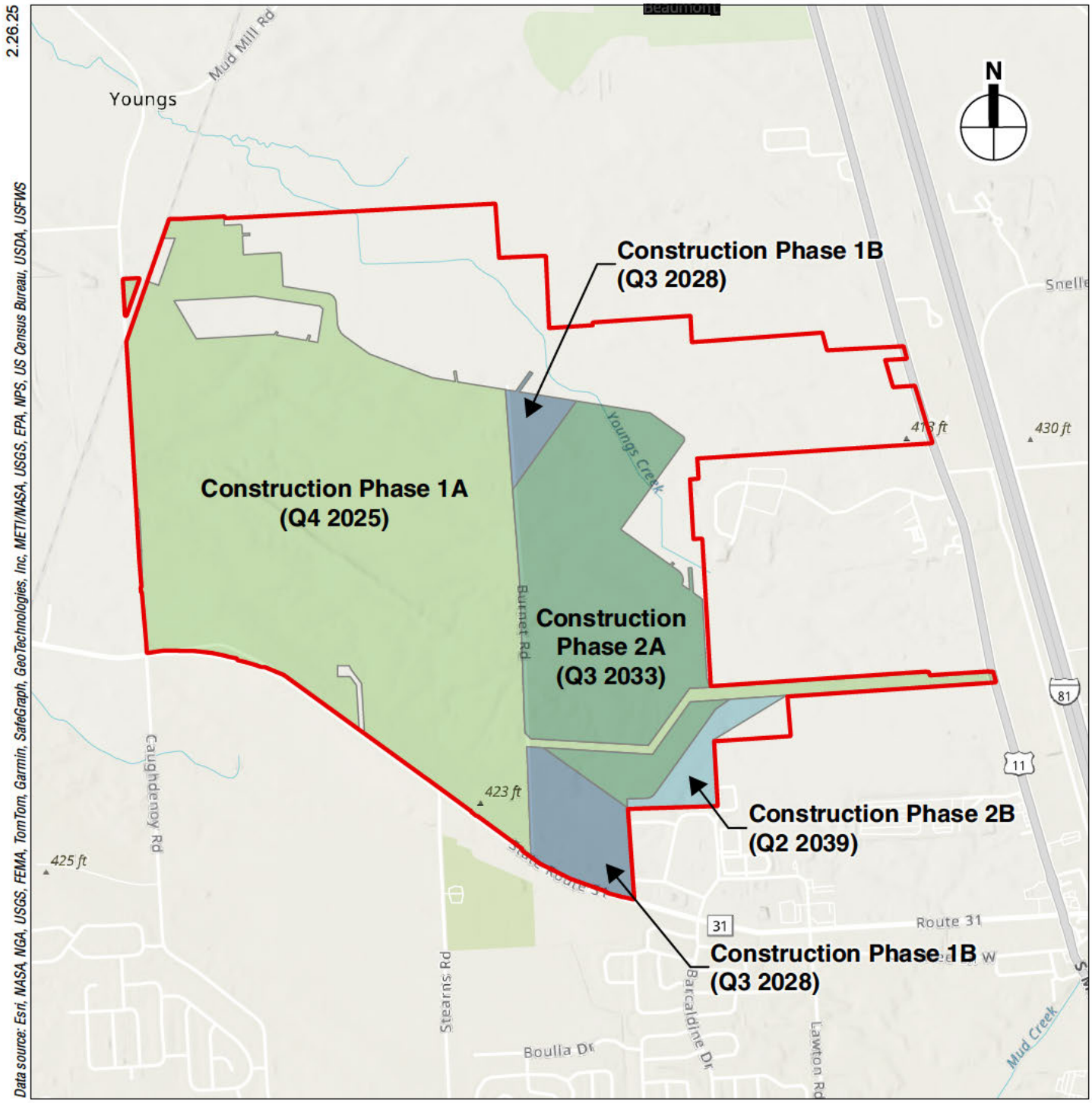
Areas of Archaeological Sensitivity

Figure 2



micron

Limits of Disturbance for Micron Campus

Figure 3

Proposed Micron Semiconductor Fabrication Project:

Rail Spur Site Area of Potential Effects

TOWN OF CLAY; ONONDAGA COUNTY, NEW YORK

Phase 1B Archaeological Investigation Work Plan

SHPO Project Review Number 23PR05779

Prepared for:

Micron New York Semiconductor Manufacturing LLC (Micron)
6360 South Federal Way
Post Office Box 6
Boise, Idaho 83716

Prepared by:

AKRF, Inc.
440 Park Avenue South
New York, NY 10016
212-696-0670

MARCH 2025
Revised MAY 2025

1. PROPOSED PROJECT

Micron New York Semiconductor Manufacturing LLC (Micron), a Delaware limited liability company and wholly owned subsidiary of Micron Technology, Inc., is proposing to acquire the approximately 1,400-acre White Pine Commerce Park site, located at 5171 New York State (NYS) Route 31, in the Town of Clay, Onondaga County, New York, from the Onondaga County Industrial Development Agency (OCIDA) at latitude and longitude: 43.190792, −76.157056. Micron's proposed semiconductor manufacturing facility campus ("Micron Campus") will be built over an approximately 16-year period. It will consist of the construction of four approximately 160-foot-tall (approximately 1.31-million-square-foot) memory fabrication facilities ("fabs"). Each fab location would be supported by additional structures, including central utility buildings; warehouse space; product testing space; electrical substations; water and wastewater pre-treatment and storage buildings; and gas storage. Access to the Micron Campus would be from NYS Route 31, Caughdenoy Road, and a secondary access from NYS Route 11. An approximately 38.24-acre parcel on the west side of Caughdenoy Road (Town of Clay Tax Parcels 046.-02-03.2 and 046.-01-19.1) (the "Rail Spur Site") would be used to deliver construction aggregate to the Micron Campus by rail spur and overhead conveyance system. Micron will also construct an employee healthcare center, childcare center, and recreation center and an athletic field at an approximately 30.2-acre parcel at 9100 Caughdenoy Road (Town of Clay Tax Parcel 042.-01-13.0, the "Childcare Site"). Collectively, the above actions are considered the Proposed Project (see **Figure 1**).

ENVIRONMENTAL REVIEW

The CHIPS Program Office (CPO) within the National Institute of Standards and Technology (NIST) of the United States Department of Commerce is serving as the lead for Section 106 of the National Historic Preservation Act (Section 106). A Programmatic Agreement will be executed by all involved parties to document the commitments to completing all future phases of cultural resources analysis, including archaeological testing. The Programmatic Agreement will also describe the measures that would be carried out to assess, identify, and treat any identified archaeological sites, as well as any unanticipated discoveries during construction.

2. AREA OF POTENTIAL EFFECTS

The Area of Potential Effects (APE) is defined as "the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if such properties exist," (36 CFR § 800.16[d]). The APE for historic properties has been defined to include the areas in which the Proposed Project may directly affect archaeological resources. The definition of the APE is a required step in the Section 106 process. An APE is influenced by the scale and nature of an undertaking and, in general, adverse effects on historic properties may include both direct physical effects—demolition, alteration, or damage from construction—and indirect effects, such as the introduction of visual, audible, or atmospheric elements that may alter the

characteristics of the historic property that qualify it for inclusion in the National Register of Historic Places in a manner that would diminish the integrity of the property's significant historic features.

The APE for the Proposed Project has been developed based on proposed work activities and their potential to affect archaeological sites. The APE as defined herein has been determined as a result of consultation with SHPO, the Indigenous Nations, and other consulting parties pursuant to Section 106. The portion of the archaeological resources APE included in this Phase 1B Archaeological Work Plan includes the proposed Rail Spur Site as depicted on **Figure 2**, including all areas that would be subject to subsurface impacts as a result of the construction, operation, and maintenance of the proposed project, including construction access and staging.

3. BACKGROUND INFORMATION AND SENSITIVITY DETERMINATION

CURRENT SITE CONDITIONS

The Rail Spur Site (see **Figure 1**) is an undeveloped and densely wooded area. A small freshwater pond is located in the eastern part of the site. Aerial photographs taken in 1938, 1951, 1966, and 2003 though the present[1] indicate that portions of the Rail Spur Site—particularly its central area west of the pond, which was not clearly visible in the 1938 photograph but can be seen in 1951—were previously cultivated while others were wooded through most of the 20th century. In recent years, areas of isolated clearing are visible on aerial imagery and the wooded area and brush/low vegetation have grown increasingly dense since 2016. However, large-scale disturbance associated with the construction or demolition of buildings or other activities that would have resulted in landscape modification and disturbance do not appear to have occurred on the Rail Spur Site.

PRECONTACT PERIOD ARCHAEOLOGICAL SENSITIVITY

[redacted]

HISTORIC PERIOD ARCHAEOLOGICAL SENSITIVITY

[redacted]

[1] Aerial imagery accessed through the Cornell University digital library (https://digital.library.cornell.edu/collections/aerialny) and Nearmap.

4. RESEARCH DESIGN

The objective of the Phase 1B Archaeological Investigation of the Rail Spur Site APE is to determine the presence or absence of historic and precontact period archaeological deposits within the undisturbed portions of the Rail Spur Site APE. If present, the Phase 1B Archaeological Investigation will make an assessment as to whether the resources are in sufficient quantity/ concentration and of sufficient research value to determine if a Phase 2 Archaeological Survey/ Evaluation is required to further delineate the boundaries of the archaeological site and to evaluate its potential significance. The determination of an archaeological site's significance is largely dependent on the types of potential archaeological resources that could be encountered within the Rail Spur Site APE and on the specific research questions that can be answered through the analysis of those resources. A professional, modern archaeological investigation could produce valuable data about the precontact occupation of the area that could be compared and contrasted with previously collected data. This could produce new data and add to existing knowledge of life in the vicinity of what is now Onondaga County during the historic and precontact period.

5. ARCHAEOLOGICAL TESTING PROTOCOL

Although documentary research determines archaeological potential, excavation for the purposes of archaeological testing is required to determine if resources are *actually* present on a site. Therefore, this Archaeological Work Plan addresses Phase 1B presence/absence testing and includes a contingency for the evaluation for National Register eligibility (e.g., a Phase 2 Archaeological Survey/Evaluation), which may become necessary. The Phase 1B Archaeological Investigation will be conducted in accordance with the "Phase 1 Archaeological Report Format Requirements" as issued by SHPO in 2005, and with the "Standards for Cultural Resources Investigations and the Curation of Archaeological Collections in New York State" as issued by the New York Archaeological Council (NYAC) in 1994 and adopted by SHPO in 1995.

Archaeological testing within the Rail Spur Site APE will take place within the areas of archaeological sensitivity identified in the Phase 1A Study as shown on **Figure 2**. Subsurface testing will primarily consist of hand-excavated shovel test pits (STPs) and, where necessary, test units. No mechanical testing is proposed as part of this Phase 1B Archaeological Investigation. The testing strategy outlined in this protocol may be altered based on conditions observed in the field, including previously unforeseen obstructions.

A representative from the Onondaga Nation will be retained to oversee the archaeological testing to determine if sacred objects or other items of cultural importance are encountered. The monitor will be compensated for their work at an hourly rate to be determined in coordination with the Onondaga Nation. In the event that the Oneida Indian Nation or other Indigenous Nations request to have an on-site monitor present during the archaeological testing, such requests will be accommodated. The Onondaga Nation will be engaged to discuss suggestions for a local archeological firm or a firm with local experience to be included in the investigation team with staff members that have local expertise and a history of and capacity to work closely with Indigenous Nation monitors and Section 106 representatives. The archaeological firm should have expertise in Haudenosaunee and Onondaga culture and artifacts and should demonstrate their respect for and ability to work with Onondaga Nation representatives.

SUBSURFACE TESTING

Testing has been recommended throughout undisturbed and accessible portions of the entire Rail Spur Site APE. No testing is proposed in visibly disturbed areas, paved areas (if any), areas with standing water. If any portions of the APE will not be impacted by the Proposed Project, those areas may be excluded from the testing program.

STPs will be excavated at intervals of approximately 50 feet (15 meters) across a grid to sample enough of the area to determine if intact precontact resources or an intact buried ground surface are likely to be present. The 50-foot (15-meter) interval is established as the preferred interval for subsurface shovel testing as outlined in the NYAC archaeological guidelines as issued in 1994 and adopted by SHPO in 1995. In locations where physical conditions suggest heightened archaeological sensitivity are observed (e.g., in areas where soil drainage is better; where surficial indications or vegetation suggesting prior disturbance are absent; where artifacts are observed on exposed/cleared ground surfaces; or where STPs are positive for archaeological resources), the interval may be narrowed to 25 feet (7.5 meters). In the event that submerged soils or areas of visible disturbance are present, STPs may be excavated at an interval of 100 feet (30 meters) to confirm the limits of disturbance or certain soil types. STPs will be placed along linear transects or along established grids depending on the landscape of the area being tested. If mature trees, large soil/fill deposits, slopes greater than 10 percent, or other obstructions are present, STPs may be offset from the grid or skipped, depending on the discretion of the archaeological consultant.

Inundated wetland areas that may have been dry, inhabitable land in the past will be tested where possible. Disturbed or saturated soils may be tested at a 100-foot (30-meter) interval to confirm the limits of saturated soils as identified by the USDA soil survey. Additional STPs may be judgmentally placed in areas deemed testable by the archaeological team. These areas where testing may be possible may include isolated elevated or dry areas within otherwise inundated wetlands. In the event that wetland areas are present that cannot be physically tested in the manner described previously, alternative means of documentation may be considered that include, but are not limited to, monitoring during construction. A plan for further examination of submerged areas will be determined based on observations made in the field regarding the viability of testing submerged areas. Each STP will be approximately 16 to 18 inches in diameter and excavated to a depth of approximately 2 to 3 feet, or until sterile subsoil is encountered. It is expected that up to 550 STPs will be excavated, however, the exact number of STPs will depend on the extent of visible disturbance/obstructions observed in the field. If isolated precontact archaeological deposits are identified in the STPs placed along the 50-foot-grid or transect, additional STPs will be excavated at closer intervals—one each at a distance of 3 feet and 10 feet to the north, south, east, and west, or eight radial STPS total—in the vicinity of the find to determine the horizontal and vertical extents of potential artifact deposits. Radial STPs will not be excavated when two of more precontact artifacts are found in consecutive shovel tests along the 50-foot grid.

Hand-excavated soils in areas where intact, natural soils are identified will be screened through quarter-inch steel mesh. Fill materials and disturbed soils will not be screened. Artifacts will be systematically collected from hand-excavated soils and will be placed in labeled plastic bags.

In addition to the excavation of STPs, where feasible, testing may involve the use plowing and disking. In the event that this method is pursued as part of the testing plan, the surface survey will follow the protocols outlined in SHPO's *Phase I Archaeological Report Format Requirements* issued in 2005. Plowed areas will be a minimum of 10 feet (3.3 meters) in width and

will be spaced a maximum of 50 feet (15 meters) apart in areas with 70 percent visibility at a minimum. Systematic pedestrian transects will be spaced at the dimensions stated above in plowed areas.

All artifacts recovered through screening will be placed in labeled plastic bags according to stratigraphic level.

IDENTIFICATION OF ARCHAEOLOGICAL FEATURES

Precontact archaeological features can include hearths, arrangements of postholes, or other evidence of camps or occupations sites. Historic features can include shaft features (e.g., privies, cisterns, or wells), foundation remnants, or middens. Precontact or historic features or buried ground surfaces encountered during testing would be sufficiently sampled so as to indicate if further testing (e.g., a Phase 2 Archaeological Survey/Evaluation) is necessary (see Contingency Tasks, below). If a Phase 2 Archaeological Survey/Evaluation is determined necessary, no further work would be completed as part of the Phase 1B Archaeological Investigation pending further coordination with CPO, SHPO, the Indigenous Nations, and any open test units or STPs will be backfilled to protect the archaeological site. At that time, the archaeological consultant will coordinate with CPO, who will coordinate with SHPO, Indigenous Nations, and other Consulting Parties to establish the scope of work for a Phase 2 Archaeological Survey/ Evaluation Work Plan ("Phase 2 Work Plan"). Depending on the number of features or sites present within the Rail Spur Site APE, the Phase 2 Work Plan may include a sampling strategy developed in coordination with CPO, SHPO, the Indigenous Nations, and other Consulting Parties, which will determine the extent to which each feature is excavated and documented. The feature or features will then be re-excavated for the Phase 2 Archaeological Survey/Evaluation.

AVOIDANCE PLAN

In the event that archaeological sites are identified within the Rail Spur Site APE that are potentially significant but that would not be impacted by the Proposed Project, an "Avoidance Plan" may be prepared after completion of the Phase 1B Archaeological Investigation. The avoidance plan will describe how the project will successfully avoid and protect areas of archaeological sensitivity (e.g., agreements to mark and post sensitive areas to prevent disturbance from heavy machinery or staging activities, etc.). Should an Avoidance Plan be necessary, CPO will coordinate with SHPO, Indigenous Nations, and other Consulting Parties to develop the plan and to established the protocols for its finalization and approval.

HEALTH AND SAFETY PLAN

Excavation completed as part of this Phase 1B Archaeological Investigation is not expected to exceed a depth of 4 feet below grade in most locations. In the event that such deep excavation will occur, a Health and Safety Plan (HASP) may be required in compliance with the standards of the United States Department of Labor's Occupational Safety and Health Administration (OSHA) pertaining to safe excavation practices.

6. CONTINGENCY PLAN FOR PHASE 2 ARCHAEOLOGICAL SURVEY/EVALUATION AND ADDITIONAL SITE PROTECTION MEASURES

As stated previously, the Phase 1B Archaeological Investigation testing will be designed to determine the presence or absence of archaeological resources, not to fully expose or document any encountered resources. A Phase 2 Archaeological Survey/Evaluation ("Phase 2 testing") occurs only if the Phase 1B Archaeological Investigation uncovers a site or evidence of a site that will need to be evaluated according to the National Register criteria for eligibility. Phase 2 testing is used "to obtain detailed information on the integrity, limits, structure, function, and cultural/historical context of an archaeological site sufficient to evaluate its potential National Register eligibility" (NYAC 1994: 4). It involves detailed research beyond that done in the first phase, greater sampling of the property, a greater variety in the types of testing units (i.e., including larger testing units and/or shovel test pits at closer intervals), and closer analysis of artifacts. If Phase 2 testing is necessary, it would be undertaken in consultation with CPO, SHPO, the Indigenous Nations, and other Consulting Parties. The Phase 2 Survey and Evaluation will then determine if additional archaeological analysis (e.g., Phase 3 Mitigation/Data Recovery) is warranted in the event that the project cannot be redesigned to avoid significant archaeological sites. In the event that Phase 2 testing is required, a separate Work Plan will be prepared at that time for submission to CPO, SHPO, the Indigenous Nations, and other Consulting Parties as described above.

7. SITE DOCUMENTATION

Professional standards for testing, screening, recording features and stratigraphy, labeling, mapping, and photographing any identified archaeological resources will be applied during the Phase 1B Archaeological Investigation. Soil profiles including colors—recorded using Munsell soil color charts—and texture/inclusions will be recorded in field notes. Soil profiles will be included in the final report in tabular form supplemented by photographs and drawings as appropriate. Testing locations will be recorded in field notes and field maps. All on-site testing will be recorded relative to an on-site datum and converted to the North American Vertical Datum of 1988 (NAVD88). The on-site datum will be calculated using existing site surveys or estimated using existing Lidar data. Where possible, testing locations will be recorded digitally using GIS software. The North American Datum of 1983 (NAD83) will be used as a permanent horizontal datum. The testing will be recorded using digital photography and videography as appropriate throughout the field effort.

8. LABORATORY PROCESSING

Archaeologists will clean, stabilize, and inventory all cultural material removed from the Rail Spur Site APE. During the course of the investigation, the archaeological consultant will retain custody of all recovered artifacts, which will not be stored on-site. All laboratory activity will be conducted in compliance with the aforementioned guidelines and with those established by the United States Department of the Interior/National Park Service for the Curation of Federally-Owned and Administered Archaeological Collections (*36 CFR 66* and *79*). Artifact washing will begin immediately after transfer of the collection to the laboratory. Trained technicians will process the artifacts using standard archaeological techniques. Artifacts will be washed with a mild, non-ionic detergent using soft-bristle brushes and after washing they will be air dried on racks. Fragile artifacts and those with non-stable surfaces will be washed separately without brushing. Artifact bags will be labeled in waterproof ink with all relevant provenience information. After they have been cleaned and dried, the artifacts will be placed in archivally stable polyethylene zipper-top bags for permanent

storage. The provenience information will be written on the outside of the bags using a permanent, waterproof marker.

An artifact catalog recording the depth and location of each recovered artifact will be created. To the extent possible, recovered artifacts will be identified as to material, temporal or cultural/chronological association, function, and style following the standard archaeological references. Detailed analysis would include the identification of the *Terminus Post Quem* (TPQ) of artifacts for each context and the generation of mean beginning and end dates for assemblages. This information could be used to establish the contemporaneity of contexts and strata, and to determine which assemblages represent primary or secondary deposits. If deemed significant and in consultation with CPO, SHPO, the Indigenous Nations, and other consulting Parties, artifacts that are recovered from the site will be curated according to the regulations of the Department of the Interior/National Park Service *356 CFR 79*.

IDENTIFICATION OF AN ARTIFACT REPOSITORY

Any artifact collection removed from the Rail Spur Site APE would be the property of owner of the Rail Spur Site APE at the time of the testing. In the event that objects of cultural significance to the Indigenous Nations are encountered, the investigators will immediately notify CPO, who will coordinate with SHPO, the Indigenous Nations, and other Consulting Parties regarding documentation and repatriation pursuant to Section 106 and any other relevant legislation. In the event that significant archaeological resources are encountered within Rail Spur APE that require permanent curation, efforts will be necessary to locate a repository that is capable of accepting and curating the collection. Upon the completion of field testing, if significant resources are found, a repository will be identified and selected in conjunction with CPO, who will further coordinate with SHPO, the Indigenous Nations, and other Consulting Parties to determine a suitable long-term curation plan. If the artifact collection is determined to have no research value, it will be returned to the site owner or discarded at their discretion within one year of the completion of fieldwork. The site owner may then choose to retain and store the collection or may seek out alternative methods of disposal.

9. REPORTING

Following the completion of field testing and laboratory processing and analysis, a detailed Phase 1B Archaeological Investigation report will be prepared. The final report will document all methodologies used during the course of the investigation and will discuss all findings that emerge from the recovered data, maps, plans, drawings, photographs, and/or other relevant images will be incorporated into the body of the report as needed to illustrate project findings. The report will include a site map showing the location of all resources identified, as well as a complete inventory of the artifacts. The report will be prepared according to the guidelines and standards issued by SHPO and NYAC. If the testing locates features *in situ*, the documentation of those features will be incorporated into the Work Plan of the Phase 2 Archaeological Survey/Evaluation.

The final technical report will include the following information:

- Description of the Rail Spur Site APE;
- Relevant documentation/background research;
- Research design;
- Field studies as actually implemented, including any deviation from this Work Plan and the reason for those changes;

- Field observations;
- Analyses and results, illustrated as appropriate with maps, photographs, tables, charts, and graphs; and
- Recommendations for further archaeological work, if necessary.

A draft report of the final technical report will be submitted to CPO, who will further coordinate with SHPO, the Indigenous Nations, and other Consulting Parties pursuant to Section 106. If necessary, a final version of the report will be prepared to address comments, which CPO will circulate to the SHPO, Indigenous Nations and other Consulting Parties for concurrence.

10. PROJECT COORDINATION AND MANAGEMENT

Prior to each stage of testing, the archaeological consultant will notify CPO, who will further coordinate with SHPO, the Indigenous Nations, and other Consulting Parties, when testing is scheduled to begin and will retain the services of a monitor from the Onondaga Nation and any other nations that may request to be present. If requested, the archaeological consultant will assist in arranging a site visit for representatives of CPO, who will coordinate the participation of SHPO, the Indigenous Nations, and other Consulting Parties as necessary and appropriate during the course of the Phase 1B Archaeological Investigation. However, during the field testing, the archaeological team will distribute a summary of work completed to date on a weekly basis (including number/location of tests completed and relevant finds) to CPO, SHPO, the Indigenous Nations, and other Consulting Parties.

It is possible that the field testing will not reveal any potentially significant archaeological features, deposits, or intact soil strata. If that is the case, no further archaeological consideration would be warranted, and a report to that effect would be prepared. In the event that archaeological resources are encountered, CPO on a weekly basis will further consult with SHPO, the Indigenous Nations, and other Consulting Parties. In either case, a final report on the field investigation will be submitted to CPO, SHPO, the Indigenous Nations, and other Consulting Parties for review and comment, indicating a presence or absence of archaeological features.

11. PROTOCOL FOR THE UNANTICIPATED DISCOVERY OF HUMAN REMAINS

There is no indication that human remains are present within the Rail Spur Site APE. However, in the unlikely event that human remains or suspected human remains are encountered within the APE, the SHPO Human Remains Discovery Protocol and the Haudenosaunee Policy on Human Remains (reproduced below) would be implemented in consultation with CPO. All requests from the Indigenous Nations to modify this protocol will be honored in consultation with CPO and SHPO. As the project is subject to Section 106, the project is not subject to the *New York State Unmarked Burial Site Protection Act* (NY EXEC § 171, the "Act"), which went into effect on August 1, 2023 and requires consultation with the New York State Archaeologist in the event that undocumented human remains are encountered in New York State. In the event that human remains are determined to be Indigenous, all relevant legislation (e.g., the Native American Graves Protection and Repatriation Act [NAGPRA]) would apply. All graves, funerary objects, and soils surrounding graves will be protected and treated with the utmost dignity and respect. As per the policies reproduced below, no photography or analysis of Indigenous remains would occur as part of the archaeological investigation unless specifically requested by the Indigenous Nations.

SHPO HUMAN REMAINS DISCOVERY PROTOCOL (JANUARY 2021)[1]

In the event that human remains are encountered during construction or archaeological investigations, SHPO recommends that the following protocol is implemented:

- *Human remains shall be treated with the utmost dignity and respect. Should human remains or suspected human remains be encountered, work in the general area of the discovery shall stop immediately and the location shall be secured and protected from damage and disturbance.*
- *If skeletal remains are identified and the archaeologist is not able to conclusively determine if they are human, the remains and any associated materials shall be left in place. A qualified forensic anthropologist, bioarchaeologist or physical anthropologist shall assess the remains in situ to help determine if they are human.*
- *If the remains are determined to be human, law enforcement, the SHPO, the appropriate Indian Nations, and the involved state and federal agencies shall be notified immediately. If law enforcement determines that the burial site is not a criminal matter, no skeletal remains or associated materials shall be removed until appropriate consultation takes place.*
- *If human remains are determined to be Native American, they shall be left in place and protected from further disturbance until a plan for their avoidance or removal is developed. Please note that avoidance is the preferred option of the SHPO and the appropriate Indian Nations. The involved agency shall consult SHPO and the appropriate Indian Nations to develop a plan of action. Photographs of Native American human remains and associated materials should not be taken without consulting with the involved Indian Nations.*
- *If human remains are determined to be non-Native American, the remains shall be left in place and protected from further disturbance until a plan for their avoidance or removal is developed. Please note that avoidance is the preferred option of the SHPO. The involved agency shall consult SHPO and other appropriate parties to develop a plan of action.*
- *The SHPO recommends that burial information is not released to the public to protect burial sites from possible looting.*

HAUDENOSAUNEE POLICY ON HUMAN REMAINS

The policy on human remains was extracted from *Polishing the Silver Covenant Chain: Building Relationships Between Federal, State Agencies and the Haudenosaunee* as issued by the Grand Council of the Haudenosaunee in 2002 (see Parts 4.1, 4.2, and 4.7).

HAUDENOSAUNEE BELIEFS

We have been taught that we bury our dead into the ground so that their bodies can become part of the sacred Earth. We believe that we come from the Mother Earth and that the human remains that rest within the Earth are an important spiritual connection to the spirit of the Earth. The Earth is enriched by the dead as our flesh becomes part of the soil.

[1] https://parks.ny.gov/documents/shpo/environmental-review/HumanRemainsProtocol.pdf

The souls of the dead have a path of destiny that they must follow. We refer to this as their journey after life. in this way, we feel that the dead are around us and hover over us as we hold ceremonies or dances. We believe that the dead have power and it is dangerous to neglect the spiritual needs of the dead.

The protection of the human remains and associated graves, sacred burial sites and related objects from the graves of the Haudenosaunee are the responsibility of each generation of Chiefs, Clan mothers, and Faithkeepers. We believe that the remains, the associated burial objects and the actual soil in which they rest is sacred. There is no acceptable excuse to justify the desecration of this sacred burial.

VIOLATION OF OUR SPIRITUAL RIGHTS

Removing the remains from their eternal resting place is a great desecration to both the dead and the living. The disturbance, destruction, and theft of the dead is a violation of the religious and spiritual welfare of the Haudenosaunee.

As long as the human remains are disturbed, there will be spiritual consequences to our people. The desecration of the graves of our ancestors, no matter what the age of the burial, is a violation of our religious freedom.

Permits issued by the State of New York or any other local government, to allow anyone to violate the sanctity of the graves of our ancestors can no longer be tolerated. In the past, our ancestors buried many objects along with the body with the belief that in the afterlife, you will need all of those things that you need in this life.

All types of objects have been associated with burials, including decorated clothing, glass beads, shell beads, silver combs, tools and weapons, ceramic and metal cooking pots, wampum belts, strings of wampum, and a variety of personal items. The removal of these objects from the grave is a theft from the dead.

VIOLATION OF OUR HUMAN RIGHTS

The remains of our deceased relatives are not "archaeological resources" that are subjects of study. They we human beings who once lived on this land. They had real lives and feelings. They had spiritual expectations about their final resting places. To look at Native Peoples as objects rather than as human beings is a gross violation of our human rights.

All graves and burial sites, Native or not, deserve respect. Our dead relatives deserve the basic human right to a dignified burial. We do not believe in the use of permanent headstones to mark graves of our ancestors and state law makes a difference between cemeteries and unmarked burials.

Our burial sites deserve to be considered hallowed ground, whether they are marked or not. There has been double standard in dealing with our people and non-Native remains. Non-Native grave sites are often afforded more protection then Native burials.

Despite the efforts of state agencies to identify Native grave locations, construction permits are issued nonetheless. Our dead deserve the same right to an eternal resting place as all other races and religions.

VIOLATION OF OUR TREATY RIGHTS

The unearthing of the remains of our ancestors from their eternal resting pace is also a violation of the promises made to the Haudenosaunee under the terms of the Canandaigua Treaty of 1794. By that treaty, the United States, including the State of New York, promised not to "disturb" the Haudenosaunee in the free use and enjoyment of their lands.

We have been on record protesting the desecration of our graves. The continual destruction of Native graves, the stealing of Native remains and the looting of burial objects causes us serious mental, emotional, and spiritual harm.

Our people are continually upset by these events and we have been forced to adjust our spiritual traditions to accommodate outside developments. The desecration of the graves violates the mutual respect promised by the United States as they pledged a firm and permanent friendship between our peoples.

The treaty also promised to remove the cause of complaint that upsets our peace. We therefore make it clear that the desecration of the graves of our ancestors causes great harm to our people and the United States and State of New York have an obligation to protect the general welfare of our people as promised in the legally binding treaties.

Protocol for Handling Discovery of Human Remains		
	Known Burials	***Unidentified Burials***
When to contact?	***Intentional excavation**: At the earliest time in decision-making process*	***Inadvertent Discovery**: Upon discovery*
Which Nation to contact?	*If the fine is within existing Nation boundary, contact that Nation's Cultural Resource representatives. If the find is within the traditional land use area (fifty mile radius from the current nation territory), contract the closest Nation's Cultural Resource Representative. If the find is within the aboriginal territory of each nation, as shown on the attached map [note: not included here], contact the Nation within that territory. For finds located within fifty miles on either side of the boundary lines shown on the map, contact the Cultural Resource Representatives of both Nations.*	
Who to contact?	*Haudenosaunee Cultural Resource representatives (HSCBRR)*	*Haudenosaunee Cultural Resource representatives (HSCBRR)*
How to contact?	*Contact list is provided [note: not included here]*	
Informatio n Required	*Brief description of the find or potential find; site map and any information on the known cultural history of the area and summary of nearby archaeological findings.*	
	Nation will send a representative to review the site.	*Company must hire a Native American on-site observer. No remains shall be removed.*
Next Steps	***Non-disturbance of burials is preferred**. If after proper consultation, the remains must be removed, we prefer to have them reburied close to their original location as possible, provided the future sanctity of the grave can be assured. **No remains should be removed without proper cultural protocols**. If no safe local burial ground can be offered, the Haudenosaunee will reclaim the remains for reburial at an undisclosed location. The local government/state agency/developer must pay for all of the costs for such reburial. All objects associated with the original burial must be reburied as well. All of the soil in the immediate area of the burial should also be placed in the new grave.*	

Source: Grand Council of the Haudenosaunee (2002)

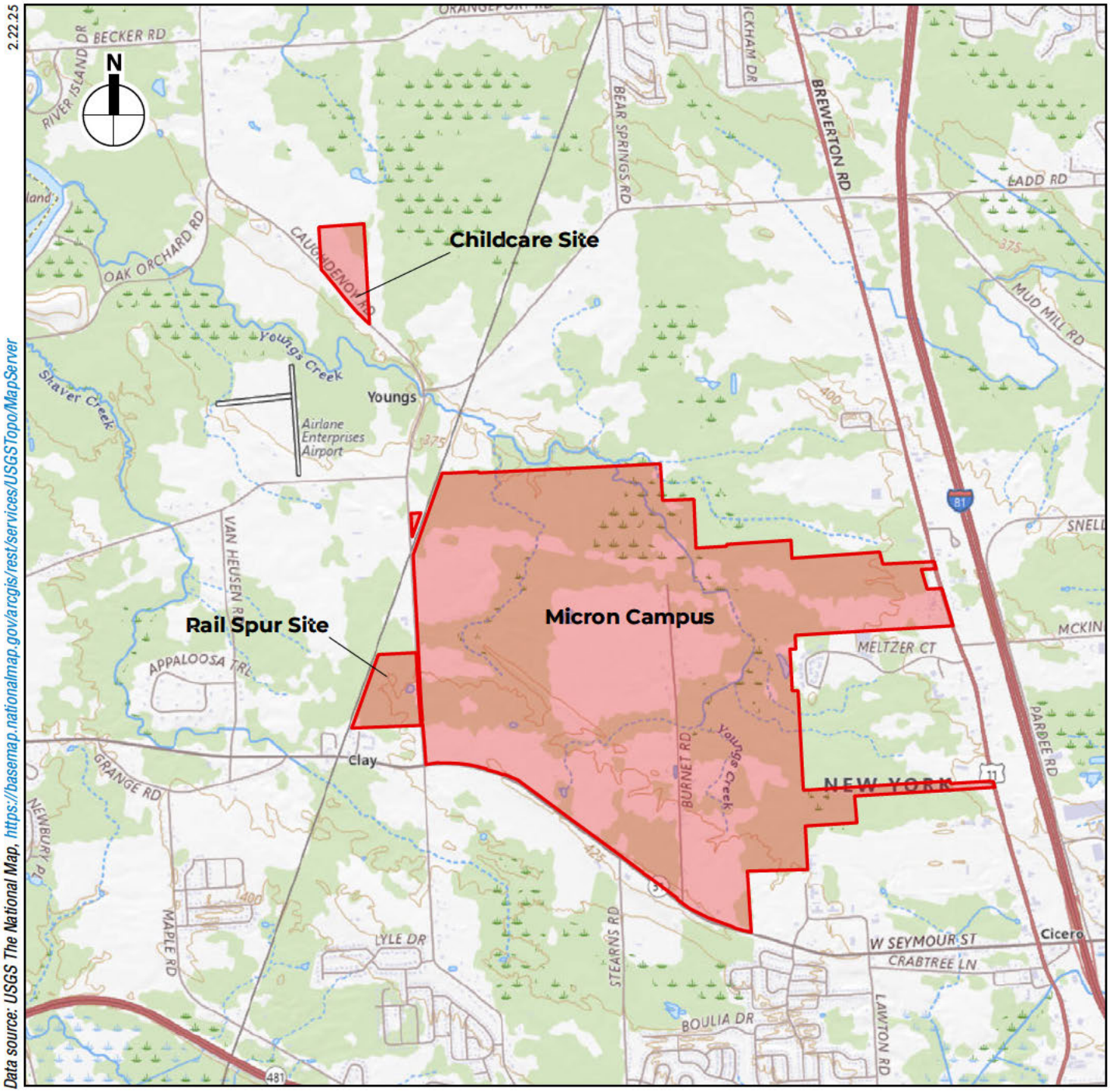
12. REFERENCES CITED

AKRF, Inc.
2024 "Proposed Micron Semiconductor Fabrication Project: Micron Campus Site; Childcare Site; and Rail Spur Site Area of Potential Effects; Towns of Clay and Cicero; Onondaga County, New York: Phase 1A Archaeological Documentary Study." Prepared for: Micron New York Semiconductor Manufacturing, LLC; Boise, Idaho.

Grand Council of the Haudenosaunee
2002 *Polishing the Silver Covenant Chain: Building Relationships Between Federal, State Agencies and the Haudenosaunee*.

New York Archaeological Council (NYAC)
1994 *Standards for Cultural Resource Investigations and the Curation of Archaeological Collections in New York State*. The New York Archaeological Council.

New York State Historic Preservation Office (SHPO)
2005 *New York State Historic Preservation Office (SHPO) Phase I Archaeological Report Format Requirements*. Available online: https://parks.ny.gov/shpo/environmental-review/documents/PhaseIReportStandards.pdf.



Approximate coordinates of Project Site:
76°9'20"W 43°11'52"N

micron™

USGS Topographic Map – Brewerton and Cicero Quadrangles

Figure 1

micron™

Areas of Archaeological Sensitivity

Figure 2

Proposed Micron Semiconductor Fabrication Project:

Childcare Site Area of Potential Effects

TOWN OF CLAY; ONONDAGA COUNTY, NEW YORK

Phase 1B Archaeological Investigation Work Plan

SHPO Project Review Number 23PR05779

Prepared for:

Micron New York Semiconductor Manufacturing LLC (Micron)
6360 South Federal Way
Post Office Box 6
Boise, Idaho 83716

Prepared by:

AKRF, Inc.
440 Park Avenue South, 7th Fl
New York, NY 10016
212-696-0670

MARCH 2025
Revised MAY 2025

Phase 1B Archaeological Work Plan

1. PROPOSED PROJECT

Micron New York Semiconductor Manufacturing LLC (Micron), a Delaware limited liability company and wholly owned subsidiary of Micron Technology, Inc., is proposing to acquire the approximately 1,400-acre White Pine Commerce Park site, located at 5171 New York State (NYS) Route 31, in the Town of Clay, Onondaga County, New York, from the Onondaga County Industrial Development Agency (OCIDA) at latitude and longitude: 43.190792, −76.157056. Micron's proposed semiconductor manufacturing facility campus ("Micron Campus") will be built over an approximately 16-year period. It will consist of the construction of four approximately 160-foot-tall (approximately 1.31-million-square-foot) memory fabrication facilities ("fabs"). Each fab location would be supported by additional structures, including central utility buildings; warehouse space; product testing space; electrical substations; water and wastewater pre-treatment and storage buildings; and gas storage. Access to the Micron Campus would be from NYS Route 31, Caughdenoy Road, and a secondary access from NYS Route 11. An approximately 38.24-acre parcel on the west side of Caughdenoy Road (Town of Clay Tax Parcels 046.-02-03.2 and 046.-01-19.1) (the "Rail Spur Site") would be used to deliver construction aggregate to the Micron Campus by rail spur and overhead conveyance system. Micron will also construct an employee healthcare center, childcare center, and recreation center and an athletic field at an approximately 30.2-acre parcel at 9100 Caughdenoy Road (Town of Clay Tax Parcel 042.-01-13.0, the "Childcare Site"). Collectively, the above actions are considered the Proposed Project (see **Figure 1**).

ENVIRONMENTAL REVIEW

The CHIPS Program Office (CPO) within the National Institute of Standards and Technology (NIST) of the United States Department of Commerce is serving as the lead for Section 106 of the National Historic Preservation Act (Section 106). A Programmatic Agreement will be executed by all involved parties to document the commitments to completing all future phases of cultural resources analysis, including archaeological testing. The Programmatic Agreement will also describe the measures that would be carried out to assess, identify, and treat any identified archaeological sites, as well as any unanticipated discoveries during construction.

2. AREA OF POTENTIAL EFFECTS

The Area of Potential Effects (APE) is defined as "the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if such properties exist," (36 CFR § 800.16[d]). The APE for historic properties has been defined to include the areas in which the Proposed Project may directly affect archaeological resources. The definition of the APE is a required step in the Section 106 process. An APE is influenced by the scale and nature of an undertaking and, in general, adverse effects on historic properties may include both direct physical effects—demolition, alteration, or damage from construction—and indirect effects, such as the introduction of visual, audible, or atmospheric elements that may alter the

characteristics of the historic property that qualify it for inclusion in the National Register of Historic Places in a manner that would diminish the integrity of the property's significant historic features.

The APE for the Proposed Project has been developed based on proposed work activities and their potential to affect archaeological sites. The APE as defined herein has been determined as a result of consultation with SHPO, the Indigenous Nations, and other consulting parties pursuant to Section 106. The portion of the archaeological resources APE included in this Phase 1B Archaeological Work Plan includes the proposed Childcare Site as depicted on **Figure 2**, including all areas that would be subject to subsurface impacts as a result of the construction, operation, and maintenance of the proposed project, including construction access and staging.

3. BACKGROUND INFORMATION AND SENSITIVITY DETERMINATION

CURRENT SITE CONDITIONS

The Childcare Site (see **Figure 1**) is developed with a vacant house and outbuildings at 9100 Caughdenoy Road. The remainder of the parcel is covered with open agricultural fields and an area of dense trees at the northeast corner.

PRECONTACT PERIOD ARCHAEOLOGICAL SENSITIVITY

[redacted]

HISTORIC PERIOD ARCHAEOLOGICAL SENSITIVITY

[redacted]

4. RESEARCH DESIGN

The objective of the Phase 1B is to determine the presence or absence of historic and precontact period archaeological deposits within the undisturbed portions of the Childcare Site. If present, the Phase 1B Archaeological Investigation will make an assessment as to whether the resources are in sufficient quantity/concentration and of sufficient research value to determine if a Phase 2 Archaeological Survey/Evaluation is required to further delineate the boundaries of the archaeological site and to evaluate its potential significance. The determination of an archaeological site's significance is largely dependent on the types of potential archaeological resources that could be encountered within the Childcare Site and on the specific research questions that can be answered through the analysis of

those resources. A professional, modern archaeological investigation could produce valuable data about the precontact occupation of the area that could be compared and contrasted with previously collected data. This could produce new data and add to existing knowledge of life in the vicinity of what is now Onondaga County during the historic and precontact period.

5. ARCHAEOLOGICAL TESTING PROTOCOL

Although documentary research determines archaeological potential, excavation for the purposes of archaeological testing is required to determine if resources are *actually* present on a site. Therefore, this Archaeological Work Plan addresses Phase 1B presence/absence testing and includes a contingency for the evaluation for National Register eligibility (e.g., a Phase 2 Archaeological Survey/Evaluation), which may become necessary. The Phase 1B Archaeological Investigation will be conducted in accordance with the "Phase 1 Archaeological Report Format Requirements" as issued by SHPO in 2005, and with the "Standards for Cultural Resources Investigations and the Curation of Archaeological Collections in New York State" as issued by the New York Archaeological Council (NYAC) in 1994 and adopted by SHPO in 1995.

Archaeological testing within the Childcare Site will take place within the areas of archaeological sensitivity identified in the Phase 1A Study as shown on **Figure 2**. Subsurface testing will primarily consist of hand-excavated shovel test pits (STPs) and, where necessary, test units. No mechanical testing is proposed as part of this Phase 1B Archaeological Investigation. The testing strategy outlined in this protocol may be altered based on conditions observed in the field, including previously unforeseen obstructions.

A representative from the Onondaga Nation will be retained to oversee the archaeological testing to determine if sacred objects or other items of cultural importance are encountered. The monitor will be compensated for their work at an hourly rate to be determined in coordination with the Onondaga Nation. In the event that the Oneida Indian Nation or other Indigenous Nations request to have an on-site monitor present during the archaeological testing, such requests will be accommodated. The Onondaga Nation will be engaged to discuss suggestions for a local archeological firm or a firm with local experience to be included in the investigation team with staff members that have local expertise and a history of and capacity to work closely with Indigenous Nation monitors and Section 106 representatives. The archaeological firm should have expertise in Haudenosaunee and Onondaga culture and artifacts and should demonstrate their respect for and ability to work with Onondaga Nation representatives.

SUBSURFACE TESTING

Testing has been recommended throughout undisturbed and accessible portions of the entire Childcare Site. No testing is proposed in visibly disturbed areas, paved areas (if any), areas with standing water. If any portions of the APE will not be impacted by the Proposed Project, those areas may be excluded from the testing program (see **Figure 2**).

STPs will be excavated at intervals of approximately 50 feet (15 meters) across a grid to sample enough of the area to determine if intact precontact resources or an intact buried ground surface are likely to be present. The 50-foot (15-meter) interval is established as the preferred interval for subsurface shovel testing as outlined in the NYAC archaeological guidelines as issued in 1994 and adopted by SHPO in 1995. In locations where physical conditions suggest heightened archaeological sensitivity are observed (e.g., in areas where soil drainage is better; where surficial indications or vegetation suggesting prior disturbance are absent; where artifacts are observed on exposed/cleared ground surfaces; or where STPs are positive for archaeological resources), the interval may be

narrowed to 25 feet (7.5 meters). In the event that submerged soils or areas of visible disturbance are present, STPs may be excavated at an interval of 100 feet (30 meters) to confirm the limits of disturbance or certain soil types. STPs will be placed along linear transects or along established grids depending on the landscape of the area being tested. If mature trees, large soil/fill deposits, slopes greater than 10 percent, or other obstructions are present, STPs may be offset from the grid or written-off depending on the discretion of the archaeological consultant.

Inundated wetland areas that may have been dry, inhabitable land in the past will be tested where possible. Disturbed or saturated soils may be tested at a 100-foot (30-meter) interval to confirm the limits of saturated soils as identified by the USDA soil survey. Additional STPs may be judgmentally placed in areas deemed testable by the archaeological team. These areas where testing may be possible may include isolated elevated or dry areas within otherwise inundated wetlands. In the event that wetland areas are present that cannot be physically tested in the manner described previously, alternative means of documentation may be considered that include, but are not limited to, monitoring during construction. A plan for further examination of submerged areas will be determined based on observations made in the field regarding the viability of testing submerged areas.

Each STP will be approximately 16 to 18 inches in diameter and excavated to a depth of approximately 2 to 3 feet, or until sterile subsoil is encountered. The exact number of STPs will depend on the extent of visible disturbance/obstructions observed in the field. If isolated precontact archaeological deposits are identified in the STPs placed along the 50-foot-grid or transect, additional STPs will be excavated at closer intervals—one each at a distance of 3 feet and 10 feet to the north, south, east, and west, or eight radial STPS total—in the vicinity of the find to determine the horizontal and vertical extents of potential artifact deposits. Radial STPs will not be excavated when two of more precontact artifacts are found in consecutive shovel tests along the 50-foot grid.

Hand-excavated soils in areas where intact, natural soils are identified will be screened through quarter-inch steel mesh. Fill materials and disturbed soils will not be screened. Artifacts will be systematically collected from hand-excavated soils and will be placed in labeled plastic bags.

In addition to the excavation of STPs, where feasible, testing may involve the use of plowing and disking. In the event that this method is pursued as part of the testing plan, the surface survey will follow the protocols outlined in SHPO's *Phase I Archaeological Report Format Requirements* issued in 2005. Plowed areas will be a minimum of 10 feet (3.3 meters) in width and will be spaced a maximum of 50 feet (15 meters) apart in areas with 70 percent visibility at a minimum. Systematic pedestrian transects will be spaced at the dimensions mentioned above within plowed areas.

All artifacts recovered through screening will be placed in labeled plastic bags according to stratigraphic level.

IDENTIFICATION OF ARCHAEOLOGICAL FEATURES

Precontact archaeological features can include hearths, arrangements of postholes, or other evidence of camps or occupations sites. Historic features can include shaft features (e.g., privies, cisterns, or wells), foundation remnants, or middens. Precontact or historic features or buried ground surfaces encountered during testing would be sufficiently sampled so as to indicate if further testing (e.g., a Phase 2 Archaeological Survey/Evaluation) is necessary (see Contingency Tasks, below).

If a Phase 2 Archaeological Survey/Evaluation is determined necessary, no further work would be completed as part of the Phase 1B Archaeological Investigation pending further coordination with CPO, SHPO, and the Indigenous Nations, and any open test units or STPs will be backfilled to protect the archaeological site. At that time, the archaeological consultant will coordinate with CPO, who will coordinate with SHPO, Indigenous Nations, and other Consulting Parties to establish the scope of work for a Phase 2 Archaeological Survey/Evaluation Work Plan ("Phase 2 Work Plan"). Depending on the number of features or sites present within the Childcare Site, the Phase 2 Work Plan may include a sampling strategy developed in coordination with CPO, SHPO, the Indigenous Nations, and other Consulting Parties, which will determine the extent to which each feature is excavated and documented. The feature or features will then be re-excavated for the Phase 2 Archaeological Survey/Evaluation.

AVOIDANCE PLAN

In the event that archaeological sites are identified within the Childcare Site that are potentially significant but that would not be impacted by the Proposed Project or that can be avoided through a redesign of the project, an "Avoidance Plan" may be prepared after completion of the Phase 1B Archaeological Investigation. The avoidance plan will describe how the project will successfully avoid and protect areas of archaeological sensitivity (e.g., agreements to mark and post sensitive areas to prevent disturbance from heavy machinery or staging activities, etc.). Should an Avoidance Plan be necessary, CPO will coordinate with SHPO, Indigenous Nations, and other Consulting Parties to develop the plan and to established the protocols for its finalization and approval.

HEALTH AND SAFETY PLAN

Excavation completed as part of this Phase 1B Archaeological Investigation is not expected to exceed a depth of 4 feet below grade in most locations. In the event that such deep excavation will occur, a Health and Safety Plan (HASP) may be required in compliance with the standards of the United States Department of Labor's Occupational Safety and Health Administration (OSHA) pertaining to safe excavation practices.

6. CONTINGENCY PLAN FOR PHASE 2 ARCHAEOLOGICAL SURVEY/EVALUATION AND ADDITIONAL SITE PROTECTION MEASURES

As stated previously, the Phase 1B Archaeological Investigation testing will be designed to determine the presence or absence of archaeological resources, not to fully expose or document any encountered resources. A Phase 2 Archaeological Survey/Evaluation ("Phase 2 testing") occurs only if the Phase 1B Archaeological Investigation uncovers a site or evidence of a site that will need to be evaluated according to the National Register criteria for eligibility. Phase 2 testing is used "to obtain detailed information on the integrity, limits, structure, function, and cultural/historical context of an archaeological site sufficient to evaluate its potential National Register eligibility" (NYAC 1994: 4). It involves detailed research beyond that done in the first phase, greater sampling of the property, a greater variety in the types of testing units (i.e., including larger testing units and/or shovel test pits at closer intervals), and closer analysis of artifacts. If Phase 2 testing is necessary, it would be undertaken in consultation with CPO, SHPO, the Indigenous Nations, and other Consulting Parties. The Phase 2 Survey and Evaluation will then determine if additional archaeological analysis (e.g., Phase 3 Mitigation/Data Recovery) is warranted in the event that the project cannot be redesigned to

avoid significant archaeological sites. In the event that Phase 2 testing is required, a separate Work Plan will be prepared at that time for submission to CPO, SHPO, the Indigenous Nations and other Consulting Parties as described above.

7. SITE DOCUMENTATION

Professional standards for testing, screening, recording features and stratigraphy, labeling, mapping, and photographing any identified archaeological resources will be applied during the Phase 1B Archaeological Investigation. Soil profiles including colors—recorded using Munsell soil color charts—and texture/inclusions will be recorded in field notes. Soil profiles will be included in the final report in tabular form supplemented by photographs and drawings as appropriate. Testing locations will be recorded in field notes and field maps. All on-site testing will be recorded relative to an on-site datum and converted to the North American Vertical Datum of 1988 (NAVD88). The on-site datum will be calculated using existing site surveys or estimated using existing Lidar data. Where possible, testing locations will be recorded digitally using GIS software. The North American Datum of 1983 (NAD83) will be used as a permanent horizontal datum. The testing will be recorded using digital photography and videography as appropriate throughout the field effort.

8. LABORATORY PROCESSING

Following each stage of work, archaeologists will clean, stabilize, and inventory all cultural material removed from the Childcare Site. During the course of the investigation, the archaeological consultant will retain custody of all recovered artifacts, which will not be stored on-site. All laboratory activity will be conducted in compliance with the aforementioned guidelines and with those established by the United States Department of the Interior/National Park Service for the Curation of Federally-Owned and Administered Archaeological Collections (*36 CFR 66* and *79*). Artifact washing will begin immediately after transfer of the collection to the laboratory. Trained technicians will process the artifacts using standard archaeological techniques. Artifacts will be washed with a mild, non-ionic detergent using soft-bristle brushes and after washing they will be air dried on racks. Fragile artifacts and those with non-stable surfaces will be washed separately without brushing. Artifact bags will be labeled in waterproof ink with all relevant provenience information. After they have been cleaned and dried, the artifacts will be placed in archivally stable polyethylene zipper-top bags for permanent storage. The provenience information will be written on the outside of the bags using a permanent, waterproof marker.

An artifact catalog recording the depth and location of each recovered artifact will be created. To the extent possible, recovered artifacts will be identified as to material, temporal or cultural/chronological association, function, and style following the standard archaeological references. Detailed analysis would include the identification of the *Terminus Post Quem* (TPQ) of artifacts for each context and the generation of mean beginning and end dates for assemblages. This information could be used to establish the contemporaneity of contexts and strata, and to determine which assemblages represent primary or secondary deposits. If deemed significant and in consultation with CPO, SHPO, the Indigenous Nations, and other Consulting Parties, artifacts that are recovered from the site will be curated according to the regulations of the Department of the Interior/National Park Service *356 CFR 79*.

IDENTIFICATION OF AN ARTIFACT REPOSITORY

Any artifact collection removed from the Childcare Site would be the property of the owner of the land at the time of the testing. In the event that objects of cultural significance to the Indigenous Nations are encountered, the investigators will immediately notify CPO, who will coordinate with

SHPO, the Indigenous Nations, and other Consulting Parties regarding documentation and repatriation pursuant to Section 106 and any other relevant legislation. In the event that significant archaeological resources are encountered within the APE that require permanent curation, efforts will be necessary to locate a repository that is capable of accepting and curating the collection. Upon the completion of field testing, if significant resources are found, a repository will be identified and selected in conjunction with CPO, who will further coordinate with SHPO, the Indigenous Nations, and other Consulting Parties to determine a suitable long-term curation plan. If the artifact collection is determined to have no research value, it will be returned to the site owner or discarded at their discretion within one year of the completion of fieldwork. The site owner may then choose to retain and store the collection or may seek out alternative methods of disposal.

9. REPORTING

Following the completion of field testing and laboratory processing and analysis, a detailed Phase 1B Archaeological Investigation report will be prepared for each stage of work. The final report will document all methodologies used during the course of the investigation and will discuss all findings that emerge from the recovered data, maps, plans, drawings, photographs, and/or other relevant images will be incorporated into the body of the report as needed to illustrate project findings. The report will include a site map showing the location of all resources identified, as well as a complete inventory of the artifacts. The report will be prepared according to the guidelines and standards issued by SHPO and NYAC. If the testing locates features *in situ*, the documentation of those features will be incorporated into the Work Plan of the Phase 2 Archaeological Survey/Evaluation.

The final technical report will include the following information:

- Description of the portion of the APE;
- Relevant documentation/background research;
- Research design;
- Field studies as actually implemented, including any deviation from this Work Plan and the reason for those changes;
- Field observations;
- Analyses and results, illustrated as appropriate with maps, photographs, tables, charts, and graphs; and
- Recommendations for further archaeological work, if necessary.

A draft report of the final technical report will be submitted to CPO, who will further coordinate with SHPO, the Indigenous Nations, and other Consulting Parties pursuant to Section 106. If necessary, a final version of the report will be prepared to address comments, which CPO will circulate to the SHPO, Indigenous Nations and other Consulting Parties for concurrence.

10. PROJECT COORDINATION AND MANAGEMENT

Prior to each stage of testing, the archaeological consultant will notify CPO, who will further coordinate with SHPO, the Indigenous Nations, and other Consulting Parties, when testing is scheduled to begin and will retain the services of a monitor from the Onondaga Nation and any other nations that may request to be present. If requested, the archaeological consultant will assist in arranging a site visit for representatives of CPO, who will coordinate the participation of SHPO, the Indigenous Nations, and other Consulting Parties as necessary and appropriate during the course of

the Phase 1B Archaeological Investigation. However, during the field testing, the archaeological team will distribute a summary of work completed to date on a weekly basis (including number/location of tests completed and relevant finds) to CPO, SHPO, the Indigenous Nations, and other Consulting Parties.

It is possible that the field testing will not reveal any potentially significant archaeological features, deposits, or intact soil strata. If that is the case, no further archaeological consideration would be warranted, and a report to that effect would be prepared. In the event that archaeological resources are encountered, CPO on a weekly basis will further consult with SHPO, the Indigenous Nations, and other Consulting Parties. In either case, a final report on the field investigation will be submitted to SHPO, the Indigenous Nations, and other Consulting Parties for review and comment, indicating a presence or absence of archaeological features.

11. PROTOCOL FOR THE UNANTICIPATED DISCOVERY OF HUMAN REMAINS

There is no indication that human remains are present within the Childcare Site. However, in the unlikely event that human remains or suspected human remains are encountered within the APE, the SHPO Human Remains Discovery Protocol and the Haudenosaunee Policy on Human Remains (reproduced below) would be implemented in consultation with CPO. All requests from the Indigenous Nations to modify this protocol will be honored in consultation with CPO and SHPO. As the project is subject to Section 106, the project is not subject to the *New York State Unmarked Burial Site Protection Act* (NY EXEC § 171, the "Act"), which went into effect on August 1, 2023 and requires consultation with the New York State Archaeologist in the event that undocumented human remains are encountered in New York State. In the event that human remains are determined to be Indigenous, all relevant legislation (e.g., the Native American Graves Protection and Repatriation Act [NAGPRA]) would apply. All graves, funerary objects, and soils surrounding graves will be protected and treated with the utmost dignity and respect. As per the policies reproduced below, no photography or analysis of Indigenous remains would occur as part of the archaeological investigation unless specifically requested by the Indigenous Nations.

SHPO HUMAN REMAINS DISCOVERY PROTOCOL (JANUARY 2021)[1]

> *In the event that human remains are encountered during construction or archaeological investigations, SHPO recommends that the following protocol is implemented:*
>
> - *Human remains shall be treated with the utmost dignity and respect. Should human remains or suspected human remains be encountered, work in the general area of the discovery shall stop immediately and the location shall be secured and protected from damage and disturbance.*
> - *If skeletal remains are identified and the archaeologist is not able to conclusively determine if they are human, the remains and any associated materials shall be left in place. A qualified forensic anthropologist, bioarchaeologist or physical anthropologist shall assess the remains in situ to help determine if they are human.*
> - *If the remains are determined to be human, law enforcement, the SHPO, the appropriate Indian Nations, and the involved state and federal agencies shall be*

[1] https://parks.ny.gov/documents/shpo/environmental-review/HumanRemainsProtocol.pdf

notified immediately. If law enforcement determines that the burial site is not a criminal matter, no skeletal remains or associated materials shall be removed until appropriate consultation takes place.

- *If human remains are determined to be Native American, they shall be left in place and protected from further disturbance until a plan for their avoidance or removal is developed. Please note that avoidance is the preferred option of the SHPO and the appropriate Indian Nations. The involved agency shall consult SHPO and the appropriate Indian Nations to develop a plan of action. Photographs of Native American human remains and associated materials should not be taken without consulting with the involved Indian Nations.*
- *If human remains are determined to be non-Native American, the remains shall be left in place and protected from further disturbance until a plan for their avoidance or removal is developed. Please note that avoidance is the preferred option of the SHPO. The involved agency shall consult SHPO and other appropriate parties to develop a plan of action.*
- *The SHPO recommends that burial information is not released to the public to protect burial sites from possible looting.*

HAUDENOSAUNEE POLICY ON HUMAN REMAINS

The policy on human remains was extracted from *Polishing the Silver Covenant Chain: Building Relationships Between Federal, State Agencies and the Haudenosaunee* as issued by the Grand Council of the Haudenosaunee in 2002 (see Parts 4.1, 4.2, and 4.7).

HAUDENOSAUNEE BELIEFS

We have been taught that we bury our dead into the ground so that their bodies can become part of the sacred Earth. We believe that we come from the Mother Earth and that the human remains that rest within the Earth are an important spiritual connection to the spirit of the Earth. The Earth is enriched by the dead as our flesh becomes part of the soil.

The souls of the dead have a path of destiny that they must follow. We refer to this as their journey after life. in this way, we feel that the dead are around us and hover over us as we hold ceremonies or dances. We believe that the dead have power and it is dangerous to neglect the spiritual needs of the dead.

The protection of the human remains and associated graves, sacred burial sites and related objects from the graves of the Haudenosaunee are the responsibility of each generation of Chiefs, Clan mothers, and Faithkeepers. We believe that the remains, the associated burial objects and the actual soil in which they rest is sacred. There is no acceptable excuse to justify the desecration of this sacred burial.

VIOLATION OF OUR SPIRITUAL RIGHTS

Removing the remains from their eternal resting place is a great desecration to both the dead and the living. The disturbance, destruction, and theft of the dead is a violation of the religious and spiritual welfare of the Haudenosaunee.

As long as the human remains are disturbed, there will be spiritual consequences to our people. The desecration of the graves of our ancestors, no matter what the age of the burial, is a violation of our religious freedom.

Permits issued by the State of New York or any other local government, to allow anyone to violate the sanctity of the graves of our ancestors can no longer be tolerated. In the past, our ancestors buried many objects along with the body with the belief that in the afterlife, you will need all of those things that you need in this life.

All types of objects have been associated with burials, including decorated clothing, glass beads, shell beads, silver combs, tools and weapons, ceramic and metal cooking pots, wampum belts, strings of wampum, and a variety of personal items. The removal of these objects from the grave is a theft from the dead.

VIOLATION OF OUR HUMAN RIGHTS

The remains of our deceased relatives are not "archaeological resources" that are subjects of study. They we human beings who once lived on this land. They had real lives and feelings. They had spiritual expectations about their final resting places. To look at Native Peoples as objects rather than as human beings is a gross violation of our human rights.

All graves and burial sites, Native or not, deserve respect. Our dead relatives deserve the basic human right to a dignified burial. We do not believe in the use of permanent headstones to mark graves of our ancestors and state law makes a difference between cemeteries and unmarked burials.

Our burial sites deserve to be considered hallowed ground, whether they are marked or not. There has been double standard in dealing with our people and non-Native remains. Non-Native grave sites are often afforded more protection then Native burials.

Despite the efforts of state agencies to identify Native grave locations, construction permits are issued nonetheless. Our dead deserve the same right to an eternal resting place as all other races and religions.

VIOLATION OF OUR TREATY RIGHTS

The unearthing of the remains of our ancestors from their eternal resting pace is also a violation of the promises made to the Haudenosaunee under the terms of the Canandaigua Treaty of 1794. By that treaty, the United States, including the State of New York, promised not to "disturb" the Haudenosaunee in the free use and enjoyment of their lands.

We have been on record protesting the desecration of our graves. The continual destruction of Native graves, the stealing of Native remains and the looting of burial objects causes us serious mental, emotional, and spiritual harm.

Our people are continually upset by these events and we have been forced to adjust our spiritual traditions to accommodate outside developments. The desecration of the graves violates the mutual respect promised by the United States as they pledged a firm and permanent friendship between our peoples.

The treaty also promised to remove the cause of complaint that upsets our peace. We therefore make it clear that the desecration of the graves of our ancestors causes great harm to our people and the United States and State of New York have an obligation to protect the general welfare of our people as promised in the legally binding treaties.

Protocol for Handling Discovery of Human Remains		
	Known Burials	***Unidentified Burials***
When to contact?	***Intentional excavation**: At the earliest time in decision-making process*	***Inadvertent Discovery**: Upon discovery*
Which Nation to contact?	*If the fine is within existing Nation boundary, contact that Nation's Cultural Resource representatives. If the find is within the traditional land use area (fifty mile radius from the current nation territory), contract the closest Nation's Cultural Resource Representative. If the find is within the aboriginal territory of each nation, as shown on the attached map [note: not included here], contact the Nation within that territory. For finds located within fifty miles on either side of the boundary lines shown on the map, contact the Cultural Resource Representatives of both Nations.*	
Who to contact?	*Haudenosaunee Cultural Resource representatives (HSCBRR)*	*Haudenosaunee Cultural Resource representatives (HSCBRR)*
How to contact?	*Contact list is provided [note: not included here]*	
Information Required	*Brief description of the find or potential find; site map and any information on the known cultural history of the area and summary of nearby archaeological findings.*	
	Nation will send a representative to review the site.	*Company must hire a Native American on-site observer. No remains shall be removed.*
Next Steps	***Non-disturbance of burials is preferred**. If after proper consultation, the remains must be removed, we prefer to have them reburied close to their original location as possible, provided the future sanctity of the grave can be assured. **No remains should be removed without proper cultural protocols**. If no safe local burial ground can be offered, the Haudenosaunee will reclaim the remains for reburial at an undisclosed location. The local government/state agency/developer must pay for all of the costs for such reburial. All objects associated with the original burial must be reburied as well. All of the soil in the immediate area of the burial should also be placed in the new grave.*	

Source: Grand Council of the Haudenosaunee (2002)

12. REFERENCES CITED

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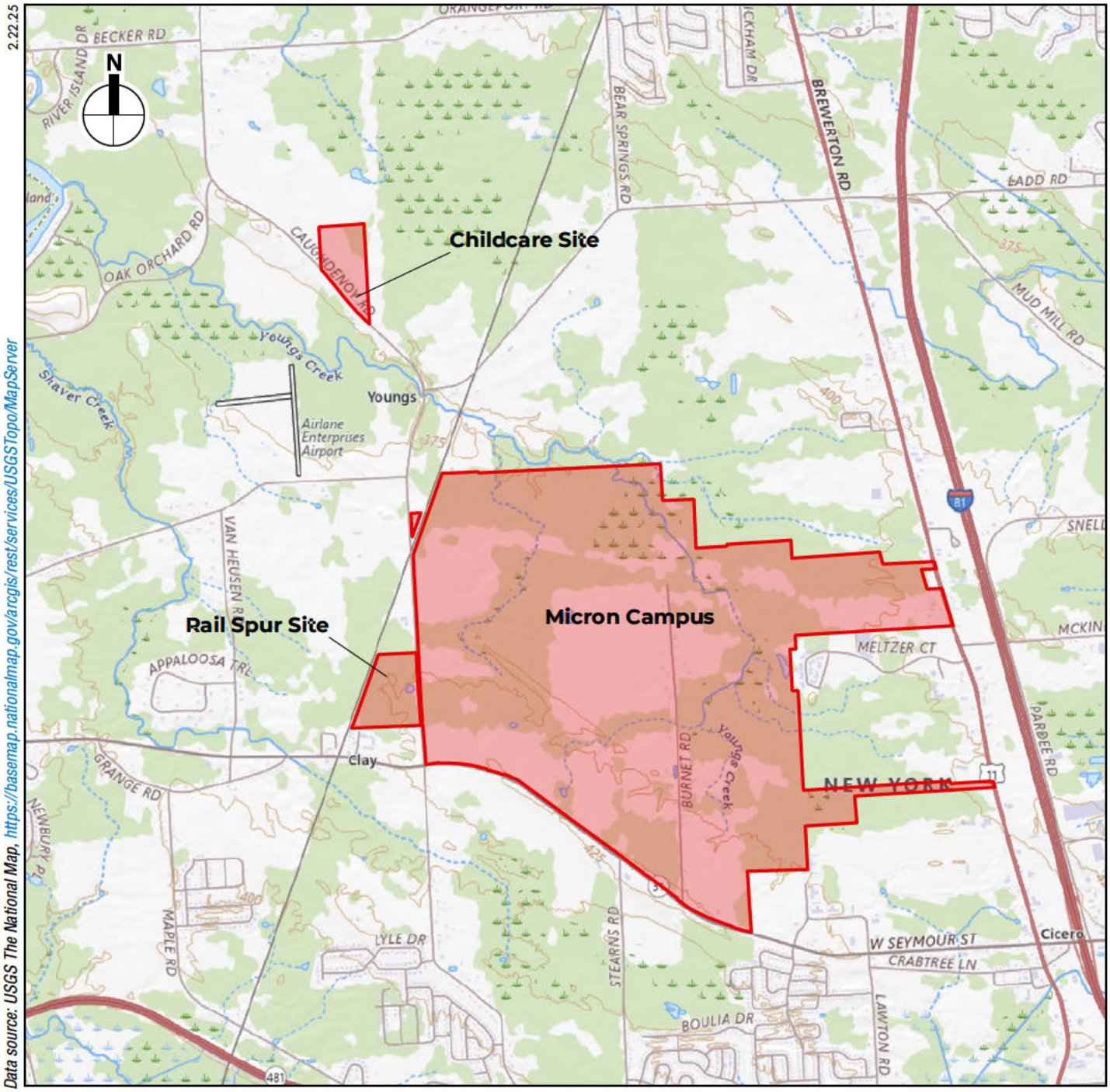
New York State Historic Preservation Office (SHPO)
2005 *New York State Historic Preservation Office (SHPO) Phase I Archaeological Report Format Requirements*. Available online: https://parks.ny.gov/shpo/environmental-review/documents/PhaseIReportStandards.pdf.



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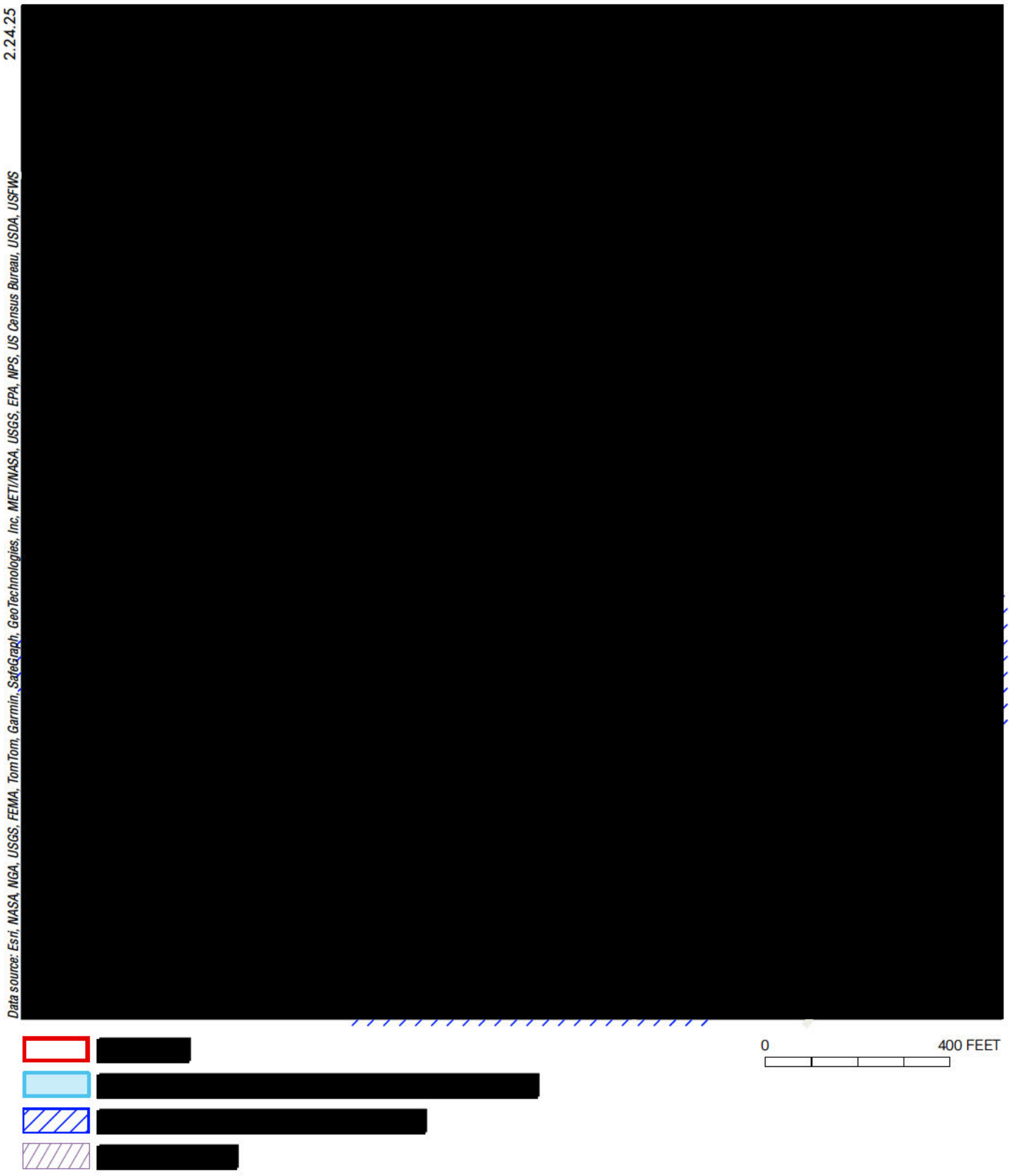
USGS Topographic Map –
Brewerton and Cicero Quadrangles

Figure 1



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Areas of Archaeological Sensitivity

Figure 2

Public Archaeology Facility Report

WORK PLAN

PROPOSED PHASE 1B ARCHAEOLOGICAL SURVEY

NATIONAL GRID
MICRON 345 KV ELECTRIC SERVICE PROJECT
TOWN OF CLAY
ONONDAGA COUNTY, NEW YORK
MCD 06703

23PR05061

PREPARED BY:

CHRIS HOHMAN, MA, RPA
and
LAURIE MIROFF, PhD, RPA

SUBMITTED TO:

JULIA BRAUNMUELLER
GZA GEOENVIRONMENTAL
6296 FLY ROAD
EAST SYRACUSE, NY 13057

SEPTEMBER 13, 2023

Binghamton University, State University of New York
Binghamton, New York 13902-6000

WORK PLAN
PROPOSED PHASE 1B ARCHAEOLOGICAL SURVEY
NATIONAL GRID MICRON 345 KV ELECTRIC SERVICE PROJECT
TOWN OF CLAY
ONONDAGA COUNTY, NEW YORK

I. INTRODUCTION

The Public Archaeology Facility (PAF) at Binghamton University has been contracted by GZA GeoEnvironmental to complete a Phase 1B archaeological investigation for the proposed National Grid Micron 345 kV Electric Service Project, Town of Clay, Onondaga County, New York. Based on an in-field meeting with PAF, GZA, NYSHPO, National Grid, and representatives from the Onondaga and Oneida Nations, a work plan for a Phase 1B archaeological survey was requested (August 11, 2023; Kudrle 2023). This document summarizes PAF's proposed work plan for the recommended Phase 1B archaeological investigation of the project. The Phase 1B archaeological survey is part of the required Section 106 consultation process with the NYS State Historic Preservation Office (SHPO).

This work plan complies with Section 106 of the National Historic Preservation Act, the New York State Historic Preservation Act, the New York Archaeological Council's professional standards for cultural resource projects (NYAC 1994), the report guidelines of the New York State Office of Parks, Recreation and Historic Preservation (2005), and the Haudenosaunee policy on human remains (Appendix I).

II. DESCRIPTION OF AREAS OF POENTIAL EFFECT (APEs)

2.1 Area of Potential Effect (APE)

National Grid and Micron are proposing installation of banks of underground electric lines. The electric services will originate from National Grid's Clay Substation on the west side of Caughdenoy Road and continue to each of the four fabrication facilities at the proposed Micron facility campus (Figures 1-3). In addition, the Clay Substation will be expanded.

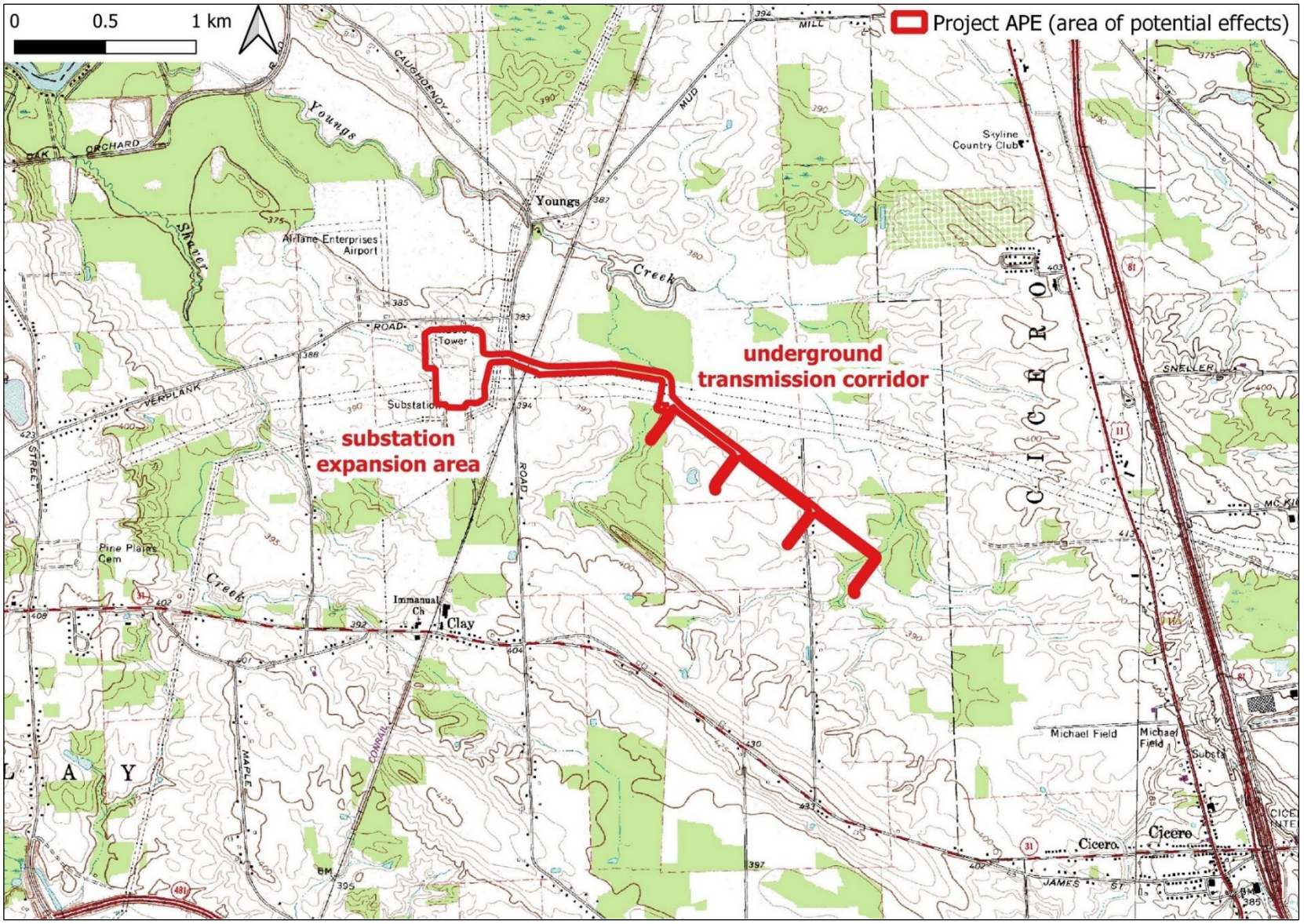

Figure 1. Location of the Micron 345 kV Electric Service Project.

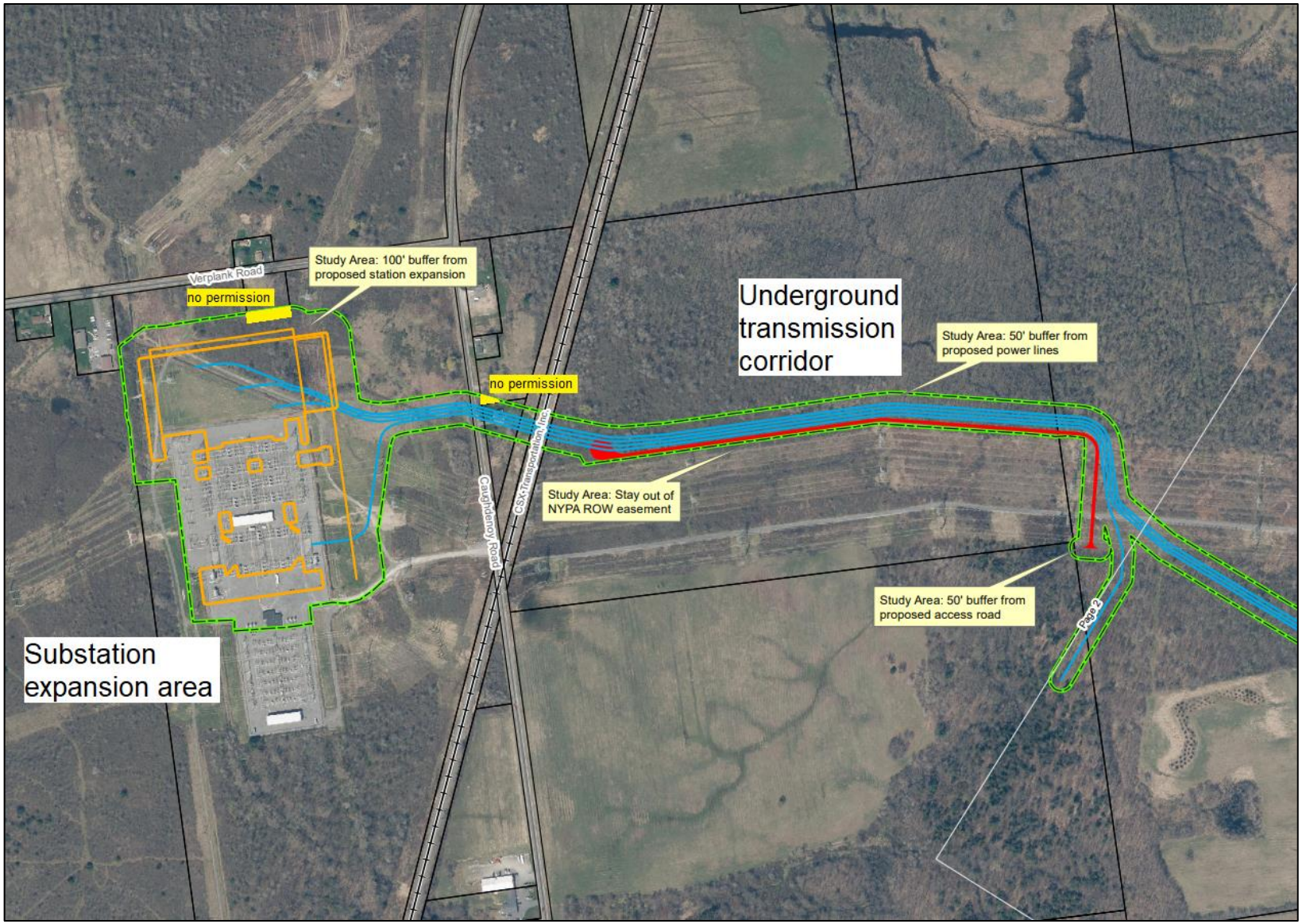

Figure 2. Aerial view of the western half of the project APE; note small areas that have not provided permission for access (image provided by GZA GeoEnvironmental, Inc.).

Figure 3. Aerial view of the eastern half of the project APE (image provided by GZA GeoEnvironmental, Inc.).

II. TECHNICAL APPROACH

We recommend the following technical approach and specific tasks for the APE. PAF used current APE identifications for this work plan (Figures 1-3 above).

3.1 Proposed Phase 1B Investigations

Based on the project maps and NYS OPRHP guidelines for Transmission Line projects, sensitivity was determined for the project area based on [redacted].

It was determined that approximately [redacted] ac out of the 64 ac APE are located within high sensitivity areas (Figures 4-8; Table 1). The high sensitivity areas are based on [redacted].

Based on the locations of the highly sensitivity areas, it is estimated that 500-600 shovel test pits (STPs) will be excavated within the project area (as outlined in the Phase 1A report; Kudrle 2023). In addition, elevated landforms in current wetlands will be tested since in the past these landforms may have been dry and usable for Indigenous people. We estimate that approximately [redacted] acres lie at 0.3 m (1 ft) above the wetlands within the APE and will be tested with an additional 25 STPs.

All STPs will be excavated at a 15 m (49 ft) interval, unless located in the vicinity of a MDS or standing structure. In the vicinity of a MDS or historic standing structure, testing will take place at 7.5 m (25 ft) intervals. STPs on elevated landforms within wetlands will be placed judgmentally.

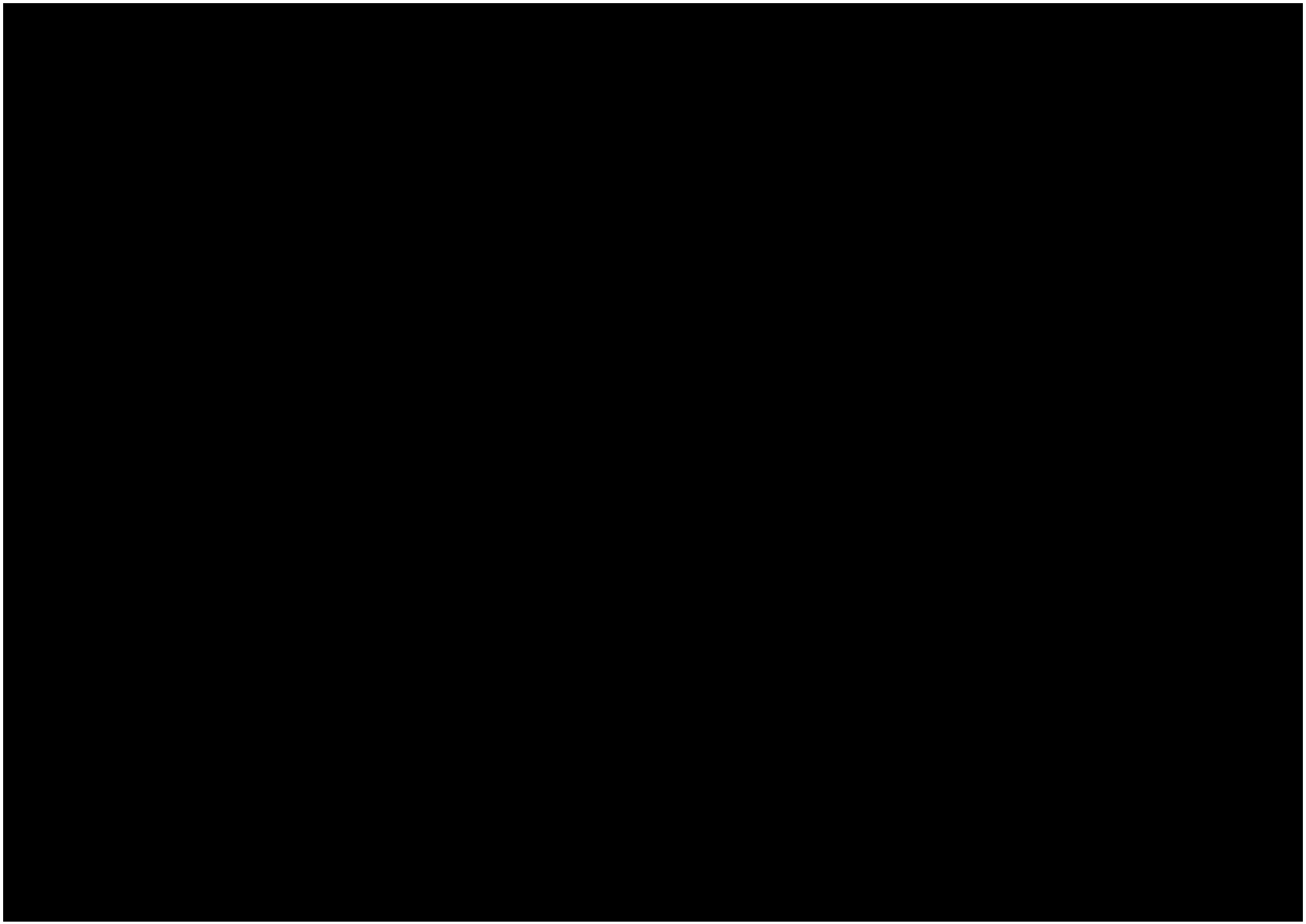

Figure 4. Overview of predicted high sensitivity zones within the APE.

Figure 5. Western end of the APE showing predicted high sensitivity zones.

Figure 6. Center of the APE showing predicted high sensitivity zones.

Figure 7. Eastern end of the APE showing predicted high sensitivity zones.

Figure 8. Area of high sensitivity for the underground transmission corridor within the 2013 EDR survey area; note that STPs were not excavated within the APE except for a small number of STPs (six or fewer) in the far south of the extension.

Table 1. Sensitivity Assessment

APE Characteristics	Total APE
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
Total STPs	**500 to 600 + 25 judgmental STPs**

3.2 Shovel Test Pit and Data Recording Protocols

The soil from each STP will be screened through 1/4 inch mesh onto plastic to more accurately recover cultural material and assist with complete backfilling. Archaeologists will note soil color and texture, soil horizon depth, natural and cultural inclusions, and cultural material content for each STP. Cultural material such as brick, coal-ash, coal, slag, and modern debris will be noted but not retained. All information will be documented in a report for agency review. STPs will be immediately backfilled after screening and tamped down; no STPs will be left open. Accurate maps will be kept of each STP location and areas of cultural material concentration, if any are found.

3.3 Human Remains Protocols

If field investigations discover human remains, or bone that is suspected to be human, PAF will follow the NYS OPRHP and Haudenosaunee protocols for protection and consultation (see Appendix I). Excavations will immediately stop, the location will be secured and protected from damage and disturbance pending the notifications and consultations (local law enforcement, county coroner/medical examiner, National Grid, and SHPO). PAF senior personnel have experience in Indigenous consultation and compliance with NAGPRA.

3.4 Laboratory Processing and Curation

All cultural material recovered will be cleaned, inventoried, and catalogued according to standard practices for federal (36CFR79) and state reviewed projects (NYAC Standards: March 1994). Cultural material becomes the property of the State University of New York at Binghamton for the purposes of proper curation and research unless alternate arrangements that comply with federal standards (36CFR 79) are made prior to the start of the survey. If objects considered sacred by Indigenous communities under the Native American Graves Protection and Repatriation Act (NAGPRA) are found, the client and federal agency representatives will be contacted so that the consultation protocols of NAGPRA can be initiated.

All of the cultural material, notes, and other documentation of the Phase 1B testing will be curated according to federal (36 CFR Part 79) and state (NYAC 1994) guidelines in the secure facilities of the Department of Anthropology at Binghamton University. The Public Archaeology Facility maintains professional collections curation facilities that comply with federal standards (36 CFR Part 79) and professional state guidelines (NYAC 1994). Use of our collections is restricted to qualified professionals, Indigenous official representatives, and students for study, public interpretation, exhibition, and research. All requests for collection use are considered by the Director of PAF. Short-term, supervised use of collection material is available in secure work areas.

3.5 Summary Report

At the conclusion of the field investigations for the Phase 1B survey, we will summarize our methods and findings in a draft report (1 pdf copy) and submit it to GZA GeoEnvironmental for comments. The report will comply with New York State Standards. If sites are found, we will include recommendations for avoiding impacts to the sites. If impacts cannot be avoided, we will recommend further work. After incorporating comments from GZA

GeoEnvironmental and National Grid, we will produce a final report (1 hard copy; 1 pdf copy). If requested, PAF will upload the report to the New York State Cultural Resource Information System.

3.6 Schedule

Following any comments from GZA GeoEnvironmental and National Grid, a revised final work plan will be submitted to all parties for review and approval. The fieldwork for the Phase 1B archaeological testing will take approximately 6 to 8 weeks to complete, weather permitting. The draft Phase 1B archaeological report can be completed within three to five weeks of the completion of the fieldwork. GZA GeoEnvironmental and National Grid will review the draft report and provide comments within seven working days of the submission. Following review of the draft report, a revised report can be submitted within one week of receiving comments.

IV. KEY PERSONNEL

Staff from PAF will be assigned to the Phase 1B survey when authorizations are approved, and the project is scheduled. All supervisory staff meet the Secretary of Interior's Standards for Professional Archaeologist (36CFR61). In addition, PAF's supervisory staff are Registered Professional Archaeologists (RPA).

APPENDIX I. HAUDENOSAUNEE and SHPO POLICIES AND PROTOCOLS ON HUMAN REMAINS

The Haudenosaunee Policies on this page are the official word of the Haudenosaunee Confederacy as promulgated by the Grand Council of Chiefs concerning cultural patrimony & repatriation.

Note:

From Kanatiyosh. The policies contain statements that are important to insure cultural sensitivity towards the Haudenosaunee. The statements are evidence of why some school projects, museums, private collections, sellers, governments, and etc., are not being culturally sensitive or respectful to the Haudenosaunee.

Haudenosaunee Policy on Human Remains

Haudenosaunee Beliefs

We have been taught that we bury our dead into the ground so that their bodies can become part of the scared Earth. We believe that we come from the Mother Earth and that the human remains that rest within the Earth are an important spiritual connection to the spirit of the Earth. The Earth is enriched by the dead as our flesh becomes part of the soil.

The souls of the dead have a path of destiny that they must follow. We refer to this as their journey after life. In this way, we feel that the dead are around us and hover over us as
we hold ceremonies or dances. We believe that the dead have power and it is dangerous to neglect the spiritual needs of the dead.

The protection of the human remains and associated graves, sacred burial sites and related objects from the graves of the Haudenosaunee are the responsibility of each generation of chiefs, clan mothers, and faithkeepers. We believe that the remains, the associated burial objects and the actual soil in which they rest is sacred. There is no acceptable excuses to justify the desecration of this sacred burial.

Violation of Our Spiritual Rights

Removing the remains from their eternal resting place is a great desecration to both the dead and the living. The disturbance, destruction, and theft of the dead is a violation of the religious and spiritual welfare of the Haudenosaunee.

As long as the human remains are disturbed, there will be spiritual consequences to our people. The desecration of the graves of our ancestors, no matter what the age of the burial, is a violation of our religious freedom.

Permits issued by the State of New York or any other local government, to allow anyone
to violate the sanctity of the graves of our ancestors can no longer be tolerated. In the past, our ancestors buried many objects along with the body with the belief that in the afterlife,
you will need all of those things that you need in this life.

All types of objects have been associated with burials, including decorated clothing, glass beads, shell beads, silver combs, tools and weapons, ceramic and metal cooking pots, wampum belts, strings of wampum, and a variety of personal items. The removal of these objects from the grave is a theft from the dead.

Violation of Our Human Rights

The remains of our dead are not "archaeological resources" that are subjects of study. They are human beings who once lived on this land. They had real lives and feelings. They had
spiritual expectations about their final resting places. To look at Native Peoples as objects rather than people is a gross violation of our human rights.

All graves and burial sites, Native or not, deserve respect. Our dead relatives deserve the basic human right to a dignified burial. We do not believe in the use of permanent headstones to mark graves of our ancestors and state law makes a difference between cemeteries and unmarked burials.

Our burial sites deserve to be considered hallowed ground, whether they are

marked or not. There has been a double standard in dealing with our people and non-Native remains. Non-Native grave sites are often afforded more protection than Native burials.

Despite the efforts of state agencies to identify Native grave locations, construction permits are issued nonetheless. Our dead deserve the same right to an eternal resting place as all other races and religions.

Violation of Our Treaty Rights

The unearthing of the remains of our ancestors from their eternal resting place is also a violation of the promises made to the Haudenosaunee under the terms of the Canandaigua
Treaty of 1794. By that treaty, the United States, including the State of New York, promised not to "disturb" the Haudenosaunee in the free use and enjoyment of their lands.

We have been on record protesting the desecration of our graves. The continual destruction of Native graves, the stealing of the Native remains and the looting of burial objects causes us serious mental, emotional, and spiritual harm.

Our people are continually upset by these events and we have been forced to adjust our spiritual traditions to accommodate outside developments. The desecration of our dead violates the mutual respect promised by the United States as they pledged a firm and permanent friendship between our peoples.

The treaty also promised to remove the cause of complaint that upsets our peace. We therefore make it clear that the desecration of the graves of our ancestors causes great harm to our people and the United States and State of New York have an obligation to protect the general welfare of our people as promised in the legally binding treaties.

4.7 Protocol for Handling Discovery of Human Remains

	Known Burials	Unidentified Burials
When to contact?	**Intentional excavation** At the earliest time in decision-making process.	**Inadvertent Discovery** Upon discovery.
Which Nation to contact?	If find is within existing Nation boundary, contact that Nation's Cultural Resource representatives. If the find is within the traditional land use area (fifty mile radius from the current nation territory, contact the closest Nation's Cultural Resource Representative. If the find is within the aboriginal territory of each nation, as shown on the attached map, contact the Nation within that territory. For finds located within fifty miles on either side of the boundary lines shown on the map, contact the Cultural Resource Representatives of both Nations.	
Who to contact?	Haudenosaunee Cultural Resource Representatives HSCBRR	Haudenosaunee Cultural Resource Representatives HSCBRR
How to contact?	Contact list is provided.	
Information Required	Brief description of the find or potential find; site map and any information on the known cultural history of the area and summary of nearby archaeological findings.	
	Nation will send a representative to review the site.	Company must hire a Native American on-site observer.
Next steps	***Non-disturbance of burials is preferred.*** If after proper consultation, the remains must be removed, we prefer to have them reburied close to their original location as possible, provided the future sanctity of the grave can be assured. ***No remains should be removed without proper cultural protocols.*** If no safe local burial ground can be offered, the Haudenosaunee will reclaim the remains for reburial at an undisclosed location. The local government /state agency/developer must pay all of the costs for such reburial. All objects associated with the original burial must be reburied as well. All of the soil in the immediate area of the burial should also be placed in the new grave.	
Time Frame	30 to 45 days	As soon as possible

State Historic Preservation Office/
New York State Office of Parks, Recreation and Historic Preservation
Human Remains Discovery Protocol
(January 2021)

If human remains are encountered during construction or archaeological investigations, the New York State Historic Preservation Office (SHPO) recommends that the following protocol is implemented.

- Human remains shall be treated with dignity and respect. Should human remains or suspected human remains be encountered, work in the general area of the discovery shall stop immediately and the location shall be secured and protected from damage and disturbance.

- If skeletal remains are identified and the archaeologist is not able to conclusively determine if they are human, the remains and any associated materials shall be left in place. A qualified forensic anthropologist, bioarchaeologist or physical anthropologist shall assess the remains in situ to help determine if they are human.

- If the remains are determined to be human, law enforcement, the SHPO, the appropriate Indian Nations, and the involved state and federal agencies shall be notified immediately. If law enforcement determines that the burial site is not a criminal matter, no skeletal remains or associated materials shall be removed until appropriate consultation takes place.

- If human remains are determined to be Native American, they shall be left in place and protected from further disturbance until a plan for their avoidance or removal is developed. Please note that avoidance is the preferred option of the SHPO and the Indian Nations. The involved agency shall consult SHPO and the appropriate Indian Nations to develop a plan of action. Photographs of Native American human remains and associated materials should not be taken without consulting with the involved Indian Nations.

- If human remains are determined to be non-Native American, the remains shall be left in place and protected from further disturbance until a plan for their avoidance or removal is developed. Please note that avoidance is the preferred option of the SHPO. The involved agency shall consult SHPO and other appropriate parties to develop a plan of action.

- The SHPO recommends that burial information is not released to the public to protect burial sites from possible looting.

Division for Historic Preservation
P.O. Box 189, Waterford, New York 12188-0189 • (518) 237-8643 • www.nysparks.com

APPENDIX I: REFERENCES CITED

Kudrle, Sam
2023 *Phase 1A Archaeological Assessment, National Grid Micron 345 Kv Electric Service, Town of Clay, Onondaga County, New York, MCD 067015*. Public Archaeology Facility, Binghamton University, Binghamton, New York.

Public Archaeology Facility Report

CULTURAL RESOURCE MANAGEMENT REPORT
PHASE 1B ADDENDUM ARCHAEOLOGICAL SURVEY

NATIONAL GRID – MICRON 345 kV ELECTRIC SERVICE PROJECT (23PR05061)

TOWN OF CLAY
ONONDAGA COUNTY, NEW YORK
MCD 06703

PREPARED BY:

SAM KUDRLE, MA and JOHN FERRI, MA

SUBMITTED TO:

NATIONAL GRID

APRIL 11, 2025

Binghamton University, State University of New York
Binghamton, New York 13902-6000

MANAGEMENT SUMMARY

Project Name:	National Grid – Micron 345 kV Electric Service Project
OPRHP #:	23PR05061
Type of Survey:	Addendum Phase 1B Cultural Resource Survey
Location:	Town of Clay, Onondaga County
Size of Addendum APE:	1 acre (0.4 hectares)
USGS 7.5 Minute Quad Map:	1973 Brewerton, NY Quadrangle
Environmental Context:	The addendum APE is located on a flat to very gently sloping plain around the headwaters of Youngs Creek, within an area covered with extensive wetlands. Soils in the larger region are glacial lacustrine in origin, varying from moderately drained silt loams to very poorly drained muck soils. Within the addendum APE, mapped soils include Collamer silt loam and Rhinebeck silt loam.
Precontact Context:	[redacted]
Historic Context:	[redacted]
Addendum Survey Field Methods:	Number of Shovel Test Pits: 16 STPs Test Pit Interval: 15 meters (49 feet) Surface survey: none
Results of Addendum Survey:	Number of precontact sites identified: 0 Number of historic sites identified: 0 Number of sites recommended for Phase 2 investigation: 0
Report Author:	Sam Kudrle, MA and John Ferri, MA / Public Archaeology Facility.
Date of Report:	April 11, 2025

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FIGURES

TABLES

PHOTOGRAPHS

I. INTRODUCTION

This report presents the results of an addendum Phase 1B archaeological survey completed by the Public Archaeology Facility (PAF) for the National Grid – Micron 345 kV Electric Service Project in the Town of Clay, Onondaga County, New York (Figure 1). The research summarized in this report was supervised by Dr. Laurie Miroff, Director of PAF. John Ferri served as project director and Sam Kudrle is the main author of the report. Tom Besom, Kristin Clyne-Lehmann, and Lee Hammond served as field assistants. Mary Lou Supa produced databases of the soil catalogs.

In compliance with the Standards for Cultural Resource Investigations in New York State (1994) and the National Park Service's Criteria and Procedures for the Identification of Historic Properties (2000), the acreage within the addendum survey area is considered the Area of Potential Effects (APE). *The results of the research performed for this report do not apply to any territory outside the addendum APE.*

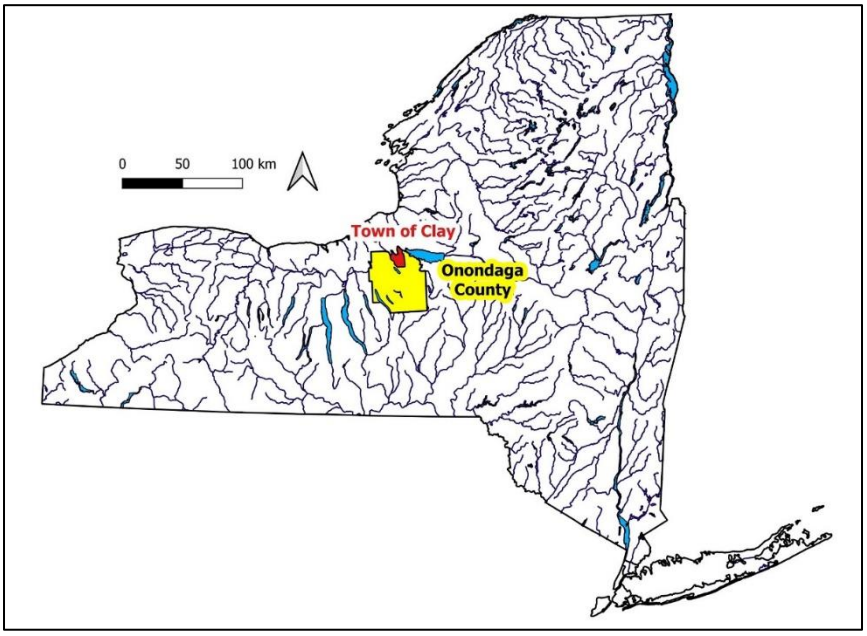


Figure 1. Location of the Town of Clay in Onondaga County and New York State.

The archaeological survey for the original National Grid – Micron 345kV Electric Service Project APE was completed by PAF in early 2024 (Kudrle and Ferri 2024). That project called for the installation of eight underground electric lines covering roughly 15.5 ha (38.2 ac), a 0.2 ha (0.5 ac) work pad north of Verplank Road, as well as expansion of the Clay Substation that would affect 21.0 ha (52.2 ac). Archaeologists surveyed approximately 36.7 ha (90.9 ac) for the original 2024 Phase 1B testing. [redacted]

The current addendum survey adds a small area of land to the original APE for the Clay Substation expansion (Figures 2 and 3). This new area, which was omitted from the original Phase 1B survey, is located along the south side of Verplank Road, and covers approximately 0.4 ha (1 ac). Photos 1-4 show the addendum APE in its current state as of April 2025, covered by overgrown grasses and brush, but clear of larger trees.

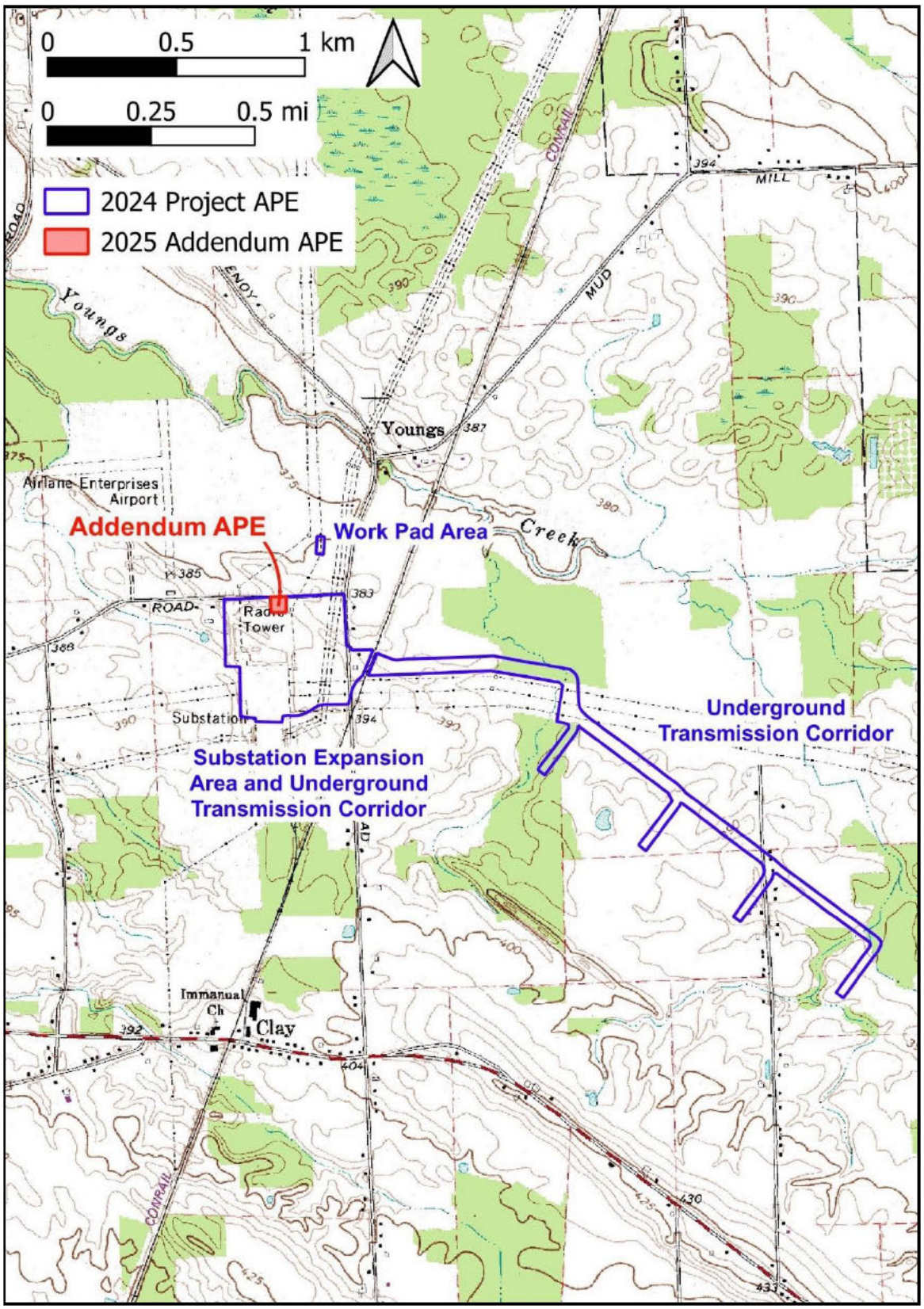


Figure 2. Location of the addendum APE on the 1973 *Brewerton, NY* 7.5' USGS quadrangle.

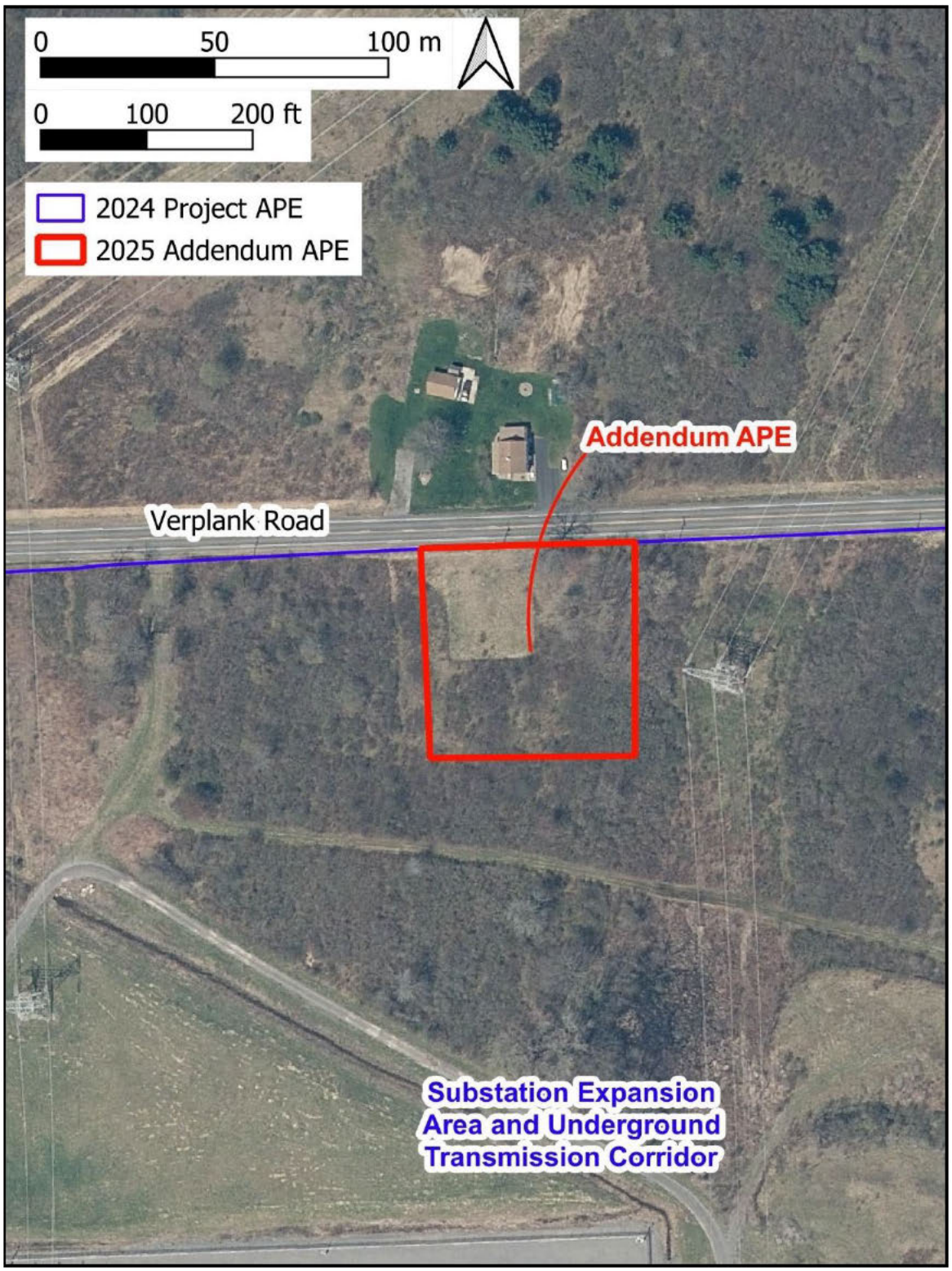


Figure 3. Aerial view of the addendum APE (2022 orthoimagery; NYS GIS Clearinghouse).

Photo 1. View north across the addendum APE from near STP BB1.

Photo 2. View north across the addendum APE from between STPs BB2 and BB3.

Photo 3. View southwest across the addendum APE from between STP AA1 and AA2.

Photo 4. View southeast across the addendum APE from between STP AAA 3 and AA4.

II. BACKGROUND RESEARCH

Extensive background research and GIS analysis of the entire larger APE was summarized for a 2023 Phase 1A assessment (see Kudrle 2023). The research completed for that assessment is briefly summarized here and adjusted in reference to the smaller addendum APE.

2.1 Environmental Context

The 2023 Phase 1A archaeological assessment described the topography of the larger APE as a flat to very gently sloping plain around the headwaters of Youngs Creek, over 2 km (1.2 mi) southeast of the Oneida River, within an area covered with extensive wetlands (Figure 4; Kudrle 2023).

Soils in the larger region are glacial lacustrine in origin, varying from moderately well-drained silt loam to very poorly drained muck soils (Kudrle 2023). Within the addendum APE, mapped soils include Collamer silt loam and Rhinebeck silt loam (Figure 5). Soil descriptions from the NRCS-USDA are provided below:

Collamer soils consist of very deep, moderately well-drained soils formed in silty glacio-lacustrine sediments on lake plains and till plains that have a thick mantle of lake sediments. The typical soil horizon stratigraphy is as follows:

Ap horizon: 0 to 30 cm (0-11 in); dark grayish-brown silt loam
E/B horizon: 30 to 46 cm (11-18 in); brown, and dark yellowish-brown silt loam
Bt/E horizon: 46 to 58 cm (18-23 in); dark yellowish-brown, pale brown, and brown silt loam
Bt1 horizon: 58 to 84 cm (23-33 in); brown silt loam
C1 horizon: 84 to 114 cm (33-45 in); light olive brown and yellowish-brown silt loam
C2 horizon: 114 to 183 cm (45-72 in); dark yellowish-brown, yellowish-brown, and brown silt loam

Rhinebeck soils consist of very deep, somewhat poorly drained soils formed in clayey lacustrine sediments on glacial lake plains and uplands mantled with lake sediments. The typical soil horizon stratigraphy is as follows:

Ap horizon: 0 to 23 cm (0-9 in), very dark grayish-brown silt loam
Eg horizon: 23 to 36 cm (9-14 in), grayish-brown silty clay loam
Bt1 horizon: 36 to 58 cm (14-23 in), light olive brown silty clay
Bt2 horizon: 58 to 81 cm (23-32 in), light olive brown silty clay loam
C1 horizon: 81 to 114 cm (32-45 in), brown silty clay loam
C2 horizon: 114 to 183 cm (45-72 in), brown varved silt and clay

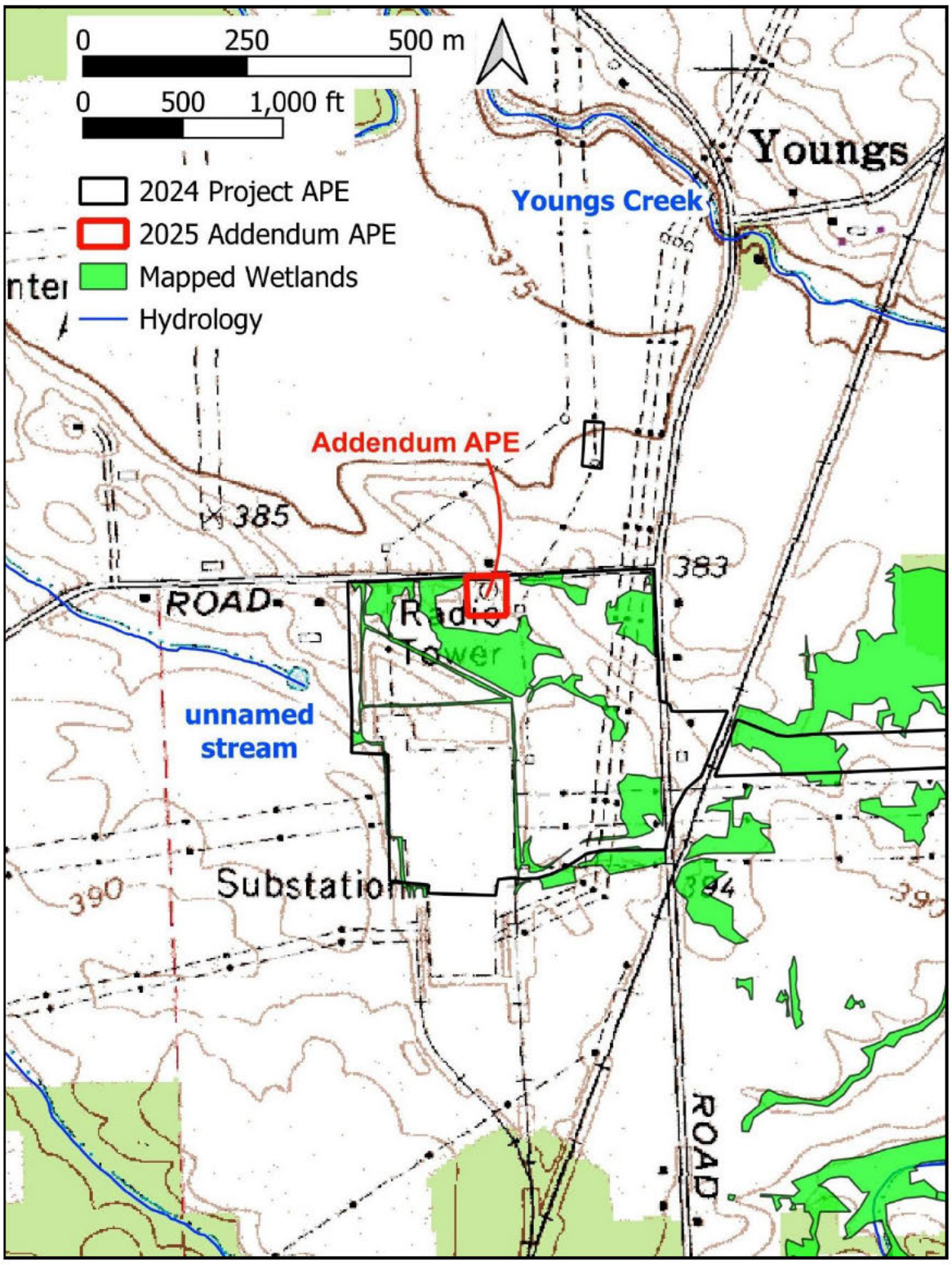


Figure 4. Hydrology and wetlands around the addendum APE.

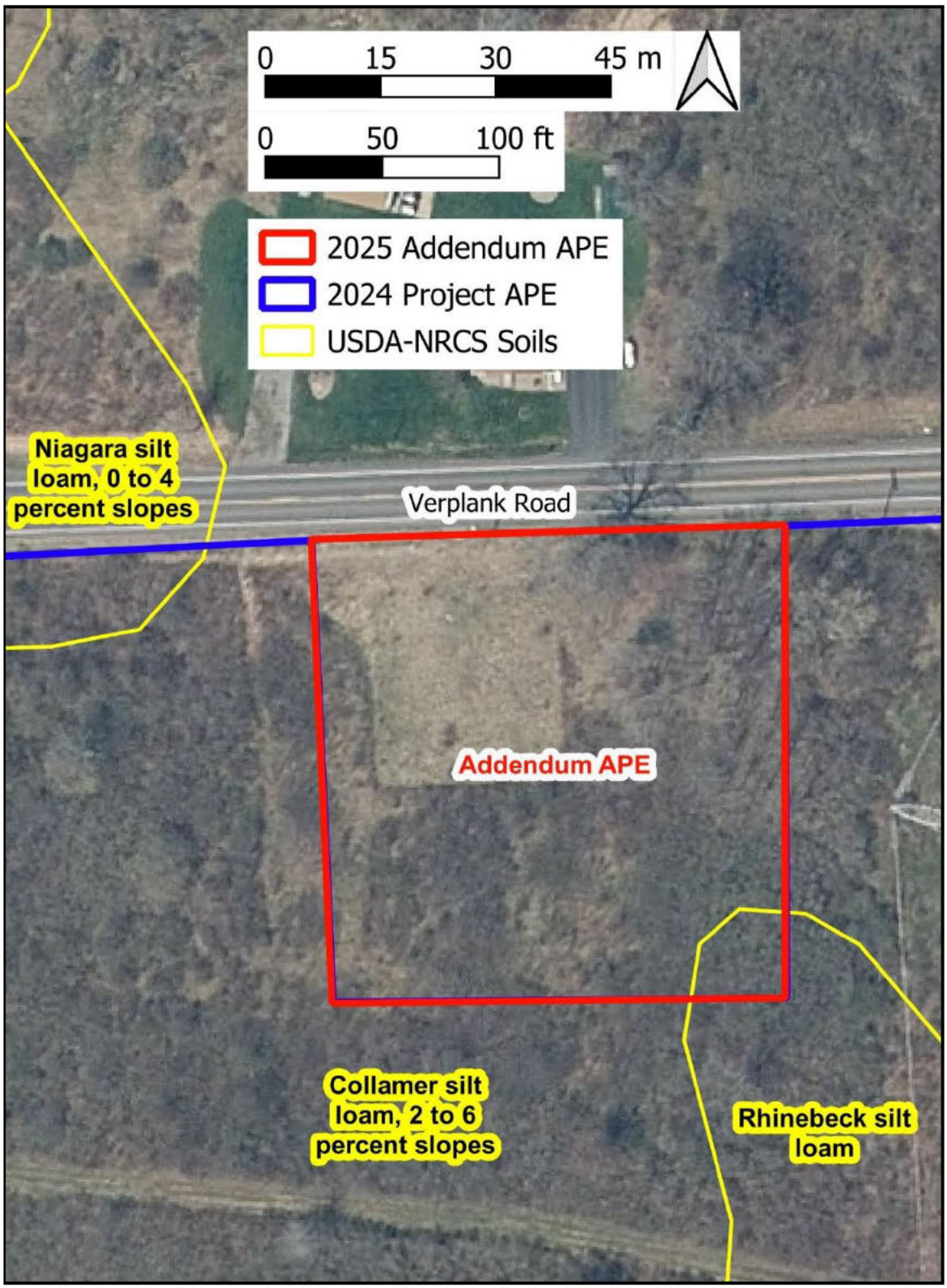


Figure 5. USDA-NRCS soils mapped for the addendum APE.

2.2 Site Files Summary

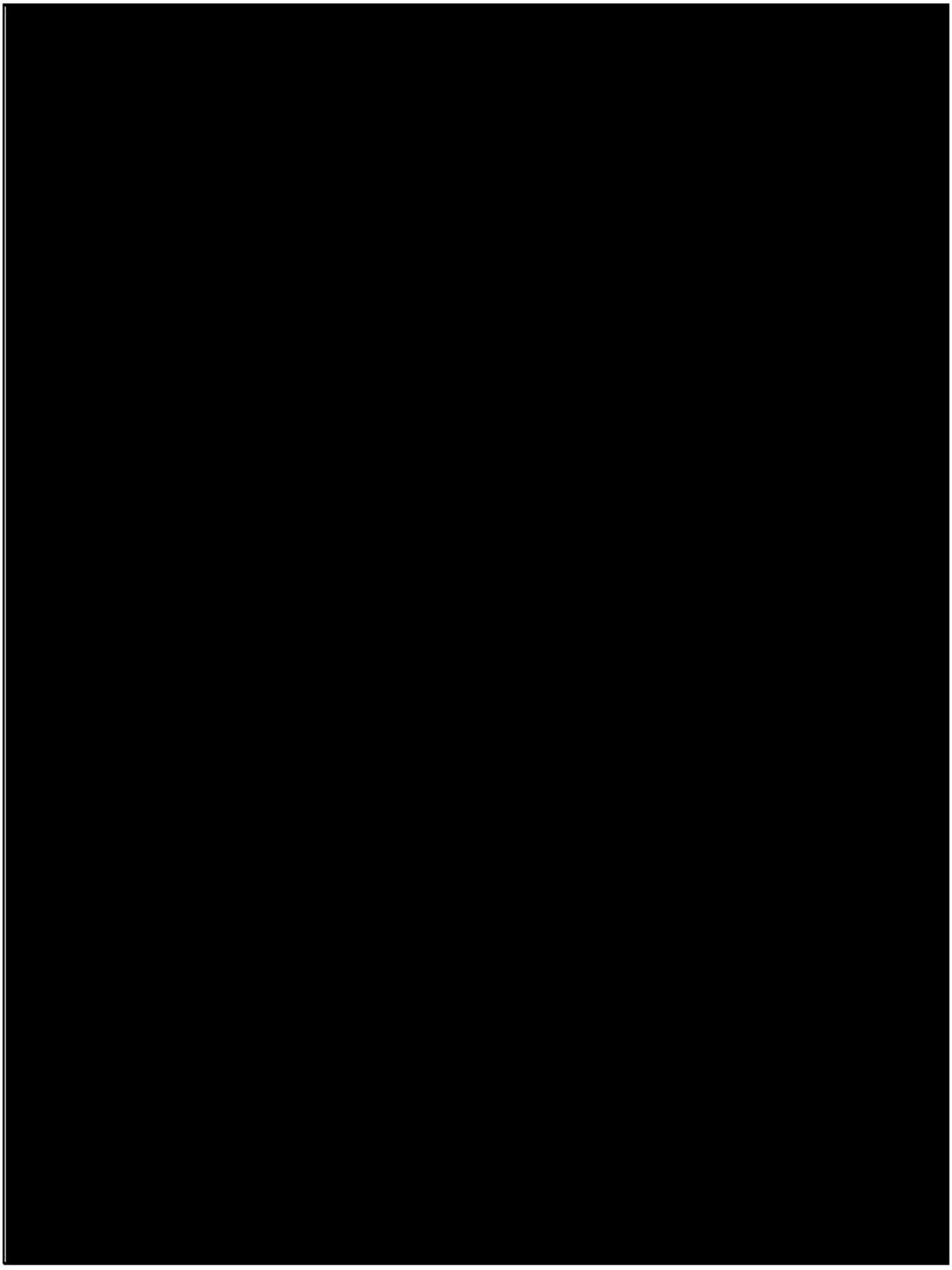
A review of the New York State Cultural Resources Information System (CRIS) indicated [redacted] S.

Table 1. CRIS: Documented Sites and State Museum Areas within 3.2 km (2 mi) of the Addendum APE

Map#	Unique Site Number (USN)	Type	Name	National Register Status	Comments
[redacted]					

[redacted]

[redacted]



2.3 Precontact Context

The precontact period of the larger Northeast was characterized by two broad subsistence patterns, both of which had profound influences on settlement types, land use patterns, and types of material culture used by Indigenous communities. The first subsistence pattern was associated with pre-agricultural hunter-gatherers, and developed with the arrival of highly mobile groups during the Paleoindian (11,000-9500 BC) and Early-Middle Archaic periods (8000-5000 BC) and flourished in the region from the Late Archaic through the early Middle Woodland (4000 BC - AD 700). During this hunter-gatherer period precontact communities relied almost solely on gathered plant resources, fish, and game animals for daily subsistence and overall mobility was fairly high as groups moved in search of available resources. Group mobility tended to compress through time, with small Paleoindian communities ranging widely across the landscape and later groups centered at seasonal basecamps within well-defined territories, often approximating regional watersheds. Hunting and gathering continued to be an important part of the subsistence base during the later farming period of the late Middle Woodland and Late Woodland (roughly AD 800-1600s), but a large part of the daily subsistence was increasingly shifted toward the production and consumption of the maize-beans-squash agricultural complex. This subsistence shift was associated with the development of more sedentary communities, and the construction of hamlet and village settlements near agricultural fields.

Precontact Sensitivity Assessment

[redacted]

2.4 Historic Context

The addendum APE is located in the Town of Clay along Verplank Road. This section of the town includes a mixture of typical rural lands (agricultural and wooded), suburban land, and light industrial development.

Prior to European settlement in the late 18th century the region that would become the Town of Clay formed a portion of the larger ancestral lands of the Onondaga Nation. The Three Rivers region in the west of the town at the confluence of the Oneida and Seneca Rivers and headwaters of the Oswego River was an important location for Haudenosaunee settlements, with the rivers providing access to lands to the north, east, and west. Dorothy Heller, the Town of Clay historian, noted that one of the many favored locales for the Onondaga people in the 1600s was around Caughdenoy in the northeast section of the Town of Clay along the Oneida River. It was in this location, as well as others along the Oneida River, where eel traps were set (Heller 2012).

The Town of Clay was organized in 1827 from the Town of Cicero, one of the original townships of the military tract in central New York. Early European groups to permanently come to the area included the Palatines (New York Dutch), who although initially settling in the Hudson Valley, started moving into central New York from the early 19th century. These early groups established hamlets with small industries and farms at locales such as: Dewey's Curve, Morgan's Landing, Pitcher's Corners, Morgan Settlement, Beckertown, Lynnville, Hall's Corners, Euclid, and Oak Orchard. Travel and trade were initially conducted over land by wagons, but with the opening of the Erie Canal in 1825, and later the railroads in the 1870s the growth of settlements increased on the area (Heller 2012).

Historic maps for the addendum APE in the Town of Clay were inspected to define the location of any MDSs within the area (see Figures 7-13). For Onondaga County and the Town of Clay, the maps date from 1852 to 1973, and all depict the addendum APE within an area largely devoid of dense historic settlements. The maps show a few historic properties along Verplank Road and nearby Caughdenoy Road, although none appear near the addendum APE.

The 1973 USGS *Brewerton, NY* Quadrangle depicts a radio tower within the addendum APE. The tower was taken down between 2009 and 2011 as aerial photography from Google Earth shows the radio tower in the area from 2003-2009, but not after 2011. A small grassy and gravelly area just off Verplank Road within the addendum APE marks the location of the former radio tower. This area is marked on the addendum APE in Figure 14.

Historic Sensitivity Assessment

[redacted]

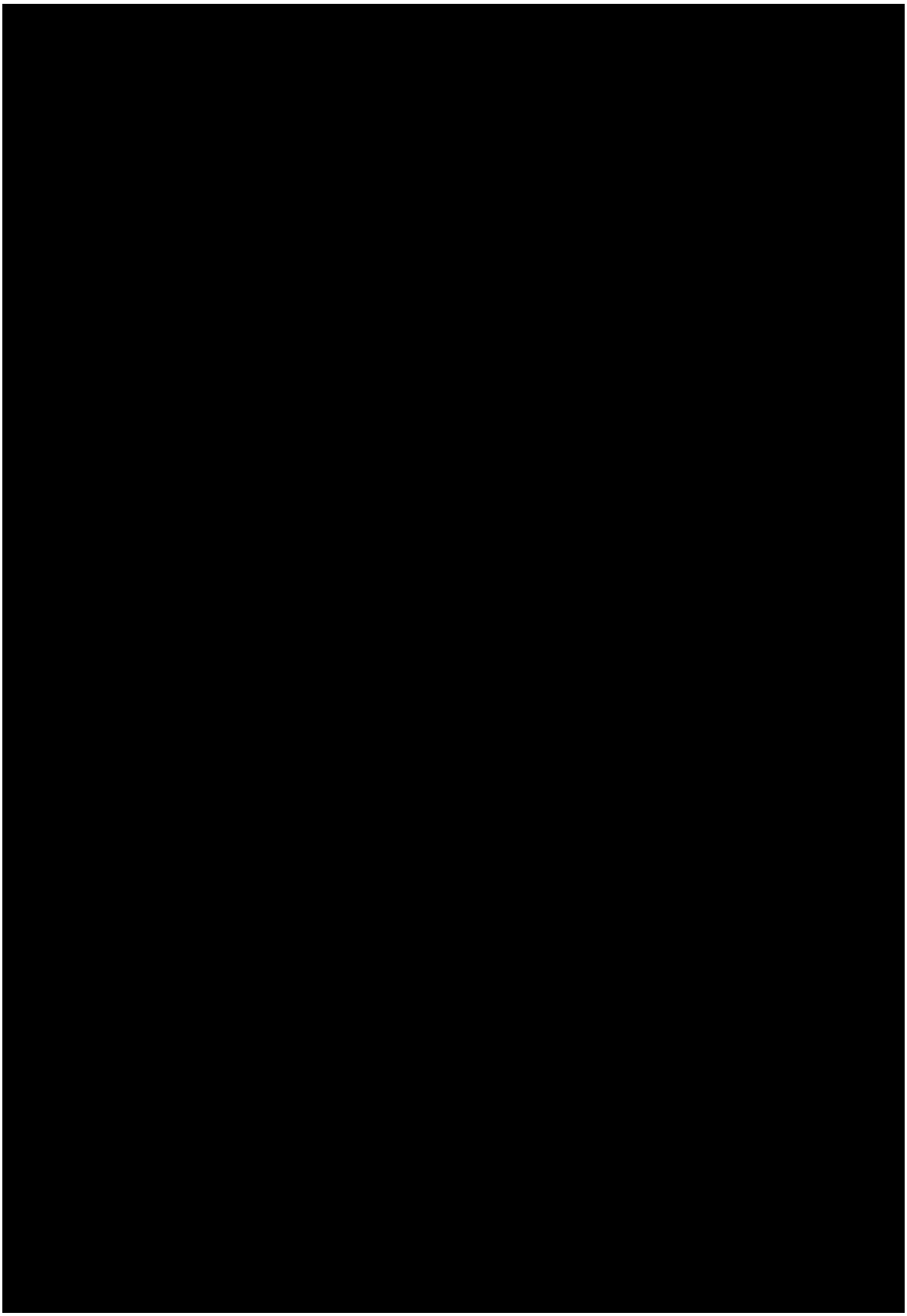


Figure 7. 1852 Fagan and Brown *Map of Onondaga County* showing the location of the addendum APE.

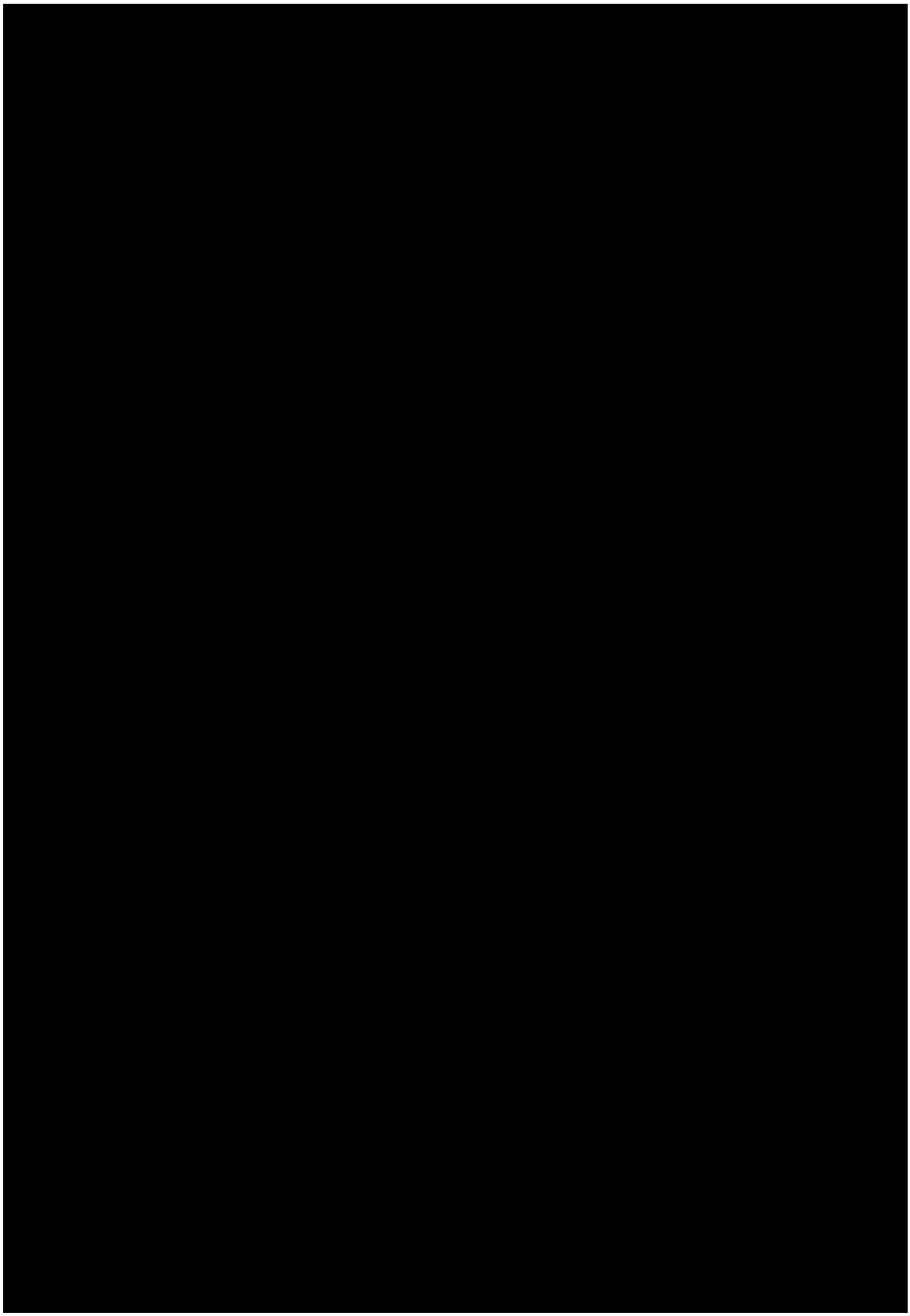


Figure 8. 1874 Sweet *Atlas of Onondaga County* showing the location of the addendum APE.

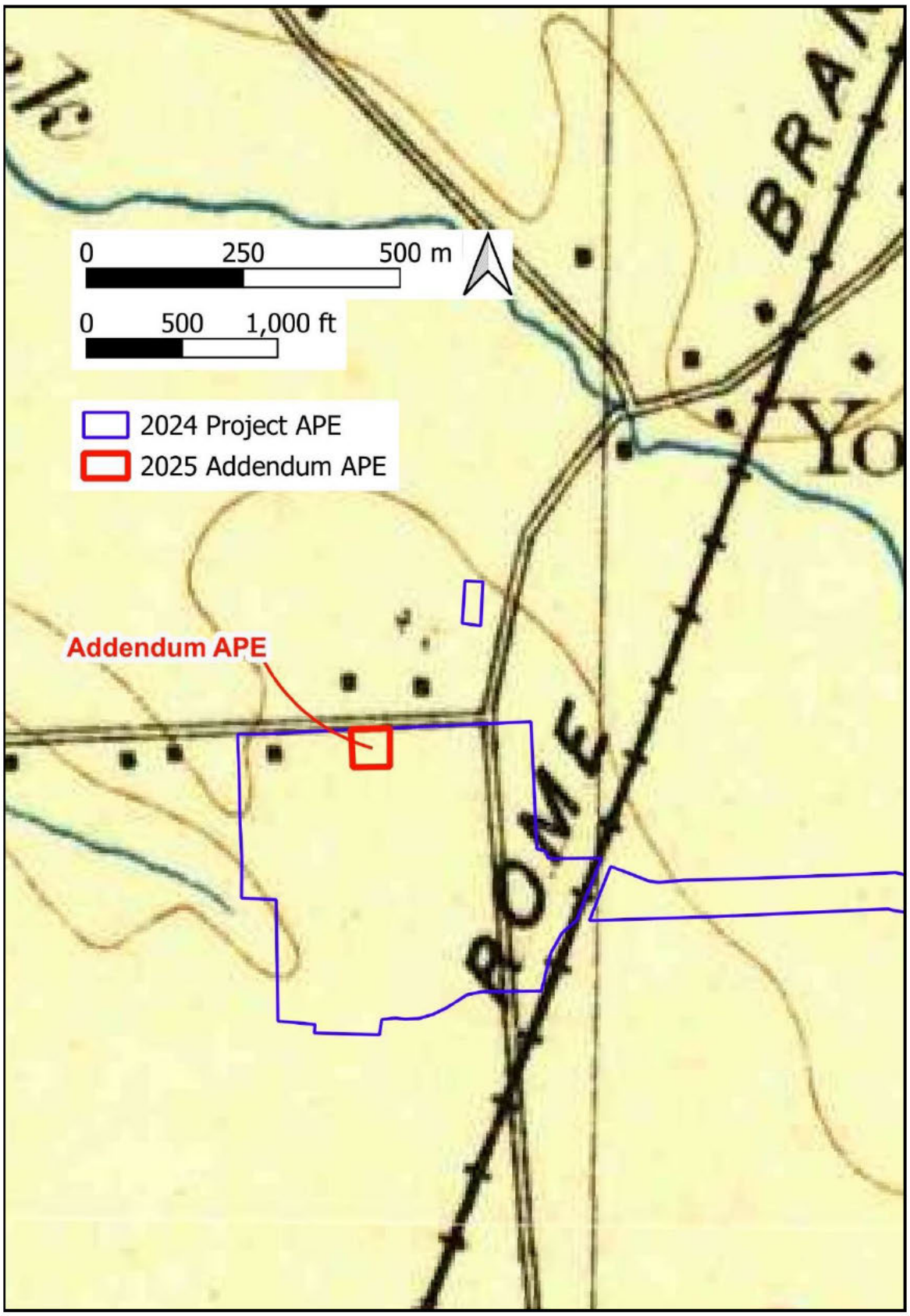


Figure 9. 1895 USGS Syracuse, NY quadrangle showing the location of the addendum APE.

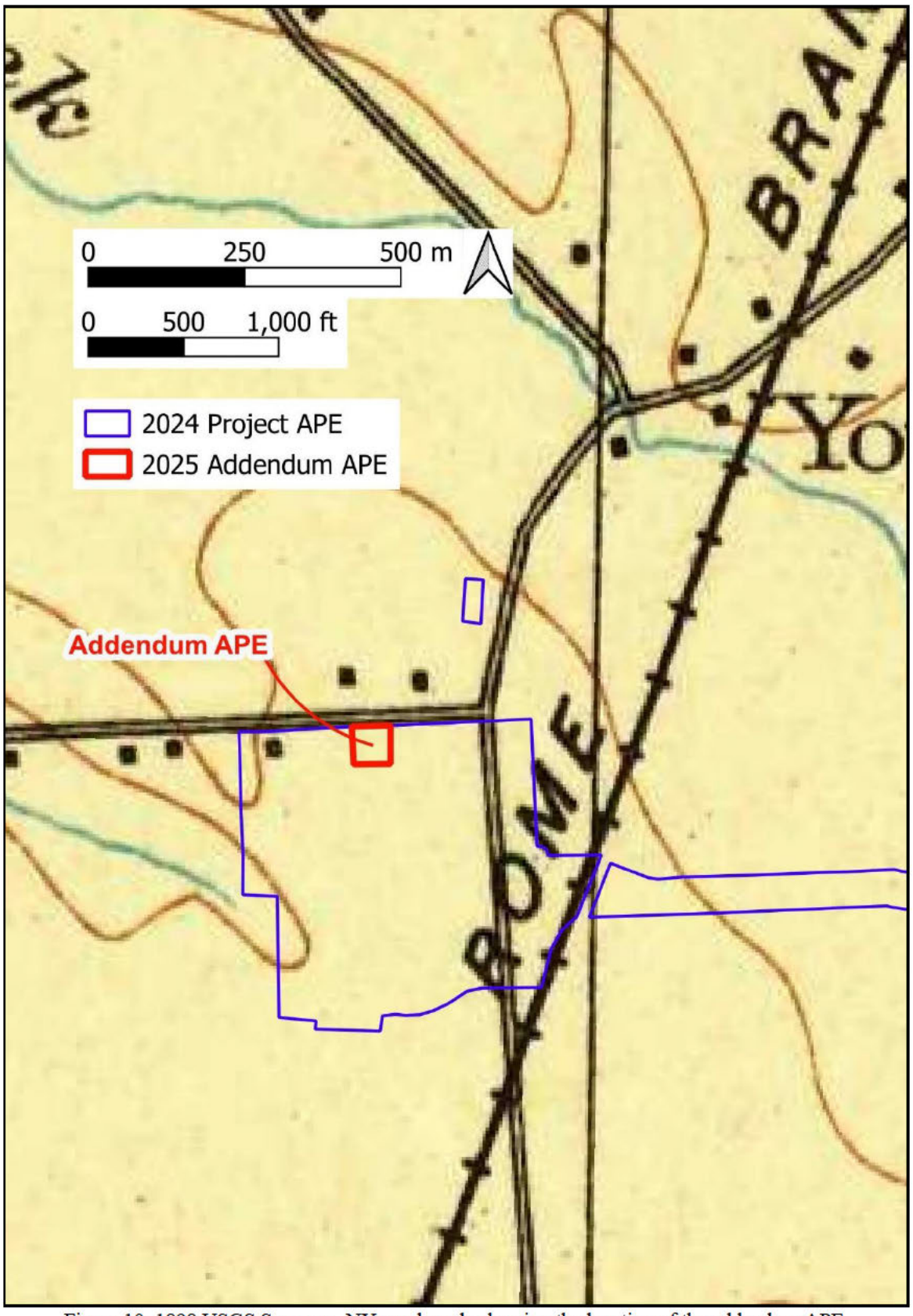


Figure 10. 1898 USGS Syracuse, NY quadrangle showing the location of the addendum APE.

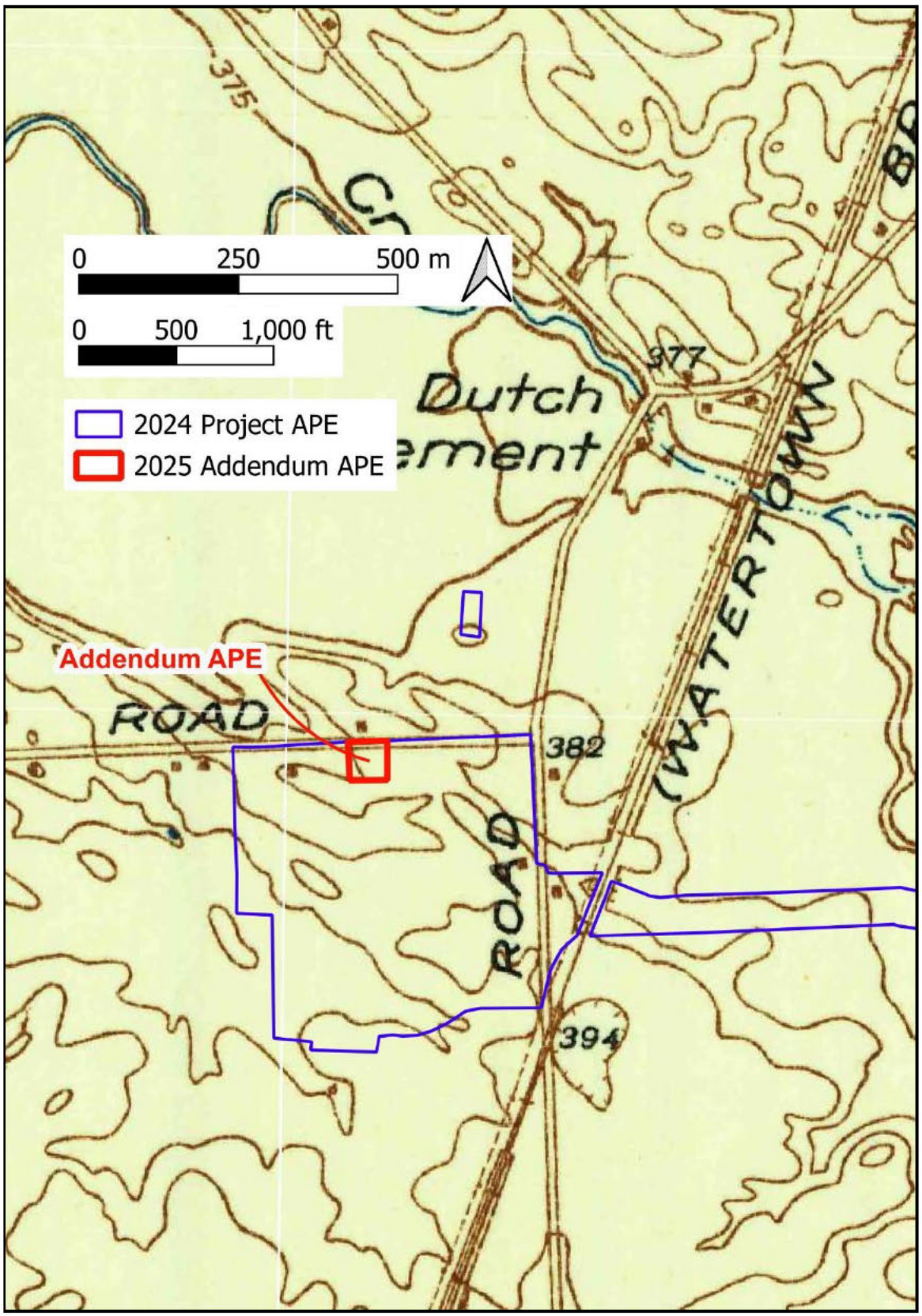


Figure 11. 1940 USGS Brewerton, NY quadrangle showing the location of the addendum APE.

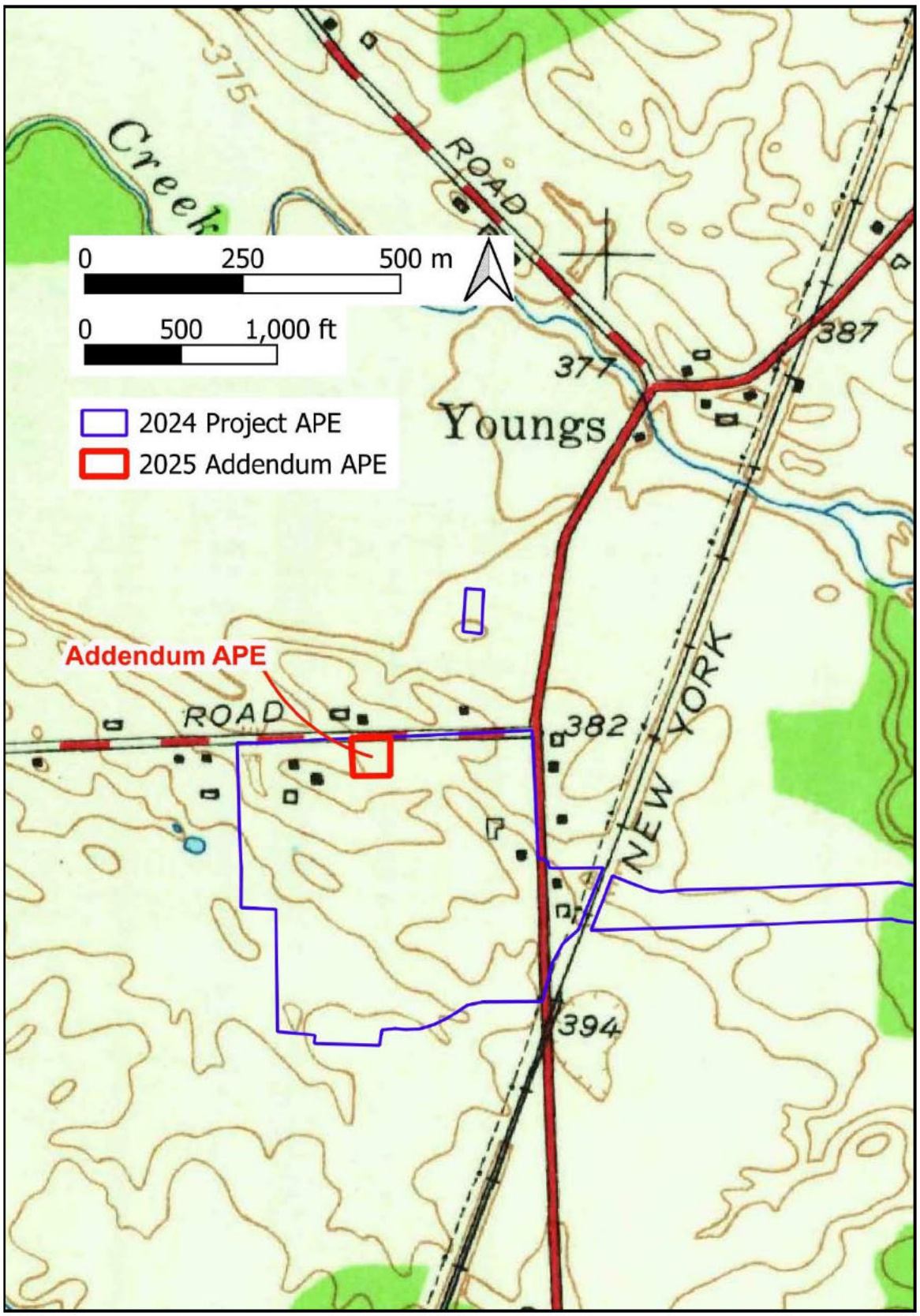


Figure 12. 1957 USGS Brewerton, NY quadrangle showing the location of the addendum APE.

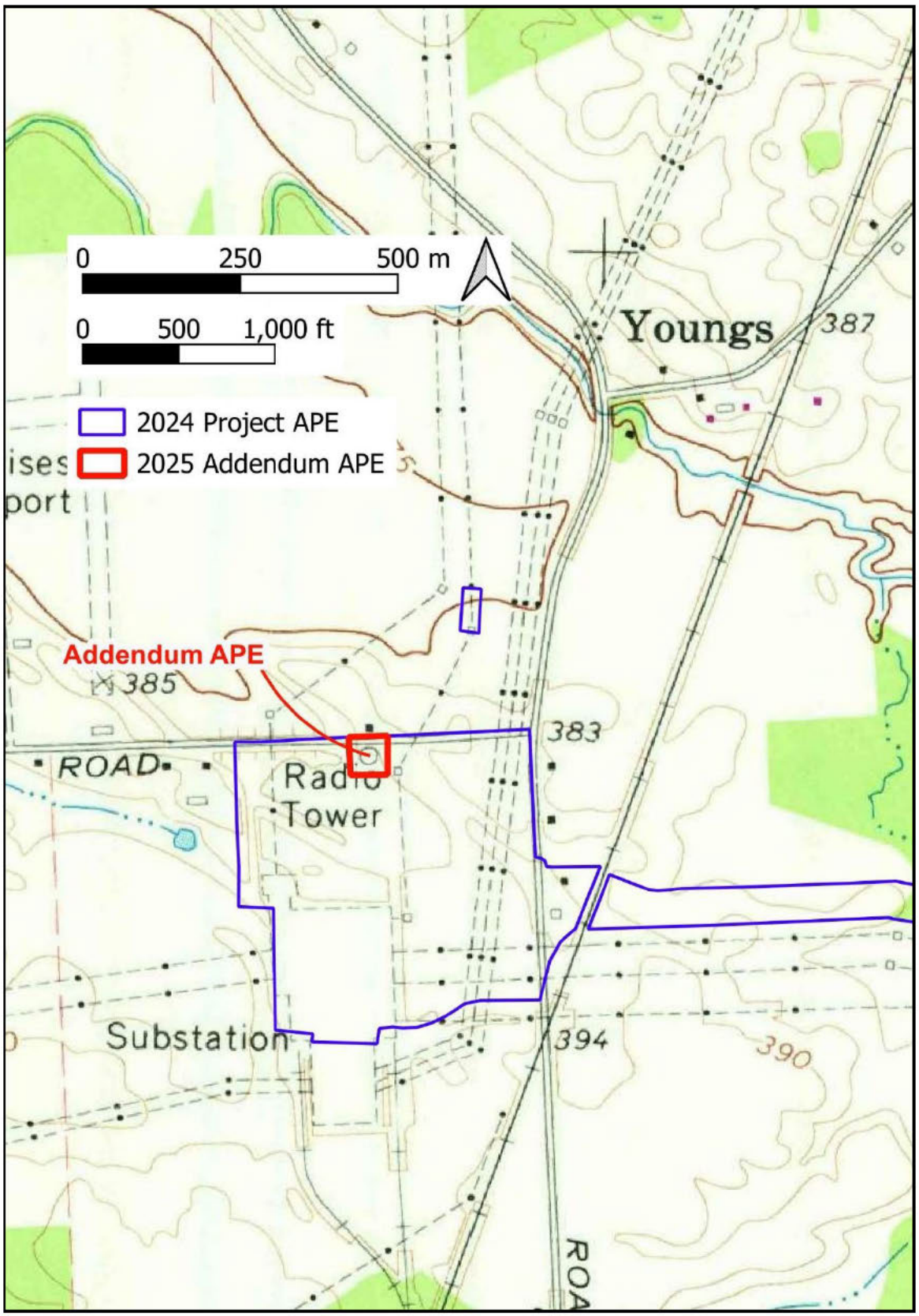


Figure 13. 1973 USGS Brewerton, NY quadrangle showing the location of the addendum APE. (note the location of a radio tower within the addendum APE)

III. ADDENDUM SURVEY METHODS

3.1 General Field Methodology

Field work for the addendum survey was based on the testing guidelines from the New York State Historic Preservation Office (NYS SHPO). The guidelines define zones of high sensitivity, where precontact and/or post-contact/historic archaeological sites are most likely to be identified, as those:

(1) [redacted]

3.2 Testing Procedures

The addendum survey field work was completed on April 9, 2025. Tony Gonyea, a Faithkeeper and a representative of the Onondaga Nation, was present with PAF archaeologists as a monitor during the survey in the event that any precontact sacred cultural items or features were uncovered within the addendum APE.

The STPs were excavated with hand tools and were generally 40 cm (16 in) in diameter. STPs extended at least 15 cm (6 in) into culturally sterile B-horizon soils, unless obstructed by rock. All soil was sifted through 7 mm (0.25 in) hardware cloth, and cultural material from each recognizable soil horizon were bagged separately. Notation was made of coal ash, brick fragments, and any post-1975 materials such as plastic and roadside debris, and these items were discarded in the field. Written descriptions of soil color and texture, cultural material content, and digging conditions were made at the time of excavation. The STP soil records and the cultural material catalog are presented in Appendix II.

3.3 General Laboratory Methods

No cultural material was found within the addendum APE.

The resulting STP notes and soil information were entered into a relational database management program (Paradox) to facilitate subsequent analysis, and are included in Appendix 2.2. All of the notes and other documentation of the reconnaissance testing are curated according to federal (36 CFR Part 79) and state (NYAC 1994) guidelines in the facilities of the Department of Anthropology at Binghamton University.

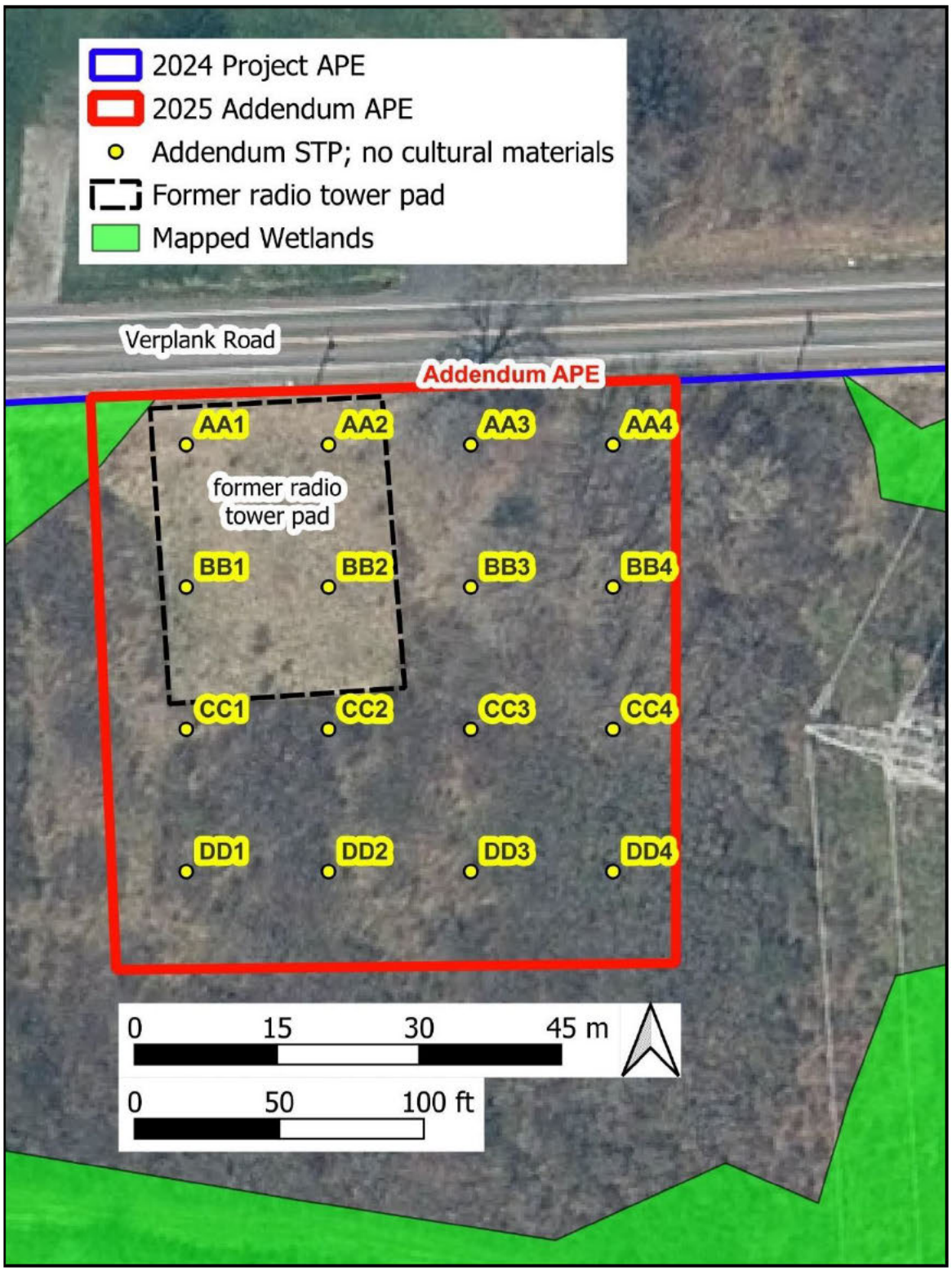


Figure 14. Location of STPs within the addendum APE; note mapped wetlands to west, south, and east, as well as radio tower pad.

IV. ADDENDUM SURVEY RESULTS

Archaeologists excavated 16 STPs within the APE for the National Grid – Micron 345 kV Electric Service Project addendum survey. No precontact or post-contact/historic cultural materials were found and no precontact or post-contact/historic archaeological sites were identified in the addendum APE.

Soil characteristics noted for STPs across the addendum APE mostly matched the anticipated lacustrine types predicted for the project area (Collamer and Rhinebeck), although within and around the former radio tower pad gravels were mixed in with or capped the A horizon soils. The A horizon soils generally appeared as a dark brown or dark grayish-brown silt loam and clay loam. The underlying B horizon subsoil appeared as a yellowish-brown silt loam or clay with roots, and often water was pooling in the bottom of the STP, consistent with the poor drainage of the area. Average depths and range of depths for the A horizon, and final STP depths are noted below:

	Average Depth	Minimum Depth	Maximum Depth
A Horizon	23 cm (9 in)	10 cm (4 in)	49 cm (19 in)
Final STP Depth	40 cm (16 in)	33 cm (13 in)	67 cm (26 in)

V. ADDENDUM SURVEY RECOMMENDATIONS

Archaeologists surveyed all areas within the APE and no archaeological sites were identified. We recommend that the proposed project will not impact any cultural resources. We recommend that no further archaeological work is required within the addendum APE for the National Grid – Micron 345 kV Electric Service Project.

APPENDIX I: References Cited

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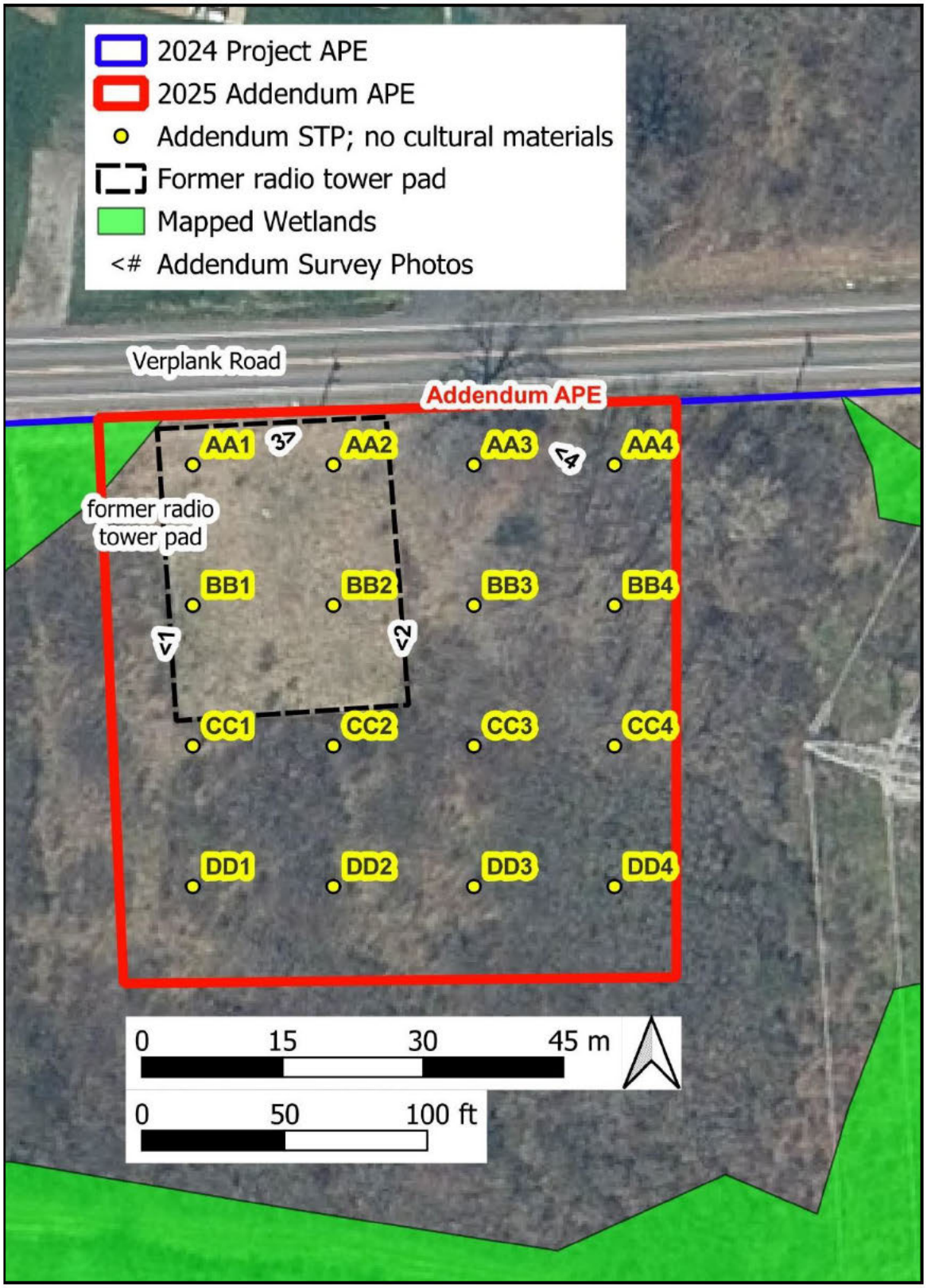
1895 *Syracuse, NY* quadrangle.
1898 *Syracuse, NY* quadrangle.
1940 *Brewerton, NY* quadrangle.
1957 *Brewerton, NY* quadrangle.
1973 *Brewerton, NY* quadrangle.

APPENDIX II: STP Soil Catalog

Pa=Pale Lt=Light Md=Medium Dk=Dark
Br=Brown Gr=Gray Yl=Yellow Ol=Olive Tn=Tan Rd=Red Bk=Black Wh=White
Si=Silt Sa=Sand Cl=Clay Lo=Loam Gvl=Gravel
P=Precontact H=Historic N=No Cultural Material
Disc.=Discarded

STP	Level	Depth	Soil Description	CM	Crew	Date
AA1	1	0-30	Dk Gr Br Sa w/ Gvl (Road Fill)	N	JF/TB	4/9/25
AA1	2	30-46	Yl Br Si Lo	N	JF/TB	4/9/25
AA2	1	0-22	Dk Br Si Lo	N	JF/TB	4/9/25
AA2	2	22-40	Dk Yl Br Si Lo	N	JF/TB	4/9/25
AA3	1	0-24	Dk Br Si Lo w/ Roots	N	JF/TB	4/9/25
AA3	2	24-43	Yl Br Si Lo	N	JF/TB	4/9/25
AA4	1	0-20	Dk Br Si Lo	N	JF/TB	4/9/25
AA4	2	20-38	Dk Yl Br Si Lo	N	JF/TB	4/9/25
BB1	1	0-15	Very Dk Br Si Lo w/ Gvl	N	JF/TB	4/9/25
BB1	2	15-38	Dk Ol Br Si Lo w/ Gvl; Standing Water at Base	N	JF/TB	4/9/25
BB2	1	0-14	Very Dk Br Sa Lo w/ Gvl (Fill)	N	JF/TB	4/9/25
BB2	2	14-25	Dk Ol Br Sa Lo w/ Gvl (Fill)	N	JF/TB	4/9/25
BB2	3	25-42	Yl Br Sa Lo; Standing Water at Base	N	JF/TB	4/9/25
BB3	1	0-13	Dk Br Si Lo	N	JF/TB	4/9/25
BB3	2	13-33	Dk Yl Br Si Lo	N	JF/TB	4/9/25
BB4	1	0-21	Gr Br Si Lo	N	JF/TB	4/9/25
BB4	2	21-42	Yl Br Si Lo	N	JF/TB	4/9/25
CC1	1	0-10	Dk Br Si Lo w/ Organics & Roots	B	KCL/LH	4/9/25
CC1	2	10-23	Br Cl Lo	N	KCL/LH	4/9/25
CC1	3	23-36	Mottled Yl Br Cl Lo & Gr Br Cl; Stopped by Standing Water	N	KCL/LH	4/9/25
CC2	1	0-22	Dk Br Wet Si Lo w/ Roots	N	KCL/LH	4/9/25
CC2	2	22-41	Mottled Gr Br & Yl Br Wet Cl Lo	N	KCL/LH	4/9/25
CC2	3	41-49	Dk Br Wet Cl Lo	N	KCL/LH	4/9/25
CC2	4	49-67	Yl Br Wet Cl Lo	N	KCL/LH	4/9/25
CC3	1	0-15	Dk Br Si Lo w/ Roots	N	KCL/LH	4/9/25
CC3	2	15-31	Dk Br Cl Lo Mottled w/ Gr Br Cl	N	KCL/LH	4/9/25
CC3	3	31-47	Dk Yl Br Cl Lo w/ Standing Water at Base	N	KCL/LH	4/9/25
CC4	1	0-31	Br Si Lo w/ Roots	N	KCL/LH	4/9/25
CC4	2	31-49	Dk Yl Br Cl Lo w/ Standing Water at Base	N	KCL/LH	4/9/25
DD1	1	0-17	Dk Br Si Lo	N	JF/TB	4/9/25
DD1	2	17-37	Dk Yl Br Si Lo	N	JF/TB	4/9/25
DD2	1	0-20	Dk Br Wet Si Lo w/ Roots	N	JF/TB	4/9/25
DD2	2	20-37	Dk Yl Br Wet Si Lo w/ Roots	N	JF/TB	4/9/25
DD3	1	0-23	Dk Br Si Lo	N	JF/TB	4/9/25
DD3	2	23-42	Dk Yl Br Si Lo; Standing Water at Base	N	JF/TB	4/9/25
DD4	1	0-27	Dk Gr Br Si Lo w/ Roots	N	JF/TB	4/9/25
DD4	2	27-41	Dk Yl Br Si Lo w/ Roots & Standing Water at Base	N	JF/TB	4/9/25

APPENDIX III: Project APE Map



APPENDIX IV: SHPO Correspondence

New York State
Parks, Recreation and
Historic Preservation

KATHY HOCHUL
Governor

RANDY SIMONS
Commissioner Pro Tempore

February 18, 2025

David Frenkel
Department of Commerce
HCHB Room 7419
1401 Constitution Ave.
Washington, D.C. 20230

Re: Chips Incentives Program
National Grid Micron 345 kV Electric Service Project
Town of Clay, Onondaga County
23PR05061

Dear Mr. Frenkel:

Thank you for requesting the comments of the New York State Historic Preservation Office ("NYSHPO"). We have reviewed the CHIPS Program Office's ("CPO") January 31, 2025 request for Section 106 Review of the National Grid – Micron 345 kV Electric Service Project in accordance with Section 106 of the National Historic Preservation Act of 1966. These comments are those of the NYSHPO and relate only to Historic/Cultural resources.

Based upon this review, the NYSHPO understands that CPO is requesting Section 106 comments on the below documents.

• Revised Phase IA Archaeological Survey Report (December 2023; 23PR00493) and the Revised Phase IB Work Plan (November 2023; 23PR00604) for the National Grid Micron 345 kV Electric Service Project (23PR05061) prepared by The Public Archaeology Facility (PAF) at SUNY Binghamton University, Consulting Archaeologists

• Phase IB archaeological survey report for the National Grid Micron 345 kV Electric Service Project (23PR05061) prepared by the Public Archaeology Facility (PAF) at SUNY Binghamton University, Consulting Archaeologists (January 2024; 24SR00002)

• Phase II Archaeological Survey report for the National Grid Micron 345 kV Electric Service Project (23PR05061) prepared by The Public Archaeology Facility, SUNY Binghamton University, Consulting Archaeologists (February 2024; 24SR00068)

[redacted]

Based on the results of the Phase II archaeological testing, it is the opinion of the NYSHPO that the research potential of both sites has been thoroughly explored and that no further archaeological investigations are warranted. The OPRHP has no further archaeological concerns for Area of Potential Effects ("APE") included in the above referenced survey documents.

Following the Phase IB and Phase II testing described above, two parcels totaling approximately one (1) acre have been added to the APE for this undertaking. The NYSHPO recommends that addendum Phase IB archaeological testing is warranted for these two parcels.

We note that the Onondaga Nation may request to monitor during the addendum Phase IB archaeological fieldwork. We understand that other interested Indigenous Nations may request to monitor or visit during the addendum Phase IB fieldwork.

If you have any questions, I can be reached at nancy.herter@parks.ny.gov.

Sincerely,

Nancy Herter

Nancy Herter
Director, Technical Preservation Services Bureau

cc. Matthew Chatfield, NYS Empire State Development
Beynan Ransom, NYS Department of Environmental Conservation
J.R. Russo, National Grid

Proposed Micron Semiconductor Fabrication Project:

Natural Gas Line

TOWN OF CLAY; ONONDAGA COUNTY, NEW YORK

Phase 1B Archaeological Investigation Work Plan

SHPO Project Review Number 23PR08021

Prepared for:

Micron New York Semiconductor Manufacturing LLC (Micron)
6360 South Federal Way
Post Office Box 6
Boise, Idaho 83716

Prepared by:

AKRF, Inc.
440 Park Avenue South, 7th Fl
New York, NY 10016
212-696-0670

MARCH 2025
Revised MAY 2025

[redacted]

Phase 1B Archaeological Work Plan

1. PROPOSED PROJECT

Micron New York Semiconductor Manufacturing LLC (Micron), a Delaware limited liability company and wholly owned subsidiary of Micron Technology, Inc., is proposing to acquire the approximately 1,400-acre White Pine Commerce Park site, located at 5171 New York State (NYS) Route 31, in the Town of Clay, Onondaga County, New York, from the Onondaga County Industrial Development Agency (OCIDA) at latitude and longitude: 43.190792, −76.157056. Micron's proposed semiconductor manufacturing facility campus ("Micron Campus") will be built over an approximately 16-year period. It will consist of the construction of four approximately 160-foot-tall (approximately 1.31-million-square-foot) memory fabrication facilities ("fabs"). Each fab location would be supported by additional structures, including central utility buildings; warehouse space; product testing space; electrical substations; water and wastewater pre-treatment and storage buildings; and gas storage. Access to the Micron Campus would be from NYS Route 31, Caughdenoy Road, and a secondary access from NYS Route 11. An approximately 38.24-acre parcel on the west side of Caughdenoy Road (Town of Clay Tax Parcels 046.-02-03.2 and 046.-01-19.1) (the "Rail Spur Site") would be used to deliver construction aggregate to the Micron Campus by rail spur and overhead conveyance system. Micron will also construct an employee healthcare center, childcare center, and recreation center and an athletic field at an approximately 30.2-acre parcel at 9100 Caughdenoy Road (Town of Clay Tax Parcel 042.-01-13.0, the "Childcare Site"). Collectively, the above actions are considered the Proposed Project (see **Figure 1**).

ENVIRONMENTAL REVIEW

The CHIPS Program Office (CPO) within the National Institute of Standards and Technology (NIST) of the United States Department of Commerce is serving as the lead for Section 106 of the National Historic Preservation Act (Section 106). A Programmatic Agreement will be executed by all involved parties to document the commitments to completing all future phases of cultural resources analysis, including archaeological testing. The Programmatic Agreement will also describe the measures that would be carried out to assess, identify, and treat any identified archaeological sites, as well as any unanticipated discoveries during construction.

2. AREA OF POTENTIAL EFFECTS

Niagara Mohawk Power Corporation dba National Grid plans is proposing natural gas infrastructure improvements to support the construction and operation of the Proposed Project. To meet the project's estimated demand for natural gas, National Grid proposes to expand Gas Regulator Station (GRS) 147 and construct an approximately 3.1-mile long, 16-inch diameter natural gas distribution line. The improvements would involve the construction of GRS 147A on the existing GRS 147 property at 4459 NYS Route 31 (Onondaga County Tax Parcel 029-01-13.1) The new gas line would extend from GRS 147A to the Micron Campus (approximately 3.1 miles) (see **Figures 1 and 2**).

Construction of GRS 147A, the below-grade gas line, and use of temporary workspace/laydown areas would not require the permanent acquisition of any properties or the demolition, moving, or alteration of any structures. The gas line would be constructed via cut-and-cover construction and horizontal directional drilling (HDD) at depths of 50 to 70 feet or more underneath Van Hoesen Road, and conventional boring methods underneath the CSX railroad tracks and Caughdenoy Road. All drilling or boring locations would require the excavation of entry and exit pits at either end of the area to be installed.

Temporary workspace/laydown areas would be necessary along the entire route. Between the location of GRS 147A and the existing easement east of Grange Road, these temporary workspaces would be located in incontiguous areas along the north side of NYS Route 31and would extend partially into adjacent private properties. The majority of these areas would include grassy lawns adjacent to the northern side of the road. However, the temporary workspace/laydown areas include a parcel at the northwest corner of NYS Route 31 and Henry Clay Boulevard (Tax Parcel 029.-01-09.1). This parcel at 4541 NYS Route 31 includes a paved lot with a one-story brick commercial building constructed in the late 20th century, which would not be affected by the construction of the gas line. North of NYS Route 31, the temporary work areas would extend on either side of the easement. An existing access road extending south of Ver Plank Road would be used to provide access to the work area located south of the Clay Substation and west of Caughdenoy Road. Improvements to this access road may be required to support the effort. In addition, areas within the temporary workspace/laydown areas are subject to potential tree clearing to make way for equipment access and/or material storage. In areas where tree stumps can be covered with mats to create a workable surface, this will be undertaken. However, there may be locations where tree stumps would have to be removed.

3. BACKGROUND INFORMATION AND SENSITIVITY DETERMINATION

CURRENT SITE CONDITIONS

The portion of the archaeological resources APE as analyzed in this Archaeological Work Plan consists of the location of the proposed Natural Gas Line (see **Figure 2**). The existing GRS consists of a gravel area with above-ground equipment and subsurface infrastructure, surrounded by a chain-link fence. Construction of GRS 147A at the existing location of GRS 147 would entail the installation of additional above-grade equipment and subsurface infrastructures northeast of the existing fenced area. The existing fence would be extended around the GRS 147A equipment area upon completion. Construction of GRS 147A, the below-grade gas line, and use of temporary workspace/laydown areas would not require the permanent acquisition of any properties or the demolition, moving, or alteration of any structures. The remainder of the Natural Gas Line route will extend beneath existing streetbeds or through easements that extend through private property.

PRECONTACT PERIOD ARCHAEOLOGICAL SENSITIVITY

The precontact sensitivity of sites in the northeastern United States is generally evaluated by a site's proximity to level slopes (e.g., less than 12 to 15 percent), water courses, well-drained soils, and previously identified precontact archaeological sites (NYAC 1994). The Natural Gas Line portion of the APE is situated in a generally level area in the immediate vicinity of Youngs Creek, Mud Creek, and Shaver Creek and their associated wetland networks. [redacted]

HISTORIC PERIOD ARCHAEOLOGICAL SENSITIVITY

As described in the Phase 1A Study, dense settlement of the area by individuals of European descent did not begin until the late 18th and early 19th centuries, though before that time, trade networks associated with Indigenous communities, French Jesuit priests, and other European colonizers extended through the region and trading activities or trade-related travel may have occurred on or in the vicinity of the APE. Historical development within the Natural Gas Line portion of the APE was clustered around [redacted]

4. RESEARCH DESIGN

The objective of the Phase 1B Archaeological Investigation of the APE is to determine the presence or absence of historic and precontact period archaeological deposits within the undisturbed portions of the APE. If present, the Phase 1B Archaeological Investigation will make an assessment as to whether the resources are in sufficient quantity/concentration and of sufficient research value to determine if a Phase 2 Archaeological Survey/Evaluation is required to further delineate the boundaries of the archaeological site and to evaluate its potential significance. The determination of an archaeological site's significance is largely dependent on the types of potential archaeological resources that could be encountered within the APE and on the specific research questions that can be answered through the analysis of those resources. A professional, modern archaeological investigation could produce valuable data about the precontact occupation of the area that could be compared and contrasted with previously collected data. This could produce new data and add to existing knowledge of life in the vicinity of what is now Onondaga County during the historic and precontact period.

5. ARCHAEOLOGICAL TESTING PROTOCOL

Although documentary research determines archaeological potential, excavation for the purposes of archaeological testing is required to determine if resources are *actually* present on a site. Therefore, this Archaeological Work Plan addresses Phase 1B presence/absence testing and includes a contingency for the evaluation for National Register eligibility (e.g., a Phase 2 Archaeological Survey/Evaluation), which may become necessary. The Phase 1B Archaeological Investigation will be conducted in accordance with the "Phase 1 Archaeological Report Format Requirements" as issued by SHPO in 2005, and with the "Standards for Cultural Resources Investigations and the Curation of Archaeological Collections in New York State" as issued by the New York Archaeological Council (NYAC) in 1994 and adopted by SHPO in 1995.

Archaeological testing within the APE will take place within the areas of archaeological sensitivity identified in the Phase 1A Study as shown on **Figure 2**. Subsurface testing will primarily consist of hand-excavated shovel test pits (STPs). No mechanical testing is proposed as part of this Phase 1B Archaeological Investigation. The testing strategy outlined in this protocol may be altered based on conditions observed in the field, including previously unforeseen obstructions.

For all testing, a representative from the Onondaga Nation will be retained to oversee the archaeological testing to determine if sacred objects or other items of cultural importance are encountered. The monitor will be compensated for their work at an hourly rate to be determined in coordination with the Onondaga Nation. In the event that the Oneida Indian Nation or other Indigenous Nations request to have an on-site monitor present during the archaeological testing, such

requests will be accommodated. The Onondaga Nation will be engaged to discuss suggestions for a local archeological firm or a firm with local experience to be included in the investigation team with staff members that have local expertise and a history of and capacity to work closely with Indigenous Nation monitors and Section 106 representatives. The archaeological firm should have expertise in Haudenosaunee and Onondaga culture and artifacts and should demonstrate their respect for and ability to work with Onondaga Nation representatives.

SUBSURFACE TESTING

Testing has been recommended throughout undisturbed and accessible portions of the entire APE. No testing is proposed in visibly disturbed areas, paved areas (if any), areas with standing water. If any portions of the APE will not be impacted by the proposed Natural Gas Line, those areas may be excluded from the testing program.

STPs will be excavated at intervals of approximately 50 feet (15 meters) across a linear transect along the line the proposed Natural Gas Line to sample enough of the area to determine if intact precontact resources or an intact buried ground surface are likely to be present. If larger areas require testing, a grid may be established at the same interval. The 50-foot (15-meter) interval is established as the preferred interval for subsurface shovel testing as outlined in the NYAC archaeological guidelines as issued in 1994 and adopted by SHPO in 1995. In locations where physical conditions suggest heightened archaeological sensitivity are observed (e.g., in areas where soil drainage is better; where surficial indications or vegetation suggesting prior disturbance are absent; where artifacts are observed on exposed/cleared ground surfaces; or where STPs are positive for archaeological resources), the interval may be narrowed to 25 feet (7.5 meters). In the event that submerged soils or areas of visible disturbance are present, STPs may be excavated at an interval of 100 feet (30 meters) to confirm the limits of disturbance or certain soil types. STPs will be placed along linear transects or established grids depending on the landscape of the area being tested. If mature trees, large soil/fill deposits, slopes greater than 10 percent, or other obstructions are present, STPs may be offset or written-off, depending on the discretion of the archaeological consultant.

Inundated wetland areas that may have been dry, inhabitable land in the past will be tested where possible. Disturbed or saturated soils may be tested at a 100-foot (30-meter) interval to confirm the limits of saturated soils as identified by the USDA soil survey. Additional STPs may be judgmentally placed in areas deemed testable by the archaeological team. These areas where testing may be possible may include isolated elevated or dry areas within otherwise inundated wetlands. In the event that wetland areas are present that cannot be physically tested in the manner described previously, alternative means of documentation may be considered that include, but are not limited to, monitoring during construction. A plan for further examination of submerged areas will be determined based on observations made in the field regarding the viability of testing submerged areas.

Each STP will be approximately 16 to 18 inches in diameter and excavated to a depth of approximately 2 to 3 feet, or until sterile subsoil is encountered. It is expected that 200 to 250 STPs will be required to test the entire easement and that the testing may be completed in stages. The exact number of STPs will depend on the extent of visible disturbance/obstructions observed in the field. If isolated precontact archaeological deposits are identified in the STPs placed along the 50-foot interval, additional STPs will be excavated at closer intervals—one each at a distance of 3 feet and 10 feet to the north, south, east, and west, or eight radial STPS total—in the vicinity of the find to determine the horizontal and vertical extents of potential artifact deposits. Radial STPs will not be excavated when two of more precontact artifacts are found in consecutive shovel tests along the 50-foot grid.

Hand-excavated soils in areas where intact, natural soils are identified will be screened through quarter-inch steel mesh. Fill materials and disturbed soils will not be screened. Artifacts will be systematically collected from hand-excavated soils and will be placed in labeled plastic bags.

In addition to the excavation of STPs, where feasible, testing may involve the use of plowing and disking. In the event that this method is pursued as part of the testing plan, the surface survey will follow the protocols outlined in SHPO's *Phase I Archaeological Report Format Requirements* issued in 2005. Plowed areas will be a minimum of 10 feet (3.3 meters) in width and will be spaced a maximum of 50 feet (15 meters) apart in areas with 70 percent visibility at a minimum. Systematic pedestrian transects will be spaced at the dimensions stated above in plowed areas.

All artifacts recovered through screening will be placed in labeled plastic bags according to stratigraphic level.

IDENTIFICATION OF ARCHAEOLOGICAL FEATURES

Precontact archaeological features can include hearths, arrangements of postholes, or other evidence of camps or occupations sites. Historic features can include shaft features (e.g., privies, cisterns, or wells), foundation remnants, or middens. Precontact or historic features or buried ground surfaces encountered during testing would be sufficiently sampled so as to indicate if further testing (e.g., a Phase 2 Archaeological Survey/Evaluation) is necessary (see Contingency Tasks, below). At that time, the archaeological consultant will coordinate with CPO, who will coordinate with SHPO, Indigenous Nations, and other Consulting Parties to establish the scope of work for a Phase 2 Archaeological Survey/Evaluation Work Plan ("Phase 2 Work Plan"). Depending on the number of features or sites present within the APE, the Phase 2 Work Plan may include a sampling strategy developed in coordination with CPO, SHPO, the Indigenous Nations, and other Consulting Parties, which will determine the extent to which each feature is excavated and documented. The feature or features will then be re-excavated for the Phase 2 Archaeological Survey/ Evaluation.

AVOIDANCE PLAN

In the event that archaeological sites are identified within the APE that are potentially significant but that would not be impacted by the proposed Natural Gas Line, an "Avoidance Plan" may be prepared after completion of the Phase 1B Archaeological Investigation. The avoidance plan will describe how the project will successfully avoid and protect areas of archaeological sensitivity (e.g., agreements to mark and post sensitive areas to prevent disturbance from heavy machinery or staging activities, etc.). Should an Avoidance Plan be necessary, CPO will coordinate with SHPO, Indigenous Nations, and other Consulting Parties to develop the plan and to established the protocols for its finalization and approval.

HEALTH AND SAFETY PLAN

Testing completed as part of this Phase 1B Archaeological Investigation is not expected to exceed a depth of 4 feet below grade in most locations. In the event that such deep excavation will occur, a Health and Safety Plan (HASP) may be required in compliance with the standards of the United States Department of Labor's Occupational Safety and Health Administration (OSHA) pertaining to safe excavation practices.

6. CONTINGENCY PLAN FOR PHASE 2 ARCHAEOLOGICAL SURVEY/EVALUATION AND ADDITIONAL SITE PROTECTION MEASURES

As stated previously, the Phase 1B Archaeological Investigation testing will be designed to determine the presence or absence of archaeological resources, not to fully expose or document any encountered resources. A Phase 2 Archaeological Survey/Evaluation ("Phase 2 testing") occurs only if the Phase 1B Archaeological Investigation uncovers a site or evidence of a site that will need to be evaluated according to the National Register criteria for eligibility. Phase 2 testing is used "to obtain detailed information on the integrity, limits, structure, function, and cultural/historical context of an archaeological site sufficient to evaluate its potential National Register eligibility" (NYAC 1994: 4). It involves detailed research beyond that done in the first phase, greater sampling of the property, a greater variety in the types of testing units (i.e., including larger testing units and/or shovel test pits at closer intervals), and closer analysis of artifacts. If Phase 2 testing is necessary, it would be undertaken in consultation with CPO, SHPO, the Indigenous Nations, and other Consulting Parties. The Phase 2 testing would then determine if additional archaeological analysis (e.g., Phase 3 Mitigation/Data Recovery) is warranted in the event that the project cannot be redesigned to avoid significant archaeological sites. In the event that Phase 2 testing is required, a separate Work Plan will be prepared at that time for submission to CPO, SHPO, the Indigenous Nations, and other Consulting Parties as described above.

7. SITE DOCUMENTATION

Professional standards for testing, screening, recording features and stratigraphy, labeling, mapping, and photographing any identified archaeological resources will be applied during the Phase 1B Archaeological Investigation. Soil profiles including colors—recorded using Munsell soil color charts—and texture/inclusions will be recorded in field notes. Soil profiles will be included in the final report in tabular form supplemented by photographs and drawings as appropriate. Testing locations will be recorded in field notes and field maps. All on-site testing will be recorded relative to an on-site datum and converted to the North American Vertical Datum of 1988 (NAVD88). The on-site datum will be calculated using existing site surveys or estimated using existing Lidar data or other available contour information. Where possible, testing locations will be recorded digitally using GIS software. The North American Datum of 1983 (NAD83) will be used as a permanent horizontal datum. The testing will be recorded using digital photography and videography as appropriate throughout the field effort.

8. LABORATORY PROCESSING

Following each stage of work, archaeologists will clean, stabilize, and inventory all cultural material removed from the APE. During the course of the investigation, the archaeological consultant will retain custody of all recovered artifacts, which will not be stored on-site. All laboratory activity will be conducted in compliance with the aforementioned guidelines and with those established by the United States Department of the Interior/National Park Service for the Curation of Federally-Owned and Administered Archaeological Collections (*36 CFR 66* and *79*). Artifact washing will begin immediately after transfer of the collection to the laboratory. Trained technicians will process the artifacts using standard archaeological techniques. Artifacts will be washed with a mild, non-ionic detergent using soft-bristle brushes and after washing they will be air dried on racks. Fragile artifacts and those with non-stable surfaces will be washed separately without brushing. Artifact bags will be labeled in waterproof ink with all relevant provenience information. After they have been cleaned and

dried, the artifacts will be placed in archivally stable polyethylene zipper-top artifact bags for permanent storage. The provenience information will be written on the outside of the bags using a permanent, waterproof marker.

An artifact catalog recording the depth and location of each recovered artifact will be created. To the extent possible, recovered artifacts will be identified as to material, temporal or cultural/chronological association, function, and style following the standard archaeological references. Detailed analysis would include the identification of the *Terminus Post Quem* (TPQ) of artifacts for each context and the generation of mean beginning and end dates for assemblages. This information could be used to establish the contemporaneity of contexts and strata, and to determine which assemblages represent primary or secondary deposits. If deemed significant and in consultation with CPO, SHPO, the Indigenous Nations, and other Consulting Parties, artifacts that are recovered from the site will be curated according to the regulations of the Department of the Interior/National Park Service *356 CFR 79*.

IDENTIFICATION OF AN ARTIFACT REPOSITORY

Any artifact collection removed from the Micron Campus would be the property of the owner of the land at the time of the testing. In the event that objects of cultural significance to the Indigenous Nations are encountered, the investigators will immediately notify CPO, who will coordinate with SHPO, the Indigenous Nations, and other Consulting Parties regarding documentation and repatriation pursuant to Section 106 and any other relevant legislation. In the event that significant archaeological resources are encountered within the APE that require permanent curation, efforts will be necessary to locate a repository that is capable of accepting and curating the collection. Upon the completion of field testing, if significant resources are found, a repository will be identified and selected in conjunction with CPO, who will further coordinate with SHPO, the Indigenous Nations, and other Consulting Parties to determine a suitable long-term curation plan . If the artifact collection is determined to have no research value, it will be returned to the site owner or discarded at their discretion within one year of the completion of fieldwork. The site owner may then choose to retain and store the collection or may seek out alternative methods of disposal.

9. REPORTING

Following the completion of field testing and laboratory processing and analysis, a detailed Phase 1B Archaeological Investigation report will be prepared. The final report will document all methodologies used during the course of the investigation and will discuss all findings that emerge from the recovered data, maps, plans, drawings, photographs, and/or other relevant images will be incorporated into the body of the report as needed to illustrate project findings. The report will include a site map showing the location of all resources identified, as well as a complete inventory of the artifacts. The report will be prepared according to the guidelines and standards issued by SHPO and NYAC. If the testing locates features *in situ*, the documentation of those features will be incorporated into the Work Plan of the Phase 2 Archaeological Survey/Evaluation.

The final technical report will include the following information:

- Description of the portion of the APE included in that investigation;
- Relevant documentation/background research;
- Research design;

- Field studies as actually implemented, including any deviation from this Work Plan and the reason for those changes;
- Field observations;
- Analyses and results, illustrated as appropriate with maps, photographs, tables, charts, and graphs; and
- Recommendations for further archaeological work, if necessary.

A draft report of the final technical report will be submitted to CPO, who will further coordinate with SHPO, the Indigenous Nations, and other Consulting Parties pursuant to Section 106. If necessary, a final version of the report will be prepared to address comments, which CPO will circulate to the SHPO, Indigenous Nations and other Consulting Parties for concurrence.

10. PROJECT COORDINATION AND MANAGEMENT

Prior to each stage of testing, the archaeological consultant will notify CPO, who will further coordinate with SHPO, the Indigenous Nations, and other Consulting Parties when testing is scheduled to begin and will retain the services of a monitor from the Onondaga Nation and any other nations that may request to be present. If requested, the archaeological consultant will assist in arranging a site visit for representatives of CPO, who will coordinate the participation of SHPO, the Indigenous Nations, or other Consulting Parties as necessary and appropriate during the course of the Phase 1B Archaeological Investigation. However, during the field testing, the archaeological team will distribute a summary of work completed to date on a weekly basis (including number/location of tests completed and relevant finds) to CPO, SHPO, the Indigenous Nations, and other Consulting Parties.

It is possible that the field testing will not reveal any potentially significant archaeological features, deposits, or intact soil strata. If that is the case, no further archaeological consideration would be warranted, and a report to that effect would be prepared. In the event that archaeological resources are encountered, CPO on a weekly basis will further consult with SHPO, the Indigenous Nations, and other Consulting Parties. In either case, a final report on the field investigation will be submitted to CPO, SHPO, the Indigenous Nations, and other Consulting Parties for review and comment, indicating a presence or absence of archaeological features.

11. PROTOCOL FOR THE UNANTICIPATED DISCOVERY OF HUMAN REMAINS

There is no indication that human remains are present within the APE. However, in the unlikely event that human remains or suspected human remains are encountered within the APE, the SHPO Human Remains Discovery Protocol and the Haudenosaunee Policy on Human Remains (reproduced below) would be implemented in consultation with CPO. All requests from the Indigenous Nations to modify this protocol will be honored in consultation with CPO and SHPO. As the project is subject to Section 106, the project is not subject to the *New York State Unmarked Burial Site Protection Act* (NY EXEC § 171, the "Act"), which went into effect on August 1, 2023 and requires consultation with the New York State Archaeologist in the event that undocumented human remains are encountered in New York State. In the event that human remains are determined to be Indigenous, all relevant legislation (e.g., the Native American Graves Protection and Repatriation Act [NAGPRA]) would apply. All graves, funerary objects, and soils surrounding graves will be protected and treated with the utmost dignity and respect. As per the policies reproduced below, no photography or analysis of Indigenous

remains would occur as part of the archaeological investigation unless specifically requested by the Indigenous Nations.

SHPO HUMAN REMAINS DISCOVERY PROTOCOL (JANUARY 2021)[1]

> *In the event that human remains are encountered during construction or archaeological investigations, SHPO recommends that the following protocol is implemented:*

- *Human remains shall be treated with the utmost dignity and respect. Should human remains or suspected human remains be encountered, work in the general area of the discovery shall stop immediately and the location shall be secured and protected from damage and disturbance.*
- *If skeletal remains are identified and the archaeologist is not able to conclusively determine if they are human, the remains and any associated materials shall be left in place. A qualified forensic anthropologist, bioarchaeologist or physical anthropologist shall assess the remains in situ to help determine if they are human.*
- *If the remains are determined to be human, law enforcement, the SHPO, the appropriate Indian Nations, and the involved state and federal agencies shall be notified immediately. If law enforcement determines that the burial site is not a criminal matter, no skeletal remains or associated materials shall be removed until appropriate consultation takes place.*
- *If human remains are determined to be Native American, they shall be left in place and protected from further disturbance until a plan for their avoidance or removal is developed. Please note that avoidance is the preferred option of the SHPO and the appropriate Indian Nations. The involved agency shall consult SHPO and the appropriate Indian Nations to develop a plan of action. Photographs of Native American human remains and associated materials should not be taken without consulting with the involved Indian Nations.*
- *If human remains are determined to be non-Native American, the remains shall be left in place and protected from further disturbance until a plan for their avoidance or removal is developed. Please note that avoidance is the preferred option of the SHPO. The involved agency shall consult SHPO and other appropriate parties to develop a plan of action.*
- *The SHPO recommends that burial information is not released to the public to protect burial sites from possible looting.*

HAUDENOSAUNEE POLICY ON HUMAN REMAINS

The policy on human remains was extracted from *Polishing the Silver Covenant Chain: Building Relationships Between Federal, State Agencies and the Haudenosaunee* as issued by the Grand Council of the Haudenosaunee in 2002 (see Parts 4.1, 4.2, and 4.7).

> *HAUDENOSAUNEE BELIEFS*
>
> *We have been taught that we bury our dead into the ground so that their bodies can become part of the sacred Earth. We believe that we come from the Mother Earth*

[1] https://parks.ny.gov/documents/shpo/environmental-review/HumanRemainsProtocol.pdf

and that the human remains that rest within the Earth are an important spiritual connection to the spirit of the Earth. The Earth is enriched by the dead as our flesh becomes part of the soil.

The souls of the dead have a path of destiny that they must follow. We refer to this as their journey after life. in this way, we feel that the dead are around us and hover over us as we hold ceremonies or dances. We believe that the dead have power and it is dangerous to neglect the spiritual needs of the dead.

The protection of the human remains and associated graves, sacred burial sites and related objects from the graves of the Haudenosaunee are the responsibility of each generation of Chiefs, Clan mothers, and Faithkeepers. We believe that the remains, the associated burial objects and the actual soil in which they rest is sacred. There is no acceptable excuse to justify the desecration of this sacred burial.

VIOLATION OF OUR SPIRITUAL RIGHTS

Removing the remains from their eternal resting place is a great desecration to both the dead and the living. The disturbance, destruction, and theft of the dead is a violation of the religious and spiritual welfare of the Haudenosaunee.

As long as the human remains are disturbed, there will be spiritual consequences to our people. The desecration of the graves of our ancestors, no matter what the age of the burial, is a violation of our religious freedom.

Permits issued by the State of New York or any other local government, to allow anyone to violate the sanctity of the graves of our ancestors can no longer be tolerated. In the past, our ancestors buried many objects along with the body with the belief that in the afterlife, you will need all of those things that you need in this life.

All types of objects have been associated with burials, including decorated clothing, glass beads, shell beads, silver combs, tools and weapons, ceramic and metal cooking pots, wampum belts, strings of wampum, and a variety of personal items. The removal of these objects from the grave is a theft from the dead.

VIOLATION OF OUR HUMAN RIGHTS

The remains of our deceased relatives are not "archaeological resources" that are subjects of study. They we human beings who once lived on this land. They had real lives and feelings. They had spiritual expectations about their final resting places. To look at Native Peoples as objects rather than as human beings is a gross violation of our human rights.

All graves and burial sites, Native or not, deserve respect. Our dead relatives deserve the basic human right to a dignified burial. We do not believe in the use of permanent headstones to mark graves of our ancestors and state law makes a difference between cemeteries and unmarked burials.

Our burial sites deserve to be considered hallowed ground, whether they are marked or not. There has been double standard in dealing with our people and non-Native remains. Non-Native grave sites are often afforded more protection then Native burials.

Despite the efforts of state agencies to identify Native grave locations, construction permits are issued nonetheless. Our dead deserve the same right to an eternal resting place as all other races and religions.

VIOLATION OF OUR TREATY RIGHTS

The unearthing of the remains of our ancestors from their eternal resting pace is also a violation of the promises made to the Haudenosaunee under the terms of the Canandaigua Treaty of 1794. By that treaty, the United States, including the State of New York, promised not to "disturb" the Haudenosaunee in the free use and enjoyment of their lands.

We have been on record protesting the desecration of our graves. The continual destruction of Native graves, the stealing of Native remains and the looting of burial objects causes us serious mental, emotional, and spiritual harm.

Our people are continually upset by these events and we have been forced to adjust our spiritual traditions to accommodate outside developments. The desecration of the graves violates the mutual respect promised by the United States as they pledged a firm and permanent friendship between our peoples.

The treaty also promised to remove the cause of complaint that upsets our peace. We therefore make it clear that the desecration of the graves of our ancestors causes great harm to our people and the United States and State of New York have an obligation to protect the general welfare of our people as promised in the legally binding treaties.

Protocol for Handling Discovery of Human Remains [As published by the Onondaga Nation in 2002]		
	Known Burials	***Unidentified Burials***
When to contact?	***Intentional excavation**: At the earliest time in decision-making process*	***Inadvertent Discovery**: Upon discovery*
Which Nation to contact?	*If the fine is within existing Nation boundary, contact that Nation's Cultural Resource representatives. If the find is within the traditional land use area (fifty mile radius from the current nation territory), contract the closest Nation's Cultural Resource Representative. If the find is within the aboriginal territory of each nation, as shown on the attached map [note: not included here], contact the Nation within that territory. For finds located within fifty miles on either side of the boundary lines shown on the map, contact the Cultural Resource Representatives of both Nations.*	
Who to contact?	*Haudenosaunee Cultural Resource representatives (HSCBRR)*	*Haudenosaunee Cultural Resource representatives (HSCBRR)*
How to contact?	*Contact list is provided [note: not included here]*	
Information Required	*Brief description of the find or potential find; site map and any information on the known cultural history of the area and summary of nearby archaeological findings.*	
	Nation will send a representative to review the site.	*Company must hire a Native American on-site observer. No remains shall be removed.*
Next Steps	***Non-disturbance of burials is preferred**. If after proper consultation, the remains must be removed, we prefer to have them reburied close to their original location as possible, provided the future sanctity of the grave can be assured. **No remains should be removed without proper cultural protocols**. If no safe local burial ground can be offered, the Haudenosaunee will reclaim the remains for reburial at an undisclosed location. The local government/state agency/developer must pay for all of the costs for such reburial. All objects associated with the original burial must be reburied as well. All of the soil in the immediate area of the burial should also be placed in the new grave.*	

12. REFERENCES CITED

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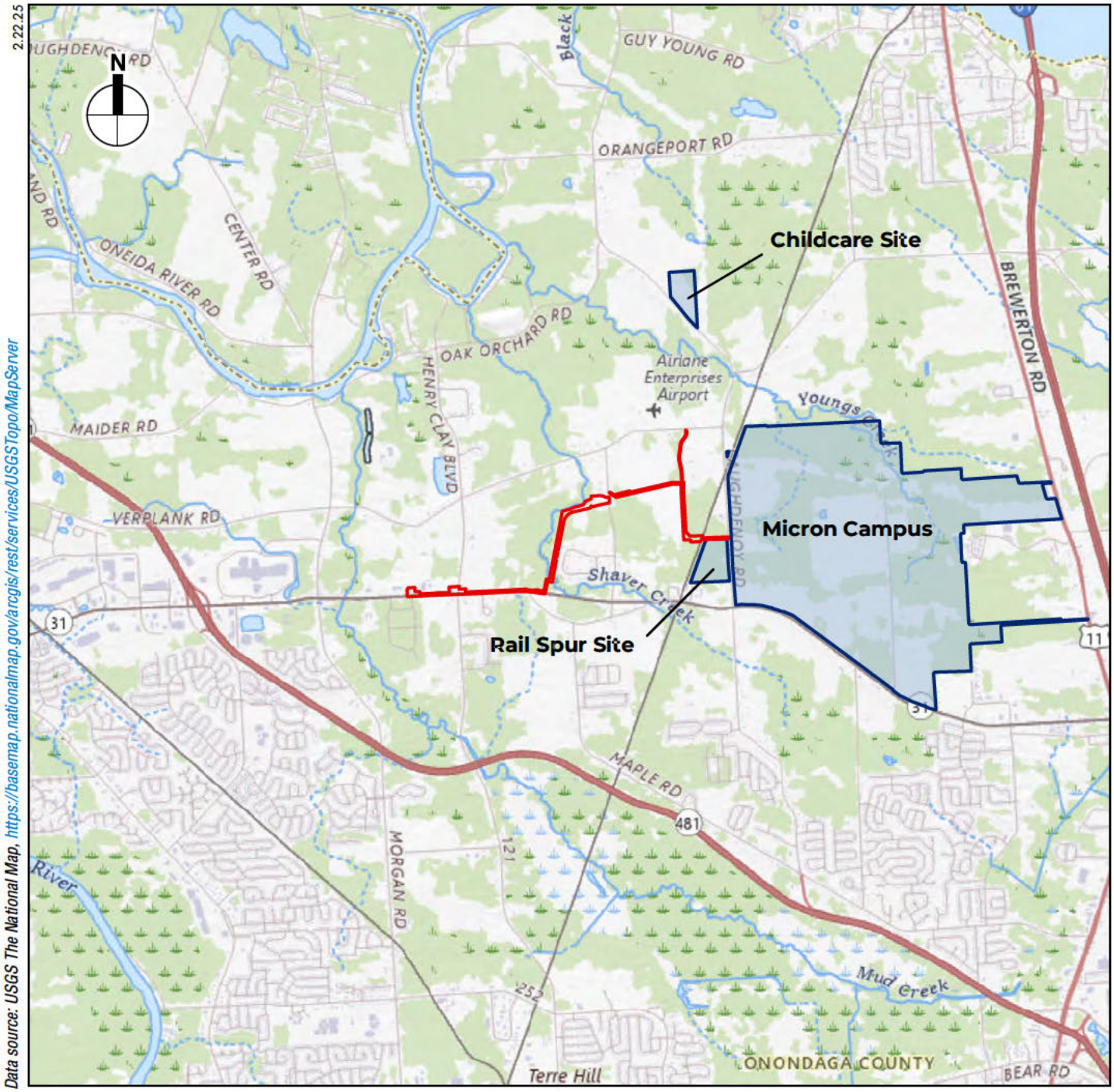
2005 *New York State Historic Preservation Office (SHPO) Phase I Archaeological Report Format Requirements*. Available online: https://parks.ny.gov/shpo/environmental-review/documents/PhaseIReportStandards.pdf.



Approximate coordinates of Project Site:
76°11'11"W 43°11'28"N

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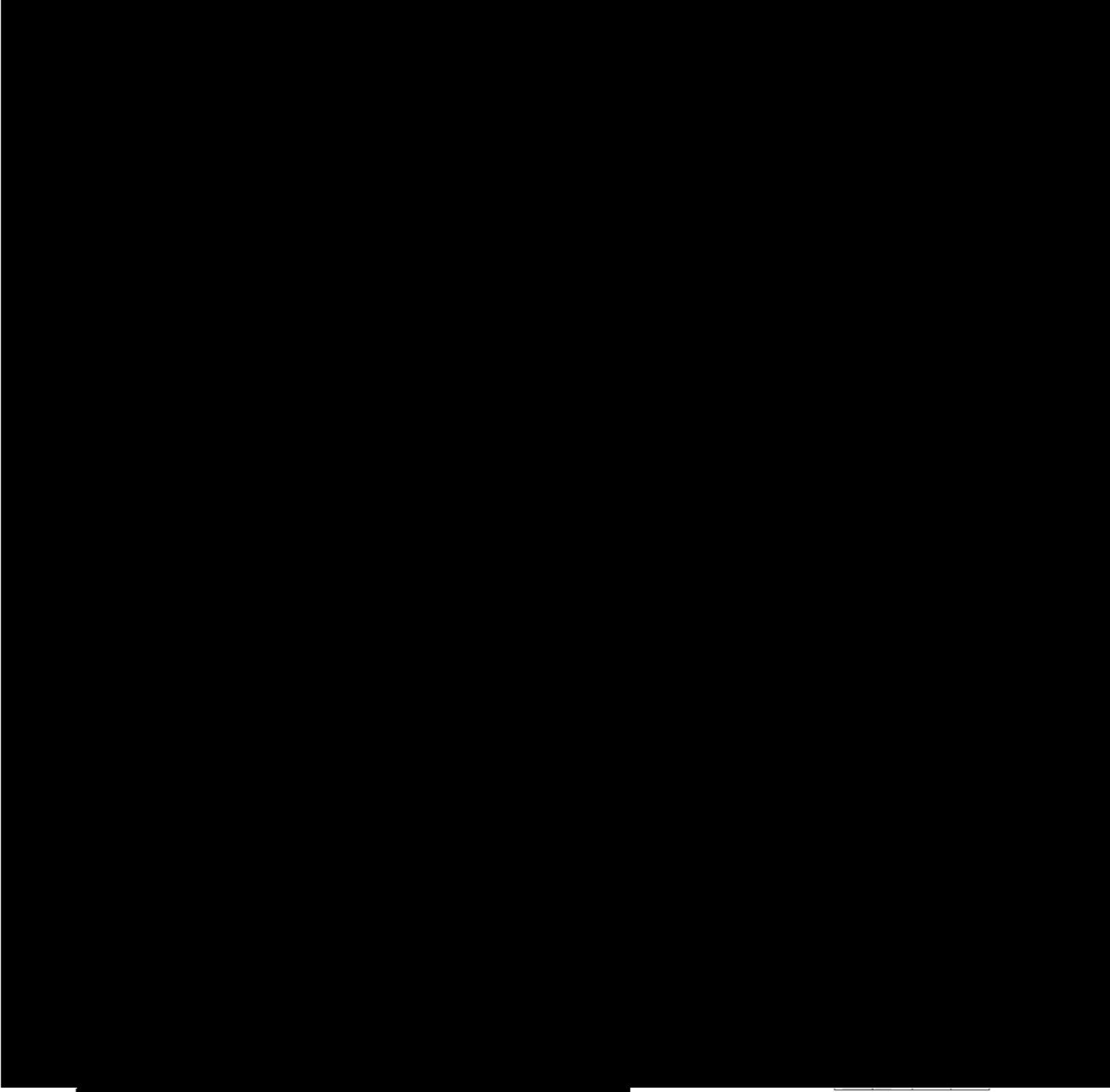
USGS Topographic Map –
Brewerton Quadrangle

Figure 1



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Areas of Archaeological Sensitivity

Figure 2

Proposed Micron Semiconductor Fabrication Project:

Proposed Onondaga County Water Authority (OCWA) Water Supply Improvements

TOWNS OF CLAY AND CICERO; ONONDAGA COUNTY, NEW YORK

Phase 1B Archaeological Investigation Work Plan

SHPO Project Review Number 23PR08019

Prepared for:

Micron New York Semiconductor Manufacturing LLC (Micron)
6360 South Federal Way
Post Office Box 6
Boise, Idaho 83716

Prepared by:

AKRF, Inc.
440 Park Avenue South, 7th Fl
New York, NY 10016
212-696-0670

MARCH 2025

[redacted]

Phase 1B Archaeological Work Plan

1. PROPOSED PROJECT

Micron New York Semiconductor Manufacturing LLC (Micron), a Delaware limited liability company and wholly owned subsidiary of Micron Technology, Inc., is proposing to acquire the approximately 1,400-acre White Pine Commerce Park site, located at 5171 New York State (NYS) Route 31, in the Town of Clay, Onondaga County, New York, from the Onondaga County Industrial Development Agency (OCIDA) at latitude and longitude: 43.190792, −76.157056. Micron's proposed semiconductor manufacturing facility campus ("Micron Campus") will be built over an approximately 16-year period. It will consist of the construction of four approximately 160-foot-tall (approximately 1.31-million-square-foot) memory fabrication facilities ("fabs"). Each fab location would be supported by additional structures, including central utility buildings; warehouse space; product testing space; electrical substations; water and wastewater pre-treatment and storage buildings; and gas storage. Access to the Micron Campus would be from NYS Route 31, Caughdenoy Road, and a secondary access from NYS Route 11. An approximately 38.24-acre parcel on the west side of Caughdenoy Road (Town of Clay Tax Parcels 046.-02-03.2 and 046.-01-19.1) (the "Rail Spur Site") would be used to deliver construction aggregate to the Micron Campus by rail spur and overhead conveyance system. Micron will also construct an employee healthcare center, childcare center, and recreation center and an athletic field at an approximately 30.2-acre parcel at 9100 Caughdenoy Road (Town of Clay Tax Parcel 042.-01-13.0, the "Childcare Site"). Collectively, the above actions are considered the Proposed Project (see **Figure 1**).

ENVIRONMENTAL REVIEW

The CHIPS Program Office (CPO) within the National Institute of Standards and Technology (NIST) of the United States Department of Commerce is serving as the lead for Section 106 of the National Historic Preservation Act (Section 106). A Programmatic Agreement will be executed by all involved parties to document the commitments to completing all future phases of cultural resources analysis, including archaeological testing. The Programmatic Agreement will also describe the measures that would be carried out to assess, identify, and treat any identified archaeological sites, as well as any unanticipated discoveries during construction.

2. AREA OF POTENTIAL EFFECTS

Among the off-site improvements necessary for the Proposed Project are new water supply facilities (see **Figures 1 and 2a through 2e**). The Onondaga County Water Authority (OCWA) has capacity within its water supply system to service Micron's initial water demand of approximately 11.5 million gallons per day (MGD) for construction and operations of Fab 1 with some minor upgrades. However, additional water would be required for the startup, testing, operations, and redundancy for Fab 2, during which time, potable water demand is expected to increase to 17.4 MGD. None of the proposed upgrades needed to meet this additional demand would require land acquisition. To reliably meet Micron's maximum Phase 1 (Fab 1 and Fab 2) demand of 17.4 MGD and meet OCWA's

current and anticipated water system demands, most components of the Lake Ontario Supply system would require minor expansion. Potable water for initial construction would be provided to the Micron Campus through existing buried water mains located within the Caughdenoy Road and Burnet Road rights-of-way. Potable water for initial construction also would require a new connection from OCWA's existing Eastern Branch Transmission Main south to NY-31 which would involve an approximate 1,000-foot-long pair of 42-inch water service connections within a 50-foot-wide easement though OCIDA property to be constructed under NYS Route 31, terminating within the Micron Campus along Caughdenoy Road.

To meet the water demand for all of Phase 1 (Fabs 1 and 2), OCWA would need to make the following water supply infrastructure improvements

- Update of existing Raw Water Pump Station pumps and drives located in Oswego County to provide higher capacity to the Water Treatment Plant. Construction would occur within the footprint of the existing pump station. If expanded capacity exceeds 62.5 MGD, a modification to the withdrawal permit would be required.
- Construction of an approximately 2.5-mile parallel 54-inch (or larger) raw water transmission main from the existing Raw Water Pump Station to the Lake Ontario Water Treatment Plant (LOWTP) for supply redundancy.
- Modification to the LOWTP to include the addition of two new filters, replacement of the existing clearwells with up to 15 MGD of storage, an additional underground seal weir structure and parallel piping on-site, replacement of an existing backwash storage tank, and additional chemical storage space and residual handling (drying bed) facilities.
- Installation of a new, approximately 22-mile, 54-inch or larger, clear water transmission main parallel to the existing clear water transmission main which runs from LOWTP to the OCWA Terminal Campus in Clay, NY.
- Within the Terminal Campus in Clay, NY, the Farrell Pumping Station would be renovated, two pumps added, and existing pumps would be upgraded. A new flow control facility would be constructed at the existing Terminal Campus to integrate the new transmission main and site piping, and manage the increased flow to the existing tanks and pump station.
- Construction of a new, approximately 5-mile, 54-inch or larger, transmission main parallel to OCWA's existing Eastern Branch Transmission Main and relocation of a portion of the existing Eastern Branch Transmission Main that is currently location on the WPCP.

OCWA is tentatively planning to undertake the following to accommodate anticipated water supply redundancy for Fab 2 and to meet water demand for Phase 2 (Fabs 3 and 4).

- Modification to the LOWTP with addition of at least two new filters and contact basins (in a new filter wing), an additional clearwell tank, a second clear water pump station, a possible third, approximately 22-mile, 54-inch clear water transmission main parallel to the existing 54-inch diameter line and Phase 1 line (the need for the third transmission main would depend on the size of the Phase 1 line), and additional chemical storage space and residual handling facilities.
- Upgrades within the Terminal Campus in Clay, NY, including up to two new 15 MG tanks, a new parallel Farrell pump station and associated piping work, and expansion of the existing substation.

- A third, approximately 5-mile, 54-inch or larger transmission main parallel to OCWA's existing Eastern Branch Transmission Main in the Town of Clay.

New or re-routed transmission mains would be installed by OCWA using standard cut and cover trenching or directionally drilled construction techniques as determined by site conditions. The routes of the water mains may be subject to potential tree clearing in locations where the routes are in unpaved areas. In areas where tree stumps can be covered with mats to create a workable surface, this will be undertaken. However, there may be locations where tree stumps would have to be removed. The water main routes are located within existing easements.

The water main routes are located within existing easements with the exception of the proposed potable water connection between the existing 54-inch diameter water main south of NYS Route 31 and the Micron Campus, and the water main routes do not contain any permanent built structures.[1] There are some locations where built structures (e.g., a swimming pool, a barn, and a number of small sheds) appear to have encroached on the extant easement. On a case-by-case basis, OCWA will address the encroachments through formal verification of the encroachments, and employ the following alternative approaches for the structures in the event that encroachments conflict with the proposed work: relocate encroachments; avoid encroachments; modify the easement; or, where the first three approaches cannot be applied, demolition of the encroachment.

OCWA's LOWTP is an existing facility originally constructed in 1965 that would be expanded, as noted above, by the addition of two new filters and one contact basin in Phase 1, and additional filters and contact basins plus one new clearwell and additional chemical storage space and residual handling facilities in Phase 2. The improvements are anticipated to be of a similar type and scale as existing facilities on the LOWTP.

For Phase 1, a new flow control facility would need to be constructed at OCWA's Terminal Campus to receive the new clearwater transmission main and distribute the incoming water to the existing tanks and pump station. For Phase 2, up to two 15 million-gallon, 360-foot diameter water storage tanks would need to be constructed on approximately 10 acres of OCWA's existing Terminal Campus. For Phase 2, a new parallel pump station of similar size to the existing parallel pump station would be constructed adjacent to the existing pump station. These improvements are anticipated to be of a similar appearance and scale to the existing facilities at this site.

The existing Raw Water Pump Station on Lake Ontario consists of the existing Raw Water Pump Station, a one-story brick building constructed circa 1965.

3. BACKGROUND INFORMATION AND SENSITIVITY DETERMINATION

CURRENT SITE CONDITIONS

The proposed water supply line would run through an existing easement along the majority of its route. The easement passes through existing facilities including the OCWA Terminal Campus, the OCWA Lake Ontario Water Treatment Plant (LOWTP); and the Raw Water Pumping Station on Lake Ontario. The current conditions of each segment of the Water Supply Improvements APE is outlined below.

[1] The location of the potable water connection, consisting of two 42-inch diameter pipes that would be constructed from the existing 54-inch diameter water main south of NYS Route 31to the Micron Campus is approximate. Should this connection involve the alteration or demolition of any buildings, further information would be provided to SHPO for review.

WATER SUPPLY EASEMENT

The majority of the existing easement extends through undeveloped agricultural fields, woodlands, and bodies of water (e.g., streams, ponds, and wetlands). The easement would cross the Oneida River southwest of its confluence with the Erie Canal's "Big Ben Cut" and the Oswego River north of Battle Island between the Towns of Minetto and Volney. The easement passes through or near commercial properties, shopping centers, or housing subdivisions or other domestic buildings/structures (houses, barns, outbuildings, and swimming pools) in several locations. It is occasionally crossed by unpaved paths; paved roads and highways; railroad tracks; solar arrays; or overhead utility corridors. Utilities are present within the easement; however, the size and location of infrastructure is not known at this time.

OCWA TERMINAL CAMPUS

The existing OCWA Terminal Campus is located on Tax Parcel 055-01-07.1. The southern portion of the campus is developed with two 15-million-gallon concrete water tanks that were constructed as part of a compliance project ca. 2012 (Fisher Associates 2011). An existing substation is situated to the east of the tanks. The tanks were built south of a former open-air reservoir, which was subsequently filled and is currently a grassy lawn with driveways/paths. North of the former reservoir is the Farrell Pumping Station. The northern portion of the tax parcel is at a lower elevation adjacent to NYS Route 31 and is developed with the headquarters of the Onondaga County Department of Health and other small structures, monuments, and infrastructure.

OCWA LAKE ONTARIO WATER TREATMENT PLANT PROPERTY

The OCWA LOWTP is located on Tax Parcel 146.00-01-01. The perimeter of the parcel is lined with dense trees and vegetation. The main LOWTP campus is developed with lagoons; two clearwell tanks; a substation; buildings of various size; and a solar array.

EXISTING RAW WATER PUMP STATION ON LAKE ONTARIO

The Water Supply APE includes a portion of the existing water easement that connects the OCWA LOWTP to the existing Raw Water Pump Station on the shore of Lake Ontario. The existing pump station is on the grounds of the McCaffrey Water Treatment Plant between the northern termini of Sheldon and 6th Avenues. This portion of the APE is developed with several buildings on the grounds of the water treatment plant. Portions of the complex have hills, grassy lawns, or paved pathways and parking areas.

PRECONTACT PERIOD ARCHAEOLOGICAL SENSITIVITY

The precontact sensitivity of sites in the northeastern United States is generally evaluated by a site's proximity to level slopes (e.g., less than 12 to 15 percent), water courses, well-drained soils, and previously identified precontact archaeological sites (NYAC 1994). The APE is situated in a generally level area in the immediate vicinity of the Oneida and Oswego Rivers as well as numerous streams, ponds, and other bodies of water. [redacted]

HISTORIC PERIOD ARCHAEOLOGICAL SENSITIVITY

As described in the Phase 1A Study, dense settlement of the area by individuals of European descent did not begin until the late 18th and early 19th centuries, though before that time, trade networks

associated with Indigenous communities, French Jesuit priests, and other European colonizers extended through the region and trading activities or trade-related travel may have occurred on or in the vicinity of the APE. Historical development within the APE was largely clustered around the roads within and near the APE in the towns of Clay, Schroeppel, Volney, Minetto, and Oswego.

4. RESEARCH DESIGN

The objective of the Phase 1B Archaeological Investigation of the Water Supply Improvements APE is to determine the presence or absence of precontact period archaeological deposits within the undisturbed portions of the Water Supply Improvements APE. If present, the Phase 1B Archaeological Investigation will make an assessment as to whether the resources are in sufficient quantity/concentration and of sufficient research value to determine if a Phase 2 Archaeological Survey/Evaluation is required to further delineate the boundaries of the archaeological site and to evaluate its potential significance. The determination of an archaeological site's significance is largely dependent on the types of potential archaeological resources that could be encountered within the Water Supply Improvements APE and on the specific research questions that can be answered through the analysis of those resources. A professional, modern archaeological investigation could produce valuable data about the precontact occupation of the area that could be compared and contrasted with previously collected data. This could produce new data and add to existing knowledge of life in the vicinity of what is now Onondaga and Oswego Counties during the precontact period.

5. ARCHAEOLOGICAL TESTING PROTOCOL

Although documentary research determines archaeological potential, excavation for the purposes of archaeological testing is required to determine if resources are *actually* present on a site. Therefore, this Archaeological Work Plan addresses Phase 1B presence/absence testing and includes a contingency for the evaluation for National Register eligibility (e.g., a Phase 2 Archaeological Survey/Evaluation), which may become necessary. The Phase 1B Archaeological Investigation will be conducted in accordance with the "Phase 1 Archaeological Report Format Requirements" as issued by SHPO in 2005, and with the "Standards for Cultural Resources Investigations and the Curation of Archaeological Collections in New York State" as issued by the New York Archaeological Council (NYAC) in 1994 and adopted by SHPO in 1995.

Archaeological testing within the Water Supply Improvements APE will take place within the areas of archaeological sensitivity identified in the Phase 1A Study as shown on **Figures 2a through 2e**. Subsurface testing will primarily consist of hand-excavated shovel test pits (STPs) and, where

necessary, test units. No mechanical testing is proposed as part of this Phase 1B Archaeological Investigation. The testing strategy outlined in this protocol may be altered based on conditions observed in the field, including previously unforeseen obstructions.

For all testing, a representative from the Onondaga Nation will be retained to oversee the archaeological testing to determine if sacred objects or other items of cultural importance are encountered. The monitor will be compensated for their work at an hourly rate to be determined in coordination with the Onondaga Nation. In the event that the Oneida Indian Nation or other Indigenous Nations request to have an on-site monitor present during the archaeological testing, such requests will be accommodated. The Onondaga Nation will be engaged to discuss suggestions for a local archeological firm or a firm with local experience to be included in the investigation team with staff members that have local expertise and a history of and capacity to work closely with Indigenous Nation monitors and Section 106 representatives. The archaeological firm should have expertise in Haudenosaunee and Onondaga culture and artifacts and should demonstrate their respect for and ability to work with Onondaga Nation representatives.

SUBSURFACE TESTING

Testing has been recommended throughout undisturbed and accessible portions of the entire Water Supply Improvements APE. No testing is proposed in visibly disturbed areas, paved areas (if any), areas with standing water. If any portions of the APE will not be impacted by the proposed OCWA water supply improvements, those areas may be excluded from the testing program.

STPs will be excavated at intervals of approximately 50 feet (15 meters) across a linear transect within the easement to sample enough of the area to determine if intact precontact resources or an intact buried ground surface are likely to be present. The 50-foot (15-meter) interval is established as the preferred interval for subsurface shovel testing as outlined in the NYAC archaeological guidelines as issued in 1994 and adopted by SHPO in 1995. In locations where physical conditions suggest heightened archaeological sensitivity are observed (e.g., in areas where soil drainage is better; where surficial indications or vegetation suggesting prior disturbance are absent; where artifacts are observed on exposed/cleared ground surfaces; or where STPs are positive for archaeological resources), the interval may be narrowed to 25 feet (7.5 meters). In the event that submerged soils or areas of visible disturbance are present, STPs may be excavated at an interval of 100 feet (30 meters) to confirm the limits of disturbance or certain soil types. STPs will be placed along linear transects depending on the landscape of the area being tested. If mature trees, large soil/fill deposits, slopes greater than 10 percent, or other obstructions are present, STPs may be offset from the transect or skipped, depending on the discretion of the archaeological consultant.

Inundated wetland areas that may have been dry, inhabitable land in the past will be tested where possible. Disturbed or saturated soils may be tested at a 100-foot (30-meter) interval to confirm the limits of saturated soils as identified by the USDA soil survey. Additional STPs may be judgmentally placed in areas deemed testable by the archaeological team. These areas where testing may be possible may include isolated elevated or dry areas within otherwise inundated wetlands. In the event that wetland areas are present that cannot be physically tested in the manner described previously, alternative means of documentation may be considered that include, but are not limited to, monitoring during construction. A plan for further examination of submerged areas will be determined based on observations made in the field regarding the viability of testing submerged areas.

Each STP will be approximately 16 to 18 inches in diameter and excavated to a depth of approximately 2 to 3 feet, or until sterile subsoil is encountered. It is expected that thousands of STPs will be required to test the entire easement over time and that the testing may be completed in stages.

The exact number of STPs will depend on the extent of visible disturbance/obstructions observed in the field. If isolated precontact archaeological deposits are identified in the STPs placed along the 50-foot interval, additional STPs will be excavated at closer intervals—one each at a distance of 3 feet and 10 feet to the north, south, east, and west, or eight radial STPs total—in the vicini1ty of the find to determine the horizontal and vertical extents of potential artifact deposits. Radial STPs will not be excavated when two of more precontact artifacts are found in consecutive shovel tests along the 50-foot grid.

Hand-excavated soils in areas where intact, natural soils are identified will be screened through quarter-inch steel mesh. Fill materials and disturbed soils will not be screened. Artifacts will be systematically collected from hand-excavated soils and will be placed in labeled plastic bags.

In addition to the excavation of STPs and, where feasible, testing may involve the use of plowing and disking. In the event that this method is pursued as part of the testing plan, the surface survey will follow the protocols outlined in SHPO's *Phase I Archaeological Report Format Requirements* issued in 2005. Plowed areas will be a minimum of 10 feet (3.3 meters) in width and will be spaced a maximum of 50 feet (15 meters) apart in areas with 70 percent visibility at a minimum.

All artifacts recovered through screening will be placed in labeled plastic bags according to stratigraphic level.

IDENTIFICATION OF ARCHAEOLOGICAL FEATURES

Precontact archaeological features can include hearths, arrangements of postholes, or other evidence of camps or occupations sites. Historic features can include shaft features (e.g., privies, cisterns, or wells), foundation remnants, or middens. Precontact or historic features or buried ground surfaces encountered during testing would be sufficiently sampled so as to indicate if further testing (e.g., a Phase 2 Archaeological Survey/Evaluation) is necessary (see Contingency Tasks, below). If a Phase 2 Archaeological Survey/Evaluation is determined necessary, no further work would be completed as part of the Phase 1B Archaeological Investigation pending further coordination with CPO, SHPO, and the Indigenous Nations, and any open test units or STPs will be backfilled to protect the archaeological site. At that time, the archaeological consultant will coordinate with CPO, who will coordinate with SHPO, Indigenous Nations, and other Consulting Parties to establish the scope of work for a Phase 2 Archaeological Survey/Evaluation Work Plan ("Phase 2 Work Plan"). Depending on the number of features or sites present within the APE, the Phase 2 Work Plan may include a sampling strategy developed in coordination with CPO, SHPO, the Indigenous Nations, and other Consulting Parties, which will determine the extent to which each feature is excavated and documented. The feature or features will then be re-excavated for the Phase 2 Archaeological Survey/Evaluation.

AVOIDANCE PLAN

In the event that archaeological sites are identified within the Water Supply Improvements APE that are potentially significant but that would not be impacted by the proposed OCWA water supply improvements, an "Avoidance Plan" may be prepared after completion of the Phase 1B Archaeological Investigation. The avoidance plan will describe how the project will successfully avoid and protect areas of archaeological sensitivity (e.g., agreements to mark and post sensitive areas to prevent disturbance from heavy machinery or staging activities, etc.). Should an Avoidance Plan be necessary, CPO will coordinate with SHPO, Indigenous Nations, and other Consulting Parties to develop the plan and to established the protocols for its finalization and approval.

HEALTH AND SAFETY PLAN

Testing completed as part of this Phase 1B Archaeological Investigation is not expected to exceed a depth of 4 feet below grade in most locations. In the event that such deep excavation will occur, a Health and Safety Plan (HASP) may be required in compliance with the standards of the United States Department of Labor's Occupational Safety and Health Administration (OSHA) pertaining to safe excavation practices.

6. CONTINGENCY PLAN FOR PHASE 2 ARCHAEOLOGICAL SURVEY/EVALUATION AND ADDITIONAL SITE PROTECTION MEASURES

As stated previously, the Phase 1B Archaeological Investigation testing will be designed to determine the presence or absence of archaeological resources, not to fully expose or document any encountered resources. A Phase 2 Archaeological Survey/Evaluation ("Phase 2 testing") occurs only if the Phase 1B Archaeological Investigation uncovers a site or evidence of a site that will need to be evaluated according to the National Register criteria for eligibility. Phase 2 testing is used "to obtain detailed information on the integrity, limits, structure, function, and cultural/historical context of an archaeological site sufficient to evaluate its potential National Register eligibility" (NYAC 1994: 4). It involves detailed research beyond that done in the first phase, greater sampling of the property, a greater variety in the types of testing units (i.e., including larger testing units and/or shovel test pits at closer intervals), and closer analysis of artifacts. If Phase 2 testing is necessary, it would be undertaken in consultation with CPO, SHPO, the Indigenous Nations, and other Consulting Parties. The Phase 2 Survey and Evaluation will then determine if additional archaeological analysis (e.g., Phase 3 Mitigation/Data Recovery) is warranted in the event that the project cannot be redesigned to avoid significant archaeological sites. In the event that Phase 2 testing is required, a separate Work Plan will be prepared at that time for submission to CPO, SHPO, the Indigenous Nations, and other Consulting Parties as described above.

7. SITE DOCUMENTATION

Professional standards for testing, screening, recording features and stratigraphy, labeling, mapping, and photographing any identified archaeological resources will be applied during the Phase 1B Archaeological Investigation. Soil profiles including colors—recorded using Munsell soil color charts—and texture/inclusions will be recorded in field notes. Soil profiles will be included in the final report in tabular form supplemented by photographs and drawings as appropriate. Testing locations will be recorded in field notes and field maps. All on-site testing will be recorded relative to an on-site datum and converted to the North American Vertical Datum of 1988 (NAVD88). The on-site datum will be calculated using existing site surveys or estimated using existing Lidar data or other available contour information. Where possible, testing locations will be recorded digitally using GIS software. The North American Datum of 1983 (NAD83) will be used as a permanent horizontal datum. The testing will be recorded using digital photography and videography as appropriate throughout the field effort.

8. LABORATORY PROCESSING

Following each stage of work, archaeologists will clean, stabilize, and inventory all cultural material removed from the Water Supply Improvements APE. During the course of the investigation, the archaeological consultant will retain custody of all recovered artifacts, which will not be stored on-site. All laboratory activity will be conducted in compliance with the aforementioned guidelines and

with those established by the United States Department of the Interior/National Park Service for the Curation of Federally-Owned and Administered Archaeological Collections (*36 CFR 66* and *79*). Artifact washing will begin immediately after transfer of the collection to the laboratory. Trained technicians will process the artifacts using standard archaeological techniques. Artifacts will be washed with a mild, non-ionic detergent using soft-bristle brushes and after washing they will be air dried on racks. Fragile artifacts and those with non-stable surfaces will be washed separately without brushing. Artifact bags will be labeled in waterproof ink with all relevant provenience information. After they have been cleaned and dried, the artifacts will be placed in archivally stable polyethylene zipper-top bags for permanent storage. The provenience information will be written on the outside of the bags using a permanent, waterproof marker.

An artifact catalog recording the depth and location of each recovered artifact will be created. To the extent possible, recovered artifacts will be identified as to material, temporal or cultural/chronological association, function, and style following the standard archaeological references. Detailed analysis would include the identification of the *Terminus Post Quem* (TPQ) of artifacts for each context and the generation of mean beginning and end dates for assemblages. This information could be used to establish the contemporaneity of contexts and strata, and to determine which assemblages represent primary or secondary deposits. If deemed significant and in consultation with CPO, SHPO the Indigenous Nations, and other Consulting Parties, artifacts that are recovered from the site will be curated according to the regulations of the Department of the Interior/National Park Service *356 CFR 79*.

IDENTIFICATION OF AN ARTIFACT REPOSITORY

Any artifact collection removed from the APE would be the property of the owner of the land at the time of the testing. In the event that objects of cultural significance to the Indigenous Nations are encountered, the investigators will immediately notify CPO, who will coordinate with SHPO, the Indigenous Nations, and other Consulting Parties regarding documentation and repatriation pursuant to Section 106 and any other relevant legislation. In the event that significant archaeological resources are encountered within the APE that require permanent curation, efforts will be necessary to locate a repository that is capable of accepting and curating the collection. Upon the completion of field testing, if significant resources are found, a repository will be identified and selected in conjunction with CPO, who will further coordinate with SHPO, the Indigenous Nations, and other Consulting Parties to determine a suitable long-term curation plan. If the artifact collection is determined to have no research value, it will be returned to the site owner or discarded at their discretion within one year of the completion of fieldwork. The site owner may then choose to retain and store the collection or may seek out alternative methods of disposal.

9. REPORTING

Following the completion of field testing and laboratory processing and analysis, a detailed Phase 1B Archaeological Investigation report will be prepared for each stage of work. With the assumption that the fieldwork will be completed in multiple stages, it is assumed that multiple reports will be prepared to summarize the work completed as part of that stage. Each final report will document all methodologies used during the course of the investigation and will discuss all findings that emerge from the recovered data, maps, plans, drawings, photographs, and/or other relevant images will be incorporated into the body of the report as needed to illustrate project findings. The report will include a site map showing the location of all resources identified, as well as a complete inventory of the artifacts. The report will be prepared according to the guidelines and standards issued by SHPO

and NYAC. If the testing locates features *in situ*, the documentation of those features will be incorporated into the Work Plan of the Phase 2 Archaeological Survey/Evaluation.

Each final technical report will include the following information:

- Description of the portion of the APE included in that investigation;
- Relevant documentation/background research;
- Research design;
- Field studies as actually implemented, including any deviation from this Work Plan and the reason for those changes;
- Field observations;
- Analyses and results, illustrated as appropriate with maps, photographs, tables, charts, and graphs; and
- Recommendations for further archaeological work, if necessary.

A draft report of the final technical report will be submitted to CPO, who will further coordinate with SHPO, the Indigenous Nations, and other Consulting Parties pursuant to Section 106. If necessary, a final version of the report will be prepared to address comments, which CPO will circulate to the SHPO, Indigenous Nations and other Consulting Parties for concurrence.

10. PROJECT COORDINATION AND MANAGEMENT

Prior to each stage of testing, the archaeological consultant will notify CPO, who will further coordinate with SHPO, the Indigenous Nations, and other Consulting Parties, when testing is scheduled to begin and will retain the services of a monitor from the Onondaga Nation and any other nations that may request to be present. If requested, the archaeological consultant will assist in arranging a site visit for representatives of CPO, who will coordinate the participation of SHPO, the Indigenous Nations, and other Consulting Parties as necessary and appropriate during the course of the Phase 1B Archaeological Investigation. However, during the field testing, the archaeological team will distribute a summary of work completed to date on a weekly basis (including number/location of tests completed and relevant finds) to CPO, SHPO, the Indigenous Nations, and other Consulting Parties.

It is possible that the field testing will not reveal any potentially significant archaeological features, deposits, or intact soil strata. If that is the case, no further archaeological consideration would be warranted, and a report to that effect would be prepared. In the event that archaeological resources are encountered, CPO on a weekly basis will further consult with SHPO, the Indigenous Nations, and other Consulting Parties. In either case, a final report on the field investigation will be submitted to CPO, SHPO, the Indigenous Nations, and other Consulting Parties for review and comment, indicating a presence or absence of archaeological features.

11. PROTOCOL FOR THE UNANTICIPATED DISCOVERY OF HUMAN REMAINS

There is no indication that human remains are present within the Water Supply Improvements APE. However, in the unlikely event that human remains or suspected human remains are encountered within the APE, the SHPO Human Remains Discovery Protocol and the Haudenosaunee Policy on Human Remains (reproduced below) would be implemented in consultation with CPO. All requests

from the Indigenous Nations to modify this protocol will be honored in consultation with CPO and SHPO. As the project is subject to Section 106, the project is not subject to the *New York State Unmarked Burial Site Protection Act* (NY EXEC § 171, the "Act"), which went into effect on August 1, 2023 and requires consultation with the New York State Archaeologist in the event that undocumented human remains are encountered in New York State. In the event that human remains are determined to be Indigenous, all relevant legislation (e.g., the Native American Graves Protection and Repatriation Act [NAGPRA]) would apply. All graves, funerary objects, and soils surrounding graves will be protected and treated with the utmost dignity and respect. As per the policies reproduced below, no photography or analysis of Indigenous remains would occur as part of the archaeological investigation unless specifically requested by the Indigenous Nations.

SHPO HUMAN REMAINS DISCOVERY PROTOCOL (JANUARY 2021)[1]

In the event that human remains are encountered during construction or archaeological investigations, SHPO recommends that the following protocol is implemented:

- *Human remains shall be treated with the utmost dignity and respect. Should human remains or suspected human remains be encountered, work in the general area of the discovery shall stop immediately and the location shall be secured and protected from damage and disturbance.*
- *If skeletal remains are identified and the archaeologist is not able to conclusively determine if they are human, the remains and any associated materials shall be left in place. A qualified forensic anthropologist, bioarchaeologist or physical anthropologist shall assess the remains in situ to help determine if they are human.*
- *If the remains are determined to be human, law enforcement, the SHPO, the appropriate Indian Nations, and the involved state and federal agencies shall be notified immediately. If law enforcement determines that the burial site is not a criminal matter, no skeletal remains or associated materials shall be removed until appropriate consultation takes place.*
- *If human remains are determined to be Native American, they shall be left in place and protected from further disturbance until a plan for their avoidance or removal is developed. Please note that avoidance is the preferred option of the SHPO and the appropriate Indian Nations. The involved agency shall consult SHPO and the appropriate Indian Nations to develop a plan of action. Photographs of Native American human remains and associated materials should not be taken without consulting with the involved Indian Nations.*
- *If human remains are determined to be non-Native American, the remains shall be left in place and protected from further disturbance until a plan for their avoidance or removal is developed. Please note that avoidance is the preferred option of the SHPO. The involved agency shall consult SHPO and other appropriate parties to develop a plan of action.*
- *The SHPO recommends that burial information is not released to the public to protect burial sites from possible looting.*

[1] https://parks.ny.gov/documents/shpo/environmental-review/HumanRemainsProtocol.pdf

HAUDENOSAUNEE POLICY ON HUMAN REMAINS

The policy on human remains was extracted from *Polishing the Silver Covenant Chain: Building Relationships Between Federal, State Agencies and the Haudenosaunee* as issued by the Grand Council of the Haudenosaunee in 2002 (see Parts 4.1, 4.2, and 4.7).

HAUDENOSAUNEE BELIEFS

We have been taught that we bury our dead into the ground so that their bodies can become part of the sacred Earth. We believe that we come from the Mother Earth and that the human remains that rest within the Earth are an important spiritual connection to the spirit of the Earth. The Earth is enriched by the dead as our flesh becomes part of the soil.

The souls of the dead have a path of destiny that they must follow. We refer to this as their journey after life. in this way, we feel that the dead are around us and hover over us as we hold ceremonies or dances. We believe that the dead have power and it is dangerous to neglect the spiritual needs of the dead.

The protection of the human remains and associated graves, sacred burial sites and related objects from the graves of the Haudenosaunee are the responsibility of each generation of Chiefs, Clan mothers, and Faithkeepers. We believe that the remains, the associated burial objects and the actual soil in which they rest is sacred. There is no acceptable excuse to justify the desecration of this sacred burial.

VIOLATION OF OUR SPIRITUAL RIGHTS

Removing the remains from their eternal resting place is a great desecration to both the dead and the living. The disturbance, destruction, and theft of the dead is a violation of the religious and spiritual welfare of the Haudenosaunee.

As long as the human remains are disturbed, there will be spiritual consequences to our people. The desecration of the graves of our ancestors, no matter what the age of the burial, is a violation of our religious freedom.

Permits issued by the State of New York or any other local government, to allow anyone to violate the sanctity of the graves of our ancestors can no longer be tolerated. In the past, our ancestors buried many objects along with the body with the belief that in the afterlife, you will need all of those things that you need in this life.

All types of objects have been associated with burials, including decorated clothing, glass beads, shell beads, silver combs, tools and weapons, ceramic and metal cooking pots, wampum belts, strings of wampum, and a variety of personal items. The removal of these objects from the grave is a theft from the dead.

VIOLATION OF OUR HUMAN RIGHTS

The remains of our deceased relatives are not "archaeological resources" that are subjects of study. They we human beings who once lived on this land. They had real lives and feelings. They had spiritual expectations about their final resting places. To look at Native Peoples as objects rather than as human beings is a gross violation of our human rights.

All graves and burial sites, Native or not, deserve respect. Our dead relatives deserve the basic human right to a dignified burial. We do not believe in the use of permanent

headstones to mark graves of our ancestors and state law makes a difference between cemeteries and unmarked burials.

Our burial sites deserve to be considered hallowed ground, whether they are marked or not. There has been double standard in dealing with our people and non-Native remains. Non-Native grave sites are often afforded more protection then Native burials.

Despite the efforts of state agencies to identify Native grave locations, construction permits are issued nonetheless. Our dead deserve the same right to an eternal resting place as all other races and religions.

VIOLATION OF OUR TREATY RIGHTS

The unearthing of the remains of our ancestors from their eternal resting pace is also a violation of the promises made to the Haudenosaunee under the terms of the Canandaigua Treaty of 1794. By that treaty, the United States, including the State of New York, promised not to "disturb" the Haudenosaunee in the free use and enjoyment of their lands.

We have been on record protesting the desecration of our graves. The continual destruction of Native graves, the stealing of Native remains and the looting of burial objects causes us serious mental, emotional, and spiritual harm.

Our people are continually upset by these events and we have been forced to adjust our spiritual traditions to accommodate outside developments. The desecration of the graves violates the mutual respect promised by the United States as they pledged a firm and permanent friendship between our peoples.

The treaty also promised to remove the cause of complaint that upsets our peace. We therefore make it clear that the desecration of the graves of our ancestors causes great harm to our people and the United States and State of New York have an obligation to protect the general welfare of our people as promised in the legally binding treaties.

Protocol for Handling Discovery of Human Remains		
	Known Burials	***Unidentified Burials***
When to contact?	***Intentional excavation**: At the earliest time in decision-making process*	***Inadvertent Discovery**: Upon discovery*
Which Nation to contact?	*If the fine is within existing Nation boundary, contact that Nation's Cultural Resource representatives. If the find is within the traditional land use area (fifty mile radius from the current nation territory), contract the closest Nation's Cultural Resource Representative. If the find is within the aboriginal territory of each nation, as shown on the attached map [note: not included here], contact the Nation within that territory. For finds located within fifty miles on either side of the boundary lines shown on the map, contact the Cultural Resource Representatives of both Nations.*	
Who to contact?	*Haudenosaunee Cultural Resource representatives (HSCBRR)*	*Haudenosaunee Cultural Resource representatives (HSCBRR)*
How to contact?	*Contact list is provided [note: not included here]*	
Information Required	*Brief description of the find or potential find; site map and any information on the known cultural history of the area and summary of nearby archaeological findings.*	
	Nation will send a representative to review the site.	*Company must hire a Native American on-site observer. No remains shall be removed.*
Next Steps	***Non-disturbance of burials is preferred**. If after proper consultation, the remains must be removed, we prefer to have them reburied close to their original location as possible, provided the future sanctity of the grave can be assured. **No remains should be removed without proper cultural protocols**. If no safe local burial ground can be offered, the Haudenosaunee will reclaim the remains for reburial at an undisclosed location. The local government/state agency/developer must pay for all of the costs for such reburial. All objects associated with the original burial must be reburied as well. All of the soil in the immediate area of the burial should also be placed in the new grave.*	

Source: Grand Council of the Haudenosaunee (2002)

12. REFERENCES CITED

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2002 *Polishing the Silver Covenant Chain: Building Relationships Between Federal, State Agencies and the Haudenosaunee*.

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1994 *Standards for Cultural Resource Investigations and the Curation of Archaeological Collections in New York State*. The New York Archaeological Council.

New York State Historic Preservation Office (SHPO)
2005 *New York State Historic Preservation Office (SHPO) Phase I Archaeological Report Format Requirements*. Available online: https://parks.ny.gov/shpo/environmental-review/documents/PhaseIReportStandards.pdf.

NOTE: APE is located on the Brewerton, Baldwinsville, Fulton, and Hannibal quadrangles

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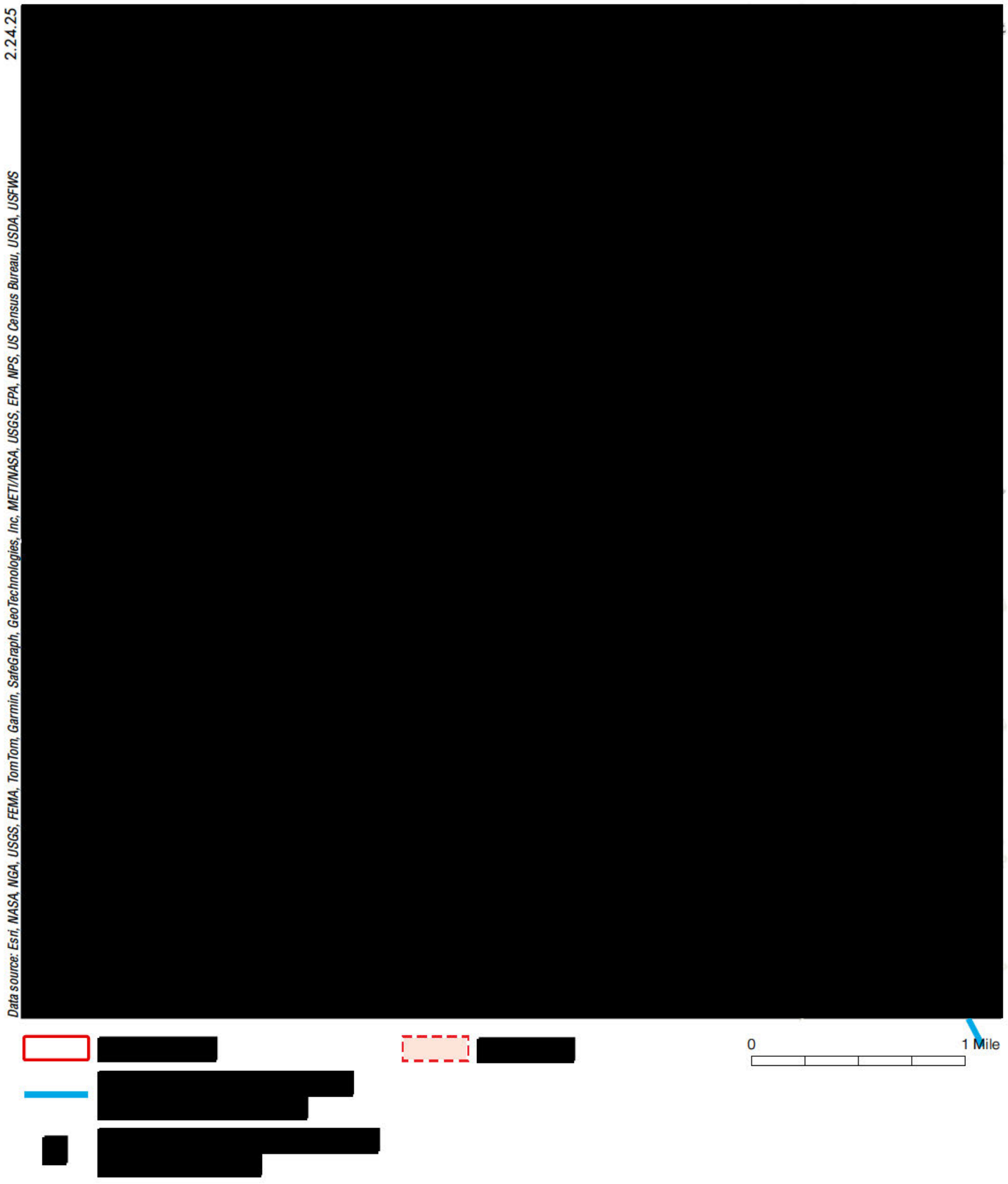
USGS Topographic Map

Figure 1



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Areas of Archaeological Sensitivity

Figure 2a

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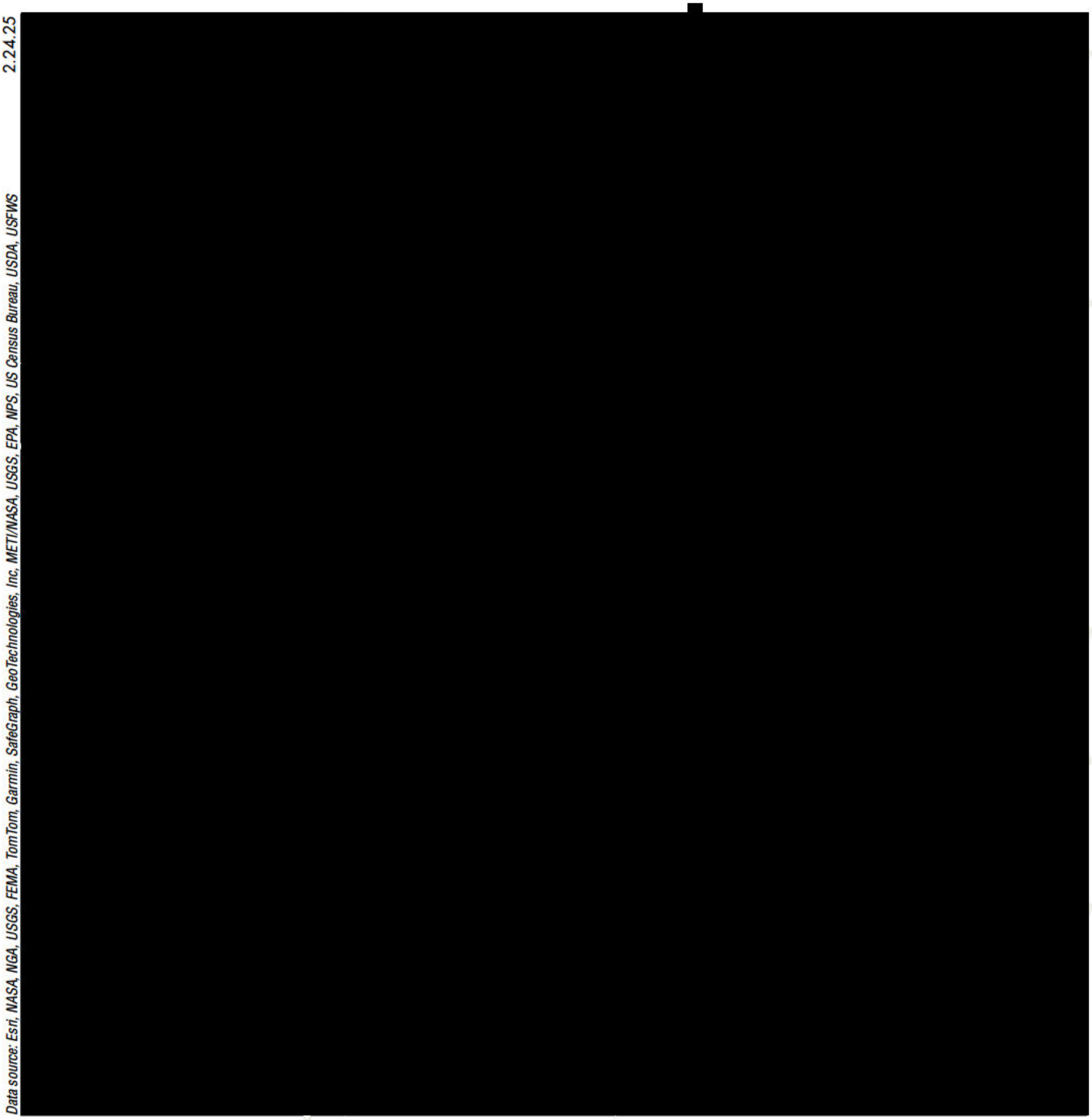
Areas of Archaeological Sensitivity

Figure 2b



2.24.25

Data source: Esri, NASA, NGA, USGS, FEMA, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, USFWS

0 1 Mile

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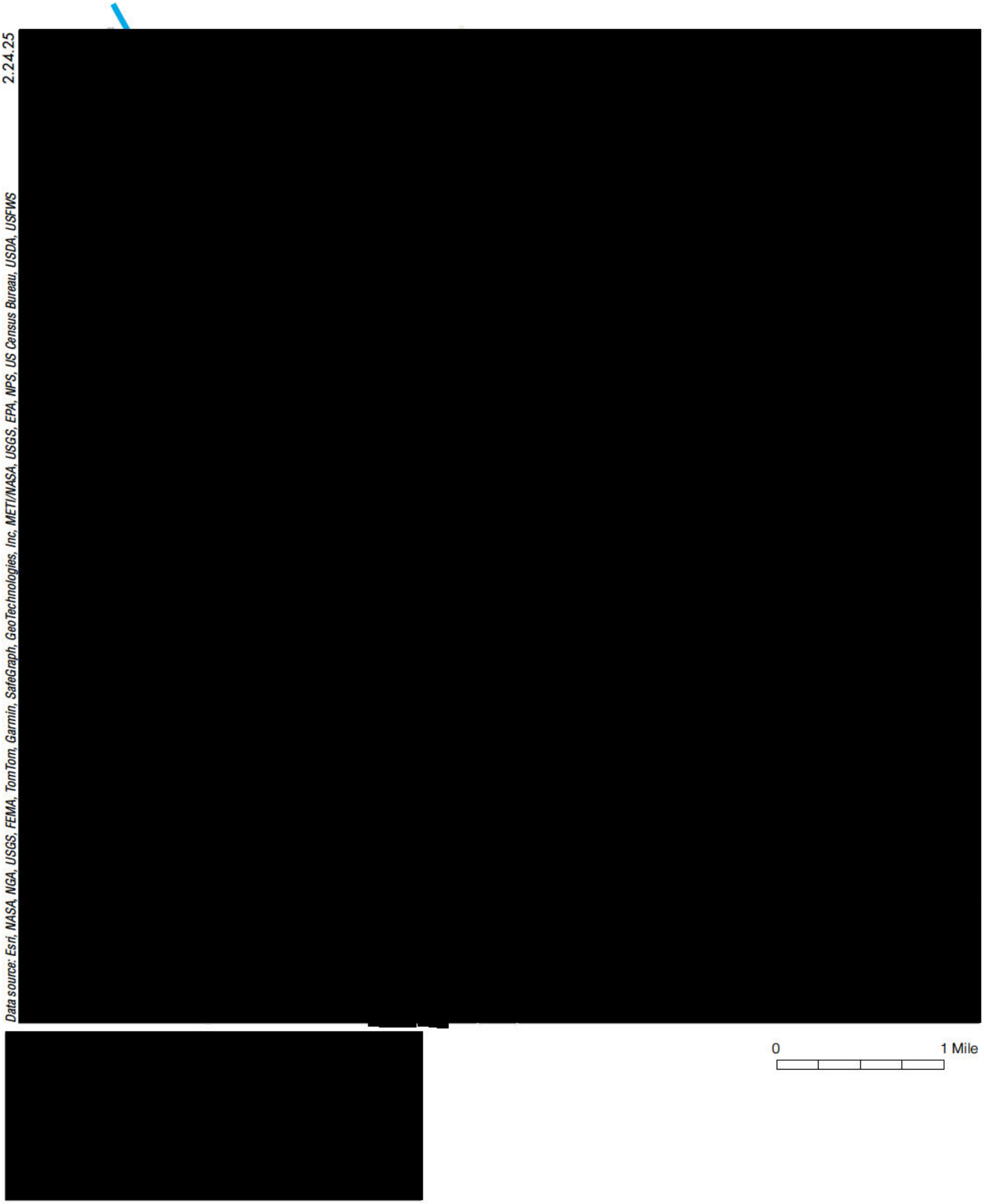
Areas of Archaeological Sensitivity

Figure 2c



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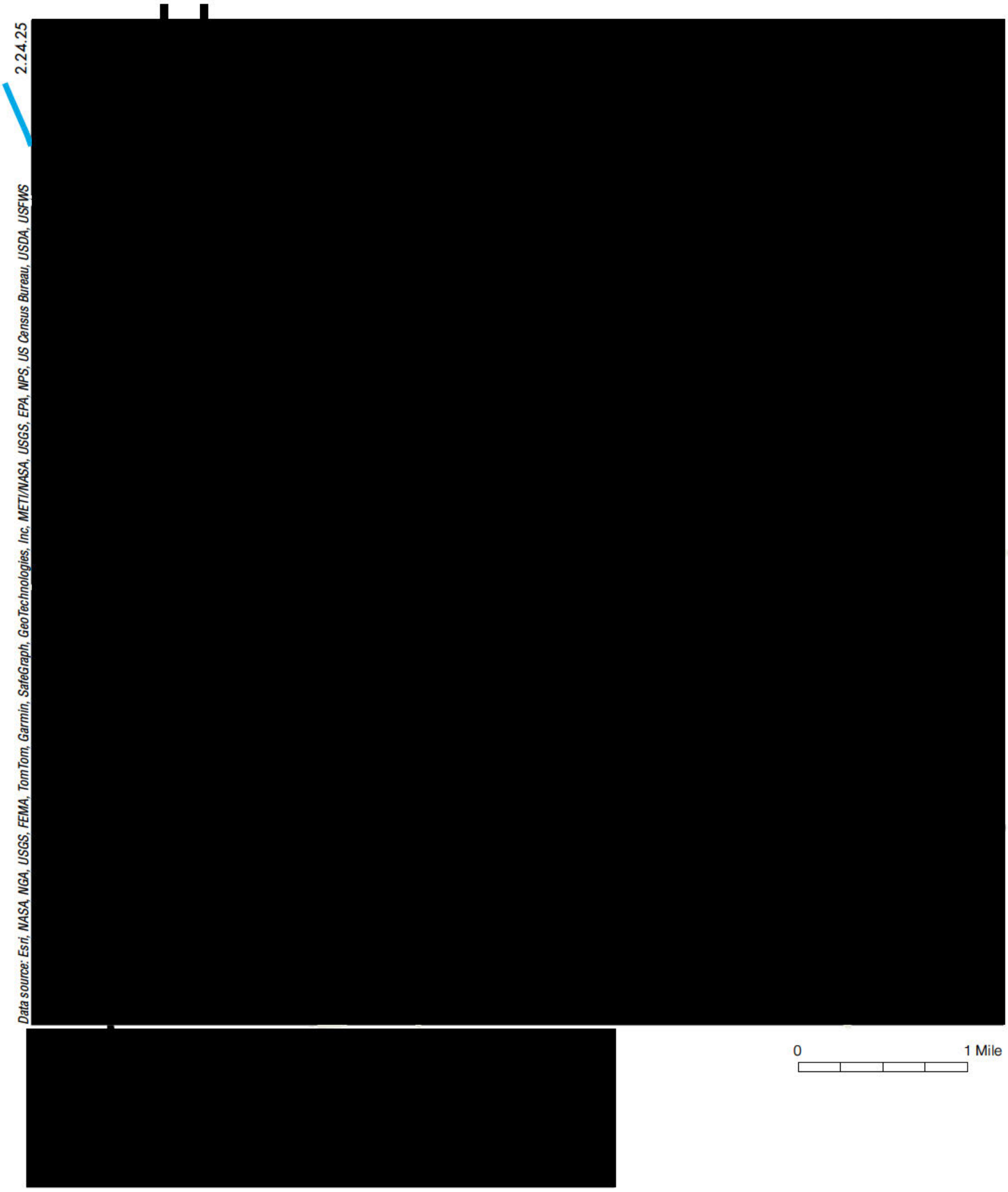
Areas of Archaeological Sensitivity

Figure 2d



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Areas of Archaeological Sensitivity

Figure 2e

Proposed Micron Semiconductor Fabrication Project:

Industrial Wastewater Treatment Plant at Oak Orchard

TOWN OF CLAY; ONONDAGA COUNTY, NEW YORK

Phase 1B Archaeological Investigation Work Plan

SHPO Project Review Number 23PR08020

Prepared for:

Micron New York Semiconductor Manufacturing LLC (Micron)
6360 South Federal Way
Post Office Box 6
Boise, Idaho 83716

Prepared by:

AKRF, Inc.
440 Park Avenue South
New York, NY 10016
212-696-0670

MARCH 2025

Phase 1B Archaeological Work Plan

1. PROPOSED PROJECT

Micron New York Semiconductor Manufacturing LLC (Micron), a Delaware limited liability company and wholly owned subsidiary of Micron Technology, Inc., is proposing to acquire the approximately 1,400-acre White Pine Commerce Park site, located at 5171 New York State (NYS) Route 31, in the Town of Clay, Onondaga County, New York, from the Onondaga County Industrial Development Agency (OCIDA) at latitude and longitude: 43.190792, −76.157056. Micron's proposed semiconductor manufacturing facility campus ("Micron Campus") will be built over an approximately 16-year period. It will consist of the construction of four approximately 160-foot-tall (approximately 1.31-million-square-foot) memory fabrication facilities ("fabs"). Each fab location would be supported by additional structures, including central utility buildings; warehouse space; product testing space; electrical substations; water and wastewater pre-treatment and storage buildings; and gas storage. Access to the Micron Campus would be from NYS Route 31, Caughdenoy Road, and a secondary access from NYS Route 11. An approximately 38.24-acre parcel on the west side of Caughdenoy Road (Town of Clay Tax Parcels 046.-02-03.2 and 046.-01-19.1) (the "Rail Spur Site") would be used to deliver construction aggregate to the Micron Campus by rail spur and overhead conveyance system. Micron will also construct an employee healthcare center, childcare center, and recreation center and an athletic field at an approximately 30.2-acre parcel at 9100 Caughdenoy Road (Town of Clay Tax Parcel 042.-01-13.0, the "Childcare Site"). Collectively, the above actions are considered the Proposed Project (see **Figure 1**).

ENVIRONMENTAL REVIEW

The CHIPS Program Office (CPO) within the National Institute of Standards and Technology (NIST) of the United States Department of Commerce is serving as the lead for Section 106 of the National Historic Preservation Act (Section 106). A Programmatic Agreement will be executed by all involved parties to document the commitments to completing all future phases of cultural resources analysis, including archaeological testing. The Programmatic Agreement will also describe the measures that would be carried out to assess, identify, and treat any identified archaeological sites, as well as any unanticipated discoveries during construction.

2. THE AREA OF POTENTIAL EFFECTS

To serve the Micron Campus, the Onondaga County Department of Water Environment Protection (OCDWEP) would oversee the design, construction, operation, and maintenance of a new Industrial Wastewater Treatment Plant (IWWTP) and water reuse facility on OCDWEP-owned land at the existing Oak Orchard site (the site of an existing wastewater treatment plant [WWTP] at 4300 Oak Orchard Road, Town of Clay tax parcel 031.-01-03.0). When complete, the IWWTP would occupy approximately 35 acres of the Oak Orchard site. In order to retain visual screening and natural habitat along the north side of the Oak Orchard WWTP property, a vegetative buffer will be retained as part of the proposed improvements.

Construction of the IWWTP would necessitate the removal of existing solar panel arrays located on the Oak Orchard site and an existing Oak Orchard WWTP lagoon. The conceptual plan provided by OCDWEP assumes the IWWTP would include a membrane biological reactor (MBR), a single water reclamation reverse osmosis facility, zero liquid discharge total dissolved solids, and control buildings consistent with traditional wastewater facility construction. The buildings and tankage that would be constructed would be similar in appearance and height as existing buildings on site. The MBR, aeration and solids building would be one to three stories tall (estimated maximum of 15 feet/story). Crystallizers could range from 30 to 75 feet tall, depending on the vendor. The IWWTP would likely require the replacement of the existing Oak Orchard WWTP outfall given its age, size and configuration. This would require construction within the Oneida River in the vicinity of the current outfall, but not within the navigation channel. Accordingly, construction would not impact Canal Corporation annual dredging areas.

3. BACKGROUND INFORMATION AND SENSITIVITY DETERMINATION

CURRENT SITE CONDITIONS

The existing WWTP is situated on the eastern side of Mud Creek (see **Figures 1 and 2**). A long paved driveway connects to the WWTP via Oak Orchard Road to the north. Two large aeration lagoons line the western side of the APE. The majority of the developed portion of the facility is a flat area in the center of the APE developed with two clusters of buildings connected by paved driveways/walkways located to the northeast and southwest of the lagoons. A large solar array is located in the northern-central portion of the APE. An existing outfall pipe is located at the vegetated shoreline of the Oneida River near the northern end of the APE. Additional portions of the APE are occupied by undeveloped woods.

PRECONTACT PERIOD ARCHAEOLOGICAL SENSITIVITY

The precontact sensitivity of sites in the northeastern United States is generally evaluated by a site's proximity to level slopes (e.g., less than 12 to 15 percent), water courses, well-drained soils, and previously identified precontact archaeological sites (NYAC 1994). The APE is situated in a generally level area in the immediate vicinity of the Oneida River, Mud Creek, and their wetland networks.

HISTORIC PERIOD ARCHAEOLOGICAL SENSITIVITY

As described in the Phase 1A Study, dense settlement of the area by individuals of European descent did not begin until the late 18th and early 19th centuries, though before that time, trade networks associated with Indigenous communities, French Jesuit priests, and other European colonizers extended through the region and trading activities or trade-related travel may have occurred on or in the vicinity of the APE.

4. RESEARCH DESIGN

The objective of the Phase 1B Archaeological Investigation of the IWWTP at Oak Orchard APE is to determine the presence or absence of precontact period archaeological deposits within the undisturbed portions of the APE. If present, the Phase 1B Archaeological Investigation will make an assessment as to whether the resources are in sufficient quantity/concentration and of sufficient research value to determine if a Phase 2 Archaeological Survey/Evaluation is required to further delineate the boundaries of the archaeological site and to evaluate its potential significance. The determination of an archaeological site's significance is largely dependent on the types of potential archaeological resources that could be encountered within the APE and on the specific research questions that can be answered through the analysis of those resources. A professional, modern archaeological investigation could produce valuable data about the precontact occupation of the area that could be compared and contrasted with previously collected data. This could produce new data and add to existing knowledge of life in the vicinity of what is now Onondaga County during the precontact period.

5. ARCHAEOLOGICAL TESTING PROTOCOL

Although documentary research determines archaeological potential, excavation for the purposes of archaeological testing is required to determine if resources are *actually* present on a site. Therefore, this Archaeological Work Plan addresses Phase 1B presence/absence testing and includes a contingency for the evaluation for National Register eligibility (e.g., a Phase 2 Archaeological Survey/Evaluation), which may become necessary. The Phase 1B Archaeological Investigation will be conducted in accordance with the "Phase 1 Archaeological Report Format Requirements" as issued by SHPO in 2005, and with the "Standards for Cultural Resources Investigations and the Curation of Archaeological Collections in New York State" as issued by the New York Archaeological Council (NYAC) in 1994 and adopted by SHPO in 1995.

Archaeological testing within the IWWTP at Oak Orchard APE will take place within the areas of archaeological sensitivity identified in the Phase 1A Study as shown on **Figure 2**. Subsurface testing will primarily consist of hand-excavated shovel test pits (STPs) and, where necessary, test units. No mechanical testing is proposed as part of this Phase 1B Archaeological Investigation. The testing strategy outlined in this protocol may be altered based on conditions observed in the field, including previously unforeseen obstructions.

For all testing, a representative from the Onondaga Nation will be retained to oversee the archaeological testing to determine if sacred objects or other items of cultural importance are encountered. The monitor will be compensated for their work at an hourly rate to be determined in coordination with the Onondaga Nation. In the event that the Oneida Indian Nation or other Indigenous Nations request to have an on-site monitor present during the archaeological testing, such requests will be accommodated. The Onondaga Nation will be engaged to discuss suggestions for a local archeological firm or a firm with local experience to be included in the investigation team with staff members that have local expertise and a history of and capacity to work closely with Indigenous Nation monitors and Section 106 representatives. The archaeological firm should have expertise in Haudenosaunee and Onondaga culture and artifacts and should demonstrate their respect for and ability to work with Onondaga Nation representatives.

SUBSURFACE TESTING

Testing has been recommended throughout undisturbed and accessible portions of the entire APE. No testing is proposed in visibly disturbed areas, paved areas (if any), areas with standing water. If any

portions of the APE will not be impacted by the proposed improvements, those areas may be excluded from the testing program.

STPs will be excavated at intervals of approximately 50 feet (15 meters) across a grid or, depending on the location of existing infrastructure, along linear transects in undisturbed areas. Testing will be designed to sample enough of the area to determine if intact precontact resources or an intact buried ground surface are likely to be present. The 50-foot (15-meter) interval is established as the preferred interval for subsurface shovel testing as outlined in the NYAC archaeological guidelines as issued in 1994 and adopted by SHPO in 1995. In locations where physical conditions suggest heightened archaeological sensitivity are observed (e.g., in areas where soil drainage is better; where surficial indications or vegetation suggesting prior disturbance are absent; where artifacts are observed on exposed/cleared ground surfaces; or where STPs are positive for archaeological resources), the interval may be narrowed to 25 feet (7.5 meters). In the event that submerged soils or areas of visible disturbance are present, STPs may be excavated at an interval of 100 feet (30 meters) to confirm the limits of disturbance or certain soil types. STPs will be placed along linear transects or established grids depending on the landscape of the area being tested. If mature trees, large soil/fill deposits, slopes greater than 10 percent, or other obstructions are present, STPs may be offset from the grid/transect or skipped, depending on the discretion of the archaeological consultant.

Inundated wetland areas that may have been dry, inhabitable land in the past will be tested where possible. Disturbed or saturated soils may be tested at a 100-foot (30-meter) interval to confirm the limits of saturated soils as identified by the USDA soil survey. Additional STPs may be judgmentally placed in areas deemed testable by the archaeological team. These areas where testing may be possible may include isolated elevated or dry areas within otherwise inundated wetlands. In the event that wetland areas are present that cannot be physically tested in the manner described previously, alternative means of documentation may be considered that include, but are not limited to, monitoring during construction. A plan for further examination of submerged areas will be determined based on observations made in the field regarding the viability of testing submerged areas.

Each STP will be approximately 16 to 18 inches in diameter and excavated to a depth of approximately 2 to 3 feet, or until sterile subsoil is encountered. It is expected that at least 300 to 400 STPs will be required to test the entire easement over time and that the testing may be completed in stages. The exact number of STPs will depend on the extent of visible disturbance/obstructions observed in the field. If isolated precontact archaeological deposits are identified in the STPs placed along the 50-foot-grid or transect, additional STPs will be excavated at closer intervals—one each at a distance of 3 feet and 10 feet to the north, south, east, and west, or eight radial STPS total—in the vicinity of the find to determine the horizontal and vertical extents of potential artifact deposits. Radial STPs will not be excavated when two of more precontact artifacts are found in consecutive shovel tests along the 50-foot grid.

Hand-excavated soils in areas where intact, natural soils are identified will be screened through quarter-inch steel mesh. Fill materials and disturbed soils will not be screened. Artifacts will be systematically collected from hand-excavated soils and will be placed in labeled plastic bags.

In addition to the excavation of STPs, where feasible, testing may involve the use of plowing and disking. In the event that this method is pursued as part of the testing plan, the surface survey will follow the protocols outlined in SHPO's *Phase I Archaeological Report Format Requirements* issued in 2005. Plowed areas will be a minimum of 10 feet (3.3 meters) in width and will be spaced a maximum of 50 feet (15 meters) apart in areas with 70 percent visibility at a minimum.

All artifacts recovered through screening will be placed in labeled plastic bags according to stratigraphic level.

IDENTIFICATION OF ARCHAEOLOGICAL FEATURES

Precontact archaeological features can include hearths, arrangements of postholes, or other evidence of camps or occupations sites. Historic features can include shaft features (e.g., privies, cisterns, or wells), foundation remnants, or middens. Precontact or historic features or buried ground surfaces encountered during testing would be sufficiently sampled so as to indicate if further testing (e.g., a Phase 2 Archaeological Survey/Evaluation) is necessary (see Contingency Tasks, below). If a Phase 2 Archaeological Survey/Evaluation is determined necessary, no further work would be completed as part of the Phase 1B Archaeological Investigation pending further coordination with CPO, SHPO, and the Indigenous Nations, and any open test units or STPs will be backfilled to protect the archaeological site. At that time, the archaeological consultant will coordinate with CPO, who will coordinate with SHPO, Indigenous Nations, and other Consulting Parties to establish the scope of work for a Phase 2 Archaeological Survey/Evaluation Work Plan ("Phase 2 Work Plan"). Depending on the number of features or sites present within the APE, the Phase 2 Work Plan may include a sampling strategy developed in coordination with CPO, SHPO, the Indigenous Nations, and other Consulting Parties, which will determine the extent to which each feature is excavated and documented. The feature or features will then be re-excavated for the Phase 2 Archaeological Survey/Evaluation.

AVOIDANCE PLAN

In the event that archaeological sites are identified within the APE that are potentially significant but that would not be impacted by the proposed improvements, an "Avoidance Plan" may be prepared after completion of the Phase 1B Archaeological Investigation. The avoidance plan will describe how the project will successfully avoid and protect areas of archaeological sensitivity (e.g., agreements to mark and post sensitive areas to prevent disturbance from heavy machinery or staging activities, etc.). Should an Avoidance Plan be necessary, CPO will coordinate with SHPO, Indigenous Nations, and other Consulting Parties to develop the plan and to established the protocols for its finalization and approval.

HEALTH AND SAFETY PLAN

Testing completed as part of this Phase 1B Archaeological Investigation is not expected to exceed a depth of 4 feet below grade in most locations. In the event that such deep excavation will occur, a Health and Safety Plan (HASP) may be required in compliance with the standards of the United States Department of Labor's Occupational Safety and Health Administration (OSHA) pertaining to safe excavation practices.

6. CONTINGENCY PLAN FOR PHASE 2 ARCHAEOLOGICAL SURVEY/EVALUATION AND ADDITIONAL SITE PROTECTION MEASURES

As stated previously, the Phase 1B Archaeological Investigation testing will be designed to determine the presence or absence of archaeological resources, not to fully expose or document any encountered resources. A Phase 2 Archaeological Survey/Evaluation ("Phase 2 testing") occurs only if the Phase 1B Archaeological Investigation uncovers a site or evidence of a site that will need to be evaluated according to the National Register criteria for eligibility. Phase 2 testing is used "to obtain detailed information on the integrity, limits, structure, function, and cultural/historical context of an

archaeological site sufficient to evaluate its potential National Register eligibility" (NYAC 1994: 4). It involves detailed research beyond that done in the first phase, greater sampling of the property, a greater variety in the types of testing units (i.e., including larger testing units and/or shovel test pits at closer intervals), and closer analysis of artifacts. If Phase 2 testing is necessary, it would be undertaken in consultation with CPO, SHPO, the Indigenous Nations, and other Consulting Parties. The Phase 2 Survey and Evaluation will then determine if additional archaeological analysis (e.g., Phase 3 Mitigation/Data Recovery) is warranted in the event that the project cannot be redesigned to avoid significant archaeological sites. In the event that Phase 2 testing is required, a separate Work Plan will be prepared at that time for submission to CPO, SHPO, the Indigenous Nations, and other Consulting Parties as described above.

7. SITE DOCUMENTATION

Professional standards for testing, screening, recording features and stratigraphy, labeling, mapping, and photographing any identified archaeological resources will be applied during the Phase 1B Archaeological Investigation. Soil profiles including colors—recorded using Munsell soil color charts—and texture/inclusions will be recorded in field notes. Soil profiles will be included in the final report in tabular form supplemented by photographs and drawings as appropriate. Testing locations will be recorded in field notes and field maps. All on-site testing will be recorded relative to an on-site datum and converted to the North American Vertical Datum of 1988 (NAVD88). The on-site datum will be calculated using existing site surveys or estimated using existing Lidar data or other available contour information. Where possible, testing locations will be recorded digitally using GIS software. The North American Datum of 1983 (NAD83) will be used as a permanent horizontal datum. The testing will be recorded using digital photography and videography as appropriate throughout the field effort.

8. LABORATORY PROCESSING

Following each stage of work, archaeologists will clean, stabilize, and inventory all cultural material removed from the APE. During the course of the investigation, the archaeological consultant will retain custody of all recovered artifacts, which will not be stored on-site. All laboratory activity will be conducted in compliance with the aforementioned guidelines and with those established by the United States Department of the Interior/National Park Service for the Curation of Federally-Owned and Administered Archaeological Collections (*36 CFR 66* and *79*). Artifact washing will begin immediately after transfer of the collection to the laboratory. Trained technicians will process the artifacts using standard archaeological techniques. Artifacts will be washed with a mild, non-ionic detergent using soft-bristle brushes and after washing they will be air dried on racks. Fragile artifacts and those with non-stable surfaces will be washed separately without brushing. Artifact bags will be labeled in waterproof ink with all relevant provenience information. After they have been cleaned and dried, the artifacts will be placed in archivally stable polyethylene zipper-top artifact bags for permanent storage. The provenience information will be written on the outside of the bags using a permanent, waterproof marker.

An artifact catalog recording the depth and location of each recovered artifact will be created. To the extent possible, recovered artifacts will be identified as to material, temporal or cultural/chronological association, function, and style following the standard archaeological references. Detailed analysis would include the identification of the *Terminus Post Quem* (TPQ) of artifacts for each context and the generation of mean beginning and end dates for assemblages. This information could be used to establish the contemporaneity of contexts and strata, and to determine which assemblages represent primary or secondary deposits. If deemed significant and in consultation with CPO, SHPO, the

Indigenous Nations, and other Consulting Parties, artifacts that are recovered from the site will be curated according to the regulations of the Department of the Interior/National Park Service *356 CFR 79*.

IDENTIFICATION OF AN ARTIFACT REPOSITORY

Any artifact collection removed from the Micron Campus would be the property of the owner of the land at the time of the testing. In the event that objects of cultural significance to the Indigenous Nations are encountered, the investigators will immediately notify CPO, who will coordinate with SHPO, the Indigenous Nations, and other Consulting Parties regarding documentation and repatriation pursuant to Section 106 and any other relevant legislation. In the event that significant archaeological resources are encountered within the APE that require permanent curation, efforts will be necessary to locate a repository that is capable of accepting and curating the collection. Upon the completion of field testing, if significant resources are found, a repository will be identified and selected in conjunction with CPO, who will further coordinate with SHPO, the Indigenous Nations, and other Consulting Parties to determine a suitable long-term curation plan. If the artifact collection is determined to have no research value, it will be returned to the site owner or discarded at their discretion within one year of the completion of fieldwork. The site owner may then choose to retain and store the collection or may seek out alternative methods of disposal.

9. REPORTING

Following the completion of field testing and laboratory processing and analysis, a detailed Phase 1B Archaeological Investigation report will be prepared for each stage of work. With the assumption that the fieldwork will be completed in multiple stages, it is assumed that multiple reports will be prepared to summarize the work completed as part of that stage. Each final report will document all methodologies used during the course of the investigation and will discuss all findings that emerge from the recovered data, maps, plans, drawings, photographs, and/or other relevant images will be incorporated into the body of the report as needed to illustrate project findings. The report will include a site map showing the location of all resources identified, as well as a complete inventory of the artifacts. The report will be prepared according to the guidelines and standards issued by SHPO and NYAC. If the testing locates features *in situ*, the documentation of those features will be incorporated into the Work Plan of the Phase 2 Archaeological Survey/Evaluation.

Each final technical report will include the following information:

- Description of the portion of the APE included in that investigation;
- Relevant documentation/background research;
- Research design;
- Field studies as actually implemented, including any deviation from this Work Plan and the reason for those changes;
- Field observations;
- Analyses and results, illustrated as appropriate with maps, photographs, tables, charts, and graphs; and
- Recommendations for further archaeological work, if necessary.

A draft report of the final technical report will be submitted to CPO, who will further coordinate with SHPO, the Indigenous Nations, and other Consulting Parties pursuant to Section 106. If necessary, a

final version of the report will be prepared to address comments, which CPO will circulate to the SHPO, Indigenous Nations and other Consulting Parties for concurrence.

10. PROJECT COORDINATION AND MANAGEMENT

Prior to each stage of testing, the archaeological consultant will contact CPO, who will further coordinate with SHPO, the Indigenous Nations, and other Consulting Parties, when testing is scheduled to begin and will retain the services of a monitor from the Onondaga Nation and any other nations that may request to be present. If requested, the archaeological consultant will assist in arranging a site visit for representatives of CPO, who will coordinate the participation of SHPO, the Indigenous Nations, and other Consulting Parties as necessary and appropriate during the course of the Phase 1B Archaeological Investigation. However, during the field testing, the archaeological team will distribute a summary of work completed to date on a weekly basis (including number/location of tests completed and relevant finds) to CPO, SHPO, the Indigenous Nations, and other Consulting Parties.

It is possible that the field testing will not reveal any potentially significant archaeological features, deposits, or intact soil strata. If that is the case, no further archaeological consideration would be warranted, and a report to that effect would be prepared. In the event that archaeological resources are encountered, CPO on a weekly basis will further consult with SHPO, the Indigenous Nations, and other Consulting Parties. In either case, a final report on the field investigation will be submitted to CPO, SHPO, the Indigenous Nations, and other Consulting Parties for review and comment, indicating a presence or absence of archaeological features.

11. PROTOCOL FOR THE UNANTICIPATED DISCOVERY OF HUMAN REMAINS

There is no indication that human remains are present within the APE. However, in the unlikely event that human remains or suspected human remains are encountered within the APE, the SHPO Human Remains Discovery Protocol and the Haudenosaunee Policy on Human Remains (reproduced below) would be implemented in consultation with CPO. All requests from the Indigenous Nations to modify this protocol will be honored in consultation with CPO and SHPO. As the project is subject to Section 106, the project is not subject to the *New York State Unmarked Burial Site Protection Act* (NY EXEC § 171, the "Act"), which went into effect on August 1, 2023 and requires consultation with the New York State Archaeologist in the event that undocumented human remains are encountered in New York State. In the event that human remains are determined to be Indigenous, all relevant legislation (e.g., the Native American Graves Protection and Repatriation Act [NAGPRA]) would apply. All graves, funerary objects, and soils surrounding graves will be protected and treated with the utmost dignity and respect. As per the policies reproduced below, no photography or analysis of Indigenous remains would occur as part of the archaeological investigation unless specifically requested by the Indigenous Nations.

SHPO HUMAN REMAINS DISCOVERY PROTOCOL (JANUARY 2021)[1]

In the event that human remains are encountered during construction or archaeological investigations, SHPO recommends that the following protocol is implemented:

- *Human remains shall be treated with the utmost dignity and respect. Should human remains or suspected human remains be encountered, work in the general area of the*

[1] https://parks.ny.gov/documents/shpo/environmental-review/HumanRemainsProtocol.pdf

discovery shall stop immediately and the location shall be secured and protected from damage and disturbance.

- *If skeletal remains are identified and the archaeologist is not able to conclusively determine if they are human, the remains and any associated materials shall be left in place. A qualified forensic anthropologist, bioarchaeologist or physical anthropologist shall assess the remains in situ to help determine if they are human.*
- *If the remains are determined to be human, law enforcement, the SHPO, the appropriate Indian Nations, and the involved state and federal agencies shall be notified immediately. If law enforcement determines that the burial site is not a criminal matter, no skeletal remains or associated materials shall be removed until appropriate consultation takes place.*
- *If human remains are determined to be Native American, they shall be left in place and protected from further disturbance until a plan for their avoidance or removal is developed. Please note that avoidance is the preferred option of the SHPO and the appropriate Indian Nations. The involved agency shall consult SHPO and the appropriate Indian Nations to develop a plan of action. Photographs of Native American human remains and associated materials should not be taken without consulting with the involved Indian Nations.*
- *If human remains are determined to be non-Native American, the remains shall be left in place and protected from further disturbance until a plan for their avoidance or removal is developed. Please note that avoidance is the preferred option of the SHPO. The involved agency shall consult SHPO and other appropriate parties to develop a plan of action.*
- *The SHPO recommends that burial information is not released to the public to protect burial sites from possible looting.*

HAUDENOSAUNEE POLICY ON HUMAN REMAINS

The policy on human remains was extracted from *Polishing the Silver Covenant Chain: Building Relationships Between Federal, State Agencies and the Haudenosaunee* as issued by the Grand Council of the Haudenosaunee in 2002 (see Parts 4.1, 4.2, and 4.7).

HAUDENOSAUNEE BELIEFS

We have been taught that we bury our dead into the ground so that their bodies can become part of the sacred Earth. We believe that we come from the Mother Earth and that the human remains that rest within the Earth are an important spiritual connection to the spirit of the Earth. The Earth is enriched by the dead as our flesh becomes part of the soil.

The souls of the dead have a path of destiny that they must follow. We refer to this as their journey after life. in this way, we feel that the dead are around us and hover over us as we hold ceremonies or dances. We believe that the dead have power and it is dangerous to neglect the spiritual needs of the dead.

The protection of the human remains and associated graves, sacred burial sites and related objects from the graves of the Haudenosaunee are the responsibility of each generation of Chiefs, Clan mothers, and Faithkeepers. We believe that the remains, the associated burial objects and the actual soil in which they rest is sacred. There is no acceptable excuse to justify the desecration of this sacred burial.

VIOLATION OF OUR SPIRITUAL RIGHTS

Removing the remains from their eternal resting place is a great desecration to both the dead and the living. The disturbance, destruction, and theft of the dead is a violation of the religious and spiritual welfare of the Haudenosaunee.

As long as the human remains are disturbed, there will be spiritual consequences to our people. The desecration of the graves of our ancestors, no matter what the age of the burial, is a violation of our religious freedom.

Permits issued by the State of New York or any other local government, to allow anyone to violate the sanctity of the graves of our ancestors can no longer be tolerated. In the past, our ancestors buried many objects along with the body with the belief that in the afterlife, you will need all of those things that you need in this life.

All types of objects have been associated with burials, including decorated clothing, glass beads, shell beads, silver combs, tools and weapons, ceramic and metal cooking pots, wampum belts, strings of wampum, and a variety of personal items. The removal of these objects from the grave is a theft from the dead.

VIOLATION OF OUR HUMAN RIGHTS

The remains of our deceased relatives are not "archaeological resources" that are subjects of study. They we human beings who once lived on this land. They had real lives and feelings. They had spiritual expectations about their final resting places. To look at Native Peoples as objects rather than as human beings is a gross violation of our human rights.

All graves and burial sites, Native or not, deserve respect. Our dead relatives deserve the basic human right to a dignified burial. We do not believe in the use of permanent headstones to mark graves of our ancestors and state law makes a difference between cemeteries and unmarked burials.

Our burial sites deserve to be considered hallowed ground, whether they are marked or not. There has been double standard in dealing with our people and non-Native remains. Non-Native grave sites are often afforded more protection then Native burials.

Despite the efforts of state agencies to identify Native grave locations, construction permits are issued nonetheless. Our dead deserve the same right to an eternal resting place as all other races and religions.

VIOLATION OF OUR TREATY RIGHTS

The unearthing of the remains of our ancestors from their eternal resting pace is also a violation of the promises made to the Haudenosaunee under the terms of the Canandaigua Treaty of 1794. By that treaty, the United States, including the State of New York, promised not to "disturb" the Haudenosaunee in the free use and enjoyment of their lands.

We have been on record protesting the desecration of our graves. The continual destruction of Native graves, the stealing of Native remains and the looting of burial objects causes us serious mental, emotional, and spiritual harm.

Our people are continually upset by these events and we have been forced to adjust our spiritual traditions to accommodate outside developments. The desecration of the graves violates the mutual respect promised by the United States as they pledged a firm and permanent friendship between our peoples.

The treaty also promised to remove the cause of complaint that upsets our peace. We therefore make it clear that the desecration of the graves of our ancestors causes great harm to our people and the United States and State of New York have an obligation to protect the general welfare of our people as promised in the legally binding treaties.

Protocol for Handling Discovery of Human Remains [As published by the Onondaga Nation in 2002]		
	Known Burials	***Unidentified Burials***
When to contact?	***Intentional excavation**: At the earliest time in decision-making process*	***Inadvertent Discovery**: Upon discovery*
Which Nation to contact?	*If the fine is within existing Nation boundary, contact that Nation's Cultural Resource representatives. If the find is within the traditional land use area (fifty mile radius from the current nation territory), contract the closest Nation's Cultural Resource Representative. If the find is within the aboriginal territory of each nation, as shown on the attached map [note: not included here], contact the Nation within that territory. For finds located within fifty miles on either side of the boundary lines shown on the map, contact the Cultural Resource Representatives of both Nations.*	
Who to contact?	*Haudenosaunee Cultural Resource representatives (HSCBRR)*	*Haudenosaunee Cultural Resource representatives (HSCBRR)*
How to contact?	*Contact list is provided [note: not included here]*	
Information Required	*Brief description of the find or potential find; site map and any information on the known cultural history of the area and summary of nearby archaeological findings.*	
	Nation will send a representative to review the site.	*Company must hire a Native American on-site observer. No remains shall be removed.*
Next Steps	***Non-disturbance of burials is preferred**. If after proper consultation, the remains must be removed, we prefer to have them reburied close to their original location as possible, provided the future sanctity of the grave can be assured. **No remains should be removed without proper cultural protocols**. If no safe local burial ground can be offered, the Haudenosaunee will reclaim the remains for reburial at an undisclosed location. The local government/state agency/developer must pay for all of the costs for such reburial. All objects associated with the original burial must be reburied as well. All of the soil in the immediate area of the burial should also be placed in the new grave.*	

Source: Grand Council of the Haudenosaunee (2002)

12. REFERENCES CITED

AKRF, Inc.
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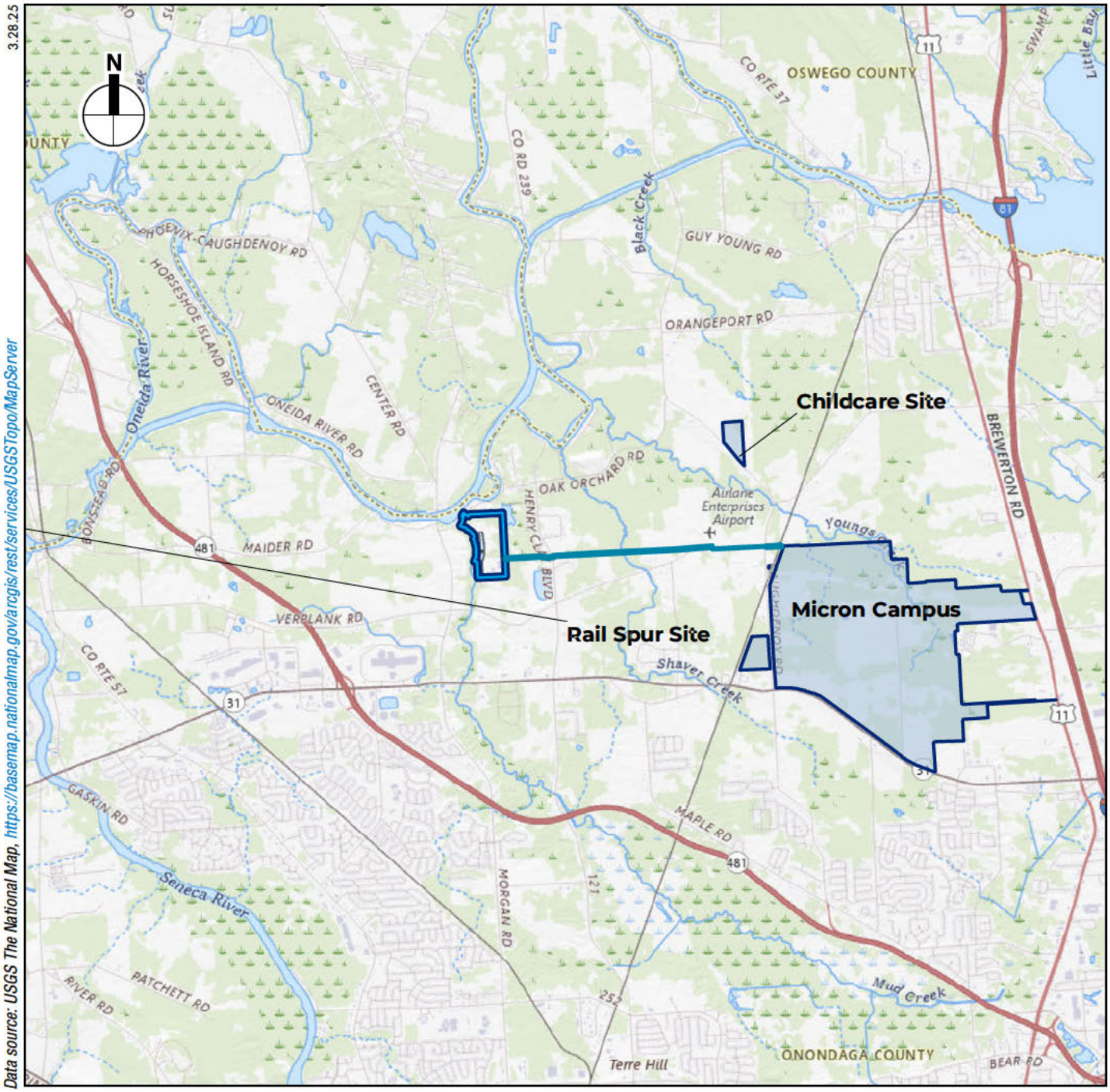
Fisher Associates
2011 "Phase 1 Cultural Resources Survey: Metropolitan Water Board Terminal Reservoir Compliance with LT2 ESWTR; Town of Clay; Onondaga County, New York." Prepared for: Metropolitan Water Board; Clay, NY.

Grand Council of the Haudenosaunee
2002 *Polishing the Silver Covenant Chain: Building Relationships Between Federal, State Agencies and the Haudenosaunee*.

New York Archaeological Council (NYAC)
1994 *Standards for Cultural Resource Investigations and the Curation of Archaeological Collections in New York State*. The New York Archaeological Council.

New York State Historic Preservation Office (SHPO)
2005 *New York State Historic Preservation Office (SHPO) Phase I Archaeological Report Format Requirements*. Available online: https://parks.ny.gov/shpo/environmental-review/documents/PhaseIReportStandards.pdf.



Approximate coordinates of Project Site:
76°11'53"W 43°12'6"N

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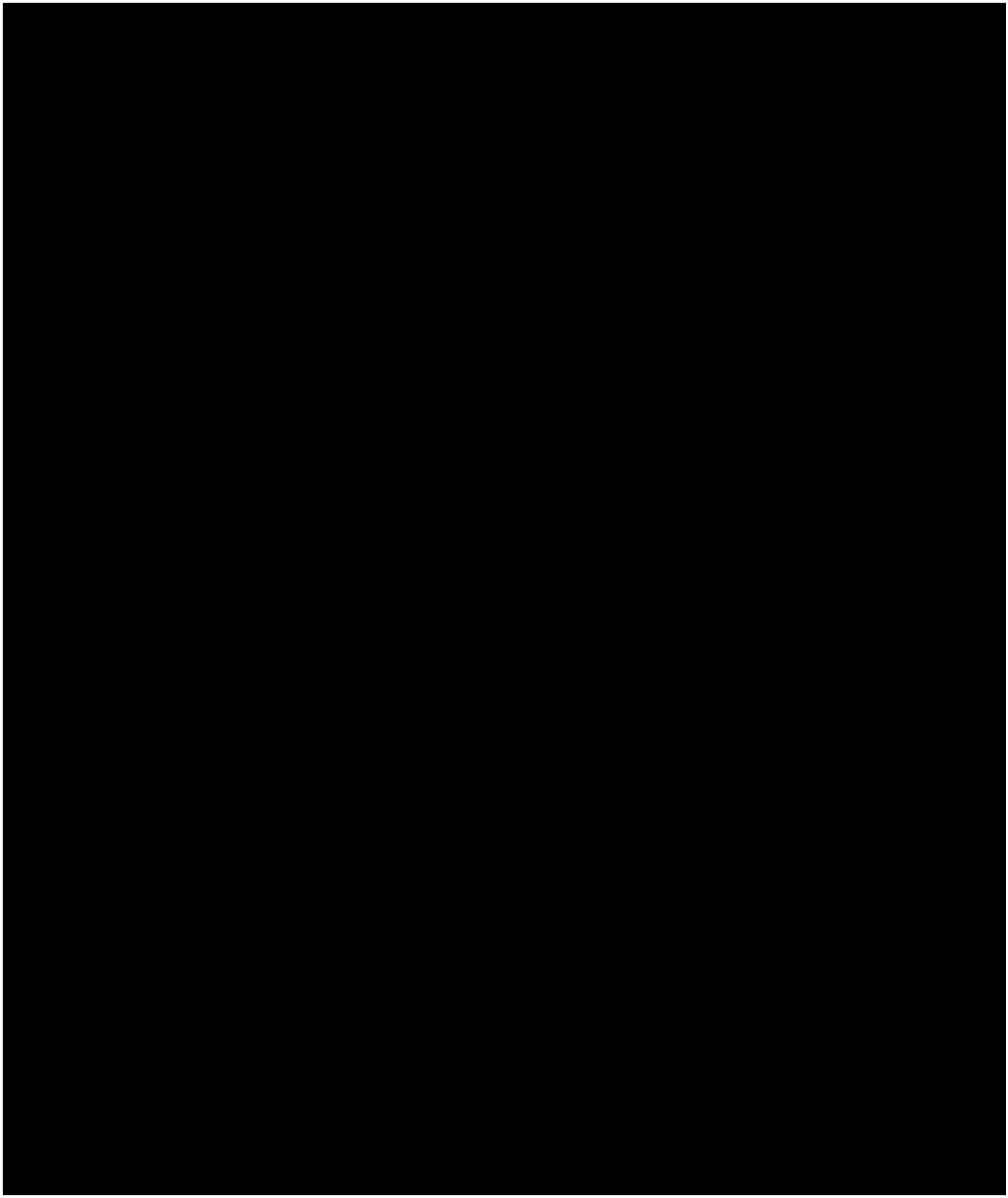
USGS Topographic Map – Brewerton Quadrangle

Figure 1



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Areas of Archaeological Sensitivity and
Proposed Limits of Disturbance

Figure 2

Proposed Micron Semiconductor Fabrication Project:

Industrial Wastewater Conveyance

TOWN OF CLAY; ONONDAGA COUNTY, NEW YORK

Phase 1B Archaeological Investigation Work Plan

SHPO Project Review Number 23PR08022

Prepared for:

Micron New York Semiconductor Manufacturing LLC (Micron)
6360 South Federal Way
Post Office Box 6
Boise, Idaho 83716

Prepared by:

AKRF, Inc.
440 Park Avenue South, 7th Fl
New York, NY 10016
212-696-0670

MARCH 2025

Phase 1B Archaeological Work Plan

1. PROPOSED PROJECT

Micron New York Semiconductor Manufacturing LLC (Micron), a Delaware limited liability company and wholly owned subsidiary of Micron Technology, Inc., is proposing to acquire the approximately 1,400-acre White Pine Commerce Park site, located at 5171 New York State (NYS) Route 31, in the Town of Clay, Onondaga County, New York, from the Onondaga County Industrial Development Agency (OCIDA) at latitude and longitude: 43.190792, −76.157056. Micron's proposed semiconductor manufacturing facility campus ("Micron Campus") will be built over an approximately 16-year period. It will consist of the construction of four approximately 160-foot-tall (approximately 1.31-million-square-foot) memory fabrication facilities ("fabs"). Each fab location would be supported by additional structures, including central utility buildings; warehouse space; product testing space; electrical substations; water and wastewater pre-treatment and storage buildings; and gas storage. Access to the Micron Campus would be from NYS Route 31, Caughdenoy Road, and a secondary access from NYS Route 11. An approximately 38.24-acre parcel on the west side of Caughdenoy Road (Town of Clay Tax Parcels 046.-02-03.2 and 046.-01-19.1) (the "Rail Spur Site") would be used to deliver construction aggregate to the Micron Campus by rail spur and overhead conveyance system. Micron will also construct an employee healthcare center, childcare center, and recreation center and an athletic field at an approximately 30.2-acre parcel at 9100 Caughdenoy Road (Town of Clay Tax Parcel 042.-01-13.0, the "Childcare Site"). Collectively, the above actions are considered the Proposed Project (see **Figure 1**).

ENVIRONMENTAL REVIEW

The CHIPS Program Office (CPO) within the National Institute of Standards and Technology (NIST) of the United States Department of Commerce is serving as the lead for Section 106 of the National Historic Preservation Act (Section 106). A Programmatic Agreement will be executed by all involved parties to document the commitments to completing all future phases of cultural resources analysis, including archaeological testing. The Programmatic Agreement will also describe the measures that would be carried out to assess, identify, and treat any identified archaeological sites, as well as any unanticipated discoveries during construction.

2. AREA OF POTENTIAL EFFECTS

The Proposed Project would require new industrial wastewater infrastructure, in the form of a new Onondaga County Department of Water Environment Protection (OCDWEP)-owned Industrial Wastewater Treatment Plant (IWWTP) on OCDWEP-owned property at the Oak Orchard site (the site of the existing OCDWEP Wastewater Treatment Plant [WWTP]), which would work in concert with the onsite industrial wastewater pre-treatment facilities that would be constructed on the Micron Campus. OCDWEP proposes to construct an industrial wastewater service conveyance between the new IWWTP on the Oak Orchard site and the proposed industrial wastewater pumping station on the northwest corner of the Micron Campus (see Figure 1).

Pending final design, the conveyance infrastructure is anticipated to be comprised of four 30-inch force mains for industrial wastewater and two roughly 36-inch force mains for recycled water supply. The

conveyance lines would be constructed within a 99-foot-wide easement extending east from the Oak Orchard site to Verplank Road at the point where the road curves southwest. Moving east, the force mains would be constructed beneath or adjacent to Verplank Road to Caughdenoy Road, then beneath Caughdenoy Road and through the undeveloped parcels between Caughdenoy Road and the CSX railroad tracks, and beneath the CSX railroad tracks to where the force mains would terminate within the Micron Campus. The force mains would be installed by conventional cut and cover trenching, directionally drilled, or additional methods depending on site conditions. The force mains would be installed below ground using HDD or other less ground-disturbing methods to the greatest extent practicable to minimize tree removal and other surface disturbances.

Between the new IWWTP and Verplank Road, the force main route would extend primarily to the rear lot lines of off-site properties or, in a few instances, would extend through adjacent vacant land parcels. On the parcels needed for the conveyance system between the Oak Orchard site and the Micron Campus, construction activities would occur in a new easement area running through portions of properties that are vacant land and farmland. To date, all but one of the easement agreements have been secured. If agreement cannot be reached with the remaining property owner, eminent domain would be used to acquire access/easements on portions of the properties where permanent easements are needed. The portions of these properties required for construction of the industrial wastewater force main do not contain structures and would not require the relocation of any structure.

East of Caughdenoy Road, two of the parcels contain no structures.

3. BACKGROUND INFORMATION AND SENSITIVITY DETERMINATION

CURRENT SITE CONDITIONS

The Industrial Wastewater Conveyance APE is partially occupied by the paved streetbeds of Ver Plank Road, Caughdenoy Road, and Henry Clay Boulevard, and by the existing CSX railroad tracks. In four locations near the CSX railroad tracks and the intersection of Ver Plank and Caughdenoy Roads, level, partially vegetated corridors containing overhead power and utility lines cross through the APE. While no structures associated with those lines are situated within the APE, areas within and adjacent to the APE exhibit evidence of clearing and possible grading as a result of their construction. Utility poles carrying additional overhead wires line both sides of Ver Plank Road within the APE. Outside of the paved roads and railroad tracks, the APE extends through wooded or vegetated areas and the front yards of several properties along Ver Plank Road. Along portions of Ver Plank Road, the streetbed is at a slightly higher elevation than the land to the north and south, and small slopes or ditches line either side of portions of the street. West of Ver Plank Road, the APE continues through open fields and dense woodlands and is bisected by Shaver Creek. West of Henry Clay Boulevard, the APE extends through an excavated sand quarry before connecting to the Oak Orchard WWTP (Tax Parcel 031-01-03.0).

PRECONTACT PERIOD ARCHAEOLOGICAL SENSITIVITY

The precontact sensitivity of sites in the northeastern United States is generally evaluated by a site's proximity to level slopes (e.g., less than 12 to 15 percent), water courses, well-drained soils, and previously identified precontact archaeological sites (NYAC 1994). The Industrial Wastewater Conveyance APE is situated in a generally level area in the immediate vicinity of the Oneida River, Mud Creek, Shaver Creek, Youngs Creek, and their wetland networks.

HISTORIC PERIOD ARCHAEOLOGICAL SENSITIVITY

As described in the Phase 1A Study, dense settlement of the area by individuals of European descent did not begin until the late 18th and early 19th centuries, though before that time, trade networks associated with Indigenous communities, French Jesuit priests, and other European colonizers extended through the region and trading activities or trade-related travel may have occurred on or in the vicinity of the APE.

4. RESEARCH DESIGN

The objective of the Phase 1B Archaeological Investigation of the APE is to determine the presence or absence of precontact period archaeological deposits within the undisturbed portions of the APE. If present, the Phase 1B Archaeological Investigation will make an assessment as to whether the resources are in sufficient quantity/concentration and of sufficient research value to determine if a Phase 2 Archaeological Survey/Evaluation is required to further delineate the boundaries of the archaeological site and to evaluate its potential significance. The determination of an archaeological site's significance is largely dependent on the types of potential archaeological resources that could be encountered within the APE and on the specific research questions that can be answered through the analysis of those resources. A professional, modern archaeological investigation could produce valuable data about the precontact occupation of the area that could be compared and contrasted with previously collected data. This could produce new data and add to existing knowledge of life in the vicinity of what is now Onondaga County during the precontact period.

5. ARCHAEOLOGICAL TESTING PROTOCOL

Although documentary research determines archaeological potential, excavation for the purposes of archaeological testing is required to determine if resources are *actually* present on a site. Therefore, this Archaeological Work Plan addresses Phase 1B presence/absence testing and includes a contingency for the evaluation for National Register eligibility (e.g., a Phase 2 Archaeological Survey/Evaluation), which may become necessary. The Phase 1B Archaeological Investigation will be conducted in accordance with the "Phase 1 Archaeological Report Format Requirements" as issued by SHPO in 2005, and with the "Standards for Cultural Resources Investigations and the Curation of Archaeological Collections in New York State" as issued by the New York Archaeological Council (NYAC) in 1994 and adopted by SHPO in 1995.

Archaeological testing within the APE will take place within the areas of archaeological sensitivity identified in the Phase 1A Study as shown on **Figure 2**. Subsurface testing will primarily consist of hand-excavated shovel test pits (STPs) and, where necessary, test units. No mechanical testing is proposed as part of this Phase 1B Archaeological Investigation. The testing strategy outlined in this protocol may be altered based on conditions observed in the field, including previously unforeseen obstructions.

For all testing, a representative from the Onondaga Nation will be retained to oversee the archaeological testing to determine if sacred objects or other items of cultural importance are encountered. The monitor will be compensated for their work at an hourly rate to be determined in coordination with the Onondaga Nation. In the event that the Oneida Indian Nation or other Indigenous Nations request to have an on-site monitor present during the archaeological testing, such requests will be accommodated. The Onondaga Nation will be engaged to discuss suggestions for a local archeological firm or a firm with local experience to be included in the investigation team with staff members that have local expertise and a history of and capacity to work closely with Indigenous Nation monitors and Section 106 representatives. The archaeological firm should have expertise in Haudenosaunee and Onondaga culture and artifacts and should demonstrate their respect for and ability to work with Onondaga Nation representatives.

SUBSURFACE TESTING

Testing has been recommended throughout undisturbed and accessible portions of the entire APE. No testing is proposed in visibly disturbed areas, paved areas (if any), areas with standing water. If any portions of the APE will not be impacted by the proposed wastewater improvements, those areas may be excluded from the testing program.

STPs will be excavated at intervals of approximately 50 feet (15 meters) across a linear transect along the lines of the proposed Industrial Wastewater Force Mains. If larger areas require testing, a grid may be established at the same interval. The testing will be designed to sample enough of the area to determine if intact precontact resources or an intact buried ground surface are likely to be present. The 50-foot (15-meter) interval is established as the preferred interval for subsurface shovel testing as outlined in the NYAC archaeological guidelines as issued in 1994 and adopted by SHPO in 1995. In locations where physical conditions suggest heightened archaeological sensitivity are observed (e.g., in areas where soil drainage is better; where surficial indications or vegetation suggesting prior disturbance are absent; where artifacts are observed on exposed/cleared ground surfaces; or where STPs are positive for archaeological resources), the interval may be narrowed to 25 feet (7.5 meters). In the event that submerged soils or areas of visible disturbance are present, STPs may be excavated at an interval of 100 feet (30 meters) to confirm the limits of disturbance or certain soil types. STPs will be placed along linear transects or established grids depending on the landscape of the area being tested. If mature trees, large soil/fill deposits, slopes greater than 10 percent, or other obstructions are present, STPs may be offset or skipped, depending on the discretion of the archaeological consultant.

Inundated wetland areas that may have been dry, inhabitable land in the past will be tested where possible. Disturbed or saturated soils may be tested at a 100-foot (30-meter) interval to confirm the limits of saturated soils as identified by the USDA soil survey. Additional STPs may be judgmentally placed in areas deemed testable by the archaeological team. These areas where testing may be possible may include isolated elevated or dry areas within otherwise inundated wetlands. In the event that wetland areas are present that cannot be physically tested in the manner described previously, alternative means of documentation may be considered that include, but are not limited to, monitoring during construction. A plan for further examination of submerged areas will be determined based on observations made in the field regarding the viability of testing submerged areas.

Each STP will be approximately 16 to 18 inches in diameter and excavated to a depth of approximately 2 to 3 feet, or until sterile subsoil is encountered. It is expected that at least 200 to 250 STPs will be required to test the entire easement and that the testing may be completed in stages. The exact number of STPs will depend on the extent of visible disturbance/obstructions observed in the field. If isolated precontact archaeological deposits are identified in the STPs placed along the 50-foot interval, additional STPs will be excavated at closer intervals—one each at a distance of 3 feet and 10 feet to the north, south, east, and west, or eight radial STPs total—in the vicini1ty of the find to determine the horizontal and vertical extents of potential artifact deposits. Radial STPs will not be excavated when two of more precontact artifacts are found in consecutive shovel tests along the 50-foot grid.

Hand-excavated soils in areas where intact, natural soils are identified will be screened through quarter-inch steel mesh. Fill materials and disturbed soils will not be screened. Artifacts will be systematically collected from hand-excavated soils and will be placed in labeled plastic bags.

In addition to the excavation of STPs and, where feasible, testing may involve the use of plowing and disking. In the event that this method is pursued as part of the testing plan, the surface survey will follow the protocols outlined in SHPO's *Phase I Archaeological Report Format Requirements* issued in 2005. Plowed areas will be a minimum of 10 feet (3.3 meters) in width and will be spaced a maximum of 50 feet (15 meters) apart in areas with 70 percent visibility at a minimum.

All artifacts recovered through screening will be placed in labeled plastic bags according to stratigraphic level.

IDENTIFICATION OF ARCHAEOLOGICAL FEATURES

Precontact archaeological features can include hearths, arrangements of postholes, or other evidence of camps or occupations sites. Historic features can include shaft features (e.g., privies, cisterns, or wells), foundation remnants, or middens. Precontact or historic features or buried ground surfaces encountered during testing would be sufficiently sampled so as to indicate if further testing (e.g., a Phase 2 Archaeological Survey/Evaluation) is necessary (see Contingency Tasks, below). If a Phase 2 Archaeological Survey/Evaluation is determined necessary, no further work would be completed as part of the Phase 1B Archaeological Investigation pending further coordination with CPO, SHPO, and the Indigenous Nations, and any open test units or STPs will be backfilled to protect the archaeological site. At that time, the archaeological consultant will coordinate with CPO, who will coordinate with SHPO, Indigenous Nations, and other Consulting Parties to establish the scope of work for a Phase 2 Archaeological Survey/Evaluation Work Plan ("Phase 2 Work Plan"). Depending on the number of features or sites present within the APE, the Phase 2 Work Plan may include a sampling strategy developed in coordination with CPO, SHPO, the Indigenous Nations, and other Consulting Parties, which will determine the extent to which each feature is excavated and documented. The feature or features will then be re-excavated for the Phase 2 Archaeological Survey/Evaluation.

AVOIDANCE PLAN

In the event that archaeological sites are identified within the APE that are potentially significant but that would not be impacted by the proposed wastewater improvements, an "Avoidance Plan" may be prepared after completion of the Phase 1B Archaeological Investigation. The avoidance plan will describe how the project will successfully avoid and protect areas of archaeological sensitivity (e.g., agreements to mark and post sensitive areas to prevent disturbance from heavy machinery or staging activities, etc.). Should an Avoidance Plan be necessary, CPO will coordinate with SHPO, Indigenous Nations, and other Consulting Parties to develop the plan and to established the protocols for its finalization and approval.

HEALTH AND SAFETY PLAN

Testing completed as part of this Phase 1B Archaeological Investigation is not expected to exceed a depth of 4 feet below grade in most locations. In the event that such deep excavation will occur, a Health and Safety Plan (HASP) may be required in compliance with the standards of the United States Department of Labor's Occupational Safety and Health Administration (OSHA) pertaining to safe excavation practices.

6. CONTINGENCY PLAN FOR PHASE 2 ARCHAEOLOGICAL SURVEY/EVALUATION AND ADDITIONAL SITE PROTECTION MEASURES

As stated previously, the Phase 1B Archaeological Investigation testing will be designed to determine the presence or absence of archaeological resources, not to fully expose or document any encountered resources. A Phase 2 Archaeological Survey/Evaluation ("Phase 2 testing") occurs only if the Phase 1B Archaeological Investigation uncovers a site or evidence of a site that will need to be evaluated according to the National Register criteria for eligibility. Phase 2 testing is used "to obtain detailed information on the integrity, limits, structure, function, and cultural/historical context of an archaeological site sufficient to evaluate its potential National Register eligibility" (NYAC 1994: 4). It involves detailed research beyond that done in the first phase, greater sampling of the property, a greater variety in the types of testing units (i.e., including larger testing units and/or shovel test pits at closer intervals), and closer analysis of artifacts. If Phase 2 testing is necessary, it would be undertaken in consultation with CPO, SHPO, the Indigenous Nations, and other Consulting Parties. The Phase 2 Survey and Evaluation will then determine if additional archaeological analysis (e.g., Phase 3 Mitigation/Data Recovery) is warranted in the event that the project cannot be redesigned to avoid significant archaeological sites. In the event that Phase 2 testing is required, a separate Work Plan will be prepared at that time for submission to CPO, SHPO, the Indigenous Nations, and other Consulting Parties as described above.

7. SITE DOCUMENTATION

Professional standards for testing, screening, recording features and stratigraphy, labeling, mapping, and photographing any identified archaeological resources will be applied during the Phase 1B Archaeological Investigation. Soil profiles including colors—recorded using Munsell soil color charts—and texture/inclusions will be recorded in field notes. Soil profiles will be included in the final report in tabular form supplemented by photographs and drawings as appropriate. Testing locations will be recorded in field notes and field maps. All on-site testing will be recorded relative to an on-site datum and converted to the North American Vertical Datum of 1988 (NAVD88). The on-site datum will be calculated using existing site surveys or estimated using existing Lidar data or other available contour information. Where possible, testing locations will be recorded digitally using GIS software. The North American Datum of 1983 (NAD83) will be used as a permanent horizontal datum. The testing will be recorded using digital photography and videography as appropriate throughout the field effort.

8. LABORATORY PROCESSING

Following each stage of work, archaeologists will clean, stabilize, and inventory all cultural material removed from the APE. During the course of the investigation, the archaeological consultant will retain custody of all recovered artifacts, which will not be stored on-site. All laboratory activity will be conducted in compliance with the aforementioned guidelines and with those established by the United

States Department of the Interior/National Park Service for the Curation of Federally-Owned and Administered Archaeological Collections (*36 CFR 66* and *79*). Artifact washing will begin immediately after transfer of the collection to the laboratory. Trained technicians will process the artifacts using standard archaeological techniques. Artifacts will be washed with a mild, non-ionic detergent using soft-bristle brushes and after washing they will be air dried on racks. Fragile artifacts and those with non-stable surfaces will be washed separately without brushing. Artifact bags will be labeled in waterproof ink with all relevant provenience information. After they have been cleaned and dried, the artifacts will be placed in archivally stable polyethylene zipper-top artifact bags for permanent storage. The provenience information will be written on the outside of the bags using a permanent, waterproof marker.

An artifact catalog recording the depth and location of each recovered artifact will be created. To the extent possible, recovered artifacts will be identified as to material, temporal or cultural/chronological association, function, and style following the standard archaeological references. Detailed analysis would include the identification of the *Terminus Post Quem* (TPQ) of artifacts for each context and the generation of mean beginning and end dates for assemblages. This information could be used to establish the contemporaneity of contexts and strata, and to determine which assemblages represent primary or secondary deposits. If deemed significant and in consultation with CPO, SHPO, the Indigenous Nations, and other Consulting Parties, artifacts that are recovered from the site will be curated according to the regulations of the Department of the Interior/National Park Service *356 CFR 79*.

IDENTIFICATION OF AN ARTIFACT REPOSITORY

Any artifact collection removed from the APE would be the property of the owner of the land at the time of the testing. In the event that objects of cultural significance to the Indigenous Nations are encountered, the investigators will immediately notify CPO, who will coordinate with SHPO, the Indigenous Nations, and other Consulting Parties regarding documentation and repatriation pursuant to Section 106 and any other relevant legislation. In the event that significant archaeological resources are encountered within the APE that require permanent curation, efforts will be necessary to locate a repository that is capable of accepting and curating the collection. Upon the completion of field testing, if significant resources are found, a repository will be identified and selected in conjunction with CPO, who will further coordinate with SHPO, the Indigenous Nations, and other Consulting Parties to determine a suitable long-term curation plan. If the artifact collection is determined to have no research value, it will be returned to the site owner or discarded at their discretion within one year of the completion of fieldwork. The site owner may then choose to retain and store the collection or may seek out alternative methods of disposal.

9. REPORTING

Following the completion of field testing and laboratory processing and analysis, a detailed Phase 1B Archaeological Investigation report will be prepared for each stage of work. With the assumption that the fieldwork will be completed in multiple stages, it is assumed that multiple reports will be prepared to summarize the work completed as part of that stage. Each final report will document all methodologies used during the course of the investigation and will discuss all findings that emerge from the recovered data, maps, plans, drawings, photographs, and/or other relevant images will be incorporated into the body of the report as needed to illustrate project findings. The report will include a site map showing the location of all resources identified, as well as a complete inventory of the artifacts. The report will be prepared according to the guidelines and standards issued by SHPO and

NYAC. If the testing locates features *in situ*, the documentation of those features will be incorporated into the Work Plan of the Phase 2 Archaeological Survey/Evaluation.

Each final technical report will include the following information:

- Description of the portion of the APE included in that investigation;
- Relevant documentation/background research;
- Research design;
- Field studies as actually implemented, including any deviation from this Work Plan and the reason for those changes;
- Field observations;
- Analyses and results, illustrated as appropriate with maps, photographs, tables, charts, and graphs; and
- Recommendations for further archaeological work, if necessary.

A draft report of the final technical report will be submitted to CPO, who will further coordinate with SHPO, the Indigenous Nations, and other Consulting Parties pursuant to Section 106. If necessary, a final version of the report will be prepared to address comments, which CPO will circulate to the SHPO, Indigenous Nations and other Consulting Parties for concurrence.

10. PROJECT COORDINATION AND MANAGEMENT

Prior to each stage of testing, the archaeological consultant will notify CPO, who will further coordinate with SHPO, the Indigenous Nations, and other Consulting Parties, when testing is scheduled to begin and will retain the services of a monitor from the Onondaga Nation and any other nations that may request to be present. If requested, the archaeological consultant will assist in arranging a site visit for representatives of CPO, who will coordinate the participation of SHPO, the Indigenous Nations, and other Consulting Parties as necessary and appropriate during the course of the Phase 1B Archaeological Investigation. However, during the field testing, the archaeological team will distribute a summary of work completed to date on a weekly basis (including number/location of tests completed and relevant finds) to CPO, SHPO, the Indigenous Nations, and other Consulting Parties.

It is possible that the field testing will not reveal any potentially significant archaeological features, deposits, or intact soil strata. If that is the case, no further archaeological consideration would be warranted, and a report to that effect would be prepared. In the event that archaeological resources are encountered, CPO on a weekly basis will further consult with SHPO, the Indigenous Nations, and other Consulting Parties. In either case, a final report on the field investigation will be submitted to CPO, SHPO, the Indigenous Nations, and other Consulting Parties for review and comment, indicating a presence or absence of archaeological features.

11. PROTOCOL FOR THE UNANTICIPATED DISCOVERY OF HUMAN REMAINS

There is no indication that human remains are present within the APE. However, in the unlikely event that human remains or suspected human remains are encountered within the APE, the SHPO Human Remains Discovery Protocol and the Haudenosaunee Policy on Human Remains (reproduced below) would be implemented in consultation with CPO. All requests from the Indigenous Nations to modify this protocol will be honored in consultation with CPO and SHPO. As the project is subject to Section

106, the project is not subject to the *New York State Unmarked Burial Site Protection Act* (NY EXEC § 171, the "Act"), which went into effect on August 1, 2023 and requires consultation with the New York State Archaeologist in the event that undocumented human remains are encountered in New York State. In the event that human remains are determined to be Indigenous, all relevant legislation (e.g., the Native American Graves Protection and Repatriation Act [NAGPRA]) would apply. All graves, funerary objects, and soils surrounding graves will be protected and treated with the utmost dignity and respect. As per the policies reproduced below, no photography or analysis of Indigenous remains would occur as part of the archaeological investigation unless specifically requested by the Indigenous Nations.

SHPO HUMAN REMAINS DISCOVERY PROTOCOL (JANUARY 2021)[1]

In the event that human remains are encountered during construction or archaeological investigations, SHPO recommends that the following protocol is implemented:

- *Human remains shall be treated with the utmost dignity and respect. Should human remains or suspected human remains be encountered, work in the general area of the discovery shall stop immediately and the location shall be secured and protected from damage and disturbance.*
- *If skeletal remains are identified and the archaeologist is not able to conclusively determine if they are human, the remains and any associated materials shall be left in place. A qualified forensic anthropologist, bioarchaeologist or physical anthropologist shall assess the remains in situ to help determine if they are human.*
- *If the remains are determined to be human, law enforcement, the SHPO, the appropriate Indian Nations, and the involved state and federal agencies shall be notified immediately. If law enforcement determines that the burial site is not a criminal matter, no skeletal remains or associated materials shall be removed until appropriate consultation takes place.*
- *If human remains are determined to be Native American, they shall be left in place and protected from further disturbance until a plan for their avoidance or removal is developed. Please note that avoidance is the preferred option of the SHPO and the appropriate Indian Nations. The involved agency shall consult SHPO and the appropriate Indian Nations to develop a plan of action. Photographs of Native American human remains and associated materials should not be taken without consulting with the involved Indian Nations.*
- *If human remains are determined to be non-Native American, the remains shall be left in place and protected from further disturbance until a plan for their avoidance or removal is developed. Please note that avoidance is the preferred option of the SHPO. The involved agency shall consult SHPO and other appropriate parties to develop a plan of action.*
- *The SHPO recommends that burial information is not released to the public to protect burial sites from possible looting.*

[1] https://parks.ny.gov/documents/shpo/environmental-review/HumanRemainsProtocol.pdf

HAUDENOSAUNEE POLICY ON HUMAN REMAINS

The policy on human remains was extracted from *Polishing the Silver Covenant Chain: Building Relationships Between Federal, State Agencies and the Haudenosaunee* as issued by the Grand Council of the Haudenosaunee in 2002 (see Parts 4.1, 4.2, and 4.7).

HAUDENOSAUNEE BELIEFS

We have been taught that we bury our dead into the ground so that their bodies can become part of the sacred Earth. We believe that we come from the Mother Earth and that the human remains that rest within the Earth are an important spiritual connection to the spirit of the Earth. The Earth is enriched by the dead as our flesh becomes part of the soil.

The souls of the dead have a path of destiny that they must follow. We refer to this as their journey after life. in this way, we feel that the dead are around us and hover over us as we hold ceremonies or dances. We believe that the dead have power and it is dangerous to neglect the spiritual needs of the dead.

The protection of the human remains and associated graves, sacred burial sites and related objects from the graves of the Haudenosaunee are the responsibility of each generation of Chiefs, Clan mothers, and Faithkeepers. We believe that the remains, the associated burial objects and the actual soil in which they rest is sacred. There is no acceptable excuse to justify the desecration of this sacred burial.

VIOLATION OF OUR SPIRITUAL RIGHTS

Removing the remains from their eternal resting place is a great desecration to both the dead and the living. The disturbance, destruction, and theft of the dead is a violation of the religious and spiritual welfare of the Haudenosaunee.

As long as the human remains are disturbed, there will be spiritual consequences to our people. The desecration of the graves of our ancestors, no matter what the age of the burial, is a violation of our religious freedom.

Permits issued by the State of New York or any other local government, to allow anyone to violate the sanctity of the graves of our ancestors can no longer be tolerated. In the past, our ancestors buried many objects along with the body with the belief that in the afterlife, you will need all of those things that you need in this life.

All types of objects have been associated with burials, including decorated clothing, glass beads, shell beads, silver combs, tools and weapons, ceramic and metal cooking pots, wampum belts, strings of wampum, and a variety of personal items. The removal of these objects from the grave is a theft from the dead.

VIOLATION OF OUR HUMAN RIGHTS

The remains of our deceased relatives are not "archaeological resources" that are subjects of study. They we human beings who once lived on this land. They had real lives and feelings. They had spiritual expectations about their final resting places. To look at Native Peoples as objects rather than as human beings is a gross violation of our human rights.

All graves and burial sites, Native or not, deserve respect. Our dead relatives deserve the basic human right to a dignified burial. We do not believe in the use of permanent

headstones to mark graves of our ancestors and state law makes a difference between cemeteries and unmarked burials.

Our burial sites deserve to be considered hallowed ground, whether they are marked or not. There has been double standard in dealing with our people and non-Native remains. Non-Native grave sites are often afforded more protection then Native burials.

Despite the efforts of state agencies to identify Native grave locations, construction permits are issued nonetheless. Our dead deserve the same right to an eternal resting place as all other races and religions.

VIOLATION OF OUR TREATY RIGHTS

The unearthing of the remains of our ancestors from their eternal resting pace is also a violation of the promises made to the Haudenosaunee under the terms of the Canandaigua Treaty of 1794. By that treaty, the United States, including the State of New York, promised not to "disturb" the Haudenosaunee in the free use and enjoyment of their lands.

We have been on record protesting the desecration of our graves. The continual destruction of Native graves, the stealing of Native remains and the looting of burial objects causes us serious mental, emotional, and spiritual harm.

Our people are continually upset by these events and we have been forced to adjust our spiritual traditions to accommodate outside developments. The desecration of the graves violates the mutual respect promised by the United States as they pledged a firm and permanent friendship between our peoples.

The treaty also promised to remove the cause of complaint that upsets our peace. We therefore make it clear that the desecration of the graves of our ancestors causes great harm to our people and the United States and State of New York have an obligation to protect the general welfare of our people as promised in the legally binding treaties.

Protocol for Handling Discovery of Human Remains [As published by the Onondaga Nation in 2002]		
	Known Burials	***Unidentified Burials***
When to contact?	***Intentional excavation**: At the earliest time in decision-making process*	***Inadvertent Discovery**: Upon discovery*
Which Nation to contact?	*If the fine is within existing Nation boundary, contact that Nation's Cultural Resource representatives. If the find is within the traditional land use area (fifty mile radius from the current nation territory), contract the closest Nation's Cultural Resource Representative. If the find is within the aboriginal territory of each nation, as shown on the attached map [note: not included here], contact the Nation within that territory. For finds located within fifty miles on either side of the boundary lines shown on the map, contact the Cultural Resource Representatives of both Nations.*	
Who to contact?	*Haudenosaunee Cultural Resource representatives (HSCBRR)*	*Haudenosaunee Cultural Resource representatives (HSCBRR)*
How to contact?	*Contact list is provided [note: not included here]*	
Information Required	*Brief description of the find or potential find; site map and any information on the known cultural history of the area and summary of nearby archaeological findings.*	
	Nation will send a representative to review the site.	*Company must hire a Native American on-site observer. No remains shall be removed.*
Next Steps	***Non-disturbance of burials is preferred**. If after proper consultation, the remains must be removed, we prefer to have them reburied close to their original location as possible, provided the future sanctity of the grave can be assured. **No remains should be removed without proper cultural protocols**. If no safe local burial ground can be offered, the Haudenosaunee will reclaim the remains for reburial at an undisclosed location. The local government/state agency/developer must pay for all of the costs for such reburial. All objects associated with the original burial must be reburied as well. All of the soil in the immediate area of the burial should also be placed in the new grave.*	

12. REFERENCES CITED

AKRF, Inc.
2024 "Proposed Micron Semiconductor Fabrication Project: Industrial Waste Water Force Mains Area of Potential Effects; Town of Clay; Onondaga County, New York: Phase 1A Archaeological Documentary Study." Prepared for: Micron New York Semiconductor Manufacturing, LLC; Boise, Idaho.

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2002 *Polishing the Silver Covenant Chain: Building Relationships Between Federal, State Agencies and the Haudenosaunee*.

New York Archaeological Council (NYAC)
1994 *Standards for Cultural Resource Investigations and the Curation of Archaeological Collections in New York State*. The New York Archaeological Council.

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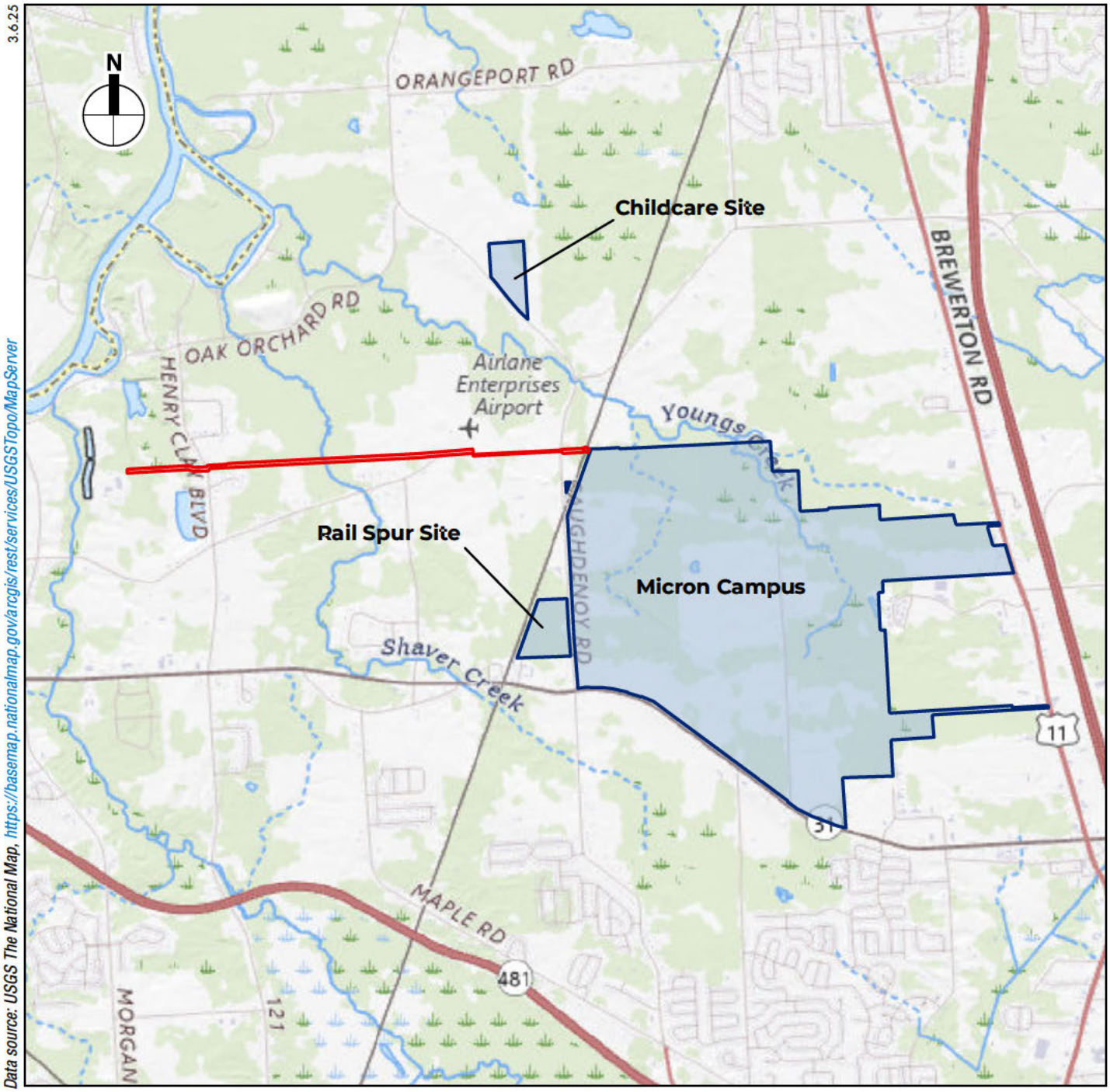
2005 *New York State Historic Preservation Office (SHPO) Phase I Archaeological Report Format Requirements*. Available online: https://parks.ny.gov/shpo/environmental-review/documents/PhaseIReportStandards.pdf.



Industrial Wastewater Conveyance APE

Proposed Project
- *Micron Campus*
- *Childcare Site*
- *Rail Spur Site*

Approximate coordinates of Project Site:
76°10'2"W 43°11'43"N

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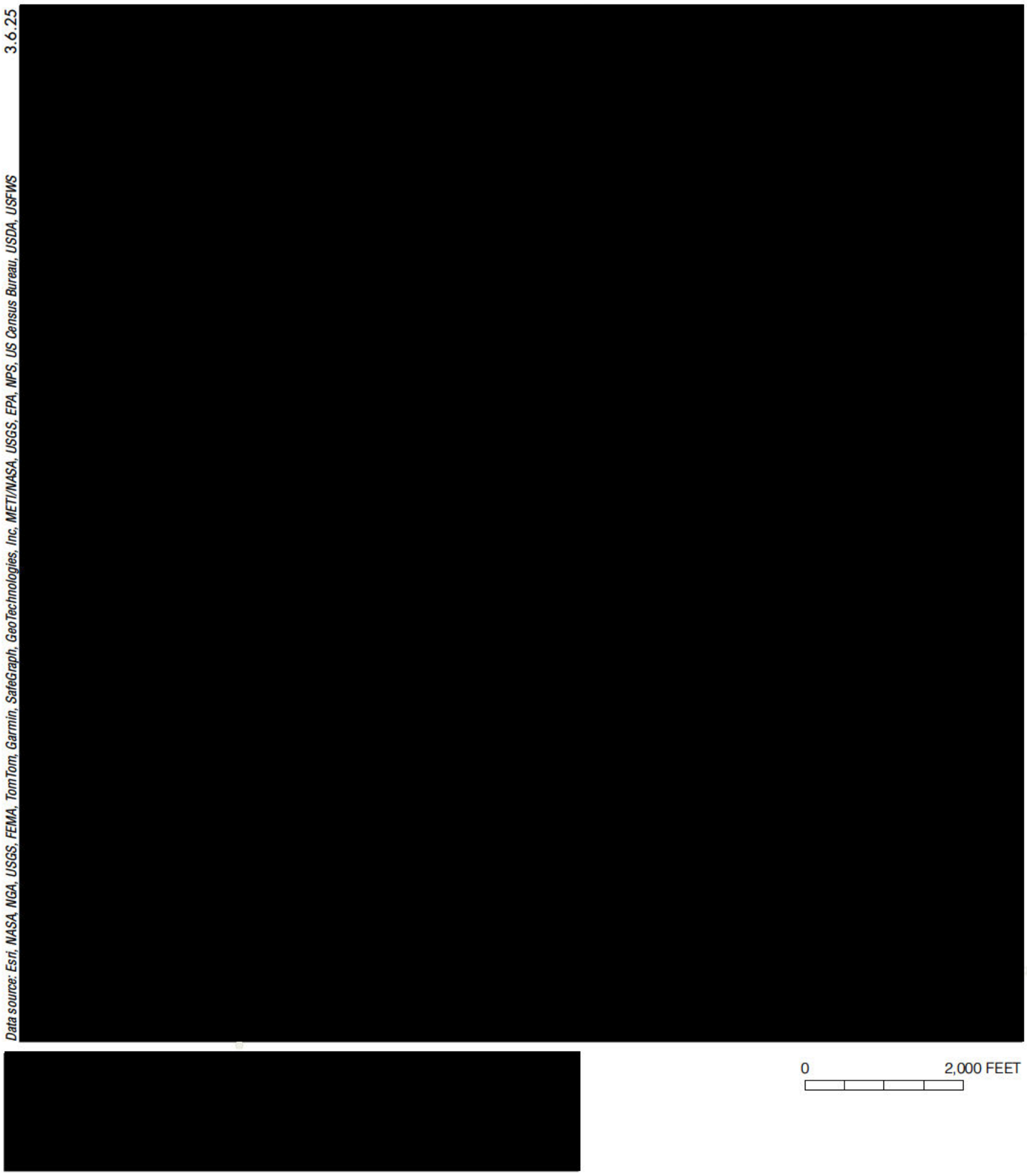
USGS Topographic Map –
Brewerton Quadrangle

Figure 1



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Areas of Archaeological Sensitivity

Figure 2

Phase IA Archaeological Survey and Phase IB Work Plan

Lower Caughdenoy Creek, Oneida River, and Sixmile Creek Wetland Restoration Project

Town of Hastings, Oswego County, New York

Prepared for:

The Wetland Trust, Inc.
PO Box 4206
Ithaca, New York 14852
Contact: Kirsten Gerhardt
kirsten@thewetlandtrust.org

Prepared by:

Environmental Design & Research, D.P.C.
217 Montgomery Street, Suite 1100
Syracuse, New York 13202
www.edrdpc.com

April 2025

MANAGEMENT SUMMARY

NYSHPO Project Review Number:	25PR01429
Involved State and Federal Agencies:	U.S. Army Corps of Engineers; New York State Office of Parks, Recreation and Historic Preservation (Section 14.09); Section 106 of the National Historic Preservation Act, as applicable.
Phase of Survey:	Phase IA Archaeological Survey
Location Information:	Town of Hastings, Oswego County, New York
USGS 7.5-Minute Quadrangle:	*Central Square, NY*
Survey Area:	
Project Description:	A proposed wetland restoration project.
Project Area:	The general area of land within which construction will take place. The Project Area encompasses approximately 639 acres.
Limits of Disturbance	The Limits of Disturbance includes the wetland work areas that will experience ground disturbance, totaling approximately 313 acres across three separate parcels: the first at approximately 55 acres, a second at approximately 65 acres, and a third at approximately 193 acres, all located within agricultural lands.
Archaeological Resources Overview:	[redacted]
Report Authors:	Moira Magni; Grace Reid; Janna Napoli, RPA, MAA; Joseph Kwiatek
Date of Report:	April 2025

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ABSTRACT

EDR conducted a Phase IA Archaeological Survey for the Lower Caughdenoy Creek, Oneida River, and Sixmile Creek Wetland Restoration Project (the Project) on behalf of The Wetland Trust, Inc. (the Applicant). The Project is a wetland restoration project located within the Town of Hastings, Oswego County, New York. The Project Area consists of three parcels totaling approximately 639 acres and is the general area of land within which construction will take place. Construction of the proposed Project will include ground disturbing activities that have the potential to impact archaeological resources. The Limits of Disturbance (LOD) includes the wetland work areas that will experience ground disturbance. The LOD totals 313 acres across three separate parcels: the first at approximately 55 acres, a second at approximately 65 acres, and a third at approximately 193 acres, all located within agricultural lands. The entire LOD will be subjected to a Phase IB archaeological survey consistent with the Phase IB Archaeological Work Plan presented in this report. Phase IB archaeological survey will be conducted in coordination with a Nation monitor.

1.0 INTRODUCTION

On behalf of The Wetland Trust, Inc. (the Applicant), EDR conducted a Phase IA Archaeological Survey for the proposed Lower Caughdenoy Creek, Oneida River, and Sixmile Creek Wetland Restoration Project (the Project), located in the Town of Hastings in Oswego County, New York (Figure 1-1). The information and recommendations included in this report are intended to assist the New York State Office of Parks, Recreation and Historic Preservation (NYSHPO), the U.S. Army Corps of Engineers (USACE), and other New York State and/or federal agencies in their review of the Project under Section 14.09 of the New York State Parks, Recreation, and Historic Preservation Law, and/or Section 106 of the National Historic Preservation Act, as applicable.

1.1 Purpose of the Investigation

The purpose of the Phase IA Archaeological Survey is to:

- Describe previously identified archaeological resources and/or sites of cultural or religious significance that are located within the Project Area; and,
- Propose a methodology to identify archaeological resources within the Project Area, evaluate their eligibility for the State/National Register of Historic Places (S/NRHP), and assess the potential effects of the Project on those resources.

All cultural resources studies undertaken by EDR are conducted by or under the supervision of professionals who satisfy the qualifications criteria per the Secretary of the Interior's Standards for archaeology and historic preservation (36 CFR 61), as appropriate. This Phase IA report was prepared in accordance with applicable portions of NYSHPO's *Phase I Archaeological Report Format Requirements* (NYSHPO, 2005).

Figure 1-1. Regional Project Location

1.2 Project Location and Description

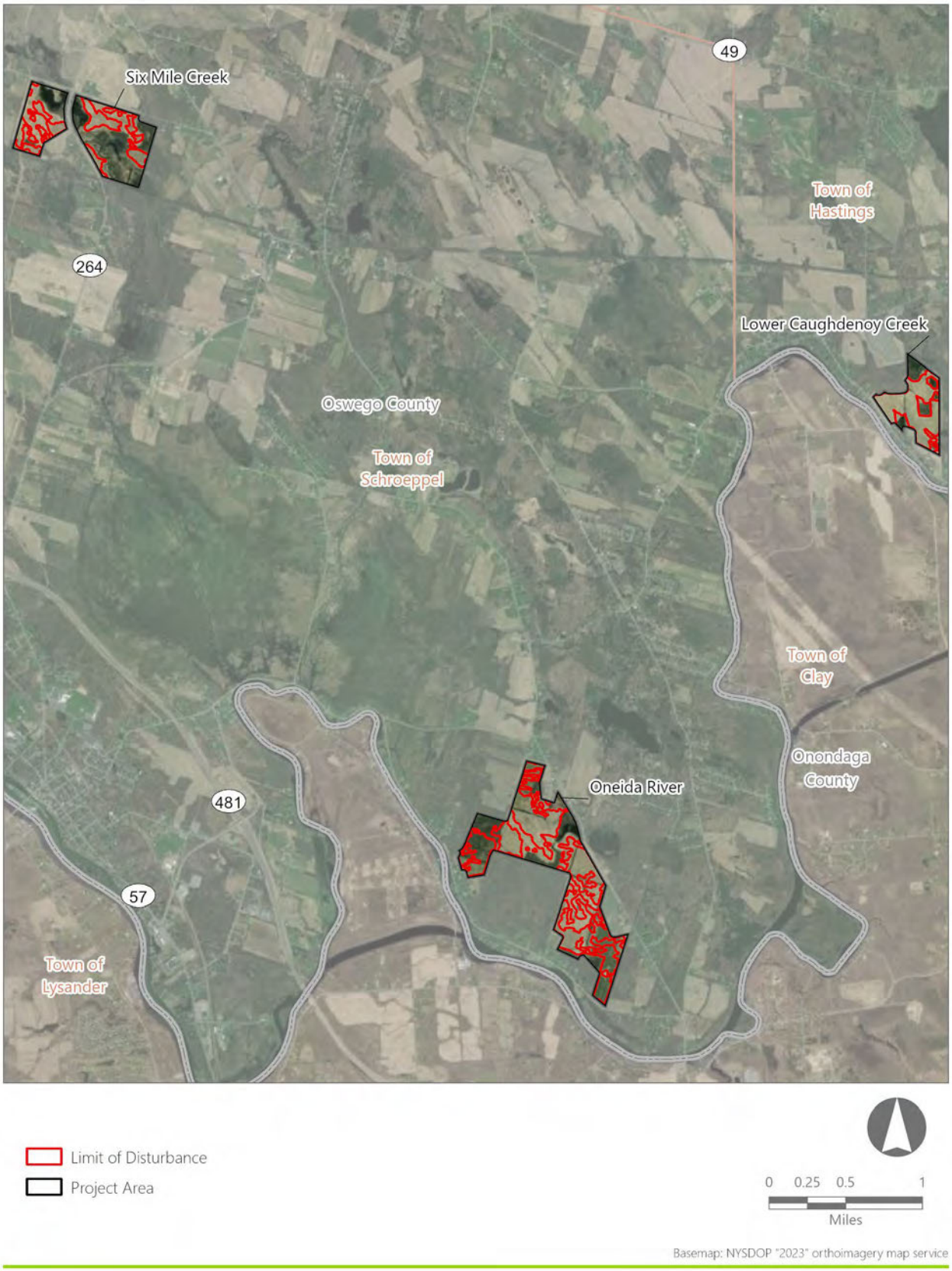
The Project is a proposed wetland restorations project located within the Town of Hastings, Oswego County, New York. The Project will include a compensatory wetland mitigation project consisting of the restoration and rehabilitation of wetlands and streams across six sites to compensate for unavoidable impacts to aquatic resources resulting from the construction of the Micron Semiconductor facility campus in Clay, New York. These mitigation efforts are designed to replace lost wetland functions and values, ensuring compliance with regulatory requirements. Construction involves disabling existing drainage structures in cultivated fields, restoring wetland basins, installing low earthen berms, and restoring hummock and hollow microtopography for vegetative biodiversity.

The following terms are used throughout this document to describe the proposed project:

Project	Collectively refers to all components of the proposed wetland restoration.
Project Area	The general area of land (three parcels) within which construction will take place. The Project Area totals approximately 639 acres.
Limits of Disturbance	The Limits of Disturbance (LOD) includes the wetland work areas that will experience ground disturbance. The LOD totals 313 acres across three separate parcels: the first at approximately 55 acres, a second at approximately 65 acres, and a third at approximately 193 acres, all located within agricultural lands.

The lands being evaluated to host the Project are typical for a rural, agricultural area in central New York and consist of cultivated crop fields, hay fields, pastures, fallow fields in various stages of secondary succession, shrubland, wetlands, and small patches of undeveloped, second-growth forest (Figure 1-2).

Figure 1-2. Project Area



1.3 Agency and Nations Consultation

The initial consultation for the project was undertaken by the Applicant, and Nations consultation is being undertaken by the USACE. Agency consultation for the Project has included the following:

- **August 14, 2024:** The Applicant initiated formal consultation for Lower Caughdenoy Creek and Oneida River[1] with the NYSHPO via the Cultural Resources Information System (CRIS) website (TWT, 2024a and 2024b).
- **August 14, 2024:** The NYSHPO issued project review letters for Lower Caughdenoy Creek and Oneida River[2], requesting that the Applicant prepare a Phase IA/IB archaeological survey (NYSHPO, 2024a and 2024b). This correspondence is included in Appendix A.
- **October 17, 2024:** The Applicant initiated formal consultation for Sixmile Creek with the NYSHPO via the Cultural Resources Information System (CRIS) website (TWT, 2024c).
- **October 17, 2024:** The NYSHPO issued a project review letter for Sixmile Creek[3], requesting that the Applicant prepare a Phase IA/IB archaeological survey (NYSHPO, 2024c). This correspondence is included in Appendix A.
- **February 24, 2025**: The Applicant had a phone call with the USACE to discuss the Section 106 process regarding the Project, and sent a corresponding email providing additional information about planned archaeological survey for the Project. USACE provided email responses informing the Applicant that the Onondaga Nation had concerns that the archaeological fieldwork may be conducted prior to the Nation's involvement. USACE further shared that the Onondaga Nation had requested:
    - A Nation monitor be present during field investigations;
    - A Phase IA report of all proposed Project Sites;
    - A Phase IB work plan for review prior to any on-site work occurring.

  The USACE also informed the Applicant that the Department of Commerce indicated Section 106 review of the Project could be included in a Programmatic Agreement, and that the Advisory Council on Historic Preservation (ACHP), the NYSHPO, the Onondaga Nation, and USACE support this approach (USACE, 2025a).
- **February 27, 2025:** The NYSHPO consolidated Lower Caughdenoy Creek, Oneida River, and Sixmile Creek wetland restoration projects under one project (PR# 25PR01429) (NYSHPO, 2025).
- **April 4, 2025:** USACE issued a reply to an email chain between the Applicant and EDR, where EDR had explained its intention to update the Phase IA report to include language regarding cooperation between the Project, the Onondaga Nation, USACE, and EDR. USACE's response stated

[1] The Oneida River site was originally named the Center Road Wetland Restoration, and the Lower Caughdenoy site was originally named the Caughdenoy Creek Wetland Restoration at the time of submittal to the NYSHPO.
[2] The original NYSHPO project review number for the Oneida River site was 24PR07318. The original NYSHPO project review number for the Lower Caughdenoy site was 24PR07317.
[3] The original NYSHPO project review number was 24PR09236.

that the agency would share the Phase IA report and Phase IB workplan with the Onondaga Nation once the updated document was received (USACE, 2025b).

Following submission and review of this Phase IA Archaeological Survey report to the NYSHPO, USACE, and the Onondaga Nation, it is anticipated the Applicant will conduct a Phase IB archaeological survey in accordance with the proposed Phase IB Archaeological Survey methodology as described in Section 3.0.

2.0 PHASE IA BACKGROUND AND SITE HISTORY

The following subsections provide environmental and historic contexts for the Project Area, as well as information about cultural resources surveys that have been previously conducted in the vicinity.

2.1 Geology and Soils

The Project Area is located within the Erie-Ontario Lowlands physiographic province, which borders the Great Lakes and generally contains areas of low topographic relief. Topography within the Project Area varies from relatively level to gently sloping terrain, and elevations within the Project Area range approximately 370 and 411 feet above mean sea level. The Project Area is approximately 3.7 miles west of Oneida Lake and is immediately adjacent to the Oneida River, which flows westward from Oneida Lake to the Seneca River and joins with Oswego River before emptying into Lake Ontario.

EDR reviewed online data from the Natural Resources Conservation Service (NRCS, 2024) for LOD soils data. In total, 13 individual soil units encompass the entirety of the LOD. However, eight soil units account for less than 2% of the LOD. Five soil units constitute approximately 96% of the LOD and are summarized in Table 1.

Table 1. Common Soils Mapped within the LOD

Soil Series Name	Percent of LOD	Soil Horizon & Depth (in)	Description	Slope, Drainage, & Landform
Rhinebeck silt loam (RhB)	39	H1: 0 to 8 H2: 8 to 16 H3: 16 to 39 H4: 39 to 53	Silt loam Silty clay loam Silty clay Silty clay	0-2% slopes. Moderately deep, poorly drained soils in lake plains. Formed in clayey and silty glaciolacustrine deposits.
Rhinebeck silt loam (RhA)	26	H1: 0 to 8 H2: 8 to 16 H3: 16 to 39 H4: 39 to 53	Silt loam Silty clay loam Silty clay Silty clay	0-2% slopes. Moderately deep, poorly drained soils in lake plains. Formed in clayey and silty glaciolacustrine deposits.
Canandaigua silt loam (Cd)	19	H1: 0 to 7 H2: 7 to 33 H3: 33 to 50	Silt loam Silt loam Stratified silt to very fine sand	0-3% slopes. Moderately deep poorly drained soils on depressions. Formed in silty and clayey glaciolacustrine deposits.
Madalin silt loam (Ma)	8	Ap: 0 to 8 Btg1: 8 to 16 Btg2: 16 to 25 Btg3" 25-33 C: 33-79	Silt loam Silty clay loam Silty clay Silty clay Stratified silt to clay	0-3% slopes. Moderately deep, poorly drained soils on depressions. Formed in glaciolacustrine deposits derived from calcareous shale.
Raynham silt loam (RaB)	4	H1: 0 to 9 H2: 9 to 36 H3: 36 to 60	Silt loam Silt loam Stratified silt to very fine sand to fine sand	0-6% slopes. Moderately deep, poorly drained soils in lake plains. Formed in glaciolacustrine, eolian, or old alluvial deposits, comprised mainly of silt and very fine sand.

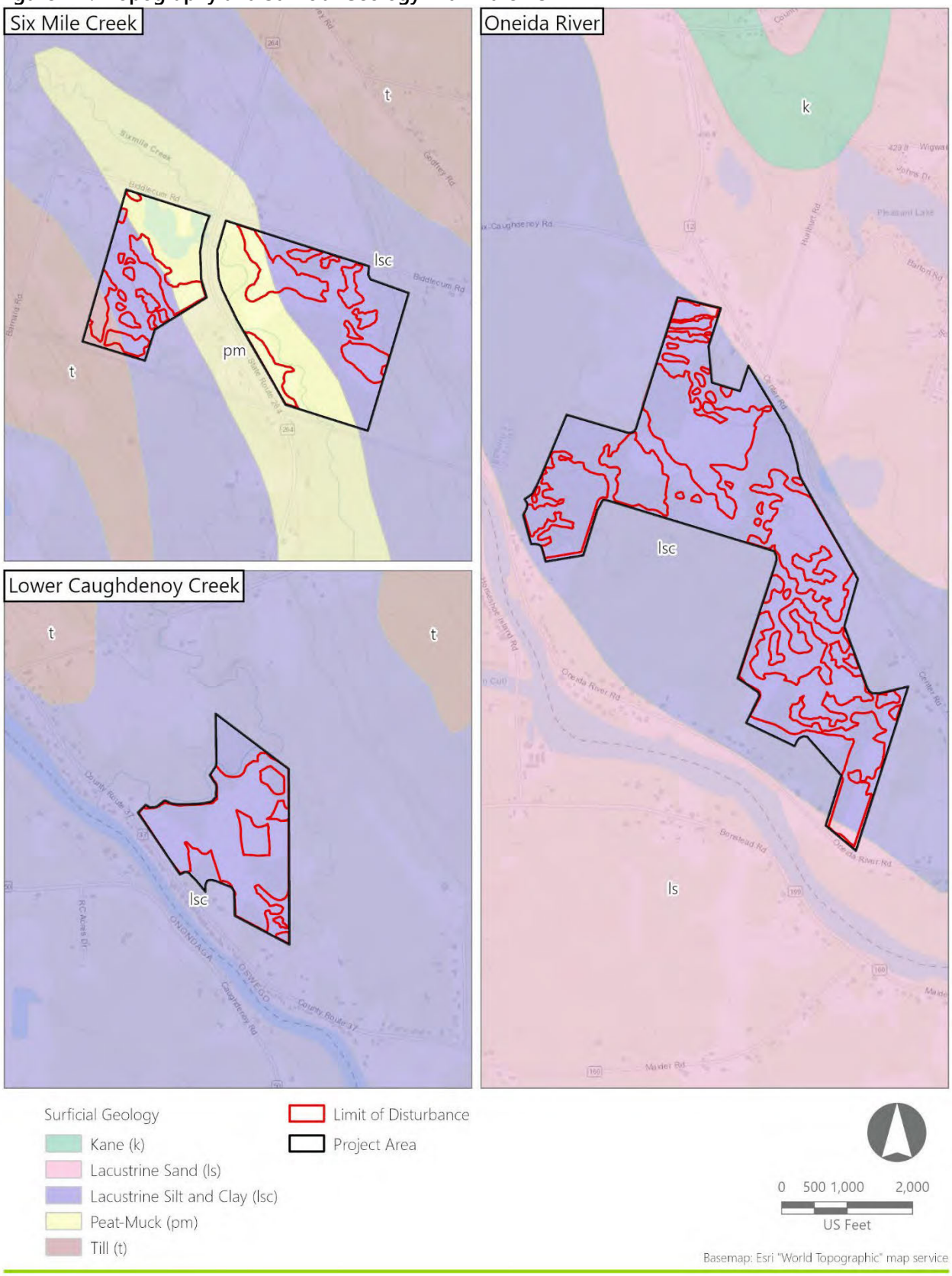
The surficial geology of the LOD is summarized in Table 2 and depicted on Figure 2-1. As soils within the LOD predominately consist of lacustrine soils and are therefore unlikely to contain deeply buried cultural horizons, archaeological testing in these soils should extend a minimum of 10 centimeters into sterile subsoil.

Table 2. Surficial Geology in LOD (NYSM, 1999)

Surficial Geology	Acres in LOD	Percent of LOD	Composition[1]
Lacustrine Silt and Clay (LSC)	289.9	93	Generally laminated silt and clay, deposited in proglacial lakes, generally calcareous, low permeability, potential land instability, thickness variable (up to 50 meters).
Swamp Deposits (PM)	16.6	5	Peat-muck, organic silt and sand in poorly drained areas, unoxidized, commonly overlies marl and lake silt, potential land instability (2-20 meters).
Till (T)	4.5	1	Variable texture (boulders to silt), usually poorly sorted sand-rich diamict, deposition beneath glacier ice, permeability varies with compaction, thickness variable (1-50 meters)
Lacustrine Sand (LS)	2.2	1	Generally quartz sand, well sorted, stratified; usually deposited in proglacial lakes, but may have been deposited on remnant ice; generally, a near-shore deposit or near a sand source; permeable; thickness variable (2-20 meters).

[1] Composition information derives from material explanation used by New York State Museum (NYSM, 2021).

Figure 2-1. Topography and Surficial Geology within the LOD



2.2 Existing Conditions

The proposed Project is located in a rural part of Oswego County. Existing conditions within the Project Area were evaluated with aerial imagery, topographic maps, digital elevation model data, and National Land Cover Database data (MRLCC, 2021). Land use within the Project Area is typical for a rural, agricultural area in central New York and consists of cultivated crop fields, hay fields, pastures, fallow fields in various stages of secondary succession, shrubland, wetlands, and patches of undeveloped, second-growth forest. General observations of existing conditions within the Project Area include the following:

- Agricultural fields comprise a large portion of the Project. Approximately 93% of the Project Area is used for pasture, hay fields, and cultivated crops. Many of these fields have been artificially drained with ditches (MRLCC, 2021).
- Woody and emergent herbaceous wetlands account for approximately 4% of the Project Area (MRLCC, 2021).
- A small portion of the Project is forested, with deciduous forests accounting for approximately 3% of the Project Area (MRLCC, 2021).
- Less than 1% of the Project Area contains developed, open space.
- Disturbances in the Project Area include drainage ditches along roadways, buried utilities, and areas of cut/fill.

2.3 Previous Archaeological Surveys

EDR consulted the NYSHPO's online CRIS database, and county maps used by the NYSHPO prior to the implementation of the CRIS database, to determine if previous archaeological surveys have been conducted within or within 1 mile of the Project Area. The Project Area includes three areas, Lower Caughdenoy Creek Wetland, Oneida River Wetland, and Sixmile Creek Wetland. [redacted]

[redacted]

- [redacted]
- [redacted]
- [redacted]
- [redacted]

Table 3. Previous Archaeological Surveys within 1 mile of the Project Area

NYSHPO Survey Number	Year	Report Name	Distance from Project (Miles)	Reference
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

NYSHPO Survey Number	Year	Report Name	Distance from Project (Miles)	Reference
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
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[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

NYSHPO Survey Number	Year	Report Name	Distance from Project (Miles)	Reference
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
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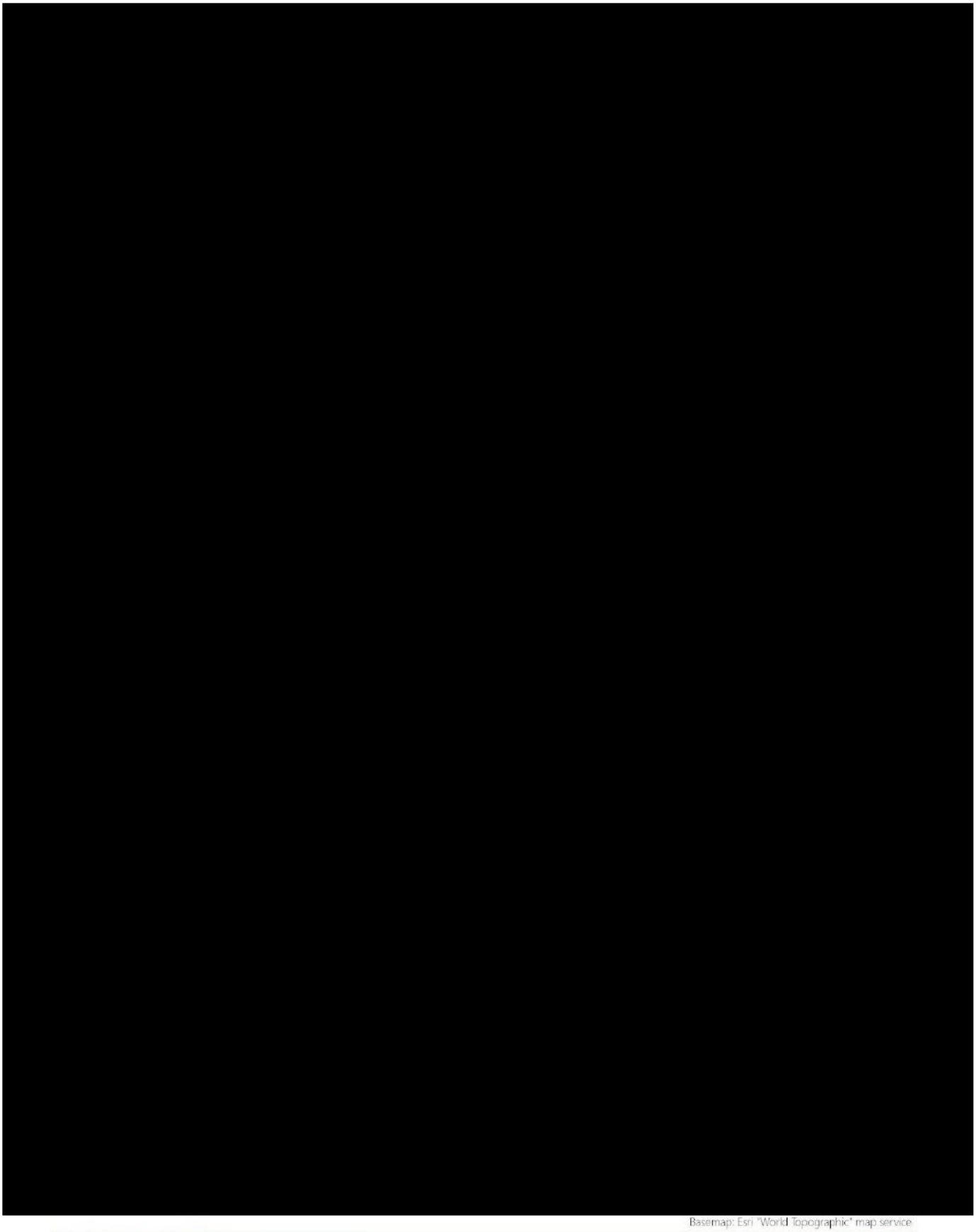


Basemap: Esri "World Topographic" map service

2.4 Previously Identified Archaeological Sites

EDR consulted the NYSHPO's online CRIS database to determine if previously recorded archaeological sites have been identified within or surrounding 1 mile of the Project Area. According to the CRIS database there [redacted]

Table 4. Previously Recorded Archaeological Sites within 1 mile of the Project Area

USN	Site Name	Site Description	S/NRHP Status	Distance from Project
[redacted]				

2.5 Cemeteries

EDR consulted the NYSHPO's online CRIS database, U.S. Geological Survey (USGS) topographic quadrangles, nineteenth century historic maps, and Find a Grave to determine if previously identified/mapped cemeteries are located within or adjacent (i.e., within 500 feet) to the Project Area. According to these sources, no cemeteries are mapped within or adjacent to the Project Area.

2.6 History of the Project Area

Archaeological evidence suggests that initial occupation in what is now Central New York began with Paleoindian groups following the retreating Laurentide Ice Sheet around 13,000 years before present (BP). During the ice sheet's retreat, much of Central New York was inundated by pro-glacial Lake Iroquois (essentially a major expansion of Lake Ontario), which quickly drained out the Mohawk and later St. Lawrence River Valleys as the ice sheet receded to the north (Lothrop et al., 2014). The first human groups to enter this post-glacial landscape specialized in hunting large game (likely caribou; and possibly mammoth and mastodon) in the recently exposed periglacial tundra and spruce forests. These groups also exploited the diverse floral resources, small game, and fish available in the post-glacial ecosystems (Ritchie and Funk, 1973). Although populations during this time were never high, Central New York was densely settled relative to other parts of the continent. Lothrop et al. (2014) note that the earliest sites in Central New York occur within the former footprint of pro-glacial Lake Iroquois. These early groups were highly

mobile, but there is also evidence of moderate to large aggregations in certain places during the year (e.g., the Bull Brook sites in Massachusetts) (Curran, 1999).

Post-Glacial conditions stabilized by approximately 10,000 BP, and small groups of hunter-gatherers reduced their mobility to exploit the diverse resources available to them in the newly emerging mixed deciduous/coniferous forests. Although megafauna were now extinct, larger to medium game such as deer, elk, and moose, and perhaps woodland caribou, were still available, as were small game, fish, and wild plants (Funk, 1978). Material culture during this time is characterized by stemmed and corner-notched projectile points as well as the first appearance of notched stone net-sinkers (Funk, 1978). Groundstone plant processing technology, including nutting stones which indicate the first systematic exploitation of mast resources such as acorns, hickory nuts, and chestnuts, was first used after approximately 6,000 BP (Funk, 1978; Ritchie and Funk, 1973:7). Beginning approximately 3,500 BP, regional diversity led to a greater variety of stone tools, including broad, side-notched projectile points, as well as gouges, plummets, and ground slate artifacts (Funk, 1978; Ritchie 1980). Between approximately 4,000 and 3,000 BP, steatite (soapstone) bowls, ceramic vessels, decorative steatite gorgets, and burial ceremonialism appears in the archaeological record (Whitthoft, 1949; Ritchie and Funk, 1973; Tuck, 1978).

The establishment of agriculture in northeastern North America began approximately 2,500 BP, possibly in response to favorable climatic conditions during the Medieval Climatic Anomaly (Fitting, 1978:44). Central and Western New York at this time were within the northeastern edge of the Hopewell cultural sphere, characterized by mound burials and other earthworks, dentate-stamped and rocker-stamped ceramic vessels, elaborate tobacco pipes, and stemmed, side-notched, and triangular unnotched Levanna projectile points (Engelbrecht, 2014; Ritchie and Funk, 1973). Groups in the northeast during this period also maintained extensive trade networks, as evidenced by the presence of exotic goods like fossil shark teeth and some ceramic motifs (Fitting, 1978; Ritchie 1980; Ritchie and Funk, 1973). Smaller settlements were more common during this period, but larger settlements are not documented in Western and Central New York until approximately 1,000 BP. In the centuries following, the appearance of maize (corn), beans, and squash agriculture led to the growth of more substantial village sites, including some protected with palisades and earthwork defenses (Ritchie and Funk, 1973; Ritchie, 1980). These villages were occupied year-round, although people still traveled far to hunt, fish, harvest plants, and trade (Cowan, 1999).

Archaeological evidence for the development of Iroquoian[4] culture points to a gradual in situ development in Central and Western New York, as opposed to the immigration of Iroquoian groups from outside the region (MacNeish, 1952; Tuck, 1971; Snow, 1994; Hart and Brumbach 2003; 2005; 2009; Brumbach, 2011; Hart, 2011). Haudenosaunee oral history also supports a deep history of occupation within Central and Western New York (Wonderley, 2004).

[4] The terms Iroquois and Iroquoian are used here to describe indigenous groups with a suite of cultural traits (e.g., ceramic styles and settlement patterns) and linguistic traits. The term Haudenosaunee is used specifically to denote the five (and later) six nation confederacy present from approximately the sixteenth century onward.

While sources differ on the specific date of the emergence of the Haudenosaunee, many researchers agree that a formalized Confederacy of five nations (also, the Great League of Peace; the Five Nations; or, the Six Nations) took shape during the late fifteenth or early sixteenth century. The initial five nations of the Haudenosaunee included, loosely from west to east, the Seneca, Cayuga, Onondaga, Oneida, and Mohawk. The Tuscarora later became a member nation in 1722. Initially, the Confederacy functioned indirectly as a religious council, calming internal conflicts through ceremonies associated with the Great Law as prescribed by the Peacemaker (Deganawidah) and Hiawatha. As conflicts arose with neighboring nations and European settlers, the Confederacy's role became more political; however, the member nations largely retained their autonomy (Richter, 2005).

European missionaries, explorers, and traders began visiting Central New York by the mid-seventeenth century. While Jesuit missionaries established missions in Central New York, Dutch and English land companies and settlers claimed land farther west into the Mohawk River Valley, thus fueling pre-existing tensions with the Haudenosaunee regarding the competitive fur trade, international wars, and diseases. Conflicts between the Haudenosaunee and the French continued into the eighteenth century as French forts were established throughout New York (Anderson, 2005; Dixon, 2005).

Following the French and Indian War, the 1768 Treaty of Fort Stanwix established a boundary line to demarcate the Haudenosaunee, Delaware, and Shawnee territories and regulate westward colonial expansion. This boundary, sometimes referred to as the "Line of Property," extended southwest from the Susquehanna River in New York to the mouth of the Tennessee River. In exchange, the Haudenosaunee forfeited their claims to the Ohio River Valley. Although the treaty bound colonists to remain east of the line, many continued to migrate and settle on Native land (Anderson, 2005; Dixon, 2005; Preston, 2005).

During the American Revolutionary War, both the British and the Americans embraced the aid of various Haudenosaunee member nations, despite the Confederacy's official policy of neutrality. The war divided the Haudenosaunee, with the Cayuga, Onondaga, Mohawk, and Seneca aiding the British and the Oneida and Tuscarora providing support to the American colonists. In retaliation, Washington ordered the Sullivan-Clinton campaign of 1779, where Haudenosaunee homes and crops were burned throughout Central and Western New York. The Sullivan-Clinton expedition destroyed many settlements with refugees fleeing to the reservations in Western New York (mainly, the Buffalo Creek Reservation), Sandusky Bay, Ohio, and Ontario, Canada (now the Six Nations of the Grand River Reservation). The Haudenosaunee were forced to cede all land west of New York State and Pennsylvania in the second Treaty of Fort Stanwix in 1784.

Today, the Onondaga Nation is recognized as an independent nation, living on a portion of its ancestral territory and maintaining its own distinct laws, language, customs, and culture. Their territory consists of 7,300 acres south of Syracuse. The Onondaga Nation's territory consists of 7,300 acres just south of Syracuse, in Onondaga County (Onondaga Nation, 2025).

Prior to the formal organization of Oswego County in the nineteenth century, New York State set aside a 1.5-million-acre tract for soldiers of the Revolutionary War, but it was not fully opened to settlers for nearly a decade due to conflicts with the Haudenosaunee. The New Military Tract encouraged migration and settlement by war veterans as well as Euro-American settlers; it encompasses what is now Cayuga, Cortland,

Onondaga, Seneca, and Tompkins Counties, as well as parts of Oswego, Schuyler, and Wayne Counties. The land was divided into 28 townships, each containing 100 lots of 600 acres arranged in a uniform grid pattern. Although the land was set aside for veterans, many of them either neglected to claim their land or sold their land to speculators. As a result, the area was settled primarily by migrants from New England, New Jersey, Pennsylvania, and the Hudson Valley (Anderson, 2005; Schein, 1993, 2005).

Oswego County, located within the Lake Ontario watershed, was formed in 1816 from parts of Oneida and Onondaga Counties. The Oswego River system created a strategic trade route between the Mohawk River and Lake Ontario, which British and French forces both utilized during the seventeenth and eighteenth centuries. The British established Fort Oswego at the mouth of the river in 1727 and their presence remained until 1796. By this time, settlement in the areas around the present-day villages of Mexico, Pulaski, and Redfield grew as the plentiful streams and water systems provided ample waterpower for milling. Capitalizing on the abundance of the Oswego River system, commercial development in the county developed around the shipment of local goods such as cordwood and barrels for salt working. Thousands of barrels of salt were shipped to Oswego port to be transported to the Old Northwest and parts of Upper Canada. Salt tax revenue in turn prompted the construction of three "salt roads" by 1820, underlining the significance of the salt working industry on the wealth of the county and its broader impact on New York State's economy. A little over a decade later, in 1833, the Welland Canal opened and linked Lake Erie and Lake Ontario, allowing the port of Oswego to act as a terminal for Midwestern agricultural products. Along the north shore of Oneida Lake, a robust glassmaking industry sprung up with the ample supply of sand, and transportation of locally produced goods made more efficient by the canal and its waterways. In 1848, the Syracuse and Oswego Railroad was completed, further developing the connection networks across the state (Wellman and Dix, 2005). Within the Project Area, structures appear along established roadways during this time, with the area remaining rural and agricultural (Geil, 1854; Figure 2-3).

Farmers benefited from the improved transportation networks that allowed for responses to competition in the market by shifting to dairy, fruit, and tobacco farming. A period of economic growth driven by these agricultural trends along with textiles, mills, and the availability of natural resources between the early nineteenth century and the early twentieth century saw settlers from Ireland, Canada, and the Alsace-Lorraine region, differing from the earliest settlers to the area who came from New England and eastern New York. This trend brought a rich diversity of immigrants to Oswego County, and with them a labor force that worked on local farms, likely similar to the former J.McKinley farmstead in Caughdenoy Creek and the former C. Plumber farmstead in Center Road, for example, within the Project Area (Figure 2-3). Additionally, Oswego County was a favorable location for abolitionists due to its geography and proximity to Canada. Many towns supported the Underground Railroad, and the county was home to abolitionists and formerly enslaved people who fled north (Johnson, 1877; Wellman and Dix, 2005).

The twentieth century saw the greatest economic changes in the county, as technology and federal aid improved communication and transportation infrastructure throughout Oswego; however, the Project Area remained relatively unchanged from 1854 (USGS, 1898, 1900a, 1900b, 1956a, 1956b, 1957a and 1957b; Figure 2-4 and Figure 2-5). With this came an increase in population and a general trend in the direction of growth and prosperity. World War II created an influx of manufacturing jobs and local Oswego County

industries put hundreds of residents to work. By the 1970s, however, the economic benefits from industry and manufacturing began to trend downwards, and other sectors such as energy, education, and tourism were growing. Notably, SUNY Oswego expanded its campus and curriculum in the 1980s and 1990s, and fishing became a popular touristic sport in the county after salmon was reintroduced into local waters (Wellman and Dix, 2005).

The Town of Hastings, formerly Constantia, was established in 1825. The town is approximately 20 miles northwest of Oneida Lake and directly north of the city of Syracuse. The southern branch of the Little Salmon River drains into the northern part of Hastings. Oneida Lake played an important role in the county for eel harvesting, an indigenous practice that continued into the late nineteenth century and was an economic resource for the town (Dix, 2005). In the nineteenth century, lumbering and the manufacturing of barrels for the Syracuse salt market were important economically for Hastings, a trend reflected in the development of villages like Caughdenoy and Central Square that grew considerably between the 1820s and 1890s (Churchill, 1895; Burr, 1829; Figure 2-4). Rural areas such as those surrounding the Project Area were generally populated with farmsteads spread out on open land until the mid-twentieth century when Interstate 81, built between 1960 and 1962, assisted in promoting land development in the region and made travel to the town of Hastings much easier. Connecting Hastings and other parts of Oswego County with the commuter region of Syracuse, Interstate 81 influenced residential growth in once-rural areas such as Pleasant Lake, just northeast of the Project Area (Wellman and Dix, 2005; USGS, 1973).

Figure 2-3. Project Area in 1854

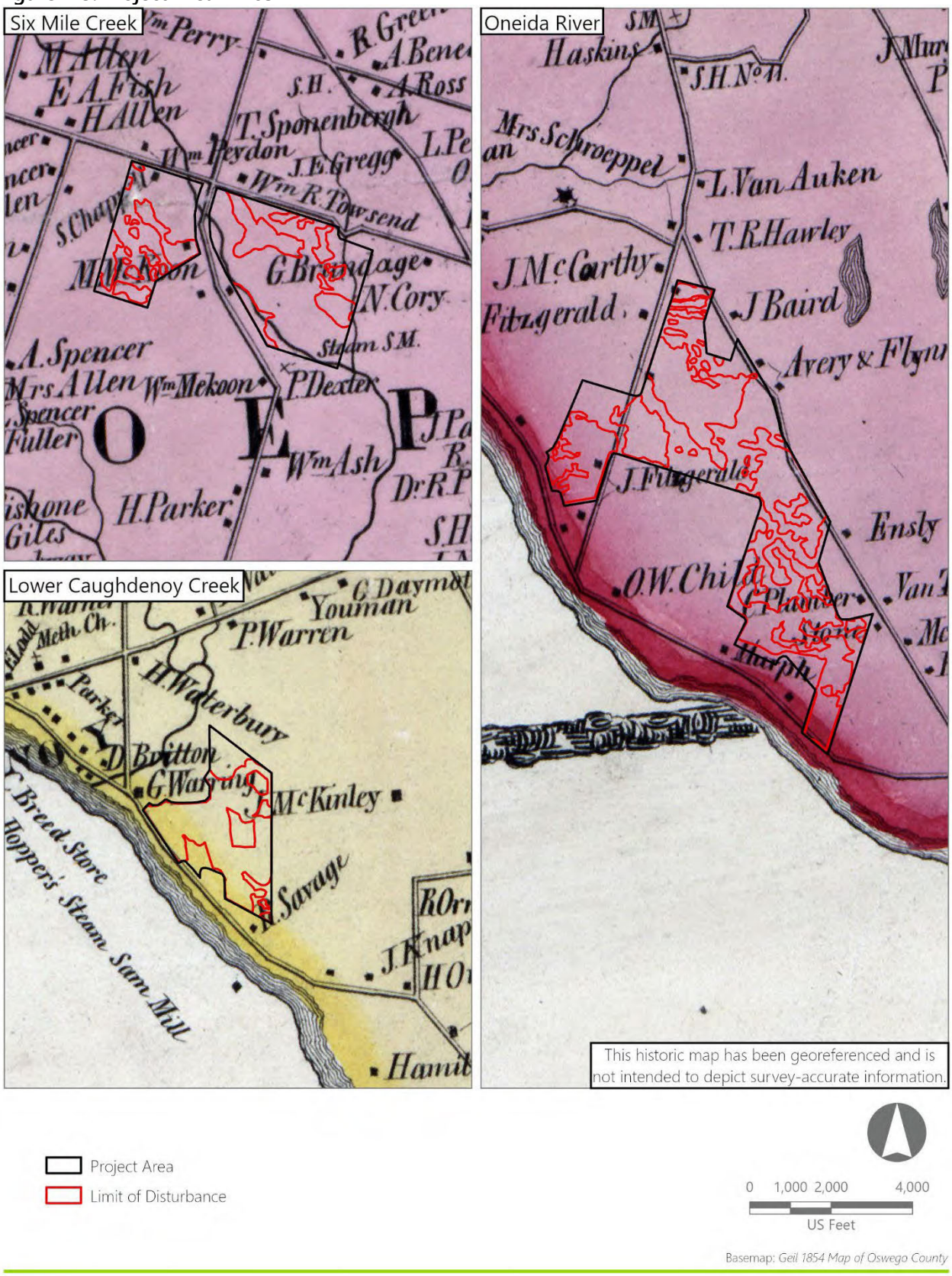
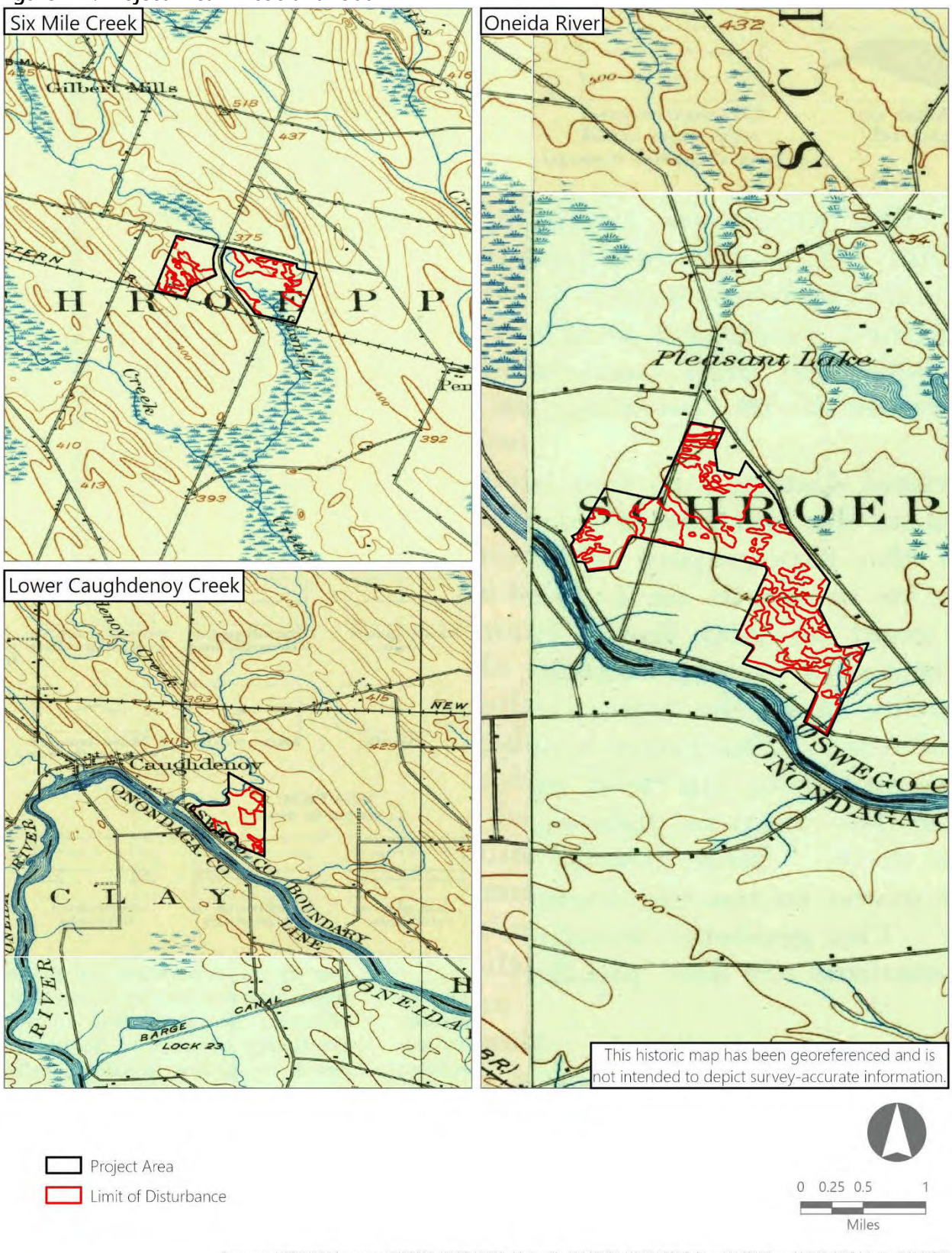
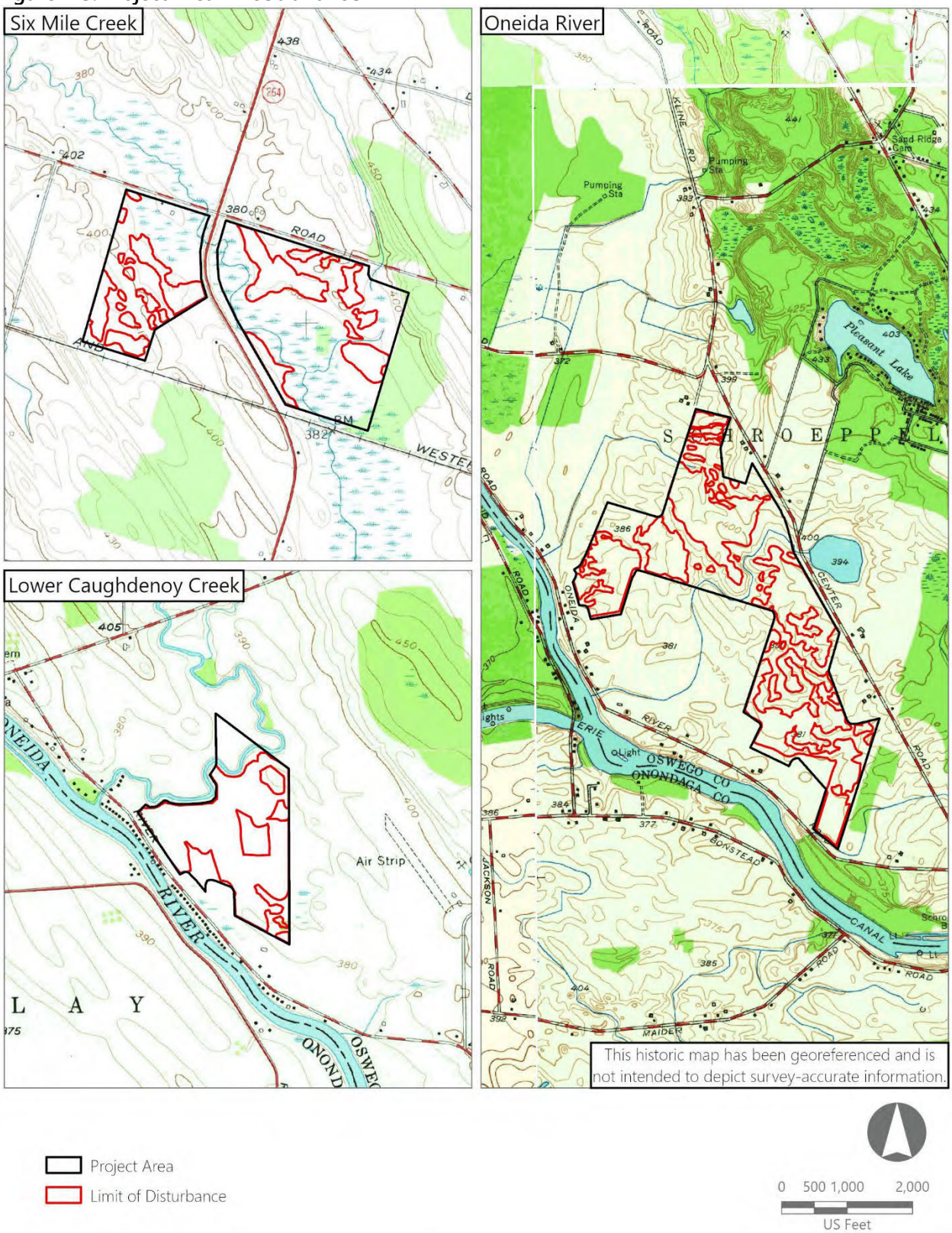


Figure 2-4. Project Area in 1898 and 1900



Basemap: *USGS 1898 Syracuse, NY 62500, USGS 1900 Baldwinsville, NY 24000, USGS 1900 Fulton, NY 62500, and USGS 1905 Mexico, NY 62500*

Figure 2-5. Project Area in 1956 and 1957



Basemap: *USGS 1956 Central Square, NY 24000, USGS 1956 Pennellville, NY 24000, USGS 1957 Baldwinsville, NY 24000, and USGS 1957 Brewerton, NY 24000*

3.0 PHASE IB ARCHAEOLOGICAL WORKPLAN - SURVEY and RESEARCH DESIGN

This section of the Phase IA report presents the proposed methodology for the Phase IB Archaeological Workplan. The Phase IB Workplan for the Project involves archaeological survey of the entire LOD, to be conducted in coordination with a Nation monitor. Archaeological survey will be conducted using the following standard field methods:

- **Pedestrian Survey:** In existing crop fields and/or previously cultivated areas with greater than 70% ground-surface visibility, archaeologists will conduct a pedestrian surface survey to determine whether archaeological sites are present. In these areas, archaeologists will traverse the LOD along transects spaced at 5-meter intervals while inspecting the ground surface for artifacts and/or archaeological features. In the vicinity of identified artifacts, transect intervals will be reduced to delineate site boundaries and the extent of cultural material. The locations of finds will be recorded using sub-meter accuracy GPS equipment. After recording the locations of artifacts and/or features in a given area, archaeologists will collect the observed artifacts for laboratory identification and analysis.

- **Shovel Test Pits:** In areas with less than 70% ground surface visibility, archaeologists will excavate shovel test pits (STPs) to determine whether archaeological sites are present. STPs will be excavated along transects at 50-foot (15-meter) intervals in a grid pattern and will be 30-50 centimeters in diameter and excavated to sterile subsoil or the practical limits of hand excavation (NYAC, 1994). The survey interval may be narrowed to 25 feet (7.5 meters) in areas where landscape conditions, artifact density, and/or other factors indicate the potential for heightened archaeological sensitivity. The survey interval may be increased to 100 feet (30 meters) in areas of saturated soils and/or pervasive ground disturbance, to confirm the limits of these conditions, before resuming the standard 50-foot (15-meter) interval grid pattern when conditions improve.

  Field notes for each STP will be recorded on standardized forms that describe soil stratigraphy, record whether any artifacts were recovered, and note any other relevant observations. All soils excavated from STPs will be screened through 0.25-inch hardware cloth. If indigenous artifacts are recovered from an isolated STP, then up to eight additional STPs will be excavated at 1-meter and 3-meter intervals around the original STP to determine whether the artifacts represent an isolated find or may indicate the presence of a more substantial archaeological site.

- **Onondaga Nation Monitoring**: A representative from the Onondaga Nation will be retained to oversee the archaeological testing to determine if sacred objects or other items of cultural importance are encountered. The monitor will be compensated for their work at an hourly rate to be determined in coordination with the Onondaga Nation. In the event that the Oneida Indian Nation or other Indigenous Nations request to have an on-site monitor present during the archaeological testing, such requests will be accommodated.

Per guidance issued in the *NYAC Standards* (NYAC, 1994), the following portions of the LOD will not be subject to Phase IB archaeological survey:

- Areas where ground slope exceeds 12%
- Areas of delineated wetland (though inundated wetland areas that may have been dry, inhabitable land in the past will be tested where possible at a 100-foot [30-meter] interval at the discretion of the field archaeologists and Nation monitor)
- Any areas that have been subject to pervasive prior ground disturbance (though testing at a 100-foot [30-meter] interval may occur at the discretion of the field archaeologists and Nation monitor)
- All areas within the LOD where previous cultural resources surveys have been conducted, if applicable (Section 2.3)

Previous ground disturbance within the Project Area is, for the most part, limited to previous or ongoing agricultural activities. However, farming is not considered significant in terms of its potential to affect the integrity of archaeological resources (NYAC, 1994; NYSHPO, 2005). Some areas immediately adjacent to existing roads within the Project Area include drainage ditches, culverts, buried utilities, and areas of cut and/or fill. With the exception of these areas, the Project Area in general does not appear to have been subjected to significant previous ground disturbance.

3.1 Actions Taken in the Event of Discovery of Human Remains

In the event of an unanticipated discovery of potential human remains and/or funerary objects during the Phase IB survey, all work in the immediate vicinity will stop until further notice and the NYSHPO, the county coroner/medical examiner, and local law enforcement will be contacted. The potential remains/funerary objects will be treated with respect, left *in situ* by on-site personnel, and protected from further disturbance. If human remains or funerary objects are determined to be Indigenous, a treatment plan will be developed in consultation with the NYSHPO and the appropriate Indigenous Nations, consistent with established protocols and guidance. These will include the NYSHPO's *Human Remains Discovery Protocol* (NYSHPO, 2025), the Advisory Council on Historic Preservation's "Policy Statement on Burial Sites, Human Remains and Funerary Objects" (ACHP, 2023), the Grand Council of the Haudenosaunee's *Protocol for Handling Discovery of Human Remains* and *Haudenosaunee Policy on Human Remains* (GCH, 2002; 2009; 2014), and NY State's Unmarked Burial Site Protection Act (New York State Executive Law Chapter 18, Article 7, Section 171).

3.2 Phase IB Archaeological Survey Reports and Delivery of Electronic Data

Results of the Phase IB archaeological survey will be presented in an illustrated report prepared in accordance with the *New York State Historic Preservation Office Phase I Archaeological Report Format Requirements* (NYSHPO, 2005). Archaeological sites identified during the Phase IB surveys will be uploaded to NYSHPO's online CRIS database at the same time as the survey report. EDR will also provide accurate location information for any additional sites identified during the Phase IB surveys via CRIS.

4.0 SUMMARY AND CONCLUSIONS

The results of the Phase IA archaeological survey and Phase IB Workplan for the Project can be summarized as follows:

- One previous archaeological survey overlaps with the Project Area, but not the LOD.
- No previously recorded archaeological sites are located within the Project Area. [redacted]
- No cemeteries are located within the Project Area.
- [redacted]
- The Phase IB Archaeological Workplan includes survey of the entire LOD, to be conducted in coordination with a Nation monitor, allowing for full identification of potential impacts to archaeological resources.

4.1 Summary of Phase IB Archaeological Workplan and Survey Recommendations

Construction of the proposed Project will include ground disturbing activities that have the potential to impact archaeological resources. The LOD will include all areas within the wetland work areas, totaling approximately 313 acres. The entirety of the LOD will be subjected to Phase IB archaeological survey consistent with the Phase IB Workplan presented in this report conducted in coordination with a Nation monitor. EDR has provided this Phase IA archaeological survey and Phase IB Workplan to the NYSHPO, USACE, and the Onondaga Nation for review and comment on the proposed research design and field methodology.

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Attachment A

NYSHPO and Nations Correspondence

New York State
Parks, Recreation and
Historic Preservation

KATHY HOCHUL
Governor

RANDY SIMONS
Commissioner *Pro Tempore*

ARCHAEOLOGY COMMENTS

Phase IA/IB Archaeological Survey Recommendation
Project: Caughdenoy Creek Wetland Restoration
PR#: 24PR07317
Date: 08/14/2024

The project is in an archaeologically sensitive area. Therefore, the State Historic Preservation Office/Office of Parks, Recreation and Historic Preservation (SHPO/OPRHP) recommends a Phase IA/IB archaeological survey for components of the project that will involve ground disturbance, unless substantial prior ground disturbance can be documented. A Phase IA/IB survey is designed to determine the presence or absence of archaeological sites or other cultural resources in the project's Area of Potential Effects (APE).

If you consider the entire project area to be disturbed, documentation of the disturbance will need to be reviewed by SHPO/OPRHP. Examples of disturbance include mining activities and multiple episodes of building construction and demolition. Documentation of ground disturbance typically consists of soil bore logs, photos, or previous project plans. Agricultural activity is not considered to be substantial ground disturbance.

Please note that in areas with alluvial soils or fill archaeological deposits may exist below the depth of superficial disturbances such as pavement or even deeper disturbances, depending on the thickness of the alluvium or fill. Evaluation of the possible impact of prior disturbance on archaeological sites must consider the depth of potentially culture-bearing deposits and the depth of planned disturbance by the proposed project.

Our office does not conduct archaeological surveys. A 36 CFR 61 qualified archaeologist should be retained to conduct the Phase IA/IB survey.

Please also be aware that a Section 233 permit from the New York State Education Department (SED) may be necessary before archaeological fieldwork is conducted on State-owned land. If any portion of the project includes the lands of New York State, you should contact the SED before initiating survey activities. The SED contact is Christina Rieth and she can be reached at (518) 402-5975 or christina.rieth@nysed.gov. Section 233 permits are not required for projects on private land.

If you have any questions concerning archaeology, please contact Bradley Russell at Bradley.Russell@parks.ny.gov

New York State
Parks, Recreation and
Historic Preservation

KATHY HOCHUL
Governor

RANDY SIMONS
Commissioner *Pro Tempore*

ARCHAEOLOGY COMMENTS

Phase IA/IB Archaeological Survey Recommendation
Project: Center Road Wetland Restoration
PR#: 24PR07318
Date: 08/14/2024

The project is in an archaeologically sensitive area. Therefore, the State Historic Preservation Office/Office of Parks, Recreation and Historic Preservation (SHPO/OPRHP) recommends a Phase IA/IB archaeological survey for components of the project that will involve ground disturbance, unless substantial prior ground disturbance can be documented. A Phase IA/IB survey is designed to determine the presence or absence of archaeological sites or other cultural resources in the project's Area of Potential Effects (APE).

If you consider the entire project area to be disturbed, documentation of the disturbance will need to be reviewed by SHPO/OPRHP. Examples of disturbance include mining activities and multiple episodes of building construction and demolition. Documentation of ground disturbance typically consists of soil bore logs, photos, or previous project plans. Agricultural activity is not considered to be substantial ground disturbance.

Please note that in areas with alluvial soils or fill archaeological deposits may exist below the depth of superficial disturbances such as pavement or even deeper disturbances, depending on the thickness of the alluvium or fill. Evaluation of the possible impact of prior disturbance on archaeological sites must consider the depth of potentially culture-bearing deposits and the depth of planned disturbance by the proposed project.

Our office does not conduct archaeological surveys. A 36 CFR 61 qualified archaeologist should be retained to conduct the Phase IA/IB survey.

Please also be aware that a Section 233 permit from the New York State Education Department (SED) may be necessary before archaeological fieldwork is conducted on State-owned land. If any portion of the project includes the lands of New York State, you should contact the SED before initiating survey activities. The SED contact is Christina Rieth and she can be reached at (518) 402-5975 or christina.rieth@nysed.gov. Section 233 permits are not required for projects on private land.

If you have any questions concerning archaeology, please contact Bradley Russell at Bradley.Russell@parks.ny.gov

New York State
Parks, Recreation and
Historic Preservation

KATHY HOCHUL
Governor

RANDY SIMONS
Commissioner *Pro Tempore*

ARCHAEOLOGY COMMENTS

Phase IA/IB Archaeological Survey Recommendation
Project Name: Sixmile Creek Wetland Restoration
PR#: 24PR09236
Date: 10/17/2024

The project is in an archaeologically sensitive location. Therefore, the State Historic Preservation Office/Office of Parks, Recreation and Historic Preservation (SHPO/OPRHP) recommends a Phase IA/IB archaeological survey for components of the project that will involve ground disturbance, unless substantial prior ground disturbance can be documented. A Phase IA/IB survey is designed to determine the presence or absence of archaeological sites or other cultural resources in the project's Area of Potential Effects (APE).

If you consider the entire project area to be disturbed, documentation of the disturbance will need to be reviewed by SHPO/OPRHP. Examples of disturbance include mining activities and multiple episodes of building construction and demolition. Documentation of ground disturbance typically consists of soil bore logs, photos, or previous project plans. Agricultural activity is not considered to be substantial ground disturbance.

Please note that in areas with alluvial soils or fill archaeological deposits may exist below the depth of superficial disturbances such as pavement or even deeper disturbances, depending on the thickness of the alluvium or fill. Evaluation of the possible impact of prior disturbance on archaeological sites must consider the depth of potentially culture-bearing deposits and the depth of planned disturbance by the proposed project.

Our office does not conduct archaeological surveys. A 36 CFR 61 qualified archaeologist should be retained to conduct the Phase IA/IB survey.

If your project is 10 acres or less in extent or a linear project that is 0.5 miles or less in length, and *NO* archaeological sites are identified, the archaeologist may use our optional *Phase IA/IB Archaeological Investigation Abridged Report Form* (attached). This form is not applicable for projects conducted in New York City.

If you have any questions concerning archaeology, please contact XXX at Bradley.Russell@parks.ny.gov.

Gmail

Kirsten Gerhardt <kirsten@thewetlandtrust.org>

25PR01429 Proposed Wetland and Stream Mitigation for the Proposed Micron Semiconductor Fabrication Facility; Department of Army No. LRB-2000-02198

Schreyer, Jessica (PARKS) <Jessica.Schreyer@parks.ny.gov> Thu, Feb 27, 2025 at 1:21 PM
To: "kirsten@thewetlandtrust.org" <kirsten@thewetlandtrust.org>

Hi Kirsten,

I am combining all Micron-related wetland mitigation projects under CRIS Project 25PR01429. You are a contact on 25PR01429 so you can view the files. By the end of this week, I will close down all the individual wetland projects in CRIS and reissue the Phase I Archeological Survey requests to you through that new project.

Thanks,

JESSICA SCHREYER

Archaeology Unit Program Coordinator

NYS Office of Parks, Recreation and Historic Preservation

Division for Historic Preservation | Peebles Island State Park, PO Box 189, Waterford, NY 12188

Office: (518) 268-2205 | Mobile: (518) 948-7050 | Jessica.Schreyer@parks.ny.gov

parks.ny.gov

Phase IB Archaeological Investigation Work Plan

Micron Wetland and Stream Mitigation Projects, Buxton Creek, Upper Caughdenoy Creek, and Fish Creek, Town of Hastings, Oswego County, New York

NYSHPO Review Number 25PR01429

Prepared for:

Micron New York Semiconductor Manufacturing LLC (Micron)
6360 South Federal Way
Post Office Box 6
Boise, Idaho 83716

On behalf of

AKRF, Inc.
440 Park Avenue South, 7th Floor
New York, NY 10016
212-696-0670
Prepared by:

Environmental Design & Research, D.P.C.
217 Montgomery Street, Suite 1100
Syracuse, New York 13202
https://www.edrdpc.com/

October 2025

1.0 PROJECT

Micron New York Semiconductor Manufacturing LLC (Micron), has engaged The Wetland Trust, Inc. (The Weland Trust) to provide compensatory wetland mitigation consisting of the restoration and rehabilitation of wetlands and streams across six Micron Wetland and Stream Mitigation Project (the Project) sites within the Town of Hastings, Oswego County, New York. The purpose of the Project is to compensate for unavoidable impacts to aquatic resources resulting from the construction of the Proposed Micron Semiconductor Fabrication Project in the Town of Clay, Onondaga County, New York.

Environmental Design & Research, D.P.C. (EDR), on behalf of The Wetland Trust, previously completed the following archaeological surveys in relation to the Project:

- *Phase IA Archaeological Survey and Phase IB Work Plan, Lower Caughdenoy Creek, Oneida River, and Sixmile Creek Wetland Restoration Project, Town of Hastings, Oswego County, New York* (EDR, 2025a)
- *Phase IB Archaeological Survey, Lower Caughdenoy Creek, Oneida River, and Sixmile Creek Wetland Restoration Project, Towns of Hastings and Schroeppel, Oswego County, New York* (EDR, 2025b)
- *Phase IA Archaeological Survey, Upper Caughdenoy Creek, Buxton Creek, and Fish Creek Wetland Restoration Project, Town of Hastings, Oswego County, New York* (EDR, 2025c)

On behalf of Micron, EDR, under contract to AKRF, Incorporated (AKRF), now intends to conduct Phase IB archaeological investigations of the Project's Buxton Creek, Upper Caughdenoy Creek, and Fish Creek wetland mitigation sites.

1.1 Environmental Review

The CHIPS Program Office (CPO) within the National Institute of Standards and Technology (NIST) of the United States Department of Commerce is serving as the lead for Section 106 of the National Historic Preservation Act (Section 106). The U.S. Army Corps of Engineers (USACE) is a participant in the Section 106 process for the for the proposed wetland mitigation. The information and recommendations included in this work plan are intended to assist the CPO, the USACE, the New York State Office of Parks, Recreation and Historic Preservation (NYSHPO), the Onondaga Nation, and other Indigenous Nations, federal agencies, and/or New York State agencies with the review of the Project under Section 106 and/or Section 14.09 of the New York State Parks, Recreation, and Historic Preservation Law, as applicable.

2.0 AREA OF POTENTIAL EFFECTS

To mitigate unavoidable impacts to aquatic resources resulting from the construction of the Proposed Micron Semiconductor Fabrication Facility, restoration and rehabilitation of wetlands and streams will be conducted at the following three Project sites:

- Buxton Creek – 254-acre Area of Potential Effects (APE); 153-acre limit of ground disturbance (LOD)
- Upper Caughdenoy Creek – 163-acre site; 72-acre LOD
- Fish Creek – 185-acre site; 24-acre LOD

Mitigation efforts are designed to replace lost wetland functions and values, ensuring compliance with regulatory requirements. Based on the proposed Project design as currently defined, Micron has identified the LOD within each Project site's APE that would be subject to subsurface impacts as a result of the mitigation efforts. Mitigation efforts will involve disabling existing drainage structures in cultivated fields, restoring wetland basins, installing low earthen berms, and restoring hummock and hollow microtopography for vegetative biodiversity.

3.0 BACKGROUND INFORMATION AND SENSITIVITY DETERMINATION

EDR previously completed the *Phase IA Archaeological Survey, Upper Caughdenoy Creek, Buxton Creek, and Fish Creek Wetland Restoration Project, Town of Hastings, Oswego County, New York* (EDR, 2025c) in June 2025. The following background information is summarized from that report.

The proposed Project is located in a rural part of Oswego County. Agricultural fields comprise a large portion of the Project at all three sites. The majority of the APE is used for pasture, hay fields, and cultivated crops. Many of these fields have been artificially drained with ditches. Woody and emergent herbaceous wetlands, deciduous forests, and developed, open space account for less than 5% of the APE combined. Disturbances in the APE include drainage ditches along roadways, buried utilities, and areas of cut/fill that are for the most part limited to previous or ongoing agricultural activities.

3.1 Indigenous Period Archaeological Sensitivity

3.2 Historic Period Archaeological Sensitivity

4.0 RESEARCH DESIGN

In an email to the NYSHPO dated July 14, 2025, the Onondaga Nation indicated they were requesting a Phase IB archaeological survey of the Buxton Creek, Upper Caughdenoy Creek, and Fish Creek sites based on their review of the *Phase IA Archaeological Survey* report (EDR, 2025c).

The purpose of a Phase IB archaeological investigation at Buxton Creek, Upper Caughdenoy Creek, and Fish Creek is to determine the presence or absence of archaeological sites within undisturbed portions of the APE. If archaeological sites are identified, the Phase IB archaeological investigation will evaluate their eligibility for the National Register of Historic Places (NRHP) and assess the Project's potential effects on those resources.

5.0 ARCHAEOLOGICAL TESTING PROTOCOL

Section 3.0 of the *Phase IA Archaeological Survey and Phase IB Work Plan (*EDR, 2025a) for Lower Caughdenoy Creek, Oneida River, and Sixmile Creek included an archaeological testing protocol and Phase IB archaeological survey methodology. The archaeological testing protocol and Phase IB archaeological survey methodology in that report was based on a combination of:

- NYSHPO's *Phase I Archaeological Report Format Requirements* (NYSHPO, 2005)
- New York Archaeological Council's (NYAC) *Standards for Cultural Resources Investigations and the Curation of Archaeological Collections in New York State* (the *NYAC Standards*; NYAC, 1994; adopted by NYSHPO in 1995)
- AKRF's various Phase IB Archaeological Work Plans for components of the Proposed Micron Semiconductor Fabrication Project that had previously been approved by CPO and the Onondaga Nation

In an email dated April 24, 2025, the USACE confirmed Onondaga Nation approval of the *Phase IA Archaeological Survey and Phase IB Work Plan (*EDR, 2025a) and recommended EDR coordinate directly with the Onondaga Nation for monitors to be present during the subsequent Phase IB survey (USACE, 2025). The Phase IB archaeological investigation of the Buxton Creek, Upper Caughdenoy Creek, and Fish Creek sites will be conducted according to the same archaeological testing protocol and Phase IB archaeological survey methodology previously approved by the USACE and the Onondaga Nation in the *Phase IA Archaeological Survey and Phase IB Work Plan (*EDR, 2025a).

The Phase IB archaeological investigation will be conducted using the following standard and previously approved field methods:

- **Pedestrian Survey:** In existing crop fields and/or previously cultivated areas with greater than 70% ground-surface visibility, archaeologists will conduct a pedestrian surface survey to determine whether archaeological sites are present. In these areas, archaeologists will traverse the LOD along transects spaced at 5-meter intervals while inspecting the ground surface for artifacts and/or archaeological features. In the vicinity of identified artifacts, transect intervals will be reduced to delineate site boundaries and the extent of cultural material. The locations of finds will be recorded using sub-meter accuracy GPS equipment. After recording the locations of artifacts and/or features in a given area, archaeologists will collect the observed artifacts for laboratory identification and analysis.

- **Shovel Test Pits:** In areas with less than 70% ground surface visibility, archaeologists will excavate shovel test pits (STPs) to determine whether archaeological sites are present. STPs will be excavated along transects at 50-foot (15-meter) intervals in a grid pattern and will be 30-50 centimeters in diameter and excavated to sterile subsoil or the practical limits of hand excavation (NYAC, 1994). The survey interval may be narrowed to 25 feet (7.5 meters) in areas where landscape conditions, artifact density, and/or other factors indicate the potential for heightened archaeological sensitivity. The survey interval may be increased to 100 feet (30 meters) in areas of saturated soils and/or pervasive ground disturbance, to confirm the limits of these conditions, before resuming the standard 50-foot (15-meter) interval grid pattern when conditions improve.

  Field notes for each STP will be recorded on standardized forms that describe soil stratigraphy, record whether any artifacts were recovered, and note any other relevant observations. All soils excavated from STPs will be screened through 0.25-inch hardware cloth. If indigenous artifacts are recovered from an isolated STP, then up to eight additional STPs will be excavated at 1-meter and 3-meter intervals around the original STP to determine whether the artifacts represent an isolated find or may indicate the presence of a more substantial archaeological site.

- **Onondaga Nation Monitoring**: Representatives from the Onondaga Nation will be retained to oversee the archaeological testing to determine if sacred objects or other items of cultural importance are encountered. The monitors will be compensated for their work at an hourly rate to be determined in coordination with the Onondaga Nation. In the event that the Oneida Indian Nation or other Indigenous Nations request to have an on-site monitor/s present during the archaeological testing, such requests will be accommodated.

Per guidance issued in the *NYAC Standards* (NYAC, 1994), the following portions of the LOD will not be subject to Phase IB archaeological investigation:

- Areas where ground slope exceeds 12%
- Areas of delineated wetland (though inundated wetland areas that may have been dry, inhabitable land in the past will be tested where possible at a 100-foot [30-meter] interval at the discretion of the field archaeologists and Nation monitor)
- Any areas that have been subject to pervasive prior ground disturbance (though testing at a 100-foot [30-meter] interval may occur at the discretion of the field archaeologists and Nation monitor)
- All areas within the LOD where previous cultural resources surveys have been conducted, if applicable

Previous ground disturbance within the APE is, for the most part, limited to previous or ongoing agricultural activities. However, farming is not considered significant in terms of its potential to affect the integrity of archaeological resources (NYAC, 1994; NYSHPO, 2005). Some areas immediately adjacent to existing roads within the APE include drainage ditches, culverts, buried utilities, and areas of cut and/or fill. With the exception of these areas, the APE in general does not appear to have been subjected to significant previous ground disturbance.

5.1 Health and Safety Plan

Testing completed as part of this Phase IB archaeological investigation is not expected to exceed a depth of 4 feet below grade in most locations. In the event that such deep excavation will occur, a Health and Safety Plan (HASP) may be required in compliance with the standards of the United States Department of Labor's Occupational Safety and Health Administration (OSHA) pertaining to safe excavation practices.

5.2 Artifact Identification and Laboratory Processing

All laboratory activity will be conducted in compliance with the aforementioned guidelines and with those established by the United States Department of the Interior/National Park Service for the Curation of Federally-Owned and Administered Archaeological Collections (36 CFR 66 and 79). In the event that artifacts are observed/collected, the following procedures will be followed:

- Archaeologists will record standard provenance information in the field and collect each artifact (or a representative sample) in sealed plastic bags
- All recovered materials will be washed, dried, and cataloged per standard archaeological laboratory procedures to prepare an artifact inventory for inclusion in the Phase IB report.
- The presence of materials such as coal, cinder, brick, and modern materials will be noted but these materials will not be recovered for further processing or analysis
- In the event that objects of cultural significance to the Indigenous Nations are encountered, the investigators will immediately notify CPO, who will coordinate with NYSHPO, the Indigenous Nations, and other Consulting Parties regarding documentation and repatriation pursuant to Section 106 and any other relevant legislation. If the artifact collection is determined to have no research value, it will be returned to the site owner or discarded at their discretion within one year of the completion of fieldwork.

5.3 Avoidance Plan

In the event that archaeological sites are identified within the APE that are potentially significant but that would not be impacted by the proposed improvements, an "Avoidance Plan" may be prepared after completion of the Phase IB archaeological investigation. The avoidance plan will describe how the Project will successfully avoid and protect areas of archaeological sensitivity

(e.g., agreements to mark and post sensitive areas to prevent disturbance from heavy machinery or staging activities, etc.). Should an Avoidance Plan be necessary, CPO will coordinate with NYSHPO, Indigenous Nations, and other Consulting Parties to develop the plan and to establish the protocols for its finalization and approval.

5.4 Contingency Plan for Phase 2 Archaeological Investigation/Evaluation

Phase 2 archaeological investigation/evaluation is only necessary if the Phase IB investigation uncovers a site or evidence of a site that will need to be evaluated according to S/NRHP criteria for eligibility. If Phase 2 testing is necessary, a separate Work Plan will be prepared at that time and all work would be undertaken in consultation with CPO, NYSHPO, the Indigenous Nations, and other Consulting Parties.

6.0 REPORTING

Following completion of Phase IB archaeological investigation at each of the three wetland mitigation sites, the results of the survey and analysis will be presented in an illustrated technical report prepared in accordance with the *New York State Historic Preservation Office Phase I Archaeological Report Format Requirements* (NYSHPO, 2005) and the *NYAC Standards* (NYAC, 1994). With the assumption that the fieldwork will be completed in multiple stages, it is assumed that multiple reports will be prepared to summarize the work completed as part of that stage. Archaeological sites identified during the Phase IB surveys will be uploaded to NYSHPO's online CRIS database at the same time as the survey report. EDR will also provide accurate location information for any additional sites identified during the Phase IB surveys via CRIS.

7.0 PROJECT COORDINATION AND MANAGEMENT

Prior to each stage of testing, EDR, via AKRF and Micron, will coordinate with CPO and USACE regarding the testing schedule, and will retain the services of monitors from the Onondaga Nation and any other nations that may request to be present. If requested, EDR, via AKRF and Micron will assist in arranging a site visit for representatives of CPO and USACE, who will coordinate the participation of NYSHPO, the Indigenous Nations, and other Consulting Parties as necessary and appropriate during the course of the Phase IB archaeological investigation. During the field testing, the archaeological team will distribute a summary of work completed to date on a weekly basis (including number/location of tests completed and relevant finds) to CPO and USACE, which will be shared with the Indigenous Nations and other Consulting Parties as part of the Section 106 process.

It is possible that the field testing will not reveal any potentially significant archaeological features, deposits, or intact soil strata. If that is the case, no further archaeological consideration would be warranted, and a report to that effect would be prepared. In the event that archaeological resources are encountered, CPO and/or USACE, on a weekly basis, will further consult with NYSHPO, the Indigenous Nations, and other Consulting Parties. In either case, a final report on the field investigation indicating a presence or absence of archaeological features will be submitted to CPO and USACE and shared with NYSHPO, the Indigenous Nations, and other Consulting Parties for review and comment,.

8.0 ACTIONS TAKEN IN THE EVENT OF DISCOVERY OF HUMAN REMAINS

There is no indication that human remains are present within the APE. However, in the unlikely event of an unanticipated discovery of potential human remains and/or funerary objects during the Phase IB investigation, all work in the immediate vicinity will stop until further notice and the CPO, USACE, NYSHPO, the county coroner/medical examiner, and local law enforcement will be contacted. The potential remains/funerary objects will be treated with respect, left in situ by on-site personnel, and protected from further disturbance. If human remains or funerary objects are determined to be Indigenous, a treatment plan will be developed in consultation with the CPO, USACE, NYSHPO, and the appropriate Indigenous Nations, consistent with established protocols and guidance. These will include the NYSHPO's *Human Remains Discovery Protocol* (NYSHPO, 2025), the Advisory Council on Historic Preservation's "Policy Statement on Burial Sites, Human Remains and Funerary Objects" (ACHP, 2023), the Grand Council of the Haudenosaunee's *Protocol for Handling Discovery of Human Remains and Haudenosaunee Policy on Human Remains* (GCH, 2002; 2009; 2014).

9.0 REFERENCES

Advisory Council on Historic Preservation (ACHP). 2023. "Policy Statement on Burial Sites, Human Remains, and Funerary Objects". Available at: https://www.achp.gov/sites/default/files/policies/2023-07/PolicyStatementonBurialSitesHumanRemainsandFuneraryObjects30June2023.pdf (Accessed March 2025).

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