Appendix E-6 Programmatic Agreement

PROGRAMMATIC AGREEMENT AMONG

THE FEDERAL HIGHWAY ADMINISTRATION THE NEW YORK STATE HISTORIC PRESERVATION OFFICE THE ADVISORY COUNCIL ON HISTORIC PRESERVATION THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION AND

THE ONONDAGA NATION
PURSUANT TO 36 CFR § 800.14(b)(1)(ii)

IMPLEMENTING SECTION 106 OF THE NATIONAL HISTORIC PRESERVATION ACT FOR PIN 3501.60, FOR THE INTERSTATE 81 VIADUCT PROJECT

ONONDAGA COUNTY, NEW YORK 16PR06314

WHEREAS, the Federal Highway Administration (FHWA), in coordination with the New York State Department of Transportation (NYSDOT), proposes the Interstate 81 (I-81) Viaduct Project (the Project), a federal-aid transportation project in the City of Syracuse, Onondaga County, New York; and

WHEREAS, the purpose of the Project is to address structural deficiencies and non-standard highway features while creating an improved transportation corridor through the City of Syracuse that meets the transportation needs and provides the infrastructure to support long-range transportation planning efforts; and

WHEREAS, the Project constitutes an undertaking subject to review under Section 106 of the National Historic Preservation Act of 1966 (54 U.S.C. § 306108) and its implementing regulation, 36 CFR Part 800: *Protection of Historic Properties*, as amended; and

WHEREAS, based on a balanced consideration of the need for safe and efficient transportation; the social, economic, and environmental effects of the project alternatives; and national, state, and local environmental protection goals, the Community Grid Alternative has been identified as the Project's preferred alternative, as indicated in the Draft Environmental Impact Statement (Draft EIS) for the Project; and

WHEREAS, the Community Grid Alternative proposes the demolition of the existing viaduct between the New York, Susquehanna and Western (NYS&W) Railway bridge and the I-81/I-690 interchange and replacement with a street-level arterial; and

WHEREAS, under the Community Grid Alternative, the existing I-81 between its northern and southern interchanges with Interstate 481 (I-481) will be re-designated as a business loop of I-81 (BL 81); existing I-81 between the southern I-81/I-481 interchange (Interchange 16A) and the I-81/I-481 northern interchange (Interchange 29) in Cicero would be de-designated as an interstate; and existing I-481 will be re-designated as the new I-81; and

WHEREAS, construction of the Project will be carried out in multiple construction phases; and

WHEREAS, the FHWA in coordination with the NYSDOT, and in consultation with the New York State Historic Preservation Office (SHPO), is progressing the Section 106 process with a Programmatic Agreement (Agreement) in accordance with 36 CFR §800.14(b)(1)(ii) because the effects of the Project cannot be fully determined prior to approval of the Project; and

WHEREAS, the NYSDOT participated in the consultation, has responsibilities for implementing stipulations under this PA, and has been invited to be a signatory to this PA; and

WHEREAS, the Advisory Council on Historic Preservation (ACHP), at the invitation of the FHWA, is participating in Section 106 consultation for the Project; and

WHEREAS, based on the Project's location within the geographical areas of interest identified by the Onondaga Nation and the Tuscarora Nation for Section 106 consultation, the FHWA formally initiated government-to-government consultation with the Nations for the I-81 Viaduct Project in accordance with 36 CFR §800.2(c)(2)(ii), and the Tuscarora Nation subsequently agreed to defer their Section 106 consultation status on the Project to the Onondaga Nation; and

WHEREAS, the FHWA approved requests from the following individuals and organizations to participate as Consulting Parties in the Section 106 process, providing them an opportunity to articulate their views on the identification of historic properties and evaluation of the Project's effects on those properties:

- Syracuse-Onondaga County Planning Agency
- Syracuse Housing Authority
- Syracuse Metropolitan Transportation Council
- Town of DeWitt Historian, Historical Preservation Society
- Preservation League of New York State
- City of Syracuse, Department of Engineering
- Downtown Committee of Syracuse
- Preservation Association of Central New York
- Central New York Chapter of the American Institute of Architects (AIA-CNY)
- Central New York Regional Planning and Development Board
- The Erie Canal Museum
- The Northside Urban Partnership
- Northeast Hawley Development Association, Inc.
- Quante Wright
- Douglas Armstrong
- Historic Oakwood Preservation Association
- Housing Visions; and

WHEREAS, the FHWA in coordination with the NYSDOT, and in consultation with the SHPO, established an Area of Potential Effects (APE) (Appendix 1) in accordance with 36 CFR § 800.4(a)(1) to incorporate potential direct and indirect effects associated with the combined scope of work for the two Build Alternatives that were evaluated in the Draft EIS for the Project, the Viaduct Alternative and the Community Grid Alternative; and

WHEREAS, due to the size of the APE, existing conditions within an urban setting, and inaccessibility of some areas for testing in advance of construction, the FHWA and NYSDOT, in consultation with the SHPO, agreed to implement a phased process to defer the final identification and evaluation of archaeological properties, pursuant to 36 CFR § 800.4(b)(2), as provided for in this Agreement; and

WHEREAS, the NYSDOT has retained professional archaeologists (henceforth referred as "Archaeologist") meeting the Secretary of the Interior's Professional Qualification Standards for Archaeology (36 CFR Part 61) to conduct archaeological surveys and prepare reports in accordance with accepted professional standards, including the SHPO Phase I Archaeological Report Format Requirements (2005), the New York Archaeological Council's Standards for Cultural Resources Investigations and the Curation of

Archaeological Collections in New York (1994), and the New York State Education Department Cultural Resources Survey Program Work Scope Specifications for Cultural Resources Investigations on New York State Department of Transportation Projects (2004); and

WHEREAS, in accordance with New York State Education Law Section 233, all scientific specimens and collections, works of art, objects of historic interest and similar property appropriate to a general museum, if owned by the state and not placed in other custody by a specific law, shall constitute the collections of the state museum, and the state museum shall be the custodian of the collections, shall perform standard curatorial, research and educational activities; and

WHEREAS, the Onondaga Nation has expressed an interest in curating any Haudenosaunee artifacts recovered through archaeological investigations for the Project; and

WHEREAS, the FHWA and the NYSDOT recognize other regulations, including the Native American Graves Protection and Repatriation Regulations (43 CFR Part 10), which will be followed as appropriate; and

WHEREAS, the NYSDOT on behalf of the FHWA, coordinated with the SHPO and the Onondaga Nation on the development of the *Phase IA Archaeological Sensitivity Assessment*, September 2016 (*Phase IA Assessment*), to establish the likely presence of archaeological resources within the APE and develop historic contexts for the Native American and Historic Periods; and

WHEREAS, the *Phase IA Assessment* concluded that the potential presence of archaeological sites within the APE is highly variable, requiring different methods of archaeological investigation depending on existing conditions, the anticipated depth of proposed Project impacts, and the type and extent of prior ground disturbance at specific locations; and

WHEREAS, the FHWA and the NYSDOT recognize that sensitivity for Haudenosaunee artifacts also depends on the proximity to current and historic waterways and the Onondaga Nation's oral history or other indigenous knowledge of ancestral presence in an area; and

WHEREAS, the Project's Archaeologists prepared the *Phase IB Archaeological Survey Work Plan: Plan for Phase IB Archaeological Survey and Archaeological Monitoring during Construction Including Data Recovery,* October 2017 (*Phase IB Work Plan*), identifying areas within the Project's APE for direct effects to be investigated through shovel testing and machine-aided testing in advance of the Project's construction and archaeological monitoring during construction; and

WHEREAS, the NYSDOT on behalf of the FHWA, coordinated with the SHPO and Onondaga Nation on the development of the *Phase IB Work Plan*, met to discuss the Onondaga Nation's concerns on June 13, 2017, considered and addressed comments received, and received notice by letter dated November 3, 2017 that the SHPO had no further concerns with the document; and

WHEREAS, the Project's Archaeologists conducted the initial stage of field investigations in accordance with the approved *Phase IB Work Plan* (Appendix 2) between November 2017 and September 2020, and the NYSDOT provided copies of the report entitled *Phase IB Archaeological Survey: Shovel Testing*, revised September 2020, (*Shovel Testing Report*) to the SHPO, the Onondaga Nation, and the Tuscarora Nation for review and comment; and

WHEREAS, the shovel testing portion of the Phase IB survey identified two historic period archaeological sites, the Britton Lime Kiln Site and the Crouse Road Site, which were recommended not eligible

for the National Register of Historic Places (NRHP), and did not identify any Native American cultural artifacts, materials or archaeological sites; and

WHEREAS, based on review of the *Shovel Testing Report*, the SHPO expressed no concerns or comments on the report by letter dated October 26, 2020 and concurred with the report's finding and recommendations by letter dated January 11, 2021; and

WHEREAS, the FHWA and NYSDOT met with representatives of the Onondaga Nation on January 20, 2021 to consider and discuss the Nation's recommendation for additional pre-construction investigation due to concerns regarding the potential presence of cultural artifacts and human remains in previously disturbed soils and unscreened fill materials, and the Onondaga Nation's further recommendation for on-site monitors during construction; and

WHEREAS, the FHWA and NYSDOT determined that additional pre-construction shovel testing was not warranted, and agreed to provide opportunities for representatives of the Onondaga Nation to participate in archaeological monitoring during construction in locations specified in the approved *Phase IB Work Plan*; and

WHEREAS, due to the Project's geographic size, location, and construction complexities, the FHWA has determined that Native Nation monitoring is warranted in locations within one quarter mile of documented existing and historic waterbody alignments where construction activities would involve excavation below ground surface (excluding existing infrastructure), as depicted in **Appendix 9**; and

WHEREAS, in accordance with 36 CFR §800.5(a)(3), a phased process will be used to apply the *criteria* of adverse effect to any National Register (NR) eligible archaeological properties that may be identified through the phased identification and evaluation efforts being conducted pursuant to 36 CFR §800.4(b)(2) and described in the approved *Phase IB Work Plan*; and

WHEREAS, the Onondaga Nation has expressed a preference for Archaeologists with direct experience or advanced training in Haudenosaunee artifacts and culture; and

WHEREAS, the NYSDOT, in coordination with the FHWA and in consultation with the SHPO, conducted an inventory and evaluation of architectural properties within the APE and identified four (4) historic districts with a total of 97 contributing resources, and 98 individual architectural properties listed or eligible for inclusion in the National Register of Historic Places; and

WHEREAS, the NYSDOT in coordination with the FHWA applied the *criteria of adverse effect*, as defined by 36 CFR §800.5(a)(1), to evaluate known effects on identified historic architectural properties within the APE for the Viaduct Alternative and the Community Grid Alternative, and prepared documentation as specified in 36 CFR §800.11(e); and

WHEREAS, the NYSDOT concluded, as recorded in the *Finding Documentation*, that the Viaduct Alternative would result in an *adverse effect* on NR-eligible or listed architectural properties within the APE and the Community Grid Alternative would have *no adverse effect* on NR-eligible or listed architectural properties within the APE; and

WHEREAS, the NYSDOT, in coordination with FHWA, provided the draft *Finding Documentation* to the Onondaga Nation, Tuscarora Nation, and other Consulting Parties on August 12, 2019 for a 30-day review period; and

WHEREAS, the NYSDOT, in coordination with FHWA, provided the draft *Finding Documentation* to the SHPO on February 10, 2021 for their preliminary review and comment; and

WHEREAS, based on review of the draft *Finding Documentation*, the SHPO provided an opinion on March 4, 2021, concurring with the assessment of effects on historic architectural resources for the Viaduct Alternative and the Community Grid Alternative, and agreed with the NYSDOT recommendation to seek to develop a Programmatic Agreement to guide the remainder of the Section 106 consultation process for the Project; and

WHEREAS, the NYSDOT in coordination with FHWA provided the *Finding Documentation* to the SHPO on April 8, 2021 for their final review and concurrence; and

WHEREAS, based on review of the provided *Finding Documentation*, the SHPO concurred that the Community Grid Alternative would not adversely affect historic architectural resources by letter dated April 15, 2021; and

WHEREAS, based on review of the provided information, the FHWA determined by letter dated April 23, 2021, that the Viaduct Alternative would result in an *adverse effect* on historic architectural resources, and the Community Grid Alternative (preferred alternative) would have *no adverse effect* on historic architectural resources, and concurred with developing a Programmatic Agreement to outline the continued Section 106 consultation process and assessment for archaeological resources; and

WHEREAS, the Onondaga Nation has participated in the consultation, has responsibilities for implementing stipulations under this Agreement, and in a phone conversation with the FHWA on October 7, 2021, accepted the FHWA's invitation to be an invited signatory to this Agreement; and

WHEREAS, the FHWA invited the other Consulting Parties to sign the Agreement as Concurring Parties; and

NOW, THEREFORE, the FHWA, SHPO, ACHP, NYSDOT and the Onondaga Nation agree that the Project shall be implemented in accordance with the following stipulations in order to take into account the effect of the Project on historic properties.

STIPULATIONS

The FHWA, in coordination with the NYSDOT, shall ensure that the following measures are carried out.

I. Roles and Responsibilities

- A. As the lead federal agency, FHWA shall be legally responsible for all Section 106 findings and determinations and shall ensure that the terms of this Agreement are carried out to complete the Section 106 process. The FHWA shall carry out Nation-to-Nation consultation with the Onondaga Nation as described in Stipulation IV and **Appendix 5**.
- B. The NYSDOT shall coordinate, manage, and oversee implementation of the approved *Phase IB Work Plan* for continuing archaeological investigations through Final Design and Construction phases of the Project, as outlined in Stipulation V, with the assistance of Archaeologists and Native Nation Monitors. The NYSDOT's commitment and ability to complete the implementation of the approved *Phase IB Work Plan* will not be impaired if the Native Nation Monitors do not participate in the full range of continuing archaeological investigations if the NYSDOT has provided the required notice, as specified in **Appendix 6**.
- C. The SHPO shall advise and assist the FHWA in carrying out Section 106 responsibilities for the Project. Based on information provided by the NYSDOT on behalf of the FHWA, the SHPO shall provide comments and/or concurrence within the specified review periods to determine National Register eligibility and consider measures to avoid, minimize, or mitigate any adverse effects on archaeological sites that may be identified through continuing archaeological investigations.
- D. The ACHP shall provide policy guidance to the FHWA and advise on the resolution of any dispute or objection from a signatory to this Agreement, a concurring party, or member of the public, as needed.
- E. The Onondaga Nation will continue to participate in ongoing Section 106 consultation for the identification and evaluation of Haudenosaunee cultural materials, artifacts, archaeological resources and any potential human remains. The Onondaga Nation will also provide Native Nation Monitors to participate in archaeological fieldwork, as specified in **Appendix 4**, **Appendix 5**, and **Appendix 6**. Construction shall not be precluded from progressing if Native Nation Monitors are not present and the NYSDOT has provided the required notice, and **Appendix 6**.

II. Professional Standards

- A. All archaeological investigations carried out pursuant to this Agreement shall be conducted by or under the direct supervision of an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for Archaeology (36 CFR Part 61).
- B. Native Nation monitoring will be conducted by individuals selected by the Onondaga Nation, and are not required to meet the standards defined in Stipulation II A. The FHWA and/or the NYSDOT will defer to the Onondaga Nation to determine how Native Nation Monitors will be designated as such by the Onondaga Nation.

III. Curation

A. All collections, consisting of artifacts, notes and other materials associated with archaeological investigations, will be curated in accordance with 36 CFR Part 79 – Curation of Federally-Owned and Administered Archaeological Collections, and the New York Archaeological Council (NYAC)

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

- B. For the purpose of study, artifacts collected through archaeological investigations for the Project will be retained by the Archaeologist for a period of up to one year after the end of the Section 233 permit. The Archaeologist may request extensions, as needed, from the State Museum. The Archaeologist shall collect, process, and prepare artifacts in accordance with the New York State Museum's (NYSM) Accession Policy and Accession Standards, as articulated in the NYSM "Archaeological Curation Guidelines".
 - 1. The Onondaga Nation may submit a request to the State Museum for a loan(s) of any artifact(s) or collections accessioned by the NYSM, consistent with that institution's established policy and procedures.
 - 2. If the State Museum declines to accession any Haudenosaunee artifact(s) or archaeological collections from state lands under the jurisdiction of the NYSDOT, the NYSDOT shall then offer these objects and materials to the Onondaga and Tuscarora Nations.
 - 3. If any artifacts which may be or are determined to be cultural objects, as defined by the Native American Graves Protection and Repatriation Act, 25 U.S.C. § 3001 et seq., are discovered, the NYSDOT shall notify the Onondaga and Tuscarora Nations and the New York State Museum and the cultural objects shall be immediately offered to the New York State Museum for review, inventory/summary, publication of notice, and repatriation to the Nations, pursuant to NAGPRA. If the State Museum declines to take possession or control of cultural objects, the NYSDOT shall immediately offer to return the objects to the Onondaga and Tuscarora Nations. If both the State Museum and the Onondaga and Tuscarora Nations decline to take possession of artifacts that are or may be cultural objects, as defined by NAGPRA, these materials may be retained, processed, and prepared by the Archaeologist in the same manner as any other artifacts collected during construction.

IV. Native Nation Consultation

- A. The FHWA, in coordination with the NYSDOT, shall continue to carry out formal Section 106 consultation with the Onondaga Nation for the identification and evaluation of cultural materials, artifacts and archaeological features encountered during machine-aided testing or archaeological monitoring during construction, as specified in **Appendix 5** and **Appendix 6**.
- B. The FHWA, in coordination with the NYSDOT, shall carry out consultation with the Onondaga Nation for the identification of any human remains, or potential human remains, that may be encountered through archaeological investigations in identified areas of sensitivity or as unanticipated discoveries during construction of the Project, as specified in Appendix 3, Appendix 5 and Appendix 6. The consultation will include a consideration of measures to avoid, minimize, or mitigate adverse effects.
- C. All signatories to this Agreement shall follow the consultation procedures and protocols as specified in **Appendix 5** and **Appendix 6**.

V. Identification and Evaluation of Archaeological Properties

The NYSDOT, in coordination with the FHWA, shall complete the identification and evaluation of archaeological properties pursuant to 36 CFR §800.4(b) and (c) by implementing the approved *Phase*

IB Work Plan for the Project (**Appendix 2**). Archaeological investigations will proceed through the Final Design and Construction phases of the Project, as locations become accessible.

A. Construction Phase Archaeological Work Plan

- Archaeological investigations during construction shall be carried out in accordance with a Construction Phase Archaeological Work Plan to be developed by the Archaeologist as additional information regarding construction phasing becomes available. The NYSDOT shall provide the draft document to the SHPO, Onondaga Nation, and FHWA for review and comment prior to approval.
 - a. The Construction Phase Archaeological Work Plan will supplement the approved *Phase IB Work Plan* and will provide more detail regarding potential types of archaeological finds anticipated to occur in areas of known archaeological sensitivity.
 - b. Using engineering plans, the Construction Phase Archaeological Work Plan will document the evaluation of anticipated disturbance in archaeologically sensitive areas, describe strategies for implementing the approved Phase IB Work Plan, and describe the sequencing of archaeological survey and/or monitoring based upon the anticipated construction schedule.
 - c. The NYSDOT, on behalf of the FHWA, will consult with the SHPO and with the Onondaga Nation for areas identified as sensitive for Native American artifacts or the potential presence of human remains on the development of the Construction Phase Archaeological Work Plan.
 - d. Following established standards and methodologies, the NYSDOT, on behalf of the FHWA, shall carry out remaining investigations to identify archaeological properties that may be affected by the Project, consistent with the Construction Phase Archaeological Work Plan.

B. Machine-Aided Archaeological Testing in Advance of Construction

- Machine-aided testing will be conducted in advance of construction at selected locations
 within the APE for direct effects, as identified in the approved *Phase IB Work Plan*, to
 investigate the potential presence of intact archaeological deposits or features below
 disturbed soil layers, fill and/or pavement. Machine-aided archaeological excavations will be
 scheduled and timed to occur immediately before the start of the Project's construction
 activities at those locations.
- The Onondaga Nation will provide Native Nation Monitors to participate in machine-aided archaeological testing, as described in **Appendix 5**, in locations specified in the approved Phase IB Work Plan.
- 3. Within two weeks following the completion of machine-aided testing, the Archaeologist will provide an end-of-field letter to the NYSDOT, summarizing the preliminary results, including recommendations for additional investigations for Phase II testing, as needed, to determine National Register eligibility for potentially eligible resources.
- 4. The NYSDOT, in coordination with the FHWA and in consultation with the SHPO, will consider the Archaeologist's recommendation(s) for Phase II site examination. If Native American cultural materials or features are identified, the NYSDOT and the FHWA will seek and consider input from the Onondaga Nation.

- 5. The Archaeologist will proceed with Phase II field investigations immediately upon approval from the NYSDOT.
- 6. The Archaeologist will prepare and submit to the NYSDOT a draft report summarizing the results of Phase IB machine-aided testing and Phase II field investigations of identified archaeological sites. The report will provide an eligibility recommendation for each site.
 - a. The NYSDOT will distribute the draft report to the SHPO, FHWA, and Onondaga Nation with a 30-day period for review and comment. The NYSDOT, in coordination with the FHWA, will consider any comments received during the review period and direct the Archaeologist to make revisions as needed to finalize the report.
 - b. The NYSDOT, in coordination with the FHWA, will formally request SHPO concurrence with the recommended eligibility findings in the report.
- 6. If there are no NR-eligible archaeological properties identified as a result of machine-aided testing, there will be no further archaeological investigations until archaeological monitoring is implemented during construction of the Project, in accordance with the approved *Phase IB Work Plan* (Appendix 2).
- 7. The NYSDOT, on behalf of the FHWA, will consult with the SHPO and with the Onondaga Nation for areas identified as sensitive for Native American artifacts or the potential presence of human remains regarding the need for archaeological monitoring during construction in locations identified but not selected for machine-aided testing.

C. Archaeological Monitoring during Construction

- 1. Archaeological monitoring during construction will be conducted under the supervision of an Archaeologist meeting the Secretary of the Interior's Professional Qualification Standards (36 CFR 61, Appendix A).
- 2. The Onondaga Nation will provide Native Nation Monitors to participate in archaeological monitoring during construction in locations specified in the approved *Phase IB Work Plan*, in any additional areas designated for archaeological monitoring in the Construction Phase Archaeological Work Plan, and in any areas within 50 meters of where unanticipated discoveries of Haudenosaunee or potentially Haudenosaunee archaeological resources, cultural objects, including objects of cultural patrimony, sacred objects, and funerary objects, or human remains are made, as described in **Appendix 5**.

VI. Consultation to Avoid, Minimize or Mitigate Adverse Effects on Archaeological Properties

- A. The NYSDOT, in coordination with the FHWA and in consultation with the SHPO, and with the Onondaga Nation for Native American sites, will apply the criteria of adverse effect (36 CFR §800.5(a)(1)) to NR-eligible archaeological properties within the APE, and document its findings.
- B. If, as a result of this analysis, the FHWA determines that the Project may have an adverse effect on any archaeological property, the FHWA, in coordination with the NYSDOT, will consult with the SHPO, and with the Onondaga Nation for Native American sites, to explore measures to avoid, minimize, or mitigate adverse effects. The FHWA, in coordination with the NYSDOT, will ensure the implementation of any modifications or conditions to avoid or minimize adverse effects, as agreed upon through consultation.
- C. In the event that adverse effects cannot be avoided, Data Recovery excavations may be considered in consultation among the FHWA, SHPO, and the NYSDOT, and including the Onondaga Nation for

Native American sites. If it is determined through consultation that Data Recovery is an appropriate treatment, the NYSDOT will direct the Archaeologist to prepare an Archaeological Data Recovery Plan (DRP) for each affected property, consistent with the above-referenced standards and guidelines for archaeology. DRPs for more than one individual property may be compiled as a single report for the purpose of review by the SHPO and by the Onondaga Nation for Native American sites.

- D. If adverse effects cannot be fully avoided, and Data Recovery is not determined appropriate, the FHWA, in coordination with NYSDOT, consultation with the SHPO, and with the Onondaga Nation for Native American sites, will continue consultation to determine alternate mitigation such as preservation in place, site burial, or other measures, and will prepare an archaeological treatment plan for each site. Treatment plans for more than one individual site may be compiled as a single report for the purpose of review by the SHPO and by the Onondaga Nation for Native American sites.
- E. The FHWA, in coordination with NYSDOT, will distribute the treatment plan or DRP for a 15-calendar day review and comment by the SHPO, and by the Onondaga Nation for Native American sites

FHWA, in coordination with the NYSDOT and in consultation with the SHPO, and with the Onondaga Nation for Native American sites, will consider all timely comments from reviewing parties in finalizing the treatment plan or DRP. If no reviewing party comments are received within 15 calendar days, FHWA will approve the treatment plan or DRP and ensure its implementation.

VII. Changes in Project Scope

In the event of any changes to the Project scope, the following measures shall be implemented in consultation with the signatories and concurring parties to this Agreement:

- A. The FHWA, in coordination with the NYSDOT and in consultation with the SHPO, shall assess and revise the Project APE as needed to incorporate any additional areas where the Project may have the potential to affect historic properties.
- B. Following established standards and methodologies, the NYSDOT, on behalf of the FHWA, shall carry out additional investigations to identify historic architectural and archaeological properties that may be affected by the Project.
- C. The FHWA, in coordination with the NYSDOT, shall document an assessment of the Project's effects on any new historic properties and explore measures to avoid, minimize, or mitigate effects on these properties in consultation with the SHPO, Onondaga Nation, and other Section 106 Consulting Parties.
- D. The FHWA, in coordination with the NYSDOT, shall ensure the preparation of appropriate reports and documents, shall notify Section 106 Consulting Parties as appropriate, including the Onondaga Nation, of any changes in the Project's effect on historic properties, and shall provide an opportunity for review and comment.
- E. If a change in project scope results in adverse effects to previously unidentified historic properties (district, site, building, structure or object), the FHWA, in coordination with the NYSDOT, shall consult with all Consulting Parties to amend the Agreement in accordance with Stipulation XIII.

VIII. Post-Review Discoveries (Archaeology)

If new archaeological resources are discovered or unanticipated effects on archaeological properties are identified during construction, and there is no Archaeologist present to conduct archaeological monitoring as stipulated herein, the NYSDOT Standard Specifications, Section 107-01 - Laws, Rules, Regulations and Permits, D. Archeological Salvage and **Appendix 6** shall apply.

In accordance with 36 CFR 800.13(b)(3), the FHWA in coordination with the NYSDOT and in consultation with the SHPO will apply the National Register criteria (36 CFR Part 63) to evaluate any new archaeological resources and to consider measures to avoid, minimize or mitigate adverse effects on NR-eligible properties. Additionally, the FHWA in coordination with the NYSDOT will consult with the Onondaga Nation for Native American cultural materials and sites.

The NYSDOT, on behalf of the FHWA, will consult with the SHPO and the Onondaga Nation regarding the need to expand the areas identified for archaeological monitoring during construction to include locations where the Project would involve excavation within 50 meters of identified Native American artifacts.

IX. Post-Review Discoveries (Human Remains)

If evidence of burials, human remains or potential human remains is encountered during construction, the NYSDOT shall suspend all work in the immediate vicinity, protect the remains from further disturbance, and immediately contact the SHPO, FHWA, ACHP, and the Onondaga Nation. The NYSDOT, in coordination with the FHWA, will implement the current NYSDOT Procedures in the Event of the Inadvertent Discovery of Human Remains during Construction [(hereafter "NYSDOT Inadvertent Discoveries Procedures") (Appendix 3)], the 2002 Haudenosaunee Protocol for Handling Discovery of Human Remains [(hereafter "2002 Haudenosaunee Protocol") (Appendix 3)], and any additional provisions incorporated in Appendix 5 and Appendix 6. Construction activities in the location of the discovery will be suspended pending notification to and consultation among the SHPO, NYSDOT, FHWA, and the Onondaga Nation, in accordance with these procedures.

The NYSDOT, on behalf of the FHWA, will consult with the SHPO and the Onondaga Nation regarding the need to expand the areas identified for archaeological monitoring during construction to include locations where the Project would involve excavation within 50 meters of the unanticipated discovery of human remains.

If requested by the Onondaga Nation, the FHWA and the NYSDOT will assist the Onondaga Nation in the relocation and reinterment of human remains determined or presumed to be Native American.

X. Confidentiality

Sensitive information concerning the location, character, or ownership of archaeological resources may be withheld from public disclosure in accordance with Section 304 of the National Historic Preservation Act (54 U.S.C. § 307103).

XI. Monitoring and Reporting

Each year following the execution of this Agreement until it expires or is terminated, the FHWA, in coordination with the NYSDOT, shall provide all parties to this Agreement a summary report detailing work undertaken pursuant to its terms. Such report shall include any scheduling changes proposed, any issues encountered, and any disputes and objections received in the FHWA's efforts to carry out the terms of this Agreement.

The NYSDOT will submit to the FHWA annually a written status of each stipulation included herein. The NYSDOT will provide a written notification to the FHWA for concurrence once all stipulations have been completed. Upon FHWA concurrence, the Section 106 process will be deemed completed.

XII. Dispute Resolution

Should any signatory or concurring party to this Agreement object at any time to any actions proposed or the manner in which the terms of this Agreement are implemented, the FHWA shall consult with such party to resolve the objection. If the FHWA determines that such objection cannot be resolved, the FHWA will:

- A. Forward all documentation relevant to the dispute, including the resolution proposed by the FHWA to the ACHP. The ACHP shall provide the FHWA with its advice on the resolution of the objection within thirty (30) days of receiving adequate documentation. Prior to reaching a final decision on the dispute, the FHWA shall prepare a written response that takes into account any timely advice or comments regarding the dispute from the ACHP, signatories and concurring parties and provide them with a copy of this written response. The FHWA will then proceed according to the final decision.
- B. If the ACHP does not provide its advice regarding the dispute within the 30-day time period, the FHWA may make a final decision on the dispute and proceed accordingly. Prior to reaching such a final decision, FHWA shall prepare a written response that takes into account any timely comments regarding the dispute from the signatories and concurring parties to this Agreement and provide them and the ACHP with a copy of such written response.
- C. The responsibilities of the FHWA to carry out all other actions subject to the terms of this Agreement that are not the subject of the dispute remain unchanged.

XIII. Amendments

This Agreement may be amended when such an amendment is agreed to in writing by all signatories. The amendment will be effective on the date a copy signed by all signatories is filed with the ACHP.

XIV. Termination

If any signatory to this Agreement determines that its terms will not or cannot be carried out, that party shall immediately consult with the other parties to attempt to develop an amendment per Stipulation XIII. If an amendment cannot be reached within thirty (30) days, any signatory may terminate the Agreement upon written notification to the other signatories.

Once the Agreement is terminated, and prior to work continuing on the Project, the FHWA must either (a) execute an Agreement pursuant to 36 CFR § 800.6 or (b) request, take into account, and respond

to the comments of the ACHP under 36 CFR § 800.7. The FHWA shall notify the signatories as to the course of action they will pursue.

XV. Duration

This Agreement will be null and void if its terms are not carried out within ten (10) years from the date of its execution. Prior to such time, the FHWA may consult with the other signatories to reconsider the terms of the Agreement and amend it in accordance with Stipulation XIII.

APPENDICES

Appendix 1: Area of Potential Effects

Appendix 2: Phase IB Archaeological Survey Work Plan: Plan for Phase IB Archaeological Survey and

Archaeological Monitoring during Construction Including Data Recovery, October 2017

Appendix 3: NYSDOT Procedures in the Event of the Inadvertent Discovery of Human Remains during

Construction

2002 Haudenosaunee Protocol for Handling Discovery of Human Remains

Appendix 4: Roles and Responsibilities in Construction

Appendix 5: Native Nation Consultation

Appendix 6: Coordination and Communication Protocols in Construction

Protocols for Communication in Construction (Flowchart)

Appendix 7: Contacts

Appendix: 8: Sample Contract

Appendix 9: Areas of Potential Native Nation Monitoring (Map 1, Sheets 1 and 2)

Focus Map - Areas of Potential Native Nation Monitoring (Map 2, Sheets 1 and 2)

Typical Road Section and Associated Definitions

Execution of this Agreement by the FHWA, the SHPO, the ACHP, the NYSDOT, and the Onondaga Nation and implementation of its terms is evidence that the FHWA has taken into account the effects of this Project on

historic properties and has afforded the ACHP an opportunity to comment.

SIGNATORY:				
FEDERAL HIGH	WAY ADMINISTRATION			
BY:			DATE:	
RICHARD J.	MARQUIS, DIVISION ADMI	INISTRATOR, FHWA NEW	YORK DIVISION	

Execution of this Agreement by the FHWA, the SHPO, the ACHP, the NYSDOT, and the Onondaga Nation and implementation of its terms is evidence that the FHWA has taken into account the effects of this Project on

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SIGNATORY:	
NEW YORK STATE HISTORIC PRESERVATION OFFICE	
RY·	DATE:

R. DANIEL MACKAY, DEPUTY COMMISSIONER, STATE HISTORIC PRESERVATION OFFICER

Page 15 of 35

SIGNATORY:		
ADVISORY COUNCIL ON HISTORIC PRESERVATION		
BY:	DATE:	
REID NELSON, EXECUTIVE DIRECTOR (ACTING)		

INVITED SIGNATORY:	
NEW YORK STATE DEPARTMENT OF TRANSPORTATION	
BY:	DATE:
NICOLAS CHOUBAH, ACTING CHIEF ENGINEER	

INVITED SIGNATORY:		
ONONDAGA NATION		
BY:	DATE:	
DRINIT NAME		

CONCURRING PARTY:	
SYRACUSE-ONONDAGA COUNTY PLANNING AGENCY	
BY:	DATE:
DAN KWASNOWSKI, DIRECTOR	
BY:	DATE:
OWEN KERNEY, ASSISTANT DIRECTOR	
BY:	DATE:
KATE AUWAERTER, PRESERVATION PLANNER	

CONCURRING PARTY:		
SYRACUSE HOUSING AUTHORITY		
BY:BILL SIMMONS, DIRECTOR	DATE:	
BY: CRAIG L. CORRIDERS, HOUSING PROPERTY MANAGER	DATE:	

CONCURRING PARTY:	
SYRACUSE METROPOLITAN TRANSPORTATION COUNCIL	
BY:	DATE:
JAMES D'AGOSTINO, DIRECTOR	

Execution of this Agreement by the FHWA, the SHPO, the ACHP, the NYSDOT, and the Onondaga Nation and
implementation of its terms is evidence that the FHWA has taken into account the effects of this Project on
historic properties and has afforded the ACHP an opportunity to comment.
CONCLIDEING DARTY.

CONCURRING PARTY:

TOWN OF DEWITT HISTORIAN, HISTORICAL PRESERVATION SOCIETY

BY: ______ DATE: _____

ELEANOR L. JOHNSON, TOWN OF DEWITT HISTORIAN

Execution of this Agreement by the FHWA, the SHPO, the ACHP, the NYSDOT, and the Onondaga Nation and

implementation of its terms is evidence that the FHWA has taken historic properties and has afforded the ACHP an opportunity to con	
CONCURRING PARTY:	
PRESERVATION LEAGUE OF NEW YORK STATE	
BY:	DATE:

KATIE EGGERS COMEAU, VICE PRESIDENT FOR POLICY AND PRESERVATION

CONCURRING PARTY:	
CITY OF SYRACUSE, DEPARTMENT OF ENGINEERING	
BY:	DATE:
MARY ROBISON, P.E., CITY ENGINEER	

CONCURRING PARTY:		
DOWNTOWN COMMITTEE OF SYRACUSE		
BY:	DATE:	_

CONCURRING PARTY:	
PRESERVATION ASSOCIATION OF CENTRAL NEW YORK	
BY:	DATE:
ANDREW ROBLEE, PRESIDENT	

CONCURRING PARTY:	
CENTRAL NEW YORK CHAPTER OF THE AMERICAN INSTITUTE OF	ARCHITECTS (AIA-CNY)
BY:ROBERT HALEY	DATE:

CONCURRING PARTY:				
ENTRAL NEW YORK REGIONAL PLANNING AND DEVELOPMENT BOARD				
BY:	DATE:			
DAVID BOTTAR, EXECUTIVE DIRECTOR				

CONCURRING PARTY:		
THE ERIE CANAL MUSEUM		
BY:	DATE:	
NATALIE STETSON, EXECUTIVE DIRECTOR		

CONCURRING PARTY:	
THE NORTHSIDE URBAN PARTNERSHIP	
BY:	DATE:
JONATHAN LINK LOGAN, DIRECTOR	

CONCURRING PARTY:	
NORTHEAST HAWLEY DEVELOPMENT ASSOCIATION, INC.	
BY:ANDREA B. WANDERSEE, EXECUTIVE DIRECTOR	DATE:

CONCURRING PARTY:		
QUANTE WRIGHT		
BY:	DATE:	
QUANTE WRIGHT		

CONCURRING PARTY:		
DOUGLAS ARMSTRONG		
BY:	DATE:	
DOUGLAS ARMSTRONG, PHD, RPA		

CONCURRING PARTY:		
HISTORIC OAKWOOD PRESERVATION ASSOCIATION		
BY: JOHN AUWAERTER, BOARD MEMBER	DATE:	

Execution of this Agreement by the FHWA, the SHPO, the ACHP, the NYSDOT, and the Onondaga Nation and implementation of its terms is evidence that the FHWA has taken into account the effects of this Project on

historic properties and has afforded the ACHP an opportunity to comment.

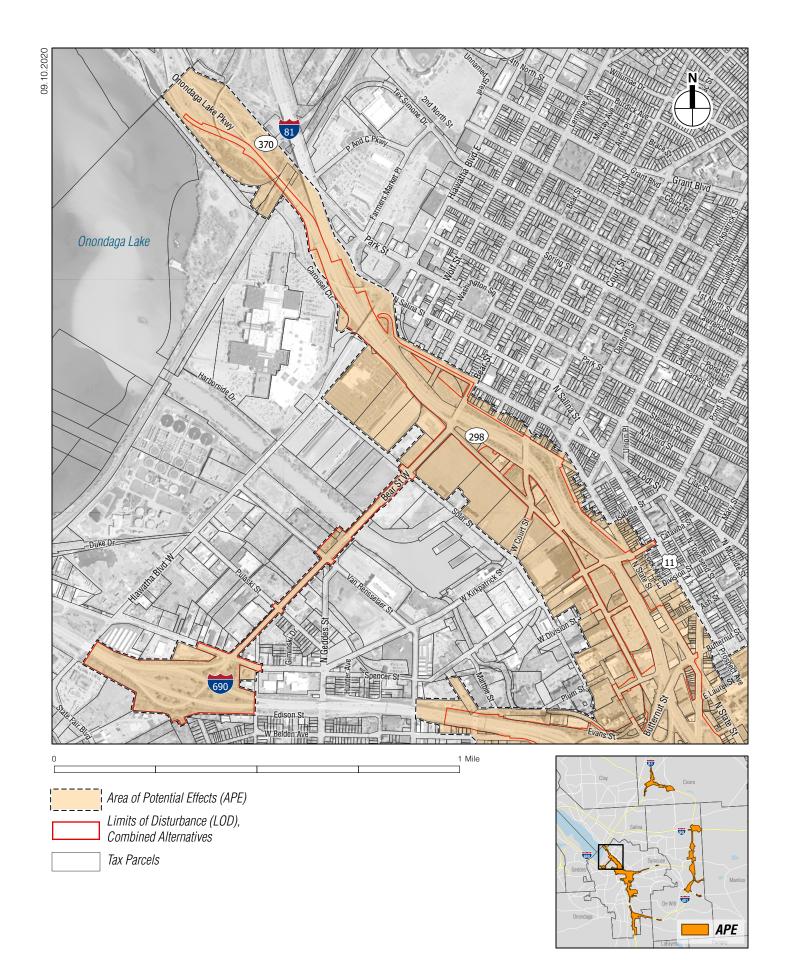
MICHAEL LA FLAIR, DIRECTOR OF COMMUNITY & GOVERNMENT RELATIONS

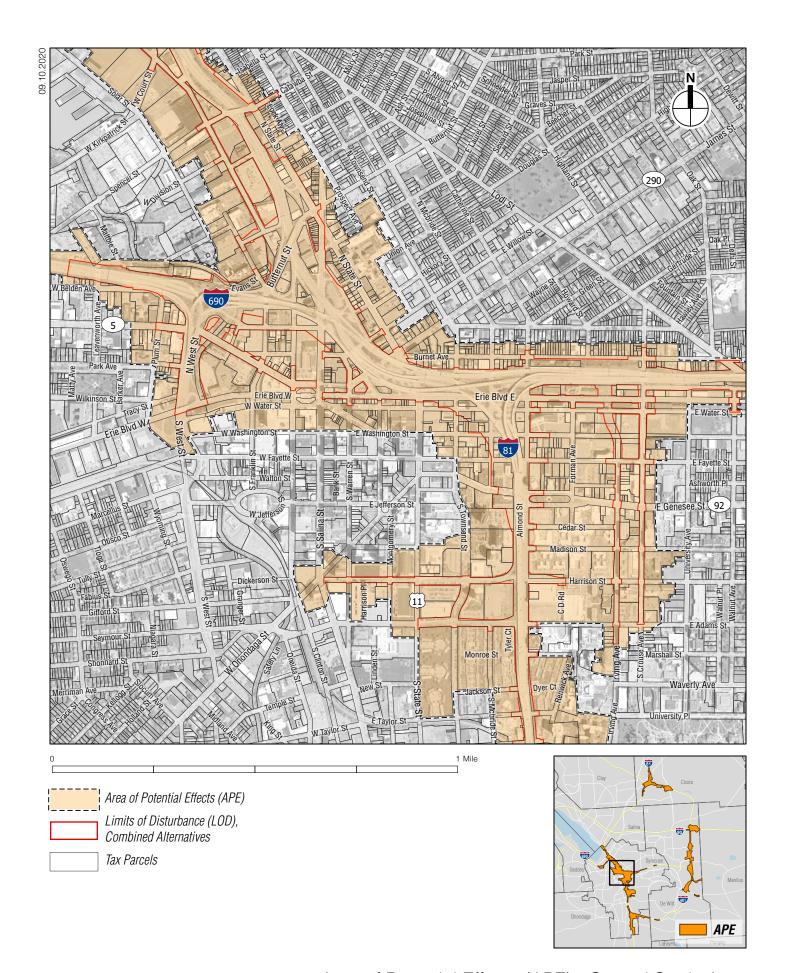
CONCURRING PARTY:			
HOUSING VISIONS			

DATE: ____

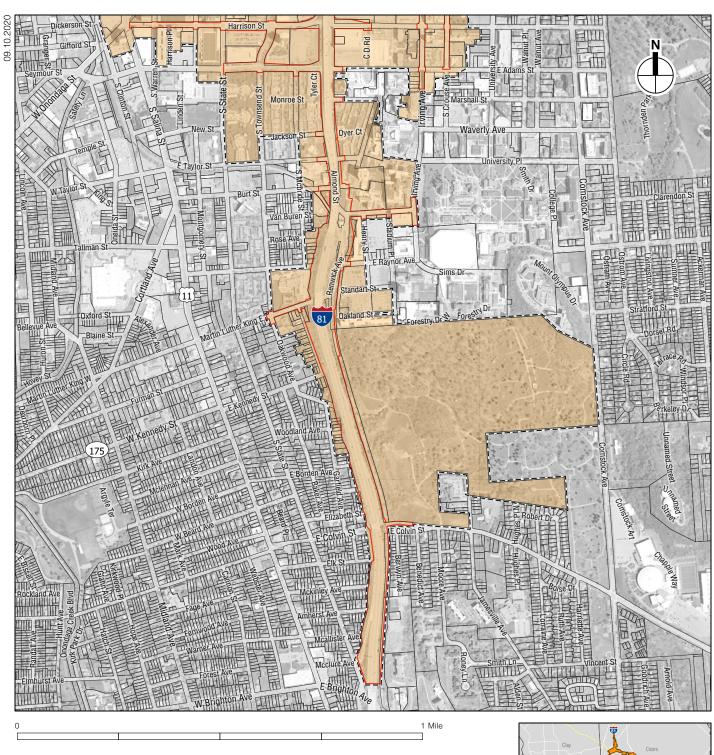
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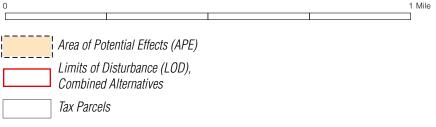
Area of Potential Effects



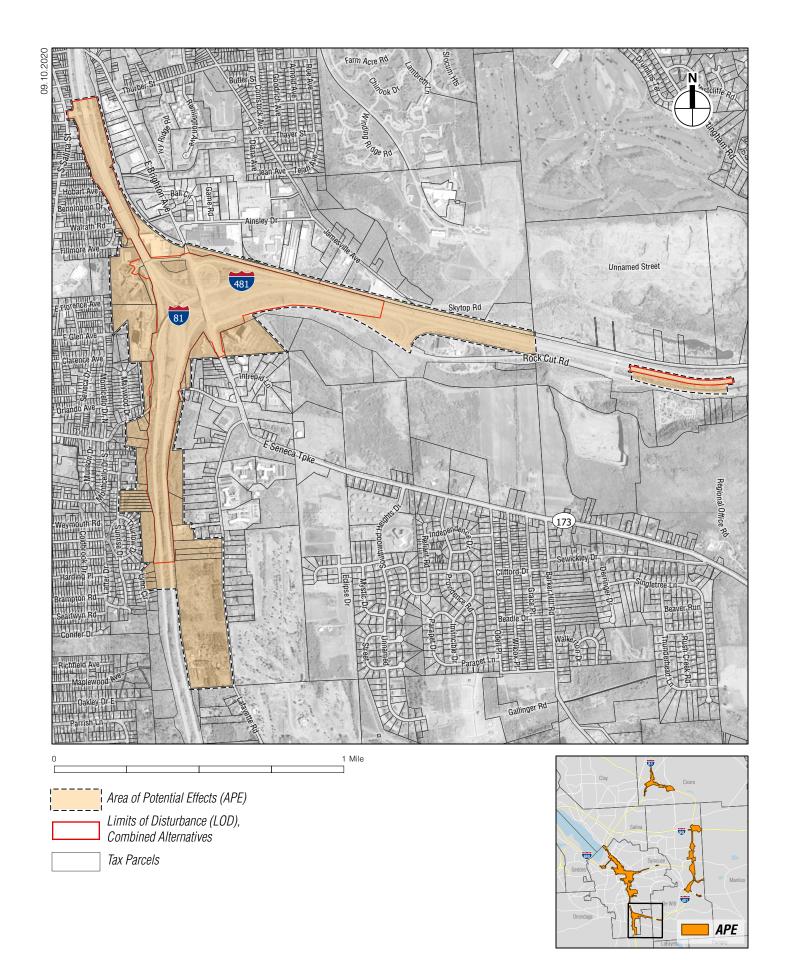


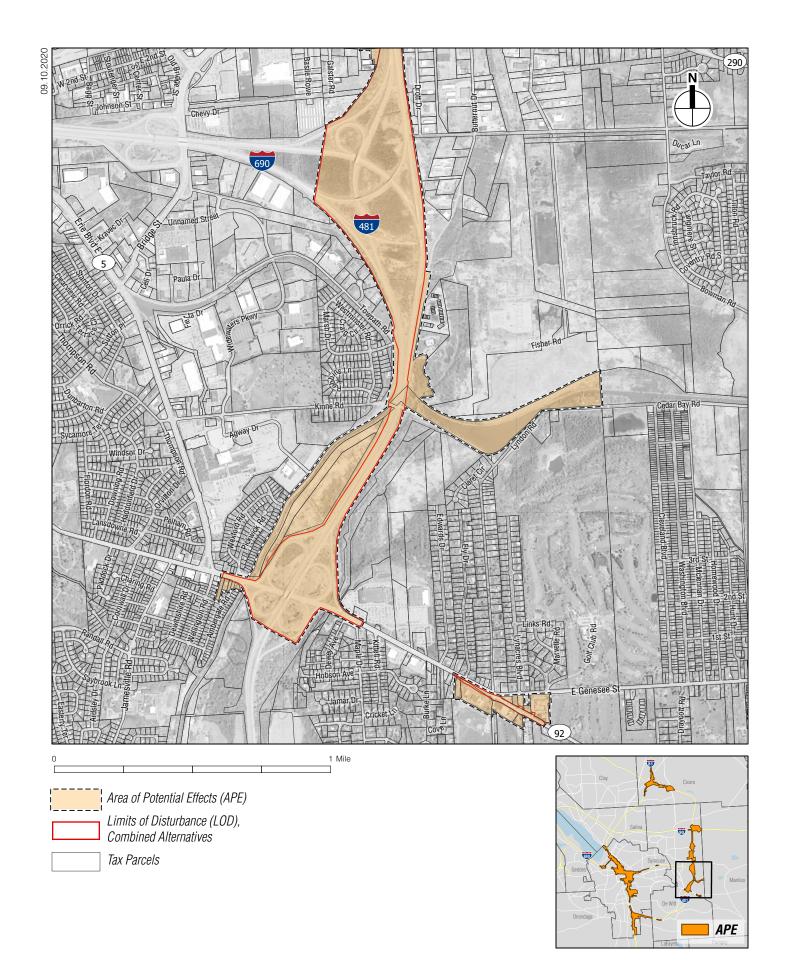




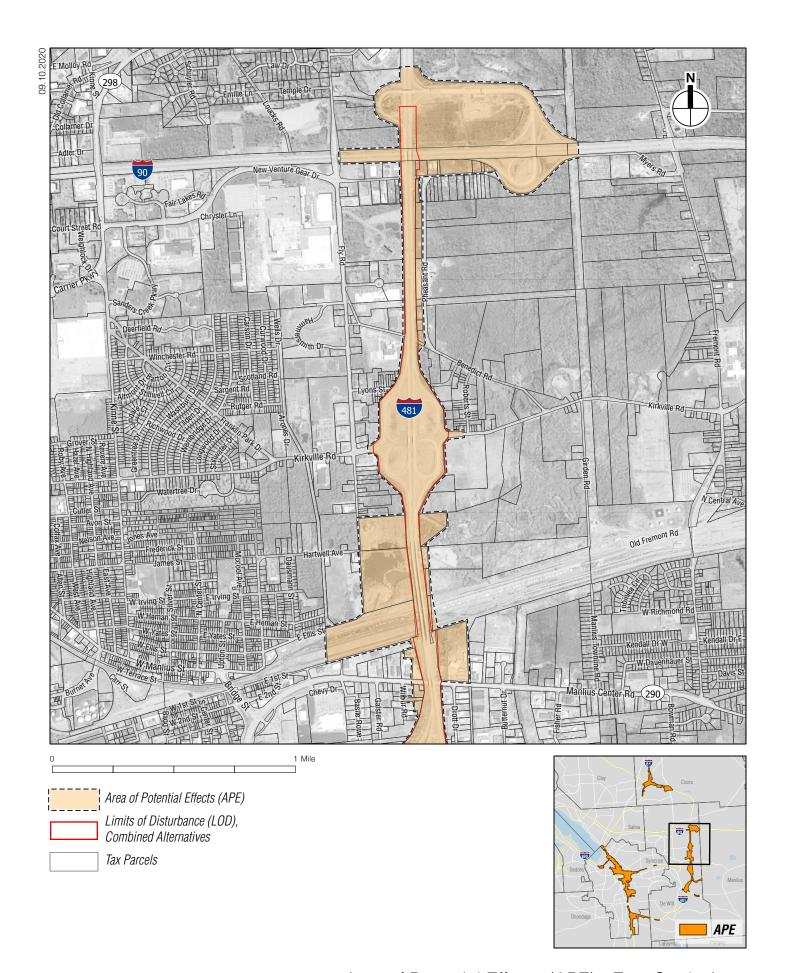








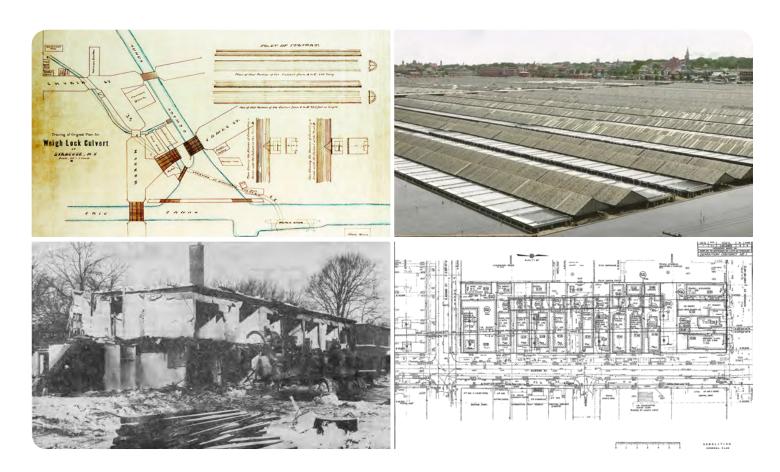
Area of Potential Effects (APE) - East Study Area Figure 1f



Area of Potential Effects (APE) - East Study Area Figure 1g



Phase IB Arch	APPENDIX 2: deological Survey Work Plan: Plan for Phase IB Archaeological Survey and Archaeological Monitoring during Construction Including Data Recovery, October 2017



Phase 1B Archaeological Survey Work Plan I-81 Viaduct Project

City of Syracuse and Towns of Salina, Cicero, and Dewitt, Onondaga County, New York

Prepared for:





Prepared by:

Environmental Design & Research, Landscape Architecture, Engineering & Environmental Services, D.P.C.

217 Montgomery Street, Suite 1000 Syracuse, New York 13202 P: 315.471.0688 F: 315.471.1061

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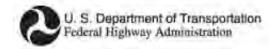
Plan for Phase IB Archaeological Survey and Archaeological Monitoring During Construction Including Data Recovery I-81 Viaduct Project

City of Syracuse and Towns of Salina, Cicero, and Dewitt, Onondaga County, New York NYSDOT PIN 3501.60

Prepared for:



And



Prepared by:



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MANAGEMENT SUMMARY

NYSDOT PIN: 3501.60

NYSORHP Project Review: 16PR06314

NYSDOT Project Type: Highway demolition, reconstruction, and/or replacement

Cultural Resources Survey Type: Plan for Phase IB Archaeological Survey and Archaeological Monitoring During

Construction Including Data Recovery

Location Information: City of Syracuse and Towns of Salina, Cicero, and Dewitt

Onondaga County

Survey Area:

Project Description: Reconstruction of I-81 and adjacent roadways in Onondaga County, New York.

The Project is considering 2 alternatives – a Viaduct Alternative and Community

Grid Alternative, described herein.

: Area of Potential Effect (APE) for Direct Effects totals 458.9 acres

USGS 7.5-Minute Quadrangle Map: Syracuse East, Syracuse West, Jamesville, Cicero and South Onondaga

Authors/Institution: Patrick J. Heaton, RPA and Nicholas Freeland, RPA

Environmental Design & Research, Landscape Architecture, Engineering, &

Environmental Services, D.P.C. (EDR), Syracuse, New York

Date: October 2017

Sponsor: New York State Department of Transportation

Federal Highway Administration

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1.0 INTRODUCTION

This *Plan for Phase IB Archaeological Survey and Archaeological Monitoring During Construction Including Data Recovery* (or Phase IB Archaeological Work Plan) for the I-81 Viaduct Project (the Project) was developed and prepared by Environmental Design & Research, Landscape Architecture, Engineering, & Environmental Services, D.P.C. (EDR) on behalf of the New York State Department of Transportation (NYSDOT) in coordination with the Federal Highway Administration (FHWA), and in consultation with the New York State Historic Preservation Office (SHPO) and the Onondaga Nation. The I-81 Viaduct Project is located in the City of Syracuse and Towns of Salina, Cicero, and Dewitt, in Onondaga County, New York. This document presents a plan for Phase IB archaeological investigations and construction monitoring to be accomplished in advance of and concurrent with the construction of the Project.

The Phase IB Archaeological Work Plan describes methodologies for field investigations to identify archaeological resources within the Project's area of potential effects (APE), in accordance with 36 CFR Part 800.4(b). All fieldwork will be conducted in accordance with the New York Archaeological Council's (NYAC's) Standards for Cultural Resources Investigations and the Curation of Archaeological Collections in New York State (NYAC, 1994), the New York State Education Department's (NYSED's) Work Scope Specifications for Cultural Resource Investigations on New York State Department of Transportation Projects (NYSED, 2004), and the Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation. The proposed work plan presented herein was prepared by archaeologists who satisfy the qualifications criteria per the Secretary of the Interior's Standards (36 CFR Part 61). Archaeological monitoring will also be conducted in accordance with NYAC's Guidelines for the Use of Archaeological Monitoring as an Alternative to Other Field Techniques (NYAC, 2002). All reports prepared in association with the Phase IB archaeological survey and/or archaeological monitoring will be consistent with the format and documentation standards of the NYSED Work Scope and the SHPO's Phase I Archaeological Report Format Requirements (2005).

1.1 Area of Potential Effect

The I-81 Viaduct Project includes the proposed reconstruction or replacement of the elevated portions of Interstate 81 (the I-81 Viaduct) through the City of Syracuse, in Onondaga County, New York. Two alternatives are currently being considered: the Viaduct Alternative and the Community Grid Alternative (Figure 1, Sheets 1 and 2). The Area of Potential Effect (APE) for the two project alternatives is described in detail in the Phase IA Archaeological Sensitivity Assessment (EDR, 2016) and the Draft Environmental Impact Statement (Draft EIS) (FHWA and NYSDOT, 2016). As defined in 36 CFR Part 800.16(d), the APE represents the geographical area within which the project "may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist," and defines the area in which identification efforts will occur for architectural and archaeological properties. The APE for the two Project alternatives carried forward for study in the Draft EIS was defined in consultation with the SHPO.

The project APE incorporates potential direct and indirect effects associated with the two build alternatives under consideration. Within the APE, a smaller area representing potential direct effects from physical alterations or ground disturbance associated with the project has been identified. This area, defined herein as the APE for Direct Effects, represents the limits of disturbance (LOD) of the two build alternatives and includes the area in which the proposed build alternatives have the potential to result in direct effects to archaeological resources (see Figure 1, Sheets 1 and 2). Changes to Project plans prior to or during construction would impact the APE which would necessarily impact the Phase IB archaeological survey and construction monitoring work plan. Therefore, any changes to Project plans need to be communicated to the archaeological consultant as quickly as possible.

1.2 Vertical Limits of Disturbance

Subsequent to completing the Phase IA report, the project design for both alternatives has continued to advance and additional detail is now available regarding the potential depth of soil disturbance for proposed work under each alternative. The anticipated depth of soil disturbance for each alternative based on preliminary/conceptual design information is shown on Figure 2 (Sheets 1 and 2). The potential depth of soil disturbance shown on Figure 2 is based on estimates by the design engineering team, based on currently available information. All areas within the APE for Direct Effects were first designated as having the potential for disturbance to a minimum depth of 0 to 2 feet (0 to 61 cm) below the ground surface. Using the preliminary project plans for each alternative, the design engineer delineated approximated areas within the APE for Direct Effects of each project Alternative where planned construction and/or demolition was expected to require soil disturbance beyond a depth of 2 feet (61 cm) to facilitate construction and/or relocation of underground utilities, sewers, bridge supports, and new highway right-of-way. In each of these areas, where possible, the estimated depth of anticipated disturbance was delineated. Anticipated depths of disturbance were not mapped for those areas characterized by previous cut and fill disturbance from the original construction of existing highway structures and embankments because, as described in the Phase IA report, the vertical depth of disturbance associated with the original highway construction was extensive and the proposed depth of construction is not expected to extend beyond the depth of previously disturbed soils into potential underlying natural subsoils (see EDR, 2016: Figures 2.4.6-13 and 2.6.3-1). Therefore, there is no possibility of intact buried archaeological materials existing at the locations mapped as "Cut and Fill Highway and Embankment Areas" on Figures 2 and 4.

2.0 ARCHAEOLOGICAL SENSITIVITY

2.1 Summary of the Phase IA Archaeological Sensitivity Assessment

A Phase IA Archaeological Sensitivity Assessment for the APE was completed in September 2016 (EDR, 2016). The purpose of the Phase IA Archaeological Sensitivity Assessment was to determine whether previously identified archaeological resources are located within the APE, and to evaluate the potential for previously unidentified archaeological resources to be located within the APE. The Phase IA study was conducted in accordance with established standards, including the NYAC *Standards for Cultural Resources Investigations and the Curation of Archaeological Collections in New York State* (NYAC, 1994), the New York State Education Department's (NYSED) *Cultural Resources Survey Program Work Scope Specifications for Cultural Resources Investigations on New York State Department of Transportation Projects* (NYSED, 2004), and the SHPO's *Phase I Archaeological Report Format Requirements* (NYSOPRHP, 2005).

The results of the archaeological sensitivity assessment presented in the Phase IA report are summarized below and depicted in Figure 3, Sheets 1 and 2, in addition to the supplemental analysis of areas with the potential to contain Native American human remains (described below). The Phase IA archaeological sensitivity assessment for the Project (EDR, 2016) was submitted by NYSDOT and FHWA to SHPO for review in September 2016. The Phase IA report (EDR, 2016:234) concluded: "...due to the extent of prior ground disturbance, the potential for archaeological sites to be present within the APE for Direct Effects is highly variable...The Phase1B archaeological survey will include different field methodologies depending on the existing conditions present within various portions of the APE for Direct Effects." The Phase IA report concluded that a Phase IB archaeological survey would be needed to determine if intact archaeological resources are present within the APE for Direct Effects, and further recommended the development of an archaeological Work Plan to identify the locations and field methodologies for the Phase IB survey.

The Phase IA Archaeological Sensitivity Assessment was completed in consultation with the SHPO and the Onondaga Nation, and the report was provided for their review in advance of developing a scope of work for Phase IB archaeological survey. The SHPO concurred with the recommendation for Phase IB testing in a letter dated September 22, 2016 in which it stated: "we concur with your agency's recommendation to FHWA. We have no issues or concerns with the Phase IB archaeology testing and reporting recommendations provided on pages 234 and 235 of the Phase IA Report" (Bonafide, 2016).

On October 7, 2016, FHWA, NYSDOT, SHPO, and the Onondaga Nation met to discuss the Phase IA Archaeological Sensitivity Assessment. Following this meeting, in a letter to the NYSDOT dated November 14, 2016, the Onondaga Nation provided comments on the Phase IA report. Additional comments were provided in a March 1, 2017 letter from

the Onondaga Nation to the FHWA, based on review of the pre-Draft EIS. Comments provided by FHWA and the Onondaga Nation during the October 7, 2016 meeting and in subsequent correspondence included requests for additional information regarding the vertical APE, mapping, proposed methods of investigation, and procedures in the event that human remains are encountered during construction. Following the completion of the Phase IA report (EDR, 2016), the Onondaga Nation requested that the historic alignment of Onondaga Creek be more clearly delineated, due to the elevated sensitivity for human burials in proximity to the historic watercourse. Information prepared in response to these requests has been included in this Phase IB Work Plan and are discussed in more detail below in Section 2.4 of this report.

The Phase IA report relies on background data and historical information specific to the project setting to assess the likelihood that archaeological resources are located in the APE. This includes detailed historic context narratives for the long period of Pre-Contact Native American settlement and use of the APE and vicinity, as well as descriptions of the settlement and development of the APE during the Historic Period. This site-specific historic context provides a foundation for the identification and evaluation of potential archaeological resources in accordance with the requirements of Section 106.

The archaeological sensitivity assessment in the Phase IA report evaluates the potential for archaeological deposits to be located within the APE based on analysis of the following information:

- The environmental setting, geology, and soils within the APE and vicinity;
- Existing conditions within the APE, based on reconnaissance-level site visits and illustrated with representative photographs;
- The locations of previously identified archaeological sites located within and adjacent to the APE;
- The results of previous archaeological surveys and investigations within and adjacent to the APE;
- Historical research and the results of historic map review; and,

There are 14 previously recorded archaeological sites within or adjacent to the APE for Direct Effects. These include eight historic-period sites and six Pre-Contact Native American sites. The Historic Period sites consist of six historic structural remains (these include intact foundations and middens/debris scatters associated with historically map-documented structures [including the Syracuse Armory]) and one Erie Canal boat basin. The Pre-Contact Native American sites consist of two villages/hamlets, two artifact scatters/traces of occupation, one camp site, and one site described as a "camp or hamlet" (Parker, 1922:647). Therefore, Historic Period archaeological sites expected to be encountered during the Phase IB survey include artifact scatters, structural remains including foundations and ancillary features such as privies and wells, and canal-related features including canal prisms, boat basins, and locks. To account for this, the Phase 1B archaeological survey strategy targets the mapped alignment of the Erie and Oswego Canals for

machine-aided testing and construction monitoring and targets historically map-documented structure locations for machine-aided testing. Pre-Contact Native American archaeological sites could range from small camps and scattered artifacts to major village sites and it is also anticipated that Pre-Contact human remains could potentially be encountered. Smaller camps and isolated artifacts could be located in any previously undisturbed portions of the APE but larger camps and village sites are likely to be located near Onondaga Lake or the former course of Onondaga Creek. Therefore, Phase IB archaeological survey will target previously undisturbed areas with shovel testing and the former alignment of Onondaga Creek (based on georeferenced historic maps) with machine-aided testing. The extent and nature of proposed Phase IB archaeological survey and archaeological monitoring are discussed in detail below in Sections 3 and 4 of this report.

The Phase IA report also includes documentation of the horizontal and vertical extent of prior ground disturbance within the APE, which affects the integrity of potential archaeological resources. The next steps in the phased approach to the identification of archaeological resources are to review the proposed locations of ground disturbance for the project and identify potential Phase IB archaeological testing methods (such as shovel testing, machine-aided excavation, and/or archaeological monitoring) that will be used in archaeologically sensitive areas where the proposed depth of ground disturbance exceeds the depth of existing ground disturbance.

The APE is primarily within a very developed urban area with a complicated history of prior ground disturbance that affects the integrity of potential archaeological deposits. Sources of previous ground disturbance within the APE for Direct Effects include land filling activities associated with nineteenth-century urban development in the City of Syracuse; demolition and construction associated with mid-twentieth century highway construction; disturbance associated with construction, expansion, or modification of buildings; areas of cut and fill associated with road and highway construction; and installation of underground utilities. The Phase IA report documents the extent of previous ground disturbance within the APE. This analysis includes consideration of mapped soils, buried utilities, demolished structures (as determined by geo-referencing historic maps and NYSDOT demolition/construction plans), GIS analysis of 955 soil borings to estimate depth of fill/disturbed soils within the APE, and identification of highway cut and fill embankment areas based on review of NYSDOT demolition and construction plans, aerial imagery (including oblique views and historical imagery), and field reconnaissance/confirmation.

2.2 Pre-Contact/Native American Archaeological Sensitivity within the APE

Potential Pre-Contact Native American archaeological sites within the APE would necessarily pre-date the significant filling and engineering of the landscape that took place as part of the development of the City of Syracuse throughout the nineteenth and twentieth centuries. Therefore, potential Native American archaeological sites are anticipated to be located only in areas with undisturbed soils. As described in the Phase IA report, approximately 19.1 acres within the

APE for Direct Effects are undisturbed, or disturbance cannot be documented, and therefore potentially sensitive for Pre-Contact Native American archaeological resources.

Prehistoric Native American site types that could be expected to occur within the APE include:

- Small campsites dating to the Paleoindian, Early Archaic, and/or Middle Archaic Periods. These sites could be expected to contain primarily chipped stone tools and debitage with potentially some bone or ivory tools. Features could include hearths and post-molds.
- Large residential campsites dating to the Late Archaic, Early Woodland, and/or Middle Woodland Periods.
 These sites could be expected to include large quantities of chipped stone tools and debitage, ground stone
 tools and net weights, bone tools, ceramic vessels and vessel fragments, steatite vessels and vessel
 fragments, ceramic and bone decorative items, and exotic goods such as marine shells and copper. Features
 could include hearths, post-molds, middens, and human burials.
- Large nucleated villages dating to the Late Woodland Period. These sites could be expected to include large
 quantities of chipped stone tools and debitage, ground stone tools, bone tools, ceramic vessels and vessel
 fragments, ceramic and bone decorative items, and exotic goods such as marine shells and copper. Features
 could include hearths, storage pits, post molds associated with both longhouses and palisade walls, extensive
 middens, and human burials.
- Small resource acquisition campsites dating to the Late Archaic, Early Woodland, Middle Woodland, and/or
 Late Woodland Periods. These sites could be expected to include small quantities of chipped stone tools,
 ground stone tools and net weights, bone tools, ceramic vessels and vessel fragments, and/or steatite vessels
 and vessel fragments. Features would likely be restricted to small hearths at these locations.
- Isolated artifacts such as projectile points, other tools, ceramic fragments, or lithic debitage with no associated features.
- Burial sites the potential for Pre-Contact Native American human remains and/or burial sites to be located within the APE is discussed in Section 2.4 of this report.

2.3 Historic-Period Archaeological Sensitivity within the APE

As described in the Phase IA report, the construction of Interstates 81 and 690 through Syracuse required demolition of large portions of city neighborhoods including much of the Fifteenth Ward, which was home to the highest concentration of African-American and Jewish populations in the city (Stamps and Stamps, 2008; Ducre, 2012). It is estimated that 800-900 families were displaced by the construction of highways in the Fifteenth Ward (Knight, 2007). Areas that were demolished included 103 acres of land in four contiguous census tracts that were predominately African-American and poor. Many residences, dozens of African-American-owned businesses, and nearly all of the

African-American churches in the city were destroyed (Stamps and Stamps, 2008). It is anticipated that archaeological features and deposits associated with these residential and commercial properties, as well as archaeological features and artifacts associated with earlier nineteenth and twentieth-century occupants, are located throughout the APE for Direct Effects. Potential historic-period archaeological resources in the APE include sites and features related to the Erie and Oswego Canals; large-scale commercial, industrial, and institutional sites; residential and small-scale commercial sites; and military sites (although none of the latter are known to be located within the project limits).

As described in and shown on maps included in the Phase IA report, hundreds of former structures are depicted on historic maps within the APE for Direct Effects. These are located throughout the APE in areas that are currently characterized as previously disturbed land with fill deposits of varying depths. It is anticipated that cellars and/or foundation remains associated with demolished structures may be present within the APE for Direct Effects at varying depths below the current ground surface (depending on local conditions). The foundations or structural remains unto themselves are unlikely to be considered archaeologically or historically significant, in large part because the location, dimensions, and arrangement of those buildings can be well understood based on review of historic cartographic sources and archaeological data is unlikely to contribute significant new information. Therefore, although these structural (foundation) remains are potentially ubiquitous throughout the APE for Direct Effects, it is assumed that archaeological investigation of these features is unlikely to contribute significant, meaningful new information.

However, potential artifact deposits and shaft features, which include privies, wells, and cisterns, are found on many domestic and commercial properties in urban contexts and are potentially located in former yard areas adjacent to the former locations of map-documented structures. In addition to their primary functions, these features were used as disposal pits for household refuse both during and at the end of their use life (Wheeler, 2000). These features are in general robustly constructed with wood, brick, and stone, and because they are underground they are likely to remain behind when the domestic or commercial structure they served is demolished or otherwise destroyed (Heck and Balicki, 1998; Roberts and Barrett, 1984; Stottman, 2000). Unlike open trash heaps which are subject to disturbance from plowing, demolition, and other actions, shaft features were typically abandoned and sealed or covered in place at the end of the feature's useful life (typically by having any remaining empty shaft space below the ground surface filled with soil, gravel, and/or debris), preventing later disturbances to the artifacts dumped inside. This enables tighter dating of sites through the glass and ceramics that are frequently recovered from them. In many instances, artifact assemblages from sealed shaft features can be associated with specific time periods and/or historically documented occupants of a given site. Therefore, shaft features have the potential to address specific historical and archaeological research questions, and therefore have the potential to be considered significant (Carnes-McNaughton and Harper, 2000; Geismar, 1993; McCarthy and Ward, 2000; Stottman, 2000; Wheeler, 2000).

2.4 Potential for Human Remains within the APE

Based on the results of the research conducted as part of the Phase IA Archaeological Sensitivity Assessment and through consultation with the Onondaga Nation, there is a potential for human remains to be located (or to be formerly located) within the APE. Historical accounts describe Native American human remains that were disturbed during nineteenth-century construction activities near Onondaga Creek and Genesee Street, which may be located within or adjacent to the APE. In addition, three historic-period cemeteries (one of these is the former site of a relocated cemetery) are located adjacent to (but outside) the APE. These include the National Register of Historic Places—(NRHP-) listed Oakwood Cemetery, the former site of Old St. Mary's Cemetery, and the House Family Cemetery. No disturbance to any of these three cemeteries is anticipated as part of the project.

As noted above, the Onondaga Nation had requested that the historic alignment of Onondaga Creek be further clarified. The Onondaga Nation noted that all areas along the historic alignment of Onondaga Creek and any additional areas near historic water sources should be considered sensitive for the potential to contain human burials. To address these concerns, the mapped extent and path of watercourses within the APE for Direct Effects were digitized and included in GIS mapping for the project. Historic maps from 1827, 1834, 1852, 1859, 1874, and 1938-1943 were digitally georeferenced using GIS software. All watercourses depicted on those maps within or immediately adjacent to the APE were traced, and buffered by 50 feet (15 meters) to account for uncertainty in the original cartographic depiction of watercourses and/or potential geo-referencing errors. The mapped former locations of these waterbodies are depicted on Figure 4 and represent areas that are considered archaeologically sensitive due to potential for buried human remains. It should be noted that the historic alignment of these water courses is also considered archaeologically sensitive for Pre-Contact Native American resources other than human burials as well as Historic Period structures.

3.0 PROPOSED PHASE IB ARCHAEOLOGICAL SURVEY METHODOLOGIES

As described in the Phase IA report (EDR, 2016) the appropriate methods for Phase IB archaeological investigations within the APE are variable and dependent on the archaeological sensitivity of different portions of the APE, the extent of prior ground disturbance, the anticipated depth of soil disturbance (see Figure 2, Sheets 1 and 2), and logistical considerations associated with the existing land uses and timing of construction activities throughout the APE. The potential need for Phase IB archaeological investigations (as described in the Phase IA report) is summarized as follows:

- Cut-and-Fill Highway and Embankment Areas: these are shown on Figures 2 and 3 and include areas within and adjacent to the APE for Direct Effects in which substantial cutting and filling of sediment has occurred related to highway construction. These include areas where the Interstate is elevated above the surrounding terrain on an earthen berm, areas where the Interstate has been excavated below the natural ground surface, areas where exit and entrance ramps are supported by concrete retaining walls or earthen berms, and other similar circumstances these areas are severely disturbed to such an extent that there is no potential for intact archaeological resources to be present. As recommended in the Phase IA report (EDR, 2016), no Phase IB archaeological investigation or further consideration of these areas (relative to the archaeological resources) is planned. It is important to note that although these areas may also be paved, they are distinct from the paved areas described below because their predominant characteristic is significant cut and/or fill disturbance. It should be noted that most of the I-81/I-481 Northern Interchange, the I-481 Eastern Improvements, and the I-81/I-481 Southern Interchange occur within Cut-and-Fill Highway and Embankment Areas.
- <u>Unpaved areas and/or areas where significant fill deposits are not documented or anticipated</u>: these consist of apparently undisturbed areas, primarily within or adjacent to Interstate rights-of-way (ROWs). These areas are **shown on Figure 4 as areas of potential "Native American Archaeological Sensitivity."** In these areas, the Phase IB survey will include a systematic program of shovel testing conducted in accordance with applicable guidelines (see Figure 5).
- Paved and/or previously disturbed areas where the proposed depth of construction activities is anticipated to be relatively minimal (i.e., within 2 feet [61 cm] of the existing ground surface): Areas where the anticipated depth of soil disturbance is anticipated to be less than 2 feet (61 cm) are shown on Figure 2. In these areas, no Phase IB archaeological investigations are planned. This would include areas where construction activities are limited to road re-surfacing or minor widening, curb replacements, streetscape improvements, and similar small-scale activities.

- Paved and/or previously disturbed areas where the proposed depth of construction activities is anticipated to be significant (i.e., greater than 2 feet [61 cm] below existing grade or otherwise involve large amounts of ground disturbance): Areas where the depth of soil disturbance is anticipated to be greater than 2 feet [61 cm] are shown on Figure 2. These will primarily consist of vacant lots, green spaces, and parking lots. In these areas, the Phase IB archaeological survey will include machine-aided archaeological investigations (see Figure 5) to determine if potentially significant archaeological deposits are present beneath fill deposits. A sampling strategy that identifies specific locations for proposed archaeological investigations is presented below in Section 3.1.2. This sampling strategy prioritizes areas where there is a potential for human remains to be present and provides for a representative assessment of the potential for the various types of historic-period archaeological resources that may be located within the APE for Direct Effects.
- Existing public roadways where the proposed depth of construction activities is anticipated to be significant (i.e., greater than 2 feet [61 cm] below existing grade or otherwise involve large amounts of ground disturbance) and where there is a potential for significant (i.e., NRHP-eligible) archaeological resources to be located (i.e., Erie and Oswego-Canal related resources): The locations of canal-related resources within the APE are shown on Figure 3. These areas are for the most part within existing roadways where machine-aided Phase IB testing would not be feasible due to the traffic stoppages it would cause. In these areas, on-site archaeological monitoring during construction is planned to document the presence or absence of potentially significant features. A monitoring protocol is included in Section 3.1.3 of this work plan.

NYSDOT will coordinate with the Onondaga Nation to provide opportunities for a Nation Representative to be present during Phase IB shovel testing, machine-aided testing, and archaeological monitoring during construction of the Project.

3.1 Phase IB Archaeological Field Methods

Proposed field methods for the Phase IB archaeological survey for the Project include shovel testing, machine-aided excavation, and archaeological monitoring during construction. Each of these methods is described below and the locations where the various methods are planned are depicted on Figure 5, Sheets 1 and 2. The Phase IB archaeological investigations will be carried out prior to the start of construction, to the extent possible, in those areas where shovel testing and machine-aided excavation are proposed.

 Shovel tests will be excavated in unpaved areas and/or areas where significant fill deposits are not documented or anticipated.

- Mechanized excavation/machine-aided archaeological testing will be employed in a representative sample of paved and/or previously disturbed areas where the proposed depth of construction activities is anticipated to be significant (i.e., greater than 2 feet [61 cm] below existing grade, or otherwise involve large amounts of ground disturbance). This work will be carried out in advance of the Project's construction activities, to the extent possible.
- Archaeological monitoring during construction will be employed in existing public roadways where the
 proposed depth of construction activities is anticipated to be greater than 2 feet [61 cm] below existing grade
 or otherwise involve large amounts of ground disturbance, and where there is a potential for significant
 archaeological resources to be located (i.e., Erie and Oswego-Canal related resources).

Some combination of these Phase IB field methods (further described below) will be used regardless of which Alternative (i.e., the Viaduct Alternative or the Community Grid Alternative) is selected. If any archaeological sites are identified, **the site's eligibility** will be assessed in terms of NRHP Criteria for Evaluation as discussed in the Phase IA report (EDR, 2016). If possible, NRHP eligibility (site significance) will be assessed based on the results of the Phase IB survey; however, Phase II investigations are typically required to fully evaluate NRHP eligibility at most archaeological sites. If, following Phase IB archaeological survey fieldwork, it is determined that Phase II investigations are necessary at one or more sites, the archaeological consultant will develop a Phase II work plan for the site or sites in questions for review by NYSDOT. It is anticipated that the preparation of a Phase II work plan will take no more than five days per site. It is also anticipated that, for most sites, Phase II investigations could be concluded within 20 days of approval of the Phase II work plan by NYSDOT.

In the event that potential human remains and/or funerary objects associated with human remains are identified during Phase IB archaeological survey, all work in the immediate vicinity will stop and the NYSDOT cultural resources lead for the Project will be contacted. All applicable procedures outlined in the SHPO Human Remains Discovery Protocol (NYSOPRHP, 2015) (Appendix A), the Haudenosaunee Human Remains Protocol (Grand Council of the Haudenosaunee, 2002) (Appendix B), and the NYSDOT *Procedures in the Event of the Inadvertent Discovery of Human Remains during Construction* (Appendix C) will be followed. If human remains or funerary objects directly associated with human remains are encountered, the appropriate treatment will be determined through consultation as described in these procedures.

In some cases, Phase III data recovery/mitigation may be appropriate at sites determined to be eligible for listing on the NRHP as a result of Phase IB survey and/or Phase II investigations. Based on consultation with the Onondaga Nation, Data Recovery would not be considered an appropriate treatment for any Native American burial site, human resources, a Phase III data recovery plan will be developed by the archaeological consultant for review by NYSDOT, SHPO, FHWA, and also by the Onondaga Nation for sites determined to be Native American.

It is anticipated that the preparation of a Phase III data recovery plan will take no more than 15 days per site. It is also anticipated that, for most sites, Phase III data recovery could be completed within 35 days of approval of the Phase III data recovery plan by NYSDOT. For both Phase II and Phase III investigations, an end-of-field (EOF) letter will be prepared and submitted to NYSDOT within five days of the conclusion of fieldwork. The EOF will summarize the preliminary results of the investigations, make recommendations for further work (or lack thereof), and present a time frame for the completion of a full Phase II or Phase III report. It should be noted that the above time frame assumes only one archaeological site will be investigated at a time. If multiple sites need to be investigated concurrently by a single archaeological consultant, the process will likely take longer. It should be noted that the methodologies and timelines discussed above apply only to data recovery that results from Phase IB archaeological survey. Data recovery that occurs as a result of archaeological monitoring is discussed below in Section 4.0 of the work plan.

Each field methodology is discussed in detail below.

3.1.1 Shovel Testing

Areas where shovel testing is recommended are depicted on Figure 5. Shovel tests will be excavated in unpaved areas where extensive previous disturbance is not documented or anticipated and where the depth of fill deposits, if present, is unlikely to exceed the practical limits of hand excavation. Shovel tests will be excavated at 50-foot (approximately 15-meter) intervals in all unpaved/undisturbed portions of the APE for Direct Effects. Shovel tests will be approximately 12-20 inches (30-50 cm) in diameter and excavated to a depth of at least 4 inches (10 cm) into the subsoil stratum or to the limits of practical hand excavation. The locations of all shovel tests will be recorded with professional-grade GPS equipment and noted on field maps. Stratigraphic profiles, including depth, soil color, and texture, for all shovel tests will be recorded on standardized field record sheets. A complete tabulation of the stratigraphy encountered in all shovel tests will be included as an appendix to the Phase IB report.

If Pre-Contact Native American artifacts are recovered from a shovel test, archaeologists will excavate additional "radial" shovel tests per the SHPO's Phase I Archaeological Report Format Requirements (NYSOPRHP, 2005). The SHPO guidance indicates when Pre-Contact Native American artifacts are recovered from an isolated shovel test, up to 8 additional shovel tests should be excavated at 1- and 3-meter intervals around the original positive shovel test to determine whether the artifacts present represent an isolated find or may indicate the presence of an archaeological site. If historic artifacts are encountered in a shovel test or if shovel tests are being excavated in an area of high historic

archaeological sensitivity (e.g. near a map-documented structure), shovel tests may be excavated at 25-foot (7.5-meter) intervals.

As described previously, if potential human remains and/or funerary objects associated with human remains are identified during shovel testing, all work in the immediate vicinity will stop and the NYSDOT cultural resources lead for the Project will be contacted. All applicable procedures outlined in the SHPO Human Remains Discovery Protocol (NYSOPRHP, 2015) (Appendix A), the Haudenosaunee Human Remains Protocol (Grand Council of the Haudenosaunee, 2002) (Appendix B), and the NYSDOT *Procedures in the Event of the Inadvertent Discovery of Human Remains during Construction* (Appendix C) will be followed.

All soils excavated from shovel tests will be screened through 0.25-inch hardware cloth. The presence of clearly modern materials, such as plastic fragments, modern bottle glass fragments, or twentieth-century architectural materials, in shovel tests will be noted on field forms but these materials will not be collected for subsequent analysis. Per standard archaeological field protocol, Pre-Contact Native American and historic-period artifacts recovered from shovel tests will be placed in plastic bags labeled with standard provenience information.

As depicted on Figure 5, shovel testing is recommended at the following locations:

- Viaduct Alternative (Figure 5, Sheet 1)
 - Apparently undisturbed areas at the southern end of the Viaduct Priority Area on either side of the I-81 ROW.
- Community Grid Alternative (Figure 5, Sheet 2)
 - Apparently undisturbed area along north side of I-81/I-481 Northern Interchange Area.
 - Apparently undisturbed areas at the southern end of the Viaduct Priority Area on either side of the I-81 ROW.
 - Apparently undisturbed at the northern and southern ends of the I-81/I-481 Southern Interchange.

3.1.2 Machine-Aided Archaeological Testing

To determine whether potentially significant archaeological deposits or features are present in areas within the APE containing evidence of previous disturbance, machine-aided archaeological testing will be conducted at selected locations within the APE to provide a representative sample of potential archaeological resources. Testing is necessary in these areas due to the potential for intact archaeological deposits to exist under a layer of disturbed fill (e.g., in the case of filled structural foundations). Under the direction of a professional archaeologist (i.e., an archaeologist who satisfies the qualifications criteria per the Secretary of the Interior's Professional Qualifications Standards [36 CFR Part

61]), test trenches will be excavated within selected locations to determine if potentially significant archaeological resources are present. A backhoe will be used to remove overburden including pavement, sidewalks, gravel ballast or fill underneath pavement, and obvious artificial fill encountered in utility trenches or other contexts, and excavate test trenches in a sample of areas within the APE.

Specific areas recommended for machine-aided testing are discussed in detail below and depicted on Figure 5. These areas were selected to specifically target the historic alignment of Onondaga Creek, which, as previously noted, is sensitive for human burials, Pre-Contact Native American cultural material, and Historic Period structures. Additionally, the machine-aided testing will target the locations of Historic Period commercial facilities located along the Erie and/or Oswego Canals and Historic Period residences along Almond Street.

Based on the results of previously conducted Phase I machine-aided archaeological testing within the City of Syracuse (e.g., Panamerican Consultants, Inc., 2000; Hartgen Archaeological Associates [HAA], 2001a; HAA, 2001b; HAA 2001c; HAA, 2003a; HAA, 2003b), it is anticipated that trenches will be excavated to a depth of approximately 3.5 feet (1.1 meters) to 7 feet (2.1 meters) below the modern ground surface. However, trenches will be terminated at the proposed depth of disturbance for the Project, upon encounter of an archaeological feature (so as not to damage the feature), 10 cm (approximately 4 inches) or more into sterile natural subsoil, or at standing water.

Under guidance from archaeologists, equipment operators will remove sediment and fill in horizontal levels by stratigraphic unit. Archaeologists will screen one sample of soil from each layer removed (excluding demolition rubble or materials such as asphalt and concrete) per 7.5 meters of linear trench. All samples will be screened through 0.25-inch hardware mesh. Archaeological artifacts will be collected for further analysis and clearly modern or highly fragmented historic materials removed from fill contexts will be noted but not collected. The presence of clearly modern materials, such as plastic fragments, modern bottle glass fragments, or twentieth-century architectural materials, in trench profiles or fill deposits will be noted but these materials will not be collected for subsequent analysis. If intact natural soil horizons are exposed within a backhoe trench, excavation will proceed either mechanically, or by hand depending on the accessibility of the natural horizon. Field archaeologists will record (draw and photograph) stratigraphic profiles of trench walls (including features, if present) and plan view maps of trench bases. The corner points of all test trenches and any identified archaeological features will be recorded with survey-grade GPS equipment.

If a potential archaeological feature is exposed, all mechanized excavation will cease and archaeologists will enter the open trench to further inspect the feature¹. In cases where the depth of the open trench exceeds 4 feet (1.2 meters),

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the trench walls will be shored up by construction personnel prior to the archaeologist entering the trench, in compliance with pertinent OSHA regulations (OHSA, 2015). Prior to the installation of shoring, the stratigraphy in the upper portions of the walls, which will be obscured by shoring, will be recorded. Shoring must be installed in such a way as to minimize impacts to cultural material in the bottom of the trench. The feature will be cleaned and further exposed via hand excavation. All exposed features will be photographed, measured and described in detailed field notes. If appropriate, a sample of sediment from the feature will be collected for further analysis. If the identified archaeological feature and/or site is considered to be potentially significant (per NRHP Criteria for Evaluation), additional fieldwork (may be warranted. Additional fieldwork will be in the form of Phase II investigations for the purposes of gathering sufficient data to assess NRHP eligibility and, potentially, Phase III investigations to mitigate adverse effects on sites determined to meet the NRHP criteria for eligibility (based on the results of Phase II investigations). The need for additional phases of fieldwork will be determined through consultation with NYSDOT, the FHWA, SHPO, and the Onondaga Nation.

As described previously, if potential human remains and/or funerary objects associated with human remains are identified during machine-aided archaeological testing, all work in the immediate vicinity will stop and the NYSDOT cultural resources lead for the Project will be contacted. All applicable procedures outlined in the SHPO Human Remains Discovery Protocol (NYSOPRHP, 2015) (Appendix A), the Haudenosaunee Human Remains Protocol (Grand Council of the Haudenosaunee, 2002) (Appendix B), and the NYSDOT *Procedures in the Event of the Inadvertent Discovery of Human Remains during Construction* (Appendix C) will be followed.

Because of the logistical constraints presented by urban archaeological testing (i.e., mobilization of mechanical equipment and operators, disruption of existing use of properties, pavement removal, the potential removal of large quantities of fill), it is anticipated that any Phase II/III archaeological work that is required will be conducted immediately following the determination that identified archaeological features warrant further investigation for the purpose of an eligibility determination or data recovery.

At each location selected for archaeological testing, at least one backhoe trench will be excavated under the supervision of a professional archaeologist following the methodology proposed above. Based on the methods employed during previously conducted Phase I machine-aided archaeological testing within the City of Syracuse (e.g., Panamerican Consultants, Inc., 2000; HAA, 2001a; HAA, 2001b; HAA 2001c; HAA, 2003a; HAA, 2003b), and the scope of the current Project, it is anticipated that backhoe trenches will likely range in size from approximately 6 feet (1.2 meters) wide by approximately 9 feet (1.8 meters) long to approximately 10 feet (3.1 meters) wide by up to 50 feet (15 meters) long; however, they may be larger or smaller as conditions dictate. Machine-aided Phase IB archaeological testing is recommended at the following locations (same for both alternatives) (see Figure 5):

- Between 5 and 7 former residential/commercial lots along Almond Street, in areas currently characterized by open lots and/or parking lots (see Figure 5). Testing locations will prioritize the areas near former rear lot lines to determine if shaft features or other potentially significant archaeological features are present.
- Between 3 and 5 former residential/commercial lots on the north side of Erie Boulevard between Townsend Street and Oswego Boulevard, in areas currently characterized by open lots and/or parking lots historically, these lots were the locations of commercial facilities located along the Erie and/or Oswego Canals (see Figure 5). Testing locations will prioritize the areas near former rear lot lines to determine if shaft features or other potentially significant archaeological features are present.
- Up to 3 locations along the historic alignment of Onondaga Creek, in areas currently characterized by open lots and/or parking lots. The purpose of this testing is to determine if potential Native American human remains (see Section 2.4 and Figure 4 of this work plan), as well as any archaeological resources, are present in this area.

The schedule and timing of the Phase IB archaeological field investigations, particularly in areas where the removal of pavement and other machine-aided testing will be necessary, will be coordinated to minimize multiple episodes of soil disturbance and disruption of existing land uses. Maximum efficiency will be achieved if machine-aided testing is undertaken immediately prior to the initiation of project construction. This way, areas disturbed by machine-aided testing will not need to be restored to their prior state because they will be immediately thereafter impacted by project construction.

3.1.3 Archaeological Monitoring during Construction

Archaeological monitoring during construction will be restricted to those areas where removal of pavement in advance of construction is not feasible (such as within active roadways). Archaeological monitoring will be conducted by qualified professional archaeologists who will observe all potential earth-disturbing construction activities associated within the areas recommended for monitoring (see Figure 5), which include:

- Viaduct Alternative (see Figure 5, Sheet 1)
 - Locations within the Viaduct Priority Area where soil disturbance greater than approximately 2 feet
 (61 cm) below the modern ground surface is proposed along streets overlapping with mapped alignments of the Enlarged Erie or Oswego Canals (see Figure 3, Sheet 2; and Figure 5, Sheet 2).
 - Locations within the Viaduct Priority Area where disturbance greater than approximately 2 feet (61 cm) below the current ground surface is proposed within existing roadways in areas adjacent to the former locations of waterbodies (and therefore sensitive for Native American human remains and other Pre-Contact resources; see Figure 4, Sheet 1; and Figure 5, Sheet 1).

- Community Grid Alternative (see Figure 5, Sheet 2)
 - o Locations within the Viaduct Priority Area where soil disturbance greater than approximately 2 feet (61 cm) below the modern ground surface is proposed along streets overlapping with mapped alignments of the Enlarged Erie or Oswego Canals (see Figure 3, Sheet 2 and Figure 5, Sheet 2).
 - Locations within the Viaduct Priority Area where disturbance greater than approximately 2 feet (61 cm) below the current ground surface is proposed within existing roadways in areas adjacent to the former locations of waterbodies (and therefore sensitive for human remains; see Figure 4, Sheet 2 and Figure 5, Sheet 2).
 - Locations within the I-81/I-481 Southern Interchange where disturbance greater than approximately
 2 feet (61 cm) below the current ground surface is proposed within existing roadways in areas adjacent to the former locations of waterbodies (and therefore sensitive for human remains; see Figure 4, Sheet 2 and Figure 5, Sheet 2).
 - Locations within the I-481 Eastern Improvements area that are adjacent to the former locations of
 waterbodies (and therefore sensitive for human remains). Proposed construction in these areas will
 be limited to installing footers for piers for an elevated highway in areas currently characterized by
 wetlands. Because of the wetland character of these areas, the potential for human remains is
 considered highly unlikely and archaeological testing in advance of construction is not considered
 feasible.

During construction monitoring, on-site archaeologists will have full access to the construction site and full Stop Work Authority. Archaeologists will inspect exposed soils throughout the course of excavation/construction and may temporarily stop work at times to further investigate exposed artifacts, foundations, soil stains, or other indications of potentially significant cultural resources. Investigation may consist of: visual inspection of exposed materials and/or trench walls, photography, hand excavation with a shovel and/or trowel, collection of artifacts and/or soil samples, and screening of excavated back dirt. It is assumed that the construction contractor will assist the archaeological consultant in maintaining safety standards (as necessary) during inspection (e.g., shoring up or grading trench walls to meet Occupational Health and Safety Administration standards). The presence of clearly modern materials, such as plastic fragments, modern bottle glass fragments, or twentieth-century architectural materials, in trench profiles or fill deposits will be noted but these materials will not be collected for subsequent analysis.

NYSDOT will coordinate with the Onondaga Nation and provide opportunities for a Nation representative to be present during archaeological monitoring during construction of the proposed Project.

A complete Archaeological Monitoring Protocol, including specific time frames allowable for trench/excavation inspection and investigation of potentially NRHP-eligible archaeological finds, as well as an explanation of the specific activities to be conducted by the archaeologist within the trench, and specific assistance required of construction personnel, is provided in Sections 4.1 and 4.2 of this report.

3.2 Laboratory Methods

Following completion of the archaeological fieldwork, materials recovered will be washed (when appropriate), identified, inventoried and re-bagged in labeled clean 4-mil archival quality plastic bags. Recovered artifacts will then be identified and described based on material type and standard descriptive characteristics in accordance with standard archaeological practice. A complete inventory of collected artifacts will be included as an appendix to the Phase IB report(s).

Depending on whether potentially significant archaeological features or deposits are identified, specialized laboratory analyses for specific materials may be necessary. These may include lithic (stone tool) analysis, vessel reconstruction and/or minimum vessel analyses, faunal (i.e., animal bone) analysis, paleo-botanical (i.e., plant remains) analysis, or other specialized soil/sediment analyses. The need for and appropriate application of specialized archaeological analyses will be determined in consultation with the NYSDOT, SHPO, FHWA, and the Onondaga Nation (for Pre-Contact Native American sites)

All materials will be processed and stored in accordance with the New York State Museum's (NYSM's) Accession Policy and Accession Standards, as articulated in the "Archaeological Curation Guidelines" (http://www.nysm.nysed.gov/services/233/curation.html) and the NYAC Standards (NYAC, 1994). All materials collected from state lands will be treated in accordance with the New York State Education Department Law §233.

3.3 Phase IB Archaeological Survey Report

Within two weeks of the completion of shovel testing, the archaeologist will provide an EOF letter to the NYSDOT summarizing the preliminary results of shovel testing. Additionally, within two weeks of the completion of machine-aided excavation, the archaeologist will provide an EOF letter to the NYSDOT, summarizing the preliminary results of machine-aided testing. The EOF letters will identify potentially eligible archaeological resources, and provide recommendations for additional investigations (i.e., Phase II), if needed, to evaluate the NRHP eligibility of specific archaeological sites. The EOF letters will also identify and map areas where shovel testing or machine-aided testing revealed no archaeological resources.

The results of the Phase I survey will be presented in a formal illustrated report prepared in accordance with the NYSED *Cultural Resources Survey Program Work Scope Specifications for Cultural Resources Investigations for New York State Department of Transportation Projects* (NYSED, 2004), and SHPO's *Phase I Archaeological Report Format Requirements* (NYSOPRHP, 2005). The report will include a narrative summary of the methods and results of the archaeological survey, recommendations regarding S/NRHP eligibility and/or recommendations for additional (i.e., Phase II) investigations to evaluate eligibility for each identified resource, documentation of soils and/or archaeological contexts encountered during the survey, a complete artifact inventory, and will include illustrations, photographs, and maps, as appropriate.

4.0 PLAN FOR ARCHAEOLOGICAL MONITORING DURING CONSTRUCTION

4.1 Plan for Archaeological Monitoring During Construction

Archaeological monitoring will be undertaken by specialists trained in archaeological fieldwork and monitoring and under the supervision of an archaeologist meeting the Secretary of the Interior's Professional Qualification Standards (36 CFR, Appendix A to Part 61). A representative from the Onondaga Nation will be provided opportunities to observe archaeological monitoring during construction.

All archaeological monitoring during construction will be conducted in accordance with existing on-site safety protocols as well as federal labor standards (OSHA 29 CFR 1926 Subpart P). OSHA 29 CFR 1926, Subpart P specifies appropriate protection measures to be used for employees working in open excavations. These include sloping and/or shoring excavation walls to prevent collapse. If the archaeologist needs to enter the open excavation to inspect exposed cultural material, construction personnel will install shoring/support in the open excavation, if this required by OSHA 29 CFR 1926 (Subpart P), given the dimensions of the excavation.

If the archaeological consultant encounters human remains (or potential human remains) during the archaeological monitoring, the *NYSDOT Procedures in the Event of the Inadvertent Discovery of Human Remains during Construction*, the SHPO Human Remains Discovery Protocol, and the Haudenosaunee Protocol on Human Remains, will be followed. Immediately upon notification of the discovery, the NYSDOT will contact the SHPO, FHWA, Tony Gonyea of the Onondaga Nation, and Joseph Heath, General Counsel to the Onondaga Nation. The SHPO Human Remains Discovery Protocol (NYSOPRHP, 2015), the Haudenosaunee Protocol on Human Remains (Haudenosaunee Confederacy, 2002), and the *NYSDOT Procedures in the Event of the Inadvertent Discovery of Human Remains during Construction* are attached to this document as Appendices A, B, and C, respectively and the Human Remains and Funerary Objects Protocol for the current project is discussed further in Section 5.0 of this work plan.

4.1.1 Initial Inspection and Investigation of Potential Cultural Material

If the archaeologist identifies potential cultural material during construction, he/she will request a temporary work stoppage to inspect the location of the exposed cultural material. This temporary work stoppage will be limited to one hour for each area within an approximately 20-foot (6.1-meter) radius. Following the confirmation of the work stoppage, the archaeologist will enter the open excavation, once the necessary shoring, if required, has been installed, and inspect the exposed cultural material. During this initial inspection, the archaeologist may photograph the exposed cultural material, collect the cultural material (or a sample thereof), draw a sketch map of the exposed stratigraphy, take additional notes, remove soil samples, and conduct additional hand excavation with a shovel or a trowel.

Following the initial inspection of identified cultural material, if the archaeologist identifies the materials as obviously, modern, or historic but with no chance of meeting the NRHP Criteria for Evaluation, he or she will notify construction personnel that they can continue work. If, however, following the initial inspection, the archaeologist determines the cultural material to be potentially significant (i.e., meet the NRHP Criteria for Evaluation), he or she will request an extension of the temporary work stoppage in order to further evaluate the exposed cultural material. The extended work stoppage may last up to but no longer than four hours, not including one hour for the initial inspection of exposed cultural material, as described above. Taking into consideration input from the Onondaga Nation representative onsite, the archaeologist will make a preliminary assessment of potential eligibility and coordinate with NYSDOT to determine the need for additional archaeological investigations and documentation. As described in the next section, NYSDOT will consult with the SHPO, FHWA, and the Onondaga Nation. If no additional investigation or documentation is needed, construction activities will resume. Activities undertaken by the archaeologist during the preliminary evaluation of potentially NRHP-eligible (i.e., significant) cultural materials will be similar to those undertaken for initial inspection of cultural materials (discussed above), but may also include screening of excavation back dirt or soil removed via hand excavation through ¼-inch hardware cloth and collection of any artifacts recovered through screening. All evaluative testing activities would be restricted to the APE for Direct Effects for the Project.

The timeframe outlined above would not apply in the case of a human remains discovery. If potential human remains and/or funerary objects associated with human remains are identified during machine-aided archaeological testing, all work in the immediate vicinity will stop the NYSDOT cultural resources lead for the Project will be contacted. All applicable procedures outlined in the NYSDOT *Procedures in the Event of the Inadvertent Discovery of Human Remains during Construction* (Appendix C), SHPO Human Remains Discovery Protocol (NYSOPRHP, 2015) (Appendix A), and the Haudenosaunee Human Remains Protocol (Grand Council of the Haudenosaunee, 2002) (Appendix B) will be followed. In this instance, the temporary work stoppage could last significantly longer than the times listed above. It is important to note that in the case of identified human remains, no additional evaluative testing or data recovery activities will occur.

Given the urban nature of the APE for Direct Effects, it is anticipated that historic and/or modern artifacts may be encountered in secondary fill contexts (i.e., neighborhood trash and coal ash dumps). For archaeological materials clearly located within secondary fill contexts, the archaeological consultant will describe and photograph a representative sample of the materials but will not collect them. Archaeological materials identified in secondary fill contexts will be described in an archaeological monitoring report to be submitted to NYSDOT and FHWA following the conclusion of fieldwork. It should be noted; however, that in addition to formal and informal refuse dumps, the Erie and Oswego Canals within the City of Syracuse were often filled with coal ash and other refuse following their closure in the early twentieth century. Therefore, although individual artifacts encountered within secondary refuse deposits will

not be collected for further analysis, the stratigraphy of these deposits will be carefully documented and, if possible, a determination will be made if they represent canal fill.

The Phase IA Archaeological Sensitivity Assessment (EDR, 2016:158-229) describes in detail the various types of potential archaeological sites that could occur within the APE for Direct Effects, as well as how the significance of each type of archaeological site would be assessed under the NRHP Criteria for Evaluation. For historic archaeological materials, the proposed archaeological monitoring during construction applies primarily to areas with potential to contain Erie or Oswego Canal-related features, but there is the potential for other historic or pre-contact cultural resources to be present in the monitored areas. Potentially significant archaeological resources which may be encountered include:

Historic cultural resources:

- o Intact portions of the Erie or Oswego Canal prisms, other canal-related features.
- Intact archaeological features in undisturbed soil contexts such as occupied surfaces, foundations, and shaft features including wells, cisterns, and privies.
- Diagnostic historic artifacts such as household and/or industrial materials located in undisturbed primary contexts.
- Any indications of human burials or funerary objects.

• Pre-Contact Native American cultural resources:

- Intact archaeological features including hearths, storage pits, middens, palisade remnants, and structural remnants.
- Diagnostic artifacts such as projectile points, ceramics, and other stone and bone tools located in undisturbed primary contexts.
- o Any indications of human burials or funerary objects.

In the cases of the above types of cultural resources, significance would be assessed in the field by the monitoring archaeologist, following the methods discussed above, who will provide preliminary recommendations to NYSDOT. NYSDOT, in turn, will consult with FHWA, SHPO, and the Onondaga Nation. A *Project Contacts Table* is included as Appendix D of this work plan. The Phase IA Archaeological Sensitivity Assessment for the I-81 Viaduct Project (EDR, 2016) discusses the specific considerations which will be brought to bear in assessing significance for different types of cultural resources. However, as a rule, cultural resources will be considered potentially significant if they contain cultural material within intact stratified deposits that maintain a high degree of physical integrity. Cultural materials

indicative of a potentially significant site could include a density and diversity of artifacts, including temporally or culturally diagnostic artifacts, intact features, and artifacts indicative of a specific activity or activities.

If the archaeological consultant determines the discovery to be a potentially significant archaeological resource (i.e., potentially NRHP-eligible), he/she will immediately notify the NYSDOT Project Manager (or identified Point of Contact) and/or onsite construction manager and request a temporary suspension of work in the location, consistent with the time frames discussed above in this Section. Preliminary determination of NRHP-eligibility will be based on the identification of potentially significant cultural resources as described above.

4.1.2 Additional Archaeological Investigations to Determine NR Eligibility

In some cases, additional archaeological testing/documentation of significant or potentially significant cultural resources, beyond the initial inspection and preliminary assessment of significance discussed above, may be required. The need for additional archaeological testing/documentation of potentially significant archaeological resources will be assessed based on consultation between the on-site archaeological monitor and NYSDOT, who will in turn consult with FHWA, SHPO, and the Onondaga Nation. Additional archaeological testing/documentation is anticipated to be necessary in cases where large intact portions of significant cultural resources occur within the APE for Direct Effects. These cultural resources would need to be recovered or sampled prior to the continuation of construction in the area. Additional archaeological testing/documentation may also be necessary in cases where the full extent/nature of the cultural resource identified within the APE for Direct Effects is unclear or impossible to establish based on the amount exposed by construction activities. In these cases, construction activities in the immediate vicinity of the cultural resources would cease and the archaeologist would proceed to test, record, and/or recover the cultural materials to an extent agreed upon by NYSDOT as sufficient. Additional testing/documentation in these cases would be limited to eight hours for each individually identified resource in the case of non-canal resources, or eight hours per 50 linear feet (15 meters) of exposed canal or canal-related features.

When potentially significant cultural resources are identified, the archaeological monitor will consult with Project personnel to determine the best course of action moving forward. It likely will be appropriate to initiate archaeological sampling immediately to further evaluate the integrity and potential significance of any identified archaeological remains. Unless otherwise directed by NYSDOT based on consultation with the SHPO, FHWA and Onondaga Nation, all work to evaluate the discovered archaeological resources will be restricted to the proposed area of potential earth disturbance associated with the Project (i.e., the APE for Direct Effects).

4.1.3 Implementation of Data Recovery Procedures

In an instance where exposed cultural material is determined to meet the NRHP Criteria for Evaluation, the archaeologist will immediately contact NYSDOT, as discussed above. All construction work in the immediate vicinity of the discovery will cease and data recovery procedures will be implemented. Data recovery procedures will be implemented to minimize the interruption of construction. Therefore, construction activities will only be stopped in the immediate vicinity of the data recovery, and only to the extent to ensure the safety of the on-site archaeologists and to ensure the protection of the exposed cultural material until data recovery is complete. Once initiated, it is anticipated that data recovery activities at any given location will be completed within no more than 15 days of the initiation of data recovery fieldwork.

Data recovery activities may include the documentation, photography, measurement, and collection of historic period or pre-contact Native American archaeological materials exposed within construction excavations. Data recovery may also involve additional investigation of such resources by hand excavation. As noted above, data recovery would occur when cultural material that meets the NRHP Criteria for Evaluation has been exposed by construction activities. This could include, but is not limited to, intact portions of the Erie or Oswego Canal prisms, or other intact canal-related features, historic structural foundations or shaft features, or significant concentrations or deposits of diagnostic historic artifacts. It could also include intact pre-contact Native American archaeological features including hearths, storage pits, middens, palisade remnants, or structure remains, or significant concentrations of diagnostic pre-contact artifacts such as projectile points, ceramics, and other stone and bones tools located in an undisturbed primary context.

In the case of historic features and artifacts encountered during construction monitoring, data recovery activities will consist of documentation of exposed features and soil stratigraphy and the collection of exposed artifacts (or a sample thereof). In the case of pre-contact Native American features and artifacts encountered during construction monitoring, data recovery activities could consist of documentation of exposed features and soil stratigraphy and the collection of feature fill and/or exposed artifacts (or a sample thereof). Typically, data recovery activities will be restricted to open excavations; however, in some limited cases it may be necessary to expose additional areas as part of data recovery. This will be accomplished via hand excavation wherever possible, but may also require mechanical excavation. In these instances, it is anticipated that data recovery activities could last for up to 10 hours for each individually identified resource in the case of non-canal (historic or pre-contact) resources, or 10 hours per 50 linear feet (15 meters) of exposed canal prism or canal-related features.

As discussed above for artifacts recovered during Phase IB survey, all artifacts recovered during data recovery investigations will be processed and stored in accordance with the New York State Museum's (NYSM's) Accession Policy and Accession Standards, as articulated in the "Archaeological Curation Guidelines"

(http://www.nysm.nysed.gov/services/233/curation.html) and the NYAC Standards (NYAC, 1994). All materials collected from state lands will be treated in accordance with the New York State Education Department Law §233.

Additionally, as discussed above for data recovery occurring as a result of Phase IB survey an EOF letter will be prepared and submitted to NYSDOT within five days of the conclusion of data recovery fieldwork. The EOF will summarize the preliminary results of the investigations, make recommendations for further work (or lack thereof), and present a time frame for the completion of a full Phase III report.

4.2 Contractor Assistance and Consideration

The following is a summary of expectations and considerations pertaining to the construction contractor's role in archaeological monitoring and/or data recovery investigations for the Project.

Archaeological Monitoring and Contractor General Considerations:

- The construction contractor should expect delays due to the identification of cultural materials during excavation.
- All archaeological monitoring during construction will be conducted in accordance with existing on-site safety protocols as well as federal labor standards (OSHA 29 CFR 1926 Subpart P).
- Temporary work stoppages for the preliminary investigation of exposed cultural materials will be limited to one hour for each approximately 20-foot (6.1-meter) radius area.
- Extended temporary work stoppages to further evaluate potentially NRHP-eligible cultural materials may last for up to four hours, not including the initial temporary stoppage discussed above.
- In some cases, additional archaeological testing/documentation of significant or potentially significant cultural resources, beyond the initial inspection and preliminary assessment of significance discussed above, may be required. Additional testing/documentation in these cases would be limited to eight hours for each individually identified resource in the case of non-canal resources, or eight hours per 50 linear feet (15 meters) of exposed canal or canal-related features.
- In certain cases, when exposed cultural material has been determined to be eligible or potentially eligible for listing on the NRHP, data recovery investigations will be implemented during which construction in this location will be suspended for up to 15 days. For historic-period archaeological resources, it is anticipated that data recovery investigations will require no more than 10 hours per individual non-canal related resource and 10 hours for every 50 linear feet of exposed canal prism or canal-related resource.
- If human remains are identified, all construction in the vicinity of the discovery will cease pending consultation, as discussed in Section 5.0 of this document. As described above, the time restrictions for temporary work stoppages do not apply to the discovery of human remains. In each case, the duration of the work stoppage

will be determined by the time needed to carry out actions for avoidance or an appropriate treatment as determined through consultation. Within 24-72 hours of the discovery, NYSDOT will notify the construction contractor of the expected duration for the suspension of the construction activities in the area of the discovery.

Construction Contractor Responsibilities:

- The contractor will stop or slow work as directed by the archaeologist.
- If human remains are identified, all construction in the vicinity of the discovery will cease pending consultation among the SHPO, FHWA, the Onondaga Nation, and NYSDOT, as discussed in Section 5.0 of this document.
 Communication and coordination among the consulting parties will be done by NYSDOT and is not the obligation of the construction contractor.
- The contractor will assist the archaeologist in complying with all work place safety measures, including shoring trenches deeper than 4 feet (1.2 meters) for the archaeologist to enter.
- If data recovery investigation is required at specific locations, it may be necessary to leave excavations open overnight. It will be the construction contractor's responsibility to secure the open excavation in these cases.
- The construction contractor will provide heavy equipment and an operator to aid the archaeologist in tasks such as the removal of overburden during archaeological monitoring and data recovery.
- The construction contractor and/or NYSDOT will provide the archaeologist with at least one week's notice prior to initiating construction/excavation in areas subject to archaeological monitoring, for logistical reasons.

Archaeologist Responsibilities:

- The archaeologist will comply with all on site safety rules and regulations.
- The archaeologist will communicate the need for and anticipated duration of any temporary work stoppages clearly and effectively to the construction contractor if cultural materials are exposed.
- The archaeologist will also clearly communicate to the construction contractor if and when work may resume in a given area.
- If the archaeological consultant determines the discovery to be a potentially significant archaeological resource (i.e., potentially NRHP-eligible), he/she will immediately notify the NYSDOT Project Manager (or identified Point of Contact)

5.0 HUMAN REMAINS AND FUNERARY OBJECTS PROTOCOL

In the event of an unanticipated discovery of potential human remains and/or funerary objects, all work in the immediate vicinity will stop until further notice and the NYSDOT cultural resources lead for the Project will be contacted. The potential remains/funerary objects will be treated with respect, left *in situ* by all on site personnel, and protected from further disturbance. All fieldwork will be conducted in accordance with SHPO's Human Remains Discovery Protocol (NYSOPRHP, 2015) (Appendix A), and the Haudenosaunee Human Remains Protocol (Grand Council of the Haudenosaunee, 2002) (Appendix B). If the discovery occurs during the Project's construction, the *NYSDOT Procedures in the Event of the Inadvertent Discovery of Human Remains during Construction* will be implemented (Appendix C). If human remains or funerary objects are Native American, a treatment plan will be developed in consultation with the SHPO and the Onondaga Nation, consistent with the established protocols and guidance. It is worth noting that the SHPO, Haudenosaunee, and NYDSOT human remains protocols all require temporary suspension of activity in the vicinity of the discovery, protection of discovered remains, notification of SHPO and Native American representatives, and consultation regarding treatment of remains.

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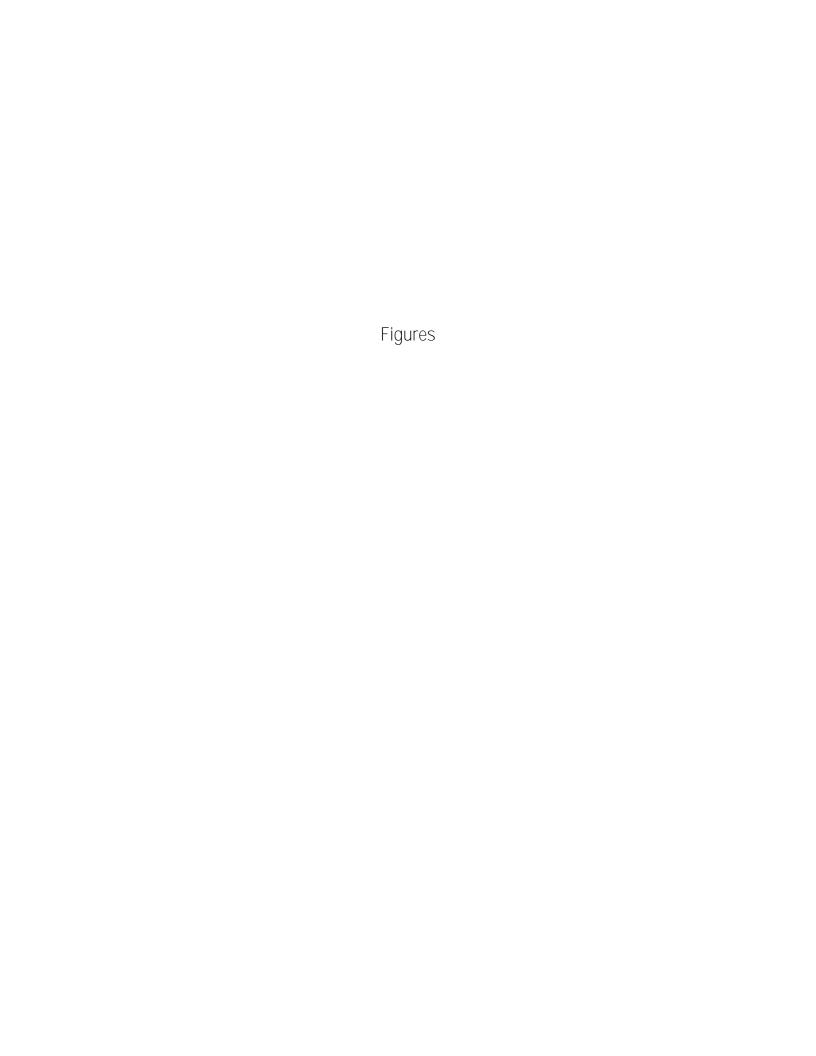
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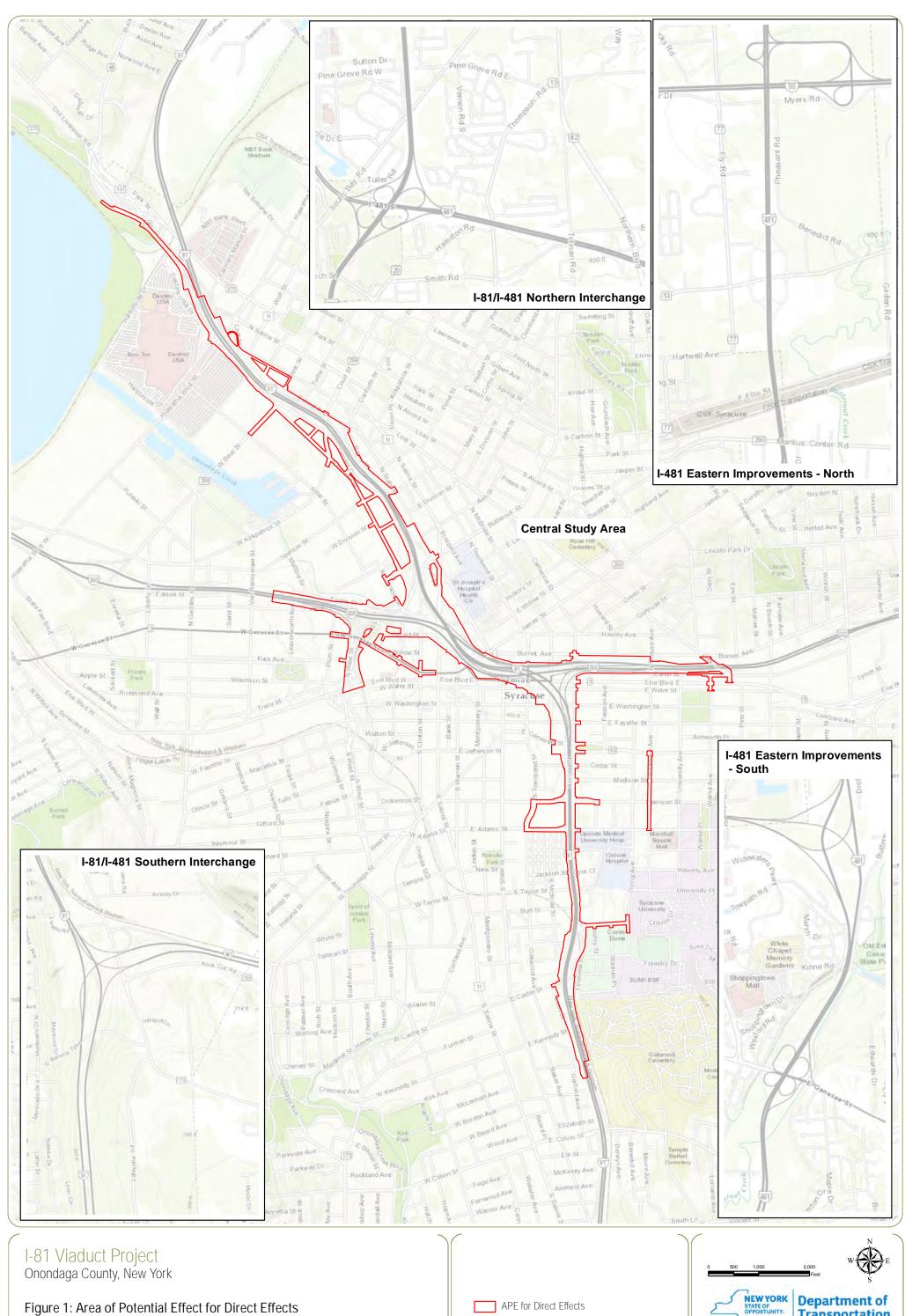
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Sheet 1: Viaduct Alternative September 2017 Notes: 1. Basemap: ESRI ArcGIS Online "World Topographic Map" Map Service.
2. This is a color graphic. Reproduction in grayscale may misrepresent the data. Legend



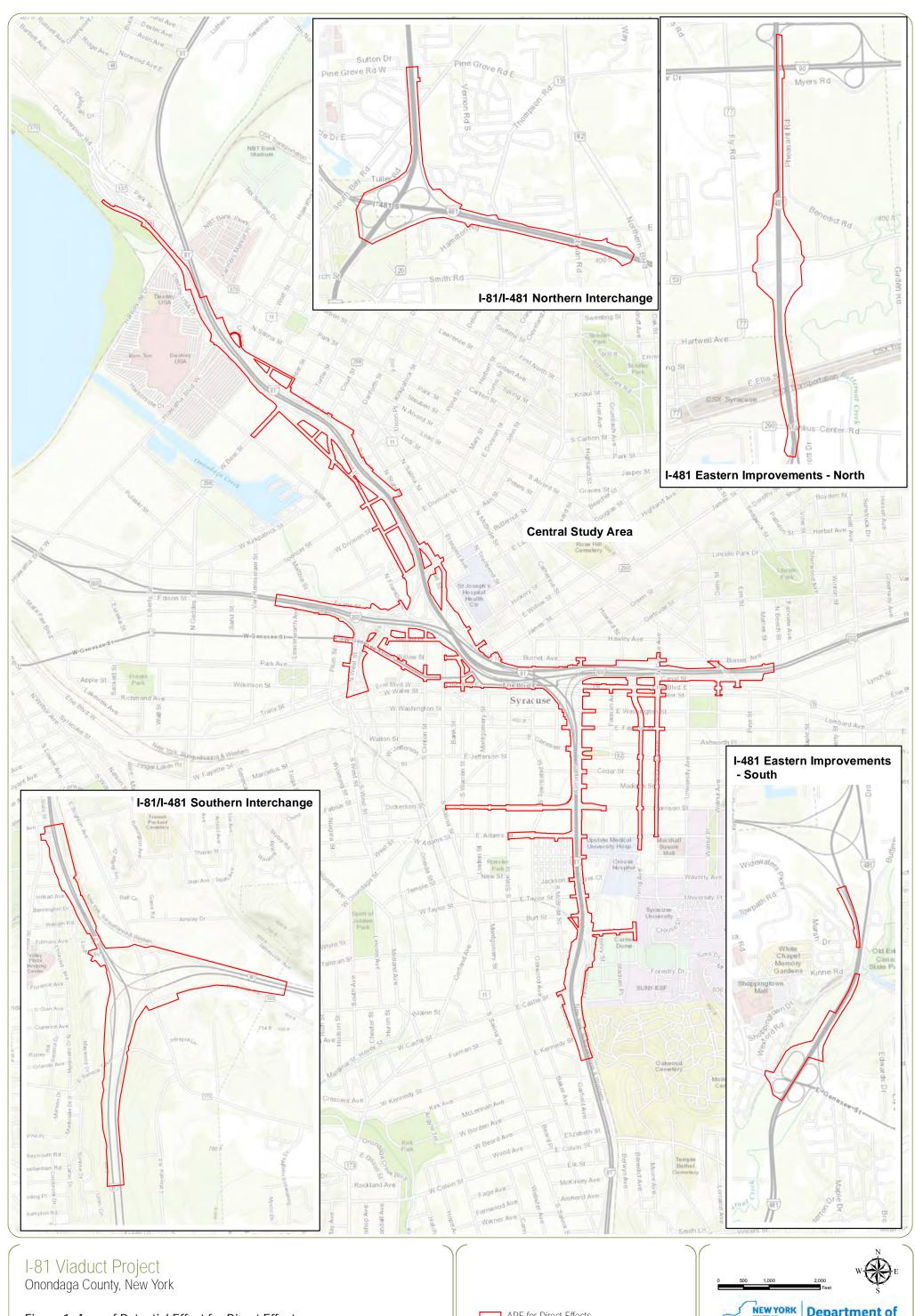
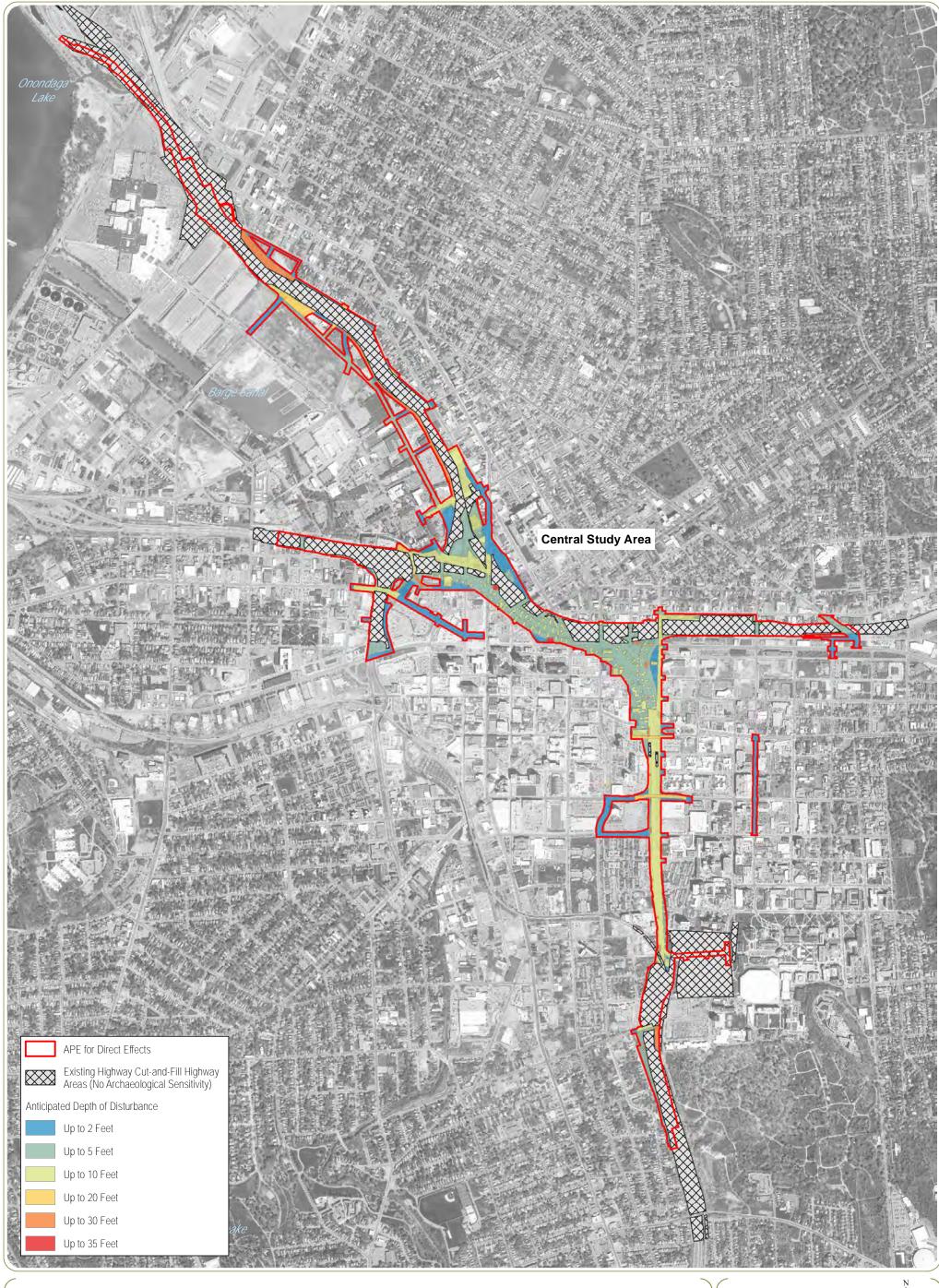


Figure 1: Area of Potential Effect for Direct Effects Sheet 2: Community Grid Alternative September 2017 Notes: 1. Basemap: ESRI ArcGIS Online "World Topographic Map" Map Service.
2. This is a color graphic. Reproduction in grayscale may misrepresent the data.

APE for Direct Effects Legend



Federal Highway Administration



I-81 Viaduct Project Onondaga County, New York

Figure 2: Anticipated Depth of Soil Disturbance (Estimated)

Sheet 1: Viaduct Alternative

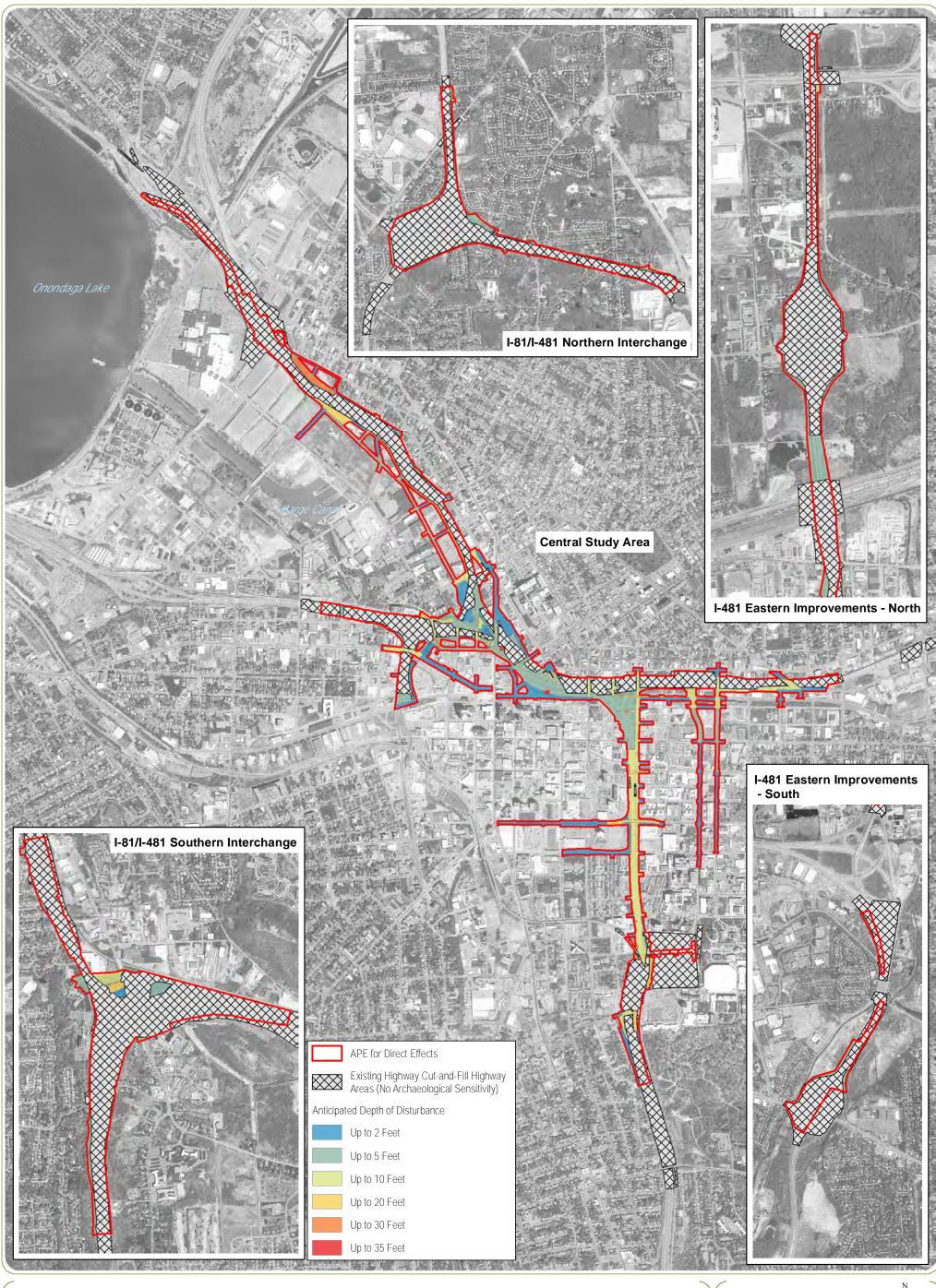
September 2017

Notes:

1. Basemap: NYS Digital Orthoimagery Program 1-foot resolution orthoimagery, 2015.

2. This is a color graphic. Reproduction in grayscale may misrepresent the data.





I-81 Viaduct Project Onondaga County, New York

Figure 2: Anticipated Depth of Soil Disturbance (Estimated)

Sheet 2: Community Grid Alternative

September 2017

Notes:
1. Basemap: NYS Digital Orthoimagery Program 1-foot resolution orthoimagery, 2015.
2. This is a color graphic. Reproduction in grayscale may misrepresent the data.



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I-81 Viaduct Project Onondaga County, New York

Figure 3: Archaeological Sensitivity

Sheet 1: Viaduct Alternative

September 2017



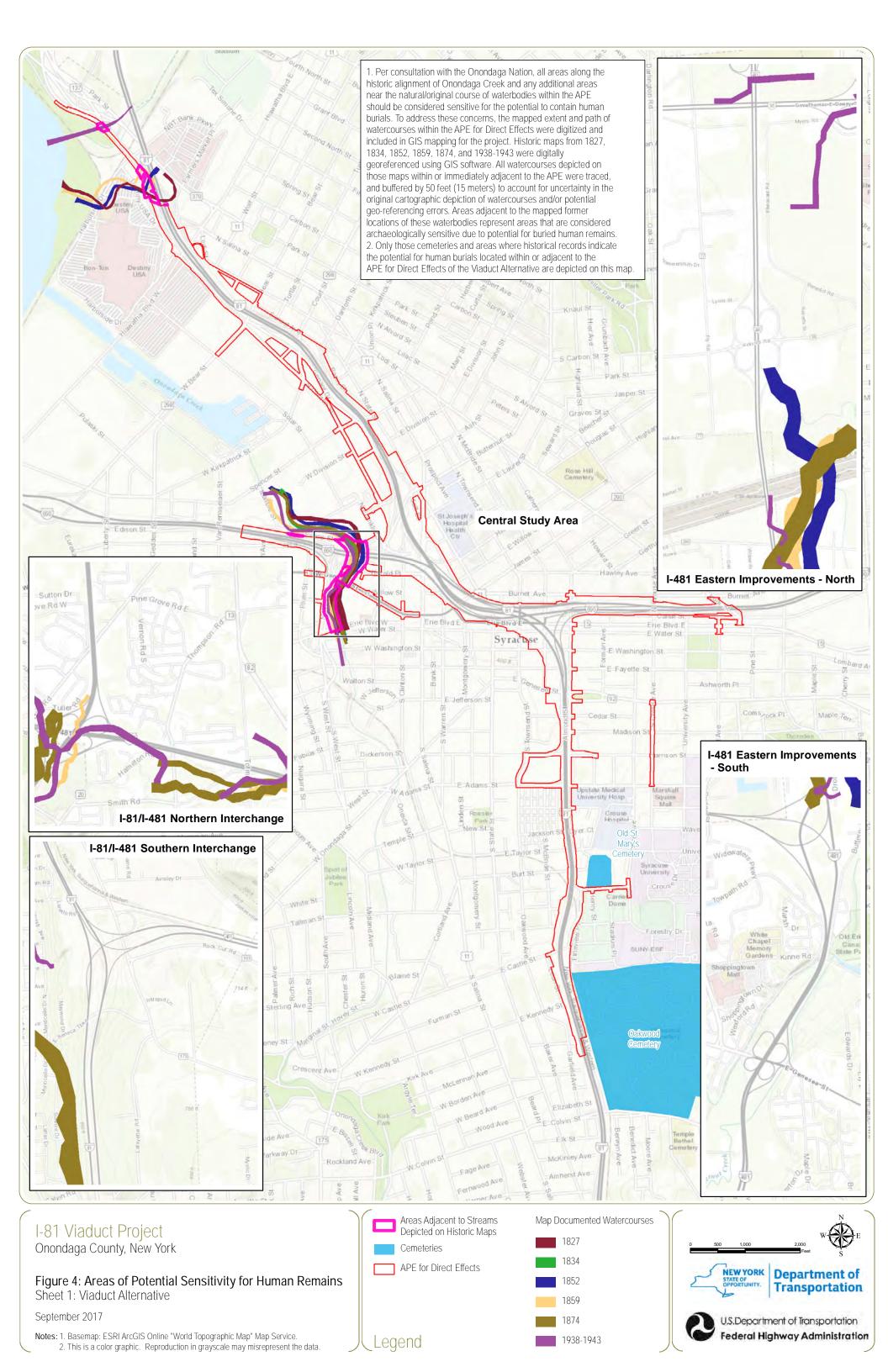
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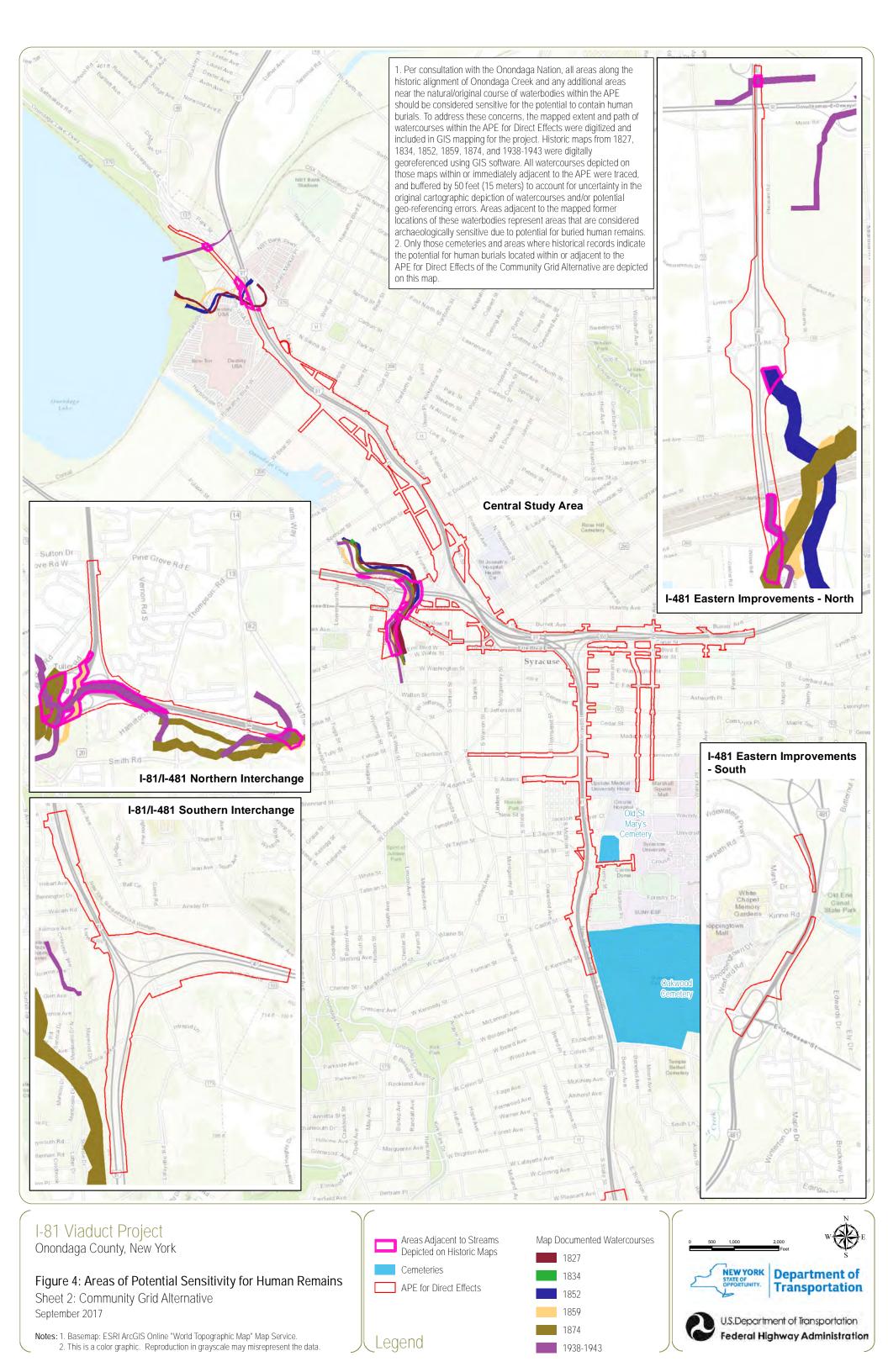
I-81 Viaduct Project Onondaga County, New York

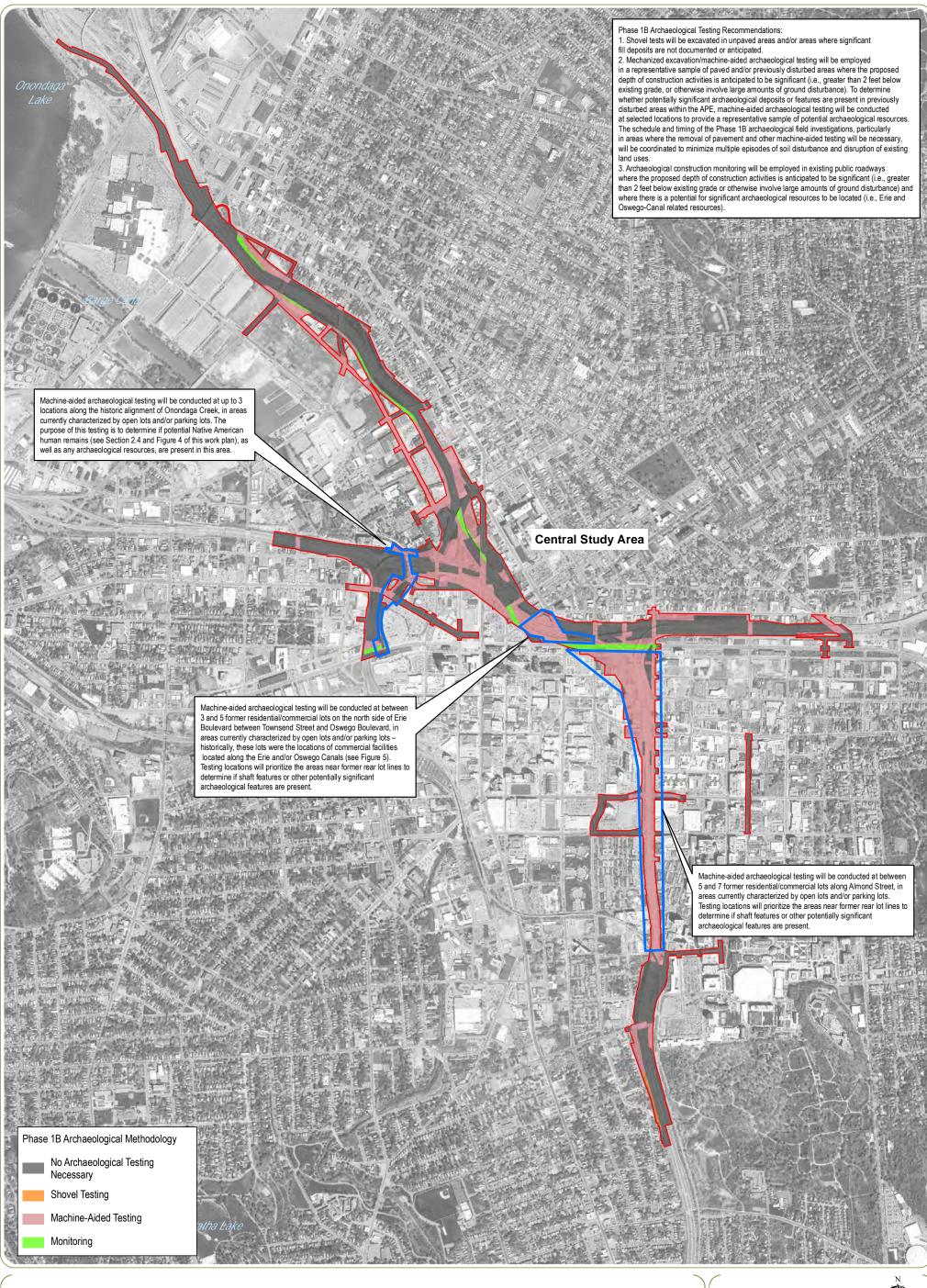
Figure 3: Archaeological Sensitivity Sheet 2: Viaduct Alternative

September 2017









I-81 Viaduct Project

Onondaga County, New York

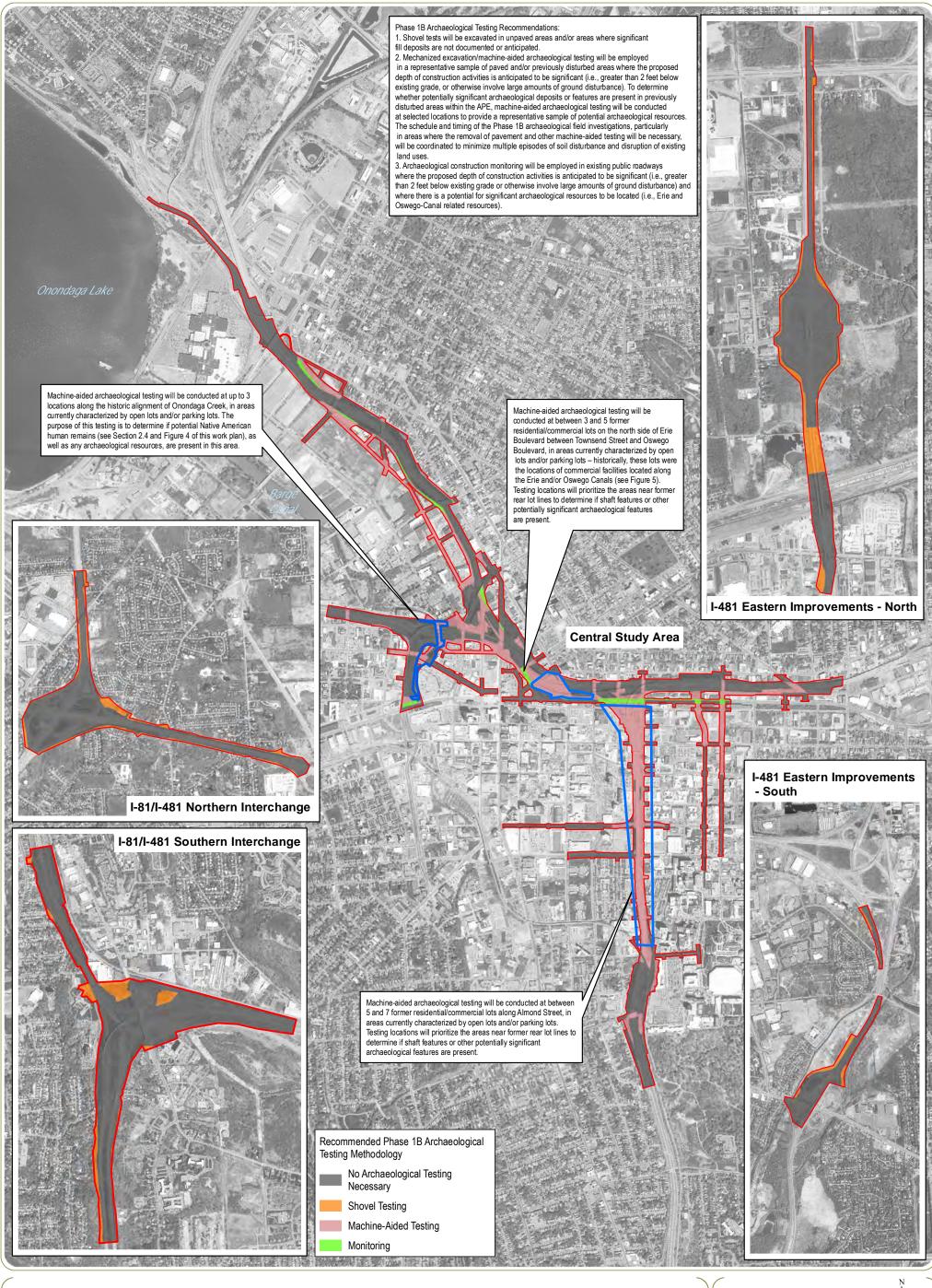
Figure 5: Recommended Phase 1B Archaeological Methods

Sheet 1: Viaduct Alternative

September 2017

Basemap: NYS Digital Orthoimagery Program 1-foot resolution orthoimagery, 2015.
 This is a color graphic. Reproduction in grayscale may misrepresent the data.





I-81 Viaduct Project

Onondaga County, New York

Figure 5: Recommended Phase 1B Archaeological Methods

Sheet 2: Community Grid Alternative

September 2017

1. Basemap: NYS Digital Orthoimagery Program 1-foot resolution orthoimagery, 2015.
2. This is a color graphic. Reproduction in grayscale may misrepresent the data.

Department of Transportation NEW YORK U.S.Department of Transportation Federal Highway Administration

Appendix A:

New York State Office of Parks, Recreation and Historic Preservation

Human Remains Discovery Protocol and Native American Graves Protection and

Repatriation Act Guidance

State Historic Preservation Office/ New York State Office of Parks, Recreation and Historic Preservation Human Remains Discovery Protocol (June 2015)

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

- Human remains must be treated with the utmost dignity and respect at all times. Should human remains or suspected human remains be encountered, work in the general area of the discovery will stop immediately and the location will be immediately secured and protected from damage and disturbance.
- Human remains or associated artifacts will be left in place and not disturbed. No skeletal remains or materials associated with the remains will be collected or removed until appropriate consultation has taken place and a plan of action has been developed.
- The SHPO, the appropriate Indian Nations, the involved state and federal agencies, the coroner, and local law enforcement will be notified immediately. Requirements of the corner and local law enforcement will be met. A qualified forensic anthropologist, bioarchaeologist or physical anthropologist will assess the remains *in situ* to help determine if the remains are Native American or non-Native American.
- If human remains are determined to be Native American, the remains will be left in place and protected from further disturbance until a plan for their avoidance or removal can be generated. Please note that avoidance is the preferred choice of the SHPO and the Indian Nations. The involved agency will consult SHPO and appropriate Indian Nations to develop a plan of action that is consistent with the Native American Graves Protection and Repatriation Act (NAGPRA) guidance. Photographs of Native American human remains and associated funerary objects should not be taken without consulting with the involved Indian Nations.
- If human remains are determined to be non-Native American, the remains will be left in place and protected from further disturbance until a plan for their avoidance or removal can be generated. Please note that avoidance is the preferred choice of the SHPO. Consultation with the SHPO and other appropriate parties will be required to determine a plan of action.

Appendix B:

Haudenosaunee Protocol for Handling Discovery of Human Remains

4.7 Protocol for Handling Discovery of Human Remains

Known Burials

Unidentified Burials

When to contact?

Intentional excavation

Inadvertent Discovery

At the earliest time in decision-making process.

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

Haudenosaunee Cultural

Resource Representatives

Resource Representatives

HSCBRR.

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

Company must hire a Native American

to review the site.

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

2002 © Intellectual Property Rights of the Grand Council of the Haudenosaunee - Text cannot be used without the written consent of the Grand Council of the Haudenosaunee.

Appendix C: NYSDOT Procedures in the Event of the Inadvertent Discovery of Human Remains during Construction

NYSDOT Procedures in the Event of the Inadvertent Discovery of Human Remains during Construction¹

- 1. If a burial site, human remains, or bones thought to be human remains, are encountered during construction for a NYSDOT undertaking, the work will be stopped immediately and rescheduled to avoid disturbing the area. The remains will be left in place and protected from further damage.
- 2. In accordance with the current NYSDOT Standard Specifications, Section 107-01 D. *Archaeological Salvage*², the Engineer-in-Charge (EIC) will, through proper channels, notify appropriate Department personnel and other authorities. The EIC will report the discovery of human remains to the local police, and the county coroner having jurisdiction, or to the medical examiner, and will arrange immediate inspection of the site³.
- 3. If the site is determined to be part of a criminal investigation, the police will notify the EIC when work in the area may resume.
- 4. If determined that the remains are not a police issue, the Regional Cultural Resources Coordinator (CRC) will notify the Federal Highway Administration (FHWA), the Office of Parks, Recreation and Historic Preservation/ State Historic Preservation Office (OPRHP/SHPO), appropriate Indian tribal contacts, and archaeologists, and arrange site visits accordingly. Work will be temporarily suspended in the area, and measures will be taken to secure the burial site and protect the remains from disturbance, including the placement of a twenty-five foot protective buffer around the burial site.
- 5. The NYSDOT Environmental Science Bureau (ESB), in coordination with the Region, will arrange for a qualified physical anthropologist to examine the remains. NYSDOT in coordination with FHWA will invite designated Indian tribal representative(s) to participate in the consultation process. Representatives will be determined on the basis of established Department contacts and identified areas of interest for tribal nations. The remains will not be removed until determined by the qualified physical anthropologist to be non-native.
- 6. NYSDOT, in consultation with the OPRHP/SHPO, Indian tribes and other identified consulting parties, will arrange for an archeologist to establish horizontal and vertical extent of the burial(s) and assess measures for avoiding the human remains if possible. The avoidance of human remains is the preferred choice.
- 7. Any new location or alignment developed to avoid the burial(s) will be subject to archaeological investigation, and the results will be provided to the OPRHP/SHPO, Indian tribes, and other consulting parties as appropriate for comment before the project proceeds in this area.
- 8. If the alignment is unchanged, a plan will be developed in coordination with FHWA, NYSHPO, the Indian tribal representatives, and other consulting parties as appropriate, to preserve the site and protect the burial(s) before the project proceeds in this area.
- 9. If removal and reburial of the remains is necessary, it will be undertaken in a manner agreed to by all involved parties. Temporary disposition of the remains until reburial will be determined in consultation with the Indian tribes, and other consulting parties as appropriate.
- 10. Any actions relating to the treatment, disposition, removal, or reburial of human remains will comply with all applicable State and Federal laws and regulations.

¹ Last updated April 21, 2016.

https://www.dot.ny.gov/main/business-center/engineering/specifications/updated-standard-specifications-us

In Erie County, the discovery must be reported to the medical director.

Appendix D:

Project Contacts

Contact Personnel for I-81 Viaduct Project Archaeological Monitoring During Construction

Contact Personnel for I-81 Viaduct Project Ar	chaeological Monitoring During Construction
Construction Project Manager (on-site) TO BE DETERMINED	Alternate TO BE DETERMINED
New York State Department of Transportation Mark Frechette, P.E. Project Director New York State Department of Transportation 333 East Washington Street Syracuse, NY 13202 315-428-4409 Mark.Frechette@dot.ny.gov Daniel P. Hitt, RLA Director, Office of Environment New York State Department of Transportation 50 Wolf Road, POD 4-1 Albany, NY 12232 518-457-4054 (Desk) 518-457-5672 (Office of Environment) Dan.Hitt@dot.ny.gov	Alternate Jonathan Adams, RLA Senior Landscape Architect New York State Department of Transportation Dulles State Office Building 317 Washington St Watertown, NY 13601 315-785-2341 Jon.Adams@dot.ny.gov Jessica Prockup Environmental Specialist Office of Environment New York State Department of Transportation 50 Wolf Road, POD 4-1 Albany, NY 12232 518-417-6642 Jessica.Prockup@dot.ny.gov
Federal Highway Administration Tricia Millington Area Engineer NY Division Tribal Nation Coordinator Federal Highway Administration Leo W. O'Brien Federal Building 11A Clinton Avenue, Suite 719 Albany, NY 12207 patricia.millington@dot.gov (518) 431-8844 Fax: (518) 431-4121	Alternate Robert M. Davies District Engineer Federal Highway Administration New York Division Leo W. O'Brien Federal Building 11A Clinton Avenue, Suite 719 Albany, NY 12207 Robert.Davies@dot.gov 518-431-8880

New York State Office of Parks Recreation and Historic Preservation

John Bonafide

Director, Technical Preservation Services Bureau

Division for Historic Preservation Agency Historic Preservation Officer

New York State Office of Parks Recreation & Historic

Preservation

Peebles Island State Park, PO Box 189 Waterford, New York 12188-0189 (518) 268-2166

john.bonafide@parks.ny.gov

Alternate
Nancy Herter
Archaeology Program Unit Coordinator
New York State Parks, Recreation & Historic
Preservation
Peebles Island State Park, PO Box 189
Waterford, New York 12188-0189
(518) 268-2179

New York State Museum

Dr. Christina Rieth

New York State Archaeologist

Division of Research and Collections

New York State Museum

3118 Cultural Education Center

Albany, NY 12230

christina.rieth@nysed.gov

518-402-5975

Alternate

Dr. John P. Hart

Director, Research and Collections Division

New York State Museum

nancy.herter@parks.ny.gov

3140 Cultural Education Center

Albany, New York 12230

john.hart@nysed.gov

518-474-5816

The Onondaga Nation Faithkeeper Anthony Gonyea

DYODIHWASNYE'NHA

Administration Building 4040 Route 11 Onondaga Nation

via-Nedrow, NY 13120 Phone: 315-952-3109 Fax: 315-469-4717

stevethomas808@yahoo.com

Alternate
Joseph Heath
General Counsel
315-475-2559

Thane Joyal, Esq. 315-475-2559

thanejoyal@gmail.com

Law Enforcement Agency Onondaga County Sheriff's Office 407 S State St, Syracuse, NY 13202 315-435-3044 Alternate
City of Syracuse Police Department
511 S. State Street
Syracuse, NY 13202
315-442-5111

County Coroner Onondaga County Medical Examiner 100 Elizabeth Blackwell Street Syracuse, New York 13210 (315) 435-3800	Alternate N/A
Archaeological Consultant	Alternate
TBD	TBD

APPENDIX 3:	
NYSDOT Procedures in the Event of the Inadvertent Discovery of Human Remains during Construction 2002 Haudenosaunee Protocol for Handling Discovery of Human Remains	
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APPENDIX 3

NEW YORK STATE DEPARTMENT OF TRANSPORTATION'S PROCEDURES IN THE EVENT OF THE INADVERTENT DISCOVERY OF HUMAN REMAINS DURING CONSTRUCTION¹

- 1. If a burial site, human remains, or bones thought to be human remains, are encountered during construction for a New York State Department of Transportation (NYSDOT) undertaking, the work will be stopped immediately and rescheduled to avoid disturbing the area. The remains will be left in place and protected from further damage.
- 2. In accordance with the current NYSDOT Standard Specifications, Section 107-01 D. Archaeological Salvage², the Engineer-in-Charge (EIC) will, through proper channels, notify appropriate Department personnel and other authorities. The EIC will report the discovery of human remains to the local police, and the county coroner having jurisdiction, or to the medical examiner, and will arrange immediate inspection of the site³.
- 3. If the site is determined to be part of a criminal investigation, the police will notify the EIC when work in the area may resume.
- 4. If determined that the remains are not a police issue, the NYSDOT will notify the Federal Highway Administration (FHWA), the Office of Parks, Recreation and Historic Preservation/ State Historic Preservation Office (OPRHP/SHPO), appropriate Native Nation contacts, and archaeologists, and arrange site visits accordingly. Work will be temporarily suspended in the area, and measures will be taken to secure the burial site and protect the remains from disturbance, including the placement of a twenty-five foot protective buffer around the burial site.
- 5. The NYSDOT will arrange for a qualified physical anthropologist to examine the remains. NYSDOT in coordination with FHWA will invite designated Native Nation representative(s) to participate in the consultation process. Representatives will be determined on the basis of established contacts and identified areas of interest for Native Nations. The remains will not be removed until determined by the qualified physical anthropologist to be non-native.
- 6. NYSDOT, in consultation with the OPRHP/SHPO, Native Nations and other identified Consulting Parties, will arrange for an archeologist to establish horizontal and vertical extent of the burial(s) and assess measures for avoiding the human remains if possible. The avoidance of human remains is the preferred choice.
- 7. Any new location or alignment developed to avoid the burial(s) will be subject to archaeological investigation, and the results will be provided to the OPRHP/SHPO, Native Nations, and other Consulting Parties as appropriate for comment before the project proceeds in this area.
- 8. If the alignment is unchanged, a plan will be developed in coordination with FHWA, NYSHPO, the Native Nation representatives, and other Consulting Parties as appropriate, to preserve the site and protect the burial(s) before the project proceeds in this area.
- If removal and reburial of the remains is necessary, it will be undertaken in a manner agreed to by all involved parties.
 Temporary disposition of the remains until reburial will be determined in consultation with the Native Nations, and other Consulting Parties as appropriate.
- 10. Any actions relating to the treatment, disposition, removal, or reburial of human remains will comply with all applicable State and Federal laws and regulations.

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¹ Last updated April 21, 2016.

² https://www.dot.ny.gov/main/business-center/engineering/specifications/updated-standard-specifications-us

³ In Erie County, the discovery must be reported to the medical director.



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 Haudenosaunce 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

APPENDIX 3b

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

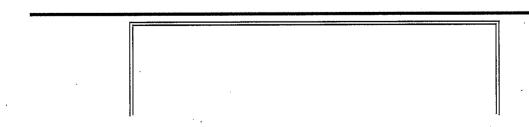
The unearthing of the remains of our ancestors from their eternal resting place is also a violation of the promises made to the Haudenosaunee under the terms of the Canandaigua

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

Inadvertent Discovery

At the earliest time in decision-making process.

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

Haudenosaunee Cultural

Resource Representatives

Resource Representatives

HSCBRR

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

Company must hire a Native American on-site observer.

to review the site.

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

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APPENDIX 4:

Roles and Responsibilities in Construction

APPENDIX 4 ROLES AND RESPONSIBILITIES IN CONSTRUCTION

The purpose of this appendix is to define the roles of those responsible for carrying out commitments specified in this Programmatic Agreement (Agreement).

The role of the **NYSDOT Office of Environment (OOE)** is to assist the FHWA in carrying out Section 106 responsibilities for the Project, including oversight and management of archaeological investigations, and initiating consultation regarding archaeological resources identified through machine-aided excavations and archaeological monitoring during construction among the FHWA, the SHPO, and the Onondaga Nation for Native American sites.

NYSDOT Engineer or Engineer in Charge (EIC) or his/her designee, is the Engineer representing the NYS Department of Transportation having direct supervision of the execution of the construction contract(s) under the direction of the Regional Director. The EIC or his/her designee is responsible for ensuring that construction work is stopped or slowed promptly upon request by the Archaeologist or Native Nation Monitor (if no Archaeologist is present).

NYSDOT Construction Environmental Coordinator (CEC), or equivalent, oversees the work of the Archaeologist on the construction site and coordinates workflows with the Construction Group and Office of Environment.

NYSDOT (Regional) Operations, or equivalent, will provide equipment and necessary personnel to assist in the machine-aided archaeological survey work.

Archaeological Consultant (Archaeologist) is the individual, firm, or corporation hired by the NYSDOT to provide professional archaeologists, including a Principal Investigator meeting the Secretary of the Interior's Professional Qualifications Standards for Archaeology (36 CFR Part 61) with demonstrated experience on projects of a similar scale and complexity, including supervisory experience for archaeological monitoring during construction in urban areas. Regional experience in the archaeology of central New York is preferred.

The Archaeological Consultant will provide qualified personnel required to perform the work as specified in the *Phase IB Archaeological Survey Work Plan: Plan for Phase IB Archaeological Survey and Archaeological Monitoring during Construction Including Data Recovery*, October 2017 (*Phase IB Work Plan*) and the approved Construction Phase Archaeological Work Plan. The staff required to perform the work will include, at a minimum, a Principal Investigator and team including the following positions:

- **Principal Investigator (PI)**: The PI will be responsible for the archaeological research, fieldwork and monitoring and for preparing and submitting archaeological reports. All archaeological investigators and Native Nation Monitor(s) will be under the direct supervision of the PI.
- Crew Chief(s): Under the direction of the PI, one or more Crew Chiefs will be responsible for the daily on-site supervision of archaeological Field Technicians for machine-aided testing and monitoring during construction, and for coordinating archaeological investigations with the EIC or his/her designee, Construction Contractor and/or subcontractors. In addition, the Crew Chiefs will ensure that the EIC or his/her designee is promptly informed of and approves any request for a temporary halt in construction, whether requested by the Archaeologist or the Native Nation Monitor(s), as per the approved *Phase IB Work Plan*, to allow the Archaeologist and Native Nation Monitor(s) to examine potential cultural materials and features.

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• **Field Technician (FT)**: The FT will assist in the field and laboratory for processing artifacts. All work by the FT will be performed under the direct supervision of the Crew Chief.

Onondaga Nation Designated Section 106 Representatives are the individuals included on the "List of Federally-Recognized Tribal Contacts for Section 106 Consultation for NYSDOT-FHWA projects".

Native Nation Monitor(s) will be selected and provided by the Onondaga Nation and will work in coordination with the Archaeologist as part of the team responsible for machine-aided testing and archaeological monitoring during construction, as identified in the approved *Phase IB Work Plan*. The Native Nation Monitor(s) will communicate to the Crew Chief or the PI (if on-site) any request for a temporary halt in construction to examine potential cultural materials, features, or human remains.

The Native Nation Monitor(s) will be responsible for coordinating monitoring activities with the EIC or his/her designee, Construction Contractor and/or subcontractors in locations where the FHWA has determined Native Nation monitoring is warranted outside of archaeological monitoring during construction.

Construction Contractor is the individual, firm, or corporation undertaking the execution of the construction work under the terms of the contract and acting directly or through his, her, their, or its agents or employees. The Contractor is responsible for facilitating the archaeological investigations.

Construction Manager is the Construction Contractor's designated representative who leads construction activities of the Contract, including overall construction oversight, assignment of the construction workforces, and coordination of the construction workforces.

Equipment Operator is the person(s) operating construction equipment.

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APPENDIX 5:

Native Nation Consultation

APPENDIX 5 NATIVE NATION CONSULTATION

The Federal Highway Administration (FHWA) in coordination with the New York State Department of Transportation (NYSDOT) will carry out Section 106 consultation with the New York State Historic Preservation Office (SHPO), the Advisory Council on Historic Preservation (ACHP), and the Onondaga Nation through the final design and construction phases of the Project to complete the identification and evaluation of archaeological resources within the Project's Area of Potential Effects (APE), and to consider measures to avoid, minimize or mitigate potential adverse effects on any National Register (NR) eligible archaeological resources identified through machine-aided excavation and archaeological monitoring during construction.

The NYSDOT will inform the SHPO, FHWA, and Onondaga Nation of any design modifications or changes in scope as the Project progresses through Final Design and Construction and will make a good faith effort to provide timely and informative communication during the Construction phases of the Project.

Native Nation Monitors

In addition to consultation with the Onondaga Nation's Designated Section 106 Representatives (Onondaga Nation), the NYSDOT will establish procedures to ensure that the Native Nation Monitors selected by the Onondaga Nation are provided opportunities to fully engage in future archaeological investigations for the Project, as outlined in the approved *Phase IB Archaeological Survey Work Plan: Plan for Phase IB Archaeological Survey and Archaeological Monitoring during Construction Including Data Recovery,* October 2017 (*Phase IB Work Plan*) and approved *Construction Phase Archaeological Work Plan.* The FHWA and NYSDOT defer to the Onondaga Nation to designate Native Nation Monitor(s) at their discretion. The individual(s) selected by the Onondaga Nation to serve as Native Nation Monitors are not required to meet the standards defined in Stipulation II A of the Agreement.

In the event that the Onondaga Nation chooses not to provide Native Nation Monitor(s) for machine-aided testing or archaeological monitoring during construction or if Native Nation Monitor(s) are unavailable to perform monitoring activities at any/all locations, Section 106 commitments for upcoming archaeological investigations can be fully met by the NYSDOT through the utilization of professional archaeologists meeting the Secretary of the Interior's Professional Qualification Standards for Archaeology (36 CFR Part 61) (henceforth referred to as "Archaeologist").

Both the Archaeologists and Native Nation Monitor(s) will have access to areas that are deemed by the NYSDOT Engineer in Charge (EIC) or his/her designee to be safe locations for non-construction personnel for the purpose of archaeological monitoring at construction sites identified in the approved *Construction Phase Archaeological Work Plan*. Based on their knowledge of Haudenosaunee culture, the Native Nation Monitors will work in coordination with the Archaeological Consultant's team to identify any Native American cultural artifacts, either because they are potentially National Register eligible, as per Section 106 of the National Historic Preservation, or because they are potentially related to human remains or indicative of a burial site. As part of this coordinated effort, the Native Nation Monitors will inform the Archaeologist on site of any request for the Construction Contractor(s) to halt or slow work for closer inspection of potential Haudenosaunee cultural artifacts or human remains. The Archaeologist will

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promptly convey the Native Nation Monitor's request to the EIC or his/her designee, who will ensure that the requested action is taken. The Native Nation Monitors will also inform the Archaeologist when coordination with the Onondaga Nation may be needed before recommending further investigation of intact archaeological deposits or upon the discovery of a potential burial site.

Though it will be up to the Onondaga Nation to establish its own internal procedures for coordination with the Native Nation Monitors in the field, the NYSDOT will contact the Onondaga Nation's Designated Section 106 Representatives to provide updates for work in progress including an end of field letter and draft Phase IB Archaeology Survey Report for each construction area identified for archaeological monitoring. As part of ongoing Section 106 consultation, the NYSDOT, in coordination with FHWA and in consultation with the SHPO, will consider the Onondaga Nation's comments and recommendations before approving and distributing final reports as specified in Stipulation IV of the Agreement.

On Site Requirements for Native Nation Monitors

The Native Nation Monitors, as well as Archaeologists, will be required to follow certain procedures and protocols during construction.

- The Native Nation Monitor(s) will follow the health and safety plan for the Project under the oversight of the EIC or his/her designee of the construction site.
- The Native Nation Monitor(s) will monitor locations in accordance with the approved Phase IB
 Work Plan and approved Construction Phase Archaeological Work Plan and will not direct the
 contractor to conduct field operations for the purposes of archaeological investigation at new
 locations.
- The Native Nation Monitor(s) will report to the established construction field office or other location as specified by the EIC or his/her designee daily and attend the Construction Contractor meeting(s) as requested and at a frequency established by the Construction Contractor(s), to learn about the scope of work and location of work planned for each day/week.
- If the Native Nation Monitor(s) fails to report to the construction site on time as specified by the EIC/Construction Manager or his/her designee, construction activities will progress as scheduled, and the Native Nation Monitor(s) may be restricted from accessing the construction site until the EIC/Construction Manager or his/her designee determines it is safe to do so.
- The Native Nation Monitor(s) will document work conducted each day, including but not limited
 to information such as a description of the work conducted each day at each location, the hours
 worked, and the tasks performed. The daily work report will include the location monitored and
 the presence or absence of any cultural materials encountered. The daily report will be shared
 with the EIC/Construction Manager or his/her designee, NYSDOT OOE, and the Archaeologist.

Compensation

The Onondaga Nation will be compensated for the services of Native Nation Monitor(s) through a separate contractual agreement and will receive payment under the terms of that agreement. A sample contract is included in **Appendix 8** of this Agreement.

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- As determined by the FHWA, payments to the Onondaga Nation for archaeological monitoring services as reported to the EIC/Construction Manager or his/her designee, NYSDOT OOE, and the Archaeologist are eligible for federal reimbursement.
- In addition, the cost of assistance as needed for the relocation and reinterment of human remains determined or presumed to be Native American are eligible for federal reimbursement.

Timeframes for Archaeological Field Investigations

As indicated in the approved *Phase IB Archaeological Survey Work Plan: Plan for Phase IB Archaeological Survey and Archaeological Monitoring during Construction Including Data Recovery, October 2017 (Phase IB Work Plan)*, machine-aided testing, particularly in areas that require the removal of existing pavement, will be scheduled to begin immediately prior to the start of construction at each designated location for the purpose of minimizing disruption to existing land use and community activities. Archaeological field investigations for machine-aided testing and archaeological monitoring during construction will proceed in accordance with the timeframes specified in the approved *Phase IB Work Plan* and the approved *Construction Phase Archaeological Work Plan*.

As defined in the NYSDOT Standard Specifications, Section 101-02 Definitions of Terms:

Calendar Day means "every day shown on the calendar", and a

Work Day means "a calendar day, on which weather and other conditions not under the control of the Contractor, will permit construction operations on the principal item or items of work which would normally be in progress at that time to proceed for the major part of the day."

For the purposes of this Agreement, timeframes are noted in calendar days, unless otherwise specified.

Machine-Aided Testing

The Native Nation Monitor(s) will provide timely input to assist the Archaeologist in the field identification of Native American cultural artifacts and features.

- If no archaeological resources are identified by machine-aided testing, the Archaeologist will submit an end-of-field (EOF) letter to the NYSDOT within two (2) weeks of the completion of fieldwork. The NYSDOT will provide the EOF letter to the SHPO, Onondaga Nation, and FHWA with a request for review and comments within fifteen (15) days.
- If the Archaeologist, in coordination with the Native Nation Monitor(s), recommends additional investigation of one or more archaeological sites to determine National Register eligibility, the Archaeologist will be allowed up to five (5) additional days to prepare and submit to NYSDOT a Phase II Work Plan for each site. The NYSDOT will provide the EOF letter and Phase II Work Plan(s) to the SHPO, Onondaga Nation, and FHWA with a request for review and comments within thirty (30) calendar days.
- The Archaeologist will begin Phase II field investigations immediately upon approval of the Phase
 II Work Plan(s) by the NYSDOT and will complete the fieldwork for each site within twenty (20)
 work days of approval. The Archaeologist will conduct Phase II investigations in coordination with

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Native Nation Monitor(s) for Native American sites, or Native American components of multicomponent sites, but may proceed with Phase II fieldwork on schedule if the Native Nation Monitor(s) is not present.

Archaeological Monitoring during Construction

The timing of archaeological monitoring during construction will be determined by construction schedules for each construction phase of the Project. Protocols for archaeological monitoring during construction are depicted in the attached flowchart (**Attachment 1**) and described below:

- If the Archaeologist, in coordination with the Native Nation Monitor(s) identifies potential cultural artifacts or features exposed by construction activity, the Archaeologist will request a temporary suspension of work limited to one hour for each area within an approximately 20-foot (6.1-meter) radius for initial inspection of the open excavation.
- Following initial inspection, if the Archaeologist in coordination with the Native Nation Monitor(s) identifies the potential cultural artifact(s) or feature(s) to be modern or to be historic with no potential to meet the criteria for National Register eligibility, the Archaeologist will notify construction personnel that work can continue.
- If the cultural material is identified as potentially National Register eligible, the Archaeologist may request an extension of the work stoppage to further evaluate the cultural material in coordination with the Native Nation Monitor(s). The extension may last up to, but no longer than four hours, not including the one hour for initial inspection. Immediately upon completing this evaluation of the cultural material, the Archaeologist will notify the NYSDOT Office of Environment (OOE) with a preliminary assessment of National Register eligibility.
- The timeframe outlined above would not apply if the Archaeologist in coordination with the Native Nation Monitor(s) identifies the presence of human remains, or potential remains. In that case, the temporary work stoppage would last substantially longer to allow time for consultation among the SHPO, Onondaga Nation, FHWA, and NYSDOT to determine appropriate next steps.
- If the Archaeologist, in coordination with the Native Nation Monitor(s), recommends additional investigations to determine National Register eligibility, the Archaeologist will notify the NYSDOT, and the NYSDOT will consult with the SHPO, Onondaga Nation, and FHWA. If approved, sampling or recovery efforts will be limited to eight hours for each individually identified resource, including Native American cultural artifacts. In the case of exposed canal or canal-related features, eight hours per 50 linear feet (15 meters) will be allowed.
- The Archaeologist will implement Data Recovery procedures immediately upon approval by the NYSDOT if the site is determined National Register eligible and Data Recovery is the agreed-upon course of action as determined though consultation among the SHPO, Onondaga Nation, FHWA, and NYSDOT. Once initiated, the Archaeologist (in coordination with Native Nation Monitor(s) for Native American sites) will complete Data Recovery activities at each site within no more than 15 work days of the start of Data Recovery fieldwork, or as specified in the approved Archaeological Data Recovery Plan and Stipulation VI of this Agreement.

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The Archaeologist, in coordination with the Native Nation Monitor(s), will submit an EOF letter to the NYSDOT within five (5) days of the completion of Data Recovery fieldwork. The NYSDOT will provide the EOF letter to the SHPO, Onondaga Nation, and FHWA with a request for comments on the preliminary results, recommendations, and timeframe for the preparation of a Phase III Data Recovery report within 15 calendar days of receiving the EOF letter.

Section 106 Consultation

Archaeological Resources

The formal identification and evaluation of archaeological resources will be conducted through consultation among the SHPO, FHWA, NYSDOT, and the Onondaga Nation's designated Section 106 representatives, based on information provided by the Archaeologist in coordination with the Native Nation Monitor(s) in EOF letters and reports.

- During ongoing field investigations for machine-aided testing and archaeological monitoring during construction, the NYSDOT will provide EOF letters and Phase II Work Plans to the SHPO, Onondaga Nation, and FHWA for a 15-day review and comment period.
- Following the end of fieldwork, the NYSDOT will provide draft Phase IB and Phase III Data Recovery reports to the SHPO, Onondaga Nation, and FHWA for a 30-day review and comment period.

Potential Discovery of Human Remains

Based on the results of research conducted for the *Phase IA Archaeological Sensitivity Assessment*, September 2016 and through consultation with the Onondaga Nation, the approved *Phase IB Work Plan* documents the potential for Native American human remains within the Project's APE. The Onondaga Nation advised that all areas along the historic alignment of Onondaga Creek and other historic watercourses should be considered sensitive for the potential to contain human burials. As a result, the sampling strategy for machine-aided testing in advance of construction, as outlined in the approved *Phase IB Work Plan*, includes locations along the historic alignment of Onondaga Creek to determine if potential human burials, or other archaeological resources, are present in these areas.

In addition, the Onondaga Nation noted the potential for partial human remains to be present in fill material transported from other areas to locations throughout the APE which have not been specifically identified as areas of sensitivity. With the assistance of Archaeologists and Native Nation Monitors, the NYSDOT will take precautions to ensure that any human remains that may be encountered during construction are properly identified and protected from further disturbance until appropriate actions are determined through consultation among the Onondaga Nation, SHPO, FHWA, and NYSDOT.

- Any human burial site, human remains, or potential human remains discovered during machineaided archaeological testing or during construction will be treated with dignity and respect.
- Upon the discovery of human remains or potential human remains, the NYSDOT has an obligation
 to report the discovery to the appropriate legal authorities. The NYSDOT has no jurisdiction over
 the burial site until those officials have determined that the remains do not warrant further
 investigation on their part.

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- If the Archaeologist, in coordination with the Native Nation Monitors, reports the discovery of human remains, or potential human remains, to the NYSDOT during machine-aided testing or archaeological monitoring during construction, the NYSDOT OOE will immediately notify the SHPO, FHWA and the Onondaga Nation's designated Section 106 representatives.
- The NYSDOT OOE will also contact the SHPO, FHWA and the Onondaga Nation's Designated Section 106 Representatives if the NYSDOT EIC or his/her designee and/or Construction Environmental Coordinator (CEC) reports the discovery of human remains, or potential human remains, during construction in any location where there is no Archaeologist or Native Nation Monitor present.
- Following the NYSDOT Procedures in the Event of the Inadvertent Discovery of Human Remains during Construction (Appendix 3) and the 2002 Haudenosaunee Protocol for Handling Discovery of Human Remains [(hereafter "2002 Haudenosaunee Protocol") Appendix 3], the FHWA, in coordination with the NYSDOT, will carry out consultation with the Onondaga Nation and the SHPO to consider measures to avoid, minimize, or mitigate effects on any intact burial site and to consider appropriate treatments for human remains or partial human remains discovered in fill material or disturbed soils. Avoidance is the preferred option to the extent practicable.
- The above-referenced timeframes for Section 106 consultation during construction will not apply
 to consultation to determine an agreed-upon course of action following the discovery of a human
 burial site or confirmed human remains.
- If requested by the Onondaga Nation, the FHWA and the NYSDOT will assist the Onondaga Nation
 in the relocation and reinterment of human remains determined or presumed to be Native
 American.

The NYSDOT will treat all information regarding the discovery of human remains as confidential and will not release information regarding the discovery or reburial of human remains to the public.

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ATTACHMENT 1: ARCHAEOLOGICAL MONITORING DURING CONSTRUCTION PROCESS

STEP 1: IDENTIFICATION	Archaeological Monitoring will be conducted during construction activities in areas identified in the approved <i>Phase IB Work Plan</i> and <i>Construction Phase Archaeological Work Plan</i> .	If no potential cultural artifacts or features exposed by construction activity, then construction will proceed. Results will be memorialized in Daily Work Reports.		If potential cultural artifacts or features exposed by construction activity, go to Step 2: Initial Inspection.	
STEP 2: INITIAL INSPECTION	If potential cultural artifacts or features exposed by construction activity, the Archaeologist will request a temporary suspension of work limited to 1 hour for each location.	identifies the potential cultural resour no potential to meet the criteria for N (NRHP) eligibility, then construction w	If the Archaeologist in coordination with the Native Nation Monitor(s) identifies the potential cultural resource to be modern or otherwise have no potential to meet the criteria for National Register of Historic Places (NRHP) eligibility, then construction will proceed. Results will be memorialized in <i>Daily Work Reports</i> .**		
STEP 3: FURTHER EVALUATION OF NRHP ELIGIBILITY	The Archaeologist may request an extension of the work stoppage to further evaluate the cultural material in coordination with the Native Nation Monitor(s). The extension may last up to, but no longer than 4 hours , not including the one hour for initial inspection.	Immediately upon completing this evaluation, the Archaeologist will notify the NYSDOT Office of Environment (OOE) with a preliminary assessment of National Register eligibility. The NYSDOT will consult with the SHPO, Onondaga Nation, and FHWA.**	If the cultural material is determined to not meet the Criteria for National Register Eligibility, then construction will proceed. Results will be memorialized in <i>Daily Work Reports</i> .	If additional investigation is required to further evaluate National Register Eligibility, go to Step 4: Additional Investigation.	
STEP 4: ADDITIONAL INVESTIGATION & NRHP ELIGIBILITY DETERMINATION	If additional investigation is required to further evaluate National Register Eligibility, sampling or recovery efforts will be limited to 8 hours for each individually identified resource. In the case of exposed canal or canal-related features, eight hours per 50 linear feet (15 meters) will be allowed.	Immediately upon completing this evaluation of the cultural material, the Archaeologist will notify the NYSDOT Office of Environment (OOE) with a preliminary assessment of NRHP eligibility. The NYSDOT will consult with the SHPO, Onondaga Nation, and FHWA. **	If the cultural material is determined to not meet the Criteria for NRHP eligibility, then NYSDOT will consult with the SHPO, Onondaga Nation, and FHWA. If parties concur, construction will proceed. Results will be memorialized in Daily Work Reports.**	If the cultural resource is determined to be NRHP eligible, go to Step 5: Consultation and Treatment Plan.	
STEP 5: CONSULTATION & TREATMENT PLAN	If the FHWA determines that the Project may have an adverse effect on a NRHP eligible archaeological resource, the FHWA, in coordination with the NYSDOT, will consult with the SHPO, and with the Onondaga Nation for Native American sites, to explore measures to avoid, minimize, or mitigate adverse effects. **	If adverse effects cannot be avoided, and it is determined through consultation that Data Recovery is an appropriate treatment, the NYSDOT will direct the Archaeologist to prepare an Archaeological Data Recovery Plan (DRP) for each affected property. Go to Step 6: Data Recovery.	If adverse effects cannot be fully avoided, and Data Recovery is not determined appropriate, the FHWA will continue consultation to determine alternate mitigation and will prepare an archaeological treatment plan for each site.	The FHWA, in coordination with NYSDOT, will distribute the treatment plan or DRP for a 15-calendar day review and comment by the SHPO, and by the Onondaga Nation for Native American sites. **	
STEP 6: DATA RECOVERY	The Archaeologist will implement Data Recovery procedures as soon as feasible upon approval of the DRP. Once initiated, the Archaeologist (in coordination with Native Nation Monitor(s) for Native American sites) will complete Data Recovery activities in accordance with the DRP.	The Archaeologist, in coordination with the Native Nation Monitor(s), will submit an EOF letter to the NYSDOT within five (5) days of the completion of Data Recovery fieldwork. The NYSDOT will provide the EOF letter to the SHPO, Onondaga Nation, and FHWA within 15 calendar days of receiving the EOF letter.	If parties concur with the findings in the EOF Letter, construction will proceed.**	As specified in the approved DRP, the Archaeologist will prepare a Phase III Data Recovery report following the resumption of construction activities.	

^{*} HUMAN REMAINS: The timeframe outlined above would not apply if the Archaeologist in coordination with the Native Nation Monitor(s) identifies the presence of human remains, or potential remains. In that case, the temporary work stoppage would last substantially longer to allow time for consultation among the SHPO, Onondaga Nation, FHWA, and NYSDOT to determine appropriate next steps.

Should any party object via electronic notification or phone to FHWA, regarding the manner in which the terms of Attachment 1 are carried out, FHWA will immediately notify the other signatory parties of the objection and proceed to consult with the objecting party to resolve the objection. FHWA will honor the request of any signatory party to participate in the consultation and will take any comments provided by such parties into account. The FHWA shall establish a reasonable time frame for such consultations.

If the objection is resolved through consultation, FHWA may authorize the disputed action to proceed in accordance with the terms of such resolution. FHWA shall take into account any comments from the other signatory parties to Attachment 1 in reaching a final decision regarding the objection. FHWA's responsibility to carry out all actions under this Agreement that are not the subjects of the objection shall remain unchanged. FHWA shall provide all other signatory parties to this Attachment with an electronic copy of its final decision regarding any objection addressed pursuant to this Attachment.

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^{**} DISPUTE RESOLUTION FOR ATTACHMENT 1: At different steps in this process there are points of consultation between NYSDOT, SHPO, Onondaga Nation, ACHP, and FHWA. Should there not be agreement between all parties at decision-making points, all parties will follow the below process for dispute resolution.

APPENDIX 6:

Coordination and Communication Protocols in Construction Protocols for Communication in Construction (Flowchart)

APPENDIX 6 COORDINATION AND COMMUNICATION PROTOCOLS IN CONSTRUCTION

The purpose of this appendix is to establish protocols for coordination and communication among the Archaeologist, Native Nation Monitor(s), Engineer in Charge (EIC), and Equipment Operator during machine-aided testing and archaeological monitoring during construction, as specified in the approved Phase IB Archaeological Survey Work Plan: Plan for Phase IB Archaeological Survey and Archaeological Monitoring during Construction Including Data Recovery, October 2017 (Phase IB Work Plan) and approved Construction Phase Archaeological Work Plan. Based on available information, the Project will be constructed under multiple construction contracts over a six-year period, with the potential for overlapping construction phases and ongoing construction activities in multiple locations at any given time.

To ensure that commitments made in the Programmatic Agreement (PA) are met, the Archaeologists and Native Nation Monitor(s) will work in cooperation with the New York State Department of Transportation (NYSDOT) and the Construction Contractor to implement effective communication protocols, both before and during construction of the Project. The NYSDOT will defer to the Onondaga Nation Designated Section 106 Representatives (Onondaga Nation) to coordinate with their designated Native Nation Monitor(s) to inform them of when the work is scheduled to begin.

Machine-Aided Testing

To the extent possible, machine-aided testing will be carried out in advance of construction and implemented in priority order based on the Project's construction phasing and anticipated schedule, with the goal of completing machine-aided testing prior to the start of construction in that area. The NYSDOT OOE will provide notification regarding construction milestones to the Archaeologist and the Onondaga Nation as the information becomes available, as specified in Stipulation IV.C. of this Agreement. Milestones may include, but are not limited to, the geographical division of construction contracts, planned progression of construction phasing, estimated timeframe for each construction contract, award of construction contracts, and construction start dates. Estimated timelines for construction will be subject to change depending on the construction start date(s) and conditions during the construction period. As the NYSDOT gains access to locations for testing, the Office of Environment (OOE) will notify the Archaeologist and the Onondaga Nation of the general location(s) of machine-aided testing two weeks in advance, with a specific location update no less than 12 hours prior to ground-breaking. The NYSDOT will defer to the Onondaga Nation to notify Native Nation Monitor(s) when the work is scheduled to begin.

If human remains (or potential human remains) are encountered during machine-aided testing, the NYSDOT OOE, in coordination with the Federal Highway Administration (FHWA), will contact the New York State Historic Preservation Office (SHPO) and the Onondaga Nation to initiate consultation in accordance with the NYSDOT Procedures in the Event of the Inadvertent Discovery of Human Remains during Construction (Appendix 3) and the 2002 Haudenosaunee Protocol for Handling Discovery of Human Remains (Appendix 3).

Communication Prior to Construction

The NYSDOT OOE will provide notification regarding construction milestones to the Archaeologist and the Onondaga Nation as the information becomes available, as specified in Stipulation IV.C. of this Agreement.

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Milestones may include, but are not limited to, the geographical division of construction contracts, planned progression of construction phasing, estimated timeframe for each construction contract, award of construction contracts, and construction start dates. Estimated timelines for construction will be subject to change depending on the construction start date(s) and conditions during the construction period.

Prior to the start of construction, the NYSDOT will implement standard practices, including holding a preconstruction meeting and an environmental preconstruction meeting to inform the Construction Contractor(s) about environmentally sensitive areas, including potential cultural resources. The Archaeologist and Native Nation Monitors will be invited to attend the meeting. Topics for discussion will include a discussion of the requirements and considerations for archaeological monitoring as described in the Section 106 Programmatic Agreement, the approved *Construction Phase Archaeological Work Plan(s)*, and construction plans and associated special notes for the Project. In addition, the preconstruction meeting will include a discussion of the communication protocol specified in the NYSDOT Standard Specifications, Section 107-01 - Laws, Rules, Regulations and Permits, D. Archeological Salvage:

"Whenever, during the course of construction, historical or prehistoric objects or human remains are encountered, such objects shall not be destroyed or moved. The Construction Contractor shall stop work to avoid disturbing such areas and notify the Engineer immediately.

The Engineer will notify the appropriate Department personnel and other authorities and arrange to have an immediate inspection of the site conducted."

At the preconstruction meeting or prior to the start of the applicable construction activities, and subject to approval by the EIC or his/her designee, the NYSDOT will provide information on the Construction Contractor's proposed schedules and methods of construction for areas identified in the *Construction Phase Archaeological Work Plan*(s). This information may include details such as the schedule, sequence of operations, materials, equipment, and excavation support systems to allow the Archaeologist to plan for implementation of the approved *Construction Phase Archaeological Work Plan*.

To facilitate scheduling for archaeological and Native Nation monitoring during construction, the NYSDOT OOE will provide notice to the Archaeologist and to the Onondaga Nation at least one week in advance of the scheduled start of construction in areas subject to archaeological monitoring. The NYSDOT will defer to the Onondaga Nation to notify Native Nation Monitor(s) when the work is scheduled to begin. Once construction is underway, the NYSDOT EIC or his/her designee or the Construction Contractor will provide weekly updates of the schedule for upcoming construction in areas identified for archaeological monitoring or Native Nation monitoring.

The Construction Contractor will review the applicable approved *Construction Phase Archaeological Work Plan* as well as the construction monitoring locations identified on the plan sheets before the start of construction at those locations.

Communication Protocols during Construction

Archaeological monitoring during construction requires the Archaeologist and Native Nation Monitors to work in close coordination with the Construction Manager, the Equipment Operator, and the EIC or his/her designee, who will have oversight of the construction site(s) and will ensure compliance with on

APPENDIX 6 Page 2 of 5

site safety protocols. Protocols for communication during construction are depicted in the attached flowchart (Attachment 2).

- The EIC or his/her designee in coordination with the Construction Contractor will notify the Archeologists and the Native Nation Monitor(s) in advance of the location and planned construction activities for the day within a timeframe and in the manner agreed upon during the preconstruction meeting. This notice may include a request to check in at the field office at a specified time. If the Archaeologists or the Native Nation Monitor(s) fail to report to the field office or other previously determined location by the time specified, the EIC or his/her designee / Construction Manager may proceed with the day's planned construction activities without the presence of the Native Nation Monitor(s), provided the EIC or his/her designee and/or the Construction Contractor have contacted the Onondaga Nation as specified herein.
- The EIC or his/her designee may direct the movement and actions of the Archaeologists and Native Nation Monitor(s) to ensure that safety standards and protocols are maintained while observing construction excavations and entering trenches to inspect potential archaeological resources.

The Archaeologist will coordinate, collaborate, and exchange views with Native Nation Monitors as part of the team, as described in this **Appendix 5: Native Nation Consultation**. The Native Nation Monitor(s) will provide input to the Archaeologist on the field identification of potential Haudenosaunee cultural artifacts, features, or potential human remains encountered and may also make recommendations for the Archaeologist to request a temporary halt in construction activities.

The Archaeologist, specifically the Principal Investigator or Crew Chief on site, will serve as the point-of-contact for coordination with the EIC or his/her designee, Construction Manager, or Equipment Operator for the purpose of communicating requests to halt or slow construction in a specific location to allow for the inspection of potential archaeological resources or cultural materials, further investigations, or documentation of identified archaeological features or sites, as outlined in the approved *Phase IB Work Plan* and approved *Construction Phase Archaeological Work Plan*. The Onondaga Nation will designate a single point-of-contact for coordination with the EIC or his/her designee, Construction Manager, or Equipment Operator for the purpose of communicating requests to halt or slow construction in a specific location to allow for the inspection of potential archaeological resources or cultural materials in areas designated only for Native Nation Monitoring.

The Crew Chief will ensure that the EIC or his/her designee is fully informed and approves any request for a temporary halt in construction, whether requested by the Archaeologist or the Native Nation Monitor(s), as per the approved Phase IB Work Plan, to allow the Archaeologist and Native Nation Monitor(s) to examine potential cultural materials and features.

The Archaeologist will clearly communicate to the EIC or his/her designee or the Construction Contractor(s) when work may resume or if further delay is anticipated pending coordination with the NYSDOT OOE for consultation with the SHPO, the Onondaga Nation, and the FHWA. At the close of business each work day, the Native Nation Monitor(s) will submit a daily work report to the Construction Contractor, the NYSDOT OOE and the Archaeologist, following a format specified in the terms of the contractual agreement for the compensation of Native Nation Monitors.

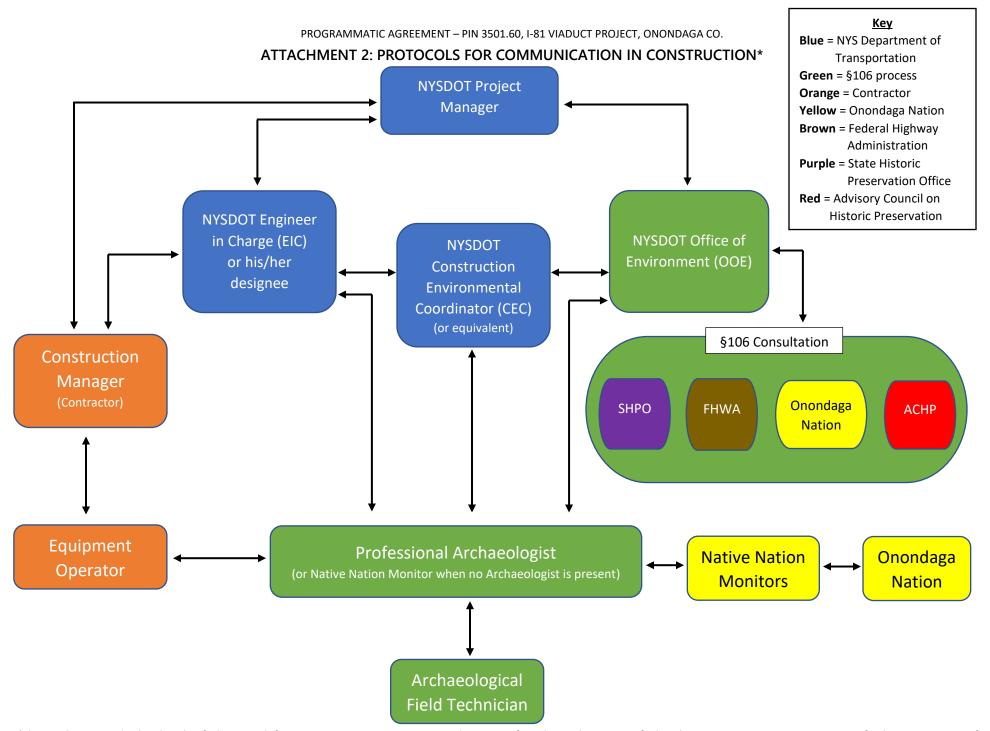
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The Archaeologist will share with the Native Nation Monitor(s) the results of archaeological monitoring at any location for which the Native Nation Monitor(s) are not present on site. The method of communication (phone, email) will be determined through mutual agreement by the Archaeologist and Native Nation Monitor(s) prior to the start of construction.

Potential Discovery of Human Remains during Construction

- The EIC or his/her designee, in coordination with the Construction Manager and Equipment Operator, will follow procedures outlined in the NYSDOT Procedures in the Event of the Inadvertent Discovery of Human Remains during Construction (Appendix 3) and the 2002 Haudenosaunee Protocol for Handling Discovery of Human Remains (Appendix 3) if human remains or potential human remains are encountered as a result of archaeological monitoring during construction. A list of names and contact information, example found in Appendix 7 of this Agreement, will be provided at the preconstruction meeting for this purpose.
- When notified of the discovery of human remains, the NYSDOT OOE, in coordination with FHWA, will contact the SHPO and the Onondaga Nation to initiate formal consultation. The NYSDOT OOE will also contact the SHPO and the Onondaga Nation in the event of an unanticipated discovery reported by the EIC or his/her designee in any location where there is no Archaeologist or Native Nation Monitor present as stipulated in Stipulation IV.B.

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^{*}This attachment was developed to identify the protocols for communication in construction as it relates to satisfying the stipulations as set forth in the Section 106 Programmatic Agreement for the Project in areas of archaeological monitoring during construction and does not necessarily represent the chain of command or employment structure.

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APPENDIX 7:

Contacts

APPENDIX 7 CONTACTS ARCHAEOLOGICAL MONITORING DURING CONSTRUCTION

NYSDOT Project Director	
Name:	
I-81 Viaduct Project, Project Director	
New York State Department of Transportation	
333 East Washington Street	
Syracuse, NY 13202	
Phone Number:	
Email Address:	
Email Address:	
NYSDOT Construction	
NYSDOT CONSTRUCTION	
Nama	Nama
Name:	Name:
Regional Construction Engineer, Region 3	Engineer in Charge, I-81 Viaduct Project
New York State Department of Transportation	New York State Department of Transportation
333 East Washington Street	333 East Washington Street
Syracuse, NY 13202	Syracuse, NY 13202
Phone Number:	Phone Number:
Email Address:	Email Address:
NYSDOT Office of Environment (OOE)	
Name:	Name:
Name:	Project Cultural Resource Coordinator
Name:	
Name:	Project Cultural Resource Coordinator Office of Environment New York State Department of Transportation
Name: Director, Office of Environment New York State Department of Transportation	Project Cultural Resource Coordinator Office of Environment
Name:	Project Cultural Resource Coordinator Office of Environment New York State Department of Transportation
Name: Director, Office of Environment New York State Department of Transportation 50 Wolf Road Albany, NY 12232	Project Cultural Resource Coordinator Office of Environment New York State Department of Transportation 50 Wolf Road
Name:	Project Cultural Resource Coordinator Office of Environment New York State Department of Transportation 50 Wolf Road Albany, NY 12232 Phone Number:
Name:	Project Cultural Resource Coordinator Office of Environment New York State Department of Transportation 50 Wolf Road Albany, NY 12232
Name:	Project Cultural Resource Coordinator Office of Environment New York State Department of Transportation 50 Wolf Road Albany, NY 12232 Phone Number: Email Address:
Name:	Project Cultural Resource Coordinator Office of Environment New York State Department of Transportation 50 Wolf Road Albany, NY 12232 Phone Number: Email Address:
Name: Director, Office of Environment New York State Department of Transportation 50 Wolf Road Albany, NY 12232 Phone Number: Email Address: NYSDOT Construction Environmental Coordinator (C	Project Cultural Resource Coordinator Office of Environment New York State Department of Transportation 50 Wolf Road Albany, NY 12232 Phone Number: Email Address:
Name:	Project Cultural Resource Coordinator Office of Environment New York State Department of Transportation 50 Wolf Road Albany, NY 12232 Phone Number: Email Address:
Name:	Project Cultural Resource Coordinator Office of Environment New York State Department of Transportation 50 Wolf Road Albany, NY 12232 Phone Number: Email Address:
Name: Director, Office of Environment New York State Department of Transportation 50 Wolf Road Albany, NY 12232 Phone Number: Email Address: NYSDOT Construction Environmental Coordinator (C Name: Construction Environmental Coordinator New York State Department of Transportation	Project Cultural Resource Coordinator Office of Environment New York State Department of Transportation 50 Wolf Road Albany, NY 12232 Phone Number: Email Address:
Name: Director, Office of Environment New York State Department of Transportation 50 Wolf Road Albany, NY 12232 Phone Number: Email Address: NYSDOT Construction Environmental Coordinator (C Name: Construction Environmental Coordinator New York State Department of Transportation 333 East Washington Street	Project Cultural Resource Coordinator Office of Environment New York State Department of Transportation 50 Wolf Road Albany, NY 12232 Phone Number: Email Address:
Name:	Project Cultural Resource Coordinator Office of Environment New York State Department of Transportation 50 Wolf Road Albany, NY 12232 Phone Number: Email Address:
Name: Director, Office of Environment New York State Department of Transportation 50 Wolf Road Albany, NY 12232 Phone Number: Email Address: NYSDOT Construction Environmental Coordinator (C Name: Construction Environmental Coordinator New York State Department of Transportation 333 East Washington Street Syracuse, NY 13202 Phone Number:	Project Cultural Resource Coordinator Office of Environment New York State Department of Transportation 50 Wolf Road Albany, NY 12232 Phone Number: Email Address:
Name:	Project Cultural Resource Coordinator Office of Environment New York State Department of Transportation 50 Wolf Road Albany, NY 12232 Phone Number: Email Address:

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Federal Highway Administration	
Name:	Name:
District Engineer	Area Engineer
Federal Highway Administration – NY Division	Federal Highway Administration – NY Division
Leo W. O'Brien Federal Building	Leo W. O'Brien Federal Building
11A Clinton Avenue, Suite 719	11A Clinton Avenue, Suite 719
Albany, NY 12207	Albany, NY 12207
Phone Number:	Phone Number:
Email Address:	Email Address:
New York State Office of Parks Recreation and Histor	ic Preservation
Name:	
Director, Technical Preservation Services Bureau	
Division for Historic Preservation	
Agency Historic Preservation Officer	
New York State Office of Parks Recreation & Historic	
Preservation	
Peebles Island State Park, PO Box 189	
Waterford, New York 12188-0189	
Phone Number:	
Email Address:	
New York State Museum	
Name:	Name:
New York State Archaeologist	Director, Research and Collections Division
Division of Research and Collections	New York State Museum
New York State Museum	3140 Cultural Education Center
3118 Cultural Education Center	Albany, New York 12230
Albany, NY 12230	Phone Number:
Phone Number:	Email Address:
Email Address:	

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Onondaga Nation	
Faithkeeper Anthony Gonyea	Joseph Heath
DYODIHWASNYE'NHA	General Counsel
Administration Building	315-475-2559
4040 Route 11	
Onondaga Nation	Name:
via-Nedrow, NY 13120	Name:Phone Number:
Phone Number:	Email Address:
Email Address:	
Law Enforcement Agency	
Onondaga County Sheriff's Office	City of Syracuse Police Department
407 S State St,	511 S. State Street
Syracuse, NY 13202	Syracuse, NY 13202
315-435-3044	315-442-5111
County Coroner	
Onondaga County Medical Examiner	
100 Elizabeth Blackwell Street	
Syracuse, New York 13210	
(315) 435-3800	
Archaeological Consultant	
Name:	
Archaeologist, I-81 Viaduct Project	
Firm:	
Address:	
Discount March 1997	
Phone Number:	
Email Address:	

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APPENDIX 8:

Sample Contract

NEW YORK STATE DEPARTMENT OF TRANSPORTATION STATE RAILROAD AGREEMENT

AGREEMENT TO REIMBURSE COSTS FOR CHANGES OF FACILITIES AND FOR ENTRY UPON LANDS

AGREEMENT NUMBER _____

This Agreement made this	by and between: The People of The State of New York
(hereinafter called "STATE"), acting by and	I through the Commissioner of Transportation (hereinafter
called "COMMISSIONER"), whose office is	the Department of Transportation Administration and
O O	Town of Colonie and County of Albany and State of New York;
and the (hereinafter called "RAILROAD").	

WHEREAS, the railroad right of way or property (hereinafter also referred to as "lands") that is the subject of this agreement is included among the property being owned or operated by the RAILROAD.

WHEREAS, the STATE, in accordance with the Highway Law, will prepare plans and specifications for the project: CLICK TO ENTER PIN; CLICK TO ENTER PROJECT DESCRIPTION,

(hereinafter called "PROJECT"), and has acquired or will acquire the necessary lands and easements therefore and intends to let a contract for the work outlined therein and will supervise the work performed under such contract, and

WHEREAS, the PROJECT will be carried across the aforesaid right-of-way of the RAILROAD in accordance with the aforesaid plans and specifications which have been heretofore approved by the RAILROAD, and the STATE has requested the RAILROAD to consent to the entry upon such lands and also to perform certain work hereinafter generally described, for the accommodation of such construction primarily.

NOW, THEREFORE, in consideration of the benefits moving to each of the parties hereto, they do mutually agree as follows:

ARTICLE 1. CONSENT TO ENTRY UPON LANDS. The RAILROAD does hereby authorize and consent to the entry by the STATE, its representatives and contractors, upon the RAILROAD's lands and premises shown on the plans referred to above for the purpose of performing all necessary work in connection with the construction of the PROJECT by the STATE and described in said plans and specifications heretofore mentioned, which plans and specifications are hereby made a part of this Agreement by reference. This consent to enter shall be coterminous with the aforementioned highway contract.

ARTICLE 2. CONTRACT WORK. The STATE agrees that the construction shall be carried on with due regard to the protection and maintenance of the property, traffic and operations of the RAILROAD, and in such a manner as to cause no damage to, or unreasonable interference with such traffic or operations.

ARTICLE 3. DESCRIPTION OF WORK. The RAILROAD agrees to make necessary changes in its railroad and railroad facilities to the extent required for the construction of the PROJECT and to construct and provide such additional facilities as may be needed in connection with the maintenance and protection of railroad traffic during such changes in its railroad and the construction of said PROJECT. The RAILROAD further agrees to coordinate its said work with that of the Contractor of the STATE and to cooperate with said Contractor.

ARTICLE 4. REIMBURSEMENT. The STATE agrees to pay or to reimburse the RAILROAD for the

entire cost of any work performed, including the cost of preliminary and construction engineering as well as for facilities provided by the RAILROAD and the premiums of any and all insurance policies provided by the RAILROAD under the Agreement in connection with said construction work, pursuant to the provisions of the Federal-Aid Policy Guide, Title 23, Code of Federal Regulations (CFR) Part 140, Subpart I, (Reimbursement for Railroad Work), and amendments thereto. It is intended by the parties hereto that by this reference to said reimbursement procedure and amendments it is agreed that the provisions thereof are deemed to be included herein and are accepted as binding upon the said parties to the same extent and with the same force and effect as if such documents had been set forth in and made a part of this Agreement.

The RAILROAD shall submit to the STATE evidence of fair and reasonable costs of the aforesaid work performed or facilities provided by the RAILROAD, less the value of materials recovered, as evidence by detailed invoices acceptable to the STATE. The STATE shall reimburse the RAILROAD in the amount of the approved costs so submitted in accordance with Article Eleven-A of the State Finance Law, but in no event shall the cost to the STATE of said work performed and facilities provided and of the liability insurance policy or policies provided by the RAILROAD exceed the sum of \$ /100 DOLLARS specified in the estimate submitted to the STATE by the RAILROAD and made a part hereof except as such sum may hereafter be increased pursuant to an amended agreement or Agreements. All costs so submitted by the RAILROAD shall be subject to the approval of the STATE and to audit by the Comptroller of the State of New York. Reimbursement therefore by the STATE to the RAILROAD will be made for monthly periods as to the work performed or facilities provided by the RAILROAD in accordance with approved certificates showing the cost of the work so performed or facilities provided up to and including the last day of the previous month. Upon the completion of all said work by the RAILROAD pursuant to this Agreement, a final statement of costs shall be submitted to the STATE within one hundred eighty (180) days. Upon the receipt of the final statement of costs by the COMMISSIONER, the COMMISSIONER will conduct an audit of the RAILROAD's project account records within one hundred eighty (180) days to determine the resources applied or used by the RAILROAD in fulfilling the terms of this Agreement. Upon the completion of said audit and concurrence by the RAILROAD, the final reimbursement payment will be made to the RAILROAD.

On projects financed in whole or in part with Federal funds, and in recognition of the participation by the Federal Government in the costs to the STATE of this PROJECT, the RAILROAD shall keep and retain cost records and accounts so that they will be available for audit by authorized representatives of the Federal Highway Administration. The RAILROAD does further agree that on or before the date of it's final billing pursuant to this Agreement, it will notify the COMMISSIONER in writing of the location where such cost records and accounts will be available for the Government, all in accordance with Title 23, CFR Part 140, Subpart I of the U.S. Department of Transportation Federal-Aid Policy Guide and amendments thereto.

ARTICLE 4(a). AGREEMENT PAYMENTS. The RAILROAD shall provide complete and accurate billing invoices to the Agency in order to receive payment. Billing invoices submitted to the Agency must contain all information and supporting documentation required by the Agreement, the Agency and the State Comptroller. Payment for invoices submitted by the RAILROAD shall only be rendered electronically unless payment by paper check is expressly authorized by the Commissioner, in the Commissioner's sole discretion, due to extenuating circumstances. Such electronic payment shall be made in accordance with ordinary State procedures and practices. The RAILROAD shall comply with the State Comptroller's procedures to authorize electronic payments. Authorization forms are available at the State Comptroller's website at www.osc.ny.gov/epay/index/htm, by e-mail at epunit@osc.ny.gov, or by telephone at 518-474-4032. The RAILROAD acknowledges that it will not receive payment on any invoices submitted under this Contract if it does not comply with the State Comptroller's electronic payment procedures, except where the Commissioner has expressly authorized payment by paper check as set forth above.

ARTICLE 5. FUNDS AVAILABLE. This contract shall be deemed executory only to the extent of money available to the STATE for the performance of the terms hereof and no liability on account thereof shall be incurred by the State of New York or the RAILROAD beyond moneys available for the purpose thereof.

ARTICLE 6. EFFECTIVE DATE OF AGREEMENT. This Agreement shall take effect on the **CHOOSE DATE.**

ARTICLE 7. TERMINATION OF AGREEMENT. The STATE will obtain the RAILROAD's written acceptance of all contract work in connection with this PROJECT prior to releasing the STATE'S contractor from his contractual obligations.

The STATE reserves the right to terminate or suspend this Agreement, for any reason whatsoever. Such right of termination or suspension shall be exercised at the discretion of COMMISSIONER, by delivery of written notice thereof to the RAILROAD, and such termination or suspension shall thereupon take effect immediately.

However, nothing in this Agreement or in this Article 7 shall relieve the STATE of its obligation to reimburse the RAILROAD for costs and expenses which the RAILROAD has incurred or committed itself to under the terms or for the purposes of this Agreement prior to such termination or suspension.

Should no other action be required, this Agreement shall be considered terminated on such date as the RAILROAD receives the final reimbursement payment from the STATE for its final statement or costs submitted in accordance with Article 4 hereof.

ARTICLE 8. **DIVISION OF MAINTENANCE.** Upon the completion and acceptance by the STATE of the contract work as indicated on the plans.

The Maintenance responsibility shall remain as is currently in effect.

Before entering upon the property of the RAILROAD to perform any maintenance, the STATE shall give due notice to the Chief Engineer of the RAILROAD.

ARTICLE 9. RESPONSIBILITY. In addition to the protection afforded to the STATE under any available insurance, the STATE shall not be liable for any damage or injury to the RAILROAD, its agents, employees, or to any other person, or to any property, occurring on the site or in any way associated with the RAILROAD's work, activities or operations pursuant to this agreement, whether undertaken by RAILROAD's own forces or by contractors or other agents working on the RAILROAD's behalf. To the fullest extent permitted by law, the RAILROAD agrees to defend, indemnify and hold harmless the STATE, the New York State Department of Transportation, the STATE's Contractor, and their agents from and against all claims, damages, losses and expenses, including but not limited to, claims for personal injuries, property damage, wrongful death, and/or environmental claims and attorney fees arising out of any such claim, that are in any way associated with the RAILROAD's, work, activities or operations pursuant to this agreement.

ARTICLE 10. INSURANCE REQUIREMENTS. The STATE agrees that as a condition of being provided access to the PROJECT location, that insurance shall be procured, including a Railroad Protective Liability Insurance policy issued to the RAILROAD, which shall be in accordance with U.S. Department of Transportation Federal-Aid Policy Guide, and any amendments thereto with limits as shown in Title 23, CFR Section 646.107.

In addition, STATE shall require its contractor to furnish the kinds and amounts of insurance, as follows:

- 1. Commercial General Liability Insurance: Each and every party performing work in connection with the PROJECT described herein shall be required to be insured under a policy of insurance. Such contractor or contractors shall maintain an occurrence form commercial general liability policy or policies insuring against liability arising from personal injury or death, advertising injury, liability insured under an insured contract (including the tort liability of another assumed in a business contract) occurring on or in any way related to the premises or occasioned by reason of the operations of the primary named insured. Such coverage shall be written on an ISO occurrence form (ISO Form CG 00 01 12 07 or a policy form providing equivalent coverage), including any excess liability insurance providing coverage in an amount of five million dollars (\$5,000,000.00) per occurrence and five million dollars (\$5,000,000.00) aggregate. Aggregate coverage must be secured on a per-project basis. This insurance must be endorsed to provide coverage to "the RAILROAD, the State of New York/New York State Department of Transportation, any municipality in which the event is conducted, and any governmental entity whose facilities are affected by the event, and any of their employees or agents working for or on the facility," using ISO form CG 20 10 07 04 or a form that provides equivalent coverage.
- 2. Protective Liability Insurance: In the event that work is to be performed exclusively by RAILROAD, the CGL requirement referenced, above, may take the form of Railroad Protective Liability (RRPL) insurance or self-insurance. In the event that one or more contractors are to be utilized for the PROJECT, then the primary contractor shall secure an RRPL policy in the name of RAILROAD providing coverage in an amount of two million dollars (\$2,000,000.00) per occurrence and not less than six million dollars (\$6,000,000.00) aggregate.
- 3. Workers' Compensation and Disability Insurance and Employers' Liability Insurance. As required by State Finance Law §142, any Contractor working on the PROJECT shall maintain in force workers' compensation insurance for all of Contractor's employees. Contractors shall also maintain disability insurance as required by the Disability Benefits Law of the State of New York.
- 4. Automobile Insurance (applicable where automobiles or other vehicles will be used in relation to the event). Contractor(s) shall maintain a commercial or other automobile policy or policies insuring against liability for bodily injury, death, or damage to property and other mandatory coverages, relating to the use, operation, loading or unloading of any automobiles (including owned, hired and non-owned vehicles) on and around the project. Coverage shall be in an amount of not less than one million dollars (\$1,000,000.00), each accident.

As required by State Finance Law Section 142 and Workers' Compensation Law Section 57, RAILROAD is required shall furnish proof that there is <u>Workers' Compensation and Disability Insurance</u> and Employers' Liability Insurance in force for all of RAILROAD's employees. RAILROAD shall also maintain disability insurance as required by the Disability Benefits Law of the State of New York. RAILROAD shall provide evidence of the required coverage or exemption where appropriate (usually Form C-105.2 and Form DB-120.1). RAILROAD may furnish proof of coverage under the Federal Employers Liability Act and similar statutes for the protection of employers for injuries to or death of employees engaged in the work.

ARTICLE 11. ASSIGNMENT OF AGREEMENT. The RAILROAD agrees not to assign, transfer, convey, sublet or otherwise dispose of this Agreement or any part thereof, or of its right, title or interest therein or its power to execute such Agreement, to any person, RAILROAD or corporation without the previous consent in writing of the COMMISSIONER, unless a transfer of its entire property and assets is made. In case the RAILROAD shall, with the consent of the STATE, make contracts for any part of the work or facilities covered by this Agreement, the terms of said contracts shall be subject to the approval of the STATE. The RAILROAD shall pay its contractors in accordance with the terms of such contracts and the STATE agrees to reimburse the RAILROAD for the cost thereof.

ARTICLE 12. STARTING OF WORK. The RAILROAD agrees to start the work covered by this Agreement only after the COMMISSIONER or his authorized representative has notified the Chief Engineer of the RAILROAD in writing that it may proceed.

ARTICLE 13. REQUIRED STATE AND FEDERAL CONTRACT CLAUSES. During the performance of this contract, the RAILROAD agrees to comply with all applicable Federal and State required contract provisions which appear as Appendix A (Standard Clauses for New York State Contracts), A-1 (Supplemental Title VI Provisions from Civil Rights Act), Appendix B (Required Contract Provisions for federal-Aid Construction Contracts) respectively and are hereby made a part of this Agreement.

With respect to Appendix A, the STATE and the RAILROAD understand and agree that the hours of labor of the RAILROAD's employees are governed exclusively by the Federal Hours of Service Act, 35 Stat. 1415 (1907), as amended, and that the prevailing rate of wages for the RAILROAD's employees shall be that rate determined by the RAILROAD. The RAILROAD and the STATE further understand and agree that if the RAILROAD subcontracts with a third party not engaged in interstate commerce to perform an obligation of this Agreement, the above-mentioned sections will apply to the subcontractor. These understandings are essential to this Agreement, and any subsequent legislation, judicial or administrative decisions, or opinions of the State Attorney General inconsistent with these understandings, shall relieve both parties of their obligations, hereunder until a mutually acceptable substitute understanding is reached. In the event that no mutually acceptable substitute understanding is reached, then either party may terminate the Agreement.

To the extent that this agreement calls for RAILROAD to provide materials, as provided in Appendices, RAILROAD will provide materials from existing inventories. The STATE and RAILROAD understand and agree that to the extent RAILROAD is required to procure additional materials for completion of the PROJECT, RAILROAD will do so in accordance with the Appendices.

ARTICLE 14. NOTICES. All notices permitted or required hereunder shall be in writing and shall be transmitted either:

(a) via certified or registered United States mail, return receipt requested;

1. Such notices shall be addressed as follows or to such different addresses as the parties may from time-

- (b) by facsimile transmission;
- (c) by personal delivery;
- (d) by expedited delivery service; or
- (e) by e-mail.

_			

- 2. Any such notice shall be deemed to have been given either at the time of personal delivery or, in the case of expedited delivery service or certified or registered United States mail, as of the date of first attempted delivery at the address and in the manner provided herein, or in the case of facsimile transmission or email, upon receipt.
- 3. The parties may, from time to time, specify any new or different address in the United States as their address for purpose of receiving notice under this Agreement by giving fifteen (15) days written notice to the other party sent in accordance herewith. The parties agree to mutually designate individuals as their respective representatives for the purposes of receiving notices under this Agreement. Additional

individuals may be designated in writing by the parties for purposes of implementation and administration/billing, resolving issues and problems and/or for dispute resolution.

IN WITNESS WHEREOF, the STATE has caused this Agreement to be signed by the Commissioner of Transportation, and the RAILROAD has caused these presents to be signed by its duly authorized officer on the day and year first above written:

If any clause, sentence, subdivision, paragraph, section or part of the contract be adjudged by any court of competent jurisdiction to be invalid, such judgment shall not affect, impair or invalidate the remainder thereof, but shall be confined in its operation to the clause, sentence, subdivision, paragraph, section or part thereof directly involved in the controversy in which such judgment shall have been rendered.

This Agreement is based on the	ne RAILROAD's force account estimate dated		
in the amount of		and	/100
DOLLARS (\$	_) and is valid through CHOOSE DATE.		

CLICK TO ENTER PIN

AGREEMENT NUMBER _____

NYSDOT Certification

"In addition to the acceptance of this contract, I also certify that original copies of this signature page will be attached to all other exact copies of this contract."

THE PEOPLE OF THE STATE OF NEW YORK (L.S.)

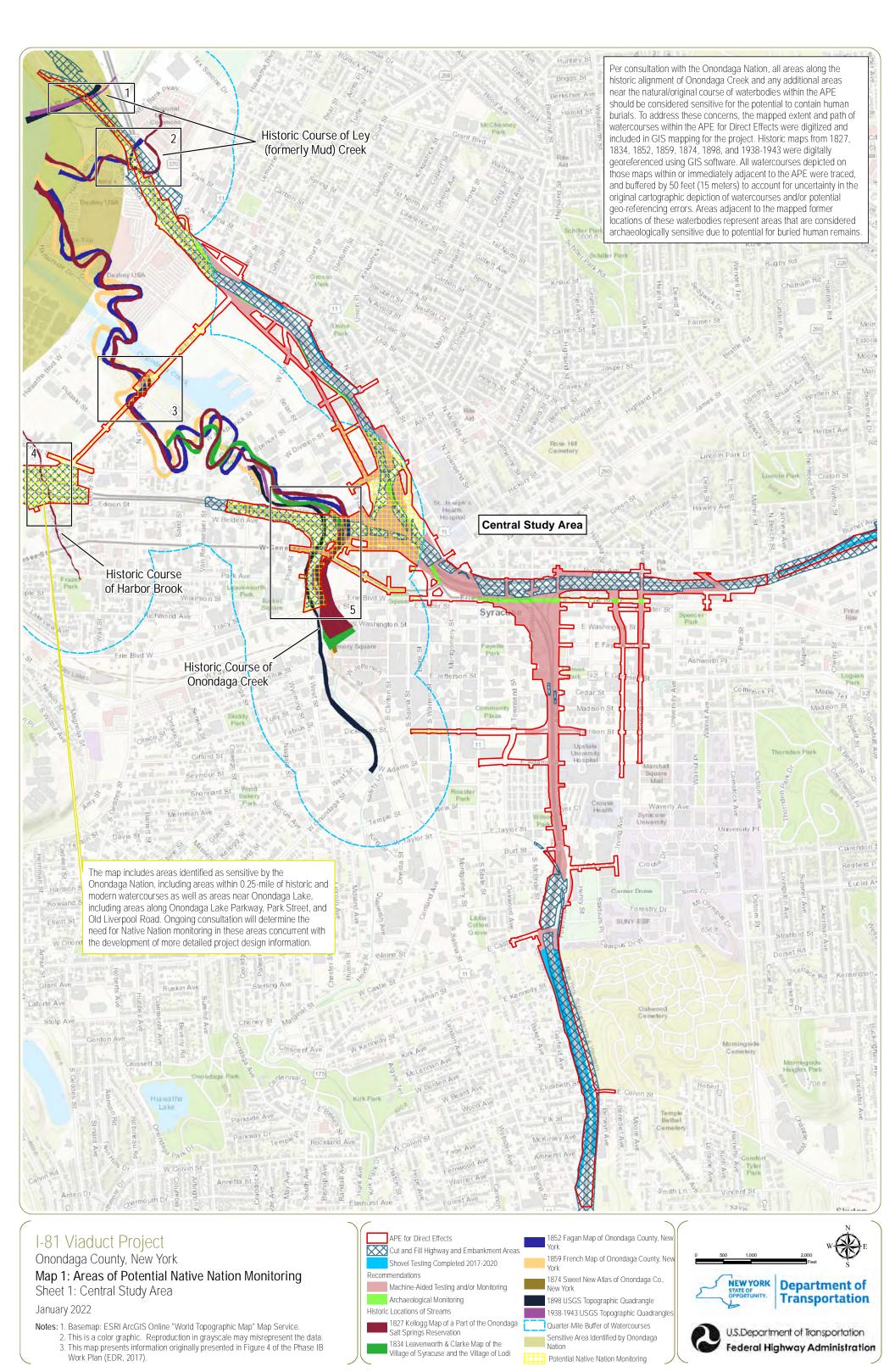
		for: Commissioner of Trans	sportation	Date
	Ву:			
	Titl	e:		
The following acknowledgmen	t to be completed b	y the RAILROAD		
STATE OF)			
COUNTY OF) S)	S:		
On this	day of	, 20	_, before me pe	rsonally came
			to me kno	own to be the
	of			
	01			
the corporation described in ar	nd which executed	the foregoing instrument:	acknowledged to	
the corporation described in ar executed the same pursuant to	nd which executed authorization by the executed by the execute	the foregoing instrument: the Board of Directors of sa	acknowledged to aid corporation.	me that (s)h
the corporation described in ar executed the same pursuant to	nd which executed a authorization by the executed by authorization by the executed by the exec	the foregoing instrument: and the Board of Directors of sa	acknowledged to	me that (s)ho

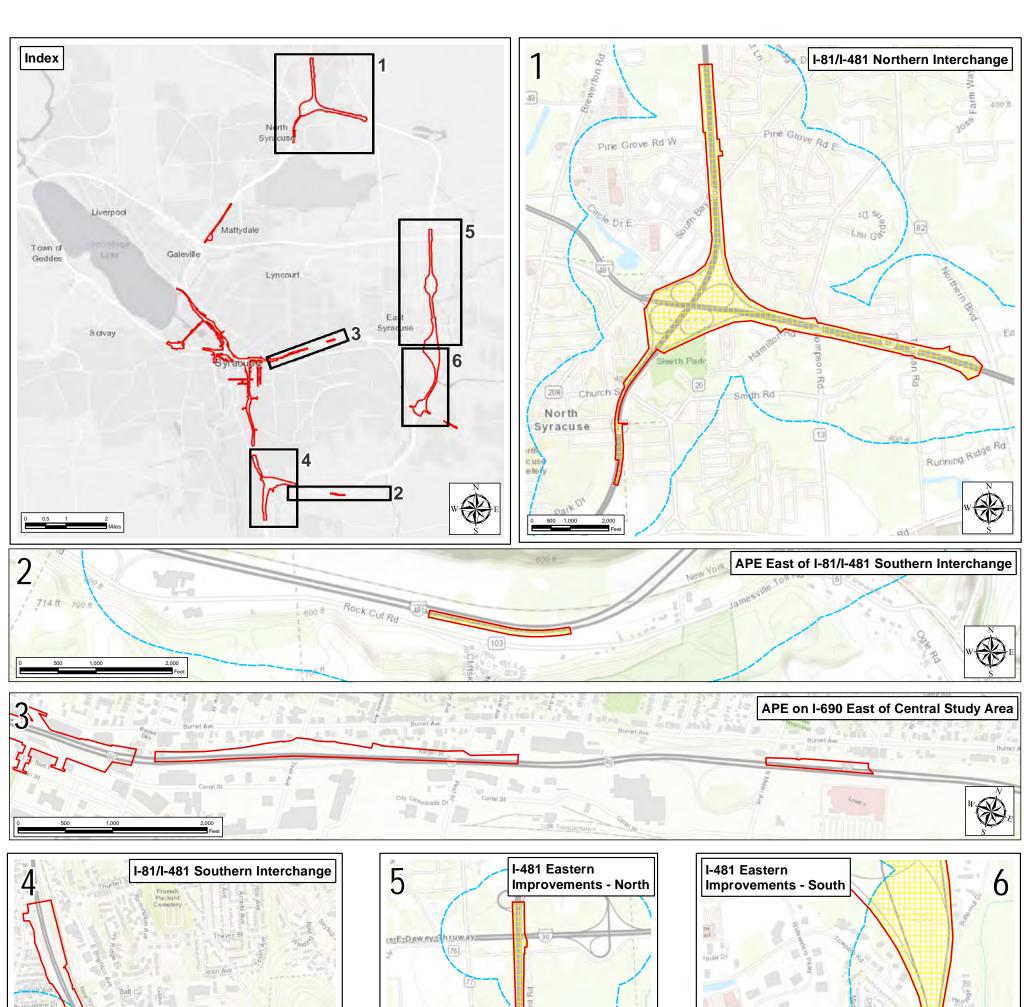
Not Applicable to agreements in amounts of \$50,000.00 or less Not Applicable to agreements in amounts of \$50,000.00 or less

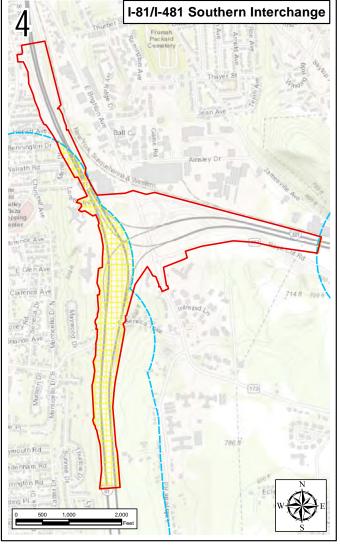
Eff. April 10, 2006, per NY Finance L. Section 112(2)(a), the "T" contract limit was raised from \$15,000.00 to \$50,000.00 or less {Ref: Comptroller's Bulletin #G - 225, d. 4/26/06}

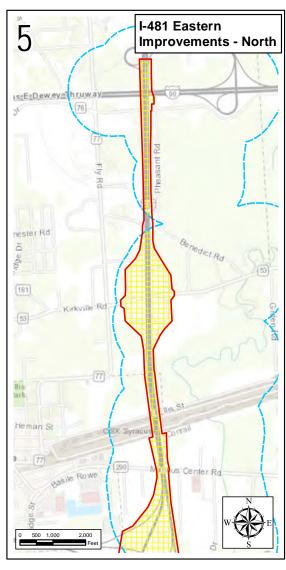
APPENDIX 9:

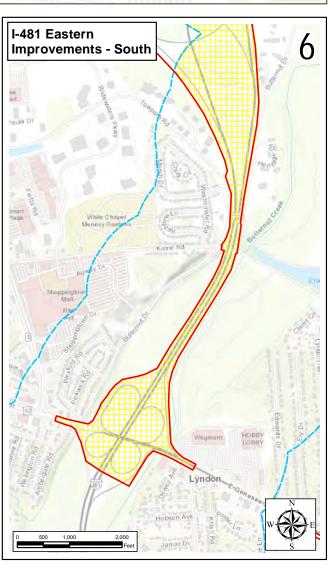
Areas of Potential Native Nation Monitoring (Map 1, Sheets 1 and 2)
Focus Map - Areas of Potential Native Nation Monitoring (Map 2, Sheets 1 and 2)
Typical Road Section and Associated Definitions











I-81 Viaduct Project Onondaga County, New York

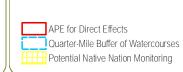
Map 2: Focus Map - Areas of Potential Native Nation Monitoring

Sheet 2: Additional Areas

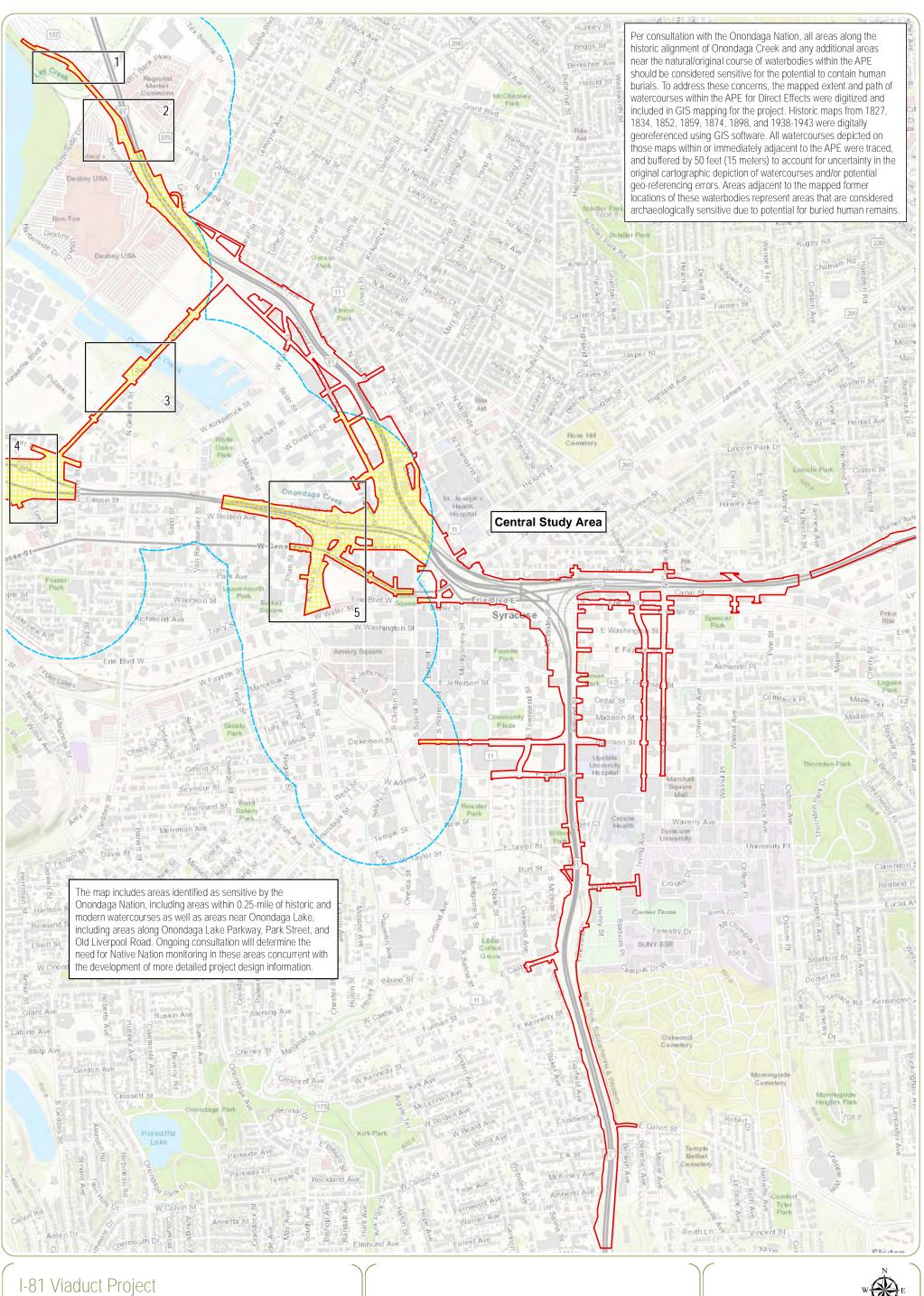
Notes: 1. Basemap: ESRI ArcGIS Online "World Topographic Map" Map Service.

 This is a color graphic. Reproduction in grayscale may misrepresent the data.
 This map presents information originally presented in Figure 4 of the Phase IB.

 (FB) 2017 Work Plan (EDR, 2017).







Onondaga County, New York

Map 2: Focus Map - Areas of Potential Native Nation Monitoring

Sheet 1: Central Study Area

Notes: 1. Basemap: ESRI ArcGIS Online "World Topographic Map" Map Service.

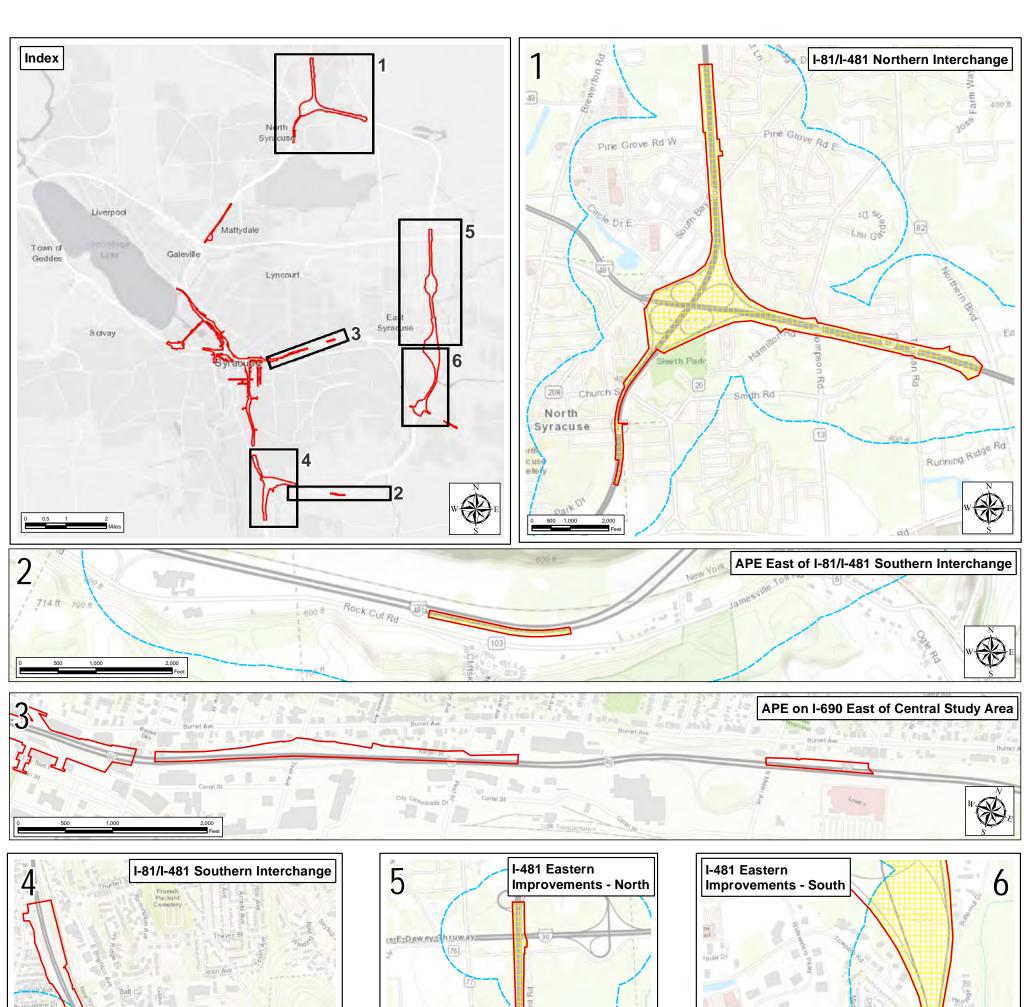
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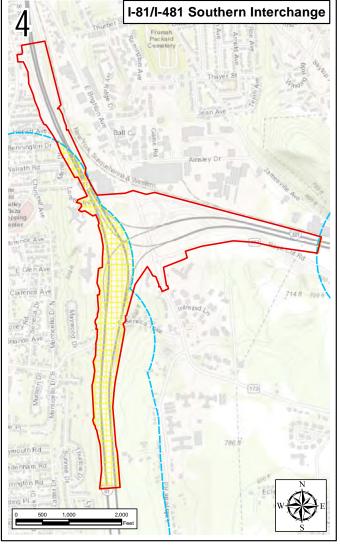
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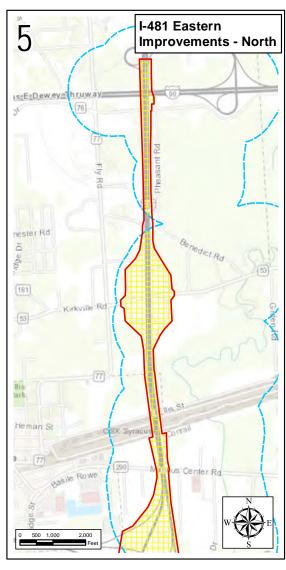


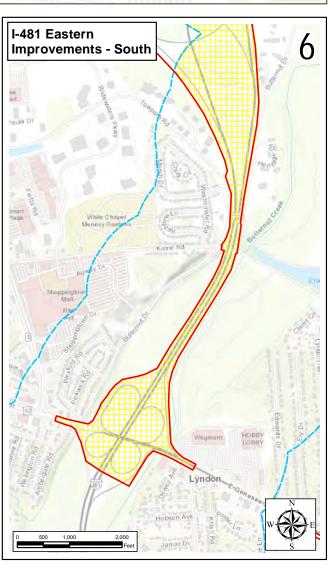


February 2022









I-81 Viaduct Project Onondaga County, New York

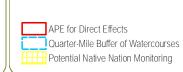
Map 2: Focus Map - Areas of Potential Native Nation Monitoring

Sheet 2: Additional Areas

Notes: 1. Basemap: ESRI ArcGIS Online "World Topographic Map" Map Service.

 This is a color graphic. Reproduction in grayscale may misrepresent the data.
 This map presents information originally presented in Figure 4 of the Phase IB.

 (FB) 2017 Work Plan (EDR, 2017).





PAVEMENT STRUCTURE EMBANKMENT SIDE-SLOPE AREA TYPICAL EMBANKMENT SECTION SHOULDER SHOULDER -TREATMENT EMBANKMENT-FOUNDATION FLEXIBLE PAVEMENT TOP COURSE-BINDER COURSE-ROADBED LIMITS TRAVELED WAY ROAD SECTION RDADWAY RIGID PAVEMENT PCCP--SUB-GRADE SURFACE -SHOULDER SHOULDER -TREATMENT TYPICAL CUT SECTION PAVEMENT STRUCTURE

APPENDIX 9
TYPICAL ROAD SECTION AND ASSOCIATED DEFINITIONS

APPENDIX 9 Page 5 of 6

AS DEFINED IN THE NYSDOT STANDARD SPECIFICATIONS, SECTION 101-02 DEFINITIONS OF TERMS:

Fill is the material used under the highway to raise the elevation of the roadway.

Foundation Course refers to the subbase and subgrade materials that support the asphalt or concrete surface layers.

Inlay refers to placing an asphalt paving course on top of a milled surface area, which fills holes and levels the pavement.

Material means any approved material acceptable to the Commissioner and conforming to the requirements of the specifications.

Pavement Structure is the combination of subbase, base course and surface course(s) placed on a subgrade to support the traffic load and distribute it to the roadbed.

Plans are the official contract drawings and applicable standard sheets, which show the location, character, dimensions and details of the work to performed.

Road Section is that portion of a highway included between the top of the slope in cut and the bottom of slope in fill.

Roadbed means the graded portions of a highway within top and side slopes, prepared as a foundation for the pavement structure and shoulders.

Shoulder means the portion of the roadway contiguous with the traveled way for accommodation of stopped vehicles, for emergency use, and for lateral support of base and surface courses.

Structures include bridges, culverts, retaining walls, cribbing, manholes, drainage structures, end walls, buildings, sewers, service pipes, underdrains, foundation drains and other features which may be encountered in the work and not otherwise classed herein.

Subbase is the layer or layers of specified or selected material of designed thickness placed on a subgrade to support a base course.

Subgrade means the existing material to remain, or embankment material which is below the pavement structure.

Tolerance Zone, when used in reference to an underground utility, shall be a distance of 2 feet on either side of the designated centerline, plus one-half of the utility diameter, if the utility diameter is known.

APPENDIX 9 Page 6 of 6