

April 29, 2022

Josalyn Ferguson, Ph.D. Scientist Archaeology New York State Parks, Recreation, and Historic Preservation Peebles Island State Park, P.O. Box 189 Waterford, NY 12188

Re: OPRHP 21PR02923

Robert J. Stansky Memorial Complex Project – Development of 2 New Baseball Fields, 2885 Clinton Street, Town of West Seneca, Erie County, New York Construction Monitoring Plan for Locus 3 (USN 02925.000562)

Dear Dr. Ferguson:

Tetra Tech, Inc. (Tetra Tech) has recently been contracted by Canisius High School (Canisius) to provide archaeological monitoring while construction activities take place within Locus 3 of USN 02925.000562 (Canisius Site). Construction activities are part of the proposed Robert J. Stansky Memorial Complex Project – Development of 2 New Baseball Fields (Project). The Project is located at 2885 Clinton Street, Town of West Seneca, Erie County. Archaeological monitoring at Locus 3 is the culmination of Phase I archaeological survey, Phase II archaeological site evaluations, and subsequent selected mechanical stripping that took place across the portion of Locus 3 / USN 02925.000562 (Canisius Site) located outside the Avoidance Area. The Avoidance Area, as determined by Phase II site evaluations, is a 13,552 ft² area within Locus 3 that will continue to be avoided. Short and long-term avoidance/protection plans for the Avoidance Area will be submitted under separate file. Attachment A includes Project location maps and a Locus 3 site map showing the Avoidance Area.

In consultation with the New York State Historic Preservation Office (NY SHPO) of the Office of Parks, Recreation, and Historic Preservation (OPRHP), the NYS Department of Environmental Conservation (DEC), Seneca Nation of Indians, and Tonawanda Seneca Nation archaeological monitoring was requested while construction activities are carried out within Locus 3 (USN 02925.000562). Tetra Tech's work plan for performance of the requested archaeological monitoring is described below.

#### ARCHAEOLOGICAL MONITORING DURING CONSTRUCTION

Tetra Tech has assembled a team for this Project with the professional capabilities and expertise to design and implement any required archaeological investigations. The Project team includes Robert Peltier, M.A. (Project Manager) and Robert Hanley, M.A. (Principal Investigator). Both archaeologists meet OPRHP standards for consulting archaeologists as well as the Secretary of Interior's Professional Qualifications Standards (48 FR 44738-9). Archaeological investigations carried out for the Project have been, and will continue to be, conducted in compliance with the National Historic Preservation Act of 1966, as amended; Executive Order 11593; the regulations of the Advisory Council on Historic Preservation (36 Code of Federal Regulations 800); Section 14.09 of the New York State Parks, Recreation and Historic Preservation Law of 1980; and the New York Archaeological Council's Standards for Cultural Resource Investigations and Curation of Collections (1994).



Archaeological monitoring is done in an archaeologically sensitive area or in a location with known archaeological deposits to prevent disturbance of unkown archaeological features during construction. Tetra Tech will perform archaeological monitoring during all soil disturbing activities carried out for the Project within Locus 3 (USN 02925.000562 / Canisius Site). All findings of the archaeological monitoring will be reported to the OPRHP, DEC, the Seneca Nation of Indians, and the Tonawanda Seneca Nation.

Fencing will be established and remain around the Avoidance Area until construction is completed. The Avoided Area will be labeled "ENVIRONMENTALLY SENSITIVE – NO ACCESS" on all construction plans.

Tetra Tech archaeologists will closely observe all excavation/construction activities in Locus 3. Tetra Tech archaeologists will coordinate with Canisius and will be present on the Project site according to an agreed upon schedule until it is determined that construction activities are completed within Locus 3. The involved Indigenous Nations are invited to observe the archaeological construction monitoring and will be given at minimum one (1) week notice and be provided with a daily/weekly schedule as appropriate.

The archaeologist will advise all project contractors to be on the alert for evidence of the presence of the potential archaeological resources, of how to identify the evidence of the potential archaeological resources, and of the appropriate protocol in the event of apparent discovery of an archaeological resource. Tetra Tech archaeologists and contractors will be aware that potential archaeological resources may include subsurface indigenous features such as post molds, hearths, storage pits, burial shafts, human remains, foundations associated with the Buffalo Creek Reservation, etc. Prior to construction, Tetra Tech archaeologists will discuss with construction personnel the overall archaeological sensitivity of Locus 3, the potential for construction activities to impact Indigenous burials and significant cultural features, and the goals of the archaeological monitoring at Locus 3. Should a work stoppage be required, Tetra Tech archaeologists will guide the excavator-operator using standard hand signals for construction sites (Attachment B).

If a subsurface archaeological feature is encountered, the Tetra Tech archaeologist will stop all excavation/construction activity in the vicinity of the find until the feature is evaluated.

#### **FEATURE ANALYSIS**

It can be expected that subsurface features may contain dateable organic materials, as well as additional diagnostic artifacts. If subsurface cultural features exist, Tetra Tech will determine the function of these features and the activities they reflect (i.e., food processing and consumption, storage, structures, etc.). The recovery of faunal and floral remains will be essential for the interpretation of subsistence practices and seasonality. Therefore, flotation samples and, when possible, radiocarbon samples will be taken from the feature. Faunal analysis will be directed toward addressing questions related to subsistence patterns, site seasonality, and activity areas for the indigenous component, as well as identifying foodways and how they relate to changes in landscape, lifeways, and consumption habits at the site. Counts and weights of identified faunal remains can be used to calculate the minimum number of individuals and reconstruct the diet. Analysis of botanical remains recovered from feature contexts should reveal the utilization of specific plant resources. Analysis of this data be extrapolated into further understanding and refining models of indigenous settlement and subsistence in western New York and the Niagara frontier region.

Identified subsurface cultural features may also require indigenous pottery and/or lithic analyses. As with previous investigations carried out at the site, the analysis of lithic debitage and tools recovered from potential features will focus primarily on two variabilities – lithic reduction technology and raw material management and procurement strategies. Lithic reduction analysis will focus on stone tool manufacturing technologies through debitage and tool analyses as it relates to overall site function. Additionally, the type of raw materials present within the assemblage, the presence of specific tool forms, and the proximity of



the raw material source can suggest models of mobility and lithic management. The analysis of these strategies can contribute to interpretation of site function and subsistence strategies within the region. If identified, analysis of indigenous ceramics will include descriptions in terms of sherd attributes, including metric variables (sherd length, width, and thickness) and qualitative characteristics (location on the vessel [i.e., rim sherd vs. body sherd]; type of temper; and a description of decoration and/or surface treatment). Some attributes of pottery, such as method of decoration, vessel form, and surface treatments can provide information concerning the general age of a vessel. Lithic and ceramic analysis will be conducted following principals, techniques, and goals such as those presented in Andrefsky (2001; 2005), Engelbrecht (1980), and Rice (1987).

All subsurface cultural features encountered during monitoring will be plotted with a GPS (sub-meter accuracy) and mapped according to their location in relation to the site grid. Features will be bisected and half the feature will be collected for flotation, while the other half will be excavated by strata inherent to the feature or, if un-stratified, in arbitrary 5.0-cm levels and screened through 1/4-inch hardware screen. The profile will be mapped and photographed. Upon consultation with the OPRHP, soil samples will be forwarded to Tetra Tech's archaeobotanical consultant Justine McKnight for flotation and analysis of plant macro-remains and taxonomic identification of all recovered botanical and carbon samples. Floral analysis will be directed toward defining the floristic environment, subsistence patterns, site seasonality, and activity areas at the site. Floral analysis will include the distribution, counts and weights or relative densities (as appropriate), and the ubiquity of the recovered floral remains.

If present, charcoal or other organic samples will be collected for radiocarbon dating. Once obtained, the appropriate number and locations of such samples will be determined in consultation with the OPRHP for submittal for radiocarbon analysis. Carbon samples will be sent to Beta-Analytic, Inc. (Coral Gables, Florida) for radiometric dating. Samples too small for standard C-14 methods will be submitted for accelerator mass spectrometry dating. Radiocarbon dating results will refine the site's chronology.

In the event that human remains are encountered during monitoring, Tetra Tech will follow the OPRHP's Human Remains Discovery Protocol as well as the Haudenosaunee Human Remains Discovery Protocol, both included in Attachment C (Human Remains Discovery Protocol). Tetra Tech will also contact subconsultant bioarchaeologist Elizabeth Smith, M.S. (SUNY UB) in the event faunal or human remains are discovered. Resumes of key personnel are included in Attachment D.

#### **ANALYSIS AND REPORTING**

Results of the archaeological monitoring will be submitted to the OPRHP within three (3) months of the completion of construction and monitoring. Should feature analysis be required, these results will be included, along with the results of the recent mechanical stripping, in the revised/finalized Phase II Archaeological Site Evaluations report. As previously determined by agency review, the final Phase II Archaeological Site Evaluations report will be submitted to the OPRHP no later than six (6) months (October 2022).

If you have any questions, please feel free to contact me by telephone 716-510-9115 or by e-mail at <a href="mailto:rob.peltier@tetratech.com">rob.peltier@tetratech.com</a>. We are looking forward to working with everyone on this project.

Sincerely, Tetra Tech, Inc.

Robert J. Peltier



#### Cultural Resources Project Manager

Attachment A: Project Location on USGS Topographic Map and on Recent Aerial

Attachment B: Protocols for Consultation and Communication in the Field

Attachment C: OPRHP and Haudenosaunee Human Remains Discovery Protocol

Attachment D: Resumes of Key Personnel

#### **REFERENCES**

Andrefsky, William Jr.

2001 Lithic Debitage: Context, Form, Meaning, Second Edition. University of Utah Press, Salt Lake Citv.

2005 Lithics: Macroscopic Approaches to Analysis, Second Edition. Cambridge University Press, New York.

#### Engelbrecht, William

1980 "Methods and Aims of Ceramic Description." In *Proceedings of the 1979 Iroquois Pottery Conference*, edited by Charles F. Hayes, pp. 27-29. Research Records No. 13. Rochester Museum and Science Center, Rochester, NY.

#### New York Archaeological Council (NYAC)

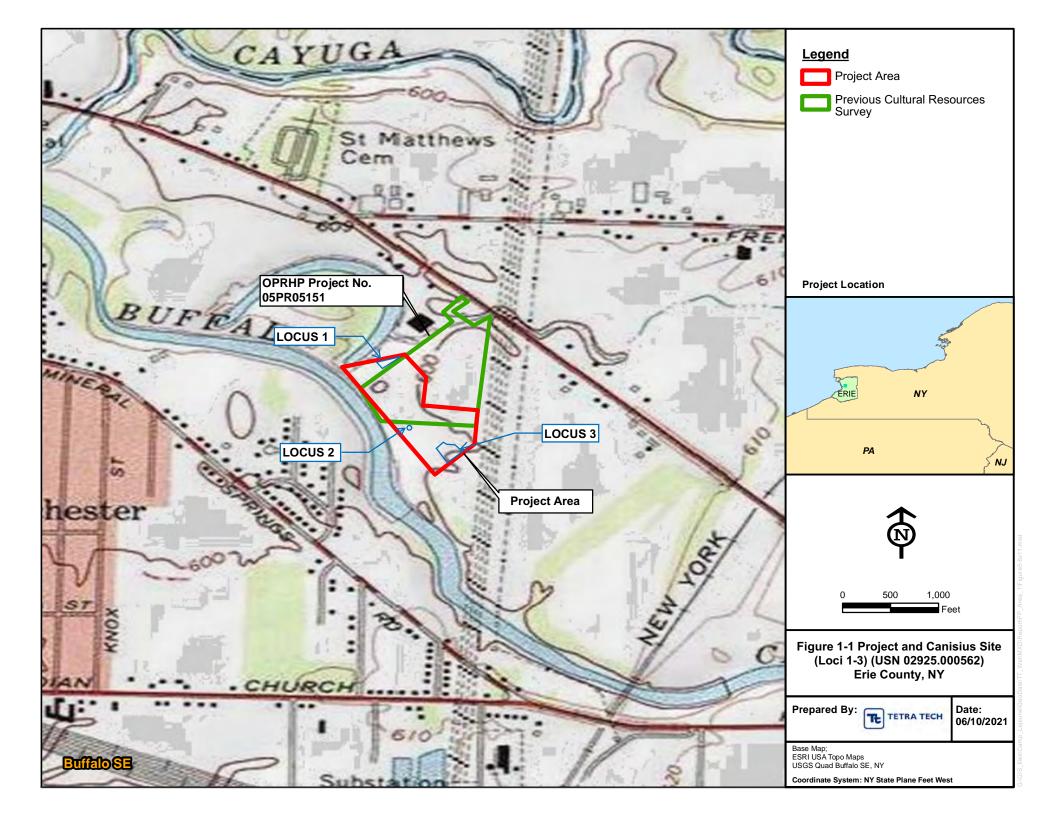
1994 Standards for Cultural Resource Investigations and Curation of Collections.

#### Rice, Prudence M.

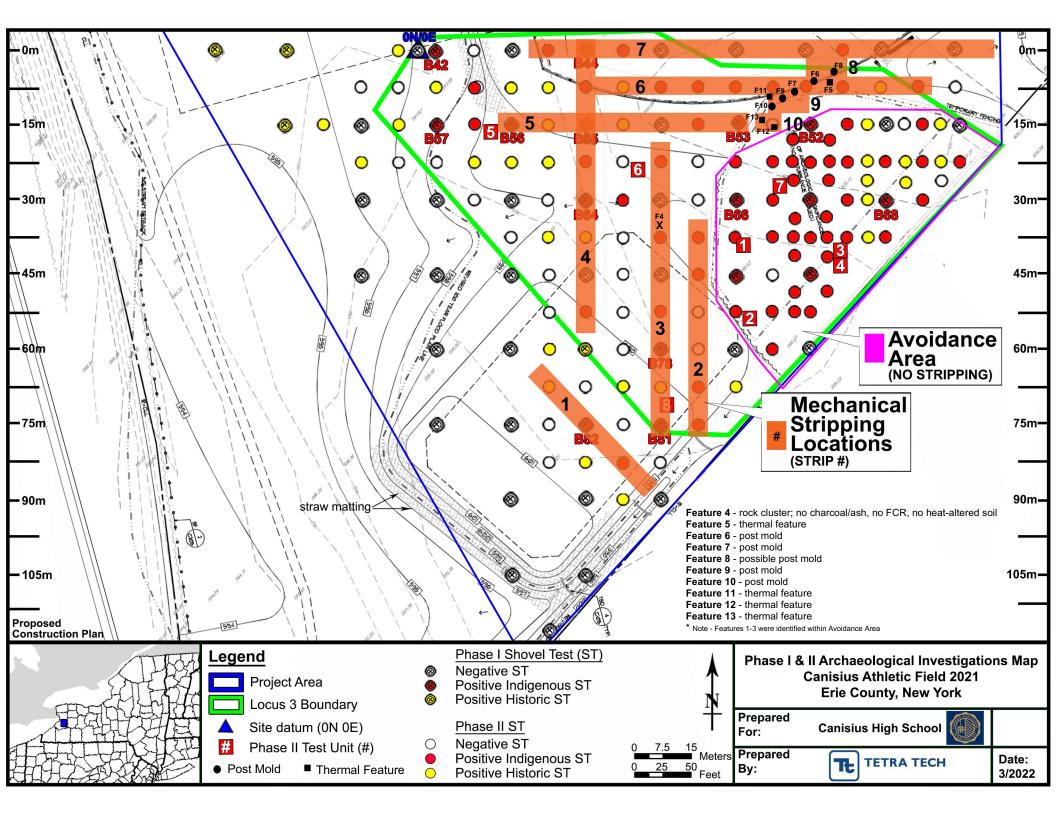
1987 Pottery Analysis: A Sourcebook. University of Chicago Press, Chicago.



ATTACHMENT A Project Location Maps









# ATTACHMENT B Protocols for Consultation and Communication in the Field

# STANDARD HAND SIGNALS



(Thumb up)



(Thumb down)



STOP or HOLD THE LOAD



RELEASE LOAD (Make scissor motion)



(Palm side up)



(Palm side down)



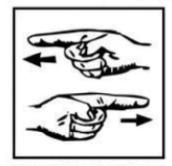
LOWER A LITTLE (Palm side down) Use pinching motion



RAISE A LITTLE (Palm side up) Use pinching motion



TRAVEL - FORWARD (Reverse - Use opposite hand rotation)



HORIZONTAL MOVEMENTS



STOP - TRAVEL (Hands high over head)

- 1. These Standard Hand Signals will apply to most operations where signals may be required.
- 2. Hand Signals will be given by One Man to avoid confusion of the operator.
- 3. When two or more operators are involved, point to the operator for whom the signal is intended.



ATTACHMENT C
OPRHP and Haudenosaunee Human Remains Discovery Protocol



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

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

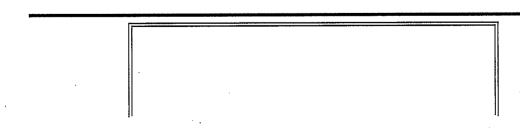
The unearthing of the remains of our ancestors from their eternal resting place is also a violation of the promises made to the Haudenosaunee under the terms of the Canandaigua

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

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.

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

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

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



ATTACHMENT D
Resumes of Key Personnel



# Robert Peltier, RPA Principal Investigator/Project Manager

#### **EXPERIENCE SUMMARY**

Mr. Peltier meets the Secretary of Interior qualifications for consulting archaeologist and architectural historian. He is a Registered Professional Archaeologist and is fully qualified to conduct Phase I-III review and compliance/contracting projects, reporting, and site monitoring for local, state, and Federal agencies and industrial and commercial businesses. He has served as Project Manager/Principal Investigator on numerous archaeological investigations, either for NHPA Section 106 historic preservation compliance, NEPA, or conducting academic research and has authored numerous cultural resource reports. Mr. Peltier has also served as Principal Investigator for numerous historic resources studies, involving architectural and historic property inventory evaluations, viewshed analysis, NRHP eligibility assessments, and HABS/HAER recordation. With over 19 years of experience performing cultural resources studies throughout the Northeast, Great Lakes, and Southern Plains, Mr. Peltier's research interests and specialties include Iroquoian studies, pre-contact settlement patterning and subsistence studies, and early 19<sup>th</sup> century Mennonite architecture and settlement patterning throughout western New York.

#### RELEVANT EXPERIENCE

**Pennsylvania Pipeline Project and Ohio Pipeline Project, Sunoco Logistics, L.P.** (2016-present). Cultural Resources Project Manager for 54-mile and 306-mile natural gas liquids pipelines from Scio, Harrison County, OH to Houston, Washington County, PA and from Houston, PA to Sunoco Logistics, L.P. Marcus Hook facility in Delaware County, Pennsylvania. Served as Co-Principal Investigator of a multi-disciplinary team of cultural resource specialists included archaeologists, architectural historians, anthropologists, and geomorphologists.

**Proposed Hecate Green Solar Facility, Hecate LLC. (2017-present).** Principal Investigator for cultural resource survey (Phase I) and historic sites inventory for a for a proposed 900+ acre solar facility development, in the Town of Coxsackie, Greene County, NY, permitted under Article 10 process. Cultural resources assessment included archival research on previous land use in the form of written and oral histories, aerial photographs, property tax files, USGS topographic maps, historic maps and the archives and records at various agencies and depositories, surface and subsurface archaeological investigations, the processing and analysis of prehistoric and historic artifacts, and historic properties evaluations.

Proposed Hecate Coeymans Solar Facility, Hecate LLC. (2017-present). Principal Investigator for cultural resource survey (Phase I) and historic sites inventory for a for a proposed 700+ acre solar facility development, in the Town of Coeymans, Albany County, NY, permitted under Article 10 process. Cultural resources assessment included archival research on previous land use in the form of written and oral histories, aerial photographs, property tax files, USGS topographic maps, historic maps and the archives and records at various agencies and depositories, surface and subsurface archaeological investigations, the processing and analysis of prehistoric and historic artifacts, and historic properties evaluations.

Lockridge Extension 30-inch Pipeline Project, Natural Gas Pipeline Company of America, LLC. (2019). Principal Investigator for 20.6 miles of pipeline looping and associated above ground facilities in Reeves, Ward, and Pecos Counties, Texas. Project involved cultural resources assessment, Resource Report No. 4 and FERC filing. Cultural resources assessments included archival research on previous land use in the form of written and oral histories, aerial photographs, property tax files, USGS topographic maps, historic maps and the archives and records at various agencies and

#### **EDUCATION**

M.A., Historic Preservation, Goucher College, Towson, MD

B.A., Anthropology/Archaeology (minor American Studies), State University of New York, Buffalo, NY

#### **AREA OF EXPERTISE**

Archaeology Historic Preservation Architectural History

#### REGISTRATIONS/ AFFILIATIONS

Register of Professional Archaeologists

#### TRAINING/CERTIFICATIONS

40 hour HAZWOPER

10 hour OSHA Construction

Section 106/NEPA Compliance Training

Business of CRM, Contracting and Project Management

Health & Safety for CRM Professionals

#### **OFFICE**

Buffalo, New York

#### YEARS OF EXPERIENCE

23 years CRM

#### YEARS WITHIN FIRM

Tetra Tech start date: 2013

#### CONTACT

#### rob.peltier@tetratech.com

716-849-9419 (office)

716-510-9115 (cell)

depositories, surface and subsurface archaeological investigations, and the processing and analysis of prehistoric and historic artifacts. The Project also involved a historic properties evaluation and viewshed analysis.

Texas Gulf Coast Header Pipeline 48-inch Pipeline Project, Texas Gulf Coast Header, LLC. (2019-2020). Principal Investigator for 44 miles of intrastate natural gas pipeline and associated above ground facilities in Nueces and San Patricio counties, Texas. Project involved USACE-Galveston District, Texas Historical Commission, and Tribal Historic Preservation Office(s) consultation and coordination. Cultural resources assessments included archival research on previous land use in the form of written and oral histories, aerial photographs, property tax files, USGS topographic maps, historic maps and the archives and records at various agencies and depositories, surface and subsurface archaeological investigations, and the processing and analysis of prehistoric and historic artifacts. The Project also involved a historic properties evaluation and viewshed analysis.

**Sweden Valley FERC Filing Project, Dominion Transmission, Inc. (2017).** Authored Resource Report 6 (Geological Resources) for the Sweden Valley *Federal Energy Regulatory Commission (FERC)* 7 (c) *Filing Project.* The Project was located in Ohio and Pennsylvania with multiple pieces of pipeline and associated facility work. The Project consisted of the placement of new pipeline and upgrades at existing facilities.

**Proposed Dryden Road Solar Photovoltaic Plant Project, SUN8 PDC LLC. (2017).** Principal Investigator for cultural resource survey (Phase I) and historic sites inventory for a for a proposed 157-acre solar facility development, in the Town of Dryden, Tompkins County, NY. Cultural resources assessment included archival research on previous land use in the form of written and oral histories, aerial photographs, property tax files, USGS topographic maps, historic maps and the archives and records at various agencies and depositories, surface and subsurface archaeological investigations, the processing and analysis of prehistoric and historic artifacts, and historic properties evaluations.

**Proposed Ellis Tract Solar Photovoltaic Plant Project, SUN8 PDC LLC. (2017).** Principal Investigator for cultural resource survey (Phase I) and historic sites inventory for a for a proposed 168-acre solar facility development, in the Town of Dryden, Tompkins County, NY. Cultural resources assessment included archival research on previous land use in the form of written and oral histories, aerial photographs, property tax files, USGS topographic maps, historic maps and the archives and records at various agencies and depositories, surface and subsurface archaeological investigations, the processing and analysis of prehistoric and historic artifacts, and historic properties evaluations.

**FCC Communications Tower Project, Chevron (2018)** Principal Investigator for cultural resource survey, including archaeological assessment and historic property evaluation and sites inventory for two proposed FCC communication towers – HHTX Russel Trust Tower (Loving County, TX) and Loving Tower (Eddy County, NM). Cultural resources assessment included archival research on previous land use in the form of written and oral histories, aerial photographs, property tax files, USGS topographic maps, historic maps and the archives and records at various agencies and depositories, surface and subsurface archaeologi*cal investigations*, and historic properties evaluations. Consulted and coordinated with the FCC, TX and NM SHPO, and Tribal Historic Preservation Office involvement.

Multiple Proposed Solar Photovoltaic Plant Projects, ForeFront Power, LLC. (2017-2019). Principal Investigator for cultural resource surveys (Phase I) and historic sites inventories for multiple ForeFront solar facilities across western and central NY. Cultural resources assessment included archival research on previous land use in the form of written and oral histories, aerial photographs, property tax files, USGS topographic maps, historic maps and the archives and records at various agencies and depositories, surface and subsurface archaeological investigations, the processing and analysis of prehistoric and historic artifacts, and historic properties evaluations.

Multiple Proposed Solar Photovoltaic Plant Projects, NextEra Energy Resources, LLC. (2018-present). Principal Investigator for cultural resource surveys (Phase I and phase II) and historic sites inventories for multiple NextEra Energy solar facilities across western and central NY. Cultural resources assessment included archival research on previous land use in the form of written and oral histories, aerial photographs, property tax files, USGS topographic maps, historic maps and the archives and records at various agencies and depositories, surface and subsurface archaeological investigations, the processing and analysis of prehistoric and historic artifacts, and historic properties evaluations.

Orion Extension 36-inch Pipeline Project, Kinder Morgan (2016-2018). Principal Investigator for 12.93 miles of pipeline looping and modifications to three compressor stations in Wayne and Pike Counties, Pennsylvania. Project involved cultural resources assessment, Resource Report No. 4 and FERC filing. Cultural resources assessments included archival research on previous land use in the form of written and oral histories, aerial photographs, property tax files, USGS topographic maps, historic maps and the archives and records at various agencies and depositories, surface and subsurface archaeological investigations, and the processing and analysis of prehistoric and historic artifacts. The Project also involved a historic properties evaluation and viewshed analysis.

Susquehanna West 36-inch Pipeline Project, Kinder Morgan (2016-2019). Principal Investigator for 8.1 miles of pipeline looping and modifications to three compressor stations in Bradford and Tioga Counties, Pennsylvania. Project involved cultural

included archival research on previous land use in the form of written and oral histories, aerial photographs, property tax files, USGS topographic maps, historic maps and the archives and records at various agencies and depositories, surface and subsurface archaeological investigations, the processing and analysis of prehistoric and historic artifacts, and historic properties evaluations.

**Reinecke Pipeline, Kinder Morgan (2015).** Principal Investigator for an approximately 14.8-mile long pipeline in Borden and Scurry Counties, Texas. Cultural resources assessments included archival research on previous land use in the form of written and oral histories, aerial photographs, property tax files, USGS topographic maps, historic maps and the archives and records at various agencies and depositories, surface and subsurface archaeological investigations, the processing and analysis of prehistoric and historic artifacts, and historic properties evaluations.

**Bobcat Pipeline Project, Western Pipeline (2015).** Principal Investigator for an approximately 37-mile long pipeline in Loving and Winkler Counties, Texas. Cultural resources assessments included archival research on previous land use in the form of written and oral histories, aerial photographs, property tax files, USGS topographic maps, historic maps and the archives and records at various agencies and depositories, surface and subsurface archaeological investigations, the processing and analysis of prehistoric and historic artifacts, and historic properties evaluations.

**SUNVIT Midland to Garden City 20-inch Pipeline Project, Sunoco Logistics, L.P (2015).** Principal Investigator for an extension and reroutes for an approximately 59-mile long pipeline in Midland and Glasscock Counties, Texas. Cultural resources assessments included archival research on previous land use in the form of written and oral histories, aerial photographs, property tax files, USGS topographic maps, historic maps and the archives and records at various agencies and depositories, surface and subsurface archaeological investigations, the processing and analysis of prehistoric and historic artifacts, and historic properties evaluations.

# TETRA TECH

## Robert J. Hanley, RPA

### Senior Archaeologist / Principal Investigator

#### **EXPERIENCE SUMMARY**

Robert Hanley has served as a Senior Archaeologist and Principal Investigator for over 15 years and has 30 years of experience in precontact Native American and historic period archaeology. He has been a Registered Professional Archaeologist since 2001 and has participated in cultural resources investigations throughout the Northeastern United States, including the States of New York, Pennsylvania, New Jersey, Virginia, Maryland, Connecticut, and Rhode Island. He's also conducted fieldwork in other parts of the United States including Iowa, Illinois, and Texas as well as the U.S. Territories of Puerto Rico and St. Croix of the USVI.

Mr. Hanley has authored or co-authored more than 600 cultural resources management reports (Phase I/II/III) for various clients including the Empire State Pipeline Company, Williams Gas Pipeline, National Fuel, U.S. Army Corps of Engineers, New York State Department of Transportation, Invenergy, Stantec, among others, as well as numerous municipalities and private sector organizations. He has served as the archaeological principal investigator on large-scale projects including pipeline/corridor and highway projects, windenergy development projects, solar power development projects, waterfront development, military installations, municipal projects (e.g., water and sanitary sewer), and commercial and private development projects.

He also has extensive experience directing and implementing a comprehensive array of field methodologies pertinent to cultural resource investigations, including developing research sensitivity designs/predictive modeling, directing field investigations, and preparing detailed written discussions of fieldwork, site interpretation, and assessments of cultural significance.

#### **RELEVANT EXPERIENCE**

#### **Energy (New York)**

#### Invenergy, LLC

- Horseshoe Solar (2021)
  - Principal Investigator
    - Conducted Phase I Cultural Resources Investigation for the Deer River Wind Farm Project in Livingston and Monroe Counties, NY.

#### NextEra Energy Transmission New York, Inc.

- Empire State Line (2020)
  - Principal Investigator
    - Conducted Phase II Cultural Resources Investigation for the Empire State Line Project which includes a 20-mile 345 kV transmission line crossing through five towns in Erie and Niagara counties.

#### **Education**

M.A., Archaeology, State University of New York, Albany, NY (1994)

B.A., Anthropology/Archaeology (minor Geology), State University of New York College at Buffalo, NY (1989)

#### **Area of Expertise**

Precontact Archaeology Cultural Resource Management

#### Registrations/ Affiliations

Register of Professional Archaeologists (RPA)

New York State Archaeological Association, Houghton Chapter

Society for American Archaeology

#### **Training/Certifications**

RPA (2001-present)

40-Hour Contaminated Site Health & Safety Training Course (2003)

Archaeology Field School: Eaton Site, West Seneca, New York (1988)

#### Office

Buffalo, New York

#### **Years of Experience**

30 years of CRM

#### **Contact**

#### bob.hanley@tetratech.com

(716) 541-9212 (office)

(716) 308-2560 (cell)

#### SunEast Development, LLC

- Limestone Solar (2020)
  - Principal Investigator
    - Conducted Phase I Cultural Resources Investigation for the SunEast Limestone Solar Project in Fulton County, NY.

#### Invenergy, LLC

- Deer River Wind Farm (2019)
  - Principal Investigator
    - Conducted Phase I Cultural Resources Investigation for the Deer River Wind Farm Project in Lewis County, NY.

#### Invenergy, LLC

- Alle-Catt Wind Farm (2018)
  - Principal Investigator
    - Conducted Phase I Cultural Resources Investigation for the Deer River Wind Farm Project in Allegany and Cattaraugus Counties, NY.

#### Invenergy, LLC

- Canisteo Wind Energy Center (2018)
  - Principal Investigator
    - Conducted Phase I Cultural Resources Investigation for Canisteo Wind Energy Center Project in Steuben County, NY.

#### **National Fuel Gas Supply Corporation**

- RM32 Natural Gas Pipeline Replacement Project (2017)
  - Principal Investigator
    - Conducted Phase I Cultural Resources Investigation for a proposed pipeline in the Cattaraugus Indian Reservation and Chautauqua County, NY.

#### Invenergy, LLC

- Java Energy Solar Project (2017)
  - Principal Investigator
    - Conducted Phase I Cultural Resources Investigation for the Java Energy Solar Project in Wyoming County, NY.

#### **Energy (Pennsylvania)**

#### **Competitive Power Ventures**

- CPV Fairview Energy Center (2017)
  - Principal Investigator
    - Conducted Phase I Cultural Resources Investigation for a planned power generation facility in Cambria County, PA.



#### **National Fuel Gas Supply Corporation**

- Keeler Natural Gas Compressor Station (2017)
  - Principal Investigator
    - Conducted Phase I Cultural Resources Investigation for a proposed Staging Area in McKean County, PA.

#### **National Fuel Gas Supply Corporation**

- National Fuel Line Q Transmission Pipeline Replacement and Abandonment (2016)
  - Principal Investigator
    - Conducted Phase I Cultural Resources Investigation for a proposed pipeline in Warren and Forrest Counties, PA.

#### Moxie Energy, LLC

- Moxie Freedom Facility (2015)
  - Principal Investigator
    - Conducted Phase I Cultural Resources Investigation for the Moxie Freedom Facility in Luzerne County,
       PA.

#### **Empire Pipeline Corporation**

- Tuscarora Lateral Project (2014)
  - Principal Investigator
    - Conducted Phase I Cultural Resources Investigation for the Tuscarora Lateral Pipeline in Tioga County,
       PA.

#### **OTHER INFORMATION**

#### **Professional Papers**

- Artifact Distribution Signatures of Resource Procurement Areas (SAA 71st Annual Meeting, San Juan Puerto Rico, 2006)
- Cultural Resources Management Planning and Predictive Modeling at Picatinny Arsenal, New Jersey (SAA 65th Annual Meeting, Philadelphia, PA, 2000)

# Justine McKnight Archeobotanical Consultant LLC RESUME/2022

#### www.archeobotany.com

archeobotany@gmail.com 410 507-3582: 289 Fibich Lane, West River, Maryland 20778

Years Experience: 35, Years with Firm: 25

#### **SELECTED PROJECT EXPERIENCE**

ADM and MD SHA (2021). Report on the Analysis of Flotation-recovered Macro-botanical Remains from the Russell House Site (18ST451) and the Lacey House Site (18ST891) Newtowne Neck State Park, St. Mary's County, Maryland

Tetra Tech (2019). Pittsburgh, Pennsylvania. Archeobotanist. Analysis of flotation samples from prehistoric sites within the Mountain Valley Pipeline right-of-way. Lewis and Harrison Counties, West Virginia.

Virginia Department of Historic Resources (2017). Analysis of flotation samples from middle Woodland contexts at the Great Neck Site (44VB0007). Virginia Beach, Virginia.

New York State Museum (2016). New York, New York. Archeobotanist. Analysis of flotation-recovered macrobotanical remains from a circa 1680's barrel/basket feature at the Broad Financial Center.

Archaeological Society of Delaware (2016). Archeobotanist. Macro-botanical analysis of material collected from a late seventeenth century well. The Avery's Rest Sites, Sussex County, Delaware.

First Colony Foundation (2015). Fort Raleigh National Historic Site, Roanoke Island, North Carolina. Archeobotanist. Analysis of flotation samples from Hariot Woods.

Wapsi Valley Archaeology (2015). Lee County, Iowa. Archeobotanist. Flotation, analysis of flotation samples, reporting Prehistoric Site 13LE947.

Morven National Historic Landmark (2014). Morven, Princeton, New Jersey. Archeobotanist. Coordination of macro-botanical and micro-botanical research, analysis and reporting of flotation-recovered remains.

Louis Berger (2015). Lee County, Iowa. Archeobotanist. Report on the Analysis of Flotation-recovered and Hand-collected Plant Remains Excavated during Phase II Testing and Phase III Archaeological Data Recovery at the Wever Number 4 Site (13LE914). Iowa Fertilizer Company Property, Wever, Lee County, Iowa.

Fairfax County Park Authority (2014). Old Colchester Park and Preserve. Fairfax County, Virginia. Archeobotanist. Analysis of plant macro-remains from various sites within the OCPP.

National Park Service (2013). Harpers Ferry Armory. Harpers Ferry, West Virginia. Archeobotanist. Flotation and analysis of floral samples from the Lower Armory Grounds.

George Washington's Mount Vernon, Mount Vernon Ladies' Association (2012). South Grove Midden. Mount Vernon, Virginia. Archeobotanist Analysis of Flotation and Waterscreen-recovered Archeobotanical Remains from the South Grove Midden, Mount Vernon 44FX762/17.

Association for the Preservation of Virginia Antiquities (2012). Jamestown Rediscovery Project. Jamestown, Virginia. Archeobotanist. Processing and analysis of macrobotanical samples from the James Fort.

College of William & Mary (2011). Werowocomoco Research Group. Williamsburg, Virginia. Archeobotanist. Archeobotanical consultation, sample analysis, interpretation at Werowocomoco (44GL32).

AKRF, Inc. (2010). The VSC World Trade Center Ship Site. New York, New York. Archeobotanist. Analysis of archeobotanical remains from the historic ship.

Earth Search, Inc. (2010). Troyville Mounds 16CT7. New Orleans, Louisiana. Archeobotanist. Analysis of flotation-recovered archeobotanical remains from Data Recovery investigations at the Troyville Mounds Site 16CT7.

Maryland Archaeological Conservation Laboratory, Maryland Department of Planning (2010-2015). Web content and database development. Saint Leonard, Maryland. Archeobotanist. Development of a website www.jefpat.org/archeobotany/Home including web-based site summaries and a searchable archeobotanical database.

American University (2009). Hughes Site (18MO3). Washington D.C. Archeobotanist. Conducted archeobotanical studies at the Hughes Site, a Late Woodland horticultural village for the Potomac River Archaeological Survey.

Pennsylvania Historical and Museum Commission (2006). Quaker Hills Quarry Site (36LA1100). Harrisburg, Pennsylvania. Archeobotanist. Archeobotanical studies at the Quaker Hills Quarry Site.

Virginia Department of Historic Resources (2001). The Fisher Site. Loudon County, Virginia. Archeobotanist. Analysis of f Archeobotanical Remains from the Fisher Site, Montgomery Focus village on the Potomac river.

#### SELECTED PUBLICATIONS AND PRESENTATIONS

Gall, Michael, A. Heinrich, I. Grossman-Bailey, P. Hayden, and J. McKnight (2020).

The Place Beyond the Fence: Slavery and Cultural Invention on a Delaware Tenant Farm. Historical Archaeology 54, 305-333.

McKnight, J. (2018). Current Middle Atlantic Paleoethnobotany. Paper presented at the Society for American Archaeology Conference, April 15.

McKnight, J. (2016). New Perspectives on Human-Plant Histories in Delaware: Archeobotanical Data from the Route 301 Mega Project. Paper presented at the Society for Historical Archaeology Conference, January 9.

McKnight, J. (2015). Late Woodland to Contact Period Farming Societies in the Potomac Valley. Presentation at the Pennsylvania State Museum's Workshops in Archaeology. November 14.

McKnight, J., M. Gallivan, S. Mahoney, B. Dore (2012) "This Indian Corn was the Staff of Food, Upon which the Indians did ever depend..." Terrestrial Symposium: Forging Identities: The Shifting Temporal and Geographic Boundaries of the Contact Period. Paper presented at the Society for Historical Archaeology Conference, Baltimore, Maryland, January 6.

McKnight, J. (2012). Archeobotanical Studies at the Worthy High School Site (44SM0025), Smyth County, Virginia. Quarterly Bulletin of the Archeological Society of Virginia. Volume 67, Number 1, March.

McKnight, J. (2010) Analysis of Flotation-recovered Archeobotanical Remains from the Claggett Retreat Site (18FR25), Frederick County, Maryland. Maryland Archaeology: Vol 46, Numbers 1 & 2. Pages 38-46.

Means, B.K and J. McKnight (2009) VDHR Threatened Sites Project: Constructing Chronologies from Curated Collections for Northern Virginia's Late Woodland Period. Virginia Archaeologist, Volume 26, Number 2. Pp. 12-13.

McKnight, J. and M.D. Gallivan (2007) The Virginia Archeobotanical Database Project: A Preliminary Synthesis of Chesapeake Ethnobotany. Archeological Society of Virginia Quarterly Bulletin. Volume 62, Number 4, pp. 181-189.

#### **Curriculum Vitae**

Elizabeth N. Smith

#### **Contact Information**

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Snyder, NY 14226

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Email: ensmith2@buffalo.edu

#### Education

2016-Present

Graduate Student, Department of Anthropology, State University of New York, University at Buffalo, Buffalo, New York

2015-2016

MSc in Paleopathology, Department of Archaeology, Durham University, Durham, England

2012-2015

BA, Department of Anthropology, Indiana University, Bloomington, Indiana

Major: Anthropology with Archaeology Concentration; Minor: Medieval Studies

1991-1996

MA in Cultural History, Department of Cultural History, University of Aberdeen, Scotland

#### **Professional Experience**

IRLAB Advanced Field Experience in Bioarchaeology—Fall 2018

(Primary Investigator: Giuseppe Vercellotti, Independent Scholar)

Archaeological Excavation, Tams, West Virginia—Summer 2015

(Primary Investigator: Carl DeMuth, Indiana University)

Glenn Black Laboratory of Archaeology internship—Summer 2014

(Supervisor: April Sievert, Indiana University)

William R. Adams Zooarchaeology Laboratory, Indiana University—Volunteer, May 2012-May 2015; Laboratory practicum, August-December 2014

(Supervisor: Ryan Kennedy, University of New Orleans)

Pintia Field School, Padilla de Duero, Spain—Summer 2013

(Primary Investigator: Carlos Sanz Minguez, University of Valladolid)

#### **Presentations**

European Association of Archaeologists Annual Meeting, September 2021—oral presentation

"Emphasizing the Boundaries—Archaeology vs Bioanthropology"

European Association of Archaeologists Annual Meeting, September 2021—oral presentation

"Taylor and Spaulding: Quantifying the Past" (Smith and Zubrow 2021)

State University of New York, University at Buffalo Anthropology Graduate Student Association Convergence Symposium, April 2017—poster presentation

" 'Our dead are never dead to us, until we have forgotten them...': An Archaeothanatological Analysis of a 6th Century Anglo Saxon Cemetery in Oakington, Cambridgeshire"

Indiana University Anthropology Graduate Student Association Symposium, February 2014—poster presentation

"The Story of Benjamina: Lambdoid Craniosynostosis in a 530,000 year old juvenile Homo heidelbergensis cranium"

#### **Honors and Awards**

Hutton Honors College Pre-Professional Experience Internship Grant—Summer 2014

Dean's List, Indiana University—Fall 2012; Spring 2015

"Broken Bone Award", William R. Adams Zooarchaeology Laboratory Volunteer Award—Spring 2014

#### References

Dr. Ezra Zubrow

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Ellicott Complex, North Campus

Buffalo, NY 14261-0026

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Dr. Della Cook

Department of Anthropology, Indiana University

Student Building 130, 701 E. Kirkwood Avenue

Bloomington, IN 47405-7100

cook@indiana.edu

Dr. April Sievert

Glenn A. Black Laboratory of Archaeology

423 N. Fess Street

Bloomington, IN 47408

asievert@indiana.edu

#### **Professional Affiliations**

Paleopathology Association, member

Medieval Academy of America, member

American Association of Physical Anthropologists, member

European Association of Archaeologists, member

#### **Additional Experience**

GIS Social Systems Laboratory, Undergraduate Workstudy Supervisor (2020-2021)

NEAA Archive Project (2019-2020)

ABD Student Journal, Editor in Chief (2019-2020)

Anthropology Graduate Student Association Vice President, University at Buffalo (2018-2019)

Chronika Student Journal peer reviewer (2018-2019)

ABD junior editor (2018-2019)

ENG105 writing session supervisor (Fall 2018)

Anthropology Graduate Student Association Alternate Senator, University at Buffalo (2017-2018)

Undergraduate Anthropology Association, Indiana University—Advertising Committee Officer, Social Media Coordinator (2013-2015)

### Languages

English: Native Speaker

French: Advanced

Spanish: Basic/Intermediate

German: Basic