

Consulting  
Engineers and  
Scientists

May 20, 2022

VIA EMAIL: [mkilpela@marquettemi.gov](mailto:mkilpela@marquettemi.gov)

Mr. Mikael Kilpela, P.E.  
City Engineer  
City of Marquette  
1100 Wright Street  
Marquette, MI 49855

**Re: Proposal for Cultural Resources Technical Services to Support the Section 106 Review Process for the Dredging the Mouth of the Dead River Project, Marquette, Michigan**

Dear Mr. Kilpela:

GEI Consultants, Inc. (GEI) is pleased to submit this proposal presenting a scope of work and fees for cultural resources technical services to support the National Historic Preservation Act (NHPA) Section 106 (Section 106) compliance review process for the Dredging the Mouth of the Dead River Project located in Marquette, Michigan.

Founded in 1970, GEI provides expertise in environmental, engineering, geotechnical, water resources, and construction management services and has completed projects for numerous local, regional, state, and federal agencies. Today, GEI employs nearly 1,000 individuals in 43 offices nationwide and in Canada; we maintain seven (7) offices in Michigan, including an office in Marquette.

Our Marquette office has completed many projects for the City, including projects with cultural resources components similar to the services requested for the Dredging the Mouth of the Dead River Project. GEI wishes to continue these services for the City and has prepared the following proposal to outline our scope of work, fees, cultural resources team, and relevant project experience.

**COMPANY NAME AND CONTACT INFORMATION:**

**Company Name:** GEI Consultants, Inc.  
**Office Address:** 109 West Baraga Avenue, Marquette, MI 49855  
**Point of Contact:** Denise M. Jurich, M.A., RPA, Cultural Resources Practice Leader  
**Phone:** 916.912.4935 (Office) and 916.296.9442 (Mobile)  
**Email:** [djurich@geiconsultants.com](mailto:djurich@geiconsultants.com)

## PROJECT UNDERSTANDING

GEI understands that the Dead River has oriented itself directly toward an existing coal conveyance for ship unloading and a 1300 foot long ore dock used for the loading of iron ore pellets onto ships. Further, the sand bedload moved by the river is filling the boat slip and requires constant maintenance dredging. The proposed project is intended to address these issues and consists of dredging activities to straighten the existing river channel into Lake Superior and the removal of sand deposited next to the existing coal conveyor and ore dock owned by Cleveland-Cliffs, Inc. As part of the dredging process, up to 75,000 cubic yards of sand will be removed and as feasible, the dredged sand will be used for beach nourishment and dune restoration along the shoreline to the south of the river. The beach nourishment area is located approximately 1.30 miles to the south of the proposed dredging area and is situated between Fair Avenue and Pine Street in Marquette. Dune restoration is also planned for the shoreline behind a proposed cobble beach between Pine Street and Hawley Street. The project work areas described above consist of the following:

- Boat slip areas next to the existing ore dock and corresponding upland spoils area;
- Dredging area at mouth of the Dead River and adjacent to the coal conveyor and boat slip;
- Beach nourishment and dune restoration areas south of the river; and an
- Overflow upland spoils site near the dune restoration area.

To fund this project, the City of Marquette received a Port Infrastructure Development Program (PIDP) grant and Cleveland-Cliffs, Inc. is providing match monies for the grant by committing to \$750,000 worth of maintenance dredging over the next three (3) years. The PIDP grant is a discretionary grant program administered by the U.S. Department of Transportation Maritime Administration (MARAD) and the issuance of the grant necessitates federal Section 106 compliance review.

MARAD has indicated that they will authorize the grant applicant (City of Marquette) to consult on their behalf during the Section 106 compliance process. This authorization will be obtained by preparing Michigan State Historic Preservation Office (SHPO) and appropriate Tribal Historic Preservation Officer(s) (THPO) template letters for MARAD review and approval. Further, the applicant must complete and submit an applicant checklist which contains information about the proposed project, the nature of proposed ground disturbances, potential for the project to result in effects to Historic Properties, and the results of the Tribal outreach efforts. These efforts are necessary to successfully navigate the Section 106 compliance process, in addition to specific paperwork required by the Michigan SHPO.

In 2020-2021, Michigan updated their Section 106 review process to include the preparation and submittal of a Michigan SHPO Application for Section 106 Consultation with supporting information prepared by or under the supervision of a federally qualified professional (36 Code of Federal Regulations [CFR] Part 61). The following scope of work has been prepared to meet the updated Section 106 requirements for the state of Michigan, as well as the information needs outlined by MARAD.

## **SCOPE OF WORK**

### ***Task 1. Agency Coordination and U.S. Department of Transportation Maritime Administration (MARAD) Documents***

GEI will complete coordination efforts with the City of Marquette and MARAD to support the Section 106 compliance process. Coordination efforts are anticipated to include discussions about the project, the delineation of the Area of Potential Effects (APE), and the methods to be employed during the research and field phases of the cultural resources technical work. This scope of work includes up to eight (8) hours for GEI's senior cultural resources staff to complete agency coordination.

Further, GEI will prepare Michigan SHPO and appropriate THPO template letters for MARAD review and approval. In addition, GEI will complete the MARAD applicant checklist for the City of Marquette's use.

### ***Task 2. Delineation of the Area of Potential Effects (APE), Records Search, and Archival Research***

GEI will prepare an APE map of the undertaking based on the project plans and the outcome of the agency coordination efforts (see Task 1, above). The APE will include the horizontal and vertical extent of ground disturbance related to the proposed project and any temporary use areas, such as equipment staging locations and access roads. Consideration will also be given to the potential for the project to result in indirect effects to nearby lands and/or built environment features.

Upon delineation of the APE, GEI cultural resource specialists will conduct a records search to identify known and previously recorded cultural resources in and adjacent to the APE. The records review will be completed for the APE and all lands within a one-mile search radius and will include a review of the following resources:

- National Historic Landmarks (NHL) List;
- National Register of Historic Places (NRHP) Spatial Data (GIS) Public Database;
- Michigan SHPO Archaeological Site Files;
- Michigan SHPO Files for Architectural Resources; and
- Michigan History Center Shipwreck Location Database maintained by the Michigan Department of Natural Resources (DNR).

The SHPO File review will be completed by SHPO staff via the SHPO Smartsheet request system.

In addition, GEI will conduct primary and secondary research online and at pertinent research facilities. Research will focus on important events or individuals that may be associated with the project area and will be used to prepare a historic context and evaluate built environment resources in the APE.

### ***Task 3. Archaeological and Architectural Resources Surveys***

Following the completion of Task 2, archaeological and built environment surveys will be conducted for the APE. A cursory review of the Michigan SHPO Archaeological Site Files indicates that there are previously recorded sites located within or immediately adjacent to several of the Project Area locations shown on Page 1 in the Request for Proposals (RFP). Based on their locations, as well as the frequency of other sites known near the Project Area locations, GEI assumes that limited fieldwork will be needed to address archaeological resources for the project.

The survey for archaeological resources will be completed in accordance with the *Michigan SHPO Draft State Archaeological Documentation Standards* (Revised May 7, 2020) and will be supervised by an archaeologist who meets the Secretary of the Interior's (SOI) Standards for Archaeology. GEI archaeologists will conduct a Phase 1 pedestrian survey of the portions of the APE that are accessible at the time of survey and considered to have a high, moderate, or unknown probability (if applicable) for containing archaeological resources. Areas with low probability designations, based on factors such as existing ground disturbances, will be eliminated from further examination. GEI assumes this will include a pedestrian (surface) survey of up to 30 acres and that these survey areas will exhibit at least 25 percent surface visibility. Limited subsurface testing may also be completed in portions of the APE to document soil profiles or soil disturbances, using up to five (5) shovel test pits (STPs). Notes and photographs will be taken to document existing conditions in the APE and any areas that cannot be surveyed.

A cursory review of the Michigan SHPO architectural files does not indicate the presence of previously recorded architectural resources within or near the Project Area locations; however, several built environment features are observable on current aerial and satellite imagery. While the features mainly appear to be modern in age (i.e., less than 45 years in age), some of the resources, including rail alignments, appear to be of potential historic age and GEI assumes limited fieldwork will be required to address the resources. Thus, GEI will conduct an intensive survey of the built environment with methods informed by the *Michigan Above-Ground Survey Manual* (Updated 2018). Historic-era (more than 45 years old) built environment resources will be recorded through photography and written notes.

#### **Task 4. Archaeological and Architectural Resources Technical Reports**

GEI will prepare two (2) draft technical reports that will summarize the results of the cultural resources records search and the surveys. Recommendations will also be made for additional work, where necessary. The reports will be certified by an archaeologist or an architectural historian listed by the Michigan SHPO as meeting the SOI Qualification Standards in their respective fields.

One (1) report will be prepared for the inventory and evaluation of archaeological resources and it will be generated in accordance with the *Michigan SHPO Draft State Archaeological Documentation Standards* (Revised May 7, 2020). Report content will also be informed by the information requirements outlined in the *Michigan SHPO Instructions for the Application for SHPO Section 106 Consultation Form* (Revised September 14, 2021). The report will minimally contain the following elements:

- Project location (Township, Range, and Section or private claim numbers);
- Description of proposed ground disturbance;
- Discussion on the presence or absence of undisturbed soils;
- Outline of past and present land use;
- Summary of previously reported sites and surveys;
- An Archaeological Sensitivity Map;
- Potential for the project to result in adverse effects pursuant to Section 106;
- Recommendations for additional fieldwork (if necessary); and
- Summary of qualifications.

GEI will also prepare a draft architectural resources inventory and evaluation report that will focus on the analysis of the built environment in the APE. The report will be prepared per guidelines outlined in the *Michigan Above-Ground Survey Manual* (Updated 2018) and the information requirements contained in the *Michigan SHPO Instructions for the Application for SHPO Section 106 Consultation Form* (Revised September 14, 2021). The report will include a description of methods, research and survey results, and an NRHP evaluation of historic-era built environment resources in the APE. It will conclude with an assessment of effects on any identified Historic Properties in the APE and management recommendations.

Michigan SHPO Architectural Properties Identification Forms will be completed for each evaluated resource and appended to the report. GEI assumes up to six (6) resources will be inventoried and evaluated.

Upon client review of the technical reports, GEI will update the documents based on client requests or recommendations (where appropriate) to produce the final technical reports for archaeological and architectural resources.

#### **Task 5. Section 106 Application Package**

GEI will prepare a Section 106 Application Package that meets the current state standards for the City of Marquette to submit to SHPO. The application will include APE maps and the final technical reports as attachments.

#### **Deliverables**

- Template Michigan SHPO Letter, Template THPO Letter, and Draft/Final MARAD Applicant Checklist.
- Draft/Final Phase 1 Archaeological Resources Technical Report with APE Maps and an Archaeological Sensitivity Map.
- Draft/Final Architectural Resources Technical Report with APE Maps and Michigan SHPO Architectural Properties Identification Forms.
- Section 106 Application Package with APE Maps and Final Technical Reports included as attachments.

#### **Exceptions/Assumptions**

- All agency coordination efforts (i.e., City of Marquette and MARAD) will be limited to telephone calls, video conferences, and/or emails. A change order may be required if in-person meetings are required to support the project or if coordination efforts exceed eight (8) hours of cultural resources senior staff time.
- MARAD will provide the City of Marquette with templates to use in the preparation of the Michigan SHPO Letter and THPO Letter. MARAD and/or the City of Marquette will provide those templates to GEI to prepare the necessary documents for MARAD review and approval.
- No recorded or previously undocumented maritime resources are located in the APE.
- No fieldwork relating to the assessment of underwater or submerged resources will be required to support the project.
- The APE will consist of the five (5) Project Area locations identified on Page 1 of the RFP.
- The client will ensure approval for right-of-entry to the APE for the archaeological and architectural resources surveys.
- If marking for utilities is necessary prior to the completion of any STPs, GEI assumes that cultural resources staff will not need to be present on-site to observe the marking.
- The archaeological survey area will measure no more than approximately 30 acres.
- Surface visibility in the archaeological survey area will be at least 25 percent and will allow for pedestrian (surface) examination as the survey method.
- Subsurface testing will not be necessary to complete the survey; however, limited subsurface exploration may be completed through up to five (5) STPs to document soil profiles or soil disturbances in the APE.
- In the event that the archaeological resources survey area lacks 25 percent surface visibility, the *Michigan SHPO Draft State Archaeological Documentation Standards* require the completion of STPs at approximate 15 meter intervals, unless obvious soil disturbances are present. In this case, the client will be contacted to discuss potential changes to the survey schedule and budget to accommodate the completion of necessary STPs in excess of five (5) STPs.

- The archaeological survey will take no more than 3, 10-hour person-days.
- No archaeological resources or human remains will be encountered during the archaeological resources survey.
- Artifacts, if encountered, must be documented. Fees associated with artifact analysis are not included in this scope of work. Further, any curation or long-term preservation fees associated with detected artifacts are not included and would be addressed via a supplemental authorization, if needed.
- If the Phase 1 archaeological survey results in positive findings, GEI will stop work and discuss the results with the client to determine the next steps for the project. Any additional work to address encountered finds would result in the need for a change order. Such efforts could include, but are not limited to, site recordation, additional subsurface testing, or excavation.
- No Phase 2 site evaluation, Phase 3 data recovery, or construction monitoring services are included in this scope of work. Such services, if needed, would be addressed via supplemental authorizations.
- The architectural resources survey will include the inventory of up to six (6) built environment resources.
- Up to six (6) built environment resources will be recorded onto Michigan SHPO Architectural Properties Identification Forms.
- No built environment resources identified in the APE will meet NRHP criteria.
- The identification efforts will result in a recommended finding of *No Historic Properties Affected* or *No Adverse Effect on Historic Properties within the APE*. If any NRHP-listed or NRHP-eligible resources are identified in the APE (i.e., Historic Properties pursuant to Section 106) and these resources cannot be avoided by the proposed project, GEI will contact the client to discuss the next steps for the project.
- The technical reports described in this scope of work will be prepared to assist MARAD or their official delegate (grant applicant/City of Marquette) in meeting their obligations under Section 106. Specifically, the reports will provide information about identification efforts completed, the results of the identification efforts, and recommendations regarding the effect of the proposed project on Historic Properties.
- The client will provide the most current site plans or conceptual drawings to include as an attachment to the technical reports and the Section 106 Application Package.
- MARAD or their official delegate (grant applicant/City of Marquette) will conduct any required consultation with Native Americans or other interested parties pursuant to Section 106 using template correspondence (information scoping letters) prepared by GEI.
- The results of all consultation efforts will be provided to GEI for incorporation into the Section 106 Application Package and MARAD Applicant Checklist.
- The City of Marquette (as designated by MARAD) will submit the Section 106 Application Package prepared by GEI directly to the Michigan SHPO.

## **COST ESTIMATE**

A detailed cost estimate is included in Attachment A. The cost for completing Tasks 1 through 5 based on the scope of work and assumptions provided above is \$31,358.00.

## TEAM MEMBERS

GEI provides an integrated team of experts in Section 106 compliance, including archaeologists, architectural historians, geoarchaeologists, and historians. The following cultural resources team members are proposed for the following roles:

- **Denise M. Jurich, M.A., RPA** will serve as the Project Manager and will provide senior technical review for all project deliverables. Ms. Jurich is the Cultural Resources Practice Leader for the nationwide GEI cultural resources group and has more than 26 years of archaeological field and project management experience. She is included in the current Michigan SHPO Consultant List as an Archaeological Consultant (Prehistoric Resources).
- **Jennifer M. Sanka, M.A., RPA** will be the Cultural Resources Lead for the project and will coordinate all work with the City of Marquette, the GEI Project Manager (Denise M. Jurich), and the GEI cultural resources team. She will also serve as the certifying archaeologist for all deliverables, as Ms. Sanka is included in the current Michigan SHPO Consultant List as an Archaeological Consultant (Prehistoric and Historic Resources). She has nearly 20 years of environmental compliance experience throughout the U.S. and currently oversees GEI's cultural resources projects in the Midwest region.
- **Madeline R. Bowen, M.A.** will be the certifying architectural historian/historian for all deliverables, as Ms. Bowen is included in the current Michigan SHPO Consultant List as an Architectural Historian/Historian. She has more than 26 years of environmental compliance experience and serves as GEI's senior historian.
- **Lena M. Philliber, B.A.** will provide support for architectural history tasks under the direction of the certifying architectural historian/historian (Madeline R. Bowen), including research, survey, and reporting. Ms. Philliber has been working in the environmental compliance industry for nearly two years and is included in the current Michigan SHPO Consultant List as a Historian.
- **Taryn J. Nance, M.A.** will provide support for the archeological resources work, including the records review, survey, and report. She will also support the architectural history tasks, as needed. Ms. Nance has over 15 years of experience in the environmental compliance industry, including 10 years of Section 106 compliance experience. She meets the SOI standards for archaeology and her qualifications are currently on-file with the Michigan SHPO.

Resumes are included in Attachment B for all team members.



## PREVIOUS PROJECT EXPERIENCE

### **Project 1: Founders Landing Pier Redevelopment Project**

**Client:** City of Marquette, Michigan

**Client Contact:** Jon Swenson, Director of Community Services

**Performance Period:** 2020

This project is located partially within the City of Marquette and partially within Lake Superior in Marquette County, Michigan and the purpose of the project is to increase public access to Lake Superior for small crafts and water sports, such as kayaking, canoeing, and stand-up paddle boards, as well as walking and fishing accessibility. During this project, the City of Marquette contracted GEI to conduct background research and to prepare a technical memorandum to assist the U.S. Army Corps of Engineers (USACE) in meeting their obligations under Section 106. The technical document was prepared in accordance with the updated Section 106 review process implemented by the SHPO in 2020 and included the evaluation of two (2) historic age docks located on Lake Superior for NRHP eligibility. The technical document was submitted to USACE for their use in a Section 106 application.



### **Project 2: Orchard Beach State Park Shelter Building Relocation Project**

**Client:** Michigan Department of Technology, Management, and Budget

**Client Contact:** Gerald Gregorski

**Performance Period:** 2020-2021



GEI engineers and project managers assisted the Michigan Department of Technology, Management, and Budget (DTMB) and the Michigan DNR throughout the life of this project, which included the relocation of a NRHP-listed historic shelter building and upgrades to portions of the sanitary and storm sewer system infrastructure in the park. The park is located on the shoreline of Lake Michigan and a significant portion of the project also focused on the rehabilitation of the existing bluff located along the shoreline. GEI cultural resources staff

completed a Phase 1 archaeological survey report at the request of DTMB and the Michigan SHPO to determine if the proposed project would affect any previously undocumented archaeological resources located on state-administered park lands. Work efforts included survey, archaeological site delineation, and coordination with the DTMB, DNR, SHPO, and the USACE to ensure that the project received the necessary environmental clearances prior to the move of the historic shelter building. A Phase 1 technical report was prepared, along with several associated memorandums. One (1) of the memorandums was prepared to assist USACE in meeting their obligations under Section 106 for the shoreline rehabilitation work. The memorandums and the final report addressed eight (8) previously unrecorded archaeological resources and included the results of lithic analysis completed for the recovered assemblage. Recommendations for NRHP eligibility were also provided for all detected resources.



In 2022, GEI was named as part of the team that was awarded a Michigan Governor's Award for Historic Preservation for this project.

**Project 3: Tourist Park Campground Project**

**Client:** City of Marquette, Michigan

**Client Contact:** Andrew MacIver, Assistant Director of Community Services

**Performance Period:** 2022-Present (Current Project)

Located in the City of Marquette Tourist Park, this current project addresses upgrades to the Tourist Park Campground and includes the construction of an access road and a parking lot on the north side of the campground. To date, background research and technical documents have been prepared to support the Section 106 review process necessitated by the pursuit of a Land and Water Conservation Fund (LWCF) grant. Future work efforts are anticipated to include an archaeological resources field survey, NRHP site evaluation, and technical reporting to document the potential for the project to affect Historic Properties pursuant to Section 106.

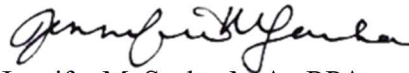
GEI appreciates your consideration of our proposal. If you have any questions about the information contained herein, please contact our proposed Project Manager, Denise M. Jurich at 916.296.9442 or [djurich@geiconsultants.com](mailto:djurich@geiconsultants.com).

Sincerely,

GEI CONSULTANTS, INC.



Denise M. Jurich, M.A., RPA  
Cultural Resources Practice Leader



Jennifer M. Sanka, M.A., RPA  
Archaeologist

Enclosures

Attachment A: Cost Estimate

Attachment B: Team Member Resumes

- Denise M. Jurich, M.A., RPA, Project Manager/Senior Archaeologist
- Jennifer M. Sanka, M.A., RPA, Cultural Resources Lead/Archaeologist
- Madeline R. Bowen, M.A., Senior Architectural Historian/Historian
- Lena M. Philliber, B.A., Architectural Historian/Historian
- Taryn J. Nance, M.A., Archaeologist

JMS:kb:dmj

## **Attachment A: Cost Estimate**

## Dredging the Mouth of the Dead River Fees

### GEI Cost Estimate

5/20/2022

	grade 7 D. Jurich \$179.00	grade 6 M. Bowen \$167.00	grade 5 J. Sanka \$128.00	grade 2 T. Nance \$97.00	grade 1 L. Philliber \$90.00	Graphics/ GIS \$102.00	WP (Admin) \$69.00	Total Hours	Total Dollars
Task 1. Agency Coordination and MARAD Documents	4		12	8				24	\$3,028.00
Task 2. Delineation of the APE, Records Search, and Archival Research	1	6	4	16	24	2		53	\$5,609.00
Task 3. Archaeological and Architectural Resources Surveys, inc. HASP	1		1	41	38	4		85	\$8,112.00
Task 4. Archaeological and Architectural Resources Technical Reports (1 draft and 1 final per technical area)	4	24	8	16	28	6	4	90	\$10,708.00
Task 5. Section 106 Application Package	1	2	10			4		17	\$2,201.00
<b>Total Labor Hours</b>	<b>11</b>	<b>32</b>	<b>35</b>	<b>81</b>	<b>90</b>	<b>16</b>	<b>4</b>	<b>269</b>	
<b>Total Direct Labor Dollars</b>	<b>\$1,969.00</b>	<b>\$5,344.00</b>	<b>\$4,480.00</b>	<b>\$7,857.00</b>	<b>\$8,100.00</b>	<b>\$1,632.00</b>	<b>\$276.00</b>		<b>\$29,658.00</b>

### OTHER DIRECT COSTS

Task 3. Mileage/Vehicle Rental (\$500/week)	\$500
Task 3. Per Diem and Lodging (\$150/day for 1 archaeologist for up to 4 days [3 in the field] and 1 historian for 4 days [3 in the field])	\$1,200
<b>Total Other Direct Costs</b>	<b>\$1,700</b>
<b>TOTAL ESTIMATED PROJECT COST</b>	<b>\$31,358.00</b>

## **Attachment B: Team Member Resumes**

**Denise M. Jurich, M.A., RPA, Project Manager/Senior Archaeologist**  
**Jennifer M. Sanka, M.A., RPA, Cultural Resources Lead/Archaeologist**  
**Madeline R. Bowen, M.A., Senior Architectural Historian/Historian**  
**Lena M. Philliber, B.A., Architectural Historian/Historian**  
**Taryn J. Nance, M.A., Archaeologist**

## Denise M. Jurich, RPA

Project Manager/Senior Archaeologist

Denise Jurich is a Registered Professional Archaeologist and project manager with more than 26 years of experience in North American archaeology. Her experience includes all phases of cultural resources management for Section 106 of the National Historic Preservation Act (NHPA), National Environmental Policy Act (NEPA), and state-mandated compliance projects. Ms. Jurich has participated in numerous environmental compliance projects for state and federal agencies throughout the US. She is an expert in managing complex projects that often include archaeological survey, cultural resource identification efforts, National Register and state-level resource evaluation, resource mitigation, Native American consultation, and agency coordination. Ms. Jurich meets the Secretary of Interior's Standards for Archaeologist.

### PROJECT EXPERIENCE

**Orchard Beach State Park Shelter Building Relocation Cultural Resources Survey and Michigan Department of Natural Resources (DNR) Coordination, Michigan DNR, Manistee Township, Manistee County, MI.** Senior archaeologist for the assessment of three non-contiguous project areas in Orchard Beach State Park. These project areas are located in the National Register of Historic Places (NRHP)-listed Orchard Beach State Park District and are associated with upgrades to a historic shelter building. The upgrades consist of the removal and partial reconstruction of the historic shelter building in a new location, the demolition and new construction of associated water and sewer lines, repair of a section of the park's bluff, and updates to the stormwater and sanitary systems. The study was required by the Michigan State Historic Preservation Office/Officer (SHPO) due to the cultural sensitivity of the Lake Michigan shoreline in the park.

**Founders Landing Pier Redevelopment Cultural Resources Records Review, City of Marquette, MI.** Senior archaeologist for this project that addressed upgrades to the City of Marquette's harbor that would increase public access to Lake Superior. The study was completed to assist the U.S. Army Corps of Engineers (USACE) in meeting their obligations under Section 106 of the NHPA and included research to identify the presence or absence of Historic Properties in the project's APE. The resultant report was submitted to the USACE to append to their Section 106 Application to be submitted to the Michigan State Historic Preservation Office.

**Cultural Resources Inventory and Evaluation for Proposed Natomas Basin Reach E Repair Project (U.S. Army Corps of Engineers, Sacramento County, CA.** The Natomas Basin Project is a cooperative effort by the U.S. Army Corps of Engineers, the Central Valley Flood Protection Board, and the Sacramento Area Flood Control Agency to address seepage and stability issues in approximately 42 miles of levee surrounding the Natomas Basin. Project manager and



### EDUCATION

M.A., Anthropology, California State University, Sacramento

B.A., Anthropology, California State University, Sacramento

### EXPERIENCE IN THE INDUSTRY

26 years

### EXPERIENCE AT GEI

6 years

### REGISTRATIONS AND LICENSES

Registered Professional Archaeologist,  
CA No. 16069

### PROFESSIONAL ASSOCIATIONS

Society for American Archaeology  
Society for California Archaeology  
Great Basin Anthropological Association  
Midwest Archaeological Conference

senior archaeologist who supervised the cultural resources study for the project for compliance with Section 106 of the NHPA.

**Cultural Resources Inventory and Evaluation for Proposed Yolo Bypass Levee repair for the West Sacramento Project, U.S. Army Corps of Engineers, Yolo County, CA.** The Project is a cooperative effort by the U.S. Army Corps of Engineers, the West Sacramento Area Flood Control Agency, the California Department of Water Resources, and the Central Valley Flood Protection Board to address seepage and stability issues in the levee systems in West Sacramento. Project manager and senior archaeologist who supervised the cultural resources study for the project for compliance with Section 106 of the NHPA.

**American River Common Features Cultural Resources Studies, U.S. Army Corps of Engineers, Sacramento County, CA.** Project manager and Principal Investigator. The project includes background research and phased archaeological work, including pedestrian survey, archaeological testing, cultural resources evaluation, and assessment of effects in order to identify and evaluate potential cultural resources in support of the American River Common Features Project. Additional work includes the production of Historic Properties Treatment Plans (HPTP) for adversely affected historic properties and the completion of the mitigation measures described in the HPTPs. Project phases to date include Sacramento River East Levee Contracts 1 and 2, Sacramento Weir Widening, Lower American River and Sacramento River Erosion sites, and habitat mitigation sites.

**Southport Sacramento River Early Implementation Project, Yolo County, CA.** Project Manager for the project and the senior archaeologist responsible for Section 106 compliance and overseeing construction monitoring. The West Sacramento Area Flood Control Agency is constructing the Southport Sacramento River Early Implementation Project to implement flood risk-reduction measures along the Sacramento River South Levee in the City of West Sacramento, Yolo County, California. The project is a blend of flood risk-reduction measures that are based on their effectiveness in addressing deficiencies, compatibility with land uses, minimization of real estate acquisition, avoidance of adverse effects to archaeological resources, and cost.

**Davey's Bridge Section 106 Compliance, Federal Highway Administration- Western Federal Lands Highway Division, Boise County, ID.** Principal investigator for a cultural resources survey of the Banks-Lowman Highway Safety- Davey's Bridge Reconstruction project in Boise County, Idaho. The intensive pedestrian survey identified seven previously unrecorded cultural properties; none of the identified resources were recommended as eligible for listing on the National Register of Historic Places. Subsurface testing was conducted prior to any ground disturbance; no historic properties were identified.

**Cultural Resources Investigation for the Minuteman Missile Road Improvement Project, Western Federal Lands Highway Division, Weld and Logan Counties, CO; Laramie and Goshen Counties, WY; and Banner, Cheyenne, and Kimball Counties, NE.** Prepared cultural resources inventory report. The undertaking consisted of rural intersection improvements. No historic properties were identified during the record search.

**Teton River Road Cultural Resources Survey, Department of Transportation FHWA Western Federal Lands Highway Division, Teton County, MT.** Principal investigator for a pedestrian survey of 22.5 miles. The survey did not identify any previously unknown historic properties eligible for listing on the National Register of Historic Places within the project corridor; however, it did result in the recordation of the Old North Trail, two irrigation canals, and several rock cairns.

**Cultural Resources Inventory for the Kalispell-Kerr Transmission Line Rebuild Project, Flathead, Lake, and Sanders Counties, MT.** The Bonneville Power Administration (BPA) is proposing to rebuild its Kalispell-Kerr transmission line, which runs between Kalispell and Kerr, Montana. The aging, 41-mile-long 115-kilovolt (kV) transmission line requires replacement of its wooden pole structures and other line components. Improvements to road systems that provide access to the transmission line right-of-way for ongoing operations and maintenance are also needed. Served as Principal Investigator for the project.

## Jennifer M. Sanka, RPA

Cultural Resources Lead/Archaeologist

Jennifer Sanka has over 20 years of archaeological fieldwork and project experience in the U.S., including projects in Alaska, Arizona, California, Illinois, Indiana, Maryland, Michigan, Nevada, New York, North Carolina, Ohio, Oregon, and Wisconsin. She has conducted all aspects of archaeological fieldwork and has authored/certified more than 100 technical reports to demonstrate compliance with Section 106 of the National Historic Preservation Act (NHPA) and state regulations. In addition, she has authored numerous cultural resources sections for National Environmental Policy Act (NEPA) environmental impact statements (EIS), NEPA environmental assessments (EA), California Environmental Quality Act (CEQA) environmental impact reports (EIR), CEQA initial studies, New York State Environmental Quality Review Act (SEQRA) EIS, and constraints analyses.

Ms. Sanka is a Registered Professional Archaeologist (RPA), meets the Secretary of Interior (SOI) Standards for Archaeology, and has served as a principal investigator on projects reviewed by the Bureau of Land Management (BLM), U.S. Forest Service (USFS), U.S. Army Corps of Engineers (USACE), Bureau of Indian Affairs (BIA), U.S. Fish and Wildlife Service (USFWS), U.S. Department of Veterans Affairs, and the Federal Highway Administration (FHWA). She has also served as the cultural resources lead for project work with Michigan agencies, including several projects for the Michigan Department of Natural Resources (DNR). Her qualifications are on file with the Michigan State Historic Preservation Office (SHPO) and she is included in the current Michigan SHPO Consultant List as an Archaeological Consultant (Prehistoric and Historic Resources).

### SELECTED PROJECT EXPERIENCE

**Orchard Beach State Park Shelter Building Relocation Cultural Resources Survey, Michigan DNR Coordination, Michigan SHPO Coordination, and USACE Coordination, Michigan Department of Technology, Management, and Budget (DTMB), Manistee Township, Manistee County, MI.** Principal investigator for a project located in Orchard Beach State Park within the National Register of Historic Places (NRHP)-listed Orchard Beach State Park District. This project considered the emergency relocation of a historic shelter building and various park upgrades. Project features included the removal and partial reconstruction of the historic shelter building in a new location, the demolition and new construction of associated water and sewer lines, repair of a section of the park's bluff subject to USACE permitting, and updates to the stormwater and sanitary systems. The study was required by SHPO due to the cultural sensitivity of the Lake Michigan shoreline in the park. The Phase I Survey resulted in the recordation of eight new archaeological sites, evaluations of the sites for NRHP eligibility, and a report that was submitted to the Michigan DNR, DTMB, and Michigan SHPO. An additional memorandum of findings was submitted to the USACE for their use in demonstrating compliance with Section 106 of the NHPA for a portion of the project.

**Founders Landing Pier Redevelopment Cultural Resources Records Review, City of Marquette, Marquette County, MI.** Principal investigator (archaeology) for this project that addressed upgrades to the City



### EDUCATION

M.A., Religion (Hebrew Bible and Archaeology), Duke University  
Graduate Certificate, Women's Studies, Duke University  
B.A., Anthropology, Classics, and Comparative Religion, Miami University

### EXPERIENCE IN THE INDUSTRY

19 years

### EXPERIENCE WITH GEI

4 years

### REGISTRATIONS AND LICENSES

Registered Professional Archaeologist (RPA 15927, 2006)  
Certified Riverside County (California) Archaeologist (103, 2007)  
Certified San Diego County (California) CEQA Consultant for Archaeological Resources (2010)  
Certified Orange County (California) Archaeologist (2017)  
Qualified as a Principal Investigator for the BLM Cultural Resources Use Permit (CRUP) for the State of California  
Qualified as a Principal Investigator for the BLM CRUP for the State of Nevada, Historic Resources  
Qualified as a Principal Investigator for the State of Nevada Antiquities Permit  
Meets the Qualifications of the Secretary of Interior (SOI) Standards for Archaeology  
SOI Qualifications Reviewed and Approved:  

- Illinois
- Michigan
- New York
- Wisconsin



of Marquette's harbor that would increase public access to Lake Superior. The study was completed to assist the USACE in meeting their obligations under Section 106 of the NHPA and included research to identify the presence or absence of Historic Properties in the project's Area of Potential Effects (APE). The resultant report was submitted to the USACE to append to their Section 106 Application to be submitted to the Michigan SHPO.

**Constraints Analyses, SHPO Coordination, and Cultural Resources Technical Services, Confidential Solar Development Client, Bond, Henry, and Kankakee Counties, IL.** Project archaeologist responsible for assisting a confidential solar development client in navigating the cultural resource compliance process for three sites located in Illinois. Constraints analysis work included conducting and managing Illinois Inventory of Archaeological Sites (IIAS) information and reviewing potentially applicable federal, state, and County regulations. This research was completed to identify cultural resource constraints for future solar facility development and included three memorandums of findings. Subsequent work included SHPO Coordination and the preparation of three SHPO Solar Farm Project Review packages to elicit SHPO comments on the studies needed to comply with applicable laws. Additional work included the completion of Phase I Survey efforts, archaeological site delineation, site recordation, NRHP evaluations, and technical reporting at the solar development sites to demonstrate compliance with Illinois state law.

**Bewabic State Park New Sewage Disposal System Cultural Resources Survey and Michigan SHPO Coordination, DTMB, Crystal Falls Township, Iron County, MI.** Principal investigator for a project located in Bewabic State Park within the NRHP-listed Bewabic State Park Historic District. This project considered upgrades to the existing septic and drain field system in the park and included potential new drain fields and a lagoon. In addition, the project included a new toilet/shower building and the proper abandonment of some of the existing sewage treatment systems in the park. The Phase I Survey returned negative findings for cultural resources and the results were incorporated into a report that was submitted to the DTMB. The final version of the report is currently pending and will be submitted to the DTMB and Michigan SHPO.

**Public Safety Enterprise Communication (PSEC) Project Environmental Compliance Services Phase 3, Riverside County Facilities Management, Orange, Imperial, Riverside, San Bernardino, and San Diego Counties, CA.** Associate project manager, visual resources manager, and cultural resources manager for Phase 3 of the PSEC Project. This project involved the placement of up to 87 new communication facilities for the County sheriff and fire departments throughout Riverside County. Phase 3 of the project spanned approximately four years and included the management of mitigation compliance at all PSEC project sites, as well as the compilation of EAs for 25 sites on BLM, USFS, USACE, and BIA lands. Three EAs were prepared for the BLM, one for the USACE, and three for the BIA. The preparation of the BIA EA documents included close coordination with the Santa Rosa Band of Cahuilla Indians and the Colorado River Indian Tribes. Additional project management duties included aiding the USFS in the preparation of multiple EAs located on the San Bernardino and Cleveland National Forests.

**PSEC Project Environmental Compliance Services Phases 1 and 2, Riverside County Facilities Management, Orange, Imperial, Riverside, San Bernardino, and San Diego Counties, CA.** Project archaeologist and cultural resources manager for the cultural resources constraints analysis and certifying author of the CRA in support of an EIR/EA. Responsibilities included conducting and managing California Historical Resources Information System (CHRIS) records searches and Class III intensive pedestrian surveys/Phase I surveys for over 165 proposed emergency services radio tower facilities throughout Riverside County and along the Riverside County borders in Orange, Imperial, San Bernardino, and San Diego counties. This sizable work effort included communication and permitting efforts with several district offices of the BLM, the USFS, and the National Park Service, as well as informal consultation efforts with local resource agencies and numerous southern California Native American groups and individuals. Phases 1 and 2 of this project involved the supervision of various staff members and several subcontracted archaeologists and architectural historians.

## Madeline R. Bowen

Senior Architectural Historian/Historian

Madeline Bowen is a senior historian/architectural historian with more than 26 years of experience in the field of cultural resources. She is experienced in historic research, field inventory, and site assessment for the National Historic Preservation Act (NHPA) Section 106 and Section 110, National Environmental Policy Act (NEPA). She meets the Secretary of the Interior's standards for work in history and architectural history. Ms. Bowen is author and co-author of cultural resources technical reports, including historic resources and historic architectural inventories/evaluations. She evaluates resources including residential, commercial, and industrial structures, linear feature, dams, bridges, and cultural landscapes for significance for the California Register of Historical Resources (CRHR) and the National Register of Historic Places (NRHP). She prepares Historic American Building Survey (HABS) and Historic American Engineering Record (HAER) documentation, develops integrated cultural resources management plans and mitigation measures, and prepares reports for cultural resource and environmental compliance. In 2018, Ms. Bowen was part of a team for a project that received a Governor's Historic Preservation Award from the State of California.

### PROJECT EXPERIENCE

**Orchard Beach State Park Shelter Building Relocation Cultural Resources Survey, Michigan Department of Natural Resources Coordination, Michigan State Historic Preservation Office (SHPO) Coordination, and U.S. Army Corps of Engineers (USACE) Coordination, Michigan Department of Technology, Management, and Budget, Manistee Township, Manistee County, MI.** Senior architectural historian for the assessment of three non-contiguous project areas in Orchard Beach State Park. These project areas are located in the NRHP-listed Orchard Beach State Park District and are associated with upgrades to a historic shelter building. The upgrades consist of the removal and partial reconstruction of the historic shelter building in a new location, the demolition and new construction of associated water and sewer lines, repair of a section of the park's bluff and fencing, and updates to the stormwater and sanitary systems. The study was required by the Michigan SHPO due to the cultural sensitivity of the Lake Michigan shoreline in the park. In 2022, the project won the Michigan Governor's award for historic preservation.

### **Founders Landing Pier Redevelopment Cultural Resources Records Review, City of Marquette, Marquette County, MI.**

Senior architectural historian for this project that addressed upgrades to the City of Marquette's harbor that would increase public access to Lake Superior. The study was completed to assist the U.S Army Corps of Engineers in meeting their obligations under Section 106 of the NHPA and included research to identify the presence or absence of



### EDUCATION

M.A., History, San Francisco State University

B.A., Liberal Studies, San Francisco State University

### EXPERIENCE IN THE INDUSTRY

26 years

### EXPERIENCE WITH GEI

6 years

### REGISTRATIONS AND LICENSES

Registered Historian, CA No. 568

### PROFESSIONAL ASSOCIATIONS

California Preservation Foundation

Historic Properties in the project's APE. The resultant report was submitted to the USACE to append to their Section 106 Application to be submitted to the Michigan SHPO.

**Cheboygan Lock Facility Repair Project, Cheboygan, MI.** Senior architectural historian who prepared an NRHP evaluation and assessment of resources that may be affected by the proposed Cheboygan Lock Facility Improvement Project. The purpose of the proposed Project is to rehabilitate the Cheboygan Lock Facility and Dam. The Lock and Dam facility is recommended as NRHP-eligible for its association with the local inland waterway system.

**Bryte Landfill Remediation Project, Sacramento Area Flood Control Agency, Yolo County, CA.** Senior architectural historian who prepared cultural resources documentation for this landfill remediation and relocation project per Section 106. The Sacramento Area Flood Control Agency proposes to remove all waste material in the Bryte Landfill and relocate all excavated materials to another site nearby. Once complete, the project will allow unrestricted future use of the Landfill property

**Permanente Creek Restoration Project, Cultural Resources Inventory and Evaluation, Lehigh Hanson, Santa Clara County, CA.** Senior architectural historian who prepared and peer reviewed cultural resources documentation for Section 106 and the California Environmental Quality Act. Project was a restoration project for Permanente Creek. Historic resources identified included a historic district that would be adversely affected by the project.

**Port Hueneme, Port of Hueneme Intermodal Infrastructure Project, Oxnard Harbor District, Ventura County, CA.** Senior architectural historian who prepared a cultural resources NRHP/CRHR inventory and assessment report for the port as part of the port's efforts to provide long-term infrastructure enhancements to continue to facilitate efficient movement of cargo. The project is of regional significance as it supports the Economic Development Assistance Program principles and promotes environmental sustainability.

**Yuba Goldfields 200-year Flood Protection Project, Three Rivers Levee Improvement Authority, Yuba County, CA.** Senior architectural historian for a project involving the construction of an engineered levee south of the Yuba Goldfields that will provide 200-year flood protection for south Yuba County and the Reclamation District 784 service area. Key services included environmental documentation, wetland permitting, endangered species compliance, cultural resources evaluations and Native American Tribe consultations, and construction monitoring and reporting.

**Cultural Resources Inventory and Evaluation for Proposed Natomas Basin Reach E Repair Project, United States Army Corps of Engineers, Sacramento County, CA.** The Natomas Basin Project is a cooperative effort by the U.S. Army Corps of Engineers, the Central Valley Flood Protection Board, and the Sacramento Area Flood Control Agency to address seepage and stability issues in approximately 42 miles of levee surrounding the Natomas Basin. Senior architectural historian who prepared cultural documentation for the project for compliance with Section 106 of the NHPA.

**American River Common Features Cultural Resources Studies, United States Army Corps of Engineers, Sacramento County, CA.** The project includes background research and cultural resources evaluation, and assessment of effects in order to identify and evaluate potential cultural resources in support of the American River Common Features Project. Additional work includes the production of Historic Properties Treatment Plans (HPTP) for adversely affected historic properties and the completion of the mitigation measures described in the HPTPs. Project phases to date include Sacramento River East Levee Contracts 1 and 2, Sacramento Weir Widening, Lower American River and Sacramento River Erosion sites, and habitat mitigation sites. Senior architectural historian who contributed to historic properties documentation.

## Lena M. Philliber

Architectural Historian/Historian

Lena Philliber is an architectural historian with a background in historic preservation and cultural resource management. She has a strong historical focus on California history, environmental history, and architectural history. Skills include preparing historic contexts, conducting primary and secondary research, and field inventories. She contributes to technical documentation for National Historic Preservation Act (NHPA), Section 106 and California Environmental Quality Act (CEQA) compliance. Ms. Philliber also has experience assessing resources for the National Register of Historic Places, the California Register of Historical Resources, and the City of Sacramento Register of Historic and Cultural Resources. She has experience assessing various built environment resources such as residential, commercial, and industrial structures in addition to linear resources. She also has experience with ArcGIS.



### EDUCATION

B.A., History, California State University,  
Sacramento

### EXPERIENCE IN THE INDUSTRY

1.5 years

### EXPERIENCE WITH GEI

Less than one year

### PROJECT EXPERIENCE

**Architectural Resources Survey Report for the Preserve on Ash (POA) Project, North Corktown Neighborhood, City of Detroit, Wayne County, Michigan.** The proposed project includes the pursuit of U.S. Department of Housing and Urban Development (HUD) funding and the issuance of HUD grants constitute an undertaking. Architectural historian who recorded and documented the built resources in the area.

**Cheboygan Lock Facility Improvement Project, Cheboygan, MI.** Architectural historian who assisted with the assessment of resources that may be affected by the proposed Cheboygan Lock Facility Improvement Project. The purpose of the proposed Project is to rehabilitate the Cheboygan Lock Facility and Dam. The Lock and Dam facility is recommended as NRHP-eligible for its association with the local inland waterway system.

**Cultural Resources Inventory and Evaluation for Proposed Natomas Basin Reach E Repair Project, United States Army Corps of Engineers, Sacramento County, CA.** The Natomas Basin Project is a cooperative effort by the USACE, the Central Valley Flood Protection Board, and the Sacramento Area Flood Control Agency to address seepage and stability issues in approximately 42 miles of levee surrounding the Natomas Basin. Architectural historian who contributed to cultural documentation for the project for compliance with Section 106 of the NHPA.

**Cultural Resources Inventory Plan for the Natomas Reaches F and G, American River Commons Features 2016 Project, Sacramento and Sutter Counties, CA.** The Natomas Basin Project is a cooperative effort by the U.S. Army Corps of Engineers, the Central Valley Flood Protection Board, and the Sacramento Area Flood Control Agency to address seepage and stability issues in approximately

42 miles of levee surrounding the Natomas Basin. Architectural historian who contributed to cultural resources documentation for the project.

**Cultural Resources Inventory and Evaluation for the Return Capacity Improvements for Regional Drought Resiliency Project, North Kern Water Storage District, Kern County.** The North Kern Water Storage District, located in southern San Joaquin Valley, proposes to connect four existing wells to the Friant-Kern Canal to improve return capacity. Architectural historian who contributed to cultural resources documentation for the project.

**Cultural Resources Inventory and Evaluation for the 500-Year Flood Protection Project, Three Rivers Levee Improvement Authority, Marysville, CA.** The 500-Year Flood Protection Project would fortify levees in Yuba county, adding additional security against flood events. Architectural historian who conducted background research and contributed to the historic context for the cultural resources technical report and environmental document.

**Inventory and Evaluation of the Yuba Goldfields Historic Mining District, Three Rivers Levee Improvement Authority, Marysville, CA.** The project involved inventorying and evaluating the 10,000-acre Yuba Goldfields for NRHP significance. Architectural historian who contributed to historic district documentation.

**Cultural Resources Inventory and Evaluation Report for the Merced Avenue Recharge Intertie Project, Shafter-Wasco Irrigation District, CA.** The project consists of the construction of a 0.75-mile, 21-inch bi-directional pipeline along the north side of Merced Avenue. Architectural historian who contributed to the cultural report for the project.

**Cultural Resources Inventory and Evaluation Report John Smith Road Landfill Expansion Project Hollister, San Benito County, California.** The County of San Benito is proposing the John Smith Road Landfill Expansion Project to expand the current 95.16 JSRL acre facility. This expansion would include 388.05 acres of new landfill, access roads, and site facilities. Architectural historian prepared historic context and assessed resources for the cultural report of this project.

**Cultural Resources Inventory and Evaluation Report American River Common Features 2016 Project, Sacramento River East Levee, Contract 4 Phase, U.S. Army Corps of Engineers, Sacramento County, CA.** The purpose of the ARCF 2016 Project is to reduce flood risk and bring the flood system in the project site into compliance with applicable engineering standards established by USACE. In addition, the proposed SREL C4 Phase, in combination with other ongoing improvements to the flood system along the Sacramento and American rivers, will allow the flood system in the Sacramento area to achieve the urban levee design standards established by the California Department of Water Resources in connection with the Central Valley Flood Protection Plan. Architectural historian who conducted fieldwork, assessed numerous cultural resources, and prepared the historic context for the project.

**Cultural Resources Inventory and Evaluation Report for the Coyote Creek Flood Protection Project, San Jose, Santa Clara County.** Valley Water is proposing Project B to implement a series of flood protection measures to prevent flooding in urban areas along approximately 9 miles of Coyote Creek between Montague Expressway and Tully Road in San Jose, Santa Clara County, California. Architectural historian who recorded the built resources in the project area and contributed to the cultural report.

#### PREVIOUS PROJECT EXPERIENCE

**California Conservation Corps and Post-World War II State Parks Administrative Facilities (1933-1965): Cultural Resource Surveys and Evaluation Approach for Determining Historical Eligibility, California State Parks, Sacramento County, CA.** The project is an extensive documentation of all post-war administrative facilities in every California state park built between 1933 and 1965. It aims to assess associated buildings for NRHP eligibility. Architectural historian who updated and edited Department of Parks and Recreation (DPR) forms in addition to creating over one hundred maps of each facility on ArcGIS.



**Taryn J. Nance**  
Archaeologist



Taryn J. Nance is an Archaeologist for GEI's Allendale, Michigan, office. Ms. Nance has 16 years of experience as a cultural resource specialist, project manager, and project coordinator in the U.S., including projects in California, Nevada, Michigan, Illinois, and Wisconsin. She has conducted all aspects of archaeological fieldwork and has authored numerous California Environmental Quality Act (CEQA) environmental impact reports (EIR), National Environmental Policy Act (NEPA) environmental impact statements (EIS), NEPA environmental assessments (EA), constraints analyses, and CEQA initial study cultural resources sections. Ms. Nance has over 10 years of working with Section 106 of the National Historic Preservation Act (NHPA) in a wide range of capacities including background research, identification and evaluation of historic properties (i.e., archaeological and architectural sites, buildings, structures), project management, and reporting.

**EDUCATION**

M.A. Anthropology, University of California-Davis  
B.S., Anthropology, Michigan State University

**EXPERIENCE IN THE INDUSTRY**

16 years

**EXPERIENCE WITH GEI**

3 years

**PROJECT EXPERIENCE**

**Orchard Beach State Park Shelter Building Relocation Project, Manistee County, MI.** Archaeologist for a project located in Orchard Beach State Park within the National Register of Historic Places (NRHP)-listed Orchard Beach State Park District. The study was required by SHPO due to the cultural sensitivity of the Lake Michigan shoreline in the park. Responsible for the Phase I Survey (including shovel test probes), the recordation of eight new archaeological sites, analysis of associated flaked-stone artifact collection, evaluations of the sites for NRHP eligibility, and coauthor of a report that was submitted to the Michigan Department of Natural Resources (DNR), Michigan Department of Technology, Management, and Budget (DTMB), and SHPO. An additional memorandum of findings was submitted to the U.S. Army Corps of Engineers (USACE) for their use in demonstrating compliance with Section 106 of the NHPA for a portion of the project.

**Bewabic State Park New Sewage Disposal System Cultural Resources Survey, DTMB, Crystal Falls Township, Iron County, MI.** Archaeologist for a project located in Bewabic State Park within the NRHP-listed Bewabic State Park Historic District. This project considered upgrades to the existing septic and drain field system in the park and included potential new drain fields and a lagoon. In addition, the project included a new toilet/shower building and the proper abandonment of some of the existing sewage treatment systems in the park. Responsible for negative Phase I Survey (including shovel test probes) and coauthor of a report that was submitted to the DTMB. The final version of the report is currently pending and will be submitted to the DTMB and Michigan SHPO.

**Architectural Resources Survey for the Preserve on Ash (POA) Project, North Corktown Neighborhood, City of Detroit, Wayne County, MI.** Provided assistance in the field for inventory of architectural resources in the North Corktown neighborhood including mapping, notetaking, and photography. Report submitted to the City of Detroit Housing and Revitalization Department (HRD).

**Crystal Falls Fire Station, Iron County, MI.** Archaeologist responsible for historical background research, review of archaeological and architectural records, and the identification and evaluation of historical properties near Crystal Falls in the Upper Peninsula of Michigan. Coauthor of a Section 106 technical memorandum addressing the identification of historic properties in the Crystal Falls Fire Station APE and recommendations of eligibility for the NRHP.

**Marquette County Shooting Range, Marquette County, MI.** Archaeologist responsible for historical background research, an archaeological and architectural records search and research, and the identification and evaluation of historical properties in Marquette County in the Upper Peninsula of Michigan. Coauthor of a Section 106 technical memorandum addressing the identification of historic properties in the Marquette County Shooting Range APE and recommendations of eligibility for the NRHP. Technical memorandum also discusses the potential for the project area to contain previously undocumented cultural resources.

**Victors and Woodley Solar, LLC Projects, Branch County, MI.** Lead archaeologist conducting historical research including the confidential archaeological and architectural records review at the MI SHPO and the completion of project area site visits for the proposed Victors Solar, LLC and Woodley Solar, LLC Projects both located in southern Michigan. Author of subsequent technical memorandums addressing potential effects of the proposed projects on cultural resources.

**Confidential Solar Development Client, Bond, Henry, and Kankakee Counties, IL.** Project archaeologist responsible for the completion of Phase I reconnaissance survey, site recordation and mapping, NRHP eligibility assessments, and Archaeological Survey Short Reports (ASSRs) at three sites to demonstrate compliance with the Illinois State Agency Historic Resources Preservation Act.

**Southern California Edison Transmission Line Separation Project, Sierra National Forest, CA.** Staff archaeologist for a multi-year project including pedestrian surveys, excavation, archaeological site recording, site records preparation and Section 106 historical resources evaluation for four of Southern California Edison's (SCE) hydroelectric projects requiring federal relicensing by the Federal Energy Regulatory Commission (FERC). Coauthor of a large inventory, evaluation and management plan for cultural resources in the southern Sierra Nevada National Forest prepared for SCE and the US Forest Service.

**Buena Vista Tribe of Miwok Indians of California Tribal Environmental Impact Report (TEIR), Amador County, CA.** Project coordinator/manager for preparation of a Tribal Environmental Impact Report (TEIR) for a proposed gaming and entertainment facility in Amador County, CA. Oversaw completion of a draft and final TEIR, technical studies, agency and Tribal coordination and consultation, and impact analyses, including cultural resources, air quality, noise, public services, biology, visual, water, land use, and traffic. Cultural resources work involved Section 106 compliance including the evaluation of historic buildings and a Native American Traditional Cultural Property, preparation of preparation of a finding of effects and preparation of Memorandum of Agreement identifying mitigation to reduce adverse effects on a Traditional Cultural Property.