APPENDIX 4D CLASS III HISTORIC STRUCTURES SURVEY REPORT Continued

Final May 2022



Figure 80. 32RI916, Queen Anne influenced dwelling, south and west elevations.



Figure 81. 32RI916, Feature 2, south and west elevations, view facing northeast.

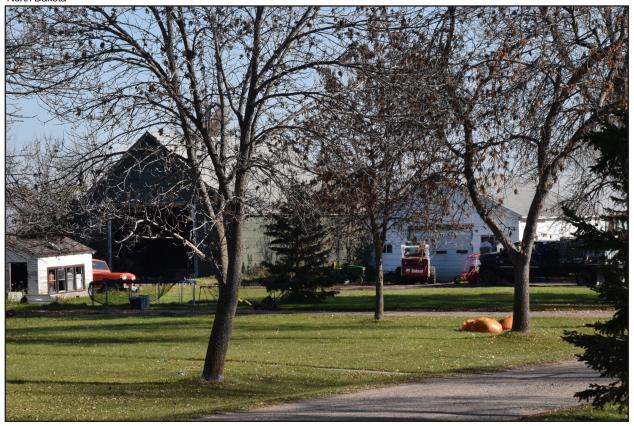


Figure 82. 32RI916, (left to right) Features 3 and 4, view facing northeast.



Figure 83. 32RI916, Feature 5, west elevation, view facing east.



Figure 84. 32RI916, Feature 6, north and west elevations, view facing southeast.



Figure 85. 32RI916, proposed NRHP boundary.

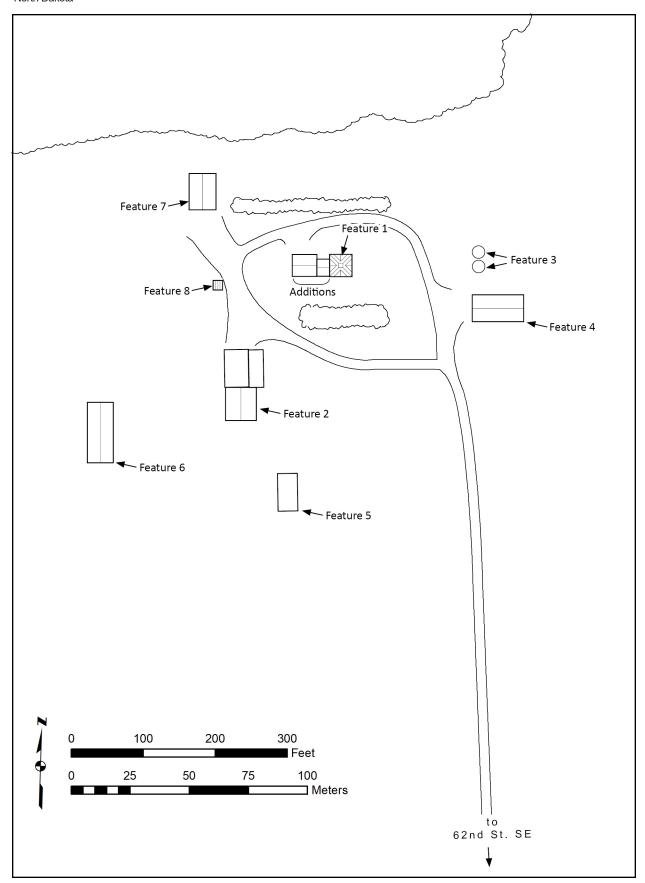


Figure 86. 32RI917, sketch map.



Figure 87. 32RI917, Feature 1, south and east elevations, view facing northwest.



Figure 88. 32RI917, Feature 2, south and east elevations, view facing northwest.



Figure 89. 32RI917, Feature 1 (dwelling), Feature 3 (grain bins), Feature 4 (trapezoidal shed), aerial view.



Figure 90. 32RI917, Feature 4, south elevation, view facing north.



Figure 91. 32RI917, Feature 5, south and east elevations, view facing northwest.



Figure 92. 32RI917, Feature 6, south and east elevations, view facing northwest.



Figure 93. 32RI917, Feature 7, south and east elevations, view facing northwest.



Figure 94. 32RI917, Feature 8, south and east elevations, view facing northwest.

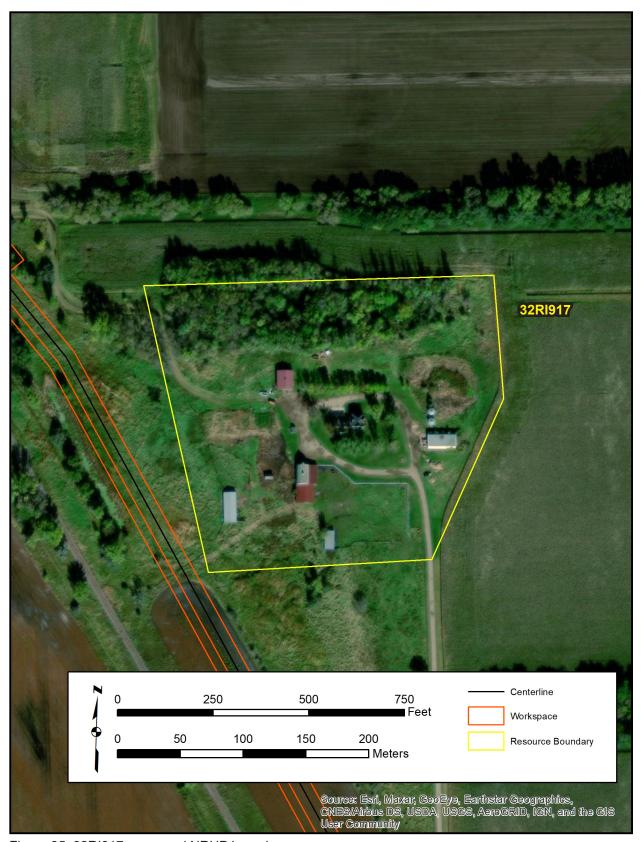


Figure 95. 32RI917, proposed NRHP boundary.

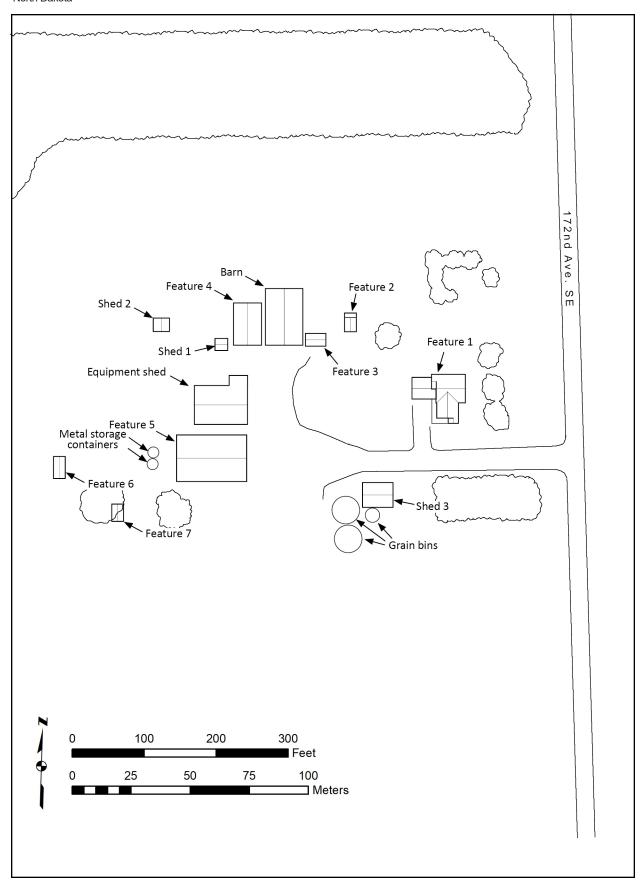


Figure 96. 32RI918, sketch map.



Figure 97. 32RI918, Feature 1, north and east elevation, view facing southwest.



Figure 98. 32RI918, Feature 2 and Feature 3, north and east elevations, view facing southwest.



Figure 99. 32RI918, Shed 2 (most W), Feature 4 (center left), Barn (center right), and Feature 3 (most E).



Figure 100. 32RI918, Feature 4, south and east elevations, view facing northwest.



Figure 101. 32RI918, Feature 5 (left) and Equipment Shed (right), east and north elevations, view facing west.



Figure 102. 32RI918, Feature 6 (left) and Metal storage containers (right), aerial view.



Figure 103. 32RI918, Feature 7, north and east elevations, view facing southwest.

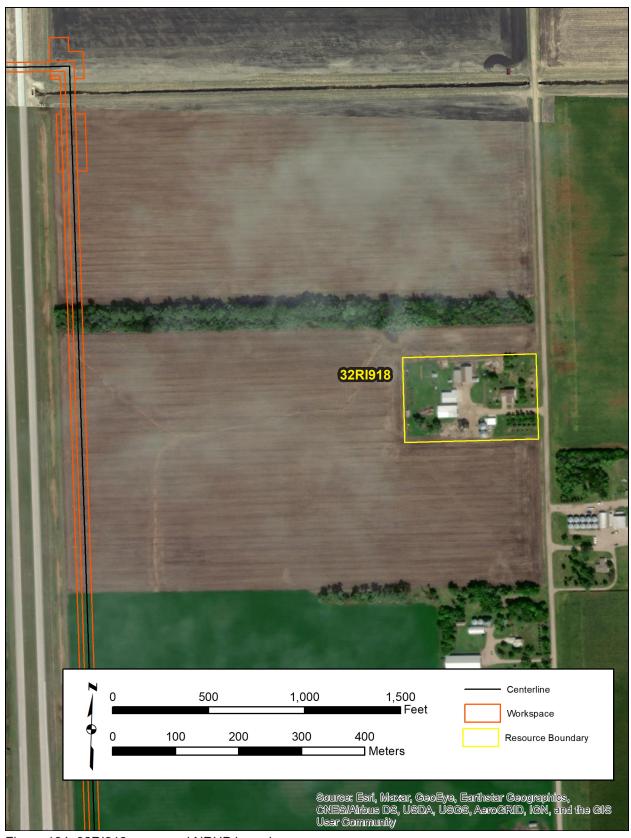


Figure 104. 32RI918, proposed NRHP boundary.

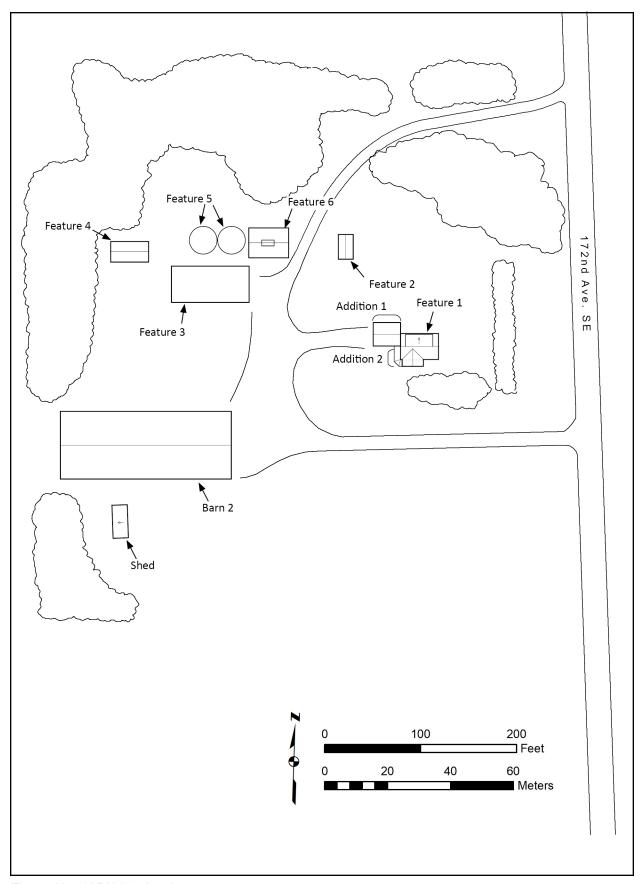


Figure 105. 32RI919, sketch map.



Figure 106. 32RI919, Feature 1, east and south elevations, view facing northwest.



Figure 107. 32RI919, Feature 2, east elevation, view facing west.

CLASS III HISTORIC ARCHITECTURE SURVEY
WBI Energy Transmission, Inc. Wahpeton Expansion Project, Cass and Richland Counties,
North Dakota



Figure 108. 32RI919, Feature 3, east elevation, view facing west



Figure 109. 32RI919, Feature 4, south elevation, view facing northwest.



Figure 110. 32RI919, Features 3, 5, and 6, aerial view.



Figure 111. 32RI919, Feature 6, east elevation, view facing west.



Figure 112. 32RI919, proposed NRHP boundary.

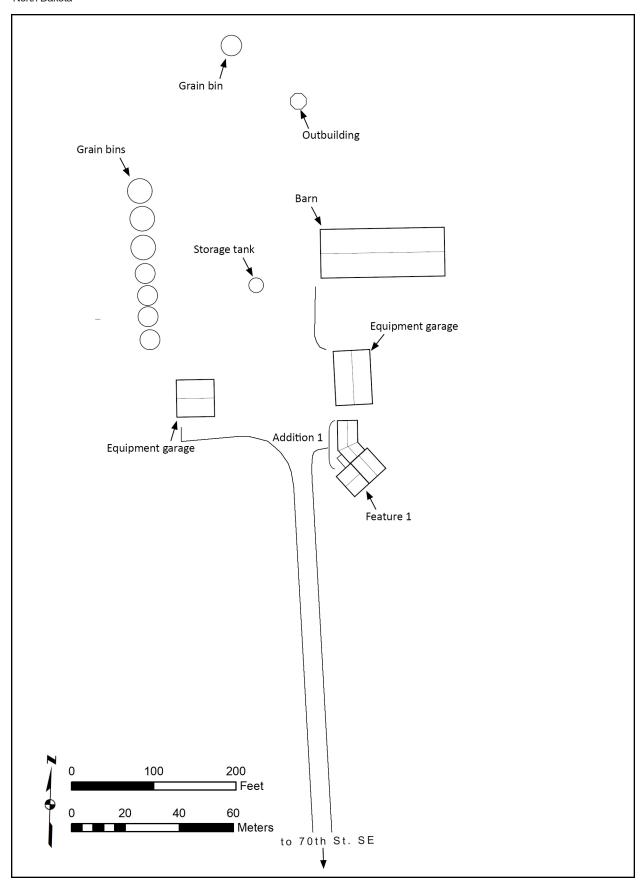


Figure 113. 32RI920, sketch map.



Figure 114. 32RI920, Feature 1, southeast elevation, view facing northwest.



Figure 115. 32RI920, Resource overview, view facing north.

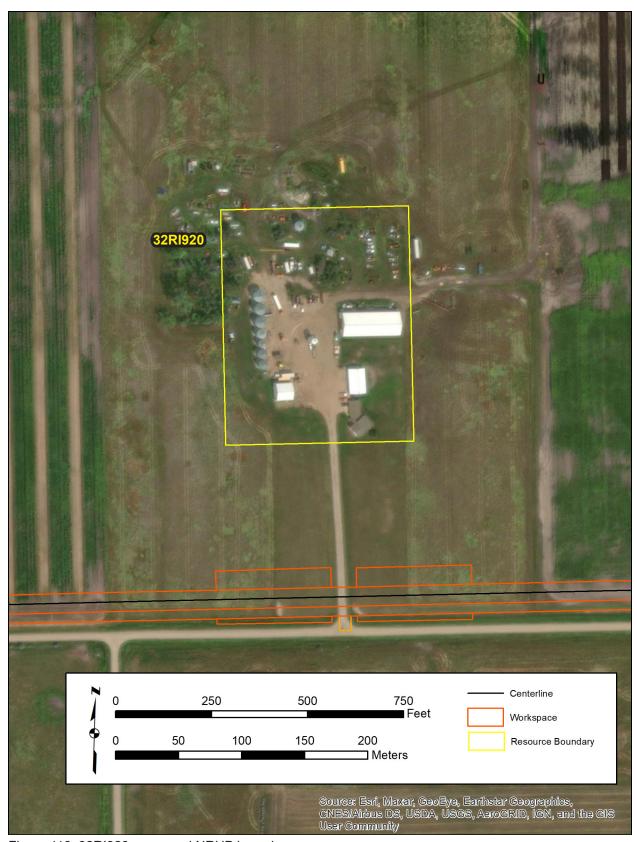


Figure 116. 32RI920, proposed NRHP boundary.

CLASS III HISTORIC ARCHITECTURAL SURVEY

APPENDIX C RESUMES

www.erm.com Version: 1.0 Project No.: 0611161 Client: WBI Energy Transmission, Inc. 28 February 2022

Emily Dodson

Consultant I, Architectural History

Emily studied history and museum studies at Tusculum University, then architectural history at Savannah College of Art and Design. She has worked in various museums, restaurants, and customer service operations since 2012. Emily worked an internship with the APCC Neighborhood Association, where she focused on research and documentation of the historic neighborhood for submittal to the NRHP. Her thesis focused on analyzing trends for monument building and what is chosen to be memorialized. She joined ERM in June 2021.

Experience: Less than 2 years' experience in architectural history consultation

Projects

- Natural gas stations and lines
- Energy transmission lines

LinkedIn: https://www.linkedin.com/in/emily-dodson-71b360158/

Email: emily.dodson@erm.com

Education

- M.F.A. Architectural History, Savannah College of Art & Design, United States, 2019.
- B.A. History/Museum Studies, Public History concentration, United States, 2017.

Professional Affiliations and Registrations

- Society of Architectural Historians
- Vernacular Architecture Forum
- Phi Alpha Theta
- Tennessee Association of Museums

Languages

English, native speaker

Fields of Competence

- Architectural history
- Photography
- Office suite
- InDesign, Illustrator

Key Industry Sectors

- History
- Museums
- Architecture

Honors and Awards

- Phi Alpha Theta, Excellence Award
- SAH- Oglethorpe Chapter, President



Mary Beth Derrick

Architectural Historian

Ms. Derrick meets the Secretary of the Interior's qualification standards [36 CFR61] for Architectural Historian. She has survey experience in West Virginia, Virginia, North Carolina, South Carolina, Georgia, Pennsylvania, Wisconsin, North Dakota, Alaska, Ohio, and Louisiana. Mary Beth has extensive experience in conducting historic research and fieldwork for Federal and state agencies, which has led to the completion of historic site inventory forms, historic structure reports, condition assessments, and mitigation plans.

Mary Beth also has an educational background in history and art history. She has had experience in museum exhibits, surveys at the local and state level, photo simulations, ArcGIS, and measured-drawings.



Experience: Over 5 years of experience in the field of Cultural Resource Management.

LinkedIn: https://www.linkedin.com/in/mary-beth-

derrick-a5920b121/

Email: marybeth.derrick@erm.com

Professional Affiliations & Registrations

- Society of Architectural Historians
- The Vernacular Architecture Forum

Fields of Competence

- Architectural surveys and evaluations
- Historic documentary research
- National Register of Historic Places eligibility evaluation and assessments for historic resources
- Compliance with state, and federal cultural resource regulations, including guidelines set forth by various State Historic Preservation Offices, the National Historic Preservation Act and the National Environmental Policy Act
- Historic Structure Reports
- Geographic Information Systems (GIS)
- Cultural Resource Survey and Reporting for Federal Agencies including FERC, FCC, and USACE
- Measured Drawings
- Photo Simulations
- Section 106

Education

- M.A., Architectural History, University of Virginia, 2016
- Certificate in Historic Preservation, University of Virginia, 2016
- B.A., History, University of South Carolina, 2013
- B.A., Art History, University of South Carolina, 2013

Languages

English, native speaker

Key Industry Sectors

- Power generation and transmission
- Oil and gas
- Wind Energy

Publications

 2016 William Jay and the South Carolina Academy of Fine Arts (Online published master's thesis).
 University of Virginia, Charlottesville, Virginia.



Key Projects

Energy Client, Wind and Electric Energy, Virginia, U.S.A., 2021- present

Acted as principal investigator and lead architectural historian for the onshore portion of an electric transmission line associated with an offshore wind farm. Duties included the preparation of the preapplication report, overseeing the historic resource field survey, and compiling a reconnaissance level report for over 300 architectural resources.

Energy Client, Wind Energy, Massachusetts, U.S.A., 2020-2021

Acted as a cultural resource specialist supporting the Bureau of Ocean Energy Management by aiding in the Section 106 consultation process for a wind energy project. Tasks included contributions to the Finding of Adverse Effects document, Memorandum of Agreement, drafting materials for consultation meetings, compiling meeting summaries, and assisting with any other tasks, as needed.

Energy Client, Pipeline, Ohio, U.S.A., 2019-present

Acted as lead architectural historian for natural gas pipeline maintenance project throughout Ohio. This included technical report preparation and writing, as well as completing Ohio I-forms for all architectural resources.

Energy Client, Pipeline, North Dakota, U.S.A., 2019-2021

Acted as principal investigator for a pipeline and two compressor sites by conducting a Class III intensive cultural resource survey and report for architectural resources in the project APE. Key tasks included researching historic sites, completing field surveys, photo documentation, and assessing historic structures for NRHP eligibility.

Energy Client, Pipeline, Wisconsin, U.S.A., 2019-present

Acted as principal investigator for an approximately 50-mile oil pipeline in northern Wisconsin, which included a reconnaissance and intensive level survey and associated report for architectural resources in the project APE.

Manufacturing Client, Refinery, Louisiana, U.S.A., 2020

Acted as lead architectural historian for a reconnaissance-level survey and report of an expansion of an existing refinery. This involved researching the refinery, and completing a field survey of the refinery and surrounding structures, photo documentation, and writing a reconnaissance-level description with National Register of Historic Places assessments and assessment of effects.

Manufacturing Client, Refinery, Alaska, U.S.A., 2019

Acted as lead architectural historian for an intensive-level survey and report of a modification of an existing refinery. This involved researching the historic property, completing a field survey, intensive photo documentation, and writing an intensive-level description with a National Register of Historic Places assessment and assessment of effects.

Energy Client, Pipeline, Louisiana, U.S.A., 2019

Acted as lead architectural historian for three compressor sites and a 300-mile pipeline, which included researching historic sites, completing field surveys, assessing historic structures for their NRHP eligibility, and evaluating the project's APE. Suggested possible changes to compressor station location to minimize possible project effects. Completed Louisiana Historic resource inventory forms and wrote the architectural resource survey report.

Energy Client, Pipeline, West Virginia, Virginia, North Carolina, U.S.A., 2016-2020

Conducted field surveys as architectural historian field lead and assessed previously-listed and unlisted historic structures within the project's APE and proposed compressor stations. Evaluated the viewshed of historic structures toward the proposed project. Determined the project's impact on the historic resources, their eligibility for inclusion in the National Register of Historic Places, completed West Virginia Historic Property Inventory forms, input data into Virginia Cultural Resources Information System, and completed North Carolina Historic Preservation Office Survey Database entries. Worked on historic structure reports, assessment of effects, and treatment plans for cultural resources to mitigate project effects. Worked on project components being permitted by FERC and FCC. Consulted with state SHPOs and consulting parties, as appropriate.

Energy Client, Wind Energy, Pennsylvania, U.S.A., 2018-2020

Acted as architectural historian field lead that involved field surveys and assessments of previously-listed and unlisted historic structures within the project's area of potential effect. Evaluated the project's impact on the structures and historic districts and contributed to the historic structures report.

Energy Client, Electric Power, Virginia, U.S.A., 2017-2019

Took high-resolution photo simulations of areas that could be affected by the proposed project and wrote assessments of previously recorded historic resources in the area. Wrote architectural descriptions for the final reports, assessed architectural resources' eligibility for inclusion in the National Register of Historic places, and determined the project's impact on the historic resource.

Energy Client, Electric Power, Michigan, U.S.A., 2018-2019

Acted as lead architectural historian, completed previously-recorded resource search at the Michigan State Historic Preservation Office in Lansing, assessed historic structures, and evaluated the project's area of potential effect (APE). Determined resources' eligibility for inclusion on the National Register of Historic Places, and completed Michigan History/Architectural Survey site forms and associated survey report.

Energy Client, Electric Power, West Virginia, U.S.A., 2018

Conducted field surveys and historic structure assessments of structures 45 years and older in the project's area of potential effect. Contributed to the history and architectural descriptions in the final historic structures reports. Determined resources' eligibility for inclusion on the National Register of Historic Places, and completed West Virginia Historic Property Inventory forms.

Energy Client, Pipeline, West Virginia and Pennsylvania, U.S.A., 2016-2018

Conducted field surveys as architectural historian field lead, assessed historic structures, and evaluated the project's area of potential effect (APE). Determined resources' eligibility for inclusion on the National Register of Historic Places, and completed Historic Property Inventory Forms and historic structures reports.

Energy Client, Pipeline, West Virginia, U.S.A., 2016-2018

Conducted field surveys as lead field architectural historian. Wrote assessments of historic structures, determined the project's impact on the historic resources, their eligibility for inclusion on the National Register of Historic Places, and completed Historic Property Inventory Forms and historic structures reports.

Energy Client, Development Project, Montana, U.S.A., 2018

Investigated the proposed project's effects on a historic trail and possible mitigation efforts.

Energy Client, LNG Project, North Carolina, U.S.A., 2018

Principal Investigator for historic architecture survey, assessed historic structures, and evaluated the project's area of potential effect (APE). Determined resources' eligibility for inclusion on the National Register of Historic Places, and completed North Carolina Historic Preservation Office Survey Database entries.

Manufacturing Client, Manufacturing Facility, West Virginia, U.S.A., 2018

Conducted field surveys, re-assessed historic structures within the project APE, and evaluated the project's area of potential effect in West Virginia. Completed Historic Property Inventory forms and the associated historic structures report.

Energy Client, Electric Power, North Carolina, U.S.A., 2017

Conducted field surveys assessments of previously listed and unlisted historic structures in the town of Scotland Neck, NC as an architectural historian field lead and evaluated their viewshed towards the proposed project. Completed North Carolina Historic Preservation Office Survey Database entries and final report.

Jeffrey L. Holland

Historian

Mr. Holland has over 30 years of experience on Cultural Resources Management projects throughout the eastern United States, the Midwest, and Texas. He has conducted historical research and documentation for National Register properties and districts, HABS/HAER recordation, Assessments of Effects reports, and cultural resources survey, testing, and data recovery projects. He has also authored popular histories for major industrial facilities and summaries of archaeological projects for public education. Mr. Holland's specialties include slavery, African American history, nineteenth century agriculture, the Civil War, and the history of military installations, utilities, and infrastructure in the twentieth century.



Experience: 30+ years' experience in Section 106, NEPA, and Historic Preservation Planning for government, energy, and industrial sectors

Email: jeffrey.holland@erm.com

LinkedIn: https://www.linkedin.com/in/jeff-holland-54993548/

Education

- M.A., History (with Historical Archaeology Apprenticeship), College of William & Mary, 1995
- B.A., History, Davidson College, 1984

Fields of Competence

- Historical research, documentation, and assessment of NRHP properties
- NEPA, Section 106
- Historic preservation planning
- Genealogical research
- Cemetery relocation
- Historical archaeology

Languages

English, native speaker

Key Industry Sectors

- Energy
- Military
- Utilities
- Transportation

Publications

- Holland, Jeffrey. 2007. Landownership and Hardship: Interpreting the Landscape of an African-American Community in Eastern Gwinnett County, Georgia. Early Georgia 35(2).
- Holland, Jeffrey. 2006. Under One Roof: The Story of Air Force Plant 6. Aeronautical System Center, Acquisition Environmental, Safety, & Health Division, Wright-Patterson Air Force Base, Ohio.
- Garrow, Patrick H., and Jeffrey L. Holland. 2005.
 Camp Lincoln and the Army of Southeastern
 Missouri. Missouri Archaeologist 66 (Dec):93–118
- Pietak, Lynn Marie, and Jeffrey L. Holland. 2003. Excavations at the Colclough Farmstead: Exploring Rural Life in Nineteenth and Twentieth Century Northeastern Mississippi. *Mississippi Archaeology* 37(2):165–218.



Key Projects at ERM

Energy Client, Pipeline Project, 2015–2019

Conducted cultural resource investigations as part of the permitting of a 600-mile natural gas pipeline in three states. Prepared historical contexts, conducted research on properties, assessed effects of project on resources, prepared mitigation plans for NRHP-eligible properties. Federal Energy Regulatory Commission issued Programmatic Agreement approving implementation of mitigative measures to complete compliance with Section 106 of the National Historic Preservation Act.

Energy Client, Wind Energy Project, 2019–2020

Prepared a Cumulative Visual Effects Assessment for a proposed off-shore wind energy installation of 800-megawatts in the waters of Rhode Island and Massachusetts. The analysis incorporated 17 lease areas and 761 wind generating turbines from the proposed project and reasonable foreseeable future projects. The assessment focused on three historic properties, including a Traditional Cultural Property and a National Historic Landmark.

Energy Client, Wind Energy Project, 2017–2019

Developed context and assessed historic significance for resources in three county area of northeast Pennsylvania that might be affected by a series of proposed wind turbines sites. The context addressed thematic resource types of primary significance in the region including coal industry related sites, railroads, and agricultural properties.

Energy Client, NRHP Evaluation of LNG Terminal, 2019

Developed context and assessed historical significance of an LNG terminal in Alaska completed in 1969 that was the first to export LNG from the United States. The research addressed the process involved in liquefying natural gas and changes to the plant over time. The plant was recommended as eligible for the NRHP.

Energy Client, NRHP Evaluation of Abandoned Pipeline, 2018

Served as author of reports for four western states assessing the historical significance of a 700-mile former oil pipeline converted to natural gas that was slated for abandonment. The assessment was conducted in accordance with a Notice of Exemption issued by the Advisory Council on Historic Preservation regarding abandoned historic natural gas pipelines.

Manufacturing Client, NRHP Evaluation of Historic Orchard Property, 2018

Conducted historical research and produced historical context for historic apple orchard and other historic properties in Jefferson County, West Virginia.

Assessed significance of properties and potential direct and visual effects of a fiber manufacturing facility.

Energy Client, Wind Energy Project, 2016–2017

Developed context and assessed historic significance for resources in four county area of northeast West Virginia that might be affected by a series of proposed wind turbines sites. The context addressed a number of resource types including historic coaling and lumber communities, railroads, and industrial sites. Assessed architectural resources for NRHP eligibility under Criteria A and B through local history sources, deed research, and genealogy. Prepared inventory forms for data entry.

Key Projects Prior to Joining ERM

Energy Client, NRHP Documentation, 2014

Researched the ownership history and development of the William Evans farmhouse and associated buildings using county records, historical maps, census returns, and other primary and secondary sources as part of a Memorandum of Agreement to mitigate the effects of a transmission line with a permanent archival record of the property

Government Agency, Nuclear Power Program History, 2013

Conducted historical research using documents from the agency's corporate libraries, records in the National Archives, contemporary newspaper articles, and secondary sources on the nuclear power industry to produce a fully-referenced, illustrated history of what was for many years the nation's largest nuclear power program. The agency commissioned this historical overview of its nuclear power program to provide a concise reference for the agency.

Government Agency, HABS Documentation, 2012

Examined project records and historic photographs, along with other primary and secondary sources to establish the history of the former project offices of the Falcon Dam Project on the Rio Grande, constructed in 1951.

Government Agency, NRHP Assessment, Levees and Water Control Features, 2010–2011

Researched the records of the U.S. Boundary and Waters Commission and the Bureau of Reclamation to assess the significance of two levees constructed on the Rio Grande to control flooding. The levees interfaced with irrigation systems constructed prior to the levees, which also had historic features.

Government Agency, Oral History Documentation of Federal Housing Project, 2009

Conducted historical research on two housing projects slated for demolition using records at the local historical societies and libraries. Current residents of the developments were interviewed about their experiences in public housing. The documentation was part of a recordation of the two facilities intended to produce a comprehensive history of the public housing prior to the sale of the properties by the city.

Energy Client, Pipeline Project, 2008

Produced statewide contexts for five states, as well as more specific histories for dozens of counties and parishes along a 507-mile natural gas transmission pipeline in the southeast U.S. Historical research was also conducted on identified architectural resources to

aid the assessment of their NRHP significance. The project was conducted on a short time schedule.

Military Agency, Air Force Facility History, 2006

Served as Historian and Author for the production of a pictorial history of Air Force Plant 6, an aircraft assembly plant operated by Bell Aircraft Company during World War II and later by Lockheed Aeronautics Company and its successors. The book is a fully-illustrated, perfect-bound history of the plant intended for a general audience and was distributed to libraries, government agencies, and other interested organizations.

Government Agency, Cultural Resources Survey of Redevelopment Property, 2006

Researched agency records and photographs on site and at the National Archives Southeast Region Branch in Atlanta, as well as local facilities to document the history and historic significance of a portion of the agency's reservation. The site included numerous industrial properties related to weapons manufacture in World War I, New Deal agricultural programs, and hydroelectric power. The assessment of the facilities was later used to develop an adaptive reuse plan for the property.

Government Agency, Archaeological Data Recovery in Historic District, 2006

Served as a Historian for this investigation of two blocks of a commercial and residential street in a historically black neighborhood of Savannah, Georgia. Using Sanborn Fire Insurance maps, city directories, and a variety of historical sources, documented neighborhood development, racial and social composition, and landscape characteristics over a period of approximately 100 years. The information was applied to the archaeological evidence from the excavation of features related to domestic and business activities on the street during the early twentieth century. A popular pamphlet on the results of the investigation was also produced.

Government Agency, Historical Research for NRHP Historic District Nomination, 2005

Conducted background research on the history of town in West Georgia, the evolution of the built environment within the district, and the construction date of the buildings, as part of a survey of 60+ properties for this historic downtown historic district. The information was used for an NRHP nomination submitted to the Georgia SHPO, and the district was listed in 2007.

Energy Client, NRHP Assessment of Hydroelectric Power System, 2004

This project involved a review of historical documents related to the design and construction of 11 dams and powerhouses along two major rivers in North and South Carolina. Published histories, company documents, contemporary accounts were consulted, and similar large-scale power and flood-control projects in the Southeast and in the United States were studied to assess the significance of a series pf projects that spanned two states and included multiple facilities along an entire river system.

Military Agency, Context and NRHP Assessment of Korean War and Cold War Structures, 2003

Conducted background research to develop historic contexts to aid in the interpretation and assessment of BASOPS structures from the Korean War and Cold War periods at Fort Bliss and Briggs Army Airfield, Texas. The assessment of the facilities required the application of NRHP guidelines for properties of exceptional significance but less than 50 years old.

Kevin Malloy, PhD., RPA

Archaeologist

Dr. Malloy has 14 years of experience in archaeological excavation and analysis, and three years of experience in cultural resources management. He is proficient in zooarchaeological faunal analysis and is experienced in bioarchaeology. Dr. Malloy has worked on both domestic and international projects in Ireland, the United Kingdom, Peru, Vietnam, and Guyana. He has planned and directed several international excavations and surveys, and has worked in conjunction with the Defense POW/MIA Accounting Agency. Domestic work has consisted of working with regulatory agencies including BOEM, FERC, USACOE, and USFS on large-scale energy projects, such as offshore wind farms, and inter-state pipelines, in multiple states across the U.S. Dr. Malloy meets the U.S. Secretary of the Interior's (36CFR61) Professional Standards for Historic and Prehistoric Archaeology.



Experience: 14 years experience in archaeology and 4 years of experience in cultural resources management.

Email: kevin.malloy@erm.com

Education

- Ph.D. Anthropology, University of Wyoming, USA, 2015
- M.Res. Environmental History, University of Stirling, United Kingdom, 2010
- B.A. Anthropology and History, University of Minnesota, 2009

Professional Affiliations and Registrations

- Register of Professional Archaeologists
- Society of American Archaeology

Languages

English native speaker

Fields of Competence

- Zooarchaeology
- Bioarchaeology
- Landscape archaeology
- Environmental archaeology
- Cultural Resources Management
- Technical writing/editing
- Phase I,II, and III archaeological field investigations
- Section 106 of the National Historic Preservation Act
- Technical Community Coordinator with 57 people in the Technical Community

Key Industry Sectors

- Wind Energy
- Oil and Gas
- Power

Publications

- Kevin Malloy and Derek Hall, 2018. "Archaeological Excavations of the Royal Kincardine Landscape in Aberdeenshire". In Medieval Archaeology. 62:1:157-176
- Kevin Malloy and Derek Hall, 2018 (online; 2019 in press). "Medieval Hunting and Wood Management in the Buzzart Dykes Landscape". In Environment and History.



Key Projects

Principal Investigator – Energy Client, Pipeline – Guyana EPA Project – 2021-2022

Principal investigator conducting a Phase I cultural heritage survey within the Demerara-Mahaica region of Guyana. Key tasks include conducting background research, meeting with the National Trust of Guyana, planning, organizing, and executing the Phase I survey, and drafting the cultural heritage analysis of the Environmental Impact Assessment (EIA).

North America Technical Community Coordinator Cultural Heritage and Archaeology Technical Community (TCC) 2020 – Present

As Technical Coordinator, I am tasked with helping broaden our community, increase our TC's connections with other TCs, and broaden our community's visibility throughout the company. This task is shared with the TCCs of EMEA and of APAC. Combined, there are currently 57 people currently in the Cultural Heritage/Archaeology TC.

Principal Investigator – Energy Client, Pipeline – NEPA Project –2021

Principal investigator conducting a Class III (Phase I) intensive cultural resource inventory of a 60 mile proposed pipeline through North Dakota under the jurisdiction of the FERC. Key tasks include survey coordination, leading Phase I surveys, consultation with the SHSND and coordination with Tribal stakeholders.

Section 106 Support – Energy Client, Offshore Wind Energy Project – NEPA Project –2021

Cultural resource specialist supporting the Bureau of Ocean Energy Management in their efforts to navigate the Section 106 consultation process for a wind project off the east coast of the United States. Key tasks include drafting documents pertaining to the Environmental Impact Statement, supporting stakeholder consultation meetings, and providing technical support for mitigation design efforts.

Principal Investigator – Energy Client Pipeline – NEPA Project 2021

Principal investigator conducting a Phase II archaeological investigation on a prehistoric site in Minnesota within a proposed Pipeline corridor. Assessed the NRHP eligibility of the site within the Project APE.

Section 106 Support – Energy Client, Pipeline – NEPA – 2020-2021Project

Cultural Resource Specialist in charge of writing Resource Report 4 for a three mile pipeline project in Illinois. Other tasks include planning and budgeting fieldwork, coordinating field crews, health and safety compliance, and report writing.

Section 106 Support – Energy Client, Offshore Wind Energy Project – NEPA Project – 2020-2021

Cultural resource specialist supporting the Bureau of Ocean Energy Management navigate the Section 106 consultation process for a wind project in Massachusetts. Key tasks include creating guidance documents for mitigation proposals, producing PowerPoint slides for consultation meetings, compiling meeting summaries, contributing to the Revised Finding of Adverse Effect (FoAE) document, the Supplement to the FoAE, and the Memorandum of Agreement.

Principal Investigator – Energy Client, Pipeline – NEPA Project – 2019-2021

Principal investigator conducting a Class III (Phase I) intensive cultural resource inventory and archaeological testing (Phase II) of key sites on 100 miles of proposed pipeline through North Dakota under the jurisdiction of the FERC. Key tasks included: intensive background research, data management and analysis using ArcGIS, conducting consultations with Tribal stakeholders, coordinating field crews, leading Phase I surveys and Phase II testing, creating site test plans, authoring the project Environmental Assessment for cultural resources, co-authoring Resource Report 4, serving as lead author for three major technical reports detailing the

findings of the 2019 and 2020 fieldwork, and coordinating with the USFS, USACOE, and SHPO. A cultural avoidance and monitoring plan (treatment plan) was also developed as part of this work.

Principal Investigator – Energy Client, Pipeline – NEPA Project – 2019

Principal investigator for a feasibility study that examined the archaeological resources within the corridor of a 300-mile proposed pipeline route across North Dakota and Minnesota. Assessed the potential difficulties pertaining to cultural resources the project was likely to encounter were they to move forward with the proposed route.

Principal Investigator – Energy Client, Pipeline – NEPA – 2019

Principal investigator conducting Class I literature search, and Class III (Phase I) intensive cultural resource inventory on approximately 80 miles of proposed pipeline in North Dakota. Key tasks included serving as crew chief for the field crew and conducting pedestrian and shovel test surveys.

Archaeologist – Energy Client, Pipeline – NEPA Project – 2019

Cultural resource specialist assisting with management of daily Phase I field data and technical report writing on a 93-mile proposed pipeline through Kansas and Oklahoma under the jurisdiction of the FERC. Key tasks included daily QA/QC review of incoming field data and writing the environmental background and prehistoric cultural context for Oklahoma and Kansas.

Archaeologist – Energy Client, Pipeline – NEPA Project – 2018-2019

Cultural resource specialist in charge of Phase I survey shovel test data management from approximately 520 miles of pipeline through Texas and Oklahoma under the jurisdiction of the USACE. Managed tens of thousands of shovel test entries in Microsoft Excel and reporting on archaeological sites identified through the Phase I work. Key tasks

included data management and data QA/QC, figure and table preparation, authoring site descriptions of new archaeological sites encountered, and managing the reports of three additional report writers.

Archaeologist – Energy Client, Pipeline – NEPA Project – 2019

Cultural resource specialist working on the production of a Phase I Archaeological Survey Addendum Report on approximately 164 miles of pipeline through West Virginia under the jurisdiction of the FERC. Key tasks included conducting a review of areas associated with all FERC Level 3 Variances to assess any existing or potentially present cultural resources.

Key Projects Outside of ERM

Scientific Recovery Expert - SNA-International/Defense Pow/MIA Accounting Agency - Mission 18-3VN - Kham Duc, Vietnam Recovery Operation - 2018

Scientific Recovery Expert (SRE), assigned to a case involving a MIA soldier in Kham Duc, Vietnam. Key tasks included background research on associated incident, creation of the Phase III project design, daily organization of archaeological tools and materials, daily on-site management of 14 U.S. military personnel and 57 local workers, supervision of all excavation and scientific recovery operation and decision-making, analysis of cultural and human-remains related evidence, daily progress reporting, maintenance of a legally binding field notebook, transportation of all culturally and biologically significant materials from Vietnam to Hawaii, and final report writing of mission outcomes.

Visiting Researcher – University of Wyoming – Alm Rock Shelter Project – Laramie, Wyoming – 2018

Visiting researcher conducting faunal analysis on archaeological material collected from the Alm Rock Shelter in the Bighorn Mountains over the course of 5 months. Key tasks included data management,

detailed analysis of 20,000+ animal bones, and database construction.

Archaeological Consultant – Canyon Creek Archaeological Project – Tensleep Wyoming – 2017

Archaeological consultant on a Phase I/II investigation and testing of rock shelters in the Canyon Creek area of the Bighorn Mountains. Key tasks included managing and supervising excavation blocks, archaeological reporting, and instruction of undergraduate students in proper archaeological methodologies.

Archaeological Consultant/Co-director – The Big Dig – Chancefield Trenches conducted by the Living Lomonds Landscape Partnership, Falkland Scotland, UK – 2016

Archaeological consultant/co-site director of all onsite excavations. This Phase III project focused on a landscape anomaly located within the grounds of Falkland Palace, and incorporated both prehistoric and historic components. Key tasks included instruction of archaeological methodologies to public volunteers, collection and management of collected cultural materials, and site recording.

Project Director/Principal Investigator – Medieval Scottish Park Project – Scotland, UK – 2010-2015

Principal Investigator studying park landscapes across Scotland. Field work for this project focused primarily on the Phase II testing and Phase III excavations of three sites across eastern Scotland. In addition, it involved background research into 80+ Scottish sites and 3000+ English sites of similar style, form and age. Key tasks included project design, site investigation and survey, archival and background research, grant writing, site-direction, all archaeological analysis and interpretation, and reporting.

Teaching Assistant – University of Wyoming - Yanaorco Archaeological Field School – Cajamarca, Peru – 2012

Teaching assistant for the Phase III Yanaorco
Peruvian Field School, operated by the University of
Wyoming. Yanaorco was a Late Intermediate Period,
high elevation village. Key tasks included directing
multiple excavation blocks, and supervising and
instructing undergraduate students in archaeological
methodologies.

Archaeological Field Technician – Mining Client – LTA – Riverton, Wyoming – 2011

Conducted Phase I archaeological surveys on a former Uranium mine. Key tasks included identification of archaeological materials and delineation and recording of archaeological sites.

Archaeological Field Technician –Cement Client – LTA – Laramie, Wyoming – 2010

Conducted Phase I archaeological surveys in the Laramie Range for a planned quarry. Key tasks included identification of archaeological materials and delineation and recording of archaeological sites.

Archaeological Volunteer – Discovery Programme – Tulsk, Co. Roscommon, Ireland – 2007, 2009

Worked with the Discovery Programme's Medieval Rural Settlement Project on the Phase III archaeological excavation of a multi-component site that spanned the Mesolithic period through the early modern.

Other Relevant Work

Corporate Trainer Epic Systems Inc. 2014-2015

Trained medical clients in the safe and proper use of a pharmaceutical software in a clinical setting. This work included training large groups of clients simultaneously, creating PowerPoint presentations, and producing training materials.

Classes Taught

Instructor – Cultural Anthropology – Gogebic Community College – Ironwood, Michigan – 2018

Teaching Assistant – Ethnographic Methods – University of Wyoming – Laramie Wyoming - 2014

Instructor – World Archaeology – University of Wyoming – Laramie, Wyoming – 2013

Teaching Assistant – Bioarchaeology – University of Wyoming – Laramie, Wyoming – 2013

Teaching Assistant – Introduction to Archaeology – University of Wyoming – Laramie, Wyoming – 2012

Teaching Assistant – University of Wyoming, Yanaorco Field School – Cajamarca Peru – 2012

Teaching Assistant – North American Archaeology – University of Wyoming – 2011

Larissa A. Thomas, Ph.D.

Senior Archaeologist

Larissa Thomas is a Consultant within ERM based in a satellite office in Lamoine, Maine, and attached to the cultural resources field services group based in Duluth, Georgia. Dr. Thomas is a senior cultural resources professional who has been working as an archaeologist since 1991 and specializes in archaeological investigations, permitting, project management, and contract management. Trained as a prehistorian, her expertise also extends to the areas of history, historic architecture, and cemetery investigations. Dr. Thomas has authored countless peer-reviewed publications and technical reports, and has held several faculty positions during her career.



Experience: 27 years' experience in archaeology and cultural resource consulting

Email: larissa.thomas@erm.com

Education

- Ph.D., Anthropology, Binghamton University, USA, 1997
- M.A., Anthropology, State University of New York at Binghamton, USA, 1994
- B.A., Anthropology and English, Wake Forest University, USA, 1991

Professional Affiliations and Registrations

 Register of Professional Archaeologists, 1999– present

Languages

English, native speaker

Fields of Competence

- Prehistoric archaeology Southeast and Midwest
- Cemetery investigations
- Historical archaeology
- Historic architecture
- Historic research

Key Industry Sectors

- Oil & Gas
- Power



Key Projects

Energy Client, Pipeline Project, 2014—2018 600-mile pipeline in West Virginia, Virginia, North Carolina. Cultural resource specialist who prepared the prehistoric and environmental contexts and conducted the technical review for all of the cultural resource survey, Phase II testing, assessment of effects, and mitigation/avoidance plan reports.

Energy Client, Supply Header Project, 2014—2018

Approximately 40 miles of pipeline and ancillary facilities in Pennsylvania and West Virginia. Cultural resource specialist who prepared the prehistoric, historic, and environmental contexts and conducted the technical review for all of the cultural resource reports.

Energy Client, Pipeline Project, 2014—2017

Approximately 165 miles of pipeline in West Virginia. Cultural resource specialist who prepared the prehistoric and environmental contexts and conducted the technical review for all of the cultural resource survey and assessment of effects reports.

Energy Client, Transmission Line Project, 2017
Six transmission line alternatives in Fairfax County,
Virginia. Cultural resource specialist who prepared
sections of the routing study, SCC application, and
pre-application analysis, and conducted the technical
review for the cultural resource investigations
conducted for a proposed line to be sited in northern
Virginia.

Energy Client, Transmission Line Project, 2017 17-mile transmission line in Halifax County, North Carolina. Cultural resource specialist who wrote portions of the historic architectural findings, and conducted the technical review for the archaeology and historic architectural reports.

Energy Client, Pipeline Project, 2015—2017

Three natural gas compressor stations in Kentucky, Tennessee, and Mississippi. Cultural resource specialist who prepared portions of the reports and conducted the technical review for all of the cultural resource survey reports.

Energy Client, Pipeline Project, 2015–2016

26-miles of pipeline as well other facilities in Plaquemines Parish, Louisiana. Cultural resource specialist who prepared the prehistoric, historic, and environmental contexts and conducted the technical review for all of the cultural resource survey reports.

Energy Client, Transmission Line Project, 2015

2.5 miles of transmission line alternatives in Luzerne County, Pennsylvania. Cultural resource task manager responsible for collecting data on recorded archaeological and historic resources, overseeing the archaeological and historic resource field survey, and authoring the technical report.

Energy Client, Pipeline Project, 2015

205-mile natural gas pipeline in Culberson, El Paso, Hudspeth, Pecos, and Reeves Counties, Texas: Cultural resource specialist who prepared the prehistoric and historic contexts and conducted the technical review for four separate cultural resource reports.

Energy Client, Texas LNG Project, 2015

LNG facility on a 625-acre tract in Cameron County, Texas: Cultural resource specialist who prepared the prehistoric, historic, and environmental contexts and conducted the technical review for the archaeological survey and testing report and mitigation plan.

Energy Client, Transmission Line Project, 2014–2015

Five transmission line alternatives in extending nearly 40 miles across northern Virginia. Cultural resource task manager responsible for collecting data on recorded archaeological and historic resources, overseeing the historic architectural field

effort, conducting the assessment of impacts, and serving as the lead author on the pre-application analysis report and preparing sections of the routing study and SCC application.

Energy Client, LNG Terminal and Pipeline Laterals, 2014–2016

42 miles of pipelines and other facilities in Cameron Parish, Louisiana. Cultural resource specialist who prepared the prehistoric, historic, and environmental contexts and conducted the technical review for all of the cultural resource survey reports.

Energy Client, Pipeline Project, 2014

4-mile pipeline abandonment and replacement in Hempstead and Howard counties, Arkansas. Cultural resource specialist who conducted the historic resources assessment and prepared prehistoric context, historic context, and historic resource findings sections of the cultural resource survey report.

Energy Client, Pipeline Project, 2013–2014

80-mile pipeline in Mississippi, Tennessee, and Arkansas. Cultural resource specialist who conducted artifact analysis, prepared site forms, and prepared prehistoric and historic background for three reports prior to project's suspension.

Energy Client, Pipeline Replacement Project, 2013

One-mile pipeline replacement in Independence County, Arkansas. Principal investigator who directed the archaeological and historic resources survey and prepared the cultural resource survey report.

Energy Client Project, 2013–2014

Eight transmission line alternatives in northern Virginia. Cultural resource specialist who prepared sections of routing study.

Energy Client Pipeline, 2013

9-mile pipeline in St. John the Baptist and St. Charles parishes, Louisiana. Cultural resource specialist who

prepared the prehistoric, historic, and environmental contexts and conducted the technical review for the cultural resource survey report.

Key Projects Prior to Joining ERM

Energy Client, Liquefaction and Pipeline Project, 2012–2013

18 miles of natural gas pipeline, 288 acres for the liquefaction facility, four compressor station sites, 10 meter stations, and a 21-acre contractor yard in Louisiana and Mississippi. Cultural resources task manager for a FERC regulated LNG terminal and pipeline project in Louisiana and Mississippi, intended to facilitate export of domestically produced natural gas from a facility currently designed for imports. Role entailed the initial SHPO and Native American consultation, oversight of the cultural resource survey teams, documentation of a compressor station upgrade in Mississippi, coauthoring the Phase I report for the 288-acre liquefaction facility site in Calcasieu Parish, Louisiana, conducting the quality assurance technical reviews for all four Phase I reports, and preparation of Resource Report 4 and the unanticipated discoveries plans for the FERC filings.

Energy Client Cameron LNG Pipeline Expansion and Liquefaction and Pipeline Project, 2012–2013

21 miles of natural gas pipeline, 503 acres for the liquefaction facility, and 46 acres for a compressor station and contractor yard in Beauregard, Calcasieu, and Cameron Parishes, Louisiana. Cultural resources task manager for a FERC regulated LNG terminal and pipeline intended to facilitate export of domestically produced natural gas from a facility currently designed for imports. Role entailed conducting the initial SHPO and Native American consultation, oversight of the cultural resource survey teams, serving as lead author of the two Phase I survey reports prepared for the liquefaction facility site and pipeline, and writing Resource Report 4 and the unanticipated discoveries plans for the FERC fillings.

Energy Client, Expansion Pipeline Project, 2012–2013

16-miles of natural gas pipeline in Washington and Smyth Counties, Virginia and Sullivan County, Tennessee. Cultural resources task manager charged with managing the cultural resource team, conducting initial consultation with state historic preservation offices, Tennessee Valley Authority, and Indian tribes, and preparing FERC resource report sections

Energy Client, Transmission Line Project, 2011 55-mile electric transmission line in Burke, Jefferson, McDuffie, and Warren Counties, Georgia, which included a portion on a nuclear generating facility. Cultural resources task manager who directed the Phase I cultural resource survey and conducted the quality assurance technical review of the survey report.

Energy Client, Pipeline Project, 2011–2012

141-mile petroleum products pipeline extending from St. Charles Parish, Louisiana to Covington County, Mississippi. Cultural resource specialist whose work included initial consultation with both SHPO, preparation of prehistoric culture histories and environmental background sections for both Phase I reports, conducting the quality assurance technical reviews for the reports, and correspondence with contacts for the three USACE districts on the Phase I and addendum reports.

Energy Client, Pipeline Project, 2011–2012

570-mile natural gas liquids pipeline extends from Midland County to Jackson County, Texas. Different reports were prepared for the two USACE districts traversed by the project. Cultural resource specialist whose involvement included writing prehistoric culture histories and environmental background sections for both Phase I reports and conducting the quality assurance technical reviews.

Energy Client Project, 2009-2011

175-mile natural gas pipeline that extends from Panola County, Texas, to Richland Parish, Louisiana. The Phase I cultural resource investigations included archaeological and historic structure surveys, Phase II archaeological testing, and investigation of a cemetery that had been impacted by an unscrupulous landowner. Cultural resource specialist whose involvement included writing a public-oriented brochure detailing the history of the cemetery and its role in local history, and conducting the quality assurance technical reviews for the Phase I and addendum reports.

Energy Client, Transmission Ruston Storage Compressor Replacement Project, 2011

Principal Investigator and report author for the Phase I cultural resource survey of a 30-acre compressor station site and associated access road in Lincoln Parish, Louisiana.

Energy Client, Transmission Line Project, 2010 6.5-mile electric transmission line in Winston County, Alabama. Project manager and principal investigator who conducted the historic architectural assessment, and served as lead author on the report.

Energy Client, Transmission Line Project, 2010 8-mile electric transmission line in Wheeler and Telfair Counties, Georgia. Project manager and principal investigator who conducted the historic architectural assessment, and was the lead author for the Phase I report.

Energy Client, Transmission Alto Compressor Station Project, 2009

Natural gas compressor station in Richland Parish, Louisiana. Cultural resource specialist who conducted the historic architectural assessment, documented a historic cotton gin complex in the Area of Potential Effects, and coauthored the report.

Energy Client, Pipeline Project, 2007–2008

507-mile natural gas pipeline beginning in southeastern Oklahoma, traversing Texas, Louisiana, Mississippi, and terminating in southwestern Alabama. Cultural resource specialist whose involvement included SHPO and Native American consultation, preparing prehistoric culture histories and environmental context for all of the Phase I reports, and conducting the quality assurance technical reviews for the Phase I reports and numerous addendum reports.

Energy Client, Transmission Line Project, 2002, 2005, and 2009

The Tennessee River crossing for a transmission line replacement in Jackson County, Alabama. Project manager for an undertaking involving replacement of a segment of electric transmission line in where it crosses the Tennessee River: cultural resource investigations included archaeological survey. archaeological test excavations to determine a location for the structure on the island with the least likelihood of impacting significant portions of a known archaeological site with Native American burials, and archaeological monitoring during construction of the footings for the transmission line structure. Dr. Thomas' involvement in the cultural resource compliance on the project included managing all phases of the project, co-authoring the report of survey and excavation findings, and assisting client through the course of the project by offering recommendations for ways to work within engineering constraints and still avoid adverse effects to a significant archaeological site.

Energy Client, Transmission Line Project, 2005 4-mile electric transmission line in DeSoto County, Mississippi. Project manager and co-author of the Phase I survey report.

Energy Client, Transmission Line Project, 2005 5-mile electric transmission line in Polk County, Tennessee. Project manager who obtained an Archaeological Resources Protection Act (ARPA) permit from the U.S. Forest Service, conducted the quality assurance technical review for the Phase I report, and assisted client with project planning.

Energy Client, Transmission Line Project, 2005
12.5-mile electric transmission line in Cherokee and
Clay Counties, North Carolina. Project manager and
co-author of the Phase I survey report.

Energy Client, Lateral Pipeline Project, 2005

30-mile natural gas pipeline in Tazewell and Smyth Counties, Virginia. Project manager who co-authored the Phase I report and several addendum reports for access roads and ancillary facilities, and prepared other project documentation such as FERC resource report sections and an unanticipated discoveries plan, in addition to meeting with State Historic Preservation Office staff to resolve issues related to historic resources in the Area of Potential Effects.

Energy Client, Transmission Line Project, 2005 7-mile electric transmission line in Choctaw County, Mississippi. Project manager and lead author on the Phase I survey report.

Energy Client, Transmission Line Routing Project, 2005

Principal investigator for a cultural resource literature review of a 93-square-mile area that would contain a 20-mile electric transmission line in McDuffie, Columbia, and Richmond Counties, Georgia. Work included collecting all of the data on archaeological sites and historic resources and presenting the information to client in a report of findings to assist them in routing the line to minimize cultural resource impacts.

Energy Client, Pipeline Project, 2003-2004

Phase II test excavations and Phase III data recovery excavations at three archaeological sites in Washington and Smyth Counties, Virginia and Jackson County, Tennessee. Dr. Thomas served as cultural resource specialist whose work included assisting with the archaeological fieldwork during the

Virginia excavations, conducting archaeobotanical analysis of plant remains, conducting the quality assurance technical review for the Phase III reports, preparing a popular brochure presenting the findings for the sites in Virginia, and authoring addendum reports for access roads and ancillary facilities.

Energy Client, Transmission Line Survey, 2000
16 miles of proposed transmission line in Perry
County, Tennessee. Principal investigator who led
the archaeological survey and was the lead author of
the Phase I report.

Energy Client, Transmission Line Survey, 1999
14 miles of proposed transmission line in Madison
County, Tennessee. Principal investigator who led
the archaeological survey and was the lead author of
the Phase I report.

Publications

Thomas, Larissa A.

- 2001 The Gender Division of Labor in Mississippian Households: Its Role in Shaping Production for Exchange. In *Archaeological Studies of Gender in the Southeast*, edited by Jane Eastman and Christopher Rodning, pp. 27–56. University of Florida Press.
- 2000 Women in Native American Iconography. In Interpretations of Native North American Life: Material Contributions to Ethnohistory, edited by Michael S. Nassaney and Eric S. Johnson, pp. 321–357. University of Florida Press.
- 1998 The Effect of Community Size on Subsistence Practices at Mississippian Sites in Southern Illinois. *Journal of the Steward Anthropological Society* 26:129–156.
- 1996 A Study of Shell Beads and Their Social Context in the Mississippian Period: A Case from the Carolina Piedmont and Mountains. Southeastern Archaeology 15:29–46.
- Thomas, Larissa A. and Jack H. Ray 2002 Exchange at the Dahlman Site (23LA259), A Late Prehistoric Neosho Phase Settlement in Southwest Missouri. *Plains Anthropologist* 47:207–229.
- Thomas, Brian W. and Larissa A. Thomas 2004Gender and the Presentation of Self: An Example from the Hermitage. In *Engendering African American Archaeology: A Southern Perspective*, edited by Gillian E. Galle and Amy L. Young, pp. 101–131. University of Tennessee Press.

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ERM

3300 Breckinridge Boulevard Suite 300

Duluth, Georgia, USA 30096

T: 678-781-1370

