



April 19, 2011

City Clerk, City of Key West
525 Angela Street
Key West, Florida 33040

RE: Request For Proposal's #007-11-Key West Historic Resource Survey 2011 Project

To Whom It May Concern:

Panamerican Consultants, Inc. (Panamerican) submits the following proposal to provide cultural resources services as required by the City of Key West in response to RFP #007-11 for the Key West Historic Resources Survey 2011 Project. Information regarding our organization and personnel is provided herewith to demonstrate why Panamerican is uniquely qualified to perform these services for the City of Key West in an efficient and professional manner. The following pages demonstrate Panamerican's ability to conduct a comprehensive professional survey to identify and analyze all potentially eligible historic resources, structures, places, and sites in the City of Key West (City of Key West RFP 007-11) through our qualifications and presentation of successful completion of similar projects. Panamerican understands that 1) all historic resources over 50 years old (those constructed through 1962) within the municipal boundaries of the City of Key West that have not been previously surveyed will be documented and evaluated for National Register of Historic Places (NRHP) eligibility, 2) the survey will most assuredly document secondary structures associated with previously surveyed buildings and structures, and 3) the survey's findings will assist the City in determining whether or not to pursue expanding the current boundaries of the Key West Historic District (KWHD), as well as help the Historical Architectural Review Commission (HARC) in their stewardship of Key West's cultural resources. If awarded, proof of license, business tax receipt, insurance requirements and indemnification agreement as described in RFP 007-11 will be provided to the City of Key West.

Panamerican's Architectural History Division includes a team of architectural historians, historians, technicians, a historic preservation planner, a cultural resources management specialist, a historic architect, and a large-format photographer. Each of these individuals meets or exceeds the accepted Professional Qualification Standards as established in 36 CFR Part 61, *Secretary of the Interior Standards and Guidelines* (as amended and annotated). All staff members have a working command of the regulations, laws, and statutes governing the direction of cultural resource management projects. Panamerican's Architectural History Division has a demonstrated record of successfully conducting and managing all types of projects. Our team has an established reputation for completing all requisite project tasks in a professional, efficient, timely, and cost-effective manner.

The Senior Architectural Historians, Staff Architectural Historian, and Architectural History Assistant specified for this project have a collective understanding of the built environment, inclusive of the architectural styles and unique characteristics that define Key West's vernacular architectural style as demonstrated through their Vitae and project examples in this proposal. Each project team member has experience in conducting large-scale surveys documenting historic landscapes, commercial and industrial structures, as well as, urban and rural residential areas. Panamerican offers considerable expertise in NRHP eligibility assessments for a wide range of historic property types including landscapes. Our project team is skilled in historic resource identification, archival research, technical report writing, and photographic documentation for all types and levels of architectural and landscape surveys. In this instance, the project team will be familiar with the City's Historic Preservation Ordinance and Historic Architectural Guidelines to better evaluate the resources for NRHP eligibility, determining potential historic districts, or individually eligible properties. The Principal Investigator (PI) assigned to the project has the expertise to conduct and complete all phases of the project, from the initial consultation phase through final compliance review. The PI will ensure the final report and deliverables meet the

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standards and requirements of the National Park Service, the City of Key West, and the State Historic Preservation Office (SHPO).

Adept at research, our project team has acquired firsthand knowledge of archival research sources and procedures, as well as familiarity with the following: regulations and individuals within local, state, and federal repositories; agency records (tax, deed, wills, archives, etc.); local repositories and libraries; contact with local historians, historical societies, and interested residents; individual City departments and agencies. In order to produce the highest level of research possible, Panamerican consults with qualified individuals for particular research expertise including individuals within the City, SHPO offices, and architectural field. Panamerican anticipates meetings and/or consultations with representatives from the City's Certified Local Government, the Planning Department, HARC, the SHPO, the Florida Historic Keys Foundation, and the City's Preservation Planner, as well as others suggested by the City. As a result of our archival research on similar projects, we possess a vast library of literature related to vernacular architecture, regional architecture, architectural history, and general histories relevant to the resources in Key West and the State of Florida.

Panamerican has considerable experience in assessing buildings and structures for historic significance and eligibility for inclusion in the NRHP. Our experience includes reconnaissance and intensive level building inventory surveys (exterior and interior), evaluation of National Register eligibility, preparation of National Register nomination forms, architectural context development, and HABS/HAER/HALS documentation. Historic significance is evaluated on a local, regional, and national level. As noted, archival research and literature reviews are completed as per the scope-of-services. As indicated in the project examples in this proposal, Panamerican is experienced and successful in conducting large-scale surveys as the one proposed for the City of Key West.

Undaunted by the short deadlines and the scope-of-services, Panamerican offers our previous experience to successfully conduct the architectural resources field survey called for by the City of Key West as presented in our methodology. Mindful of the requirements set forth by the State of Florida grant that is partially funding the project, Panamerican is prepared to be on site immediately in order to meet the specified deadlines if awarded the project. With only eight weeks in which to complete the literature review of previous reports, conduct archival research, review materials on file at the City and local repositories, participate in public meetings, and complete the physical survey, Panamerican's Senior Architectural Historians have designed a phased plan and timeline to accomplish each required task, and produce the specified deliverables that meet the requirements of Chapter 1A-46.001 FAC within the City's deadline for project completion. Coordination and communication with the City's project point of contact will play a key role in the success of the project, as will the organization and use of Panamerican's entire project team inclusive of our production staff. Carefully orchestrating the gathering and exchange of survey information between on-site and off-site team members, the PI will maintain strict quality control over project material ensuring the successful completion of simultaneous tasks.

The PI and Panamerican point of contact designated for this project is Ms. Stacey L. Griffin, M.A., Senior Architectural Historian; co-Senior Architectural Historian is Ms. Christine M. Longiaru, M.A.; other key personnel include Ms. Kelly Mahar, M.H.P, Staff Architectural Historian; and Ms. Sharon Jenkins, M.A., Architectural History Assistant. If you have any questions, please do not hesitate to call. We look forward to the opportunity to work with the City of Key West.

Sincerely,

A handwritten signature in black ink, appearing to read "Stacey L. Griffin". The signature is fluid and cursive, with the first name being the most prominent.

Stacey L. Griffin, M.A.
Principal Investigator

City of Key West Request for Proposals #007-11 KEY WEST HISTORIC RESOURCE SURVEY 2011 PROJECT

April 20, 2011



City Clerk
City of Key West
525 Angela Street
Key West, Florida 33040



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Lakeland, Florida 33809
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STACEY L. GRIFFIN, M.A.
Principal Investigator
Senior Architectural Historian

M.A., History/Historic Preservation, Middle Tennessee State University (2003)
B.A., Art History (Art Studio, Minor), University of Alabama at Birmingham (1991)

Ms. Griffin exceeds the requirements in 36 CFR 61 for Architectural History having worked 15 years in the historic preservation field completing historical and architectural research, architectural surveys, National Register nominations, Historic American Buildings Survey (HABS) and Historic American Engineering Recordation (HAER) projects, and cultural resource surveys assessing National Register of Historic Places (NRHP) eligibility for reconnaissance surveys. She is well versed in NRHP eligibility criteria; Sections 106 and 110 processes for federal, state, and military agencies; completing historic structure forms; and executing other types of mitigation-type documentation. As Principal Investigator for Panamerican, Ms. Griffin manages architectural history projects, develops project proposals and budgets, and conducts fieldwork and research. Her management experience encompasses clients located throughout the country inclusive of federal, state, and local municipalities, as well as the Department of Defense.

Past projects include architectural surveys and National Register eligibility determinations for Integrated Cultural Resource Management Plans, cultural resources surveys, and architectural inventories of historic communities, military installations, industrial sites, and municipalities. Ms. Griffin has completed numerous large-scale historic buildings surveys in rural, urban, and military settings identifying individually eligible buildings, historic landscapes, significant industrial and commercial areas, and historic districts. She has considerable experience researching and discussing military and American Vernacular Architecture. Other project experience includes research and writing comprehensive historical narratives for HABS/HAER documents, National Register nominations, and stand alone historic contexts.

Ms. Griffin's experience includes the completion of multiple large-scale intensive level architectural resource surveys that includes the Harborview neighborhood in Tampa, Florida; the completion of historic structure site file forms for the Eatonville Historic District for the Town of Eatonville, Florida; the historic resort town of Highlands, New Jersey; the historic main post cantonment at Fort Benning, Georgia; and assisted on several wind-energy projects in New York state, evaluating visual impacts to historic properties.

Recent Panamerican Experience

- **Architectural Survey and NRHP Evaluations:** Principal Investigator, Senior Architectural Historian, and co-author of *Camp Merrill Buildings Survey and NRHP Evaluations, 5th Ranger Training Battalion, U.S. Army Ranger School, Dahlenega, Georgia*. Prepared by Panamerican Consultants, Inc., Tuscaloosa Alabama. Prepared for the U.S. Army Maneuver Center of Excellence, Fort Benning Military Reservation, Georgia.
- **HABS Documentation:** Principal Investigator, Senior Architectural Historian, and author, *Level II, Historic American Buildings Survey of Riverside (Quarters 1), Fort Benning Military Reservation, Georgia*. Prepared by Panamerican Consultants, Inc., Tuscaloosa Alabama. Prepared for the U.S. Army Maneuver Center of Excellence, Fort Benning Military Reservation, Georgia.

- **Historic Properties NRHP Reevaluation:** Principal Investigator, Senior Architectural Historian, and author, Fort Benning Historic Properties Survey Update For the Reevaluation of Historic Properties, U.S. Army Maneuver Center of Excellence, Fort Benning, Georgia. Panamerican conducted a reevaluation of the installation's historic properties. A master list of properties surveyed to date includes properties previously evaluated in 1987, 2007, 2003, and 2005. The goal of the project was two-fold: 1) to determine if the information found in the previous surveys was still current and 2) to determine if those historic properties were still eligible for the NRHP. A total of 1,857 previously evaluated historic properties (of which 630 are NRHP eligible) were reevaluated against the NPS and DoD criteria for eligibility. Identified historic districts were discussed and individual properties were listed in their respective historic district or cross-listed within several historic districts. Maps of the historic districts were also generated as part of the project deliverables. Property cards, historic photographs, and historic maps and aerials were consulted when available. A literature review of previous cultural resource surveys was also completed. A summary of determinations reached upon completion of the reevaluation process included the following: loss of two historic districts (one was recommended as an archaeological historic district); the expansion of one historic district; the addition of five historic districts; the identification of individually eligible buildings; the identification of individual National Historic Landmark (NHL) Buildings and NHL Districts; the identification and addition of 22 historic open spaces; and the addition of several monuments.

Historic Context Development

- Principal Investigator, Senior Architectural Historian, and research assistant, *Historic Context for the Biloxi Veterans Affairs Medical Center Biloxi, Harrison County, Mississippi*. Panamerican Consultants, Inc., Tuscaloosa Branch, Tuscaloosa, Alabama. Prepared for the Gulf Coast Veterans Health Care System and the Biloxi Veterans Affairs Medical Center, Biloxi, Mississippi.
- Principal Investigator, Senior Architectural Historian, and author, *Nationwide Historic Context Study: The Role of the National Guard in the Civil Rights Movement*. Funded by the Department of Defense Legacy Resource Management Program. Prepared for the Alabama Army National Guard by Panamerican Consultants, Inc., Tuscaloosa, Alabama.
- Historic Context and Cultural-Resource Assessment of the Hurricane Creek Drift Mines in Tuscaloosa County, Alabama.

Architectural Historic Resources Survey Experience

- Architectural Historian, *Architectural Survey of Harborview, A Neighborhood in the City of Tampa, Hillsborough County, Florida, Phase I: Tampa City-Wide Survey Grant No. S-1054*. Panamerican Consultants, Inc., Tampa, Florida. Prepared for The City of Tampa Historic Preservation Commission, Tampa, Florida.
- Architectural Historian, completion of Florida Master Site File forms for the Eatonville Historic District as a supplement to the *Eatonville Historic District Guidelines*. Panamerican Consultants, Inc., Tampa, Florida. Prepared for Historic Preservation Board of the Town of Eatonville, Florida.
- Architectural Historian, *An Addendum to a Cultural Resource Assessment of Sheridan Street (SR 822) from West Dixie Highway to US 1 (Federal highway), Broward County, Florida*. Panamerican Consultants, Inc., Tampa, Florida. Prepared for the Florida Department of Transportation, District Four.
- Architectural Historian, *Addendum to the Cultural Resources Assessment Survey Report for Palm Pointe Golf and Country Club, Pasco County, Florida: W. R. Smith House (8PA1426)*. Panamerican Consultants, Inc., Tampa, Florida. Prepared for the Florida Department of Transportation, District Four.

- Principal Investigator and Senior Architectural Historian, *Fort Benning Historic Resources Surveys and Treatment Plans for the Historic Properties Component, Fort Benning, Georgia*. Panamerican Consultants, Inc., Tuscaloosa, Alabama. Prepared for Fort Benning Military Reservation, Georgia. Panamerican conducted in-depth exterior and interior architectural surveys and completed Treatment Plans for Fort Benning's six hundred and sixty-nine (669) NRHP eligible buildings/structures. Prior to the creation of the Treatment Plans, Panamerican conducted a literature review and in-depth exterior and interior architectural surveys of the Installation's NRHP eligible buildings, structures, and historic housing areas that included completing survey forms, photography, and research of blueprints, maps, and real property cards. Using this information, Treatment Plans for both individual buildings and representative type buildings were written and produced in both a hard copy and a hyperlinked electronic version. Each Treatment Plan consists of several components including a building overview, floor plan, digital images, exterior and interior survey forms, repair guidelines, maintenance guidelines, inappropriate treatment and adverse effects guidelines, and new construction and alteration guidelines. Upon completion, the Treatment Plans provided guidance for the installation's Cultural Resources Manager in making sound decisions on projects affecting historic properties, as well as to provide individual building proponent's approved repair and maintenance guidelines regarding their historic building/structure.

Historic American Buildings Survey (HABS) and Historic American Engineering Recordation (HAER) Documentation Experience

- Principal Investigator and Senior Architectural Historian, *Level II, Historic American Buildings Survey of Fort Benning's Historic Housing Types, Fort Benning, Georgia (Draft Report)*. Panamerican Consultants, Inc., Tuscaloosa, Alabama. Prepared for Fort Benning Military Reservation, Georgia.
- Architectural Historian, *Level II Historic American Engineering Record (HAER) of the B. B. Comer Bridge, Jackson County, Alabama*. Panamerican Consultants, Inc., Tuscaloosa, Alabama. Prepared for the Alabama Department of Transportation.
- Level II, Historic American Engineering Recordation (HAER) for the Main Post Water Treatment Plant Complex at Fort Benning, Georgia. Panamerican Consultants, Inc., Tuscaloosa, Alabama. Prepared for Fort Benning Military Reservation, Georgia.

Specialized Projects

- Architectural Historian, *Design for the Permanent Museum Exhibit Panels for Historic Elyton Village, Birmingham, Jefferson County, Alabama*. Panamerican Consultants, Inc., Tuscaloosa, Alabama. Prepared for the City of Birmingham, HUD.
- Historian and production assistant for *Preserving American Heritage: The Fort Benning Story (DVD)*; a 10-minute video produced for Earth Day 2006 regarding the stewardship of cultural resources at Fort Benning Military Reservation. Panamerican Consultants, Inc., Tuscaloosa, Alabama. Prepared for Fort Benning Military Reservation, Georgia.



CHRISTINE M. LONGIARU, M.A.
Senior Architectural Historian

M.A., Art History, State University of New York at Buffalo (1999)
B.A., Anthropology and Art History, State University of New York College at Buffalo (1991)

Ms. Longiaru exceeds the requirements in 36 CFR 61 for Architectural History. She has more than 21 years of experience in Cultural Resource Management with 18 years conducting historical and architectural research, architectural inventories, and National Register eligibility assessments for cultural reconnaissance surveys. As Principal Investigator for Panamerican, Ms. Longiaru manages architectural history projects, assists with project proposals and budgets, conducts fieldwork and research, and implements innovative methods to architectural survey-based data collection. She is proficient in executing technical, theoretical, and regulatory aspects of historic resources survey, evaluation and documentation. Her diverse project history includes a wide range of cultural resource investigations across the Northeast, Mid-Atlantic, Southeast and Northwest regions of the country. Ms. Longiaru has conducted architectural surveys for municipalities (funded by federal, state, and local agencies), independent wind-energy developers and other energy infrastructure projects, transportation corridor projects (private, state and federal) and military installations. She has contributed to more than 80 cultural resources reports for State Departments of Transportation (DOT) in New York, Rhode Island, and Alabama.

Her diverse project experience includes identification and evaluation of various types of historic resources in different settings ranging from densely populated urban neighborhoods to rural agricultural landscapes. She has prepared historic buildings surveys and visual impact assessments for Environmental Impact Statements (EIS), Environmental Assessments (EA) and Section 106 compliance. Her large-scale historic buildings survey expertise includes more than 20 industrial wind-energy projects, which facilitated the assessment of visual impacts to historic properties. Skilled in the identification of historic districts, she has identified and delineated boundaries for numerous historic districts in both village commercial centers and residential neighborhoods as part of these large-scale surveys.

Ms. Longiaru has developed comprehensive historic contexts and completed National Register of Historic Places (NRHP) nominations for historic districts, which have included a variety of historic resource types. She has considerable experience researching and discussing American Vernacular Architecture. Her related experience as Principal Investigator and Architectural Historian includes four large-scale, intensive level historic resources surveys of four neighborhoods in the City of Buffalo, New York and the downtown district in the City of Niagara Falls, New York. As the Principal Investigator of several historic resources surveys in western New York, she advanced a revised report format in New York State for Historic Resources Surveys. Ms. Longiaru has also conducted historic buildings surveys and documented Heritage Landscapes in coastal communities of southeastern Massachusetts and on the North Shore of Long Island, New York. For the community of Wareham, Massachusetts, the historic gateway to Cape Cod on U.S. Route 6, she conducted a reconnaissance survey of all buildings in the town at least 50 years old (more than 3,000 buildings). She has identified and documented thousands of early-to-mid twentieth century historic resources (i.e., cottages, cabins, boathouses, commercial buildings, and roadside architecture) originally associated seasonal recreation and resort communities. These include locations on Lake Erie; Lake Ontario; the 1,000 Islands; the St. Lawrence River; and Chautauqua Lake, as well as, other smaller lakes in western and central New York. She has also surveyed late nineteenth and early twentieth century resort communities and seasonal cottages in the Catskills and Adirondacks regions of New York.

Recent Panamerican Experience

- **Architectural Survey, NRHP Evaluations, and Viewshed Assessment:** Principal Investigator and Senior Architectural Historian for *Historic Buildings Survey of a Half-mile (.5 mile) Study area for the Proposed Wind Power Project Northport Veterans Affairs Medical Center, Town of Huntington, Suffolk County, New York (NYS #10PR02512)*. (Draft in progress) Panamerican Consultants, Inc., Buffalo, New York. Prepared for Mangi Environmental Associates, Inc., McLean, Virginia, under contract to the U.S. Veterans Administration, Northport Veterans Affairs Medical Center, New York.
- **HABS Documentation:** Principal Investigator and Senior Architectural Historian *Level II, Historic American Buildings Survey, Central Apartments (Building No. 01), The U.S. Military Academy, West Point, New York (Draft Report)*. Panamerican Consultants, Inc., Buffalo, New York. Prepared for Tetra Tech, Inc., Portland, Maine under contract to U.S. Army Corps of Engineers, New York District, New York.
- **Architectural Survey and NRHP Evaluations:** Senior Architectural Historian and co-author of *Camp Merrill Buildings Survey and NRHP Evaluations, 5th Ranger Training Battalion, U.S. Army Ranger School, Dahlonga, Georgia*. Prepared by Panamerican Consultants, Inc., Tuscaloosa Alabama. Prepared for the U.S. Army Maneuver Center of Excellence, Fort Benning Military Reservation, Georgia.
- **Architectural Survey and NRHP Evaluations:** Senior Architectural Historian for *Cultural Resources Sections for Programmatic Environmental Impact Statement for the Operations of U.S. Customs and Border Protection along the Northern Border of the United States from Maine to Washington* (Draft Report). Panamerican Consultants, Inc., Buffalo, New York. Prepared for Mangi Environmental Associates, Inc., McLean, Virginia, under contract to the U.S. Customs and Border Protection, Washington, D.C.
- **HABS Documentation:** Senior Architectural Historian for *Level II, Historic American Buildings Survey of the Veterinary Hospital Complex, Fort Benning Military Installation, Georgia (Draft Report)*. Panamerican Consultants, Inc., Tuscaloosa, Alabama. Prepared for Global Engineering & Construction, LLC, Kent, Washington.
- **Architectural Survey, NRHP Evaluations, and Viewshed Assessment:** Senior Architectural Historian for *Phase IA and IB Cultural Resources Investigation for the Proposed St. Lawrence Transmission Gas Line, Franklin and St. Lawrence Counties, New York*. Panamerican Consultants, Inc., Buffalo, New York. Prepared for EDR, Syracuse, New York.

Historic Context Development

- Senior Architectural Historian and primary author of *Historic Context for the Biloxi Veterans Affairs Medical Center Biloxi, Harrison County, Mississippi*. Panamerican Consultants, Inc., Tuscaloosa, Alabama. Prepared for the Gulf Coast Veterans Health Care System and the Biloxi Veterans Affairs Medical Center, Biloxi, Mississippi.
- Historian for the Allen Family Research for the Freeport-McMoRan Main Pass Energy Hub, Mobile County, Alabama. Ms. Longiaru also authored a comprehensive historic context for the Henderson Sawmill site, Sanford, Covington County, Alabama for the Alabama Department of Transportation. The study focused on steam-powered sawmills from the late nineteenth century to early twentieth century and the longleaf pine timber industry of Alabama.
- Architectural Historian and primary author of *A Historic Context of Steam-powered Sawmills in Alabama and the Longleaf Pine Industry*. Panamerican Consultants, Inc., Tuscaloosa, Alabama. Prepared for Alabama Department of Transportation, Montgomery, Alabama.

- Assisted with archival research for *Nationwide Historic Context Study: The Role of the National Guard in the Civil Rights Movement*. Funded by the Department of Defense Legacy Resource Management Program. Prepared for the Alabama Army National Guard by Panamerican Consultants, Inc., Tuscaloosa, Alabama.

Historic Resources Survey Experience

- Principal Investigator and Architectural Historian for the Historic Resources Intensive Level Survey Broadway – Fillmore Neighborhood City of Buffalo, Erie County, New York (in progress). Prepared for the City of Buffalo Urban Renewal Agency and the New York State Office of Parks, Recreation and Historic Preservation (NYSOPRHP).
- Principal Investigator and Architectural Historian for the Historic Resources Intensive Level Survey Downtown Neighborhood, City of Niagara Falls, Niagara County, New York (Draft submitted). Prepared for the Niagara Falls Historic Preservation Commission and the NYSOPRHP. Authored the historic context for the entire City of Niagara Falls.
- Architectural Historian for the reconnaissance level historic buildings survey conducted as part of the *Phase IA Cultural Resources Investigation for the proposed Ambassador Niagara Signature Bridge Project, City of Buffalo, Erie County, New York*. Prepared for Ambassador Niagara Signature Bridge Group, Buffalo, New York.

Large-scale Historic Buildings Surveys for Wind Power Projects

- Principal Investigator and Senior Architectural Historian for *Architectural Survey (Five-Mile APE) for the Proposed Stony Creek Wind Farm, Town of Orangeville, Wyoming County, New York*. Prepared for Stony Creek Energy, LLC., Rockville, Maryland.
- Principal Investigator and Senior Architectural Historian for *Historic Building Survey of the Ten-Mile APE for the Proposed Hounsfield Wind Farm, Georgialloo Island, Town of Hounsfield, Jefferson County, New York*. Prepared for Upstate NY Power Corp., West Seneca, New York.
- Principal Investigator/Senior Architectural Historian *Architectural Survey (Five-Mile APE) for the Proposed Moresville Energy Center, Towns of Harpersfield, Roxbury, and Stamford, Delaware County, and Towns of Blenheim, Gilboa, and Jefferson, Schoharie County, New York*. Prepared for Moresville Energy LLC., Rockville, Maryland.
- Co-Principal Investigator and Architectural Historian for *Phase IA Cultural Resources Investigation for the Proposed Top Notch Wind Power Project, Towns of Fairfield and Norway, Herkimer County, New York*. Prepared for PPM Atlantic Renewable, Skillman New Jersey.
- Principal Investigator/Senior Architectural Historian for *Architectural Survey (Five-Mile APE) Architectural Survey (Five-Mile APE) for the Proposed Dairy Hills Wind Power Project, Towns of Bethany and Pavilion, Genesee County, Towns of Leicester, Mount Morris, and York, Livingston County, and Towns of Castile, Covington, Middlebury, Perry, and Warsaw, Wyoming County, New York (OPRHP # 06PR01244)*. Prepared for Horizon Wind Energy, Perry, New York.

Heritage Landscape Survey Experience

- Ms. Longiaru served as the Architectural Historian and Project Supervisor for the Massachusetts Heritage Landscape Pilot Survey—Intensive Level conducted in 15 municipalities in southeastern Massachusetts. She was a contributor to an award-winning publication based on that pilot-study, *Massachusetts Heritage Landscapes, Reading the Land: A Guide to Identification and Protection*, prepared for the Massachusetts Department of Environmental Management.



KELLY MAHAR, M.H.P.
Staff Architectural Historian

M.H.P. Heritage Preservation, Georgia State University, 2005
B.A. History, Kennesaw State University, 2002

Ms. Mahar is an Architectural Historian with Panamerican Consultants, Inc. She conducts architectural fieldwork and research, prepares technical reports and report sections related to historic architecture, and provides National Register of Historic Places (NRHP) eligibility evaluations. As part of the Panamerican Architectural Division, Ms. Mahar has conducted numerous large-scale historic building surveys in the Northeast and Southeast. She has specific expertise related to the identification and delineation of historic districts. Her project experience includes Historic American Buildings Survey (HABS), National Register nominations, transportation-related projects, energy infrastructure projects and other historic building surveys for federal, state, municipal, and private clients. She has conducted architectural surveys in urban, rural, military, and industrial settings. Most recently for Panamerican, Ms. Mahar has assisted with NRHP eligibility assessments for large-scale cultural resources surveys for the State of Florida Department of Transportation (DOT) and for cellular communication tower projects in Alabama and Mississippi.

Ms. Mahar's work in Florida has included identifying, recording, and conducting eligibility assessments of architecture from the late nineteenth and twentieth centuries. Extensive recording and research prevail in the Boom Time Era (1920-1926) and Post World War II Era (1945-1960) in Miami, Fort Lauderdale, Hollywood, Orlando, and West Palm Beach. Residential, commercial, and municipal buildings have been recorded, assessed and documented on Florida Master Site File forms in accordance with the Florida Division on Historical Resources and the *Guide to Historical Structure Form*.

Relevant Panamerican Experience

For the State of Florida DOT in 2010, Ms. Mahar served as Panamerican's architectural historian and has assisted with four cultural resource surveys in which she documented approximately 200 properties (both historic and non-historic buildings and structures), and provided recommendations of eligibility for the NRHP. This series of projects was initiated by the Florida DOT for either sidewalk installation or road reconstruction. A Florida Master Site File (FMSF) form and complete building descriptions were supplied for each inventoried building.

For Trileaf, a National Environmental Policy Act (NEPA) compliance company, Ms. Mahar conducted six cellular communication tower and antenna impact projects in the State of Florida. She documented approximately 200 properties (both historic and non-historic buildings and structures) and made recommendations of eligibility for the NRHP. A FMSF form was completed for each property and complete building descriptions were provided in the final report. Some properties were recommended as eligible for the NRHP and required desktop research and a more detailed description.

For the Florida East Coast (FEC) SunRail, Ms. Mahar documented approximately 150 properties both historic and non-historic structures and made recommendations of eligibility for the NRHP. A FMSF form was completed for each property. Complete building descriptions were written for the final report. Some properties were recommended as eligible for the NRHP and required additional research and a more detailed description.

In the State of Alabama, Ms. Mahar completed a historic structure report for a small tenant farm house associated with Prattville, Alabama native McQueen Smith. As part of the documentation, she reviewed photographs of the exterior and interior of the farm house and completed an initial structure report. The property was recommended as eligible for listing on the NRHP for its local significance.

In the State of Mississippi, Ms. Mahar contributed to an addendum to an earlier Phase I *Cultural Resources Survey of the Proposed Southern Tower Antenna Rental II, (STAR) West in Summit, "Near 5741 HWY 570", Mississippi*. The project required providing additional information to the Mississippi SHPO on three structures identified in the earlier report. A brief desktop search was conducted and Mississippi survey form 640 was completed for each of the three properties. Additionally a letter was devised to the Mississippi SHPO to present our findings. None of the properties were recommended as eligible for the NRHP.

For Fort Benning, Georgia, Ms. Mahar served as architectural historian for the Level II, HABS of the 92nd MP Footprint "Tank sheds." The project assessed seven buildings located in the Main Post "motor pool" area of Fort Benning, which were previously associated with the Tanks School at the installation (from 1932 to 1940). The assessment included a description of interior and exterior spaces, features, finishes, and exterior landscapes that are important in defining the historic use, nature, and development of the area in reference to the overall historic character of Fort Benning, particularly the Main Post and the Tank School. Ms. Mahar conducted background research including primary and secondary sources on both the motor pool buildings and the Tank School. She also directed the large-format photographer, and selected and captioned large-format photographs. The HABS report was completed according to U.S. Department of the Interior standards.

Also for Fort Benning, Georgia, she served as architectural historian for the Level II, HABS of the Quartermaster Area Complex. The project assessed 15 buildings located in the Main Post warehouse district of Fort Benning, which were constructed between 1919 and 1940. Included in the assessment were a description of interior and exterior spaces, features, finishes, and exterior landscapes that are important in defining the historic use, nature, and development of the area in reference to the overall historic character of the post; areas of attention included the Main Post, railroad history, and the Quartermaster General standardized plans. Ms. Mahar directed the large-format photographer, and completed the architectural information portion of the HABS report according to National Park Service standards.

For Picatinny Arsenal, New Jersey, under a cooperative agreement with U.S. Army Medical Research Acquisition Activity, she recently assisted with the architectural survey and evaluation of 323 buildings and structures spread throughout the entire installation, with several structures located in isolated, off-limits "enclosures." These buildings/structures were erected beginning in the inter-war years (the period between World War I and World War II) and extended through the 1980s. They varied greatly in type from general storehouses, to rocket test stands, to family housing, to nuclear-weapons storage igloos, and ranged in size from a few hundred square feet to several thousand square feet.

Ms. Mahar also assists in the field inspection and evaluation of historic resources within the five-mile visual APE around all project components for wind-energy/wind-power projects. The purpose of these architectural surveys is to identify National Register eligible properties in the five-mile APE of the proposed projects. Ms. Mahar has identified and delineated boundaries for several historic districts as part of these studies. Representative wind-energy/wind-power project investigations she has worked on are listed below:

- Architectural Historian for *Architectural Survey (Five-Mile APE) for the Proposed Ripley-Westfield Wind Farm, Towns of Ripley and Westfield, Chautauqua County, New York*. Prepared

for Pattern Renewables LLC, Houston, Texas and Ecology & Environment, Inc., Lancaster, New York.

- Architectural Historian for *Architectural Survey (Five-Mile APE) for the Proposed Crown City Wind Farm, Towns of Cortlandville, Homer, Solon, and Truxton, Cortland County, New York*. Prepared for Air Energy TCI, Inc., Montreal, Quebec, Canada.
- Architectural Historian for *Initial Architectural Survey (FiveMile Ape) for the Proposed Steuben Wind Project, Towns of Hartsville and Hornellsville, Steuben County, New York*. Prepared for EC&R Northeast, LLC., Ashford, Connecticut.
- Architectural Historian for *Phase IA Cultural Resources Investigation for the Proposed Upstate NY Power Corp. Transmission Line Project Area Towns of Hounsfield, Henderson and Ellisburg, Jefferson County, and Towns of Sandy Creek, Richland, and, Mexico, Oswego County, New York*. Prepared for Upstate NY Power Corp., West Seneca, New York.
- *Architectural Survey (Five-Mile APE) for the Proposed Noble Ball Hill Windpark, Towns of Villenova and Hanover, Chautauqua County, New York*. Prepared for Noble Ball Hill Windpark, LLC, Essex, Connecticut.
- Architectural Historian for the *Five-Mile Cultural Resources Investigation for the Proposed High Sheldon Wind Farm, Wyoming County, New York*. Prepared for Invenergy Wind, LLC.
- Architectural Historian for *Five-Mile Cultural Resources Investigation for the Proposed Noble Allegany Windpark, Allegany County, New York*. Prepared for Noble Environmental.
- Architectural Historian for *Five-Mile Cultural Resources Investigation for the Proposed Noble Wethersfield, Windpark, Wyoming County, New York*. Prepared for Noble Environmental.
- Architectural Historian for *Five-Mile Cultural Resources Investigation for the Proposed Moresville Wind Power Project, Delaware County, New York*. Prepared for Invenergy Wind, LLC.
- Architectural Historian for *Five-Mile Cultural Resources Investigation for the Proposed Dairy Hill Wind Power Project, Towns of Perry, Covington, and Castile, Wyoming County, New York*. Prepared for Horizon Wind Energy.

Other Relevant Architectural Experience

- Principal researcher and photographer, *Historic District Survey, Cabbagetown, Atlanta, Georgia*. Prepared for the Atlanta Urban Design Commission.
- Principal researcher and photographer, *Historic District Survey, Castleberry Hill, Atlanta, Georgia*. Prepared for the Atlanta Urban Design Commission.
- Principal organizer, *Atlanta Post World War II Housing, Atlanta, Georgia*. Prepared for the Atlanta Urban Design Commission.
- Principal researcher and writer, *Starlight Drive-in Theater National Register Nomination, Atlanta, Georgia*.
- Researcher and writer, *City-wide Survey, Lithonia, Georgia*, Prepared for the City of Lithonia, Georgia.



SHARON M. JENKINS, M.A.
Architectural History Assistant

M.A. Anthropology (Archaeology), State University of New York at Buffalo, 2007
B.A. Anthropology (*summa cum laude*, with Honors), State University of New York,
College at Buffalo, 2003

Ms. Jenkins is currently an Architectural History Project Assistant with the Buffalo Office of Panamerican Consultants, Inc. For more than three years, Ms. Jenkins has supported the Architectural History Division for numerous field investigations across New York State, in both urban and rural contexts. These include cultural resources investigations for improvements to Customs Border Protection facilities in Burke and Cannon Corners, New York, and the Veterans Affairs Medical Center in Northport, Long Island, as well as surveys for windfarm projects in the cities of Cortland and Hornell, and in the Towns of Ripley, Westfield, and Hounsfield. In addition, Ms. Jenkins has conducted historical and archival research, historical map analysis, aerial photograph interpretation, and assisted in historic structure inventories as well as National Register eligibility assessments for cultural resources surveys. She is skilled in data acquisition techniques using equipment such as the Trimble GeoXM GPS unit with ESRI ArcPad, Rino GPS units and HP Tablet, technical report writing, and database preparation. She has co-authored several architectural cultural resources reports and project proposals.

Ms. Jenkins also serves as Staff Archaeologist and offers more than eight years of field and research with specific experience in historic archaeology in the Northeast. She has participated in numerous Phase I and Phase II investigations throughout New York State.

Relevant Panamerican Experience

- *Historic Buildings Survey of a Half-mile (.5 mile) Study Area for the Proposed Wind Power Project Northport Veterans Affairs Medical Center, Town of Huntington, Suffolk County, New York (under contract to Mangi Environmental;2011) (Draft).* As the Architectural History Assistant, Ms. Jenkins conducted historical and archival research, served as field investigator assisting with data acquisition, historic structure inventories, and National Register eligibility assessments for the cultural resources surveys as well as database preparation and co-author of the draft report.
- *U.S. Customs and Border Protection (CBP) Technical Support for Preparation of Programmatic Environmental Impact Statement (PEIS) and Planning Documentation For Proposed Activities Along the US Northern Border (under contract to Mangi Environmental; ongoing).* Ms. Jenkins serves as assistant to the Senior Preservation Planner, conducting extensive research on Native American Tribes and collecting data regarding archaeological and historic sites, including historic structures within the 100-mile corridor. Panamerican is tasked with addressing all cultural resource requirements for the project. The analysis is programmatic in nature and evaluates a broad scope of potential actions and activities across the Northern Border. Panamerican is developing NHPA Programmatic Agreements (PAs) for the 13 states along the Northern Border. This includes fully detailing the CBP process and procedures for complying with the NHPA for future projects within the Northern Border regions. The NEPA analysis and documentation will identify and evaluate all relevant cultural resource impacts, conditions, and issues associated with the proposed action(s), and alternatives. Panamerican is responsible for preparing the draft and final cultural resource document for the PA and PEIS.

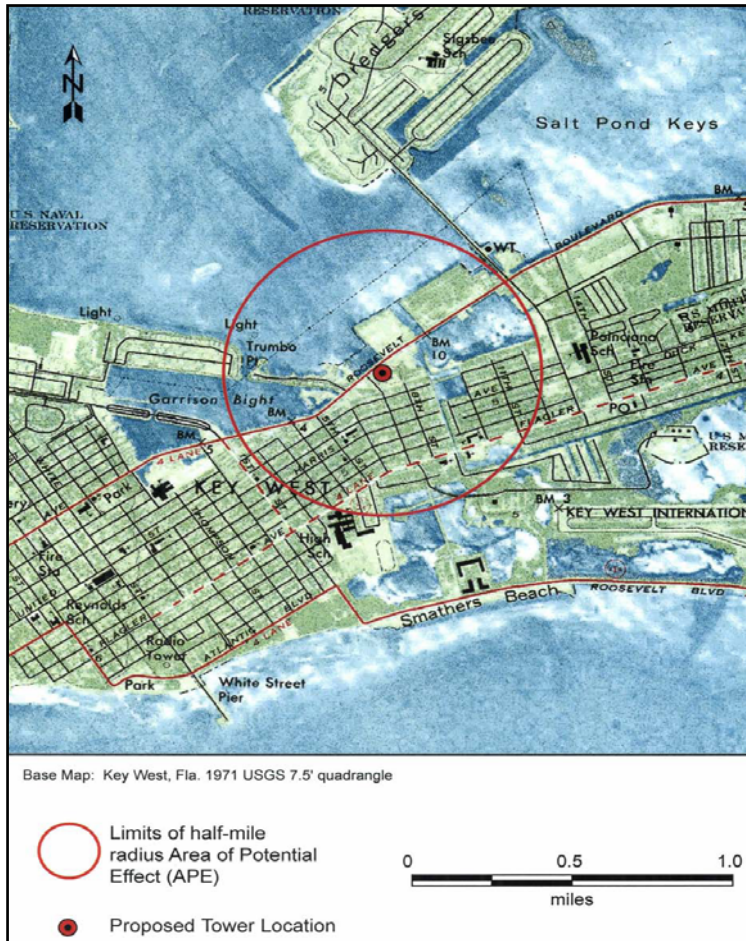
- *Supplemental Phase IA Cultural Resources Investigation for the Millennium Parkway Project, South Roberts Road Section (CR 81), City of Dunkirk, Chautauqua County, New York (under contract to TVGA Consultants; 2010).* Ms. Jenkins served as both Architectural History Assistant and Project Archaeologist for the supplemental Phase IA architectural/survey for the Parkway project. The project entails utilizing either an existing or a proposed roadway corridor to facilitate access to the existing Chadwick Bay Industrial Park from the New York State Thruway (I-90), Interchange 59. The supplemental survey covered subsequent revisions/additions to the project area that were made following the original Phase IA and Phase IB cultural resources investigations were completed. As Architectural History Assistant, Ms. Jenkins assisted with assessing the architectural data from the previously completed Phase IA and Phase IB in tandem with the findings from the supplemental investigation.
- *Architectural Survey (Five-Mile APE) for the Proposed Stony Creek Wind Farm, Town of Orangeville, Wyoming County, New York (under contract to Stony Creek Energy LLC, Rockville, Maryland; 2010).* Ms. Jenkins served as Architectural History Assistant for the architectural survey of the five-mile visual area of potential effect around all project components of the Stony Creek Wind Farm in the Town of Orangeville, New York. The purpose of the historic building survey was to identify National Register-listed and National Register eligible properties in the five-mile visual APE.
- *Architectural Survey (Five-Mile APE) for the Proposed Ripley-Westfield Wind Farm, Towns of Ripley and Westfield, Chautauqua County, New York (under contract to Pattern Renewables LLC, Houston, Texas and Ecology & Environment, Inc., Lancaster, New York; 2009).* Ms. Jenkins served as the architectural project assistant for a cultural resource investigation for a wind-power project in the towns of Ripley and Westfield, New York. The investigation covered both a Preferred Layout and an Alternate Layout of the wind-power turbines and associated facilities and access roads and corridors. The purpose of the historic building survey was to identify National Register-listed and National Register eligible properties in the five-mile visual APE.
- *Historic Building Survey of the Ten-Mile APE for the Proposed Hounsfield Wind Farm, Galloo Island, Town of Hounsfield, Jefferson County, New York. Upstate New York Power Corp., West Seneca, New York (under contract to Upstate New York Power Corp; 2009).* Ms. Jenkins served as Architectural History Assistant on a historic building survey of the ten-mile APE for the Hounsfield Wind Farm, a wind-energy project in Jefferson and Oswego counties, New York. The architectural survey included the project topographical viewshed within a 10-mile radius of the project footprint, the historic Village of Sackets Harbor and archival research at local institutions for islands to which no access was possible (Grenadier, Fox, and Stony islands).
- *Architectural Survey and Evaluation for U.S. Customs and Border Protection Modernization of the Cannon Corners (CNN) Land Port-of-Entry (LPOE), Town of Clinton, Clinton County, New York (under contract to Parsons, Washington, D.C., and U.S. Customs and Border Protection; 2009).* Ms. Jenkins served as Architectural History Assistant for the Phase I architectural survey and evaluation for the modernization of the Cannon Corners LPOE in the Town of Mooers, New York. The modernization project is part of the U.S. Custom border Patrol's efforts to update a number of existing LPOE along the northern and southern borders of the U.S. Upgrades at the Cannon Corners LPOE include the acquisition of additional land parcels, a reconfiguration of Cannon Corners Road, and the construction of a new office building. The architectural resources investigation encompassed the approximately 8.47 acre project area and a 1,000-ft visual APE around the boundaries of the project area.
- *Architectural Survey and Evaluation for U.S. Customs and Border Protection Modernization of the Churubusco (CHU) Land Port-of-Entry (LPOE), Town of Clinton, Clinton County, New York (under contact to Parsons, Washington, D.C., and U.S. Customs and Border Protection; 2009).* Ms. Jenkins served as Architectural History Assistant For the Phase I architectural survey and

evaluation for the modernization of the Churubusco LPOE in the Town of Clinton, New York. The modernization project is part of the U.S. Custom Border Patrol's efforts to update a number of existing LPOE along the northern and southern borders of the U.S. Upgrades at the Churubusco LPOE include the acquisition of additional land parcels, a reconfiguration of New York State Route (NY) 189, and the construction of a new office building. The architectural resources investigation encompassed the approximately 8.16 acre project area and a 1,000-ft. visual APE around the boundaries of the project area.

- *Phase IA Cultural Resources Investigation for the Proposed St. Lawrence Transmission Gas Line, Franklin and St. Lawrence Counties, New York. EDR, Syracuse, New York (under contract to Environmental Design and Research (EDR); 2010).* Ms. Jenkins served as Architectural History Assistant for the Phase IA cultural resources investigation for the St. Lawrence Transmission Gas Line project in the counties of Franklin and St. Lawrence, New York. The project entails the installation of a high-pressure steel gas mains for the purpose of distributing natural gas to communities in the region. The architectural resources investigation covered the 47.54-mile long proposed transmission line route and areas within a three-mile radius (six-mile corridor) around the proposed route.
- *Phase IA Cultural Resources Investigation for the Proposed Intermodal Bus Transfer Station (City of Corning Transportation Center), City of Corning, Steuben County, New York (under contract to Haley & Aldrich of New York; 2009).* Ms. Jenkins served as Architectural History Assistant for the Phase IA cultural resources investigation for the Intermodal Bus Station Transfer Station in the City of Corning, New York. The approximately 1.5 acre project survey area made up of commercial buildings and a parking lot was located in a commercial area in the City of Corning.
- *Architectural Survey (Five-Mile APE) for the Proposed Crown City Wind Farm, Towns of Cortlandville, Homer, Solon, and Truxton, Cortland County, New York. Draft. (under contract to Air Energy TCI, Inc., Montreal, Quebec, Canada; 2009).* Ms. Jenkins served as Architectural History Assistant.
- *Phase IA Cultural Resources Investigation for the Proposed Upstate New York Power Corp. Transmission Line Project Area Towns of Hounsfield, Henderson and Ellisburg, Jefferson County, and Towns of Sandy Creek, Richland, and, Mexico, Oswego County, New York. (under contract to Upstate NY Power Corp., West Seneca, New York.; 2008).* Ms. Jenkins served as Architectural History Assistant.

An Architectural and Historical Survey of the Proposed East Key West Tower Location in Monroe County, Florida

Panamerican Consultants, Inc conducted *An Architectural and Historical Survey of the Proposed East Key West Tower Location in Monroe County, Florida* under contract to EPAC Environmental Services, Inc., Pompano Beach, Florida. The study was required by Section 106 of the *National Historic Preservation Act* of 1966 (PL 89-665), as amended in 1992, and *36 CFR, Part 800: Protection of Historic Properties*. The study was performed in accordance with the Historic Preservation Compliance Review Program of the Florida Department of State, DHR.



Map of proposed East Key West Tower Location showing the half-mile radius APE, Key West, Florida.



The proposed East Key West Tower location is at 2600 North Roosevelt Boulevard, City of Key West, Florida. The location is north of Roosevelt Boulevard in the parking lot of Silber Eagle Distributors, which lies within the NW¼ of Section 33 of Township 67 South, Range 25 East. The project proposed construction of a 70-foot monopole cellular tower. Numerous historic resources constructed prior to 1950 were identified within a half-mile radius of the proposed location, the extent of the APE. Due to the number of structures in the APE, only a representative sample was described in the report. None of the structures were recommended as individually eligible for inclusion in the NRHP.

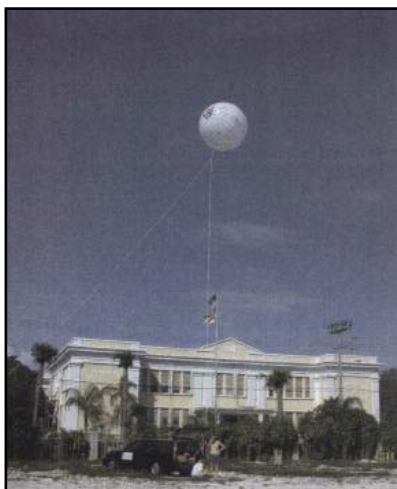
Background review included a search of the FMSF, which resulted in no previously recorded archeological sites or historic structures in the project area. The boundaries of the KWHD, which is listed on the NRHP, were not located in or near the APE at the time the study was conducted in 2001. The survey documented 16 representative buildings in the APE, which largely included single family residential buildings associated with the previously surveyed A. Santella and Company Cigar Factory at 2010 Staples Avenue (MO869: Built ca. 1910) located just outside the APE to the southwest. Several of the structures in the southwest ¼ of the APE served as cigar factory workers' housing constructed from 1910 through 1920s. The survey also identified residential buildings and a shopping center constructed in the mid-twentieth century.

A. Santella and Company Cigar Factory at 2010 Staples Avenue, Key West, Florida.

Proposed National Weather Service Forecast Location City of Key West, Monroe County, Florida

Panamerican Consultants, Inc conducted a cultural resources assessment survey and viewshed impact assessment of the proposed National Weather Services (NWS) Weather Forecast Office (WFO) location at 1200 Union Street in Key West, Monroe County, Florida. The proposed survey of the WFO project area was conducted to satisfy the recommendations of the FDHR in accordance with Section 106 of the National Historic Preservation Act of 1966, as amended *36 CFR Part 800: Protection of Historic Properties*; as well as the National Environmental Policy Act of 1969, as amended. As per the DHR recommendation, the property was surveyed to identify and evaluate all cultural resources in the area of potential effect (APE) for the proposed project.

The National Oceanic and Atmospheric Administration (NOAA) planned to replace an existing Key West NWS WFO and upper air facility (UAF) with a new facility on the same location. The area under study for the historic buildings survey included the 1.9-acre parcel and an additional area 200-ft. buffer around the project footprint. The WFO property is surrounded on two-thirds by the Key West Historic District (KWHD), which is listed on the NRHP. As such, Panamerican conducted a balloon test to determine the potential visual impacts of the proposed 52-ft. tall UAF. Photographs were taken from visual receptor points (i.e. historic structures and other locations) in the APE looking toward the balloon locations to illustrate the potential impact to the general viewshed of the neighborhood. A literature review of primary and secondary historic sources was also completed. Sanborn Fire Insurance Maps and other historic-period atlases and maps were reviewed to assess the historic land use of the project APE. The FMSF was checked for any previously surveyed structures and archaeological sites in the project APE. The results of the historic background review and research concluded numerous buildings were constructed on the project location including the Hargrove Institute (Women's Home Mission Society [WHMS]). The U.S. Navy acquired the property from the WHMS in 1918 and used the school's existing buildings. By 1926, a U.S. Naval Hospital occupied the property. In 1948, the property became the Navy Commissary and most of the buildings were demolished. A third of the property was transferred to the Monroe County School board while the remaining two-thirds of the property became the White Street Trailer Park (designed in 1958). In 2001, the U.S. Navy transferred the property to NOAA.



Balloon test for viewshed impact assessment with Glyn Archer Elementary School (8MO1795: 1300- 1302 White Street) in foreground, City of Key West, Florida.

Thirty-seven buildings in the 200-ft. APE of the proposed WFO were surveyed; 27 of which were contributing buildings in the KWHD. Other properties included seven previously recorded buildings and three newly surveyed buildings, each located outside of the KWHD. A pedestrian survey was conducted in the APE to identify historic resources. Street addresses were cross-referenced with a list of previously recorded structures to ensure that all buildings over 50 years in age were recorded in the FMSF. FMSF forms were completed for those buildings not previously recorded. The study concluded that while the WFO and the UAF was visible from some contributing structures in the KWHD, the project area itself was located outside of the historic district boundaries. The only structures the facility was visible from were those immediately adjacent to and facing the project area. DHR determined the three newly documented buildings did not appear to be individually eligible for listing in the NRHP; however, they could potentially be contributing buildings to the KWHD. Based on the recommendations and the information provided in the report, DHR concurred that the proposed project would have no adverse effect on any historic properties. In 2004, NWS broke ground for the new, hurricane-resistant WFO in Key West.

Architectural Survey of Harborview for the City of Tampa, Hillsborough County, Florida

Architectural Survey of Harborview, A Neighborhood in the City of Tampa, Hillsborough County, Florida, Phase I: Tampa City-wide Survey Grant No. S-1054. The Phase I: Tampa Citywide Survey, an architectural and historic resources survey, was conducted by Panamerican Consultants, Inc., for the Tampa Historic Preservation Commission (THPC). The survey area was comprised of the Harborview neighborhood. Completion of this survey report provided THPC with both an inventory of standing historic resources and a tool to help manage historic resources in the area, thus avoiding loss of character-defining elements of the area due to infiltration of adverse impacts such as demolition of original buildings or construction of incompatible building style, size, or materials.

THPC's proposed survey encompassed 750 acres and anticipated NRHP evaluation of between 500-800 structures dating from 1900-1954. Project objectives included the completion of an intensive-level historical and architectural survey, a property inventory/survey log, and a final survey report with recommendations for potentially eligible structures and the identification of possible historic districts. Fieldwork and historical research consisted of: (1) a reconnaissance level survey to locate and document pre-1955 structures within predetermined boundaries; (2) research to determine dates of construction, historical significance, and patterns of development; (3) analysis/mapping of sites identified; (4) evaluation of mapped information; (5) determination of the structures' NRHP eligibility and location of



Example of the various styles of Bungalow homes within the Harborview Neighborhood, Tampa, Florida.

possible historic districts; and (6) recommendations for protection.

One hundred percent of the project area was surveyed. The Harborview area included both middle and high-income single family homes as originally developed. Bound by the Hillsborough Bay on the east, the physical setting and streetscapes of Harborview were typical neighborhood scenes enhanced with Florida

foliage of fruit trees and landscaped yards, canopies of tree-lined streets, views of the bay along Bayshore Boulevard's famous sidewalk, commercial blocks, and high-rise condominium towers. Several brick paved streets were indicative of Tampa's early residential development era.

Survey methods included both archival research and field survey methods to gather information regarding Harborview's historical and architectural significance. Archival research gathered information from the local courthouse, archive repositories, historic photograph collections, tax records, real estate records, Sanborn maps, city directories, the County's Property Appraiser's office, and local and university libraries. Early histories and maps of the area were also investigated, as well as previously recorded Florida Master Site File (FMSF) forms.

Over the course of the survey, 775 structures that spanned a diversity of architectural styles from classical to vernacular with construction dates ranging from 1902 to the time of the survey were documented. All 775 documented structures were evaluated for significance using the criteria set forth by the National Park Service. The culmination of the survey and research provided THPC a categorization of Harborview properties that enabled management decisions sensitive to the area's preservation and place in Tampa's developmental history. FMSF forms were completed to document pre-1955 structures and were supplemented with black and white photographs, color digital photographs, and location maps. The final report included tables listing the project area properties, previously recorded FMSF properties, newly recorded FMSF properties, survey maps, and photographs. Panamerican submitted hard and .pdf copies of the final report complete with digital color photographs of pre-1955 properties, 35mm black and white photographs, survey maps, and printed *Smart Forms* (electronically generated FMSF forms) to both THPC and the Florida Department of State Division of Historical Resources (DHR).



Renovated vernacular home within the Harborview Neighborhood, Tampa, Florida.

Survey findings proved that the Harborview neighborhood continued to portray its original configuration inclusive of varied architectural styles, diverse dwelling types (single and multi-residences), both residential and commercial structures, the presence of differing income levels, and neighborhood setting. The survey's documentation of vacant lots, combined lots, and newly constructed "McMansions" also verified the destruction of Harborview's historic building fabric through demolition requests and incompatible new construction.

Panamerican recommended the establishment of a Harborview Historic District under Criterion A for planning and development of the area and Criterion C

for architecture. The development of design guidelines and/or zoning laws to govern the changes to the neighborhood's identifying architectural and landscape setting inflicted by demolition, renovation, and new construction were also recommended.

Architectural Survey of Port Tampa for the City of Tampa, Hillsborough County, Florida

Architectural Survey of Port Tampa and Ballast Point/Interbay Neighborhoods in the City of Tampa, Hillsborough County, Florida, Phase II: Tampa City-wide Survey Grant No. F0120. The Phase II: Tampa Citywide Survey, an architectural and historic resources survey, was conducted by Panamerican Consultants, Inc., for the Tampa Historic Preservation Commission (THPC). The survey area was comprised of the neighborhoods of Port Tampa and Ballast Point/Interbay.

THPC's proposed survey area encompassed roughly 1,300 acres and anticipated approximately 500 structures constructed prior to 1955 to be evaluated. Project objectives included the completion of an intensive-level historical and architectural survey, a property inventory/survey log, and a final survey report with recommendations for potentially eligible structures and the identification of possible historic districts. Fieldwork and historical research for the Port Tampa-Ballast Point/Interbay survey consisted of: (1) a pedestrian survey to locate and document pre-1955 structures within predetermined boundaries; (2) research to determine dates of construction, historical significance, and patterns of development; (3) analysis/mapping of sites identified; (4) evaluation of mapped information; (5) determination of the structures' eligibility for inclusion in local districts and/or the National Register of Historic Places (NRHP); (6) location of possible historic districts; and (7) recommendations for protection.

Completion of this survey report provided THPC with both an inventory of standing historic resources and a list of previously recorded properties that had been demolished. Due to the high demand for building sites in south Tampa, and especially in Ballast Point, many older houses have been demolished to provide sites for either much larger houses, or for multi-family housing in the form of apartments or condominiums. This survey provided THPC with a tool to help manage historic resources in the area, thus avoiding loss of character-defining elements of the area due to infiltration of adverse impacts such as demolition of original buildings or construction of incompatible building style, size, or materials.



Multiple-unit dwelling located on Bayshore, Tampa, Florida.

One hundred percent of the project area was surveyed. Florida Master Site File (FMSF) Forms for Historic Structures were completed

to document pre-1955 structures and were supplemented with black and white photographs, color digital photographs, and location maps. Only the exteriors of the building were inspected. The final report included survey logs listing the project area properties, pre-1955 structures, previously recorded FMSF properties, newly recorded FMSF properties, survey maps, and photographs. Panamerican submitted hard and .pdf copies of the final report complete with digital color photographs of pre-1955 properties, 35mm

black and white photographs, survey maps, and printed *Smart Forms* (electronically generated FMSF forms) to THPC.

Completion of the Port Tampa-Ballast Point/Interbay survey revealed several aspects of the neighborhoods. First, the survey documented the stylistic characteristics of the neighborhoods. Second, the survey established the then current status and future direction of the area. Third, the survey provided a comprehensive understanding of the area's growth and change over time. Using this information of growth and change, several tables delineated construction activity within the project area, interpreting periods of development and growth by decade.

The Ballast Point/Interbay survey results demonstrated that, while the area retains several fine Bungalows, Colonial Revivals, and commercial buildings, the resources are too widely dispersed and infilled with new construction to constitute a historic district, which were the opposite findings of the Port Tampa survey. Ballast Point/Interbay no longer retained sufficient fabric to constitute a historic district. However, the survey recommended ten properties as potentially eligible for individual or multiple-property listing on the NRHP: Ballast Point School, Elim Temple, the Hurley Building, Labadie's Hardware building, and six residences.

Survey findings indicated that Port Tampa had retained much of its original architecture and setting, with its rich stock of turn of 19th century buildings and small town feeling. It was recommended that a NRHP nomination form be prepared for this area. The survey also identified potentially eligible commercial structures remaining from Port Tampa's first business section, a series of buildings that appear to represent a basic plan fitting the description given of the housing originally erected on the docks for the workers who loaded the ships. The buildings were called flats, or Plant's Quarters, and described



Single family home in Ballast Point, Tampa, Florida.

as 50 feet long by 16 feet wide, shaped like a box car with four rooms on one side, a long hall, and a front and back porch. Along with a former telegraph/ticket office building, all of these buildings are most likely related to the railroad in Port Tampa. Further research was recommended to determine the potential of a multiple property nomination under the theme of transportation. Other recommendations included a multiple-property nomination for Gothic Revival churches in the area (n=3), and five individually eligible buildings: the Port Tampa Library (originally The Port Tampa Bank) and four residences.

Architectural and Historical Investigations in Broward and Collier Counties, Florida



A typical 1959, masonry house on Hollywood Boulevard, Broward County, Florida.

historic fabric or resources, Panamerican concluded no historic properties would be affected by the road improvement project.

An Historical Assessment of Buildings at Goodland Harbour Park in Collier County, Florida.

Panamerican Consultants, Inc. was contracted by Collier County Parks and Recreation, Naples, Florida to assess eleven remaining buildings associated with a trailer park and marina in operation for more than 50 years (1952-2005). A winter resort where most people brought in trailers for a few months, eleven permanent buildings remained at the park. Included were three frame cottages moved to the site from a closed fish camp, other privately-built cottages, a theater/museum/restaurant, laundry and cistern, duplex cottage, a separate cistern, and a second laundromat. Documentation included digital and black and white photographs, architectural descriptions, and FMSF forms. The history of the trailer park, the community of Goodland and Marcos Island were researched and their histories written. Many local informants were consulted and local and regional libraries were searched for relevant material. All buildings were considered potentially eligible for listing in the NRHP under Criterion A, while some were eligible under Criteria A and C. The property will be developed by Collier County as a public park, with some structures preserved and adapted to new uses or used for historical interpretation.



A relocated shot-gun style cabin in Goodland Harbour Park, Collier County, Florida.

Architectural and Historical Investigations in Indian River County, Florida



Historical Recordation of Structure 8IR1125 (D & S Auto Repair) in Indian River County, Florida. Panamerican Consultants, Inc. was contracted by Kimley-Horn and Associates, Inc., Vero Beach, Florida to conduct a Level II-type HABS documentation of a commercial building, an auto repair garage with a stucco exterior. The building was evaluated for its historic plan, materials, and architectural integrity. This HABS-type investigation included medium-format black and white photographs and a sketch of the building. In a report, the building was described in detail and evaluated as eligible for listing in the NRHP based on its association with the development of the Dixie Highway, the prevalence of automobiles, and growth of the tourist industry.

Auto repair shop, Dixie Highway, Indian River County, Florida.

A Cultural Resource Assessment Survey of the County Road 510 (Wabasso Road) Project Development and Environment Study from County Road 512 (Fellsmere Road) to Indian River Bridge #880052 in Indian River County, Florida.



Florida citrus packing house on piers, Indian River County, Florida.

For the Florida Department of Transportation, District Four, Fort Lauderdale, Florida, Panamerican completed a five-and-a-half-mile-long cultural resource survey. The project consisted of both archaeological testing and historical assessment. Historic buildings were identified by previous county record research, then were photographed, recorded on FMSF forms, described, and evaluated for possible individual inclusion in the NRHP. The investigation resulted in 18 previously recorded and 39 newly recorded historic buildings. None of the buildings were considered eligible for listing in the NRHP, but three were considered eligible for listing on the county register of historic resources. A history of the area and of individual buildings was compiled from local and regional sources.

Cultural Resource Assessment Surveys in Martin, Palm Beach, and St. Lucie Counties, Florida

A Cultural Resource Assessment Survey of State Road 707 Proposed Jurisdictional Roadway Transfer from Savanna Road to the Jensen Beach Causeway in Martin County, Florida. Panamerican under contract with the Florida Department of Transportation conducted a cultural resource survey of a four-



Constructed as a boat dealership, this 1955 building has an elevated “winged” roof to accommodate boat masts.

mile-long survey of State Road 707 Proposed Jurisdictional Roadway Transfer from Savanna Road to the Jensen Beach Causeway in Martin County, Florida. The project began with a reconnaissance survey that eliminated archaeological testing since the APE had previous disturbance from development. Historic buildings discovered through research and a windshield survey were described, recorded on FMSF forms, photographed, and evaluated for possible individual

inclusion in the NRHP or as part of an historic district. The investigation resulted in 27 previously recorded buildings, one cemetery, one object, 24 newly recorded structures, and one potential historic district. Fourteen resources were considered eligible for listing in the NRHP, and five of those were considered contributors to a potential National Register historic district. A history of the area and of individual buildings was compiled from local and regional sources, and from local informants.

A Cultural Resource Assessment Survey of State Road A1A from State Road 5 (US 1) to South of Burnt Bridge in Palm Beach County, Florida. Also for the Florida

Department of Transportation, Panamerican conducted a cultural resource survey of a three-mile long section of State Road A1A from State Road 5 (US 1) to South of Burnt Bridge in Palm Beach County, Florida. The project consisted of both archaeological testing and historical assessments. Historic buildings identified by a previous county record research and a windshield survey were photographed and documented. FMSF forms were completed and properties were evaluated for possible individual inclusion in the NRHP. The investigation resulted in 6 previously recorded and 12 newly documented historic buildings. One historic object was also noted in the survey. Three of the buildings were considered eligible for listing in the NRHP. A history of the area and of individual buildings was compiled from local and regional sources and from local informants.



A mid-twentieth century, commercial building with a folded-plate roof.

Architectural and Historical Investigations in Manatee County, Florida



A representative example of a stucco house, Manatee County, Florida.

A Cultural Resource Assessment Survey of the Cone Property Project Area in Manatee County, Florida. Contracted by Hunters Hill, Inc., Cortez, Florida to conduct archaeological testing and provide a historical assessment, Panamerican documented three historic resources, including two frame houses (one in two pieces) and a barn. All buildings were photographed, recorded on FMSF forms, described, and evaluated for possible inclusion in the NRHP. Due to the location of the barn near a historic district and the barn's post and beam construction, further research and documentation of the barn was recommended.



A 1925 Mission style grade school, Manatee County, Florida.

A Cultural Resource Assessment Survey of the Moccasin Wallow Road Corridor/Alignment Study from US 41 to Interstate 75 in Manatee County, Florida. For Wilson Miller of Tampa, Florida, Panamerican conducted a cultural resources survey of a 1.6-mile-long corridor. The windshield and pedestrian surveys resulted in the inventory of 16 historic buildings. Documentation included FMSF forms, architectural descriptions, and photographs. The only building previously recorded was a 1925 Mission style grade school that was a private residence at the time of the survey. The school was the only building of the 16 documented resources considered eligible for listing in the NRHP.

Architectural and Historical Investigations in Miami-Dade County, Florida

An Archaeological and Historical Survey of the Helen Mar Condo Tower in Miami-Dade County, Florida. The project proposed to locate cellular antennae on the rooftop of an historic hotel considered potentially eligible for inclusion in the NRH). As designed, the antennae were to be mounted away from the building with the mounting panel designed and painted to mimic the existing corner pieces of the building to avoid adverse visual effects on any historic properties. To mitigate any possible adverse effects caused by the collocation, final documentation included the following: medium-format black and white photographs of the building, architectural description, and a historical context developed from background research.



The 1936 Helen Mar Condo, a polychrome Art Deco building, Miami-Dade County, Florida.



Rosenstiel Building Tower in Miami-Dade County, Florida.

An Archaeological and Historical Survey of the Rosenstiel Building Tower in Miami-Dade County, Florida. Panamerican Consultants, Inc. was contracted by ATC Associates, Inc., Miami, Florida to conduct an archaeological and historical survey of the Rosenstiel Building Tower in Miami-Dade County, Florida. The project proposed to locate cellular antennae on the rooftop of a non-historic medical building. Many historic buildings were located in the half-mile project's APE. The survey concluded the flush-mounted antennae on top of the Rosenstiel Building were not anticipated to be visible from any of the historic properties in the APE. As such, no adverse impact was expected.

Architectural and Historical Investigations in Orange County, Florida

Eatonville Historic District Design Guidelines and FMSF Forms, Orange County, Florida. Prepared for Historic Preservation Board, Town of Eatonville, Florida financed in part with historic preservation grant assistance provided by the National Park Service, U.S. Department of the Interior, administered through the Bureau of Historic Preservation, Division of Historic Resources, Florida Department of State assisted by the Historic Preservation Advisory Council Panamerican completed FMSF forms and prepared design guidelines for the Eatonville Historic District, within the Town of Eatonville, Florida. Eatonville is the oldest Black incorporated municipality in America and the location of the Zora Neale Hurston homesite. The purpose of the guidelines is to aid the Historic Preservation Board in protecting the integrity of designated historic resources by requiring review of proposals to add to, demolish, or in any way alter the exterior historic fabric of buildings within the Historic District. The guidelines emphasize rehabilitation of historic buildings over remodeling or restoration and are based in part on the U.S. Secretary of the Interior's Standards for Rehabilitation and the Florida Department of State, Division of Historic Resource's *Model Guidelines for Design Review*. Character defining features of the district are established and each design component discusses recommendations and things to avoid. Photographs, drawings, maps and a glossary help make the guidelines easy to understand and to follow.

Architectural Update Survey of the Eatonville Historic District, Orange County, Florida All properties in the Eatonville Historic District were visited and reviewed for evidence of removal or alterations since the original documentation of the historic district by Panamerican in 2000. Substantially altered buildings or newly recorded buildings were documented with either updated or original FMSF forms. Contributing properties to the Eatonville Historic District were documented with digital photographs. The Florida Division of Historic Resources was also advised of buildings that no longer stood in their original location.



A typical Eatonville frame house, constructed ca 1935, Eatonville Historic District, Orange County, Florida.

LEVEL II, HISTORIC AMERICAN ENGINEERING RECORD (HAER) In Palm Beach County, Florida

Level II Historic American Engineering Record (HAER) documentation of Flagler Memorial Bridge (SR A1A), Palm Beach County, Florida. Panamerican, under contract with the Florida Department of Transportation, completed a Level II HAER documentation of Flagler Memorial Bridge to mitigate adverse effects of pending demolition. Under the guidance of staff of the Florida Department of Historical Resources, Panamerican submitted the following documentation to fulfill the necessary recordation requirements: large format photographs with negatives, topographic map, and written narrative meeting the standards set forth by the National Park Service HAER guidelines, as required by the DHR.

Considered structurally deficient, Flagler Memorial Bridge (8PB9533) will be replaced with a new bridge and the current bridge removed. Due to its status as a contributing resource in the Royal Poinciana Way Historic District and potentially eligible for individual listing in the NRH), a Memorandum of Agreement between the U.S. Department of Transportation, the Federal Highway Administration, and the Florida DHR established measures to mitigate the adverse effects of removal of Flagler Memorial Bridge. The bridge is considered historically significant under Criterion A for its association with the transportation, commerce, and developmental patterns of the Town of Palm Beach.

Built in 1938, Flagler Memorial Bridge is one three bridges over the Intercoastal Waterway connecting the Town of Palm Beach to the City of West Palm Beach and Florida's mainland. Flagler Memorial Bridge is the northernmost of the three bridges. The bridge has a total length of 2,414-foot long and includes a 116-foot bascule bridge. A crossing in this general location has existed since 1903. The replacement bridge is proposed on the south side of the existing bridge.



**Flagler Memorial Bridge State Road A1A, spanning Lake Worth
(Intracoastal Waterway), Palm Beach County, Florida.**

Architectural and Historical Investigations in Pasco County, Florida

An Archaeological and Historical Survey of the Gore's Dairy Property in Pasco County, Florida. Panamerican Consultants, Inc. was contracted by Metro Development Group, Tampa, Florida to conduct this study of a dairy farm that was closing. The property was surveyed for standing historic structures. Although some farm buildings were demolished, the field investigation documented a house, dairy offices, and a feed barn. After a pedestrian survey, the three buildings were photographed and recorded. Research was conducted into the history of the dairy farm between 1943, when it opened, and 2006, when it closed. Because of alterations and lack of outstanding architecture, none of the buildings was considered eligible for listing in the National Register of Historic Places (NRHP). Integrity of the site was also compromised as most of the dairy buildings and structures had already been demolished.



Gore's Dairy Property, Pasco County, Florida.

Historical Recordation of Three Properties in the Water's Edge Project Area in Pasco County, Florida. For Ryland Group, Inc., Oldsmar, Florida, Panamerican conducted a Level II-type HABS documentation (medium format photography) and the historic significance of three remaining structures at the once popular Moon Lake Gardens and Dude Ranch was evaluated. The investigation included medium-format black and white photographs and sketches of the buildings. Documentation included a detailed architectural description and recommended the buildings as eligible for listing in the NRHP based on their association with the former Dude Ranch and their construction of limerock, a material common to the county but rapidly disappearing. The former power house was to be preserved as part of a new development. The other two buildings, a commissary and kitchen joined on the ends, were to be mitigated. The report included the history of the long-closed Dude Ranch and its surrounding area.



Former Gas Station and Store constructed of limerock, Pasco County, Florida.

Architectural and Historical Investigations Sarasota County, Florida



The 1931 Burrows-Matson House is an excellent example of a restored neo-classical waterfront home in Sarasota County, Florida.

An Archaeological and Historical Survey of the Bay Preserve at Osprey Property in Sarasota County, Florida. Panamerican Consultants, Inc. was contracted by Sarasota Conservation Foundation, Osprey, Florida to conduct a historical survey of property on Little Sarasota Bay. The study examined the 1931 Burrows-Matson House, brick garage, boathouse, seawall, two frame bungalows, and one circa 1910 frame cottage. Archival research focused on the history of nearby communities, significant individuals like Bertha Palmer, and the families who first occupied the land or later built winter homes on the property. County historical records, including maps, were reviewed

and used to explain the story of land acquisition and occupation. The interior and exterior of all structures were photographed with the exception of the much-altered 1910 cottage. The property was considered potentially eligible for listing in the NRHP because of its architectural design and construction materials.

Archaeological and Historical Survey of the Sarasota Rails to Trails Rail Corridor in Sarasota County, Florida.

Panamerican Consultants, Inc. was contracted by Sarasota County Procurement, Sarasota, Florida to conduct a historical survey of eight railroad timber trestle bridges located along 14 miles of intact railroad track and across two large bays. A trunk line, the railroad had been constructed by Seaboard Air Line Railway in 1911. The investigation included a below deck examination of the two large bridges from a boat as well as inspection of the railroad corridor where physical conditions permitted. Documentation included photography, Florida site file forms, descriptions of all the bridges, and extensive research into the history of timber-trestle bridges, Seaboard Air Line Railway, and communities along the railroad corridor.



Sarasota Rails to Trails Rail Corridor in Sarasota County, Florida.

SCHEDULE AND COMPLETION TIMES

PHASE I – FIELDWORK: May 2 – June 15, 2011

Project kickoff meeting with the City of Key West project's Point of Contact and Panamerican Consultants, Inc.

Conduct and complete literature review, archival research, and architectural resources field survey as per the RFP; host a public meeting informing residents about the project's objectives

Exit meetings with project Point of Contact (June 13) and presentation of preliminary survey findings to the HARC (June 14)

PHASE II – FINALIZE DRAFT REPORT: June 20-25, 2011

Complete and submit draft report to the City of Key West no later than June 24, 2011

PHASE III – REVIEW PERIOD: June 27-July 8, 2011

Draft report reviewed by the City of Key West and comments submitted to Panamerican; proposed review dates necessary to enable Panamerican to address comments, make corrections, and meet the final submittal deadline

PHASE IV – FINAL REPORT & MEETING PRESENTATIONS: July 11-August 9, 2011

Comments addressed by Panamerican and final report with MSF forms finalized

Final report submitted to the City of Key West by August 1, 2011

Presentation of survey findings at City Commission meeting, August 2, 2011

Presentation of survey findings at HARC meeting, August 9, 2011

INTRODUCTION

PANAMERICAN CONSULTANTS, INC. (Panamerican) specializes in cultural resource management with expertise in historic architectural investigations, terrestrial archaeology, and maritime archaeology. Established in 1989, Panamerican has successfully completed over 4,000 individual cultural resource contracts. Representative services include investigations for historic architectural and landscape-related projects such as National Register of Historic Places (NRHP) evaluation surveys and nominations, Historic American Buildings Survey, Historic American Engineering Record, and Historic American Landscapes Survey (HABS/HAER/HALS) recordations, as well as terrestrial and maritime archaeological investigations.

Panamerican has four main regional offices, each directed by corporate officers: the Southeastern regional offices in Tuscaloosa, Alabama and Tampa, Florida; the Northeastern regional office in Buffalo, New York; and the Mid-South/Southwestern regional office in Memphis, Tennessee. The resulting system creates strategically located centers of expertise from which we provide a wide range of capabilities throughout the United States and Caribbean. Our network of regional centers supported by satellite offices provide clients access to Panamerican's highly-skilled cultural resource specialists as well as the latest technology available to expedite cultural resource investigations.

Panamerican's Architectural History Division offers services across the United States. Clients include the Department of Defense, U.S. Army Corps of Engineers, Departments of Transportation, County and City governments, as well as private agencies. Our large, experienced workforce, our previous project experience (as demonstrated in the following pages), and our positive relationships with state and federal review agencies ensures a project completed in a timely and cost-effective manner. The Architectural History Division includes a team of professionals that offer a broad number of specialized skills and abilities. The depth of this team includes not only architectural historians and historians, but also historic architects, a preservation planner, and a cultural resource management specialist. The specialized skills and abilities of the team have allowed them to complete projects and provide services beyond the typical research and architectural survey tasks.

CULTURAL RESOURCE MANAGEMENT CAPABILITIES

PANAMERICAN routinely supports numerous projects concurrently with our permanent staff of experienced project managers, principal investigators, senior architectural historians, staff architectural historians, historians, a preservation planner, a large format photographer, architectural project technicians, terrestrial and maritime archaeologists, field directors and crews, laboratory technicians, and support staff. The high quality technical expertise offered by our personnel allows for rapid mobilization for project start-ups, timely and cost-effective approaches, and proven excellence in final report production. Our staff of professionals has experience in conducting all phases of cultural resource investigations throughout the nation and the Caribbean region. Panamerican maintains regular contact with cultural resource managers and State Historic Preservation Offices in individual states to stay abreast of current trends in CRM, cultural resource planning, management goals, and current state and federal guidelines. Panamerican's capabilities are particularly suited to undertaking all-levels of historic structure and landscape inventories, HABS/HAER/HALS documentation, historic context studies, and archaeological surveys. Panamerican prepares professional-quality technical reports documenting the results of our cultural resource investigations that meet compliance regulations. Based on past experience we have a thorough understanding of the compliance processes that satisfies state and federal requirements.

RELEVANT CULTURAL RESOURCE SERVICES

Architectural Investigations and Services

- Architectural Surveys - Reconnaissance and Intensive Level
- National Register Evaluations and Determinations of Eligibility
- National Register of Historic Places (NRHP) Nominations
- Historic American Buildings Survey (HABS)/Historic American Engineering Record (HAER)
Historic American Landscapes Survey (HALS) Documentation
- Preservation Planning [Preparation of Historic Preservation Plans (HPP), Integrated Cultural Resources Management Plans (ICRMP), Environmental Assessments (EA), Environmental Impact Statement (EIS)]
- Historical Context Studies
- Landscape Surveys
- Building and Site Chronology
- Preparation of Historic Buildings Treatment Plans
- Preparation of State Historic Preservation Office (SHPO) Inventory Forms
- Public Outreach

Archaeological Investigations

- Terrestrial and Maritime Phase I Surveys
- Phase II Cultural Resource Testing and Evaluation at both Terrestrial and Submerged Sites
- Phase III Data Recovery and Mitigation of Adverse Effect on both Terrestrial and Submerged Sites
- Preparation of State Site Forms
- Laboratory Analysis and Treatment of Recovered Cultural Materials

Client Management Concerns

- Preparation of Memoranda of Agreement (MOAs), Memoranda of Understanding (MOUs), and Programmatic Agreements (PAs)
- GIS Formatting of Cultural Resource Data
- Development of Health and Safety Plans for Terrestrial and Marine Archaeological Investigations
- Section 106 Consultation and Environmental Compliance Surveys

**HISTORIC AMERICAN BUILDINGS SURVEY (HABS)
ILLINOIS**

Rock Island Arsenal Dry Kiln, Building 141, Historic American Buildings Survey (HABS): Panamerican conducted this HABS documentation of a Dry Kiln under a cooperative agreement with the U.S. Army Medical Research and Materiel Command, Fort Detrick, Maryland as part of the HABS/HAER recordation to Level II of four resources at Rock Island Arsenal, Illinois. The Dry Kiln seems to have been associated with the arsenal's role in the creation of the now legendary 1903 Springfield rifle. These rifles were known for their black walnut stocks which exhibit a high degree of workmanship and an exceptionally fine wood grain. The black walnut used for the stocks and the stocks themselves underwent periods of kiln drying at Rock Island Arsenal.

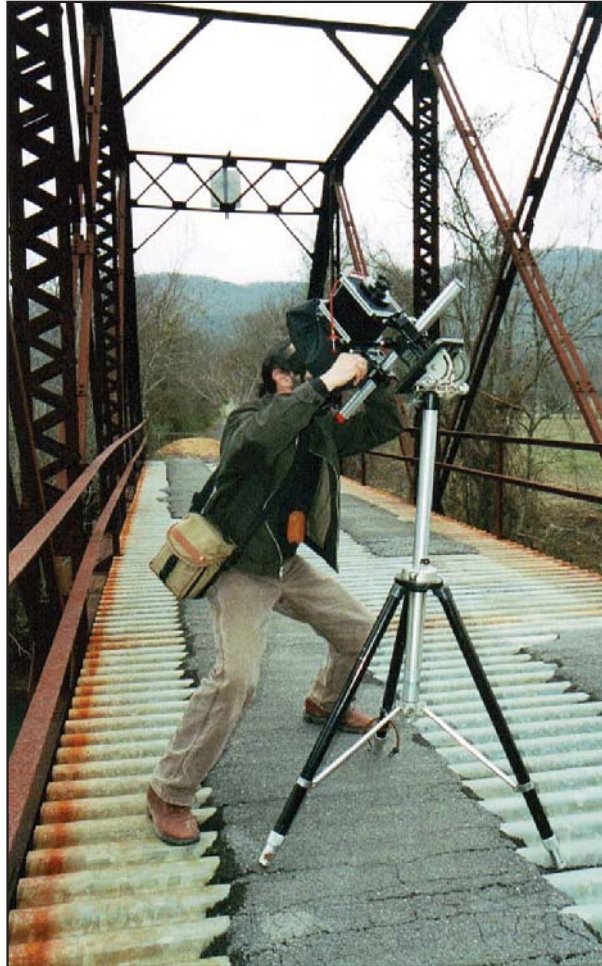


The HABS/HAER document provides a comprehensive and complete technological and developmental history of a historic resource and reflects the National Park Service's commitment to document, understand, and preserve the surviving physical structures that represent America's or its territories' heritage. In providing this level of recordation, Panamerican is capable of producing historic contexts, measured drawings, large format photographs, and archival quality photos and negatives, and producing the final archival-quality document that meets the guidelines and standards put forth by the National Park Service. Panamerican has performed more than 150 HABS/HAER documentations throughout the United States in both military and civilian settings.

HISTORIC AMERICAN ENGINEERING RECORDATION (HAER) ALABAMA

County Road 142 Bridge, Historic American Engineering Recordation (HAER): Panamerican Consultants, Inc. was contracted to complete HAER documentation of the Jackson County Road 142 Bridge for the Jackson County, Alabama, Department of Public Works. A HAER was conducted as the historically significant structure was scheduled for demolition due to a proposed bridge replacement along Jackson County Road 142 over Paint Rock River north of the Princeton community and just east of the junction of State Road 65. The bridge, a steel truss-thru type, was one of the earliest steel truss-thru bridges remaining in the State of Alabama, with a construction date of 1897. Supported by concrete abutments and steel piers, the County Road 142 Bridge was considered a good example of a Pratt steel thru-truss type bridge and eligible for the National Register of Historic Places (NRHP).

Completion of the HAER involved fieldwork and documentary research. Research was conducted at the local and state level and included review of the county engineer's bridge records, the Alabama Department of Transportation's bridge records, professional bridge industry periodicals, and local newspapers, as well as visits to the local library and State Archives in search of information pertaining to the bridge's fabricator and/or contractor. Final documentation included 1) large format photography, 2) a written historical narrative inclusive of the bridge's physical history (location and date of erection; information on the engineer, fabricator, contractor, and owner of the bridge, and description of the original plans) and a historic context that provided local and county background information, a history of the bridge itself and its setting, and historical significance; 3) engineering information outlining bridge construction, specifically truss bridge construction; and 4) architectural information that provided a physical description, and any alterations over time. Supplemental information included a location map, historic photographs and maps, and the large format photographs.

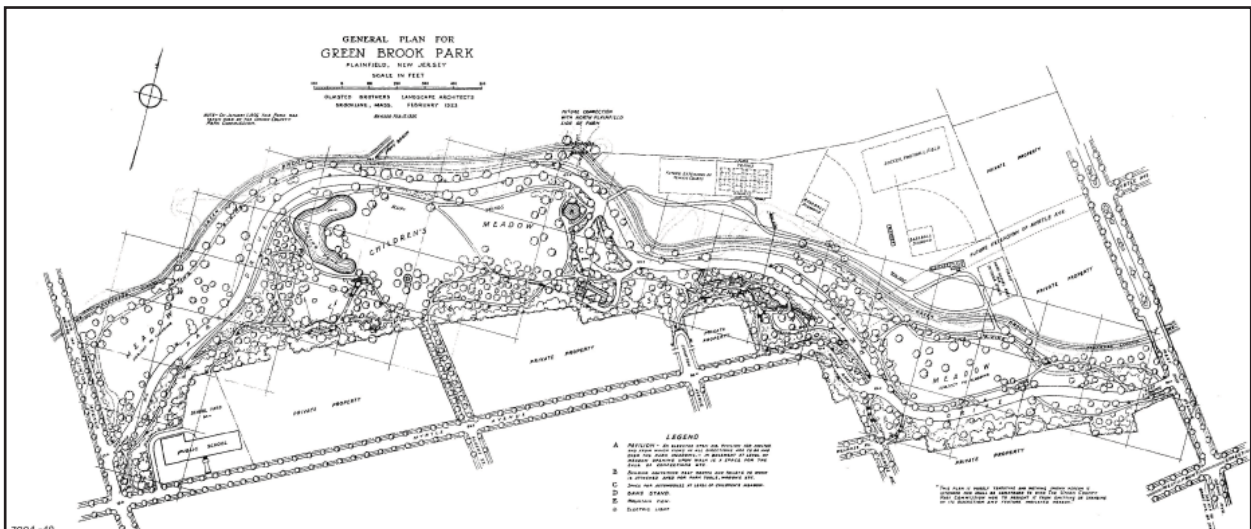


HERITAGE LANDSCAPE SURVEY NEW JERSEY

National Register of Historic Places Evaluation of Green Brook Park, City of Plainfield, Union County, New Jersey for the Green Brook Flood Control Project, City of Plainfield, Union County, and the Borough of North Plainfield, Somerset County, New Jersey: Panamerican, under contract to Barry A. Vittor and Associates, Inc, Mobile, Alabama, for the U.S. Army Corps of Engineers (USACE), New York District, prepared a National Register of Historic Places (NRHP) evaluation of Green Brook Park, City of Plainfield, New Jersey. The purpose of this evaluation was to determine if Green Brook Park (1922), an Olmsted Brothers design, and its entry bridges was eligible for the NRHP. This evaluation was conducted as part of a flood control feasibility study for the USACE, New York District. Control measures proposed included: channel modifications, installation of concrete retaining walls, riprap lining, and bridge replacements including those at the entry points into Green Brook Park. In order to adequately evaluate the bridges for their NRHP status, the park as a whole was evaluated since the Olmsted's regularly created all elements of their parks to complement each other including road networks, water features, buildings, and bridges.

To accomplish the NRHP evaluation of Green Brook Park, Panamerican conducted a pedestrian survey of the park and its sister parks, also Olmsted parks, within the larger context of the Union County Park System. Field documentation included the identification and photographic documentation of all park elements and character defining features. Extensive documentary research was undertaken at various repositories including: non-cataloged records at the Union County Department of Parks, Plainfield Historical Society, Plainfield Public Library, and the National Archives. The National Archives provided microfilm records of the Olmsted's Green Brook Park job. Local informants were also used.

Green Brook Park and its two entry bridges were recommend as eligible for inclusion in the NRHP under Criteria A and C primarily for their association with the Olmsted Brothers, the Olmsted's quest for a unified national park system, and the park's place within the tri-state (New Jersey, New York and Connecticut) park system. Green Brook Park is currently listed on the the NRHP.



INTENSIVE LEVEL ARCHITECTURAL SURVEY UTAH

National Register of Historic Places Evaluations for the Carr Facility Area and Surrounding Range Facilities, U.S. Army Dugway Proving Ground, Tooele County, Utah:

Panamerican completed an intensive level National Register of Historic Places (NRHP) survey of the Carr Facility and surrounding range areas including the White Sage artillery ranges, the Radiological Weapons Grid (Rad Pad), the Defensive Test Chamber originally created to test biological and chemical weapons, the Suppressive Shield Facility formerly used in the safe and environmentally friendly elimination



of unwanted ordnance, and the former Camel Back Animal Farm now a security training range at Dugway Proving Ground (DPG), Utah. The goal of the survey was to assist DPG's compliance with Sections 106 and 110 of the National Historic Preservation Act and the Cultural Resources Management officer with the stewardship of historic resources regarding future renovations, new construction, and demolition activities related to the installation's mission. In completing this project, all buildings, structures, and landscapes were evaluated during a pedestrian survey, photographed, and recorded on Utah State Historic Preservation Office (SHPO) Intensive Level Survey Forms. In addition a literature review related to the buildings, the Carr Facility and the range areas was conducted at DPG, the Utah SHPO, various regional universities, national and state newspapers, and state and local libraries.

The intensive survey of the Carr Facility and surrounding ranges resulted in the recommendation of the Rad Pad, a testing facility designed to measure the hazards of residual radiation produced by nuclear bombs using measurements under reproducible conditions, as eligible for the NRHP. The Rad Pad was never used for its intended purpose, but the concept of measuring specific levels of radiation that an object can withstand is still practiced today, by computer, for the nuclear "hardening" of items. It also recommended the Defensive Test Chamber (DTC) eligible for the NRHP. The DTC was the military's answer to testing large objects or systems in a chemical or biological setting without the use of open-air drop systems. For most of the Cold War (1946-1989) nuclear oriented years, the DTC was the only real testing platform for either chemicals or biologicals.

MITIGATION MISSISSIPPI

Biloxi Veterans Administration Medical Center Historic Context, Biloxi, Mississippi:

Panamerican was contracted by the Department of Veterans Affairs (VA) Gulf Coast Veterans Health Care System (GCVHCS) to prepare a detailed historic context of their Biloxi, Harrison County, Mississippi campus to meet a stipulation of a 2008 Programmatic Agreement among the GCVHCS, Mississippi State Historic Preservation Officer, and the Advisory Council on Historic Preservation. The VA had previously prepared a master plan for the expansion of the GCVHCS, which involved the demolition of two buildings (both non-contributing to its National Register of Historic Places [NRHP] eligible Historic District) and the construction of four new buildings, a new parking structure, and the expansion of an existing parking lot.



The GCVHCS defined the undertaking's area of potential effect (APE) as the area within the Biloxi Veterans Administration Medical Center (BVAMC) Historic District boundary, which included the Biloxi National Cemetery. The GCVHCS determined that the undertaking had an adverse effect on the Biloxi Veterans Administration Medical Center Historic District (BVAMCHD), determined eligible for the NRHP in 1980 and formally listed on the NRHP in 2002. The BVAMC campus comprises a large, sprawling complex of buildings arrayed in a campus-like setting on approximately 109 acres of land on the southern shore of the Back Bay in the City of Biloxi.

Historic research was conducted in consultation with staff of the U.S. Department of Veterans Affairs in Washington, D.C. and carried out at regional, state and local repositories. Primary sources and original documents such as real estate information and reports, campus plans, building blueprints, and other relevant materials on file at the BVAMC Real Estate, Engineering, Public Affairs, and the Biloxi National Cemetery offices were examined. The architectural field investigation identified and documented buildings and landscape features in the BVAMC Historic District. Historic plans of the campus were reviewed and compared to existing campus conditions to interpret the building site chronology of the campus. Historic aerial photographs were also examined to ascertain the loss of trees, ornamental plantings, landscape features, and damages to buildings incurred by natural disasters in the Gulf Coast region from the late 1960s through Hurricane Katrina in 2005.

**PRESERVATION PLANNING:
INTEGRATED CULTURAL RESOURCE MANAGEMENT PLANS,
SECTION 106 CONSULTATIONS AND COMPLIANCE SURVEYS,
ENVIRONMENTAL ASSESSMENTS AND ENVIRONMENTAL IMPACT STATEMENTS**

Panamerican is well versed in the application of the regulations, laws, and statutes that mandate and direct cultural resource management projects, including requirements for various reports used for Preservation Planning. With this knowledge and experience, Panamerican has successfully prepared numerous preservation and management documents, particularly for military installations. These documents include Integrated Cultural Resources Management Plans (ICRMP), Historic and Archaeological Resources Protection plans (HARPs), Historic Preservation Plans (HPP), Environmental Effects (EA), Environmental Impact Statement (EIS), and treatment plans. Panamerican professionals are trained in Section 106 regulations to facilitate the production of these documents.



Directed by our Preservation Planner, Panamerican has prepared numerous ICRMP, EA and EIS documents that provide guidelines for cultural resource managers at various military installations for compliance with existing federal regulations concerning the management of their cultural properties. These installations include Fort Benning, Georgia, Picatinny Arsenal, New Jersey, and the Military Academy, West Point, New York. Planning documents generally involve outlining the procedures, legislation, and regulations necessary to manage cultural resources, summaries of natural and cultural settings of the particular installation, and databases of individual cultural resources for the management of information on all previous and future resources identified at the installation. These reports are drafted to be concise and understandable to contractors and installation personnel.

TREATMENT PLANS GEORGIA

Treatment Plans for the Historic Properties Component, Fort Benning Military Reservation, Georgia:

Panamerican's Architectural History Division conducted in-depth exterior and interior architectural surveys and completed Treatment Plans for Fort Benning's six hundred and sixty-nine (669) National Register of Historic Places (NRHP) eligible buildings/structures. The surveys and Treatment Plans were undertaken to accompany the Installation's Historic Properties Component for the Army Alternate Procedures. The purpose of the Treatment Plans is to offer guidance for the Cultural Resources Manager in making sound decisions on projects affecting historic properties, as well as to provide individual building proponent's approved repair and maintenance guidelines regarding their historic building/structure. Prior to the creation of the Treatment Plans, Panamerican conducted a literature review and in-depth exterior and interior architectural surveys of the Installation's NRHP eligible buildings, structures, and historic housing areas that included completing survey forms, photography, and research of blueprints, maps, and real property cards. Using this information, Treatment Plans for both individual buildings and representative type buildings were written and produced in both a hard copy and a



hyperlinked electronic version. Each Treatment Plan consists of several components including a building overview, floor plan, digital images, exterior and interior survey forms, repair guidelines, maintenance guidelines, inappropriate treatment and adverse effects guidelines, and new construction and alteration guidelines.

PUBLIC OUTREACH

Historic Elyton Village Museum Exhibit, Birmingham, Alabama. Created for the Birmingham Housing Authority Development (BHAD), the design of a permanent exhibit was mandated by the Alabama Historical Commission as a mitigation effort for the planned demolition of select units. The purpose of the exhibit was to provide a public forum documenting Elyton Village's historical significance as the first white public housing development in the State of Alabama and its place within the nation's larger public housing context. The panels were designed to hang in the BHAD's new offices on site at Elyton Village when constructed.

Preserving American Heritage: The Fort Benning Story (DVD), Fort Benning Military Reservation, Georgia. Panamerican coordinated and directed a DVD produced to feature Fort Benning's and the Army's stewardship of its cultural resources as part of planned activities for Earth Day 2006. In conjunction with Fort Benning's Cultural Resources Manager and staff, Panamerican contributed to the script, was responsible for research, locating and choosing images that included both photographs and location shots, and editing of the video. The ten minute video was produced to be shown during Earth Day tours of the Installation and is accessible through Fort Benning's website at <https://www.infantry.army.mil/videos/>.

Biloxi Veterans Affairs Medical Center, Mississippi, A Historical Perspective [tri-fold brochure]: Panamerican was contracted by the Department of Veterans Affairs (VA) Gulf Coast Veterans Health Care System (GCVHCS) to create a tri-fold brochure depicting the history of the GCVHCS Biloxi and Gulfport, Mississippi to meet one of the stipulations of a 2008 programmatic agreement (PA) among the GCVHCS, Mississippi State Historic Preservation Officer, and the Advisor Council on Historic Preservation. The VA is redeveloping its Biloxi, Mississippi campus for the expansion of the medical center's facilities in order to accommodate services formerly available at the Gulfport medical center, which closed in 2005 after Hurricane Katrina. The GCVHCS determined the undertaking would have an adverse effect on the Biloxi Veterans Administration Medical Center Historic District (BVAMCHD), determined eligible for the NRHP in 1980 and formally listed on the NRHP twelve years later. Prior to the brochure, Panamerican completed a detailed historic context of BVAMC for the VA as stipulated in the 2008 PA. Information and images from the historic context were incorporated into the brochure copy and design. The brochure is intended for distribution at GVAMC and other local venues.

COLD WAR HISTORIC CONTEXT & ARCHITECTURAL SURVEYS CONTINENTAL UNITED STATES (CONUS)

Installation Cold War Context and Architectural Surveys for National Register of Historic Places Eligibility Assessment:

Panamerican has demonstrated expertise in military Cold War (1946 -1989) surveys and studies gained through years of work at numerous installations. The Architectural History Division has been recognized by its peers for this expertise and members of the division have made presentations on the subject at conferences. Three large Cold War projects conducted by Panamerican include: Installation Cold War Inventory and Assessment, Fort Monmouth, Red Bank, Monmouth County, New Jersey;



Pine Bluff Arsenal, Jefferson County, Arkansas; and Umatilla Chemical Depot, Hermiston, Umatilla and Morrow Counties, Oregon. These Cold War projects were completed under a cooperative agreement with the Army Medical Research and Materiel Command in association with the Army Materiel Command (AMC) for the United States Army Corps of Engineers, Fort Worth District. The AMC sought an installation by installation inventory of all cultural resources under its ownership to determine which Cold War properties were eligible or included in the National Register of Historic Places (NRHP) and to clarify the general and technical understanding of Cold War material culture. This process was begun with the survey of Fort Monmouth, Pine Bluff Arsenal, and Umatilla Chemical Depot.

Panamerican's experience at Cold War military installations has included the following: chemical, biological, nuclear, and conventional weapons testing and storage, and training; experimental programs; materiel testing; and production facilities. Our Architectural History Division has worked extensively at sites with chemical, biological and nuclear weapons histories and developed historic contexts, conducted surveys, and completed NRHP eligibility evaluations in accordance with NRHP Special Criterion G for properties achieving significance in the last 50 years. This is accomplished by researching the development of the installation; associated weapon's buildings, structures, and landscapes; transportation of the weapons; storage of the weapons; in some cases the destruction of the weapons; and treaties involving the weapons. As necessary, the industrial processes and the role of the military industrial complex are included.

Panamerican has researched, surveyed, and made determinations of NRHP eligibility on more than 1,500 Cold War era buildings, structures and landscapes.

MILITARY ARCHITECTURAL SURVEYS AND HISTORIC CONTEXTS CONTINENTAL UNITED STATES (CONUS)

Military Architectural Surveys for National Register of Historic Places Eligibility Determinations and Historic Contexts:

Panamerican has extensive Department of Defense (DoD) and military industrial complex experience with specific expertise in Cold War history and architecture, military factory facilities and production sequences, World War II permanent and temporary buildings, and military housing. Military projects include large and small architectural surveys, cultural resources management plans, landscape surveys and treatment plans, building treatment plans, specific industrial facilities surveys and evaluations, completion of Historic American Buildings Survey/Historic



American Engineering Record (HABS/HAER) documentation, creation of histories and contexts, National Register of Historic Places (NRHP) assessments, as well as evaluations and reevaluations of potential and current historic districts. Buildings, structures, and landscape types surveyed, researched and evaluated for NRHP eligibility include but are not limited to: headquarters buildings, classroom buildings, barracks, storage facilities, railroad networks, bridges, ranges, golf courses, and traditionally open spaces.

Panamerican has worked at more than 75 DoD installations in 23 states and U.S. Territories (see map next page) including: Soldiers Systems Center, Natick, Massachusetts, Aberdeen Proving Ground, Maryland, Fort Knox, Kentucky, Naval Station Norfolk, Virginia, Seymour Johnson Air Force Base, Ohio, Dugway Proving Ground, Utah, Umatilla Chemical Depot, Oregon, Fort Benning Military Reservation, Georgia, Picatinny Arsenal, New Jersey, and Camp Lejeune, North Carolina. Work has also been completed at former installations such as Anclote Missile Tracking Annex, Florida, now held in civilian hands.

Panamerican's broad range of project experience coupled with extensive DoD experience has helped create a proven record of successfully conducting and managing military projects and completing all required tasks in a professional, efficient, timely, and cost-effective manner.

CONTINUING IMPLEMENTATION OF ARCHIECTURAL STUDIES RIVERSIDE PLANTATION

Riverside Plantation (Quarters 1), Fort Benning Military Reservation, Georgia:

Riverside Plantation was the summer home of Columbus, Georgia businessman, Arthur Bussey. Built in 1909, the neo-classical home was the center of Bussey's 1,782-acre farm located 9 miles south of Columbus until the Army acquired it for the establishment of Camp Benning in November 1918. Since that time, Riverside has served as the residence for the installation's commanding officer. Historically significant for its role as military housing quarters, Riverside also has importance from its previous owner. Bussey, like many gentlemen of that period,



created a model of the self-sufficient dairy and agricultural farm using the latest scientific and technological methods available. The house was listed in the National Register of Historic Places (NRHP) in 1971.

Unlike most buildings and sites that Panamerican works, we have had the opportunity and privilege to conduct a number of cultural resources studies at Riverside Plantation thereby building a body of knowledge for continuing studies that has helped shape the interpretation of this pivotal piece of property within the Main Post Historic District and its role in Georgia history. Panamerican conducted intensive-level interior and exterior surveys of the house in order to create Treatment Plans for the Historic Properties Component of the Army Alternate Procedures. A Level II Historic American Buildings Survey (HABS) was completed on the property which includes large format photographs of the interior and the exterior, a full construction history of the building, and existing blueprints. The extensive landscape surrounding the quarters was documented and placed within a greater installation context in a Historic Open Spaces Survey. Although Riverside was placed on the Register in 1917, the nomination is not complete and in need of updating. Panamerican will amend the original NRHP nomination to expand its significance statement and include documentation of an associated outbuilding and its historic landscape.

METHODOLOGY

The City of Key West (CKW) seeks to engage the services of a qualified firm to conduct a comprehensive professional survey to identify and analyze all potential eligible historic resources, structures, places and sites within the CKW potentially eligible for protection under the City Historic Preservation Ordinance and Historic Architectural Guidelines. The survey will encompass the entire area of the CKW municipal boundaries, exclusive of Federal lands (City of Key West RFP 007-11, Addendum No. 1:3). Panamerican's proposed methodology is designed to meet the City's requirement to identify historic resources that are at least 50 years old with specific focus on the subject period of 1954 to 1962) and also identify and document secondary buildings not previously recorded but associated with previously recorded buildings (City of Key West RFP 007-11). Florida Master Site File (FMSF) forms will be completed on all newly recorded historic properties and existing FMSF forms revised when inaccurate information has been found or updated upon identification of a non-previously recorded ancillary structure. The findings of the analysis may provide information for the possible expansion of the KWHD boundaries as recorded in the NRHP. The 2011 historic resources survey will serve as a principal tool for the HARC and their staff to review project proposals that may have an effect on individual historic buildings or the surrounding urban fabric. The survey will further serve as a tool for professional and owners to understand the historic and architectural significance of a property.

Each of the Architectural Historians assigned to the survey meet or exceed the Secretary of the Interior's Professional Qualifications Standards used by the National Park Service and published in 36 CFR Part 61. Panamerican has the capabilities and expertise to complete all of the required survey tasks to accomplish the deadline objective for the final report submittal of August 1, 2011. The final report will meet the requirements of Chapter IA-46.001 FAC. All work subject to grant reimbursement will be billed to the City no later than August 1, 2011.

To date, the CKW has a total of 2,649 previously surveyed resources in its municipal boundaries. Most of the previously surveyed resources are within the boundaries of the National Register-listed and locally designated KWHD (established 1971; expanded 1983). The KWHD is the largest historic district in the State of Florida known for the wealth of vernacular frame structures stylistically unique to Key West. The CKW has a total of 11,175 parcels within the CKW municipal boundaries, excluding military lands. Based on a review of the 2004 historic resources survey, the types of historic resources anticipated in the subject period of 1954 to 1962 will be largely residential properties. The previous survey reported that residential properties dating from the late 1820s to the 1950s represent 74 percent of the historic resources in Key West (URS 2004). Commercial properties from the late 1800s to the 1950s make up the second most represented type of historic resources (20 percent) in the City (URS 2004). The proposed comprehensive survey of mid-twentieth century properties will likely identify more commercial properties. The subject period of the 2011 survey encompasses resources constructed during a period of residential and commercial growth in the City's mid-twentieth century development. Key West had a population of 33,956 in 1960, a 28.5 percent increase from 1950¹ (U.S. Census 1960). The 1960 U.S. Census also listed a total of 9,110 households in the City, which was a 42.2 percent increase from 1950.

PHASE I – FIELDWORK: May 2-June 18, 2011

Panamerican will be in Key West the week following award of contract in an effort to meet the August 1, 2011 deadline for completion of the project. At this time the project team will set up a six week Key

¹ Population information for the City of Key West from the U.S. Bureau of the Census, *Census of Population: 1960. Vol. I Characteristics of the Population. Part II Florida.* U.S. Government Printing Office, Washington, D.C.

West field office equipped with computer work stations, internet, printing capabilities, as well as a place to maintain survey and research files. This space will allow the PI to coordinate and meet with the project team, address emails and phone calls, provide a place for survey teams to depart for fieldwork, and ensure communication with the project's point of contact (either by phone or email). Panamerican proposes weekly updates, via email, with the City's representative unless otherwise informed. Meetings will be scheduled with the City/POC as needed.

Project Kickoff Meeting. Panamerican will coordinate with the City's point of contact for a project kickoff meeting prior to commencement of the reconnaissance field survey. The meeting's goal will be to discuss project objectives, deadlines, and field survey concerns (the public's awareness of the survey); obtain local contact information to acquire maps, previous FMSF forms, and Geographic Information System (GIS) information; set in motion applications to participate in public meetings (HARC, City Commissioners, and a public meeting-see below); and obtain access to materials held by the City. During the first week, Panamerican will need to acquire survey maps, existing FMSF forms, and access to the 1962 Sanborn maps from the City.

Literature Review, Archival Research, and Development of a Historic Context. Archival and historical research efforts and literature reviews provide the necessary contexts in which to understand built or designed environments; inclusive of buildings, structures, objects, and landscapes. Research methodologies are established relative to the project and its associated historic resources. Background research complementing architectural resources surveys entails knowledge of local research sources, archival research procedures, architectural history, and stylistic sources relevant to the project area. Whether prepared in conjunction with a survey or for the development of a historic context, comprehensive research and literature reviews for the proposed project requires examination of existing documentation and previous surveys, City history, existing NRHP and/or HABS/HAER/HALS records, SHPO documents, and searches within local and/or regional archival repositories relevant to the survey. As per our standard practice, Panamerican conducts a literature review of all previous surveys related to the project to glean useful background information on the area and its development.

Of primary concern to historical research is the collection and assimilation of existing information to formulate a context for the development of a survey area, type of building or structure, designed landscape, or specific era of history and/or construction. Panamerican consistently obtains reference materials relevant to the task at hand. Prospective background information and materials will include the following sources: the FMSF for information on previously documented historic resources in Key West; previous historic architectural surveys and cultural resources management reports, available from the CKW and the SHPO, which will be reviewed for relevant background information that will be incorporated into the survey's analysis of historic resources and the historic context development. Background review of existing documents, tax assessor's records, parcel data, city directories, newspaper articles, permit and zoning records, historic postcards and photographs, historic maps and atlases, and mid-twentieth century aerial views of the City will be essential for identifying historic resources constructed in the period from 1954 to 1962. Additional background research for historic context development will be conducted at the Monroe County Library-Key West branch, the office of the Historic Florida Keys Foundation, the Monroe County Courthouse in Key West, City Departments and agencies, and the Florida State Archives in Tallahassee (if necessary). Panamerican will consult with local historians and other knowledgeable individuals.

The survey will utilize the Monroe County Property Appraisers as a supplemental tool for identifying historic resources constructed in the subject period. The 1962 Sanborn Fire Insurance Maps will serve as the primary reference tool employed in the survey, as the maps will aid in the identification, analysis, and field inspection. The survey will use the Sanborn Maps to identify changes in the City's built environment since the mid-twentieth century. Identification of historic resources in the subject period

will be based on the findings of the background research, comparative visual analysis of mid-twentieth century architectural resources in the CKW, and knowledge of popular trends and architectural styles of the mid-twentieth century in the State of Florida.

Architectural Resources Field Survey. The proposed field survey has two objectives: the first is to survey those properties having become 50 years old since the 2004 survey. As stated, these structures will date from the mid-century period of the 1950s and 1960s outside of the KWHD. This survey will document those land lots located “on land newly created from submerged area” (City of Key West RFP 007-11). FMSF forms with photographs and maps will be completed for each newly identified historic resource and any associated ancillary structures regardless of their NRHP eligibility determination.

The second objective of the 2011 historic resources survey is to update the City’s existing inventory with an analysis of outbuildings and accessory structures identified with previously recorded properties with FMSF forms. The 2011 survey will update FMSF forms for each previously recorded property identified with an associated outbuilding or structure including a photograph and required maps. Updated information for each outbuilding and accessory structure will include one photograph and a brief summary of the resource (i.e., location, type, date of construction, architectural style, materials, and other notable features). Each secondary building and structure identified in the KWHD will be evaluated to determine if the resource is a contributing element to the historic district. The contributing or non-contributing status of those resources in the KWHD will also be included in the updated FMSF forms. The results of this evaluation will be presented in the final historic resources survey report in both narrative and tabular formats. The updated survey information will serve as the basis for the City to determine the level of protection and regulation necessary to preserve significant examples. Already familiar with working in the FMSF database and completing forms, several Panamerican team members currently retain login and password information to access the FMSF forms and manuscript collection of previous cultural resource survey reports.

To accomplish the updated survey for newly identified ancillary buildings, Panamerican proposes to first obtain copies of the 1962 Sanborn Fire Insurance Maps from the City to identify outbuildings associated with previously documented properties. Initial review of the Sanborn Maps will expedite the identification and documentation of the secondary buildings and structures. Other historical architectural surveys and inventories will also be reviewed for relevant background information. The final analysis will include a coded Sanborn map showing the geographic distribution and density of secondary buildings and structures, the approximate date of construction range, and architectural style if applicable. Existing FMSF forms for each previously recorded property identified with a newly associated outbuilding or structure will be updated.

Panamerican proposes to employ two teams of two individuals each, consisting of an Architectural Historian and an Architectural Project Assistant, to conduct the field survey. The survey team will begin with a preliminary windshield survey of the CKW to develop the field investigation strategy, which will be based on densities and historic resource types as revealed in the field and the background review. The survey team will identify and document all pre-1962 historic resources that have not been previously inventoried. Information gathered for each historic resource will meet the requirements for the completion of new, as well as updated, FMSF forms. Representative information collected is to include (if applicable) the following: property name, address or street location, original and current use, architect/builder (if known), date of construction, architectural style, building materials, architectural details, alterations, and integrity and physical condition. Each property in the survey will be photographed with a digital camera.

The survey team will utilize a list of buildings and parcel maps to systematically conduct and track the progress of the field survey. Field data recordation for historic resources is conducted with a Trimble Geo

XM and other global positioning systems (GPS). Panamerican will develop a custom data dictionary containing all of the necessary fields required for thorough documentation of each historic resource. Each historic resource will be marked with a single GPS point. In numerous previous surveys, streamlined data collection has proven effective in meeting the challenges presented by large architectural surveys, particularly the organization, analysis, and retrieval of large amounts of architectural data. Databases can be linked with GIS and AutoCAD maps to develop an interactive display of the data that enables users to intuitively query the database for information. For each new surveyed resource, information in the database will be used to generate the Survey Log Sheet in accordance with the requirements of Chapter 1A-46.001 FAC. In instances where information on existing FMSF forms is found to be inaccurate, Panamerican will update the existing form.

Public/Municipal Meetings. During the fieldwork phase, Panamerican proposes to engage the Key West community at the onset of the survey by holding an informal public outreach meeting for residents at the Monroe County Library-Key West branch. Libraries provide an excellent venue to consult with members of the community who potentially may hold important information about the history of their home or other relevant information that is not available in primary or secondary sources. For the informal meeting, Panamerican's Architectural Historians will present the project's objectives and goals to seek potential knowledgeable local informants. In past surveys, local informants have provided our architectural survey team with valuable information about specific buildings, events, and people. In some cases, homeowners have produced important documents such as architect's drawings or historic photographs. Information supplied by owners about their properties in areas subject to hurricanes and tropical storms can assist the architectural survey with assessing damage to historic properties and identifying subsequent rebuilding or modifications. Panamerican will create an informational, one-page flyer about the study for distribution at the library, which will be subject to review and approval by the HARC. Public outreach presents the architectural survey team with an opportunity to obtain additional historical information about the City's historic architectural resources and development history. Further, an informal meeting provides an opportunity for the community to learn more about the historic resources survey and, if interested, how individuals can participate in the study.

Panamerican would attempt to schedule an exit meeting with the project's point of contact for June 12, 2011, to discuss the remaining phases of the project, if so desired. As stated above, Panamerican plans to participate in two HARC meetings and one meeting with the City Commission. The first meeting with the HARC would be proposed to take place on June 13, 2011, at the end of fieldwork and prior to Panamerican leaving Key West. At this time, Panamerican will present their initial survey findings, with tentative counts of additional contributing and non-contributing properties and provisional conclusions for the potential to expand the KWHD boundaries, as well as identify any new historic districts or individually eligible properties.

PHASE II – DRAFT REPORT: May 30-June 23, 2011

Finalize Draft Report (Due on June 25, 2011). Writing for the draft report is scheduled to begin during the fieldwork phase of the project. Writing is scheduled to begin the week of May 5, 2011. Information will flow between the field office and production office to generate FMSF forms and maps. Panamerican will submit to the CKW three copies of the draft report (meeting the requirements of 1A-46.001 FAC), a Survey Log, five sample FMSF forms with photographs and maps, and electronic copies in PDF format.

PHASE III – REVIEW PERIOD: June 24-July 8, 2011

Review Period. Once submitted to the CKW for review, Panamerican anticipates receiving comments by July 8, 2011, in order to have time to address comments and make corrections to meet the final deadline of August, 1, 2011.

**PHASE IV – FINAL REPORT: (July 11-August 1, 2011) and PUBLIC/MUNICIPAL MEETINGS:
August 2-9, 2011**

Upon receipt of comments from the City (and SHPO, if applicable), Panamerican will address any comments, make corrections, and produce the final report. Submission of the final report is August 1, 2011, and will include three copies of the final report, all FMSF forms with photographs and maps, Survey Log, and PDF versions of the report. A final invoice will also be submitted by this date.

Public/Municipal Meetings. The second HARC meeting (tentatively scheduled for August 9, 2011) and a meeting with the City Commissioners (tentatively scheduled for August 2, 2011) will take place upon completion of the project. Panamerican will present the final survey findings and any recommendations that would benefit the HARC and the City in its management of Key West's historic resources at this time.

Bibliography

City of Key West

2011 *City of Key West Request for Proposals (RFP) #007-11: Key West Historic Resources Survey 2011 Project and Addendum #1.* Prepared by the City Clerk, City of Key West, Florida.

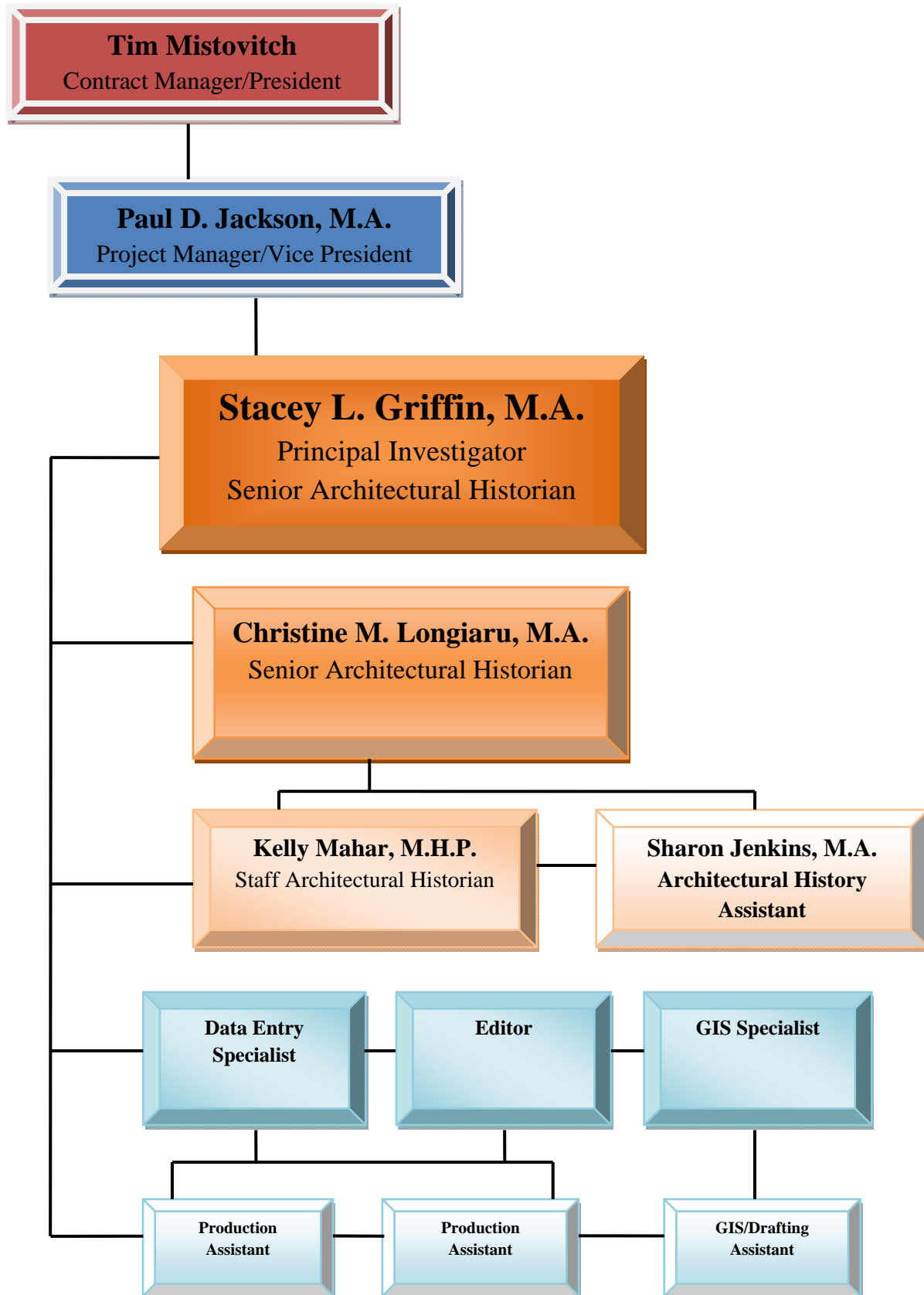
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URS Corporation, Inc.

2004 *Historic Resources Survey of Key West, Monroe County, Florida.* Prepared for the City of Key West, Florida. Prepared by URS Corporation, Inc., Gaithersburg, Maryland.

PROJECT ORGANIZATIONAL CHART



PROJECT PERSONNEL

The Senior Architectural Historians, Staff Architectural Historian, and Architectural History Assistant specified for this project have a collective understanding of the built environment, inclusive of the architectural styles and unique characteristics that define Key West's vernacular architectural style as demonstrated through their vitae and project examples in this proposal. Each project team member has experience in conducting large-scale surveys documenting historic landscapes, commercial and industrial structures, as well as, urban and rural residential areas. Panamerican offers considerable expertise in NRHP eligibility assessments for a wide range of historic property types including landscapes. Our project team is skilled in historic resource identification, archival research, technical report writing, and photographic documentation for all types and levels of architectural and landscape surveys. In this instance, the project team will be familiar with the City's Historic Preservation Ordinance and Historic Architectural Guidelines to better evaluate the resources for NRHP eligibility, determining potential historic districts, or individually eligible properties. The Principal Investigator (PI) assigned to the project has the expertise to conduct and complete all phases of the project, from the initial consultation phase through final compliance review. The PI will ensure the final report and deliverables meet the standards and requirements of the National Park Service, the City of Key West, and the State Historic Preservation Office (SHPO).

Project key personnel include: Ms. Stacey L. Griffin, M.A., Senior Architectural Historian, who will serve as Principal Investigator, co-author, and survey team leader, and will be Panamerican's point of contact for this project. Ms. Christine M. Longiaru, M.A., Senior Architectural Historian, will serve as co-author and as a survey team leader. As project team members, Ms. Kelly Mahar, M.H.P, Staff Architectural Historian and Ms. Sharon Jenkins, M.A., Architectural History Assistant, will assist in survey fieldwork, will retain quality control regarding the generation of FMSF forms with maps and photographs, and provide production assistance. A project organizational chart and vitae follow.

The survey team will be fully supported by Panamerican's corporate office and a production team that consists of a data entry specialist (FMSF forms and building lists), GIS specialist (maps and illustrations), editor (FMSF forms, draft and final reports), and several production assistants (FMSF forms, mapping, report production). Other qualified company personnel, if needed for unforeseen reasons, include Ms. Kelly Nolte, M.A., Director, Architectural History Division; Ms. Angie Clifton, M.A., Staff Architectural Historian; and Mr. Martin Wachadlo, M.A., Staff Architectural Historian.

BREAKDOWN OF SCHEDULE BY PHASED TASK AND PERSONNEL

April 29, 2011: Award of Contract.

PHASE I – FIELDWORK

Week 1 – May 2-7, 2011: Panamerican arrives in Key West for project kickoff meeting with the City of Key West's (CKW) Point of Contact (POC), literature review, and archival research (**Griffin and Longiaru**)

- Discuss project objectives, deadlines, field survey, and community's awareness of the survey
- Obtain contact information for local and state agencies to acquire survey maps, GIS information, parcel maps, FMSF forms for all previously recorded structures (with construction date of 1962 or earlier), as well as contact information for the local historian, librarian, and historical society, if available
- Set in motion applications to hold/participate in public meetings (one community meeting proposed; two meetings with HARC; and one meeting with the City Commission) after completion of the report
- Review and/or obtain copies of historic and current materials (previous architectural surveys and inventories; historic and current maps; historic photographs, city plans, building lists, etc.) held by the CKW
- Obtain lists, maps, FMSF forms, etc. from City Departments/Agencies for use during fieldwork and for report production
- Conduct research for the City's development context dating between the 1950s and 1960s
- Ready survey maps and review and organize FMSF forms for fieldwork

Week 2 – May 9-14, 2011: Research and architectural resources field survey (**Griffin and Longiaru**)

- Visit the Florida SHPO and State Archives, if necessary (**Longiaru**)
- Begin the comprehensive architectural survey within CKW's municipal boundaries focusing on historic resources that have become 50 years old since the 2004 architectural survey (those resources constructed between 1954 and 1962) and historic resources that have not been previously included in past surveys that are at least 50 years old (**Griffin and Longiaru**)

Week 3 – May 16-21, 2011: Architectural resources field survey (**Griffin, Longiaru, Mahar, and Jenkins**)

- Continue field survey
- *Host public outreach meeting* at the Key West Library branch (or other public meeting space) to present the project's objectives to residents and gather information from local informants

Week 4 – May 23-28, 2011: Architectural resources field survey and documentation (**Griffin, Longiaru, Mahar, and Jenkins**)

- Continue field survey
- Production team begins generating FMSF forms inclusive of maps and photographs

Week 5 – May 30-June 4, 2011: Architectural resources field survey, documentation, and draft report (**Griffin, Longiaru, Mahar, and Jenkins**)

- Observation of Memorial Day
- Continue field survey
- Production team continues generating FMSF forms inclusive of maps and photographs (**also Mahar and Jenkins**)
- Begin draft report (**Griffin and Longiaru**)

Week 6 – June 6-11, 2011: Architectural resources field survey, research, documentation, and draft report

- ***Complete field survey and research*** (**Griffin and Longiaru**)
- Production team continues generating FMSF forms inclusive of maps and photographs (**also Mahar and Jenkins**)
- Continue writing draft report (**Griffin and Longiaru**)

Week 7 – June 13-18, 2011: Field survey exit meeting, field survey wrap up, and draft report

- June 13 – exit meeting with City’s POC (**Griffin and Longiaru**)
- ***June 14 – HARC meeting***, presentation of preliminary survey findings (**Griffin and Longiaru**)
- Continue writing draft report, generate report illustrations and maps, continue working on FMSF forms, and Survey Log Sheet (**Griffin and Longiaru with support from production team**)

PHASE II – FINALIZE DRAFT REPORT

Week 8 – June 20-25, 2011: Finalize draft report

- Complete draft report inclusive of illustrations, drafting, five sample FMSF forms with maps and photographs, and Survey Log Sheet (**Griffin and production team**)
- ***June 25 – draft final survey report due to CKW by June 24***, submit three copies of draft report and PDF format

PHASE III – REVIEW PERIOD

Weeks 9 and 10 – June 27-July 8, 2011: Review of draft report by CKW

- CKW to review draft report and submit comments to Panamerican

PHASE IV – FINAL REPORT AND MEETING PRESENTATIONS

Week 11-13: July 11-29, 2011: Final report preparation

- Panamerican to address CKW (and SHPO if applicable) comments and make corrections for final report (**Griffin and project team**)

Weeks 14 and 15: August 1, 2011: Final survey report

- ***Submission of final report no later than August 1, 2011***; report to meet the requirements of Chapter 1A-46.001 FAC, the final draft will include the final report, Survey Log Sheet, and all FMSF forms with photographs and maps (3 copies each and PDF versions)
- ***August 2, 2011: City Commission meeting***, presentation of final survey findings (date negotiable due to everyone’s schedule) (**Griffin and Longiaru**)
- ***August 9, 2011: HARC meeting***, presentation of final survey findings (date negotiable due to everyone’s schedule) (**Griffin and Longiaru**)

COST ESTIMATE BY PHASED TASKS

PHASE	COMPLETION TIME	COST
CONTRACT AWARD.	April 29, 2011	N/A
PHASE I – FIELDWORK: Project kickoff meeting; literature review, archival research, field survey, public meeting, begin draft report, meetings with HARC and project’s POC. Personnel: Griffin, Longiaru, Mahar, and Jenkins, plus production team.	May 2-June 14, 2011	Labor: \$41,106.08 Airfare: \$4,000.00 Rental Car: \$1,500.00 Fuel: \$992.00 Lodging: \$9,100.00 Per Diem: \$5,086.00 Research Materials: \$500.00 Equipment: \$150.00 Supplies/Shipping/Copies: <u>\$1,200.00</u> PHASE I TOTAL COST: \$63,634.08
PHASE II – DRAFT REPORT: Finalize draft report inclusive of illustrations, five sample FMSF forms with maps and photographs, and Survey Log Sheet (3 copies of report and PDF format).	June 20-25, 2011	Labor: \$15,791.20 Airfare: \$0.00 Rental Car: \$0.00 Fuel: \$217.00 Lodging: \$625.00 Per Diem: \$210.00 Research Materials: \$50.00 Equipment: \$150.00 Supplies/Shipping/Copies: <u>\$160.00</u> PHASE II TOTAL COST: \$17,203.20
PHASE III – REVIEW PERIOD: Draft report under review by City of Key West, comments due to Panamerican by July 8, 2011.	June 27-July 8, 2011	N/A
PHASE IV – FINAL REPORT AND MEETINGS: Panamerican to address City’s comments, make corrections, and submit final draft report and invoice no later than August 1, 2011. Final report to include all FMSF forms with maps and photographs, Survey Log Sheet (3 copies of report and PDF format). Panamerican to attend City Commission meeting (August 2, 2011) and HARC meeting (August 9, 2011) to make presentation of survey findings.	July 1-August 1, 2011; August 2, 2011; and August 9, 2011	Labor: \$5,226.88 Airfare: \$650.00 Rental Car: \$600.00 Fuel: \$310.00 Lodging: \$2,000.00 Per Diem: \$900.00 Research Materials: \$0.00 Equipment: \$0.00 Supplies/Shipping/Copies: <u>\$150.00</u> PHASE IV TOTAL COST: \$9,836.88
		TOTAL COST: \$90,674.16

Cultural Resources Investigation and NRHP Evaluation for Admiral's Row, Brooklyn Navy Yard, Kings County, New York

Phase IA Cultural Resources Investigation for Admiral's Row Section Former Brooklyn Navy Yard, Brooklyn, Kings County, New York (OPRHP #03PR05477). Panamerican Consultants, Inc., Buffalo, New York prepared for Tetra Tech, Inc., Portland, Maine, under contract to the U.S. Army Corps of Engineers (USACE), New York District, New York in consultation with the U.S. Army National Guard Bureau (NGB) a Phase IA Cultural Resources Investigation for the Admiral's Row housing on the former Brooklyn Navy Yard, Brooklyn, New York. The NGB is responsible for transferring the Admiral's Row property from federal government's ownership and disposing of the property as per Public Law 100-202. The USACE is currently serving as the real estate agent assisting the NGB in complying with all federal regulations as they pertain to the undertaking. The completion of the Phase IA cultural resources investigation served as part of the environmental review for disposal of the property. The purpose of the architectural component of the Phase IA investigation was to identify National Register-eligible properties in the APE by conducting background research and field reconnaissance. The architectural investigation documented all buildings, structures and objects within the entire 6.07-acre project area (i.e., APE) in the southwest corner of the former Brooklyn Navy Yard.

The Phase IA architectural reconnaissance survey documented eight NRHP-eligible domestic structures (ten quarters) erected between ca. 1850 and ca. 1900, related outbuildings, and a timber shed reportedly constructed as early as 1833. Background research was conducted at numerous repositories located in Manhattan and Brooklyn, New York and The field reconnaissance for this Phase IA cultural resource investigation included both archaeological and architectural components. In addition, the Phase IA addressed questions raised by a previous investigation of the project area.

Specific tasks included providing additional information on an existing Timber Shed as well as evaluating it for eligibility for listing to the NRHP, determining the involvement of architect Thomas U. Walter in the design and/or construction of the Admiral's Row residences, and determining the original shoreline of Wallabout Bay and its extent in relation to the Admiral's Row project area. NRHP-eligibility recommendations were included in the final Phase IA report for the related outbuildings and the Timber Shed.



Officer's Quarters, Admiral Row, Brooklyn Navy Yard, New York.

Historic District National Register of Historic Places Nomination

Mena Commercial Historic District National Register Nomination, Mena, Arkansas. The Mena Commercial Historic District was once a thriving commercial center for Mena, Arkansas, and a major transportation route for the Kansas City Southern Railroad. Mena, the county seat for Polk County, is located in the central western section of Arkansas near the Oklahoma border. Four buildings within the district boundaries have been previously listed on the NRHP. Within the district boundaries, there are 65 buildings and 1 ancillary structure. Of the buildings within the district, 58.50 percent (38 total including the four previously NRHP listed buildings) maintain a high level of integrity and are contributing elements. The other 27 buildings account for 41.50 percent of the district and are non-contributing. The 1920 Mena Kansas City-Southern Depot (NR listed 06-05-91) is located on the south side of Sherwood Ave. between Mena St. and DeQueen Street. The 1917 Old Post Office (NR listed 06-05-91) is located at 520 North Mena St. on the north end of the district. The 1908 Elks Lodge (NR listed 06-04-98) is located at 500 Mena St. at the northeast corner of the district. The 1948 Studebaker Showroom (NR listed 06-09-00) is located at 519 Port Arthur Avenue at the northwest corner of the district. Several periods of significance are represented since there are different phases of development for the town of Mena that occurred 1896-1955. In addition, all buildings constructed after 1959 are listed as non-contributing structures within the district. The Mena Commercial Historic District's buildings represent commercial architecture from the late nineteenth and early twentieth centuries.



Mena Commercial Historic District, Mena, Arkansas.

The Mena Commercial Historic District was nominated to the National Register of Historic Places under Criterion A for its association with early development in Mena. The district which has local significance exemplifies the growth of the town through its height in the 1950s. The Mena Commercial Historic District's period of significance extends from 1896-1959 and is tied to the Kansas City, Pittsburg & Gulf Railroad which played a pivotal role in the development of the area.

Large-Scale, Intensive Level Architectural Survey

Architectural Survey (Five-Mile Area of Potential Effect) for the Proposed Moresville Energy Center, Towns of Harpersfield, Roxbury, and Stamford, Delaware County, and Towns of Blenheim, Gilboa, and Jefferson, Schoharie County, New York. Panamerican was contracted by Moresville Energy LLC to conduct an architectural survey of a five-mile visual APE around all project components of the proposed Moresville Energy Center, a wind-energy project proposed in the Towns of Roxbury and Stamford, Delaware County, New York. The study area encompassed approximately 136 square miles. Per New York State Office of Parks, Recreation and Historic Preservation (OPRHP) guidelines, the historic building survey for wind farms was conducted in two distinct phases, resulting in two reports. The purpose of the historic building survey was to identify National Register eligible (NRE) properties in the five-mile visual APE of the proposed Moresville Energy LLC.



Architectural survey and viewshed assessment for proposed wind energy project, Delaware County, New York.

Located in the Western Catskill Mountain region of New York State, the study area was representative of the region's scenic natural landscape which is characterized by rugged, rocky terrain, numerous mountains, valleys, streams, waterfalls, and wild forests. Beginning in the 2nd quarter of the nineteenth century, tourism transformed the Catskill region from a hunting and agricultural landscape into an intensely developed tourist destination. Though largely defunct in

Roxbury and Stamford, the impact of the great resort era of the late nineteenth century

and early twentieth century tourism still resonates in these villages through extant buildings that once served as summer houses, hotels or boarding houses. The natural scenic beauty of the northern Catskills provided the backdrop for summer tourists.

In total, 793 properties [inclusive of non-contributing properties located in proposed historic districts] were documented in this study. The architectural survey identified 172 individual NRE properties and three large National Register-eligible historic districts, which are significant for their association with the Catskills Resort development and history and Catskill Resort Architecture. The three districts included the Stamford Historic District (244 contributing buildings and 50 non-contributing buildings), the Hobart Historic District (136 contributing buildings and 28 non-contributing buildings), and the Grand Gorge Historic District (110 contributing buildings and 28 non-contributing buildings). Numerous individual farmsteads in the survey area were further identified for their potential as rural historic districts intertwined by the highly intact landscape and interconnections of land use and development.

HISTORICAL CONTEXT STUDIES ALABAMA, ARKANSAS, CALIFORNIA, & MISSISSIPPI

Nationwide Historic Context Study - The Role of the National Guard in the Civil Rights Movement: Panamerican was contracted by the Alabama Army National Guard to develop a historic context examining the role of the Army National Guard (ARNG) in the Civil Rights Movement during the 1950s and 1960s (DoD Legacy Project No. 07-366). The objective of the project was two-fold; first to develop a baseline historic context examining the role of the ARNG in the Civil Rights Movement and secondly, to provide a process by which to survey, interpret, and evaluate related ARNG cultural resources (armories, training ranges or readiness centers, etc.) for historical significance and determination of eligibility for the National Register of Historic Places (NRHP). Four states (Arkansas, Mississippi, Alabama, and California) were chosen for known participation of ARNG troops in civil rights disturbances including school desegregation at Little Rock Central High School (1957), The University of Mississippi (1962), The University of Alabama (1963), and riot control in Watts (1965). A comparison across four states demonstrated the differences in the role of the ARNG at the state level, participation in the movement, and the differences in the movement in separate states.

Intensive archival research conducted at the National Archives and Records Administration (NARA) in Washington, D.C., individual state archives, special collections at universities, the National Guard (NG) Bureau, NG state headquarters, and site visits pinpointed the NG's actual physical locations (armories, staging areas, command stations, schools, etc.) during these incidents, as well as provided a history of the NG units involved in the incidents.

Twenty-one Army NG properties were identified, surveyed, and evaluated for historical significance related to their association to the Civil Rights Movement. Following NRHP eligibility guidelines, only one of the 21 properties was recommended as eligible for listing in the NRHP; the Oxford Mississippi Armory. Panamerican also developed a checklist to aid in the identification of those cultural resources related to the Civil Rights Movement.



Oxford National Guard Armory, Oxford, Mississippi.

DEPARTMENTS OF TRANSPORTATION HISTORIC BUILDINGS AND PHASE I ARCHAEOLOGICAL SURVEYS

Architectural/Historical Assessment of the Proposed Byhalia Road Widening Project from Holmes Road to SR 385 in Collierville, Shelby County, Tennessee: The Tennessee Department of Transportation proposed to improve Byhalia Road (partial SR 175) between Holmes Road and SR 385 (Bill Morris Parkway) in Collierville, Shelby County, Tennessee, for enhanced regional and local transportation mobility. At the request of Pickering Inc., Panamerican conducted an architectural/historical Phase I assessment of the proposed project area. A Phase I assessment identifies all historic structures and archaeological sites within an APE. This is generally the first step in identifying cultural resources on a property.

A records search, field survey, and research were conducted in March and April of 2009. The purpose of the effort was to identify individual architectural/historical resources or districts that would meet the Criteria of Eligibility for the National Register of Historic Places (NRHP). Properties within the APE for this project were surveyed and evaluated for NRHP eligibility. As a result of the field survey, three previously surveyed resources were determined to require further evaluation: the John M. Fleming Home Place (NR Listed 12-06-1990), the 1952 Mann House and Farm and the ca. 1848 Old Salem Presbyterian Church Cemetery.



John Fleming Home Place (ca. 1850), Shelby County, Tennessee.

Located on the ca. 1850 John M. Fleming Home Place are a ca. 1850 Greek Revival/Italianate plantation home, several agricultural tenant houses, outbuildings, archaeological sites, and related land features. The 1952 Mann House and Farm is a custom designed ranch house that has several farm structures on the property that include a lean-to, a main horse barn, and a small horse barn. The Mann House and Farm was recommended as ineligible for the NRHP lacking in architectural integrity due to alterations made to the property. Although the Old Salem Presbyterian Church Cemetery has historic associations from the community's early period of settlement, it too was recommended as ineligible as it does not retain its historic integrity due to its deterioration.

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PANAMERICAN CONSULTANTS, INC.

CULTURAL RESOURCE MANAGEMENT

INTRODUCTION

Panamerican Consultants, Inc. (Panamerican) is a State of Alabama registered corporation specializing in Cultural Resource Management (CRM) and archaeological research. Formed in 1989, Panamerican has successfully performed thousands of individual cultural resources contracts, terrestrial, maritime, and architectural, ranging from small reconnaissance surveys to full-scale archaeological and architectural mitigations within the continental United States, Pacific, and Caribbean regions.

Panamerican provides cultural resources services to federal and state agencies and private entities. Panamerican is particularly qualified to provide services including, though not limited to, the following:

Cultural Resources Planning Studies

- ❖ *Phase I surveys*
- ❖ *Phase II testing*
- ❖ *Phase III data recovery or mitigation*
- ❖ *Evaluation of standing structures*
- ❖ *Preparation of state site forms (archaeological and architectural)*
- ❖ *Historic American Buildings Survey/Historic American Engineering Record/ Historic American Landscape Survey (HABS/HAER/HALS) documentation*
- ❖ *Preparation of Historic Preservation Plans (HPP) or Integrated Cultural Resources Management Plans (ICRMP)*
- ❖ *Geophysical and Ground Penetrating Radar (GPR)*
- ❖ *National Register of Historic Places (NRHP)*

Landscape Inventories and Evaluations

- ❖ *Inventories of cultural and natural landscapes*
- ❖ *Application of NRHP criteria of evaluation*
- ❖ *HALS*

Client Management Concerns

- ❖ *Mitigation plans*
- ❖ *Preparation of Memoranda of Agreement (MOA) and Memoranda of Understanding (MOU)*
- ❖ *Completion of NRHP nomination forms*
- ❖ *Native American Facilitation*

Database Design and Management

- ❖ *Cultural material inventories and field data*
- ❖ *Artifact attributes*
- ❖ *Intrasite and intersite distributions*
- ❖ *Statistical analysis*
- ❖ *Geographic Information System (GIS) applications*

Panamerican offers full corporate capability to respond to clients' needs. This includes our corporate headquarters in Tuscaloosa, Alabama, with offices in Memphis, Tennessee; Lakeland, Florida; Buffalo, New York; Columbus, Georgia; Mobile, Alabama; and Pensacola, Florida. Panamerican has performed cultural resources investigations in the continental United States and its territories and protectorates, e.g., Puerto Rico, the U.S. Virgin Islands, and the Marshall Islands. Panamerican has a proven record of successfully conducting and managing projects, and of completing all required tasks in a professional, efficient, timely, and cost-effective manner. In addition, our staff is fully trained and aware of the issues, theory, practice, legislation, and laws that guide CRM work.

Panamerican personnel have experience with and access to a comprehensive array of field equipment. We have conducted field investigations using both relatively simple equipment and state-of-the-art technology, such as global positioning systems, total station surveyor's instrumentation, terrestrial magnetometry, GPR, earth resistance, and large-scale excavation equipment. By tailoring equipment needs to the requirements of each project relative to site conditions and the scope of work, we are able to successfully complete projects in a prompt and professional manner, according to the highest standards of the discipline.

Panamerican maintains high standards in the production of quality technical reports and supporting graphics. Our permanent staff are individuals of proven ability in the production of HABS/HAER/HALS-quality technical architectural drawings and photography. Canon® imageRunner Advance C7000 digital color printer and copier; Canon image PROGRAF iPF600 24-inch large format printer; Hewlett Packard (HP)® DesignJet Plotter (E-size, monochrome) and laserjet printers; color inkjet printers and high-quality reproduction assure readable, professional-level text and illustrations. Reports are supported by quality photography and technical drawings. Panamerican's reports meet or exceed current professional standards within the discipline. Our reports follow the American Antiquity style sheet, unless otherwise requested, and are suitable for publication.

COMPANY OVERVIEW

CAPABILITIES

With our permanent staff of 44 professionals, Panamerican can easily support a number of projects concurrently. Our extensive list of research consultants and skilled field and laboratory personnel enables us to staff projects with individuals particularly suited to project needs. Panamerican offers experienced field crews and support staff together with rapid mobilization, technical expertise, and proven excellence in the final product. Our archaeologists and architectural historians have experience with varied and complementary research specialties and areas of expertise. Our offices maintain regular contact with cultural resource managers and State Historic Preservation Offices (SHPO) in individual states to stay abreast of cultural resources planning and management goals.

Illustrating our capabilities in this area of expertise, the Panamerican staff and core team members have assisted numerous federal agencies (e.g., the USACE, U.S. Navy, National Park Service, Air National Guard, U.S. Forest Service, and National Resources Conservation Service), state agencies, local governments, and private sector clients in complying with and implementing federal and state laws and regulations. Panamerican's capabilities include all levels and types of investigation, including archival and historical research; survey, site testing, and data recovery; architectural assessment; preparation of technical reports and architectural drawings; and preparation of NRHP nomination forms.

Panamerican also maintains and compiles numerous databases designed for maximum results and uses special technology, such as GIS and Differential Global Positioning Systems (dGPS), in order to maximize results and provide usable data to our clients. Along with our field capabilities, Panamerican operates fully equipped laboratories that allow for in-depth analysis of artifacts and rapid turnaround on reports.

As a part of Panamerican's goal of excellence, our field, laboratory, and administrative work meets accepted professional standards in accordance with Standards and Guidelines established in 36 CFR Part 66, Recovery of Scientific, Prehistoric, Historic, and Archeological Data: Methods, Standards and Reporting Requirements (Federal Register 1977 [42]:19) and Archeology and Historic Preservation, Secretary of the Interior's Standards and Guidelines (Federal Register 1984 [190]:44,716-744,752).



Panamerican lab technicians analyzing material from a recent excavation.

Each archaeologist, architectural historian, and historian on staff at Panamerican has a broad range of experience in the area of background and literature searches. This, coupled with intimate knowledge of the literature, assures that projects are carried out within a framework utilizing current data and state-of-the-art approaches tailored to the needs of particular project and research goals. Beyond these basic requirements for adequate research, staff members also have particular expertise in other areas of document research and oral history collection. In order to produce the highest level of research possible, the company staff also consults with qualified individuals for particular research expertise. Our full-time historians provide in-house expertise for in-depth historical studies.

Examples of archival and historic research conducted by Panamerican include:

- ❖ Archival research of over 550 miles of proposed fiber-optic right-of-way from Texas to Florida. Performed for Gremminger and Associates, Inc.,

ARCHIVAL AND HISTORIC RESEARCH

ARCHAEOLOGICAL SURVEY

RECONNAISSANCE SURVEYS

AT&T, and PFnet. This project included site file checks for five states, reviewing the NRHP and state and local listings for historic structures and cemeteries. When needed local deed searches were undertaken. This study provided the clients with a planning program that allowed them, in most cases, to proceed with their construction and avoid the disturbance of cultural resources.

- ❖ Historical research to help assess the potential eligibility for inclusion in the NRHP of 49 known historic archaeological sites located within the right-of-way of the 3P section of the Natchez Trace Parkway, Mississippi. Performed for the National Park Service, Southeast Archaeological Center.

Panamerican's archaeologists have extensive experience in the design and implementation of cultural resource surveys and in the analysis and synthesis of resulting data. Our archaeologists have directed hundreds of cultural resource surveys ranging from the small reconnaissance level to large-scale intensive investigations using the full suite of sampling and location strategies.

An on-the-ground reconnaissance of a specific project area is intended to verify the locations and current conditions of previously recorded sites listed on or exhibiting a high potential for listing on the NRHP, to aid in the formulation of site distribution/type predictions, and to test previously formulated site models. Data produced by reconnaissance surveys are often intended for incorporation into documents such as environmental impact statements.

Examples of reconnaissance surveys conducted by Panamerican include:

- ❖ An archaeological and historical reconnaissance of the Tennessee-Tombigbee Wildlife Mitigation Lands, Mobile-Tensaw Delta, Alabama. Performed for the Mobile District COE, these investigations provided an assessment and reconnaissance-level survey of 21,000 acres and provided the COE with sufficient baseline information of the area to allow effective planning for future activities.
- ❖ Phase IA survey of the Veteran's Drive Improvements, St. Thomas, United States Virgin Islands. This reconnaissance-level survey, which also included a ground-testing component, was conducted in the Charlotte Amalie Historical District. Performed for Parsons, Brinckerhoff, Quade & Douglas, Inc.
- ❖ Cultural Resources Reconnaissance, Yazoo Delta Project (Sunflower and Quiver Rivers). The primary goal of this project was to compile all existing archaeological data for an approximately 1,309 km² area, which encompassed 119 previously identified sites, in Oliver, Leflore, Sunflower, Tallahatchie, and Washington counties, Mississippi. Performed for the USACE, Vicksburg District.



Panamerican field archaeologist digging shovel tests on a site.

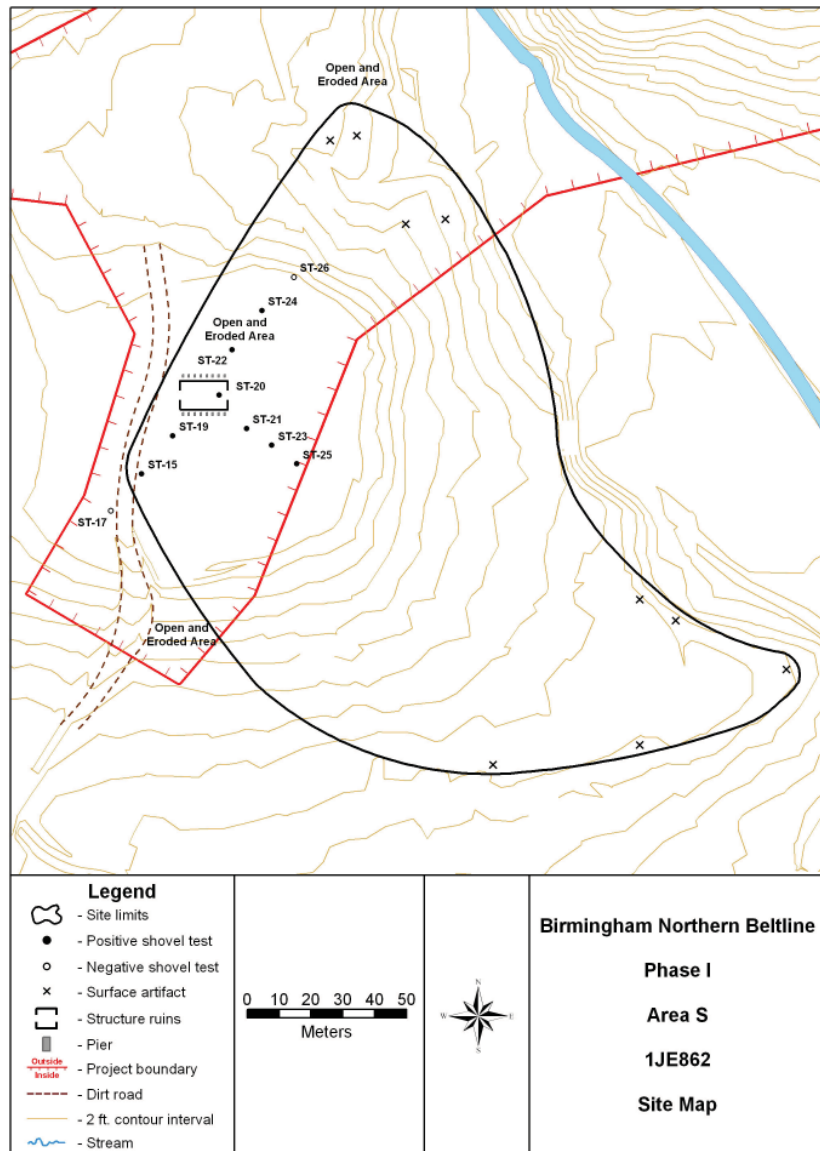
Phase I surveys are intended to provide a complete examination of a particular area in order to provide an inventory and assessment of all cultural resources present, whether previously known or newly discovered. These resources include both archaeological sites and standing structures or other above-ground objects. One of the primary concerns of Phase I surveys is an evaluation of site significance based on the NRHP eligibility criteria.

This type of cultural resource investigation is perhaps the most common one requested. Typically, these survey efforts are comprised of a background literature search to compile existing site data for a specific locale, intensive physical inspection of the project area, recording of both prehistoric and historic sites and structures, and assessment of the NRHP eligibility potential.

Examples of Phase I surveys completed by Panamerican include:

- ❖ Intensive Phase I survey of 17,558 acres at Fort Benning Military Reservation, Alabama and Georgia, for fulfillment of 12 separate work orders. During the course of this work, 443 sites were investigated and documented. Performed for the National Park Service, Southeast Regional Office.
- ❖ Intensive Phase I survey of 31,950 acres at J. Strom Thurmond Lake in McCormick County, South Carolina, and Lincoln, Wilkes, and Elbert counties, Georgia. A total of 1,064 archaeological sites were recorded during this survey, and the reports included discussions of previous research in the area and comparisons with work conducted on the Richard

**PHASE I CULTURAL
RESOURCE SURVEYS**



Example of a site map produced for a survey report. This map, generated during the Phase I survey of Site 1JE384 in Jefferson County, Alabama was produced using ArcView 10®.

B. Russell Reservoir to the north. Performed for the USACE, Savannah District.

- ❖ A Phase I cultural resources survey and architectural inventory at the Seneca Army Depot, New York, of approximately 700 acres, including the airfield. Surface and subsurface field survey was performed by a hazardous waste trained archaeological field director and crew in addition to identifying any areas of potential contamination and areas with unexploded ordnance within the study area. Performed for the USACE, New York District.

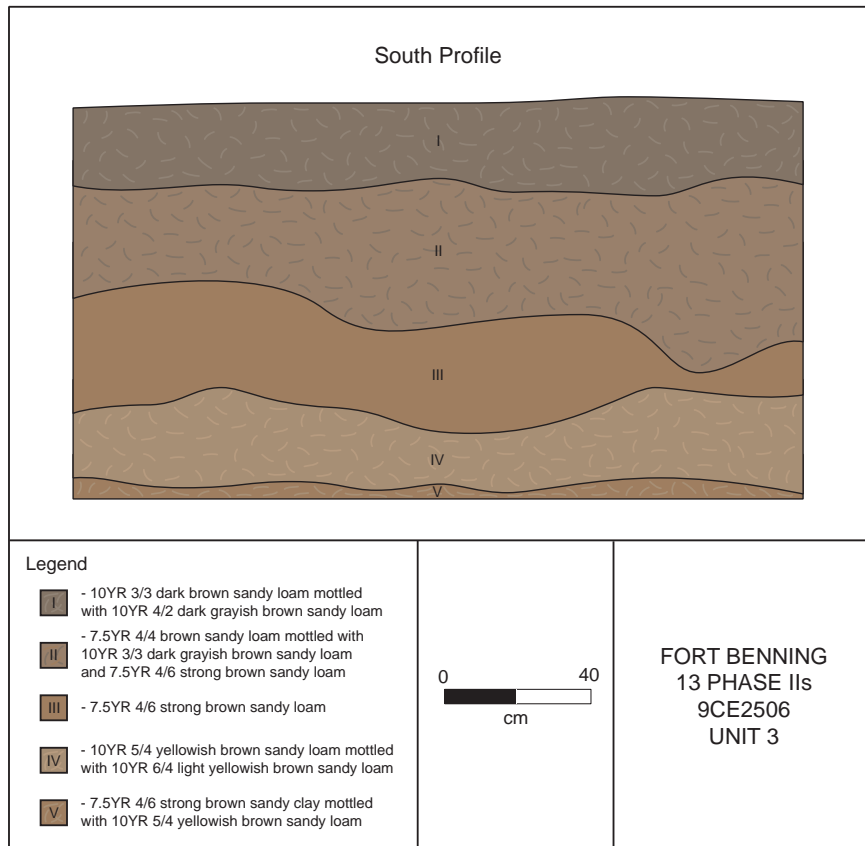
A normal progression occurs from cultural resource surveys, in which potentially eligible sites are located, to a site testing and evaluation program designed to clearly determine a site's eligibility for the NRHP. These studies involve both prehistoric sites and historic archaeological sites containing no above-ground remains, as well as historic buildings and structures. The purpose of the Phase II testing is to evaluate a site's eligibility criteria set forth in the NRHP requirements according to criteria set by 36 CFR Part 60.

Methods typically used for sites with no standing structural remains include controlled surface collection, test unit excavation, and/or machine-assisted plowzone removal. Methodologies are adjusted to meet the demands of a particular site. Field procedures are detailed in a research design or proposal agreed upon between the client's technical representatives and the principal investigator prior to the initiation of fieldwork. Consultants may be employed for specialties such as radiocarbon dating, paleobotanical analysis, or zooarchaeological analysis.

Sites with above-ground features, such as historic buildings or prehistoric earthworks, require a somewhat different methodological approach, one which augments the subsurface exploration techniques outlined above. A combination of accurate measurement and drawing, professional photo-documentation, and the input of specialists such as architectural historians or soil scientists, is required on such sites.

Examples of Phase II testing and evaluation projects completed by Panamerican include:

- ❖ Archaeological Phase II testing of Site 1TU845, Tuscaloosa County, Alabama. This bluff shelter was tested for Compliance Corporation.
- ❖ Phase II investigation of Sites 1MT275, 1MT276, and 1MT277, which fell within the planned construction limits of the Montgomery Outer Loop highway project. All three sites, which were primarily prehistoric, were found to be eligible for the NRHP. Performed for the Alabama Department of Transportation.
- ❖ Archaeological Site Testing and Evaluation of 30 sites within Fort Benning Military Reservation, Alabama. Through these investigations, many sites were determined ineligible for NRHP listing. However, several were considered eligible, including three Creek towns. Performed for the National Park Service, Southeast Region.



Example of profile drawing from a Phase II investigation of Site 9CE2506 in Chattahoochee County, Georgia. Illustration produced using Adobe Illustrator®.

PHASE III DATA RECOVERY AND MITIGATION OF ADVERSE EFFECT

The purpose of a Phase III investigation is to mitigate any adverse effects a project may have on a cultural resource eligible for the NRHP. These investigations seek to collect and analyze data in such a way as to capture information that would be lost due to adverse effects. This information is assembled and interpreted within a report produced after investigation.

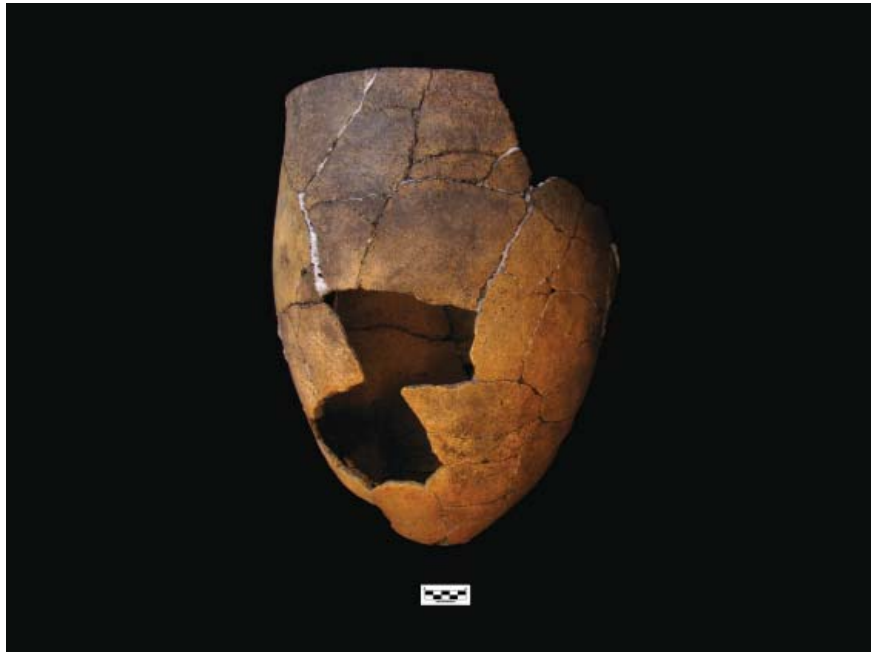
The performance of Phase III studies, cultural resource data recovery and mitigation, is essentially a combination and expansion of the various tasks outlined above and specialized studies such as geomorphology, and is designed to prevent further damage to a cultural resource. A higher level of company capabilities, personnel, equipment, and logistics is required to successfully conduct mitigation projects. All excavation methods are conducted in accordance with the provisions contained in OSHA 1910.1200. A safety officer is assigned to the daily excavation crew and regular safety meetings are held.



General view of excavations conducted by Panamerican personnel at Site 1EE491 for the Alabama Department of Transportation.

Following the development of an appropriate research design and sampling strategy, site clearing, mapping, and site boundary delineation are generally the initial steps. Mapping is accomplished using company-owned total stations to produce a map showing relevant topographic and landscape features (e.g., elevations, roads, structures, or other landmarks), site grid, and the location of all excavation units and appropriate shovel tests, cores, etc. A computer generated map of the site is produced using data taken from the total station and imported into the Surfer software mapping program. Gridding of the site for provenience control is generally accomplished in concert with site mapping, utilizing the same control points and providing systematic elevation recordings.

Excavation Units. These units are generally the mainstay of a terrestrial archaeological field effort. The unit sizes are 1-x-1 m, 2-x-2 m, or a combination thereof. Normally, these are excavated in arbitrary 10-cm or natural levels as appropriate. Processing areas are set up to water-screen or dry-screen the excavated soil, process special samples, and otherwise coordinate and record recovered material or samples from the field. General soil is processed through 1/4-in. mesh screen. Additional processing with 1/8-in. and 1/16-in. screens of selected midden samples, feature fill, etc. is used to recover specific classes of cultural remains. Provenience control, both horizontal and vertical, is maintained through reference to the previously established site grid.



Partially reconstructed pottery vessel recovered from a feature at Site 1BB227, Bibb County, Alabama.

All pertinent information is recorded on dedicated forms tailored to the project's specific needs. These include bag, photographic, level, feature, shovel test, burial, special sample, soil sample, and radiocarbon-sample forms. Detailed information recorded on these forms is supplemented by narratives and sketches in field logs. Information on specialized forms includes, but is not limited to: site designation, sample type, intrasite provenience, excavator, date of recovery, map, and cross-reference to other pertinent forms completed. In addition to forms, notes, maps, plans, and profiles, documentation includes a photographic record of site conditions, appropriate excavation unit plans, and profiles and features. This is accomplished using 35mm or larger format if appropriate, black-and-white, and color transparency film as well as in digital format.

The recovery of a variety of special samples may be required during a Phase III investigation. Types of samples will vary with research design and site conditions/preservation potential.

Field Conservation. The objective of field conservation methods is to stabilize the condition of remains to prevent further deterioration once exposed in the field or laboratory. This is accomplished by keeping mechanical and chemical cleaning to a minimum, consolidating



Partially reconstructed whiteware pitcher with Globe Pottery maker's mark (1907-1912) from Site 9ME751, Fort Benning, Georgia.

materials, if necessary (e.g., bone or wood), and documenting general and specific conservation procedures.

Mechanical Equipment and Archaeological Excavations.

Panamerican has effectively used mechanical stripping to remove overburden such as alluvial deposits and urban refuse/disturbed soils as an aid in the excavation of buried archaeological deposits, as well as to remove topsoil/plowzone layers to locate sub-plowzone features. When used appropriately, this technique increases productivity, time effectiveness, and cost effectiveness of labor intensive archaeological excavations. Panamerican employees are experienced in the use of mechanical equipment in various regions of the United States and the Caribbean.

Examples of Phase III mitigation projects completed by Panamerican include:

- ❖ The mitigation of the destruction of a portion of Site 1WA140 by the Corridor X highway project was conducted for the Alabama Department of Transportation. The large set of data collected from the site was used to create a model to aid in the classification of Late Woodland components in the upper regions of northwest Alabama.

- ❖ Archaeological data recovery at East Nashville Mounds (Site 40DV4) and the French Lick/Sulphur Dell site (Site 40DV5). This project, conducted



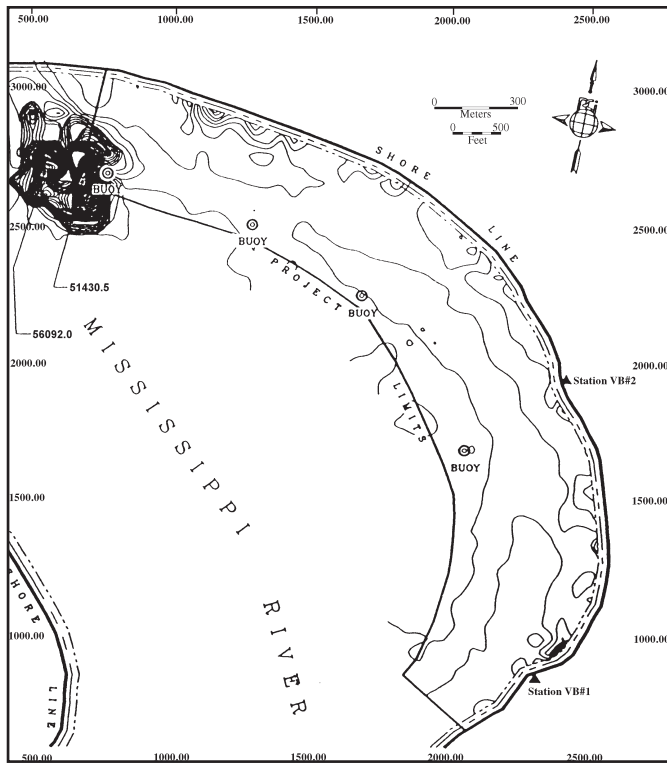
An aerial view of Panamerican excavations at the Creek town of Kasita (Site 9CE1), Fort Benning, Georgia.

for the Tennessee Department of Transportation, involved extensive archival research and mitigation of adverse effect to portions of two Mississippian mound and village centers occupying opposite banks of the Cumberland River in downtown Nashville.

- ❖ Panamerican completed the excavations of approximately seven acres of a known Creek town, Kasita (Site 9CE1) in Fort Benning, Georgia. As a result of the large and complicated excavations that employed multiple means of data collection, Panamerican was able to address a number of questions about Creek culture and Kasita itself.

MARITIME INVESTIGATIONS

With one of the largest professional underwater archaeological staffs of any CRM firm in the United States, Panamerican has successfully performed numerous individual maritime cultural resources contracts ranging from small remote sensing surveys to full-scale shipwreck excavations within the continental United States and the Caribbean region.



Two-dimensional magnetic intensity contour map for the Victoria Bend, Mississippi survey area. The large anomaly in the upper left represents the magnetic signature from the wreckage of a modern steel barge.

Maritime remote sensing surveys, which commonly employ magnetometer and sidescan sonar, are conducted to identify the presence or absence of potentially significant submerged cultural resources within a given project area. Panamerican personnel have extensive experience in remote sensing surveys using a variety of advanced equipment for projects ranging from small magnetometer surveys to complex, multicomponent investigations demanding the use of a full array of remote sensing instrument packages.

Panamerican has conducted studies for the Galveston, Jacksonville, Little Rock, Memphis, Mobile, New Orleans, New York, Savannah, Tulsa, Wilmington, and Vicksburg Districts of the Corps of Engineers under a wide range of conditions, including shallow-water riverine, high energy coastal, and offshore environments. In addition, Panamerican has been contracted by various petroleum and environmental companies to analyze geohazard survey data for the presence of submerged cultural resources in the Gulf Coast and Long Island Sound regions. Clients have included the Florida Department of Transportation

ANOMALY/TARGET
LOCATION,
IDENTIFICATION, AND
ASSESSMENT

(FDOT), ENSR Corporation, Georgia Department of Natural Resources, Mangi Environmental Group, Inc., National Oceanic & Atmospheric Administration, Tennessee Historical Commission, Tetra Tech, Texas General Land Office (Texas GLO), USACE (Jacksonville, Memphis, Mobile, New York, Savannah, Vicksburg, and Wilmington Districts).

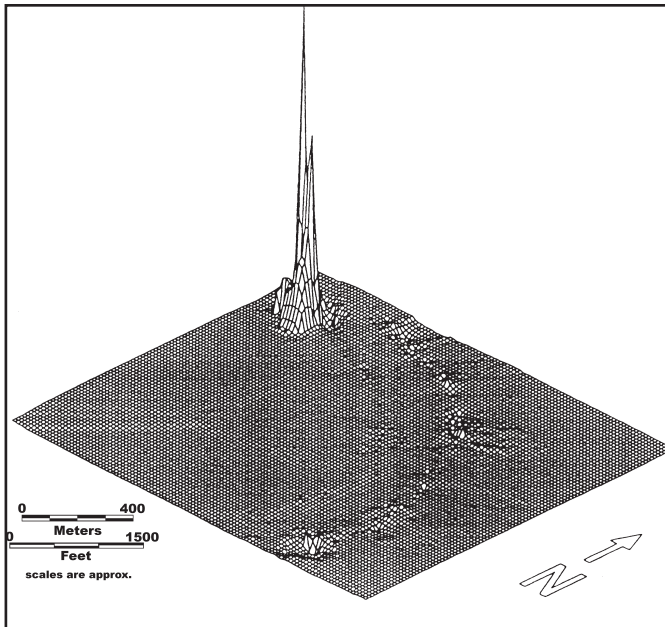


Panamerican underwater archaeologist in full gear.

Panamerican's familiarity with advanced remote sensing equipment includes magnetometers, sidescan sonars, subbottom profilers, and fathometers, as well as requisite navigation systems such as dGPS, microwave systems (Mini Ranger II, Del Norte), and range-azimuth systems (Laser Track and Geodimeter Total Station).

Panamerican conducts all field investigations according to exacting professional standards with the highest regard for archaeological principles and personal safety. Paramount to any investigation of submerged cultural resources is the question of safety; Panamerican emphasizes this in all field endeavors. Given the increased threat of injury when working in and around water, Panamerican has developed a Water Safety Plan for use on all submerged cultural resources investigations. Panamerican field investigators are committed to maintaining a safe working environment while achieving maximum data retrieval.

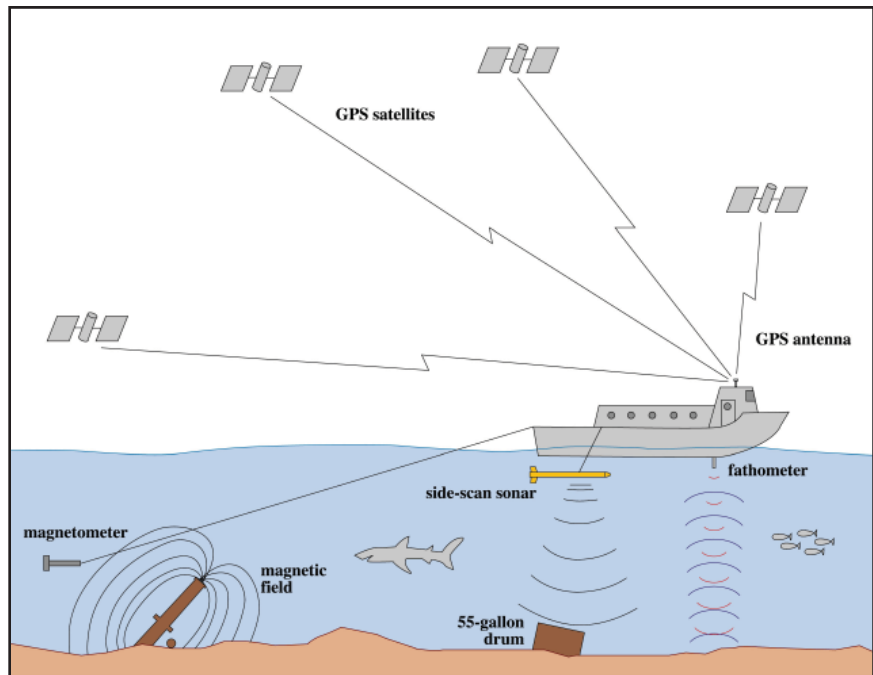
Panamerican utilizes three marine magnetometers, an EG&G 806, and an EG&G 866 marine magnetometer, as well as an EG&G 856 portable land magnetometer. The 856 is a useful tool for both land projects and small shallow marine projects. Additionally, it is employed as a base station to adjust for diurnal variation when collecting data over an extended field period. Panamerican has navigational capabilities for large or small projects, as well as computer software capabilities to expedite the contouring of magnetic data in two and three dimensions. Panamerican's positioning instruments include a Geodimeter Total Station for small-scale projects where range azimuth of less than two miles can be obtained, and a Motorola dPGS



Three-dimensional magnetic intensity contour map for the Victoria Bend, Mississippi survey area. The wreckage of a modern steel barge is graphically illustrated using Surfer®.

employed for larger projects. In the event that additional equipment or personnel for survey work is required, Panamerican has excellent working relationships with several marine survey companies that we have subcontracted with successfully on past projects. Advanced subbottom profiler and sidescan sonar systems are leased from various geophysical companies for projects requiring these systems. Computerized range-range positioning/navigation systems also are provided under subcontract.

Past and current remote sensing survey projects directed and conducted by Panamerican include: a magnetometer, sidescan, and bathymetric survey of Pools 3, 4, and 5 of the Red River, Louisiana; a three-month magnetometer and sidescan survey at Oregon Inlet, considered one of North Carolina's most treacherous stretches of nearshore water; a magnetometer survey off Kure Beach, North Carolina, for the USACE, Wilmington District; a magnetometer, sidescan, and subbottom profile survey of 120 line-miles off Long Island, for the USACE, New York District; a magnetometer and sidescan survey of approximately 60 line-miles offshore Port Aransas and within the Corpus Christi Bay system, Texas, for the USACE, Galveston District; magnetometer surveys of Compass Point Bay, St. Thomas, and the proposed cruise ship pier location, Frederiksted, St.

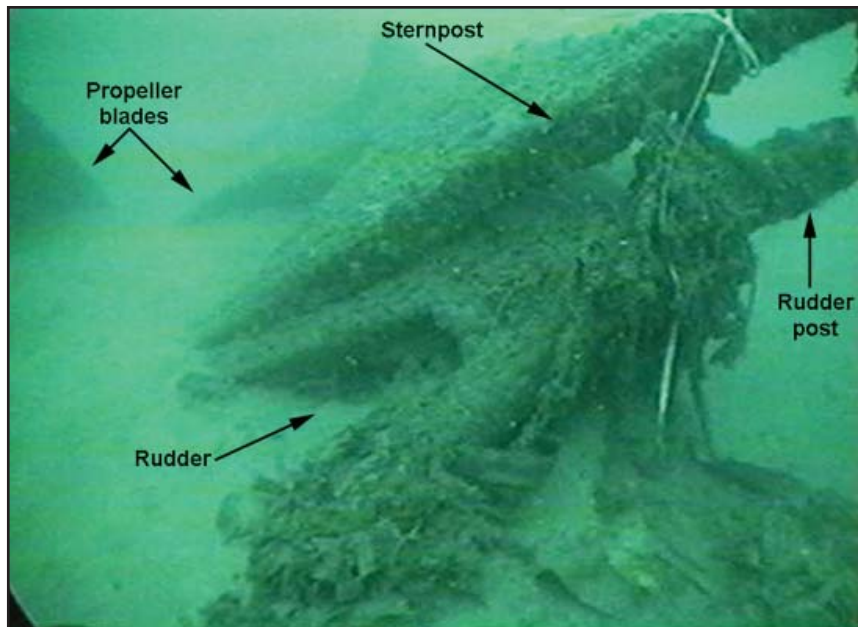


Schematic of a typical survey vessel conducting a remote-sensing survey.

Croix, both located in the U.S. Virgin Islands; and a magnetometer and sidescan survey of three bridge crossings in Mobile Bay for the Alabama Department of Transportation.

Panamerican’s maritime archaeologists have extensive experience in diver location and identification of anomalies and targets recorded during remote sensing investigations. Upon completion of data analysis and identification of targets from the data that have a high probability of representing potentially significant cultural resources, a concerted effort of remote sensing reacquisition and diver identification of these targets is implemented. Priority targets are relocated employing a variety of methods, depending upon the specific project. Some targets require the deployment of a full array of remote sensing equipment for reacquisition, while other targets call only for simple positioning and diver location. Once the target or its general area is demarcated with positioning equipment, its position can be refined with either the sidescan sonar or the magnetometer.

Analysis of sidescan sonar features represent above-bottom targets and are relatively easily located by archaeological divers employing standard circle search techniques, once the feature’s immediate location is positioned and buoyed. In the case of magnetometer targets with no sidescan sonar record, the position is buoyed and its

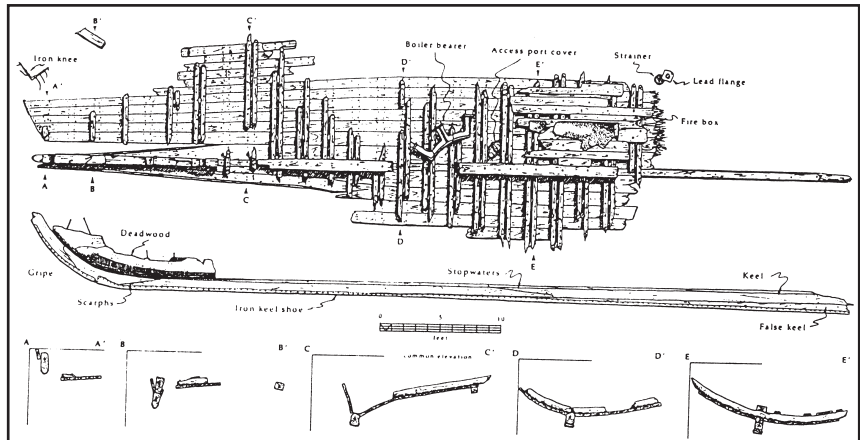


Underwater photograph of the stern of the Manuela, a Spanish-American War vessel, San Juan Harbor, Puerto Rico.

location refined by further magnetometer survey, at times employing a diver-towed sensor. Once refined, either hydraulic or manual probing is conducted to identify specific location and depth below sediment. The anomaly is then excavated employing air lifts, venturi induction dredges, or water jets.

When priority sidescan features and anomalous targets are located, archaeological divers proceed with the target's identification. If the target is found to represent nonsignificant material, it is briefly recorded. This entails preliminary measurements and photo documentation, generally with a 35mm camera. If a target is determined to represent a potentially significant resource, it is subjected to an extensive and comprehensive assessment, which is described in the subsection at the end of this segment.

Paramount to any investigation of cultural resources is the question of personal safety. Panamerican emphasizes the importance of safety in all field endeavors, especially in projects involving diving, and has developed a Diving Safety Program that meets both the USACE and the OSHA standards for use in cultural resource investigations. This program has been approved by Diving Safety Officers for the Galveston, Mobile, Vicksburg, New York, and Savannah Districts. Two weeks prior to any diving project a "Diving Plan" developed



Plan, profile, and cross-sections of Vessel 21, a late nineteenth-century steam tug employed on the Savannah River. The vessel was recorded during a Phase III investigation for the USACE, Savannah District.

specifically to the project’s objectives and environment is submitted to the USACE Diving Safety Officer for approval.

All Panamerican divers are archaeologists, as well as experienced divers. Most are schooled specifically in nautical and maritime archaeology, and all have project experience on numerous shipwreck sites. Panamerican’s underwater archaeologists are intimately familiar and comply with the requirements of “Contract Diving Operations” (385-1-3). As stipulated by these regulations, all team members are currently certified in CPR and first aid, as well as the emergency administration of oxygen. Additionally, we certify our equipment annually and present these and certifications on air quality prior to commencement of field work. Panamerican carries all necessary insurance for the conduct of both terrestrial and underwater archaeology, including Longshoreman and Jones Act insurance required for maritime activities, and will provide Certificates of Insurance upon award of contract.

Specific examples of anomaly location, identification, and assessment conducted by Panamerican include:

- ❖ Investigation conducted for Fluor Daniels, Inc. of Sugarland, Texas. This anomaly investigation assessed seven anomalies offshore Freeport, Texas. This entailed the repositioning of anomaly locations, additional magnetometer survey to refine the anomaly positions, and then diver location and identification. All anomalies were located and identified as modern debris.
- ❖ Under contract to Alpine Ocean Seismic, Inc., Panamerican relocated and assessed 26 magnetic and sidescan targets in the near shore sand placement

area of the Atlantic Coast of New Jersey. Only one target, the site of a well-preserved, late eighteenth to late nineteenth-century copper-clad sailing vessel, was thought to be historically significant and potentially eligible for nomination to the NRHP. Recommendations of avoidance or mitigation were presented.

Submerged targets determined to represent potentially significant resources undergo a preliminary but comprehensive investigation to determine the nature and integrity of the site. The assessment of potential significance is based on eligibility criteria for nomination to the NRHP as specified in 36 CFR Part 60.4. In order to properly assess eligibility criteria, a program of limited test excavation, limited artifact recovery, mapping, and 35mm/photo documentation is implemented. Employing established standards and procedures for conducting archaeological research that ensure maximum data retrieval, Panamerican's archaeologists carefully record all important information to facilitate the evaluation and interpretation of the site.

Once significance is determined and mitigation is required, a comprehensive data recovery program is initiated. The mitigation program ensures that a maximum amount of information relative to archaeological, anthropological, and architectural aspects of the site is obtained. Mitigation often includes intensive excavation, comprehensive mapping, artifact retrieval, photographic documentation, special sampling for analysis (e.g., wood and ballast), as well as additional archival research. Assessment or mitigation can include completion of NRHP eligibility forms. Panamerican personnel are familiar with the forms and the process and have completed numerous NRHP eligibility forms for various wrecks.

Materials recovered from submerged and wet-site environments are particularly sensitive to environmental changes and can be easily damaged by improper treatment. Proper handling of artifactual material is critical from the moment it is uncovered on the bottom until conservation is completed. Panamerican's staff archaeologists have had formal instruction and field experience in the conservation of archaeological materials. Consultants hired by Panamerican for field investigation of submerged sites are expected to be familiar with the proper techniques for dealing with artifacts from wet environments. Panamerican has established procedures for preliminary handling and treatment of artifacts prior to their transfer to a conservation facility.

MARITIME
HISTORICAL
SIGNIFICANCE
EVALUATION AND
MITIGATION

MARITIME
ARTIFACT
CONSERVATION

ARCHITECTURAL ASSESSMENTS

Panamerican has extensive experience in standing structures assessment and in documentation for historic significance and eligibility for listing in the NRHP. This includes field structure inventory surveys, recording and evaluation of the NRHP eligibility, preparation of architectural histories, HABS/HAER/HALS documentation, and preparation of the NRHP forms.

Panamerican's architectural assessment reports include discussion of the physical environment, the historical and architectural context for the area, the methodology employed, a listing of all properties within the impact area, the potential effects on properties, and recommendations as to the eligibility of each structure.

Examples of architectural assessments completed by Panamerican include:

- ❖ Intensive exterior survey of 1,020 historic properties, 1939-1962 at Fort Benning Military Reservation, Georgia, which also documented and evaluated for the NRHP eligibility the installation's remaining World War II temporary properties, as well as identifying, documenting, and determining the NRHP eligibility of the family housing properties built under the Capehart and Wherry and MCA housing programs (Fort Benning Military Reservation).
- ❖ The NRHP Evaluation of buildings, structures, and landscapes and the creation of a historic context for the Borough of Highlands, Monmouth County, New Jersey, including a pedestrian survey the Area of Potential Effect, photography of the area, and research for flood control project



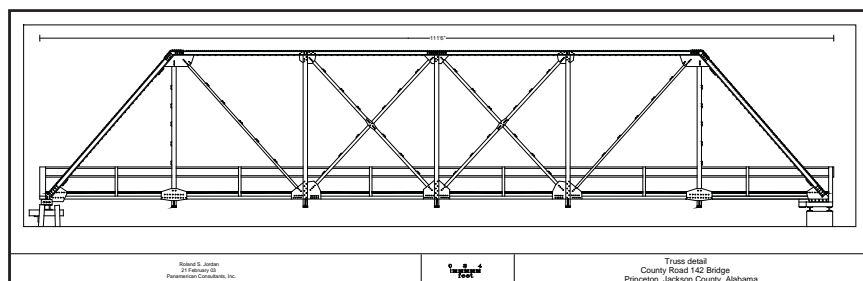
Example of a historic church recorded by Panamerican during a architectural and archaeological survey.

(Northern Ecological Associates, Inc., Portland, Maine under contract to USACE, New York District).

- ❖ Five mile reconnaissance level survey for the proposed Moresville Energy Center in the Towns of Hapersfield, Roxbury, and Stamford, Delaware County, and the Towns of Blenheim, Gilboa, and Jefferson, Schoharie County, New York, to identify the NRHP eligible properties in a five-mile visual Area of Potential Effect for the construction of a proposed Energy Center (under contract to Moresville Energy LLC).

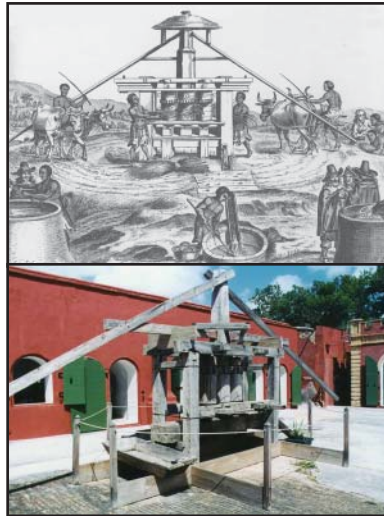
Buildings and landscapes determined to be eligible for inclusion in the NRHP following an architectural assessment survey and that may be adversely impacted by future projects can be successfully mitigated through HABS/HAER/HALS documentation. This process is designed to document structures of local, regional, and national significance. The goals of HABS/HAER/HALS documentation are to acquire, preserve, and make accessible a written and graphic record of historically significant properties and to ensure preparation of the documentation in a standard format to facilitate integration into the HABS/HAER/HALS Collection at the Library of Congress.

Large-format photographs and measured drawings supplement the written documentation provided during the HABS/HAER/HALS process. Objectively written documents allow the reader to place the structure under consideration into a general or specific historic context, a physical setting, or an interpretive framework. As a historic resource, the HABS/HAER/HALS document provides a comprehensive and complete technological and developmental history of a resource, and reflects the federal government's commitment to document, understand, and preserve the surviving physical structures that represent America's heritage.



Example of a measured drawing produced during the HAER-like documentation of the County Road 142 Bridge (ca. 1897) near Princeton, Alabama. Illustration produced using AutoCAD®.

HABS/HAER/HALS DOCUMENTATION



This illustration was created to present a depiction of an animal mill for a sugar plantation in the U.S. Virgin Islands recorded by Panamerican architectural historians.

Examples of HABS/HAER projects completed by Panamerican include:

- ❖ Level I HAER investigations on five bridges associated with Alabama's Memorial Bridge System. These bridges, all designed by Herman Howard Houk, were constructed during the late 1920s and early 1930s to improve Alabama's infrastructure (Alabama Department of Transportation).
- ❖ Level II HABS recordation of Pyrotechnic R&D Laboratory, Building 1510, and General Storage Building, Building 1510B, Cold War era, Picatinny Arsenal, New Jersey, prior to proposed demolition (Parsons Infrastructure and Technology, St. Louis, Missouri under contract to USACE, Mobile District).
- ❖ Level III HABS documentation of 32 Selected Buildings at Naval Air Station Norfolk Historic District, Chambers Field, Naval Station Norfolk, Norfolk, Virginia, prior to demolition and change in use (Allen & Hoshall, Memphis Tennessee, under contract to Atlantic Division, Naval Facilities Engineering Command, Norfolk, Virginia).

Panamerican personnel are well versed in the application of the regulations, laws, and statutes that govern the direction of cultural resource projects. The knowledge of these regulations is applied to our daily work, and Panamerican has used this knowledge in the past towards the successful completion of HPP, MOA, and NRHP nomination forms.

HISTORIC PRESERVATION PLANS (HPP)

Panamerican is experienced in the preparation of HPP and CRM plan documents, particularly for military installations and local governments. Preparation includes updating existing plans and generating original plans. Panamerican is well-versed in the requirements established for various preservation plans, such as *Army Regulation [AR] (Facilities Engineering - Historic Preservation)* and *DoD Instruction 4715.3 Environmental Conservation Program*. Panamerican staff includes professionals trained in Section 106 regulations to aid in the production of HPP documents.

Panamerican has prepared several HPP reports to provide guidelines for resource managers at various military installations in compliance with existing federal regulations concerning the management of cultural resources on federally-owned or monitored lands. The HPP reports prepared by Panamerican generally involve outlines of the procedures, legislation, and regulations necessary to manage cultural resources; summaries of natural and cultural settings of the particular installation; and databases of individual cultural resources for the management of information on all previous and future resources identified at the installation. These reports are drafted to be concise and understandable to the contractor personnel.

Examples of HPP studies conducted by Panamerican include:

- ❖ An update of the Historical and Archaeological Resources Protection Plan, Charleston Naval Weapons Station, South Carolina (USACE, Savannah District).
- ❖ An update of the Fort Jackson Military Reservation Cultural Resources Management Plan, Richland County, South Carolina (USACE, Savannah District).
- ❖ Cultural Resources Management Plan for Picatinny Arsenal, Morris County, New Jersey (USACE, New York District).

An MOA is a legal document presenting formalized agreements for resolving adverse affects to a cultural resource, and an evidentiary document of an agency's compliance with Section 106. An MOA is a written agreement between the sponsoring agency (e.g., the USACE, Savannah District), the SHPO, the Advisory Council on Historic Preservation in most instances, and any party who assumes a responsibility for the agreement's actions. MOAs can be suggested or created in an HPP.

MEMORANDUM OF AGREEMENT (MOA)

PREPARATION OF NRHP NOMINATIONS

The archaeologist's role with respect to an MOA is to implement various components of the document, such as production of a data recovery or research plan or performance of requisite mitigation of adverse affects (e.g., data recovery). Panamerican has been involved in several projects in which MOAs stipulated various products or conformance. Panamerican completed two MOAs for projects in Mississippi. The first MOA included the Advisory Council, the Mississippi SHPO (MS SHPO), and the Mississippi Department of Transportation (MDOT) regarding the excavation of a multicomponent prehistoric site and a steamboat. The second MOA involves the Advisory Council, the USACE, Vicksburg District, and the MS SHPO. Panamerican also has conducted a project recently for the USACE, New York District, to provide planning information for the implementation of an MOA involving the mitigation of seven historic sailing vessels.

The NRHP is the list of our Nation's buildings, structures, objects, and landscapes that should be preserved. The Register recognizes the wide variety of significant properties in the United States including prehistoric and historic listings. Panamerican's personnel have proven experience in the completion of NRHP nomination forms for both prehistoric and historic sites as well as for buildings and shipwrecks.

The Architectural History Division is well versed in the NRHP criteria and the completion of nomination forms. The division has completed both individual building/structure and multiple property nominations and has both listed on the Register. The nomination and registration of properties to the NRHP has provided Panamerican with a wealth of knowledge on the best approaches, types of research and handling of material that will result in a successful nomination.

Examples of NRHP nominations performed by Panamerican include:

- ❖ Waldron Commercial Historic District (1880-1958), NRHP Nomination, Waldron, Scott County, Arkansas, for local significance under Criteria A and C (City of Waldron).
- ❖ Little Red School House (1886), NRHP Nomination, Town of Lancaster, Erie County, New York, for local significance under Criteria A and C.
- ❖ Archaeological Investigations at the Aklis Site, Sandy Point National Wildlife Refuge, St. Croix, U.S. Virgin Islands. Following intensive site testing (mitigation) of portions of the Aklis Site, St. Croix, U.S.

Virgin Islands, and after a request by the NPS, Panamerican completed an update of the existing NRHP form. This updated nomination form was completed following a refinement of the ceramic chronology and the excavation of additional features.

- ❖ National Register Assessment of Four Great Lake Shipwrecks, Lake Superior, Minnesota. As components of two investigations conducted for the Minnesota Historical Society, Panamerican completed NRHP forms for four Great Lake shipwrecks (the Essex, Hesper, Amboy, and George Spencer) located in Lake Superior, Minnesota.

Panamerican is able to utilize, both through in-house specialists and through consultants, a number of specialized services to meet the needs of our clients. This includes Native American Tribal Consultation; the use of survey grade Global Positioning Systems (GPS); GIS; hazardous, toxic, or radioactive waste site trained personnel (HTRW); and special studies such as 14C, luminescence, or archaeomagnetic dating along with full floral and faunal analysis.

Panamerican has experience facilitating consultation among numerous Federally recognized Native American nations and the United States Government. Panamerican's role has covered everything from making travel and lodging arrangements to holding sensitivity training classes for the United States Government entity holding the consultation meetings. Meeting notebooks containing all information covered are created for all who attend and are mailed out to tribes who were unable to attend. Panamerican handles all aspects of event coordinating and can also make arrangements for any special requests.

In 2006, Panamerican prepared the Florida Army National Guard (FL ARNG) MOU that was presented for discussion and finalized at the meeting. The MOU was included in the Panamerican-prepared FL ARNG ICRMP, which included 65 installations through the state.

Panamerican also facilitated the Tri-State Native American Consultation among the Alabama Army National Guard (AL ARNG), FL ARNG, Georgia Army National Guard (GA ARNG), and pertinent Federally Recognized Native American Tribes in April 2007. The National Guard representatives proposed an MOU, prepared by Panamerican, to streamline the communication process between the Tribes and the National Guard in each respective state.

SPECIALIZED SERVICES

NATIVE AMERICAN TRIBAL CONSULTATION



Photograph of Native American Tribal Consultation attendees in Fort Benning, Georgia.

Panamerican organized the Southeast Regional Native American Consultation for the FL ARNG in conjunction with the AL ARNG, GA ARNG, and the Mississippi Army National Guard (MS ARNG). This consultation meeting, held in August 2008 in St. Augustine, Florida, provided updates of the cultural resources and environmental programs of the participating National Guard units to tribes with interests throughout the Southeast. It was also used as training in the consultation process by the Oklahoma Army National Guard (OK ARNG), who was in attendance, as well as by the Kialegee Tribal Town who brought interns to observe and participate in the meetings.

Panamerican has also orchestrated seven consultations between Fort Benning, Georgia and federally recognized tribes. The first was hosted at the Muscogee (Creek) Nation in Okmulgee, Oklahoma in July 2007. The second was at the Fort Benning MWR Recreational Area in Destin, Florida in November 2007. The third consultation was located at Fort Benning, Georgia in July 2008. The fourth consultation was also located at Fort Benning, Georgia in March 2009. A fifth consultation was held at the Fort Benning MWR Recreational Area in Destin, Florida again in August 2009. A sixth consultation was conducted for Fort Benning Military Reservation and held at the military installation in November 2009. The November 2009 consultation was a larger than usual event with the City of Columbus, Georgia; the Georgia State Historic Preservation Office (GA SHPO); and the GA ARNG all attending this three-day meeting.

The GA ARNG was considered to be a separate consultation meeting. The seventh meeting was held at the Thlopthlocco Tribal Town headquarters in Okemah, Oklahoma in May 2010. An eighth meeting was held in October 2010 again on the Fort Benning installation. The meetings provided updated information on the status of cultural resources located on Fort Benning to the tribes who in turn provided input and advice on handling site impacts.

Data revealed through the use and interpretation of Panamerican's geophysical equipment allows non-destructive assessments of known and potentially-existing archaeological and environmental subsurface features over multiple surface types. Computer mapping techniques are used to produce two and three-dimensional images of subsurface features, allowing Panamerican to recommend the most appropriate form(s) of mitigation, treatment, and/or data recovery. Panamerican's variety of geophysical techniques quickly and easily images large sites, allowing integration of traditional archaeological and environmental methods with innovative geophysical analytics.

Having detailed knowledge of a site prior to ground-disturbing activities/investigation reduces overall project costs while ensuring that the site is adequately assessed. As many projects are time-sensitive, the availability of a rapid, effective method, such as GPR, electrical resistivity or earth resistance, and magnetics may mean the difference between recovery and non-recovery of cultural and environmental data.

On most sites, combinations of Panamerican's geophysical technologies result in a series of complementary and informative datasets.

Panamerican's geophysical hardware includes:

- ❖ Sensors & Software, Inc. NogginPlus Smart Cart GPR System including:
 - GPR unit capable of providing three-dimensional modeling and accurate depths to subsurface objects.
 - Various antenna frequency options available dependent on survey objectives and location (primary: 250MHz center frequency antenna with 3dB bandwidth from 125MHz-375MHz)
 - Digital Video Logger III GPR control, data display, and data recorder.
 - Rugged cart with integrated odometer positioning, power, and DVL for integration of GPR/GPS components.

GEOPHYSICAL

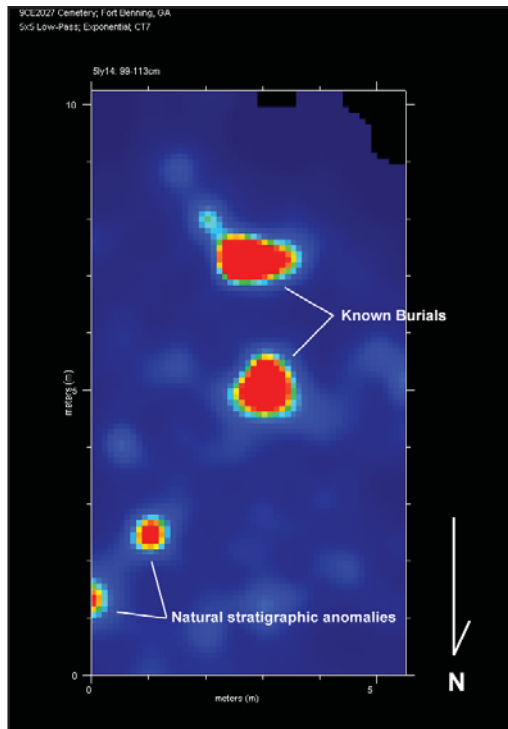
- ❖ NAVCOM SF-2050M modular StarFire™ receiver Global Satellite-Based Augmentation System (GSBAS) receiver and antenna
 - GPS with real-time satellite based differential correction.
 - Decimeter (4-inch) accuracy virtually anywhere on the earth's surface on land or sea.
 - Unit can couple to GPR unit for random navigation (GPS) surveys and accurate position tracking of grid surveys.
- ❖ Geoscan Research RM-15-D Advanced Resistance Meter
 - Used to measure the electrical potential of the soil, which gives indications of prior disturbances, human occupation, and cultural features.
 - Resistance studies allow for rapid site surveys of small and large areas
 - Used worldwide for archaeological surveys, geological surveys, environmental surveys, civil engineering, and mineral prospection.
- ❖ GEM Systems GSM-19 Overhauser total field magnetometer/ gradiometer
 - This system detects minute differences within a survey area's magnetic field in comparison with the earth's total magnetic field based on the physical phenomenon that many cultural artifacts are magnetic, or that cultural activities lead to disturbances in soils that can be detected using magnetic methods.
 - Magnetometry and gradiometry also detect many structures, including buildings, cooking sites, furnaces used for smelting, burial grounds, and other types of buried subsurface objects.

Software used includes:

- ❖ Sensors & Software, Inc. Smart System software.
 - For control, data display and recording of field images for replay and report generation.
 - Logs raw digital data for advanced data processing and imaging with external software products.
- ❖ GPR-SLICE processing software
 - GPR Post-processing software for analysis and interpretation of GPR data.
 - Enables radargram, planimetric time-slice and Open GL 3-dimensional views of processed GPR data.

Recent examples of geophysical investigations performed by Panamerican include:

- ❖ Cemetery investigations on multiple sites, Fort Benning, Georgia. Panamerican performed multiple geophysical investigations of known and potential cemeteries on the Fort Benning Military Reservation, Georgia, in order to delineate the extent of burials within known and potential cemeteries at the installation. Panamerican's geophysical survey methods identified boundaries of cemeteries compared to currently fenced (protected) areas. Cemeteries in which geophysical investigation revealed burials outside currently fenced boundaries will be expanded to protect all known burials.



Radar profile shows two distinct signatures resolved as burials. Surrounding areas appear relatively intact stratigraphically, with little sign of soil disturbance, soil inversion, or significant subsurface anomalies. There is no evidence of unmarked burials outside the currently fenced boundary.

- ❖ Right-of-Way analysis for a Mississippi Department of Transportation road realignment project, Nitta Yuma, Mississippi. This project, supporting a larger Panamerican archaeological contract, was performed to determine the potential existence of two reported infant burials and caches of family heirlooms reportedly buried during the Civil War on an antebellum home site. Multiple anomalies were observed and recommended for further archaeological investigation.

Panamerican can provide survey grade and sub-meter GPS equipment including NavCom SF-2050 StarFire™ GSBAS, Trimble Pro XL, and Motorola LGT 1000 dGPS.

Panamerican’s GSBAS system provides real-time accuracy through absolute positioning and does not determine position relative to some fixed point of the earth’s surface. Instead, positions are determined within a space-based reference frame. This system provides immediate decimeter positioning accuracy on a worldwide basis.

GLOBAL
POSITIONING
SYSTEM

GEOGRAPHIC
INFORMATION
SYSTEM

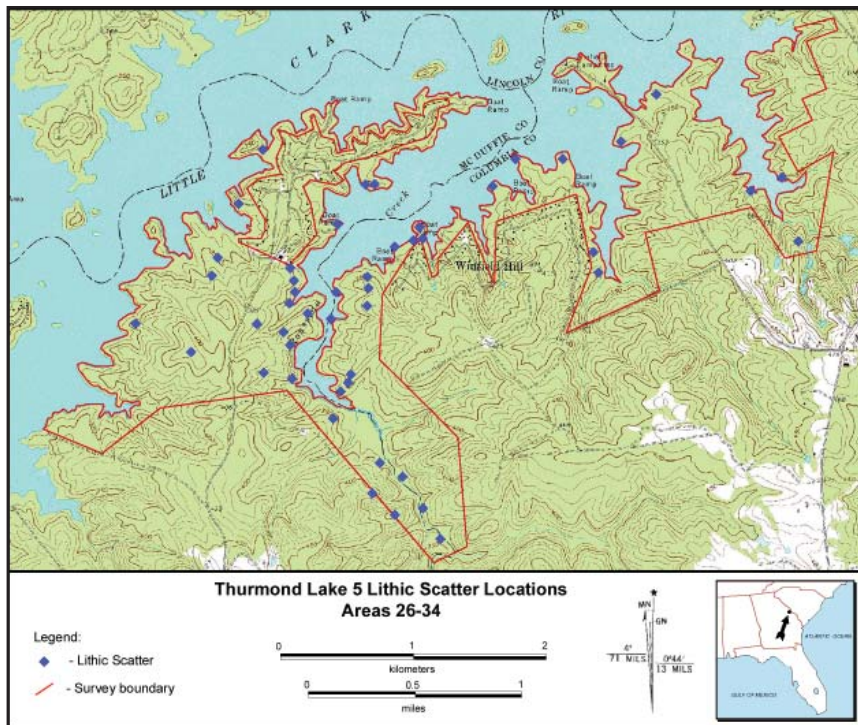
Panamerican's dGPS equipment provides relative positioning determined from reference stations located on the earth's surface, either at individual sites or averaged over a region. These corrections are an amalgam of primary reference error sources and are transmitted to the user via radio or satellite link. User coordinates are determined relative to the reference site(s) and corrected during GPS post-processing.

All of Panamerican's dGPS equipment provides downloading formats compatible with the current government requirements for format and data quality. The dGPS data can be exported into a variety of formats, including those for industry-standard GIS and drafting applications. In-house data management and processing capabilities allow Panamerican to deliver final products to customers in formats common across multiple industry-standard software.

Panamerican has successfully integrated GIS applications into various cultural and natural resource project analyses. GIS is the ideal tool for spatial analysis of resources across broad landscapes or within smaller, more localized sites. When combined with appropriate spatial information and digital imagery, GIS can provide detailed information regarding site location and resource distribution in respect to geology, topography, hydrology, and other features of the physical environment. In addition to these examples, GIS is a proven tool for land use planning and management. Consequently, the application of GIS in cultural and natural resource management projects enhances the analyses of archaeologists, architectural historians, historians, and managers while providing clients with layers of data, all of which contribute to effective and informed decision making and constitute an invaluable product for use in land use planning, conservation, and development.

Specific examples of GIS applications performed by Panamerican include:

- ❖ Cultural Resources Remote Sensing Survey of the Navigation Channel within Pools 3, 4, and 5 of the Red River Waterway, Louisiana. Survey results were produced as a major GIS product. The GIS product included layering of historic channel migrations, known adjacent archaeological sites, the current navigable channel area, remote sensing survey track lines, contour maps of magnetic data, and identified anomalies (USACE, Vicksburg District).
- ❖ Phase III Mitigation of Site 1WA128, Walker County, Alabama. This GIS application consisted of the spatial analysis of cultural material recovered during a Phase III mitigation of Site 1WA128. In this example, GIS software was used to map various artifact densities across the site and



Example of GIS application used to generate a map of prehistoric lithic scatters in the Thurmond Lake area, Georgia. The map was produced using ArcView®, USGS 7.5' quadrangle digital raster maps, and Adobe Illustrator®.

isolate areas of particularly dense concentrations. The GIS study was used in conjunction with numerical analyses produced using Microsoft Excel and SPSS software (Drummond Company, Birmingham, Alabama).

Occasionally, archaeological sites are located in areas that have been identified as hazardous, toxic, or radioactive waste (HTRW) sites. A number of our professional staff and members of our permanent technical staff are trained in the investigation of HTRW sites. Panamerican has successfully completed several projects in such areas.

**HAZARDOUS, TOXIC, OR
RADIOACTIVE WASTE
SITES (HTRW)**