Appendix K – Section 106 FRA Designation Letter Section 106 Cultural Resources Report SHPO and THPO Consultation Letters



Federal Railroad Administration 1200 New Jersey Avenue, SE Washington, DC 20590

January 15, 2021

US Army Corps of Engineers Mobile District P.O. BOX 2288 Mobile, Alabama

Attention: Mr. Munther N. Sahawneh Branch Chief Regulatory Division South Mississippi Branch

Re: Invitation to accept NEPA Cooperating Agency status for the Federal Railroad Administration-led North Rail Connector Project

Dear Mr. Sahawneh:

The Federal Railroad Administration (FRA) awarded the Jackson County Port Authority (JCPA) a grant for the proposed North Rail Connector Project (Proposed Project). The Proposed Project would connect rail owned by Mississippi Export Railroad (MSE) that crosses over the Escatawpa River just east of Highway 63 in Moss Point, Mississippi to an existing JCPA-owned rail line that crosses through the Moss Point Industrial and Technology Complex (MPITC). FRA anticipates that we will prepare an Environmental Assessment (EA) pursuant to the National Environmental Policy Act (NEPA) for the Proposed Project. The purpose of this letter is to invite the US Army Corps of Engineers (USACE) to be a cooperating agency on the EA, as your agency may have an interest based on your jurisdiction by law, including Section 404 of the Clean Water Act, and special expertise. FRA also requests that you designate us as the lead federal agency for National Historic Preservation Act Section 106 consultation for the Proposed Project.

The purpose of the Proposed Project is to provide additional railroad capacity and connectivity between existing infrastructure to support the growing needs of the Port of Pascagoula, Bayou Casotte Harbor. Currently, freight trains that travel from the north on the MSE line must pass through downtown Moss Point and Pascagoula to the Pascagoula Interchange to join CSX rail. This operation regularly blocks vehicular traffic and creates delays at four major roadway intersections. Also, the curve between the existing MSE line that joins with the rail line that enters into the MPITC is too tight to allow unit trains to travel. The Proposed Project is needed remove operational conflicts between railroads, reduce congestion, and accommodate the proposed restoration of passenger rail service.

Enclosed is a figure of the Proposed Project. The proposed rail line is located within JCPA owned land and several parcels are currently being assessed for purchase/right of way. The proposed rail line begins at approximate latitude/longitude 30.251207/-88.310005 on the north and extends to approximate latitude/longitude 30.413308/-88.508269 where it joins existing rail. The approximate center point of the proposed rail line is located at 30.415001 degrees latitude and -88.513679 degrees longitude.

The proposed rail line would cross over estuarine wetlands and forested uplands, and join on the east with an existing JCPA rail line that connects to an interchange located within the MPITC. The length of the

proposed rail line through estuarine wetlands is approximately 3,659 total linear feet with approximately 2,852 feet through marsh wetlands, and 807 through uplands. Most of the proposed rail would be elevated and fill will be used at the abutments to the pile structures. One area of marsh wetlands will be filled with a length of approximately 413 feet and 45.5 feet width. The total impact to wetlands from fill is approximately 39,261 square feet (0.90 acres). There would be approximately 2,649 cubic yards of fill. Construction would be conducted either from uplands or from existing rail. A construction staging area would be established within the MPITC in an area that was recently used for the same purpose. The staging area would be approximately 1-acre in size, and it is <u>not</u> located within a wetland.

Construction of the North Rail Connector Project would result in permanent filling of 0.90 acres of regulated estuarine wetland. JCPA would identify exact mitigation measures and wetland compensation ratios in collaboration with your agency and other regulatory agencies during the subsequent preliminary design and permitting phase. At this time, JCPA anticipates that mitigation requirements would be satisfied through permittee responsible mitigation in which an upland area is converted into estuarine wetland.

In accordance with 40 CFR § 1501.8, FRA requests USACE's assistance in the participation of our anticipated EA for proposed North Rail Connector Project as a cooperating agency. Further, we request that USACE designate FRA as the lead federal agency for Section 106 NHPA to streamline and fulfill collective Federal responsibilities under 36 CFR 800.2(a)(2). Please provide your written concurrence with this invitation and our proposed EA schedule within 15 days from the date on this letter. Should you decline to accept our invitation to be a cooperating agency, we advise that you provide a copy of your response to CEQ as specified at 40 CFR § 1501.8(c). We look forward to working cooperatively with you on this important project.

If you have any questions or would like to discuss our respective roles and responsibilities in more detail, please contact Ms. Amanda Murphy, FRA Environmental Protection Specialist at 202-339-7231 or Amanda.murphy2@dot.gov.

Sincerely,

MICHAEL M JOHNSEN Digitally signed by MICHAEL M JOHNSEN Date: 2021.01.15 12:05:32 -05'00'

Michael Johnsen Supervisory Environmental Protection Specialist

Cc: Rudolph C. Villarreal, Senior Project Manager, USACE Mobile - South Mississippi Branch Sandy Feathers, JCPA Assistant Port Director

Enclosures: Proposed Project Figure Proposed EA Schedule



DEPARTMENT OF THE ARMY MOBILE DISTRICT, CORPS OF ENGINEERS P.O. BOX 2288 MOBILE, ALABAMA 36628-0001

January 27, 2021

South Mississippi Branch Regulatory Division

SUBJECT: Participating Agency invitation to accept NEPA Cooperating Agency status For the Federal Railroad Administration-led North Rail Connector Project (SAM-2021-00025-RCV)

U.S. Department of Transportation Federal Railroad Administration Attention: Mr. Michael M. Johnsen 1200 New Jersey Avenue SE Washington, D.C. 20590 <u>michael.johnsen@dot.gov</u>

Mr. Johnsen:

The U.S. Army Corps of Engineers (USACE), Mobile District received your letter dated January 15, 2021, inviting the Mobile District to participate as a "Cooperating Agency" in the environmental evaluation process and development and preparation of an Environmental Assessment (EA) for proposed North Rail Connector Project as a cooperating agency.

In accordance with CEQ regulations 40 CFR §1501.8 for Lead and Cooperating Agencies, we accept your invitation to become a participating agency for the environmental evaluation process of this project.

In order to maintain a high level of interagency cooperation, the Mobile District agrees to participate in agency coordination meetings, provided consultation on relevant technical studies when appropriate, and review project information and study results. Further, USACE designates the Federal Railroad Administration as the lead federal agency for Section 106 NHPA to streamline and fulfill collective Federal responsibilities under 36 CFR 800.2(a)(2). In addition, please see the attached revision to the schedule for the EA. The USACE respectfully requests additional time for review of both the interested agency comment period, and the FRA and USACE review of version 2 of the EA.

Copies of this correspondence is being furnished via email to Ms. Amanda Murphy, FRA Environmental Protection Specialist @<u>Amanda.murphy2@dot.gov.</u>

The Mobile District's project manager and primary point of contact for this project will be Mr. Rudolph Villarreal. You can contact him at (251) 690-3246 or at <u>rudolph.c.villarreal@usace.army.mil</u> should you have any information or questions related to this project.

Sincerely,

SAHAWNEH.MUNT Digitally signed by SAHAWNEH.MUNTHER.N.1230711 HER.N.1230711808 808 Date: 2021.01.28 12:07:49-06'00' Munther N. Sahawneh Chief, South Mississippi Branch Regulatory Division

enclosure

# A Phase I Cultural Resources Survey of the Proposed North Rail Connector Project Sections 20 and 29, T7S, R5W, Jackson County, Mississippi

MDAH Project Log #'s 11-119-20 and 01-084-21

Prepared by:

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of the

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Prepared for:

Jackson County Port Authority and Federal Railroad Administration

Contracted by:

Compton Engineering, Inc. 156 Nixon Street Biloxi, Mississippi 39530

Contract #3826CI-358

April 8, 2021

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#### **Management Summary**

On January 20, 2021, at the request of Compton Engineering, Inc. of Biloxi, Mississippi, on behalf of the Jackson County Port Authority (JCPA) and the Federal Railroad Administration (FRA), personnel from the Cobb Institute of Archaeology, Mississippi State University, conducted a Phase I cultural resources survey of the proposed footprint of the North Rail Connector Project (the project) in Jackson County, Mississippi (Figures 1 and 2). The project is about 2,360 ft. (719.3 m) long with varying width, for a total area covering approximately 3.81 acres (1.54 hectares). The FRA is providing the JCPA grant funds for the project, as such the project is a federal undertaking subject to Section 106 of the National Historic Preservation Act (NHPA), as amended and its implementing regulation 36 CFR Part 800.The U.S. Army Corps of Engineers also has a Clean Water Act Section 404 permitting role in the project, and designated FRA as lead federal agency for Section 106 of the NHPA to identify and assess effects to historic properties.

A pre-survey search of the Mississippi Department of Archives and History's (MDAH) online records revealed that the southern portion of the archaeological APE (extant railroad) was previously surveyed (Figure 1). This extant railroad was previously designated as an archaeological site, 22JA823 (Table 2). There are also eleven previous cultural resources surveys, six known archaeological sites, and seven MDAH-inventoried historic properties within a one-mile radius of the archaeological APE (Figures 1 and 2; Tables 1-3).

As stated in Baca and O'Neal (2014), the only historic attribute retained by 22JA823 is that its current orientation is consistent with its historic orientation. Based on their investigation, Baca and O'Neal determined 22JA823 was not eligible for inclusion in the National Register of Historic Places (NRHP). As the project will not affect historic orientation, there will be no effects to 22JA823.

No additional cultural resources other than 22JA823 were discovered during this survey. Additionally, none of the inventoried historic properties within a one-mile radius are within the area of potential effect (APE) of the project, therefore none of them will be affected. It is therefore recommended that the project has no effect to historic properties, and no further archaeological investigations are required.

#### Introduction

Fieldwork was completed in one day by Bradley Carlock and Nathan Shores of the Cobb Institute of Archaeology, Mississippi State University. Secretary of Interior Qualified archaeologist Bradley Carlock also prepared the technical report of the findings (See appendix for CV). The project area is located in Sections 20 and 29, Township 7 South, Range 5 West as shown on the Pascagoula North, Miss. U.S.G.S. 7.5' topographic quadrangle map (Figures 1 and 2).



Figure 1. Location of the archaeological APE (red polygon), previous cultural resources surveys (yellow dots, lines, and polygons), and known archaeological sites (orange dots, lines, and polygons) within a one-mile radius (black ellipse) of the archaeological APE. Sections 20 and 29, T7S, R5W. Base Maps: Kreole and Pascagoula North, MS, U.S.G.S. 7.5' topographic quadrangles, scale: 1:24,000.



Figure 2. Location of the archaeological APE (red polygon) and MDAH-inventoried historic properties (purple dots) within a one-mile radius (black ellipse) of the archaeological APE. Sections 20 and 29, T7S, R5W. Base Maps: Kreole and Pascagoula North, MS, U.S.G.S. 7.5' topographic quadrangles, scale: 1:24,000.

MDAH Report No.	Project Author		Year
80-084	CRS of Gas Pipeline Replacement crossing Smith Lake off the Pascagoula River	S of Gas Pipeline Replacement crossing Smith Lake off the Pascagoula River D. Crusoe	
91-123	CRS of a proposed Barge Unloading Facility on the Escatawpa River, Jackson Co., MS	C.B. Mann	1991
93-212	CRS of a proposed wetland mitigation plan for the Highway 63 commercial corridor.	C.B. Mann	1993
97-001	CRS of Proposed Widening of Existing Boat slip and Maintenance Dredging	B. Mann	1997
08-857	MDA-06HA014925 6106 Orange Grove Road, Moss Point, MS	R. Lackowicz	2008
10-0197	Phase I Cultural Resources Investigation, MS Gasification Project, Jackson County, MS	MS S S.L. Perrault	
11-0329	Phase I CRA of A Proposed Mississippi Export Railroad Spur Extension, Jackson Co, MS N.R. Stowe		2011
12-0115	Phase I CRS SR611/SR63 Improvements corridor	P. Stallings	2012
12-0550	MDA 10NH09496 6831 Holley Ave Moss Point Ms R. Lackowicz		2012
12-0670	0670 MDA #10NH06549 survey 0f 4824 1st Street. Moss Point, MS R. Lackowicz		2012
14-0105	Phase I CRS of Proposed Railways & Other Faculty, Upgrade Areas Associated with the Bayou Casotte Harbor Wood Pellet Loading Terminal, Port of Pascagoula, Jackson Co., Ms	K. Baca, H. O'Neal	2014

Table 1. Previous cultural resources surveys within a radius of one mile from the archaeological APE.

Table 2. Previously recorded archaeological sites within a one mile radius of the archaeological APE.

State Trinomial	Cultural Period	Recorder	Date Recorded	NRHP Eligibility
22JA543	Early-Late Woodland, Mississippian	D. Marshall, T. Boudreaux	1972, 2006	Unevaluated
22JA544	Early Woodland	D. Marshall, T. Boudreaux	1972, 2007	Unevaluated
22JA545	Early Woodland, Late Woodland, Archaic	D. Marshall	1972	Unevaluated
22JA787	Historic (late 19 <sup>th</sup> -20 <sup>th</sup> century)	A. Maass	2009	Ineligible
22JA822	Historic (early 20 <sup>th</sup> century – present)	K. Baca	2014	Ineligible
22JA823	Historic (early 20 <sup>th</sup> century)	K. Baca	2014	Ineligible

Map ID#	Inventory #	Historic Name	Common Name	Date of Construction
1	059-MOS-0404	n/a	Fishmeal plant	c. 1946
2	059-MOS-5511	n/a	House	c. 1925
3	059-MOS-0413	n/a	House	n/a
4	n/a	n/a	House	n/a
5	059-MOS-5513	n/a	Martin Gautier House	c. 1900
6	059-MOS-5517	n/a	House	1913
7	059-MOS-0405-X	Southern Paper Company paper mill	n/a	n/a

Table 3. MDAH-inventoried historic properties within a one mile radius of the archaeological APE.

#### **Background Research**

A pre-survey search of the MDAH's online records revealed that the southern portion of the archaeological APE (extant railroad) had been previously surveyed (Figure 1). This extant railroad has been previously designated as an archaeological site, 22JA823 (Table 2). There are also eleven previous cultural resources surveys, six known archaeological sites, and seven MDAH-inventoried historic properties within a one-mile radius of the archaeological APE (Figures 1 and 2; Tables 1-3).

One of the previous surveys, MDAH Report #08-857, is immediately adjacent to the south-central portion of the archaeological APE (Figure 1). This was a survey done for the Mississippi Development Authority Project Elevation Grant and Small Rental Assistance Program. No cultural resources were recorded in the survey. Another of the previous surveys, MDAH Report #14-0105, intersects with and crosses the southern portion of the archaeological APE (Figure 1). This was part of a survey done in association with rail line (existing and proposed) and other facility upgrade locations within and outside of the wood pellet loading terminal in Bayou Casotte Harbor, Port of Pascagoula, and in the city of Moss Point, Jackson County, Mississippi. No cultural resources were recorded in the survey other than two abandoned railroad spur segments, 22JA822 and 22JA823.

One cultural resource, 22JA823, an old Mississippi Export Railroad segment, was previously recorded within the current archaeological APE in association with MDAH Report #14-0105 (see above). According to Baca and O'Neal (2014), this segment was constructed in the early 20<sup>th</sup> century to serve the International Paper Company mill. Based on their investigation, they determined that, although the railroad segment maintains its original orientation, it does not otherwise meet any of the criteria necessary for inclusion in the NRHP, and is therefore considered not eligible.

A review was conducted of historic maps from the region. This included the 1828 and 1845 General Land Office (GLO) plat maps, the 1927 Bureau of Soils Map of Jackson County, and the 1953, 1957, 1963, and 1984 Mobile, Ala. (1:250,000), the 1982 Biloxi, Miss. (1:100,000), the 1943 and 1955 Pascagoula, Miss. (1:62,500), and the 1982 Pascagoula North, Miss. (1:24,000) U.S.G.S. topographic quadrangle maps.

Three historic structures were shown north of Elder Street in the eastern portion of the archaeological APE in 1927 (Figures 3 and 4). Only two of these structures north of Elder Street in the eastern portion of the archaeological APE are shown in 1943 (Figures 5 and 6). In 1955, only one structure is still shown in the eastern portion of the archaeological APE, north of Elder Street; however, one structure appears just south of the western portion of the archaeological APE (Figures 7 and 8). In 1982, all of the structures north of Elder Street in the eastern portion of the archaeological APE (Figures 7 and 8). In 1982, all of the structure previously shown just south of the western portion of the archaeological APE have disappeared and the within the archaeological APE (Figures 9 and 10).



Figure 3. Enlarged detail of the 1927 Bureau of Soils Map of Jackson County.



Figure 4. Enlarged detail of the 1927 Bureau of Soils Map of Jackson County showing structures (black squares) within the archaeological APE (red polygon).



Figure 5. Enlarged detail of the 1943 Pascagoula, MS 1:62,500 U.S.G.S. topographic quadrangle.



Figure 6. Enlarged detail of the 1943 Pascagoula, MS 1:62,500 U.S.G.S. topographic quadrangle showing structures (black squares) within the archaeological APE (red polygon).



Figure 7. Enlarged detail of the 1955 Pascagoula, MS 1:62,500 U.S.G.S. topographic quadrangle.



Figure 8. Enlarged detail of the 1955 Pascagoula, MS 1:62,500 U.S.G.S. topographic quadrangle showing a structure (black square) within the archaeological APE (red polygon).



Figure 9. Enlarged detail of the 1982 Pascagoula North, MS 1:24,000 U.S.G.S. topographic quadrangle.



Figure 10. Enlarged detail of the 1982 Pascagoula North, MS 1:24,000 U.S.G.S. topographic quadrangle showing a structure (black square) within the archaeological APE (red polygon).

#### Environmental Setting

The project area, situated in the Coastal Zone physiographic region, is located within the city of Moss Point, Mississippi. Most of the area is marshland drained by the Escatawpa River, which flows about 0.75 miles (1.2 km) to the north. The majority of the archaeological APE has been previously impacted by the construction of Elder Street, the construction of the railroad, and urban development. Additionally, the area has been heavily impacted by countless coastal storms, floods, and hurricanes stretching back into prehistory. The archaeological APE is currently covered in mature hardwoods and pines on the first terraces and marsh grasses in the lowland marshes (Figures 17-28).

Soils in the archaeological APE consist of Daleville silt loam, 0 to 1 percent slopes (13), Smithton loam, 0 to 1 percent slopes, occasionally flooded (26), Stough loam, 0 to 2 percent slopes (63), Axis mucky sandy clay loam, frequently flooded (95), and Bayou sandy loam, 0 to 1 percent slopes (226) (Figures 11 and 12). Daleville silt loam soils are poorly drained soils located on the tread of stream terraces, with a water table depth of 0-12 in. (0-30 cm). Smithton loam soils are poorly drained soils located on the tread and dip of terraces, with a water table depth of 0-12 in. (0-30 cm). Stough loam soils are somewhat poorly drained soils located on the shoulder, crest, and tread of terraces, with a water table depth of 12-18 in. (30-45 cm). Axis mucky sandy clay loam soils are very poorly drained soils located on the dip of depressions, with a water table depth of 0-12 in. (0-30 cm). Bayou sandy loam soils are poorly drained soils located on the dip of depressions, with a water table depth of 0-12 in. (0-30 cm). Bayou sandy loam soils are poorly drained soils located on the dip of depressions, with a water table depth of 0-12 in. (0-30 cm). Bayou sandy loam soils are poorly drained soils located on the dip of depressions, with a water table depth of 0-12 in. (0-30 cm) (Delaney 2006).



Figure 11. Detail of the Pascagoula North, MS, U.S.G.S. 7.5' topographic quadrangle showing locations of shovel tests (red dots) and soil types (yellow polygons) in the archaeological APE.



Figure 12. Aerial image showing locations of shovel tests (red dots) and soil types (yellow polygons) in the archaeological APE.

#### **Cultural and Historical Context**

The coastal areas of Mississippi have been continuously inhabited by human civilizations for the past 14,000 years. Pre-contact indigenous peoples inhabited the area from about 12,000 B.C. until around A.D. 1500, when the first European explorers began to arrive. The pre-contact periods are divided into the Paleoindian, Archaic, Woodland, and Mississippian Periods, and further divided into Early, Middle, and Late sub-periods. The Paleoindian Period spanned from about 12,000 B.C. until around 8000 B.C. and was characterized by hunter-gathers who followed big-game mammals down the rivers and streams into what is now Mississippi. The Archaic Period spanned from about 8000 B.C. until 1500 B.C. This time period was characterized by hunter-gatherers who spread across the landscape hunting smaller game. The Woodland Period spanned from about 1500 B.C. until A.D. 1000 and was characterized by sedentary occupations and widespread new technology, such as wood-fired clay ceramics in the Early Woodland and the bow-and-arrow in the Late Woodland. The first widespread evidence of domesticates and agriculture occur during the Woodland Period also. The Mississippian Period spanned from about A.D. 1000 until European contact, which depending on location, occurred somewhere around A.D. 1500-1550. This period was characterized by further refining of wood-fired clay ceramics and projectile point technology, fortified mound centers, and widespread maize agriculture. European contact brought a relatively swift end to the pre-contact peoples' way of life due to disease, wars, and relocation. The post-contact period of the area was characterized by a rapid increase in European settlers followed by industrialization, which largely consisted of the timber and fishing industries along the coastal communities.

A more in-depth discussion of the various chronological periods can be found in sources such as Hudson (1978), Anderson and Sassaman (1996), Brown (1992), and Gums and Waselkov (2015). As this is a report of negative findings, they have not been discussed here in detail.

#### **Field Methods**

An APE is defined in 36 CFR 800.16(d) of the NHPA as "the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties if any such properties exist. The APE is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking." The APE of the project was defined as having two distinct areas: an archaeological APE and an architectural APE.

The archaeological APE is associated with the most direct effects on cultural resources, as it is the area that will have significant above-ground clearing as well as subsurface soil disturbance before and during construction. Although generally a construction buffer is included that encompasses areas outside of the proposed rail line footprint, in a comment letter dated December 11, 2020 and sent to the Mississippi Department of Marine Resources, MDAH states that "a cultural resource survey is needed only in areas of the APE where fill will be placed." This is most likely due to the fact that, although some elements of construction will take place outside of the rail line footprint, this will consist only of construction activities with practically no subsurface disturbance, e.g. movement of fill dirt. Therefore, the definition of the archaeological APE for the current project takes into account MDAH's comments and only includes the rail line's footprint (Figures 1, 2, 14, and 15).

The architectural APE is associated with indirect effects caused during both the construction phase as well as the operating phase of a project. This considers visual, audio, and other effects (e.g. vibration) that a project will have on surrounding properties, especially those that are greater than fifty years old and either are currently or have the potential to be considered eligible for inclusion in the NRHP. Specifically, these properties may fall under one of the criteria for inclusion in the NRHP by being associated with a historically significant event (Criterion A) or being associated with a historically significant person (Criterion B). Additionally, a historic property may contain historically significant architectural or engineering features (Criterion C). Historic properties could also hold the potential to yield historical or archaeological information (Criterion D), although Criterion D is mostly applied to archaeological sites. As the current project is anywhere from 0-950 ft. (0-290 m) from an already existing rail line, any nearby historic properties have already been subject to the current rail line's indirect effects, as defined earlier. Therefore, in consultation with MDAH, the architectural APE was defined as encompassing a 50 ft. buffer around the archaeological APE (Figure 13). The architectural APE buffer is only applied in the areas of proposed new construction. As the southernmost portion of the archaeological APE does not contain any proposed new construction, it is unnecessary to apply the 50 ft. architectural APE buffer in this area. All historic or potentially historic properties were evaluated that fell within the defined architectural APE.

Field investigation consisted of pedestrian survey using shovel testing in areas of low ground surface visibility due to vegetation coverage and visual surface inspection of sparsely vegetated or bare ground. Low-lying areas subject to flooding, areas with greater than 15 percent

slope, and areas of obvious disturbance (e.g. ditches) were inspected but excluded from subsurface investigation.

Shovel testing was conducted by digging a 30 cm diameter hole every 30 meters along a single transect down the center of the archaeological APE (Figures 14 and 15). Additional shovel tests were placed between this interval in areas believed to have a higher probability of containing cultural resources. All shovel tests were excavated to the depth that either culturally sterile subsoil or the water table was encountered. All shovel-test fill was screened through <sup>1</sup>/<sub>4</sub>" mesh.

All survey records are curated at the Cobb Institute of Archaeology, Mississippi State University. This facility meets or exceeds U.S. Department of the Interior standards (36 CFR Part 79).



Figure 13. Aerial photograph showing the locations of shovel tests (red dots) and photographs (green dots) within the architectural (orange polygon) and archaeological (blue polygon) APE's.



Figure 14. Aerial photograph showing the locations of shovel tests (red dots) and photographs (green dots) within the archaeological APE (blue polygon).



Figure 15. Detail of a project map showing the locations of shovel tests (red dots), photographs (green dots), wetlands (red polygons), and uplands (yellow polygons) within the archaeological APE.

#### **Field Results**

No additional cultural resources were found during fieldwork other than 22JA823; all seventeen shovel tests that were dug were negative. Additionally, no evidence was found of the structures north of Elder Street in the eastern portion of the archaeological APE as shown on early maps of the area (Figures 3-8). The structure in the western portion of the archaeological APE appears to be correctly plotted on the 1955 Pascagoula, MS map (Figures 7 and 8) as opposed to its location as shown on the 1982 Pascagoula North, MS map (Figures 9 and 10). This is evidenced by the concrete house slab still located at the 1955 plotted location, outside of the archaeological APE (Figure 22). No historic properties (or any properties period) were located within the architectural APE, therefore there were no properties to evaluate.

In the center of the western portion of the archaeological APE was a junkyard that was inaccessible for survey (Figures 17 and 21). Lots of large junkyard debris was encountered in this small area, but all of it was modern trash associated with the active junkyard, which did not warrant recordation as an archaeological site. A shovel test was placed as close as possible to the eastern and western limits of the junkyard (Figures 14, 17 and 21) to test for cultural materials not associated with the junkyard, but none was encountered.

A representative soil profile was taken at shovel test 15 (St 15). It consisted of 0 to 36 cm of a very dark brown (10YR2/2) sandy clay E horizon and 36 to 53 cm of a yellowish brown (10YR5/4) sandy clay B horizon (Figure 16).



Figure 16. Soil profile of St 15, view south.



Figure 17. Photograph showing junkyard debris near St 1, view east. (Photo 1)



Figure 18. Photograph showing an overview of survey conditions and vegetation at St 2, view west. (Photo 2)



Figure 19. Photograph showing washed up trash (foreground) and marsh grasses (background), view southeast. (Photo 3)



Figure 20. Photograph showing the wetland marsh, view east. (Photo 4)



Figure 21. Photograph showing a view of the junkyard's metal wall west of St 4, view west. (Photo 5)



Figure 22. Photograph showing a concrete house slab outside of the archaeological APE, view south. (Photo 6)



Figure 23. Photograph showing an overview of survey conditions and vegetation from the bridge on Elder Street, view north. (Photo 7)



Figure 24. Photograph showing a view of the wetland marsh, view west. (Photo 8)



Figure 25. Photograph showing the northeastern segment of 22JA823, view southwest. (Photo 9)



Figure 26. Photograph showing the southwestern segment of 22JA823, view northeast. (Photo 10)



Figure 27. Photograph showing an overview of Elder Street, view west. 22JA823 is on the left side of the photo. (Photo 11)



Figure 28. Photograph showing an overview of Elder Street, view east. 22JA823 is on the right side of the photo. (Photo 12)

#### **Conclusions and Recommendations**

No archaeological materials were found by surface inspection nor by shovel testing within the archaeological APE other than 22JA823 Much of the archaeological APE was previously disturbed by urban development, flooding, erosion, and the construction of Elder Street and the railroad. No properties, historic or otherwise, were located within the architectural APE, and therefore there were no properties to evaluate.

The three structures shown on early maps in the eastern portion of the archaeological APE and north of Elder Street were not located during this investigation. As there was no physical evidence noted above or below ground in the area where they were plotted, it is assumed that the houses were either demolished or removed and the land thoroughly cleared after their demolition/removal. The one structure shown within the western portion of the archaeological APE in 1982 was incorrectly plotted, as evidence was noted (concrete house slab) outside of the archaeological APE, in its 1955 correctly plotted location. As such, none of the structures shown in the archaeological APE on historic maps will be affected by the current project.

As noted earlier, a segment of one cultural resource, 22JA823, was previously recorded within the current archaeological APE. Baca and O'Neal described 22JA823 (and 22JA822) in their 2014 report, stating:

Originally built in the early 20th century, these railways were peripherally associated with the (now-demolished) Southern Paper CO./International Paper mill in Moss Point, which was of some historical significance as one of the first mills to successfully utilize southern pine pulpwood for the manufacture of kraft paper (DeAngelo 1989; Fickle 2001:141; International Paper Co. n.d.; Rogers n.d.:9). However, these railways contain no noteworthy engineering or architectural features, and are indistinguishable in appearance from hundreds of miles of other railroad lines crisscrossing Mississippi. Moreover, local historical sources (Jackson County n.d.; Jackson County Genealogical Society 1989; Rogers n.d.; Works Progress Administration n.d.) make no mention of significant events or persons associated with these rail lines [Baca and O'Neal 2014:11].

Their investigations determined the site to be not eligible for listing in the NRHP under any criteria, stating:

Specifically, the sites fails to meet criteria A and B as they are not associated with any events related to "the broad patterns of our history" (Criterion A), and they are not associated with the life of a historically significant person or persons (Criterion B). Moreover, both sites' lack of significant architectural or engineering character prevents them from meeting Criterion C. Finally, pervasive ground disturbance caused by the original grading of the railroad rights-of-way, and the evident lack of prehistoric or pre-railroad historic cultural deposits within those rights-of-way, mean that the sites are unlikely to yield archaeological "information important in prehistory or history," and as a result they fail to meet Criterion D [Baca and O'Neal 2014:11].

Under current standards (Mississippi Department of Archives and History 2020), 22JA823 would be considered to have an "undetermined" NRHP eligibility instead of "ineligible", as Baca and O'Neal did not investigate the rail line as a whole in 2014, but only a specific segment of it. The North Rail Connector project (subject of this cultural resources report) investigated an even smaller segment of what was investigated in 2014. No further information was obtained in this investigation that would warrant an alternate NRHP eligibility determination from what Baca and O'Neal recommended in 2014. However, as similarly stated in Baca and O'Neal's 2014 report, since the North Rail Connector project is planning to use the affected portion of 22JA823 for its intended use as a rail line, it is this author's opinion that the project is helping to preserve the site rather than destroy its integrity. The proposed affected section of 22JA823 contains no features that would contribute to a future NRHP eligibility determination beyond the rails and grade present, which stretch for miles outside of the project area.

Due to the degree of disturbance and lack of evidence of any archaeological deposits, it is the opinion of the author that no further archaeological investigations are warranted. Further, based on this cultural resource investigation, the author recommends that the project would have no effect on historic properties in the architectural or archaeological APE.

There remains the possibility that unrecorded cultural resources may be encountered during construction. Should this occur, work must cease and the Project Sponsor (JCPA) must immediately contact the FRA to consult with the SHPO and any Indian tribe that might attach religious and cultural significance to the affected property in compliance with 36 CFR 800.13.

#### **References Cited**

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#### Brown, Calvin S.

1992 Archeology of Mississippi. University Press of Mississippi, Jackson, Mississippi.

# Gums, Bonnie L. and Gregory A. Waselkov

2015 Archaeology at La Pointe-Krebs Plantation in Old Spanish Fort Park (22JA526), Pascagoula, Jackson County, Mississippi. Archaeological Report 35. Mississippi Department of Archives and History, Jackson, Mississippi.

#### Hudson, Charles M.

1978 The Southeastern Indians. University of Tennessee Press, Knoxville, Tennessee.

## Johnson, Delaney B.

2006 Soil Survey of Jackson County, Mississippi. United States Department of Agriculture, Soil Conservation Service, in cooperation with the Mississippi Agricultural Experiment Station.

# Mississippi Department of Archives and History

2020 *Mississippi Standards for Archaeological Practices*. Developed by the Mississippi Department of Archives and History, Historic Preservation Division, Archaeology and Historic Sites Section. Jackson, Mississippi.

# Appendix

Updated site card for site 22JA823.

Missis	suppi Department of Archives and History
STIB HAME: Una Mississippi Export Kaliroad Segment SITE	NO: <u>22J A823 REVISI</u> OTHER NOS: <u>75 QUAD; Pascagoula North</u>
COUNTY: Juckson SEC: 20	<u>229</u> TWN: <u>75</u> RNG: <u>5W</u> UTM DATA: zone <u>16</u> <u>B</u> <u>355093</u> <u>N</u> <u>3365358</u>
Ownership: provide [ ] state [ ] county [ ] city [/] feder	u( ).
NAMB OF OWNER: City of Moss Point	RECORDER Bradley Carlock DATE:1/20/2021
NATIONAL REGISTER POTENTIAL: eligible [ ] ineligible	[/] unknown [] NATURAL SETTING: bluff [] bluff shelter [] chenier [] dune []
floodplain [] first terrace [] knoll on terrace [] upland (rid	ige) [] estuary [] natural levee [] backswamp []
VEGETATION COVER: active cultivation [ ] fallow field [	] pasture [ ] orchard [ ] pine forest [ ] hardwood forest [/] denuded [ ] garden [ ] other [ ]
ESTIMATION OF GROUND COVER: (estimate %)0	DEGREE OF DISTURBANCE (estimate %)
TYPE OF DISTURBANCE: cultivation [ ] natural [/] scienti	fic excavation [ ] Place Quad Xerox Here
unscientific excavation [ ] extensively collected [ ] construct	ion [] land levelled [/] buried site []
redeposited site [ ] forestry [ ] periodic flooding [ ] indefin	itely flooded [] unknown [] other []
SOIL TYPE: Daleville sit loan/Smithton loam SOIL CODE:	13/26
ARTIFACT DENSITY: heavy [ ] medium [ ] light [ ] sing	le artifact []
INSTITUTION WHERE ARTIFACTS CURATED:	n/a
SURFACE AREA(sq.m.): 2046 max length 341m max with	th 6m ELEVATION (ft): 10
DEPOSIT DEPTH (m.):4 CHRONOLOGY: Paleo	Indian []
Archaic [ ] early [ ] middle [ ] late [ ] Woodland [ ] earl	y[]middle[]
late [ ] Miss. [ ] early [ ] middle [ ] late [ ] Historic Indi	an[]
Contact Indian [ ] Unknown Aboriginal [ ] Historic [/]	early 20th century
REPORT REFERENCE:	MOSS POINT
MDAH REPORT NO: USE REVERSE SIDE	B FOR ADDITIONAL INFORMATION
M	2274022
Mounds # conical [ ]	comments:
# pyramidal [ ]	Originally part of the Pascagoula Railroad then the Mississippi and Alabama
# indeterminate [ ]	Railroad and finally the Mississippi Export Railroad was incorporated in
	railroad extending from with the corporate limits of Pascagoula. Mississippi to a
earthworks [ ]	northern terminus at Luce Farms, in George County, Mississippi. The company was
material identified:	officially organized on November 15, 1922.
Modern steel rails, creosote wood crossties, crushed	limestone Abandoned rail spur built to serve the International Paper Co. mill. Railroad grade
ballast, metal pipe	is 6m wide at base. The height of the grade is only about .4m above the flat,
	surrounding terrain. Other than the grade, the infrastructure is minimal. The
	line, but remain intact in others.
2	
	Southwest end: E355066 N3365351
component discretion	Centrold: E305093 N3365358 Northeast end: E355254 N3365378
component – diagnostics	
20th century steel rails, creosote woo	d
ballast, metal pipe	one
	MDAH USE ONLY
	Dimineratie Destan
	YRI I HI I RWI I PRI I RWI I DRI I THI I DRI I LI PRI I COMI I MCHI I
:	National Register Status: NRL [], date, criteria
	DOE [ ], date, criteria
	NHL [], date, criteria
	mussisappi Lanomark [ ], date
с <b>1</b>	:
	X.

Figure 29. Updated site card for 22JA823.

March 24, 2021

#### CURRICULUM VITAE

# Name:

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# **Telephone:**

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# **Education:**

M.A., Applied Anthropology, Mississippi State University, Fall 2015

B.A., Anthropology, Mississippi State University, Fall 2006

#### **Certificates:**

Geospatial and Remote Sensing Technologies Certificate

-Completed all of the prescribed coursework for the certificate program in "Geospatial and Remote Sensing Technologies", June 2009

#### **Registrations:**

Registered Professional Archaeologist 43700349, 2017 - Present

# Field and Research Experience:

Archaeologist – Cobb Institute of Archaeology, Spring 2018 – Present

Full-time staff archaeologist. Supervised crews of two to twelve people. Responsible for all aspects of fieldwork, including but not limited to daily safety meetings, choosing daily work locations, recording field data using Trimble Geo7x, iPad, and BadElf GPS unit, recording site forms, field vehicle maintenance, correspondence with clients, etc. Prepared maps and documents needed for fieldwork. Responsible for technical report writing using Microsoft Office Word and Excel, ArcMap GIS, and Photoshop software packages. Submitted proposal bids for field projects. Kept track of office supplies/needs. Performed other work as necessary.

Archaeological Technician – Cobb Institute of Archaeology, Summer 2015 – Spring 2018. Supervised field crews, conducted archaeological shovel test and open field survey, catalogued artifacts, performed curatorial duties, and any other duties as needed with the cultural resource management division of the Cobb Institute of Archaeology. Archaeological Technician – Mergent, Inc., Spring – Summer 2015

Conducted archaeological shovel test and open field survey, catalogued artifacts, and any other duties as needed for linear projects in North Dakota and Minnesota.

Archaeological Technician/Crew Chief – Cobb Institute of Archaeology, Fall 2012 – Spring 2015. Conducted archaeological shovel test and open field survey, catalogued artifacts, performed curatorial duties, and any other duties as needed with the cultural resource management division of the Cobb Institute of Archaeology. Also supervised survey crew on projects when needed.

Lab Technician – Cobb Institute of Archaeology, Spring 2013

Performed analysis of archaeological and modern mussel and oyster shells using a Laser Ablation-Inductively Coupled Plasma-Mass Spectrometer in conjunction with the Mississippi State chemistry department.

Area Supervisor – Mississippi State Archaeological Field School, Summer 2011 and Summer 2012. Six weeks of excavation at Khirbet Summeily, a small biblical period village that is located in the northern part of Israel's Negev Desert and dates to the 10th-8th century BCE.

Participant - Excavation at 22OK1147, a Mississippian house site, Summer 2011

Participant – Excavation at 22OK1076, an Early Archaic through Late Woodland site, Fall 2010

- Lab Supervisor Cobb Institute of Archaeology, Summer 2009-Spring 2012. Supervised students while washing, cataloguing, and analyzing artifacts.
- Field Archaeologist, GS-5 -- Worked for Humboldt-Toiyabe National Forest, Elko Ranger District in Elko, NV, October 2009. Archaeological detail consisted of survey of roads and nearby archaeological sites for the Travel Management program.
- Field Archaeologist, GS-5 Worked for Tombigbee National Forest in Ackerman, MS, August 2009-May 2010. Tasks included but were not limited to archaeological survey, site recording using paper forms, GPS, and GIS software, determining NRHP eligibility of sites, leading field crew on surveys, report writing, GIS mapping of archaeological sites and of prescribed burn areas, and acted as main archaeologist when district archaeologist on leave.
- Field Assistant Mississippi State Archaeological Field School, Summer 2009. Five weeks of controlled surface collection, open field, and shovel test survey in the Mississippi Delta and Starkville vicinity. Five weeks of excavation at Poverty Point, a Late Archaic site in northeast Louisiana.
- Research Assistant Assisted Dr. Evan Peacock, Ph.D., with research involving mussel shell sourcing, Fall 2007-Spring 2009. Became proficient using a Laser Ablation-Inductively Coupled Plasma-Mass Spectrometer (LA-ICP-MS).
- Field Archaeologist, GS-5 Worked for Tombigbee National Forest in Ackerman, MS, May-August 2007. Tasks included but were not limited to archaeological survey, site recording using paper forms, GPS, and GIS software, and determining NRHP eligibility of sites.

- Field Assistant Assisted Andrew Triplett with M.A. thesis fieldwork, including survey and excavation, in Oktibbeha County, MS, Spring/Summer 2007
- Field Assistant Assisted Jeffrey Alvey, M.A., on CRM survey in Starkville vicinity, Fall 2006
- Field and Lab Assistant Assisted Jeffrey Alvey, M.A., at Cobb Institute of Archaeology, Summer 2006

Participant - Excavation at 22L1504, an Archaic mound, Spring 2006

Participant - Excavation at 22OK1079, a Protohistoric homestead, Spring 2006

- Field Assistant Assisted Jeffrey Alvey, M.A., on Cultural Resources Management survey for OIL-DRI, Spring 2006
- Undergraduate Research Excavation in plaza area at Lyon's Bluff (220K520), Fall 2005

Lab worker - Cobb Institute of Archaeology, Fall 2005-Spring 2007

Participant - Mississippi State Archaeological Field School, Summer 2005. Five weeks of open field and shovel test survey in Mississippi, and five weeks of excavation of small Woodland sites

#### **Positions Held in Organizations:**

President - Mississippi Archaeological Association, 2018 - Present

Northern Vice-President - Mississippi Archaeological Association, 2016-2018

Secretary/Treasurer - Mississippi State University Anthropology Club, Fall 2005 -

Spring 2008

Member of Lambda Alpha, the National Collegiate Honors Society for Anthropology, 2006 - Present

#### **Papers Delivered at Professional Meetings:**

#### Carlock, Bradley, and Jared Wilson

 Is It Worth It?: Comparing Tried and True Techniques to Cutting Edge Technology.
Paper presented at the 2012 American Schools of Oriental Research Conference, Chicago, Illinois.

#### Carlock, James Bradley, and Janet Rafferty

2009 Spatially Extensive Examination of the Kinlock Site (22SU526) Using Controlled Surface Collection, Magnetometry, Excavation, and Soil Cores. Paper presented at the 66<sup>th</sup> Southeastern Archaeological Conference, Mobile, Alabama.

Carlock, Bradley

2006 Location of a Plaza at Lyon's Bluff (22OK520). Paper presented at the annual meeting,Mississippi Archaeological Association, Starkville, Mississippi.

#### **Invited Papers:**

William Parkinson, Evan Peacock, Ronald A. Palmer, Yunju Xia, and Bradley Carlock

2009 LA-ICP-MS on Ceramic Incrustations Indicates Long-Term Cultural Continuity in the Prehistoric Carpathian Basin. 74<sup>th</sup> Annual Meeting of the Society for American Archaeology, Atlanta, Georgia.

Evan Peacock, Ronald A. Palmer, Yunju Xia, Bradley Carlock, and Weston Bacon-Schulte

2008 Establishing an Elemental Database for Sourcing Shell-Tempered Pottery via Laser Ablation-Inductively Coupled Plasma-Mass Spectrometry. 73<sup>rd</sup> Annual Meeting of the Society for American Archaeology, Vancouver, British Columbia.

# **Publications:**

## Carlock, Bradley

In Press. Location of a Plaza at Lyon's Bluff (22OK520). Mississippi Archaeology.

Peacock, Evan, Ronald A. Palmer, Yunju Xia, Weston Bacon-Schulte, Bradley Carlock, and Jennifer Smith

2010 Chemical Sourcing of a Prehistoric Freshwater Shell Artifact Using Laser Ablation-Inductively Coupled Plasma-Mass Spectrometry. *Archaeology of Eastern North America* 38:91-99.

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Parkinson, William A., Evan Peacock, Ronald A. Palmer, Yunju Xia, Bradley Carlock, Attila

Gyucha, Richard W. Yerkes, and Michael L. Galaty

2010 LA-ICP-MS on Ceramic Incrustation Indicates Long-Term Cultural Continuity in the Prehistoric Carpathian Basin. *Archaeology, Ethnology and Anthropology of Eurasia* 38/2:64-70.

#### Selected Technical Reports:

Each entry preceded by the Mississippi Department of Archives and History Report No.

19-0332 Baca, K; Carlock, B

*Phase I CRS of a Ten-Acre Area Proposed for the Construction of Poultry House,* SB, T12N, R13F, Neshoba County, Ms

19-0342 Baca, K; Carlock, B

A CRS of the Proposed Location for Construction of a Boat Ramp, pier & Bulkhead, Hancock Co.

19-0343 Carlock, B

Phase I CRS of the Proposed Williamson Road Bridge Replacement Project, Hinds Co, MS MDOT/State Aid Project No. LSBP-25(51)

19-0357 Baca, K, Carlock, B

Phase I Cultural Resource Survey of a Thirty-Acre Area Proposed for the Construction of Eight Poultry Houses, S19, T10N, R10E, Neshoba County, Ms 20-0001 Carlock, B

Phase I Cultural Resources Survey of the Proposed Cynthia Road Emergency Bridge Replacement Project, Hinds County, MS(MDOT/State Aid Project No. ERBR-25-049(1)

20-0002 Carlock, B

Phase I Cultural Resource Survey of the Proposed Midway Road Bridge Replacement Project, Hinds County, MS (MDOT Project No. STP-7266-00(001)LPA/108124-701000

20-0005 Carlock, B

Phase I Cultural Resource Survey of the Proposed Kickapoo Road Emergency Bridge Replacement Project, Hinds County, MS (MDOT/State Aid Project no. ERBR-25-049(2)

20-0023 Carlock, B

Phase I Cultural Resource Survey of the Proposed County Road 705 Bridge Replacement Project for Tallashua Creek, Neshoba County, MS (MDOT/State Aid Project No. LSBP-50(14))

20-0028 Baca, K; Carlock, B

Phase I Cultural Resource Survey of the Proposed Tiplersville Cellular Tower Site, Tippah County, MS

20-0029 Baca, K; Carlock, B

Phase I Cultural Resource Survey of the Proposed County Road 405 Bridge Replacement Project at the Yalobusha River, Chickasaw County, MS 20-0030 Baca, K; Carlock, B

Phase I Cultural Resource Survey for the Proposed County 410 Bridge Replacement Project, S15/22, T13S, R5E, Chickasaw County,

20-0036 Carlock, B

Phase I Cultural Resource Survey of the Bay Springs Telephone Company Fiber Optic Cable Project along Morton-Marathon Road and Warrentown Road, Compartments 75, 78, and 254, Bienville National Forest, Scott county

20-0039 Carlock, B

Phase I Cultural Resources Survey of a Proposed 4.5-Acre Borrow Pit on County Road 740 near Theo, Alcorn Co, MS

20-0065 Baca, K. Carlock, B

Phase I Cultural Resources Survey of the Proposed County Road 755 Bridge Replacement Project at the Hatchie River, Alcorn County, MS State Aid Project No. ERBR-02(01)

20-0068 Baca, K; Carlock, B

A Phase I Cultural Resource Survey of a 61-Acre Tract, N 1/2, NE 1/4, S6, T8S, R6E, Lee County, MS

20-0068 Baca, K; Carlock, B

A Phase I Cultural Resource Survey of a 61-Acre Tract, N 1/2, NE 1/4, S6, T8S, R6E, Lee County, MS

20-0180 Carlock, B

A Phase I Cultural Resources Survey for the Community Development Block Grant Water System Improvement Project for the Town of Glen, Alcorn County, MS 21-0010 Alvey, J., Baca, K., Carlock, B.

A Phase I Cultural Resources Survey of 6.92 Miles of Dozer Lines and Other Prescribed Burning Work on the Homochitto National Forest

21-0015 Baca, K., Carlock, B.

A Phase I Cultural Resources Survey of the Proposed Hickory Grove Road Bridge Replacement Project at Ittobechi Creek; LSBP-53(14)

21-0035 Carlock, B.

A Phase I Cultural Resources Survey of the Proposed Royal Road Bridge Replacement Project over Gallagher Creek

21-0045 Baca, K., Carlock, B.

A Phase I Cultural Resources Survey of a 3.44 Acre Tract for the Proposed

Expansion of an Existing Rubbish Facility, MDAH Log #10-053-20

#### Workshops

Proposal Writing for Cultural Resources Management Professionals - December 2015

Workshop sponsored by the American Cultural Resources Association (ARCA). This intensive 2 hour class focused on the nuts-and-bolts of how to write a successful proposal, offered hands on information targeted at helping CRM professionals and students learn how to increase the success rate of their proposals, assured clarity in scoping of proposals, and provided a complete framework for the proposal writing process.