



STATE OF MISSISSIPPI
HALEY BARBOUR, GOVERNOR

MISSISSIPPI EMERGENCY MANAGEMENT AGENCY

THOMAS M. "MIKE" WOMACK
EXECUTIVE DIRECTOR

November 29, 2010

A.J. Holloway
Mayor
City of Biloxi
P.O. Box 429
Biloxi, MS 39533

RE: FEMA-1604-DR-MS - CITY OF BILOXI, #047-06220-00
FEMA concerns regarding Maritime Museum relocation to Tullis-Toledano property

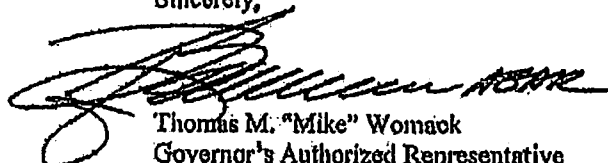
Dear Mayor Holloway:

Enclosed is a letter from FEMA noting their concerns on the City's proposed plans to relocate the Maritime Museum to the Tullis-Toledano property. FEMA's environmental and historic preservation staff have conducted two surveys on this property, and have found that the site "retains enough integrity to remain eligible for listing in the National Register of Historic Places." The Tullis-Toledano property contains many intact cultural deposits, and the adjoining property contains Native American burial sites. Due to the high likelihood of encountering burials and other archaeological deposits on the property, FEMA feels there is a high potential for substantial increases in cost of building at this site, as well as extensive time delays.

FEMA would like the City to be reminded that FEMA "funds can be jeopardized if the Subgrantee fails to meet completion deadlines." If the project, for various reasons, could not be completed on the existing site then FEMA may consider funds already expended by the City intelligible. Funds may also be jeopardized if the Subgrantee does not adhere to "the conditions set forth by Section 106 of the National Historic Preservation Act, FEMA's BHP staff, the State Historic Preservation Officer (SEPO), and all involved Native American Tribal Historic Preservation Officers (THPO)." Due to the sensitive historic nature of the proposed site FEMA concurs with FEMA that potential scenarios could arise beyond the control of the applicant which could jeopardize either a portion or all of the available FEMA funding.

Please review the attached information very carefully. If you have additional questions concerning this matter, please contact your assigned project officer, or the Harrison County Branch Director, Mr. Chris Fields, who may be reached at 228-236-4521.

Sincerely,

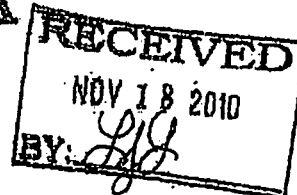


Thomas M. "Mike" Womack
Governor's Authorized Representative

U.S. Department of Homeland Security
Federal Emergency Management Agency
Mississippi Recovery Office
220 Poppo Ferry Road
Biloxi, MS 39531



FEMA



November 16, 2010

Mr. Thomas M. "Mike" Womack
Executive Director
Mississippi Emergency Management Agency
P.O. Box 5644
Pearl, Mississippi 39288-5644

Attention: Larry Bowman

Re: FEMA-1604-DR-MS
City of Biloxi
PA ID 047-06220-00
Maritime Museum relocation to Tullis-Toledano property concerns

Dear Mr. Womack:

This letter is written to express the Federal Emergency Management Agency's (FEMA) concerns surrounding the relocation of the Maritime Museum to the Tullis-Toledano property as planned by the City of Biloxi (the Subgrantee).

In 2005, Hurricane Katrina caused major damage to a number of museums and historical sites in the City of Biloxi. With the desire to relocate the City's museums onto one site, the Subgrantee made plans to construct a new museum complex on a 5-acre tract on Highway 90, referred to as the Tullis-Toledano Property. Past archeological research has demonstrated that intact cultural deposits exist on this site.

Because of anticipated federally funded activity on the property, FEMA's Environmental/Historic Preservation (EHP) staff recommended and conducted two Phase I archeological surveys. The first, in 2007, was conducted to both determine the post-storm condition of the site as well as to determine if the site retained enough integrity to remain eligible for the National Register of Historic Places (NHRP). The second Phase I survey was a more comprehensive project deemed necessary after the Subgrantee expressed plans to develop the site into a museum complex. This survey examined areas of the site that had not been previously tested.

The surveys confirmed that the site still retains enough integrity to remain eligible for listing in the NHRP and proved positive for the presence of intact prehistoric and historic cultural deposits. FEMA's EHP staff concluded that because intact cultural deposits are present on the site, as well as Native American burial sites on the adjacent property, "the likelihood of

City of Biloxi
Tullis-Toledano Property concerns
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encountering additional intact deposits (or burials) at Tullis (Tullis-Toledano Property) is considered quite high".

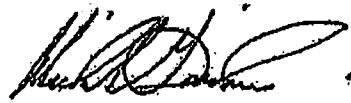
FEMA's EHP staff has estimated the financial impact of the discovery of intact cultural deposits or burials could result in increased testing costs of \$28,000 to \$63,000 per excavation unit. In addition, the presence of any archaeological deposits (features, structures, burials, etc.) would result in the immediate stoppage of work; therefore, delaying construction and potentially increasing the cost.

It is therefore for the reasons of the high potential for substantial increases in costs as well as extensive time delays that FEMA expresses its concerns with the Subgrantee implementing their proposed plan. FEMA funds can be jeopardized if the Subgrantee fails to meet completion deadlines or incurs substantial ineligible costs. In addition, funds can be jeopardized with failure to adhere to the conditions set forth by Section 106 of the National Historic Preservation Act, FEMA's EHP staff, the State Historic Preservation Officer (SHPO), and all involved Native American Tribal Historic Preservation Officers (THPO).

If you have any questions, please contact either myself (228) 239-9222 or Michael (228) 365-9027.

Sincerely,


J. Randy Walker
Public Assistance Section Chief

 11-16-10
Michael Grisham
Environmental Liaison Officer

Attachment

City of Biloxi – Cultural Museum Complex

Prepared by Paul Drummond, FEMA Historic Preservation Specialist, 11/02/10

Overview:

The City of Biloxi intends to create a Biloxi Museum Complex along Highway 90 by relocating the Maritime Seafood and Industry Museum, an Exhibit Space and a Katrina Museum to the Tullis-Toledano Property site adjacent to the Ohr-O'Keefe Museum.

This property contained three mid-nineteenth-century structures that were destroyed by Hurricane Katrina on August 29, 2005. These buildings consisted of the main house—Tullis-Toledano Manor, a detached kitchen generally referred to as the servants' quarters, and the carriage/Crawford House. The main house was placed on the National Register of Historic Places (NRHP) in 1976, but was de-listed after its destruction. However, Mississippi Department of Archives and History (MDAH) have also determined the entire property/archaeological site as eligible for the NRHP, due to the intact historic and prehistoric archaeological deposits it is known to contain. Intact subsurface deposits, both historic and prehistoric, have been encountered in all but one of the areas tested at Tullis in previous excavations. Therefore, the likelihood of encountering additional intact deposits at Tullis is considered quite high.

Archaeological Information:

The Tullis property is a five-acre (2.023 hectares) tract located on U.S. Highway 90 at 947 Beach Boulevard in southeastern Biloxi, Mississippi. The property is bounded by Beach Boulevard to the south, Hoxie Street to the east, and partially by Meaux Street to the northwest. The site of the Ohr-O'Keefe museum adjoins the Tullis property to the west. The Mississippi Sound is located about 150 m south of the site. Before it was destroyed, the Tullis House faced south toward the sound and Deer Island.

The Tullis property is located on the Sangamon Beach Ridge, a high (15-to-34-ft), relatively flat ridge of well-drained soils that parallels the shoreline of the Mississippi Sound across virtually all of Harrison County, western Jackson County, and a small portion of Hancock County. The Sangamon Beach Ridge is a relict shoreline that formed during the late Pleistocene, and is geologically a part of the Gulfport Formation. The Sangamon Beach Ridge is the Mississippi Gulf Coast's most prominent and exploited geologic formation. It is an attractive area for settlement because of its well-drained soils, its proximity to resource-rich estuaries and marshes, and its relatively high elevation. Numerous prehistoric sites are located along this ridge. Likewise, much of the area's historic settlement was concentrated along the Sangamon Ridge.

A FEMA contractor (CEI) conducted a cultural resources survey of the Tullis-Toledano Manor property (22Hr911) in Biloxi, Mississippi in April 2007 under a Presidential disaster declaration

(FEMA-1604-DR-MS) contract. The project area included the location of three historic structures—a main house and two outbuildings—that were destroyed by Hurricane Katrina on August 29, 2005. The primary aim of this survey was to determine the post-storm condition of 22Hr911 and determine if the site retained enough integrity to remain eligible for the NRHP. If the site was sufficiently intact, CEI was also requested to identify all parts of the site with probable intact deposits and make recommendations on how to avoid damaging them during any federally funded future action.

Intact subsurface deposits, both historic and prehistoric, have been documented at the site through previous investigations. This survey determined that the subsurface foundations of the three destroyed buildings and a brick well, located north of the Crawford House, also survive intact. The casino barge, which flattened the Tullis House, may have compacted the subsurface deposits located in the southern third of the property to some degree, but did little other damage. The leveling conducted at the site in 2007 removed construction debris, downed trees, and topsoil from the site but did not significantly impact subsurface deposits. In fact, CEI's shovel tests suggest that in some areas these deposits have been further buried by a stratum of storm debris. Therefore, site 22Hr911 retains enough integrity to remain eligible for the NRHP under criterion D, i.e., it has yielded and is likely to yield additional information important in prehistory and history.

All previous archaeological investigations conducted at Tullis to date were survey and/or testing phase projects. Only parts of the site had been previously shovel tested at the survey level. Archaeologist Guy Weaver, systematically shovel tested the northern third of the property in 2002 but the remainder of the site had been subjected to only random shovel testing in certain areas, and the locations of these shovel tests are not clearly defined in previous reports. Therefore, CEI systematically shovel tested at 10-m intervals the southern two-third of the site not already examined by Weaver. Most of Weaver's and CEI's shovel tests proved positive for artifacts, while several also encountered intact deposits.

Aboriginal artifacts were found in six of Weaver's shovel tests and in 14 of CEI's. Test units dug by Archaeologist Dale Greenwell in 1976 encountered intact prehistoric deposits including features and post molds associated with a Middle Woodland period circular structure. Likewise, MDAH's three test units yielded aboriginal lithics, ceramics, and bone. Finally, Weaver identified a prehistoric midden deposit that extended from roughly 70 to 92 cmbs.

The 1925 Sanborn map shows that nine buildings and an above-ground cistern stood on the property by that time. Three of these buildings, the main house, the servants' quarters, and the carriage/Crawford House stood until destroyed by Hurricane Katrina in 2005. Their foundations remain intact below the ground surface. Test units excavated at Tullis have revealed the foundations of two additional Sanborn buildings, the Lafoure House and a structure once located immediately northeast of the Crawford House. No evidence of the two Green Oaks Hotel buildings shown on the Sanborn map has been found to date, but this portion of the site has seen only limited testing.

City of Biloxi – Cultural Museum Complex

The two remaining buildings shown on the Sanborn map were identified at that time as automobile garages. However, both buildings may have served other purposes prior to 1925. No excavation has yet been conducted at the site of these two buildings.

Test excavations have also found the remains of three buildings and a second well that do not appear on the 1925 Sanborn map. Two of these buildings were found by Greenwell in 1976. The structure in one area might represent a slave quarters, while the function of the building with a complete cellar found immediately east of the servants' quarters remains unknown. The third undocumented structure was located in the northwest corner of the site by Weaver et al. in 2002. MDAH found the second well, probably associated with the Lafoure House, in 1992.

Testing has also revealed non-architectural historic deposits at Tullis. Greenwell located an oyster shell deposit in 1976 that he suggested might represent a mortar making area. Weaver also found oyster shell mixed with historic artifacts in the northwest corner of the site. Finally, Weaver identified an intact historic midden during testing in 2002.

In summary, intact subsurface deposits, historic and prehistoric, have been encountered in every portion of the Tullis site tested to date, except for an area located south of the servants' quarters. Therefore, the likelihood of encountering additional intact deposits at Tullis is considered quite high. The number of features already identified is remarkable, considering that less than 10 percent of the property has been tested to date. Known aboriginal deposits at Tullis extend to depths of 60 to 92 cmbs, while historic deposits have been identified at depths of 45 to 75 cmbs.

Finally, a newspaper article from 1939 indicates that a now unmarked cemetery may be located in or near the northeast corner of the Tullis property (Chapter 5: page 63).

Potential Issues Concerning Construction on this Site:

- The National Historic Preservation Act (NHPA) is the cornerstone of federal historic and cultural preservation policy. Its purpose is to encourage the preservation and protection of America's historic and cultural resources. NHPA created the National Register of Historic Places to give recognition to places of significance in American history, architecture, archaeology, engineering, and culture. Section 106 of NHPA requires Federal agencies to take into account the effects a project will have on historic properties and allow the Advisory Council on Historic Preservation (ACHP) the opportunity to comment on the effects of the project. FEMA activities requiring NHPA compliance include repair or restoration of historic facilities, demolition or removal of historic structures, and improved, alternate, or relocated projects affecting historic or archeological sites. FEMA is required to make a good faith effort to identify historic

properties within a given project area's potential effect.

The NHPA requires FEMA to:

- Identify historic properties that may be affected by federally funded activities to assess the effects of the proposed work on historic properties
 - Consult with the State Historic Preservation Officer (SHPO)/Tribal Historic Preservation Officer (THPO), the ACHP, and other interested parties to resolve adverse effects.
 - Proceed with the work only after completing the historic review process.
- Section 106 consultations with interested parties can be very lengthy in time and can ultimately lead to the need for a Memorandum of Agreement (MOA) between all involved parties. An MOA under Section 106 of NHPA is a legally binding document that records the terms and conditions agreed upon to resolve adverse effects of an undertaking upon historic properties. The MOA is typically the result of consultation between the agency and the SHPO/THPO regarding an assessment of adverse effects on identified historic properties after the agency has determined that its undertaking will result in adverse effects to historic properties. The MOA outlines agreed-upon measures that the Federal agency will take to avoid, minimize, or mitigate these adverse effects.
 - If archaeological monitoring is required during ground disturbing activities work would be stopped in any area if intact midden/features or large artifact concentrations are identified. The monitor would then be required to stop work and record artifacts/features when and where found. All FEMA projects that include new ground disturbance are bound by the following Inadvertent Discovery Clause:

If during the course of work, archaeological artifacts (prehistoric or historic) or human remains are discovered, the applicant shall stop work in the vicinity of the discovery and take all reasonable measures to avoid or minimize harm to the finds. The applicant shall inform their public assistance (PA) contacts in FEMA, who will in turn contact FEMA Historic Preservation Staff. Work will not proceed until FEMA Historic Preservation Staff has completed consultation with the SHPO and THPO.

(Please see attachments A & B for cost estimates)

- If human remains are discovered during ground disturbance, then all work is stopped for an indefinite period of time in order to consult with appropriate Tribes and/or agencies. Tribes have the authority to request if human remains are removed or left in place. If the remains are removed, then very lengthy and expensive archaeological excavation

will be required to remove the remains. If the remains are left in place, then the project cannot proceed in the area of the discovery.

(Please see attachments C – I for cost estimates)

- Since this site is considered eligible for the National Register of Historic Places, any disturbance or destruction of its historic or prehistoric components will be considered an "Adverse Effect" which will lead to consultation and construction delays.

FEMA has the following Policy concerning consultation with Native American Tribes:

Federal Emergency Management Agency (FEMA): a component of the U.S. Department of Homeland Security (DHS) and is periodically referred to in this document as "the Agency." The Agency's status as a component of DHS was established under the Homeland Security Act of 2002, as amended (5 U.S.C. 101 *et seq.*), effective March, 2003.

Indian Tribal Government: any Federally-recognized governing body of an Indian or Alaska Native tribe, band, nation, pueblo, village, or community that the Secretary of Interior acknowledges to exist as an Indian tribe under the Federally Recognized Tribe List Act of 1994, 25 U.S.C 479a. This does not include Alaska Native corporations, the ownership of which is vested in private individuals.

POLICY: The following policy principles define the commitment of FEMA and its employees to build a strong and lasting partnership with American Indian and Alaska Native Tribal governments. These principles direct the Agency's interactions with American Indian and Alaskan Native Tribal governments and mirror DHS' commitment to implementing E.O. 13175, Consultation and Coordination With Indian Tribal Governments, and the President's Memorandum of November 5, 2009, Tribal Consultation. FEMA recognizes the sovereign rights, authority, and unique status of Tribal Governments and is committed to working in partnership with Indian Tribes on a nation-to-nation basis. FEMA acknowledges that a concerted effort between the Agency and American Indian and Alaska Native Tribal governments is needed in order to establish regular and meaningful consultation and collaboration in the development of policies that have Tribal implications, to strengthen the United States nation-to-nation relationships with Indian Tribes, and to minimize the imposition of unfunded mandates upon Indian Tribes.

- FEMA commits to nation-to-nation relationships with American Indian and Alaska Native Tribal governments.

FEMA recognizes that the Tribal right of self-government flows from the inherent sovereignty of American Indian and Alaska Native Tribes as nations and that Federally-recognized Tribes have a unique and direct relationship with the Federal government. Native American and Alaska Native Tribal governments are not political subdivisions of States, but are recognized by the United States as distinct sovereign entities.

- **FEMA will consult, to the extent permitted by law, with American Indian and Alaska Native Tribal governments before taking actions that affect Federally-recognized Tribal governments to ensure that Tribal rights and concerns are addressed.**

FEMA recognizes that, as a sovereign government, each Tribal government sets its own priorities and goals for the welfare of its membership, which include the considerations Tribal governments make to fulfill their responsibilities to their non-Tribal residents, relatives, employees, and neighboring jurisdictions. FEMA will involve Tribal governments in consultations to seek their input on policies, programs, and issues so that they may evaluate the potential impacts for their communities.

- **FEMA acknowledges the trust responsibility of the Federal Government to American Indian and Alaska Native Tribal governments as established by specific treaties, court decisions, statutes, executive orders, regulations, and policies.**

In recognition of this trust responsibility, FEMA will evaluate the impact of policies, programs, and activities on Tribal trust resources and consider the rights and concerns of Tribal governments in its decision-making. FEMA will also assist Tribal governments, should they seek assistance, in setting priorities for the interests of their community members as it relates to FEMA programs.

- **FEMA will identify and take reasonable, appropriate steps to eliminate or diminish procedural impediments to working directly and effectively with Tribal governments.**

FEMA recognizes there may be legal, procedural, organizational, or other impediments that affect its working relationships with Tribes. FEMA will apply the requirements of Executive Order (E.O.) 13175, Consultation and Coordination With Indian Tribal Governments, the "DHS Plan to Develop a Tribal Consultation and Coordination Policy," E.O. 12875, "Enhancing the Intergovernmental Partnership," and E.O. 12866, "Regulatory Planning and Review," to design solutions and tailor Agency programs to address specific or unique needs of Tribal governments, as permitted by law.

Sources:

Boudreaux, Edmond A. III, Kelsey M. Lowe, Karen L. Mayo. 2009. "An Archaeological Survey Of The Tullis-Toledano Manor Property (22Hr911), Biloxi, Mississippi." Submitted to The Mississippi Department of Archives and History and the Federal Emergency Management Agency.

City of Biloxi – Cultural Museum Complex

FEMA (Attachment A)
Tullis-Toledano
Biloxi, MS
2 x 2 m Test Unit Estimate

TASK 1: Archaeological Fieldwork (1 2x2m TU)

Field Director	40	@	\$ 92.00	\$ 3,680.00	24 hours flt
Technician (2)	80	@	\$ 61.00	\$ 4,880.00	24 hours flt
Subtotal	120			\$ 8,660.00	

TASK 2: Laboratory Processing, Analysis, and Curation Preparation (200 artifacts)

Lab Director	12	@	\$ 92.00	\$ 1,104.00
Technicians	32	@	\$ 61.00	\$ 1,952.00
Subtotal	44			\$ 3,056.00

TASK 3: Draft and Final Report Preparation

PI	8	@	\$ 144.00	\$ 1,152.00
Field Director	60	@	\$ 92.00	\$ 5,520.00
Graphic Artist	24	@	\$ 98.00	\$ 2,352.00
Subtotal	92			\$ 9,024.00

TASK 4: Project Management

PI	8	@	\$ 144.00	\$ 1,152.00
Field Director	8	@	\$ 92.00	\$ 736.00
Lab Director	4	@	\$ 92.00	\$ 368.00
Clerical	4	@	\$ 62.00	\$ 248.00
Subtotal	24			\$ 2,504.00

EXPENSES

Airline	3	@	\$ 500.00	\$ 1,500.00
Lodging	12	@	\$ 82.00	\$ 984.00
Meals	16	@	\$ 56.00	\$ 840.00
Rental SUV	6	@	\$ 50.00	\$ 300.00
Gas				\$ 50.00
Shipping				\$ 400.00
Mileage	240	@	\$ 0.50	\$ 410.00
Parking	15	@	\$ 12.00	\$ 180.00
Curation	1	@	\$ 250.00	\$ 250.00
Equipment				\$ 250.00
Subtotal				\$ 6,184.00

GRAND TOTAL \$ 28,308.00

Assumptions:

No historic research- no historic context
 No Native American consultation
 Test Units are no greater than 1 m in depth

Soils are sandy- no compact fill deposits will be excavated- no mechanical excavation is required
No more than 200 artifacts per 2x2
Minimal feature excavation
Assumes 1 box for curation

FEMA (Attachment B)
Tullis-Toledano
Biloxi, MS
2 x 2 m Test Unit Estimate
Additional Test Unit

TASK 1: Archaeological Fieldwork (1 2x2m TU)

Field Director	24	@	\$ 92.00	\$ 2,208.00
Technician (2)	48	@	\$ 61.00	\$ 2,928.00
Subtotal	72			\$ 5,136.00

TASK 2: Laboratory Processing, Analysis, and Curation Preparation (200 artifacts)

Lab Director	12	@	\$ 92.00	\$ 1,104.00
Technicians	32	@	\$ 61.00	\$ 1,952.00
Subtotal	44			\$ 3,056.00

TASK 3: Draft and Final Report Preparation

PI	2	@	\$ 144.00	\$ 288.00
Field Director	8	@	\$ 92.00	\$ 736.00
Graphic Artist	4	@	\$ 98.00	\$ 392.00
Subtotal	14			\$ 1,416.00

TASK 4: Project Management

PI	2	@	\$ 144.00	\$ 288.00
Field Director	2	@	\$ 92.00	\$ 184.00
Lab Director	2	@	\$ 92.00	\$ 184.00
Clerical	1	@	\$ 62.00	\$ 62.00
Subtotal	7			\$ 718.00

EXPENSES

Airline	0	@	\$ 500.00	\$ -
Lodging	9	@	\$ 82.00	\$ 738.00
Meals	9	@	\$ 56.00	\$ 504.00
Rental SUV	3	@	\$ 60.00	\$ 180.00
Gas				\$ 36.00
Shipping				\$ 100.00
Mileage		@	\$ 0.50	\$ 410.00
Parking	9	@	\$ 12.00	\$ 108.00
Curation	1	@	\$ 260.00	\$ 260.00
Equipment				\$ 100.00
Subtotal				\$ 2,426.00

GRAND TOTAL \$ 12,751.00

Assumptions:

No historic research- no historic context
 No Native American consultation
 Test Units are no greater than 1 m in depth

Soils are sandy- no compact fill deposits will be excavated- no mechanical excavation is required

No more than 200 artifacts per 2x2

Minimal feature excavation

Assumes 1 box for curation

Assumes no additional travel (i.e., covered by first TU)

FEMA (Attachment C)
Tullis-Toledano
Biloxi, MS
Burial Excavation- Immediate Reburial

TASK 1: Archaeological Fieldwork (1 Individual burial)

Field Director	32	@	\$ 92.00	\$ 2,944.00	16 hours flt
Technician	32	@	\$ 61.00	\$ 1,952.00	16 hours flt
Subtotal	64			\$ 4,896.00	

TASK 2: Laboratory Analysis (0 artifacts)

Lab Director	0	@	\$ 92.00	\$ -
Technicians	0	@	\$ 61.00	\$ -
Subtotal	0			\$ -

TASK 3: Draft and Final Report Preparation

PI	16	@	\$ 144.00	\$ 2,304.00
Field Director	40	@	\$ 92.00	\$ 3,680.00
Graphic Artist	24	@	\$ 98.00	\$ 2,352.00
Subtotal	80			\$ 8,336.00

TASK 4: Project Management

PI	8	@	\$ 144.00	\$ 1,152.00
Field Director	8	@	\$ 92.00	\$ 736.00
Clerical	4	@	\$ 62.00	\$ 248.00
Subtotal	20			\$ 2,136.00

EXPENSES

Airline	2	@	\$ 500.00	\$ 1,000.00
Lodging	6	@	\$ 82.00	\$ 492.00
Meals	8	@	\$ 56.00	\$ 448.00
Rental SUV	4	@	\$ 60.00	\$ 240.00
Gas				\$ 50.00
Shipping				\$ 400.00
Mileage	180	@	\$ 0.60	\$ 108.00
Parking	8	@	\$ 12.00	\$ 96.00
Equipment				\$ 260.00
Subtotal				\$ 3,386.00

GRAND TOTAL \$ 18,764.00

Assumptions:

No historic research- no historic context
 No Native American consultation
 Single, simple burial (i.e., not multiple or complex burial)
 Human remains immediately reburied
 No artifacts or human remains will be analyzed or curated

Soils are sandy- no compact fill deposits will be excavated- no mechanical excavation is required
Brief report of excavation only
No osteologist

FEMA (Attachment D)
Tullis-Toledano
Biloxi, MS
Burial Excavation- Immediate Reburial
Additional Burial

TASK 1: Archaeological Fieldwork (1 individual burial)

Field Director	16	@	\$ 92.00	\$ 1,472.00
Technician	16	@	\$ 61.00	\$ 976.00
Subtotal	16			<u>\$ 2,448.00</u>

TASK 2: Laboratory Analysis (0 artifacts)

Lab Director	0	@	\$ 92.00	\$ -
Technicians	0	@	\$ 61.00	\$ -
Subtotal	0			<u>\$ -</u>

TASK 3: Draft and Final Report Preparation

PI	4	@	\$ 144.00	\$ 576.00
Field Director	8	@	\$ 92.00	\$ 736.00
Graphic Artist	8	@	\$ 98.00	\$ 784.00
Subtotal	20			<u>\$ 2,096.00</u>

TASK 4: Project Management

PI	2	@	\$ 144.00	\$ 288.00
Field Director	2	@	\$ 92.00	\$ 184.00
Clerical	2	@	\$ 62.00	\$ 124.00
Subtotal	6			<u>\$ 596.00</u>

EXPENSES

Airline	2	@	\$ 500.00	\$ 1,000.00
Lodging	4	@	\$ 82.00	\$ 328.00
Meals	4	@	\$ 56.00	\$ 224.00
Rental SUV	2	@	\$ 60.00	\$ 120.00
Gas				\$ 30.00
Shipping				\$ 400.00
Mileage		@	\$ 0.50	\$ 410.00
Parking	4	@	\$ 12.00	\$ 48.00
Equipment				<u>\$ 100.00</u>
Subtotal				<u>\$ 2,660.00</u>

GRAND TOTAL \$ 7,800.00

Assumptions:

No historic research- no historic context
 No Native American consultation
 Single, simple burial (i.e., not multiple or complex burial)
 Human remains immediately reburied
 No artifacts or human remains will be analyzed or curated

Soils are sandy- no compact fill deposits will be excavated- no mechanical excavation is required

Brief report of excavation only

Assumes no additional travel (i.e., covered by first burial)

No osteologist

FEMA (Attachment E)
Tullis-Toledano
Bilox, MS
Burial Excavation- Basic Analysis

TASK 1: Archaeological Fieldwork (1 individual burial)

Field Director	40	@	\$ 92.00	\$ 3,680.00	24 hours flt
Technician	40	@	\$ 61.00	\$ 2,440.00	24 hours flt
Subtotal	80			\$ 6,120.00	

TASK 2: Laboratory Analysis (50 artifacts + human remains)

Lab Director	80	@	\$ 92.00	\$ 7,360.00
Osteologist	12	@	\$ 144.00	\$ 1,728.00
Technicians	12	@	\$ 61.00	\$ 732.00
Subtotal	104			\$ 9,820.00

TASK 3: Draft and Final Report Preparation

PI/Osteologist	16	@	\$ 144.00	\$ 2,304.00
Field Director	60	@	\$ 92.00	\$ 5,520.00
Graphic Artist	40	@	\$ 98.00	\$ 3,920.00
Subtotal	116			\$ 11,744.00

TASK 4: Project Management

PI	8	@	\$ 144.00	\$ 1,152.00
Field Director	8	@	\$ 92.00	\$ 736.00
Lab Director	4	@	\$ 92.00	\$ 368.00
Clerical	2	@	\$ 62.00	\$ 124.00
Subtotal	22			\$ 2,380.00

EXPENSES

Airline	2	@	\$ 500.00	\$ 1,000.00
Lodging	8	@	\$ 82.00	\$ 656.00
Meals	10	@	\$ 56.00	\$ 560.00
Rental SUV	5	@	\$ 60.00	\$ 300.00
Gas				\$ 50.00
Shipping				\$ 400.00
Mileage	160	@	\$ 0.50	\$ 80.00
Parking	10	@	\$ 12.00	\$ 120.00
Curation	2	@	\$ 250.00	\$ 500.00
Equipment				\$ 250.00
Subtotal				\$ 4,246.00

GRAND TOTAL \$ 34,310.00

Assumptions:

No historic research- no historic context
 No Native American consultation

Single, simple burial (i.e., not multiple or complex burial)

Basic osteological analysis (e.g., age and sex if possible)

No more than 50 artifacts

Soils are sandy- no compact fill deposits will be excavated- no mechanical excavation is required

No osteologist in field

Assumes 2 boxes for curation

FEMA (Attachment F)
Tullis-Toledano
Biola, MS
Burial Excavation- Basic Analysis
Additional Burial

TASK 1: Archaeological Fieldwork (1 Individual burial)

Field Director	24	@	\$ 92.00	\$ 2,208.00
Technician	24	@	\$ 61.00	\$ 1,464.00
Subtotal	48			\$ 3,672.00

TASK 2: Laboratory Analysis (50 artifacts + human remains)

Lab Director	80	@	\$ 92.00	\$ 7,360.00
Osteologist	12	@	\$ 144.00	\$ 1,728.00
Technicians	12	@	\$ 61.00	\$ 732.00
Subtotal	104			\$ 9,820.00

TASK 3: Draft and Final Report Preparation

PI/Osteologist	4	@	\$ 144.00	\$ 576.00
Field Director	16	@	\$ 92.00	\$ 1,472.00
Graphic Artist	16	@	\$ 98.00	\$ 1,568.00
Subtotal	36			\$ 3,616.00

TASK 4: Project Management

PI	2	@	\$ 144.00	\$ 288.00
Field Director	2	@	\$ 92.00	\$ 184.00
Lab Director	2	@	\$ 92.00	\$ 184.00
Clerical	2	@	\$ 62.00	\$ 124.00
Subtotal	8			\$ 780.00

EXPENSES

Airline	2	@	\$ 500.00	\$ 1,000.00
Lodging	6	@	\$ 82.00	\$ 492.00
Meals	6	@	\$ 56.00	\$ 336.00
Rental SUV	3	@	\$ 60.00	\$ 180.00
Gas				\$ 35.00
Shipping				\$ 400.00
Mileage		@	\$ 0.50	\$ 410.00
Parking	6	@	\$ 12.00	\$ 72.00
Curator	2	@	\$ 250.00	\$ 500.00
Equipment				\$ 100.00
Subtotal				\$ 3,625.00

GRAND TOTAL \$ 21,413.00

Assumptions:

No historic research- no historic context
 No Native American consultation

Single, simple burial (i.e., not multiple or complex burial)

Basic osteological analysis (e.g., age and sex if possible)

No more than 50 artifacts

Soils are sandy- no compact fill deposits will be excavated- no mechanical excavation is required

Assumes no additional travel (i.e., covered by first burial)

No osteologist in field

Assumes 2 boxes for curation

FEMA (Attachment G)
Tullis-Toledano
Biloxi, MS
Burial Excavation- Detailed Analysis

TASK 1: Archaeological Fieldwork (1 individual burial)

PI/Osteologist	40	@	\$ 144.00	\$	5,760.00	24 hours flt
Field Director	40	@	\$ 92.00	\$	3,680.00	24 hours flt
Technician	40	@	\$ 61.00	\$	2,440.00	24 hours flt
Subtotal	120			\$	11,880.00	

TASK 3: Laboratory Analysis (50 artifacts + human remains)

Lab Director	80	@	\$ 92.00	\$	7,360.00
Osteologist	20	@	\$ 144.00	\$	2,880.00
Technicians	12	@	\$ 61.00	\$	732.00
Subtotal	112			\$	10,972.00

TASK 4: Draft and Final Report Preparation

PI/Osteologist	20	@	\$ 144.00	\$	2,880.00
Field Director	72	@	\$ 92.00	\$	6,624.00
Graphic Artist	48	@	\$ 98.00	\$	4,704.00
Subtotal	140			\$	14,208.00

TASK 5: Project Management

PI	8	@	\$ 144.00	\$	1,152.00
Field Director	8	@	\$ 92.00	\$	736.00
Lab Director	4	@	\$ 92.00	\$	368.00
Clerical	2	@	\$ 62.00	\$	124.00
Subtotal	22			\$	2,380.00

EXPENSES

Airline	3	@	\$ 500.00	\$	1,500.00
Lodging	12	@	\$ 82.00	\$	984.00
Meals	15	@	\$ 56.00	\$	840.00
Rental SUV	5	@	\$ 60.00	\$	300.00
Gas				\$	60.00
Shipping				\$	400.00
Mileage	240	@	\$ 0.60	\$	410.00
Parking	15	@	\$ 12.00	\$	180.00
Curation	2	@	\$ 250.00	\$	600.00
Equipment				\$	250.00
Subtotal				\$	5,414.00

GRAND TOTAL \$ 44,854.00

Assumptions:

No historic research- no historic context

No Native American consultation

Single, simple burial (i.e., not multiple or complex burial)

Detailed osteological analysis (e.g., age, sex, and pathology, if possible)

No more than 60 artifacts

Soils are sandy- no compact fill deposits will be excavated- no mechanical excavation is required

Osteologist in field and lab

Assumes 2 boxes for curation

FEMA (Attachment H)
Tullis-Toledano
Biloxi, MS
Burial Excavation- Detailed Analysis
Additional Burial

TASK 1: Archaeological Fieldwork (1 individual burial)

PI/Osteologist	24	@	\$ 144.00	\$	3,456.00
Field Director	24	@	\$ 92.00	\$	2,208.00
Technician	24	@	\$ 61.00	\$	1,464.00
Subtotal	72			\$	7,128.00

TASK 3: Laboratory Analysis (60 artifacts + human remains)

Lab Director	80	@	\$ 92.00	\$	7,360.00
Osteologist	20	@	\$ 144.00	\$	2,880.00
Technicians	12	@	\$ 61.00	\$	732.00
Subtotal	112			\$	10,972.00

TASK 4: Draft and Final Report Preparation

PI/Osteologist	4	@	\$ 144.00	\$	576.00
Field Director	16	@	\$ 92.00	\$	1,472.00
Graphic Artist	16	@	\$ 98.00	\$	1,568.00
Subtotal	36			\$	3,616.00

TASK 5: Project Management

PI	2	@	\$ 144.00	\$	288.00
Field Director	2	@	\$ 92.00	\$	184.00
Lab Director	2	@	\$ 92.00	\$	184.00
Clerical	2	@	\$ 62.00	\$	124.00
Subtotal	8			\$	780.00

EXPENSES

Airline	3	@	\$ 500.00	\$	1,500.00
Lodging	12	@	\$ 82.00	\$	984.00
Meals	15	@	\$ 56.00	\$	840.00
Rental SUV	3	@	\$ 60.00	\$	180.00
Gas				\$	35.00
Shipping				\$	400.00
Mileage		@	\$ 0.50	\$	410.00
Parking	9	@	\$ 12.00	\$	108.00
Curation	2	@	\$ 250.00	\$	500.00
Equipment				\$	100.00
Subtotal				\$	6,067.00

GRAND TOTAL \$ 27,553.00

Assumptions:

No historic research- no historic context

No Native American consultation

Single, simple burial (i.e., not multiple or complex burial)

Detailed osteological analysis (e.g., age, sex, and pathology, if possible)

No more than 50 artifacts

Soils are sandy- no compact fill deposits will be excavated- no mechanical excavation is required

Assumes no additional travel (i.e., covered by first burial)

Osteologist in field and lab

Assumes 2 boxes for curation

**Cost Estimate for Individual Burials If Found
(Attachment I)**

Single Burial:

\$18,754.00 – to excavate and reburial only.

\$53,064.00 – to excavate with basic analysis and reburial.

\$63,608.00 – to excavate with detailed analysis and reburial.

Additional Burials if the Archaeological Crew is still on site:

\$7,800.00 - to excavate and reburial only.

\$29,213.00 - to excavate with basic analysis and reburial.

\$35,353.00 - to excavate with detailed analysis and reburial.