NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SERVICE
ESTABLISHING A GULF OF MEXICO DISASTER RESPONSE CENTER
ENVIRONMENTAL ASSESSMENT

Final Report

June 5, 2009

Prepared by
Tetra Tech EM Inc.

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ACRONYMS AND ABBREVIATIONS

ACAMP	Alabama's Coastal Area Management Program
ADCNR	Alabama Department of Conservation and Natural Resources
ADEM	Alabama Department of Environmental Management
AHC	Alabama Historical Commission
AL	Alabama
ALDOT	Alabama Department of Transportation
AOS	Alabama Ornithological Society
APE	Area of Potential Effect
AQI	Air Quality Index
AST	Aboveground storage tank
BMP	Best management practices
CCMA	Center for Coastal Monitoring and Assessment
CEQ	Council on Environmental Quality
CFC	Chlorofluorocarbon
CFR	Code of Federal Regulations
CO	Carbon monoxide
CWA	Clean Water Act
dB	Decibel
EA	Environmental Assessment
EFH	Essential Fish Habitat
EMA	Emergency Management Agency
EO	Executive Order
EPA	Environmental Protection Agency
ESA	Endangered Species Act
FCC	Federal Communications Commission
FEMA	Federal Emergency Management Agency
FIRM	Flood insurance rate maps
GIS	Geographic Information Systems
GoMDRC	Gulf of Mexico Disaster Response Center
HVAC	Heating, Ventilation, and Air-Conditioning
kw	Kilowatt
LEED®	Leadership in Energy and Environmental Design
MAWSS	Mobile Area Water and Sewer System
MCCC	Mobile County Communications Center-911
MCEMA	Mobile County Emergency Management Agency
NAAQS	National Ambient Air Quality Standards
NAO	NOAA Administrative Order
NEPA	National Environmental Policy Act

NHPA	National Historic Preservation Act
NO_2	Nitrogen dioxide
NO_x	Nitrogen oxides
NOAA	National Oceanic and Atmospheric Administration
NOI	Notice of Intent
NOS	National Ocean Service
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NWI	National Wetlands Inventory
O_3	Ozone
Pb	Lead
ppm	Parts per million
PM	Particulate matter
PM_{10}	PM less than or equal to 10 micrometers in diameter
POTW	Publicly Owned Treatment Works
RCRA	Resource Conservation and Recovery Act
sf	Square feet
SHPO	State Historic Preservation Officer
SO_2	Sulfur dioxide
SPCC	Spill Prevention Control and Countermeasure Plan
SWPPP	Storm Water Pollution Prevention Plan
TES	Threatened and endangered species
TMDL	Total maximum daily loads
$\mu g/m^3$	Micrograms per cubic meter
U.S.	United States
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
UST	Underground storage tank
VOC	Volatile organic compounds

EXECUTIVE SUMMARY

This document is an environmental assessment (EA) for the United States (U.S.) National Oceanic and Atmospheric Administration's (NOAA) National Ocean Service (NOS). This EA assesses potential impacts from implementing the Proposed Action – a Gulf of Mexico Disaster Response Center (GoMDRC) – at various alternative sites in Mobile, Alabama (AL); it also assesses the No Action Alternative.

This EA complies with requirements set forth under the National Environmental Policy Act (NEPA) of 1969, in accordance with the regulations of the Council on Environmental Quality (CEQ) for implementation of NEPA (Title 40 *Code of Federal Regulations* [CFR] parts 1500 through 1508 [CEQ, 1992]) and NOAA Administrative Order (NAO) 216-6 (NOAA 1999), which describes NOAA's policies, requirements, and procedures for complying with NEPA and the regulations for implementation. NOAA, as the lead federal agency under NEPA and in accordance with the regulations of the CEQ, has prepared this EA to assess potential impacts on the natural and manmade environment, and to support decision-making.

PURPOSE AND NEED

The purpose of the EA is to support regional and national planning, preparedness, response, and recovery activities resulting from natural or human-induced emergencies.

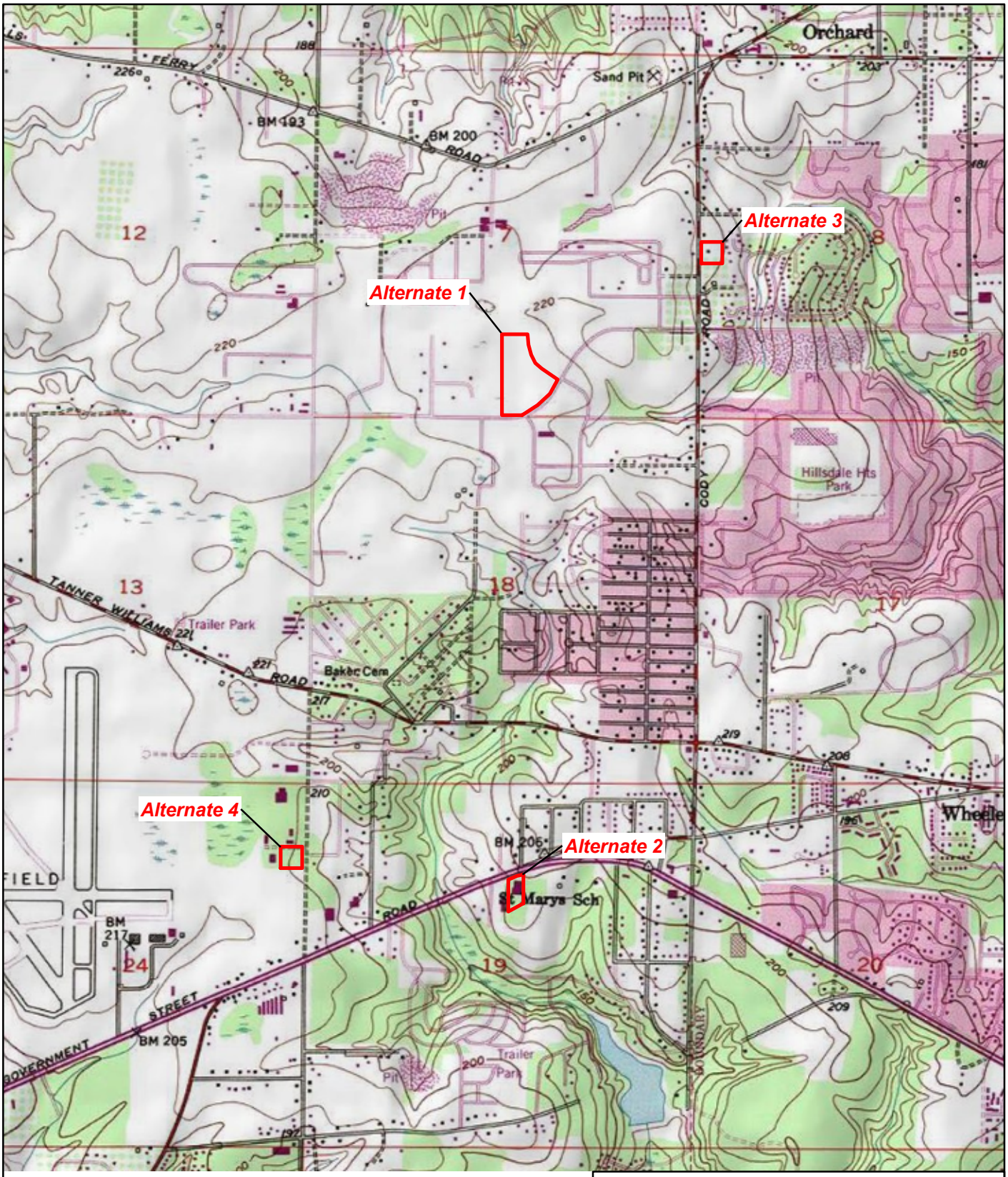
The need is related to the new and expanded federal requirements for all-hazards response. These can be met through NOAA's scientific assets and personnel, which are capable of supporting a wide variety of emergency scenarios involving severe weather incidents, maritime accidents, oil spills, harmful algal blooms, fishery disasters, and other coastal emergencies. NOAA is first and foremost a science agency. But NOAA's mission also is to efficiently reduce human risk, as well as environmental and economic consequences, resulting from natural or human-induced emergencies. Indeed, new and expanded federal requirements for all-hazards response, as well as increased public expectations of the Federal Government, call for all federal agencies to support regional and national planning, preparedness, response, and recovery activities.

PROPOSED ACTIONS AND ALTERNATIVES

The Proposed Action is to establish a GoMDRC in or near Mobile, AL. Proposed site alternatives in or near Mobile are shown on Figure ES-1. Mobile also is the location of tropical weather monitoring programs affiliated with NOAA, including the University of South Alabama and the Dauphin Island Sea Lab. Co-location of these programs and the GoMDRC would strengthen the Gulf of Mexico's defense and awareness capabilities to better protect lives, property, and natural resources from natural disasters. A no action alternative was also evaluated.

FINDINGS TO BE DETERMINED

This EA documents the intentions (Proposed Action) of NOAA and will serve as a tool to determine whether the Proposed Action (1) would significantly impact the human environment and therefore trigger need to prepare an environmental impact statement (EIS) or (2) would not significantly impact the human environment, necessitating a documented finding of no significant impact (FONSI).



Source: USGS Spring Hill, AL 7.5 Minute Topo Quad, 1982

Gulf of Mexico Disaster Response Center
Proposed Locations
Mobile, Alabama

Figure ES1

Site Location Map

TETRA TECH EM INC.

Date: 01/21/09 Drawn By: Ingrid Tobar Project No: G1278.4.0019.02

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SUMMARY OF ENVIRONMENTAL IMPACTS

The Proposed Action, its components, and the no action alternative were evaluated to determine potential impacts to the human and natural environments, including environmental, cultural, and socioeconomic resources. Relevant impacts are defined as follows:

- **Direct impacts** are those impacts that occur at the same time and place as the Proposed Action.
- **Indirect impacts** are those impacts caused or induced by the Proposed Action that occur later in time or are removed in distance from the time and location of the Proposed Action.
- **Cumulative impacts** are those impacts that result from the incremental effect of the Proposed Action, in combination with other past, present, or reasonably foreseeable future actions.

A qualitative assessment was conducted for the following: (1) direct short- and long-term impacts, (2) indirect short- and long-term impacts, and (3) cumulative impacts. The terms used in the qualitative assessment are no impact, not a significant impact, or a significant impact. The impacts that are not significant are defined further by the terms minor and moderate impacts, and the significant impacts are defined further by the terms major and severe impacts.

Table ES-1 presents a summary of the environmental impacts of the Proposed Action and the no action alternative for each issue type.

CONCLUSIONS

This EA concludes that the Proposed Action at the preferred location would result in no significant adverse impacts on the resources examined herein. The Proposed Action would cause short-term minor adverse impacts to several of the resources of the proposed area, which would be reduced through mitigation measures. Therefore, preparation of an environmental impact statement (EIS) is not warranted at this time. This decision will be documented for public record by formal submission of a finding of no significant impact (FONSI).

TABLE ES-1
SUMMARY OF POTENTIAL IMPACTS

Resource Topic	Alternative 1 (Preferred Location): Parcel to the West of 7340 Zeigler Boulevard, Mobile, AL 36608	Alternative 2: 7431 Airport Boulevard, Mobile, AL 36616	Alternative 3: 1000 Cody Road, Mobile, AL 36608	Alternative 4: 140 Schillinger Road, Mobile, AL 36608	No Action Alternative
LOCATION AND LAND USE					
Location and Land Use	Minor impacts associated with clearing of the wooded area and increased impermeable land due to construction of the structures. Reevaluation of land use zoning would not be required.	Minor impacts associated with infrastructural improvement of the current structures to become capable of withstanding level 5 hurricane and tornado conditions. Reevaluation of land use zoning would not be required.	Impacts associated with clearing of several substantial live oak trees present on site and fragmentation of existing wooded area. Reevaluation of land use zoning would not be required.	No impacts on land use because the site is located in a commercially developed area and the site was previously developed as a mobile home sales lot. Reevaluation of land use zoning would not be required.	No major impacts on location and land use. However, these sites are zoned as Commercial Business District and would likely be developed by another entity imposing similar impacts on land use as the Proposed Action.
GEOLOGY AND SOIL RESOURCES					
Geology	No impacts on regional geology; minimal impacts on local geology for constructing building to withstand level 5 hurricanes and tornados.	No impacts on regional geology; minimal impacts on local geology for renovating existing structures to withstand level 5 hurricanes and tornados.	No impacts on regional geology; minimal impacts on local geology for constructing building to withstand level 5 hurricanes and tornados.	No impacts on regional geology; minimal impacts on local geology for constructing building to withstand level 5 hurricanes and tornados.	No impacts on local and regional geology.
Soils	Temporary impacts would occur during construction through compaction of the soil and increased runoff. The subsoil would be impacted by the weight of the building, causing decreased water capacity and permeability.	Minimal impacts on subsoil because the site has already been paved and developed with structures. The impacts could be greater if the paved area were to be replaced or removed.	Temporary impacts would occur through compaction of the soil, increased runoff, decreased water capacity, and permeability of the area under the building.	Minimal impacts on subsoil because the site has already been paved with a layer of gravel. Temporary impacts would occur through increased runoff, decreased water capacity, and permeability of the area under the building.	No impacts on soil.

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WATER RESOURCES					
Groundwater	Minor impacts from the potential stormwater runoff, fuel tanks, and emergency generator.	Minor impacts from the potential stormwater runoff, fuel tanks, and emergency generator.	Minor impacts from the potential stormwater runoff, fuel tanks, and emergency generator.	Minor impacts from the potential stormwater runoff, fuel tanks, and emergency generator.	No impacts on groundwater.
Surface Water	Adverse, direct, short-term and minor impacts because of increases in local erosion and surface runoff during construction, causing increased turbidity and elevated sediments.	Adverse, direct, short-term and minor impacts because of increases in local erosion and surface runoff during construction, causing increased turbidity and elevated sediments.	Adverse, direct, short-term and minor impacts because of increases in local erosion and surface runoff during construction, causing increased turbidity and elevated sediments.	Adverse, direct, short-term and minor impacts because of increases in local erosion and surface runoff during construction, causing increased turbidity and elevated sediments.	No impacts on surface water.
BIOLOGICAL RESOURCES					
Flora and Fauna	Adverse, direct, long-term, minor impacts on the vegetation and terrestrial wildlife in the immediate vicinity, due to loss of vegetation and habitat. Minor impacts on fauna from construction noise pollution.	Minor, indirect, short-term impacts on fauna located on adjacent properties from construction noise pollution.	Adverse, direct, long-term, minor impacts on the vegetation and terrestrial wildlife in the immediate vicinity, due to loss of vegetation and habitat. Minor impacts on fauna from construction noise pollution.	Adverse, indirect, short-term and minor impacts on flora and fauna located on the adjacent properties from the construction noise pollution.	No impacts on flora and fauna.
Threatened, Endangered, and Sensitive Species	No adverse impacts on the listed species. Indication of the presence of listed species was not observed during the site reconnaissance.	No adverse impacts on the listed species. Indication of the presence of listed species was not observed during the site reconnaissance.	No adverse impacts on the listed species. Indication of the presence of listed species was not observed during the site reconnaissance.	No adverse impacts on the listed species. Indication of the presence of listed species was not observed during the site reconnaissance.	No impacts on the listed species.
Insects, Disease, and Other Exotic Organisms	Minimal, temporary impacts during construction activities.	Minimal, temporary impacts during construction activities.	Minimal, temporary impacts during construction activities.	Minimal, temporary impacts during construction activities.	No impacts on or caused by insects, disease, and other exotic organisms.

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AIR RESOURCES					
Air Quality	Temporary impacts due to fugitive emission of dust and diesel exhaust during construction. Minimal impacts from the operation of a diesel generator.	Temporary impacts due to fugitive emission of dust and diesel exhaust during construction. Minimal impacts from the operation of a diesel generator.	Temporary impacts due to fugitive emission of dust and diesel exhaust during construction. Minimal impacts from the operation of a diesel generator.	Temporary impacts due to fugitive emission of dust and diesel exhaust during construction. Minimal impacts from the operation of a diesel generator.	No impacts on air quality.
Noise	Temporary, short-duration noise impacts to local residents and adjacent businesses during construction. Minimal impacts from day-to-day operation of the facility.	Temporary, short-duration noise impacts to local residents and adjacent businesses during construction. Minimal impacts from day-to-day operation of the facility.	Temporary, short-duration noise impacts to local residents and adjacent businesses during construction. Minimal impacts from day-to-day operation of the facility.	Temporary, short-duration noise impacts to local residents and adjacent businesses during construction. Minimal impacts from day-to-day operation of the facility.	No impacts on or resulting from noise pollution.
CULTURAL AND HISTORIC RESOURCES					
Cultural and Historic Resources	No impacts. No cultural or historic resources are located within a 1-mile radius.	No impacts. No cultural or historic resources are located within a 1-mile radius.	No impacts. No cultural or historic resources are located within a 1-mile radius.	No impacts. Cultural and historic resources are within a 1-mile radius.	No impacts on cultural and historic resources.
SOCIOECONOMIC AND MAN-MADE RESOURCES					
Socioeconomic Resources	Minor, short-term, beneficial impacts on the economy of the local area from creation of construction jobs and long-term effects from the facility to support emergency response.	Minor, short-term, beneficial impacts on the economy of the local area from creation of construction jobs and long-term effects from the facility to support emergency response.	Minor, short-term, beneficial impacts on the economy of the local area from creation of construction jobs and long-term effects from the facility to support emergency response.	Minor, short-term, beneficial impacts on the economy of the local area from creation of construction jobs and long-term effects from the facility to support emergency response.	Negative impacts on the local economy because additional construction jobs would not be created.

Resource Topic	Alternative 1 (Preferred Location): Parcel to the West of 7340 Zeigler Boulevard, Mobile, AL 36608	Alternative 2: 7431 Airport Boulevard, Mobile, AL 36616	Alternative 3: 1000 Cody Road, Mobile, AL 36608	Alternative 4: 140 Schillinger Road, Mobile, AL 36608	No Action Alternative
Transportation	Minor temporary increase of traffic on Zeigler Blvd. between Cody Road and Schillinger Road during construction activities. Minor permanent traffic increase due to staff members commuting to the office and during emergency events.	Minor temporary increase of traffic on Airport Blvd. and during construction of a driveway from Zeigler Blvd. to the parking lot. Minor permanent traffic increase due to staff members commuting to the office and during emergency events.	Minor temporary increase in traffic on Cody Road between Zeigler Blvd. and E. Vincent Road during construction. Minor permanent traffic increase due to staff members commuting to the office and during emergency events.	Minor temporary increase in traffic on Schillinger Road between Airport Boulevard and Old Shell Road during construction activities. Minor permanent traffic increase due to staff members commuting to the office and during emergency events.	No traffic increases. There would be no construction activities and no office to staff.
Utilities	Proposed use of existing utilities would be within current capacities. Minor positive impacts due to income generated by the use of local utilities.	Proposed use of existing utilities would be within current capacities. Minor positive impacts due to income generated by the use of local utilities.	Proposed use of existing utilities would be within current capacities. Minor positive impacts due to income generated by the use of local utilities.	Proposed use of existing utilities would be within current capacities. Minor positive impacts due to income generated by the use of local utilities. The functionality of the drainage ditch that runs along Eads Casa Drive would not be affected.	Minor negative impacts. No additional income would be generated for the local utility companies.
Hazardous Materials and Solid Waste	Minor impacts due to the proposed use of diesel operated emergency generator, storage of fuel, and general office cleaning products. Solid waste generated during the operation of the facility would cause minor impacts.	Minor impacts due to the proposed use of diesel operated emergency generator, storage of fuel, and general office cleaning products. Solid waste generated during the operation of the facility would cause minor impacts.	Minor impacts due to the proposed use of diesel operated emergency generator, storage of fuel, and general office cleaning products. Solid waste generated during the operation of the facility would cause minor impacts.	Minor impacts due to the proposed use of diesel operated emergency generator, storage of fuel, and general office cleaning products. Solid waste generated during the operation of the facility would cause minor impacts.	No impacts from hazardous materials and solid wastes.

Resource Topic	Alternative 1 (Preferred Location): Parcel to the West of 7340 Zeigler Boulevard, Mobile, AL 36608	Alternative 2: 7431 Airport Boulevard, Mobile, AL 36616	Alternative 3: 1000 Cody Road, Mobile, AL 36608	Alternative 4: 140 Schillinger Road, Mobile, AL 36608	No Action Alternative
Recreational Resources	No impacts on the proposed site as there are no public recreational resources on-site. Minimal positive impacts on the adjacent fairgrounds due to addition of staff and increased fair revenue.	No impacts on the proposed site as there are no recreational resources on the site. The adjacent residential area would be disrupted during construction and emergency events.	No impacts on the proposed site as there are no public recreational resources on-site. Minimal positive impacts on the adjacent fairgrounds due to addition of staff and increased fair revenue.	No impacts on the proposed site as there are no public recreational resources on-site.	No impacts on recreational resources.
Visual and Aesthetic Resources	Negligible impacts because of the existing commercial development in the surrounding area.	Minor positive effect on the aesthetics of the area because of the renovation of the existing older building.	Negligible impacts because of the small size of the footprint of the proposed project, and the expected tree line buffer that would be left between the new facility and the adjacent residential community.	Negligible impacts because the area is highly commercialized and the site is already cleared and paved.	No impacts on visual and aesthetic resources.

1.0 INTRODUCTION

This document is an environmental assessment (EA) for the United States (U.S.) National Oceanic and Atmospheric Administration's (NOAA) National Ocean Service (NOS). This EA assesses potential impacts from implementing the Proposed Action – a Gulf of Mexico Disaster Response Center (GoMDRC) – at various alternative sites in Mobile, Alabama (AL); it also assesses the No Action Alternative.

This EA complies with requirements set forth under the National Environmental Policy Act (NEPA) of 1969, in accordance with the regulations of the Council on Environmental Quality (CEQ) for implementation of NEPA (Title 40 *Code of Federal Regulations* [CFR] parts 1500 through 1508 [CEQ, 1992]) and NOAA Administrative Order (NAO) 216-6 (NOAA 1999), which describes NOAA's policies, requirements, and procedures for complying with NEPA and the regulations for implementation. NOAA, as the lead federal agency under NEPA and in accordance with the regulations of the CEQ, has prepared this EA to assess potential impacts on the natural and manmade environment, and to support decision-making.

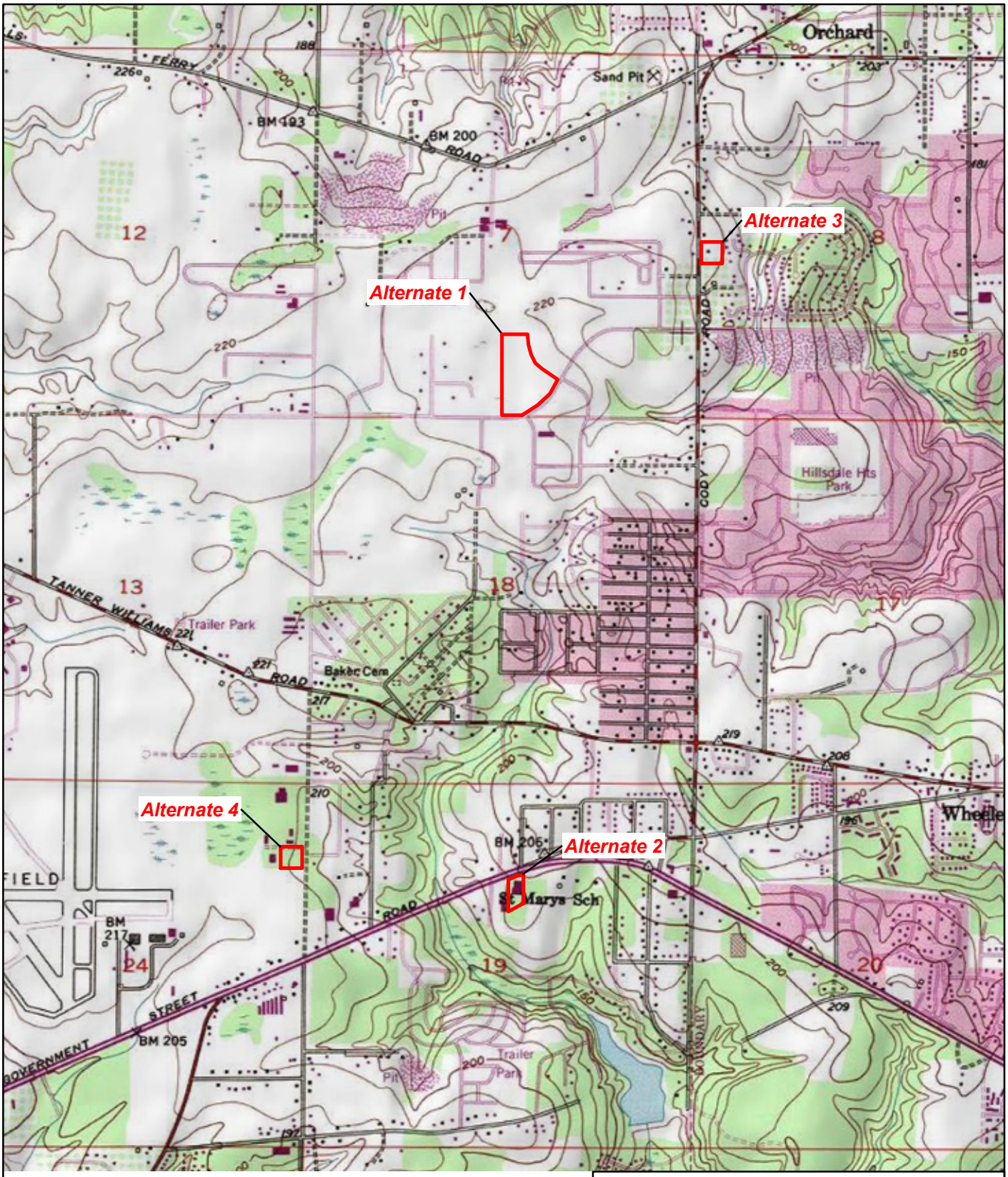
This section describes the project location, overviews the proposed project, specifies the project purpose and need, describes permits required, and presents the scope of the environmental review in this EA.

1.1 PROJECT LOCATION AND GENERAL DESCRIPTION

The Proposed Action is to establish a GoMDRC in or near Mobile, AL. Proposed site alternatives in or near Mobile are shown on Figure 1. Mobile also is the location of tropical weather monitoring programs affiliated with NOAA, including the University of South Alabama and the Dauphin Island Sea Lab. Co-location of these programs and the GoMDRC would strengthen the Gulf of Mexico's defense and awareness capabilities to better protect lives, property, and natural resources from natural disasters.

NOAA has specified a number of criteria by which to identify project location alternatives, and has documented use of those criteria in a Site Alternatives Study that scoped potential sites in Mobile (NOAA 2008a). The facility is to be used as a "home base" for day-to-day business, training, and actual disaster response activities. Therefore, it must be located near government facilities and amenities such as hotels, the airport, residential complexes, schools, and additional infrastructure that the City of Mobile and the surrounding area have to offer. The area of the site must exceed 1 acre and be located outside of flood and storm surge zones.

The facility must be capable of withstanding level 5 hurricane or tornado conditions. In addition, the facility is to encompass at least 15,400 square feet (sf) with 1,000 sf storage for a trailered vessel. Adequate space for daily parking and equipment needs for approximately 15 full-time employees is required. During an event, up to 100 to 150 people could use the facility; design of the building should accommodate this number of people within the square footage indicated above. Off-site parking is anticipated for vehicles used by people coming to the facility during an event.



N

0 1,000 2,000

Feet

Source: USGS Spring Hill, AL 7.5 Minute Topo Quad, 1982

Gulf of Mexico Disaster Response Center
Proposed Locations
Mobile, Alabama

Figure 1

Site Location Map

TETRA TECH EM INC.

Date: 01/21/09 Drawn By: Ingrid Tobar Project No: G1278.4.0019.02

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1.2 PROJECT PURPOSE AND NEED FOR ACTION

The purpose of the EA is to support regional and national planning, preparedness, response, and recovery activities resulting from natural or human-induced emergencies.

The need is related to the new and expanded federal requirements for all-hazards response. These can be met through NOAA's scientific assets and personnel, which are capable of supporting a wide variety of emergency scenarios involving severe weather incidents, maritime accidents, oil spills, harmful algal blooms, fishery disasters, and other coastal emergencies. NOAA is first and foremost a science agency. But NOAA's mission also is to efficiently reduce human risk, as well as environmental and economic consequences, resulting from natural or human-induced emergencies. Indeed, new and expanded federal requirements for all-hazards response, as well as increased public expectations of the Federal Government, call for all federal agencies to support regional and national planning, preparedness, response, and recovery activities.

The Gulf of Mexico is particularly vulnerable to disasters that stem from frequent hurricanes and other severe weather events; the pollution potential of its oil industry; its fragile ecosystem; the large number of its economically critical ports, waterways, and fishing industries; complex hurricane evacuation scenarios; and numerous preparedness and response activities. The GoMDRC would serve as a physical location for consolidating and coordinating staff, resources, and programmatic capability to provide NOAA scientific expertise throughout the Gulf of Mexico region. NOAA's scientific support includes geo-spatial and remote sensing data; oceanic and atmospheric modeling, forecasts, and observations; incident-specific weather forecasts; and emergency response training before, during, and after emergency events. The consolidation of NOAA's assets and personnel would provide greater synergy and integration across the agency and improve delivery of NOAA products and services in the Gulf region. The establishment of the GoMDRC also would result in improved mission performance and long-term operational savings. By avoiding, minimizing, and responding to the impacts of these emergencies, NOAA would be able to better protect lives, property, and natural resources.

The GoMDRC is intended to provide access to NOAA resources, as well as assets and expertise to support planning for, mitigating against, responding to, and recovering from a natural or man-made disaster. Primary daily activities would include coordinating with emergency managers and coastal planners on development and application of NOAA assets; training resource managers, emergency managers, and other state and local decision makers on NOAA products; and exercising NOAA assets in conjunction with regional response agencies in preparation for a disaster event. Depending on the location selected, either a new building would be constructed or an existing one would be used. The building would require approximately 15,000 sf and would consist of the following spaces:

- Lobby, media entrance (635 sf)
- Response operations area (6,525 sf)
- Administrative office (3,870 sf)
- Support spaces (2,192 sf)
- Other support spaces (1,778 sf).

Under the Proposed Action, NOAA intends to pursue Leadership in Energy and Environmental Design (LEED®) certification or meet the requirements of Executive Order (EO) 13423 for constructing the GoMDRC. LEED® is a set of voluntary, national standards for developing buildings that capitalize on today's innovative technologies and practices. By application of these emerging technologies and

methods, buildings can be designed and constructed to be more energy efficient and to minimize impacts on the environment.

1.3 COMPLIANCE WITH ENVIRONMENTAL REGULATIONS AND REQUIREMENTS

This section describes the environmental regulations and permits that may be required for the Proposed Action. This EA was produced in accordance with these laws, statutes, regulations, and permits.

1.3.1 Environmental Regulations

Several environmental regulations were reviewed and may be applicable to the Proposed Action, including the following:

Clean Air Act of 1970:

Under the Clean Air Act of 1970, Congress established procedures for developing National Ambient Air Quality Standards (NAAQS) for protection of human health and public welfare. The U.S. Environmental Protection Agency (EPA) published the NAAQS in 1971, and these standards took effect at that time. Standards are provided for the following criteria pollutants:

- Carbon monoxide (CO)
- Sulfur dioxide (SO_2)
- Nitrogen dioxide (NO_2)
- Ozone (O_3)
- Lead (Pb)
- Particulate matter (PM) less than or equal to 10 micrometers in diameter (PM_{10}).

The Air Division of the Alabama Department of Environmental Management (ADEM) administers provisions of the Clean Air Act, as well as ADEM's Air Pollution Control Program.

Clean Water Act:

The objective of the Clean Water Act (CWA) is to restore and maintain the chemical, physical, and biological integrity of the nation's water. In 1989, the U.S. Army Corps of Engineers (USACE) and EPA reached a memorandum of agreement on federal enforcement of Section 404 of the CWA. The memorandum of agreement stipulates that a permit is required for removal of more than one-third acre of wetlands.

Federal Water Protection Act:

Compliance with the CWA would provide for compliance with the Federal Water Protection Act.

The Endangered Species Act:

The Endangered Species Act (ESA) requires all federal agencies, in consultation with and with the assistance of the secretaries of the Departments of the Interior and Commerce, to ensure that their actions are not likely to jeopardize the continued existence of endangered or threatened species or result in the destruction or adverse modification of the critical habitat of such species. Protected species include threatened and endangered species listed by federal or state authorities.

Migratory Bird Treaty Act of 1918:

The Migratory Bird Treaty Act of 1918 protects all migratory birds and their parts (including eggs, nests, and feathers) and requires that impacts on such birds by federal action be explored fully in the decision-making process. The law fulfills U.S. commitments under four international conventions for protection of the shared migratory bird resource.

Fish and Wildlife Coordination Act:

The Fish and Wildlife Coordination Act requires agencies to consult with the U.S. Fish and Wildlife Service (USFWS) and appropriate state agencies prior to modification of any stream or other body of water, in order to ensure conservation of wildlife resources.

National Historic Preservation Act of 1966:

The National Historic Preservation Act of 1966 (NHPA), as amended in 1992, requires that before a responsible agency can take action to affect any property with historic, architectural, archeological, or cultural value that is listed on or eligible for listing on the National Register of Historic Places (NRHP), that agency must comply with the procedures for consultation and comment issued by the Advisory Council on Historic Preservation. The responsible agency also must identify properties affected by the action that are potentially eligible for listing on the NRHP, usually through consultation with the state historic preservation officer (SHPO). In Alabama, the Alabama Historical Commission undertakes the duties of the SHPO.

Executive Order 12898:

Executive Order 12898—Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations—mandates that programs of federal agencies identify and address disproportionately large and adverse effects on human health and the environment of minority or low-income populations.

Resource Conservation and Recovery Act of 1976:

The Resource Conservation and Recovery Act (RCRA) of 1976 provides technical and financial assistance to develop management plans and facilities for recovering energy and other resources from discarded materials, and for regulating management of hazardous materials and waste.

1.3.2 Required Permits

This section presents a comprehensive list of federal, state, and local permits likely required to complete the Proposed Action. Preparation and submission of these permits is not within the scope of this EA; however, NOAA should obtain these permits prior to the proposed construction activities. The following permits have been identified as likely required for the Proposed Action:

- Storm Water Permits:
  - A National Pollutant Discharge Elimination System (NPDES) permit for site stormwater must be obtained under either of the following circumstances: (1) ground disturbance activities would occur over more than 1 acre, including all access roads and areas needed to place equipment during the construction process; or (2) the ultimate discharge of stormwater would reach a sediment-impaired water body.

  - A project-specific construction NPDES permit and site-specific Storm Water Pollution Prevention Plan (SWPPP) may be necessary prior to construction. A Notice of Intent (NOI) would initiate the process and generally requires no more than a few weeks prior to construction.
  - Alabama state Storm Water Management review may also be required.

- City of Mobile Construction Permit:
  - Construction projects must be submitted to the City of Mobile for plan review. This is generally completed by the construction contractor. Additional information about the construction permit process can be found on the following website: http://www.cityofmobile.org/pdf/commercialpermittingprocess.pdf
  - Depending on design, installation of various utility lines may require permits or site plan reviews and approvals. These are generally obtained by the construction contractor. Substantial increases in the use of potable water or discharge of wastewater to Publicly Owned Treatment Works (POTW) would likely require revised or new permits or approvals. If revised electrical power demands require a new transformer or trigger upgrades at servicing substations, these issues would need to be addressed with the utility companies.
- City of Mobile Tree Permit: All work to be performed on city right of way trees requires a permit from the Mobile Tree Commission. Additional information can be found on the following website: http://urban.cityofmobile.org/mobile_tree_commission/index.php
- City of Mobile Install Tank Permit: NOAA would require a permit from the City of Mobile Fire and Rescue Department for installation of a diesel aboveground storage tank (AST) associated with an emergency generator that would be operated during power outages. The site plan and the tank locations must be submitted to the fire department for a review along with a total fee of $167.

The following is a list of other relevant consultations (some of which could require actions or mitigations):

- USFWS under the ESA.
- NHPA consultations with the Alabama Historical Commission.
- CWA consultations with the USACE.
- Alabama Department of Conservation and Natural Resources (ADCNR) and ADEM regarding state listed threatened or endangered species, or species of concern.
- City of Mobile Urban Development, Planning, Land Use Administration/Geographic Information Systems (GIS) for zoning requirements.
- ADEM, Air Division, optional consultation for installing the emergency generator.

See Section 4.9 for mitigation measures or other possible activities to reduce potential impacts, which may be included in contracts or considered during design and construction.

1.4 SCOPE OF THE ENVIRONMENTAL REVIEW

This section describes the scope of review for the EA, including the region of influence and resources that have been eliminated from further study.

1.4.1 Region of Influence

The impacts from the Proposed Action have two associated scales: temporal (time) and spatial (geographic). This sub-section briefly describes the temporal and spatial boundaries within the scope of the review. Each alternative was analyzed within these boundaries. For the Proposed Action, the temporal range is approximately 30 years from the point of construction. The geographic range of the impact is assumed 0.5 mile from the project area in all directions.

1.4.2 Resources Eliminated from Further Study

Issues are questions or statements about the relationship between the Proposed Action and the natural or cultural environment. Examining issues requires describing the relationship between a Proposed Action and the environment. Issues do not specify the context, potential impacts, or intensity of potential impacts; issues just state that a relationship exists between the Proposed Action and specific environmental, cultural, and social resources, and are used to determine impact topics examined in the EA. Table 1-1 presents the issues identified during the scoping process, and the impact topics related to each issue and examined in the EA.

Key issues are used to formulate alternatives, prescribe mitigation measures, or analyze environmental consequences. These issues are key because of the extent of their geographic distribution, the potential duration of their effects, or the potential intensity of interest or resource conflict. Based on the scoping process, no key issues are associated with the Proposed Action. The issues identified in Table 1-1 and their relationships to specific resource topics serve as the basis for the analyses presented in the EA.

TABLE 1-1
ISSUES AND IMPACT TOPICS RELATED TO EACH ISSUE

Issue	Impact Topics Related to Each Issue
Potential impacts on the long-term integrity of natural systems and processes	Geology and Soils Water Resources Insects, Disease, and Other Exotic Organisms Air Quality Noise Flora and Fauna Threatened, Endangered, and Sensitive Species
Potential impacts on traditional land uses	Location and Land Use Recreational Resources Visual and Aesthetic Resources
Potential impacts resulting from erosion and soil compaction	Geology and Soils Transportation
Potential impacts on water bodies and floodplains	Water Resources
Potential impacts on air quality and natural soundscapes	Air Quality Noise
Preservation and protection of threatened, endangered, and sensitive species	Threatened, Endangered, and Sensitive Species
Potential impacts on the long-term integrity of cultural, historic, and archaeological resources	Cultural and Historic Resources
Potential impacts on specially-managed areas	Insects, Disease, and Other Exotic Organisms

Issue	Impact Topics Related to Each Issue
Potential impacts on infrastructure and hazardous materials	Utilities Hazardous Materials Other Infrastructure
Potential impacts on the local economy	Socioeconomic Resources

Several issues involving resources that would possibly require analysis according to statute and regulation were found not applicable to the Proposed Action or no action alternative, and therefore were not carried forward for further analysis. These resources are floodplains, coastal zone management, essential fish habitat, prime and unique farmlands, wilderness and wild and scenic rivers, and mineral and energy resources. The rationale for not examining each of these resources in this EA is presented below.

Floodplains

Floodplains are the valley floors adjacent to the stream channel that may be inundated during high water (Linsley, Kohler, and Paulhus 1982). Two common floodplain delineations are the 100-year and 500-year floodplain. The 100-year floodplain is the area inundated by water during a 100-year flood. The 100-year flood is the flood elevation with a 1 percent chance of being equaled or exceeded in any one year. Likewise, the 500-year floodplain is the area flooded by the 500-year flood; the 500-year flood is the flood elevation with a 0.20 percent chance of being equaled or exceeded in any one year.

The Federal Emergency Management Agency (FEMA) is an independent federal agency whose mission is "to reduce loss of life and property and protect our nation's critical infrastructure from all types of hazards, including natural disasters, acts of terrorism, and other man-made disasters, by leading and supporting the Nation in a risk-based, comprehensive emergency management system of preparedness, protection, response, recovery, and mitigation" (FEMA No Date [a]). Among its responsibilities, FEMA is charged with flood hazard mitigation. FEMA divides floodplains into various flood hazard zones that describe their flood risks based on characteristics of the areas (topography, soils, etc.) and the magnitude of the flood event. These flood zones are detailed on the flood insurance rate maps (FIRM) (FEMA No Date [b]). The FIRM also shows areas labeled Zone B or Zone X (shaded); these are areas between the limits of the 100-year floodplain and the 500-year floodplain. Areas designated as Zone C or Zone X (unshaded) are areas of minimal flood hazard; they are outside of the 100-year floodplain and are higher in elevation than the 500-year floodplain. According to the FIRM corresponding to each proposed site location, all proposed site alternatives are located outside of the 100- and 500-year floodplains. Therefore, floodplains were dismissed as an impact topic in this EA and were not carried forward for further analysis.

Coastal Zone Management

Alabama's Coastal Area Management Program (ACAMP) was approved and has been in effect since 1979 (ADEM 2002). The program regulates various activities on coastal lands and waters seaward of the continuous 10-foot contour in Baldwin and Mobile Counties of Alabama. Implementation of the ACAMP is shared by ADEM and ADCNR. ADEM is responsible for the permitting, monitoring, and enforcement activities associated with the ACAMP and the regulations set forth in ADEM Administrative Code R. 335-8. According to a map located on the ADEM website, all of the proposed site locations are outside of the coastal area boundaries (ADEM 2002). Therefore, coastal zone management was dismissed as an impact topic in this EA and was not carried forward for further analysis.

Essential Fish Habitat

Marine fish depend on healthy habitats to survive and reproduce (NOAA No Date). Throughout their lives, fish use many types of habitats including seagrass, salt marsh, coral reefs, kelp forests, and rocky intertidal areas, among others. Various activities on land and in the water constantly threaten to alter, damage, or destroy these habitats. NOAA Fisheries, regional Fishery Management Councils, and federal and state agencies work together to address these threats by identifying Essential Fish Habitat (EFH) for each federally managed fish species and developing conservation measures to protect and enhance these habitats. Productive commercial and recreational fisheries are inextricably linked to healthy marine habitats; protecting them will help support fishing communities now and for generations to come.

EFH can consist of both the water column and the underlying surface (e.g., seafloor) of a particular area (NOAA No Date). Areas designated as EFH contain habitat essential to the long-term survival and health of our nation's fisheries. Certain properties of the water column such as temperature, nutrients, or salinity are essential to various species. Some species may require certain bottom types such as sandy or rocky bottoms, vegetation such as seagrasses or kelp, or structurally complex coral or oyster reefs.

EFH includes those habitats that support the different life stages of each managed species (NOAA No Date). A single species may use many different habitats throughout its life to support breeding, spawning, nursery, feeding, and protection functions. EFH encompasses those habitats necessary to ensure healthy fisheries now and in the future. According to the Gulf of Mexico Essential Fish Habitat website (Center for Coastal Monitoring and Assessment [CCMA] 2007), the proposed project areas are not located in the Gulf of Mexico EFH for Alabama. Therefore, essential fish habitat was dismissed as an impact topic in this EA and was not carried forward for further analysis.

Prime and Unique Farmlands

In August 1980, the CEQ directed that federal agencies must assess the effects of their actions on farmland soils classified by the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) as prime or unique. Prime farmland is defined as soil that particularly produces general crops such as common foods, forage, fiber, and oil seed; unique farmland produces specialty crops such as fruits, vegetables, and nuts. According to NRCS, no soils in the project areas are classified as prime and unique farmlands (USDA NRCS 2009). Therefore, the topic of prime and unique farmlands was dismissed as an impact topic in this EA and was not carried forward for further analysis.

Wilderness and Wild and Scenic Rivers

Federal and state agencies can designate specific regions as wilderness or specific water bodies as wild and scenic rivers, if such regions or water bodies have unique features or resources that warrant special preservation or planning considerations. No such resources or water bodies are located in or around the project areas. Three wilderness areas are located in the State of Alabama: (1) the Sipsey Wilderness Area, (2) the Cheaha Wilderness Area, and (3) Dugger Mountain. The largest wilderness area in the State of Alabama is the Sipsey Wilderness Area, which is located in the Bankhead National Forest near Lewis Smith Lake. These wilderness areas are located in northwestern and northeastern Alabama, and the closest wilderness area to the project site is the Black Creek Wilderness Area—located in southeastern Louisiana. The closest wild and scenic river is the Sipsey Fork of the Black Warrior River, West Branch in northwestern Alabama (USFWS 2007a). Therefore, the topic of wilderness and wild and scenic rivers was dismissed as an impact topic in this EA and was not carried forward for further analysis.

Minerals and Energy Resources

Mineral and energy resource extraction is governed by various federal and state laws and regulations. The State of Alabama is very rich in mineral resources. In 2007, approximately 200 companies or operations were mining and producing mineral resources in Alabama (Alabama Department of Industrial Relations 2007). According to the Geological Survey of Alabama, Mobile County has been mined for clay, sand and gravel, artificial zeolite, and sulphur (Dean 2008). Six clay, sand, and gravel operations are within a 5-mile radius of all alternative sites under study in this EA, and the nearest one is Tommy Graham Pit No. 1, located approximately 1 mile north of alternative 1 (Mindat 2009). However, no known mineral and energy resources operations are in the project area; no current exploration or excavation plans exist; no historic or previous exploration or excavation projects have occurred in the project area; and the current and planned land use of the project area does not facilitate future exploration or excavation activities. Therefore, minerals and energy resources was dismissed as an impact topic in this EA and was not carried forward for further analysis.

2.0 DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES

Potential site alternatives were initially identified through use of a local commercial realtor and documented in a Site Alternatives Study (NOAA 2008a). The realtor's extensive search located 26 initial sites based on the criteria listed in Section 1.1. Additional analysis of the site characteristics reduced the selection to seven potential site locations (for example, all sites south of Interstate 10 were excluded because they were not located outside of flood and storm surge zones). Field investigations of the seven sites were performed, and cost and risk analysis reduced the list to alternatives 2 through 4 discussed in Sections 2.2 through 2.4 below. The remaining sites not carried forward for further analysis are discussed in Section 2.6. Alternative 1 (Section 2.1), the preferred location, was not initially available during the alternative site analysis but was added to the list once it was determined that the land was available to NOAA. Figure 1 shows the location of each alternative.

2.1 ALTERNATIVE 1: PARCEL TO THE WEST OF 7340 ZEIGLER BOULEVARD, MOBILE, ALABAMA 36608 (PROPOSED ACTION – PREFERRED LOCATION)

This site alternative, the preferred location, is located west of 7340 Zeigler Blvd. and would be co-located with the Mobile County Emergency Management Agency (MCEMA). MCEMA would be allowed future use of the Response Operation Area within the GoMDRC to coordinate a response to an incident affecting the Mobile County area. The site would consist of 4 acres of the 15.23-acre MCEMA property, and the land would be provided without cost. The site is 2.4 miles northeast of the Mobile Regional Airport and NOAA Weather Forecast Office, as well as 2.4 miles away from the U.S. Coast Guard's Aviation Training Center facility. Currently, the proposed site is a wooded lot and would require tree clearing prior to construction. Figure 2 shows representative photographs of the site, and Figure 3 shows the proposed site layout for the preferred alternative.

2.2 ALTERNATIVE 2: 7431 AIRPORT BOULEVARD, MOBILE, ALABAMA 36616

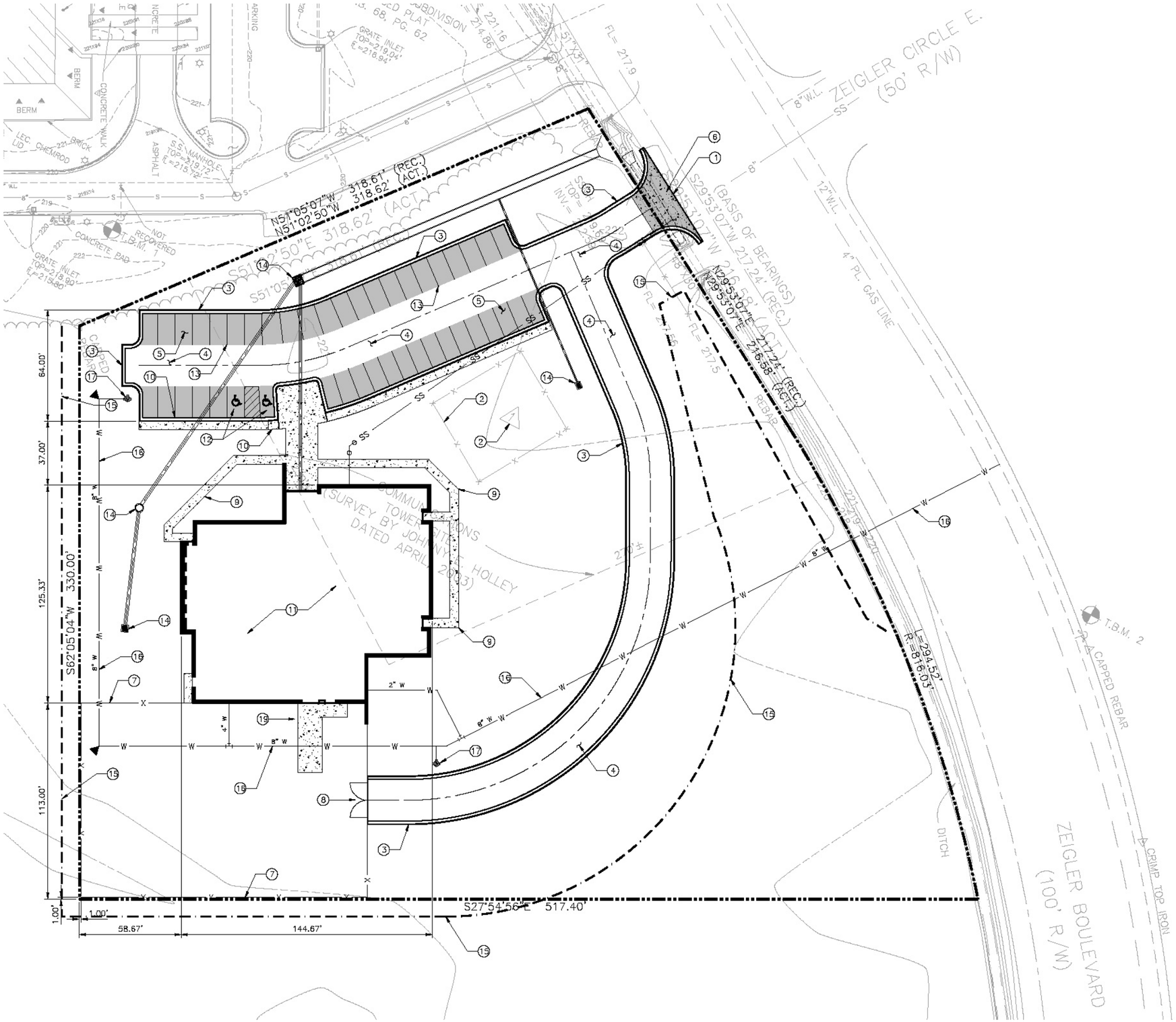
This site alternative, located at 7431 Airport Blvd., consists of approximately 3.2 acres of land at a cost of $2,700,000. The Regional Mobile airport and NOAA Weather Forecast Office are located about 1.5 miles west of the site. The site has been developed, and an abandoned building (approximately 30,000 sf) currently exists. This structure would need to be modified to become capable of withstanding level 5 hurricane or tornado conditions to meet NOAA's requirements. In addition, no fuel storage containers are currently on site. Currently present are 7,000 sf of covered, outdoor storage and a security fence that limits access to the southern half of the site. Long-term, secure parking would be easily accommodated because the entire site, other than the building, is a paved surface.

Expansion of the GoMDRC would be possible because more than the required amount of space is available. Tree clearing and site adaptability would not be necessary because the site already is developed. The condition of the paving would need to be further reviewed if it is not removed. The foundation, floor slab, and structural steel elements could be reused in an upgrade of the existing facility. In addition, the site could require removal of a portion of surface parking, billboard signage, and a portion of the existing building. Loading docks would be excavated and associated canopies removed. Selected demolition of the existing building roof and walls could also be required, but the structure, slabs, and foundations would remain.

FIGURE 2
REPRESENTATIVE PHOTOGRAPHS OF ALTERNATIVE 1

Typical vegetation cover at the site.

City of Mobile, AL 911 Communication Center, which is located east of the site.



Legend

- Concrete sidewalk
- Concrete pavement
- Light duty asphalt pavement
- Heavy duty asphalt pavement

Site Layout Key Notes

① Sawcut full depth and remove existing pavement.
② Existing fence and tower to remain.
③ Construct 2'-0" wide concrete curb and gutter.
④ Construct heavy duty asphalt pavement.
⑤ Construct heavy duty asphalt pavement.
⑥ Construct concrete entrance.
⑦ Install 6'-0" tall chain link fence .
⑧ Install 2 swing gates.
⑨ Construct sidewalk around building.
⑩ Construct accessible sidewalk ramp with detectable warning.
⑪ Construct new building.
⑫ Accessible parking.
⑬ 4" wide parking stall lines.
⑭ Install storm drainage structure.
⑮ Assumed limits of tree removal.
⑯ 8" water main. Connect to city main.
⑰ Install fire hydrant.
⑱ 8" thick gravel storage area.
⑲ Install 8" thick concrete driveway and staging area.

Not to Scale

Source: Modified from GDS Engineering, NOAA - Gulf of Mexico Disaster Response Center, Site Layout Plan C101, 20 March 2009.

Gulf of Mexico Disaster Response Center
Mobile, Alabama

Figure 3
Site Layout Plan

TETRA TECH EM INC.

Date: 04/15/09 | Drawn By: Ingrid Tobar | Project No: G1278.4.0019.02

X:\G1278\400190\2\FH10\Figure3.FH10

FIGURE 4
REPRESENTATIVE PHOTOGRAPHS OF ALTERNATIVE 2

Building located on the site.

View of covered outdoor storage area on the western end of the site.

2.3 ALTERNATIVE 3: 1000 CODY ROAD, MOBILE, ALABAMA 36608

This site alternative, located at 1000 Cody Road, consists of approximately 1.4 acres of land at a cost of $140,000. Within a 1-mile radius of the site are four major access roads. The Regional Mobile Airport and NOAA Weather Forecast Office are located about 3 miles southwest of the site.

The site alternative provides sufficient space to support construction of the GoMDRC. However, additional space would not be available for any future expansion of the GoMDRC to support operations, if needed. Expansion would be possible only if adjacent sites are purchased, including 998 Cody Road, which is further discussed in Section 2.6. The adjacent fairgrounds to the west could be used during an event for increased parking needs. A residential neighborhood is located to the east, so some of the vegetation along the east property line could be left to create a buffer. Most of the site is covered with medium- to small-growth trees and would need to be cleared. Several substantial live oak trees are present on site and could be retained as part of any site development. Currently, no structure is on the site. Figure 5 shows representative photographs of the site.

2.4 ALTERNATIVE 4: 140 SCHILLINGER ROAD, MOBILE, ALABAMA 36608

This site alternative, located at 140 Schillinger Road, consists of approximately 1.4 acres of land at a cost of $760,878. Within a 1-mile radius of the site are four major access roads. Access to the Regional Mobile Airport is optimized with a passage leading directly from the site to the airport on Eads Casa Drive. The Regional Mobile Airport and NOAA Weather Forecast Office are located within 1 mile west of the site.

This site alternative provides sufficient space to support construction of the GoMDRC. However, additional space is not available for any future expansion of the GoMDRC to support operations, if needed. Tree clearing and site adaptability would not be necessary because the site has been developed as a mobile home sales lot and currently has a layer of gravel coating the surface of the site that could be removed. Currently, a small structure is present that could be removed or renovated. A large billboard located on the southeastern corner of the site requires consideration. Figure 6 shows representative photographs of the site.

FIGURE 5
REPRESENTATIVE PHOTOGRAPHS OF ALTERNATIVE 3

Typical vegetative cover at the site.

Residential development located along the eastern boundary of the site.

FIGURE 6
REPRESENTATIVE PHOTOGRAPHS OF ALTERNATIVE 4

View of site.

Building and billboard located at the site.

2.5 NO ACTION ALTERNATIVE

Under the No Action Alternative, the GoMDRC would not be established in Mobile, Alabama, and a facility would not be constructed. NOAA's mission requirements of reducing human health, environment, and economic consequences resulting from natural or human-induced emergencies would not be met. There would be no location to consolidate and coordinate staff and resources throughout the Gulf of Mexico region, and long-term operational savings would not be realized. In addition, NOAA staff and resources would not be co-located with the University of South Alabama or Dauphin Island Sea Lab.

2.6 ALTERNATIVES CONSIDERED BUT NOT CARRIED FORWARD FOR DETAILED ANALYSIS

During the Site Alternatives Study, a number of alternatives in the Mobile area were evaluated in addition to the alternatives described above (NOAA 2008b). Through use of a commercial realtor, 26 potential sites were identified that were available for purchase. Sites south of Interstate 10 were removed from the list because they were not located outside of flood and storm surge zones. This narrowed the selection to nine sites plus the preferred alternative. Three of those sites are evaluated in this EA. The remaining six sites were not considered for further analysis, as described below:

- **Airway Park Drive, Mobile, AL 36608:** This alternative site encompasses 11.4 acres, which would provide more than the required amount of space and would allow for expansion of the GoMDRC. This alternative is not considered further because the site is located on a cul-de-sac, which would hinder site access.
- **998 Cody Road, Mobile, AL 36608:** This alternative site encompasses 1.4 acres, which would provide the required amount of space. The property meets the minimum space requirements, but additional parcels would need to be purchased to allow for any expansion of the GoMDRC. This alternative was not considered further, but a parcel would be available if an expansion is necessary.
- **910 Cody Road, Mobile, AL 36608:** This alternative site encompasses 1.5 acres, which would provide the required amount of space. However, the property is rectangular and could restrict potential layouts of the GoMDRC. Power lines also cross the site diagonally and could restrict construction at this location. This alternative was not considered further because of the construction restrictions imposed by the shape of the property and the presence of power lines.
- **2286 Schillinger Road, Semmes, AL 36575:** This alternative site encompasses 4 acres, which would provide more than the required amount of space and would allow for expansion of the GoMDRC. This alternative was not considered further because of transportation considerations: traffic along this site moves at a steady rate, and only one major access road is within a 1-mile radius of the site.
- **1650 Shelton Beach Road, Mobile, AL 36618:** This alternative site encompasses 6 acres, which would provide more than the required amount of space and would allow for expansion of the GoMDRC. This alternative was not considered further because it is situated 6 miles from the Regional Mobile Airport, which is one of the farthest sites evaluated.
- **8400 Airport Boulevard, Mobile, AL 36608:** This alternative site encompasses 5.27 acres, which would provide more than the required amount of space and would allow for expansion of the GoMDRC. The property would be adjacent to the NOAA facility located on the Regional Mobile Airport property. The property is assumed available as a no cost lease, which was provided for the adjacent NOAA property and would be available for this property as well.

However, the availability is pending. This alternative is not considered further because availability of the property is not known.

3.0 AFFECTED ENVIRONMENT

3.1 INTRODUCTION

This section describes the baseline environmental conditions of the four alternative sites selected for possible implementation of the Proposed Action. The resources described below for each alternative were used to evaluate the potential impacts of each alternative in Section 4.0. Presented below are details for each alternative on the current location and land use; geology and soil resources; water resources; biological resources; air resources; cultural and historic resources; and socioeconomic and man-made resources.

The four alternatives are located in central Mobile County, Alabama, approximately 25 miles west of downtown Mobile. The alternatives are all within 3 miles of each other, but Alternative 2 falls within a separate Census Tract. Alternatives 1, 3, and 4 are within Census Tract 64.02 and Alternative 2 is located within Census Tract 64.05. Table 3-1 presents the demographic comparisons for the two Census Tracts, Mobile County, the State of Alabama, and the U.S. as a whole. As shown in Table 3-1, the population in Census Tract 64.05 has 164.7 percent more people per square mile than Census Tract 64.02. Both tracts are predominantly Caucasian and have a median household income above the county and state levels. Census Tract 64.05 has a percentage of people with an education at or above a Bachelor's Degree—25 points higher than Census Tract 64.02.

TABLE 3-1
DEMOGRAPHIC COMPARISONS

Category	City of Mobile, AL, Census Tract 64.02 (Alternatives 1, 3, and 4)	City of Mobile, AL, Census Tract 64.05 (Alternative 2)	Mobile County, AL	State of Alabama	United States of America
Square miles	6.14	3.52	1,233.09	50,744.00	3,537,438.44
Persons per square mile	718.7	1902.19	324.3	87.6	79.6
Population, 2000 Census	4,413	6,087	399,843	4,447,100	281,421,906
Population, 2007 Estimate	Not Available	Not Available	404,406	4,627,851	301,621,157
White Persons	79.60%	84.90%	63.90%	71.10%	80.20%
Non-White Persons	20.40%	15.10%	36.10%	28.90%	19.80%
High School Graduates	73.40%	85.50%	76.70%	75.30%	80.40%
Bachelor's Degree or Higher	13.30%	38.30%	18.60%	19.00%	24.40%
Per Capita Income, 1999	$15,134	$22,830	$17,178	$18,189	$21,587
Median Household Income, 1999	$39,236	$60,222	$33,710	$34,135	Not Available
* U.S. Census Bureau, Census 2000.					

3.2 ALTERNATIVE 1: PARCEL TO THE WEST OF 7340 ZEIGLER BOULEVARD, MOBILE, ALABAMA 36608 (PROPOSED ACTION – PREFERRED LOCATION)

3.2.1 Location and Land Use

The proposed project site is located in Mobile County, Alabama, the second largest county in the State (see Figure 1). Mobile County is located in the extreme southwestern corner of the State, covering over 1,239.8 square miles (USDA 1980). The County is bordered on the north by Washington County, on the northeast by Baldwin County, on the east by Mobile Bay and the Mobile Tensaw River Delta, on the south by the Gulf of Mexico, and on the west by the State of Mississippi. The project site is located within the Southern Coastal Plain Resource area, consisting of a series of level to gently sloping, broad, low lying ridges that have steeper slopes along drainageways (USDA 1980).

Mobile County is one of the fastest growing counties in the region. From 1960 to 1996, the population in the unincorporated portion of Mobile County increased 144 percent, while the population of the incorporated part increased only 3 percent (Patterson 2000). The growth in population directly affects land use in the County, particularly in the western part of the County. Mobile County currently has no regulation and zoning plans for land use within the County. The City of Mobile, however, has a general land use and zoning plan that extends beyond the city limit.

The City of Mobile is Alabama's second largest city after Birmingham, and is located 31 miles north of the Gulf of Mexico (see Figure 1). Mobile Bay, located east of the City, is Alabama's only port for oceangoing ships and a point of entry for hundreds of cruising vessels (or pleasure cruisers) that travel the 450 mile trip to the Tennessee River. As the 10th largest port in the nation, the Alabama State Dock located in Mobile Bay handles international shipping and also serves as the gateway to the Tennessee-Tombigbee Waterway (Meteorology University of South Alabama 2009). Major industrial plants for chemicals, oil and natural gas, pulp and paper, and shipbuilding and repair are found in commercial parks south of the city, along the waterfront, and northward along the Mobile River (Meteorology University of South Alabama 2009). In January 2008, the City created a new comprehensive master plan for the downtown area and surrounding neighborhoods. The planning area is bordered on the north by Three Mile Creek and the neighborhoods north of Martin Luther King Avenue, on the east by the Mobile River, on the south by Interstate 10 and Duval Street, and on the west by Houston Street.

The preferred alternative site is located in west Mobile, approximately 2.4 miles northeast of the Mobile Regional Airport. General land use around the preferred alternative site is partially undeveloped lands mixed with commercial and residential development (see Figure 7). Currently, the site is mostly undeveloped and wooded except for a small portion to the northeast where a Mobile County 911 building is located. Surrounding land uses are commercially developed with a fairground to the north, the Mobile County 911 tower to the northeast, other miscellaneous commercial development to the southeast, Gilmer Funeral Home and Crossrivers Church to the south, and undeveloped land to the west. The adjacent property to the west consists of a paved cul-de-sac and a building in the middle of a wooded lot. The usage of the adjacent property to the west is unknown. This site was chosen for the Proposed Action because of the following reasons: (1) proximity to Ziegler Boulevard decreasing the length of the access road and utility runs, (2) closer proximity to the 911 building and the potential future Mobile Emergency Management Agency (EMA) building than other considered locations, and (3) access to the site's lowest elevation, facilitating site drainage and likely decreasing site fill for drainage.

Legend

Land Use

- Auto Parking
- Cell Tower
- Worship Place
- Commercial Outdoor
- Contractor
- Engine Repair/Service
- Fabricated Metal Products
- Funeral Home
- General Retail Sales
- Mobile Homes
- Nursery
- Office Park
- Publishing
- Single-family Detached
- Standard Apartments
- Vacant Land

N

0 250 500

Feet

Source: GlobeXplorer Aerial Imagery, DigitalGlobe, 2007; City of Mobile GeoDatabase, 2009.

Gulf of Mexico Disaster Response Center
Proposed Locations
Mobile, Alabama

Figure 7

Alternative 1 Land Use Map

TETRA TECH EM INC.

Date: 02/26/09 Drawn By: Ingrid Tobar Project No: G1278.4.0019.02

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3.2.2 Geology and Soil Resources

This section describes the soil and geology resources for Alternative 1.

3.2.2.1 Geology

Geologic units in Mobile County are of Tertiary and Quaternary age and consist mainly of sand, gravel, silt, clay, and sandstone. The project site for Alternative 1 overlies the Pliocene and Miocene sedimentary rocks within the Coastal Plain physiographic province (Reed 1971). The Citronelle Formation overlies the Miocene Series and crops out in central and southern parts of Mobile County. The Citronelle Formation and underlying beds in the upper part of the Miocene Series are well exposed in the project area (Reed 1971). The Citronelle formation consists mainly of brown, red, and orange gravelly sand that locally contains clay balls and partings, and gray, orange, and brown lenses of sandy clay. Additionally, the base of the formation is generally marked by ferruginous sandstone that contains quartz and minor amounts of chert gravel (Reed 1971). The Miocene Series consists of light-gray and very light gray clay with mottled orange and red on the top layer; and medium-light-gray sand consisting of mottled light brown and dark yellowish orange, clayey, and scattered dark mineral grains on the bottom layer. Sand deposits are present in all geologic units throughout the County (Reed 1971).

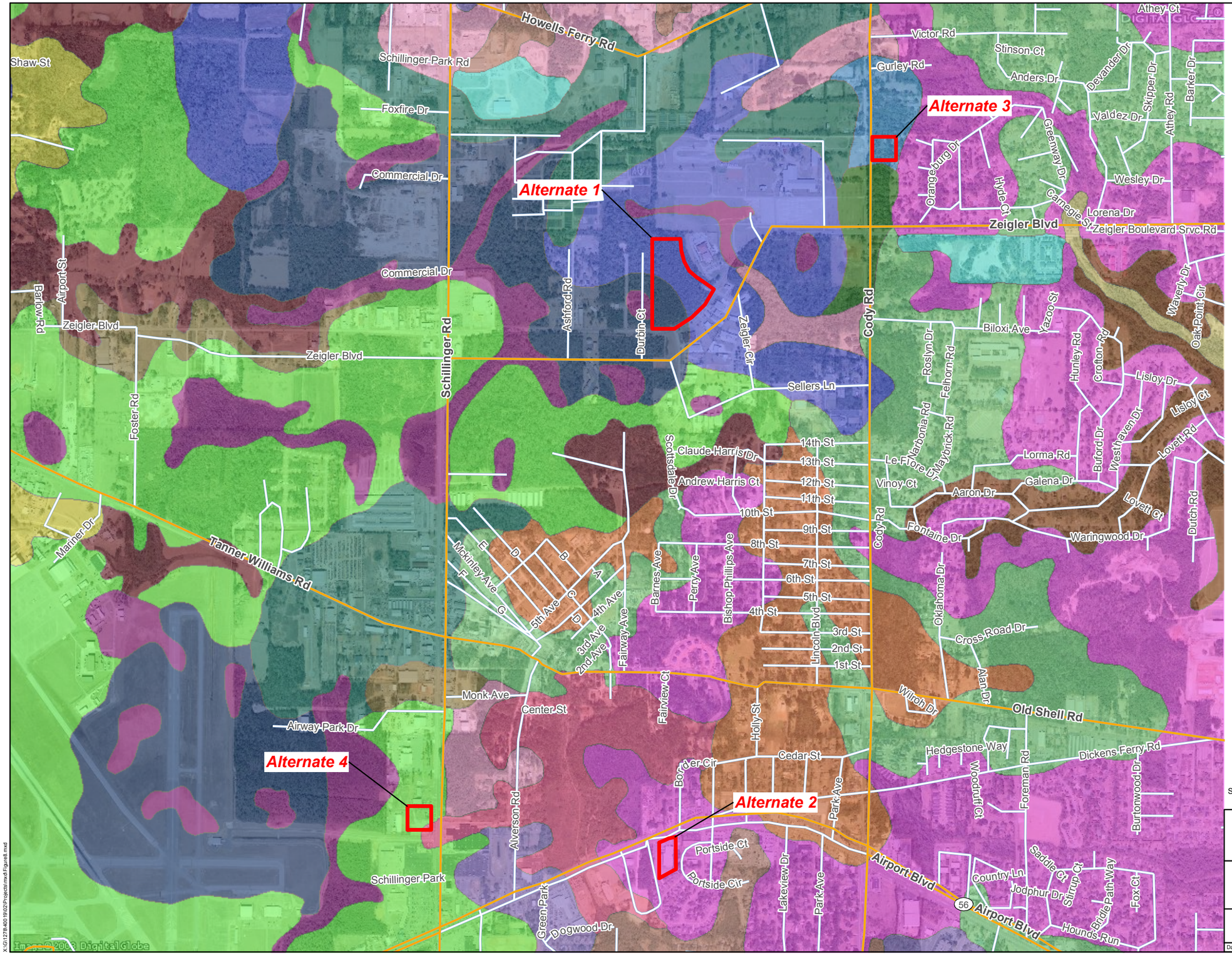
3.2.2.2 Soils

Mobile County encompasses two major land resource areas—the Southern Coastal Plain Resource area, which includes the northern, western, and central parts of the County, and the Gulf Coast Flatwoods Resource area, which includes a narrow strip along the eastern and southern boundaries. The project site for Alternative 1 is located within the Southern Coastal Plain with series of level to gently sloping, broad, low lying ridges that have steeper slopes along drainageways (USDA 1980).

The site consists of soils classified as Malbis sandy loam to the north and Saucier sandy loam to the south (USDA 1980). Both are moderately well-drained soils that have not been significantly altered at the project site (USDA 1980). However, much of the native soils in the vicinity of the project area to the east and southeast have been paved. The characteristics of each soil type are described below. Figure 8 shows the soil types found at the site.

Malbis sandy loam soils are moderately drained soils occurring on slopes ranging from 0 to 2 percent. The surface layer is a dark grayish brown sandy loam, typically 5 inches thick. The subsurface layer is yellowish brown and dark grayish brown sandy loam. The upper part of the subsoil (46 inches thick) is yellowish brown loam; the middle part (60 inches) is yellowish brown loam with mottles; and the lower part (72 inches) is mottled brownish yellow, red, strong brown and light gray sandy clay loam. The middle and lower parts have 10 to 20 percent slightly brittle nodules of plinthite. Permeability is moderate in the upper part of the subsoil and moderately slow in layers that have plinthite. These areas are typically suited for cultivated crops and pasture. This type of soil has a good to fair potential for site development. The soils in the area have low strength for developing local roads and streets.

Saucier sandy loam soils are moderately well-drained soils occurring on slopes ranging from 0 to 2 percent. The surface layer is a dark gray sandy loam, typically 5 inches thick (USDA 1980). Below the surface layer is approximately 30 inches of light yellowish brown and yellowish brown loam. The subsoil consists of 5 to 20 percent of slightly brittle nodules of plinthite. The permeability of this soil type is moderate in the upper part of the sub-soil and slow in the layers that have plinthite. This type of soil has fair potential for urban development because of its limitation on wetness and low strength (USDA 1980).



Legend

Soil unit

- Benndale-Urban land complex
- Grady loam, 0 to 1 percent slopes
- Harleston-Urban land complex
- Heidel sandy loam, 0 to 2 percent slopes
- Heidel sandy loam, 2 to 5 percent slopes
- Heidel sandy loam, 5 to 8 percent slopes
- Malbis sandy loam, 0 to 2 percent slopes
- Notcher sandy loam, 0 to 2 percent slopes
- Notcher sandy loam, 2 to 5 percent slopes
- Notcher sandy loam, 5 to 8 percent slopes
- Pits
- Bama sandy loam, 0 to 2 percent slopes
- Saucier sandy loam, 0 to 2 percent slopes
- Smithton-Urban land complex, 0 to 1 percent slopes
- Smithton-Benndale association, undulating
- Bama sandy loam, 2 to 5 percent slopes
- Troup loamy sand, 0 to 5 percent slopes
- Troup-Heidel complex, 8 to 12 percent slopes
- Troup-Urban land complex, 0 to 8 percent slopes
- Troup-Urban land complex, 8 to 12 percent slopes
- Bama sandy loam, 5 to 8 percent slopes

Streets

- Interstate
- Highway
- Major Road
- Local Road

N

0 750 1,500

Feet

Source: GlobeXplorer Aerial Imagery, DigitalGlobe, 2007
Soil Survey Geographic database for Mobile County, Alabama, 2006

Gulf of Mexico Disaster Response Center
Proposed Locations
Mobile, Alabama

Figure 8

Soil Survey Map

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Date: 02/20/09 Drawn By: Ingrid Tobar Project No: G1278.4.0019.02

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In both soil types, use of septic tank absorption fields is severely restricted because of seasonal wetness and moderately slow permeability of the layers that have plinthite (USDA 1980).

3.2.3 Water Resources

This section discusses the groundwater and surface water resources for the proposed Alternative 1 site location.

3.2.3.1 Groundwater

Most of the Alabama population depends on groundwater as a source of water supply (U.S. Geological Survey [USGS] 1990). Mobile, Alabama is located in the Southeastern Coastal Plain aquifer system; part of the system is also referred to as the Mississippi embayment aquifer system and another part as the Coastal lowlands aquifer system (a sand and gravel aquifer). An aquifer system consists of two or more aquifers hydraulically connected—that is, their flow systems function similarly, and a change in conditions in one aquifer affects the other aquifer(s). The Southeastern Coastal Plain aquifer system consists of four regional aquifers underlying an area of about 90,000 square miles of the Coastal Plain of Alabama, Georgia, and South Carolina, and extending for a short distance into northern Florida. The Southeastern Coastal Plain aquifer system is partly overlain by, and partly grades laterally into, the Floridan aquifer system to the south and the Mississippi embayment and Coastal lowlands aquifer systems to the west, all in the Mobile, Alabama region. The sediments of the Southeastern Coastal Plain aquifer system have been grouped into seven regional hydrogeologic units—four regional aquifers separated by three regional confining units. In most places, no confining unit is between the two aquifer systems, and groundwater can pass freely between them.

Recharge enters the Southeastern Coastal Plain aquifer system from precipitation on the outcrop areas of the aquifers (USGS 1990). The average annual precipitation in Mobile, Alabama is 66 inches. When reaching the water table, most of this water moves laterally to discharge at small streams in the outcrop area, evaporates, or is transpired by plants. Only a small part of the water percolates downward into the deeper parts of the aquifer system. In the outcrop areas, movement of the water is downward along generally short flowpaths until it reaches the area where the aquifers are confined. From this area, most of the movement is horizontal, along generally long flowpaths, until the water approaches discharge points, where its movement becomes again predominately vertical—but here it moves upward, either toward a surface water body or a shallower aquifer, either of which is a discharge area.

The sand and gravel aquifer underlies an area of about 6,500 square miles in southwestern Alabama and the westernmost part of panhandle Florida (USGS 1990). The sand and gravel aquifer is the primary source of water in Baldwin, Washington, and western Escambia Counties, Alabama, and also supplies most of the water used by small communities in the rural parts of Mobile County, Alabama; the City of Mobile, however, is supplied by surface water. Due to the close proximity to the Gulf of Mexico, the groundwater located in Mobile, Alabama, has the potential to contain greater than 10,000 milligrams per liter dissolved solids.

3.2.3.2 Surface Water

Directly north of Alabama's Mobile Bay, within a broad river valley that leads northward to the confluence of the Tombigbee and Alabama Rivers, lies a vast region of wetlands known by various names, including the Mobile-Tensaw delta, the Mobile delta, or simply the delta. The region features numerous interconnected stream systems, floodplains, swamps, bayous, lakes, and forests (Encyclopedia of Alabama 2008).

The proposed Alternative 1 site location is located in the Mobile-Tensaw watershed (EPA 2009a). Superfund sites, water discharge permits, toxic releases, and additional information for the Mobile-Tensaw watershed were not reported for the proposed site location (EPA 2009a).

Drainage improvements are located along the southern and western property boundaries of the proposed Alternative 1 site location. The drainage ditch located on the southern boundary of the project site runs west to northwest, and separates the property boundary and Zeigler Road. No water was observed during the site reconnaissance. The drainage ditch located immediately west of the western property boundary is concrete-lined in its southern section, runs north to south, parallels the western property line, and terminates approximately 100 feet south of the northern property boundary. The channel north of the concrete-lined drainage ditch has natural side slopes and bottom. The drainage ditch drains south to the previously mentioned drainage ditch located along the southern property boundary. The western drainage channel is estimated to range from approximately 2 feet near its southern limit to ground level at the beginning of the channel. The width of the bottom of the channel is approximately 3 to 4 feet. Another channel drains perpendicular from the west into the western drainage ditch approximately midway along the western channel's length. No water was observed during the site reconnaissance, and the ditch appeared to be unmaintained, as the ditch contained a large amount of plant debris, and plants were observed growing inside the ditch. The proposed access drive from Durbin Court would cross the western drainage ditch, and at this point the channel is concrete-lined, approximately 1 foot deep, and approximately 3 to 4 feet wide. Neither drainage ditch is mapped as a potential wetland area in the National Wetlands Inventory (NWI).

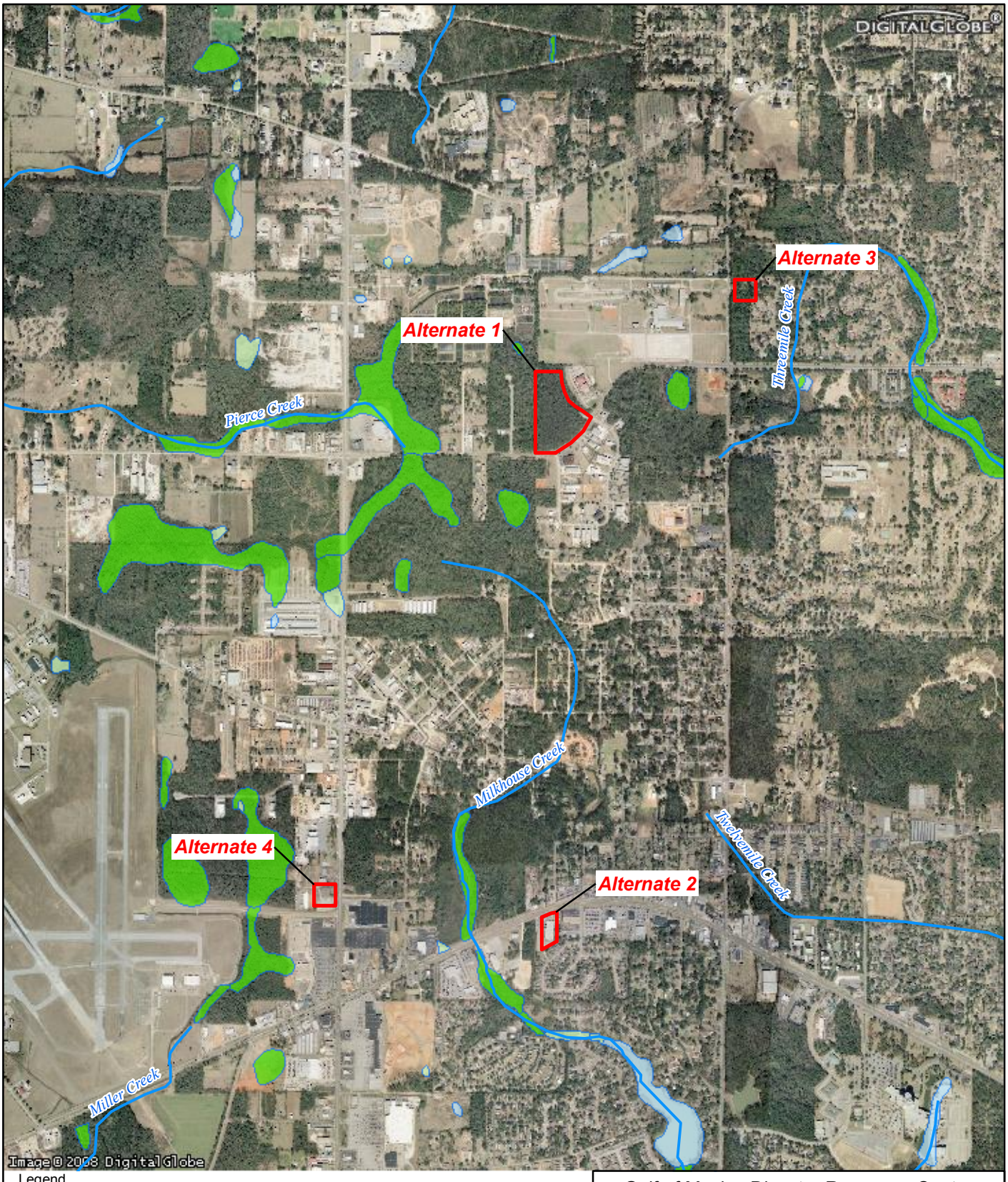
Wetlands are governed by Section 404 of the CWA (as amended) and various other federal and state laws and regulations. Wetlands are defined as transitional areas between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water – and wetlands must have one or more of the following three attributes:

- At least periodically, the land supports predominantly hydrophytic plants.
- The substrate is predominantly undrained hydric soil.
- The substrate is saturated with water or covered by shallow water at some time during the growing season of each year (Canter 1996).

A variation of the above definition is that wetlands are those areas inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal conditions do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas (USACE 1987).

The USFWS maintains the NWI. According to the NWI, no wetlands exist within or adjacent to the proposed project area (see Figure 9).

Water bodies located within 0.5 mile of the proposed Alternative 1 site location include a freshwater pond northeast of the site, freshwater forested/shrub wetlands east-northeast and southwest of the site, and freshwater forested/shrub wetlands located southwest and west of the site along Pierce Creek (see Figure 9). Big Creek Lake, also called Converse Reservoir, is a 3,600-acre reservoir in west Mobile County which serves as the public water supply for the Mobile metropolitan area. This reservoir was formed by impounding Big Creek, which flows into the Escatawpa River drainage (Rivers of Alabama No Date). Big Creek Lake is located approximately 4.3 miles northwest of the proposed Alternative 1 site location.



Legend

- Creek/stream
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

N

0 1,000 2,000

Feet

Source: GlobeXplorer Aerial Imagery, DigitalGlobe, 2007; National Wetland Inventory, Spring Hill, AL.

Gulf of Mexico Disaster Response Center
Proposed Locations
Mobile, Alabama

Figure 9

NWI Wetland Map

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Date: 02/06/09 Drawn By: Ingrid Tobar Project No: G1278.4.0019.02

X:\G\1278\40019\02\Projects\mxd\Figure9.mxd

3.2.4 Biological Resources

This section describes the general flora and fauna; threatened, endangered, and sensitive species; and insects, disease, and other exotic organisms for the proposed Alternative 1 site location.

3.2.4.1 Flora and Fauna

The proposed Alternative 1 site location is located in the Outer Coastal Plain Mixed Province (USDA Forest Service 1995). The flora of the region is described as a temperate rainforest, also called temperate evergreen forest or laurel forest. The temperate rainforest has fewer species of trees than its equatorial or tropical counterparts, and hence larger populations of individual species. Trees are not as tall here as in low-latitude rainforests; leaves are usually smaller and more leathery, and the leaf canopy less dense. Common species include evergreen oaks and members of the laurel and magnolia families. There is usually a well-developed lower stratum of vegetation that may variously include tree ferns, small palms, shrubs, and herbaceous plants. Lianas and epiphytes are abundant. At higher elevations, where fog and clouds persist, many trunks and branches of trees are sheathed in moss. A striking example of epiphyte accumulation at lower elevations is the Spanish "moss" that festoons the Evangeline oak, baldcypress, and other trees of the eastern Gulf coast.

Sandy uplands have forests of loblolly and slash pine, and baldcypress is a dominant tree in swamps; but such vegetation represents either xerophytic and hydrophytic forms in excessively dry or wet habitats, or second-growth forest following fire and deforestation. The climax vegetation of mesophytic habitats is the evergreen-oak and magnolia forest.

Alabama is home to 62 native mammals, including 22 species of rodents, 16 species of bats, 11 species of carnivores, six species of insectivores, four species of rabbits, one ungulate, one opossum and one armadillo (ADCNR 2008). The Alabama bird list includes 420 species that comprise the official Alabama Ornithological Society (AOS) state list. A total of 178 species are known breeders, including 158 species that regularly breed in the State. Additionally, 174 species of birds regularly winter in, and 80 species migrate through, Alabama. Alabama has more than 300 species of fish and is home to 83 species of crayfish, more species than any other state. Alabama has one of the richest and most diverse assemblages of mussels in the world with 179 species. Approximately two-thirds of North American mussel species have been reported from Alabama. Alabama is also home to 73 native amphibians, including 30 species of frogs and 43 species of salamanders, and is home to 93 native reptiles, including 12 lizards, 49 snakes, 31 turtles, and the alligator (ADCNR 2008).

The Outer Coastal Plain Mixed Province provides habitat for a wide variety of animals. Except for a few isolated areas where black bear or the endangered Florida panther are found in small numbers, the whitetail deer is the only large indigenous mammal. Common small mammals include raccoons, opossums, flying squirrels, rabbits, and numerous species of ground-dwelling rodents. Bobwhite and wild turkey are the principal game birds. Migratory nongame bird species are numerous, as are migratory waterfowl. Winter birds are diverse and numerous. Of the numerous species of reptiles found in this province, the American alligator is the largest (USDA Forest Service 1995).

The species diversity of the Mobile-Tensaw watershed includes approximately 500 plants, 300 birds, 126 fish, 46 mammals, 69 reptiles, and 30 amphibians (Encyclopedia of Alabama 2008).

The proposed Alternative 1 site location is currently an undeveloped, wooded area with both juvenile and mature trees, and a thin layer of undergrowth providing habitat for terrestrial wildlife. Smaller wildlife is

expected to be the primary form of wildlife found on site, since the proposed site is located within a developed area.

3.2.4.2 Threatened, Endangered, and Sensitive Species

Alabama is also home to many endangered and threatened species. The USFWS and NOAA administer the ESA, passed by Congress in 1973 to conserve the ecosystems upon which threatened and endangered species (TES) depend and to conserve and recover listed species. Under the law, species may be listed as either "endangered" or "threatened." Endangered means a species is in danger of extinction throughout all or a significant portion of its range. Threatened means a species is likely to become endangered within the foreseeable future (USFWS 2007b). Table 3-2 presents the scientific names, common names, and statuses of federally listed animal and plant species found in Mobile County, Alabama (USFWS 2007b). After discussion with ADCNR, it was determined that a county-specific list of state endangered and threatened species does not exist. However, a consultation response subsequently received from ADCNR, included in Appendix A, indicated this project is unlikely to impact any state-protected species.

TABLE 3-2
FEDERALLY LISTED SPECIES FOUND IN MOBILE COUNTY, ALABAMA

Scientific Name	Common Name	Federal Status
Trichechus manatus	West Indian manatee	Endangered
Charadrius melodus	Piping plover	Threatened
Picoides borealis	Red-cockaded woodpecker	Endangered
Sterna antillarum	Least tern	Endangered
Haliaeetus leucocephalus	Bald eagle	Bald & Golden Eagle Protection Act
Drymarchon corais couperi	Eastern indigo snake	Threatened
Gopherus polyphemus	Gopher tortoise	Threatened
Pseudemys alabamensis	Alabama red-bellied turtle	Endangered
Caretta caretta	Loggerhead sea turtle	Threatened
Lepidochelys kempii (Possible occurrence (P))	Kemp's ridley sea turtle	Endangered
Chelonia mydas (P)	Green sea turtle	Threatened
Acipenser oxyrinchus desotoi	Gulf sturgeon	Threatened
Ambystoma cingulatum (P)	Flatwoods salamander	Threatened
Isoetes louisianensis (P)	Louisiana quillwort	Endangered
Pituophis melanoleucus lodingi Blanchard	Black pine snake	Candidate Species

The following includes a more detailed description of federally listed species potentially occurring on the proposed Alternative 1 site location, as indicated in the USFWS consultation response included in Appendix A.

Eastern indigo snake (*Drymarchon corais couperi*)

The Eastern indigo snake is a large, docile, non-poisonous snake growing to a maximum length of about 8 feet. The color in both young and adults is shiny bluish-black, including the belly with some red or cream coloring about the chin and sides of the head. This snake seems to be strongly associated with high, dry, well-drained sandy soils, closely paralleling the sandhill habitat preferred by the gopher tortoise. During warmer months, indigos also frequent streams and swamps, and individuals are occasionally found in flat woods. Gopher tortoise burrows and other subterranean cavities are commonly used as dens and for egg laying (USFWS response 2009).

In Alabama, the Eastern indigo snake was studied and reintroduced in its historical range within the State. Research in the 1980s included releases in Autuaga, Baldwin, Bullock, Covington, Escambia, Mobile, and Washington Counties. During the research study, reintroduced snakes were recaptured and found thriving on some of the restocked areas. Since that time, sightings of indigo snakes have occurred in Alabama (ADCNR 2008).

Gopher tortoise (*Gopherus polyphemus*)

The gopher tortoise is a burrowing terrestrial reptile. This species generally occurs on deep, well-drained sandy soils, especially Troup and Heidel soils, in open forests or savannas of the extreme southeastern United States. It is commonly associated with pine forests (historically longleaf pine) with an open understory with grass and forb groundcover. Gopher tortoises are also often associated with open areas, such as pipeline and road right-of-ways and woodland edges. The species is herbivorous (primarily herbs, berries, and wiregrass) and highly colonial, with burrows reported more than 25 feet long. Nesting occurs primarily from May to July. Between three and 11 eggs are buried, usually near the burrow entrance. Thirty-nine invertebrate and 42 vertebrate species are known to utilize gopher tortoise shelter/breeding burrows to varying degrees (USFWS response 2009).

The largest populations occur in dry, deep sandy soils where the overhead canopy is open. This allows the tortoise suitable habitat for digging deep burrows, and the required sunlight on the ground for thermo-regulation, nesting, and incubation of the eggs. The best populations in Alabama are found in longleaf, pine-scrub, oak-wiregrass, sand hills that are frequently burned (ADCNR 2008).

Black pine snake (*Pituophis melanoleucus lodingi*)

The black pine snake is a large, relatively stout species reaching a maximum adult size of approximately 6.5 feet. This species is often associated with the same xeric habitats that support gopher tortoise populations (USFWS response 2009). Anal scute is undivided; scales are keeled except for some of lowermost rows; rostral scute (at tip of snout) is enlarged, curving backward and ending in a point between and behind nostrils. Adults are almost uniform black or dark brown, but occasional specimens may have a few white scales or a trace of a pattern. The young tend to have a pattern of black blotches on brown background along the posterior three-fourths of body that darkens with age (ADCNR 2008).

The black pine snake range includes the Coastal Plain from extreme southeastern Louisiana through southern Mississippi into southwestern Alabama. The snake has been recorded in Alabama from Mobile, Clarke, and Washington Counties, and probably occurs in southern Choctaw County (Mount 1975).

The black pine snake's habitat includes xeric, fire-maintained, longleaf pine forests having sandy, well-drained soils preferred, usually on hilltops, ridges, and toward the tops of slopes, with open canopy, reduced midstory, and dense herbaceous understory. Riparian areas, hardwood forests, or other closed-canopy conditions are not regularly used (Duran 1998).

3.2.4.3 Insects, Disease, and Other Exotic Organisms

Invasive species are "alien species whose introduction does or is likely to cause economic or environmental harm or harm to human health" (EO 13112) (Office of the President 1999).

Six exotic (non-native) mammal species have been introduced in Alabama—the black rat (*Rattus rattus*), Norway rat (*Rattus norvegicus*), house mouse (*Mus musculus*), nutria (*Myocaster coypus*), fallow deer (*Dama dama*), and feral swine (*Sus scrofa*). One established exotic species, the greenhouse frog (*Eleutherodactylus planirostris*), occurs in Baldwin and Mobile Counties. In addition, four exotic bird species, the house sparrow (*Passer domesticus*), the rock dove (*Columba livi*a), the Eurasian collared-dove (*Streptopelia decaocto*), and the European starling (*Sturnus vulgaris*) have established populations in south Alabama. Four exotic lizard species have also established populations in south Alabama: the Mediterranean house gecko (*Hemidactylus turcicus*), the Indo-Pacific gecko (*Hemidactylus garnotii*), the Texas horned lizard (*Phrynosoma cornutum*), and the brown anole (*Anolis sagrei*).

Given the ranges of the exotic species located in south Alabama, the above-listed species could occur on the undeveloped proposed Alternative 1 site location.

3.2.5 Air Resources

The climate of the region is strongly influenced by the proximity to the Gulf of Mexico. During the summer, the weather is characterized by hot and humid temperatures, but the coast is frequently cooled by sea breezes (USDA 1980). In winter, the area averages temperatures of 53 degrees with an average daily low temperature of 43 degrees (USDA 1980). Precipitation in the area averages 36 inches per year. Relative humidity is 60 percent at mid-afternoon, and about 90 percent at night and morning (USDA 1980). Average wind speed is highest in March, about 11 miles per hour (USDA 1980). Located on the Gulf of Mexico, the Mobile coastline has one of the highest frequencies of hurricane landfalls in the nation and is occasionally affected by tropical storms.

In this report, air resources are categorized into two components: air quality and noise. The following sections describe the current air and noise quality within Mobile County and the project area.

3.2.5.1 Air Quality

The Mobile (Alabama)-Pensacola-Panama City (Florida)-Southern Mississippi Interstate Air Quality Control Region includes Mobile County and is divided into classifications of either attainment or nonattainment of air quality standards. The division refers to the NAAQS as determined by the Clean Air Act, as amended. The Clean Air Act established six "criteria pollutants" that can injure human health, harm the environment, and cause property damage. These include: CO, NO_2, ozone, PM, SO_2, and lead.

Carbon Monoxide:

CO is a colorless, odorless, tasteless, and significantly toxic gas. When introduced into the bloodstream, CO inhibits delivery of oxygen to body tissue and creates a severe health risk to individuals with cardiovascular diseases. Additionally, CO can also severely affect the fetus of a pregnant woman. This pollutant is of concern in areas with high traffic density and near industrial sources.

Nitrogen dioxide:

NO_2 is a reddish-brown, toxic gas that has a sharp and biting odor. This pollutant is mainly produced by fuel combustion in vehicles and industrial sources. The primary indoor sources are combustion processes,

such as unvented combustion appliances, e.g. gas stoves, vented appliances with defective installations, welding, and tobacco smoke. NO_2 acts as an irritant affecting the mucosa of the eyes, nose, throat, and respiratory tract. Continued exposure to high NO_2 levels could contribute to development of acute or chronic bronchitis.

Ozone:

Ozone is emitted into the atmosphere, formed by reaction of other pollutants such as volatile organic compounds (VOC) and oxides of nitrogen in the presence of sunlight. Ozone is a strong irritant to human eyes and upper respiratory system, and damages crops and forests.

Particulate Matter:

PM is solid or liquid matters suspended in gas. Human activities, such as burning of fossil fuel, grassland fire, power plants, and various industrial processes generate significant amounts of PM. Fugitive emissions, such as dust and dirt from roadways and trails are another source of PM. Increased levels of fine particles in the air are generally linked to health problems such as heart disease, altered lung function, asthma, and lung cancer.

Sulfur dioxide:

SO_2 is a gaseous compound emitted primarily by industrial sources or power plants that burn coal or oil containing sulfur. Because coal and petroleum often contain sulfur compounds, their combustion generates SO_2. Continued exposure to SO_2 can contribute to impairment of breathing and respiratory problems. SO_2 is a precursor to acid rain and could damage trees, plants, and crops.

Lead:

Lead is a metal that is highly toxic when inhaled or ingested. Lead emitted into the atmosphere can be inhaled, or it can be ingested after it settles out of the air. Lead is rapidly absorbed into the bloodstream and is believed to adversely affect the central nervous system, the cardiovascular system, kidneys, and the immune system.

Nonattainment areas are generally those areas where criteria NAAQSs are exceeded more than once a year. Geographic areas where air pollution levels remain consistently below the NAAQS are designated "attainment" areas. Mobile County has been monitoring two of the six major pollutants regulated by the EPA: ozone and PM. This monitoring is performed to confirm attainment status. According to the ADEM, Air Division, the Mobile County region has attainment status for both ozone and PM (ADEM 2009). Mobile County has three monitoring locations. However, no air quality monitors are at or near the proposed project site under Alternative 1. The average of quarterly highest concentrations of ozone and PM observed in Mobile County in 2008 are provided in Table 3-3, along with the EPA air quality standards. The concentrations provided in Table 3-3 were calculated by averaging the highest quarterly measurements obtained at different monitoring locations in Mobile County.

TABLE 3-3
EPA AIR QUALITY STANDARDS AND HIGHEST QUARTERLY CONCENTRATIONS OF POLLUTANTS IN MOBILE COUNTY

Pollutants	Type of Average	Highest Quarterly Concentration (2008)[1]	EPA Air Quality Standards
Ozone	Maximum Daily 1-Hour Average	0.089 ppm	0.12 ppm
	Fourth Daily 8-Hour Average	0.077 ppm	0.075 ppm
Particulate Matter 2.5 microns or smaller	Annual Arithmetic Mean	9.94 µg/m^3	15 µg/m^3
	24 Hour (based on 3-year average of 99th percentile)	21.57 µg/m^3	35 µg/m^3
Particulate Matter 10 microns or smaller	Annual Arithmetic Mean	25 µg/m^3	50 µg/m^3
	24 Hour (based on 3-year average of 99th percentile)	43.3 µg/m^3	150 µg/m^3

Source: EPA. 2009b. "Monitor Values Report – Criteria Air Pollutants." AirData. On-line address: http://www.epa.gov/air/data/geosel.html

Notes:
[1] Average of highest quarterly levels observed at various monitoring locations in Mobile County
EPA U.S. Environmental Protection Agency
ppm Parts Per Million
µg/m^3 Micrograms per cubic meter

The Air Quality Index (AQI) is a nationally uniform index for reporting and forecasting daily air quality (EPA 2009b). The AQI uses a normalized scale from 0 to 500; the range breakdown is provided in Table 3-4. In the most recent data from December 22, 2008, the AQI value for the City of Mobile is between 0 and 50. This range of AQI indicates that the air quality in Mobile is satisfactory, and air pollution poses little or no risk to human health. AQI ranges and significance for human health are provided in Table 3-4.

TABLE 3-4
AIR QUALITY INDEX AND HEALTH CONCERN

Air Quality Index Range	Levels of Health Concern	Meaning
0 to 50	Good	Air quality is satisfactory, poses little or no risk.
51 to 100	Moderate	Air quality is acceptable; however, some pollutants may pose a moderate health concern for unusually sensitive people
101 to 150	Unhealthy for Sensitive Groups	Sensitive group of people may experience health effect; however, the general public is not likely to be affected.
151 to 200	Unhealthy	Everyone may begin to experience health effects; members of sensitive groups may experience more serious health effects.
201 to 300	Very Unhealthy	Health alert: everyone may experience more serious health effects.
> 300	Hazardous	Health warnings of emergency conditions. The entire population is more likely to be affected.

Source: AirNow. 2007. Air Quality Index – A Guide to Air quality and Your Health. http://www.adem.state.al.us/ftproot/air/aqi.pdf

3.2.5.2 Noise

Noise is generally described as unwanted sound and wholly subject to personal tastes and tolerance levels. In addition, the sensitivity of the human ear to noise depends on a number of collaborative factors that typically include wind factor, humidity, traffic density, and other factors. The presence of unwanted sound is called noise pollution. The unwanted sounds can seriously damage and effect physiological and psychological health. Other effects of noise pollution include interference with speech communication, sleep disturbances, annoyance and aggression, hypertension, high stress levels, tinnitus, hearing loss, and other harmful effects depending on the level of sound, or how loud it is. Often, "background" noise sources can contribute substantially to an ambient noise environment. Examples of background noises are environmental noises such as waves, traffic noise, idling engines, alarms, people talking, bioacoustics noise from animals or birds, and mechanical noise from devices such as refrigerators or air conditioning, power supplies, or motors (International Fund for Animal Welfare and Natural Resources Defense Council 2004).

Humans do not perceive noise levels in a linear fashion. It is generally accepted that a 55-decibel ((dB) [A]) sound would be disturbing whereas a 65 dB(A) noise level would be deemed intolerable, causing severe sleep disturbance (International Fund for Animal Welfare and Natural Resources Defense Council 2004). Typical ambient noise levels and common sources of various noise levels are presented in Table 3-5.

TABLE 3-5
AMBIENT NOISE LEVELS FROM COMMON SOURCES

Example Noise Source	Decibels (dB)	Subjective Evaluation
Near jet engine	140	Deafening
Threshold of pain	130	
Threshold of feeling – loud music	120	
Loud auto horn at 10 feet	100	Very Loud
Noisy urban street	90	(Intolerable)
Noisy factory	85	
Near Freeway auto traffic	50 to 60	Moderate to Loud (disturbing)
Average office	50	Moderate
Average residence	30	Faint

Source: U.S. Department of Housing and Urban Development, Office of Community Planning and Development. 1992. "The Noise Guidebook." The Environmental Planning Division. Office of Environment and Energy.

The project site under Alternative 1 and the surrounding areas are somewhat developed, with moderate commercial/residential development interspersed with wooded, undeveloped areas. Because the project area is managed for multiple uses, the ambient noise levels at different times of the day and different seasons of the year are affected by sound associated with several sources. The Mobile Regional Airport is located approximately 2.4 miles away and produces sporadic, short-term noise in the area. A fairground immediately north of the project area under this alternative produces short-term noises when utilized for events. A sand and gravel facility is located approximately 2 miles north of the site, and some ambient noise levels are affected by that facility's operations. Finally, current ambient noise levels in the area are affected by commercial and residential uses, including road traffic noise.

3.2.6 Cultural and Historic Resources

The National Register of Historic Places does not list any historic or cultural resources within 2 miles of the proposed site. The Alabama Historical Commission (AHC) is the state agency charged with safeguarding Alabama's historic buildings and sites, and according to the AHC's website, no historic sites are within a 2-mile radius of the proposed site. The AHC was contacted, requesting a comment regarding any historic or cultural resources that may be affected by the Proposed Action at the Alternative 1 site location. As of the date of this report, a response has not been received.

3.2.7 Socioeconomic and Man-Made Resources

The following sections describe socioeconomic and man-made resources affecting the Alternative 1 site.

3.2.7.1 Socioeconomic Resources

The parcel to the west of 7340 Zeigler Boulevard, Mobile, Alabama 36608 is located in Census Tract 64.02 within Mobile County. As shown on Figure 7, the property is surrounded by mixed-use residential, commercial, municipal, industrial, and undeveloped properties. To the north of the proposed site are fairgrounds and a plant nursery. The Greater Gulf States Fairgrounds is a public entertainment center located northeast of the proposed site. Primary fair activities on the grounds occur for 10 days during October and include entertainment rides, exhibits, agriculture and livestock showcases, and musical/theater concerts. The October fair brings approximately 300,000 visitors within those 10 days. The grounds also are used year round to host meetings, weddings, balls, and concerts. Concert capacity is approximately 20,000 visitors at one time. Access to the fairgrounds for the public is through Gate 4 located on Zeigler Road between the Zeigler Circle E. and Cody Road—approximately 0.5 mile from the proposed site. The Overlook Plant Nursery to the north of the site is accessed only via Howells Ferry Road and extends south, abutting the proposed site. The nursery encompasses approximately 60 acres of cleared land that houses wholesale woody ornamentals. None of the commercial plants is stored in native soils; they are all stored in aboveground containers. There are no plans to expand or redevelop the nursery in the future, as the nursery proprietors are phasing out growth with an eye toward retirement in a few years.

To the south on Zeigler Circle are various properties including commercial businesses, residential housing, two churches, a funeral home, and the Mobile Society for the Prevention of Cruelty to Animals. The Gilmer Funeral Home, located across the street from the site, is the only full-service funeral home in Mobile; it has a large cooler, modern crematory facility, autopsy facilities, and eight body transport vehicles.

To the immediate east of the proposed site is the Mobile County Communications Center-911 Center (MCCC), which answers 911 and non-emergency calls for citizens and guests of Mobile County. MCCD operates 24 hours a day, 7 days a week and 365 days a year, answering and dispatching calls for emergency and non-emergency service.

3.2.7.2 Transportation

The proposed property is directly accessible via Zeigler Boulevard, a two-lane asphalt road (see Figure 7). The main arterial roads are Cody Road to the east and Schillinger Road to the west. The Alabama Department of Transportation (ALDOT) *Rural Planning, 2009-2012 Highway Projects* plans to add lanes to Zeigler Boulevard between Cody Road and Schillinger Road starting in 2009. The site is approximately 7.5 miles west of Interstate 65 and 2.4 miles northeast of the Mobile Regional Airport, which also has heliport access.

The Greater Gulf States Fairgrounds, as discussed in Section 3.2.7.1, accommodates approximately 300,000 visitors during its 10-day October fair, and the grounds also are used year round to host concerts that can have upwards of 20,000 visitors at one time. Traffic in and out of the fairgrounds is located on Ziegler Boulevard approximately 0.5 mile from the proposed site. Discussions with the fairgrounds staff and the owner of Gilmer Funeral Home revealed that during these times, traffic can back up on Ziegler Boulevard past where the NOAA facility would be located.

3.2.7.3 Utilities

Visible utilities on the property include a city-owned Federal Communications Commission (FCC) registered communications tower (registration number 1210054) and the tower's base building, located in the southeast corner of the site (see Figure 7). The tower sits on three concrete footings in an area of approximately 40 by 40 feet, and is accessed by Zeigler Blvd. There are two drainage ditches: one runs adjacent to the west side of the property and the other runs along the south side of the property alongside Zeigler Boulevard.

Because of the location within Mobile County, Alabama Power is the primary provider of electricity and Mobile Gas Service Corporation is the primary provider of natural gas. Mobile Area Water and Sewer System (MAWSS) is the primary provider of water and sewer services. Multiple provider options are available for phone, internet, and cable – including Comcast, Cox, DIRECTTV, and DISH Network, which are all large-firm national companies serving millions of residential, business, and industrial customers. Below is a summary of each provider's capacity.

Alabama Power:

Alabama Power provides reliable electricity supply service to 1.4 million homes, businesses, and industries in the southern two-thirds of Alabama. It is one of four U.S. utilities operated by Southern Company, one of the nation's largest producers of electricity. Alabama Power is the second largest subsidiary of Southern Company, serving homes, businesses, and industries in the southern two-thirds of Alabama. More than 78,000 miles of power lines carry electricity to customers throughout 44,500 square miles.

Mobile Gas:

Sempra Pipelines & Storage owns Mobile Gas, a local natural gas distribution company, serving residential, commercial, and industrial customers in Mobile and Baldwin Counties in Southwest Alabama. The company and its affiliates operate and/or own 1,200 miles of pipeline in northern Mexico and the United States, and are building an additional 800 miles of pipeline. With 13,600 employees worldwide, Sempra Energy, the parent of Sempra Pipelines & Storage, develops energy infrastructure, operates utilities, and provides related products and services to more than 24 million consumers worldwide.

Mobile Area Water and Sewer System:

MAWSS provides safe drinking water and sanitary sewer service for more than 265,000 people in the Mobile metropolitan area. The source of drinking water is the J.B. Converse Reservoir, located in the western part of Mobile County. The 3,600-acre reservoir holds 17 billion gallons and is continually fed by groundwater, streams, and rainfall. Built to supply Mobile with water for future generations, it provides an abundant and enviable supply of quality water for Mobile and surrounding communities. MAWSS has an alternative source of water in the Burton S. Butler River System, which currently provides raw water for industrial use.

MAWSS' wastewater system serves approximately 233 square miles in Mobile County and approximately 1 square mile in Baldwin County. The collection and transmission system consists of approximately 1,300 miles of gravity sewers, approximately 200 lift stations, and approximately 120 miles of force mains. MAWSS currently owns and operates two conventional wastewater treatment facilities and five decentralized wastewater facilities. MAWSS uses a Capacity Assurance Program to monitor the available capacity of its wastewater collection and transmission systems.

3.2.7.4 Hazardous Materials and Solid Waste

Nearby commercial facilities use small quantities of hazardous materials and generate small amounts of wastes associated with operations. During the site visit, minor debris and trash were observed on the property, but no underground storage tanks (UST), ASTs, transformers, or other hazardous materials were evident on or in the immediate vicinity of the property. A Shell Oil Gas Station is located at 7107 Zeigler Road, approximately 0.5 mile from the proposed site.

Solid waste services are provided by multiple private companies that all serve West Mobile County. These providers include H&L Sanitation, B.T. Sanitation, Charleston Sanitation, John Richardson, Harold Richardson, and Doris Richardson. Municipal solid waste from the proposed area of West Mobile would be deposited in the Chastang Sanitary Landfill. In 2005, the Chastang Sanitary Landfill was estimated to have 85 remaining years of operation at the current intake. The reported average daily value in the *Mobile County Comprehensive Solid Waste Management Plan, June 2005-2015* was 709 tons, with a daily permitted tonnage of 1725.

3.2.7.5 Recreational Resources

There is no evidence of recreational activities on the property. The land is owned by the City of Mobile and is not open to the public for recreational activities. The Greater Gulf States Fairgrounds is a public entertainment center located northeast of the proposed site. Primary fair activities on the grounds occur for 10 days during October and include activities such as entertainment rides, exhibits, agriculture and livestock showcases, and musical/theater concerts. The October fair brings approximately 300,000 visitors within those 10 days. The grounds also are used year round to host meetings, weddings, balls, and concerts. Concert capacity is approximately 20,000 visitors at one time. Access to the fairgrounds for the public is through Gate 4 located on Zeigler Road between the Zeigler Circle E and Cody Road – approximately 0.5 mile from the proposed site.

3.2.7.6 Visual and Aesthetic Resources

The proposed site is located in a predominantly commercial area. The area is part of a larger, heavily wooded area (approximately 0.4 square mile) fragmented by various commercial, residential, and cleared areas, as seen on Figure 7.

3.3 ALTERNATIVE 2: 7431 AIRPORT BOULEVARD, MOBILE, ALABAMA 36616

3.3.1 Location and Land Use

This alternative site is located in Mobile County and the City of Mobile, the general land uses of which are described in Section 3.2.1. This alternative site is a 3.2-acre parcel located in a mixed use commercial, residential, and undeveloped area on the south side of Airport Boulevard between Cody Road and Schillinger Road. The site is located within western Mobile, about 1.5 miles east of the Regional Mobile Airport and the Coast Guard Base. The site location and the property boundary are shown on Figure 1.

The site is currently occupied by an abandoned building, a covered structure for outdoor storage, and a security fence that limits access to the southern half of the site. The abandoned building, encompassing approximately 30,000 sf, is at the eastern portion of the site. This structure would need modifications to become capable of withstanding level 5 hurricane conditions and tornado conditions. The project site also is occupied by 7,000 sf of covered outdoor storage area located west of the abandoned building. The building includes loading docks and is surrounded by an asphalt-paved parking area. A billboard sign also is located on the northwestern corner of the parcel. Based on the current condition of the site, it appears to have been utilized commercially in the past. However, the age and prior use of the structures are unknown. The current owner of the site is Mr. Dino Velazquez. Tetra Tech attempted to contact Mr. Velazquez to discuss the site history. A telephone message was left for Mr. Velazquez on February 20, 2009, but no response has been received to date.

Land uses in this area are mostly residential, undeveloped, and commercial (see Figure 10). Airport Boulevard is the main highway that connects downtown Mobile to the Regional Mobile Airport. Commercial developments exist on either side of Airport Boulevard due to proximity of the street to the regional airport. Land use of the surrounding properties to the north across Airport Boulevard is commercial; to the east is commercial; to the south is residential; and to the west is an undeveloped wooded area. Within a 1-mile radius of the site are four major access roads, and the site is connected to Airport Boulevard via two paved access driveways.

3.3.2 Geology and Soil Resources

This section describes the soil and geology resources for Alternative 2.

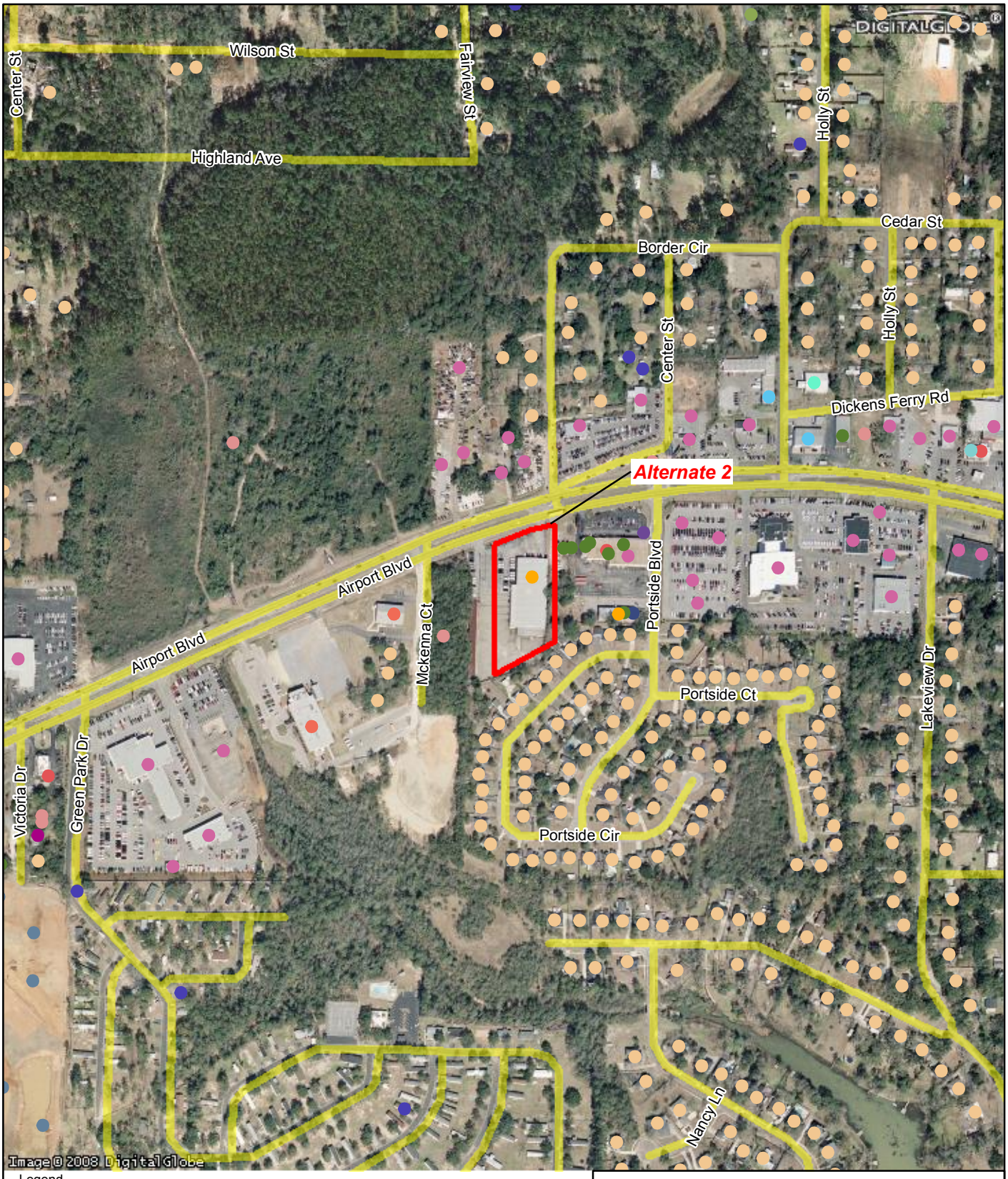
3.3.2.1 Geology

The geology for this site is similar to that of Alternative 1 and has been discussed in Section 3.2.2.1.

3.3.2.2 Soils

The project area is located within the Southern Coastal Plain Resource area, consisting of a series of level to gently sloping, broad, low lying ridges that have steeper slopes along drainageways (USDA 1980).

This alternative site is located within Troup-Urban land complex, 0- to 8-percent slope (USDA 1980). The soil in this area is well-drained, nearly level to sloping Troup soils (45 to 70 percent) and areas of Urban Land soil (15 to 35 percent) (USDA 1980). The soil types in the area are depicted on Figure 8.



Legend

Land Use

- Auto Parts
- Worship Place
- Contractor
- Convenience Store
- Engine Repair/Service
- General Retail Sales
- General Offices
- Mobile Homes
- Nursery
- Office Park
- Restaurant
- Single-family Detached
- Standard Apartment
- Vacant Land
- Veterinary Hospital
- Warehousing

N

0 250 500

Feet

Source: GlobeXplorer Aerial Imagery, DigitalGlobe, 2007; City of Mobile GeoDatabase, 2009.

Gulf of Mexico Disaster Response Center
Proposed Locations
Mobile, Alabama

Figure 10

Alternative 2 Land Use Map

TETRA TECH EM INC.

Date: 02/26/09 Drawn By: Ingrid Tobar Project No: G1278.4.0019.02

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The surface layer of Troup soil is a dark grayish brown loamy sand, typically 4 inches thick. The subsurface layer is yellowish brown loamy sand to a depth of 15 inches; brownish yellow loamy sand to 44 inches; and reddish yellow loamy sand to 69 inches. The subsoil is red sandy loam to 86 inches.

The Urban Land areas are mostly covered by streets, sidewalks, buildings, parking lots, and other structures. These areas have a high rate of runoff because the soils are covered with non-permeable material due to the infrastructure development.

Troup soils are rapidly permeable in the sandy layers and moderately permeable in subsoil. The water capacity is low in these types of soils. These soils have a good potential for most urban uses. Areas of these soils have slopes of more than 4 percent and a moderate limitation for small commercial buildings; but these conditions can be overcome by proper engineering design. Seepage is a severe limitation for sewage and sanitation uses (USDA 1980).

3.3.3 Water Resources

This section discusses the groundwater and surface water resources for the proposed Alternative 2 site location.

3.3.3.1 Groundwater

The groundwater resources for the Alternative 2 site location are the same as the Alternative 1 site location groundwater resources as described in Section 3.2.3.1.

3.3.3.2 Surface Water

The proposed Alternative 2 site location is located in the Mobile Bay watershed (EPA 2009a). Superfund sites, water discharge permits, toxic releases, and additional information for the Mobile Bay watershed were not reported for the proposed site location (EPA 2009a).

Mobile Bay drains the fourth largest watershed in the United States in terms of flow volume, and is the receiving basin for the sixth largest river system in the United States (Mobile Bay National Estuary Program (NEP No Date). Sixty-five percent of Alabama's land area drains its waters into Mobile Bay. Mobile Bay is Alabama's central estuary system. In simplest terms, an estuary is defined as an area "where rivers meet the sea." They are transitional zones where freshwater rivers meet tidally influenced marine waters. Estuaries are considered environmentally and economically important because of their exceptional biological diversity and productivity.

Water bodies located within 0.5 mile of the proposed Alternative 2 site location include Milkhouse Creek and the corresponding freshwater forested/shrub wetlands, freshwater emergent wetlands, and freshwater ponds (see Figure 9). Big Creek Lake, as described in Section 3.2.3.2, is located approximately 4.9 miles northwest of the proposed Alternative 2 site location.

3.3.4 Biological Resources

This section describes the general flora and fauna; threatened, endangered, and sensitive species; and insects, disease, and other exotic organisms for the proposed Alternative 2 site location.

3.3.4.1 Flora and Fauna

The proposed Alternative 2 site location is also located in the Outer Coastal Plain Mixed Province (USDA Forest Service 1995), as described for Alternative 1 in Section 3.2.4.1.

The species diversity of the Mobile Bay watershed includes more than 800 non-vertebrates, approximately 337 fish, 126 amphibians and reptiles, 355 birds, and 49 mammals (Rivers of Alabama No Date).

The proposed Alternative 2 site location is developed, and therefore, minimal wild flora grows in the project area. Some wildlife may be found in the project area, but the area is developed, and therefore, most wildlife usually avoids the proposed project area. An undeveloped, wooded area is located immediately west of the proposed Alternative 2 site location.

3.3.4.2 Threatened, Endangered, and Sensitive Species

Table 3-2 in Section 3.2.4.2 presents the scientific names, common names, and statuses of federally listed animal and plant species found in Mobile County, Alabama (USFWS 2007b). The listed species potentially occurring on the proposed Alternative 2 site location, as indicated in the USFWS consultation response, are the same as described in Section 3.2.4.2 for the Alternative 1 site location.

3.3.4.3 Insects, Disease, and Other Exotic Organisms

The insects, disease, and other exotic organisms for the Alternative 2 site location are the same as the Alternative 1 site location as described in Section 3.2.4.3. Given the ranges of the exotic species located in south Alabama, it is possible that the exotic species could occur in the vicinity of the developed proposed Alternative 2 site location.

3.3.5 Air Resources

In this section, air resources are categorized into two components: air quality and noise. The following sections describe the current air and noise quality within Mobile County and the project area.

3.3.5.1 Air Quality

The air quality for this alternative site would not differ from the preferred site because these sites are located within the same general area. The ambient air quality has been discussed in Section 3.2.5.1. No air quality monitors are at or near this alternative site.

3.3.5.2 Noise

This alternative site is located within mostly developed area consisting of commercial/residential structures. Because the project area is managed for multiple uses, it has various sources of noise including those associated with road traffic and commercial/residential usage. The Mobile Regional Airport is located about 1.5 miles away and produces sporadic short-term noise in the area. The ambient noise at this site is similar to that of Alternative 1 and has been discussed in Section 3.2.5.2.

3.3.6 Cultural and Historic Resources

The NRHP does not list any historic or cultural resources within 2 miles of the proposed site. The AHC is the state agency charged with safeguarding Alabama's historic buildings and sites, and according to the AHC's website, no historic sites are within a 2-mile radius of the proposed site. The AHC was contacted,

requesting a comment regarding any historic or cultural resources that may be affected by the Proposed Action at the Alternative 2 site location. As of the date of this report, a response has not been received.

3.3.7 Socioeconomic and Man-Made Resources

The following sections describe the socioeconomic and man-made resources associated with the proposed Alternative 2 site location.

3.3.7.1 Socioeconomic Resources

The proposed site, located at 7431 Airport Boulevard, Mobile, Alabama 36616, is in Census Tract 64.05 within Mobile County. As shown in Figure 10, the property is surrounded by mixed-use residential, commercial, industrial, and undeveloped properties. To the north of the proposed site, across Airport Boulevard, is commercial and undeveloped property. Morgan High School is located about 0.30 mile northeast of the site on Border Circle East. To the east are parking lots and commercial properties including restaurants, shopping centers, and service industries. Residential properties to the south of the proposed site are single family homes, and approximately 10 of those homes are located directly behind the proposed site. To the immediate west of the proposed site is an undeveloped wooded property that extends westward for approximately 0.10 mile and southward along a residential community for roughly 0.30 mile.

3.3.7.2 Transportation

The proposed property is directly accessible via Airport Boulevard, a four-lane divided asphalt road (see Figure 10). Within a 1-mile radius of the site are four major access roads. The ALDOT *Rural Planning, 2009-2012 Highway Projects* documents plans to resurface Airport Boulevard from CR-537 (Flave Pierce Road) to CR-429 (Cody Road). This construction would pass by the entrance to the proposed site. ALDOT also would begin preliminary engineering to add lanes to Airport Boulevard from Cody Road to the Mobile Regional Airport. The site is approximately 5.5 miles west of Interstate 65 and 1.5 miles east of the Mobile Regional Airport, which also has heliport access.

3.3.7.3 Utilities

Visible utilities on the property include a three-pole-mounted electrical transformer on the north side of the shed structure and a one-pole-mounted electrical transformer located at the northeast corner of the property. Major utilities located along the street include electric, a 12-inch water main with fire hydrant, and a 2-inch medium pressure gas main.

Because of the location within Mobile County, Alabama Power is the primary provider of electricity, and Mobile Gas Service Corporation is the primary provider of gas. MAWSS is the primary provider of water and sewer services. Multiple providers are options for phone, internet, and cable—including Comcast, Cox, DIRECTTV, and DISH Network, which are all large-firm national companies serving millions of residential, business, and industrial customers. The services and provider capacity for the proposed site can be referenced in Section 3.2.7.3.

3.3.7.4 Hazardous Materials and Solid Waste

Nearby commercial facilities use small quantities of hazardous materials and generate small amounts of wastes associated with existing operations. A three-pole-mounted electrical transformer is on the north side of the shed structure, and a one-pole-mounted electrical transformer is located at the northeast corner of the property. The site visit found no evidence of USTs, ASTs, or other hazardous materials located on

or in the immediate vicinity of the property. Solid waste services are provided by multiple private companies, as described in Section 3.2.7.4.

3.3.7.5 Recreational Resources

There is no evidence of recreational activities on the property. The land is owned by Dino and Ann Velazquez and is not open to the public for recreational activities. The residential homes to the south of the property have backyards that abut the proposed site.

3.3.7.6 Visual and Aesthetic Resources

The proposed site is located in a predominantly commercial and residential area. The area is part of a larger wooded area (approximately 0.03 square mile) fragmented by various commercial, residential, and cleared areas, as seen on Figure 10.

3.4 ALTERNATIVE 3: 1000 CODY ROAD, MOBILE, ALABAMA 36608

3.4.1 Location and Land Use

This alternative site is located in Mobile County and the City of Mobile, the general land uses of which are described in Section 3.2.1. The site is located in an undeveloped wooded area surrounded by commercial and residential developments (see Figure 11). The site is located approximately 3 miles northeast of the Mobile Regional Airport and east of Cody Road. This alternative site, totaling 1.4 acres, is primarily wooded with no existing structures (see Figure 2). The site is currently owned by the Glen Air Trust.

The surrounding properties have mixed used development consisting mostly of residential, commercial, and undeveloped areas. A state fairground is located across Cody Road to the west of the site, which could serve as an additional parking area for the NOAA facility. Most of the site is currently covered with medium- to small-growth trees, and several substantial live oak trees are present on site. In addition, the northern and southern adjacent properties are undeveloped and consist of similar types of medium- and small-growth trees. The adjacent property to the east is primarily developed with residential lots. The site is easily accessible, as it is located adjacent to North Cody Road.

3.4.2 Geology and Soil Resources

This section describes the soil and geology resources for Alternative 3.

3.4.2.1 Geology

The geology for this site is similar to that of Alternative 1 and has been discussed in Section 3.2.2.1.

3.4.2.2 Soils

The site under Alternative 3 is located within the Southern Coastal Plain Resource area, consisting of a series of level to gently sloping, broad, low lying ridges that have steeper slopes along drainageways (USDA 1980).

As shown in Figure 8, this alternative site is comprised of Heidel sandy loam, 0- to 2-percent slopes (USDA 1980). These are well-drained soils located on nearly level, broad flats of the Coastal Plain uplands (USDA 1980). The surface layer is a dark grayish brown sandy loam, typically 7 inches thick. The upper part of the subsoil is reddish brown and yellowish red sandy loam that extends to a depth of 33

Legend

Land Use

- Agriculture Activities
- Worship Place
- Outdoor Recreational
- Convenience Store
- Industrial
- Warehousing
- Single-family Detached
- Single-family Garage
- Single-family Structure
- Vacant Land

N

0 250 500

Feet

Source: GlobeXplorer Aerial Imagery, DigitalGlobe, 2007; City of Mobile GeoDatabase, 2009.

Gulf of Mexico Disaster Response Center
Proposed Locations
Mobile, Alabama

Figure 11

Alternative 3 Land Use Map

TETRA TECH EM INC.

Date: 02/26/09 Drawn By: Ingrid Tobar Project No: G1278.4.0019.02

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inches. The lower part of the subsoil is red sandy clay loam that extends to a depth of 68 inches thick and red sandy loam to a depth of 92 inches. Permeability and available water capacity are moderate in this soil type. This soil type also includes small areas (5 to 20 percent) of Bama, Benndale, Lucedael, Grady, and Troup soils. Most of the acreage of this soil is typically utilized for planting cultivated crops and pasture. In addition, this soil has a good potential for most urban uses because of no significant limitations. Septic tank absorption fields function well in this soil (USDA 1980).

3.4.3 Water Resources

This section discusses the groundwater and surface water resources for the Alternative 3 proposed site location.

3.4.3.1 Groundwater

The groundwater resources for the Alternative 3 site location are the same as the Alternative 1 site location groundwater resources as described in Section 3.2.3.1.

3.4.3.2 Surface Water

The surface water resources for the Alternative 3 site location are the same as the Alternative 1 site location surface water resources as described in Section 3.2.3.2.

The proposed Alternative 3 site location is located in the Mobile-Tensaw watershed (EPA 2009a). Superfund sites, water discharge permits, toxic releases, and additional information for the Mobile-Tensaw watershed were not reported for the proposed site location (EPA 2009a). The EPA has authority under the Clean Water Act of 1972 to work with the states on developing water quality standards for particular contaminants. The EPA maintains a list of contaminated (impaired) waterways as required by the Clean Water Act, which is based on the water quality standards developed in conjunction with the states. This list is a compilation of identified water bodies not supporting their designated uses. The 303(d) list is administered by ADEM, in accordance with the EPA. Once the impaired waters are identified, Section 303(d) requires that the states establish total maximum daily loads (TMDL) that will meet water quality standards for each listed water, considering seasonal variations and a margin of safety (MOS) that accounts for uncertainty (ADEM No Date). A TMDL is a calculation of the maximum amount of a pollutant that a water body can receive and still meet water quality standards (EPA 2008a). According to the list of impaired waterways (the "303(d)" list), the Threemile Creek, located approximately 0.10 mile east of the proposed site location, is listed due to carbonaceous biochemical oxygen demand (BOD), fecal colifrom, and nitrogenous BOD.

Water bodies located within 0.5 mile of the proposed Alternative 3 site location include Threemile Creek east of the site, a freshwater forested/shrub wetland and freshwater pond southeast of the site, a freshwater forested/shrub wetland southwest of the site, and two freshwater ponds northwest of the site (see Figure 9). Big Creek Lake, as described in Section 3.2.3.2, is located approximately 4.75 miles northwest of the proposed Alternative 3 site location.

3.4.4 Biological Resources

This section describes the general flora and fauna; threatened, endangered, and sensitive species; and insects, disease, and other exotic organisms for the proposed Alternative 3 site location.

3.4.4.1 Flora and Fauna

The proposed Alternative 3 site location is located in the Outer Coastal Plain Mixed Province (USDA Forest Service 1995), and in the Mobile-Tensaw watershed, as described for Alternative 1 in Section 3.2.4.1.

The proposed Alternative 3 site location is currently an undeveloped, wooded area with both juvenile and mature trees, and a thin layer of undergrowth providing habitat for terrestrial wildlife. Smaller wildlife is expected to be the primary form of wildlife found on site because the proposed site is located within a developed area.

3.4.4.2 Threatened, Endangered, and Sensitive Species

Table 3-2 in Section 3.2.4.2 presents the scientific names, common names, and statuses of federally listed animal and plant species found in Mobile County, Alabama (USFWS 2007b). The listed species potentially occurring on the proposed Alternative 3 site location, as indicated in the USFWS consultation response, are the same as described in Section 3.2.4.2 for the Alternative 1 site location.

3.4.4.3 Insects, Disease, and Other Exotic Organisms

The insects, disease, and other exotic organisms for the Alternative 3 site location are the same as the Alternative 1 site location as described in Section 3.2.4.3. Given the ranges of the exotic species located in south Alabama, it is possible that the exotic species could occur in the vicinity of the undeveloped proposed Alternative 3 site location.

3.4.5 Air Resources

Air resources are categorized into two components: air quality and noise. The following sections describe the current air and noise quality within the project area.

3.4.5.1 Air Quality

The air quality for this alternative site would not differ from the preferred alternative site because these sites are located within the same general area. The ambient air quality of the area has been discussed in Section 3.2.5.1. No air quality monitors are at or near this alternative site.

3.4.5.2 Noise

This alternative site is located within moderate commercial/residential development mixed in patches of wooded areas. Because the project area is managed for multiple uses, it has various sources of noise including those associated with road traffic, usage of fairground and residences adjacent to the site. The Mobile Regional Airport is located about 3 miles away and produces sporadic short-term noise in the area. A fairground located immediately west of the site produces short-term noises when utilized for events.

3.4.6 Cultural and Historic Resources

The NRHP does not list any historic or cultural resources within 2 miles of the proposed site. The AHC is the state agency charged with safeguarding Alabama's historic buildings and sites, and according to the AHC's website, no historic sites are within a 2-mile radius of the proposed site. The AHC was contacted,

requesting a comment regarding any historic or cultural resources that may be affected by the Proposed Action at the Alternative 3 site location. As of the date of this report, a response has not been received.

3.4.7 Socioeconomic and Man-Made Resources

The following sections describe the socioeconomic and man-made resources associated with the proposed Alternative 3 site location.

3.4.7.1 Socioeconomic Resources

The proposed site, located at 1000 Cody Road, Mobile, Alabama 36608, is in Census Tract 64.02 within Mobile County. As shown on Figure 11, the property is primarily surrounded by sparse residential properties and open space. To the direct north and south of the site is undeveloped wooded area. Northeast, east, and southeast are approximately 20 residential, single-family homes located off Orangeburg Drive W. Across Cody Road is the Greater Gulf States Fairgrounds, a public entertainment center located northeast of the proposed site. Primary fair activities on the grounds occur for 10 days during October and include activities such as entertainment rides, exhibits, agriculture and livestock showcases, and musical/theater concerts. The October fair brings approximately 300,000 visitors within those 10 days. The grounds also are used year round to host meetings, weddings, balls, and concerts. Concert capacity is approximately 20,000 visitors at one time. Access to the fairgrounds for the public is through Gate 4 located on Zeigler Road between the Zeigler Circle E and Cody Road—approximately 0.33 mile from the proposed site. An entrance to the fairgrounds is directly across the proposed site. To the south of the site across the Zeigler Boulevard at the intersection of Cody Road and Ziegler Boulevard is a Shell Gas Station.

3.4.7.2 Transportation

The proposed property is directly accessible via Cody Road, a two-lane asphalt road (see Figure 11). Within a 1-mile radius of the site are four major access roads. The site is approximately 7 miles west of Interstate 65 and 3 miles northeast of the Mobile Regional Airport, which also has heliport access.

3.4.7.3 Utilities

The proposed site has major utilities located along the street frontage, including large power lines, a 12–inch water main, an 8-inch sanitary sewer, and a 6-inch medium pressure natural gas main. Because of the location within Mobile County, Alabama Power is the primary provider of electricity, and Mobile Gas Service Corporation is the primary provider of gas. MAWSS is the primary provider of water and sewer services. Multiple providers are options for phone, internet, and cable—including Comcast, Cox, DIRECTTV, and DISH Network, which are all large-firm national companies serving millions of residential, business, and industrial customers. The services and provider capacity for the proposed site can be referenced in Section 3.2.7.3.

3.4.7.4 Hazardous Materials and Solid Waste

The nearby fairgrounds and gas station use small quantities of hazardous materials and generate small amounts of wastes associated with existing operations. A Shell Oil Gas Station is located approximately 0.10 mile from the proposed site on the southwest corner of the intersection of Zeigler Boulevard and Cody (see Figure 11). The site visit found no evidence of USTs, ASTs, transformers, or other hazardous materials located on the proposed site property. Solid waste services are provided by multiple private companies, as described in Section 3.2.7.4.

3.4.7.5 Recreational Resources

The property is owned by Glen Air Trust and is not open to the public for recreational activities. However, there was evidence that children in the abutting residential property play in the wooded area on the site. A tree fort was found in a large oak tree on the proposed site.

3.4.7.6 Visual and Aesthetic Resources

The proposed site is located in a predominantly residential area. The area provides a wooded buffer for the residents to the east of the site from Cody Road and the fairgrounds, as seen on Figure 11.

3.5 ALTERNATIVE 4: 140 SCHILLINGER ROAD, MOBILE, ALABAMA 36608

3.5.1 Location and Land Use

This alternative site is located in Mobile County and the City of Mobile, the general land uses of which are described in Section 3.2.1. This alternative site, a 1.4-acre parcel, is located in a commercially developed area (see Figure 12). The Regional Mobile Airport is located within 1 mile west of the site. This site has been previously developed as a mobile home sales lot and the access road has been paved with gravel. Based on this past use, the site might have consisted of permanent fixtures for mobile homes and other structures. A drainage ditch runs along the southern edge of the site but the topography of the site is relatively flat. Currently, one small structure is present, a modular commercial building, which may need to be removed or renovated. A large billboard is located on the southeastern corner of the site. The site is surrounded by commercial developments with some wooded/undeveloped lots in the surrounding area to the west. Commercial development in the area includes major retail stores and paved parking areas. The retail stores located in the adjacent area include Lowes to the east across Schillinger Road and Sears to the south.

3.5.2 Geology and Soil Resources

This section describes the soil and geology resources for Alternative 4.

3.5.2.1 Geology

The geology for this site is similar to that of Alternative 1 and has been discussed in Section 3.2.2.1.

3.5.2.2 Soils

The site is located within the Southern Coastal Plain Resource area, consisting of a series of level to gently sloping, broad, low lying ridges that have steeper slopes along drainageways. This alternative site consists of Notcher sandy loam, 0- to 2-percent slopes on the western property boundary (USDA 1980). Figure 8 shows the soil types found at the site. The characteristics of each soil type are described below.

Notcher sandy loam is moderately well-drained, nearly level soil located on the Coastal Plains uplands in the southern part of the County. The surface layer is dark grayish brown sandy loam, typically about 7 inches thick. The upper part of the subsoil has 10 to 25 percent iron concentrations and is yellowish brown loam to a depth of 44 inches. The lower part consists of clay loam up to 76 inches. It is mottled in shades of gray, yellow, brown, and red, and has lower iron concentration and 10 to 15 percent nodules of plinthite. The soil permeability is moderate in the upper part of the subsoil and moderately slow in the layers with plinthite. A water table is 3 to 4 feet below the surface during winter and early spring.

Also included in this soil mapping area are other soils such as Bama, Grady, Malbis, Robertsdale, and Saucier soils. These included soils make up 10 to 15 percent, and individual areas are mostly less than 5 acres. Notcher sandy loam is good to fair for site and infrastructure development. The major limitation is the low strength of the soil type; however, this limitation can be mitigated by proper engineering design. Wetness is a moderate limitation for residences with basements. The moderately slow permeability and seasonal wetness are severe limitations for septic tank absorption field (USDA 1980).

3.5.3 Water Resources

This section discusses the groundwater and surface water resources for the Alternative 4 proposed site location.

3.5.3.1 Groundwater

The groundwater resources for the Alternative 4 site location are the same as the Alternative 1 site location groundwater resources as described in Section 3.2.3.1.

3.5.3.2 Surface Water

The surface water resources for the Alternative 4 site location are the same as the Alternative 2 site location surface water resources as described in Section 3.3.3.2.

A drainage improvement is located along the southern property boundary of the proposed Alternative 4 site location. The drainage ditch located on the southern boundary of the project site runs east to west, and separates the property boundary and Eads Casa Drive. No water was observed during the site reconnaissance. The drainage ditch is not mapped as a potential wetland area in the NWI.

Water bodies located within 0.5 mile of the proposed Alternative 4 site location include Milkhouse Creek and the corresponding freshwater forested/shrub wetlands east of the site; and Miller Creek and the corresponding freshwater forested/shrub wetlands west of the site (see Figure 9). Big Creek Lake, as described in Section 3.2.3.2, is located approximately 4.3 miles northwest of the proposed Alternative 4 site location.

3.5.4 Biological Resources

This section describes the general flora and fauna; threatened, endangered, and sensitive species; and insects, disease, and other exotic organisms for the proposed Alternative 4 site location.

3.5.4.1 Flora and Fauna

The proposed Alternative 4 site location is located in the Outer Coastal Plain Mixed Province (USDA Forest Service 1995), as described in Section 3.2.4.1, and is located in the Mobile Bay watershed, with diversity as described in Section 3.3.4.1.

The proposed Alternative 4 site location is developed, and therefore, minimal wild flora grow in the project area. Some wildlife may be found in the project area, but the area is developed, and therefore, most wildlife usually avoids the proposed project area. The proposed Alternative 4 site location is surrounded by commercial/industrial developments and roadways.

3.5.4.2 Threatened, Endangered, and Sensitive Species

Table 3-2 in Section 3.2.4.2 presents the scientific names, common names, and statuses of federally listed animal and plant species found in Mobile County, Alabama (USFWS 2007b). The listed species potentially occurring on the proposed Alternative 4 site location, as indicated in the USFWS consultation response, are the same as described in Section 3.2.4.2 for the Alternative 1 site location.

3.5.4.3 Insects, Disease, and Other Exotic Organisms

The insects, disease, and other exotic organisms for the Alternative 4 site location are the same as the Alternative 1 site location, as described in Section 3.2.4.3. Given the ranges of the exotic species located in south Alabama, it is possible that the exotic species could occur in the vicinity of the developed proposed Alternative 4 site location.

3.5.5 Air Resources

Air resources are categorized into two components: air quality and noise. The following sections describe the current air and noise quality within the project area.

3.5.5.1 Air Quality

The air quality for this alternative site would not differ from the preferred alternative site because these sites are located within the same general area. The ambient air quality in the area has been discussed in Section 3.2.5.1. No air quality monitors are at or near this alternative site.

3.5.5.2 Noise

This alternative site is located in primarily commercial/residential development. Because the project area is managed for multiple uses, it has various sources of noise including those associated with road traffic due to the adjacent retail stores. The Mobile Regional Airport and the Coast Guard Base are located about 1 mile to the west and also produce sporadic short-term noise in the area.

3.5.6 Cultural and Historic Resources

The NRHP does not list any historic or cultural resources within 2 miles of the proposed site. The AHC is the state agency charged with safeguarding Alabama's historic buildings and sites, and according to the AHC's website, no historic sites are within a 2-mile radius of the proposed site. The AHC was contacted, requesting a comment regarding any historic or cultural resources that may be affected by the Proposed Action at the Alternative 4 site location. As of the date of this report, a response has not been received.

3.5.7 Socioeconomic and Man-Made Resources

The following sections describe the socioeconomic and man-made resources associated with the proposed Alternative 4 site location.

3.5.7.1 Socioeconomic Resources

The proposed site, located at 140 Schillinger Road, Mobile, Alabama 36608, is in Census Tract 64.02 within Mobile County. As shown on Figure 12, the property is surrounded by mixed-use commercial, industrial, and undeveloped properties. To the direct north and south of the proposed site are commercial properties including restaurants and shopping centers. To the east, across Schillinger Road, are a Lowes Home Improvement Store and a patch of undeveloped, wooded area. To the immediate west of the

proposed site is a Frito-Lay Inc., distribution facility that abuts approximately 0.2 square mile of undeveloped, wooded area buffering the Mobile Regional Airport runways. A large billboard is located on the southeastern corner of the site.

3.5.7.2 Transportation

The proposed property is directly accessible via Schillinger Road, a five-lane asphalt road (see Figure 12). Within a 1-mile radius of the site are four major access roads, and the site is approximately 6.5 miles west of Interstate 65. The Mobile Regional Airport is located directly west, and a passage leads directly from the site to the airport on Eads Casa Drive (two-lane asphalt road); the drive from the proposed site to the airstrips approximates 0.5 mile, and to the main terminal, 1 mile.

3.5.7.3 Utilities

Major utilities are located along the street including electric, a 6-inch water main with a fire hydrant, an 8-inch sanitary sewer, and a 4-inch medium pressure gas main and telephone. A drainage ditch runs along Eads Casa Drive along the south side of the property.

Because of the location within Mobile County, Alabama Power is the primary provider of electricity, and Mobile Gas Service Corporation is the primary provider of gas. MAWSS is the primary provider of water and sewer services. Multiple providers are options for phone, internet, and cable, such as Comcast, Cox, DIRECTTV, and DISH Network, which are all large-firm national companies serving millions of residential, business, and industrial customers. The services and provider capacity for the proposed site can be referenced in Section 3.2.7.3.

3.5.7.4 Hazardous Materials and Solid Waste

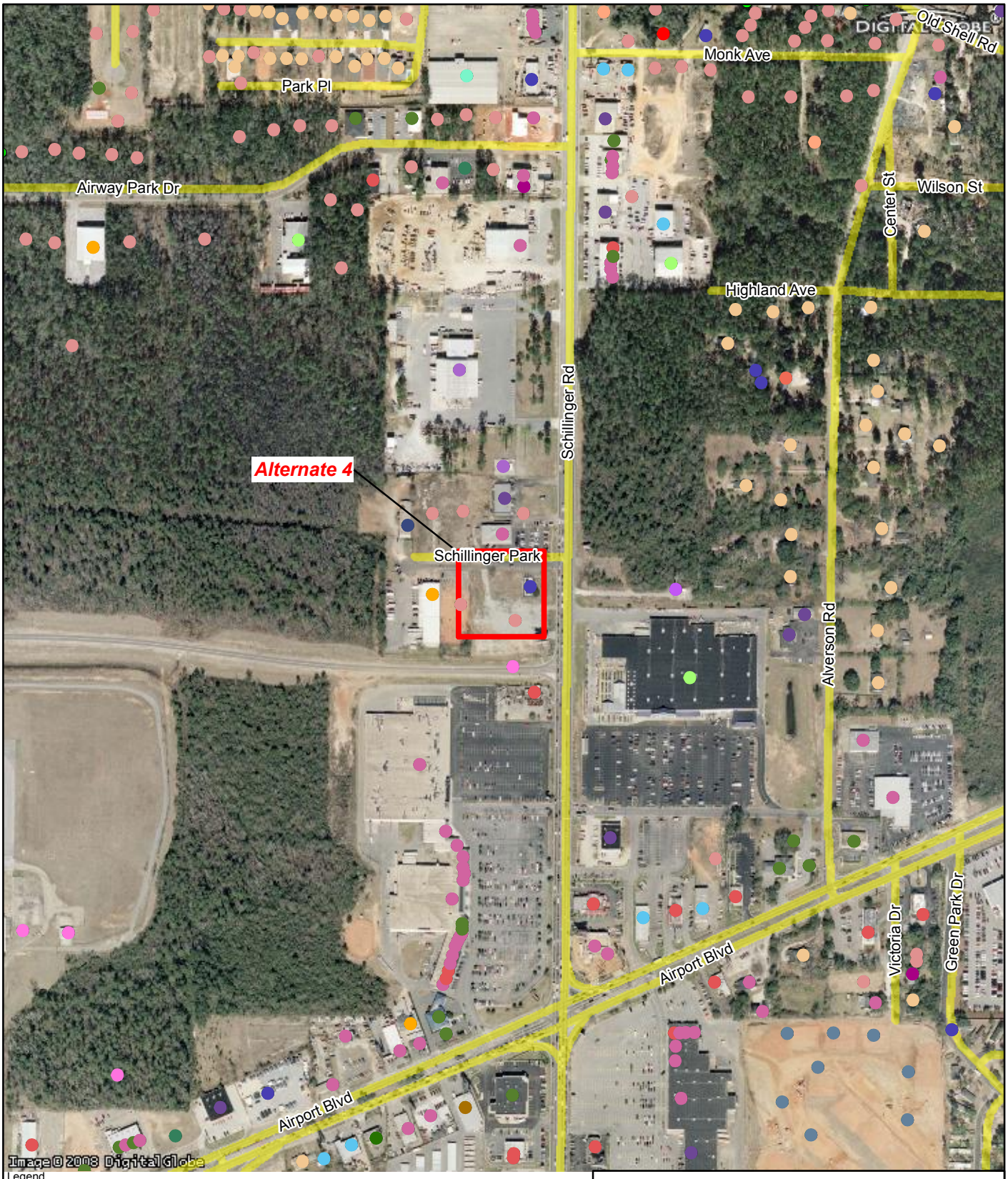
Nearby commercial facilities use small quantities of hazardous materials and generate small amounts of wastes associated with existing operations. The site visit found no evidence of USTs, ASTs, transformers, or other hazardous materials located on or in the immediate vicinity of the property. Solid waste services are provided by multiple private companies, as described in Section 3.2.7.4.

3.5.7.5 Recreational Resources

There is no evidence of recreational activities on the property. The property is owned by E.B. Cropp and is not open to the public for recreational activities.

3.5.7.6 Visual and Aesthetic Resources

The proposed site is located in a predominantly commercial area and neither contains nor is surrounded by aesthetic resources.



Legend

Land Use

- Airport
- Auto Parking
- Auto Parts
- General Offices
- Restaurant
- Manufacturing/Building Materials
- Cell Tower
- Worship Place
- Indoor Recreational
- Contractors
- Electric
- Engine/Repair Service
- General Retail Sales
- Improved Land
- Mini Storage
- Mobile Home
- Service Station
- Single-family Detached
- Standard Apartments
- Vacant Land
- Vacant Single-Family Residential
- Veterinary Hospital
- Warehousing

N

0 250 500

Feet

Source: GlobeXplorer Aerial Imagery, 2007; City of Mobile GeoDatabase, 2009.

Gulf of Mexico Disaster Response Center
Proposed Locations
Mobile, Alabama

Figure 12

Alternative 4 Land Use Map

TETRA TECH EM INC.

Date: 02/26/09 Drawn By: Ingrid Tobar Project No: G1278.4.0019.02

X:\G\1278\40019\02\Projects\mxd\Figure12.mxd

4.0 ENVIRONMENTAL IMPACTS

4.1 INTRODUCTION AND METHODOLOGY

This section evaluates potential environmental impacts of the Proposed Action on the four alternatives described above, as well as potential environmental impacts of the No Action Alternative. All resources carried forward for analysis, as presented in Section 3.0, are evaluated for all alternatives. For each resource evaluated, an Area of Potential Effect (APE) and an impacts threshold are indicated, where applicable. The APE and threshold for each type of resource evaluated were determined as follows:

- Location and Land use: The APE is within a 0.5-mile radius of the project site. The threshold is whether the Proposed Action would significantly affect land use requiring a reevaluation of land use zoning in the City of Mobile.

- Geology and Soil Resources: The APE is within a 0.5-mile radius of the project site. The threshold is whether the Proposed Action would cause moderate to severe soil compaction, surface runoff, and/or changes in geological structure.

- Water Resources: The APE is the Southern Coastal Plain (sand and gravel) aquifer and the communities that utilize its water. The threshold is whether the Proposed Action would cause groundwater, surface water, and aquatic habitat quality to decrease.

- Air Resources: The APE is the area immediately surrounding the project site for noise and within a 1-mile radius for air quality. The threshold is whether the Proposed Action would cause a change in attainment status of criteria pollutants per the NAAQS.

- Biological Resource: The APE is the proposed project site, including the location of the proposed building and parking lot. The threshold is whether the Proposed Action would be likely to significantly impact any existing vegetation, terrestrial wildlife, and any TES or designated habitat.

- Cultural and Historic Resources: The APE is within a 1.0 mile radius of the project site. The threshold is whether the Proposed Action would cause a significant impact on cultural and historical resources listed or eligible for listing on the National or State Registry of Historical Places.

- Socioeconomic Resources: The APE is the County of Mobile. The threshold is whether the Proposed Action would cause moderate to severe changes to local area population, demographics, or economy.

Presented below are potential environmental impacts for each alternative on the location and land use; geology and soil resources; water resources; air resources; biological resources; air resources; cultural and historic resources; and socioeconomic and man-made resources. Also discussed are cumulative impacts, unavoidable adverse effects, and mitigation measures. TABLE 4-1 presents a summary of all potential environmental impacts for each alternative and resource.

TABLE 4-1

SUMMARY OF POTENTIAL IMPACTS

Resource Topic	Alternative 1 (Preferred Location): Parcel to the West of 7340 Zeigler Boulevard, Mobile, AL 36608	Alternative 2: 7431 Airport Boulevard, Mobile, AL 36616	Alternative 3: 1000 Cody Road, Mobile, AL 36608	Alternative 4: 140 Schillinger Road, Mobile, AL 36608	No Action Alternative
LOCATION AND LAND USE					
Location and Land Use	Minor impacts associated with clearing of the wooded area and increased impermeable land due to construction of the structures. Reevaluation of land use zoning would not be required.	Minor impacts associated with infrastructural improvement of the current structures to become capable of withstanding level 5 hurricane and tornado conditions. Reevaluation of land use zoning would not be required.	Impacts associated with clearing of several substantial live oak trees present on site and fragmentation of existing wooded area. Reevaluation of land use zoning would not be required.	No impacts on land use because the site is located in a commercially developed area and the site was previously developed as a mobile home sales lot. Reevaluation of land use zoning would not be required.	No major impacts on location and land use. However, these sites are zoned as Commercial Business District and would likely be developed by another entity imposing similar impacts on land use as the Proposed Action.
GEOLOGY AND SOIL RESOURCES					
Geology	No impacts on regional geology; minimal impacts on local geology for constructing building to withstand level 5 hurricanes and tornados.	No impacts on regional geology; minimal impacts on local geology for renovating existing structures to withstand level 5 hurricanes and tornados.	No impacts on regional geology; minimal impacts on local geology for constructing building to withstand level 5 hurricanes and tornados.	No impacts on regional geology; minimal impacts on local geology for constructing building to withstand level 5 hurricanes and tornados.	No impacts on local and regional geology.
Soils	Temporary impacts would occur during construction through compaction of the soil and increased runoff. The subsoil would be impacted by the weight of the building, causing decreased water capacity and permeability.	Minimal impacts on subsoil because the site has already been paved and developed with structures. The impacts could be greater if the paved area were to be replaced or removed.	Temporary impacts would occur through compaction of the soil, increased runoff, decreased water capacity, and permeability of the area under the building.	Minimal impacts on subsoil because the site has already been paved with a layer of gravel. Temporary impacts would occur through increased runoff, decreased water capacity, and permeability of the area under the building.	No impacts on soil.

Resource Topic	Alternative 1 (Preferred Location): Parcel to the West of 7340 Zeigler Boulevard, Mobile, AL 36608	Alternative 2: 7431 Airport Boulevard, Mobile, AL 36616	Alternative 3: 1000 Cody Road, Mobile, AL 36608	Alternative 4: 140 Schillinger Road, Mobile, AL 36608	No Action Alternative
WATER RESOURCES					
Groundwater	Minor impacts from the potential stormwater runoff, fuel tanks, and emergency generator.	Minor impacts from the potential stormwater runoff, fuel tanks, and emergency generator.	Minor impacts from the potential stormwater runoff, fuel tanks, and emergency generator.	Minor impacts from the potential stormwater runoff, fuel tanks, and emergency generator.	No impacts on groundwater.
Surface Water	Adverse, direct, short-term and minor impacts because of increases in local erosion and surface runoff during construction, causing increased turbidity and elevated sediments.	Adverse, direct, short-term and minor impacts because of increases in local erosion and surface runoff during construction, causing increased turbidity and elevated sediments.	Adverse, direct, short-term and minor impacts because of increases in local erosion and surface runoff during construction, causing increased turbidity and elevated sediments.	Adverse, direct, short-term and minor impacts because of increases in local erosion and surface runoff during construction, causing increased turbidity and elevated sediments.	No impacts on surface water.
BIOLOGICAL RESOURCES					
Flora and Fauna	Adverse, direct, long-term, minor impacts on the vegetation and terrestrial wildlife in the immediate vicinity, due to loss of vegetation and habitat. Minor impacts on fauna from construction noise pollution.	Minor, indirect, short-term impacts on fauna located on adjacent properties from construction noise pollution.	Adverse, direct, long-term, minor impacts on the vegetation and terrestrial wildlife in the immediate vicinity, due to loss of vegetation and habitat. Minor impacts on fauna from construction noise pollution.	Adverse, indirect, short-term and minor impacts on flora and fauna located on the adjacent properties from the construction noise pollution.	No impacts on flora and fauna.
Threatened, Endangered, and Sensitive Species	No adverse impacts on the listed species. Indication of the presence of listed species was not observed during the site reconnaissance.	No adverse impacts on the listed species. Indication of the presence of listed species was not observed during the site reconnaissance.	No adverse impacts on the listed species. Indication of the presence of listed species was not observed during the site reconnaissance.	No adverse impacts on the listed species. Indication of the presence of listed species was not observed during the site reconnaissance.	No impacts on the listed species.
Insects, Disease, and Other Exotic Organisms	Minimal, temporary impacts during construction activities.	Minimal, temporary impacts during construction activities.	Minimal, temporary impacts during construction activities.	Minimal, temporary impacts during construction activities.	No impacts on or caused by insects, disease, and other exotic organisms.

Resource Topic	Alternative 1 (Preferred Location): Parcel to the West of 7340 Zeigler Boulevard, Mobile, AL 36608	Alternative 2: 7431 Airport Boulevard, Mobile, AL 36616	Alternative 3: 1000 Cody Road, Mobile, AL 36608	Alternative 4: 140 Schillinger Road, Mobile, AL 36608	No Action Alternative
AIR RESOURCES					
Air Quality	Temporary impacts due to fugitive emission of dust and diesel exhaust during construction. Minimal impacts from the operation of a diesel generator.	Temporary impacts due to fugitive emission of dust and diesel exhaust during construction. Minimal impacts from the operation of a diesel generator.	Temporary impacts due to fugitive emission of dust and diesel exhaust during construction. Minimal impacts from the operation of a diesel generator.	Temporary impacts due to fugitive emission of dust and diesel exhaust during construction. Minimal impacts from the operation of a diesel generator.	No impacts on air quality.
Noise	Temporary, short-duration noise impacts to local residents and adjacent businesses during construction. Minimal impacts from day-to-day operation of the facility.	Temporary, short-duration noise impacts to local residents and adjacent businesses during construction. Minimal impacts from day-to-day operation of the facility.	Temporary, short-duration noise impacts to local residents and adjacent businesses during construction. Minimal impacts from day-to-day operation of the facility.	Temporary, short-duration noise impacts to local residents and adjacent businesses during construction. Minimal impacts from day-to-day operation of the facility.	No impacts on or resulting from noise pollution.
CULTURAL AND HISTORIC RESOURCES					
Cultural and Historic Resources	No impacts. No cultural or historic resources are located within a 1-mile radius.	No impacts. No cultural or historic resources are located within a 1-mile radius.	No impacts. No cultural or historic resources are located within a 1-mile radius.	No impacts. Cultural and historic resources are within a 1-mile radius.	No impacts on cultural and historic resources.
SOCIOECONOMIC AND MAN-MADE RESOURCES					
Socioeconomic Resources	Minor, short-term, beneficial impacts on the economy of the local area from creation of construction jobs and long-term effects from the facility to support emergency response.	Minor, short-term, beneficial impacts on the economy of the local area from creation of construction jobs and long-term effects from the facility to support emergency response.	Minor, short-term, beneficial impacts on the economy of the local area from creation of construction jobs and long-term effects from the facility to support emergency response.	Minor, short-term, beneficial impacts on the economy of the local area from creation of construction jobs and long-term effects from the facility to support emergency response.	Negative impacts on the local economy because additional construction jobs would not be created.

Resource Topic	Alternative 1 (Preferred Location): Parcel to the West of 7340 Zeigler Boulevard, Mobile, AL 36608	Alternative 2: 7431 Airport Boulevard, Mobile, AL 36616	Alternative 3: 1000 Cody Road, Mobile, AL 36608	Alternative 4: 140 Schillinger Road, Mobile, AL 36608	No Action Alternative
Transportation	Minor temporary increase of traffic on Zeigler Blvd. between Cody Road and Schillinger Road during construction activities. Minor permanent traffic increase due to staff members commuting to the office and during emergency events.	Minor temporary increase of traffic on Airport Blvd. and during construction of a driveway from Zeigler Blvd. to the parking lot. Minor permanent traffic increase due to staff members commuting to the office and during emergency events.	Minor temporary increase in traffic on Cody Road between Zeigler Blvd. and E. Vincent Road during construction. Minor permanent traffic increase due to staff members commuting to the office and during emergency events.	Minor temporary increase in traffic on Schillinger Road between Airport Boulevard and Old Shell Road during construction activities. Minor permanent traffic increase due to staff members commuting to the office and during emergency events.	No traffic increases. There would be no construction activities and no office to staff.
Utilities	Proposed use of existing utilities would be within current capacities. Minor positive impacts due to income generated by the use of local utilities.	Proposed use of existing utilities would be within current capacities. Minor positive impacts due to income generated by the use of local utilities.	Proposed use of existing utilities would be within current capacities. Minor positive impacts due to income generated by the use of local utilities.	Proposed use of existing utilities would be within current capacities. Minor positive impacts due to income generated by the use of local utilities. The functionality of the drainage ditch that runs along Eads Casa Drive would not be affected.	Minor negative impacts. No additional income would be generated for the local utility companies..
Hazardous Materials and Solid Waste	Minor impacts due to the proposed use of diesel operated emergency generator, storage of fuel, and general office cleaning products. Solid waste generated during the operation of the facility would cause minor impacts.	Minor impacts due to the proposed use of diesel operated emergency generator, storage of fuel, and general office cleaning products. Solid waste generated during the operation of the facility would cause minor impacts.	Minor impacts due to the proposed use of diesel operated emergency generator, storage of fuel, and general office cleaning products. Solid waste generated during the operation of the facility would cause minor impacts.	Minor impacts due to the proposed use of diesel operated emergency generator, storage of fuel, and general office cleaning products. Solid waste generated during the operation of the facility would cause minor impacts.	No impacts from hazardous materials and solid wastes.

Resource Topic	Alternative 1 (Preferred Location): Parcel to the West of 7340 Zeigler Boulevard, Mobile, AL 36608	Alternative 2: 7431 Airport Boulevard, Mobile, AL 36616	Alternative 3: 1000 Cody Road, Mobile, AL 36608	Alternative 4: 140 Schillinger Road, Mobile, AL 36608	No Action Alternative
Recreational Resources	No impacts on the proposed site as there are no public recreational resources on-site. Minimal positive impacts on the adjacent fairgrounds due to addition of staff and increased fair revenue.	No impacts on the proposed site as there are no recreational resources on the site. The adjacent residential area would be disrupted during construction and emergency events.	No impacts on the proposed site as there are no public recreational resources on-site. Minimal positive impacts on the adjacent fairgrounds due to addition of staff and increased fair revenue.	No impacts on the proposed site as there are no public recreational resources on-site.	No impacts on recreational resources.
Visual and Aesthetic Resources	Negligible impacts because of the existing commercial development in the surrounding area.	Minor positive effect on the aesthetics of the area because of the renovation of the existing older building.	Negligible impacts because of the small size of the footprint of the proposed project, and the expected tree line buffer that would be left between the new facility and the adjacent residential community.	Negligible impacts because the area is highly commercialized and the site is already cleared and paved.	No impacts on visual and aesthetic resources.

4.2 ALTERNATIVE 1: PARCEL TO THE WEST OF 7340 ZEIGLER BOULEVARD, MOBILE, ALABAMA 36608 (PROPOSED ACTION – PREFERRED LOCATION)

4.2.1 Impacts on Location and Land Use

APE/Threshold: The APE is the parcel located at 7340 Zeigler Boulevard and surrounding areas (within a 0.5-mile radius) in western Mobile. The threshold is whether the Proposed Action would significantly affect land use requiring a reevaluation of land use zoning in the City of Mobile.

Impact Analysis: This site was chosen as the preferred alternative because of the following reasons: (1) cost; (2) future expansion options; (3) collaboration with MCEMA; (4) proximity to Ziegler Boulevard decreasing the length of the access road and utility runs; (5) closer proximity to the 911 building and the potential future Mobile EMA building than other considered locations; and (6) access to the site's lowest elevation, facilitating site drainage and likely decreasing site fill for drainage. This preferred alternative site is currently a wooded lot with an existing city-owned tower and a base structure. Overall, the land use of this site would change from undeveloped wooded land to developed land zoned for Community Business District (B-3). The southeastern portion would require some clearing and grading prior to construction of the facility. Implementation of the Proposed Action would provide additional building expansion (15,400 sf), a paved parking area, an outdoor storage area (1,000 sf), and access roads. This 15,400 sf building would house an administration space, a response operations area and a service area. The proposed facility would be used as a "home base" for various activities while providing daily parking and equipment needs for approximately 15 full-time employees. During an emergency event, up to 150 people could use the facility, and accommodation for parking for an influx of people during an event is anticipated off site. In the future, the proposed facility could be shared with the MCEMA. All these activities would contribute to more impermeable land and eventually more clearing of the wooded area to accommodate future development by MCEMA on the site.

The Proposed Action would have some impacts on land use in the local area because the wooded area would be cleared during construction. The site is located in the wooded area; however, it is surrounded to the east by a significant area of paved land. Because surrounding land uses to the north, east, and south are mostly commercial, the Proposed Action is consistent with land development occurring in the area. In addition, even if NOAA does not implement the project and develop this land, other entities would probably eventually develop the site.

The City of Mobile currently regulates zoning of the project area. The overall land use and zoning of the area by the City would not be impacted because the Proposed Action is consistent with the general land development occurring in the area. Therefore, city land use and zoning regulations would be met by the Proposed Action and reevaluation of the current zoning would not be required.

NOAA is trying to get the proposed building LEED® certificated, which requires sustainable development of the site. As a standard, NOAA has adopted LEED® strategies as a basis of design and requires a rating of silver or better for all new construction [Gould Evans Associates, Inc. (Gould) 2008]. NOAA could obtain credits for developing a sustainable site by implementing LEED® strategies such as: (1) reduce the development footprint and/or provide vegetated open space within the project boundary to exceed the local zoning's open space requirement for the site by 25%; (2) provide vegetated open space equal to 20% of the project area; and (3) limit site disturbance. One or more of these site development strategies could be implemented by NOAA to obtain the LEED® certification. These sustainable strategies, if implemented, would be considered mitigation measures for the land use impacts from the Proposed Action.

4.2.2 Impacts on Geology and Soil Resources

This section describes the potential environmental impacts on soil and geology resources for Alternative 1.

4.2.2.1 Impacts on Geology

APE/Threshold: The APE is the parcel located at 7340 Zeigler Boulevard and the surrounding areas (within 0.5-mile radius) in west Mobile. The threshold is whether the Proposed Action would cause any changes in geological structure.

Impact Analysis: Implementation of the Proposed Action would have no impact on the geology of the region. Minimal impact would occur on local geology depending on how far down foundations or steel pilings are placed to construct a secure building that can withstand level 5 hurricanes and tornados. The foundation for the proposed building would be custom-designed based on the loads imposed on the supporting surfaces and recommendation from a geotechnical engineer. Depending on loads on the columns of the building, the building likely would be supported on a system of isolated and continuous reinforced concrete footings. A more robust foundation system such as driven piles supporting concrete pile caps may be needed to support columns, exterior walls, or heavily loaded interior partitions. Pile capacities and embedment depths would be determined by the geotechnical engineer based on the underlying geology at the site (Gould 2008).

Additionally, a protected tornado shelter would be incorporated into the design, which may have deeper foundations, steel support structure, fully grouted and reinforced Concrete Masonry Unit walls, and 8-inch-thick concrete lid (Gould 2008). The tornado shelter would be located in the interior of the structure and designed to withstand tornado-induced winds and potential projectile impacts. Under adverse conditions, this shelter space would serve to protect staffs of NOAA and agencies associated with NOAA.

4.2.2.2 Impacts on Soils

APE/Threshold: The APE is the parcel located at 7340 Zeigler Boulevard and the surrounding areas (within 0.5-mile radius) in west Mobile. The threshold is whether the Proposed Action would cause moderate to severe soil compaction and surface runoff.

Impact Analysis: According to the Soil Survey of Mobile County, the soil at the site is in good to fair condition for site development (USDA 1980). One of the primary reasons for choosing this site as a preferred alternative is because it provides access to the site's lowest elevation, facilitating proper site drainage. The Proposed Action would require constructing a new building and storage area for a trailered vessel. Temporary impacts would occur through compaction of the soil and due to increased runoff from the construction site. In addition, temporary impacts would occur through relocation of the existing tower. The subsoil would become compacted by the increased weight of the proposed building, causing decreased water capacity and permeability of the area under the building, affecting any water flow in the area. Effects on the area surrounding the new building would depend primarily on the revegetation of the area to reduce stormwater runoff. The Proposed Action would have a minor and temporary impact on soils and subsoil during construction activities.

The Proposed Action would have minimal permanent impact on soil and subsoil due to the operation of the proposed NOAA facility. Paved areas would lead to more runoff of water, and if not controlled, would lead to more soil erosion, loss of soil productivity, and impact on natural drainage pattern. To offset the impact, compliance with the following standard mitigations would occur: controlling the slope

and overland flow length of erosion surfaces of facilities identified above; paving the parking area; and limiting site disturbances.

As a standard, NOAA has adopted LEED® strategies as a basis of design and requires a rating of silver or better for all new construction. In order to meet this requirement, NOAA would have to limit all site disturbances, retain and restore native vegetation, and maximize vegetated open space. In addition, NOAA would have to prepare and implement a stormwater management plan that reduces impervious cover, promotes infiltration, and captures and treats the stormwater runoff by using acceptable best management practices (BMP). BMPs would be designed in accordance with standards and specifications from a state or local program that has adopted the LEED® performance standards. Additionally, flat roof structures and green roofs are desired for achieving LEED® silver rating. Therefore, green roof could also be incorporated into the building design, which would further help prevent soil erosion due to rainwater runoff.

4.2.3 Impacts on Water Resources

This section evaluates potential environmental impacts of the Proposed Action at the Alternative 1 site location on water resources, including groundwater and surface water.

4.2.3.1 Impacts on Groundwater

APE/Threshold: The APE is the Southern Coastal Plain (sand and gravel) aquifer and the communities that utilize its water. The threshold is whether the Proposed Action would cause groundwater quality and supply to decrease.

Impact Analysis: The construction activities would result in adverse, short-term, minor impacts on groundwater quality. The operation of the GoMDRC would result in adverse, long-term, minor impacts on groundwater supply and adverse, short-term, minor impacts on groundwater quality. The primary concern would be maintaining the quality of the groundwater. As the GoMDRC would be typically used for administrative purposes, the main area of concern for groundwater quality impacts is the storage and service component that would be utilized in a variety of ways. An area for a large, stand-by, diesel generator capable of supplying power during adverse weather conditions, as well as elevated fuel storage tanks for such operations, would all need to be encompassed within the storage and service area, which would be a restricted area. The groundwater quality would likely not be affected because the fuel tanks and generator located on site would have secondary containment, although accidental release could still occur. The stormwater management design may contain an on-site drainage ditch, swale, or basin that would collect runoff during heavy rain events, therefore allowing increased infiltration into the groundwater. The impact to groundwater from the potential stormwater design is expected to be negligible, as the site is not known to be contaminated.

The impacts to groundwater supply would also be minimal because, as a standard, NOAA has adopted LEED® strategies as a basis of design and requires a rating of Silver or better for all new construction (NOAA 2008b). During construction and operation of the facility, water-efficient landscaping would be developed on site, and water use reduction measures would be put into place.

4.2.3.2 Impacts on Surface Water

APE/Threshold: The APE includes two drainage ditches located immediately south and west of the southern and western property boundaries, respectively, as well as a freshwater pond northeast of the site; freshwater forested/shrub wetlands east-northeast and southwest of the site; and freshwater forested/shrub

wetlands located southwest and west of the site along Pierce Creek (see Figure 8). The threshold is whether the Proposed Action would decrease water and habitat quality.

Impact Analysis: The construction activities and use of heavy equipment associated with the Proposed Action would result in adverse, direct, short-term, minor impacts on surface water quality. Potential short-term, direct, minor impacts to surface water quality include temporary increases in local erosion and temporary increases in surface runoff during construction of septic or large wastewater systems. The increase in stormwater runoff and in local erosion would result in elevated levels of sediment that would enter the drainage ditches, which would increase turbidity levels resulting in a temporary adverse impact on surface water quality. The surface water quality would likely not be significantly impacted by the Proposed Action, as BMPs would be implemented to reduce soil erosion—including use of silt fencing, limitation of construction activities during significant rain events, or other applicable measures. The impacts to surface water quality would also be minimal because as a standard, NOAA has adopted LEED® strategies as a basis of design and requires a rating of Silver or better for all new construction (NOAA 2008b), and stormwater management designs would meet these requirements. In addition, the Proposed Action would include all requirements in the general stormwater permit, if required, by the State of Alabama. A consultation request letter and telephone message have been left with ADEM to determine if a stormwater permit would be required for the Proposed Action. Dale Mapp of ADEM responded via telephone on April 9, 2009, and stated that a stormwater permit is required under either of the following conditions: (1) ground disturbance activities would occur within an area exceeding 1 acre, including all access roads and areas needed to place equipment during the construction process; or (2) the ultimate discharge of stormwater would reach a sediment impaired water body. According to the 60 percent design documentation, the area of disturbance activities is approximately 4 acres, so a stormwater permit would be required prior to construction. A Spill Prevention, Control and Countermeasure Plan (SPCC) would also be implemented for the AST. Surface water quality of water bodies not located immediately adjacent to the project site would not be directly impacted by the construction activities and use of heavy equipment.

4.2.4 Impacts on Biological Resources

This section discusses the impacts for the Proposed Action at the Alternative 1 site location for flora and fauna; threatened, endangered, and sensitive species; and insects, disease, and other exotic organisms. The impacts on biological resources would be primarily associated with construction activities.

4.2.4.1 Impacts on Flora and Fauna

APE/Threshold: The APE is the proposed project site, including the location of the proposed building and parking lot. The threshold is whether the Proposed Action would be likely to significantly impact any existing vegetation and terrestrial wildlife.

Impact Analysis: The proposed Alternative 1 site location is currently an undeveloped, wooded area; therefore, implementation of the Proposed Action would result in adverse, direct, long-term, minor impacts on the vegetation and terrestrial wildlife in the immediate vicinity of the Proposed Action. The impacts would result from the loss of vegetation and habitat due to construction. A mitigation measure for the loss of vegetation and habitat would be established during the construction activities through voluntary LEED® strategies. As a standard, NOAA has adopted LEED® strategies as a basis of design and requires a rating of Silver or better for all new construction (NOAA 2008b). During site development, all site disturbance would be limited beyond the areas directly affected by construction, and open space would be maximized. The Proposed Action would also result in adverse, indirect, short-term, minor impacts on fauna located on the properties adjacent to the site location that would result from the

noise pollution produced during construction activities. The impacts of the noise pollution could be minimized by avoiding construction activities during nesting and breeding seasons.

4.2.4.2 Impacts on Threatened, Endangered, and Sensitive Species

APE/Threshold: The APE is the proposed project site, including the location of the proposed building and parking lot. The threshold is whether the Proposed Action would be likely to significantly impact any TES or designated habitat.

Impact Analysis: Although the proposed Alternative 1 site location is currently an undeveloped, wooded area, based on available data on the state- and federally-listed TES, construction activities associated with the proposed construction of the GoMDRC would not likely adversely impact any of the listed species (see Table 3-2). The USFWS, ADCNR, and NOAA Fisheries Service were contacted for consultation; they evaluated and determined potential impacts on TES species based on information provided for the Proposed Action. Consultation letters and each agency's responses are included in this report in Appendix A. The ADCNR and NOAA Fisheries Service responses stated that no impact would occur on any of the listed species due to the proposed project and, therefore, no further coordination with these agencies would be required. The USFWS identified three federally listed species potentially occurring in the vicinity of the project area: the threatened gopher tortoise, the threatened Eastern indigo snake, and the candidate black pine snake. It is unlikely that these species would be adversely impacted by the Proposed Action. The USFWS indicated the gopher tortoise generally occurs on deep, well-drained sandy soils, especially Troup and Heidel soils, in open forests or savannas. The Alternative 1 site soils are mapped as predominantly Malbis and Saucier soils (see Figure 8) that are moderately well-drained sandy soils, but Troup or Heidel soils were not mapped on the project site. The USWS also indicated that the tortoise is also commonly associated with an open understory, which was not observed on site during the site reconnaissance. The listed Eastern indigo snake and black pine snake, as indicated in the USFWS response, generally occur in the same vicinity as the gopher tortoise, with the Eastern indigo snake commonly using the gopher tortoise burrows as dens and for egg laying. Although a survey has not been performed on the proposed Alternative 1 site location, indications of the presence of the gopher tortoise, Eastern indigo snake, or black pine snake were not observed during the site reconnaissance, and due to the lack of ideal habitat, these are not likely to occur in the project area. If a survey is performed, a survey for the gopher tortoise, the Eastern indigo snake, and black pine snake should be included, and if any of these are identified, the USFWS should be contacted immediately. All contractors should be informed of the species' descriptions, and all work should cease immediately if any of the species are observed.

4.2.4.3 Impacts on Insects, Disease, and Other Exotic Organisms

APE/Threshold: The APE is the project site, including the location of the proposed building and parking lot. The threshold is whether the Proposed Action would significantly increase the likelihood of insects, diseases, and other exotic organisms.

Impact Analysis: The Proposed Action would have minimal impact regarding insects, diseases, and other exotic organisms. Presence of these exotic organisms and insects on the construction site is possible. Exotic organisms, insects, and diseases are usually brought to a site by an outside vector. Several potential pathways for these species to enter the site would be created by the Proposed Action, including construction trucks and other associated vehicles. For example, construction vehicles may contain spores, pollens, insects, and animals from other regions and deposit them at the construction sites. Mitigation measures to avoid bringing exotic organisms, insects, and diseases to the site are to use local contractors for all construction activities, and to wash and check the vehicles for stowaway organisms on a regular basis.

4.2.5 Impacts on Air Resources

This section describes the potential environmental impacts on air resources for Alternative 1.

4.2.5.1 Impacts on Air Quality

APE/Threshold: The APE is the area surrounding the project site within a 1-mile radius. The threshold is whether the Proposed Action would cause a change in attainment status of criteria pollutants per the NAAQS.

Impact Analysis: The long-term operation of the NOAA facility would not contribute to decline of ambient city air quality. However, the local air quality would be affected by implementation of the Proposed Action through various sources, such as emission from construction equipment and vehicles, emissions from the emergency generator, and demolition and construction of structures. All impacts on air quality during the proposed construction activities would be temporary, as they would end when construction ends. The construction would contribute to PM in the air during the proposed activities. The fugitive emission of dust from the construction site would be a primary concern. The concern of fugitive dust can be addressed using dust suppression and abatement techniques such as watering disturbed areas and having workers wear protective equipment (U.S. Navy 1994). Furthermore, the impact would be minimized by reducing the number of trips to and from the site.

In addition, diesel exhaust from the construction equipment is of specific concern. Non-road diesel engines can contribute significantly to the local levels of PM and nitrogen oxides (NO_x) in the air. In recent years, the EPA has set emissions standards for engines used in most new construction equipment (EPA 2008b). However, due to the short term of the Proposed Action, the diesel exhaust and PM would not impact the local air quality significantly. Also, implementation of the Proposed Action would not significantly impact the attainment status of criteria pollutants per the NAAQS. The impact would be minimized by lowering emissions during loading, unloading, transportation, and storage of construction materials.

The Proposed Action includes installation of a large, stand-by, diesel generator capable of supplying power during adverse weather conditions, as well as an elevated AST for such operations. Diesel exhaust from the emergency generator would contribute minimally to the local levels of PM and NO_x in the air. The generator would consume approximately 4,000 gallons of diesel in 4 days. The generator would be operated only during power outages and in accordance with a routine maintenance and operation schedule. During non-emergency conditions, the generator would be unused for the most part, except during monthly maintenance and inspection. For the diesel AST, NOAA would prepare and implement a SPCC Plan as a mitigation measure and obtain a permit from the Mobile Fire and Rescue Department.

The main building would be conditioned with a variable-air-volume Heating, Ventilation, and Air-Conditioning (HVAC) system (such as for space heating, space cooling, fans, pumps, toilet exhaust, parking garage ventilation). As per LEED® requirement, NOAA would not use chlorofluorocarbon (CFC)-based refrigerants in the building HVAC systems (Gould 2008). Furthermore, NOAA would eliminate the use of ozone depleting compounds during and after construction to obtain LEED® certification (Gould 2008). Therefore, operations of the NOAA facility would have minimal impact on the air quality from daily office use, and thus would not affect the ambient air quality in the city.

4.2.5.2 Impacts on Noise

APE/Threshold: The APE is the area immediately surrounding the project site, including any sensitive noise receptors. The threshold is whether the Proposed Action would noticeably exceed ambient noise levels for a prolonged period.

Impact Analysis: The long-term operation of the NOAA facility would not contribute to a significant increase in the ambient city noise. However, short-term impacts would occur from the operation of heavy construction machinery during the construction. Construction activities would result in temporary, short-duration noise which could be bothersome to adjacent businesses and surrounding residences.

Town ordinances regulate noise impacts associated with development. Construction would occur during the day and not at night, when noise levels should be lower, by local regulation. In addition, the construction activities would be performed within the designated hours specified under the local ordinance. According to the local ordinance regulation, construction work cannot begin before 8:00 a.m. Any person can register a complaint if the noise level is too high due to construction activities. Noise would be a more critical issue at development sites adjacent to residential areas. Residential development exists to the southeast farther away from the site. There would be temporary noise impacts at local residences during the construction phase.

In day-to-day operation of the facility, noise levels generated include any present and future transportation activities on the road during the peak office hours and car parking in the parking lot. This type of impact would occur only during working hours, restricted to day time, except during an emergency event. Operation of the emergency generator once a month and during power outages would create minimal noise impact. Inside the building, sound absorbing acoustical panels would be used in the Incident Command Area to help regulate the noise in the space (Gould 2008). Therefore, minimal impacts of noise on the local area would result from the operation of the NOAA facility.

4.2.6 Impacts on Cultural and Historic Resource

APE/Threshold: The APE is a 1-mile radius around the proposed site. The threshold of significance is no potential effect on historic or cultural resources resulting from implementation of the proposed project.

Impact Analysis: As per Section 106 of the NHPA, a coordination letter was sent to the SHPO to verify the non-existence of any cultural and historical resources in this area. The SHPO was contacted, requesting a comment regarding any historic or cultural resources that may be affected by the Proposed Action at the Alternative 1 site location. As of the date of this report, a response has not been received.

Cultural and historic resources are not within a 1-mile radius of the proposed project site. Therefore, none of these cultural and historical resources would be impacted by the Proposed Action.

4.2.7 Impacts on Socioeconomic and Man-Made Resources

The following sections describe impacts from the socioeconomic and man-made resources associated with the proposed Alternative 1 site location.

4.2.7.1 Impacts on Socioeconomic Resources

APE/Threshold: The APE is the County of Mobile. The threshold of significance is whether the Proposed Action would cause moderate to severe changes to local area population, demographics, or economy.

Impact Analysis: The Proposed Action would have negligible impacts on the population and demographics of Census Tract 64.02 or Mobile County. NOAA proposes to locate approximately 15 full-time employees at the area. It is expected that only during an event would NOAA locate between 100 to 150 persons in the area on a temporary basis. This increase in population in the County's permanent population would be negligible.

The Proposed Action would have minor, positive effects on the economy of the local area. The construction of the proposed facilities would require estimated expenditures of $6.3 million, and would have short-term beneficial impacts on the local economy in terms of temporary construction labor, subcontractors, local goods and services, and expenditures at local establishments. During an event, additional temporary staff would contribute to the local economy, particularly in the service industries of hotels, restaurants, and shopping centers.

On a longer-term basis, the facility would have minor, positive effects due to the enhanced ability of the facility to support emergency response in Mobile County and by allowing NOAA to fully meet its mission requirements. Also, the increase in population would represent a minor beneficial impact to the local economy. Actual economic benefits would be expected to increase considering economic multiplier factors according to which actual construction expenditures would cause further indirect expenditures. Increased local tax revenues would cover the additional negligible community costs for providing more sewer, water, police, fire, educational, and transportation (traffic and roads) resources.

The Proposed Action would cause minor changes to the local area population, demographics, or economy which would not be significant.

4.2.7.2 Impacts on Transportation

APE/Threshold: The APE is the proposed site and an area within 1 mile of the site. The threshold is whether the Proposed Action would significantly affect traffic patterns requiring additional construction or alteration of roads within a 1-mile radius.

Impact Analysis: The Proposed Action would not have a significant impact on transportation, as no significant road construction is expected. A primary driveway, including a culvert over the drainage ditch, from Zeigler Boulevard to the newly constructed facility parking lots would be constructed. Due to the proposed construction of the primary driveway (including the proposed culvert), impacts are expected to soil, water, and biological resources, as discussed in Sections 4.2.2, 4.2.3, and 4.2.4, respectively.

Minor, temporary increases in traffic on Zeigler Boulevard between Cody Road and Schillinger Road would occur during construction activities, but permanent additional traffic would be minor as a result of the estimated 15 employees that would work in the facility on a permanent basis. Furthermore, during an emergency event, temporary staff would likely carpool to the facility, resulting in a higher impact on traffic than in non-event times; however, the County's 2009-2012 transportation plans include widening Ziegler Boulevard, which would alleviate increased traffic impacts during an emergency event.

4.2.7.3 Impacts on Utilities

APE/Threshold: The APE is the County of Mobile. The threshold is whether the Proposed Action would require reconfiguration of the current utilities of Mobile County or if an additional source of power or water management system would be required.

Impact Analysis: The Proposed Action would have minor impacts on utilities in the area. Due to the location of the proposed site, in a commercial and residential area, all necessary utilities including

electric, gas, water, sewer, cable, internet, and phone are available and would only need to be connected after initial lines and pipes are established from the new structures to the utility connection point. The construction and connection of utility lines and pipes would have minor impacts to soils, groundwater, and biological resources, as described in Sections 4.2.2, 4.2.3, and 4.2.4, respectively. The FCC tower is not expected to be removed or altered for this Proposed Action. It is expected a 500-kilowatt (kw) generator would be sited on the property. The generator would be used during an emergency event and intermittently during non-event times to ensure proper function. The generator would consume approximately 4,000 gallons of fuel in 4 days, which would be supplied by an on-site AST with a capacity of 4,000 gallons of fuel.

Use of these utilities would be within the current capacity of each provider, and the facility would have a minor positive impact on income generated by use of local utilities. The utility providers available to the site are all large companies with ability to provide the new facility service that would not require reconfiguration of current utilities or require additional sources of power or water management systems.

4.2.7.4 Impacts on Hazardous Materials and Solid Waste

APE/Threshold: The APE is the County of Mobile. The threshold is whether the Proposed Action would involve use of a substantial amount of hazardous materials, generate hazardous wastes in large quantities, trigger an action under RCRA, or require the County to expand solid waste collection or landfill area.

Impact Analysis: Minor impacts would be expected as a result of the Proposed Action. The only hazardous materials to be used during construction are standard diesel fuel and lubricants for construction machinery. The Proposed Action calls for the facility to store up to 4,000 gallons of fuel maximum in an AST. Because of the size, secondary containment would be present and a SPCC plan would be required and prepared. All staff interacting with the stored fuel would be trained appropriately. General office supplies and cleaning materials would be on site, and if any other types of hazardous materials were used as a result of the Proposed Action, staff and visitors would be trained appropriately. Under the Proposed Action, the facility would have a staff of approximately 15 people, which would generate a negligible amount of solid waste. During an event, the facility may have up to 150 people operating out of the facility and producing additional solid waste on a temporary basis. All solid waste would be disposed of properly through a solid waste disposal service. Based on the Mobile County Comprehensive Solid Waste Management Plan, June 2005-2012, the County is only depositing 41 percent of its daily permitted tonnage and has an estimated 85 years of operation remaining. The solid waste produced during non-event and event times at the new facility would have a negligible impact on solid waste collection or landfill capacity.

The Proposed Action would not involve use of a substantial amount of hazardous materials, would not generate hazardous wastes in significant quantities, and would not trigger a RCRA action. The Proposed Action would not produce a significant amount of solid waste. Therefore, the minor impacts described above would not be significant.

4.2.7.5 Impacts on Recreational Resources

APE/Threshold: The APE is any public recreation-specific area in the immediate vicinity of the proposed site. The threshold is whether the Proposed Action would have a significant adverse impact on any public areas used for recreation.

Impact Analysis: The Proposed Action would not affect the recreational resources on the site, as there are no recreational resources on the proposed site. In the immediate vicinity, the only public recreational

resource includes the adjacent fairgrounds. Due to the small number of permanent employees at the new facility, effects on the fairground would be minimal and may increase fair revenue.

4.2.7.6 Impacts on Visual and Aesthetic Resources

APE/Threshold: The APE is the immediate vicinity around the proposed site. The threshold is whether the Proposed Action would adversely affect visual enjoyment of the area.

Impact Analysis: The Proposed Action would not significantly affect the aesthetic resources of the area. The project would pursue LEED® certification, which would require a limitation on site disturbance to 40 feet beyond the building perimeter; 10 feet beyond surface walkways, patios, surface parking and utilities less than 12 inches in diameter; 15 feet beyond primary roadway curbs and main utility branch trenches; and 25 feet beyond constructed areas with permeable surfaces (such as pervious paving areas, stormwater detention facilities, and playing fields) that require additional staging areas in order to limit compaction in the constructed area.

Because of the small size of the footprint of the proposed project and the existing commercial development in the area, the effect on aesthetics would be negligible.

4.3 ALTERNATIVE 2: 7431 AIRPORT BOULEVARD, MOBILE, ALABAMA 36616

4.3.1 Impacts on Location and Land Use

APE/Threshold: The APE is the parcel located at 7431 Airport Boulevard and surrounding areas (within 0.5-mile radius) in western Mobile. The threshold is whether the Proposed Action would significantly affect land use requiring a reevaluation of land use zoning in the City of Mobile.

Impact Analysis: This alternative site has already been developed with a covered structure for outdoor storage, an abandoned building, a paved parking lot, billboard signage, and a security fence. An abandoned building encompassing approximately 30,000 sf is located on site. The site is currently zoned for B-3, Commercial Business District. Land use of the area would not change if the Proposed Action is implemented on this alternative site, although some renovation and demolition of existing structures would be necessary. Currently, 7,000 sf of covered, outdoor storage is present, along with a security fence that limits access to the southern half of the site.

Implementation of the Proposed Action on this site would provide infrastructural improvement of the current structures. The abandoned building on site would be modified to become capable of withstanding level 5 hurricane and tornado conditions. The site already has the infrastructure to provide adequate space for daily parking and equipment needs for approximately 15 full-time employees. The condition of the paved areas would need to be further reviewed if it is not removed and replaced. The foundation, floor slab, and structural steel elements could be reused in an upgrade of the existing facility. In addition, the site would require removal of a portion of surface parking, billboard signage, a portion of the existing building, and excavation of loading docks. Selected demolition of the existing building roof and walls, with the structure, slabs, and foundations remaining, would also be required.

The overall land use of the region would not be impacted because the City of Mobile is already one of the largest growing cities in the State. The City has developed industrially and commercially mainly due to the location of the port in the Mobile Bay area. Therefore, the Proposed Action is consistent with the general land development occurring in the area. Additionally, the Proposed Action would exert minimal impact on the land use of the area because the site and most of the surrounding properties have already

been developed. City land use zoning regulations would be met by the Proposed Action, and a reevaluation of land use zoning would not be required.

4.3.2 Impacts on Geology and Soil Resources

This section describes the potential environmental impacts on soil and geology resources for Alternative 2.

4.3.2.1 Impacts on Geology

APE/Threshold: The APE is the parcel located at 7431 Airport Boulevard and the surrounding areas (within 0.5-mile radius). The threshold is whether the Proposed Action would cause any changes in geological structure.

Impact Analysis: Implementation of Proposed Action would have no impact on the geology of the region. Because renovation and demolition of some part of existing structures would be necessary, there would be minimal impact on the local geology. Geological impact would occur depending on the type of changes to the existing building enabling it to withstand hurricanes and tornados. Additionally, a protected tornado shelter would be incorporated into the design, which may have deeper foundations, steel support structure, fully grouted and reinforced Concrete Masonry Unit walls, and 8-inch-thick concrete lid. The tornado shelter would be designed to withstand tornado-induced winds and potential projectile impacts. Under adverse conditions, this shelter space would serve to protect staffs of NOAA and agencies associated with NOAA. The addition of this tornado shelter may cause minor changes in the local geology.

4.3.2.2 Impacts on Soils

APE/Threshold: The APE is the parcel located at 7431 Airport Boulevard and the surrounding areas (within 0.5-mile radius). The threshold is whether the Proposed Action would cause moderate to severe soil compaction and surface runoff.

Impact Analysis: According to the Soil Survey of Mobile County, the soil at the site is in good to fair condition for site development. The soil in the area, Urban Land, is mostly covered by streets, sidewalks, buildings, parking lots, and other developed structures. This alternative project site and the surrounding areas have a high rate of runoff because the soils are covered with non-permeable material. On-site erosion would be confined to designated area of construction and building repair activities. The Proposed Action would have a minimal impact on subsoil during construction activities because the site has already been paved.

Implementation of the Proposed Action on this site would not impact the soil too much during the infrastructural improvement of the current structures. However, if the paved area has to be removed and replaced, the impact could be greater. The foundation, floor slab, and structural steel elements could be reused in an upgrade of the existing facility. In addition, the site would require removal of a portion of surface parking, billboard signage, a portion of the existing building, and excavation of loading docks. Selected demolition of the existing building roof and walls, with the structure, slabs, and foundations remaining, would also be required. Because the site building has been already constructed, the impact on soil from Alternative 2 would be minimal. From the operation standpoint, impacts on soil and subsoil would be similar to Alternative 1.

With LEED® silver rating as the basis of design, various mitigation measures would be implemented that would alleviate soil impacts. The mitigation measures would be similar to those discussed in Alternative 1 in Section 4.2.2.2.

4.3.3 Impacts on Water Resources

This section evaluates potential environmental impacts of the Proposed Action at the Alternative 2 site location on water resources, including groundwater and surface water.

4.3.3.1 Impacts on Groundwater

APE/Threshold: The APE is the Southern Coastal Plain (sand and gravel) aquifer and the communities that utilize its water. The threshold is whether the Proposed Action would decrease groundwater quality and supply.

Impact Analysis: The Proposed Action would result in similar impacts to groundwater as described in Section 4.2.3.1 for the Alternative 1 site location.

4.3.3.2 Impacts on Surface Water

APE/Threshold: The APE includes the drainage ditch located immediately north of the northern property boundary, as well as Milkhouse Creek and associated freshwater forested/shrub wetlands, freshwater emergent wetlands, and the freshwater pond located south and west of the site (see Figure 8). The threshold is whether the Proposed Action would decrease water and habitat quality.

Impact Analysis: The construction activities and use of heavy equipment associated with the Proposed Action would result in similar impacts as described in Section 4.2.3.2 for the Alternative 1 site location.

4.3.4 Impacts on Biological Resources

This section discusses the impacts for the Proposed Action at the Alternative 2 site location for flora and fauna; threatened, endangered, and sensitive species; and insects, disease, and other exotic organisms. The impacts on biological resources would be primarily associated with construction activities.

4.3.4.1 Impacts on Flora and Fauna

APE/Threshold: The APE is the proposed project site, including the location of the proposed building and parking lot. The threshold is whether the Proposed Action would be likely to significantly impact any existing vegetation and terrestrial wildlife.

Impact Analysis: Neither wild nor ornamental vegetation would be impacted by the proposed activities because the areas proposed for new construction are paved and include a large commercial/industrial building located on the eastern property boundary, loading docks, and a covered warehouse/shed area located on the western property boundary (see Figure 4). The proposed Alternative 2 site location is currently paved and developed; therefore, implementation of the Proposed Action would not impact vegetation and terrestrial wildlife in the immediate vicinity of the Proposed Action. The Proposed Action would also result in adverse, indirect, short-term, minor impacts on fauna located on the properties adjacent to the site location that would result from the noise pollution produced during construction activities. The impacts of the noise pollution could be minimized by avoiding construction activities during nesting and breeding seasons.

4.3.4.2 Impacts on Threatened, Endangered, and Sensitive Species

APE/Threshold: The APE is the proposed project site, including the location of the proposed building and parking lot. The threshold is whether the Proposed Action would be likely to significantly impact any TES or designated habitat.

Impact Analysis: The proposed Alternative 2 site location is currently paved and developed, and based on available data on the state- and federally-listed TES, construction activities associated with the proposed construction of the GoMDRC would not likely impact any of the listed species (see Table 3-2). The USFWS, ADCNR, and NOAA Fisheries Service were contacted for consultation and responded as described in Section 4.2.4.2 for the Alternative 1 site location. It is unlikely that the gopher tortoise, Eastern indigo snake, or black pine snake would be adversely impacted by the Proposed Action, as the site is currently paved and developed. All contractors should be informed of the species' descriptions, and all work should cease immediately if any of the species are observed.

4.3.4.3 Impacts on Insects, Disease, and Other Exotic Organisms

APE/Threshold: The APE is the project site, including the location of the proposed building and parking lot. The threshold is whether the Proposed Action would significantly increase the likelihood of insects, diseases, and other exotic organisms.

Impact Analysis: The Proposed Action would result in similar impacts on insects, disease, and other exotic organisms as described in Section 4.2.4.3 for the Alternative 1 site location.

4.3.5 Impacts on Air Resources

This section describes the potential environmental impacts on air resources for Alternative 2.

4.3.5.1 Impacts on Air Quality

APE/Threshold: The APE is the area surrounding the project site (within 1-mile radius). The threshold is whether the Proposed Action would cause a change in attainment status of criteria pollutants per the NAAQS.

Impact Analysis: Implementation of the Proposed Action would have impacts on local ambient air quality, from both mobile and stationary sources. Although no significant effect on regional or local air quality is expected, the addition of emissions from construction and operation would add some pollutants to the regional air. The local air quality would be affected by implementation of the Proposed Action through various sources, such as construction equipment and vehicles and demolition and construction of structures. The construction would contribute to the particulate matter in the air during the activities. The fugitive emission of dust from the construction site would be a primary concern. The concern of fugitive dust can be addressed using dust suppression and abatement techniques such as watering disturbed areas and having workers wear protective equipment (U.S. Navy 1994).

In addition, diesel exhaust from the construction equipment is of specific concern. Non-road diesel engines can contribute significantly to the levels of PM and NO_x in the air. In recent years, the EPA has set emissions standards for engines used in most new construction equipment (EPA 2008b). However, due to the short term of the Proposed Action, diesel exhaust and PM would not impact the local air quality significantly. Also, implementation of the Proposed Action would not significantly impact the attainment status of criteria pollutants per the NAAQS. The impact would be minimized by lowering the emissions during loading, unloading, transportation, and storage of construction materials.

The Proposed Action includes installation of a large, stand-by, diesel generator capable of supplying power during adverse weather conditions, as well as an elevated AST for such operations. Diesel exhaust from the emergency generator would contribute minimally to the local levels of PM and NO_x in the air. The generator would consume approximately 4000 gallons of diesel in 4 days. The generator would be operated only during power outages and in accordance with a routine maintenance and operation schedule. During non-emergency conditions, the generator would be unused for the most part, except during monthly maintenance and inspection. For the diesel AST, NOAA would prepare and implement a SPCC Plan as a mitigation measure and obtain a permit from the Mobile Fire and Rescue Department.

Operations of the NOAA facility also would have minimal impact on the air quality from daily office use and would not affect the ambient air quality in the City. The existing building would be conditioned with a variable-air-volume HVAC system (such as for space heating, space cooling, fans, pumps, toilet exhaust, parking garage ventilation). As per LEED® requirement, NOAA would not use CFC-based refrigerants in the building HVAC systems. Furthermore, NOAA would eliminate use of ozone depleting compounds during and after construction. Therefore, operations of the NOAA facility would have minimal impact on the air quality from daily office use, and thus would not affect the ambient air quality in the City.

4.3.5.2 Impacts on Noise

APE/Threshold: The APE is the area immediately surrounding the project site, including any sensitive noise receptors. The threshold is whether the Proposed Action would noticeably exceed ambient noise levels for a prolonged period.

Impact Analysis: Construction would occur during the day and not at night, when noise levels should be lower, by local regulation. In addition, the construction activities would be performed within the designated hours specified under the local ordinance. According to the local ordinance regulation, construction work cannot begin before 8:00 a.m. However, any person can register a complaint if the noise level is too high due to the construction activities. Residential development abuts the southern property boundary. Construction activities would result in temporary, short-duration noise which could be bothersome to adjacent businesses and surrounding residences.

On day-to-day operation of the facility, noise levels generated include any present and future transportation activities on the road during peak office hours and car parking in the parking lot. This type of impact would occur only during working hours, restricted to day time, except during an emergency event. Operation of the emergency generator once a month and during power outages would create minimal noise impact. In addition, the presence of the airport would increase traffic volume in this area, which in turn would produce more noise pollution. Inside the building, sound absorbing acoustical panels would be used in the Incident Command Area to help regulate the noise in the space (Gould 2008). Therefore, minimal impacts of noise on the local area would result from operation of the NOAA facility.

4.3.6 Impacts on Cultural and Historic Resources

APE/Threshold: The APE is a 1-mile radius around the proposed site. The threshold of significance is no potential effects on historic or cultural resources resulting from implementation of the proposed project.

Impact Analysis: As per Section 106 of the NHPA, a coordination letter was sent to the SHPO to verify the non-existence of any cultural and historical resources in this area. The SHPO was contacted, requesting a comment regarding any historic or cultural resources that may be affected by the Proposed Action at the Alternative 2 site location. As of the date of this report, a response has not been received.

Cultural and historic resources are not within a 1-mile radius of the proposed project site. Therefore, none of these cultural and historical resources would be impacted by the Proposed Action.

4.3.7 Impacts on Socioeconomic and Man-Made Resources

The following sections describe impacts from the socioeconomic and man-made resources associated with the proposed Alternative 2 site location.

4.3.7.1 Impacts on Socioeconomic Resources

APE/Threshold: The APE is the County of Mobile. The threshold of significance is whether the Proposed Action would cause moderate to severe changes to local area population, demographics, or economy.

Impact Analysis: The Proposed Action is within the same APE area and therefore would have the same impact analysis as Section 4.2.7.1.

4.3.7.2 Impacts on Transportation

APE/Threshold: The APE is the proposed site and an area within 1 mile of the site. The threshold is whether the Proposed Action would significantly affect traffic patterns requiring additional construction or alteration of roads within a 1-mile radius.

Impact Analysis: The Proposed Action would not have significant impacts on transportation, as no significant road construction is expected. A primary driveway, from Airport Boulevard to the newly constructed facility parking lots, would need to be repaved or constructed causing minor traffic impacts. Minor, temporary increases in traffic on Airport Boulevard would be anticipated during construction activities, but permanent additional traffic would be minor as a result of the estimated 15 employees who would work in the facility on a permanent basis. Furthermore, during an emergency event, temporary staff would likely carpool to the facility, resulting in a higher impact on traffic than in a non-event time; however, the County's 2009-2012 transportation plans include initializing the process to add additional lanes on Airport Boulevard from Cody Road to the Mobile Regional Airport which, once constructed, would alleviate increased traffic impacts during an emergency event.

4.3.7.3 Impacts on Utilities

APE/Threshold: The APE is the County of Mobile. The threshold is whether the Proposed Action would require reconfiguration of the current utilities of Mobile County or if an additional source of power or water management system would be required.

Impact Analysis: Because of a similar location of Alternative 1, this alternative would have the same impact analysis for utilities as described in Section 4.2.7.3. The three-pole-mounted electrical transformer and a one-pole-mounted electrical transformer are not expected to be removed or altered for this Proposed Action.

4.3.7.4 Impacts on Hazardous Materials and Solid Waste

APE/Threshold: The APE is the County of Mobile. The threshold is whether the Proposed Action would involve use of a substantial amount of hazardous materials, would generate hazardous wastes in large quantities, would trigger an action under RCRA, or would require the County to expand solid waste collection or landfill area.

Impact Analysis: The Proposed Action is within the same APE area and therefore would have the same impact analysis as Section 4.2.7.4. The three-pole-mounted electrical transformer and a one-pole-mounted electrical transformer are not expected to be removed or altered for this Proposed Action.

4.3.7.5 Impacts on Recreational Resources

APE/Threshold: The APE is any public recreation-specific area in the immediate vicinity of the proposed site. The threshold is whether the Proposed Action would have a significant adverse impact on any public areas used for recreation.

Impact Analysis: The Proposed Action would not affect the recreational resources of the site, as there are no recreational resources on the proposed site. The nearby backyards of homes may experience minor disruptions due to construction and on occasion of an event. These disruptions are likely to be noise, as discussed in Section 3.2.5.2; minor dust and diesel exhaust emissions during construction, as discussed in Section 4.3.5.1; and noise, as discussed in Section 4.3.5.2.

4.3.7.6 Impacts on Visual and Aesthetic Resources

APE/Threshold: The APE is the immediate vicinity around the proposed site. The threshold is whether the Proposed Action would adversely affect visual enjoyment of the area.

Impact Analysis: The impact of the Proposed Action would not significantly affect aesthetic resources of the area. The proposed site currently is developed with structures already in place. The addition of a new facility is expected to have a minor positive effect on the aesthetics of the area and on residents abutting the site, because a new and more aesthetically pleasing building would replace the current older building.

4.4 ALTERNATIVE 3: 1000 CODY ROAD, MOBILE, ALABAMA 36608

4.4.1 Impacts on Location and Land use

APE/Threshold: The APE is the parcel located at 1000 Cody Road and surrounding areas (within 0.5-mile radius) in western Mobile. The threshold is whether the Proposed Action would significantly affect land use requiring a reevaluation of land use zoning in the City of Mobile.

Impact Analysis: The Proposed Action would have some impact on land use of this alternative site because the wooded area would need to be cleared for construction purposes and changed from undeveloped land to developed land. Most of the site is currently covered with medium- to small-growth trees. Several substantial live oak trees are present on site and may not be retained during the site development. In addition, the northern and southern adjacent properties are wooded with a similar type of medium- and small-growth trees. The wooded area would become fragmented by implementation of the Proposed Action. Overall, the land use of this site would change from undeveloped wooded land to developed land zoned for B-3, Commercial Business District. The adjacent property to the east has been developed with residential lots interspersed with wooded areas, and the adjacent property to the west has been developed with a state fair ground.

The overall land use of the region would not be impacted because the City of Mobile is already one of the fastest growing cities in the State. The City has developed industrially and commercially mainly due to the location of the port in the Mobile Bay area. Therefore, the Proposed Action is consistent with the general land development occurring in the area. Most land in this area has either residential or commercial structures with small areas of undeveloped lands between developed portions. Therefore, the

impact on land use of this alternative site would not be significant from implementation of the Proposed Action, and a reevaluation of land use zoning would not be required.

To obtain LEED® Silver Rating on the proposed building, NOAA would be required to implement sustainable site development strategies that have been discussed in Section 4.2.1 of Alternative 1. These sustainable strategies would be considered as mitigation measures for the land use impacts from the Proposed Action.

4.4.2 Impacts on Geology and Soil Resources

This section describes the potential environmental impacts on soil and geology resources for Alternative 3.

4.4.2.1 Impacts on Geology

APE/Threshold: The APE is the parcel located at 1000 Cody Road and surrounding areas (within 0.5-mile radius) in western Mobile. The threshold is whether the Proposed Action would cause any changes in geological structure.

Impact Analysis: The implementation of Proposed Action would have no impact on the geology of the region. Impacts on local geology for Alternative 3 would be similar to those described in Alternative 1 (see Section 4.2.2.1).

4.4.2.2 Impacts on Soils

APE/Threshold: The APE is the parcel located at 1000 Cody Road and surrounding areas (within 0.5-mile radius) in western Mobile. The threshold is whether the Proposed Action would cause moderate to severe soil compaction and surface runoff.

Impact Analysis: The Proposed Action would have some impact on soil at the site because the wooded area would need to be cleared for construction purposes and changed from undeveloped land to developed land. According to the Soil Survey of Mobile County, the soil at this site has a good potential for most urban uses, as there are no significant limitations for infrastructure development. A residential complex is located on the east adjacent property; therefore, some of the vegetation along the east property line would be left to create a buffer. Most of the site is covered with medium- to small-growth trees and would need to be cleared. Minimal soil erosion would occur in the immediate area of construction due to stormwater runoff.

Impacts on soil from the construction and operation of the NOAA facility at the site would be similar to the impact presented in Alternative 1 (see Section 4.2.2.2). As a standard, NOAA has adopted LEED® strategies as a basis of design and requires a rating of silver or better for all new construction. With LEED® Silver Rating as the basis of design, various mitigation measures would be implemented that would alleviate soil impacts. The mitigation measures would be similar to those discussed in Alternative 1 in Section 4.2.2.2.

4.4.3 Impacts on Water Resources

This section evaluates potential environmental impacts of the Proposed Action at the Alternative 3 site location on water resources, including groundwater and surface water.

4.4.3.1 Impacts on Groundwater

APE/Threshold: The APE is the Southern Coastal Plain (sand and gravel) aquifer and the communities that utilize its water. The threshold is whether the Proposed Action would decrease groundwater quality and supply.

Impact Analysis: The Proposed Action would result in similar impacts to groundwater as described in Section 4.2.3.1 for the Alternative 1 site location.

4.4.3.2 Impacts on Surface Water

APE/Threshold: No surface water bodies or drainage ditches are on or in close proximity to the project area; however, the following are located within 0.5 mile of the site: Threemile Creek east of the site, a freshwater forested/shrub wetland and freshwater pond southeast of the site, a freshwater forested/shrub wetland southwest of the site, and two freshwater ponds northwest of the site (see Figure 9). The threshold is whether the Proposed Action would decrease water and habitat quality.

Impact Analysis: The construction activities and use of heavy equipment associated with the Proposed Action would result in adverse, direct, short-term, minor impacts on surface water quality, as drainage ditches are not located on or adjacent to the site location. The BMPs to reduce adverse impacts to surface water would be similar to those discussed in Section 4.2.3.2 for the Alternative 1 site location.

4.4.4 Impacts on Biological Resources

This section discusses the impacts for the Proposed Action at the Alternative 3 site location for flora and fauna; threatened, endangered, and sensitive species; and insects, disease, and other exotic organisms. The impacts on biological resources would be primarily associated with construction activities.

4.4.4.1 Impacts on Flora and Fauna

APE/Threshold: The APE is the proposed project site, including the location of the proposed building and parking lot. The threshold is whether the Proposed Action would be likely to significantly impact any existing vegetation and terrestrial wildlife.

Impact Analysis: The Proposed Action would result in similar impacts on flora and fauna as described in Section 4.2.4.1 for the Alternative 1 site location.

4.4.4.2 Impacts on Threatened, Endangered, and Sensitive Species

APE/Threshold: The APE is the proposed project site, including the location of the proposed building and parking lot. The threshold is whether the Proposed Action would be likely to significantly impact any TES or designated habitat.

Impact Analysis: The Proposed Action would result in similar impacts on threatened, endangered, and sensitive species as described in Section 4.2.4.2 for the Alternative 1 site location. However, the proposed Alternative 3 site location is mapped as Troup and Heidel soils (see Figure 8). The USFWS response indicated that the tortoise is also commonly associated with an open understory, which was not observed on site during the site reconnaissance. The listed Eastern indigo snake and black pine snake, as indicated in the USFWS response, generally occur in the same vicinity as the gopher tortoise, with the Eastern indigo snake commonly using the gopher tortoise burrows as dens and for egg laying. Although a survey has not been performed on the proposed Alternative 3 site location, indications of the presence of

the gopher tortoise, Eastern indigo snake, or black pine snake were not observed during the site reconnaissance; due to the lack of ideal habitat, these are not likely to occur in the project area. If a survey is performed, a survey for the gopher tortoise, the Eastern indigo snake, and black pine snake should be included; if any of these are identified, the USFWS should be contacted immediately. All contractors should be informed of the species' descriptions, and all work should cease immediately if any of the species are observed.

4.4.4.3 Impacts on Insects, Disease, and Other Exotic Organisms

APE/Threshold: The APE is the project site, including the location of the proposed building and parking lot. The threshold is whether the Proposed Action would significantly increase the likelihood of insects, diseases, and other exotic organisms.

Impact Analysis: The Proposed Action would result in similar impacts on insects, disease, and other exotic organisms as described in Section 4.2.4.3 for the Alternative 1 site location.

4.4.5 Impacts on Air Resources

This section describes the potential environmental impacts on air resources for Alternative 3.

4.4.5.1 Impacts on Air Quality

APE/Threshold: The APE is the area surrounding the project site (within 1-mile radius). The threshold is whether the Proposed Action would cause a change in attainment status of criteria pollutants per the NAAQS.

Impact Analysis: Implementation of the Proposed Action would have impacts on local ambient air quality, from both mobile and stationary sources. The local air quality would be affected through various sources, such as emission from construction equipment and vehicle; fugitive emission of dust; demolition and construction of structures; and diesel exhaust from the emergency generator. Operations of the NOAA facility would have minimal impact on the air quality from daily office use and would not affect the ambient air quality in the City. The impacts and the mitigation measures would be similar to Alternative 1 and have been discussed in detail in Section 4.2.5.1.

4.4.5.2 Impact on Noise

APE/Threshold: The APE is the area immediately surrounding the project site, including any sensitive noise receptors. The threshold is whether the Proposed Action would noticeably exceed ambient noise levels for a prolonged period.

Impact Analysis: Implementation of the Proposed Action would have a short-term and temporary effect on the ambient noise quality. The long-term operation of the NOAA facility would not contribute much to the ambient city noise, except for daily traffic noise. However, short-term impacts would occur during the construction from operation of heavy construction machinery. Implementation of the Proposed Action would not significantly increase noise for a short duration, especially for the adjacent residences located to the east of the development site. Construction activities would result in temporary, short-duration noise which could be bothersome to adjacent businesses and surrounding residences. Construction would occur during the day and not at night, when noise levels should be lower, by local regulation. As per the ordinance, the construction activities would be performed only after 8:00 a.m. The wooded areas on the site and adjacent properties act as buffers between the major roads and the residences. All these activities would contribute to more impermeable land and clearing of the wooded

area to accommodate proposed structures and paved parking. Therefore, the noise level from Cody Road would also increase generally because the wooded buffer would be removed.

The operation of the NOAA facility would have minimal impacts on noise of the local area. Operation of the emergency generator once a month and during power outages would create minimal noise impact.

Noise levels generated include any future transportation activities on the road during the peak office hours and car parking in the parking lot. This type of impact would occur only during working hours, restricted to day time, except during an emergency event. Inside the building, sound absorbing acoustical panels would be used in the Incident Command Area to help regulate the noise in the space (Gould 2008). Therefore, minimal impacts on noise of the local area would result from operation of the NOAA facility.

4.4.6 Impacts on Cultural and Historic Resources

APE/Threshold: The APE is a 1-mile radius around the proposed site. The threshold of significance is no potential effects on historic or cultural resources resulting from implementation of the proposed project.

Impact Analysis: As per Section 106 of the NHPA, a coordination letter was sent to the SHPO to verify the non-existence of any cultural and historical resources in this area. The SHPO was contacted, requesting a comment regarding any historic or cultural resources that may be affected by the Proposed Action at the Alternative 3 site location. As of the date of this report, a response has not been received.

Cultural and historic resources are not within a 1-mile radius of the proposed project site. Therefore, none of these cultural and historical resources would be impacted by the Proposed Action.

4.4.7 Impacts on Socioeconomic and Man-Made Resources

The following sections describe impacts from the socioeconomic and man-made resources associated with the proposed Alternative 3 site location.

4.4.7.1 Impacts on Socioeconomic Resources

APE/Threshold: The APE is the County of Mobile. The threshold of significance is whether the Proposed Action would cause moderate to severe changes to local area population, demographics, or economy.

Impact Analysis: The Proposed Action is within the same APE area and therefore would have the same impact analysis as described in Section 4.2.7.1.

4.4.7.2 Impacts on Transportation

APE/Threshold: The APE is the proposed site and an area within 1 mile of the site. The threshold is whether the Proposed Action would significantly affect traffic patterns requiring additional construction or alteration of roads within a 1-mile radius.

Impact Analysis: The Proposed Action would not have significant impacts on transportation, as no significant road construction is expected. A primary driveway, from Cody Road to the newly constructed facility parking lots, would need to be constructed. Due to construction, impacts to soil, water, and biological resources are expected to be minimal, as discussed in Sections 4.2.2, 4.2.3, and 4.2.4, respectively.

Minor, temporary increases in traffic on Cody Road between Zeigler Boulevard and E Vincent Road would be anticipated during construction activities, but permanent additional traffic would be minor as a result of the estimated 15 employees who would work in the facility on a permanent basis. Furthermore, during an emergency event, temporary staff would likely carpool to the facility, resulting in a higher impact on traffic than in a non-event time; however, the County's 2009-2012 transportation plans include widening Ziegler Boulevard, which would alleviate increased traffic impacts during an event.

4.4.7.3 Impacts on Utilities

APE/Threshold: The APE is the County of Mobile. The threshold is whether the Proposed Action would require reconfiguration of the current utilities of Mobile County or if an additional source of power or water management system would be required.

Impact Analysis: Because of a similar location of Alternative 1, this alternative would have the same impact analysis for utilities as described in Section 4.2.7.3.

4.4.7.4 Impacts on Hazardous Materials and Solid Waste

APE/Threshold: The APE is the County of Mobile. The threshold is whether the Proposed Action would involve use of a substantial amount of hazardous materials, would generate hazardous wastes in large quantities, would trigger an action under RCRA, or would require the County to expand solid waste collection or landfill area.

Impact Analysis: The Proposed Action is within the same APE area and therefore would have the same impact analysis as described in Section 4.2.7.4.

4.4.7.5 Impacts on Recreational Resources

APE/Threshold: The APE is any public recreation-specific areas in the immediate vicinity of the proposed area. The threshold is whether the Proposed Action would have a significant adverse impact on any public areas used for recreation.

Impact Analysis: The Proposed Action would not affect the public recreational resources of the site, as there are no public recreational resources on the proposed site. Although there is evidence from the tree house that neighborhood children play in the undeveloped land, it is private property and therefore does not affect public resources. In the immediate vicinity, the only public recreational resource includes the adjacent fairgrounds. Due to the small number of permanent employees at the new facility, effects on the fairground would be minimal and may increase fair revenue. The abutting backyards of homes may experience minor disruptions due to construction and on occasion of an event. These disruptions are likely to be noise, as discussed in Section 3.2.5.2, and minor dust and diesel exhaust emissions during construction, as discussed in Section 4.4.5.1 and noise as discussed in Section 4.4.5.2.

4.4.7.6 Impacts on Visual and Aesthetic Resources

APE/Threshold: The APE is the immediate vicinity around the proposed site. The threshold is whether the Proposed Action would adversely affect visual enjoyment of the area.

Impact Analysis: The impact of the Proposed Action would not significantly affect the aesthetic resources of the area. The project would pursue LEED® certification, which would require a limitation on site disturbance to 40 feet beyond the building perimeter; 10 feet beyond surface walkways, patios, surface parking, and utilities less than 12 inches in diameter; 15 feet beyond primary roadway curbs and

main utility branch trenches; and 25 feet beyond constructed areas with permeable surfaces (such as pervious paving areas, stormwater detention facilities, and playing fields) that require additional staging areas in order to limit compaction in the constructed area.

Because of the small size of the footprint of the proposed project, and the expected tree line buffer that would be left between the new facility and the abutting residential community, the effect on the aesthetics would be negligible.

4.5 ALTERNATIVE 4: 140 SCHILLINGER ROAD, MOBILE, ALABAMA 36608

4.5.1 Impacts on Location and Land use

APE/Threshold: The APE is the parcel located at 140 Schillinger Road and surrounding areas (within 0.5-mile radius) in western Mobile. The threshold is whether the Proposed Action would significantly affect land use requiring a reevaluation of land use zoning in the City of Mobile.

Impact Analysis: The overall land use of the region would not be impacted because the City of Mobile is already one of the largest growing cities in the State. The City has developed industrially and commercially mainly due to the location of the port in the Mobile Bay area. Therefore, the Proposed Action is consistent with the general land development occurring in the area, and a reevaluation of land use zoning would not be required under this alternative.

The Proposed Action would have no impact on land use in the area because the site and the surrounding areas are mostly commercially developed. This alternative site is currently zoned for B-3, Commercial Business District. Tree clearing on site and site adaptability would not be necessary because the site has been previously developed as a mobile home sales lot and currently has a layer of gravel. The existing modular commercial building would have to be removed or renovated prior to construction of new structures. A large billboard, located on the southeastern corner of the site, would be removed to accommodate new structures. The graveled area and access road would be paved to accommodate the parking needs of NOAA staff. Additional parking would be available in the surrounding area to accommodate more people during emergency events. Because the site has been already developed in the past and the surrounding area is mostly commercial, the Proposed Action would have no impact on land use.

4.5.2 Impacts on Geology and Soil Resources

This section describes the potential environmental impacts on soil and geology resources for Alternative 4.

4.5.2.1 Impacts on Geology

APE/Threshold: The APE is the parcel located at 140 Schillinger Road and the surrounding areas (within 0.5-mile radius) in western Mobile. The threshold is whether the Proposed Action would cause any changes in geological structure.

Impact Analysis: Implementation of the Proposed Action would have no impact on the geology of the region. Impacts on the local geology for Alternative 4 would be similar to those described in Alternative 1 (see Section 4.2.2.1).

4.5.2.2 Impacts on Soils

APE/Threshold: The APE is the parcel located at 140 Schillinger Road and the surrounding areas (within 0.5-mile radius) in western Mobile. The threshold is whether the Proposed Action would cause moderate to severe soil compaction, subsoil impact, and surface runoff.

Impact Analysis: Impacts on soil from construction and operation of the NOAA facility at the site would be similar to the impact presented in Alternative 1 (see Section 4.2.2.2). As a standard, NOAA has adopted LEED® strategies as a basis of design, and requires a rating of silver or better for all new construction. With LEED® Silver Rating as the basis of design, various mitigation measures would be implemented that would alleviate soil impacts. The mitigation measures would be similar to those discussed in Alternative 1 in Section 4.2.2.2.

4.5.3 Impacts on Water Resources

This section evaluates potential environmental impacts of the Proposed Action at the Alternative 4 site location on water resources, including groundwater and surface water.

4.5.3.1 Impacts on Groundwater

APE/Threshold: The APE is the Southern Coastal Plain (sand and gravel) aquifer and the communities that utilize its water. The threshold is whether the Proposed Action would decrease groundwater quality and supply.

Impact Analysis: The Proposed Actions would result in similar impacts to groundwater as described in Section 4.2.3.1 for the Alternative 1 site location.

The impacts to groundwater supply would also be minimal since, as a standard, NOAA has adopted LEED® strategies as a basis of design and requires a rating of Silver or better for all new construction (NOAA 2008b). During construction and operation of the facility, water-efficient landscaping would be developed on site, and water use reduction measures would be put into place.

4.5.3.2 Impacts on Surface Water

APE/Threshold: The APE includes the drainage ditch located immediately south of the southern property boundary, as well as Miller Creek and the corresponding freshwater forested/shrub wetlands located west of the site (see Figure 9). The threshold is whether the Proposed Action would decrease water and habitat quality.

Impact Analysis: The construction activities and use of heavy equipment associated with the Proposed Action would result in similar impacts as described in Section 4.2.3.2 for the Alternative 1 site location.

4.5.4 Impacts on Biological Resources

This section discusses the impacts for the Proposed Action at the Alternative 4 site location for flora and fauna; threatened, endangered, and sensitive species; and insects, disease, and other exotic organisms. The impacts on biological resources would be primarily associated with construction activities.

4.5.4.1 Impacts on Flora and Fauna

APE/Threshold: The APE is the proposed project site, including the location of the proposed building and parking lot. The threshold is whether the Proposed Action would be likely to significantly impact any existing vegetation and terrestrial wildlife.

Impact Analysis: Neither wild nor ornamental vegetation would be impacted by the proposed activities because the area proposed for new construction is a gravel lot with minimal grass and weed growth, and includes a commercial building located in the northeast corner of the property (see Figure 6). The proposed Alternative 4 site location is currently gravel and developed; therefore, implementation of the Proposed Action would not impact vegetation and terrestrial wildlife in the immediate vicinity of the Proposed Action. The Proposed Action would also result in adverse, indirect, short-term, minor impacts on fauna located on the properties adjacent to the site location that would result from the noise pollution produced during construction activities. The impacts of the noise pollution could be minimized by avoiding construction activities during nesting and breeding seasons.

4.5.4.2 Impacts on Threatened, Endangered, and Sensitive Species

APE/Threshold: The APE is the proposed project site, including the location of the proposed building and parking lot. The threshold is whether the Proposed Action would be likely to significantly impact any TES or designated habitat.

Impact Analysis: The construction activities and use of heavy equipment associated with the Proposed Action would result in similar impacts on threatened, endangered, and sensitive species as described in Section 4.3.4.2 for the Alternative 2 site location.

4.5.4.3 Impacts on Insects, Disease, and Other Exotic Organisms

APE/Threshold: The APE is the project site, including the location of the proposed building and parking lot. The threshold is whether the Proposed Action would significantly increase the likelihood of insects, diseases, and other exotic organisms.

Impact Analysis: The Proposed Action would result in similar impacts on insects, disease, and other exotic organisms as described in Section 4.2.4.3 for the Alternative 1 site location.

4.5.5 Impacts on Air Resources

This section describes the potential environmental impacts on air resources for Alternative 4.

4.5.5.1 Impacts on Air Quality

APE/Threshold: The APE is the area surrounding the project site (within 1-mile radius). The threshold is whether the Proposed Action would cause a change in attainment status of criteria pollutants per the NAAQS.

Impact Analysis: Implementation of the Proposed Action would have impacts on local ambient air quality, from both mobile and stationary sources. The local air quality would be affected through various sources, such as emission from construction equipment and vehicles; fugitive emission of dust; demolition and construction of structures; and diesel exhaust from the emergency generator. Operations of the NOAA facility would have minimal impact on the air quality from daily office use and would not

affect the ambient air quality in the City. The impacts and the mitigation measures would be similar to Alternative 1 and have been discussed in detail in Section 4.2.5.1.

4.5.5.2 Impacts on Noise

APE/Threshold: The APE is the area immediately surrounding the project site, including any sensitive noise receptors. The threshold is whether the Proposed Action would noticeably exceed ambient noise levels for a prolonged period.

Impact Analysis: Implementation of the Proposed Action would have a short-term and temporary effect on the ambient noise quality. Construction activities would result in temporary, short-duration noise which could be bothersome to adjacent businesses and surrounding residences. The long-term operation of the NOAA facility would not contribute much to the ambient city noise, except for daily traffic noise. However, short-term impacts would occur during the construction from operation of heavy construction machinery.

The operation of the NOAA facility would have minimal impacts on noise in the local area. This alternative site is not located near any residences. In fact, the site is proximate to the airport, retail stores, and other commercial development. Therefore, minimal impacts on noise in the local area would result from operation of the facility in the long term. Operation of the emergency generator once a month and during power outages would create minimal noise impact. The mitigation measures for the noises produced during construction and operation of the facility would be similar to those described in Alternative 1 (see Section 4.2.5.2).

4.5.6 Impacts on Cultural and Historic Resources

APE/Threshold: The APE is a 1-mile radius around the proposed site. The threshold of significance is no effects on historic or cultural resources resulting from implementation of the proposed project.

Impact Analysis: As per Section 106 of the NHPA, a coordination letter was sent to the SHPO to verify the non-existence of any cultural and historical resources in this area. The SHPO was contacted, requesting a comment regarding any historic or cultural resources that may be affected by the Proposed Action at the Alternative 4 site location. As of the date of this report, a response has not been received.

Cultural and historic resources are not within a 1-mile radius of the proposed project site. Therefore, none of these cultural and historical resources would be impacted by the Proposed Action.

4.5.7 Impacts on Socioeconomic and Man-Made Resources

The following sections describe impacts from the socioeconomic and man-made resources associated with the proposed Alternative 4 site location.

4.5.7.1 Impacts on Socioeconomic Resources

APE/Threshold: The APE is the County of Mobile. The threshold of significance is whether the Proposed Action would cause moderate to severe changes to local area population, demographics, or economy.

Impact Analysis: The Proposed Action is within the same APE area and therefore would have the same impact analysis as described in Section 4.2.7.1.

4.5.7.2 Impacts on Transportation

APE/Threshold: The APE is the proposed site and an area within 1 mile of the site. The threshold is whether the Proposed Action would significantly affect traffic patterns requiring additional construction or alteration of roads within a 1-mile radius.

Impact Analysis: The Proposed Action would not have significant impacts on transportation, as no significant road construction is expected. A primary driveway, from Schillinger Road to the newly constructed facility parking lots, would be constructed. It is not expected that a secondary driveway would be constructed from the facility to Eads Casa Drive, precluding any impact on the existing ditch or culvert. Due to construction, impacts are expected on soil, water, and biological resources, as discussed in Sections 4.2.2, 4.2.3, and 4.2.4, respectively.

Minor, temporary increases in traffic on Schillinger Road between Airport Boulevard and Old Shell Road would be anticipated during construction activities, but permanent additional traffic would be minor as a result of the estimated 15 employees who would work in the facility on a permanent basis. Furthermore, during an emergency event, temporary staff would likely carpool to the facility, resulting in a higher impact on traffic than in a non-event time; however, four major access roads within a 1-mile radius would provide multiple routes of transport during an event period.

4.5.7.3 Impacts on Utilities

APE/Threshold: The APE is the County of Mobile. The threshold is whether the Proposed Action would require reconfiguration of the current utilities of Mobile County or if an additional source of power or water management system would be required.

Impact Analysis: Because of a similar location of Alternative 1, this alternative would have the same impact analysis for utilities as described in Section 4.2.7.3. The functionality of the drainage ditch that runs along Eads Casa Drive would not be affected, as construction of a secondary driveway from the facility to Eads Casa Drive is not expected, precluding any impact on the existing ditch or culvert.

4.5.7.4 Impacts on Hazardous Materials and Solid Waste

APE/Threshold: The APE is the County of Mobile. The threshold is whether the Proposed Action would involve use of a substantial amount of hazardous materials, would generate hazardous wastes in large quantities, would trigger an action under RCRA, or would require the County to expand solid waste collection or landfill area.

Impact Analysis: The Proposed Action is within the same APE area and therefore would have the same impact analysis as described in Section 4.2.7.4.

4.5.7.5 Impacts on Recreational Resources

APE/Threshold: The APE is any public recreation-specific areas in the immediate vicinity of the proposed area. The threshold is whether the Proposed Action would have a significant adverse impact on any public areas used for recreation.

Impact Analysis: The Proposed Action would not affect the recreational resources of the site, as no public recreational resources are on the proposed site or in the immediate vicinity.

4.5.7.6 Impacts on Visual and Aesthetic Resources

APE/Threshold: The APE is the immediate vicinity around the proposed site. The threshold is whether the Proposed Action would adversely affect visual enjoyment of the area.

Impact Analysis: The impact of the Proposed Action would not significantly affect the aesthetic resources of the area. The area is highly commercialized and the Proposed Action would replace an already cleared and paved lot.

4.6 NO ACTION ALTERNATIVE

Under the No Action alternative, no new site development would occur in Mobile, and NOAA would not construct any structures for the GoMDRC. The No Action alternative would result in no impact on land use because no construction activities would occur in the area. The four alternative sites are zoned as Commercial Business District; therefore, these sites would likely be developed and used by another entity. If future site developments occur, these would likely have similar impacts on land use as the Proposed Action.

The No Action Alternative would have no effect on the geology, soils, air, biological, and water resources of the areas. No impacts on surface waters or groundwater are expected from implementation of the No Action Alternative. The No Action Alternative would result in no impact on flora and fauna of the area. These resources would remain as they are under current conditions because no construction activities would occur.

Under the No Action Alternative, some impact on socioeconomic resources would be expected. Despite no changes in the population and demographics, negative impact on the local economy could ensue because construction jobs that would have been created to implement the Proposed Action would not be available to the local people. No impacts on any cultural and historical resources would result from the No Action Alternative.

4.7 CUMULATIVE IMPACTS

A cumulative effect is defined as "the impact on the environment which results from the incremental impact of the action when added to other past, present, or reasonable foreseeable future action regardless of what agency (federal or non-federal) or person undertakes such other actions" (Council on Environmental Quality (CEQ) 1992). Cumulative impacts have two components—spatial and temporal (e.g., geography or time). Regarding spatial concerns, most potential impacts would be isolated to the individual, alternative sites, as previously described. Only minor cumulative, spatial impacts would result due to such considerations as minor water and soil runoff or dispersion of fugitive dust, all of which would be reduced through use of mitigation measures. Regarding temporal concerns, most potential impacts would be isolated to the temporary construction phase of the project, as previously described. Operation of the facility would cause only minor cumulative impacts on traffic, and would cause minor, positive cumulative impacts on the local economy. Also, no known, currently planned projects in the vicinity of any of the alternatives are under evaluation. However, if any future projects are undertaken at any of the proposed locations, the cumulative impacts would be minimal because of the nature of NOAA's Proposed Action. Most potential impacts that would result from NOAA's Proposed Action would occur during the construction phase of the project.

4.8 UNAVOIDABLE ADVERSE IMPACTS

Unavoidable adverse effects may result from activities such as soil mixing and compaction, waste generated from various construction activities, and construction material storage. Temporary construction trailers and other temporary structures, if established, would be removed after the construction phase of the project. Construction debris would be removed periodically from the site. All construction storage and equipment areas would be fenced and located on the site so as to minimize their impact on adjacent properties and public streets.

To mitigate the potential impacts, standard BMPs, such as temporary erosion and sediment control devices, would be utilized during the construction to ensure that disturbed soil and other materials would not flow into surface waters and to other areas.

4.9 MITIGATION MEASURES AND ADAPTIVE MANAGEMENT

Mitigation measures should be incorporated into the design, construction, and operations of the Proposed Action to further minimize the potential impacts identified in this EA. Also, NOAA would use adaptive management to implement changes to the following mitigation measures, as necessary, if such changes are deemed appropriate during project implementation. The following mitigation measures would be implemented, as necessary:

- If any items of potential cultural, historical, or archaeological significance are unearthed or otherwise discovered during construction activities, work would be ceased at once and the AHC would be informed.

- To limit potential temporary noise effects during construction, construction and/or renovation of the proposed building(s) would be limited to daytime hours consistent with local ordinances and restrictions. In addition, construction vehicle idling would be limited as much as possible.

- Construction scheduling and movement of heavy, slow-moving vehicles and equipment would be coordinated with local officials to minimize traffic disturbances.

- Mitigation measures associated with accepted LEED strategies would be implemented.

- Straw bales, silt fencing, or other temporary erosion and sediment control devices would be used, if appropriate. Such measures would help minimize any surface runoff from disturbed areas and protect nearby areas from runoff during rain events.

- BMPs would be incorporated in a stormwater management plan prepared for the proposed project site.

- Clear site limitation fences or markers would be used to ensure that construction crews are aware of project area boundary limits.

- As applicable, drip pans or mats would be used for any heavy construction equipment left on site. For any temporary on-site storage of fuels, lubricants, solvents, or other hazardous materials during construction, impermeable mats or temporarily approved storage sheds would be used. For any fuel tanks on site during construction, appropriate containment measures would be used.

- The construction contractor would be required to have and post on site a site-specific plan and procedures for stowing, securing, or removing construction equipment, materials, and debris in the event of anticipated major storm events.

- Construction activities would be avoided during nesting or breeding seasons.

- Work would stop if threatened or endangered species are observed.

4.10 RELATIONSHIP OF SHORT-TERM USES AND LONG-TERM PRODUCTIVITY

The Proposed Actions would, in general, cause short-term impacts to almost all resource uses because of short-term construction activities. However, the short-term impacts and uses would lead to establishment of the GoMDRC and its ability to respond to natural disaster impacting the Gulf of Mexico region. The long-term productivity would result from NOAA's consolidation of its assets and personnel to provide greater synergy and integration across the agency and improve delivery of NOAA products and services in the Gulf region. The establishment of the GoMDRC would provide access to NOAA resources, as well as assets and expertise to support planning for, mitigating against, responding to, and recovering from a natural or man-made disaster.

4.11 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES

Although the Proposed Actions would commit specific sites to a long-term conversion of land use from vacant land to commercial property only some of the impacts would be irreversible and irretrievable. This land use could be changed again, in the future, if necessary, and is therefore not irreversible.

5.0 COORDINATION AND PUBLIC INVOLVEMENT

This section presents a comprehensive list of federal, state, and local consultations and coordination activities that were undertaken for this EA. Other relevant consultations (some of which may require certain actions or mitigations) are as follows:

- As part of the NEPA process, SHPO regarding historical and cultural resources impacts
- USFWS under the Endangered Species Act
- NOAA NMFS under the Endangered Species Act and Marine Mammal Protection Act
- ADCNR regarding listed threatened, endangered, or other species of concern
- ADEM regarding applicable permits.

Although consultation was not necessary, the City of Mobile, Department of Planning was also notified of the Proposed Action.

All available coordination letters and responses from the aforementioned agencies are provided in Appendix A. It should be noted that the SHPO has not responded to date. If received after publication, any relevant environmental information and its significance will be provided by NOAA as an addendum to this EA.

NOAA will solicit comments from the public on the Proposed Action and this document during a 30-day public comment period. This process involves announcements and publications of the draft final EA for the Proposed Action. A public news release, announcing the opening date of the public comment period and availability of the draft final EA, will be published in the local newspaper. A copy of the draft final EA will be made available at the City of Mobile Library for public review. All received public comments, along with identities of respondents who submitted these, will be documented in a comment database and the EA modified as warranted.

6.0 LIST OF PREPARERS

NOAA

Mark George
Environmental Compliance Officer

Tetra Tech EM, Inc.

David Homer, Environmental Scientist

Daniel F. Barone, Environmental Analyst

Jessica Berry, Policy Analyst

Amber Bixler, Environmental Scientist

Christina Engemann, Environmental Scientist

Kripa Garg, Environmental Scientist

7.0 REFERENCES

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APPENDICES

APPENDIX A

AGENCY CORRESPONDENCE

AGENCY CORRESPONDANCE FOR THE GULF OF MEXICO DISASTER RESPONSE CENTER, MOBILE, ALABAMA

Alabama Department of Conservation and Natural Resources
ATTN: M.N. Corky Pugh
64 N. Union Street
Montgomery, Alabama 36130

Alabama Department of Environmental Management
ATTN: Ms. Glenda Dean
P.O. Box 301463
Montgomery, AL 36130-1463

Alabama Historical Commission
ATTN: Elizabeth Ann Brown
468 South Perry Street
Montgomery, Alabama 36104

City of Mobile, Urban Development - Planning
ATTN: Mr. Frank Palombo
205 Government Street
3rd Floor, South Tower
Mobile, AL 36644

Choctaw Nation of Oklahoma
Chief Gregory Pyle
PO Box 1210
Durant, OK 74702

Mississippi Band of Choctaw
Chief Beasley Denson
PO Box 6010
Choctaw, Mississippi 39350

Mobile West Regional Library
ATTN: Ms. Janet Curry
5555 Grelot Road
Mobile,AL 36609-3643

Muscogee Creek Nation
A. D. Ellis
Highway 75, Loop 56
PO Box 580
Okmulgee, OK 74447

National Oceanic and Atmospheric Administration
Office of the Chief Administrative Officer
ATTN: Mr. Mark George
DSRC Room: GB137
325 Broadway
Boulder, CO 80305

Poarch Band of Creek Indian
Mr. Buford Rolin
5811 Jack Springs Road
Atmore, AL 36502

Thlopthlocco Tribal Town
Mr. Meko Vernon Warholar
109095 North 3830 Road
Okemah, OK 74859

US Army Corps of Engineers
Mobile District
ATTN: Mike Eubanks
P.O. Box 2288
Mobile, Alabama 36628-0001

U.S. Fish and Wildlife Services
Ecological Services Field Office
ATTN: Mr. Peter Tuttle
1208 B. Main Street
Daphne, AL 36526

Tetra Tech, Inc.

1 South Wacker Drive; 37th Floor □ Chicago, IL 60606 □ (312) 201-7739 □ FAX (312) 938-0118

January 27, 2009

Alabama Department of Conservation and Natural Resources
ATTN: M.N. Corky Pugh
64 N. Union Street
Montgomery, Alabama 36130

RE: Consultation on Impacts to Fish and Wildlife
Potentially Resulting from Proposed NOAA Construction Project
Gulf of Mexico Disaster Response Center, Mobile, Alabama

Dear Mr. Pugh:

On behalf of the National Oceanic and Atmospheric Administration (NOAA), Tetra Tech, Inc. (Tetra Tech) requests Alabama Department of Conservation and Natural Resources consultation on proposed construction activities for the above-referenced site. NOAA contracted Tetra Tech to complete an environmental assessment (EA) under the National Environmental Policy Act (NEPA). The contract includes consultation with officials on potential impacts of the proposed actions to threatened and endangered species.

NOAA proposes to establish a new Gulf of Mexico Disaster Response Center in Mobile, Alabama that would provide facility for staffs and support programs to deliver data, observations, forecasts and scientific expertise before, during and after emergency events in the Gulf of Mexico. Site-selection criteria were based on NOAA's mission, geographic location, building requirement and staffing needs. The site locations considered for establishing the NOAA center were:

- Alternate 1: 7340 Zeilger Boulevard
- Alternate 2: 7431 Airport Road
- Alternate 3: 1000 Cody Road
- Alternate 4: 140 Schillinger Road

The property located on west of 7340 Zeigler Boulevard, Mobile, Alabama has been identified as a preferred location for constructing the center. The site locations for the preferred and all the other alternatives are presented in enclosed Figure 1.

This letter is part of the scoping process undertaken during preparation of the NEPA document. Any information available on threatened or endangered species in these areas or your comments at this early stage of the planning process will be considered during preparation of the EA. Tetra Tech requests your consideration of the proposed action and potential effects of the proposed action on the environment - including whether critical habitat and/or threatened or endangered species may be impacted.

Please call me at me at (312) 201-7739 if you have any questions. Please direct any comments at this time to the attention of:

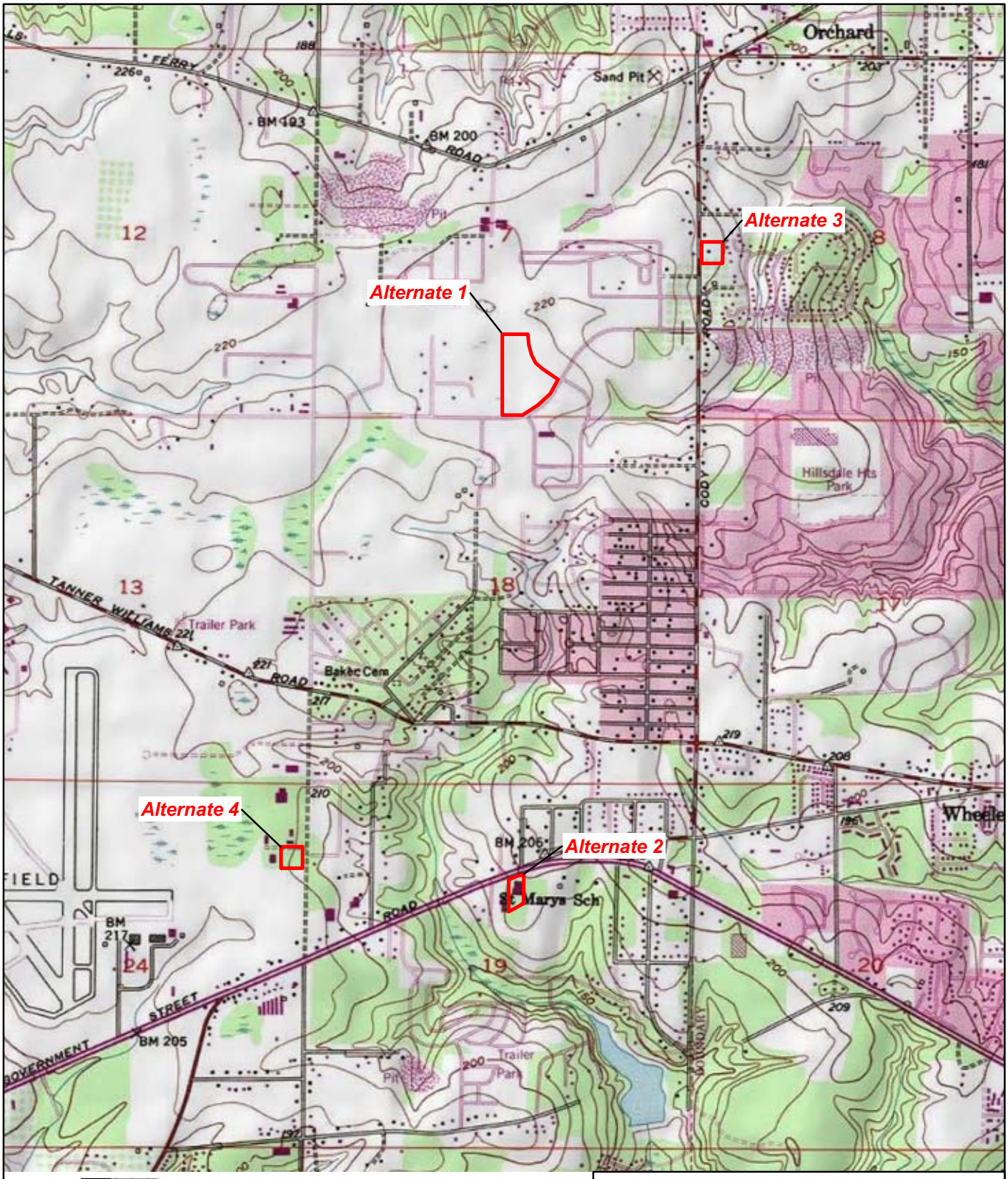
Mr. David Homer
Tetra Tech EM Inc.
415 Oak Street
Kansas City, MO 64106
(812) 412-1762
David.homer@ttemi.com

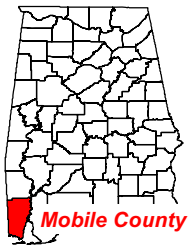
Sincerely,

Kripa Garg
Environmental Scientist
Tetra Tech, Inc.

Enclosure

CC: Mark George, Environmental Compliance Officer, NOAA Boulder, CO Office





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Source: USGS Spring Hill, AL 7.5 Minute Topo Quad, 1982

Gulf of Mexico Disaster Response Center
Proposed Locations
Mobile, Alabama

Figure 1

Site Location Map

TETRA TECH EM INC.

Date: 01/21/09 Drawn By: Ingrid Tobar Project No: G1278.4.0019.02

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STATE OF ALABAMA
DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES
WILDLIFE AND FRESHWATER FISHERIES DIVISION
64 NORTH UNION STREET, SUITE 567
POST OFFICE BOX 301456
MONTGOMERY, ALABAMA 36130-1456
(334) 242-3465
FAX (334) 242-3032
www.outdooralabama.com

BOB RILEY
GOVERNOR

M. BARNETT LAWLEY
COMMISSIONER

M. N. "CORKY" PUGH
DIRECTOR

FRED R. HARDERS
ASST. DIRECTOR

The mission of the Wildlife and Freshwater Fisheries Division is to manage, protect, conserve, and enhance the wildlife and aquatic resources of Alabama for the sustainable benefit of the people of Alabama.

February 4, 2009

Mr. David Homer
Tetra Tech EM Inc.
415 Oak Street
Kansas City, MO 64106

Re: Project No: N/A
Project Description: Consultation on Impacts to Fish and Wildlife
Location: Preferred and Alternate Site Locations in Mobile, Alabama
Mobile County

Dear Mr. Homer:

The Division of Wildlife and Freshwater Fisheries, Department of Conservation and Natural Resources has reviewed the above-referenced project for both proposed locations and provides the following comments and recommendations:

1. This project is unlikely to impact any state-protected species at either the preferred or alternate site locations. Federally-protected species are under the jurisdiction of the U. S. Fish and Wildlife Service. Please contact that agency regarding potential impacts to federally-protected species (251-441-5181).

2. No net loss of stream functions or habitat should occur as a result of the project. If flowing streams, ditches, or wetlands will be impacted by the proposed activity, the Army Corps of Engineers - Mobile District (251-690-3188), should be contacted to determine if the activity falls under a Corps regulation requiring mitigation for adverse ecological, morphological, or hydrological impacts. Adverse stream impacts requiring mitigation include (but are not limited to) accelerated siltation resulting from improper construction or erosion control practices, stream realignment, flow diversion or interruption, the placement of riprap or other fill in the streambed in such a way that habitat functions are impaired or fish movement is impeded under low flow conditions, and other modifications of habitat or hydrology which reduce the density or diversity of aquatic species.

3. We encourage the proper installation and implementation of best management practices as outlined in the Alabama Handbook for Erosion Control in order to minimize erosion and

migration of sediments into wetland and stream areas. Appropriate siltation barriers include: green zones, sod strips, silt fences, erosion eels or other superior means of erosion control that will minimize siltation area authorized in the finalize permit.

We appreciate the opportunity to comment on this project.

Sincerely yours,

Sandy P. Gibson
Environmental Coordinator

Tetra Tech, Inc.

1 South Wacker Drive; 37th Floor □ Chicago, IL 60606 □ (312) 201-7739 □ FAX (312) 938-0118

January 27, 2009

NOAA Fisheries Service
Southeast Regional Office – Habitat Conservation Division
ATTN: David Dale, NEPA/EFH Specialist
263 13th Avenue South
Saint Petersburg, Florida 33701

RE: Consultation on Impacts to Fish and Wildlife
Potentially Resulting from Proposed NOAA Construction Project
Gulf of Mexico Disaster Response Center, Mobile, Alabama

Dear Mr. Dale:

Tetra Tech, Inc. (Tetra Tech) requests National Oceanic and Atmospheric Administration (NOAA) Fisheries Service Center consultation on proposed construction activities for the above-referenced site. NOAA contracted Tetra Tech to complete an environmental assessment (EA) under the National Environmental Policy Act (NEPA). The contract includes consultation with officials on potential impacts of the proposed actions to threatened and endangered species.

NOAA proposes to establish a new Gulf of Mexico Disaster Response Center in Mobile, Alabama that would provide facility for staffs and support programs to deliver data, observations, forecasts and scientific expertise before, during and after emergency events in the Gulf of Mexico. Site-selection criteria were based on NOAA's mission, geographic location, building requirement and staffing needs. The site locations considered for establishing the NOAA center were:

- Alternate 1: 7340 Zeilger Boulevard
- Alternate 2: 7431 Airport Road
- Alternate 3: 1000 Cody Road
- Alternate 4: 140 Schillinger Road

The property located on west of 7340 Zeigler Boulevard, Mobile, Alabama has been identified as a preferred location for constructing the center. The site locations for the preferred and all the other alternatives are presented in enclosed Figure 1.

This letter is part of the scoping process undertaken during preparation of the NEPA document. Any information available on threatened or endangered species in these areas or your comments at this early stage of the planning process will be considered during preparation of the EA. Tetra Tech requests your consideration of the proposed action and potential effects of the proposed action on the environment - including whether critical habitat and/or threatened or endangered species may be impacted.

Please call me at me at (312) 201-7739 if you have any questions. Please direct any comments at this time to the attention of:

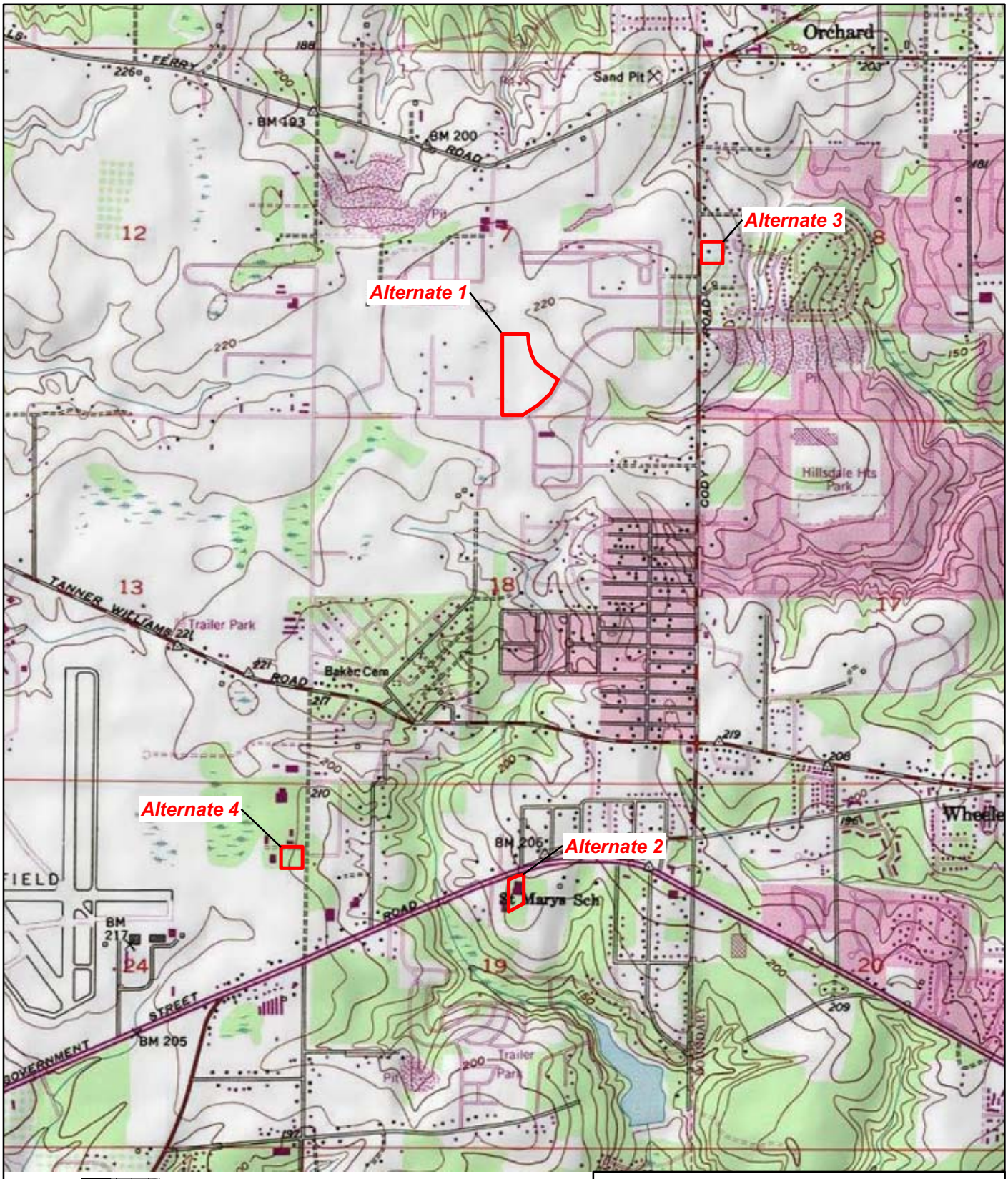
Mr. David Homer
Tetra Tech EM Inc.
415 Oak Street
Kansas City, MO 64106
(812) 412-1762
David.homer@ttemi.com

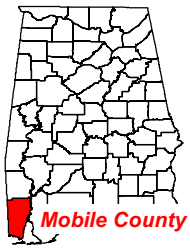
Sincerely,

Kripa Garg
Environmental Scientist
Tetra Tech, Inc.

Enclosure

CC: Mark George, Environmental Compliance Officer, NOAA Boulder, CO Office





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Source: USGS Spring Hill, AL 7.5 Minute Topo Quad, 1982

Gulf of Mexico Disaster Response Center
Proposed Locations
Mobile, Alabama

Figure 1

Site Location Map

TETRA TECH EM INC.

Date: 01/21/09 Drawn By: Ingrid Tobar Project No: G1278.4.0019.02

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Engemann, Christina

From: Homer, David
Sent: Thursday, February 12, 2009 1:12 PM
To: Bixler, Amber; Barone, Dan; Garg, Kripa; Engemann, Christina; Berry, Jessica
Subject: FW: Gulf of Mexico Disaster Response Center, Mobile, Alabama

The latest from NMFS.

David Homer
Tetra Tech EM Inc.
Phone: 816.412.1762
Fax: 816.410.1748
P Think Green - Not every email needs to be printed

-----Original Message-----
From: David Dale [mailto:David.Dale@noaa.gov]
Sent: Thursday, February 12, 2009 12:43 PM
To: Homer, David
Cc: Mark George; Mark Thompson; Stephania Bolden
Subject: Gulf of Mexico Disaster Response Center, Mobile, Alabama

Dear Mr. Homer,

The National Marine Fisheries Service (NMFS), Southeast Region, Habitat Conservation Division received your correspondence, dated January 27, 2009, regarding fish and wildlife resources at the sites considered for the subject project being proposed by the National Oceanic and Atmospheric Administration (NOAA). Based on our review of the identified alternative sites, four parcels in the vicinity of the Mobile Regional Airport, the resources affected are not ones for which the NMFS is responsible and, therefore, we have no comments to provide regarding this activity.

If we can be of further assistance, please advise.

Sincerely,
David Dale
Fishery Biologist
Essential Fish Habitat Coordinator

Tetra Tech, Inc.

1 South Wacker Drive; 37th Floor □ Chicago, IL 60606 □ (312) 201-7739 □ FAX (312) 938-0118

January 26, 2009

Mr. Peter Tuttle
U.S. Fish and Wildlife Services
Ecological Services Field Office
1208 B. Main Street
Daphne, AL 36526

RE: Consultation on Impacts to Fish and Wildlife
Potentially Resulting from Proposed NOAA Construction Project
Gulf of Mexico Disaster Response Center, Mobile, Alabama

Dear Mr. Tuttle:

On behalf of the National Oceanic and Atmospheric Administration (NOAA), Tetra Tech, Inc. (Tetra Tech) requests U.S. Fish and Wildlife Services consultation on proposed construction activities for the above-referenced site. NOAA contracted Tetra Tech to complete an environmental assessment (EA) under the National Environmental Policy Act (NEPA). The contract includes consultation with officials on potential impacts of the proposed actions to threatened and endangered species.

NOAA proposes to establish a new Gulf of Mexico Disaster Response Center in Mobile, Alabama that would provide facility for staffs and support programs to deliver data, observations, forecasts and scientific expertise before, during and after emergency events in the Gulf of Mexico. Site-selection criteria were based on NOAA's mission, geographic location, building requirement and staffing needs. The site locations considered for establishing the NOAA center were:

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This letter is part of the scoping process undertaken during preparation of the NEPA document. Any information available on threatened or endangered species in these areas or your comments at this early stage of the planning process will be considered during preparation of the EA. Tetra Tech requests your consideration of the proposed action and potential effects of the proposed action on the environment - including whether critical habitat and/or threatened or endangered species may be impacted.

Please call me at me at (312) 201-7739 if you have any questions. Please direct any comments at this time to the attention of:

Mr. David Homer
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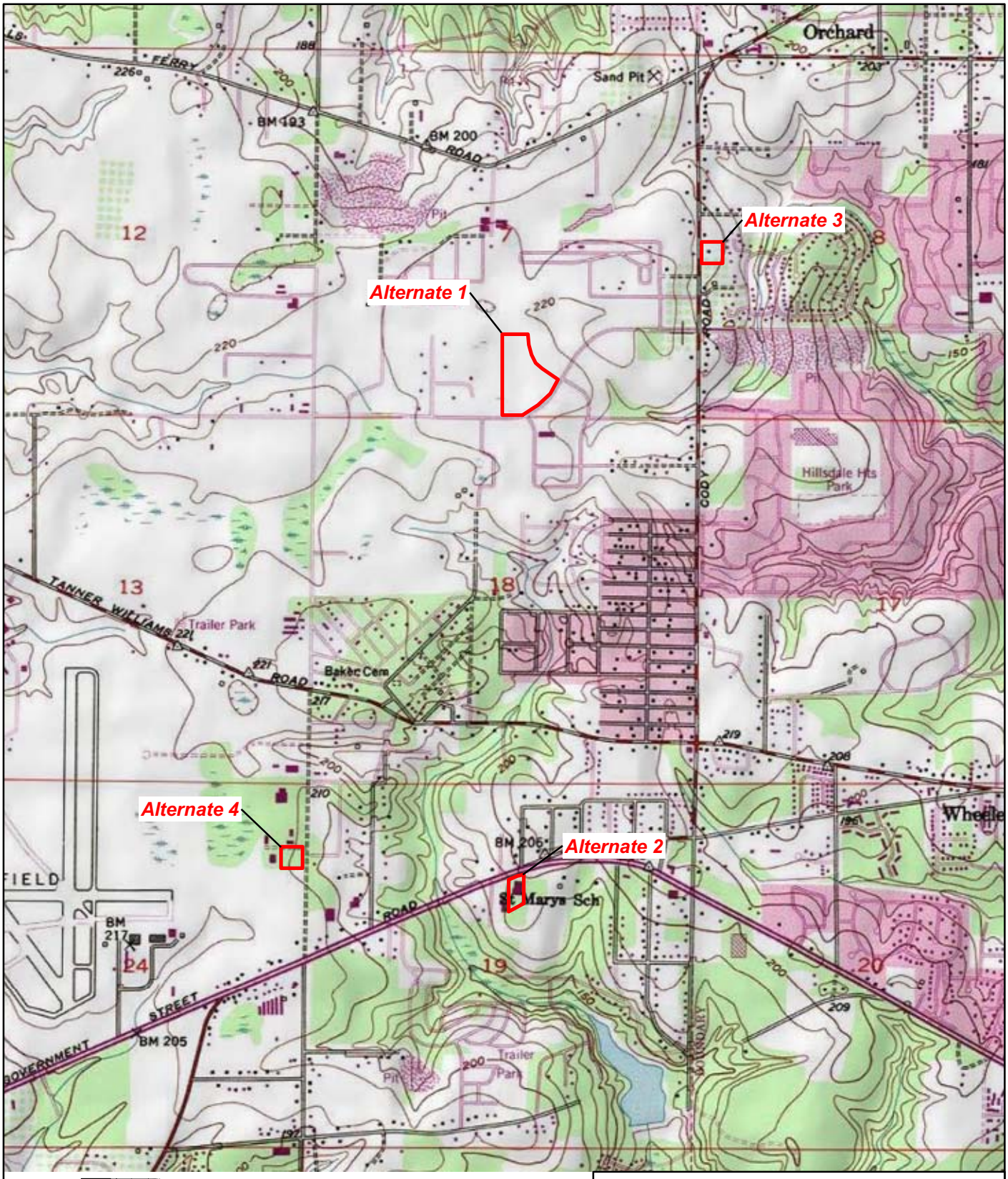
Kansas City, MO 64106
(812) 412-1762
David.homer@ttemi.com

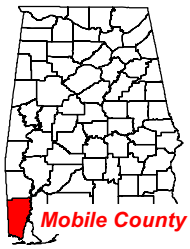
Sincerely,

Kripa Garg
Environmental Scientist
Tetra Tech, Inc.

Enclosure

CC: Mark George, Environmental Compliance Officer, NOAA Boulder, CO Office





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Source: USGS Spring Hill, AL 7.5 Minute Topo Quad, 1982

Gulf of Mexico Disaster Response Center
Proposed Locations
Mobile, Alabama

Figure 1

Site Location Map

TETRA TECH EM INC.

Date: 01/21/09 Drawn By: Ingrid Tobar Project No: G1278.4.0019.02

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United States Department of the Interior

FISH AND WILDLIFE SERVICE
1208-B Main Street
Daphne, Alabama 36526

FEB 1 3 2009

IN REPLY REFER TO:
2009-TA-0266

Mr. David Homer
Tetra Tech EM, Inc.
415 Oak Street
Kansas City, MO 64106

Dear Mr. Homer:

Thank you for your letter requesting concurrence with a proposed NOAA construction project (Gulf of Mexico Disaster Response Center) at one of four sites in Mobile County, Alabama. We have reviewed the information and are providing the following comments in accordance with the Endangered Species Act of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.) (ESA).

We have determined that the following federally listed species may occur within the project areas:

Gopher tortoise *(Gopherus polyphemus)* - Threatened

The gopher tortoise is a burrowing terrestrial reptile. This species generally occurs on deep, well-drained sandy soils, especially Troup and Heidel soils, in open forests or savannas of the extreme southeastern United States. It is commonly associated with pine forests (historically longleaf pine) with an open understory with grass and forb groundcover. Gopher tortoises are also often associated with open areas, such as pipeline and road right-of-ways and woodland edges. The species is herbivorous (primarily herbs, berries and wiregrass) and highly colonial, with burrows reported more than 25 ft. long. Nesting occurs primarily from May to July. Between 3 and 11 eggs are buried usually near the burrow entrance. Thirty-nine invertebrate and 42 vertebrate species are known to utilize gopher tortoise shelter/breeding burrows to varying degrees, including the federally threatened eastern indigo snake. Pictures of the gopher tortoise and its burrow can be seen at the following web sites:

http://www.tortoise.org/gallery/ picgoph.html
http://troyb.com/photo/gallery/ 00007996.htm

We recommend that surveys for this federally protected species be conducted if suitable habitat exists onsite. Should surveys disclose likely gopher tortoise presence, please contact Mr. Bruce Porter in our office at (251) 441-5864 to develop a plan for their conservation.

Eastern indigo snake *(Drymarchon corais couperi)* – Threatened

The Eastern indigo snake is a large, docile, non-poisonous snake growing to a maximum length of about eight feet. The color in both young and adults is shiny bluish-black, including the belly, with some red or cream coloring about the chin and sides of the head. This snake seems to be strongly associated with high, dry, well-drained sandy soils, closely paralleling the sandhill habitat preferred by the gopher tortoise. During warmer months, indigos also frequent streams and swamps, and individuals are occasionally found in flat woods. Gopher tortoise burrows and other subterranean cavities are commonly used as dens and for egg laying.

We recommend that the Eastern indigo snake be included in any survey performed for gopher tortoises, and that contractors and workers be informed of the snake's description. Work activity should cease immediately and any sighting reported to our office, should the Eastern indigo snake be observed. Photographs of the Eastern indigo snake can be viewed at:

http://www.uga.edu/srel/eastern_indigo_snake.htm
http://www.beachtobay.org/html/eastern_indigo_snake.htm

Black pine snake (*Pituophis melanoleucus lodingi)* - Candidate

The black pine snake, a candidate species, has been known to occur in Mobile County. The black pine snake is a large, relatively stout species reaching a maximum adult size of approximately 6.5 ft. This species is often associated with the same xeric habitats that support gopher tortoise populations. Although candidate species are not afforded protection under the ESA, we request that the black pine snake be included in any survey performed for gopher tortoises. If black pine snakes are observed on the property, we recommend that construction activities cease and that the contractor contact our office for further instructions. We also recommend use of best management practices to protect suitable habitat and conserve the snake. Also, this information is being provided to alert you that the black pine snake could be listed in the future. If the proposed work is not carried out in the next year, it would be prudent to contact this office to determine if any changes have occurred to the status of this species. A picture of the black pine snake can be seen at:

http://www.cfr.msstate.edu/gap/images/black%20pine%20snake.jpg

If you have any questions or need additional information, please contact Mr. Patric Harper of my staff at (251) 441-5857. Please refer to the reference number located at the top of this letter in future phone calls or written correspondence.

Sincerely,

William J. Pearson
Field Supervisor
Alabama Ecological Services Field Office

Tetra Tech, Inc.

1 South Wacker Drive; 37th Floor □ Chicago, IL 60606 □ (312) 201-7739 □ FAX (312) 938-0118

January 27, 2009

Choctaw Nation of Oklahoma
Chief Gregory Pyle
PO Box 1210
Durant, OK 74702

RE: Consultation on Impacts to Archaeological Sites
Potentially Resulting from Proposed NOAA Construction Projects
Gulf of Mexico Disaster Response Center, Mobile, Alabama

Dear Mr. Pyle:

On behalf of the National Oceanic and Atmospheric Administration (NOAA), Tetra Tech, Inc. (Tetra Tech) requests Choctaw Nation of Oklahoma office consultation on proposed construction activities for the above-referenced site. NOAA contracted Tetra Tech to complete an environmental assessment (EA) under the National Environmental Policy Act (NEPA) for the above referenced project. Tetra Tech requests your input on the proposed actions and its impact on any archaeological sites.

NOAA proposes to establish a new Gulf of Mexico Disaster Response Center in Mobile, Alabama that would provide facility for staffs and support programs to deliver data, observations, forecasts and scientific expertise before, during and after emergency events in the Gulf of Mexico. Site-selection criteria were based on NOAA's mission, geographic location, building requirement and staffing needs. The site locations considered for establishing the NOAA center were:

- Alternate 1: 7340 Zeilger Boulevard
- Alternate 2: 7431 Airport Road
- Alternate 3: 1000 Cody Road
- Alternate 4: 140 Schillinger Road

The property located on west of 7340 Zeigler Boulevard, Mobile, Alabama has been identified as a preferred location for constructing the center. The site locations for the preferred and all the other alternatives are presented in enclosed Figure 1.

This letter is part of the scoping process undertaken during preparation of the NEPA document. Any information available on archaeological sites in this area or your comments at this early stage of the planning process will be considered during preparation of the EA. Tetra Tech requests your assistance in identifying potential effects of the proposed action on archaeological sites.

Please call me at me at (312) 201-7739 if you have any questions. Please direct any comments at this time to the attention of:

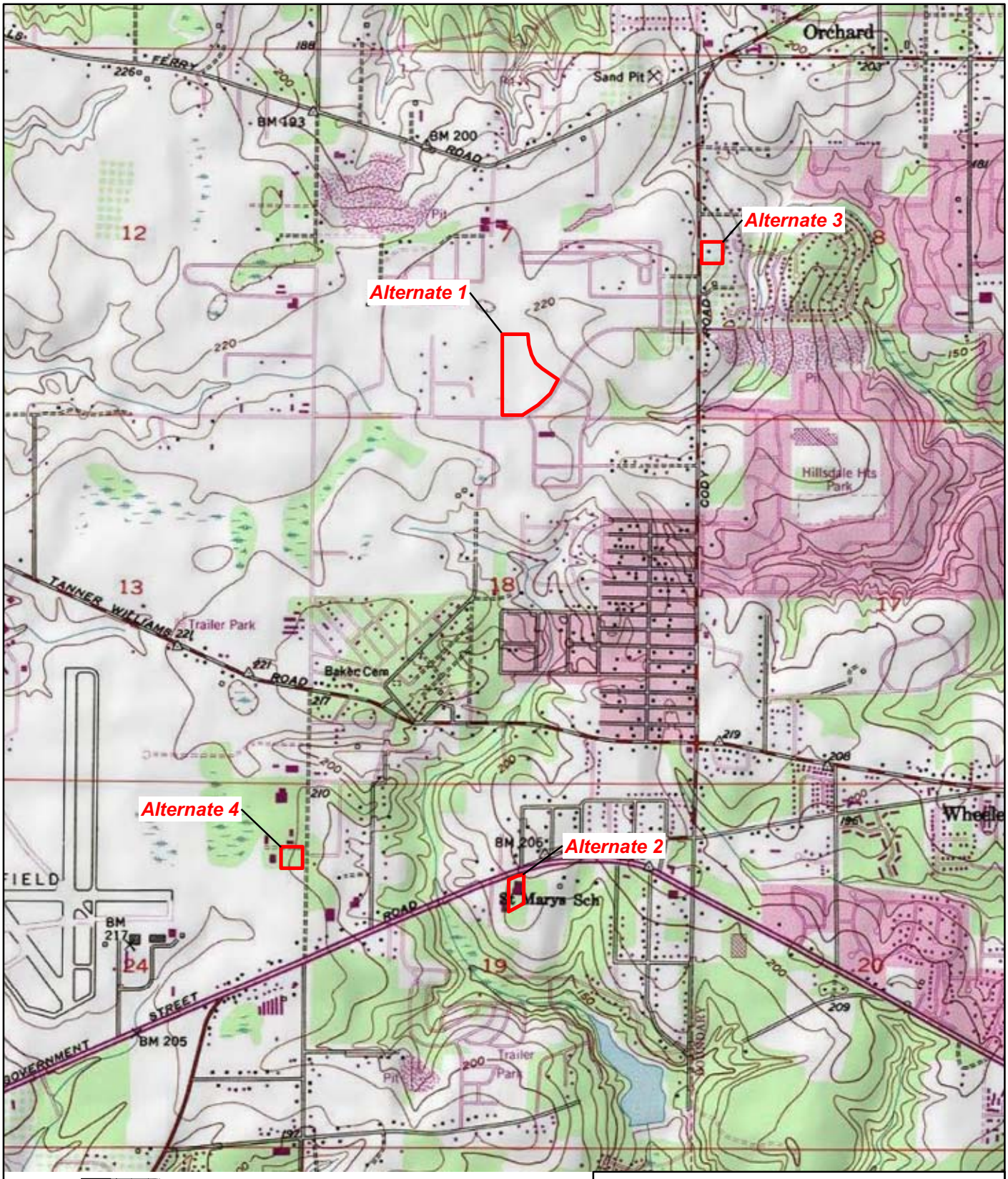
Mr. David Homer
Tetra Tech EM Inc.
415 Oak Street
Kansas City, MO 64106
(812) 412-1762
David.homer@ttemi.com

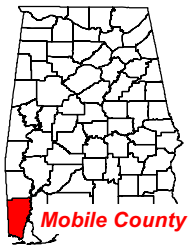
Sincerely,

Kripa Garg
Environmental Scientist
Tetra Tech, Inc.

Enclosure

CC: Mark George, Environmental Compliance Officer, NOAA Boulder, CO Office





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Source: USGS Spring Hill, AL 7.5 Minute Topo Quad, 1982

Gulf of Mexico Disaster Response Center
Proposed Locations
Mobile, Alabama

Figure 1

Site Location Map

TETRA TECH EM INC.

Date: 01/21/09 Drawn By: Ingrid Tobar Project No: G1278.4.0019.02

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Choctaw Nation of Oklahoma

P.O. Box 1210 • Durant, OK 74702-1210 • (580) 924-8280

Gregory E. Pyle
Chief

Gary Batton
Assistant Chief

February 10, 2009

Mr. David Horner
Tetra Tech EM Inc.
415 Oak Street
Kansas City, MO 64106

Dear Mr. Horner:

We have reviewed the following proposed project (s) as to its effect regarding religious and/or cultural significance to historic properties that may be affected by an undertaking of the projects area of potential effect.

Project Description: Consultation on Impacts to Archaeological Sites Potentially Resulting from Proposed NOAA Construction Projects

Project Location: Gulf of Mexico Disaster Response Center, Mobile, Alabama

Comments: After further review of the above mentioned project (s), we are **unable** to determine adverse effect on any historic properties in the project's area of potential effect. Until we have received a SHPO letter. Also the 30 day response period will be the date we receive the requested information. If you have any questions, please call the Choctaw Historic Preservation Office at 1-800-522-6170 ext. 2137.

Sincerely,

Terry D. Cole
Tribal Historic Preservation Officer
Choctaw Nation of Oklahoma

By: Caren A Johnson
Caren A. Johnson
Administrative Assistant

CAJ:vr

Tetra Tech, Inc.

1 South Wacker Drive; 37th Floor □ Chicago, IL 60606 □ (312) 201-7739 □ FAX (312) 938-0118

January 27, 2009

Ms. Glinda Dean
Alabama Department of Environmental Management
P.O. Box 301463
Montgomery, AL 36130-1463

RE: Consultation on Impacts to Water and Natural Resources Potentially Resulting from Proposed NOAA Construction Project Gulf of Mexico Disaster Response Center, Mobile, Alabama

Dear Ms. Dean:

On behalf of the National Oceanic and Atmospheric Administration (NOAA), Tetra Tech, Inc. (Tetra Tech) requests Alabama Department of Environmental Management consultation on proposed construction activities for the above-referenced site. NOAA contracted Tetra Tech to complete an environmental assessment (EA) under the National Environmental Policy Act (NEPA). The contract includes consultation with officials on potential impacts of the proposed actions to water and other natural resources.

NOAA proposes to establish a new Gulf of Mexico Disaster Response Center in Mobile, Alabama that would provide facility for staffs and support programs to deliver data, observations, forecasts and scientific expertise before, during and after emergency events in the Gulf of Mexico. Site-selection criteria were based on NOAA's mission, geographic location, building requirement and staffing needs. The site locations considered for establishing the NOAA center were:

- Alternate 1: 7340 Zeilger Boulevard
- Alternate 2: 7431 Airport Road
- Alternate 3: 1000 Cody Road
- Alternate 4: 140 Schillinger Road

The property located on west of 7340 Zeigler Boulevard, Mobile, Alabama has been identified as a preferred location for constructing the center. The site locations for the preferred and all the other alternatives are presented in enclosed Figure 1.

This letter is part of the scoping process undertaken during preparation of the NEPA document. Any information available on water and other natural resources in these areas or your comments at this early stage of the planning process will be considered during preparation of the EA. Tetra Tech requests your consideration of the proposed action and potential effects of the proposed action on the environment - including whether critical habitat and/or threatened or endangered species may be impacted.

Please call me at me at (312) 201-7739 if you have any questions. Please direct any comments at this time to the attention of:

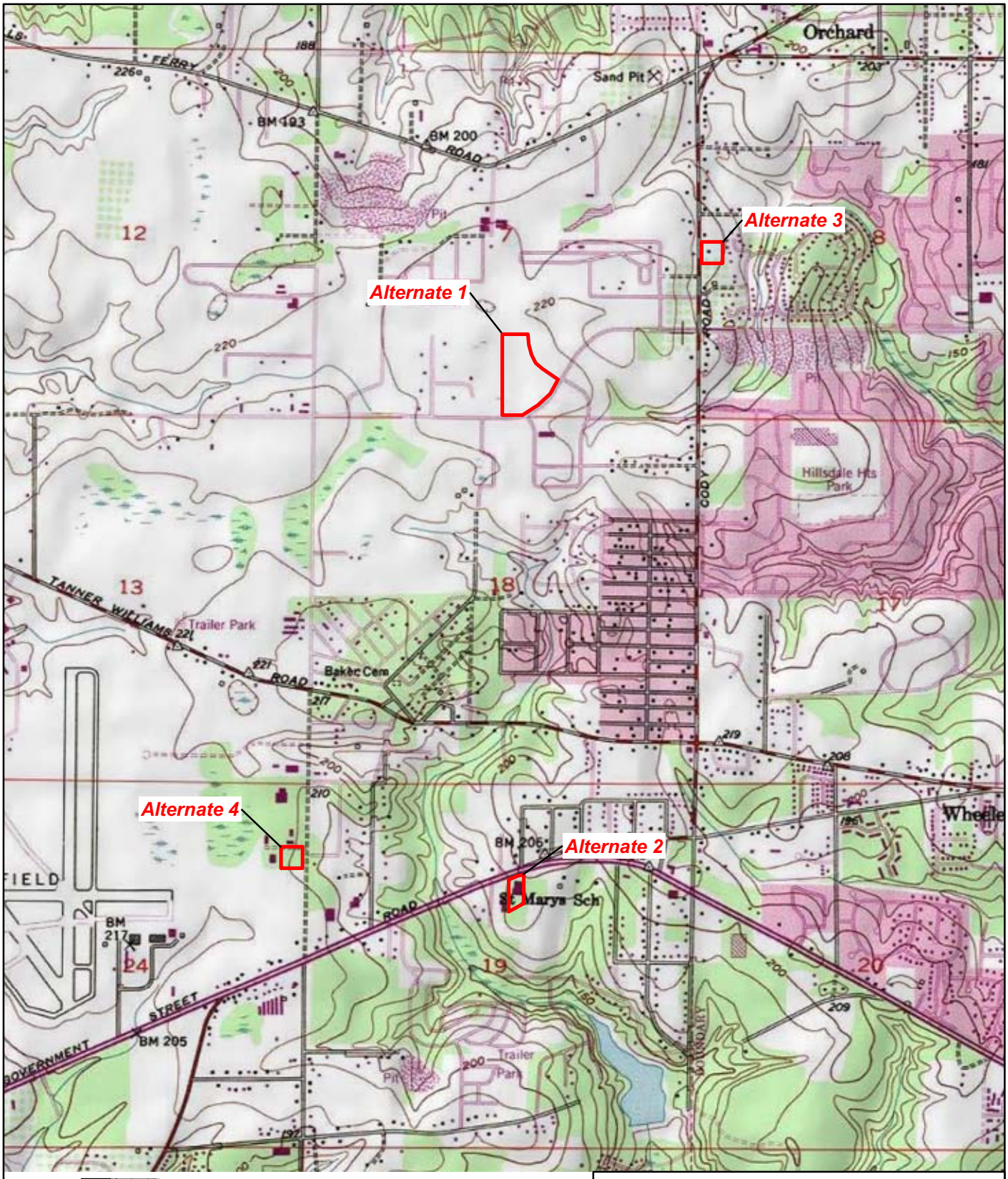
Mr. David Homer
Tetra Tech EM Inc.
415 Oak Street
Kansas City, MO 64106
(812) 412-1762
David.homer@ttemi.com

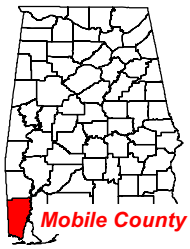
Sincerely,

Kripa Garg
Environmental Scientist
Tetra Tech, Inc.

Enclosure

CC: Mark George, Environmental Compliance Officer, NOAA Boulder, CO Office





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Source: USGS Spring Hill, AL 7.5 Minute Topo Quad, 1982

Gulf of Mexico Disaster Response Center
Proposed Locations
Mobile, Alabama

Figure 1

Site Location Map

TETRA TECH EM INC.

Date: 01/21/09 Drawn By: Ingrid Tobar Project No: G1278.4.0019.02

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Tetra Tech, Inc.

1 South Wacker Drive; 37th Floor □ Chicago, IL 60606 □ (312) 201-7739 □ FAX (312) 938-0118

January 27, 2009

Mississippi Band of Choctaw
Chief Beasley Denson
PO Box 6010
Choctaw, Mississippi 39350

RE: Consultation on Impacts to Archaeological Sites
Potentially Resulting from Proposed NOAA Construction Projects
Gulf of Mexico Disaster Response Center, Mobile, Alabama

Dear Ms. Denson:

On behalf of the National Oceanic and Atmospheric Administration (NOAA), Tetra Tech, Inc. (Tetra Tech) requests Mississippi Band of Choctaw office consultation on proposed construction activities for the above-referenced site. NOAA contracted Tetra Tech to complete an environmental assessment (EA) under the National Environmental Policy Act (NEPA) for the above referenced project. Tetra Tech requests your input on the proposed actions and its impact on any archaeological sites.

NOAA proposes to establish a new Gulf of Mexico Disaster Response Center in Mobile, Alabama that would provide facility for staffs and support programs to deliver data, observations, forecasts and scientific expertise before, during and after emergency events in the Gulf of Mexico. Site-selection criteria were based on NOAA's mission, geographic location, building requirement and staffing needs. The site locations considered for establishing the NOAA center were:

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The property located on west of 7340 Zeigler Boulevard, Mobile, Alabama has been identified as a preferred location for constructing the center. The site locations for the preferred and all the other alternatives are presented in enclosed Figure 1.

This letter is part of the scoping process undertaken during preparation of the NEPA document. Any information available on archaeological sites in this area or your comments at this early stage of the planning process will be considered during preparation of the EA. Tetra Tech requests your assistance in identifying potential effects of the proposed action on archaeological sites.

Please call me at me at (312) 201-7739 if you have any questions. Please direct any comments at this time to the attention of:

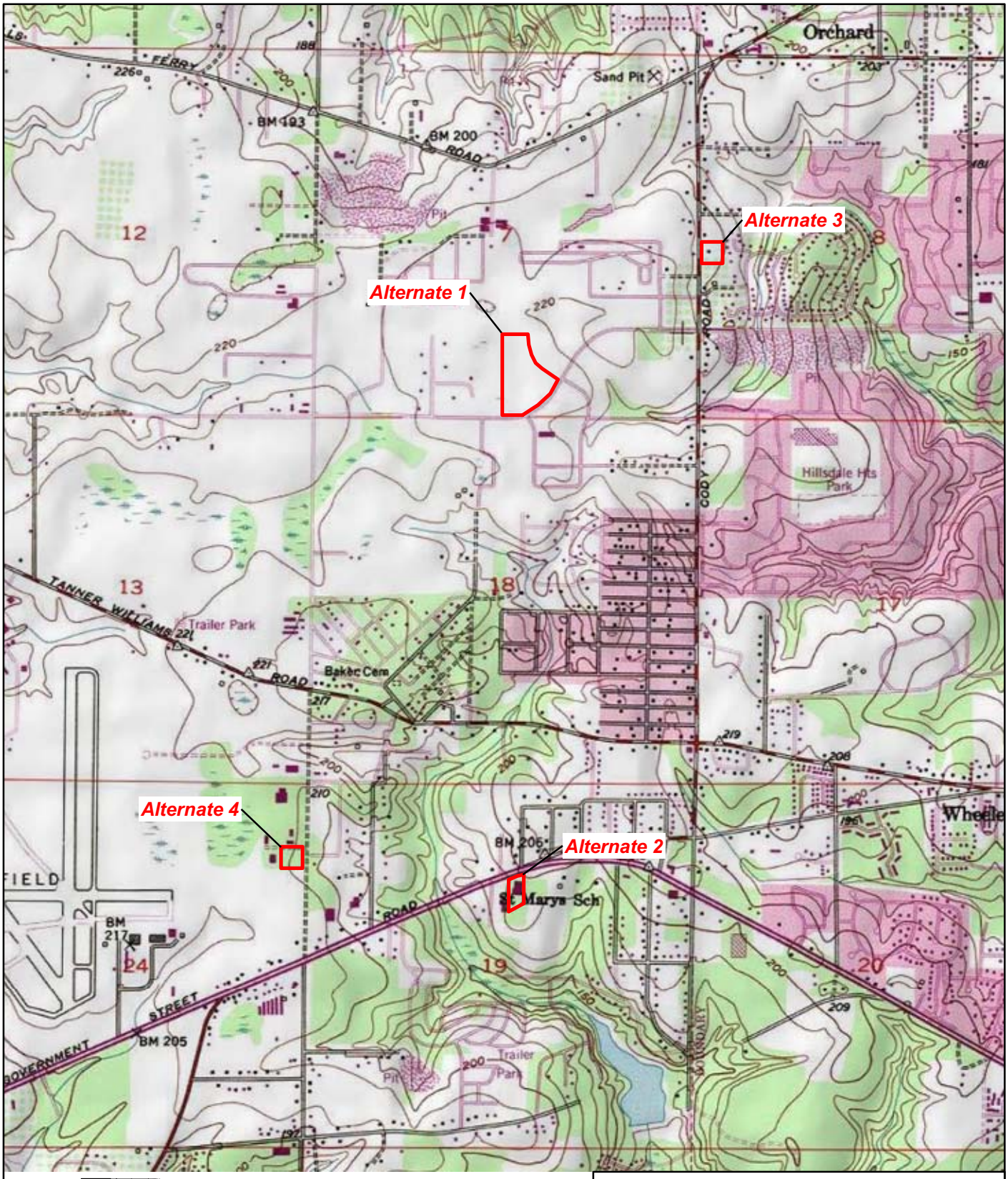
Mr. David Homer
Tetra Tech EM Inc.
415 Oak Street
Kansas City, MO 64106
(812) 412-1762
David.homer@ttemi.com

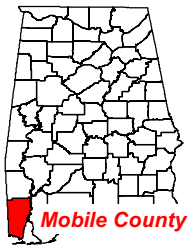
Sincerely,

Kripa Garg
Environmental Scientist
Tetra Tech, Inc.

Enclosure

CC: Mark George, Environmental Compliance Officer, NOAA Boulder, CO Office





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Source: USGS Spring Hill, AL 7.5 Minute Topo Quad, 1982

Gulf of Mexico Disaster Response Center
Proposed Locations
Mobile, Alabama

Figure 1

Site Location Map

TETRA TECH EM INC.

Date: 01/21/09 Drawn By: Ingrid Tobar Project No: G1278.4.0019.02

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Tetra Tech, Inc.

1 South Wacker Drive; 37th Floor □ Chicago, IL 60606 □ (312) 201-7739 □ FAX (312) 938-0118

January 27, 2009

Muscogee Creek Nation
A. D. Ellis
Highway 75, Loop 56
PO Box 580
Okmulgee, OK 74447

RE: Consultation on Impacts to Archaeological Sites
Potentially Resulting from Proposed NOAA Construction Projects
Gulf of Mexico Disaster Response Center, Mobile, Alabama

Dear Mr. Ellis:

On behalf of the National Oceanic and Atmospheric Administration (NOAA), Tetra Tech, Inc. (Tetra Tech) requests Muscogee Creek Nation office consultation on proposed construction activities for the above-referenced site. NOAA contracted Tetra Tech to complete an environmental assessment (EA) under the National Environmental Policy Act (NEPA) for the above referenced project. Tetra Tech requests your input on the proposed actions and its impact on any archaeological sites.

NOAA proposes to establish a new Gulf of Mexico Disaster Response Center in Mobile, Alabama that would provide facility for staffs and support programs to deliver data, observations, forecasts and scientific expertise before, during and after emergency events in the Gulf of Mexico. Site-selection criteria were based on NOAA's mission, geographic location, building requirement and staffing needs. The site locations considered for establishing the NOAA center were:

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This letter is part of the scoping process undertaken during preparation of the NEPA document. Any information available on archaeological sites in this area or your comments at this early stage of the planning process will be considered during preparation of the EA. Tetra Tech requests your assistance in identifying potential effects of the proposed action on archaeological sites.

Please call me at me at (312) 201-7739 if you have any questions. Please direct any comments at this time to the attention of:

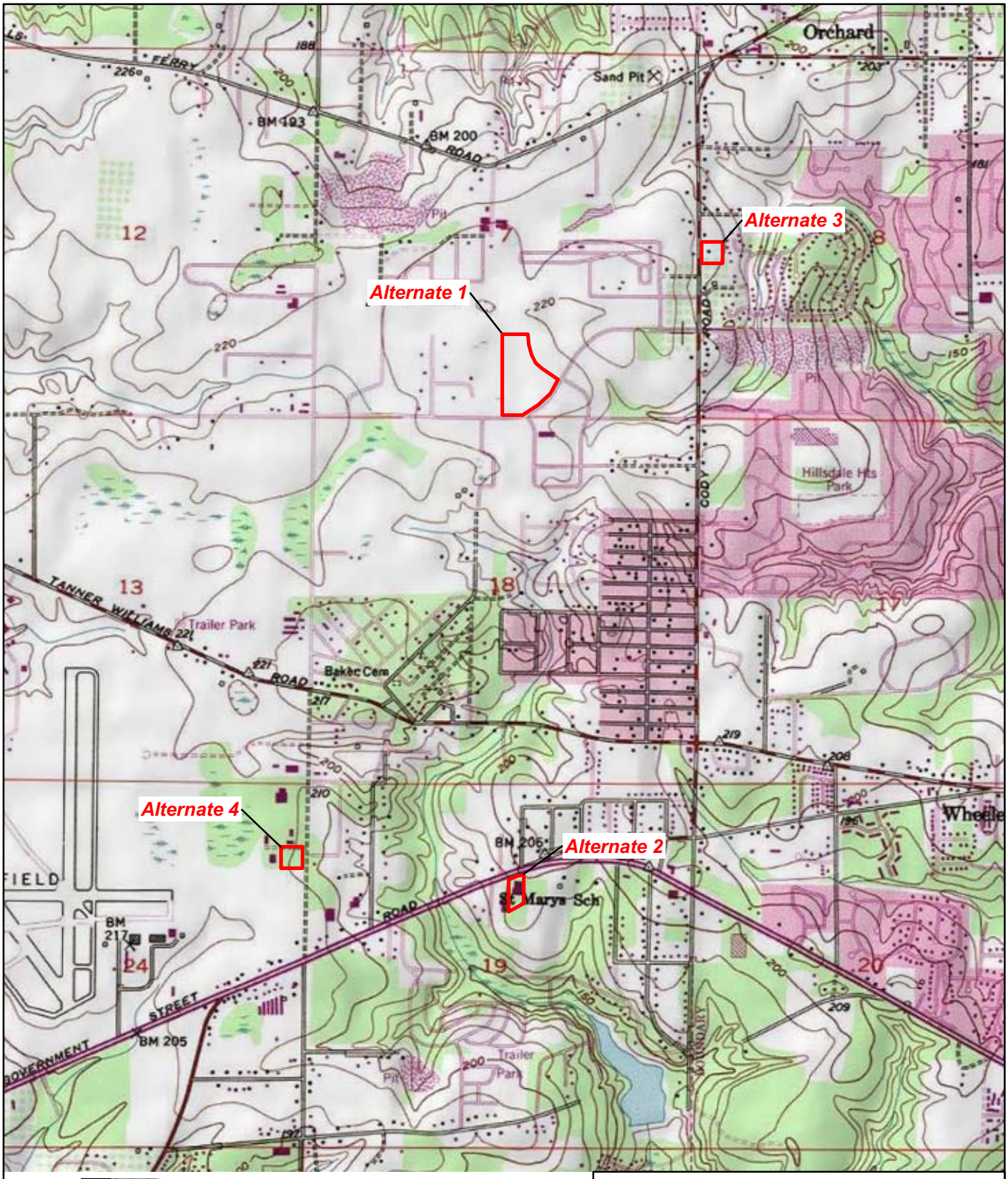
Mr. David Homer
Tetra Tech EM Inc.
415 Oak Street
Kansas City, MO 64106
(812) 412-1762
David.homer@ttemi.com

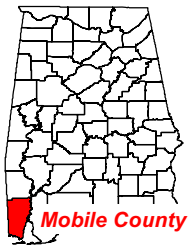
Sincerely,

Kripa Garg
Environmental Scientist
Tetra Tech, Inc.

Enclosure

CC: Mark George, Environmental Compliance Officer, NOAA Boulder, CO Office





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Source: USGS Spring Hill, AL 7.5 Minute Topo Quad, 1982

Gulf of Mexico Disaster Response Center
Proposed Locations
Mobile, Alabama

Figure 1

Site Location Map

TETRA TECH EM INC.

Date: 01/21/09 Drawn By: Ingrid Tobar Project No: G1278.4.0019.02

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Tetra Tech, Inc.

1 South Wacker Drive; 37th Floor □ Chicago, IL 60606 □ (312) 201-7739 □ FAX (312) 938-0118

January 27, 2009

Poarch Band of Creek Indian
Mr. Buford Rolin
5811 Jack Springs Road
Atmore, AL 36502

RE: Consultation on Impacts to Archaeological Sites
Potentially Resulting from Proposed NOAA Construction Projects
Gulf of Mexico Disaster Response Center, Mobile, Alabama

Dear Mr. Rolin:

On behalf of the National Oceanic and Atmospheric Administration (NOAA), Tetra Tech, Inc. (Tetra Tech) requests Poarch Band of Creek Indian office consultation on proposed construction activities for the above-referenced site. NOAA contracted Tetra Tech to complete an environmental assessment (EA) under the National Environmental Policy Act (NEPA) for the above referenced project. Tetra Tech requests your input on the proposed actions and its impact on any archaeological sites.

NOAA proposes to establish a new Gulf of Mexico Disaster Response Center in Mobile, Alabama that would provide facility for staffs and support programs to deliver data, observations, forecasts and scientific expertise before, during and after emergency events in the Gulf of Mexico. Site-selection criteria were based on NOAA's mission, geographic location, building requirement and staffing needs. The site locations considered for establishing the NOAA center were:

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This letter is part of the scoping process undertaken during preparation of the NEPA document. Any information available on archaeological sites in this area or your comments at this early stage of the planning process will be considered during preparation of the EA. Tetra Tech requests your assistance in identifying potential effects of the proposed action on archaeological sites.

Please call me at me at (312) 201-7739 if you have any questions. Please direct any comments at this time to the attention of:

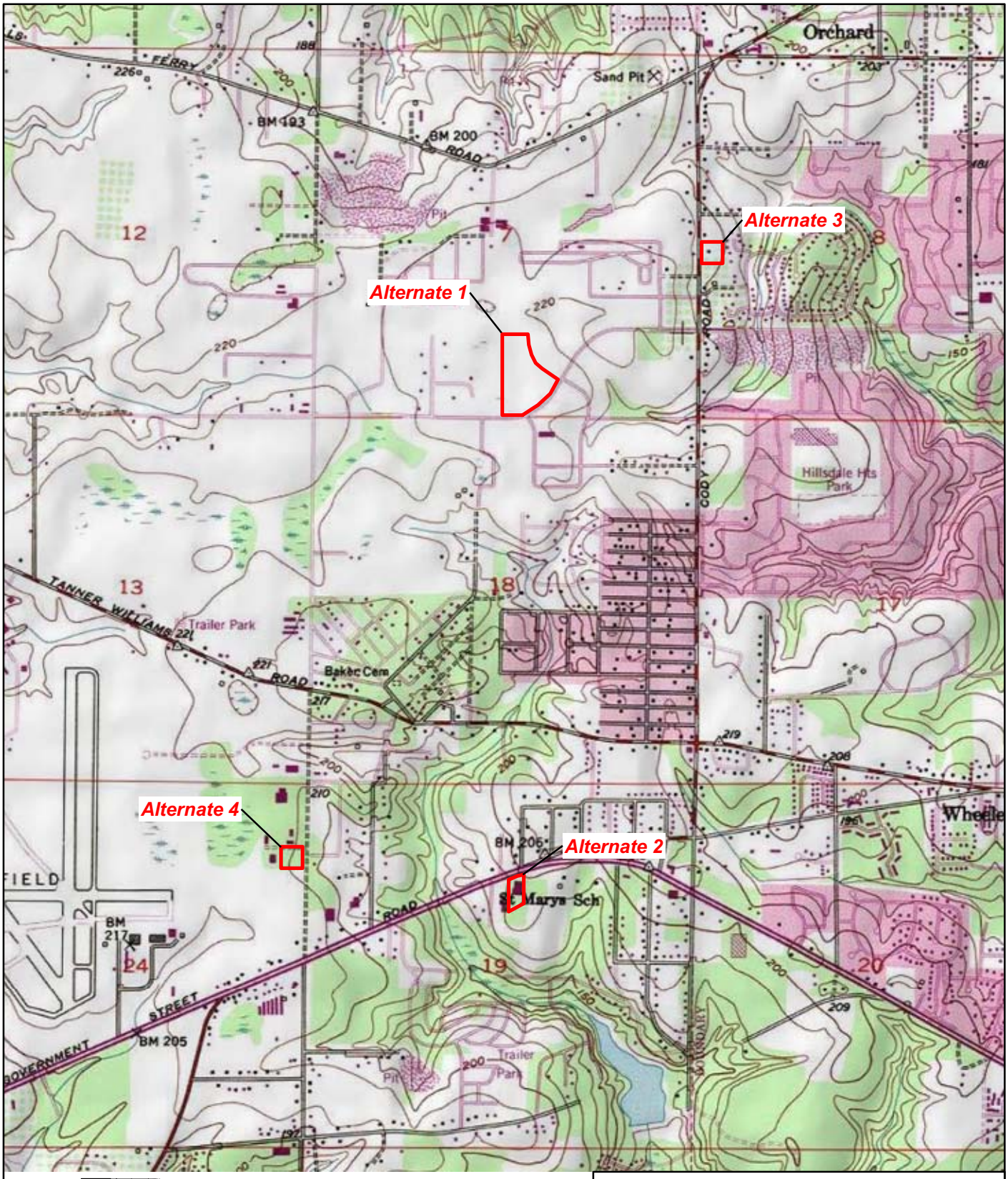
Mr. David Homer
Tetra Tech EM Inc.
415 Oak Street
Kansas City, MO 64106
(812) 412-1762
David.homer@ttemi.com

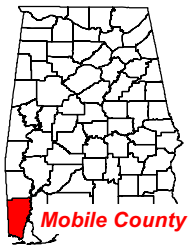
Sincerely,

Kripa Garg
Environmental Scientist
Tetra Tech, Inc.

Enclosure

CC: Mark George, Environmental Compliance Officer, NOAA Boulder, CO Office





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Source: USGS Spring Hill, AL 7.5 Minute Topo Quad, 1982

Gulf of Mexico Disaster Response Center
Proposed Locations
Mobile, Alabama

Figure 1

Site Location Map

TETRA TECH EM INC.

Date: 01/21/09 Drawn By: Ingrid Tobar Project No: G1278.4.0019.02

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Tetra Tech, Inc.

1 South Wacker Drive; 37th Floor □ Chicago, IL 60606 □ (312) 201-7739 □ FAX (312) 938-0118

January 27, 2009

Thloco Tribal Town
Mr. Meko Vernon Warholar
PO Box 188
Okemah, OK 74859

RE: Consultation on Impacts to Archaeological Sites
Potentially Resulting from Proposed NOAA Construction Projects
Gulf of Mexico Disaster Response Center, Mobile, Alabama

Dear Mr. Warholar:

On behalf of the National Oceanic and Atmospheric Administration (NOAA), Tetra Tech, Inc. (Tetra Tech) requests Thloco Tribal Town office consultation on proposed construction activities for the above-referenced site. NOAA contracted Tetra Tech to complete an environmental assessment (EA) under the National Environmental Policy Act (NEPA) for the above referenced project. Tetra Tech requests your input on the proposed actions and its impact on any archaeological sites.

NOAA proposes to establish a new Gulf of Mexico Disaster Response Center in Mobile, Alabama that would provide facility for staffs and support programs to deliver data, observations, forecasts and scientific expertise before, during and after emergency events in the Gulf of Mexico. Site-selection criteria were based on NOAA's mission, geographic location, building requirement and staffing needs. The site locations considered for establishing the NOAA center were:

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This letter is part of the scoping process undertaken during preparation of the NEPA document. Any information available on archaeological sites in this area or your comments at this early stage of the planning process will be considered during preparation of the EA. Tetra Tech requests your assistance in identifying potential effects of the proposed action on archaeological sites.

Please call me at me at (312) 201-7739 if you have any questions. Please direct any comments at this time to the attention of:

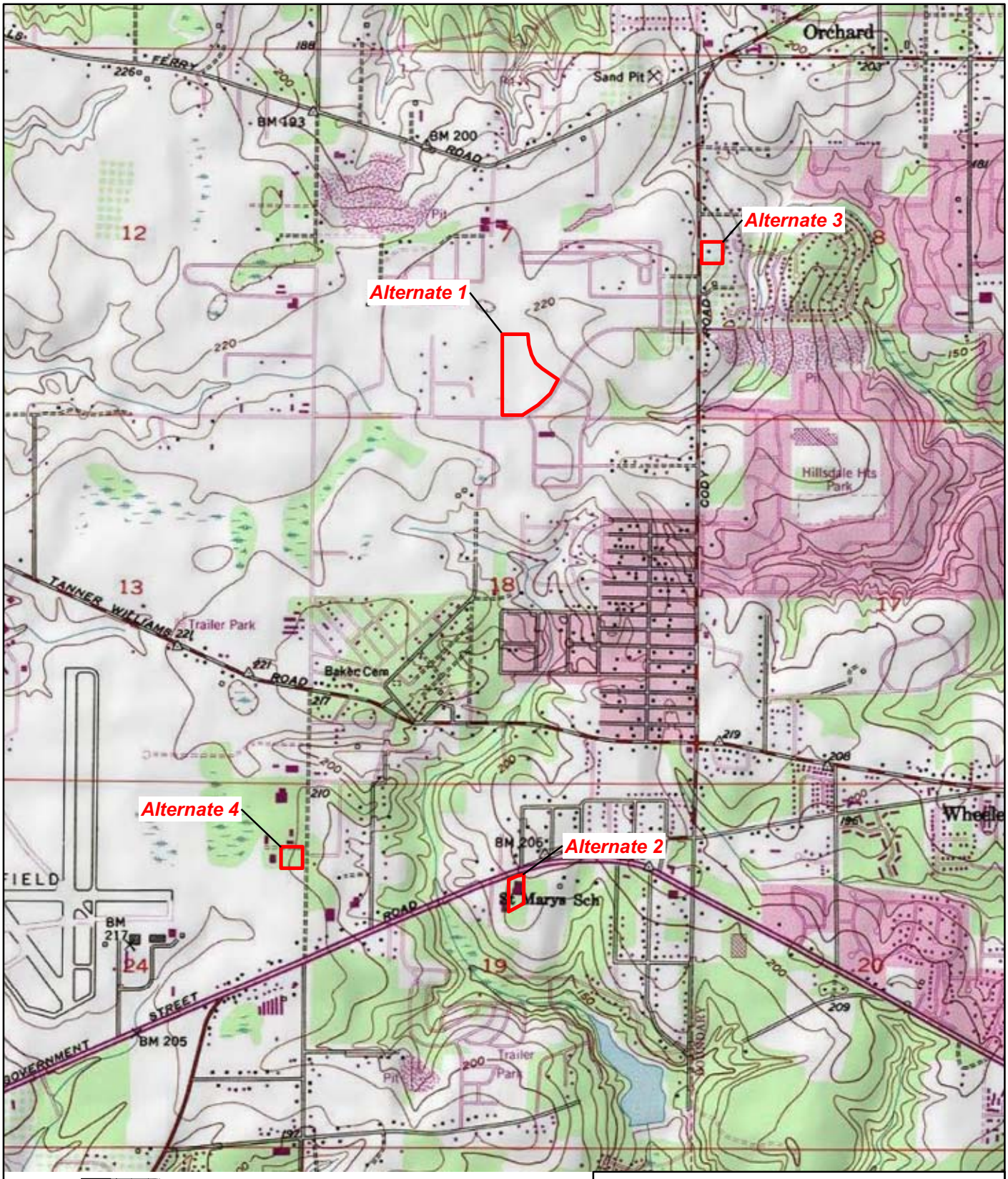
Mr. David Homer
Tetra Tech EM Inc.
415 Oak Street
Kansas City, MO 64106
(812) 412-1762
David.homer@ttemi.com

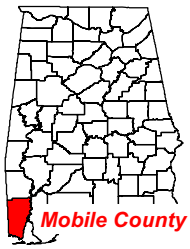
Sincerely,

Kripa Garg
Environmental Scientist
Tetra Tech, Inc.

Enclosure

CC: Mark George, Environmental Compliance Officer, NOAA Boulder, CO Office





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Source: USGS Spring Hill, AL 7.5 Minute Topo Quad, 1982

Gulf of Mexico Disaster Response Center
Proposed Locations
Mobile, Alabama

Figure 1

Site Location Map

TETRA TECH EM INC.

Date: 01/21/09 Drawn By: Ingrid Tobar Project No: G1278.4.0019.02

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THLOPTHLOCCO TRIBAL TOWN

Federal Charter 1938 — Creek Tribe
Executive Office

May 4, 2009

Mr. David Horner
Tetra Tech EM Inc.
415 Oak Street
Kansas City, Mo 64106

Re: Final Draft Environmental Assessment (EA)
Gulf of Mexico Disaster Response Center, Mobile, Alabama

Dear Mr. Horner:

My staff and I have reviewed the above referenced project as to its effect upon religious and/or cultural significance to historic properties that may be undertaking of the project area of potential effect. After review we are unable to determine adverse effect on any historic properties in the project's area of potential effect.

Thlopthlocco Tribal Town has no comments or objection to the environmental assessment of the proposed Gulf of Mexico Disaster Response Center, Mobile, Alabama.

Sincerely

Vernon Yarholar

Vernon Yarholar, Town King

PO Box 188 * Okemah, Oklahoma 74859
(918) 560-6198 * (866) 988-8696
Fax (918) 560-6196

Tetra Tech, Inc.

1 South Wacker Drive; 37th Floor □ Chicago, IL 60606 □ (312) 201-7739 □ FAX (312) 938-0118

January 27, 2009

Alabama Historical Commission
ATTN: Elizabeth Ann Brown
468 South Perry Street
Montgomery, Alabama 36104

RE: Consultation on Impacts to Cultural Resources
Potentially Resulting from Proposed NOAA Construction Project
Gulf of Mexico Disaster Response Center, Mobile, Alabama

Dear Ms. Brown:

On behalf of the National Oceanic and Atmospheric Administration (NOAA), Tetra Tech, Inc. (Tetra Tech) requests Alabama Historical Commission consultation on proposed construction activities for the above-referenced site. NOAA contracted Tetra Tech to complete an environmental assessment (EA) under the National Environmental Policy Act (NEPA). The contract includes consultation with officials on potential impacts of the proposed actions to cultural resources and archeological sites.

NOAA proposes to establish a new Gulf of Mexico Disaster Response Center in Mobile, Alabama that would provide facility for staffs and support programs to deliver data, observations, forecasts and scientific expertise before, during and after emergency events in the Gulf of Mexico. Site-selection criteria were based on NOAA's mission, geographic location, building requirement and staffing needs. The site locations considered for establishing the NOAA center were:

- Alternate 1: 7340 Zeilger Boulevard
- Alternate 2: 7431 Airport Road
- Alternate 3: 1000 Cody Road
- Alternate 4: 140 Schillinger Road

The property located on west of 7340 Zeigler Boulevard, Mobile, Alabama has been identified as a preferred location for constructing the center. The site locations for the preferred and all the other alternatives are presented in enclosed Figure 1.

This letter is part of the scoping process undertaken during preparation of the NEPA document. Any information available on cultural resources in this area or your comments at this early stage of the planning process will be considered during preparation of the EA. Tetra Tech requests your consideration of the proposed action and potential effects of the proposed action on cultural resources and archeological sites.

Please call me at me at (312) 201-7739 if you have any questions. Please direct any comments at this time to the attention of:

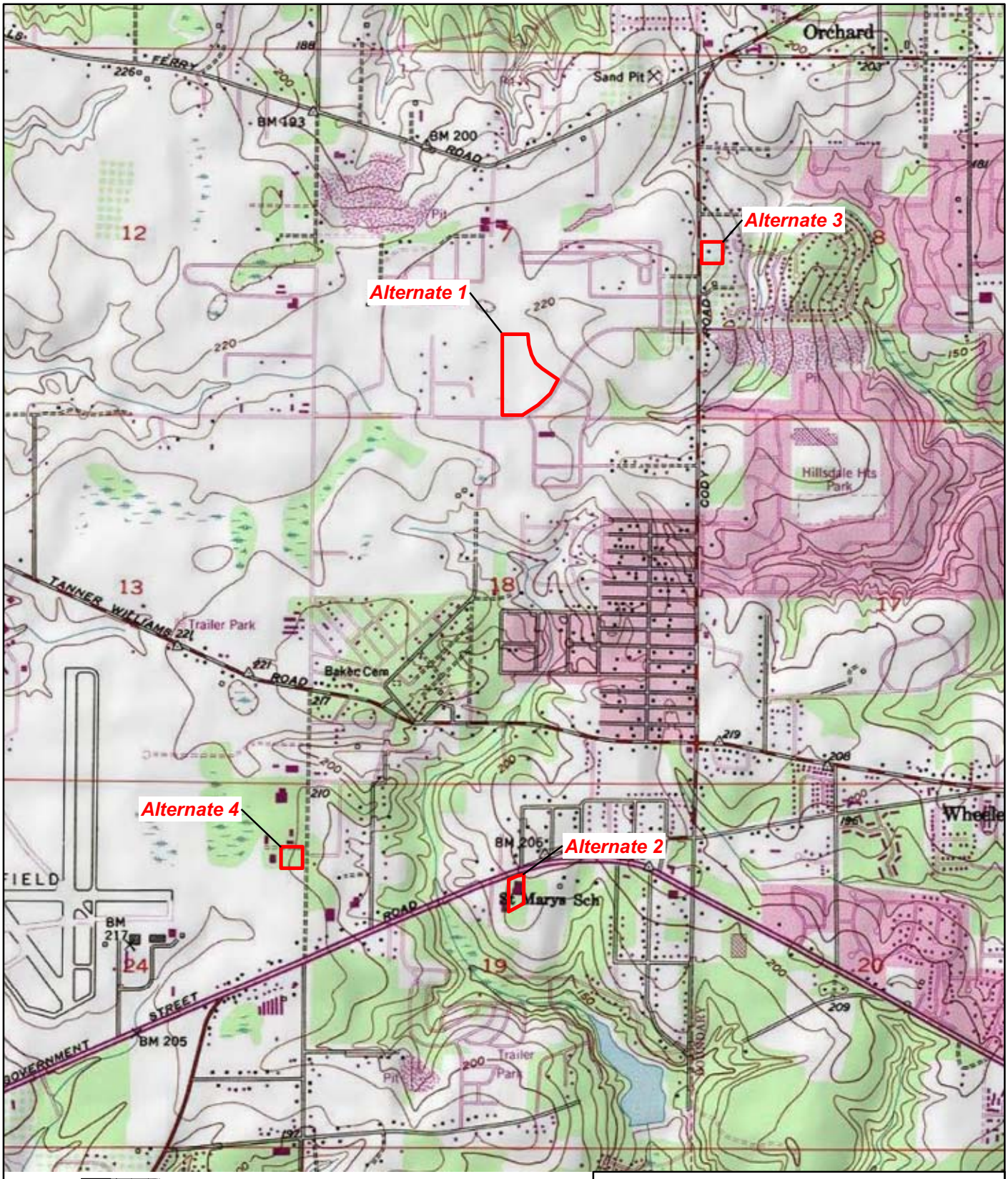
Mr. David Homer
Tetra Tech EM Inc.
415 Oak Street
Kansas City, MO 64106
(812) 412-1762
David.homer@ttemi.com

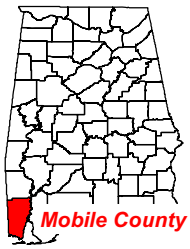
Sincerely,

Kripa Garg
Environmental Scientist
Tetra Tech, Inc.

Enclosure

CC: Mark George, Environmental Compliance Officer, NOAA Boulder, CO Office





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Source: USGS Spring Hill, AL 7.5 Minute Topo Quad, 1982

Gulf of Mexico Disaster Response Center
Proposed Locations
Mobile, Alabama

Figure 1

Site Location Map

TETRA TECH EM INC.

Date: 01/21/09 Drawn By: Ingrid Tobar Project No: G1278.4.0019.02

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Tetra Tech, Inc.

1 South Wacker Drive; 37th Floor □ Chicago, IL 60606 □ (312) 201-7739 □ FAX (312) 938-0118

January 27, 2009

City of Mobile, Urban Development - Planning
ATTN: Ms. Joanie Love
205 Government Street
3rd Floor, South Tower
Mobile, AL 36644

RE: Proposed NOAA Construction Project
Gulf of Mexico Disaster Response Center, Mobile, Alabama

Dear Ms. Love:

The purpose of this letter is to notify you about the proposed construction activities for the above-referenced site. NOAA contracted Tetra Tech to complete an environmental assessment (EA) under the National Environmental Policy Act (NEPA).

NOAA proposes to establish a new Gulf of Mexico Disaster Response Center in Mobile, Alabama that would provide facility for staffs and support programs to deliver data, observations, forecasts and scientific expertise before, during and after emergency events in the Gulf of Mexico. Site-selection criteria were based on NOAA's mission, geographic location, building requirement and staffing needs. The site locations considered for establishing the NOAA center were:

- Alternate 1: 7340 Zeilger Boulevard
- Alternate 2: 7431 Airport Road
- Alternate 3: 1000 Cody Road
- Alternate 4: 140 Schillinger Road

The property located on west of 7340 Zeigler Boulevard, Mobile, Alabama has been identified as a preferred location for constructing the center. The site locations for the preferred and all the other alternatives are presented in enclosed Figure 1.

Tetra Tech requests your consideration of the proposed action and potential effects of the proposed action at this early stage of the planning process.

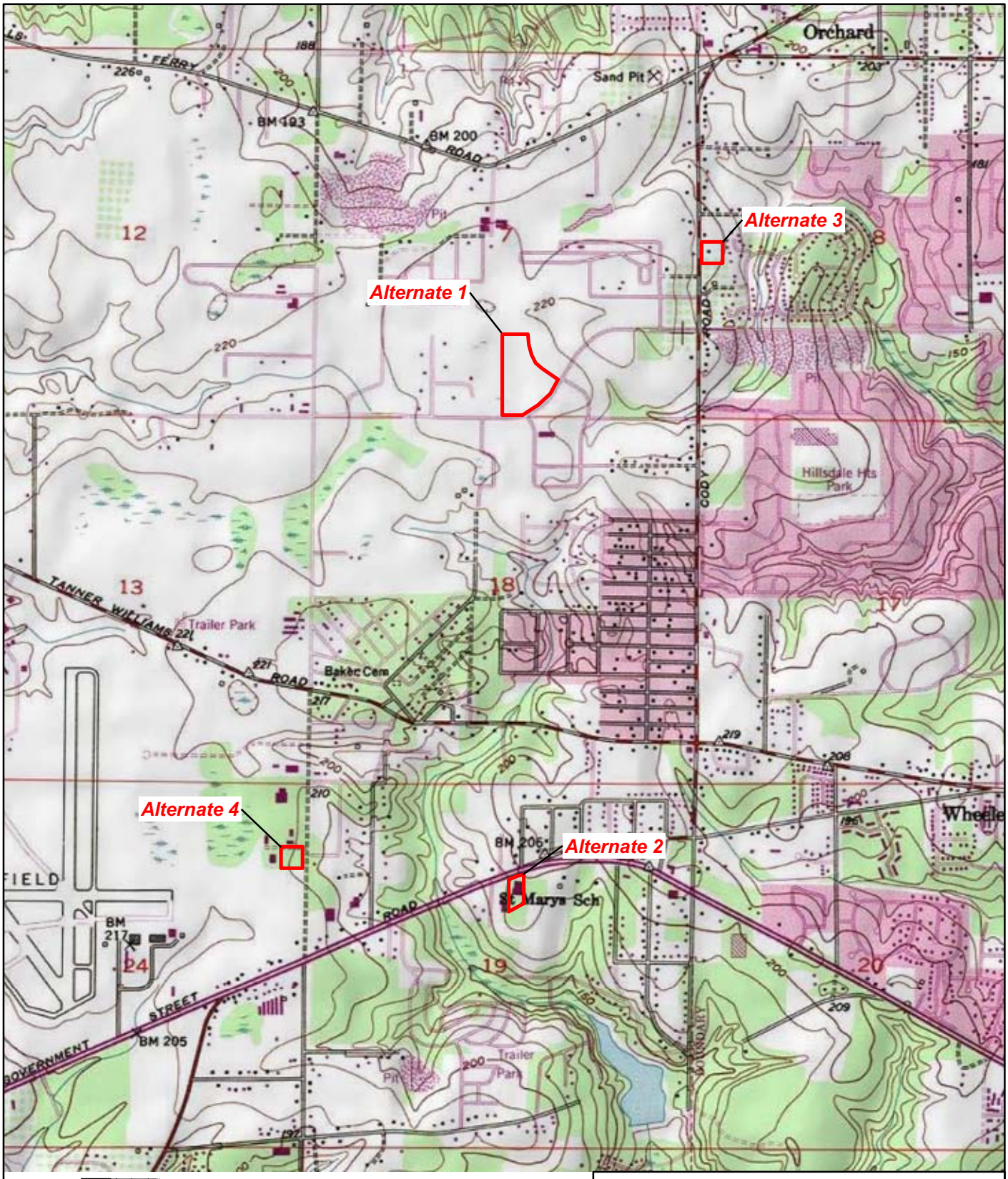
Please call me at me at (312) 201-7739 or David Homer at (812) 412-1762 if you have any questions regarding the project.

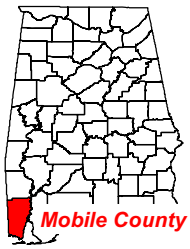
Sincerely,

Kripa Garg
Environmental Scientist
Tetra Tech, Inc.

Enclosure

CC: Mark George, Environmental Compliance Officer, NOAA Boulder, CO Office





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Gulf of Mexico Disaster Response Center
Proposed Locations
Mobile, Alabama

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Site Location Map

TETRA TECH EM INC.

Date: 01/21/09 Drawn By: Ingrid Tobar Project No: G1278.4.0019.02

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1 South Wacker Drive; 37th Floor □ Chicago, IL 60606 □ (312) 201-7739 □ FAX (312) 938-0118

January 27, 2009

US Army Corps of Engineers
Mobile District
ATTN: Mike Eubanks
P.O. Box 2288
Mobile, Alabama 36628-0001

RE: Consultation on Environmental Impacts on Water Resources Potentially Resulting from Proposed NOAA Construction Project Gulf of Mexico Disaster Response Center, Mobile, Alabama

Dear Mr. Eubanks:

On behalf of the National Oceanic and Atmospheric Administration (NOAA), Tetra Tech, Inc. (Tetra Tech) requests U.S. Army Corps of Engineers consultation on proposed construction activities for the above-referenced site. NOAA contracted Tetra Tech to complete an environmental assessment (EA) under the National Environmental Policy Act (NEPA). The contract includes consultation with officials on potential impacts of the proposed actions to various natural resources including water resources.

NOAA proposes to establish a new Gulf of Mexico Disaster Response Center in Mobile, Alabama that would provide facility for staffs and support programs to deliver data, observations, forecasts and scientific expertise before, during and after emergency events in the Gulf of Mexico. Site-selection criteria were based on NOAA's mission, geographic location, building requirement and staffing needs. The site locations considered for establishing the NOAA center were:

- Alternate 1: 7340 Zeilger Boulevard
- Alternate 2: 7431 Airport Road
- Alternate 3: 1000 Cody Road
- Alternate 4: 140 Schillinger Road

The property located on west of 7340 Zeigler Boulevard, Mobile, Alabama has been identified as a preferred location for constructing the center. The site locations for the preferred and all the other alternatives are presented in enclosed Figure 1.

This letter is part of the scoping process undertaken during preparation of the NEPA document. Any information available on water resource impact or your comments at this early stage of the planning process will be considered during preparation of the EA. Tetra Tech requests your consideration of the proposed action and potential effects of the proposed action on water resources.

Please call me at me at (312) 201-7739 if you have any questions. Please direct any comments at this time to the attention of:

Mr. David Homer
Tetra Tech EM Inc.
415 Oak Street
Kansas City, MO 64106
(812) 412-1762
David.homer@ttemi.com

Sincerely,

Kripa Garg
Environmental Scientist
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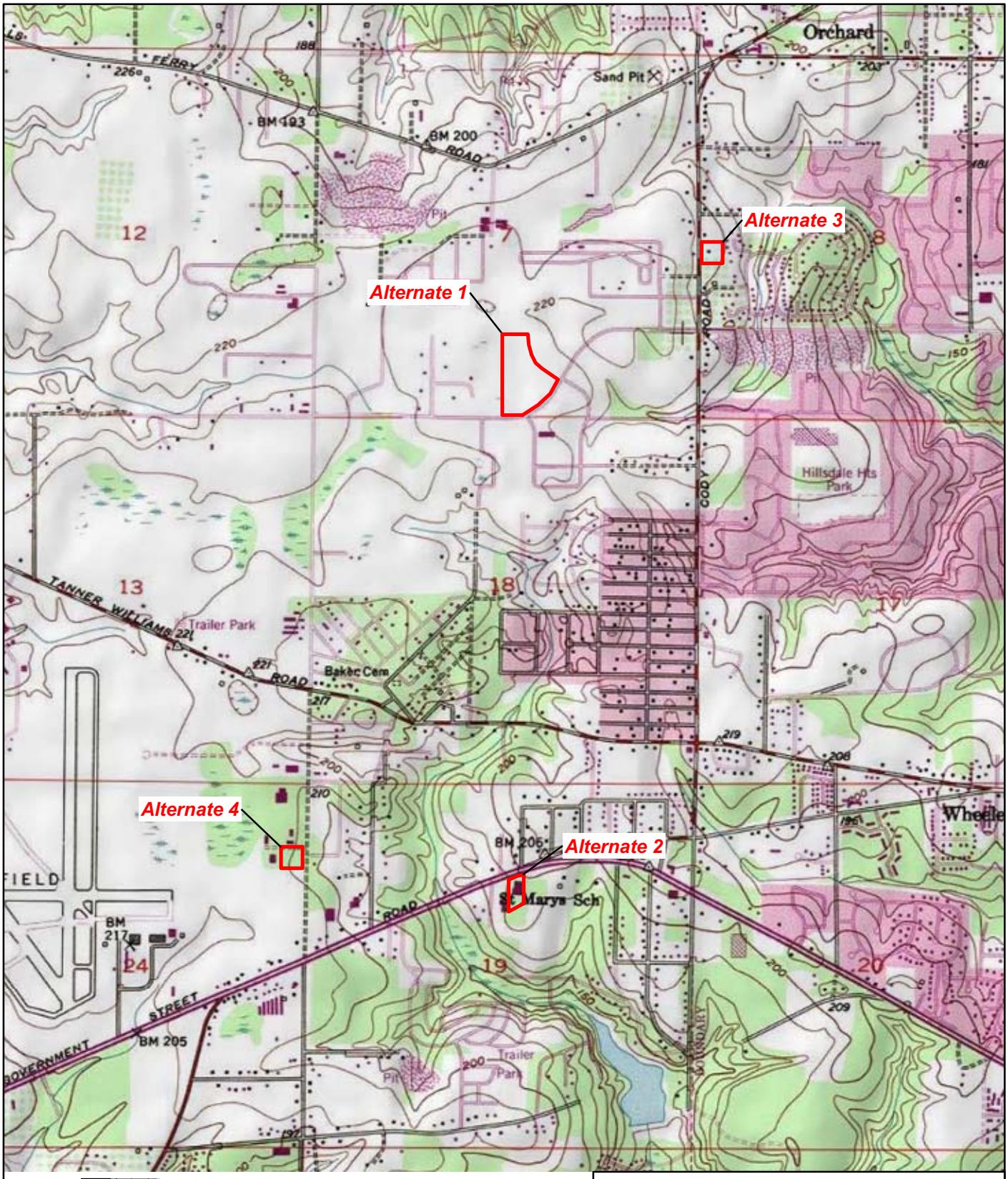
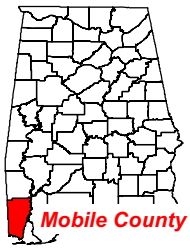
CC: Mark George, Environmental Compliance Officer, NOAA Boulder, CO Office





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Gulf of Mexico Disaster Response Center
Proposed Locations
Mobile, Alabama

Figure 1

Site Location Map

TETRA TECH EM INC.

Date: 01/21/09 Drawn By: Ingrid Tobar Project No: G1278.4.0019.02

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