

Draft Environmental Assessment

City of Waveland Police Department Relocation Project

Hancock County, Mississippi

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FEMA

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ACRONYMS AND ABBREVIATIONS

ABFE	advisory base flood elevation
amsl	above mean sea level
APE	Area of Potential Effects
BMP	Best Management Practice
CAA	Clean Air Act
CFR	Code of Federal Regulations
CHHA	Coastal High Hazard Area
CO	carbon monoxide
CWA	Clean Water Act
dB	decibel
DNL	Day-Night Average Sound Level
EA	Environmental Assessment
EO	Executive Order
EPA	U.S. Environmental Protection Agency
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
MDAH	Mississippi Department of Archives and History
MDEQ	Mississippi Department of Environmental Quality
MDMR	Mississippi Department of Marine Resources
MSWCC	Mississippi Soil and Water Conservation Commission
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NISTAC	Nationwide Infrastructure Support Technical Assistance Consultants
NO ₂	nitrogen dioxide
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
O ₃	ozone
Pb	lead
PM _{2.5}	particulate matter less than 2.5 microns
PM ₁₀	particulate matter less than 10 microns
SO ₂	sulfur dioxide
SWPPP	Storm Water Pollution Prevention Plan
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service



1.0 INTRODUCTION

On August 29, 2005, Hurricane Katrina struck the Mississippi Gulf Coast, causing extensive damage. Subsequently, a Presidential Disaster Declaration, FEMA-1604-DR-MS, was signed for Hurricane Katrina.

The City of Waveland, Mississippi, has submitted an application for Federal Emergency Management Agency (FEMA) funding under FEMA's Public Assistance Program in response to FEMA-1604-DR-MS. In accordance with the Robert T. Stafford Disaster Relief and Emergency Assistance Act, PL 93-288, as amended, and implementing regulations at Title 44 Code of Federal Regulations (CFR) Part 206, FEMA is required to review the environmental effects of the proposed action prior to making a funding decision. This Environmental Assessment (EA) has been prepared in accordance with FEMA's National Environmental Policy Act (NEPA) regulations found at 44 CFR Part 10.

2.0 PURPOSE AND NEED

The City of Waveland operates the Waveland Police Department in Hancock County, Mississippi. The Waveland Police Department building was located at 628 Highway 90 in Waveland, approximately 2.5 miles south of the Jourdan River and approximately 1 mile south of one of its tributaries (Figures 1 and 2 in Appendix A). The Waveland Police Department building was more than 50 percent damaged by the Hurricane Katrina storm surge and will be demolished. In accordance with FEMA's policy for FEMA-1604-DR-MS, the property will be returned to grade and revegetated.

The Waveland Police Department is currently operating at a reduced capacity out of temporary trailer units located at Coleman Avenue and Central Avenue in Waveland. The trailer units are neither expected nor intended to withstand many months of regular use and are not considered a long-term solution for the replacement of the Waveland Police Department building.

In order to maintain service during storm events, the Waveland Police Department needs to be provided with a replacement building located in an area less likely to be flooded than the previous Waveland Police Department building or the temporary trailer complex units.

3.0 ALTERNATIVES

This section describes the alternatives that were considered in addressing the purpose and need stated in Section 2. Two alternatives were evaluated: the No Action Alternative and the Proposed Action Alternative, which is the construction of a new Waveland Police Department building in an area that is less flood-prone.

Alternative 1: No Action

Under the No Action Alternative, the Waveland Police Department building would not be rebuilt at a new location, and the Waveland Police Department would continue operating at a reduced capacity out of a trailer complex at Coleman Avenue and Central Avenue. The trailer complex facility and equipment would continue to be at risk of incurring repetitive damage from future flooding events, as the site is located within the 100-year floodplain. Residents within the

Waveland Police Department's service area could experience temporary loss of emergency services if the trailer complex incurred damage during periods of flooding.

Alternative 2: Relocation of Waveland Police Station (Proposed Action)

Under the Proposed Action Alternative, the City of Waveland would construct a new Waveland Police Department building in a less flood-prone area, and upgrade the building design to include mitigation measures that would protect it from future storm damages and a potential interruption of police services. The new building would accommodate the Waveland Police Department and administrative offices for judges. The new Waveland Police Department building would be constructed on a 3.5-acre lot on the northeast corner of McLaurin Street and St. Anthony Street (Figure 2 in Appendix A).

Although the proposed project site is within the Advisory Base Flood Elevation (ABFE) and the Coastal High Hazard Area (CHHA), it is outside the ABFE 3-foot wave zone and the 100-year floodplain. There are no identifiable sites outside the ABFE and CHHA within the Waveland Police Department's service area. The ABFE of the proposed site is 20.5 feet above mean sea level (amsl) and the elevation at the proposed project site is 19.5 feet amsl. In compliance with 44 CFR 9.11, which requires buildings to be constructed with finished habitable spaces above the ABFE, the concrete slab of the new building would be constructed to a thickness that would elevate the new building above the ABFE.

The proposed project site is approximately 1.2 miles southwest of the existing Waveland Police Department building, and is 0.7 mile from Highway 90. The proposed project site is bounded to the north by wooded areas, to the east by cleared land, to the south by St. Anthony Street, and to the west by McLaurin Street (Figure 2 in Appendix A). Several homes are located along St. Anthony and McLaurin Streets opposite the proposed project site. The proposed project site has been cleared of buildings since Hurricane Katrina and is sparsely vegetated with grass and shrubs.

The new Waveland Police Department building would occupy the footprint of a demolished mental health facility that was previously located on the proposed project site, so no clearing would be required. The new Waveland Police Department building would be constructed on compacted fill, and would occupy 0.86 acres of the 3.5-acre parcel. Utilities that were used by the demolished mental health facility are functional and would be used by the new Waveland Police Department building. The new Waveland Police Department building would be a one-story structure with a footprint of approximately 6,000 square feet.

The proposed project site would adequately support the Waveland Police Department's accessibility to its service area. A traffic study would be conducted to determine whether a traffic signal or other signing modifications would be necessary on McLaurin Street.

4.0 AFFECTED ENVIRONMENT AND IMPACTS

The following table summarizes the potential impacts of the Proposed Action Alternative and conditions or mitigation measures to offset those impacts. Following the summary table, any areas where potential impacts were identified are discussed in greater detail.

Affected Environment	Impacts	Mitigation
Geology and Soils	No impacts to geology or native soils are anticipated. Short-term minor impacts to non-native soils may occur during construction activities. The proposed project site is located within the city limits of Waveland; therefore, no conversion of farmland would occur.	A Stormwater Pollution Prevention Plan (SWPPP) and a National Pollutant Discharge Elimination System (NPDES) permit must be obtained prior to construction. The SWPPP would include erosion and sediment control best management practices (BMPs), such as silt fencing, mulching, or revegetation to minimize the potential for erosion and the transport of sediment off-site.
Surface Water	Short-term minor impacts to downstream surface water may occur during construction activities.	A SWPPP and a NPDES permit must be obtained prior to construction. The SWPPP would include erosion and sediment control BMPs, such as silt fencing, mulching, or revegetation to minimize the potential for erosion and the transport of sediment off site, thereby reducing impacts to downstream surface waters.
Groundwater	No impacts to groundwater are anticipated.	None.
Floodplains	Proposed project site is located outside the 100-year floodplain, but within the ABFE and CHHA. Minor long-term impacts to floodplains would continue, as natural floodplain use would be impeded. There are no other sites available within the service area and outside of the ABFE and CHHA.	The new facility would be elevated to 20.5 feet amsl to meet ABFE requirements.
Waters of the United States, including Wetlands	No waters of the United States, including wetlands, occur on the proposed project site. Therefore, no impacts to waters of the United States, including wetlands, would occur.	None.

Affected Environment	Impacts	Mitigation
Transportation	<p>A minor short-term increase in the volume of construction traffic on roads in the immediate vicinity of the proposed project site is anticipated.</p> <p>A long-term increase in traffic is anticipated after construction due to normal law enforcement activities.</p>	<p>Construction vehicles and equipment would be stored on site during project construction and appropriate signage would be posted on affected roadways.</p> <p>A traffic study will be conducted to determine whether a traffic signal or other signing modifications will be necessary on McLaurin Street.</p>
Public Health and Safety	<p>Short-term impacts may occur during construction. Construction activities could present safety risks to those performing the activities.</p> <p>There would be a beneficial impact to the public living within the Waveland Police Department service area by providing the Waveland Police Department with more reliable access to the community during flooding events.</p>	<p>All construction activities would be performed using qualified personnel and in accordance with the standards specified in Occupational Safety and Health Administration (OSHA) regulations. Appropriate signage and barriers would be in place prior to construction activities to alert pedestrians and motorists of project activities.</p>
Hazardous Materials	<p>No hazardous materials or waste impacts are anticipated. A Phase I Environmental Site Assessment conducted for the proposed project site revealed no evidence of Recognized Environmental Conditions in association with the proposed project site or surrounding parcels and recommended no further investigation (NISTAC, 2008).</p>	<p>Any hazardous materials discovered, generated, or used during construction would be disposed and handled in accordance with applicable local, State, and Federal regulations.</p>
Socioeconomic Resources	<p>No impacts to socioeconomic resources would occur.</p>	<p>None.</p>
Environmental Justice	<p>No disproportionately high or adverse effect on minority or low-income populations would occur.</p> <p>All populations would benefit from the police department's increased accessibility to the service area during storm events.</p>	<p>None.</p>

Affected Environment	Impacts	Mitigation
Air Quality	Short-term impacts to air quality would occur during the construction period. Emissions from fuel-burning internal combustion engines could temporarily increase the levels of some criteria pollutants and non-criteria pollutants.	Construction areas would be watered down to prevent fugitive dust; fuel-burning equipment running times would be kept to a minimum; engines would be properly maintained.
Noise	Short-term noise impacts would occur at the proposed project site during the construction period. There would also be occasional noise in the project area from testing of police sirens. The vicinity would experience long-term, occasional noise impacts from normal police operations such as car sirens.	Construction would occur during normal business hours and equipment would meet all local, State, and Federal noise regulations. Use of sirens would be restricted to emergency use and tests would be performed during daylight hours.
Biological Resources	The site was previously occupied by another facility, has been recently cleared, and is sparsely vegetated. No additional clearing is required. No impacts to federally listed threatened or endangered species are anticipated.	None.
Cultural Resources	No impacts to cultural resources are anticipated.	None.

4.1 Geology and Soils

The proposed project site is mapped as containing soils classified as the Smithton Series, a fine sandy loam with poor drainage (USDA NRCS, 2007a). Typically, these soils have a seasonably high water table of less than 1 foot below the ground surface and are considered to be hydric soils (USDA NRCS, 2007b). Nationwide Infrastructure Support Technical Assistance Consultants (NISTAC) and FEMA biologists conducted a site visit on July 18, 2007. Analysis of soil samples collected during the site visit indicates that the proposed project site consists of disturbed fill material. The proposed project site slopes gently south toward storm drains on Highway 603. The area surrounding the proposed project site slopes gently northeast toward the Edwards Bayou, which drains into the Jourdan River (Figure 1 in Appendix A).

The Farmland Protection Policy Act states that Federal agencies must “minimize the extent to which Federal programs contribute to the unnecessary conversion of farmland to nonagricultural uses...” According to the soil survey for Hancock County, the proposed project site contains soils classified as prime farmland, if drained (USDA NRCS, 2007a). However, the proposed project site is within the city limits of Waveland. The proposed project site has already been developed for non-agricultural use and contains underground utilities and foundations.

The Clean Water Act (CWA), as amended in 1977, established the basic framework for regulating discharges of pollutants into the waters of the United States. The NPDES, managed by the Environmental Protection Agency (EPA), controls water pollution by regulating point sources that discharge pollutants into waters of the United States. For projects that will disturb greater than 1 acre of soil, an NPDES permit is required, which includes preparation of a SWPPP.

No Action Alternative – Under the No Action Alternative, no impacts to geology or soils would occur.

Proposed Action Alternative – Under the Proposed Action Alternative, no impacts to geology or native soils would occur. Non-native soils at the proposed project site would be disturbed during construction activities. The City of Waveland would obtain an NPDES permit and prepare a SWPPP prior to construction. The SWPPP would include erosion and sediment control BMPs, such as silt fencing, mulching, or revegetation to minimize the potential for erosion and the transport of sediment off-site. On July 26, 2007, a letter was sent to the Natural Resources Conservation Service (NRCS) requesting project review. The NRCS response letter dated September 20, 2007, stated that the proposed project site was within the city limits of Waveland, and that all lands inside city limits are not considered farmland, so there would be no impact to farmland soils (see Appendix B).

4.2 Water Resources

4.2.1 Surface Water

NPDES controls water pollution by regulating point sources that discharge pollutants into waters of the United States. Such discharges require a permit and the preparation of a SWPPP.

The proposed project site is located approximately 1.15 miles northwest of the Mississippi Sound. The elevation at the proposed project site is 19.5 feet amsl. A stormwater drain is located at the southeastern corner of the proposed project site on St. Anthony Street. Surface water drains to the southeast in drainage ditches that are located along the northern, western, and southern boundaries of the property.

No Action Alternative – Under the No Action Alternative, no adverse impacts to downstream surface water would occur.

Proposed Action Alternative – Under the Proposed Action Alternative, short-term impacts to downstream surface waters may occur during the construction period due to erosion and the potential transport of sediment off-site. The City of Waveland would obtain an NPDES permit and prepare a SWPPP prior to construction. The SWPPP would include erosion and sediment control BMPs, such as silt fencing, mulching, or revegetation to minimize the potential for erosion and the transport of sediment off-site, thereby reducing impacts to water quality. On July

26, 2007, letters requesting project review were sent to the U.S. Environmental Protection Agency Water Management Division, the Mississippi Department of Environmental Quality (MDEQ) Office of Pollution Control, and the Mississippi Soil and Water Conservation Commission (MSWCC) (see Appendix B). EPA responded via electronic mail on August 6, 2007, noting that EPA's primary interests include the protection of wetlands and water quality issues (see Appendix B). To date, no responses from MDEQ or MSWCC have been received.

4.2.2 Floodplains

Executive Order (EO) 11988 (Floodplain Management) requires Federal agencies to avoid direct or indirect support of development within the 100-year floodplain whenever there is a practicable alternative. FEMA uses Flood Insurance Rate Maps (FIRMs) to identify the regulatory 100-year floodplain for the National Flood Insurance Program. Consistent with EO 11988, conventional FIRMs and Preliminary Digital FIRMs were examined during the preparation of this EA.

The proposed project site is located in Flood Zone C according to the conventional FIRM (FEMA, 1983; Community Panel Number 285262 0004 B) and in Flood Zone X according to the Preliminary Digital FIRM (FEMA, 2007; Community Panel Number 285262 0342 D), both of which are outside the 100-year floodplain. The proposed project site is located within the ABFE and the CHHA, but outside the ABFE 3-foot wave zone. The ABFE of the proposed site is 20.5 feet amsl and the elevation at the proposed project site is 19.5 feet amsl.

No Action Alternative – Under the No Action Alternative, the Waveland Police Department would continue to operate out of a temporary trailer unit complex that is located within the 3-foot wave zone of the ABFE and the CHHA. Long-term adverse impacts to the floodplain would continue because the temporary trailer unit structures impede natural floodplain uses. Furthermore, the temporary trailer unit complex would continue to experience flooding, potentially causing an interruption of services provided by the Waveland Police Department.

Proposed Action Alternative – Under the Proposed Action Alternative, long-term adverse impacts to the floodplain would continue because the new Waveland Police Department building would be constructed within the ABFE and CHHA, which would impede natural floodplain uses. There are no identifiable sites outside the ABFE and CHHA within the Waveland Police Department's service area. However, the concrete slab of the new building would be constructed to a thickness that would elevate the new building above the ABFE.

4.2.3 Waters of the United States, Including Wetlands

The U.S. Army Corps of Engineers (USACE) regulates the discharge of dredged or fill material into waters of the United States, including wetlands, pursuant to Section 404 of the CWA. Additionally, Executive Order 11990 (Protection of Wetlands) requires Federal agencies to avoid, to the extent possible, adverse impacts to wetlands.

The proposed project site is approximately 1.15 miles northwest of the Mississippi Sound. The National Wetlands Inventory map for the proposed project area shows wetlands located on and immediately adjacent to the proposed project site (USFWS, 2007a). However, a site visit conducted by NISTAC and FEMA biologists on July 18, 2007, confirmed that no wetlands occur on the proposed project site. Wetlands previously located on the project site were filled to construct the mental health building that has since been demolished. The proposed project site now consists of sparse vegetation including southern magnolia (*Magnolia grandiflora*), Chinese

tallow (*Triadica sebifera*), and weedy plants. Soil profiles indicated that soils within the boundaries of the fenced property at the proposed project site consist of disturbed fill material. The 1987 *Corps of Engineers Wetlands Delineation Manual* requires the presence of three parameters (greater than 50 percent dominance of hydrophytic vegetation, evidence of hydric soils, and hydrologic indicators) for an area to be considered a wetland (USACE, 1987).

The Coastal Zone Management Act enables coastal States, including Mississippi, to designate State coastal zone boundaries and develop coastal management programs to improve protection of sensitive shoreline resources and guide sustainable use of coastal areas. According to the National Oceanic and Atmospheric Administration, the proposed project site is located within the Mississippi Coastal Zone (NOAA, 2004).

No Action Alternative – Under the No Action Alternative, no impacts to waters of the United States, including wetlands, would occur.

Proposed Action Alternative – No waters of the United States, including wetlands, occur on the proposed project site. Therefore, under the Proposed Action Alternative, no impacts to waters of the United States, including wetlands, would occur. On July 26, 2007, letters requesting project review were sent to the Mississippi Department of Marine Resources (MDMR), Bureau of Wetlands Permitting, and the U.S. Army Corps of Engineers (USACE) Mobile District. In a letter dated August 9, 2007, MDMR stated that it had no objections to the project provided there are no direct or indirect impacts to coastal wetlands (see Appendix B). To date, no response has been received from the USACE.

4.3 Transportation

The proposed project site for the new Waveland Police Department building is cleared land located on the northeast corner of McLaurin Street and St. Anthony's Street. Access to the proposed project site would be provided via driveways off of McLaurin Street (Figure 2 in Appendix A).

No Action Alternative – Under the No Action Alternative, the area surrounding the temporary Waveland Police Department trailer unit complex would continue to be affected by increased police activity.

Proposed Action Alternative – Under the Proposed Action Alternative, short-term impacts to transportation and site access are anticipated at the proposed project site. There would be a minor temporary increase in the volume of construction traffic on roads in the immediate vicinity of the proposed project site that could potentially result in a slower traffic flow for the duration of the construction phase. To mitigate potential delays, construction vehicles and equipment would be stored on site during construction and appropriate signage would be posted on affected roadways.

There would be a long-term impact to traffic in the immediate vicinity of the proposed project site, due to the operations of the police department, including deployment of emergency vehicles. A traffic study would be conducted to determine whether a traffic signal or other signing modification would be necessary on McLaurin Street.

On July 26, 2007, a letter requesting review of the Proposed Action Alternative was sent to the Mississippi Department of Transportation (see Appendix B). To date, no response has been received.

4.4 Public Health and Safety

Safety and security issues considered in this EA include the health and safety of area residents and the general public, and the protection of personnel involved in activities related to the construction of the new Waveland Police Department building.

EO 13045 (Protection of Children) requires that Federal agencies make it a high priority to identify and assess environmental health and safety risks that may disproportionately affect children. There are six schools located within 5 miles of the proposed project site, but none adjacent to the site.

No Action Alternative – Under the No Action Alternative, the safety of the general public would continue to be affected by flooding that could result in an interruption and/or loss of police services due to damage of the temporary trailer unit complex that currently houses the Waveland Police Department.

Proposed Action Alternative – Under the Proposed Action Alternative, construction activities could present safety risks to those performing the activities. To minimize risks to safety and human health, all construction activities would be performed using qualified personnel trained in all appropriate safety precautions, including the proper use of the appropriate equipment. Additionally, all activities would be conducted in a safe manner in accordance with the standards specified in OSHA regulations. Prior to and during construction activities, signs and barriers would be placed around the proposed project site in order to alert motorists and pedestrians of project activities.

Any negative impacts to the safety of children are unlikely. Although the construction would occur near residential areas, appropriate construction barriers would be placed at the proposed project site in order to protect area and local residents, including children.

Under the Proposed Action Alternative, benefits to the general public and the Waveland Police Department would occur by providing the Waveland Police Department with more reliable access to the community during flooding events.

4.5 Environmental Justice

EO 12898 (Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations) mandates that Federal agencies identify and address, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority and low-income populations. Socioeconomic and demographic data for the project area were analyzed to determine whether a disproportionate number of minority or low-income persons have the potential to be adversely affected by the Proposed Action Alternative.

No Action Alternative – Under the No Action Alternative, there would be no disproportionately high or adverse effect on minority or low-income populations. All populations would be

adversely affected by an interruption and/or loss of police services due to damage of the temporary trailer unit complex that currently houses the Waveland Police Department.

Proposed Action Alternative – Under the Proposed Action Alternative, there would be no disproportionately high and adverse effect on minority or low-income populations. Implementation of the Proposed Action would benefit all populations within Waveland equally by providing the Waveland Police Department with more reliable access to the community during flood events, and therefore reduce the potential interruption in and/or loss of police and emergency services during and immediately after these events. The new Waveland Police Department building would allow emergency vehicles to deploy onto roads less likely to be flooded than the roads surrounding the previous Waveland Police Department building or the temporary trailer complex units.

4.6 Air Quality

The Clean Air Act (CAA) requires that States adopt ambient air quality standards. The standards have been established in order to protect the public from potentially harmful amounts of pollutants. Under the CAA, the EPA establishes primary and secondary air quality standards. Primary air quality standards protect the public health, including the health of “sensitive populations, such as people with asthma, children, and older adults.” Secondary air quality standards protect public welfare by promoting ecosystems health, and preventing decreased visibility and damage to crops and buildings. EPA has set National Ambient Air Quality Standards (NAAQS) for the following six criteria pollutants: ozone (O₃), particulate matter (PM_{2.5}, PM₁₀), nitrogen dioxide (NO₂), carbon monoxide (CO), sulfur dioxide (SO₂), and lead (Pb). According to the Mississippi Department of Environmental Quality, the entire State of Mississippi is classified as in attainment for all criteria pollutants, meaning that these pollutants do not exceed the NAAQS (MDEQ, 2002).

No Action Alternative – Under the No Action Alternative, there would be no short- or long-term impacts to air quality because no construction would occur; therefore, construction vehicles and equipment would not emit pollutants into the air.

Proposed Action Alternative – Under the Proposed Action Alternative, short-term impacts to air quality could occur during construction activities. To reduce temporary impacts to air quality, construction areas and adjacent roadways (if sediment is tracked onto public roads) would be watered down as necessary to reduce the amount of fugitive dust generated by construction equipment and vehicles. Emissions from fuel-burning internal combustion engines (e.g., heavy equipment and earthmoving machinery) could temporarily increase the levels of some criteria pollutants including CO, NO₂, O₃, PM₁₀, and non-criteria pollutants, such as volatile organic compounds. To reduce the emission of criteria pollutants, fuel-burning equipment running times would be kept to a minimum and engines would be properly maintained.

4.7 Noise

Noise is generally defined as unwanted sound. Sound is most commonly measured in decibels (dB) on the A-weighted scale, which is the scale most similar to the range of sounds that the human ear can hear. The Day-Night Average Sound Level (DNL) is an average measure of sound. The DNL descriptor is accepted by Federal agencies as a standard for estimating sound

impacts and establishing guidelines for compatible land uses. EPA guidelines, and those of many other Federal agencies, state that outdoor sound levels in excess of 55 dB DNL are “normally unacceptable” for noise-sensitive land uses including residences, schools, or hospitals (EPA, 1974).

Noise-sensitive areas within a 4-mile radius of the proposed project site include several schools and a hospital. A noise ordinance exists for the City of Waveland.

No Action Alternative – Under the No Action Alternative, no short term impacts to noise would occur because there would be no construction. Long term noise impact at the temporary site would continue due to the increased police activity.

Proposed Action Alternative – Under the Proposed Action Alternative, short-term increases in noise levels are anticipated during the construction period. To reduce noise impact to area residents, construction activities would take place during normal business hours. Equipment and machinery utilized for Proposed Action activities would meet all local, State, and Federal noise regulations.

The vicinity of the proposed project site would experience long-term, occasional noise impacts from normal police operations such as car sirens. The Waveland Police Department would have a siren located at the new building which is only for emergency use. Siren testing would occur only during daylight hours. The Waveland Police Department is exempt from the city’s noise ordinance (Barnell, pers. comm.). Furthermore, since police enforce the noise ordinance, they are trained regarding the location of noise-sensitive areas and use extra caution in those areas.

4.8 Biological Resources

The proposed project site for the new Waveland Police Department building has been previously disturbed and filled. NISTAC and FEMA biologists conducted a site visit on July 18, 2007, and observed a recently cleared parcel of land with demolition debris, weedy vegetation, southern magnolia (*Magnolia grandiflora*), Chinese tallow (*Triadica sebifera*), and a variety of ornamental plants.

The U.S. Fish and Wildlife Service (USFWS) lists the following federally endangered (E) and threatened (T) plant and animal species for Hancock County (USFWS, 2007b):

Common Name	Scientific Name	Status
Louisiana black bear	<i>Ursus americanus luteolus</i>	T
West Indian manatee	<i>Trichechus manatus</i>	E (P)
Brown pelican	<i>Pelecanus occidentalis</i>	E
Piping plover	<i>Charadrius melodus</i>	T (CH)
Gopher tortoise	<i>Gopherus polyphemus</i>	T
Green turtle	<i>Chelonia mydas</i>	T (P)
Kemp's Ridley sea turtle	<i>Lepidochelys kempii</i>	E (P)
Loggerhead turtle	<i>Caretta caretta</i>	T (P)
Gulf sturgeon	<i>Acipenser oxyrhynchus desotoi</i>	T (CH)
Inflated heelsplitter	<i>Potamilus inflatus</i>	T (P)
Louisiana quillwort	<i>Isoetes louisianensis</i>	E (P)
(P) = potential to occur; (CH) = listed with critical habitat		

According to the USFWS, the Louisiana quillwort is the only federally listed plant species that potentially occurs in Hancock County. It is a rare aquatic plant that occurs on sand and gravel bars, overflow channels, and areas in or near shallow blackwater streams in riparian woodland and bayhead forests of pine flatwoods and upland pine forests (CPC, 2007). The site visit conducted on July 18, 2007, confirmed that the proposed project site does not contain habitat for any federally listed plant and animal species; therefore, it is unlikely that any federally listed threatened and endangered species are present.

No Action Alternative – Under the No Action Alternative, there would be no impacts to biological resources.

Proposed Action Alternative – The proposed project site does not provide suitable habitat for any federally listed plant or animal species; therefore, there would be no impacts to federally listed threatened or endangered species under the Proposed Action Alternative.

4.9 Cultural Resources

Section 106 of the National Historic Preservation Act, as amended, and implemented by 36 CFR Part 800, requires Federal agencies to consider the effects of their actions on historic properties and provide the Advisory Council on Historic Preservation an opportunity to comment on Federal projects that will have an effect on historic properties prior to implementation. Historic properties are defined as archeological sites, standing structures, or other historic resources listed on or eligible for listing in the National Register of Historic Places (NRHP).

A NISTAC archeologist and an architectural historian, both qualified in their respective disciplines under the *Secretary of the Interior's Professional Qualifications Standards* (36 CFR Part 61), conducted an assessment of the Proposed Action Alternative's potential to affect cultural resources within the Area of Potential Effects (APE). The APE is the geographic area

within which an undertaking may directly or indirectly cause changes in the character or use of historic properties, if such properties exist.

A literature search was conducted to determine whether previously identified archaeological sites exist within the proposed project area. One site, 22HA555, is located approximately 1.2 miles northwest of the APE. This site consisted of low conical mounds with light artifact density and has been determined eligible for listing in the NRHP. Several surveys have been completed in the immediate area, all with negative results.

A site visit was conducted by FEMA Historic Preservation Staff on July 18, 2007, to assess the possible impact of construction on buried and above ground cultural resources. The site is previously disturbed, cleared land. Aerial photographs show that two buildings once occupied the property; these buildings have since been demolished. The project area consists of recently disturbed soil with some woody and concrete debris. There is minimal vegetation, consisting of grass and approximately 20 small trees/bushes that appear to have been planted for landscape purposes on the proposed project site.

Visual inspection of the exposed and vegetated surfaces revealed no artifactual evidence of prehistoric occupation. Currently, the proposed project site is an empty lot located in a sparsely built-up residential area. To the south and west of the site is a residential neighborhood comprised of post-1970 homes. The nearest historic homes are approximately 1 mile east of the proposed project site and are not visible from the APE. The proposed Waveland Police Department building would replace a one-story, steel-framed, metal building located at 628 Highway 90.

No Action Alternative – Under the No Action Alternative no construction would occur and there would be no impacts to cultural resources.

Proposed Action Alternative – Due to the current disturbance of the site, its location in a low probability area for archaeological resources, and its location in cleared and filled-in historic wetlands, FEMA has determined that the Proposed Action will have no adverse effect on NRHP-eligible archaeological resources or standing structures. FEMA communicated this determination in letters dated August 22, 2007, to the Mississippi Department of Archives and History (MDAH) and the Mississippi Band of Choctaw Indians dated (see Appendix B). In a letter dated September 6, 2007, MDAH concurred with FEMA’s determination of no effect on NRHP-eligible archaeological resources or standing structures (see Appendix B). No response from the Mississippi Band of Choctaw Indians has been received to date.

5.0 CUMULATIVE IMPACTS

According to the Council on Environmental Quality regulations (40 CFR 1508.7), cumulative impacts represent the “impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions, regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time. In accordance with NEPA, and to the extent reasonable and practical, this EA considered the combined effect of the Proposed Action Alternative and other actions occurring or proposed in the vicinity of the proposed project site.

Hancock County and the entire Mississippi Gulf coast are undergoing recovery efforts after Hurricane Katrina caused extensive damages. The recovery efforts in Hancock County include demolition, reconstruction, and new construction. These projects and the Proposed Action Alternative may have a cumulative temporary impact on air quality in Hancock County by increasing criteria pollutants during construction activities. No other cumulative effects are anticipated.

6.0 PUBLIC INVOLVEMENT

FEMA is the lead Federal agency responsible for conducting the NEPA compliance process for the Proposed Action in the City of Waveland, Mississippi. FEMA's goal is to expedite the preparation and review of NEPA documents and to be responsive to the needs of the community and the purpose and need of the Proposed Action Alternative while meeting the intent of NEPA and complying with all NEPA provisions.

The City of Waveland will publish a public notice in a local newspaper to notify the public of the availability of the draft EA. FEMA will conduct an expedited public comment period commencing on the initial date of publication of the public notice.

7.0 AGENCY COORDINATION AND PERMITS

The following agencies and organizations were contacted by letter requesting project review during the preparation of this EA. Responses received to date are included in Appendix B.

- U.S. Army Corps of Engineers, Mobile District, Alabama
- U.S. Department of Agriculture, Natural Resources Conservation Service
- U.S. Environmental Protection Agency, Region 4, Water Management Division
- U.S. Fish and Wildlife Service, Jackson Field Office
- Mississippi Department of Agriculture and Commerce
- Mississippi Department of Archives and History
- Mississippi Department of Environmental Quality, Office of Pollution Control, Environmental Permits Division
- Mississippi Department of Marine Resources, Bureau of Wetlands Permitting
- Mississippi Department of Transportation, Environmental Division
- Mississippi Soil and Water Conservation Commission

In accordance with applicable local, State, and Federal regulations, the City of Waveland would be responsible for acquiring any necessary permits prior to commencing construction at the proposed project site.

8.0 CONCLUSIONS

No impacts to geology, groundwater, hazardous materials, waters of the United States, socioeconomic resources, minority or low-income populations, federally listed threatened or endangered species, or cultural resources are anticipated under the Proposed Action Alternative.

During the construction period, short-term impacts to non-native soils, surface water, transportation, public health and safety, air quality, and noise are anticipated. All short-term impacts will be mitigated utilizing BMPs, such as silt fencing, proper equipment maintenance, and appropriate signage.

Minor, long-term impacts to floodplains, transportation, and noise are anticipated. Floodplain impacts will be minimized by elevating the structure to 20.5 feet amsl to meet the ABFE requirements. A transportation study will be conducted to address necessary modifications. Long-term noise impacts will be limited to emergency uses of sirens.

9.0 REFERENCES

- Barnell, James. 2008. Waveland Police Department. Personal Communication with Matt Schlitzer of NISTAC on April 17, 2008.
- Center for Plant Conservation. 2007. http://www.centerforplantconservation.org/ASP/CPC_ViewProfile.asp?CPCNum=2345. Accessed July 12, 2007.
- Environmental Data Resources (EDR), Inc. 2007. *The EDR Radius Map with GeoCheck*. <http://www.edrnet.com>. Accessed July 12, 2007.
- Environmental Protection Agency (EPA). 1974. *EPA Identifies Noise Levels Affecting Health and Welfare*. <http://www.epa.gov/history/topics/noise/01.htm>. Accessed August 2, 2007.
- Federal Emergency Management Agency (FEMA). 1983. *Flood Insurance Rate Map, City of Waveland, Mississippi, Hancock County. Community Panel Number 285262 0004 B*. November 16. <http://msc.fema.gov/webapp/wcs/stores/servlet/FemaWelcomeView?storeId=10001&catalogId=10001&langId=-1>. Accessed July 19, 2007.
- FEMA. 2007. *Flood Zones Defined*. <http://www.floodsmart.gov/floodsmart/pages/riskassessment/floodzonesdefined.jsp>. Accessed July 19, 2007.
- Mississippi Department of Environmental Quality (MDEQ). 2002. *New Air Quality Standards*. http://deq.state.ms.us/MDEQ.nsf/page/Air_NewAirQualityStandardsandAttainment?OpenDocument. Accessed August 2, 2007.
- National Oceanic and Atmospheric Administration (NOAA). 2004. *State Coastal Zone Boundaries*. <http://coastalmanagement.noaa.gov/mystate/docs/StateCZBoundaries.pdf>. Accessed July 17, 2007.
- Nationwide Infrastructure Support Technical Assistance Consultants (NISTAC). 2008. *Draft Phase I Environmental Assessment, City of Waveland Police Department Relocation, Hancock County, Mississippi*. Prepared for FEMA.
- U.S. Department of Agriculture, Natural Resources Conservation Service (USDA NRCS). 2007a. *Official Soil Series Description*. <http://ortho.ftw.nrcs.usda.gov/cgi-bin/osd/osdname.cgi>. Accessed July 27, 2007.
- USDA NRCS. 2007b. *National Hydric Soils List by State*. <http://soils.usda.gov/use/hydric/lists/state.html>. Accessed July 27, 2007.
- USDA NRCS. 2007c. *Soil Data Mart*. <http://soildatamart.nrcs.usda.gov/>. Accessed July 27, 2007.
- U.S. Army Corps of Engineers (USACE). 1987. *Corps of Engineers Wetland Delineation Manual*.
- U.S. Fish and Wildlife Service (USFWS). 2007a. *National Wetlands Inventory Maps*. <http://wetlandsfws.er.usgs.gov/wtlnds/launch.html>. Accessed July 13, 2007.
- USFWS. 2007b. http://ecos.fws.gov/tess_public/StateListingAndOccurrence.do?state=MS. Accessed July 19, 2007.

U.S. Geological Survey (USGS). 2007. *Ground Water Atlas of the United States, Arkansas, Louisiana, Mississippi HA 730-F*. http://capp.water.usgs.gov/gwa/ch_f/F-text3.html. Accessed July 13, 2007.

USGS. 1969. *National Geologic Map Database*. http://ngmdb.usgs.gov/ngm-bin/ILView.pl?sid=q500_16555_us_1.sid&vtype=b. Accessed July 13, 2007.

Waveland Police Department. 2007. <http://www.wavelandpolice.com>. Accessed July 12, 2007.

Appendix A

Figures

Appendix B
Agency Coordination