

Draft Environmental Assessment
**City of Pass Christian Police Station
Relocation Project**
Harrison County, Mississippi

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FEMA

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ACRONYMS AND ABBREVIATIONS

ABFE	Advisory Base Flood Elevation
ACHP	Advisory Council on Historic Preservation
amsl	above mean sea level
APE	Area of Potential Effects
BMP	Best Management Practice
CAA	Clean Air Act
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CO	carbon monoxide
CWA	Clean Water Act
CZMA	Coastal Zone Management Act
dB	decibel
DNL	Day-Night Average Sound Level
EA	Environmental Assessment
EO	Executive Order
EOC	Emergency Operations Center
EPA	U.S. Environmental Protection Agency
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
HMGP	Hazard Mitigation Grant Program
MDEQ	Mississippi Department of Environmental Quality
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NISTAC	Nationwide Infrastructure Support Technical Assistance Consultants
NO ₂	nitrogen dioxide
NOAA	National Oceanic and Atmospheric Administration
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NWI	National Wetlands Inventory
O ₃	ozone
OSHA	Occupational Safety and Health Administration
Pb	lead
PM _{2.5}	particulate matter less than 2.5 microns
PM ₁₀	particulate matter less than 10 microns



ACRONYMS AND ABBREVIATIONS

REC	Recognized Environmental Condition
SO ₂	sulfur dioxide
STP	Shovel Test Pit
SWPPP	Storm Water Pollution Prevention Plan
THPO	Tribal Historic Preservation Officer
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
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 Katrina.

The City of Pass Christian (City), Mississippi, has submitted an application for Federal Emergency Management Agency (FEMA) funding under FEMA's Public Assistance Program being administered in response to FEMA-1604-DR-MS for the proposed relocation of the Pass Christian Police Department buildings. In accordance with the Robert T. Stafford Disaster Relief and Emergency Assistance Act, PL 93-288, as amended, and implementing regulations at 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 in 44 CFR Part 10.

2.0 PURPOSE AND NEED

The former Pass Christian Police Station building, located at 123 East 2nd Street in Pass Christian, served as the City's main law enforcement building (Figures 1 and 2, Appendix A). It was comprised of a 4,800-square-foot, one-story metal framed building and a 200-foot communications tower. The Police Station building was constructed in 1996 and was retrofitted in 1999-2000 to withstand Hurricane Category 3 winds using funds from FEMA's Hazard Mitigation Grant Program (HMGP). The Pass Christian Police Department utilized two additional buildings in the Randolph Complex, located at 315 Clark Avenue in Pass Christian. The Police Annex building, a 4,780-square-foot, one-story metal framed building, housed the police department's evidence storage and fitness/self-defense training rooms. The VFW storage building, a 3,052-square-foot, one-story metal framed building, was a former technology lab serving as a storage facility at the time of the disaster. All three buildings were located within the 100-year floodplain and the Advisory Base Flood Elevation (ABFE).

The Pass Christian Police Station building was completely destroyed by Katrina's storm surge and high winds. Damages to both of the Randolph Complex buildings exceeded the 50% repair/replacement ratio, meeting FEMA's criteria for demolition and replacement of the structures.

The Pass Christian Police Department is currently providing services at a reduced capacity, utilizing two temporary FEMA trailers located at East 2nd Street and Fleitas Avenue. These trailers are of insufficient size to meet the needs of the police department. 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 Pass Christian Police Department buildings; the trailers also do not provide any dedicated space for fitness or other training activities.

Consequently, the City requires a replacement facility, located in an area less flood-prone than the previous Police Station building or the temporary trailer complex, in order to restore the Police Department to full operational status and also to maintain operations during future storm events.

3.0 ALTERNATIVES

This section describes the alternatives that were considered in addressing the purpose and need stated in Section 2. One alternative, rebuilding the police station buildings at their original locations, was dismissed as not feasible. Two alternatives are evaluated further in this EA: the No Action Alternative, and the Proposed Action Alternative, which is the relocation and construction of the new Police Station buildings in a less flood-prone area.

3.1 Alternatives Evaluated

Alternative 1: No Action

Under the No Action Alternative, the Pass Christian Police Station buildings would not be rebuilt. The Pass Christian Police Department would continue operating at a reduced capacity out of temporary trailer units and lacking facilities for fitness and training.

Alternative 2: Relocation and Construction of the new Pass Christian Police Station and Emergency Operations Center (Proposed Action)

Under the Proposed Action Alternative, the City would relocate the Police Station buildings out of the floodplain and ABFE, protecting it from future storm damages and interrupted service during future storm events. The Police Station buildings would be relocated to a 9.9-acre undeveloped lot at 525 Espy Avenue, northeast of Pass Christian (Figures 1 and 2, Appendix A). Dense woodlands cover the western half of the proposed project site, while unmaintained grass, herbaceous plants and vines, and scattered trees populate the eastern half of the property.

The proposed project site is approximately 3.8 and 4.1 miles northeast of the former Pass Christian Police Station building and Randolph Complex buildings, respectively. The proposed project site is bordered by residential and wooded areas to the north and west; a power line right-of-way, the Pass Christian Police Department shooting range, and a Department of Public Works facility to the south; and Espy Avenue to the east. The proposed project site is located outside both the 100- and 500-year floodplain (Flood Zone C) and the ABFE. The property is also located in the only area of the City that did not flood as a result of Katrina's storm surge.

Hurricane Katrina highlighted the need for a storm shelter that can house first responders and critical government officials within Pass Christian. Therefore, the City proposes to utilize separate HMGP Section 404 funding to design the new facility to FEMA 361 shelter standards, with occupancy of up to 100 public safety and public works first responders and other essential government personnel. The new facility will be known as the Pass Christian Police Station and Emergency Operations Center (EOC).

The proposed Police Station and EOC building will be a 9,500-square-foot, one-story building, with a covered parking area for emergency vehicles, a gated police parking lot with 33 parking spaces, 10 fire department parking spaces, and 36 public parking spaces. The facility will provide parking for emergency vehicles and other heavy equipment necessary for emergency response during severe storm events. The City proposes to utilize approximately 4 acres of the overall approximately 10-acre site for construction of the new facility. The preliminary site plan for the proposed facility is shown in Figure 3, Appendix A.

Access to the proposed project site would be from the east via Espy Ave. The new police station building would utilize municipal water, electricity, sewerage and telephone facilities, with tie-ins



from existing lines running parallel to Espy Avenue. Originally, the applicant had proposed to construct a new 200-foot communications tower on the proposed project site. However, the communications tower is no longer required for facility operations and is no longer considered to be a part of the proposed action.

3.2 Alternatives Considered and Dismissed

Reconstruction of the City of Pass Christian Police Station Buildings at Existing Locations

The City considered rebuilding the former facilities to their respective pre-disaster footprints, incorporating all upgrades to current codes and standards. However, the former building locations are within the 100-year floodplain as well as the ABFE and are susceptible to future flooding and storm damage. Also, FEMA funds may not be used to construct buildings in the floodplain unless there is no practicable alternative. Therefore, this alternative is not considered feasible and was dismissed from further consideration.

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 will be discussed in greater detail.

Affected Environment	Impacts	Mitigation
Geology and Soils	No impacts to geology are anticipated. Long-term minor impacts to soils may occur.	Appropriate Best Management Practices (BMPs), such as installing silt fences and revegetating bare soils immediately upon completion of construction, will be used to stabilize soils
Surface Water	Temporary short-term impacts to adjacent surface waters are possible during construction activities.	A Storm Water Pollution Prevention Plan (SWPPP) and a National Pollutant Discharge Elimination System (NPDES) permit must be obtained prior to construction. Appropriate BMPs, such as installing silt fences and revegetating bare soils, would minimize runoff. A General Permit from the Mississippi Department of Environmental Quality (MDEQ) will be required for control of erosion and sediment.
Groundwater	No impacts to groundwater are anticipated.	None.



Affected Environment	Impacts	Mitigation
Floodplains	No impacts to the floodplain are anticipated.	None.
Waters of the U.S. including Wetlands	No impacts to wetlands or waters of the U.S. are anticipated.	None
Transportation	A minor temporary increase in the volume of construction traffic on roads in the immediate vicinity of the proposed project site is anticipated.	Construction vehicles and equipment would be stored on site during project construction and appropriate signage would be posted on affected roadways.
Public Health and Safety	No impacts to public health and safety are anticipated.	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.
Hazardous Materials	A Phase I Environmental Site Assessment was conducted in March of 2008. No on-site or off-site Recognized Environmental Conditions (RECs) that have the potential to impact the proposed project site were identified. No impacts to hazardous materials or wastes are anticipated.	Any hazardous materials discovered, generated, or used during construction would be disposed of and handled in accordance with applicable local, state, and federal regulations.
Socioeconomic Resources	No impacts to socioeconomic resources would occur.	None.
Environmental Justice	No disproportionately high or adverse effect on minority or low-income populations would occur. All populations would benefit from police department services.	None.

Affected Environment	Impacts	Mitigation
Air Quality	Short-term impacts to air quality would occur during the construction period.	Construction contractors would be required to water down construction areas when necessary; 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. The vicinity of the proposed project site would experience long-term minor noise impacts from the daily operations of the Police Station and EOC. Noise levels in the vicinity of the Police Station and EOC would be similar to the noise levels in adjacent residential communities.	Construction would occur during normal business hours and equipment would meet all local, state, and federal noise regulations.
Biological Resources	Approximately 4 acres of mixed upland vegetation would be cleared for construction of the new facility. No impacts to federally listed species are anticipated.	None
Cultural Resources	No impacts to archeological or cultural resources are anticipated.	None

4.1 Geology and Soils

The proposed project site contains soils classified in the Harleston and Latonia Series. The Harleston series consists of deep, moderately well drained, moderately permeable soils formed on terraces and uplands in marine or stream deposits. The Harleston Series is not listed as a hydric soil. The Harleston series soils are located at the southern edge of the property, roughly following the path of the power line right-of-way, and are not slated for development according to the site plan (Figure 3, Appendix A). The remainder of the project site is comprised of the Latonia series, which are deep, well-drained, moderately rapidly permeable soils formed on marine or stream terraces with slopes of 0 to 5 percent. The Latonia Series is listed as a hydric soil (USDA/NRCS, 2007b).

The Farmland Protection Policy Act (FPPA) 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 U.S. Department of Agriculture (USDA) Soil Survey



for Harrison County, both the Latonia and Harleston soil series are listed as prime farmland (USDA/NRCS, 2007a). However, according to the FPPA, farmland does not include land that is already in or committed to urban development (USDA/NRCS 2007c). The definition of farmland already in urban development includes lands identified as “urbanized area” on the Census Bureau Map. The project site meets the definition of farmland already in urban development as it falls within the Gulfport-Biloxi urbanized area on the U.S. Census Bureau Map (USCB, 2000).

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 would occur. Under the Proposed Action Alternative, soils on the project site would be disturbed to develop the property. The applicant would be required to submit an SWPPP. Implementation of appropriate BMPs would be required at the construction location including the installation of silt fences and the revegetation of soils to minimize the potential for erosion. A letter dated November 5, 2007, requesting project review was sent to MDEQ. In a response dated November 13, 2007, MDEQ stated that, if the project disturbs more than 1 acre of land, coverage under a General Permit for control of erosion and sediment will be required (Appendix B).

On November 5, 2007, a letter was sent to the USDA Natural Resources Conservation Service (NRCS) requesting project review (Appendix B). In a response dated January 22, 2008, NRCS stated that an 8-acre mitigation site had been established by NRCS on the property just south of the proposed project site. NRCS expressed concern about potential construction impacts to the mitigation area, including the placement of soil or woody debris and parking of construction equipment in the mitigation area.

Approximately 4 acres of soils classified as prime farmland will be permanently converted for development of the Police Station and EOC building. However, since the proposed site is located within an urbanized area, the FPPA does not apply. A Farmland Conversion Impact Form (AD-1006) would not be required (USDA/NRCS, 2007c). The City shall ensure that all construction activities, including the placement of workspaces for debris removal and construction equipment, will occur within the proposed approximate 4-acre construction area. The proposed project is not anticipated to impact the adjacent NRCS mitigation site.

4.2 Water Resources

4.2.1 Surface Water

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 proposed project site is located approximately 1.0 mile north of the Mississippi Sound and approximately 0.27 mile north of Johnson Bayou. Elevations on the proposed project site range from 23 to 13 feet above mean sea level (amsl). Site elevations are highest in the center and gently slope downward to the north, east, and west. The greatest changes in elevation are to the south, where the site slopes to 13 feet amsl. There is one drainage ditch, located along the northern boundary of the property, that extends west to east and connects to the Espy Avenue drainage ditch on the eastern boundary of the site (Figure 4, Appendix A). Surface water on the



site drains into these drainage ditches, in addition to four isolated open water wetlands located in the northwest and southwest corners of the proposed project site. Site visits conducted by Nationwide Infrastructure Support Technical Assistance Consultants (NISTAC) and FEMA biologists on November 29, 2007, December 10, 2007 and February 14, 2008, verified these findings.

No Action Alternative – Under the No Action Alternative, no construction would occur and there would be no adverse impacts to surface water.

Proposed Action Alternative – Under the Proposed Action Alternative, short-term impacts to downstream surface waters may occur during the construction period due to soil erosion. The applicant would be required to submit a SWPPP and NPDES permit application prior to construction. To reduce impacts to surface water, the applicant would implement appropriate BMPs, such as installing silt fences and revegetating bare soils.

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, both conventional FIRMs (FEMA, 1987; Community Panel Numbers 285261 0003 C and C285261 0002 C) and the Preliminary Digital FIRM (MDEQ, 2007a; Map No. 28047C0354) were examined. The proposed project site is located in Flood Zones C and X, outside the 100-year floodplain. FEMA has also developed ABFE Maps based on a flood frequency analysis completed by FEMA that update the flood risk data with information on storms that have occurred in the past 25+ years, including (but not limited to) Hurricane Katrina. The ABFE maps show that the proposed project site is located outside the ABFE (FEMA, 2006; ABFE Map Numbers MS-G14 and MS-G15).

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

Proposed Action Alternative – Under the Proposed Action Alternative, the City of Pass Christian Police Station and EOC would be constructed on a site located outside both the 100-year floodplain and ABFE. No impacts to the floodplain are anticipated.

4.2.3 Waters of the U.S. including Wetlands

The U.S. Army Corps of Engineers (USACE) regulates the discharge of dredged or filled material into waters of the U.S., including wetlands, pursuant to Section 404 of the CWA. Additionally, EO 11990 (Protection of Wetlands) requires federal agencies to avoid, to the extent possible, adverse impact of wetlands.

A review of the National Wetlands Inventory (NWI) map indicated that two potential wetland areas are located on the proposed project site (USFWS, 2007a). During a site visit conducted by NISTAC and FEMA biologists on November 29, 2007, potential wetland areas were observed on the proposed project site. Therefore on December 10, 2007, a wetland delineation was conducted by NISTAC and FEMA wetland biologists.

Using guidance manuals and procedures set forth by the USACE, four isolated open water wetlands were delineated within the proposed project site, in accordance with the 1987 *Corps of Engineers Wetlands Delineation Manual*. The USACE manual requires the presence of all three parameters (greater than 50% dominance of hydrophytic vegetation, evidence of hydric soils, and presence of hydrologic indicators) for an area to be considered a wetland.

The proposed project site contains four small, nontidal, isolated open water wetlands, two in the southwest corner and two in the northwest corner (Figure 4, Appendix A). Wetlands P1 and P2 are located in the southwest corner. Wetland P1 comprises 0.04 acre, has been partially filled, and is littered with debris. Plants identified within this wetland include seedbox (*Ludwigia* sp.), pennywort (*Hydrocotyle* sp.), southern cattail (*Typha domingensis*), torpedo grass (*Panicum repens*), black willow (*Salix nigra*) and wax myrtle (*Morella cerifera*). Wetland P2 is an 0.18-acre retention pond immediately to the west of Wetland P1 and separated from it by an upland berm. Wetlands P3 and P4 are located adjacent to one another in the northwest corner of the proposed project site; Wetland P3 0.06 acre and Wetland P4 is 0.03 acre. At the time of the delineation, Wetlands P3 and P4 were mostly dry and appeared to be several feet deep.

Historically, the drainage ditch located along the northern boundary of the site (D1) most likely connected to these wetland areas. However, the drainage pattern has been altered due to an area of fill that now cuts off the western portion of D1 to the Wetlands P3 and P4. A later site visit conducted on February 14, 2008, verified that Wetlands P3 and P4 were completely inundated with water; these areas collect precipitation and surface water runoff from the site. Plants identified at Wetlands P3 and P4 include smartweed (*Polygonum hydropiperoides*), black willow (*Salix nigra*), sesbania (*Sesbania herbacea*), buttonbush (*Cephalanthus occidentalis*), sweetgum (*Liquidambar styraciflua*) and inkberry (*Ilex glabra*).

The Coastal Zone Management Act (CZMA) 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 (NOAA), the proposed project site is located within the Mississippi Coastal Zone (NOAA, 2007).

No Action Alternative – Under the No Action Alternative, no construction would occur and there would be no impacts to waters of the U.S., including wetlands.

Proposed Action Alternative –Under the Proposed Action Alternative, no impacts to wetlands are anticipated because the delineated wetland areas are located outside the proposed approximate 4-acre project construction area. A letter dated November 5, 2007, requesting project review was sent to MDMR. In a response dated November 27, 2007, MDMR stated that it has no objections to the project provided there are no direct or indirect impacts to coastal wetlands (Appendix B).

4.3 Transportation

The proposed project site for the Pass Christian Police Station and EOC is currently undeveloped land located on Espy Avenue, northeast of Pass Christian. Access to the site is currently via Espy Avenue.

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



Proposed Action Alternative – Under the Proposed Action Alternative, some short-term impacts to transportation and site access are anticipated during construction. 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 project construction and appropriate signage would be posted on affected roadways.

Post construction, the new facility will generate some long-term increases in local traffic. Espy Avenue is a collector roadway (MDOT, 1993) which can accommodate the increased traffic. The original police station was also located on a collector roadway.

On November 5, 2007, a letter requesting project review was sent to the Mississippi Department of Transportation (Appendix B). To date, no response has been received.

4.4 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 if a disproportionate number of minority or low-income persons have the potential to be adversely affected by the proposed project.

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 impacted by the Police Department’s continued reduced operational capacity and reduced ability to perform essential services efficiently.

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 the City of Pass Christian by providing the police department with the facilities necessary to carry out their daily operations efficiently and effectively.

4.5 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 U.S. Environmental Protection Agency (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 MDEQ, the entire state of Mississippi is classified as in attainment, meaning that criteria air 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.

Proposed Action Alternative – Under the Proposed Action Alternative, short-term impacts to air quality could occur during construction of the new Police Station building and EOC. To reduce temporary impacts to air quality, the construction contractors would be required to water down construction areas when necessary. Emissions from fuel-burning internal combustion engines (e.g., heavy equipment and earthmoving machinery) could temporarily increase the levels of some of the 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.

4.6 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).

No Action Alternative – Under the No Action Alternative, there would be no noise impacts because no construction would occur.

Proposed Action Alternative – Under the Proposed Action Alternative, short-term increases in noise levels are anticipated during the construction period. To reduce noise levels, construction activities would take place during normal business hours. Equipment and machinery utilized at the proposed project site would meet all local, state, and federal noise regulations.

The Phase I Environmental Site Assessment identified no noise sensitive areas within a one-quarter mile radius of the proposed project site (NISTAC, 2008). The vicinity of the proposed project site would experience long-term minor noise impacts from the daily operations of the Police Department, including occasional emergency siren use.

4.7 Biological Resources

The proposed project site consists of approximately 10 acres of upland wooded and previously disturbed and cleared land, covered with vegetation, burn piles, stumps, and debris. NISTAC and FEMA biologists conducted site visits on November 29, 2007, and December 10, 2007, and observed moderate vegetation at the proposed project site. Vegetation identified throughout the site include live oak (*Quercus virginiana*), water oak (*Quercus nigra*), southern magnolia (*Magnolia grandiflora*), southern red oak (*Quercus falcata*), eastern redcedar (*Juniperus virginiana*), loblolly pine (*Pinus taeda*), Chinese tallow (*Triadica sebifera*), Chinese privet (*Ligustrum sinense*), dog fennel (*Eupatorium capillifolium*), Bermuda grass (*Cynodon dactylon*), carpet grass (*Axonopus fissifolius*), windmill grass (*Chloris* sp.), sprangletop (*Leptochloa* sp.), gamagrass (*Tripsacum dactyloides*), greenbrier (*Smilax* sp.), Virginia spider wort (*Tradescantia virginiana*), little bluestem (*Schizachyrium scoparium*), (*Dichanthelium* sp.), dewberry (*Rubus*



sp.), American pokeweed (*Phytolacca americana*), hairy clustervine (*Jacquemontia tamnifolia*), St. Andrew's cross (*Hypericum hypericoides*), ragweed (*Ambrosia* sp.), American beautyberry (*Callicarpa americana*), yaupon (*Ilex vomitoria*), umbrella sedges (*Cyperus* sp.), bamboo, Brazilian vervain (*Verbena brasiliensis*), common yellow oxalis (*Oxalis stricta*), and sedges (*Carex* sp.). Additionally, four open water area wetlands were identified.

The U.S. Fish and Wildlife Service (USFWS) lists the following federally endangered (E) and threatened (T) animal species for Harrison County (USFWS, 2008):

Common Name	Scientific Name	Status
Louisiana black bear	<i>Ursus americanus luteolus</i>	T
Gulf sturgeon	<i>Acipenser oxyrinchus desotoi</i>	T (CH)
Piping plover	<i>Charadrius melodus</i>	T (CH)
Gopher tortoise	<i>Gopherus polyphemus</i>	T
Green turtle	<i>Chelonia mydas</i>	T
Loggerhead turtle	<i>Caretta caretta</i>	T
Kemp's Ridley	<i>Lepidochelys kempii</i>	E
Mississippi gopher frog	<i>Rana capito sevosa</i>	E
Louisiana quillwort	<i>Isoetes louisianensis</i>	E
Alabama red-bellied turtle	<i>Psuedemys alabamensis</i>	E
Leatherback turtle	<i>Dermochelys comacea</i>	E
West Indian manatee	<i>Trichechus manatus</i>	E
Brown pelican	<i>Pelecanus occidentalis</i>	E
Red-cockaded woodpecker	<i>Picoides borealis</i>	E
(CH) = listed with critical habitat		

The site visits conducted on November 29, 2007 and December 10, 2007 confirmed that the proposed project site does not contain habitat for any federally listed flora and fauna species; therefore, it is unlikely that any threatened and endangered species are present.

No Action Alternative – Under the No Action Alternative, there would be no impacts to biological resources or federally listed endangered or threatened species because no construction would occur.

Proposed Action Alternative – Approximately 4 acres of mixed upland vegetation would be cleared for construction of the new facility. The proposed project site does not contain suitable habitat for any federally listed flora and fauna species. Therefore, under the Proposed Action Alternative, there would be no impacts to threatened or endangered species. A letter requesting project review was sent to the USFWS on November 5, 2007. A response, dated November 7, 2007, was received from the USFWS stating that no federally listed endangered, threatened, or candidate species are present on the project site (Appendix B).

4.8 Cultural Resources

Section 106 of the National Historic Preservation Act (NHPA), 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 (ACHP) 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 in or eligible for listing in the National Register of Historic Places (NRHP).

A FEMA Archeologist and Architectural Historian, both qualified in their respective disciplines under *Secretary of the Interior's Professional Qualifications Standards* (36 CFR Part 61), conducted an assessment of the project's potential to affect historic properties 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. For archeological resources, the APE consists of the entire 10-acre proposed site; for above-ground historic properties, the APE is extended out to a 0.5-mile radius around the proposed project site. This APE was previously established through FEMA consultation with the Mississippi State Historic Preservation Office (SHPO).

NISTAC conducted a Phase I cultural resources survey of the proposed project site, beginning with a review of archeological site files at the MDAH State Historic Preservation Office (SHPO) in Jackson, Mississippi. This examination showed that no previously recorded archeological sites were present within the project area or within a 1.6-kilometer (1-mile) radius of the project area. A further review showed that a cultural resources survey of 50 acres was conducted within the same 1.6-kilometer (1-mile) radius; no archeological resources were identified from that survey.

The Phase I archeological survey was completed in December 2007. Field methods for the archeological survey included pedestrian survey and excavation of shovel test pits (STPs) within the APE. A single historic archeological site (22HR994) was identified in the southeastern quadrant of the project area. The site is located at the intersection of Espy Road and a dirt driveway. The site consists of a sparse surface scatter of early twentieth century historic artifacts, although modern materials were also observed. Historic map research shows that a structure was present at this location in 1925 and again in 1954. However, disturbances resulting from relatively recent post-Katrina clearing and grading activities have degraded the overall integrity of the site such that any additional work would not likely provide any significant new information on past occupations at the site. A large portion of the site appears to have been graded and used as fill for a nearby pond. As such, Site 22HR994 lacks research potential and is recommended not eligible for listing in the NRHP. No further archeological work is recommended at this site.

The architectural survey completed in December of 2007 identified a single historic residential building and an historic cemetery within a 0.5-mile radius of the APE. The historic residence is recommended not eligible for listing in the NRHP due to the number of changes made to the original structure and therefore its lack of historic integrity. The historic cemetery (Courtenay Cemetery) is recommended potentially eligible for listing on the NRHP. However, the cemetery is not within the viewshed of the proposed project site. No impacts to historic structures are anticipated.



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

Proposed Action Alternative – Under the Proposed Action Alternative, no impacts to archeological or cultural resources are anticipated. An agency consultation letter and draft report for the Phase I cultural resources survey were submitted to MDAH and the Tribal Historic Preservation Officer (THPO) on July 24, 2008, for review. This report documented the Phase I survey findings and recommended no further work for the proposed project site (Banguilan et al., 2008). No response has been received to date.

5.0 CUMULATIVE IMPACTS

According to the Council on Environmental Quality (CEQ) regulations, 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 (40 CFR 1508.7).” 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.

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

6.0 PUBLIC INVOLVEMENT

FEMA is the lead federal agency for conducting the NEPA compliance process for the proposed project in Pass Christian, Mississippi. It is the goal of the lead agency 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 while meeting the intent of NEPA and complying with all NEPA provisions.

The City of Pass Christian will notify the public of the availability of the draft EA through publication of a public notice in a local newspaper. 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, Regulatory Division
- 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



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- Tribal Historic Preservation Officer, Mississippi Band of Choctaw Indians
 - 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 applicant 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, floodplains, wetlands, public health and safety, hazardous materials, socioeconomic resources, environmental justice, threatened or endangered species, or cultural resources are anticipated under the Proposed Action Alternative.

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

Minor, long-term impacts to noise, traffic, and biological resources are anticipated. These impacts are not anticipated to be significant.

9.0 REFERENCES

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Appendix A
Figures

Appendix B
Agency Coordination