

Draft Environmental Assessment

Grand Caillou Elementary School Building C

Terrebonne Parish, Louisiana
August 2012

U.S. Department of Homeland Security
Federal Emergency Management Agency, Region VI
Louisiana Recovery Office
1 Seine Court
New Orleans, Louisiana 70114



FEMA

<u>SECTION</u>	<u>PAGE</u>
TABLE OF CONTENTS	I
LISTS OF TABLES, FIGURES, & APPENDICES	II
LIST OF ACRONYMS	III
1.0 INTRODUCTION.....	1
1.1 Project Authority.....	1
1.2 Background.....	1
1.3 Area Description.....	2
1.4 Purpose and Need.....	6
2.0 ALTERNATIVES CONSIDERED.....	6
2.1 Alternative 1 – No Action.....	6
2.2 Alternative 2 – Reconstruction at Original Site.....	6
2.3 Alternative 3 – Proposed Action – Reconstruction at an Alternate Location.....	7
3.0 AFFECTED ENVIRONMENT AND IMPACTS.....	7
3.1 Geology and Soils.....	7
3.1.1 Regulatory.....	7
3.1.2 Existing Conditions.....	7
3.1.3 Environmental Impacts.....	9
3.2 Water Resources.....	10
3.2.1 Regulatory.....	10
3.2.2 Existing Conditions.....	14
3.2.3 Environmental Impacts.....	14
3.3 Floodplains.....	15
3.3.1 Regulatory.....	15
3.3.2 Existing Conditions.....	20
3.3.3 Environmental Impacts.....	20
3.4 Biological Resources.....	21
3.4.1 Regulatory.....	21
3.4.2 Existing Conditions.....	21
3.4.3 Environmental Impacts.....	21
3.5 Cultural Resources.....	23
3.5.1 Regulatory.....	23
3.5.2 Existing Conditions.....	24
3.5.3 Environmental Impacts.....	24
3.6 Environmental Justice.....	25
3.6.1 Regulatory.....	25
3.6.2 Existing Conditions.....	25
3.6.3 Environmental Impacts.....	26
3.7 Air Quality.....	27
3.7.1 Regulatory.....	27

3.7.2	Existing Conditions.....	28
3.7.3	Environmental Impacts	28
3.8	Noise	28
3.8.1	Regulatory.....	28
3.8.2	Existing Conditions.....	29
3.8.3	Environmental Impacts	29
3.9	Traffic.....	30
3.9.1	Regulatory.....	30
3.9.1	Existing Conditions.....	30
3.9.2	Environmental Impacts	30
3.10	Hazardous Materials	31
3.10.1	Regulatory.....	31
3.10.2	Existing Conditions.....	31
2.10.3	Environmental Impacts	32
4.0	CUMULATIVE IMPACTS	33
5.0	CONDITIONS AND MITIGATION MEASURES	33
6.0	PUBLIC INVOLVEMENT AND AGENCY CONSULTATION	35
7.0	LIST OF PREPARERS.....	36
8.0	REFERENCES.....	37

TABLES

Table 1 – US Census Population Demographics, Houma, LA	2
Table 2 – Threatened and Endangered Species of Terrebonne Parish, LA	22
Table 3 – US Census Population Demographics, Dulac, LA	26

FIGURES

Figure 1 – Highlighted Map of Terrebonne Parish	3
Figure 2 – Map of Original Location	4
Figure 3 – Map of Temporary Location	4
Figure 4 – Map of Proposed Location	5
Figure 5 – Map of Original and Proposed Locations	5
Figure 6 – General Geology Map of Louisiana	8
Figure 7 – USDA Soil Map	9
Figure 8 – USFWS Wetland Inventory Map of Original Location	10
Figure 9 – USFWS Wetland Inventory Map of Proposed Location	11
Figure 10 – Wetland Delineation Map for Proposed Location	12
Figure 11 – Site Plan for Proposed Location	13
Figure 12 – DFIRM Map of Proposed Location	16
Figure 13 – ABFE Map of Proposed Location	17
Figure 14 – DFIRM Map of Original Location	18
Figure 15 – ABFE Map of Proposed Location	19

APPENDICES

Wetland Delineation with Site Photos
Agency Correspondence
Eight-Step Decision Making Process
Public Notice

Appendix A
Appendix B
Appendix C
Appendix D

LIST OF ACRONYMS

ABFE	Advisory Base Flood Elevation
BFE	Base Flood Elevation
CFR	Code of Federal Regulations
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CZMA	Coastal Zone Management Act
DFE	Design Flood Elevation
DFIRM	Digital Flood Insurance Rate Map
EA	Environmental Assessment
EDMS	Environmental Document Management System
EIS	Environmental Impact Statement
EO	Executive Order
ESA	Endangered Species Act
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
FONSI	Finding of No Significant Impact
GOHSEP	Governor's Office of Homeland Security and Emergency Preparedness
HMTA	Hazardous Materials Transportation Act
HP	Historic Preservation
LDEQ	Louisiana Department of Environmental Quality
LDNR	Louisiana Department of Natural Resources
LGS	Louisiana Geological Survey
LUST	Leaking Underground Storage Tank
LVIRA	Louisiana Voluntary Investigation and Remedial Action
NEPA	National Environmental Policy Act
NFIP	National Flood Insurance Program
NHPA	National Historic Preservation Act
PA	Programmatic Agreement
RCRA	Resource Conservation and Recovery Act
REC	Recognized Environmental Code
RHA	Rivers and Harbors Act
SF	Square Feet
SFHA	Special Flood Hazard Area
SHPO	State Historic Preservation Office/Officer
USACE	United States Army Corps of Engineers
USC	United States Code
USDA	United States Department of Agriculture
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
VRP	Volunteer Remedial Program

1.0 INTRODUCTION

1.1 Project Authority

Hurricane Gustav made landfall on September 1, 2008 near Cocodrie, Louisiana with sustained winds of 105 mph and damaging floodwaters. President George W. Bush declared a major disaster for the State of Louisiana (FEMA-1786-DR-LA) on September 2, 2008, authorizing the Department of Homeland Security's Federal Emergency Management Agency (FEMA) to provide Federal assistance in designated areas of Louisiana.

Hurricane Ike made landfall on September 13, 2008 near Galveston, Texas with sustained winds of 110 mph and damaging floodwaters. President George W. Bush declared a major disaster for the State of Louisiana (FEMA-1792-DR-LA) on September 13, 2008, authorizing the Department of Homeland Security's Federal Emergency Management Agency (FEMA) to provide Federal assistance in designated areas of Louisiana.

Federal Assistance is available pursuant to the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act), PL 93-288, as amended. Section 406 of the Stafford Act authorizes FEMA's Public Assistance Program (PA) to assist in funding the repair, restoration, reconstruction, or replacement of public facilities damaged as a result of the declared disaster.

This Environmental Assessment (EA) has been prepared in compliance with the National Environmental Policy Act of 1969 (NEPA), the President's Council on Environmental Quality regulations implementing NEPA (Title 40 of the Code of Federal Regulations [CFR] Parts 1500 to 1508), and FEMA's regulations implementing NEPA (44CFR Parts 9 and 10).

The purpose of this EA is to analyze potential environmental impacts of the proposed project. FEMA will use the findings in this EA to determine whether to prepare an Environmental Impact Statement (EIS) or a Finding of No Significant Impact (FONSI).

1.2 Background

The Terrebonne Parish School District's (applicant) Grand Caillou Middle School in Dulac, Louisiana sustained major damage as a result of wind, rain, and flooding brought on by Hurricane's Gustav and Ike. Included amongst the damaged facilities was Elementary School Building C, which was located within the Grand Caillou Middle School campus. Elementary School Building C provided classrooms, common areas, a library, and storage.

Grand Caillou Middle School has been subject to repetitive flooding as a result of many tropical cyclones that have made landfall within the region. On October 3, 2002, Hurricane Lili made landfall near Intracoastal City, LA inundating the Grand Caillou Middle School campus with floodwaters. On August 29, 2005 Hurricane Katrina made landfall near Grand Isle, LA, causing building and roof damage to the school. Hurricane Rita moved westward along the Louisiana coast flooding the entire coastal area of the state before finally making landfall near the LA-Texas border on September 23, 2005. Grand Caillou Middle School once again sustained flood damage. On September 1, 2008 Hurricane Gustav made landfall in Terrebonne Parish.

Hurricane Ike passed south of Terrebonne Parish less than two weeks later, inundating the school with over four feet of water. Grand Caillou Middle School and Elementary School Building C sustained catastrophic damages as a result of Hurricanes Gustav and Ike and were subsequently condemned.

Grand Caillou Middle School and Elementary School Building C are currently housed at a temporary facility six (6) miles north of the original location at 3933 Grand Caillou Road, Houma, Louisiana. The applicant determined that neither repair nor replacement of the existing school in its original location would best meet the needs of Terrebonne Parish School District. The applicant proposes to replace Grand Caillou Middle School including the FEMA funded Elementary School Building C at a new location ten (10) miles north of the original location and four (4) miles north of the temporary location on Grand Caillou Road in Houma, LA.

1.3 Area Description

Grand Caillou Middle School is located in Terrebonne Parish, Louisiana. The parish is bordered by Lafourche, Assumption, and St. Mary parishes, with the Gulf of Mexico to the south. The parish seat is the city of Houma, which is located in the northern section of the parish. Houma’s estimated population in 2010 was 33,727 (U.S. Census American FactFinder, Table 1).

Geography: Houma city, Louisiana

Subject	Number	Percent
SEX AND AGE		
Total population	33,727	100.0
Male population	16,547	49.1
Female population	17,180	50.9
RACE		
Total population	33,727	100.0
Race alone or in combination with one or more other races: [4]		
White	22,755	67.5
Black or African American	8,521	25.3
American Indian and Alaska Native	1,663	4.9
Asian	396	1.2
Native Hawaiian and Other Pacific Islander	53	0.2
Some Other Race	1,010	3.0
HISPANIC OR LATINO		
Total population	33,727	100.0
HISPANIC OR LATINO AND RACE		
Total population	33,727	100.0
RELATIONSHIP		
Total population	33,727	100.0
HOUSEHOLDS BY TYPE		
Total households	12,751	100.0
HOUSING OCCUPANCY		
Total housing units	13,924	100.0
HOUSING TENURE		
Occupied housing units	12,751	100.0

Table 1 - U.S. Census Population Demographics, 2010 Estimates



Figure 1 – Terrebonne Parish (Google Images, 2012)

The original campus is located at 6741 Grand Caillou Road, Dulac, LA (Latitude 29.415636, Longitude -90.699597). The temporary campus is located at 3933 Grand Caillou Road, Houma, LA (Latitude 29.415636, Longitude -90.699597). A proposed 15,572 square foot (SF) Elementary School Building C will be incorporated within the new 52,000 SF Grand Caillou Middle School campus. The facility will be located at 2161 Grand Caillou Road, Houma, LA, (Latitude 29.551853, Longitude -90.679528). (Figures 2, 3, and 4 respectively).

The proposed location is located on a 19 acre site near the intersection of Grand Caillou Road and East Woodlawn Ranch Road. Saia Motor Freight (a shipping company) is located to the north of the site on East Woodlawn Road, K&B Machine Works, an oil field and natural gas manufacturing company, is located to the southwest of the site across Grand Caillou Road, and CS Controls, a marine and industrial engineering and design company, is located to the west of the site across Grand Caillou Road. An engineered stream and fields are located to the east. A ditch and croplands consisting of sugarcane are located to the south. The proposed location was an agricultural site used to farm sugar cane since the 1970's.



Figure 2 – Grand Caillou Middle School and Elementary School Building C original site (Google Earth, 2012)



Figure 3 – Grand Caillou Middle School and Elementary School Building C temporary relocation site (Google Earth, 2012)



Figure 4. Grand Caillou Middle School and Elementary School Building C proposed location (Google Earth, 2012)



Figure 5. Grand Caillou Middle School and Elementary School Building C original, temporary, and proposed locations (Google Earth, 2012)

1.4 Purpose and Need

The objective of FEMA's PA Grant Program is to provide assistance to state, tribal and local governments, and certain types of private nonprofit organizations so that communities can quickly respond to and recover from major disasters or emergencies declared by the President. The objective of Terrebonne Parish School District is to provide educational services to students of Terrebonne Parish.

In order to restore the services, facilities, and resources that were lost as a result of Hurricanes Gustav and Ike, Terrebonne Parish School District seeks federal grant funds to replace the 15,572 SF Elementary School Building C originally located at 6741 Grand Caillou Road, Dulac, LA at a new location serving similar function and increased capacity with additional square footage to meet current codes and standards.

Grand Caillou Middle School has been subject to repetitive flooding, and the parish population continues a northward shift with each tropical system that affects the area. The population of Dulac, LA decreased from 2458 to 1463 between the years 2000 to 2010, a 40% reduction in population, while the population of Houma, LA increased from 32,393 to 33,727 during that same time period, a 4% increase (U.S. Census FactFinder, 2010). Restoration of the repetitively flooded Elementary School Building C in a manner that best mitigates future flood hazards and services the shifting population is needed for the Terrebonne Parish School District to achieve its objective.

2.0 ALTERNATIVES CONSIDERED

The NEPA process consists of an evaluation of the environmental effects of a federal undertaking, including its alternatives. Three alternatives have been proposed and assessed including, 1) the No Action Alternative 2) Reconstruction/repair of Grand Caillou Middle School and Elementary School Building C in the same footprint with elevation (Figure 2) and 3) Reconstruction of Grand Caillou Middle School and Elementary School Building C in an alternate location (Figure 4).

2.1 Alternative 1 - No Action

No FEMA assistance would be provided for the restoration and relocation of Grand Caillou Elementary School Building C. As a result, educational services would no longer be provided and would leave the population without critical much needed services. This alternative does not meet the purpose and need; however it will be evaluated throughout this EA.

2.2 Alternative 2 – Reconstruct at Original Site with Elevation

This alternative would rebuild the damaged Grand Caillou Middle School and Elementary School Building C at the original site to pre-disaster configuration and function. The facilities would be replaced/repared within the respective original footprints and would include improvements for meeting current codes and standards (e.g., American with Disabilities Act,

building codes, local floodplain ordinances, etc.) including elevation to the 100 year base flood elevation.

This alternative does not address the shifting population demands; however it does lessen the flood risk. This practicable alternative meets the purpose and need and will be further evaluated.

2.3 Alternative 3 – Reconstruction at an Alternate Location – Proposed Action

The proposed site consists of a 19 acre agricultural area located at 2161 Grand Caillou Road, Houma, LA. The direct northern boundary of the project site is dominated by trees/foliage, the west by Highway 57, the east by an engineered stream, and the south by a ditch and croplands. The proposed location is approximately ten (10) miles inland from the original Grand Caillou Middle School (Figure 4).

The entire school would expand in overall capacity from 420 to 450 students, but would retain the function and purpose of the former facility. This alternative meets the purpose and need and will be further evaluated.

3.0 AFFECTED ENVIRONMENT AND IMPACTS

3.1 Geology and Soils

3.1.1 Regulatory

The Farmland Protection Policy Act (FPPA: P.L. 97-98, Sec. 1539-1549; 7 U.S.C. 4201, *et. seq.*) was enacted in 1981 to minimize the unnecessary conversion of farmland to non-agricultural uses as a result of federal actions. Programs administered by federal agencies must be compatible with state and local farmland protection policies and programs. The Natural Resources Conservation Service (NRCS) is responsible for protecting significant agricultural lands from irreversible conversions that result in the loss of an essential food or environmental source. Prime farmland is characterized as land with the best physical and chemical characteristics for production of food, feed, forage, fiber and oilseed crops (USDA 1989).

3.1.2 Existing Conditions

According to the Louisiana Geological Survey (LGS), the geology in the vicinity of the site is predominantly Holocene Alluvium, Mississippi River sedimentary deposits composed mainly of sands, silts and clays (LGS, 2008). Figure 6 is a generalized geology map for Louisiana showing the location of the proposed project site in Terrebonne Parish.

The soils in Terrebonne Parish vary widely in their potential for major land uses and urban development. Soils in the vicinity of the proposed project site include the Cancienne silty clay loam, Cancienne silt loam, and Schriever Clay (Figure 7, USDA, 2011). Cancienne silty clay loam and Cancienne silt loam are somewhat poorly drained soils in high and intermediate position on natural levees of the Mississippi River and its tributaries. Slope is less than 1 percent.

Schriever clay is a poorly drained hydric soil occurring in backswamp areas that are separated from river systems by natural levees. Slope is less than 1 percent.

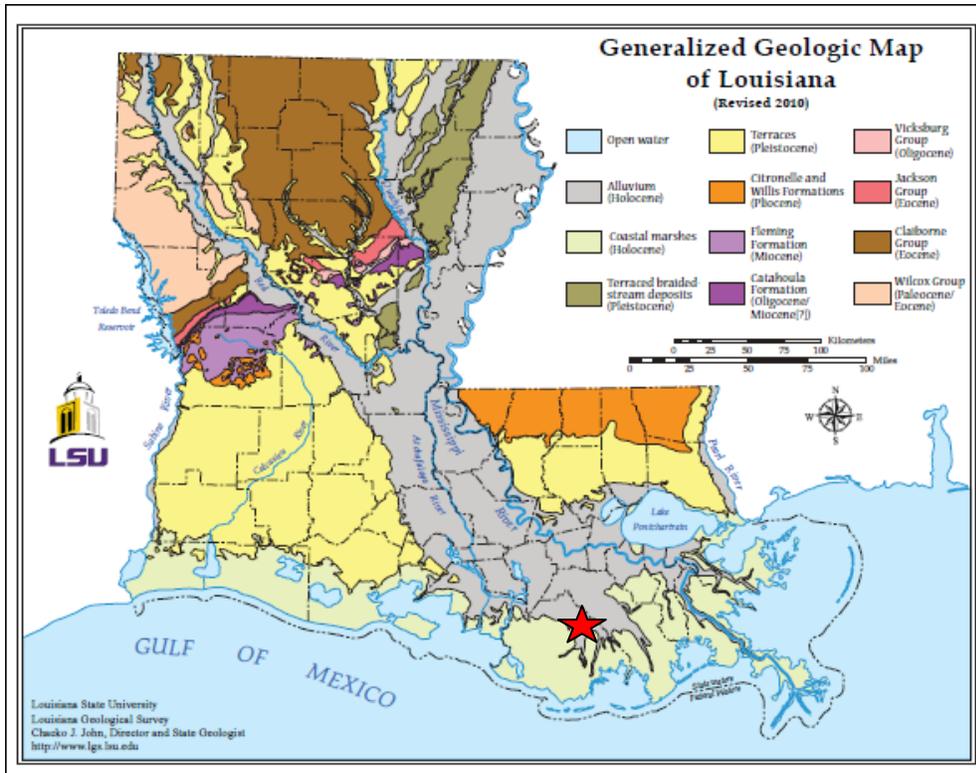


Figure 6 – General Geology Map of Louisiana (LGS, 2010)



Figure 7 - USDA Soil Map (USDA, 2011)

Figure 2

3.1.3 Environmental Impacts

Alternative 1 - No Action

Implementation of the no action alternative would not impact the soils or geologic processes known for the area.

Alternative 2 – Reconstruction in Original Location with Elevation: Construction of the new facility within substantially its original footprint would temporarily impact soils during site preparation and building construction. Soils would be exposed during grading and foundation work. Additionally, installation of new buildings may result in further compaction of the underlying soil. The soil around the reconstructed facility could be more susceptible to subsidence if adequate drainage and vegetation is not used.

Alternative 3 – Reconstruction at an Alternate Location - Preferred Alternative: The proposed action would temporarily impact soils during site preparation and building construction. Soils would be exposed during grading, foundation work and trenching for utilities. Additionally, installation of the proposed building would result in the compaction of the underlying soil.

FEMA initiated consultation with the NRCS on March 19, 2012, regarding potential impacts to prime and unique farmland as defined in 7 CFR §658.2(a). In a response dated March 19, 2012,

the NRCS indicated that the proposed action would be conducted in an area that is already devoted to urban and built-up areas and is exempt from the Farmland Protection Policy Act; therefore, no prime farmlands will be impacted (*Appendix B*).

3.2 Water Resources

3.2.1 Regulatory

The United States Army Corps of Engineers (USACE) regulates the discharge of dredged or fill material into waters of the U.S., including wetlands, pursuant to Section 404 of the Clean Water Act. Wetlands are identified as those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. The USACE also requires permission to construct any bridge, dike, dam, or causeway in or over any navigable water or to cause any diversion or obstruction to the navigable capacity of any water in the United States, including any pier, boom, breakwater, or jetty pursuant to Sections 9 and 10 of the Rivers and Harbors Act (RHA).

Executive Order (EO) 11990, Protection of Wetlands, directs Federal agencies to minimize the destruction, loss, or degradation of wetlands and to preserve and enhance the values of wetlands for federally funded projects. FEMA regulations for complying with EO 11990 are found at 44 CFR Part 9, Floodplain Management and Protection of Wetlands.

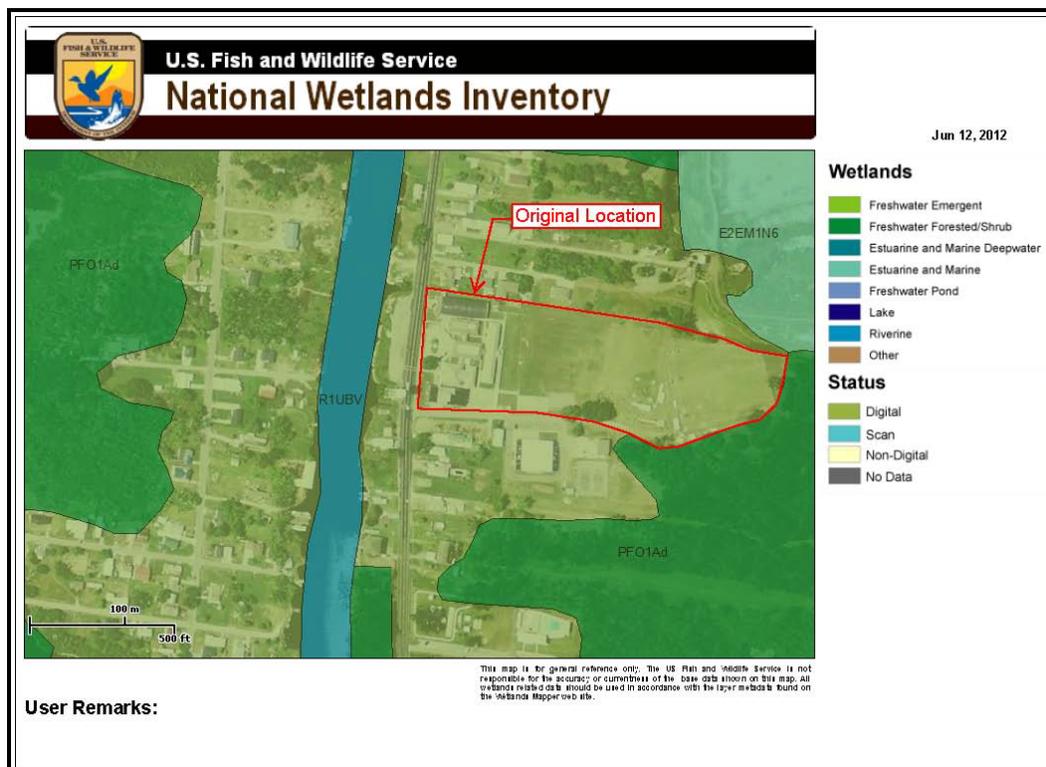


Figure 8 – Original location, U. S. Fish and Wildlife Service Wetlands Inventory Map (USFWS, 2011)

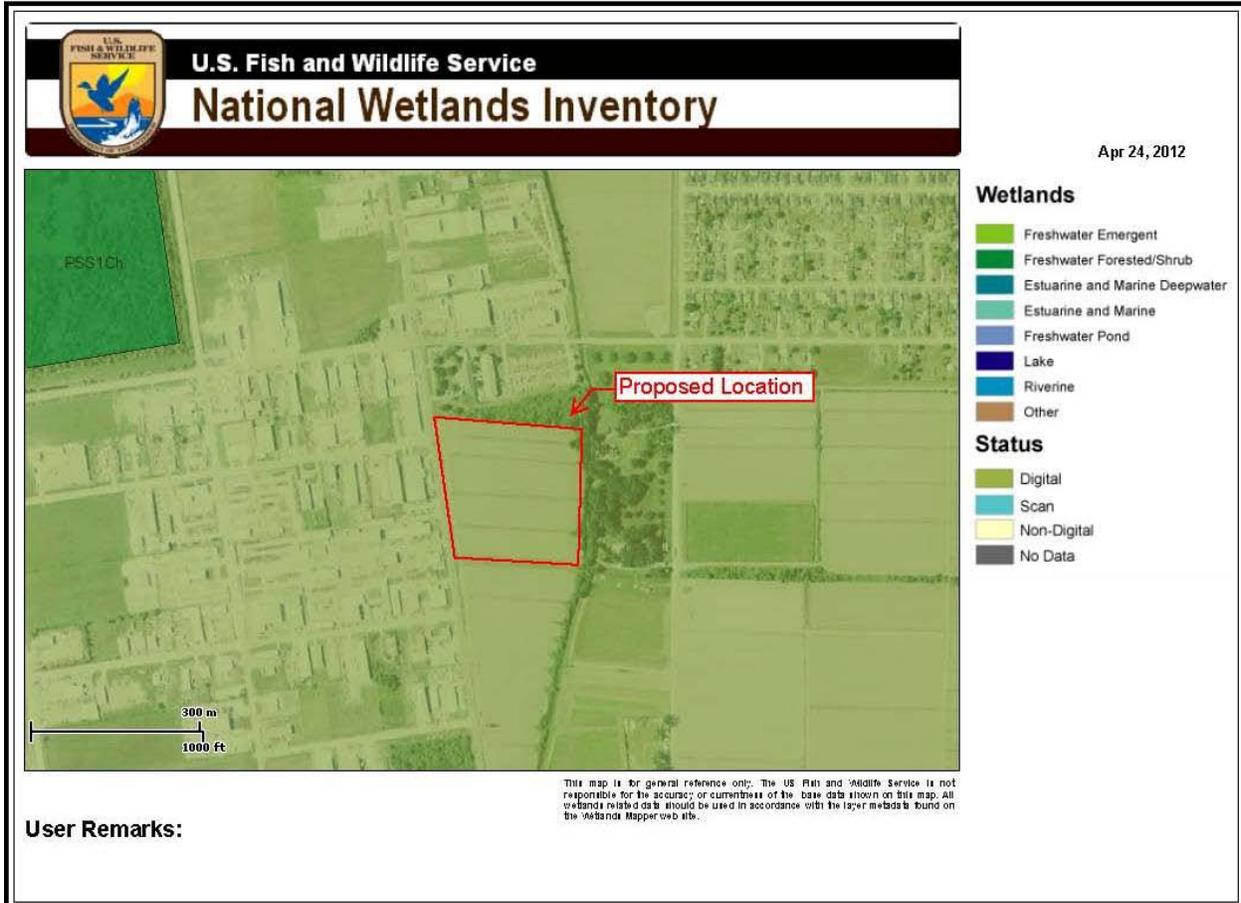


Figure 9 – Proposed Location, U. S. Fish and Wildlife Service Wetlands Inventory Map (USFWS, 2011)



Figure 10 – Wetland delineation map for proposed location

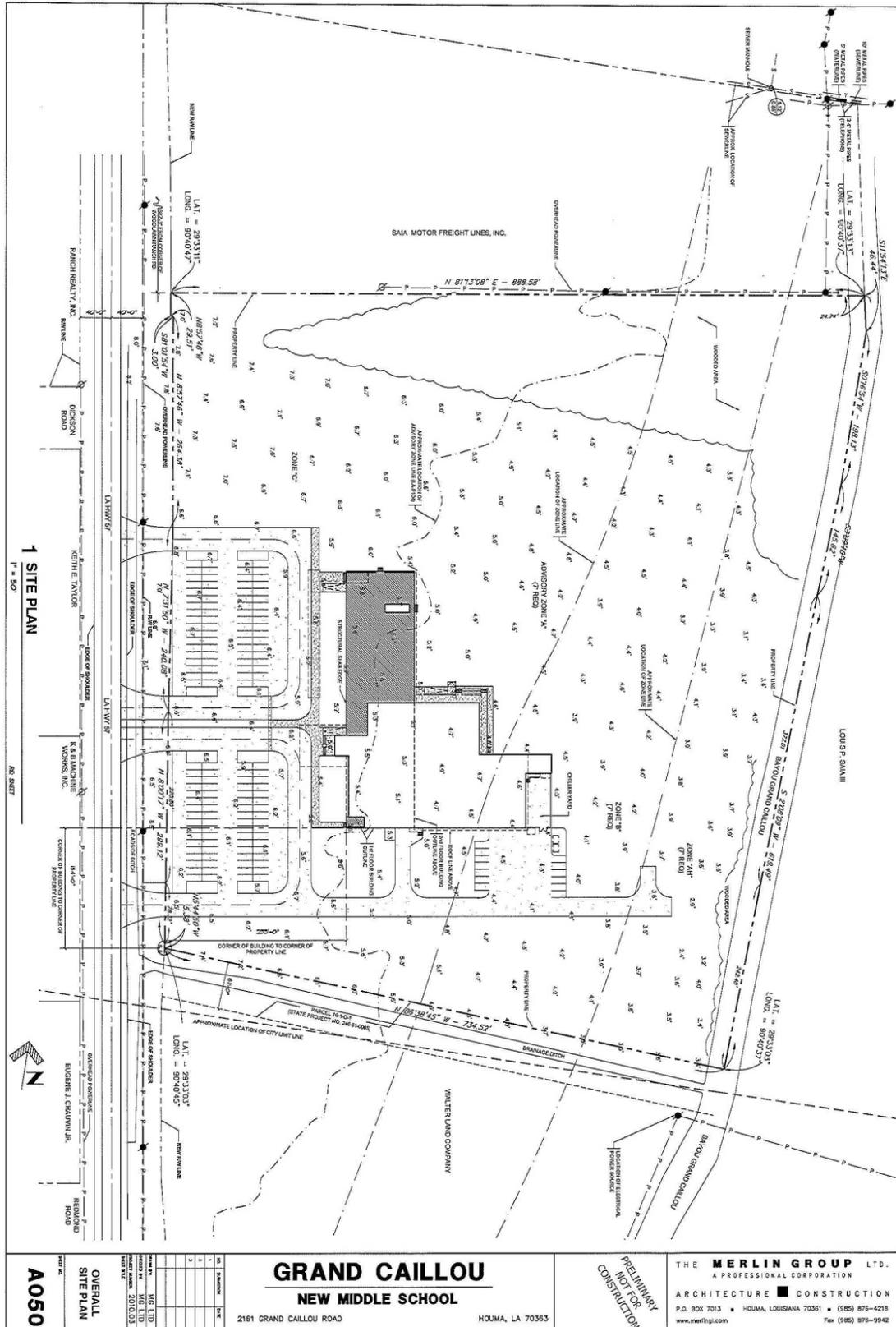


Figure – 11 Site plan for proposed location

3.2.2 Existing Conditions

According to the National Wetlands Inventory (NWI) wetlands exist to the east and south of the original Grand Caillou Elementary Building C site (Figure 8, USFWS 2011). NWI suggests that wetlands do not exist within proximity of the proposed location (figure 9, USFWS 2011). FEMA conducted a wetland delineation of the proposed location which determined the presence of wetlands within the forested area near the northern border of the site, and ephemeral drainage ditches running east-west and draining into Bayou Grand Caillou which forms the site's eastern border (figure 10). The U.S. Army Corps of Engineers jurisdictional determination letter dated July 17, 2012 confirms that jurisdictional wetlands exist on the northern portion of the site, and Bayou Grand Caillou is classified as other waters of the U.S. Jurisdictional wetlands and other waters of the U.S. are subject to permitting under Section 404 of the Clean Water Act. Bayou Grand Caillou which forms the site's eastern border is a navigable waterway, and is subject to permitting under Section 10 of the Rivers and Harbors Act.

3.2.3 Environmental Impacts

Alternative 1 – No Action: The no action alternative would not impact wetlands or other waters of the U.S. and would not require a CWA Section 404 permit.

Alternative 2 – Reconstruction in Original Location with Elevation: Reconstruction of Building C in substantially its original footprint would have no impact on wetlands or other waters of the U.S. FEMA has determined that the proposed site is an urban previously-disturbed site with no direct impact to wetlands. It would not require permits under Section 404 of the Clean Water Act or Section 10 of the Rivers and Harbors Act.

Alternative 3 – Reconstruction at an Alternative Location - Proposed Action: The U.S. Fish & Wildlife Service (USFWS) National Wetlands Inventory (NWI) map indicates no wetlands within the proposed project area that could be adversely affected by the project (Figure 9, USFWS 2011). However, in comments received on April 30, 2012, the USACE indicated that wetlands may exist in the vicinity of the project site. On May 15, 2012, FEMA prepared a wetland delineation report on behalf of the Terrebonne Parish School District (*Appendix A*). FEMA concluded that jurisdictional wetlands may occur within the wooded area near the site's northern border (Figure 10). Per the July 17, 2012 jurisdictional determination letter, the USACE has determined that the cropland portion of the site is not a jurisdictional wetland under the Clean Water Act, however jurisdictional wetlands do exist on the northern portion of the site and other waters of the U.S. are present the eastern border. Jurisdictional wetlands and other waters of the U.S. are subject to permitting under Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act (*Appendix B*). Site plans indicate that the proposed project will be located within the cropland portion of the site, therefore wetlands and other waters of the U.S. would not be impacted (Figure 11). If however, the adjacent wetlands or other waters of the U.S. are affected by project activities, the applicant must initiate the permitting process through the USACE prior to the activity. FEMA's responsibilities under E.O 11990 have been fully addressed in the wetland delineation report. The applicant is responsible for securing any permits under the CWA that may be required as a result of the undertaking.

To minimize indirect impacts (erosion, sedimentation, dust and other construction-related disturbances) to the well-defined urban drainage ways surrounding the proposed action, the following best management practices should be included into the daily operations of the construction activities: silt screens, barriers (e.g., hay bales), berms/dikes, and/or fences to be placed where and as needed. Fencing will be placed for marking staging areas to store construction equipment and supplies as well as conduct maintenance/repair operations.

3.3 Floodplains

3.3.1 Regulatory

Executive Order 11988 (Floodplain Management) requires Federal agencies to avoid direct or indirect support or development within the 100-year floodplain whenever there is a practicable alternative. FEMA's regulations for complying with EO 11988 are found at 44 CFR Part 9, Floodplain Management and Protection of Wetlands.

In July 2005, FEMA initiated a series of flood insurance studies for many of the Louisiana coastal parishes as part of the Flood Map Modernization effort through FEMA's National Flood Insurance Fund. These studies were necessary because the flood hazard and risk information shown on many Flood Insurance Rate Maps (FIRMs) was developed during the 1970s, and the physical terrain had changed significantly, such as major loss of wetland areas. After Hurricanes Katrina and Rita, FEMA expanded the scope of work to include all of coastal Louisiana. The magnitude of the impacts of Hurricanes Katrina and Rita reinforced the urgency to obtain additional flood recovery data for the coastal zones of Louisiana.

During initial post-hurricane analyses, FEMA determined that the "100-Year" or 1-percent chance storm flood elevations on FIRMs for many Louisiana communities, referred to as Base Flood Elevations (BFEs), were too low. FEMA created recovery maps showing the extent and magnitude of Hurricane Katrina's and Rita's surge, as well as information on other storms over the past 25 years. The advisory flood data shown on the recovery maps for the Louisiana-declared disaster areas show high-water marks surveyed after the storm; flood limits developed from these surveyed points; and Advisory Base Flood Elevations, or ABFEs. The recovery maps and other advisory data were developed to assist parish officials, homeowners, business owners, and other affected citizens with their recovery and rebuilding efforts.

Updated preliminary flood hazard maps from an intensive five-year mapping project guided by FEMA are now provided to all Louisiana coastal parishes. The new maps, known as Preliminary Digital Flood Insurance Rate Maps (DFIRMs), are based on the most technically advanced flood insurance studies ever performed for Louisiana, followed by multiple levels of review. They provide an up-to-date, accurate picture of coastal Louisiana flood risks. The DFIRMs provide communities with a more scientific approach to economic development, hazard mitigation planning, emergency response and post-flood recovery.

FEMA Public Assistance grant funded projects carried out in the floodplain or affecting the floodplain must be coordinated with the local floodplain administrator for a floodplain development permit. The action must be undertaken in compliance with relevant, applicable and

required local codes and standards. This will reduce the risk of future flood loss, minimize the impacts of floods on safety, health, and welfare, and preserve and possibly restore beneficial floodplain values as required by EO 11988. To further minimize impacts of the action in the floodplain, restoration projects conducted with Public Assistance grant funds utilize the current preliminary DFIRM zone determination and base flood elevation as the NFIP “best available data” as a minimum standard.

In compliance with FEMA policy implementing EO 11988, Floodplain Management, the proposed project was reviewed for possible impacts associated with occupancy or modification to a floodplain. Terrebonne Parish enrolled in the NFIP on November 20, 1970.

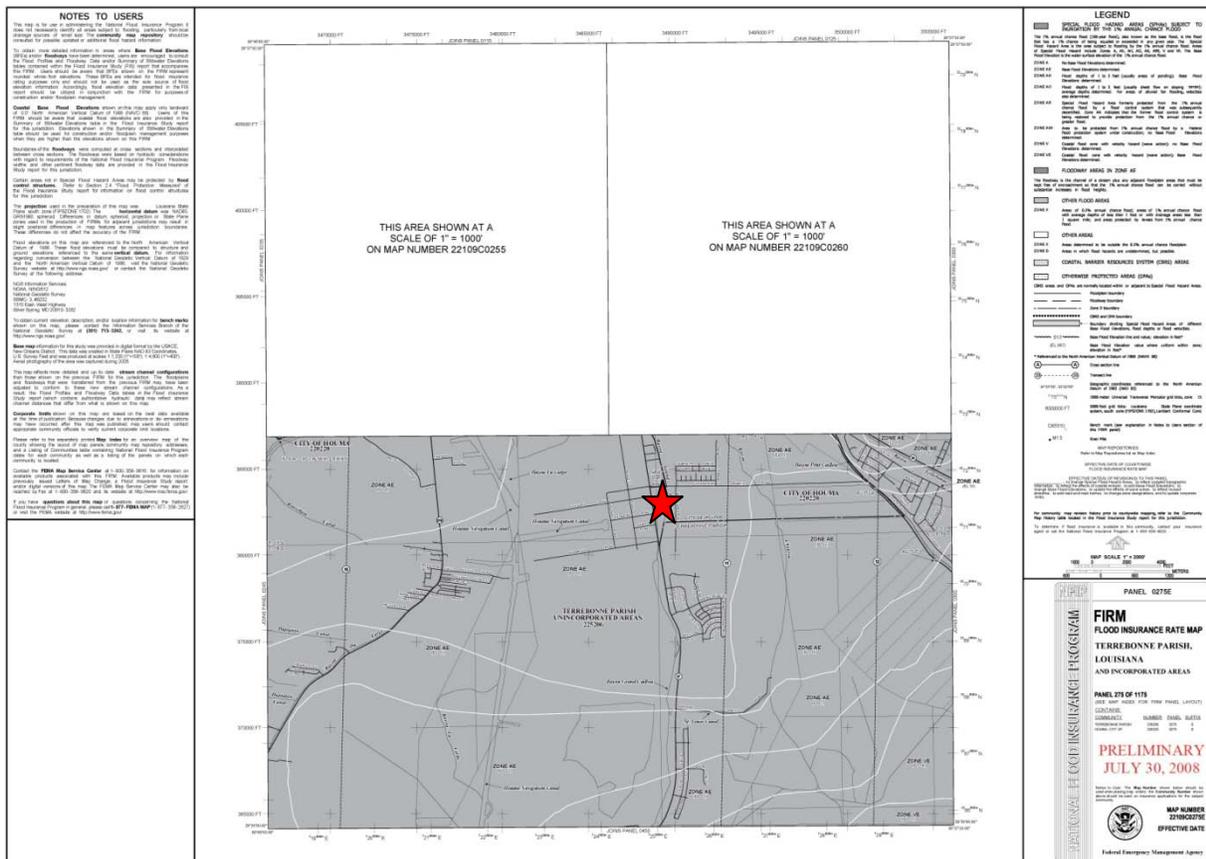


Figure 12 – Proposed Location, Digital Flood Insurance Rate Map Panel 22109C0275E (FEMA, July 30, 2008)

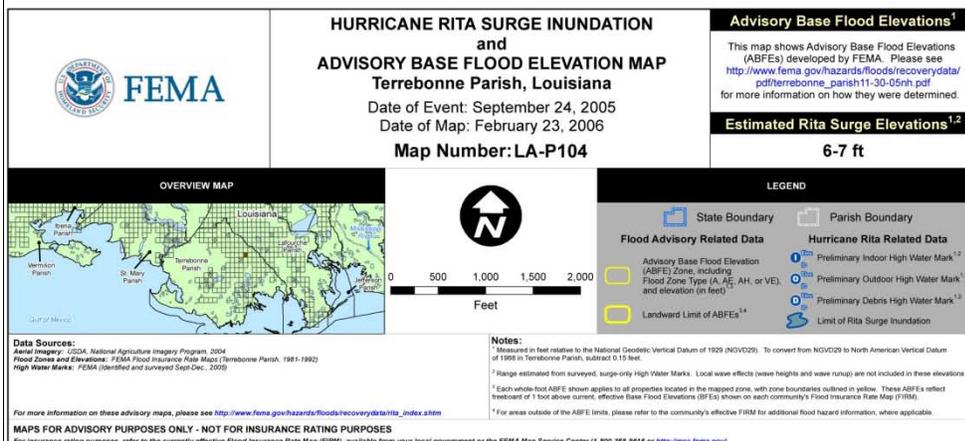
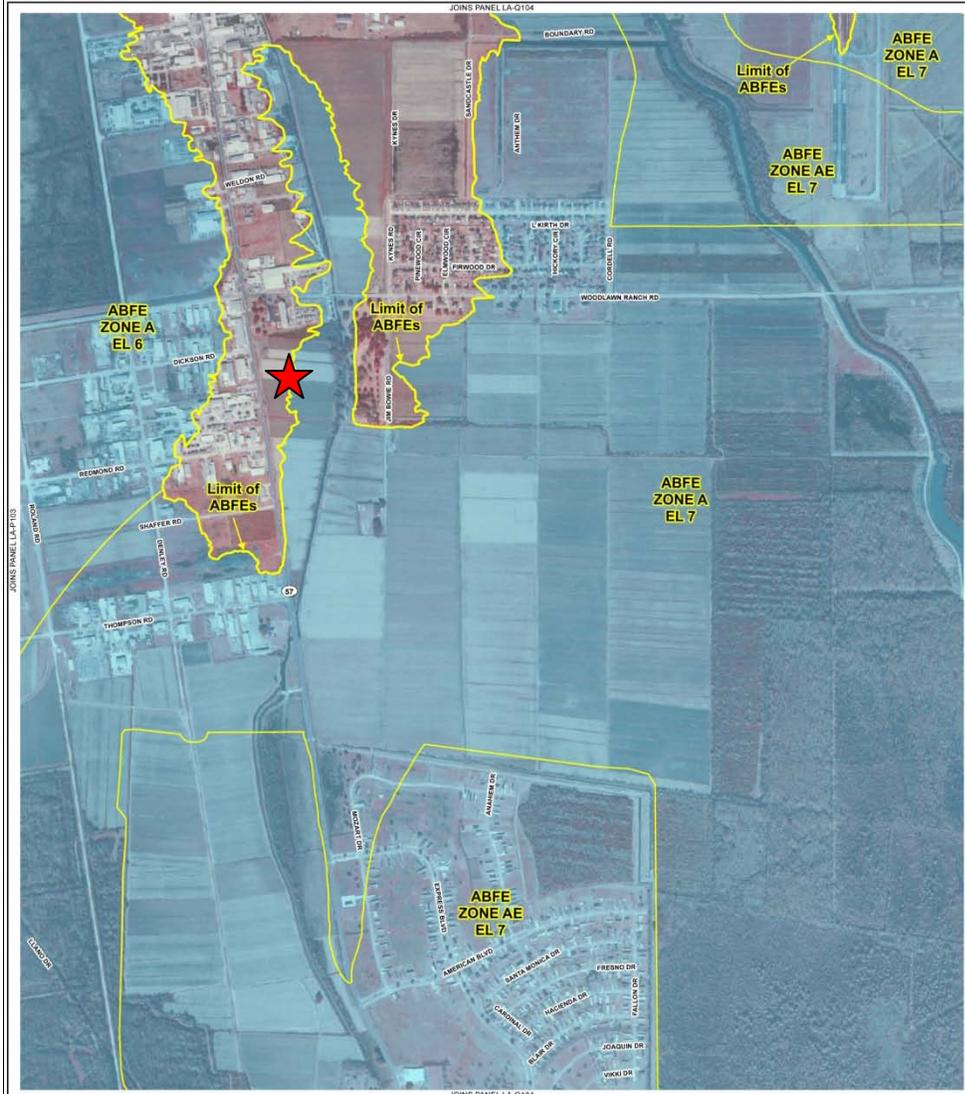


Figure 13 – Proposed Location, Advisory Base Flood Elevation Map LA-P104 (FEMA, February 23, 2006)

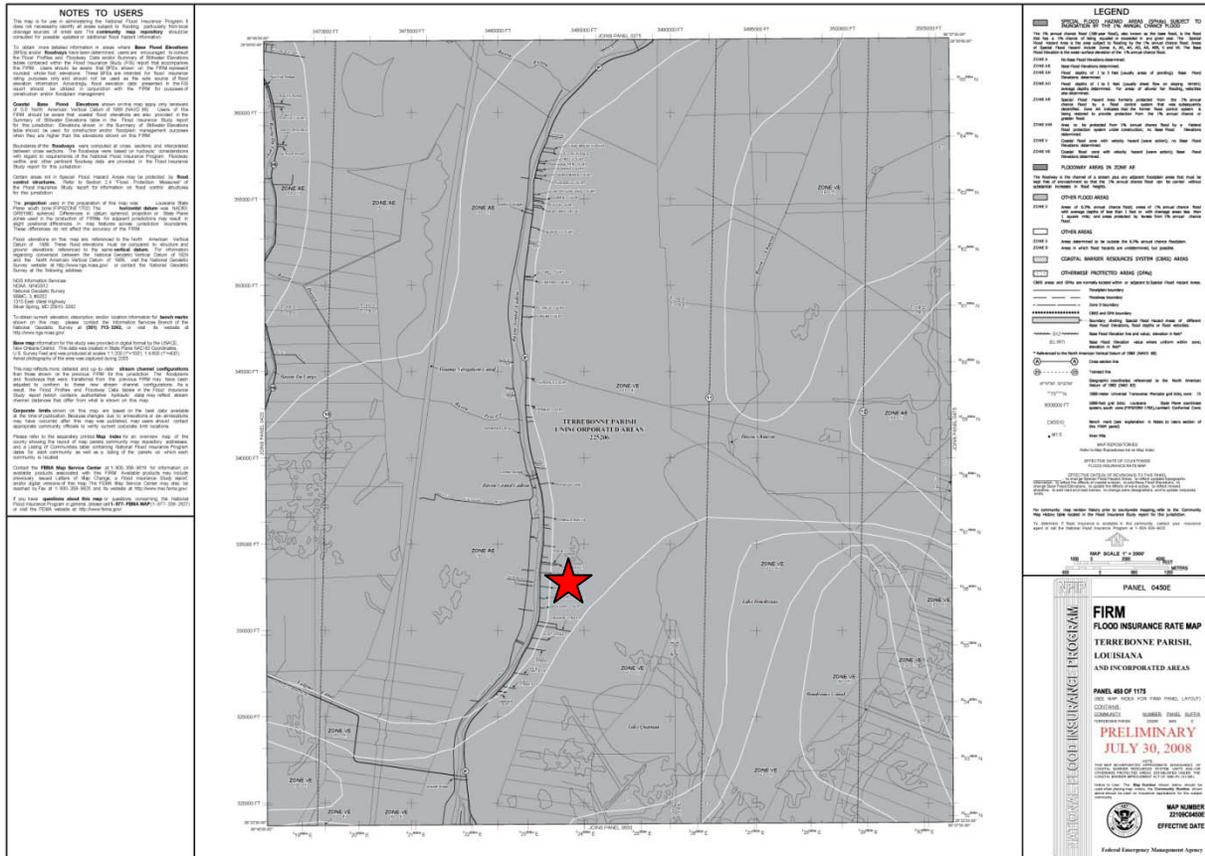


Figure 14 – Original Location, Digital Flood Insurance Rate Map Panel 22109C0450E (FEMA, July 30, 2008)

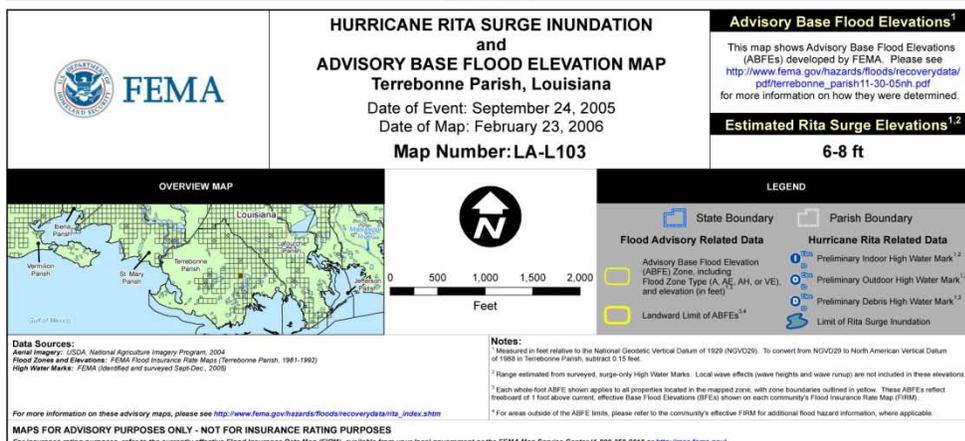
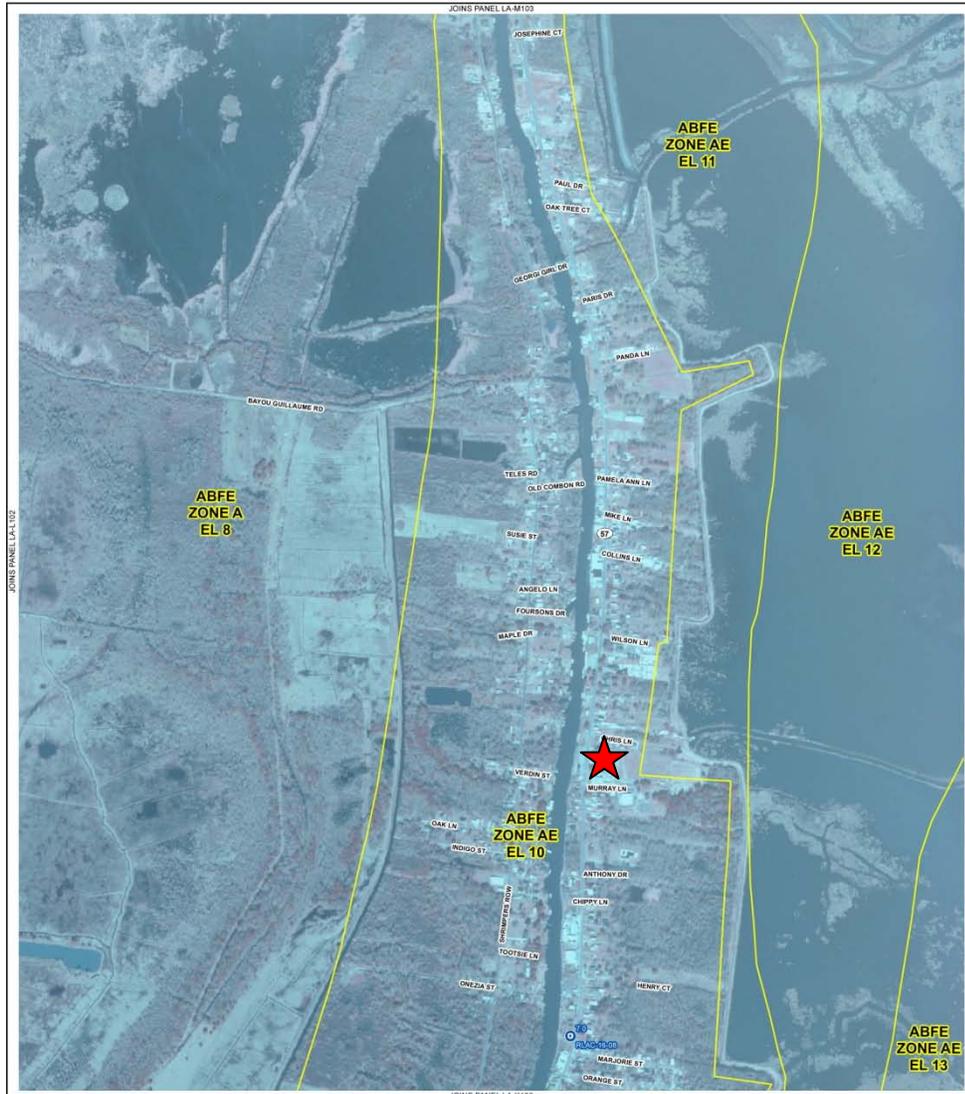


Figure 15 – Original Location, Advisory Base Flood Elevation Map LA-L103 (FEMA, February 23, 2006)

3.3.2 Existing Conditions

The original location of Grand Caillou Middle School and Elementary School Building C is within an “AE” Zone, EL 13, per Preliminary Digital Flood Insurance Rate Map (DFIRM) Panel #22109C0450 E, dated, 06/30/08, and within an “AE” Zone, EL 10, per Advisory Base Flood Elevation (ABFE) Map L103, dated 02/23/06 (figures 14 & 15). The proposed project site is located within an “AE” Zone, EL 10, per Preliminary Digital Flood Insurance Rate Map (DFIRM) Panel #22109C0275 E, dated, 06/30/08, and within an “AE” Zone, EL 7, per ABFE Map P104, dated 02/23/06 (figures 12 & 13). Both sites are within the 100 year floodplain, a Special Flood Hazard Area. However, the BFE at the proposed location is three feet lower and the proposed location is less vulnerable to tropical cyclones due to its inland location.

3.3.3 Environmental Impacts

Alternative 1 – No Action: The no action alternative would not result in impacts to the 100-year floodplain.

Alternative 2 – Reconstruction in Original Location with Mitigation: Reconstruction to pre-disaster condition with mitigation at its present location is a practicable alternative; it would restore the damaged facility back to its pre-disaster function and capacity. Reconstructing the facility at its current location would require mitigation against a Base Flood Elevation of 13 ft. NAVD. Rebuilding in the original location with elevation is practicable; however the applicant has proposed relocating Elementary School Building C. Reconstruction to pre-disaster condition at its present location would continue to expose the facility to the flood hazard with the risk possibly lessened with mitigation measures. The natural floodplain would continue to be impacted by the development. The facility would impede ground water recharge and affect natural moderation of floods.

Alternative 3 – Reconstruction at an Alternative Location - Proposed Action: The proposed Change of Location/Reconstruction of the new Grand Caillou Elementary School Building C is located within the 100-year (1% annual chance) floodplain. Relocating the facility to the proposed site will require mitigation against a Base Flood Elevation of 10 ft. NAVD per preliminary DFIRM. The relocation to another floodplain is considered most practicable for the following reasons: (a) The new site requires mitigation against a lower Base Flood Elevation (BFE) than the original site. (b) Per the preliminary DFIRM, there is no practicable location outside of the 100-yr floodplain that can serve the intended Houma/Dulac communities.

The proposed change of location/reconstruction of the new Grand Caillou Elementary School Building C will have risk associated with its location in a 100 year floodplain. This new location is however located in an area with a lower Base Flood Elevation than the pre-existing site. The risk will need to be lessened with mitigation measures. The natural floodplain on the project site will be impacted. The new development will impede ground water recharge and affect natural moderation of floods. These impacts are expected to be mitigated through the implementation of a storm water pollution plan and proper drainage. The impacts to the natural floodplain are expected to be minor given the location’s surrounding urban environment.

New construction must be compliant with 44 CFR 9 minimization standard and current codes and standards. The Terrebonne Parish School Board is required to coordinate with the local floodplain administrator regarding floodplain permit(s) prior to the start of any activities. The applicant is responsible for obtaining all required permits, including if needed, a Clean Water Act Section 401 permit and a Storm Water Pollution Plan from the Department of Environmental Quality.

3.4 Biological Resources

3.4.1 Regulatory

The Endangered Species Act (ESA) of 1973 prohibits the taking of listed, threatened, and endangered species unless specifically authorized by permit from the United States Fish and Wildlife Service (USFWS) or the National Marine Fisheries Service (NMFS). “Take” is defined in ESA Section 3 as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in any such conduct." Harm is further defined by the ESA regulations to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns such as breeding, feeding, or sheltering.

The Migratory Bird Treaty Act of 1918 implements various treaties and conventions between the U.S. and Canada, Japan, Mexico and the former Soviet Union for the protection of migratory birds. Under the Act, taking, killing or possessing migratory birds is unlawful.

3.4.2 Existing Conditions

Ten (10) federally listed endangered or threatened species and one candidate species are found in Terrebonne Parish. The original site is within a previously disturbed urban area. The proposed site is an agricultural field near an urban area. An isolated forested wetland area is located on the northern portion of the site, Bayou Grand Caillou forms the eastern boundary, a drainage ditch is located near the southern boundary, and the site is bounded to the west by highway 57. Reconnaissance of the site confirmed the previously-disturbed site conditions and no listed species or critical habitats were identified present. The project is located within the Mississippi Flyway (USFWS, 2012.)

3.4.3 Environmental Impacts

Alternative 1 – No Action: The no action alternative would not impact or modify endangered, threatened, as well as proposed listed species, migratory birds, or federally listed critical habitat.

Alternative 2 – Reconstruction in Original Location with Elevation: Reconstruction of Building C in substantially its original location would not impact or modify endangered, threatened, as well as proposed listed species, migratory birds, or federally listed critical habitat.

Alternative 3 – Reconstruction at an Alternative Location - Proposed Action: This project has been reviewed by the USFWS for effects to federal trust resources under their jurisdiction and currently protected by the Endangered Species Act of 1973. Reconstruction of Grand Caillou

Middle School and Elementary School Building C in the proposed location would not impact or modify endangered, threatened, as well as proposed listed species, migratory birds, or federally listed critical habitat per USFWS Effects to Federal Trust Resources letter dated April 10, 2012 (*Appendix A*).

Common Name	Scientific Name	Federal Status†	Critical Habitat	Habitat Requirements	Impact‡ / Rationale
Birds					
Bald Eagle	<i>Haliaeetus leucocephalus</i>	Threatened	No	Habitat includes estuaries, large lakes, reservoirs, rivers, and some seacoasts. In winter, the birds congregate near open water in tall trees for spotting prey and night roosts for sheltering.	None / Suitable habitat does not occur in or near the project area.
Piping Plover	<i>Charadrius melodus</i>	Threatened	Yes	Shore bird that breeds in the Great Lakes and northern plains regions and overwinters on the coastlines of the Gulf of Mexico. Preferred habitat is coastal sand and algal matt areas.	None / Suitable overwintering habitat for this species is not found in or near the proposed project area.
Brown Pelican		Endangered	No	Habitat includes coastal estuaries, islands, and shorelines. Brown pelicans nest in large colonies near the seashore.	None / Suitable habitat does not occur in or near the project area.
Fishes					
Gulf Sturgeon	<i>Acipenser oxyrinchus desotoi</i>	Threatened	No	Anadromous species that spends most of its life in freshwater habitats and spawns in estuarine bays. Found in a variety of substrate areas based on age class of species.	None / Suitable habitat does not occur in or near the project area.
Reptiles					
Green Sea Turtle	<i>Chelonia mydas</i>	Threatened	No	Shallow waters (except when migrating) inside reefs, bays, and inlets. Attracted to lagoons and shoals with an abundance of marine grass and algae.	None / Suitable habitat does not occur in or near the project area.
Hawksbill Sea Turtle	<i>Eretmochelys imbricata</i>	Endangered	No	Nesting habitat includes low and high energy beaches of tropical locations. Non-nesting habitat preferences include mangroves and areas of high energy coastline with rock	None / Suitable habitat does not occur in or near the proposed project area.

				outcrops, shoals and jetties.	
Kemp's Ridley Sea Turtle	<i>Lepidochelys kempii</i>	Endangered	No	Nesting habitat includes sandy beaches typically between Mexico and Texas. Non-nesting habitat is primarily oceanic.	None / Suitable habitat does not occur in or near the proposed project area.
Leatherback Sea Turtle	<i>Dermochelys coriacea</i>	Endangered	No	Nesting habitat includes high energy warm water, beaches. Non-nesting habitat includes marine environments with a preference for pelagic areas.	None / Suitable habitat does not occur in or near the proposed project area.
Loggerhead Sea Turtle	<i>Caretta caretta</i>	Threatened	No	Nesting habitat includes high energy warm water, beaches. Non-nesting includes: bays, sounds, and estuaries along the Atlantic and Gulf coasts and nearshore and oceanic habitats.	None / Suitable habitat does not occur in or near the proposed project area.
Mammals					
West Indian Manatee	<i>Trichechus manatus</i>	Endangered	No	Found in marine, estuarine, and freshwater environments with a strong preference for warm and well vegetated waters.	None / Suitable habitat does not occur in or near the project area.
† Status designations are relevant to Louisiana only; federal listing status may be different elsewhere.					

Table data acquired from: USFWS Plaquemines Parish TES species data accessed 7/17/2012 from USFWS IPaC Web Portal. (<http://ecos.fws.gov/ipac/>) (NOAA Office of Protected Fisheries – Loggerhead Turtle Website, Accessed 7/17/2012 (<http://www.nmfs.noaa.gov/pr/species/turtles/loggerhead.htm#habitat>))

Table 2. Threatened or Endangered Species Known to Occur in Terrebonne Parish.

3.5 Cultural Resources

Regulatory 3.5.1

The consideration of effects to historic properties listed in or eligible for the National Register of Historic Places (NRHP) is mandated under Section 106 of the National Historic Preservation Act (NHPA) as implemented by 36 CFR Part 800. Requirements include the identification of significant or historic properties that may be affected by the proposed action or alternatives within the project's area of potential effects. Historic properties are defined as archaeological sites, standing structures or other historic resources listed in or determined eligible for listing in the NRHP. Federal agencies must take into account their effects on historic properties and allow the Advisory Council on Historic Properties opportunity to comment.

FEMA has reviewed this project in accordance with the Statewide Programmatic Agreement dated August 17, 2009 and amended on July 22, 2011 between the Louisiana State Historic Preservation Officer (SHPO), the Louisiana Governor's Office of Homeland Security and

Emergency Preparedness (GOHSEP), the Alabama-Coushatta Tribe of Texas, the Caddo Nation, the Chitimacha Tribe of Louisiana, the Choctaw Nation of Oklahoma, the Coushatta Tribe of Louisiana, the Jena Band of Choctaw Indians, the Mississippi Band of Choctaw Indians, the Quapaw Tribe of Oklahoma, the Seminole Nation of Oklahoma, the Seminole Tribe of Florida, the Tunica-Biloxi Tribe of Louisiana, and the Advisory Council on Historic Preservation (2009 Statewide PA as amended). The 2009 Statewide PA as amended was created to streamline the Section 106 review process.

Existing Conditions 3.5.2

The archaeological Area of Potential Effects (APE) is located along the eastern side of Grand Caillou Road (Hwy 57) and covers a 7.3 hectare (18 ac) area. The APE includes a portion of an abandoned sugar cane field bisected by an occasional ditch. The Standing Structures APE includes five (5) industrial/commercial properties within the view shed of the proposed undertaking. On March 20, 2012 FEMA Historic Preservation Staff consulted the National Register of Historic Places (NRHP) database and the Louisiana Cultural Resources Map and determined that 2161 Grand Caillou Road, Houma, Terrebonne Parish, LA is not located within a listed or eligible National Register Historic District nor was is located within view-shed of an individually listed National Register Property. All surrounding view-shed properties are less than fifty (50) years of age. FEMA Historic Preservation Specialists also consulted data provided by SHPO and determined that there are no previously identified archaeological sites within 0.5 miles of the APE. The current undertaking is located predominantly on Cancienne silt with a band of Schriever Clay running through the center of the project area. Cancienne silt consists of somewhat poorly drained soils formed on natural levees whereas Schriever clay forms at a lower elevation on natural levees. The earliest map located that includes the current project area was the 1932 Houma SW 7.5' USGS topographic map that indicates no development within the project area although structures are shown to the northeast across Bayou Grand Caillou. Similarly, according to the 1963 Houma 7.5' USGS topographic map no development occurs within the project area although many structures are shown on the opposite side of Highway 57. Woodlawn Cemetery is shown east of the project area opposite Bayou Grand Caillou. Despite the lack of historic development, the location of the project area on a natural levee along Bayou Grand Caillou indicates a potential for prehistoric archaeological sites.

Environmental Impacts 3.5.3

Alternative 1: No Action: The no action alternative does not include any FEMA undertaking; therefore FEMA has no further responsibilities under Section 106 of the National Historic Preservation Act.

Alternative 2 – Reconstruction in Original Location with Elevation: The project area is located on Cancienne silt loam and Cancienne silty clay loam on the natural levee adjacent to Bayou Grand Caillou. The area has a high probability for the presence of archaeological sites. During a survey conducted by boat along Bayou Grand Caillou in 1983 by the US Army Corps of Engineers, New Orleans District, two sites, 16TR154 and 16TR155, were reported between the school campus and the Bayou. The sites represent ship wrecks associated with a 1929 boat and a 1930 boat that were removed by Terrebonne Parish in 1984. No survey has been conducted

within the project area. Although no historic standing structures are noted on the Louisiana Cultural Resources map as of June 11, 2012, a search of available topographic maps indicates that the school has occupied the property since approximately 1935 and that several residential structures greater than 50 years of age exist within its view shed. In order to fulfill obligations under Section 106 and in accordance with the 2009 Statewide PA as amended, a cultural resources investigation would be required prior to demolition and reconstruction in order to identify and evaluate potential historic properties if present within the APE that could be affected by the proposed construction activities. In addition, a Determination of Eligibility for the existing school facility will be required.

Alternative 3 – Reconstruction at an Alternate Location - Proposed Action: In order to fulfill obligations under Section 106 and in accordance with the 2009 Statewide PA as amended, a cultural resources investigation was conducted on the proposed Grand Caillou Elementary School campus in order to identify and evaluate potential historic properties if present within the APE that could be affected by the proposed construction activities. This field investigation followed an alternate archaeological survey methodology as allowed in the archaeological guidelines disseminated by the Louisiana Department of Culture, Recreation and Tourism, Office of Cultural Development, Division of Archaeology, in Baton Rouge, Louisiana. The alternate methodology was developed in consultation with SHPO verbally and in an email exchange dated March 26, 2012. The archaeological reconnaissance survey was conducted by FEMA archaeologists on March 27-28, 2012. Field testing consisted of twenty-five (25) shovel tests. No cultural features, intact soils, intact cultural deposits, or discrete cultural components were identified during the field investigations. In accordance with Stipulation VIII.E of the 2009 Statewide PA as amended, FEMA determined that there are No Historic Properties Affected as a result of the proposed undertaking and provided the SHPO and Tribes (Choctaw Nation of Oklahoma, Coushatta Tribe of Louisiana, Jena Band of Choctaw Indians, Mississippi Band of Choctaw Indians, and the Tunica-Biloxi Tribe of Texas) the opportunity to review and comment. SHPO concurrence with FEMA’s determination was received in a letter dated May 14, 2012. The Tribes did not object within the regulatory timeframes.

3.6 Environmental Justice

3.6.1 Regulatory

Executive Order 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 programs on minority and low-income populations.

3.6.2 Existing Conditions

The populations of Houma and Dulac Louisiana are diverse in ethnic composition (Tables 1 & 3 respectively).

Information obtained from the U.S. Census Bureau Fact Finder website for Houma, Louisiana indicates population percentages in 2010 were: 67.5 percent White, 25.3 percent Black, 4.8 percent Hispanic, 1.2 percent Asian, and 4.9 percent Native American. The 2010 median household income for the Houma, LA is \$44,223 (U.S. Census Bureau, 2010).

Information obtained from the U.S. Census Bureau Fact Finder website for Dulac, Louisiana indicates population percentages in 2010 were: 53.5 percent White, 3.6 percent Black, 4.2 percent Hispanic, 1 percent Asian, and 46.8 percent Native American. The 2010 median household income for the Dulac, LA is \$21,534 (U.S. Census Bureau, 2010).

Information obtained from the National Center for Education Statistics website for Grand Caillou Elementary School indicates student percentages in the 2010-2011 school year were 40.5 percent Native American, 36.3 percent White, 18.6 percent Black, 3.4 percent Hispanic, and 1 percent Native American (National Center for Education Statistics, 2011).

Geography: Dulac CDP, Louisiana

Subject	Number	Percent
SEX AND AGE		
Total population	1,463	100.0
Male population	745	50.9
Female population	718	49.1
RACE		
Total population	1,463	100.0
Race alone or in combination with one or more other races: [4]		
White	782	53.5
Black or African American	53	3.6
American Indian and Alaska Native	684	46.8
Asian	15	1.0
Native Hawaiian and Other Pacific Islander	0	0.0
Some Other Race	24	1.6
HISPANIC OR LATINO		
Total population	1,463	100.0
HISPANIC OR LATINO AND RACE		
Total population	1,463	100.0
RELATIONSHIP		
Total population	1,463	100.0
HOUSEHOLDS BY TYPE		
Total households	490	100.0
HOUSING OCCUPANCY		
Total housing units	646	100.0
HOUSING TENURE		
Occupied housing units	490	100.0

Table 3 - U.S. Census Population Demographics, 2010 Estimates

3.6.3 Environmental Impacts

Alternative 1 – No Action: The no action alternative would forego FEMA assistance. This alternative would leave the Terrebonne Parish community without an educational facility to serve the demand of the parish. This would likely result in an adverse impact to low income and minority populations of the community.

Alternative 2 – Reconstruction in Original Location with Elevation: Reconstruction in its original location with appropriate elevation may limit the original flood risk; however this would not address the demands of population shifts within the parish. Reconstruction of Grand Caillou

Middle School and Elementary School Building C in their original location would have no disproportionately high and adverse impact on low income or minority population within Dulac, as the previous school facility would be re-established on the original site (Table 3). However, this reconstruction would not address the diminishing demand in Dulac, and the increasing demand in Houma.

Alternative 3 – Reconstruction at an Alternate Location - Proposed Action: Reconstruction of Grand Caillou Middle School and the federally funded Elementary School Building C at the proposed site is not likely to result in an adverse impact to low income or minority populations of the Terrebonne Parish community. The proposed action includes the construction of needed educational services for the community. The construction of this facility will benefit all school aged children within the community and support the objectives of the Terrebonne Parish School District. As a result of storm damage from Hurricane Ike in September 2008, the Grand Caillou Middle School has been operating at a temporary location (3933 Grand Caillou Rd., Houma, LA), six (6) miles north of the original school site (6741 Grand Caillou Rd., Dulac, LA). The school district is now proposing to construct a permanent school facility at 2161 Grand Caillou Rd., Houma LA, which is approximately ten (10) miles north of the original site and four (4) miles north of the temporary site. The Terrebonne Parish School District has publicly discussed the construction of the new school site. Open forum school board meetings were held on January 20, 2009, March 3, 2009, May 25, 2010, and February 14, 2012 (Website, accessed August 7, 2012: <http://www.tpsd.org/home/index.php.home>). No substantive comments objecting the proposed action have been recorded in these meeting minutes. (Website, accessed August 7, 2012: <http://www.tpsd.org/home/index.php.home>). The public is invited to comment on the findings of this Draft Environmental Assessment (DEA). A public notice announcing the availability of this DEA will be published for five (5) consecutive days in the display ad section of the Houma Courier. Public comments will be accepted for a period of fifteen (15) days. Any substantive public comments received will be addressed before this EA will be finalized.

3.7 Air Quality

3.7.1 Regulatory

The Clean Air Act (CAA) of 1963, as amended, provides for federal protection of air quality by regulating air pollutant sources and setting standards for air pollutants. Under the CAA, States adopt ambient air quality standards 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).

3.7.2 Existing Conditions

According to EPA, Terrebonne Parish, Louisiana is classified as in attainment, meaning that criteria air pollutants do not exceed the NAAQS (EPA 2009).

3.7.3 Environmental Impacts

Alternative 1 – No Action: Implementation of the no action alternative would not adversely impact ambient air quality for the area.

Alternative 2 – Reconstruction in Original Location with Elevation: Minor impacts would be anticipated from movement of heavy equipment during construction activities. To further minimize temporary air quality impacts, the Terrebonne Parish School Board and its contractors shall implement BMPs to limit emissions, fugitive dust and exhaust during project activities at Grand Caillou Middle School. BMPs would include maintaining and covering spoil piles, covering the loads of haul vehicles, and keeping construction equipment properly tuned. Long-term emissions associated with the new facility, such as those generated by small engines used for lawn maintenance and offsite generation of electrical power, are expected to be minor and comparable to emissions generated by the previously existing facilities.

Alternative 3 - Reconstruction at an Alternate Location - Preferred Alternative: Minor impacts would be anticipated from movement of heavy equipment during construction activities. To further minimize temporary air quality impacts, the Terrebonne Parish School Board and its contractors shall implement BMPs to limit emissions, fugitive dust and exhaust during project activities at Grand Caillou Middle School. BMPs would include maintaining and covering spoil piles, covering the loads of haul vehicles, and keeping construction equipment properly tuned. Long-term emissions associated with the new facility, such as those generated by small engines used for lawn maintenance and offsite generation of electrical power, are expected to be minor and comparable to emissions generated by the previously existing facilities.

3.8 Noise

3.8.1 Regulatory

Commonly defined as unwanted and/or unwelcome sound, noise is federally regulated by the Noise Control Act of 1972. Although this Act tasks the USEPA with preparing guidelines for acceptable ambient noise levels, it only charges those federal agencies that operate noise-producing facilities or equipment to implement noise standards. Therefore, by the nature of its mission, FEMA does not have statutes defining noise; however, Terrebonne Parish, Louisiana Code of Ordinances (Section 14-200) has made “excessive noises” pertaining to residences, commercial structures, and domestic animals unlawful. Excessive noises pertaining to any commercial structures, means sound produced by radio, television, loudspeakers, musical equipment or devices, within the interior or on the exterior of commercial buildings, which is audible at a distance of seven and one-half (7.5) meters (twenty-five (25) feet) or exceeds seventy (70) decibels in volume. Excessive noises pertaining to motor vehicles, means sound produced by radio, television, loudspeakers, musical equipment or devices, within the interior or

on the exterior of motor vehicles, which is audible at a distance of seven and one-half meters (7.5) (twenty-five (25) feet) or exceeds seventy (70) decibels in volume.

3.8.2 Existing Conditions

Currently the proposed project site is a farmland area. Increases in noise levels at the project site are due to the operation of farm equipment. However, the site is bordered by a commercial area that produces elevated noise levels from vehicular activity. The original site is now condemned. No increased noise levels are present near the original site.

3.8.3 Environmental Impacts

Alternative 1 – No Action: Implementation of the no action alternative would not adversely impact noise levels in the area.

Alternative 2 – Reconstruction in Original Location: The construction of the Grand Caillou Middle School and Elementary School Building C at the original location would result in a temporary increase in noise levels at and around the proposed project site because of the operation of construction equipment and increased vehicular activity. Noise-sensitive receptors are subject to stress or significant interference from noise. Examples include residential dwellings, mobile homes, hotels, motels, hospitals, nursing homes, educational facilities, libraries, and places of worship.

After the construction of the new facility, there would be increased noise at and around the facility due to increased occupancy of the developed site. Noises from vehicular traffic to the facility and day-to-day operation and maintenance of the facility are expected. These long-term effects would return noise to pre Gustav/Ike levels, therefore having minimal impact on people in the vicinity of the project.

Alternative 3 – Reconstruction at an Alternate Location - Preferred Alternative: The construction of the Grand Caillou Middle School and Elementary School Building C at the proposed location would result in a temporary increase in noise levels at and around the proposed project site because of the operation of construction equipment and increased vehicular activity. Noise-sensitive receptors are subject to stress or significant interference from noise. Examples include residential dwellings, mobile homes, hotels, motels, hospitals, nursing homes, educational facilities, libraries and places of worship. A reconnaissance on May 15, 2012, indicated no noise-sensitive receptors in the vicinity of the proposed project site. The increased noise levels at other times would be localized and short-term.

After the construction of the new facility, there would be increased noise at and around the facility due to increased occupancy of the developed site. Noises from vehicular traffic to the facility and day-to-day operation and maintenance of the facility are expected. These long-term effects would have minimal to no significant adverse impact on people in the vicinity of the proposed project.