**Draft Environmental Assessment** 

# St. John the Baptist School Board Flood Protection Project

FEMA-4080-DR-LA, PWs 566 and 606 St. John the Baptist Parish, Louisiana *August 2014* 



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# **Acronyms and Abbreviations**

ACHP Advisory Council on Historic Preservation

APE Area of Potential Effect

BFE base flood elevation

BMP Best Management Practice

CAA Clean Air Act

CBRA Coastal Barrier Resources Act
CBRS Coastal Barrier Resources System

CDP Census Designated Place

CEQ Council on Environmental Quality

CERCLA Comprehensive Environmental Response, Compensation and Liability Act

CFR Code of Federal Regulations

CH<sub>4</sub> methane

CO carbon monoxide CWA Clean Water Act

CZMA Coastal Zone Management Act

dB decibel

DNL day-night average sound level

EA Environmental Assessment

EIS Environmental Impact Statement

EO Executive Order

EPA Environmental Protection Agency

ESA Endangered Species Act
ESJHS East St. John High School

FEMA Federal Emergency Management Agency

FIRM Flood Insurance Rate Map

FONSI Finding of No Significant Impact FPPA Farmland Protection Policy Act

H&H hydrology and hydraulicsHMA Housing Market Area

HUD U.S. Department of Housing and Urban Development

Hwy 61 U.S. Highway 61

LCRP Louisiana Coastal Resources Program

LDEQ Louisiana Department of Environmental Quality LDNR Louisiana Department of Natural Resources

LDOT Louisiana Department of Transportation and Development



LDWF Louisiana Department of Wildlife and Fisheries

LGS Louisiana Geological Society

LPDES Louisiana Pollutant Discharge Elimination System

LPES Lake Pontchartrain Elementary School

NAAQS National Ambient Air Quality Standards
NAVD 88 North American Vertical Datum of 1988
NEPA National Environmental Policy Act
NHPA National Historic Preservation Act

NISTAC Nationwide Infrastructure Support Technical Assistance Consultants

NO<sub>2</sub> nitrogen dioxide

NOAA National Oceanic and Atmospheric Administration

NRCS Natural Resources Conservation Service NRHP National Register of Historic Places

NWI National Wetlands Inventory

 $O_3$  ozone

OCM Office of Coastal Management

OSHA Occupational Safety and Health Administration

PAAP Public Assistance Alternative Procedures Pilot Program

Pb lead

PM<sub>2.5</sub> particulate matter less than 2.5 microns PM<sub>10</sub> particulate matter less than 10 microns

PW Project Worksheet

RCRA Resource Conservation and Recovery Act

SHPO State Historic Preservation Office SJBSB St. John the Baptist School Board SRIA Sandy Recovery Improvement Act

SO<sub>2</sub> sulfur dioxide

SWPPP Stormwater Pollution Prevention Plan

T&E threatened and endangered

USACE U.S. Army Corps of Engineers

U.S.C. U.S. Code

USCB U.S. Census Bureau

USDA U.S. Department of Agriculture USFWS U.S. Fish and Wildlife Service

USGS U.S. Geological Survey



# SECTION ONE INTRODUCTION

On August 26, 2012, Hurricane Isaac struck the Louisiana Gulf Coast causing extensive damage. Subsequently, a Presidential Disaster Declaration, FEMA-4080-DR-LA, was signed for Hurricane Isaac.

East St. John High School (ESJHS) in Reserve, LA, and Lake Pontchartrain Elementary School (LPES) in nearby LaPlace, LA, had significant flooding as a result of high winds, overland flooding, and tidal surge from the hurricane during the incident period of August 26, 2012, to September 10, 2012. ESJHS and LPES were inundated with floodwaters of up to 8 inches and 16 inches, respectively.

St. John the Baptist School Board (SJBSB) has submitted a project application to the Federal Emergency Management Agency (FEMA) to participate in the Public Assistance Alternate Procedures Pilot Program (PAAP) authorized under the Sandy Recovery Improvement Act of 2013 (SRIA). Under the PAAP, the SJBSB proposes to consolidate sub-grant funding, including Public Assistance and Section 406 Hazard Mitigation funding, from ESJHS and LPES. The funds would be applied for the following two projects:

- **1. ESJHS Flood Protection Project**. The project would involve restoring five damaged structures to their predisaster condition using hazard mitigation measures and constructing a floodwall around the perimeter of the campus and a new drainage system to mitigate future flooding on the campus. See Section 1.1 for the location of the project site and Section 3 for a more detailed description of the project.
- **2. LPES Reconstruction Project.** The Project would demolish and reconstruct a new school on the existing LPES campus. LPES is located at 3328 Highway 51 in LaPlace, Louisiana (Latitude: 30.081388, Longitude: -90.467247). The LPES campus resides on approximately 19 acres and consists of one school building and athletic fields. LPES is a 26-year-old facility with approximately 133,000 square feet and no longer conforms to the current needs of the school district. According to SJBSB, the school has been plagued by maintenance issues, is too large for the existing and projected student populations, and is inadequate for contemporary student educational requirements. SJBSB proposes to construct a new 100,000-square-foot structure within the footprint of the existing facility. The proposed school would be elevated above the 100-year floodplain to meet the base flood elevation (BFE) of 8 feet North American Vertical Datum of 1988 (NAVD 88). In addition, SJBSB proposes to use as much of the existing pavement as possible to maintain the current traffic flow and parking.

In accordance with 44 CFR Part 10, FEMA has prepared this Environmental Assessment (EA) to meet the requirements of Section 102 of the National Environmental Policy Act of 1969, as amended (NEPA) (42 U.S.C. § 4332); the President's Council on Environmental Quality (CEQ) regulations to implement NEPA (40 CFR Parts 1500–1508); and FEMA's regulations



implementing NEPA (44 CFR Part 10). FEMA is required to consider potential environmental impacts before funding or approving actions and projects.

Because the SJBSB has proposed consolidating the subgrant funding for the two proposed projects (ESJHS Flood Protection Project and LPES Reconstruction Project), the environmental impacts of both projects must be considered. FEMA has conducted an environmental review for the proposed LPES Reconstruction Project and determined that the project is Categorically Excluded in accordance with 44 CFR § 10.8(d)(2)(xv). Neither an EA nor an Environmental Impact Statement (EIS) is therefore required for the LPES Reconstruction Project, and the potential environmental impacts from this project are not evaluated in this EA. However, the LPES Reconstruction Project is considered as part of the cumulative impacts discussion in Section 5.

The purpose of this Draft EA is to analyze the potential environmental impacts of the proposed ESJHS Flood Protection Project. FEMA will use the findings in the Draft EA to determine whether preparation of an EIS or a Finding of No Significant Impact (FONSI) is required.

# 1.1 PROJECT LOCATION

ESJHS is located at 1 Wildcat Drive, Reserve, St. John the Baptist Parish, LA (Latitude: 30.078377, Longitude: -90.531036). The ESJHS campus resides on approximately 27.5-acres and consists of six (6) school buildings and athletic fields. The southern edge of the campus runs parallel with U.S. Highway 61 (Hwy 61). See Appendix A, Figures 1 and 2. LPES is located at 3328 Highway 51 in LaPlace, Louisiana (Latitude 30.081388, Longitude -90.467247). LPES resides on approximately 19-acres and consists of one school building and athletic fields.

The cities of LaPlace and Reserve are identified census designated places (CDPs) located on the East Bank of the Mississippi River approximately 25-miles west of New Orleans



# SECTION TWO PURPOSE AND NEED

The objective of FEMA's Public Assistance Grant Program is to provide assistance to State, Tribal, and local governments and certain types of private, nonprofit organizations so communities can quickly respond to and recover from major disasters or emergencies declared by the President. Through the program, FEMA provides supplemental Federal disaster grant assistance for debris removal, emergency protective measures, and the repair, replacement, or restoration of disaster-damaged publicly owned facilities and the facilities of certain private, nonprofit organizations. The Public Assistance Program also encourages protection of these damaged facilities from future events by providing assistance for hazard mitigation measures during the recovery process. Storm damage from Hurricane Isaac rendered ESJHS unusable with the exception of the Ninth Grade Academy Building. SJBSB temporarily relocated the 10th through 12th grade faculty and approximately 993 students to modular classrooms (trailers) that were placed on the campus of the Leon Godchaux School at 1880 Highway 44, Reserve, LA. The trailers were neither expected nor intended to withstand many months of regular use and are not considered a long-term solution for the replacement of the school buildings.

As mentioned in Section 1.3, the ESJHS campus is approximately 7 miles southwest of Lake Pontchartrain and 2 miles north of the Mississippi River (see Appendix A, Figure 1). Part of the ESJHS campus is within a 100-year floodplain (Zone AE, FEMA Flood Insurance Rate Map [FIRM], Panel 22095C0210D) at a base flood elevation (BFE) of 4 feet NAVD 88 (see Appendix A, Figure 3) and remains susceptible to flooding from future storm events.

The purpose of the proposed ESJHS project is to provide SJBSB with permanent school facilities that are less susceptible to damage and loss of operation from future storm events and to restore the functions at ESJHS to predisaster conditions.



#### SECTION THREE ALTERNATIVES

This section describes the two alternatives that were considered: Alternative 1 (No Action Alternative) and Alternative 2 (Proposed Action Alternative). Alternative 2 is the ESJHS Flood Protection Project.

# 3.1 ALTERNATIVE 1: NO ACTION ALTERNATIVE

Under the No Action Alternative, ESJHS would be restored to its predisaster condition, but the existing stormwater management system would not be modified. ESJHS would continue to be susceptible to flooding from future storm events, resulting in the potential for future damage to the high school campus, displacement of ESJHS students, and a negative effect on people who are directly and indirectly involved with ESJHS. ESJHS would continue to function normally during typical rainfall conditions, but in a flood event similar to Hurricane Isaac, SJBSB may again need to temporarily relocate students and faculty to others school and or utilize temporary facilities in order to maintain educational services.

#### 3.2 ALTERNATIVE 2: PROPOSED ACTION ALTERNATIVE

Under the Proposed Action Alternative, SJBSB proposes to do the following:

- Construct a floodwall around the perimeter of the campus with an earthen embankment along the floodwall
- Improvements to the campus' existing stormwater conveyance system
- Construct a drainage pump station and stormwater retention area
- Restore five damaged structures to their predisaster condition

A new flood protection system and drainage pump station would provide an independent, forced-drainage system to quickly move water away from the ESJHS campus. The proposed flood protection system would mitigate flooding associated with the ESJHS property and reduce the likelihood that ESJHS students would have to be relocated to a school campus farther away from their homes.

The proposed project is intended to be a low impact development and anticipated to be low maintenance. It is designed to reduce the potential risks associated with the 10-year flood event (10-percent-annual-chance flood).

# 3.2.1 Floodwall and Earthen Embankment

The floodwall around the perimeter of the campus would comprise a 2,510-linear-foot steel sheet pile barrier, an earthen embankment along the floodwall, and a drainage pump station (see Appendix A, Figure 4). The steel sheet pile barrier would extend 25 feet below grade and 5 feet above grade to the design flood elevation of 8.0 feet.



The floodwall would be 3 feet high along Hwy 61 and transition to 5 feet high at the termination points with the steel sheet pile walls. The width of the earthen embankment would be 22 feet with a total footprint of 60 feet for the construction of the floodwall and the regrading of the site to drain water away from the floodwall. The 60-foot construction corridor would be confined to the high school property. Excavation for the construction of the floodwall would be required for only the top 6 inches of soil to remove vegetative material from within the floodwall section (see Appendix A, Figure 4).

The steel sheet pile wall would consist of a PZ-22 (or equivalent structural material) steel sheet pile driven in place up to the level of flood protection. The height of the wall would vary from 5 feet to 6 feet. To guide water away from the wall, a 6-foot-wide corridor would be graded on each side of the wall. In areas where the ground is below elevation (3 feet or less), a 1-foot-high by 6-foot-wide floodwall would be constructed to keep standing water away from the sheet pile wall during regular high water events. The finished sheet pile wall would be approximately 12 feet wide and would require a 40-foot-wide corridor for construction. The construction corridor would be confined to school property and would not affect non-maintained ground beyond the existing tree line. The sheet pile wall would be driven by an impact hammer or vibratory hammer.

Two existing driveways, that provide ingress and egress for the school, would be elevated to 4 feet above ground level (1 foot above the 3-foot floodwall). The driveways would be graded at 5%, at an approximate 180-foot width, to accommodate school bus traffic. The finished driveways would be paved with asphalt. Asphalt is a flexible pavement that would accommodate the anticipated long-term settlement of the ramps with minimal maintenance.

# 3.2.2 Stormwater Conveyance System Improvements and Pump Station and Retention Area Construction

The existing storm water conveyance system would be enlarged and expanded to improve site drainage within the campus. Approximately 2,350 linear feet of existing drainage pipe would need to be removed and replaced with 6,300 linear feet of drainage pipe. Much of the existing drainage pipe is 18 inches in diameter or smaller and is currently sloped to drain to an existing outfall pipeline that discharges to the adjacent drainage canal. Because the proposed drainage path is significantly longer than the existing one, the drainage line sizes would need to be increased. A new trunk line consisting of 36-inch and 48-inch lines would be installed to relay all runoff to the existing outfall or to the proposed pump station. The existing outfall would be replaced with a sluice gate to improve site drainage. The sluice gate would serve as the primary outfall for the campus' stormwater discharge. The proposed pump station would only be used during significant rainfall events to alleviate the potential for campus flooding.

Trenching would be used to remove the old drainage pipe system and install the new drainage line system. Trench dimensions would vary according to pipe size and depth and would range



from 3 to 8 feet wide and 2 to 7 feet deep. Excess material from the drainage line installation would be used for onsite grading activities.

The pump station would be located near the northeastern corner of the campus. The 16,000-gallon-per-minute pump station would work in conjunction with a subsurface drainage-piping network that would be installed throughout the property, as well as a low-lying storm water retention area both designed to handle a 25-year storm event.

The pump station would comprise two 20-inch electrical centrifugal pumps, one spare centrifugal pump, and a backup 325-horsepower diesel engine generator with a capacity of 175 kilowatts. The pump station would be a supported by 100-foot-long by 14-square-inch precast concrete piles and 60-foot-long timber piles for the discharge piping. The wet well for the drainage pump station would be excavated to a depth of 15 feet, and the retaining structure would be constructed using steel sheet pile. The steel sheet piles would be installed by an impact hammer or vibratory hammer.

In order to retain water away from the high school buildings, a 0.8-acre stormwater retention area would be constructed. The location for the retention area was selected as the only space on the campus that would not result in damage if it unexpectedly held water for several days. Parking lots, streets, and green space around the buildings were ruled out as potential areas for the retention basin because severe rainfall can happen at any time, including while school is in session. The football and baseball fields were excluded because of concerns that the field surface could be damaged if it sustained ponding for long periods. The area selected for the retention basin is currently used as an auxiliary practice field primarily by the marching band and soccer club. The retention area would be graded to an elevation of 1.5 feet on all 4 sides at a slope of 1 percent from the bank to the basin centerline. The addition of the retention area to the proposed site plan adds an additional 0.5 acre-foot of water retention below the roadway and 1 acre-foot of water retention below the building floor elevations.

#### 3.2.3 Earthen Work

A total of approximately 21,500 cubic yards of earth would be imported (17,000 cubic yards) and excavated (4,500 cubic yards). Approximately 8,000 cubic yards of new lean clay would be imported for the construction of the floodwall and entrance and exit ramps. Approximately 9,000 cubic yards of sand would be brought in for new paving assemblies and regrading in the athletic areas where a clay top soil is not appropriate. Excess material from onsite activities, including trenching for drainage pipe installation and spoil piles from pump station and retention pond installation would be an additional 4,500 cubic yards. The excess material would be used for onsite grading where clay material is appropriate, including areas along the new floodwall and sheet pile wall where sand would not be a suitable fill material.



#### 3.2.4 Relocation Work

In order to accommodate the installation of the flood protection and drainage features, the following items would need to be relocated:

- Approximately 40 parking spaces from the front of the school to the rear western side of the property
- Batting cages in the rear of the property
- Some wooden bleachers and a shot put slab on the western side of the athletic fields. The batting cages would be relocated to the same area but relocated northward by approximately 30 feet. The shot put slab and bleachers would be relocated to the other side of the football field.

Security gates, located at the school entrances on Highway 61, would be removed to accommodate the new floodwall and driveway ramps. The gates would be reused to secure the access roadway to the drainage pumping station.

# 3.2.5 Hazard Mitigation of Structures and Restoration of Structures to Predisaster Condition

Building hardening activities would include replacing existing windows and storefronts with wind-rated and large missile impact-resistant windows and storefronts at the Main Building, Gym/Cafeteria Building, Vocational Tech Building, and Small Classroom Building. Repairs of the buildings would include replacing damaged dry wall, removing mold, and replacing damaged flooring and other damaged items such as desks and chairs.

# 3.2.6 Summary

In summary, the Proposed Action Alternative would mitigate flooding at ESJHS through the construction of a floodwall around the perimeter of the campus, improvements to the existing stormwater conveyance system, pump station with outlet structures,, a retention basin, fencing, elevated ingress/egress driveway ramps, and drainage swales for directing sheet flow around the floodwall protecting the structures and contents of ESJHS from future flood damage. The conceptual design is provided in Appendix A, Figure 4, and a photographic log of the project site is provided in Appendix B.



#### SECTION FOUR AFFECTED ENVIRONMENT AND POTENTIAL IMPACTS

This section describes the potential impacts of the No Action Alternative and the Proposed Action Alternative on six resource categories (physical, water, coastal, biological, cultural, and socioeconomic). Measures that would mitigate potential impacts are provided when potential impacts are identified. A summary of the impacts and mitigation is provided in Section 4.8.

# 4.1 PHYSICAL RESOURCES

# 4.1.1 Geology, Soils, and Seismicity

Southeastern Louisiana is underlain by geologically young sedimentary sequences that were deposited in or adjacent to rivers and deltas in a coastal-plain setting. The project area is within a physiographic region of Louisiana called the Mississippi Alluvial Plain. The Mississippi Alluvial Plain consists of a low floodplain and delta system that were formed by the Mississippi River. Surface soils consist primarily of Holocene deposits, including alluvium of the Mississippi River. The alluvium consists of sandy and gravelly channel deposits mantled by sandy to muddy natural levee deposits, with organic-rich, muddy back-swamp deposits in between; coastal marsh deposits are chiefly mud and organic matter (LGS 2008; USGS 1998).

A review of the USGS 7.5-minute Reserve Louisiana topographic map indicates that the project area has little relief and is 5 feet above sea level. The lowest elevation in the vicinity of the proposed project site is 5 feet above sea level, and the highest elevations in the area are 20 feet above sea level.

According to the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey (USDA/NRCS 2013), the project site contains soils classified as Cancienne silt loam, Gramercy silt clay, Schriever clay, and Schriever clay frequently flooded, all between 0 to 1 percent slopes. The Cancienne series consists of very deep, somewhat poorly drained mineral soils that are moderately, slowly permeable. These soils formed in loamy or clayey alluvium. They are on high and intermediate positions on natural levees and deltaic fans of the Mississippi River and its tributaries. These soils are not considered hydric (USDA/NRCS 2013).

The Gramercy series consists of very deep, poorly drained, very slowly permeable soils that formed in clayey over fine-silty alluvium. These soils are on alluvial flats and on the lower parts of natural levees on the alluvial plain of the Mississippi River and its distributaries. These soils are considered hydric (USDA/NRCS 2013).

The Schriever series consists of very deep, poorly drained, very slowly permeable soils that formed in clayey alluvium. These soils are on the lower parts of natural levees and in backswamp positions on the lower Mississippi River alluvial plain. These soils are considered hydric (USDA/NRCS 2013).



The Farmland Protection Policy Act of 1981, as amended (FPPA) (7 U.S.C. § 4201 et seq.) states that Federal agencies must "minimize the extent to which Federal programs contribute to the unnecessary conversion of farmland to nonagricultural uses..." The resources protected by the FPPA include prime and unique farmland. These lands are categorized by the USDA/NRCS based on underlying soil mapping units. Cancienne silt loam is designated as prime farmland; however, according to the FPPA, farmland does not include land use that is already in or committed to urban development. The project site does not contain prime and unique farmlands and is in use as urban development land.

Executive Order (EO) 12699, Seismic Safety of Federal and Federally Assisted or Regulated New Building Construction, establishes responsibilities regarding the seismic-related safety of buildings owned, leased or funded by Federal agencies. Under this EO, each Federal agency responsible for the design and construction of a Federal or federally funded building must ensure that the building is designed and constructed in accordance with appropriate seismic design and construction standards.

Louisiana is not considered seismically active and the Proposed Action Alternative does not involve the construction of buildings.

#### 4.1.1.1 No Action Alternative

Under the No Action Alternative, no ground-disturbing activities would be required for repairs to ESJHS, and no impacts to geology or soils are therefore anticipated.

# 4.1.1.2 Proposed Action Alternative

Under the Proposed Action Alternative, activities associated with the construction of the floodwall would consist of grading to a maximum depth of 6 inches below ground surface. In the portions of the project site where an earthen floodwall is not proposed, the steel sheet pile would be driven to a maximum depth of 25 feet below ground surface. Depth of drainage line trenching would be a maximum of 7 feet. Sheet piling would be driven to a depth of 40 feet below ground surface in the vicinity of the pump station and sluice gate.

A new drainage pump station would be installed in the northeastern corner of the site. To minimize disturbance of the area, the pump station wet well would be constructed of steel sheet piling wall, internally braced with struts, thus eliminating the need for cofferdams and over excavation of the structure footprint. Excavation of the wet well would be limited to within the perimeter of the sheet pile walls. To support the pump station structure, precast concrete piles would be driven to a depth of 26 feet.

Temporary effects to surface soils are expected in the form of erosion of exposed soils during storm events. A Storm Water Pollution Prevention Plan (SWPPP) would be prepared in accordance with the requirements of the Louisiana Pollutant Discharge Elimination System (LPDES) Storm Water General Permit for Construction Activities 5 Acres or Greater (Permit No.



LAR100000). The objective of the SWPPP is the reduction or elimination of surface water pollution through implementation of Best Management Practices (BMPs). BMPs may include but are not limited to silt fencing, erosion control mats, maintaining established vegetation, and vehicle track pads. Excavated soil and waste materials would be managed and disposed of in accordance with applicable local, State, and Federal regulations. If contaminated materials are discovered during construction activities, the work would cease until the appropriate procedures can be implemented and permits obtained. Prior to construction, SJBSB would be required to obtain an LPDES permit and prepare a SWPPP that includes BMPs to minimize erosion of soils from the construction area and reduce offsite sediment transport.

Construction activities would disturb a total of approximately 27.5 acres of soils within the property boundaries of ESJHS. Soils on the project site have been previously disturbed from development of the school building structures, driveways, athletic fields, hardscapes, and landscapes. Construction activities would not be deep enough to impact underlying geologic resources or seismicity. No permanent impacts to the geology, soils, and seismicity are anticipated as a result of the Proposed Action Alternative.

# 4.1.2 Air Quality

The Clean Air Act of 1970, as amended (CAA) (42 U.S.C. §§ 7401–7661) requires that States adopt ambient air quality standards. The standards have been established 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.

The EPA has set national ambient air quality standards (NAAQS) for the following six criteria pollutants: ozone ( $O_3$ ), particulate matter ( $PM_{2.5}$ ,  $PM_{10}$ ), nitrogen dioxide ( $NO_2$ ), carbon monoxide (CO), sulfur dioxide ( $SO_2$ ), and lead (Pb).

St. John the Baptist Parish is currently in attainment, meaning criteria air pollutants do not exceed the NAAQS (EPA 2012a).

# 4.1.2.1 No Action Alternative

Under the No Action Alternative, repairs to ESJHS would not require ground-disturbing activities or use of heavy construction equipment. No impacts to air quality are anticipated.

# 4.1.2.2 Proposed Action Alternative

Under the Proposed Action Alternative, no long-term impacts to air quality would occur. Short-term impacts to air quality may occur during construction. To reduce temporary impacts to air



quality, the construction contractors would be required to water down construction areas to control dust when necessary. Emissions from fuel-burning internal combustion engines (e.g., heavy equipment, earthmoving machinery) could temporarily increase the levels of some of the criteria pollutants, including CO, NO<sub>2</sub>, O<sub>3</sub>, PM<sub>10</sub>, 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.

Installation of diesel-driven pumps could potentially increase emissions of CO, NO<sub>2</sub>, PM, and other regulated air pollutants while in operation. Newer diesel-driven internal combustion engines are equipped with technologies that enable them to meet more stringent emission standards. In an effort to reduce emissions to the maximum extent possible, the pumps that are proposed for the Proposed Action Alternative would be powered by electricity, and the pumps would not fall under any State or Federal air quality regulations. However, the backup generator to be installed at the proposed pump station would be diesel driven. Based on a 175-horsepower diesel generator rated to meet a minimum of Tier 3 Emissions Standards and a conservative estimated annual runtime of 1,000 hours, the total emissions listed in Table 4-1 are anticipated from the proposed backup generator.

Table 4-1. Anticipated Total Emissions per year from the Backup Generator

Pollutant	Annual Emissions (tons/year)	Pollutant	Annual Emissions (tons/year)
NO <sub>x</sub>	0.58	Ethyl-benz	0.00
СО	0.50	Xylene	0.00
$PM_{2.5}/PM_{10}$	0.03	Formaldehyde	0.00
$SO_2$	0.18	Acetaldehyde	0.00
VOC	0.21	Acrolein	0.00
Benzene	0.00	Naphthalene	0.00
Toluene	0.00	_	_

VOC = volatile organic compound

On August 15, 2008, the State of Louisiana enacted Act 547, which provides for exemptions from permitting requirements for certain air emissions sources for which facility-wide potential emissions are less than 5 tons per year for each of any regulated air pollutant, as defined by the CAA, less than 15 tons per year emitted of all such defined pollutants combined, and less than the minimum emission rate for each toxic air pollutant established pursuant to Louisiana Reserved Statute 30:2060. Because the diesel backup generator would be operated intermittently throughout the year and has control technologies designed to reduce emissions, it is unlikely that a total of 5 tons per year or greater would be generated from its operation as a backup generator. Louisiana Department of Environmental Quality (LDEQ) would not require that an air permit be



obtained for the operation of the pump station, and no significant impacts to air quality are therefore anticipated.

# 4.2 WATER RESOURCES

#### 4.2.1 Surface Water

The Clean Water Act of 1977, as amended (CWA) (33 U.S.C. §§ 1251 et seq.), established the basic framework for regulating discharges of pollutants into the waters of the United States.

The EPA established the CWA to restore and maintain the chemical, physical, and biological integrity of the Nation's waters by preventing point and nonpoint pollution sources, providing assistance to publicly owned treatment works for the improvement of wastewater treatment, and maintaining the integrity of wetlands.

Pollutants regulated under the CWA consist of priority pollutants, which include various toxic pollutants; conventional pollutants such as biochemical oxygen demand, total suspended solids, fecal coliform, and oil and grease; and any pollutant not identified as either priority or conventional or priority. The CWA regulates both direct and indirect discharges.

Louisiana's Water Quality Regulations require permits for the discharge of pollutants from any point source into waters of the State of Louisiana. The surface water discharge permitting system is administered under the LPDES and governed by the LDEQ.

ESJHS is situated approximately 7 miles southwest of Lake Pontchartrain and 2 miles north of the Mississippi River. ESJHS is located in the Belle Pointe drainage area. The Belle Pointe drainage area is served by a single canal, draining from the Mississippi River levee (south) to the back flood berm to the north. The total drainage area for this basin is 2.35 square miles (1,504 acres) and is primarily agricultural land use.

The primary drainage canal flows south-to-north from River Road to Airline Highway, along the eastern boundary of the ESJHS campus, and north to the drainage pump station into Lake Maurepas, totaling approximately 1,400 feet in length. The drainage canal passes under Airline Highway via two 4-foot by 4-foot concrete box culverts. The width of the bottom of the ditch averages 10 feet, and the side slopes are 1-foot vertical on 1.8-foot horizontal for a grade of approximately 56%. The bottom of the drainage ditch is generally clean up to the normal water line at approximately elevation 0.0. Above the normal water line, the side slopes consist of thick brush. The existing ESJHS stormwater conveyance system drains through a single outfall to this drainage canal.

#### 4.2.1.1 No Action Alternative

Under the No Action Alternative, repairs to ESJHS would not require ground-disturbing activities, and there would be no impacts to surface waters from construction. Minor short-term



impacts to downstream surface waters may occur due to stormwater runoff transporting sediments from soils disturbed during flood events.

# 4.2.1.2 Proposed Action Alternative

Under the Proposed Action Alternative, the existing drainage outfall would be replaced with a new sluice gate as part of the floodwall. Riprap would be installed at the outfall to reduce the potential for erosion to the ditch banks and bottom. In addition, a new outfall would be constructed along the northeastern corner for the proposed pump station. Construction of the new outfall would include a concrete lined apron within the drainage ditch for erosion control. The proposed modifications are not anticipated to change the dimensions or capacity within the drainage ditch.

Minor short-term impacts to downstream surface waters may occur due to stormwater runoff transporting sediments from soils disturbed during construction. The applicant would be required to obtain an LPDES permit prior to construction. As part of the LPDES requirements, construction activities require the creation and implementation of a SWPPP. The SWPPP describes methods and requirements to comply with the regulations governing discharges to water bodies, including stormwater drains. To reduce impacts to surface waters, BMPs would be required at the construction location, such as silt fences and the revegetation of disturbed soils.

No sanitary wastewater would be discharged from the construction areas. Portable sanitary units would be placed onsite temporarily, and waste would be removed from the property by licensed septic disposal contractors.

A Joint Permit Application for the Proposed Action Alternative was submitted to the Louisiana Department of Natural Resources (LDNR) Office of Coastal Management Permits & Mitigation Division on April 1, 2014. The Office of Coastal Management issued a response on June 25, 2014, indicating that the agency has determined that the proposed project is exempt from the coastal management program.

#### 4.2.2 Groundwater

The project area is located in an area where groundwater is dominated by the Mississippi River Alluvial Aquifer. The Mississippi River Alluvial Aquifer is composed of Mississippi River alluvium, which consists of fining upward sequences of gravel, sand, silt, and clay (LDEQ 2003). The aquifer is poorly to moderately well sorted, with fine-grained to medium-grained sand near the top, grading to coarse sand and gravel in the lower portions. The maximum depths of occurrence of freshwater in the Mississippi River Alluvial Aquifer range from 20 feet below sea level to 500 feet below sea level. The range thickness of the fresh water interval in the Mississippi River Alluvial Aquifer is 50 to 500 feet. At an active groundwater well in St. John the Baptist Parish (site 300234090390301, local number), the highest recording of groundwater was 2.80 feet below ground surface in May 2011.



#### 4.2.2.1 No Action Alternative

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

# 4.2.2.2 Proposed Action Alternative

Exact depths to groundwater at the site are not known, but because the project area is 5 feet above sea level, shallow groundwater is likely to be close to the surface. Impacts to shallow groundwater would not necessarily impact the aquifer below, and the area does not depend on groundwater as a source for municipal drinking water. Under the Proposed Action Alternative, excavation activities would be shallow and remain above the shallow groundwater since the purpose of the project is to provide additional capacity for water detention.

# 4.2.3 Waters of the United States including Wetlands

The U.S. Army Corps of Engineers (USACE) regulates the discharge of dredged or fill material into waters of the United States, including wetlands, pursuant to Section 404 of the CWA (33 U.S.C. § 1344). Additionally, EO 11990, Protection of Wetlands, requires Federal agencies to avoid, to the extent possible, adverse impacts to wetlands.

The U.S. Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI) map of the area was reviewed to identify the potential for wetlands and/or other waters of the United States to occur within the project area. The NWI map indicated there are no wetlands within the project site (USFWS 2014a). A wetland delineation was not conducted for this project.

#### 4.2.3.1 No Action Alternative

Under the No Action Alternative, construction of a new facility would not occur, and there would be no impacts to wetlands or other waters of the United States.

# 4.2.3.2 Proposed Action Alternative

Under the Proposed Action Alternative, no direct impacts to waters of the United States, including wetlands, would occur. The project would not require the clearance of any wetland vegetation adjacent to the proposed site. Minor short-term impacts to the adjacent offsite drainage channel may occur from the transport of sediments from ground disturbance and soil erosion during construction. Appropriate BMPs would be implemented to minimize soil erosion and reduce offsite sediment transport to adjacent surface waters and wetland areas.

A Joint Permit Application for the proposed action was submitted to the LDNR Office of Coastal Management Permits & Mitigation Division on April 1, 2014. In response, LDNR issued a Costal Use Permit/Consistency Determination dated July 16, 2014, and determined that the project would have no direct or significant impact on coastal waters and therefore does not require a Coastal Use Permit. As such, the USACE has issued a Programmatic General Permit



for "work outside the boundaries of the Louisiana Coastal Zone" (Appendix C). In addition, correspondence, dated June 26, 2014, with the USACE New Orleans District identified no concerns regarding the proposed project activities within the campus or the adjacent drainage canal (Appendix C).

# 4.2.4 Floodplains

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. FIRMs show BFEs, which represent the elevation to which floodwater is anticipated to rise during the base flood; floodplain boundaries in a given area and are classified based on 1-percent and 0.2-percent-annual-chance floods; and minimal flood risk areas.

Consistent with EO 11988, the relevant FIRMs were examined during the preparation of this EA. The project site is located within Community Panel Number 22095C0210D, effective November 4, 2010 (FEMA 2010). According to the FIRM for St. John the Baptist Parish, a portion of the project area is located within Zone AE, a 100-year floodplain (1-percent-annual-chance flood). The BFE established for the portion of project area in Zone AE is 4 feet. Most of the project area is located in Zone X, and BFEs have not been established (Appendix A, Figures 3 and 5).

#### 4.2.4.1 No Action Alternative

Under the No Action Alternative, construction of the flood protection project would not occur, and there would be no impacts to floodplains. However, the ESJHS campus would continue to experience flooding with the potential to endanger lives and damage structures.

# 4.2.4.2 Proposed Action Alternative

Under the Proposed Action Alternative, construction would take place within the 100-year floodplain. Construction of the retention basin and floodwalls is not anticipated to have an appreciable increase on flood elevations or velocities on the campus. Additionally, the intent of the proposed action is to increase the capacity of the drainage infrastructure on the ESJHS campus through the use of low impact mechanisms in order to reduce flooding.

Correspondence was received from the St. John the Baptist Parish Floodplain Administrator on March 7, 2014, stating that the ESJHS is not designated a "critical facility" in accordance with guidance in FEMA 543 (FEMA 2007). As a result of the designation, the National Flood Insurance Program would not require that the project area meet 500-year floodplain protection requirements.



A hydrology and hydraulics (H&H) analysis was conducted for the proposed project, and a report was prepared, signed, and sealed by a Professional Engineer (All South Consulting Engineers, LLC. 2014). The findings as a result of the analysis are as follows:

- 1. Implementation of the proposed project would not result in internal flooding of the ESJHS buildings during a standard 25- or 100-year rainfall event.
- 2. The proposed project would reduce the 25- and 100-year flood water surface elevations within the project site, eliminating the flood hazard for the high school buildings for these two storm events.
- 3. Implementing the proposed project would not have a significant impact on adjacent properties. The largest projected increase in water surface elevation occurred during the 100-year storm event and was limited to the area below Airline Highway and was only 0.08 foot or less than 1 inch. As discussed in the report, this water surface elevation is conservatively overpredicted in the model per the discussion of study limitations.
- 4. Implementation of the proposed project would not impact the published FEMA 100-year flood elevation because the area of inundation due to the 100-year storm surge is immeasurably larger than the area within the hazard area proposed to be removed.

The H&H report was submitted to the St. John the Baptist Parish Floodplain Administrator for review and approval. A response dated July 17, 2014, stated that the project falls under the St. John the Baptist Parish jurisdiction and provided concurrence with the findings and recommendations of the H&H report. Further, the St. John the Baptist Parish Floodplain Administrator has no objections to the proposed project (see Appendix C).

# 4.2.4.3 Eight-Step Planning Process for Floodplains

In accordance with EO 11988, Floodplain Management, FEMA's Eight-Step Planning Process for Floodplains was completed to identify, minimize, and mitigate floodplain impacts.

Step 1: Determine whether the Proposed Action is located in a wetland and/or the 100-year floodplain (500-year floodplain for critical actions), and whether it has the potential to affect or be affected by a floodplain or wetland.

According to the FIRM, the project site is partially located within Zone AE, a Special Flood Hazard Area (100-year floodplain) with water surface elevations determined on Community Panel Number 22095C0210D (Effective November 4, 2010). A review of the NWI concludes that no wetlands are located within the project site. A site visit conducted by a Nationwide Infrastructure Support Technical Assistance Consultants (NISTAC) Environmental Specialist on June 26, 2014, verified these findings. No direct impacts to wetlands are anticipated.

Step 2: Notify public at earliest possible time of the intent to carry out an action in a floodplain, and involve the affected and interested public in the decision-making process.



An Early Notice and Public Review of a Proposed Activity in a 100-year Floodplain for the project was published in the local newspaper *L'Observateur* on July 12, 2014. See Appendix D.

Step 3: Identify and evaluate practicable alternatives to locating the Proposed Action in a floodplain.

There only practicable alternative while meeting the purpose of the proposed action, to reduce flooding on the ESJHS campus, would be to move the school outside the floodplain. However, moving the school outside the floodplain would no longer serve the intended school zone. The high school and most of the surrounding areas are located within the 100-year floodplain due to the location of Reserve, LA, with elevations as low as 5 feet above sea level and the proximity to Lake Pontchartrain and the Mississippi River. Because of the location of ESJHS, the campus would continue to be susceptible of incurring repetitive damage from future flooding events. The project area is already developed; therefore, the proposed action is not anticipated to encourage additional development within the 100-year floodplain. Rather, the proposed action would provide improved drainage and reduced risk of flooding to the ESJHS campus.

The Proposed Action Alternative would use remnant fill material located onsite and fill material brought to the campus to construct floodwalls, a retention basin, and pump station. The flood protection system would include installing a 2,510-linear-foot steel sheet pile barrier extending 25 feet below grade and 5 feet above grade to the design flood elevation of 8.0 feet, an earthen embankment along the floodwall and at the water pump station, approximately 6,000 feet of new drain lines, and a drainage pumping station. The proposed project would require approximately 11,808 cubic yards of excavated material, 360 cubic yards of concrete, 62.5 cubic yards of rock, 3,046 cubic yards of sand, and 8,803 cubic yards of clay. Approximately 6.76 acres of the project area is located within the 100-year floodplain and would be modified as a result of the floodwall. The proposed project would improve stormwater drainage on the ESJHS campus and prevent flooding of the campus during future flood events.

Step 4: Identify the full range of potential direct or indirect impacts associated with the occupancy or modification of floodplains, and the potential direct and indirect support of floodplain development that could result from the Proposed Action.

Direct impacts to the floodplain include using both onsite and offsite fill material to create a floodwall and ground disturbance to construct a drainage basin and pump station and install sheet pile floodwalls and 6,000 feet of new drain lines throughout the campus. Most of the 27.5-acre campus is outside the floodplain. This impact is permanent. The loss of 6.76 acres of floodplain in the project area is considered a minimal adverse effect; flooding in St. John the Baptist Parish is predominantly driven by inadequate drainage as a result of flat topography and tidal storm surge.

According to the H&H analysis conducted for the proposed project, the removal of this portion of the site from the published 100-year storm surge storage area would have no significant



impact on the published 100-year water surface elevation (All South Consulting Engineers, 2014).

Step 5: Minimize the potential adverse impacts from work within floodplains (identified under Step 4), restore, and preserve the natural and beneficial floodplain values.

The proposed project would not impact floodplain elevations or velocities. No minimization is necessary. Appropriate BMPs, including the installation of silt fences and the revegetation of disturbed soils, would be implemented to minimize soil erosion and reduce offsite sediment transport to adjacent surface waters and wetland areas.

Step 6: Reevaluate the Proposed Action to determine: 1) if it is still practicable in light of its exposure to flood hazards; 2) the extent to which it will aggravate the hazards to others; 3) its potential to disrupt floodplain values.

The proposed project remains practicable in light of its exposure to flood hazards and the extent to which it would aggravate hazards to others. The goal of the project is to provide the ESJHS property that would be less susceptible to flooding, in an effort to maintain operations during future storm events. In addition, construction of the proposed project would allow ESJHS students, faculty, and staff to remain safely at the school and within their local community. The proposed action has no potential to disrupt floodplain values.

Step 7: If the agency decides to take an action in a floodplain, prepare and provide the public with a finding and explanation of any final decision that the floodplain or wetland is the only practicable alternative. The explanation should include any relevant factors considered in the decision-making process.

A Final Floodplain Notice and Notice of Availability for the Draft Environmental Assessment for the project will be published in the *L'Observateur* informing the public of FEMA's decision to proceed with the project.

Storm damage resulting from Hurricane Isaac rendered ESJHS unusable with the exception of the Ninth Grade Academy Building. SJBSB temporarily relocated the 10th through 12th grade faculty, approximately 993 students, to modular classrooms (trailers) that were placed on the Leon Godchaux School campus. The trailers 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 school buildings at ESJHS. The purpose and need of the project is to provide a permanent solution to avoid flooding of the high school campus during future storm events.

No other alternative locations were considered viable because of the infrastructure already located on the ESJHS campus that is outside the 100-year floodplain. The loss of floodplain within the ESJHS campus boundary is considered a minimal adverse effect because flooding on the high school campus is driven predominantly by inadequate drainage as a result of flat topography and tidal storm surge. The proposed project would not likely result in appreciable



increases in flood velocities or elevations upstream or downstream. Indirect impacts include supporting the ongoing occupancy of the floodplain that occurs in Reserve, LA.

Step 8: Review the implementation and post-implementation phases of the Proposed Action to ensure that the requirements of the EOs are fully implemented.

The proposed project would be constructed in accordance with Federal, State, and local floodplain requirements. This step is integrated into the NEPA process and FEMA project management and oversight functions.

# 4.3 COASTAL RESOURCES

The Coastal Zone Management Act of 1972, as amended (CZMA) (16 U.S.C. §§ 1451–1456), enables coastal States, including Louisiana, 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. The LDNR supervises CZMA activities within the Louisiana Coastal Zone. FEMA must conduct its activities in a manner consistent with the Federally approved Louisiana Coastal Resources Program (LCRP). In addition, St. John the Baptist Parish has assumed the responsibility of developing its Parish Coastal Program (LDNR 2014). According to the LDNR, the proposed action is located in the Louisiana Coastal Zone Boundary (LDNR 2014). The Louisiana Coastal Zone Boundary was most recently updated in 2012 and encompasses a total of 20 coastal parishes including portions of St. John the Baptist (USFWS 2014b).

The Coastal Barrier Resources Act of 1982, as amended (CBRA) (16 U.S.C. §§ 3501–3510), administered by USFWS, was enacted to protect sensitive and vulnerable barrier islands along the U.S. Atlantic, Gulf, and Great Lakes coastlines. The CBRA established the Coastal Barrier Resources System (CBRS), which is composed of undeveloped coastal barrier islands, including those in the Great Lakes. With limited exceptions, areas contained within a CBRS are ineligible for direct or indirect Federal funds that could support or promote coastal development, thereby discouraging development in coastal areas. According to the USFWS CBRS Mapper, the project is located outside Louisiana CBRS (USFWS 2014b).

The Coastal Use Permit process is part of the LCRP, which has been established to preserve, restore, and enhance Louisiana's valuable coastal resources. The guidelines of the permit have been established to ensure that development taking place within the Coastal Zone can be accomplished with the greatest benefit and the fewest negative impacts. Coastal Use Permit applications must be submitted for projects that could impact coastal waters and involve dredging and filling, water control structures, bulkheads, oil and gas facilities, and marina or residential development. Permit applications are sent to the LDNR Office of Coastal Management (OCM) through the joint application system that allows comments to be solicited from multiple regulatory agencies from a single submittal. The impacts to coastal waters caused



by the proposed project would dictate conditions of the Coastal Use Permit. Mitigation of impacts to wetland areas is a potential "mitigating action" required by the Coastal Use Permit.

# 4.3.1.1 No Action Alternative

Under the No Action Alternative, construction of the flood protection system on the ESJHS campus would not occur and there would be no impacts to coastal resources.

# 4.3.1.2 Proposed Action Alternative

Under the Proposed Action Alternative, impacts to coastal resources are expected to be minimal, particularly with regard to natural storm barriers, wildlife habitat, aquatic resources, aesthetic value, and quality of life for future generations. The proposed action is not intended to promote additional development within the coastal zone but to improve localized stormwater drainage on the ESJHS campus. A total of approximately 27.5 acres of upland would be impacted by the construction of the floodwalls, drain lines, sheet pile structure, and pump station and installation of a campus-wide drainage system.

A Joint Permit Application for the proposed action was submitted to the LDNR OCM Permits & Mitigation Division on April 1, 2014. The LDNR OCM issued a response on July 16, 2014, indicating the agency has determined that the project would have no direct or significant impact on coastal waters and therefore does not require a Coastal Use Permit. However, the LDNR OCM determination does require the SJBSB to notify the OCM of the date on which initiation of the proposed activity begins. In addition, the SJBSB must adhere to the special conditions assigned to this determination. A copy of the agency response is available in Appendix C.

#### 4.4 BIOLOGICAL RESOURCES

The Endangered Species Act of 1973, as amended (ESA) (16 U.S.C. §§ 1531–1544), provides a program for the conservation of threatened and endangered (T&E) plants and animals and the habitats in which they are found. Section 7 of the ESA (16 U.S.C. § 1536) requires Federal agencies, in consultation with the USFWS and/or the National Oceanic and Atmospheric Administration Fisheries Service (NOAA), to ensure that actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of designated critical habitat of such species. The ESA also prohibits any action that causes a "taking" of any listed species of endangered fish or wildlife.

The USFWS lists the following federally threatened and endangered (T&E) species as occurring in St. John the Baptist Parish:



Table 4-2. USFWS Listed Threatened and Endangered Species

Common Name	Scientific Name	Status
Pallid sturgeon	Scaphirhynchus albus	Е
West Indian manatee	Trichechus manatus	Е
Gulf sturgeon	Acipenser oxyrinchus desotoi	T
Louisiana black bear	Ursus americanus luteolus	T
Brown pelican	Pelecanus occidentalis	R

Source: USFWS (2014c)

T = Threatened, E = Endangered, R = Recovery

In addition to the federally listed T&E species, Louisiana Department of Wildlife and Fisheries (LDWF) also list the following State-listed threatened and endangered species as occurring in St. John the Baptist Parish:

Table 4-3. LDWF Listed Threatened and Endangered Species

Common Name	Scientific Name	Status
Bald eagle	Haliaeetus leucocephalus	Е
West Indian manatee	Trichechus manatus	Е

Source: LDWF (2014)

T = Threatened, E = Endangered, R= Recovery

A site visit was conducted by a NISTAC Environmental Specialist on June 26, 2014. The proposed action would occur entirely on ESJHS property adjacent to a residential neighborhood, Hwy 61, and several farm fields. The site is located in a partially urban area and provides limited wildlife habitat for common, urban species; the site does not provide habitat for animals requiring forested or wetland habitats. No protected species were observed during site reconnaissance. The site does not provide suitable habitat for any federally or State-listed T&E species.

According to the USFWS Migratory Bird Program (USFWS 2014d), the State of Louisiana is located within the Mississippi Flyway where lands may provide resting, feeding, and breeding grounds for migratory birds, especially flocking species. Much of the land in the vicinity of the project area (to the north, northeast, and east) consists of coastal marshland and other wetland areas that would be considered suitable habitat for migratory waterfowl. The project area has the potential to provide open upland resting for many species of birds. However, higher quality habitat exists in the adjacent Maurepas Wildlife Management Area (4 miles north) as well as Lake Maurepas, Manchac Wildlife Management (10 miles northeast), and Lake Pontchartrain 7 miles to the east.



#### 4.4.1.1 No Action Alternative

Under the No Action Alternative, there would be no impacts to biological resources, including federally and State-protected species.

# 4.4.1.2 Proposed Action Alternative

Under the Proposed Action Alternative, approximately 27.5 acres of previously disturbed, developed land would be redeveloped and improved. The project site provides little habitat for wildlife and no suitable habitat for any federally or State-listed T&E species. No impacts to T&E species or migratory birds are anticipated. Based on habitat in the project area, and no net change in water quality impacts, FEMA has determined that the proposed action would have no effect on T&E species nor would it adversely modify critical habitat.

# 4.5 CULTURAL RESOURCES

The National Historic Preservation Act of 1966, as amended (NHPA) (16 U.S.C. §§ 470 et seq.) outlines Federal policy to protect historic properties and promote historic preservation in cooperation with States, Tribal Governments, local governments, and other consulting parties. The NHPA established the National Register of Historic Places (NRHP) and designated the State Historic Preservation Office (SHPO) as the entity responsible for administering State-level programs. The NHPA also created the Advisory Council on Historic Preservation (ACHP), the Federal agency responsible for overseeing the Section 106 of the NHPA (16 U.S.C. § 470f) process and providing commentary on Federal activities, programs, and policies that affect historic properties.

Section 106 of the NHPA and its implementing regulations (36 CFR Part 800) outlines the procedures for Federal agencies to follow to take into account the effect of their actions on historic properties. The Section 106 process applies to any Federal undertaking that has the potential to affect historic properties, defined in the NHPA as properties (archaeological sites, standing structures, or other historic resources) that are listed in or eligible for listing in the NRHP. Although buildings and archaeological sites are most readily recognizable as historic properties, a diverse range of resources are listed in the NRHP, including roads, landscapes, and vehicles. Under Section 106, Federal agencies are responsible for identifying historic properties within the Area of Potential Effects (APE) for an undertaking, assessing the effects of the undertaking on those historic properties, if present, and considering ways to avoid, minimize, and mitigate any adverse effects of the undertaking on historic properties. It is the primary regulatory framework that is used in the NEPA process to determine impacts on cultural resources.

The Louisiana Office of Cultural Development is given the role of the SHPO. Within the SHPO, the two offices that conduct Section 106 reviews on a joint basis are the Division of Archaeology and Division of Historic Preservation.



#### 4.5.1.1 No Action Alternative

Under the No Action Alternative, no construction would occur and no cultural resources would be affected.

# 4.5.1.2 Proposed Action Alternative

Under the Proposed Action Alternative, no impacts to archeological or cultural resources are anticipated.

FEMA conducted background research using the Louisiana Cultural Resources Map and determined that no archaeological sites are recorded within the APE. In addition, the entirety of the APE is addressed in the Louisiana Division of Archaeology reports 22-555, 22-2572, and 22-3381. The buildings within the APE, specifically the ESJHS, were constructed in 1977 with additions made after that year. They do not exhibit exceptional significance to qualify them for listing in the NRHP under Criterion Consideration G. Photographs of the buildings are provided in Appendix B.

FEMA is responsible for obtaining clearance from the SHPO on Cultural Resources. Letters were sent to the SHPO on July 18, 2013, and June 18, 2014. Responses were received from the SHPO on August 7, 2013, and July 2, 2014, stating that "No known historic properties will be affected by this undertaking." SHPO concurrence documentation is contained in Appendix C.

The follow Tribes were also consulted via email on June 25, 2014, regarding this project:

- Alabama Coushatta Tribe of Texas
- Chitimacha Tribe of Louisiana
- Choctaw Nation of Oklahoma
- Coushatta Tribe of Louisiana
- Jena Band of Choctaw Indians
- Mississippi Band of Choctaw Indians
- Seminole Nation of Oklahoma
- Seminole Tribe of Florida
- Tunica-Biloxi Tribe of Louisiana

The Tribes were requested to provide a response by July 17, 2014. The Choctaw Nation of Oklahoma responded to the request with no objection to the project. No other responses were received by the requested deadline.



If ground-disturbing activities occur during construction, the Applicant (SJBSB) would monitor the ground disturbance and if any potential archeological resources are discovered, would immediately cease construction in that area and notify the State and FEMA.

#### 4.6 SOCIOECONOMIC RESOURCES

#### 4.6.1 Socioeconomics

The City of Reserve, LA, is bounded by the Mississippi River to the south, the City of LaPlace to the east, Interstate 10 to the north, and Marathon Avenue to the west. The area is characterized as a family and farming area with mostly single-family dwellings and large farm fields. The City of Reserve lies within the Reserve CDP, Louisiana census tract (GNOCDC 2012a).

The population of Reserve in 2012 was 9,766, which represents a 6.5 percent increase in population from the 2000 census estimates (GNOCDC 2012a). Leading employment sectors in Reserve are education services, health care, and social assistance (17 percent); manufacturing (14 percent); and retail trade (13 percent).

The economy of the New Orleans Housing Market Area (HMA), which includes Jefferson, Orleans, Plaquemines, St. Bernard, St. Charles, St. John the Baptist, and St. Tammany Parishes, has been evaluated by the U.S. Department of Housing and Urban Development (HUD). The economy has struggled to recover from the recent national recession as well as the effects of Hurricane Katrina in 2005, Hurricane Isaac in 2012, and the Deepwater Horizon oil spill in 2010.

Economic recovery in the HMA began in earnest in mid-2007, with more than \$100 billion in government investment, and continued until mid-2009. The rebuilding efforts protected the region's economy from major impacts associated with national recession, but jobs began declining in mid-2009. Economic improvements have been seen since January 2011.

# 4.6.1.1 No Action Alternative

Under the No Action Alternative, adverse impacts to socioeconomic resources from periodic flooding events would continue, creating an unsafe environment for the students, faculty, and staff. In the event of a flood on school grounds, the community educational system would be disrupted, causing a loss to productivity within the school system and within the community as a whole because of the parents' contribution to the local workforce. Depending on the frequency of such events, students may fall behind in the curriculum, potentially impacting their lifetime career potential. Without improvements to the school system, families may choose to relocate to a community with a safer and more reliable school system. Further, ESJHS would likely apply for multiple flood loss claims.



# 4.6.1.2 Proposed Action Alternative

Under the Proposed Action Alternative, the residences of Reserve and surrounding communities are expected to benefit from the new improvements to the stormwater drainage system on the ESJHS campus. The proposed project would provide flood mitigation for the schools' structures and entire campus, reduce future flood loss claims, create a more viable neighborhood, and provide a safe environment for the students, faculty, and staff. Construction of the proposed action would create temporary jobs during the construction phase and may create a few permanent employment positions for facility and staff at the school. No adverse socioeconomic impacts are anticipated.

#### 4.6.2 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 reviewed to determine whether a disproportionate number of minority or low-income persons have the potential to be adversely affected by the proposed project. The information in Table 4-4 was gathered from the United States Census Bureau (USCB) 2011 Census and the 2010 American Community Survey for evaluation.

Table 4-4. 2012 Demographic Data for Reserve, LA; St. John the Baptist Parish; and the State of Louisiana

Demographics	Reserve CDP, LA	St. John the Baptist Parish	State of Louisiana
Total population (2010)	9,766	45,924	4,533,372
Annual median household income (2010 dollars)	\$44,462	\$51,040	\$43,673
Percent households below poverty level	22.00%	16.00%	17.39%
Percent minority population <sup>1</sup>	64.77%	63.00%	39.67%
Percent Hispanic (may be of any race)	2.90%	4.70%	4.25%
Percent of population over 65	12.00%	10.00%	12.31%

Racial Minority = Black or African American alone; American Indian and Alaskan Native alone; Asian alone; Native Hawaiian and Other Pacific Islander alone; Some Other Race alone; Two or More Races; and Hispanic or Latino.

Source: GNOCDC (2012b, 2012c), USCB (2010, 2011)



Minorities represent 64.77 percent, 63 percent, and 39.67 percent, respectively, in Reserve, St. John the Baptist Parish, and the State of Louisiana. Table 4-5 shows the racial composition of Reserve, St. John the Baptist Parish, and the State of Louisiana.

Table 4-5. 2012 Ethnicity Demographics for Reserve, LA; St. John the Baptist Parish; and the State of Louisiana

Ethnicity	Reserve, LA	St. John the Baptist Parish	State of Louisiana
White	38%	43.6%	60.33%
Hispanic or Latino	3.0%	4.7%	4.25%
Black or African American	59.5%	54.3%	31.82%
American Indian or Native Alaskan	0.23%	0.3%	0.62%
Asian	0.39%	0.70%	1.53%
Native Hawaiian or Other Pacific Islander	_	_	0.03%
Some Other Races Alone	1.0%	1.9%	0.15%
Two or More Races	1.15%	1.44%	1.27%

Sources: GNOCDC (2012a and 2012b), USCB (2010)

— = Zero or rounds to zero

#### 4.6.2.1 No Action Alternative

Under the No Action Alternative, students, facility, and staff that use the ESJHS campus would continue to be at risk of injury and property damage during severe weather events that cause flooding. There would be no disproportionately high or adverse impact on minority or low-income portions of the population, and all populations would continue to be at risk for localized flooding.

# 4.6.2.2 Proposed Action Alternative

The Proposed Action Alternative would improve drainage and decrease flooding for all members of the ESJHS. The proposed action would not require the relocation or displacement of any population. There would be no disproportionately high or adverse impact on minority or low-income portions of the population. All populations would benefit from the protection to life and property provided by the proposed action.

# 4.6.3 Hazardous Materials

Hazardous substances are defined as any solid, liquid, contained gaseous, or semisolid waste, or any combination of wastes that pose a substantial present or potential hazard to human health and the environment. Hazardous substances are generated primarily by industry, hospitals, research facilities, and the government. Improper management and disposal of hazardous



substances can lead to pollution of groundwater or other drinking water supplies and the contamination of surface water and soil.

The primary Federal regulations for the management and disposal of hazardous substances are the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended (CERCLA) (42 U.S.C. §§ 9601–9675) and the Resource Conservation and Recovery Act of 1976, as amended (RCRA) (42 U.S.C. §§ 6901 et seq.).

A review of the EPA EnviroMapper for Envirofacts and LDEQ list of leaking underground storage tanks online databases identified no known hazardous material sites on or adjacent to the proposed project sites (EPA 2012b; LDEQ 2014).

A site visit was conducted by a NISTAC Environmental Specialist on June 26, 2014. No hazardous or toxic materials were observed onsite.

#### 4.6.3.1 No Action Alternative

Under the No Action Alternative, no construction would occur, and there would be no impacts to hazardous materials or waste.

# 4.6.3.2 Proposed Action Alternative

Under the Proposed Action Alternative, no hazardous materials or waste impacts are anticipated. During construction, petroleum products for fueling and maintenance would be located within construction and staging areas. These hazardous materials would be the responsibility of the contractor. Any hazardous materials discovered, generated, or used during construction would be handled and disposed of in accordance with applicable local, State, and Federal regulations.

#### 4.6.4 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 such as residences, schools, and hospitals.

The St. John the Baptist Parish has a noise Ordinance, Article III: Noise, which regulates noise levels within the parish based on land use types. Temporary construction activities are exempt from decibel restrictions provided they operate within the allowable time periods. The ordinance prohibits the operation of construction and demolition equipment from 10 p.m.to 7 a.m.

The proposed project is in the immediate vicinity of a residential neighborhood to the east, a busy highway (Hwy 61) to the south, and several farm fields to the west, north, and south of



Hwy 61. The sound level limits for residential areas, during the day (7 a.m. to 10 p.m.) cannot exceed 60 dBA for 10 percent of the time in any measurement period ( $L_{10}$ ) and cannot exceed 70 dBA from any source ( $L_{max}$ ).

#### 4.6.4.1 No Action Alternative

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

# 4.6.4.2 Proposed Action Alternative

Under the Proposed Action Alternative, temporary short-term increases in noise levels are anticipated during the construction period. Noise levels created by heavy equipment, pile driving, generators, and large trucks would vary depending on climatic conditions, equipment type and model, activity, and condition of the equipment. To mitigate noise impacts to these noise sensitive receptors, construction activities would take place during normal business hours and within the confines of the Parish ordinance (between 7 a.m. and 10 p.m.) Equipment and machinery installed at the project site would meet all local, State, and Federal noise regulations; therefore no adverse impacts to ambient sound quality of nearby residents is anticipated.

# 4.6.5 Transportation

ESJHS is north of and adjacent to Hwy 61. The only entrance to the school campus is off Hwy 61 via two driveways that connect Wildcat Drive (the primary driveway inside the campus to Hwy 61). The transportation infrastructure within the project area is a network of driveways throughout the high school campus. The proposed action includes construction of two driveway ramps sloped at 5% at the entrance and exit to the campus off Hwy 61. These ramps would replace the existing driveways, which would be removed to allow for vehicular crossing of the floodwall. Access to the construction site would be primarily via Hwy 61.

# 4.6.5.1 No Action Alternative

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

# 4.6.5.2 Proposed Action Alternative

Under the Proposed Action Alternative, temporary increases in vehicular traffic volume would occur throughout the duration of the proposed construction activities. Construction is proposed to take place over approximately 10 months and would include surface and subsurface work in the two proposed driveway ramp areas, the installation of the earthen berm and steel pile sheet walls surrounding the campus, and installation of hardscapes and landscapes throughout the campus. No short-term road or lane closures are anticipated during construction. Equipment and construction materials would be left in place after the work day and blocked off by barricades



within the boundaries of the ESJHS campus. Negligible increases to traffic volumes are anticipated as a result of the proposed action,

In the event that any construction activities are to be performed at the entrance or exit to the school onto Hwy 61, flaggers and physical protection barriers would be used where necessary to ensure safe and continuous traffic flow through this area.

No long-term impacts to transportation are anticipated as the result of the proposed action.

On May 29, 2014, a request sent to the Louisiana Department of Transportation & Development (LDOTD) for a permit for construction of two ramps over the proposed floodwall entering and exiting the site. The only work anticipated within the LDOTD right-of-way would involve the construction of the two driveway ramps. LDOTD issued a permit to SJBSB for the proposed action on June 11, 2014. Appendix C contains copies of the request letters and permit.

# 4.6.6 Public Health and Safety

EO 13045, *Protection of Children*, requires Federal agencies to make it a high priority to identify and assess environmental health and safety risks that may disproportionately affect children. Safety and security issues considered in this EA include the health and safety of area residents and the public and the protection of personnel involved in the activities related to the proposed construction of the project.

#### 4.6.6.1 No Action Alternative

Under the No Action Alternative, construction of the proposed project at ESJHS would not occur, which could pose a potential risk to the health and safety of the students and associated faculty on the campus by not providing adequate flood protection and building updates to provide a safe environment for school activities. Potential risks include health effects from future flooding events, such as stress from the disruption of the school closings, attendance in temporary modular classrooms that are not meant to be permanent, and/or exposure to mold and other dangerous conditions common in frequently flooded structures.

# 4.6.6.2 Proposed Action Alternative

Under the Proposed Action Alternative, construction activities could pose safety risks to those performing the activities, but no impacts to the public health and safety are anticipated. To minimize risks to safety and human health, all construction activities would be performed using qualified personnel trained in the proper use of the appropriate equipment, including all appropriate safety precautions. Additionally, all activities would be conducted in a safe manner in accordance with the standards specified in the Occupational Safety and Health Administration (OSHA) regulations. The appropriate signage and barriers should be in place prior to construction activities to alert pedestrians and motorists of project activities.



# **Affected Environment and Potential Impacts**

Physical protection barriers would be placed around all open trenches and excavations while unattended in order to ensure the safety of the general public, students attending the school, and school staff in the project area. Appropriate signs and barriers would be in place prior to commencement of construction activities to alert the public, students, and school staff of project activities. In order to ensure public safety, flaggers and physical protection barriers would be used during construction activities conducted close to Hwy 61.

The intent of the Proposed Action Alternative is to provide the ESJHS campus with protection from flooding resulting from excessive rainfall occurring during tropical storm and hurricane events. Reducing the school facility's exposure to these disasters would eliminate health and safety risks associated with dangers of high water, illness from stagnant standing water, overflow of sewer treatment systems, and mold growth within existing structures exposed to rising water.

It is anticipated that the Proposed Action Alternative would have long-term positive effects on the public health and safety of the area.

#### 4.7 SUMMARY

Table 4.6 is a summary of the potential impacts of the Proposed Action Alternative and conditions or mitigation measures that would address the impacts.



**Table 4-6. Potential Environmental Impacts of the Proposed Action Alternative and Mitigation Measures** 

Affected Environment	Potential Impacts	Mitigation	
Geology, Soils, and Seismicity	No impacts to underlying geology or seismicity are anticipated.  Minor, short-term impacts to approximately 27.5 acres of soils, composed primarily of fill material, would occur during site leveling and grading and construction of the new pump station and drainage structures.  No impacts to prime and unique farmlands are anticipated.	A SWPPP and a LPDES permit must be obtained prior to construction.  Implementation of appropriate BMPs would be required at the construction location. BMPs could include the installation of silt fences and the revegetation of disturbed soils to minimize the potential for erosion.  Excavated soil and waste materials would be managed and disposed of in accordance with applicable local, State, and Federal regulations. If contaminated materials are discovered during the construction activities, the work would cease until the appropriate procedures and permits can be implemented.	
Air Quality	Minor, 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, and engines would be properly maintained.	
Surface Waters	Minor, short-term impacts to offsite surface waters would occur due to the transport of sediment from disturbed soils by stormwater runoff during construction and increased amount of impervious surfaces after completion of the proposed facility	SJBSB will create a SWPPP and obtain an LPDES permit for the project. Appropriate BMPs, such as installing silt fences and revegetating bare soils with native plants, would minimize runoff.	
Groundwater	No impacts to groundwater are anticipated.	None	
Waters of the United States, including Wetlands	No impacts to wetlands or other waters of the United States are anticipated.	Appropriate BMPs would be implemented to minimize soil erosion and reduce offsite sediment transport to adjacent surface waters and wetland areas.	
Floodplains	No significant impacts to the floodplain are anticipated.	None	
Coastal Resources	No impact to coastal resources is anticipated.	ne LDNR OCM issued a response on July 16, 2014, indicating the agency as determined that the project would have no direct or significant impact on pastal waters and therefore does not require a Coastal Use Permit. However, the LDNR OCM determination does require the SJBSB to notify the OCM of the date on which initiation of the proposed activity begins. In addition, the the BSB must adhere to the special conditions assigned to the LDNR OCM etermination.	
Biological Resources	No impact on biological resources is anticipated.	None	



# **Affected Environment and Potential Impacts**

<b>Affected Environment</b>	Potential Impacts	Mitigation	
Cultural Resources	No impact on cultural resources is anticipated.	If ground-disturbing activities occur during construction, the Applicant will monitor ground disturbance and if any potential archeological resources are discovered, will immediately cease construction in that area and notify the State and FEMA.	
Socioeconomics	No socioeconomic impacts are anticipated.	None	
Environmental Justice	No disproportionately high or adverse effect on minority or low-income populations is anticipated.	None	
Hazardous Materials	No impacts from hazardous materials are anticipated.	During construction, petroleum products for fueling and maintenance would be located within construction and staging areas. These hazardous materials would be the responsibility of the contractor. Any hazardous materials discovered, generated, or used during construction would be handled and disposed of in accordance with applicable local, State, and Federal regulations.	
Noise	Minor-short term impacts to noise levels would occur at the proposed project site during the construction phase.	Construction would take place during normal business hours and equipment would meet all local, State, and Federal noise regulations.	
Transportation	Minor short-term increase in traffic volume on adjacent roadways may occur during construction.	Construction vehicles and equipment would be stored onsite during project construction, and appropriate signage would be posted on affected roadways. The appropriate signage and barriers should be in place prior to construction activities to alert pedestrians and motorists of project activities.	
Public Health and Safety	No adverse impacts to public health and safety are anticipated.	Qualified personnel would perform all construction activities in accordance with the standards specified in OSHA regulations; appropriate signage and barriers would be in place prior to construction activities to alert pedestrians and motorists of project activities. The construction contractor would be responsible for adhering to the Louisiana Underground Utilities and Facilities Damage Prevention Law ("Call Before You Dig").	

BMP = Best Management Practice

FEMA = Federal Emergency Management Agency
LDNR = Louisiana Department of Natural Resources
LPDES = Louisiana Pollutant Discharge Elimination System

OCM = Office of Coastal Management

OSHA = Occupational Safety and Health Administration SJBSB = St. John the Baptist School Board SWPPP = Stormwater Pollution Prevention Plan



## SECTION FIVE CUMULATIVE IMPACTS

According to 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.

St. John the Baptist Parish is undergoing recovery and rebuilding efforts from Hurricane Isaac. Hurricane Isaac damaged nearly 59,000 homes within 21 parishes in Louisiana, with St. John the Baptist Parish being hardest hit with 9,868 homes and business sustaining damage, mostly from high floodwaters caused by an 8- to 10-foot storm surge and heavy rainfall. The recovery efforts have included demolition, reconstruction, and construction of new residential and commercial properties, rehabilitation of public infrastructure including roadway and water and wastewater systems. Hurricane Isaac-related projects have been funded by more than \$11.2 million from FEMA. These projects and the Proposed Action Alternative may have cumulative temporary impacts on air quality by increasing criteria pollutants during construction activities, job opportunities within St. John the Baptist Parish and surrounding areas, and traffic due to construction activities.

Construction of the proposed action at ESJHS and the LPES Reconstruction Project would have a cumulative, direct, and permanent impact on the floodplain. Remnant fill material located onsite and fill located offsite would be used to build floodwall structures around the 27.5-acre ESJHS campus and to elevate the proposed rebuilding of LPES, resulting in the elevation of the majority of the site outside the floodplain. As discussed in the floodplain analysis (Section 4.2.4), the loss of floodplain area in the vicinity of the project is considered a minimal adverse effect; flooding in St. John the Baptist Parish is predominantly driven by inadequate drainage as a result of flat topography, and tidal storm surge. The proposed conversion of land from floodplain to non-floodplain in an area that is predominantly located in the 100-year floodplain is not likely to result in appreciable increases in flood velocities or elevations upstream or downstream. Although the project does not encourage additional development within the floodplain, the proposed project would result in providing civic support to populations living in the floodplain.

If construction of the proposed LPES is conducted concurrently with the proposed project, additional short-term impacts to soils, surface waters, waters of the United States, noise, and transportation would occur during construction. Impacts to these resources would remain minor and consistent with those defined for the proposed action alternative analysis.



## SECTION SIX PUBLIC INVOLVEMENT

FEMA is the lead Federal agency for conducting the NEPA compliance process for the proposed St. John the Baptist School Board Flood Mitigation Project. 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.

In accordance with 44 CFR §§ 9.6 and 9.8, an Early Notice and Public Review of a Proposed Activity in a 100-year Floodplain for the project was published in the local newspaper of record *L'Observateur* on July 12, 2014, providing the public with a 30-day public comment period for the proposed project (Appendix D).

FEMA will provide additional notification to the public of the availability of the draft EA through publication of a Final Floodplain Notice and Notice of Availability for the Draft EA for the proposed project in the *L'Observateur* informing the public of FEMA's decision to proceed with the project.

In addition, the draft EA is available for public viewing on FEMA's website (<a href="http://www.fema.gov/media-library/assets/documents">http://www.fema.gov/media-library/assets/documents</a>). FEMA will conduct a 7-day public comment period commencing on the initial date of publication of the public notice.



## SECTION SEVEN AGENCY COORDINATION

As part of the development of the EA, the following Federal, and State resource protection agencies were contacted. Responses received to date are included in Appendix C.

- Alabama Coushatta Tribe of Texas
- Chitimacha Tribe of Louisiana
- Choctaw Nation of Oklahoma
- Coushatta Tribe of Louisiana
- Department of Natural Resources, Coastal Management Division
- Jena Band of Choctaw Indians
- Louisiana Department of Environmental Quality
- Louisiana Department of Natural Resources, Coastal Management Division
- Louisiana Department of Transportation and Development
- Louisiana Office of Cultural Development Department of Historic Preservation
- Mississippi Band of Choctaw Indians
- Seminole Nation of Oklahoma
- Seminole Tribe of Florida
- St. John the Baptist Floodplain Administrator
- St. John the Baptist Planning and Zoning
- State Historic Preservation Officer, Department of Culture, Recreation, and Tourism
- Tunica-Biloxi Tribe of Louisiana
- U.S. Army Corps of Engineers, New Orleans District
- U.S. Department of Agriculture, Natural Resources Conservation Service

In accordance with applicable local, State, and Federal regulations, the Applicant (SJBSB) would be responsible for acquiring any necessary permits prior to commencing construction at the project site.



## SECTION EIGHT CONCLUSIONS

No impacts to geology, seismicity, groundwater, threatened or endangered species, coastal resources, cultural resources, environmental justice, hazardous materials, and public health 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. Short-term impacts would be mitigated using erosion and sediment control BMPs, appropriate signage, and proper equipment maintenance.

The proposed use of fill material to build floodwalls, driveways and parking, a pump station, and a drainage basin for development of the proposed action and a majority of the 27.5 acres of property outside the floodplain would have a direct, permanent impact on the floodplain. The loss of floodplain in the vicinity of the project is considered a minimal adverse effect; flooding in St. John the Baptist Parish is driven predominantly by inadequate drainage as a result of flat topography and tidal storm surge. The proposed project would not likely result in appreciable increases in flood velocities or elevations upstream or downstream. Although the project does not encourage additional development within the floodplain, the proposed project would result in providing civic support to populations living in the floodplain.

The preliminary findings of the Environmental Assessment indicate that the proposed project would result in no significant environmental impacts to the human or natural environment. Therefore, it is anticipated that the proposed action will meet the requirements of a FONSI under NEPA and that the preparation of an EIS will not be required.



## SECTION NINE REFERENCES

- All South Consulting Engineers, LLC. 2014. East St. John High School Flood Mitigation Hazard Project, Hydrology and Hydraulic Report.
- EPA (Environmental Protection Agency). 2012a. 2008 Ground-level Ozone Standards Region 6 Final Designations. Available at <a href="http://www.epa.gov/ozonedesignations/">http://www.epa.gov/ozonedesignations/</a> 2008standards/final/region6f.htm. Accessed July 2, 2014.
- EPA (Environmental Protection Agency). 2012b. EnviroMapper for Envirofacts. Available at <a href="http://www.epa.gov/emefdata/em4ef.home">http://www.epa.gov/emefdata/em4ef.home</a>. Accessed July 2, 2014.
- FEMA (Federal Emergency Management Agency). 2007. Design Guide for Improving Critical Facility Safety from Flooding and High Winds: Providing Protection to People and Buildings. Available at <a href="http://www.fema.gov/media-library/assets/documents/8811">http://www.fema.gov/media-library/assets/documents/8811</a>. Accessed August 8, 2014.
- FEMA. 2010. Flood Insurance Rate Map, St. John the Baptist Parish, Louisiana. Community Panel Number 22095C0210D. Revised November 4, 2010. Available at <a href="http://www.msc.fema.gov">http://www.msc.fema.gov</a>. Accessed July 1, 2014.
- GNOCDC (Greater New Orleans Community Data Center). 2012a. GNOCDC Analysis of U.S. Census Bureau, Decennial Census. Reserve, Louisiana CDP. Available at <a href="http://www.datacenterresearch.org/">http://www.datacenterresearch.org/</a>. Accessed July 2, 2014.
- GNOCDC. 2012b. Demographic Data for Places in Southeast Louisiana: A Reference for Understanding Communities Impacted by Hurricane Isaac. Available at <a href="http://www.datacenterresearch.org/">http://www.datacenterresearch.org/</a>. Accessed July 2, 2014.
- GNOCDC. 2012c. *Poverty in Southeast Louisiana, Post-Katrina*. Available at <a href="http://www.datacenterresearch.org/">http://www.datacenterresearch.org/</a>. Accessed July 2, 2014.
- LDEQ (Louisiana Department of Environmental Quality. 2003. "Mississippi River Alluvial Aquifer Summary Baseline Monitoring Project, FY 2002," Appendix 8 of the *Triennial Summary Report*, 2003 for the Environmental Evaluation Division of the Louisiana Department of Environmental Quality. Available at <a href="http://www.deq.louisiana.gov/portal/Portals/0/evaluation/aeps/08MississippiRiverAlluvialAquiferSummary03.pdf">http://www.deq.louisiana.gov/portal/Portals/0/evaluation/aeps/08MississippiRiverAlluvialAquiferSummary03.pdf</a>. Accessed on June 30, 2014.
- LDEQ. 2014. List of Leaking Underground Storage Tanks. Available at <a href="http://www.deq.louisiana.gov/portal/Portals/0/">http://www.deq.louisiana.gov/portal/Portals/0/</a>
  UndergroundStorageTank/LUST%206%2026%2013.pdf. Accessed June 27, 2014.
- LDNR (Louisiana Department of Natural Resources). 2014. Coastal Zone Boundary (2014). Available at <a href="http://dnr.louisiana.gov/index.cfm?md=pagebuilder&tmp=home&pid=85&ngid=5">http://dnr.louisiana.gov/index.cfm?md=pagebuilder&tmp=home&pid=85&ngid=5</a>. Accessed July 1, 2014.



- LDWF (Louisiana Department of Wildlife and Fisheries). 2014. Species by Parish List St. John the Baptist. Available at <a href="http://www.wlf.louisiana.gov/wildlife/species-parish-list?tid=259&type\_1=All">http://www.wlf.louisiana.gov/wildlife/species-parish-list?tid=259&type\_1=All</a>. Accessed June 26, 2014.
- LGS (Louisiana Geological Society). 2008. Generalized Geology of Louisiana. Available at <a href="http://www.lgs.lsu.edu/deploy/uploads/gengeotext.pdf">http://www.lgs.lsu.edu/deploy/uploads/gengeotext.pdf</a>. Accessed July 3, 2014.
- USCB (U.S. Census Bureau. 2010. American FactFinder. 2010 Census Summary Reserve CDP, Louisiana, St. John the Baptist Parish, Louisiana. Available at <a href="http://factfinder2.census.gov/faces/nav/jsf/pages/community\_facts.xhtml">http://factfinder2.census.gov/faces/nav/jsf/pages/community\_facts.xhtml</a>. Accessed July 2, 2014.
- USCB. 2011. 2006–2010 American Community Survey 5-Year Estimates, Census Tract Reserve, Louisiana. Available at <a href="http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml">http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml</a>. Accessed June 25, 2014.
- USDA/NRCS (U.S. Department of Agriculture / Natural Resource Conservation Service). 2013. Web Soil Survey. Available at <a href="http://websoilsurvey.nrcs.usda.gov/app/">http://websoilsurvey.nrcs.usda.gov/app/</a>. Accessed July 3, 2014.
- USFWS (U.S. Fish and Wildlife Service). 2014a. National Wetland Inventory. Available at <a href="http://www.fws.gov/wetlands/Data/Mapper.html">http://www.fws.gov/wetlands/Data/Mapper.html</a>. Accessed July 1, 2014.
- USFWS. 2014b. John H. Chafee Coastal Barrier Resource System: Maps of Coastal Barrier Resources System. Available at <a href="http://www.fws.gov/CBRA/Maps/Mapper.html">http://www.fws.gov/CBRA/Maps/Mapper.html</a>. Accessed June 23, 2014.
- USFWS. 2014c. U.S. Fish and Wildlife Service, Species By County Report, St. John the Baptist Parish. Available at <a href="http://ecos.fws.gov/tess\_public/countySearch!species">http://ecos.fws.gov/tess\_public/countySearch!species</a>
  ByCountyReport.action?fips=22095. Accessed July 7, 2014.
- USFWS. 2014d. U.S. Fish and Wildlife Service, Migratory Bird Program. Available at <a href="http://www.fws.gov/migratorybirds/Flyways.html">http://www.fws.gov/migratorybirds/Flyways.html</a>. Accessed June 28, 2014.
- USGS (U.S. Geological Survey). 1998. *Groundwater Atlas of the United States: Arkansas, Louisiana, and Mississippi, HA 730-F*. Available at <a href="http://pubs.usgs.gov/ha/ha730/ch\_f/F-text1.html">http://pubs.usgs.gov/ha/ha730/ch\_f/F-text1.html</a>. Accessed June 28, 2014.



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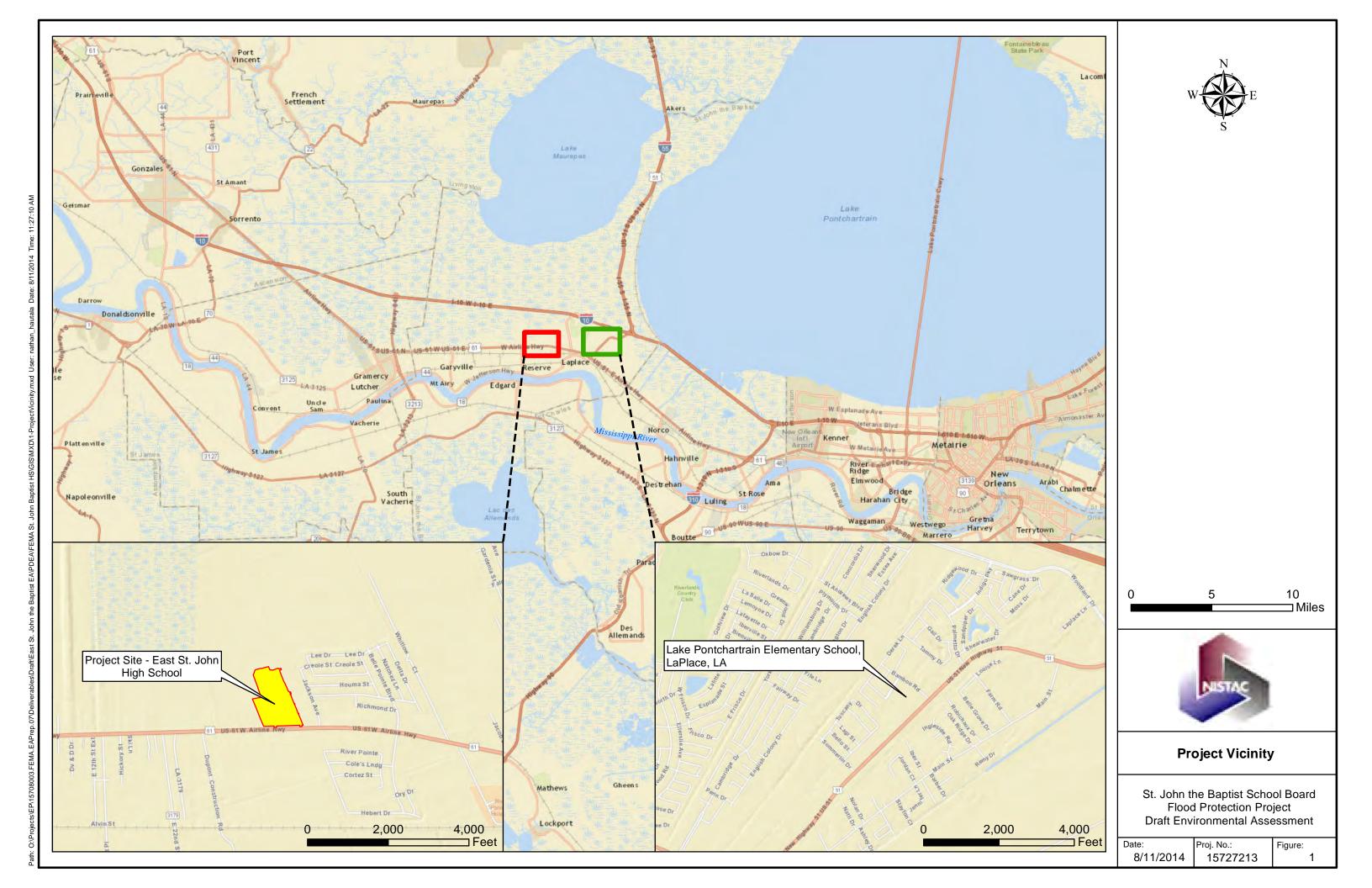
Project Manager All South Consulting, LLC Metairie, LA

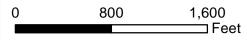
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Appendix A Figures

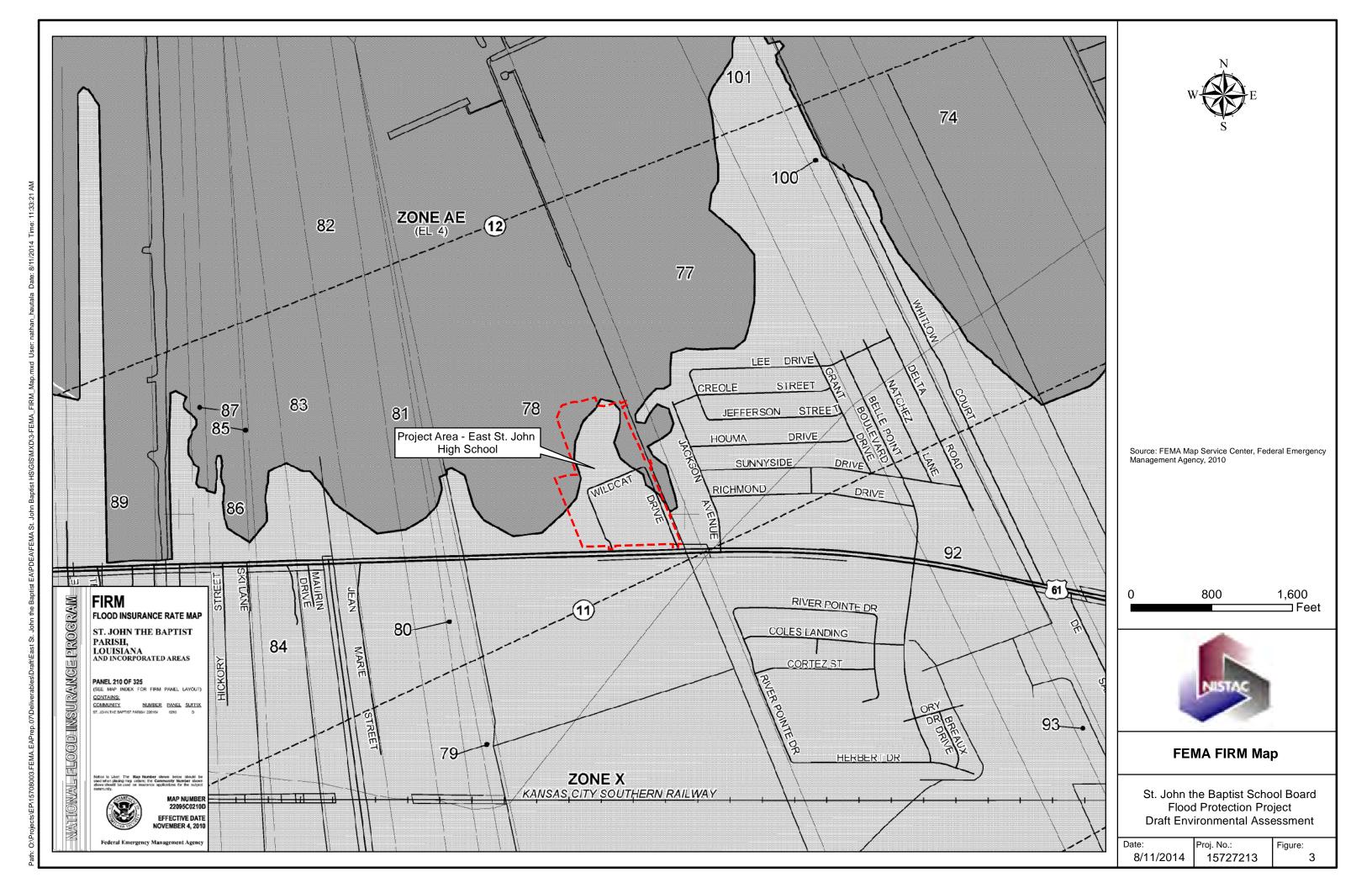


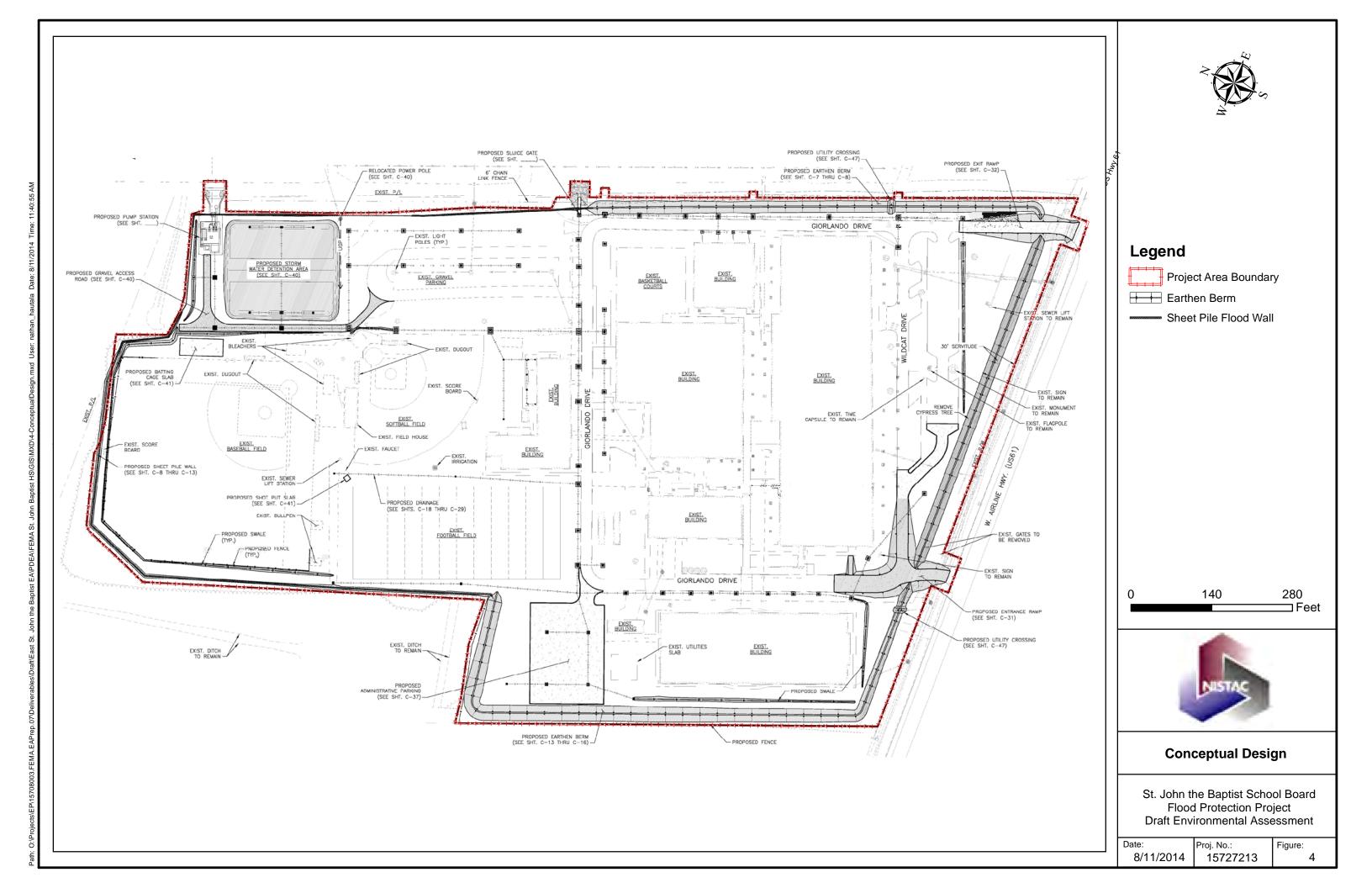


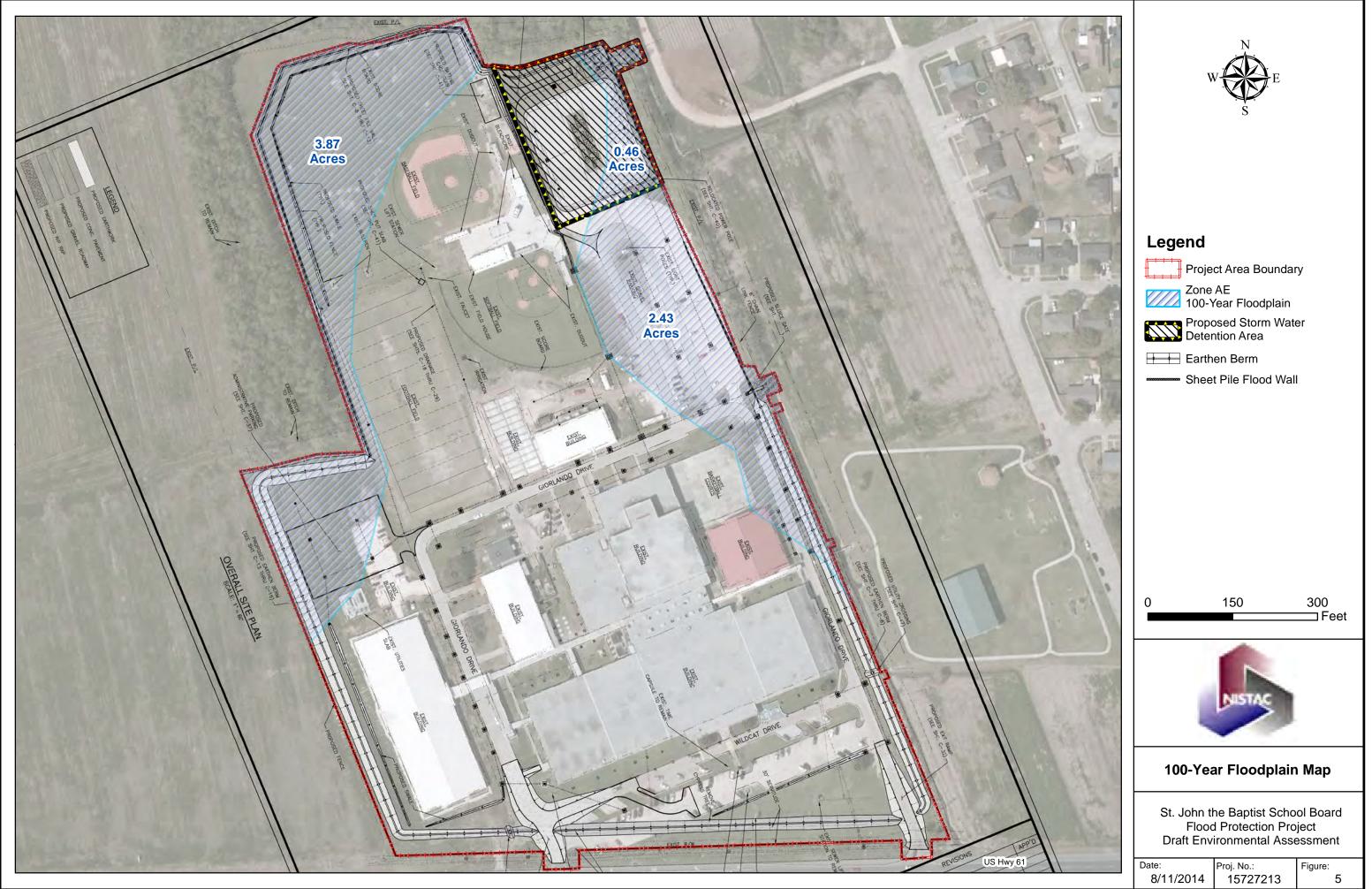


St. John the Baptist School Board Flood Protection Project Draft Environmental Assessment

Date:	Proj. No.:	Figure:
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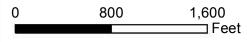






# Legend

Project Area - East St. John

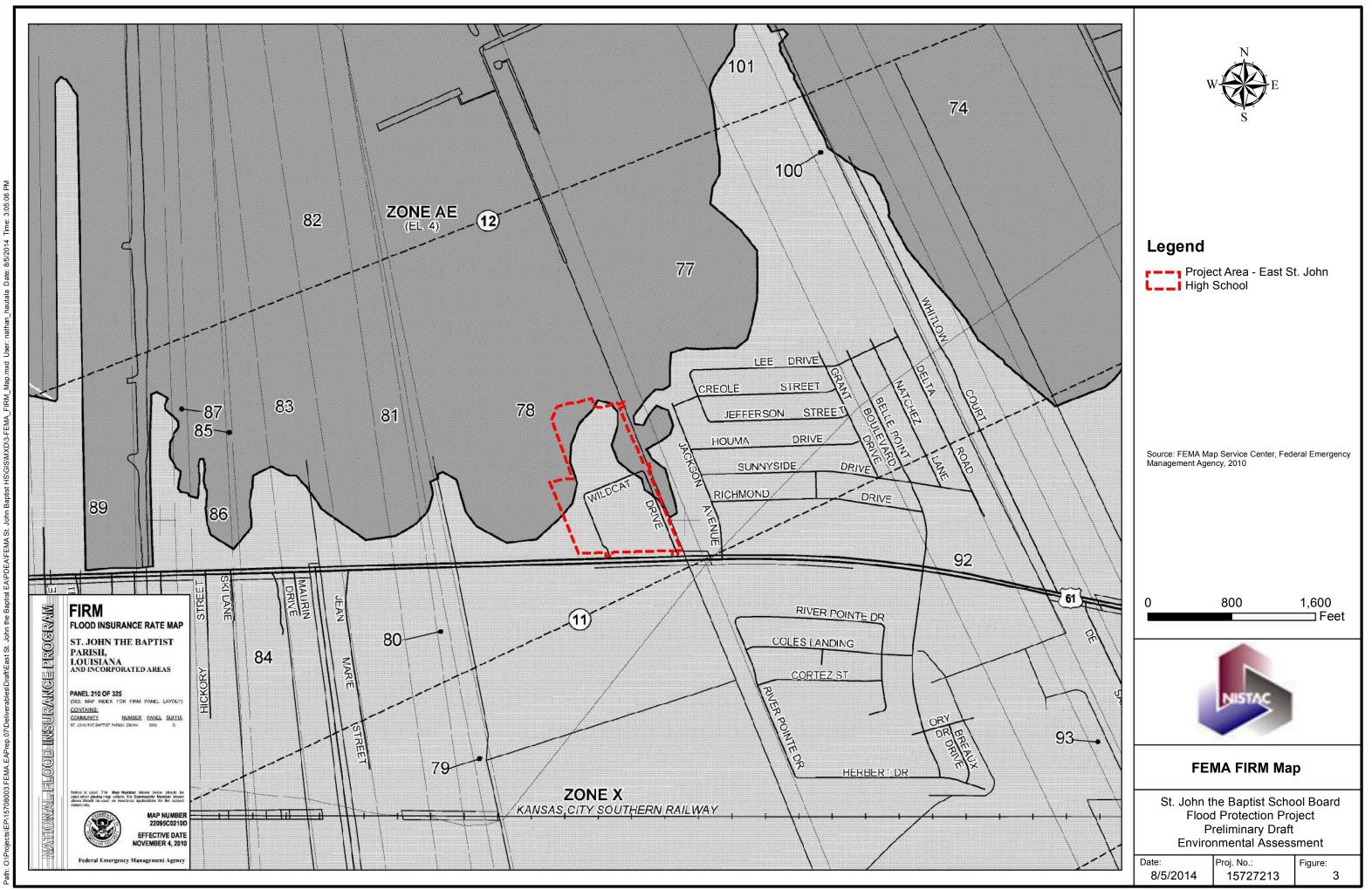


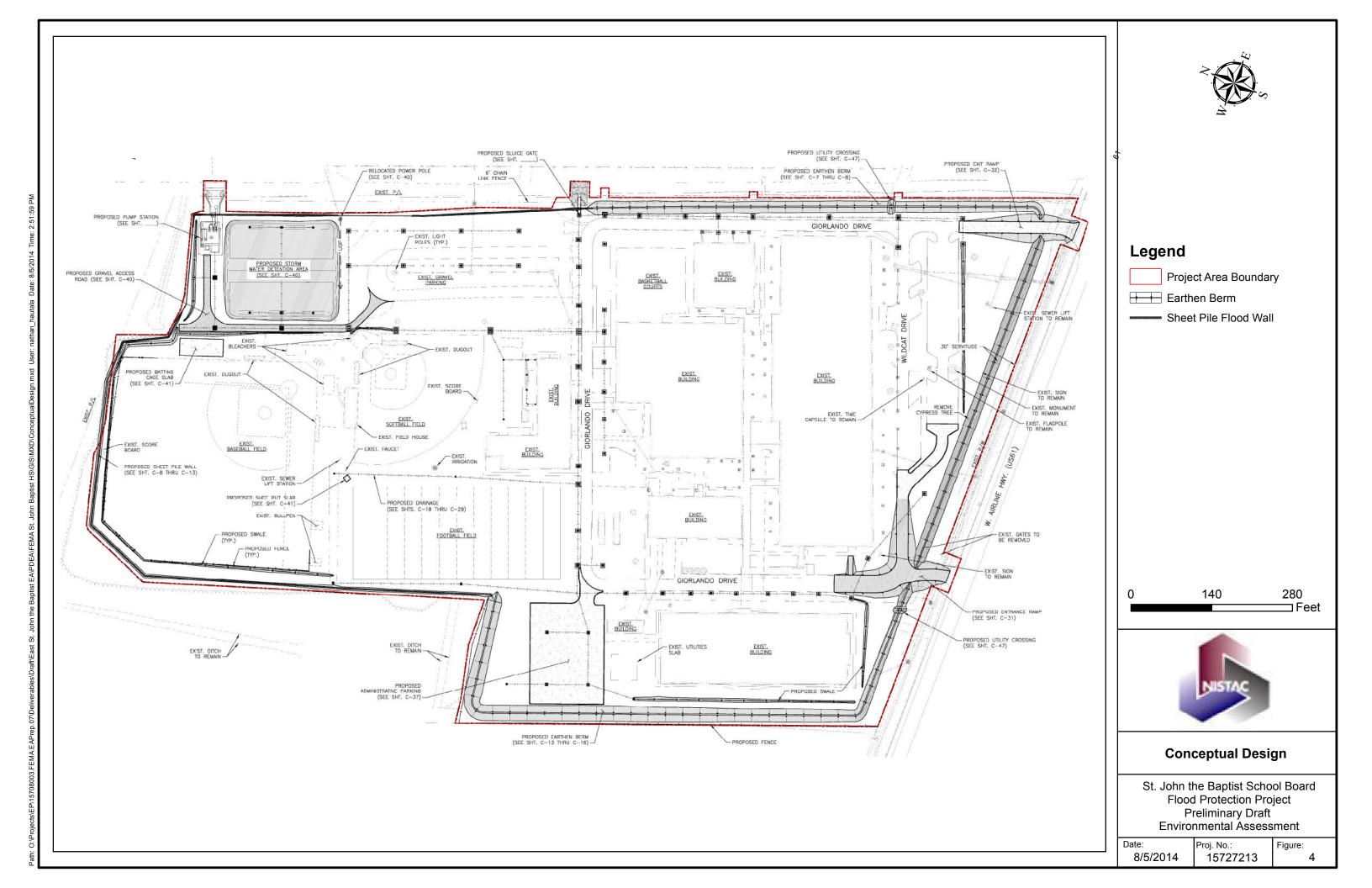


# **Project Area**

St. John the Baptist School Board Flood Protection Project Preliminary Draft Environmental Assessment

Date: Proj. No.: Figure: 2





Appendix B Photographic Log



## **Project Name:**

St. John the Baptist School Board Flood Protection Project

#### Site Location:

East St. John the Baptist High School 1 Wildcat Drive, Reserve, Louisiana

Project No. PWs 566 & 606

**Date** 6/23/2014

Photo No.

## **Direction Photo Taken:**

North

## **Description:**

East St. John High School Main Building.



**Date** 6/23/2014

Photo No.2

## **Direction Photo Taken:**

Northwest

## Description:

Ninth Grade Academy Building. This building is the only building currently operating at the ESJHS campus.





## **Project Name:**

St. John the Baptist School Board Flood Protection Project

**Date** Photo No. 6/23/2014 3

#### **Direction Photo Taken:**

West

## **Description:**

View of the southern boundary of the ESJHS Campus and Airline Highway. The proposed project would construct an earthen berm flood wall within the maintained grassed areas and existing parking lot.

#### Site Location:

East St. John the Baptist High School 1 Wildcat Drive, Reserve, Louisiana

Project No. PWs 566 & 606



**Date** I 6/23/2014

Photo No.

#### **Direction Photo Taken:**

East

## **Description:**

View of the southern boundary of the ESJHS Campus and Airline Highway. The proposed project would construct an earthen berm within the maintained grassed areas The parking lot would be relocated to the rear of the Ninth Grade Academy Building to accommodate the flood wall. In addition, new elevated ramps would be constructed at the existing entrance/exit driveways (west access drive shown) to provide access over the proposed flood wall.





## **Project Name:**

St. John the Baptist School Board Flood Protection Project

**Date** Photo No. 6/23/2014 5

**Direction Photo Taken:** 

West

## **Description:**

View of eastern entrance/exit driveway at Airline Highway. A new elevated ramp would be constructed at the existing driveway to provide access over the proposed flood wall.

#### Site Location:

East St. John the Baptist High School 1 Wildcat Drive, Reserve, Louisiana

Project No. PWs 566 & 606



**Date** Photo No. 6/23/2014 6

#### **Direction Photo Taken:**

West

## **Description:**

View of drainage ditch culvert located at the southeast corner of the campus. The drainage ditch and culverts conveys stormwater flow from areas south of Airline Highway north to the Belle Pointe Drainage Basin Pump Station.





## **Project Name:**

St. John the Baptist School Board Flood Protection Project

**Date** Photo No. 6/23/2014 7

**Direction Photo Taken:** 

North

## **Description:**

View of the drainage ditch located along the eastern boundary of the campus. Existing and proposed stormwater outfalls for the ESJHS Campus discharge to this drainage ditch.

#### Site Location:

East St. John the Baptist High School 1 Wildcat Drive, Reserve, Louisiana

Project No. PWs 566 & 606



**Date** Photo No. 6/23/2014 8

**Direction Photo Taken:** 

Northeast

## **Description:**

View of perimeter fence and drainage ditch along the eastern boundary of the ESJHS Campus. The proposed flood wall would be installed along the fence line.





## **Project Name:**

St. John the Baptist School Board Flood Protection Project

#### Site Location:

East St. John the Baptist High School 1 Wildcat Drive, Reserve, Louisiana

Project No. PWs 566 & 606

**Date** 6/23/2014

Photo No.

#### **Direction Photo Taken:**

North

## **Description:**

View of perimeter fence along the eastern boundary of the ESJHS Campus.

The proposed flood wall will be installed along the fence line. Construction of the floodwall would require the removal of several existing cypress trees (shown) along the perimeter.



**Date** Photo No. 6/23/2014 10

## **Direction Photo Taken:**

South

## **Description:**

View of the eastern boundary of the ESJHS Campus. The proposed flood wall would be installed along the fence line.

Construction of the floodwall would require the removal of several existing cypress trees (shown) along the perimeter. The flood wall would transition from an earthen berm to a sheet pile wall at this point extending north.





## **Project Name:**

St. John the Baptist School Board Flood Protection Project

#### **Site Location:**

East St. John the Baptist High School 1 Wildcat Drive, Reserve, Louisiana

Project No. PWs 566 & 606

**Date** 6/23/2014

Photo No.

## **Direction Photo Taken:**

North

## **Description:**

View of the eastern and northern boundaries of the ESJHS Campus and athletic fields. A sheet pile flood wall would be installed along the perimeter of the athletic fields.

Excavation would occur along the vegetated boundary of the campus. The field shown would also be used as a temporary construction laydown and parking area.



**Date** 6/23/2014

Photo No.

#### **Direction Photo Taken:**

North

## **Description:**

View of the northeast corner of the ESJHS campus. The proposed retention area and pump station would be installed at this location.





## **Project Name:**

St. John the Baptist School Board Flood Protection Project

#### Site Location:

East St. John the Baptist High School 1 Wildcat Drive, Reserve, Louisiana

Project No. PWs 566 & 606

**Date** 6/23/2014

Photo No.

## **Direction Photo Taken:**

East



Proposed pump station site. Construction of the pump station would require minor vegetation removal for construction of the pump station's outfall structure.



**Date** 6/23/2014

Photo No.

## **Direction Photo Taken:**

North

## **Description:**

View of the baseball field on the northern boundary of the site. The proposed sheet pile flood wall would be constructed along the baseball field's outfield walls.





## **Project Name:**

St. John the Baptist School Board Flood Protection Project

#### Site Location:

East St. John the Baptist High School 1 Wildcat Drive, Reserve, Louisiana

Project No. PWs 566 & 606

**Date** 6/23/2014

Photo No. 15

## **Direction Photo Taken:**

North



Looking north along the baseball field's outfield walls and the northwest boundary of the ESJHS Campus.

The proposed sheet pile wall will be installed along the existing wall. The existing baseball field wall will be relocated inward to allow accommodate the construction



**Date** 6/23/2014

Photo No. 16

#### **Direction Photo Taken:**

North

## **Description:**

View of the western and northern boundaries of the ESJHS Campus and athletic fields.

The proposed flood wall would revert back to the earthen berm wall from the tree line (shown left) south to the southern boundary of the campus at Airline Highway.





## **Project Name:**

St. John the Baptist School Board Flood Protection Project

**Date** Photo No. 6/23/2014 17

**Direction Photo Taken:**North

## **Description:**

View of the proposed parking lot site located behind the Ninth Grade Academy Building.

#### Site Location:

East St. John the Baptist High School 1 Wildcat Drive, Reserve, Louisiana

Project No. PWs 566 & 606



**Date** 6/23/2014

Photo No.

## **Direction Photo Taken:**

North

## **Description:**

View of the western boundary of the ESJHS Campus, along the Ninth Grade Academy Building.

The proposed earthen berm flood wall would be installed within the maintained grassed area.





## **Project Name:**

St. John the Baptist School Board Flood Protection Project

#### **Site Location:**

East St. John the Baptist High School 1 Wildcat Drive, Reserve, Louisiana

Project No. PWs 566 & 606

**Date** 6/23/2014

Photo No.

## **Direction Photo Taken:**

South



Looking South from the ESJHS Campus and Airline Highway at adjacent agricultural properties.



**Date** 6/23/2014

Photo No.

## **Direction Photo Taken:**

Southeast

## **Description:**

Looking Southeast from the ESJHS Campus and Airline Highway. Residential subdivisions are located southeast and East of the ESJHS Campus.



Appendix C Agency Coordination



**Natalie Robottom** 

Parish President

Angelic Sutherland
Director of Planning & Zoning

July 17, 2014

Mr. Kevin George Superintendent St John the Baptist Parish School Board 118 West 10 Reserve, LA 70084

RE: Concurrence with July 2014 All South Consulting Engineers Hydrology and Hydraulics Report East St John High School Hazard Mitigation Project

Dear Mr. George:

This letter is to certify that the East St. John High School Hazard Mitigation project falls under the jurisdiction of the St. John the Baptist Parish Floodplain Administrator. I have review the Hydrology and Hydraulics report prepared by Chris Sanchez, PE, and am in concurrence with its finding and recommendations.

The parish has no objections with the proposed hazard mitigation project.

Sincerely,

Eric Wolverton, CFM Floodplain Administrator St John the Baptist Parish



#### **Natalie Robottom**

Parish President

**Angelic Sutherland** 

Director of Planning & Zoning

March 7, 2014

Mr. Kevin George Superintendent St. John the Baptist Parish School Board 118 West 10th St. Reserve, LA 70084

Re: Clarification of St. John the Baptist Parish Critical Facility Designation for East St. John High School and Lake Pontchartrain Elementary School

Dear Mr. George:

St. John the Baptist Parish's Hazard Mitigation Plan designates East St. John High School and Lake Pontchartrain Elementary School as "critical facilities," in accordance with guidance from FEMA Publication 543 "Design Guide for Improving Critical Facility Safety from Flooding and High Winds." This designation broadly addresses parish-wide facilities that would disrupt vital socioeconomic activities in the parish's daily operations if their functionality was impaired, as critical facilities.

This designation is distinct from FEMA's determination of "critical actions," as defined by 44 CFR Section 9.4: "The minimum floodplain of concern for critical actions is the 500-year floodplain, i.e., critical action floodplain. Critical actions include, but are not limited to, those which create or extend the useful life of structures or facilities: (a) Such as those which produce, use or store highly volatile, flammable, explosive, toxic or water-reactive materials: (b) Such as hospitals and nursing homes, and housing the elderly which are likely to contain occupants who may not be sufficiently mobile to avoid loss of life or injury during flood and storm events; (c) Such emergency operations centers, or data storage centers which contain records or services that may become lost or inoperative during flood and storm events; and (d) Such as generating plants, and other principal points of utility lines."

Coincidentally, NFIP does not require 500-year protection for critical facilities. For St. John the Baptist Parish to remain compliant per the Parish's participation in the NFIP, the School Board does not have to implement 500year floodplain requirements at these sites.

Sincerely,

Eric Wolverton, CFM Floodplain Administrator

St. John the Baptist Parish

## Rothbard, Heather

From: Mehok, Brian

**Sent:** Monday, June 23, 2014 12:18 PM

**To:** Rothbard, Heather

**Subject:** RE: East St. John High School Flood Mitigation Layout

#### Parish authorization for tree clearance

#### Brian S. Mehok, CFM

**Environmental Planning & Permitting Area Manager** 

URS Corporation – Houston Office: (713) 914-6490 Cell: (713) 201-1788



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From: Chris [mailto:csanchez@ascellc.com] Sent: Wednesday, June 18, 2014 4:32 PM

**To:** Mehok, Brian **Cc:** Cindy Janecke

Subject: FW: East St. John High School Flood Mitigation Layout

See below regarding trees.

Christopher L. Sanchez, P.E.

All South Consulting Engineers

652 Papworth Avenue Metairie, LA 70005 Phone: 504-322-2783

#### www.ascellc.com

From: Lou Ellen Vaughn [mailto:l.vaughn@sjbparish.com]

**Sent:** Wednesday, June 18, 2014 4:29 PM

To: Chris

Subject: RE: East St. John High School Flood Mitigation Layout

Chris,

You are not required to get a permit for the removal of trees.

Kindest Regards,

Lou Ellen Vaughn

St. John Parish Planning & Zoning Office: 985.651.5565 ext. 1155

Fax: 985.653.9808

Email: <a href="mailto:l.vaughn@sjbparish.com">l.vaughn@sjbparish.com</a>
Website: <a href="mailto:www.sjbparish.com">www.sjbparish.com</a>

From: Chris [mailto:csanchez@ascellc.com]
Sent: Wednesday, June 18, 2014 4:24 PM

To: Lou Ellen Vaughn

Subject: RE: East St. John High School Flood Mitigation Layout

The school has a line of cypress trees along the east boundary that are in line with the levee berm and will need to be removed. Additionally, there is a single live oak on the east side of the property mixed in with the cypress trees about 550-ft back from Airline Hwy. Additionally there are two trees in the front that have to be removed and one tree in the far back corner where the pump station is being located. The school board has no objection to the work.

Christopher L. Sanchez, P.E.

All South Consulting Engineers 652 Papworth Avenue Metairie, LA 70005 Phone: 504-322-2783

www.ascellc.com

From: Lou Ellen Vaughn [mailto:l.vaughn@sjbparish.com]

**Sent:** Wednesday, June 18, 2014 4:16 PM

To: Chris

Subject: RE: East St. John High School Flood Mitigation Layout

What trees are you taking out?

#### Kindest Regards,

# Lou Ellen Vaughn

St. John Parish Planning & Zoning Office: 985.651.5565 ext. 1155

Fax: 985.653.9808

Email: <a href="mailto:l.vaughn@sjbparish.com">l.vaughn@sjbparish.com</a> Website: <a href="mailto:www.sjbparish.com">www.sjbparish.com</a>

From: Chris [mailto:csanchez@ascellc.com]
Sent: Wednesday, June 18, 2014 3:29 PM

**To:** Lou Ellen Vaughn **Cc:** Eric Wolverton

Subject: RE: East St. John High School Flood Mitigation Layout

Lou Ellen,

I wanted to update your office on the status of our project. We have recently obtained permits from the USACE and the DNR offices. We are now moving forward on completing the project and having it ready for advertisement. FEMA is in the final stages of an accelerated EA and we are hoping to be clear for bid in two weeks. One item I have not been able to confirm is if St. John Parish has any tree conservation requirements. Can you confirm if the parish requires any permits for the removal of trees?

Thanks,

Christopher L. Sanchez, P.E.

All South Consulting Engineers 652 Papworth Avenue Metairie, LA 70005 Phone: 504-322-2783

www.ascellc.com

From: Lou Ellen Vaughn [mailto:l.vaughn@sjbparish.com]

Sent: Friday, February 21, 2014 1:10 PM

**To:** Chris Sanchez **Cc:** Eric Wolverton

Subject: RE: East St. John High School Flood Mitigation Layout

I am in the process of doing some research and hope to call you on Monday so we can discuss. Do you have any information from Department of Natural Resources, Office of Coastal Management, Permits & Mitigation Division and USACE on what they require?

St. John Floodplain Manager's information as you requested:

St. John Floodplain Manager Eric Wolverton 102 East Airline Highway LaPlace, La 70068 e.wolverton@sjbparish.com

Kindest Regards,

Lou Ellen Vaughn

Manager of Planning & Zoning

St. John the Baptist Parish 102 East Airline Highway LaPlace. LA 70068

Office: 985.651.5565 ext. 1155

Fax: 985.653.9808

Email: <a href="mailto:l.vaughn@sjbparish.com">l.vaughn@sjbparish.com</a>
Website: <a href="mailto:www.sjbparish.com">www.sjbparish.com</a>

From: Chris Sanchez [mailto:csanchez@ascellc.com]

**Sent:** Friday, February 21, 2014 9:02 AM

**To:** Lou Ellen Vaughn

Subject: RE: East St. John High School Flood Mitigation Layout

Lou,

Can I give you a call later today to discuss the project?

For one, I apologize for not explaining this to you but we are already working with FEMA on the levee and floodwall requirements. Our office prepared the scope of work for the school board to secure the flood hazard mitigation grant. We worked with FEMA to ensure the conceptual design covered their minimum requirements. Our design plans are in production but will not be completed until mid-April. Based on the school boards schedule, we will have to bid the project by then. I will need to work closely with you and other agencies to start any required permitting outside of general commercial construction before the plans are completed.

Also, FEMA is now requesting a letter from the Parish's floodplain manager clarifying the parish's categorization of the East St John High School facility as critical infrastructure site. Can you provide me the contact information for the new parish's flood plain manager? This is something we have to resolved immediately.

Please let me know when we can discuss, I may have to leave the office a couple times today so feel free to call my cell phone at 427-6419.

Thanks!

Christopher L Sanchez, PE All South Consulting Engineers, LLC 504-322-2783

**From:** Lou Ellen Vaughn [mailto:l.vaughn@sjbparish.com]

**Sent:** Monday, February 17, 2014 2:49 PM

To: Chris Sanchez

Subject: RE: East St. John High School Flood Mitigation Layout

Mr. Sanchez,

Upon contacting the Department of Natural Resources, Office of Coastal Management, Permits & Mitigation Division and USACE could you please inform our office on what their requirements are.

## Kindest Regards,

# Lou Ellen Vaughn

# Manager of Planning & Zoning

St. John the Baptist Parish 102 East Airline Highway LaPlace, LA 70068

Office: 985.651.5565 ext. 1155

Fax: 985.653.9808

Email: <a href="mailto:l.vaughn@sjbparish.com">l.vaughn@sjbparish.com</a> Website: <a href="mailto:www.sjbparish.com">www.sjbparish.com</a>

From: Lou Ellen Vaughn

**Sent:** Friday, February 14, 2014 8:52 AM **To:** Chris Sanchez (<u>csanchez@ascellc.com</u>)

Cc: Angelic Sutherland; Kristi Muller; e.wolverton@sjbparish.com; Brian Nunes; Jobe Boucvalt; CJ Savoie

(cjs@cjsavoie.com)

Subject: East St. John High School Flood Mitigation Layout

# Good Morning,

You will need approvals or a letter saying they are not required to review and approve the proposed levee from the Department of Natural Resources, Office of Coastal Management, Permits & Mitigation Division and USACE. Upon receiving those approvals or a letter saying they are not required to review and approve please forward them to our office along with 5 full sets of detailed plans for review.

You may also want to contact FEMA at 1-877-FEMA MAP for guidance on building the levee and or a Conditional Letter of Map Revision (CLOMR).

If I can be of assistance please do not hesitate giving me a call.

Kindest Regards,

Manager of Planning & Zoning

Lou Ellen Vaughn

St. John the Baptist Parish 102 East Airline Highway

LaPlace, LA 70068

Office: 985.651.5565 ext. 1155

Fax: 985.653.9808

Email: <u>I.vaughn@sjbparish.com</u> Website: www.sjbparish.com

## Mehok, Brian

From: Thibodeaux, Christine MVN <Christine.Thibodeaux@usace.army.mil>

**Sent:** Thursday, June 26, 2014 4:18 PM

To: Chris

Subject: RE: MVN-2014-01037-CJ (P20140491) (St. John the Baptist Parish Schools - East St. John

High School Flood Hazard Mitigation at 1 Giorlando Drive) (UNCLASSIFIED)

Classification: UNCLASSIFIED

Caveats: NONE

Yes, this is correct. Is all this for FEMA regulations?

----Original Message----

From: Chris [mailto:csanchez@ascellc.com] Sent: Thursday, June 26, 2014 4:16 PM

To: Thibodeaux, Christine MVN

Cc: Steve Bourg

Subject: [EXTERNAL] RE: MVN-2014-01037-CJ (P20140491) (St. John the Baptist Parish Schools - East St. John High School

Flood Hazard Mitigation at 1 Giorlando Drive) (UNCLASSIFIED)

Christine,

Thanks for taking the time to discuss this permit with Steve and I this afternoon.

As we discussed, you were not concerned about any improvements within the maintained area of the high school site, which corresponds to within the footprint of our proposed flood protection. Additionally, you had reviewed the proposed pump station installation and had no concerns regarding the impacts to the adjacent drainage canal. In general, you do not consider any changes to site work within this area to be a change to the permit and therefore we do not need to resubmit for an amended permit. As an example, the changes we discussed were replacing drain lines, replacing paved areas and adding an additional parking lot, all work to occur inside the limits of the proposed flood protection.

You had stated your only concern was any project impacts to the area north of the baseball fields and we have confirmed that our work on the north side of the site will not extend into the existing tree line. This area will remain undisturbed and outside the limits of our proposed flood protection.

Please let me know if you concur with our understanding of the phone conversation.

Sincerely,

Christopher L. Sanchez, P.E.

All South Consulting Engineers 652 Papworth Avenue Metairie, LA 70005 Phone: 504-322-2783

www.ascellc.com

----Original Message----

From: Thibodeaux, Christine MVN [mailto:Christine.Thibodeaux@usace.army.mil]

Sent: Tuesday, June 24, 2014 3:11 PM

To: Chris

Subject: RE: MVN-2014-01037-CJ (P20140491) (St. John the Baptist Parish Schools - East St. John High School Flood

Hazard Mitigation at 1 Giorlando Drive) (UNCLASSIFIED)

Classification: UNCLASSIFIED

Caveats: NONE

Chris,

Every permit authorized has a Jurisdictional Determination, either a formal one or an informal one. Correct me if I am wrong but, as I understood this project, it is located in the Coastal Zone and did not propose any impacts to wetlands, only other waters of the US (ditch). It was reviewed as a Programmatic General Permit I (PGP-I) because of the amount of wetland impacts and its location within the coastal zone. An informal determination was made and the permit was conditioned to limit dredge and fill activities to areas essential to development. If the proposed project required any additional work not expressly permitted or impacts to wetlands or other waters other than the areas indicated on the drawings, the permittee must apply for an amendment to the permit. Additionally, the permit was conditioned that any changes in the project configuration as a result of local approvals must be documented and appropriate drawings provided to this District Office for incorporation into this permit.

So, a wetland delineation was not needed for this permit unless the activities have changed and there is a need to amend the permit. This does not exclude the permittee from having to provide a wetland delineation to other local, state or federal agencies. The permit authorizes the permittee to perform the work stated on the application and drawings submitted.

Thank you for your inquiry and if you need additional information or clarification you may call me at 504-862-2278.

Regards, Christine

----Original Message-----

From: Chris [mailto:csanchez@ascellc.com] Sent: Tuesday, June 24, 2014 2:30 PM

To: Thibodeaux, Christine MVN

Subject: [EXTERNAL] RE: MVN-2014-01037-CJ (P20140491) (St. John the Baptist Parish Schools - East St. John High School

Flood Hazard Mitigation at 1 Giorlando Drive) (UNCLASSIFIED)

Christine,

Just for my records, can you confirm that we did not require a wetland delineation for this permit.

Thanks and feel free to call me if you have any questions.

Christopher L. Sanchez, P.E.

All South Consulting Engineers 652 Papworth Avenue

Metairie, LA 70005 Phone: 504-322-2783

www.ascellc.com

----Original Message-----

From: Thibodeaux, Christine MVN [mailto:Christine.Thibodeaux@usace.army.mil]

Sent: Tuesday, June 17, 2014 10:19 AM

To: Chris Sanchez

Subject: RE: MVN-2014-01037-CJ (P20140491) (St. John the Baptist Parish Schools - East St. John High School Flood

Hazard Mitigation at 1 Giorlando Drive) (UNCLASSIFIED)

Classification: UNCLASSIFIED

Caveats: NONE

Chris,

Chris,

Attached please find the scanned copy of your permit for St. John Baptist Parish Schools. I may have mailed it to the wrong address. I have put a new permit copy in the mail to All South Consulting Engineers, Attn: Christopher Sanchez, 652 Papworth Avenue, Metairie, LA 70005.

My apologies for the confusion.

**Christine Thibodeaux** 

----Original Message-----

From: Chris Sanchez [mailto:csanchez@ascellc.com]

Sent: Monday, June 16, 2014 4:37 PM

To: Thibodeaux, Christine MVN

Subject: [EXTERNAL] RE: MVN-2014-01037-CJ (P20140491) (St. John the Baptist Parish Schools - East St. John High School

Flood Hazard Mitigation at 1 Giorlando Drive) (UNCLASSIFIED)

Christine,

Can I give you a call tomorrow morning to discuss the status of the permit below? Please let me know what would be a good number.

Thanks,

Christopher L. Sanchez, P.E.

All South Consulting Engineers 652 Papworth Avenue Metairie, LA 70005 Phone: 504-322-2783

www.ascellc.com

----Original Message-----

From: Thibodeaux, Christine MVN [mailto:Christine.Thibodeaux@usace.army.mil]

Sent: Wednesday, April 23, 2014 1:28 PM

To: Chris Sanchez

Subject: RE: MVN-2014-01037-CJ (P20140491) (St. John the Baptist Parish Schools - East St. John High School Flood

Hazard Mitigation at 1 Giorlando Drive) (UNCLASSIFIED)

Classification: UNCLASSIFIED

Caveats: NONE

Hi Chris,

Thank you for contacting me. I have just received this permit application in my box today. Is there a Jurisdictional Determination or a wetland delineation for this project? In step 11 on the application, the answers appear to indicate no wetland impacts. So I don't see what would be triggering jurisdiction on our part. Will any of the forested portion on the north end of the project be impacted?

#### Christine

Christine Thibodeaux **Environmental Resources Specialist US Army Corps of Engineers New Orleans District** Regulatory Branch **CEMVN-OD-SC** (504) 862-2278 Phone (504) 862-1928 Fax

Christine.Thibodeaux@usace.army.mil

----Original Message-----

From: Chris Sanchez [mailto:csanchez@ascellc.com]

Sent: Wednesday, April 23, 2014 1:06 PM

To: Thibodeaux, Christine MVN

Subject: [EXTERNAL] FW: MVN-2014-01037-CJ (P20140491) (St. John the Baptist Parish Schools - East St. John High

School Flood Hazard Mitigation at 1 Giorlando Drive) (UNCLASSIFIED)

### Christine,

I just received the email below and wanted to introduce myself as the engineer on the project. We are hoping to expedite the permit so we may advertise for construction and break ground in June or July. Please give me a call if you have any questions or concerns.

Sincerely,

Christopher L. Sanchez, P.E.

All South Consulting Engineers 652 Papworth Avenue

Metairie, LA 70005 Phone: 504-322-2783

www.ascellc.com

----Original Message-----

From: Arnold, Dirreen S MVN [mailto:Dirreen.S.Arnold@usace.army.mil]

Sent: Wednesday, April 23, 2014 1:01 PM

To: Chris Sanchez

Subject: MVN-2014-01037-CJ (P20140491) (St. John the Baptist Parish Schools - East St. John High School Flood Hazard

Mitigation at 1 Giorlando Drive) (UNCLASSIFIED)

Classification: UNCLASSIFIED

Caveats: NONE

Christopher -

The US Army Corps of Engineers, New Orleans District Regulatory Branch, received your permit application on behalf of St. John the Baptist Parish Schools, for East St. John High School Flood Hazard Mitigation, on April 17, 2014.

Your Corps file number is MVN-2014-01037-CJ.

While your application is being processed, any questions you may have should be directed to your permit processor/project manager Christine Thibodeaux, who may be reached at (504) 862-2278 or by email at christine.thibodeaux@usace.army.mil

Please note that this is not your permit, just acknowledgement that your application has been received.

Thanks, Dirreen

Dirreen S. Arnold Western Evaluation Section Regulatory Branch US Army Corps of Engineers (504) 862-2301

Classification: UNCLASSIFIED

Caveats: NONE

Operations Division Regulatory Branch

Subject: MVN 2014-01037



MAY 6 2014

St. John Baptist Parish Schools Post Office Drawer AL Reserve, Louisiana 70361

Mr. Boughton:

The proposed work to excavate and deposit fill for the purpose of drainage improvements at East St. John High School located in Reserve, Louisiana, in St. John the Baptist Parish, as shown on the enclosed drawings, is <u>authorized</u> under **Category I** of the **Programmatic General Permit** provided that all conditions of the permit are met.

This authorization has a blanket water quality certification from the Louisiana Department of Environmental Quality; therefore, no additional authorization from DEQ is required.

However, prior to commencing work on your project, you must obtain approvals from state and local agencies as required by law and by terms of this permit. These approvals include, but are not limited to, a permit, consistency determination or determination of "no direct or significant impact (NDSI) on coastal waters" from the Louisiana Department of Natural Resources, Office of Coastal Management.

The following special conditions are being made a part of this authorization:

- 1. The permittee shall limit dredge and/or fill activities to areas essential to the development. If the proposed project requires any additional work not expressly permitted herein, or impacts any wetlands (or "other waters of the US") other than the areas indicated on the attached drawings, the permittee must apply for an amendment to this authorization prior to commencement of work.
- Any changes in the project configuration as a result of local approvals must be documented and appropriate drawings provided to this District office for incorporation into the permit file.

This approval to perform work is valid for **5 years** from the date of this letter.

Permittee is aware that this office may reevaluate its decision on this permit at any time the circumstances warrant.



Should you have any further questions concerning this matter, please call Christine Thibodeaux of this office at (504) 862-2278.

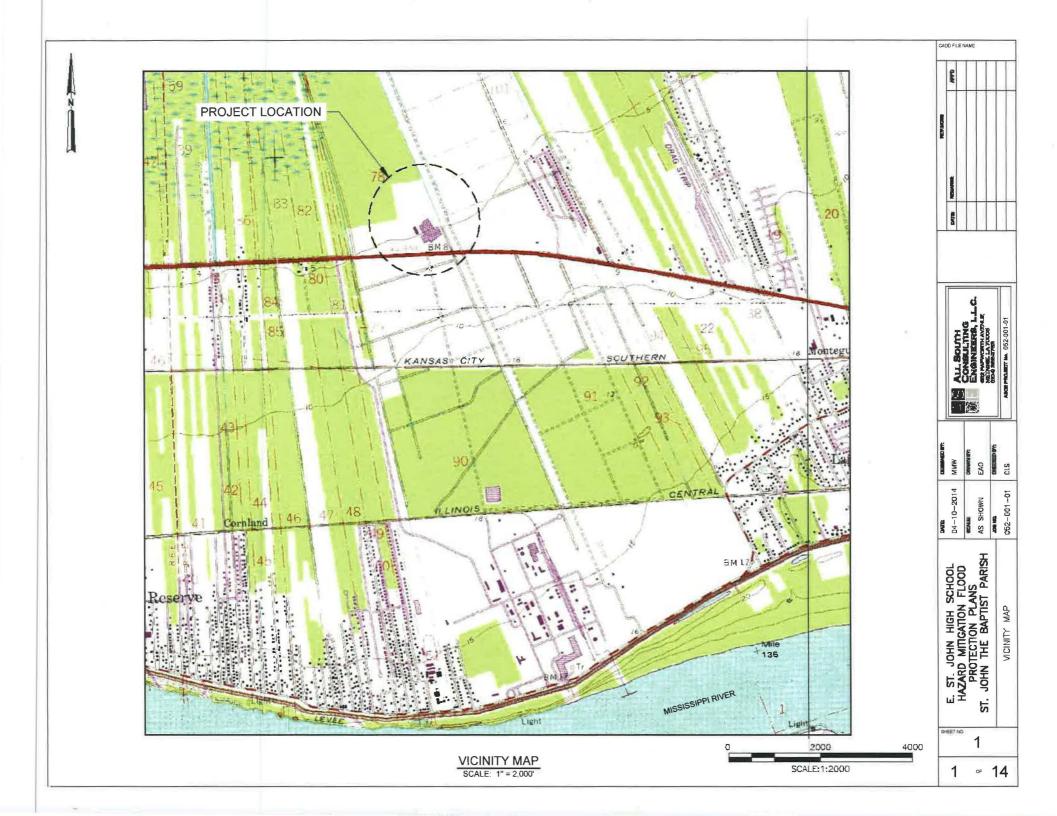
Sincerely,

Martin S. Mayer Chief, Regulatory Branch

Enclosure

Herman OD-SC

Mayer OD-S



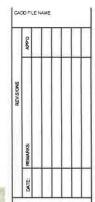
	POINT LOCATIONS						
PNT#	LATITUDE	LONGITUDE					
P-1	30 04 40.87551	90 31 47,72357					
P-2	30 04 48.37563	90 31 51.20875					
P-3	30 04 48 45425	90 31 51,41934					
P-4	30 04 50 59198	90 31 52.40074					
P-5	30 04 50.62657	90 31 52.49338					
P-6	30 04 54.29429	90 31 54 17720					
P-7	30 04 53.84077	90 31 55.86944					
P-8	30 04 53,90960	90 31 56.60294					
P-9	30 04 54.60400	90 31 57.03204					
P-10	30 04 54.59582	90 31 57.44948					
P-11	30 04 54.26261	90 31 58.91283					

P-12	30 04 54.34704	90 31 59.97952
P-13	30 04 54.12610	90 32 01.47827
P-14	30 04 53.57568	90 32 01.58930
P-15	30 04 50.88877	90 32 00.59901
P-16	30 04 50.20804	90 31 59.94442
P-17	30 04 49.63915	90 31 59.63747
P-18	30 04 49 49739	90 31 59.89270
P-19	30 04 48.89017	90 31 59.68430
P-20	30 04 48.55322	90 31 59.79532
P-21	30 04 48.13288	90 31 59.67540
P-22	30 04 47.79427	90 31 59.17141
P-23	30 04 47.02337	90 31 58 88571
P-24	30 04 46 70742	90 32 01.23407

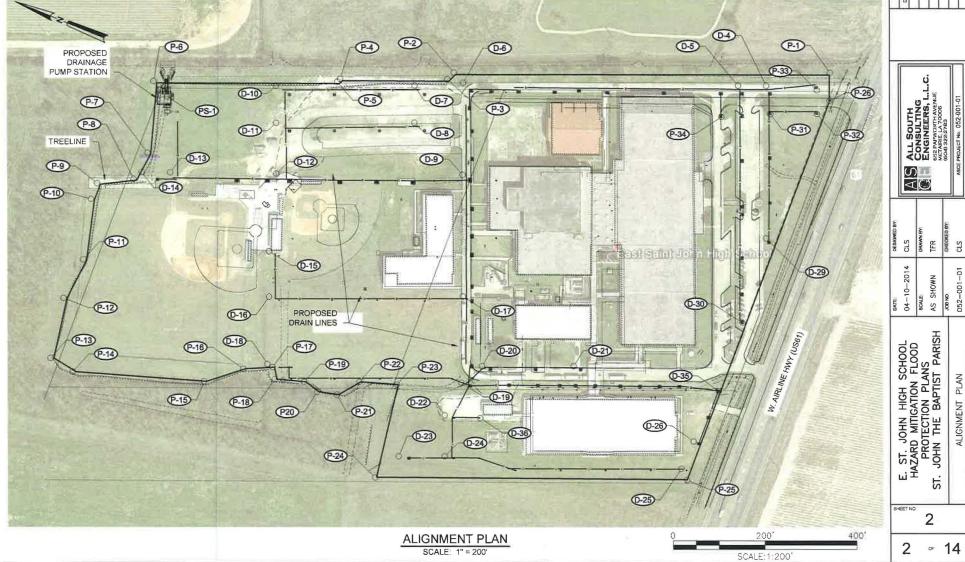
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PS-1	30 04 53.93731	90 31 54.39404
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D-2	30 04 41.89362	90 31 49.01260
D-3	30 04 41.13439	90 31 48.00810
D-4	30 04 42 05060	90 31 48.56342
D-5	30 04 42.61952	90 31 48 82226
D-6	30 04 48.15687	90 31 51.32550
D-7	30 04 49 08473	90 31 51.84809
D-8	30 04 48 78826	90 31 52.69452
D-9	30 04 47.40681	90 31 53.45447
D-10	30 04 51.84366	90 31 53,13463

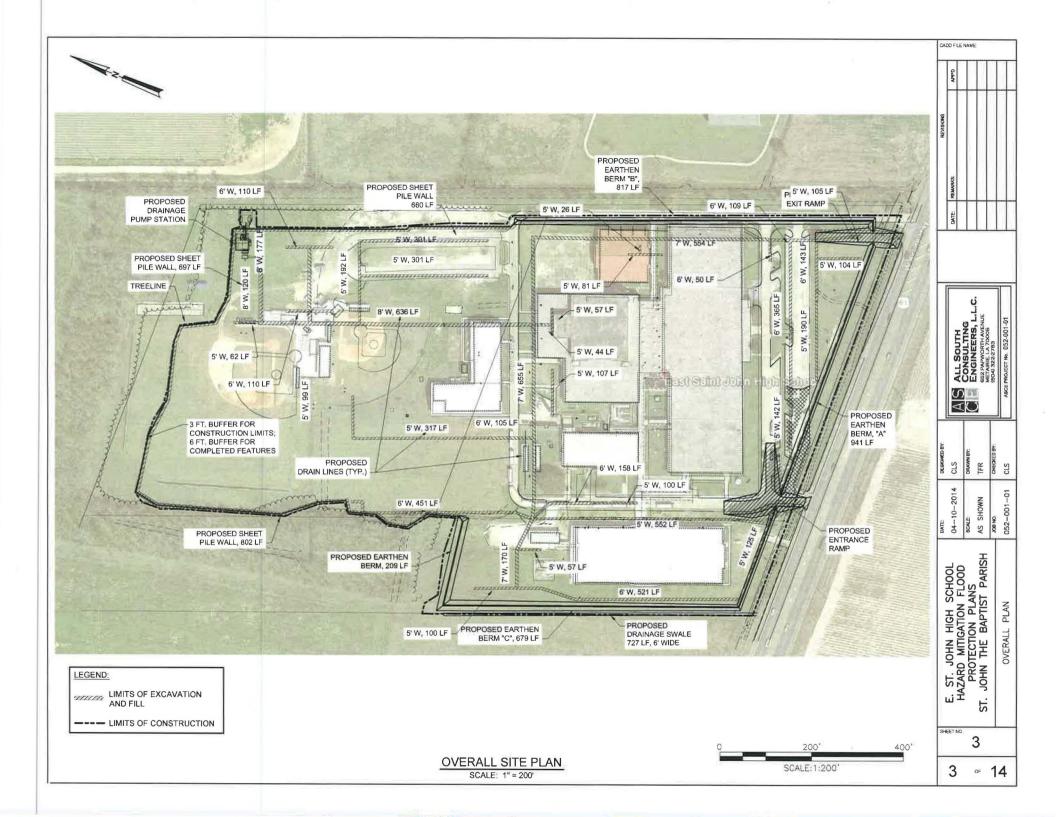
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D-12	30 04 51 13074	90 31 55.15590
D-13	30 04 53.26244	90 31 56.11117
D-14	30 04 53.83294	90 31 56.36665
D-15	30 04 50.66473	90 31 57.00680
D-16	30 04 50.29640	90 31 58.05109
D-17	30 04 46.42241	90 31 56.24453
D-18	30 04 49.78880	90 31 59.62131
D-19	30 04 45.76638	90 31 58.25034
D-20	30 04 45.49025	90 31 57.67586
D-21	30 04 43.65556	90 31 56.82029
D-22	30 04 45.83472	90 31 59.15912
D-23	30 04 46 42148	90 32 00 54014

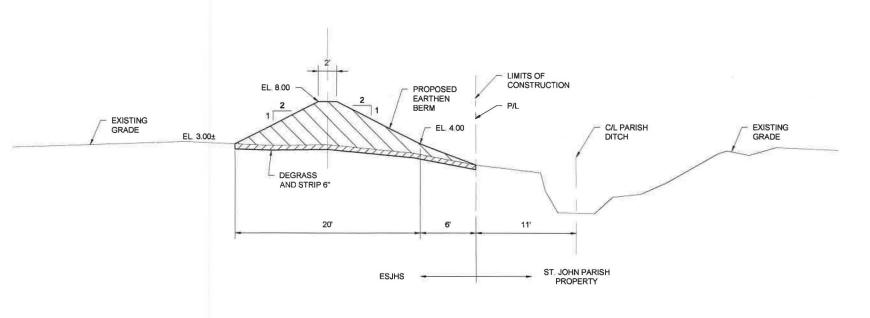
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D-26	30 04 40.64006	90 31 57.44171
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D-28	30 04 40.74694	90 31 54,17573
D-29	30 04 40.82640	90 31 52.07685
D-30	30 04 40.74693	90 31 54,17570
D-31	30 04 41.89362	90 31 49.01261
D-32	30 04 40,93729	90 31 48,56661
D-33	30 04 41.13435	90 31 48.00808
D-34	30 04 42.86988	90 31 49.54450
D-35	30 04 40 66796	90 31 56.01927
D-36	30 04 45 31031	90 31 58 91968



ALIGNMENT PLAN







## TYPICAL SECTION - LEVEE "B" (ALONG EAST PROPERTY LINE) SCALE: 1" = 10'

LEGEND:

EXCAVATE

FILL

SUMMARY OF QUANTITIES:

SOIL STRIP, DEGRASS 6": 2.67 SY/FT

FILL COMPACTED CLAY: 11,56 SY/FT

SECTION LENGTH:

817 LF

TOTAL EXCAVATE:

727.13 CY

TOTAL FILL:

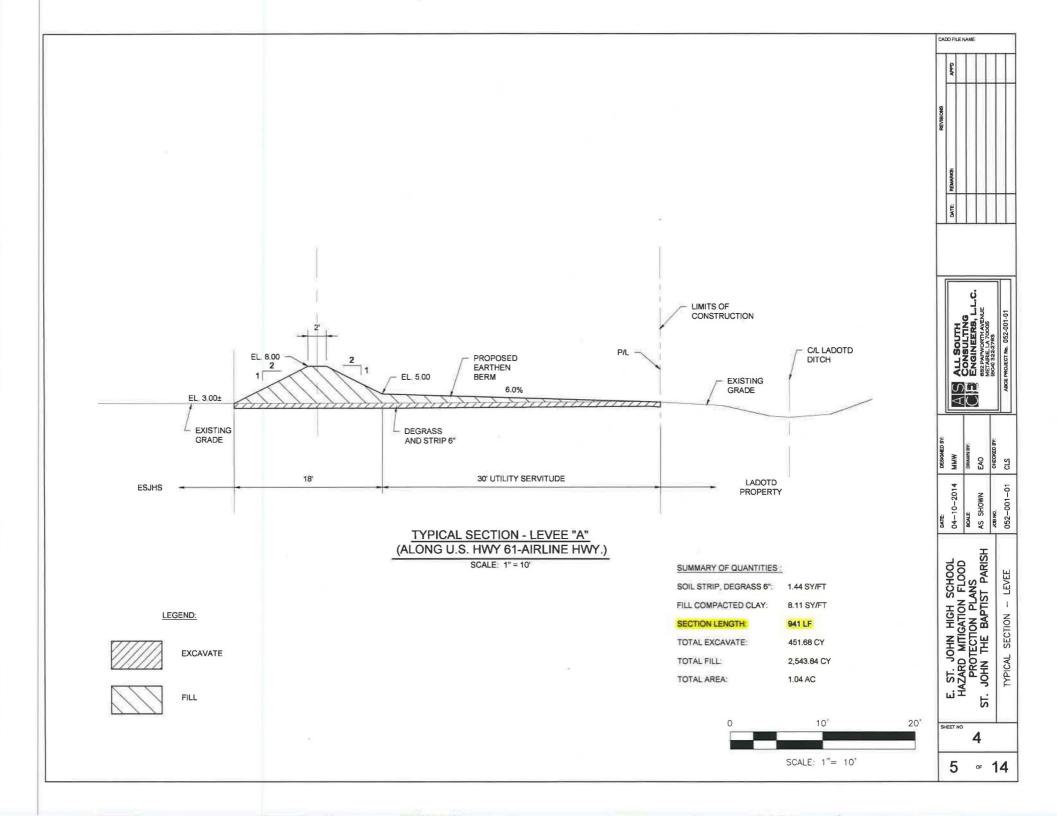
3,148.17 CY

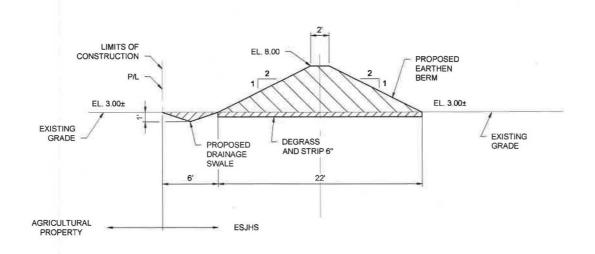
TOTAL AREA:

0.49 AC



,		DATE:	DEBIONED BY:			REVISIONS	
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È	DECTECTION DIANG	BCALE	DRAWN BY	CONSULTING			-
ST	ST. JOHN THE BAPTIST PARISH	AS SHOWN	FF	GBZ PAPWORTH AVENUE			
		JOBNO	CHECKED BY:	METAINE, LA 70006 (604) 322:2783			
	TYPICAL SECTION - LEVEE	052-001-01 CLS	SIS	ABCE PROJECT No. 052-001-01			
		The second secon					_





# TYPICAL SECTION - LEVEE "C" (ALONG WEST PROPERTY LINE)

SCALE: 1" = 10"

LEGEND:

**EXCAVATE** 

FILL

#### SUMMARY OF QUANTITIES:

SOIL STRIP, DEGRASS 6°:

1.22 SY/FT

EXCAVATE SWALE:

0.33 SY/FT

FILL COMPACTED CLAY:

6.67 SY/FT

SECTION LENGTH:

888 LF

TOTAL EXCAVATE:

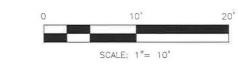
458.80 CY

TOTAL FILL:

1,974.32 CY

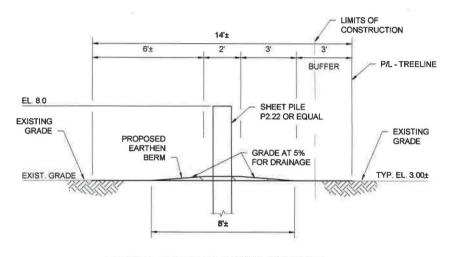
TOTAL AREA:

0.57 AC



DRAWN DRAWN EAO CHECKE 04-10-2014 AS SHOWN DATE E. ST. JOHN HIGH SCHOOL HAZARD MITIGATION FLOOD PROTECTION PLANS ST. JOHN THE BAPTIST PARISH - LEVEE SECTION ST. 6 of 14

CADO FILE NAME



TYPICAL SHEET PILE WALL SECTION
SCALE: 1:5

\*NOTE: A 6 FT BUFFER WILL BE MAINTAINED BETWEEN THE SHEET PILE WALL AND ANY TREE LINE INSIDE THE PROPERTY LINE.

> A 3 FT BUFFER WILL BE MAINTAINED BETWEEN THE LIMITS OF CONSTRUCTION AND THE PROPERTY LINE.

#### QUANTITIES LEGEND:

FILL, GENERAL:

0.08 SY/FT

LENGTH OF WALL:

2,159 LF

TOTAL FILL:

57.57 CY 0.40 AC

TOATL AREA (FILL ONLY):

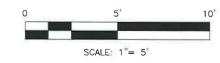
LEGEND:



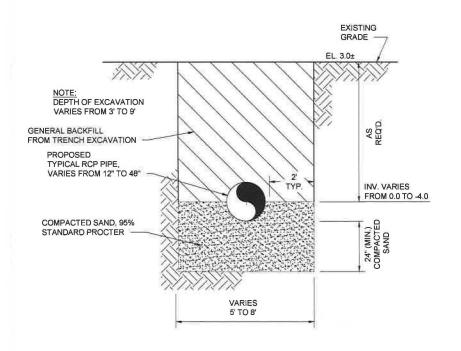
EXCAVATE



FILL



CADO FILE NAME.  $\langle C \rangle$ DRAWN EAO CHECKE JOB NO. 052-001-01 04-10-2014 AS SHOWN E. ST. JOHN HIGH SCHOOL HAZARD MITIGATION FLOOD PROTECTION PLANS T. JOHN THE BAPTIST PARISH PILE WALL SECTION TYPICAL SHEET SĮ. 7 7 ~ 14



# TYPICAL DRAINAGE PIPE SECTION

SCALE: N.T.S.

## SUMMARY OF QUANTITIES:

TOTAL LENGTH OF NEW DRAINAGE PIPING:

7,495 LF

TOTAL EXCAVATE:

TOTAL SAND BACKFILL:

9,048.96 CY 2.661.98 CY

TOTAL GENERAL BACKFILL: 5,021.46 CY

TOTAL AREA:

1,03 AC

LEGEND:



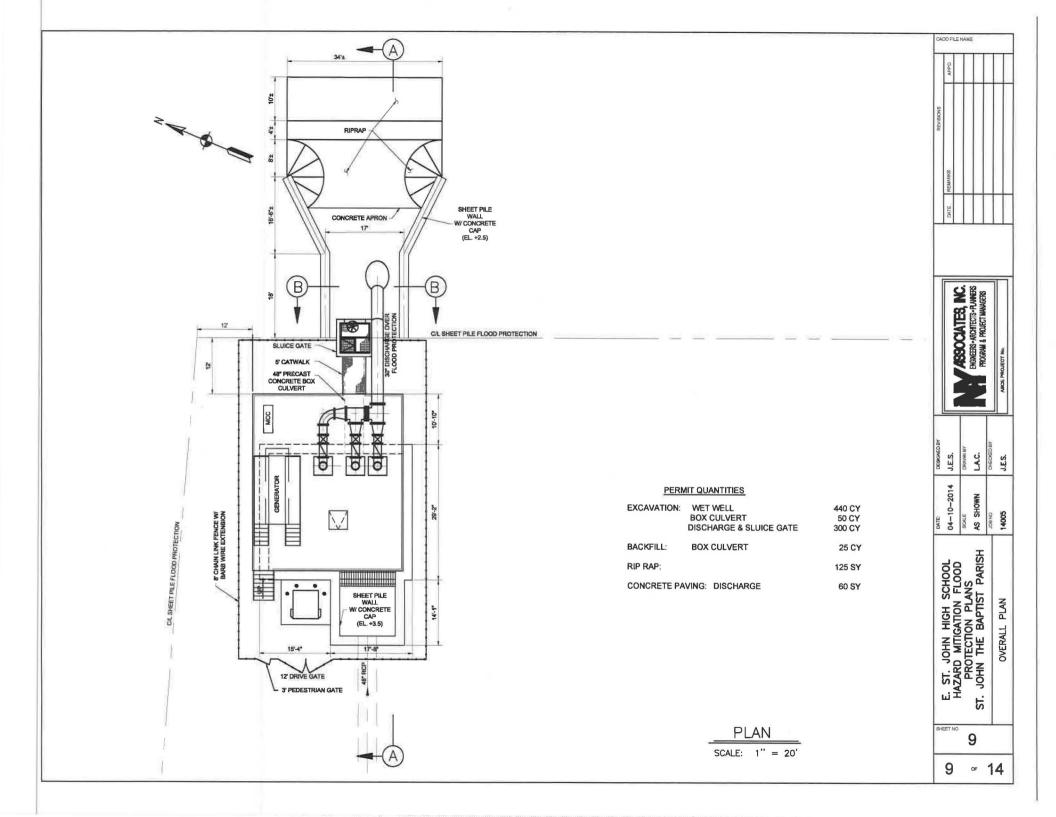
COMPACTED SAND

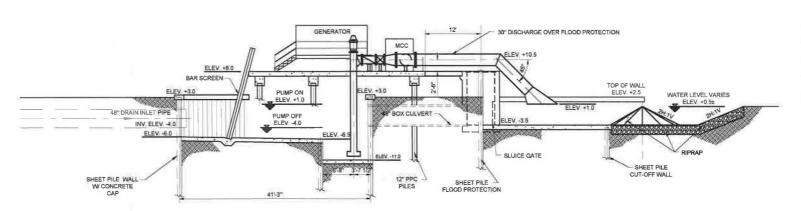


FILL

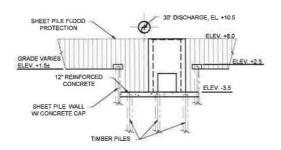
CADD FLE NAME  $\triangleleft \bigcirc$ EAO DATE: 04-10-2014 AS SHOWN E. ST. JOHN HIGH SCHOOL HAZARD MITIGATION FLOOD PROTECTION PLANS ST. JOHN THE BAPTIST PARISH TYPICAL DRAIN PIPE SECTION ST. SHEET NO. 8

of 14





# SECTION "A" SCALE: 1" = 20'



<u>SECTION</u> "B"

SCALE: 1" = 20'

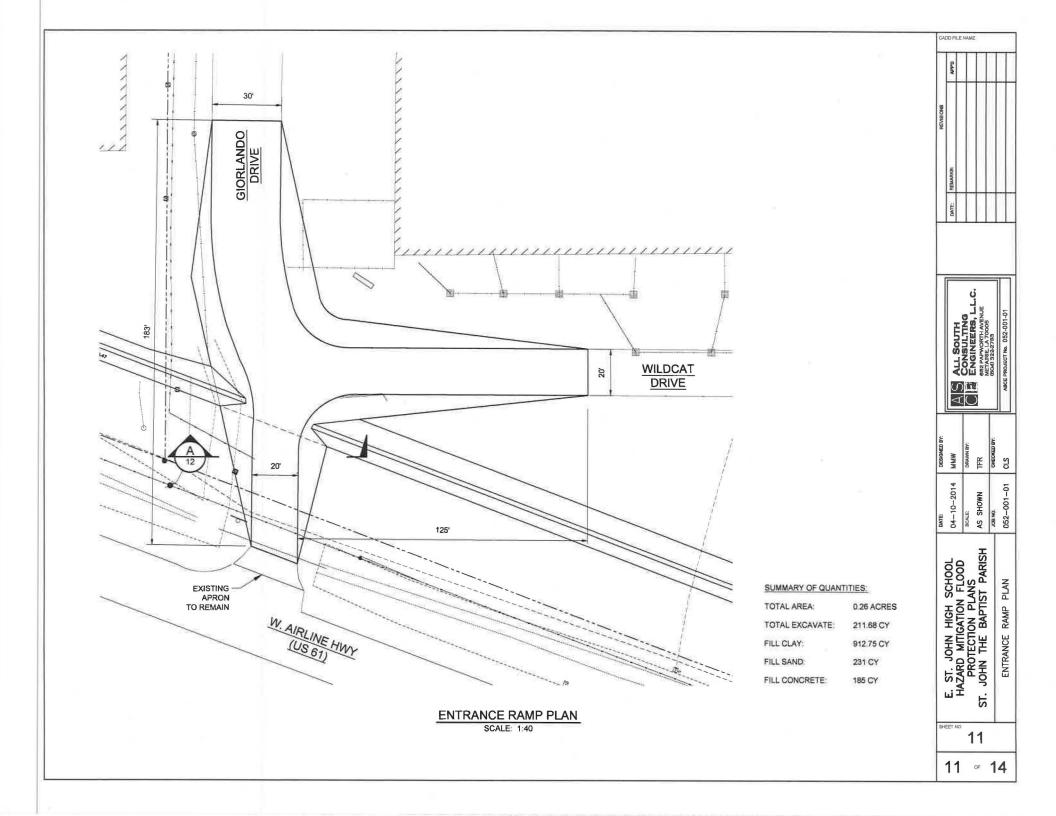
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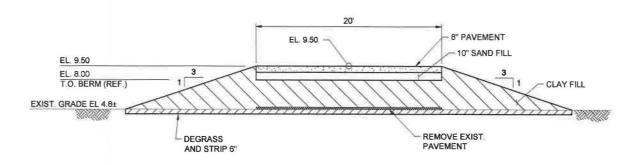


DESIGNED BY	J.E.S.	DRAWN BY	LA.C.	CHECKED BY	J.E.S.
DATE	04-10-2014	SCALE	AS SHOWN	ONBOC	14005
	E. ST. JOHN HIGH SCHOOL	DOCT I NOTICE DAY	ST. JOHN THE BAPTIST PARISH		SECTION

sheet NO 10

10 - 14





A ENTRANCE RAMP SECTION
11 SCALE: 1" = 10'

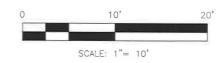
LEGEND:



**EXCAVATE** 

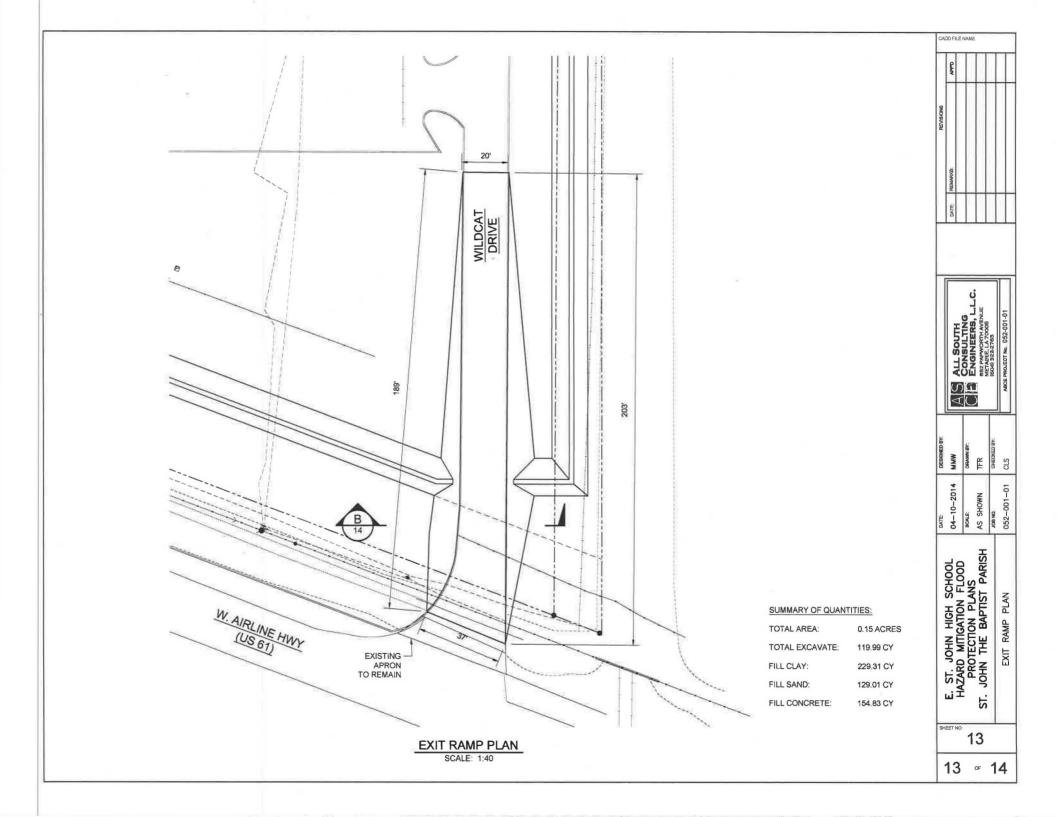


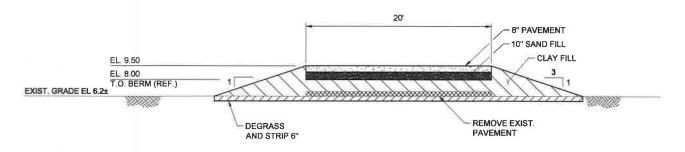
FILL



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052-001-01		JOB NO.	CHECKED BY:	(604) 322-2783			
	ENTRANCE RAMP PLAN	052-001-01	SIS	AUCII PROJECT No. 052:001-01			

12 of 14





B EXIT RAMP SECTION

13 SCALE: 1" = 10"

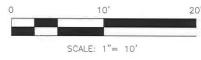
LEGEND:



**EXCAVATE** 



FILL



REVISIONS	CLINE			
	REMARKS:	1		
1	DATE			
	ALL SOUTH	CONSULTING	BENGINEERS, L.L.	METAIRIE, LA 70008 (804) 922-2783
DEBIONED BY:	MMM	DRAWN BY:	Ħ	CHECKED BY-
DATE	04-10-2014 MMW	BCALE:	AS SHOWN	CHARO
			_	-
1000	E. ST. JOHN HIGH SCHOOL	DEOTECTION PLANS	CT JOHN THE BADTIST DADISH	יויי פטווא ווויד פטרווטי יוס

# DEPARTMENT OF NATURAL RESOURCES COASTAL MANAGEMENT DIVISION

P.O. BOX 44487 BATON ROUGE, LOUISIANA 70804-4487 (225)342-7591 1-800-267-4019

## COASTAL USE PERMIT/CONSISTENCY DETERMINATION

**CUP No.:** 

P20140491

COE. No.:

MVN-2014-01037-CJ

NAME:

ST. JOHN BAPTIST PARISH SCHOOLS
ALL SOUTH CONSULTING ENGINEERS

652 PAPWORTH AVE METAIRIE, LA 70005 Attn: Christopher Sanchez

LOCATION:

St. John the Baptist Parish, LA

Project center approximately @ Lat. 30° 04' 44.00"N / Long. 90° 31' 52.00"W:

Section 78, T11S-R07E; 1 Giorlando Dr, Reserve, LA 70084.

**DESCRIPTION:** 

Proposed flood prevention system on the campus of East St. John High School to include approximately 2,645 feet of earthen berm, approximately 2,200 feet of sheet pile flood wall, approximately 6,600 feet of new drain lines and a drainage pumping station. The proposed project will require approximately 11,808 cubic yards of excavated material, 360 cubic yards of concrete, 62.5 cubic yards of

rock, 3,046 cubic yards of sand and 8,803 cubic yards of clay.

After careful consideration of the referenced project, it has been determined that the proposed activity has no direct and significant impact on coastal waters. Therefore, in accordance with the Louisiana Administrative Code, Title 43, Part 1, Chapter 7, §723.B.8.b, a Coastal Use Permit will not be required.

This determination is valid for two (2) years from the date of this letter. If the proposed activity is not initiated within this two year period, this determination will expire and the applicant will be required to submit a new application. The applicant will notify the Office of Coastal Management of the date on which initiation of the proposed activity began by mailing the enclosed green initiation card on the date of initiation of the proposed activity. This determination does not eliminate the need to obtain a permit from the United States Army, Corps of Engineers or any other Federal, state, or local approval, that may be required by law.

This determination has been made on the basis of information provided by your application. If it is later established that you furnished erroneous data, you may be directed to alter or modify your plans, to remove structures you have installed, and/or to restore the work area to pre-project conditions at your own expense. If it is established that you knowingly furnished erroneous data, you could also be subject to legal action. Note that your application shows that either no dredging or limited dredging would be necessary to access the work site. Dredging beyond that described in your application, including prop washing, wheel washing, or otherwise displacing water bottom material is not authorized by this determination. If site conditions are such that dredging beyond that authorized is

C.U.P. No. P20140491 C.O.E. No. MVN-2014-1037-CJ Page 2 necessary, a revised determination including agency or public notice, if applicable, will be required. The drawings submitted with the referenced application are attached hereto and made a part of the record. ************************************
By accepting this determination the applicant agrees to its terms and conditions.
I affix my signature and issue this determination this 16 day of 34 day of 2014.
DEPARTMENT OF NATURAL RESOURCES  Karl L. Morgan, Administrator Office of Coastal Management
This agreement becomes binding when signed by the Administrator of the Office of Coastal Management, Department of Natural Resources.
KLM/bb
Attachment (plats) Enclosure (green card)
cc: Martin Mayer, COE w/plats David Butler, LDWF w/plats Jessica Diez, OCM/IAFSD/SS w/plats Craig LeBlanc, OCM/IAFSD/FB w/plats St. John the Baptist Parish w/plats

#### P20140491 NOTES

- 1. All structures built under the authorization and conditions of this permit shall be removed from the site within 120 days of abandonment of the facilities for the herein permitted use, or when these structures fall into a state of disrepair such that they can no longer function as intended. This condition does not preclude the necessity for revising the current permit or obtaining a separate Coastal Use Permit, should one be required, for such removal activities.
- As-built drawings and/or plats shall have written on them the date of completion of said activities and shall be submitted to the Louisiana Department of Natural Resources, Office of Coastal Management, P. O. Box 44487, Baton Rouge, LA 70804-4487 within 30 days following project completion.
- 3. In order to ensure the safety of all parties, the permittee shall contact the Louisiana One Call System (1-800-272-3020) a minimum of 48 hours prior to the commencement of any excavation (digging, dredging, jetting, etc.) or demolition activity.

# RECEIVED

JUN 1 8 2014
ARCHAEOLOGY

U.S. Department of Homeland Security Federal Emergency Management Agency Baton Rouge Processing Center 1500 Main Street Baton Rouge, Louisiana 70802-3760



June 18, 2014

Pam Breaux State Historic Preservation Officer Department of Culture, Recreation & Tourism P.O. Box 44247 Baton Rouge LA 70804 No known historic properties will be affected by this undertaking. This effect determination could change should new information come to our attention.

Pam Breaux

Date

State Historic Preservation Officer

RE: Section 106 Review Consultation, FEMA-4080-DR-LA, PW# 606(1)

Applicant: St. John the Baptist Parish

Undertaking: East St. John High School Floodwall, East St. John High School, #1 Wildcat Drive, Reserve, St. John the Baptist Parish, Louisiana, Coordinates: N 30.078815 W 90.531605

Dear Ms. Breaux:

The Federal Emergency Management Agency (FEMA) will be providing funds authorized under the Robert T. Stafford Disaster Relief and Emergency Assistance Act, P.L. 93-288, as amended, in response to the following major Disaster Declaration for FEMA-DR-4080-LA, Hurricane Isaac, dated August 29, 2012.

FEMA is initiating Section 106 review, in accordance with the "Programmatic Agreement among FEMA, the Louisiana State Historic Preservation Officer, the Louisiana Governor's Office of Homeland Security and Emergency Preparedness, 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 Mississlppi 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" dated August 17, 2009 and amended on July 22, 2011 (2009 Statewide PA as amended) and providing the SHPO and Tribes with the opportunity to consult on the proposed Undertaking.

The scope of work for the above-referenced project includes installing a floodwall and associated components around the high school buildings and the sports fields. The applicant previously applied for FEMA Public Assistance grant funding to construct a floodwall around the buildings only. FEMA determined, in a letter to the SHPO dated July 16, 2013, that no historic properties would be affected by the construction of a floodwall around the buildings at East St. John High School. The SHPO concurred with this determination on August 13, 2014. Please find the previous correspondence attached for your reference. The new scope of work expands the footprint of the floodwall to encompass the sports fields and changes the location of the proposed pump station to

Ms. Breaux June 18, 2014 Page 2

the northwest portion of the APE. The floodwall will be constructed of a combination of sheet piling, concrete, earthen berms, and floodgates. Detailed plans have been attached for your convenience.

FEMA has determined the APE is the entire campus of East St. John High School (see attached APE map).

Previous identification efforts revealed no historic properties are located within the APE; therefore, FEMA has determined that there will be No Historic Properties Affected as a result of this Undertaking. FEMA requests your comments within 15 days as provided in the 2009 Statewide PA as amended.

We look forward to your concurrence with this determination. Maps, photos, plans, and previous correspondence are attached. If you have any questions or need additional information regarding this Undertaking, please contact Amber Martinez at <a href="martinez2@fema.dhs.gov">amber.martinez2@fema.dhs.gov</a> or at (225) 334-7790.

Sincerely,

Linda L. Depa, REM, CESCO

Lunda L. Degra

Environmental Historic Preservation Team Lead

Baton Rouge Processing Center

Attachments

U.S. Department of Homeland Security Federal Emergency Management Agency

Section 106 Review: Site Photos

Resource Name: East St. John High School

Resource Address: #1 Wildcat Drive, Reserve, LA 70084



Front view of East St. John High School, Main building



View of 9th Grade Building (western), East St. John High School



View of western portion of APE and 9th Grade Building, East St. John High School



View of Field House, facing east, East St. John High School



View of Field House, facing west, East St. John High School



View of eastern portion of APE facing south, East St. John High School Eastern portions of basketball court, small classroom, and main building on right

U.S. Department of Homeland Security Federal Emergency Management Agency Section 106 Review: Aerial View Location Map

Resource Name: East St. John High School

Resource Address: #1 Wildcat Drive, Reserve, LA 70084



Aerial image of East St. John High School. APE shown in red.

U.S. Department of Homeland Security Federal Emergency Management Agency

Section 106 Review: USGS Quad Location Map

Resource Name: East St. John High School

Resource Address: #1 Wildcat Drive, Reserve, LA 70084



USGS 7.5' Quad, Reserve, Louisiana. Project Area circled in red.

U.S. Department of Homeland Security Federal Emergency Management Agency

Section 106 Review: Site Plan

Resource Name: East St. John High School

Resource Address: #1 Wildcat Drive, Reserve, LA 70084



Schematic design for floodwall, provided by the applicant

	POINT LOCAT	TIONS
PNT#	LATITUDE	LONGITUDE
P-1	30 04 40 87551	90 31 47.72357
P-2	30 04 48 37563	90 31 51.20875
P-3	30 04 48 45425	90 31 51,41934
P-4	30 04 50.59198	90 31 52,40074
P-5	30 04 50 62657	90 31 52.49338
P-6	30 04 54.29429	90 31 54.17720
P-7	30 04 53 84077	90 31 55.86944
P-8	30 04 53.90960	90 31 56.60294
P-9	30 04 54 60400	90 31 57.03204
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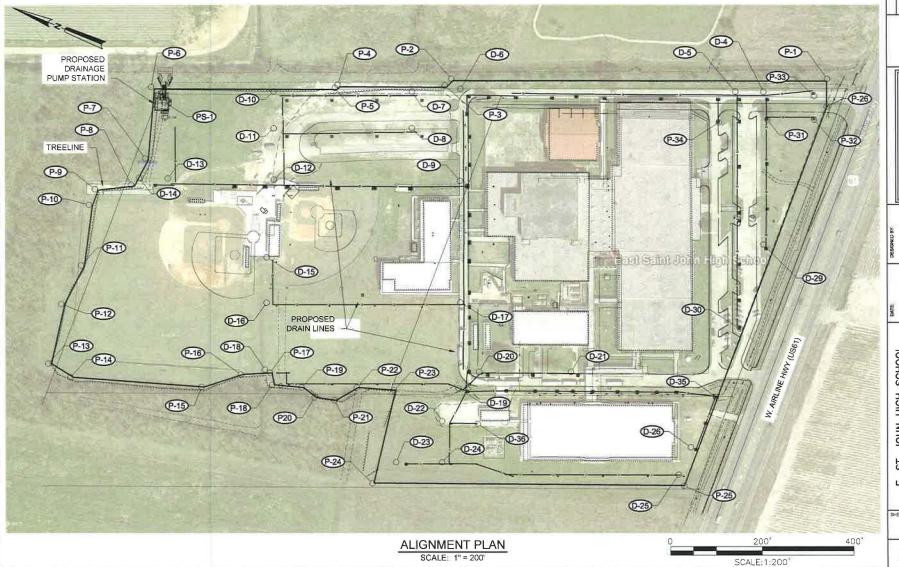
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P-13	30 04 54.12610	90 32 01,47827
P-14	30 04 53.57568	90 32 01.58930
P-15	30 04 50 88877	90 32 00.59901
P-16	30 04 50.20804	90 31 59.94442
P-17	30 04 49.63915	90 31 59.63747
P-18	30 04 49-49739	90 31 59.89270
P-19	30 04 48.89017	90 31 59.68430
P-20	30 04 48.55322	90 31 59.79532
P-21	30 04 48.13288	90 31 59 67540
P-22	30 04 47-79427	90 31 59.17141
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P-24	30 04 46.70742	90 32 01,23407

P-25	30 04 40 46310	90 31 58.38699
P-26	30 04 40 66000	90 31 48.33671
PS-1	30 04 53.93731	90 31 54 39404
D-1	30 04 40.93729	90 31 48.56663
D-2	30 04 41 89362	90 31 49.01260
D-3	30 04 41.13439	90 31 48.00810
D-4	30 04 42.05060	90 31 48.56342
D-5	30 04 42.61952	90 31 48.82226
D-6	30 04 48.15687	90 31 51.32550
D-7	30 04 49.08473	90 31 51.84809
D-8	30 04 48.78826	90 31 52.69452
D-9	30 04 47.40681	90 31 53.45447
D-10	30 04 51.84366	90 31 53.13463

D-11	30 04 51.54541	90 31 53.98024
D-12	30 04 51.13074	90 31 55.15590
D-13	30 04 53.26244	90 31 56.11117
D-14	30 04 53.83294	90 31 56.36665
D-15	30 04 50 66473	90 31 57.00680
D-16	30 04 50.29640	90 31 58.05109
D-17	30 04 46.42241	90 31 56.24453
D-18	30 04 49.78880	90 31 59.62131
D-19	30 04 45.76638	90 31 58.25034
D-20	30 04 45.49025	90 31 57.67586
D-21	30 04 43 65556	90 31 56.82029
D-22	30 04 45.83472	90 31 59.15912
D-23	30 04 46.42148	90 32 00.54014

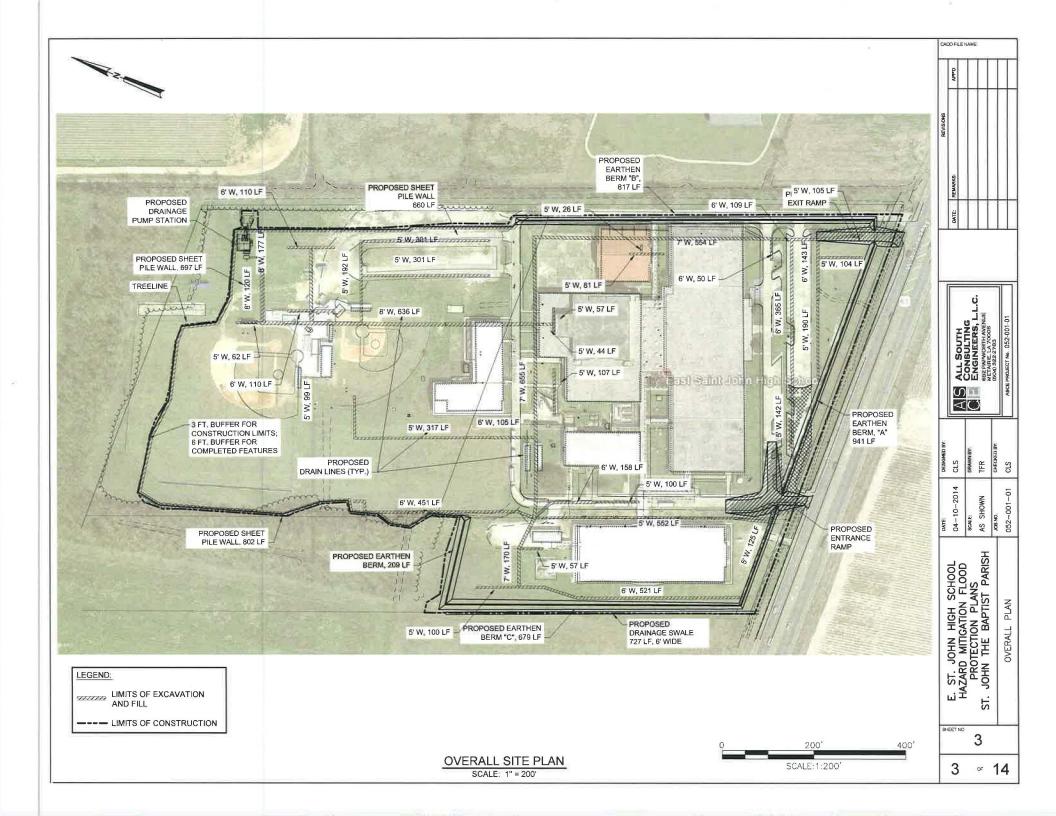
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D-26	30 04 40.64006	90 31 57 44171
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D-28	30 04 40 74694	90 31 54.17573
D-29	30 04 40 82640	90 31 52.07685
D-30	30 04 40.74693	90 31 54.17570
D-31	30 04 41.89362	90 31 49.01261
D-32	30 04 40 93729	90 31 48.56661
D-33	30 04 41.13435	90 31 48.00808
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D-35	30 04 40.66796	90 31 56.01927
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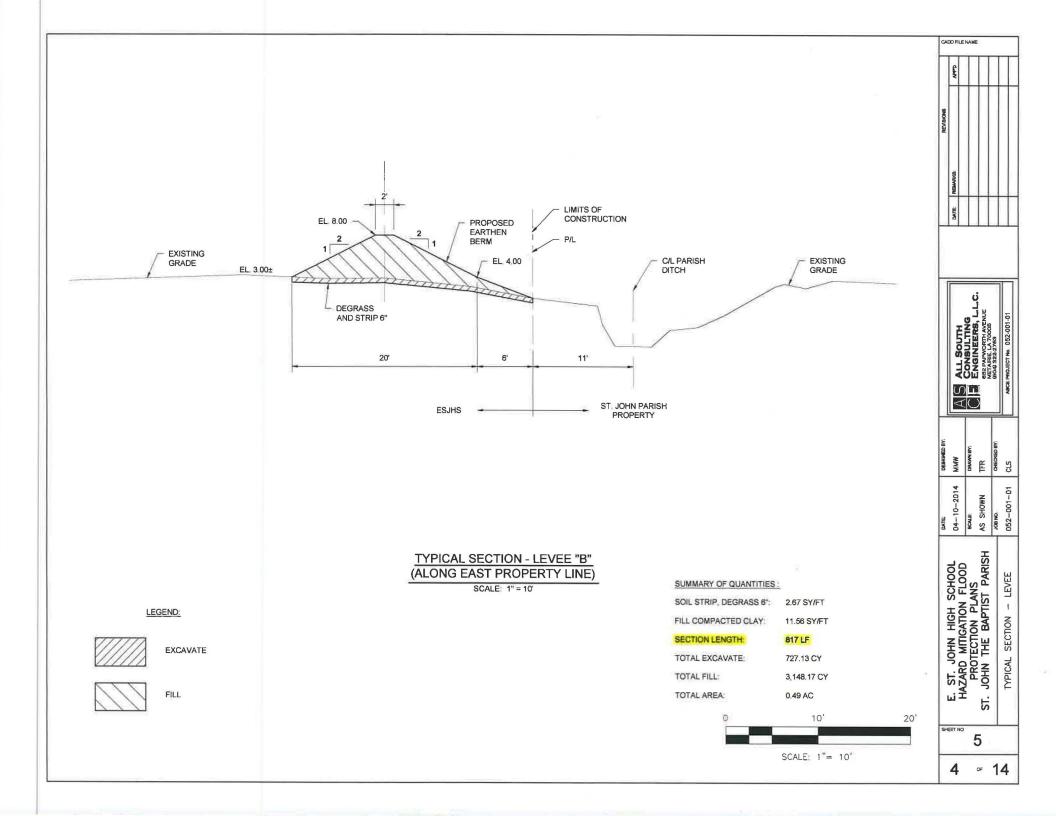


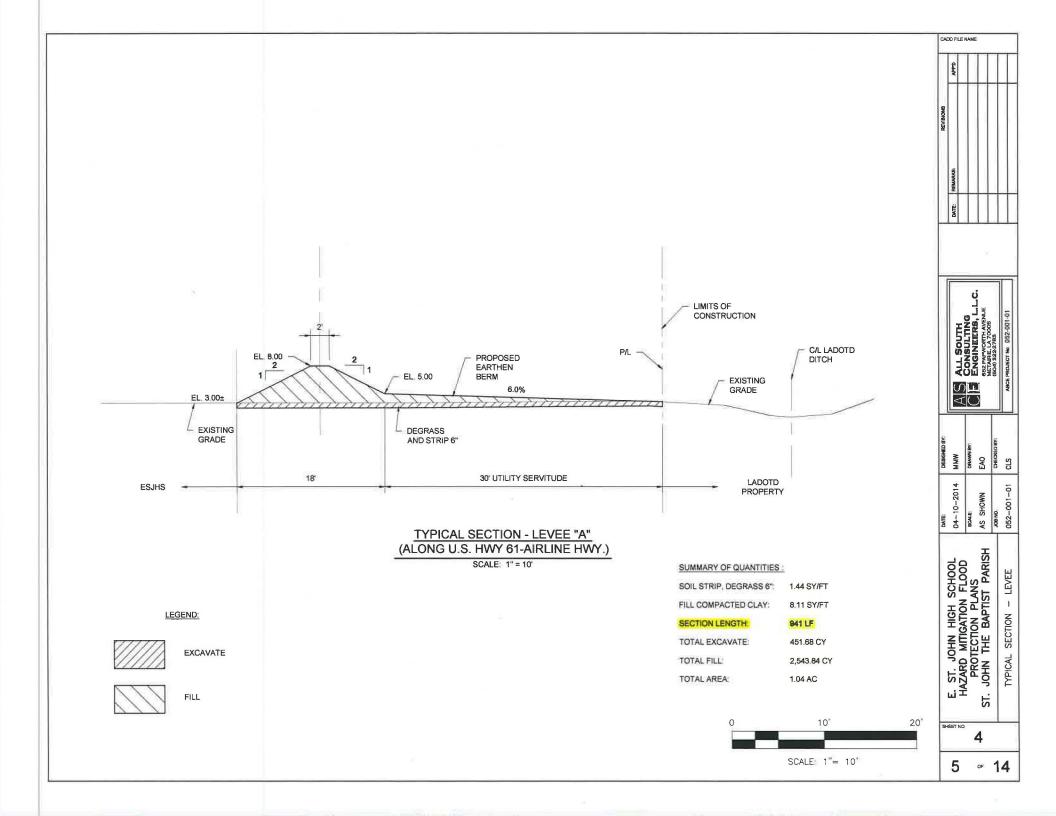


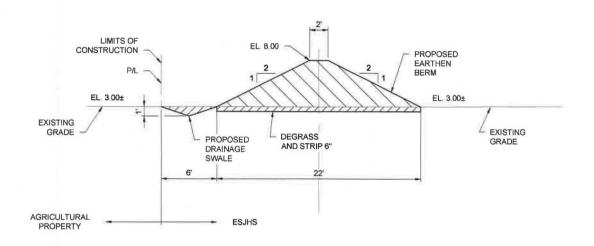


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# TYPICAL SECTION - LEVEE "C" (ALONG WEST PROPERTY LINE)

SCALE: 1" = 10'

LEGEND:



**EXCAVATE** 



FILL

#### SUMMARY OF QUANTITIES:

SOIL STRIP, DEGRASS 6":

1.22 SY/FT

EXCAVATE SWALE:

0,33 SY/FT

FILL COMPACTED CLAY:

6.67 SY/FT

SECTION LENGTH:

888 LF

TOTAL EXCAVATE:

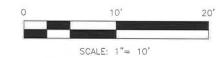
458.80 CY

TOTAL FILL:

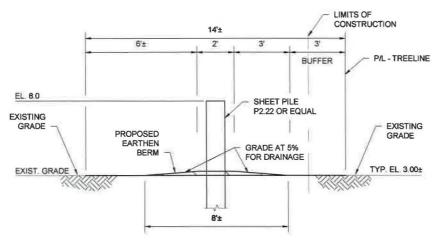
1,974,32 CY

TOTAL AREA:

0,57 AC



E. ST. JOHN HIGH SCHOOL HAZARD MITIGATION FLOOD PROTECTION PLANS AS SHOWN EN CONSTRUCTION THE BAPTIST PARISH  AS SHOWN EN CONSTRUCTION TO SHOW THE BAPTIST PARISH  TO JOHN THE BAPTIST PARISH  TO SHOW	DATE: REMANGE: RE	REVISIONS
1000 1000 1000		
- LEVEE   052-001-01   CLS   ABGE PROJECT No. 052-001-01		



### TYPICAL SHEET PILE WALL SECTION SCALE: 1:5

\*NOTE: A 6 FT BUFFER WILL BE MAINTAINED
BETWEEN THE SHEET PILE WALL AND ANY
TREE LINE INSIDE THE PROPERTY LINE

A 3 FT BUFFER WILL BE MAINTAINED BETWEEN THE LIMITS OF CONSTRUCTION AND THE PROPERTY LINE.

#### QUANTITIES LEGEND:

FILL, GENERAL:

0.08 SY/FT

LENGTH OF WALL

2,159 LF

TOTAL FILL:

57.57 CY 0.40 AC

TOATL AREA (FILL ONLY):



LEGEND:

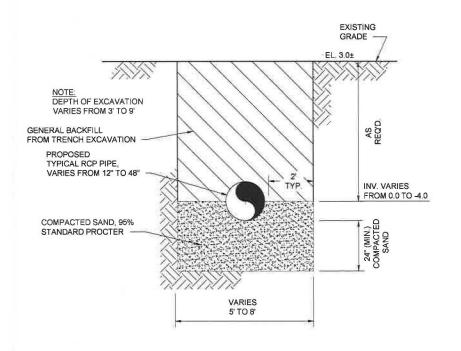
**EXCAVATE** 

FILL



DRAWN EAO CHECKE DATE: 04-10-2014 AS SHOWN E. ST. JOHN HIGH SCHOOL HAZARD MITIGATION FLOOD PROTECTION PLANS ST. JOHN THE BAPTIST PARISH SECTION PILE SHEET TYPICAL ST. **∞** 14

CADO FILE NAME.



#### TYPICAL DRAINAGE PIPE SECTION SCALE: N.T.S.

#### SUMMARY OF QUANTITIES:

TOTAL LENGTH OF

NEW DRAINAGE PIPING:

7,495 LF

TOTAL EXCAVATE:

9,048.96 CY

TOTAL SAND BACKFILL: 2,661.98 CY

TOTAL GENERAL BACKFILL: 5,021,46 CY

TOTAL AREA:

1.03 AC

LEGEND:

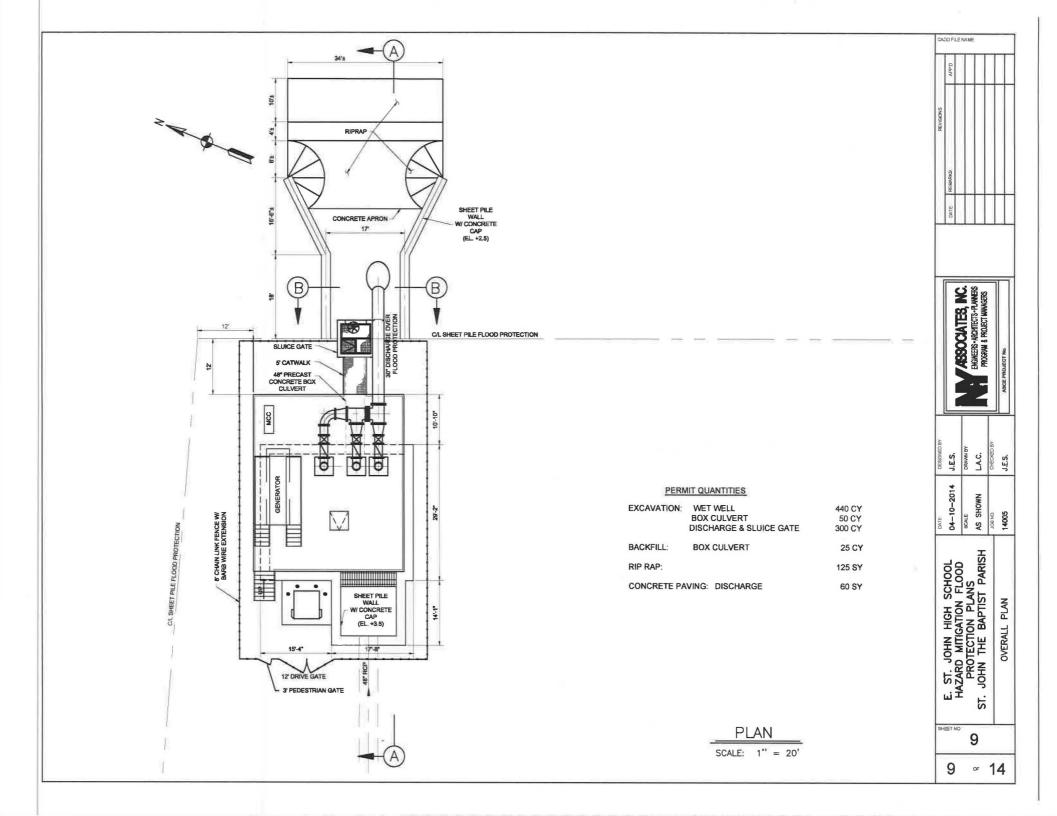


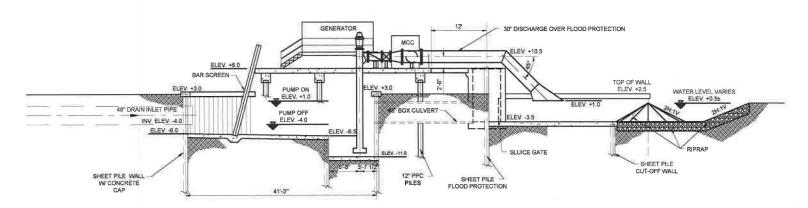
COMPACTED SAND



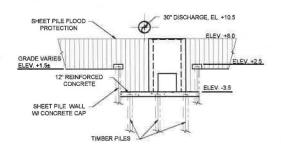
EAO GRECHE MMM 04-10-2014 AS SH E. ST. JOHN HIGH SCHOOL HAZARD MITIGATION FLOOD PROTECTION PLANS ST. JOHN THE BAPTIST PARISH TYPICAL DRAIN PIPE SECTION SHEET NO. 8 or 14

CADD FILE NAME





### <u>SECTION</u> "A" SCALE: 1" = 20'



<u>SECTION</u> "B"

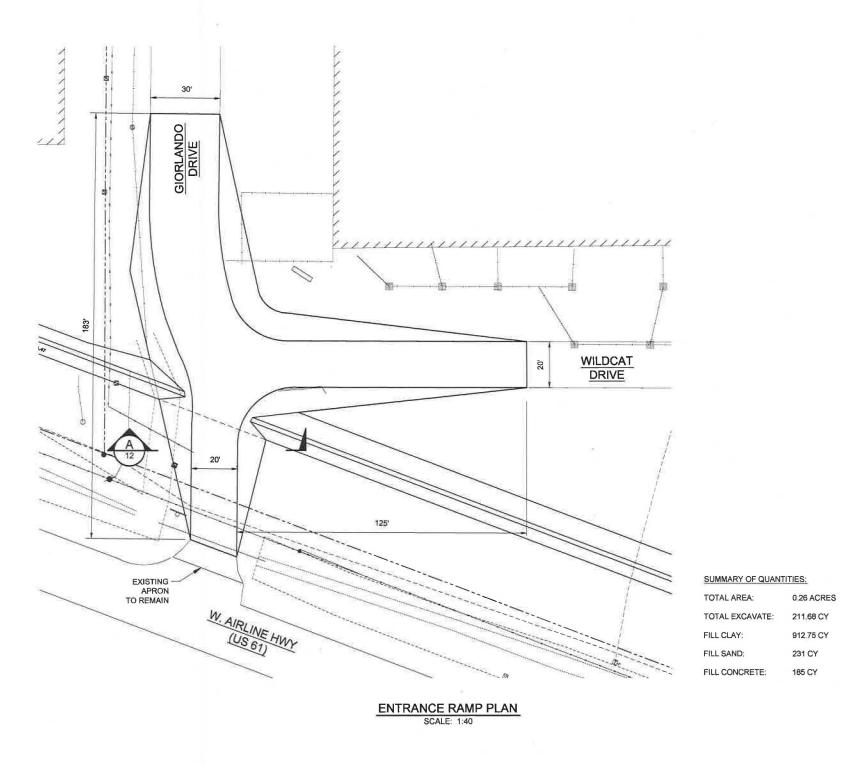
SCALE: 1" = 20'

DATE	DESIGNED BY			REVISIONS	ONS	CAL
04-10-2014 J.E.S.	J.E.S.	OH OHIVOOON A WE	DATE:	REMARKS	APPD	OFLE
SCALE	DRAWN BY	ASSUCATES INC.				NAME
AS SHOWN	LA.C.	BYGNERS - ARCHITECTS - PLANNESS PROJECT MANAGERS				: 
ON BOF	CHECKED BY					Т
14005	J.E.S.	ABCE PROJECT No.				_

04-10-2014 J.E.S.	SCALE DRAWN BY	AS SHOWN LA.C.	JOBNO CHECKED BY	
E. ST. JOHN HIGH SCHOOL		I	1	- ACHOLO

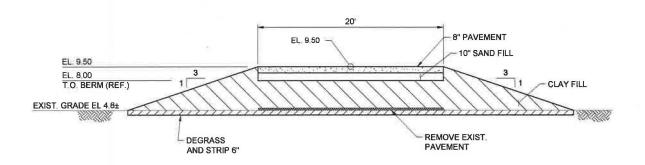
10

10 ~ 14



GADO FILE HAME O N E S MMW
DRAWN BY:
TPR
CHECKED BY: DATE: 04-10-2014 BONLE: AS SHOWN JOB NO. 052-001-01 E. ST. JOHN HIGH SCHOOL HAZARD MITIGATION FLOOD PROTECTION PLANS ST. JOHN THE BAPTIST PARISH RAMP PLAN ENTRANCE F ST. 11

11 ~ 14

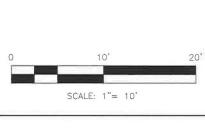


A ENTRANCE RAMP SECTION
11 SCALE: 1" = 10'

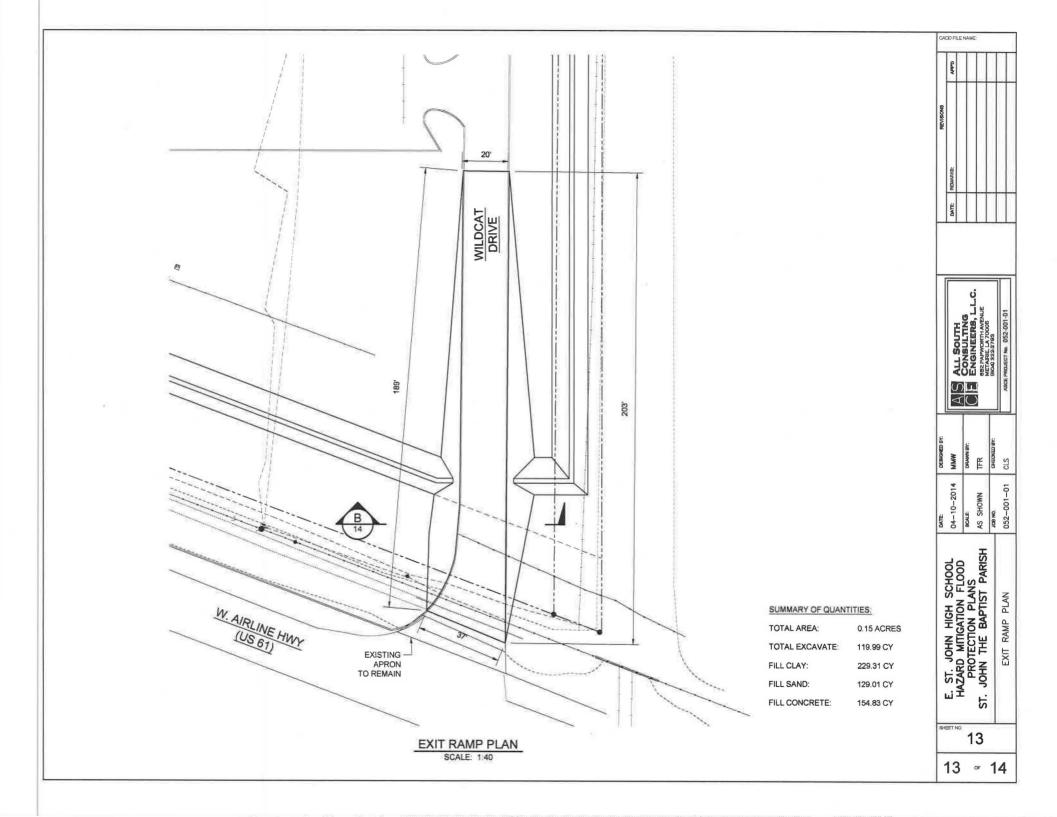
LEGEND:

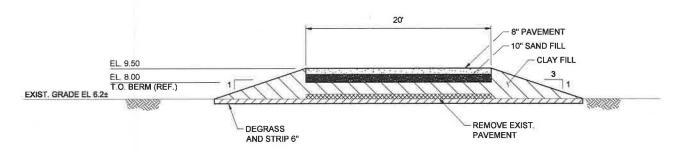


**EXCAVATE** FILL



12 - 14





B EXIT RAMP SECTION

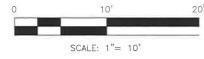
13 SCALE: 1" = 10"

LEGEND:

EXCAVATE



FILL



U.S. Department of Homeland Security Federal Emergency Management Agency FEMA-DR-4080-LA 800 N. Loop 288 Denton, TX 76209



July 18, 2013

Pam Breaux
State Historic Preservation Officer
Department of Culture, Recreation & Tourism
P.O. Box 44247
Baton Rouge LA 70804

No known historic properties will be affected by this undertaking. This effect determination could change should new information come to our attention.

Pam Breaux

Date

State Historic Preservation Officer

RE: Section 106 Review Consultation, FEMA-DR-4080-LA

PW# 00606(1), Construction of a Floodwall at East St. John High School, #1 Wildcat Drive,

Reserve, St. John the Baptist Parish, Louisiana Coordinates: N 30.078815, W -90.531605

Dear Ms. Breaux:

TOFOLOGY

The Federal Emergency Management Agency (FEMA) will be providing funds authorized under the Robert T. Stafford Disaster Relief and Emergency Assistance Act, P.L. 93-288, as amended, in response to the following major Disaster Declaration for FEMA-DR-4080-LA, Hurricane Isaac, dated August 29, 2012.

FEMA is initiating Section 106 review, in accordance with the Programmatic Agreement among FEMA, the Louisiana State Historic Preservation Officer, the Louisiana Governor's Office of Homeland Security and Emergency Preparedness, 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" dated August 17, 2009.

The scope of work for the above-referenced project includes installing a floodwall and associated components around the high school buildings (Small Classroom, Main Admin, Gym/Cafeteria, Vocational, Field House, and 9<sup>th</sup> Grade). The preliminary plans and schematics call for a steel sheet pile floodwall that extends approximately 25 feet below the ground surface. Also according to the preliminary plans and schematics, the associated components include earthen embankments along the floodwall and pump station, flood gates at the north parking lot, a pump station (with outlet structures, pumps, pipes, valves, crushed stone, and fences) in the northwest portion of the project area, new storm drain pipes through the floodwall, and backflow preventers (sewer and storm drain) in multiple places along the floodwall.

Pam Breaux July 18, 2013 Page 2

Generally, the floodwall and associated components will surround the high school. However, official engineering drawings have not yet been completed. Please see the enclosed APE map.

FEMA conducted background research using the Louisiana Cultural Resources Map and has determined that no archaeological sites are recorded within the APE. In addition, the entirety of the APE is addressed by Louisiana Division of Archaeology reports 22-555, 22-2572, and 22-3381. The buildings within the APE, specifically the East St. John High School, were constructed in 1977 with additions made after. They do not exhibit exceptional significance to qualify them for listing in the National Register of Historic Places under Criterion Consideration G. Photographs of the building are attached.

FEMA will use the following condition on the project regarding any material used for the earthen embankment:

All fill and backfill material must come from permitted commercial sources or applicant stockpile. If any digging is to occur, including a new borrow pit, no materials should be claimed without proper permitting or consultation. Contact FEMA and SHPO for environmental review of any unapproved fill or backfill sources before digging.

With the above condition and based on the available information, FEMA has determined that there will be No Historic Properties Affected as a result of this Undertaking. FEMA requests your comments within 15 days as provided in the 2009 Statewide PA as amended.

We request concurrence with these determinations. Should you have any questions or need additional information, please contact Amber Martinez at <a href="martinez@fema.dhs.gov">amber.martinez@fema.dhs.gov</a> or at 225-334-7790.

Sincerely,

LaToya Leger Environmental Advisor

Salaya segen

DR-4080-LA FEMA Region VI

Attachments

Appendix **D**Public Notice

### Federal Emergency Management Agency PUBLIC NOTICE

## Early Notice and Public Review of a Proposed Activity in a 100-Year Floodplain

### Proposed St. John the Baptist School Board Flood Protection Project St. John the Baptist Parish, Louisiana

Public Notice is hereby given by the Federal Emergency Management Agency (FEMA) per 44 Code of Federal Regulations (CFR) Part 10 (FEMA's regulations implementing National Environmental Policy Act [NEPA]) of its intent to provide funding for the proposed St. John the Baptist School Board Flood Protection Project. FEMA is required to consider potential environmental impacts before funding or approving actions and projects.

St. John the Baptist School Board (SJBSB) has submitted a project application to FEMA to participate in the Public Alternate Procedures Pilot Program (PAAP) authorized under the Sandy Recovery Improvement Act of 2013 (SRIA). Under the PAAP, the SJBSB proposes to consolidate sub-grant funding, including Public Assistance and Section 406 Hazard Mitigation funding, from East St. John High School (ESJHS) and Lake Pontchartrain Elementary School (LPES), for alternate and improved projects at each school, respectively. FEMA hereby provides interested parties with an initial notice of its intent to carry out the proposed action within a floodplain.

ESJHS is located within the 100-year floodplain (Flood Zone AE (EL 4); FEMA Flood Insurance Rate Map (FIRM), Panel 22095C0210D) at a Base Flood Elevation of 4 feet North American Vertical Datum of 1988 (NAVD 88) and remains susceptible to flooding from future storm events. Consequently, there is a need to provide the SJBSB with a permanent solution. The proposed project would allow the SJBSB to construct a new flood protection system and drainage pump station that would provide an independent forced drainage system to the project area. The floodwall system will be comprised of approximately 2,645 linear feet of earthen berm, 2,050 linear feet of steel sheet pile wall and two elevated driveway ramps over the top of flood protection.

The earthen berm will run along the northern boundary of the property, parallel to US Hwy. 61 (Airline Hwy.), and run northward along both property lines. Along the east property line, the earthen berm will run approximately 810 feet adjacent to an existing drainage canal. Along the west property line, the earthen berm will run approximately 700 feet to an existing tree line, and then align eastward for 170 feet. At the termination of the earthen berm, the flood protection system will transition to a steel sheet pile wall. The earthen berm is generally 3 feet-high along US 61 and transitions to 5 feet-high at the termination points with the steel sheet pile walls. The width of the earthen berm is an average of 22 feet with a total footprint of 60 feet to construct the berm and re-grade the site to drain water away from the berm. The construction corridor will be confined to the high school property.

The two existing driveways will be elevated to a foot above the flood protection system (earthen berms and steel sheet pile walls). These driveways will be 20-feet wide and will be graded at 5% to accommodate school buses. In order to accommodate the installation of the flood protection and drainage features, several items will need to be relocated, including approximately 40 parking spaces from the front of the school to the rear west side of the property.

A drainage pump station will be located near the northeast corner of the high school campus and has a capacity of 16,000 gallons per minute. The pump station will work in conjunction with a 6,300 linear foot, subsurface drainage piping network, to be installed throughout the property, as

well as a low lying retention area, both designed to handle a 25-year storm event. The method of removal and installation of drainage lines will be trenching.

The total estimated earthwork quantities for this project are estimated at 21,500 cubic yards. Approximately 8,000 cubic yards of new lean clay will be imported into the site for new earthen berm and driveway ramp construction. An additional 9,000 cubic yards of sand is estimated for new paving assemblies and re-grading activities in the athletic areas where a clay top soil is not appropriate. Excess material from onsite activities is estimated at an additional 4,500 cubic yards. This material will be used for overall on-site grading where clay material is appropriate including along the new earthen berm and sheet pile walls, where sand would not be a suitable fill material. The proposed project would require construction within approximately 7.3-acres of floodplain.

This constitutes initial notice and FEMA is accepting comments for the proposed project. The comment period will end 30 days from the initial notice publication date of July 12, 2014. Written comments can be mailed or faxed to the contact below.

Federal Emergency Management Agency, Region VI c/o Alan Hermely 800 North Loop 288, Denton, TX 76209 Fax: 940-383-7299