Draft Environmental Assessment

City of New Orleans

Construction of NOPD 4th District Police Station and NOFD 8th District Fire Station

FEMA-1603-DR-LA

New Orleans, Orleans Parish, Louisiana

May 2018

U.S. Department of Homeland Security
Federal Emergency Management Agency, Region VI
Louisiana Recovery Office
1500 Main Street
Baton Rouge, Louisiana 70802

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LIST OF ACRONYMS AND ABBREVIATIONS

ABFE	Advisory Base Flood Elevation
ACM	Asbestos Containing Materials
ADA	Americans with Disabilities Act
APE	Area of Potential Effects
BFE	Base Flood Elevation
BMP	Best Management Practices
CAA	Clean Air Act
CBD	Central Business District
CBRA	Coastal Barrier Resources Act
CBRS	Coastal Barrier Resources System
CEQ	Council on Environmental Quality
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
C.F.R.	Code of Federal Regulations
CNO	City of New Orleans
CTR	In-House Contract Consultant
CUP	Coastal Use Permit
CWA	Clean Water Act
CZMA	Coastal Zone Management Act
dBA	decibel, on the A-weighted Scale
DEA	Draft Environmental Assessment
DEHP	Di(2-ethylhexyl)phthalate
DFIRM	Digital Flood Insurance Rate Map
DHS	U.S. Department of Homeland Security
DNL	Day-Night Average Sound Level
DoA	U.S. Department of the Army
EA	Environmental Assessment
EC	Elevation Certificate
EDMS	Electronic Document Management System
EIS	Environmental Impact Statement
EL	Elevation
E.O.	Executive Order
ESA	Endangered Species Act
FEMA	Federal Emergency Management Agency
FFE	furniture, fixtures, and equipment
FIRM	Flood Insurance Rate Map
FONSI	Finding of No Significant Impact
FPPA	Farmland Protection Policy Act
GHG	Greenhouse Gas
GPO	U.S. Government Printing Office
HEAG	Highest Existing Adjacent Grade
HSDRRS	Hurricane Storm Damage Risk Reduction System

HUD	U.S. Department of Housing and Urban Development
IER	Individual Environmental Report
LA GOHSEP	Louisiana Governor's Office of Homeland Security and Emergency Preparedness
LaDOTD	Louisiana Department of Transportation and Development
LDEQ	Louisiana Department of Environmental Quality
LDNR	Louisiana Department of Natural Resources
LFA	Local Floodplain Administrator
LPDES	Louisiana Pollutant Discharge Elimination System
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NFIP	National Flood Insurance Program
NHPA	National Historic Preservation Act
NMFS	National Marine Fisheries Service
NOFD	New Orleans Fire Department
NOPBR	New Orleans Public Belt Railroad
NOPD	New Orleans Police Department
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
OCM	Office of Coastal Management
OSHA	Occupational Safety and Health Administration
PA	Public Assistance
PACM	Possible Asbestos Containing Materials
PCB	Polychlorinated Biphenyls
P.L.	Public Law
RCRA	Resource Conservation and Recovery Act
RHA	Rivers and Harbors Act
SARA	Superfund Amendments and Reauthorization Act
sf	square-foot, square feet
SFHA	Special Flood Hazard Area
SHPO	State Historic Preservation Office/Officer
SIP	State Implementation Plan
SOV	Solicitation of Views
TSCA	Toxic Substances Control Act
USACE	U.S. Army Corps of Engineers
U.S.C.	U.S. Code
USDOC	U.S. Department of Commerce
USDOI	U.S. Department of the Interior
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
UST	Underground Storage Tank
WBV	West Bank and Vicinity

1 INTRODUCTION

1.1 Hurricane Katrina

Hurricane Katrina made landfall on 29 August 2005, near the town of Buras, Louisiana, with sustained winds of more than 125 miles per hour. The accompanying storm surge damaged levees and entered the city of New Orleans from various coastal waterways, resulting in flooding throughout much of the city. The storm's high winds, heavy rains, and flooding caused considerable damage to the Algiers and West Bank neighborhoods of New Orleans, Louisiana.

1.2 Project Authority

President George W. Bush declared a major disaster for the State of Louisiana (FEMA-1603-DR-LA) on 29 August 2005, authorizing the U.S. Department of Homeland Security's (DHS) Federal Emergency Management Agency (FEMA) to provide federal assistance in designated areas of Louisiana. This assistance is pursuant to the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act), Public Law (P.L.) 93-288, as amended. Section 406 of the Stafford Act authorizes FEMA's Public Assistance (PA) Program to assist with funding the repair, restoration, reconstruction, or replacement of public facilities damaged as a result of the declared disaster.

In accordance with FEMA Instruction 108-1-1, a Draft Environmental Assessment (DEA) has been prepared pursuant to Section 102 of the National Environmental Policy Act (NEPA) of 1969, as implemented by the regulations promulgated by the President's Council on Environmental Quality (CEQ; 40 CFR Parts 1500-1508). (Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act 2005).

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

1.3 Background

The City of New Orleans (CNO or Sub-Recipient) has requested, through the State of Louisiana Governor's Office of Homeland Security and Emergency Preparedness (LA GOHSEP) (Recipient), that FEMA provide disaster assistance consisting of federal grant funds in accordance with the provisions of the Stafford Act. FEMA has determined that the CNO is eligible for federal disaster Public Assistance and that the CNO qualifies for rehabilitation as a facility serving the needs of the general public.

The CNO requested FEMA funding for required work to be done at a proposed new site for the New Orleans Police Department (NOPD) 4th District Police Station site through the PA Program. Consequently, in accordance with 44 C.F.R. § 206.203(d)(1), CNO has requested an Improved Project for this project, which will allow funds to restore the pre-disaster functions of the NOPD and the New Orleans Fire Department (NOFD) in the West Bank neighborhood of New Orleans. The Sub-Recipient proposes construct a new NOPD 4th District building and a new NOFD building and associated parking areas for both buildings, including staff and visitor parking.

1.4 General Site Description

The City of New Orleans is located entirely within the parish of Orleans. Orleans Parish is primarily urban, with the exception of some areas of coastal marsh in the eastern part and woodlands on the west bank of the Mississippi River (the Lower Coast). The parish is entirely within the Mississippi River Delta, with a subtropical, humid climate typical of coastal regions along the Gulf of Mexico. The average winter temperature is 54°F and the average summer temperature is 81°F. Orleans Parish typically receives 59

inches of rainfall annually (Trahan 1989). *Figure 1* depicts the two West Bank neighborhood sites of New Orleans evaluated in this DEA.

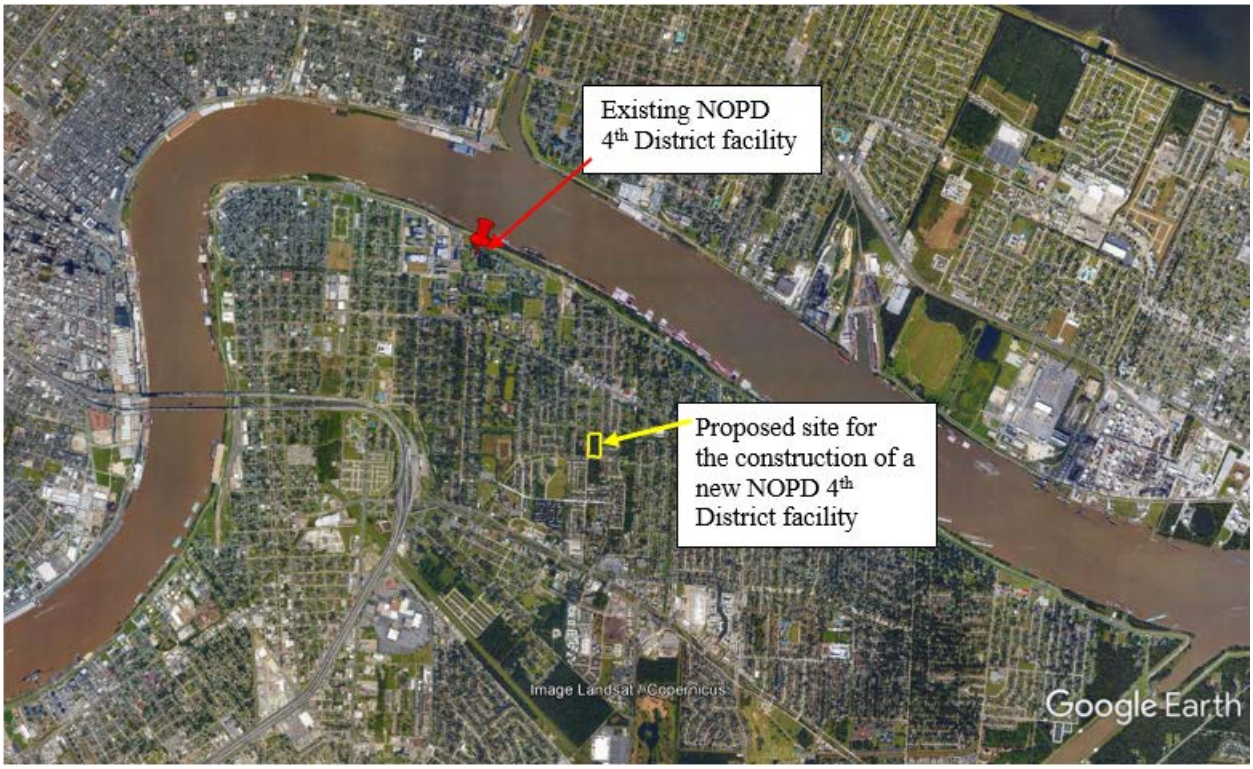

Figure 1: Project Vicinity in the West Bank neighborhood of Orleans Parish. The proposed project area is depicted in yellow. The existing NOPD 4th District location is depicted in red. (Image Source: Google Earth 2016)

Although the corporate boundary of the City of New Orleans has been unchanged since the 1800s, the City's urban footprint has expanded significantly since then. Before 1900, urbanization was confined primarily to natural levees and ridges along the Mississippi River and elsewhere (the Esplanade Ridge, for example). In 1913, construction of a levee and pump system began, which allowed for the development of lower-lying areas and wetlands. Between 1913 and 2000, the city's urbanized footprint almost doubled to approximately 71 square miles. The extent of urbanization has been relatively unchanged since the mid-1980s, however, when development slowed considerably due to a lack of large remaining developable tracts within the city, the general economic downturn resulting from the "oil bust," and ongoing concerns about quality of life issues related to crime and public education (CNO 2010).

New development stalled in the 1980s but, by the 1990s, the city began to witness small-scale reinvestment within established neighborhoods and larger adaptive re-use and limited infill development projects within and around the Central Business District (CBD), or "downtown" area. The CBD is located northwest of the project site addressed by this DEA. Since Hurricane Katrina, due to the extent of flooding and numerous other impediments to recovery, many structures within the city remain unoccupied, while others have been demolished and left as vacant lots (CNO 2010).

2 PURPOSE AND NEED

The objective of FEMA's PA Grant Program is to provide assistance to state, tribal, and local governments, as well as certain types of private, non-profit organizations, such that communities can quickly respond to, recover from, and mitigate major disasters and emergencies. The massive flooding associated with Hurricane Katrina severely impaired the operation of the New Orleans Police Department.

The damage to the 4th District NOPD and 8th District NOFD facilities caused by Hurricane Katrina greatly reduced the Sub-Recipient's ability to provide needed emergency response services to the local community. Restoration of these services is necessary for the community to fully recover from the impact of the storm. The purpose of this project is to restore and improve community access to quality community police and firefighting services. The need for the project is defined by the Sub-Recipient's current lack of optimally functioning facilities. According to the www.nola.gov website, the NOPD 4th District serves all of the West Bank of Orleans Parish (*Figure 2*) and requires an optimally sited facility to effectively serve the needs of the West Bank community. Although the 4th District NOPD and the 8th District NOFD facilities are not currently co-located, the CNO feels that the co-location of the facilities at the proposed site in a central location of the West Bank community would best serve the needs of the community.

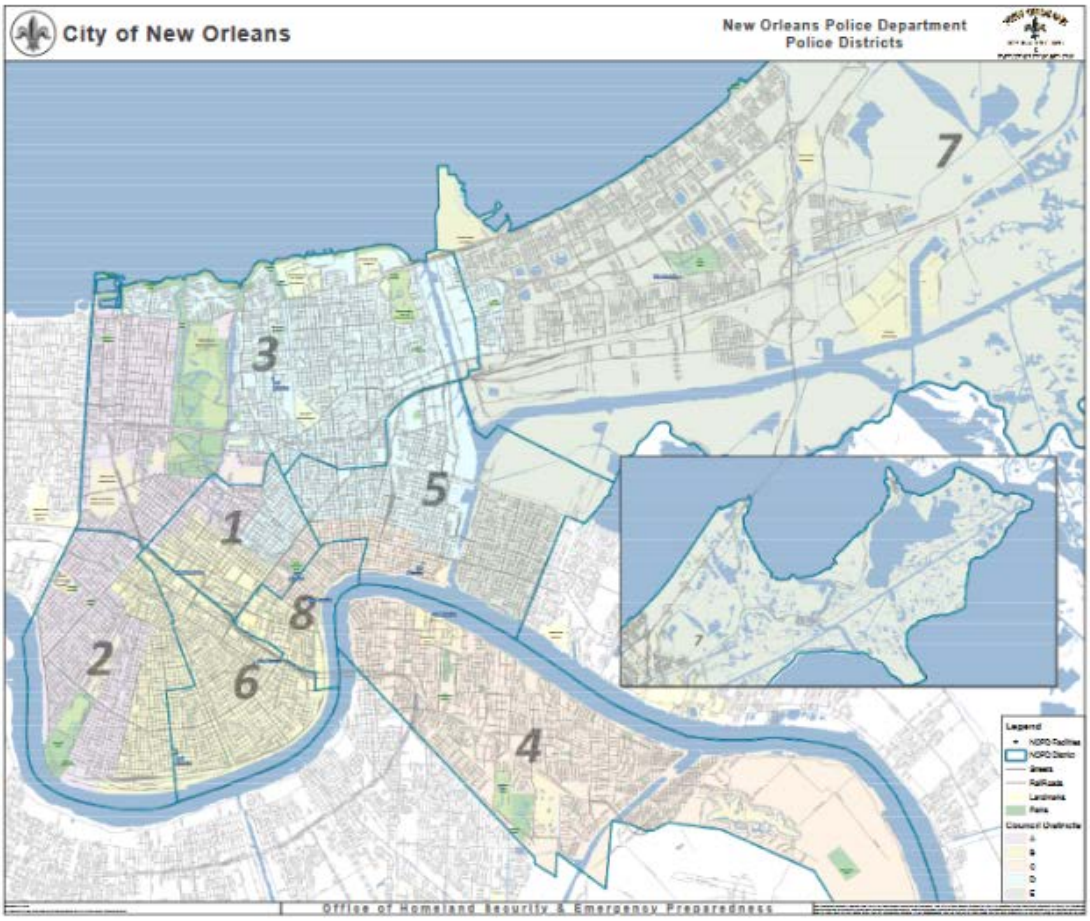

Figure 2: New Orleans Police Department (NOPD) Districts Map (Image Source: NOLA.gov website at http://www.nola.gov/nopd/documents/nopd_districts_2014/)

3 ALTERNATIVES

3.1 Overview of Alternatives

The NEPA process consists of an evaluation of the environmental effects of a federal undertaking, including its alternatives. Three alternatives have been considered and reviewed including 1) the "No Action" alternative, 2) Construct a new NOPD 4th District Police Station co-located with a new NOFD 8th District Building along Wall Boulevard (Preferred Alternative), and 3) The NOPD 4th District remains at the current location, but renovates the interior of existing structure.

3.2 Alternative 1 – No Action

Under the "No Action" alternative, there would be no new construction of the NOPD 4th District building and the NOFD 8th District building. Consequently, the NOPD 4th District personnel, and the NOFD 8th District personnel, would continue to operate under current conditions, as no new facilities would be constructed. "No Action" would forego the opportunity to improve working conditions for the NOPD and NOFD staff and to provide quality police and fire fighting services to the West Bank community of New Orleans. This alternative does not meet the purpose and need, but will continue to be evaluated throughout this DEA and serve as a baseline comparison of impacts from other action alternatives.

3.3 Alternative 2 – Construct a new NOPD 4th District Police Station Co-located with a new NOFD 8th District Building along Wall Boulevard (Preferred Alternative)

This alternative includes the design, construction, and furniture, fixtures, and equipment (FFE) for the new NOPD 4th District Police Station and NOFD 8th District Fire Station building in the West Bank area of New Orleans. The existing trees on the project site would be removed, the lot would be graded to accommodate the new structures and parking lots. The new structures would be constructed on the south side of the proposed site.

The property proposed for the new NOPD 4th District Station is currently an undeveloped, densely forested, approximately 5.3 acre lot located in the West Bank neighborhood of New Orleans. The proposed site is located north of Wall Boulevard, between the 3200 block and 3400 block of Wall Boulevard. According to the CNO Property Viewer, the CNO owns the proposed project lot. The lot is bordered on the north by the Magellan Canal, to the east by Flanders Street, to the south by Wall Boulevard, and to the west by Horace Street. *Table 1* defines the four (4) corners of the proposed project site. The footprint of the proposed project location is depicted in *Figure 3 and Figure 4.*

Table 1. Four Corners of the Proposed NOPD 4th District Police Station Project Site

Corner	Latitude	Longitude
Northwest	29.935845	-90.021608
Northeast	29.935794	-90.020509
Southeast	29.933945	-90.020614
Southwest	29.934021	-90.021723

Figure 3: Aerial overview of the proposed project footprint, outlined in yellow. (Image Source: Google Earth 2016)

Figure 4: Street view of the proposed project footprint, outlined in red. (Image Source: MapQuest 2016)

Under this Alternative, the CNO would construct a new 2-story, approximate 17,783 square foot police station building for the NOPD 4th District and a new NOFD 8th District building on the same lot with a public interface and connection area between the two structures. In addition, Columbus Street will be extended to the east through the proposed site to facilitate access to the two structures. The proposed structures would meet all Federal, State, and local codes, be compliant with the Americans with Disabilities Act (ADA) and have onsite parking for staff and visitors. Although the CNO is requesting FEMA funding only for the new NOPD 4th District Station, the scope of work for the entire proposed project will be evaluated in this DEA.

Figure 5 depicts the proposed Columbus Street extention through the project site. The proposed NOPD 4th District Station and the NOFD 8th District building would be constructed in the area labelled "Square 22", south of the proposed Columbus Street extension. *Figure 6* depicts a schematic plan showing the respective locations of the proposed project structures and associated parking lots. Site photos for this Alternative are attached in Appendix A. Construction Plans provided by the CNO for this Alternative are attached to this DEA in Appendix B.

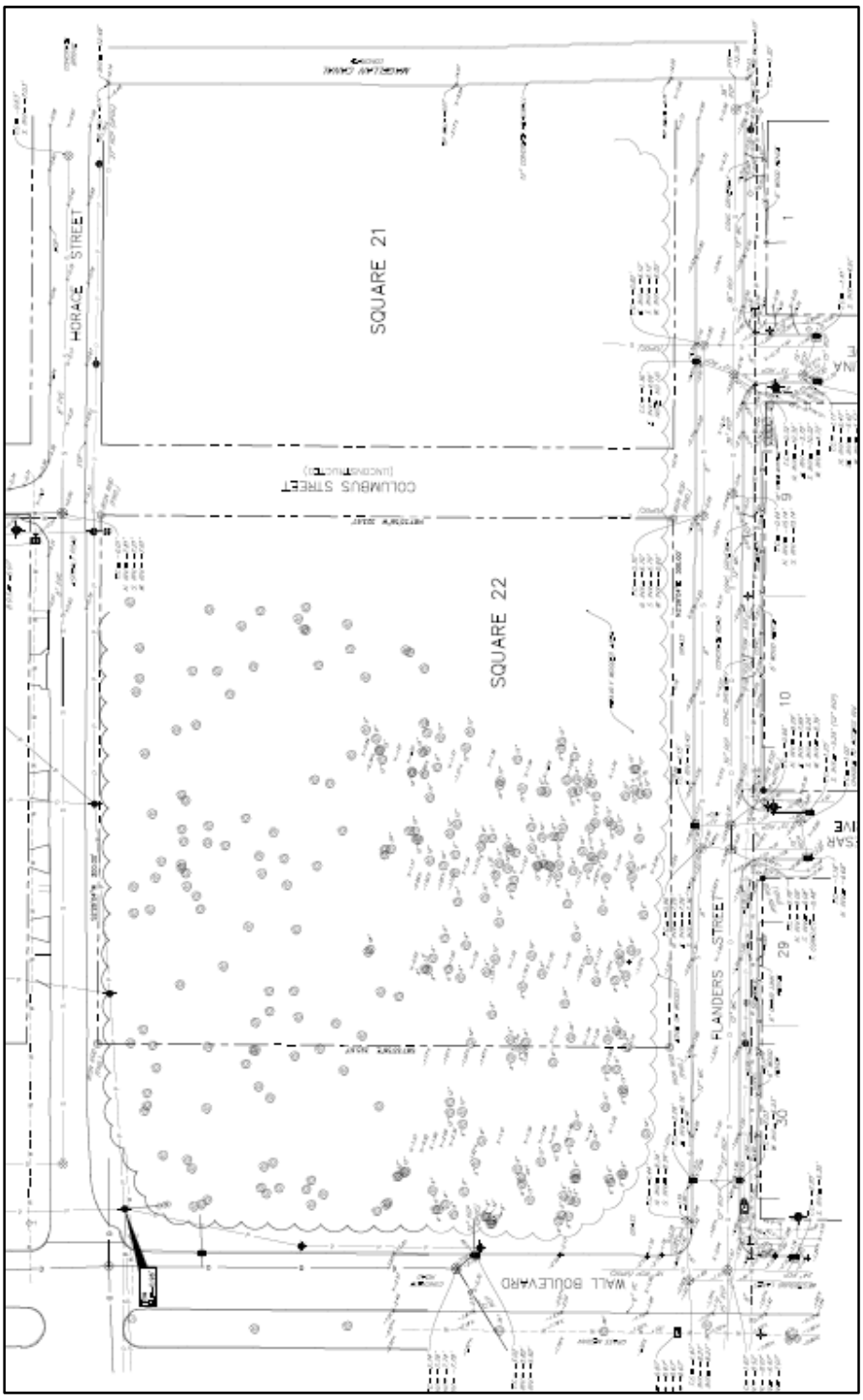

Figure 5 – Pre-construction site plan showing the proposed Columbus Street extension. (Image Source: City of New Orleans NOPD 4th District Station, 95% Design Development Submittal, Holly & Smith Architects.)

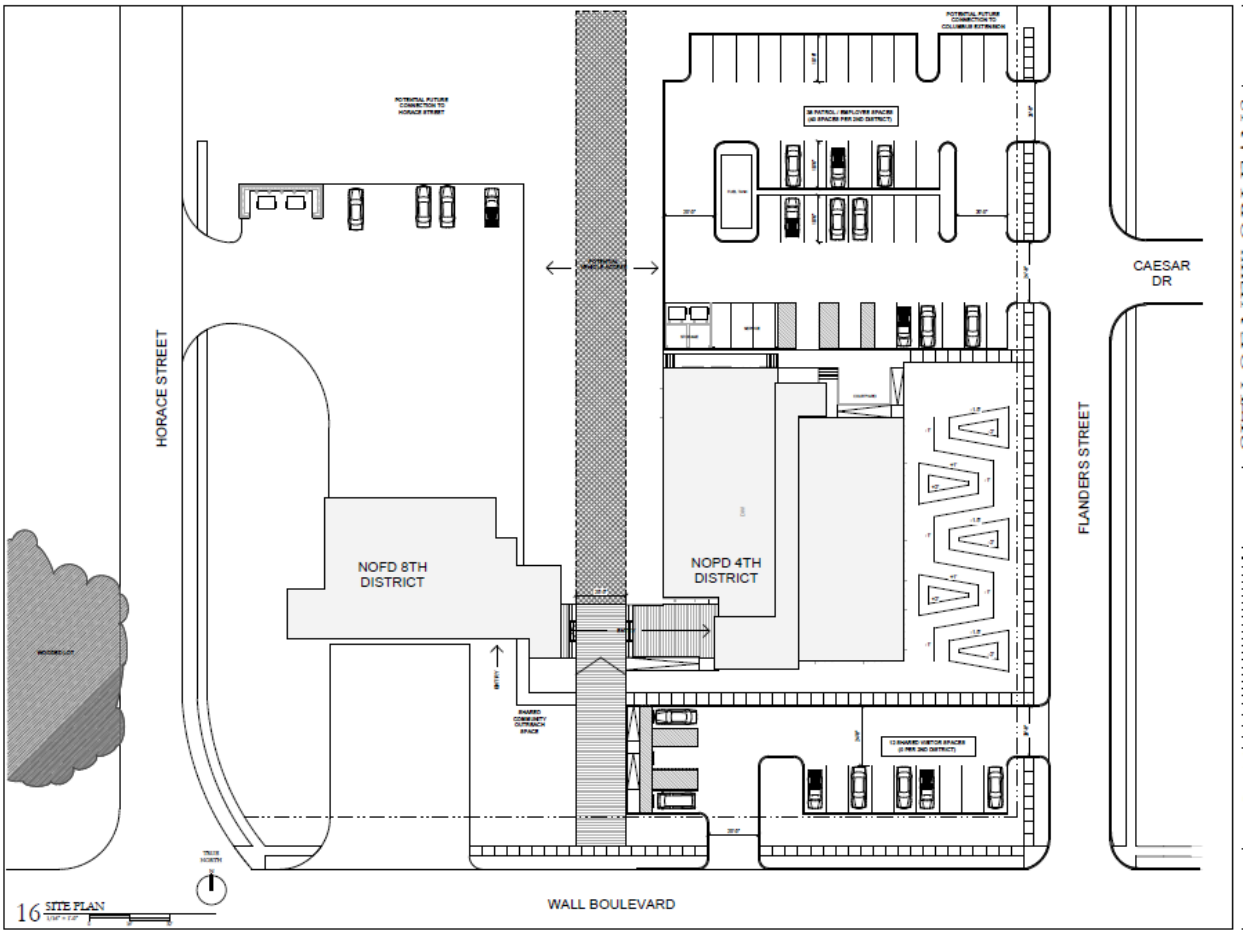

Figure 6: Schematic image depicting the proposed project plans south of the proposed Columbus Street extension. (Image Source: City of New Orleans NOPD 4th District Station, 95% Design Development Submittal, Holly & Smith Architects.)

As shown in *Figure 6*, the proposed NOPD and NOFD buildings and associated parking lots would be constructed in the southern portion of the site, along Wall Boulevard. A visitor parking lot for 12 vehicles would be constructed south of the NOPD building with access to Wall Boulevard. Separate parking areas for 38 NOPD patrol/employee vehicle spaces and NOFD staff members would be constructed north of the respective proposed buildings. To facilitate site access, a new connecting drive would be constructed north of the parking areas, in line with the existing Columbus Street, which would connect Horace Street to the west and Flanders Street to the east.

According to the CNO's proposed project construction design plans from Holly & Smith Architects, APAC H/S Project No. 16047, dated November 20, 2017, the completed NOPD structure will appear as shown in *Figure 7*. According to the detailed construction plan in *Figure 8*, a retention swale will be constructed east of the proposed NOPD structure. In addition, an underground storage tank (UST) for fuel storage will be installed in the parking lot north of the structure.

Figure 7: Image depicting the proposed NOPD 4th District Police Station, according to 95% construction plans. (Image source: Holly & Smith Architects, APAC H/S Project No. 16047, dated November 20, 2017.)

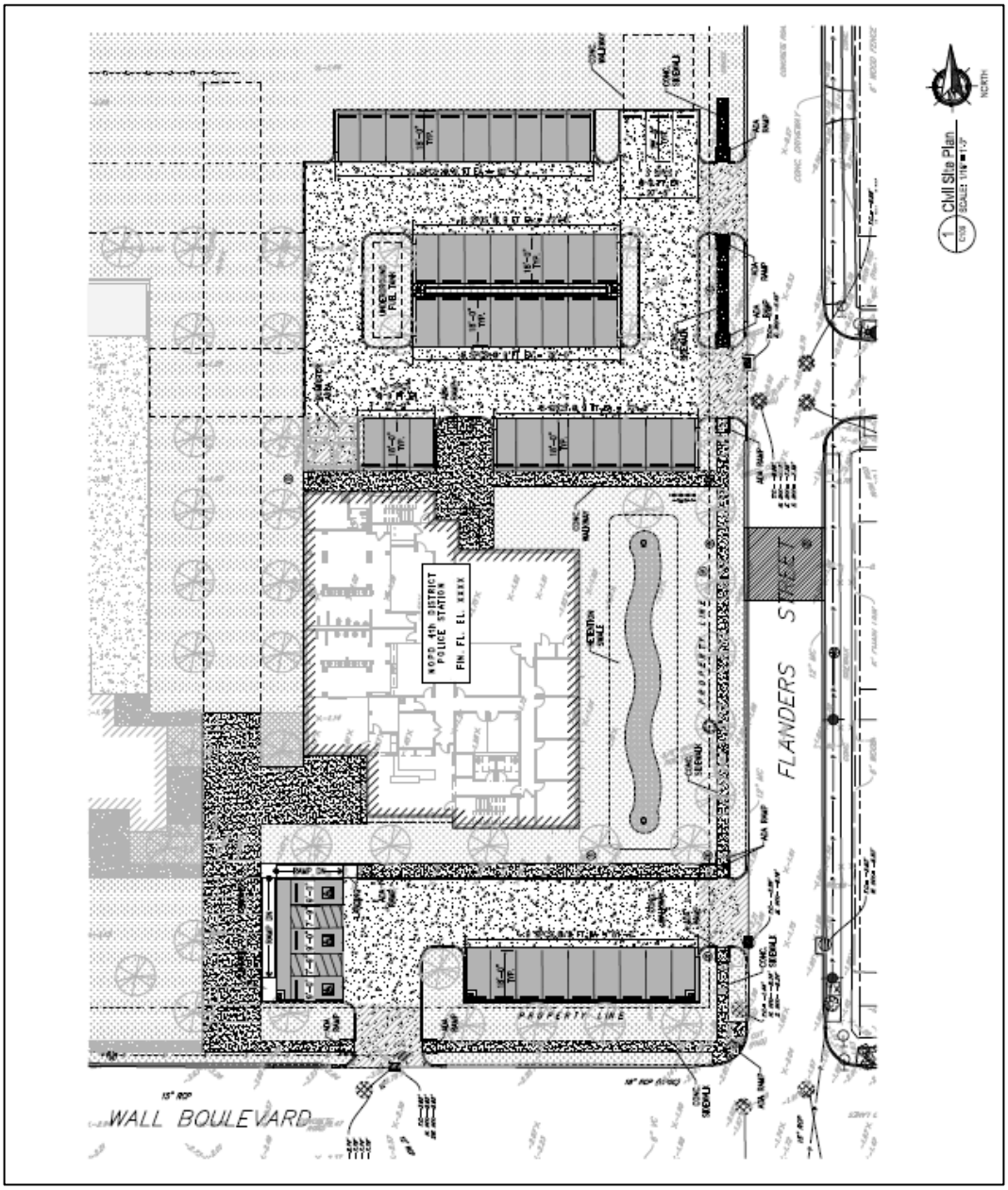

Figure 8: Detailed schematic image depicting the proposed project plans for the NOPD 4th District Police Station. (Image Source: City of New Orleans NOPD 4th District Station, 95% Design Development Submittal, Holly & Smith Architects.)

3.4 Alternative 3 – The NOPD 4th District remains at the current location, but renovates the interior of existing structure

For this alternative, the NOPD would remain in their current facility, which is located at 2405 Sanctuary Drive, New Orleans, LA (29.949681, -90.031802), near the old U.S. Naval Base in the Algiers neighborhood (*Figure 9*), but would perform interior renovations within the existing footprint of building to better suit the needs of the NOPD staff. However, the existing NOPD facility is not of adequate size,

nor is it centrally located within the service area to meet the current needs of the NOPD 4th District staff in serving the West Bank neighborhood of the New Orleans. Photos of the exterior of existing NOPD 4th District Police Station are attached in Appendix A.

Although this alternative could meet some of the needs of the Sub-Recipient, the CNO has determined that this location is not the optimal location for the NOPD 4th District to be located. This alternative is a less desirable alternative, however, it does not necessarily render this action alternative unreasonable. The alternative nevertheless meets the purpose and need of the action, and therefore, will continue to be evaluated throughout this DEA.

Figure 9: Aerial photo of he current NOPD 4th District facility (Image Source: Google Earth 2016)

4 AFFECTED ENVIRONMENT AND ALTERNATIVES ANALYSIS

4.1 Geology, Soils, and Topography

4.1.1 Regulatory Setting

The Farmland Protection Policy Act (P.L. 97-98, §§ 1539-1549; 7 U.S.C. 4201, et seq.) was enacted in 1981 and is intended to minimize the impact federal actions have on the unnecessary and irreversible conversion of farmland to non-agricultural uses. This law assures that, to the extent possible, federal programs and policies are administered in a way that is compatible with state and local farmland protection policies and programs. In order to implement the FPPA, federal agencies are required to develop and review their policies and procedures every two (2) years. The FPPA does not authorize the federal government to regulate the use of private or non-federal land or, in any way, affect the property rights of owners.

The Natural Resources Conservation Service is responsible for protecting significant agricultural lands from irreversible conversions that result in the loss of essential food or environmental resources. For purposes of the FPPA, farmland includes prime farmland, unique farmland, and farmland of statewide or local importance. Prime farmland is characterized as land with the best physical and chemical characteristics for production of food, feed, forage, fiber, and oilseed crops (USDA 2013). Farmland subject to FPPA requirements does not currently have to be used for cropland; it also can be forest land, pastureland, or other land, but not water or built-up land.

4.1.2 Existing Conditions

Within Orleans Parish, approximate surface elevations range from 12 feet above sea level on Mississippi River berms to 5 feet below sea level within the drained wetlands inside the city levees. Undrained marshes and swamps typically range from sea level to about one (1) foot above in elevation (Trahan 1989). According to the Louisiana Geological Survey, the geology in the vicinity of the project site is predominantly Holocene Alluvium, which also covers about 55% of the state. The Holocene Epoch began approximately 11,700 years ago and continues to the present day. These alluvial soils consist of sandy and gravelly river channel material overlain by sandy to muddy natural levee deposits, often with an organic-rich muddy backswamp layer in between (Louisiana Geological Survey 2010). During the Holocene Epoch, there has been no known active faulting in the New Orleans area. The city is "seismically quiescent" (Seed et al. 2006).

4.1.3 Environmental Consequences

Alternative 1 – No Action

The "No Action" alternative would have no significant impacts on prime farmland, unique farmland, farmland of statewide or local importance, or other important geologic resources.

Alternative 2 – Construct a new NOPD 4th District Police Station Co-located with a new NOFD 8th District Building along Wall Boulevard (Preferred Alternative)

The soils of Orleans Parish vary in their potential for land use and urban development. According to the Natural Resources Conservation Service Web Soil Survey, soils in and surrounding the project location consist primarily of Schriever clay (0 to 1 percent slopes). The soil landform is backswamps, the landform position is talf, the down slope shape and the across slope shape are both linear. The soil parent material is clayey alluvium. Schriever clay is classified as prime farmland. Schriever clay is poorly drained and the depth to water is about 0 inches below the ground surface, according to the Soil Survey site. The soil is chemically non-saline. This soil is rated as 98 percent hydric, which is one of the indicators for wetland

soils, although other criteria must be met for a particular area to be classified as a wetland. The slopes are less than 1 percent with a slight erosion hazard.

Schriever is poorly suited to surface mechanical site preparation due to its stickiness and high plasticity index. The main disadvantages of this type of soil are flooding, depth to saturation zone, low strength, and shrink/swell.

Although the proposed site is located in an urban area, due to the undeveloped nature and size of the site, FEMA consulted with the NRCS on 24 October 2016. The consultation included a completed U.S. Department of Agriculture Farmland Conversion Impact Rating Form (AD-1006) and a soils map of the proposed project site, along with information regarding the proposed project scope of work. The NRCS indicated in a letter dated 25 October 2016, that the proposed construction area is in an urban area and therefore is exempt from the rules and regulations of the Farmland Protection Policy Act (FPPA)-Subtitle I of Title XV, Section 1539-1549. Furthermore, no impacts to NRCS work in the vicinity are predicted (Appendix D). There would be no significant impact other geologic resources.

Alternative 3 – The NOPD 4th District facility remains at the current location, but renovates the interior of the existing structure

According to the Natural Resources Conservation Service Web Soil Survey, soils in and surrounding the existing NOPD 4th District facility location consist primarily of Cancienne silt loam, 0 to 1 percent slopes. The soil landform is natural levees, the landform position is rise, the down slope shape is convex and the across slope shape is linear. The soil parent material is silty alluvium. Cancienne silt loam is classified as prime farmland. The risk of concrete corrosion is moderate and the risk of steel erosion is high with Cancienne silt loam. This soil is rated as 2 percent hydric, which is one of the indicators for wetland soils, although other criteria must be met for a particular area to be classified as a wetland. The slopes are less than 1 percent with a slight erosion hazard. Cancienne silt loam is well suited to surface mechanical site preparation. The main disadvantages of this type of soil are flooding, depth to saturation zone, and shrink/swell.

The existing NOPD 4th District facility is located on a developed lot in an urban area and therefore is exempt from the rules and regulations of the Farmland Protection Policy Act (FPPA)-Subtitle I of Title XV, Section 1539-1549. There would be no impact other geologic resources, as no new construction outside the existing building footprint would take place.

4.2 Wetlands and Waters of the United States

4.2.1 Regulatory Setting

Wetlands have important ecological functions and are biologically diverse. They assimilate nutrients in surrounding surface waters, remove suspended solids and pollutants from stormwater, and protect shorelines from wind and wave action and storm-generated forces. Actions that would impact wetlands would require review under several regulatory programs.

The United States Army Corps Engineers (USACE) regulates the discharge of dredged or fill material into waters of the U.S., including wetlands, pursuant to Sections 401 and 404 of the Clean Water Act (CWA). Wetlands are identified as those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, or that under normal hydrologic conditions do or would support, a prevalence of vegetation typically adapted for life in saturated soil conditions. The USACE also regulates the building of structures in waters of the U.S. pursuant to Section 10 of the Rivers and Harbors Act (RHA). Executive Order (E.O.) 11990, Protection of Wetlands, directs federal agencies to minimize the destruction, loss, or degradation of wetlands and to preserve and enhance the values of wetlands for

federally funded projects. FEMA regulations for complying with E.O. 11990 are codified at 44 C.F.R. Part 9, Floodplain Management and Protection of Wetlands.

The U.S. Environmental Protection Agency (USEPA) regulates discharges to waters of the United States through permits issued under Section 402 of the CWA, entitled the National Pollutant Discharge Elimination System (NPDES), which authorizes and sets forth standards for state administered permitting programs regulating the discharge of pollutants into navigable waters within each state's jurisdiction. On August 27, 1996, USEPA Region VI delegated the authority to administer the NPDES program for matters within the jurisdiction of the State of Louisiana. Having assumed NPDES responsibilities, Louisiana directly issues NPDES permits and has primary enforcement responsibility for facilities located within the State, with certain exceptions such as Indian Country Lands. Louisiana administers the NPDES Program and surface water discharge permitting system under the Louisiana Pollutant Discharge Elimination System (LPDES) program.

The LPDES requires permits for the discharge of pollutants/wastewater from any point source into waters of the State. Per the CWA, the term "point source" is defined as "any discernible, confined, and discrete conveyance such as a pipe or a ditch." Prior to assumption of the program, permittees were required to hold both a valid state and federal permit. Today, all point source discharges of pollutants to waters in the state of Louisiana are subject to a LPDES permit issued by the Louisiana Department of Environmental Quality (LDEQ). Additionally, the LDEQ requires a Stormwater Pollution Prevention Plan (SWPPP) for land disturbing activities greater than 1 acre. For land disturbing activities greater than 5 acres the LDEQ requires: 1) a SWPPP 2) a Notice of Intent and 3) a Notice of Completion.

Section 303(d) of the CWA requires states to develop a list of impaired waters. Water is considered impaired if the current quality does not meet the numeric or narrative criteria in a water quality standard, or the designated use described by that state is not achieved. Section 303(d)(2) requires that states submit and USEPA approve or disapprove lists of waters for which existing technology-based pollution controls are not stringent enough to attain or maintain state water quality standards, and for which total maximum daily loads (TMDLs) must be prepared (40 C.F.R. §130.7). Total maximum daily loads are pollution budgets designed to identify necessary reductions of pollutant loads to the impaired waters so that the appropriate water quality standards are met, including designated uses like fishing or swimming and water quality criteria for parameters such as dissolved oxygen and water clarity. The regulations require states to identify water quality limited waters still requiring TMDLs every two years. The lists of waters still needing TMDLs must also include priority rankings and must identify the waters targeted for TMDL development during the next two years (40 C.F.R. § 130.7). Types of impairments may include, for example, impaired primary contact use (e.g., swimming, water skiing), mercury and polychlorinated biphenyls (PCBs) in fish tissue, impaired fish consumption use, low dissolved oxygen, copper, phosphorus, manganese, excessive siltation, physical-habitat alterations, and total suspended solids which impair aquatic life use.

FEMA's implementation of E.O. 11990 is described in 44 C.F.R. Part 9. Under this regulation, FEMA is required to engage in the 8-step decision-making process to ensure that proposed activities are consistent with EO 11990 and to evaluate the potential effects of an action on wetlands. The 8-step process includes using minimization measures when a project affecting a wetland is the only practicable alternative. The 8-step process for this project is located in Appendix C. Minimization measures include avoidance techniques such as establishing wetland buffer zones to avoid converting or filling wetlands and obtaining and complying with NPDES permits. Sub-Recipients and Sub-Recipients are responsible for obtaining any applicable NPDES permits and meeting permit conditions. In addition to complying with 44 C.F.R. Part 9, the Recipient or Sub-Recipient must obtain the applicable CWA Section 404 permit prior to the initiation of the project if it will affect jurisdictional wetlands. The Recipient or Sub-Recipient must coordinate with USACE to determine whether any of the NWPs or a Regional General Permit apply or whether an

Individual Permit is required. Proposed projects that require an Individual Permit will require close coordination between the Sub-Recipient or Sub-Recipient, FEMA and USACE. The Sub-Recipient or Sub-Recipient is required to comply with all conditions of the 404 general or individual permit, which may include compensation measures, such as wetlands banking, for any loss of wetlands.

4.2.2 Existing Conditions

Past human interventions have significantly modified the natural hydrologic regime within Orleans Parish. Levees along the Mississippi River now prevent the annual overbank flooding that previously occurred. Water from precipitation is instead discharged into the wetlands that remain via pumping stations and floodgates which are part of the channelized drainage network within the city's leveed areas. As mentioned earlier, a significant reduction in wetland acreage occurred in the early to mid-20th Century due to this drainage network. Elsewhere in the parish, deep canals have been excavated for logging, drainage, improved navigation and, in later years, oil and gas development. These and other similar modifications to the local landscape allowed freshwater to enter the estuary more quickly from point sources. The sidecast excavated material along the canals caused segmentation of the wetlands and interfered with natural circulation. The deeper water within the canals allowed tidal fluctuation to extend farther inland, increasing saltwater intrusion during drier periods. Although major saltwater intrusions into the Mississippi River usually do not extend as far upstream as Orleans Parish, intrusions through various canals and channels do reach other surface waters in most areas of the parish. Because of these human-created conditions, hydrologic circulation now reflects an unnatural competition between local runoff, discharges from diked areas, and daily tides. As a result, a stable hydrologic regime has been altered relatively rapidly into one with greater fluctuations in water levels, salinity values, and sediment transfer/deposition (Templett 1982).

Stormwater runoff is created when gravity and topographical features cause rain water to flow into a nearby water body. Stormwater runoff collects any contaminants, including metals and chemical pollutants and objects light enough to be carried by the water, as it flows to the water body. These contaminants then enter the water body, negatively impacting its water quality. Avian, fish, and other aquatic animal excreta also contributes to the accumulation of sediment in the area water bodies. Negative impacts to water quality include high levels of chemical pollutants, high bacteria and virus loads, erosion, and sedimentation. Increased sedimentation in area water bodies has reduced oxygen levels within these water bodies and has compromised their ability to support healthy fish habitats and populations of desired fish species.

4.2.3 Environmental Consequences

Alternative 1 – No Action

The "No Action" alternative would have no impact on wetlands or other waters of the U.S. and would not require permits under § 404 of the CWA or § 10 of the RHA.

Alternative 2 – Construct a new NOPD 4th District Police Station Co-located with a new NOFD 8th District Building along Wall Boulevard (Preferred Alternative)

The proposed project site is land which is currently maintained in a relatively natural state to provide an open space area in an urban environment. The proposed project involves construction of a new NOPD police station and a new NOFD building and associated parking lots, access roads, and green space. There are no navigable waters or other waters of the U.S. present on the proposed site, although the man-made Magellan Canal is a potentially navigable water body which borders the proposed project site to the north. According to the U.S. Fish and Wildlife Service's (USFWS) National Wetlands Inventory map, there are no USFWS-mapped wetlands within the project area; however, the Magellan Canal is depicted as a "Riverine" wetland (USDOI 2016) (*Figure 10*).

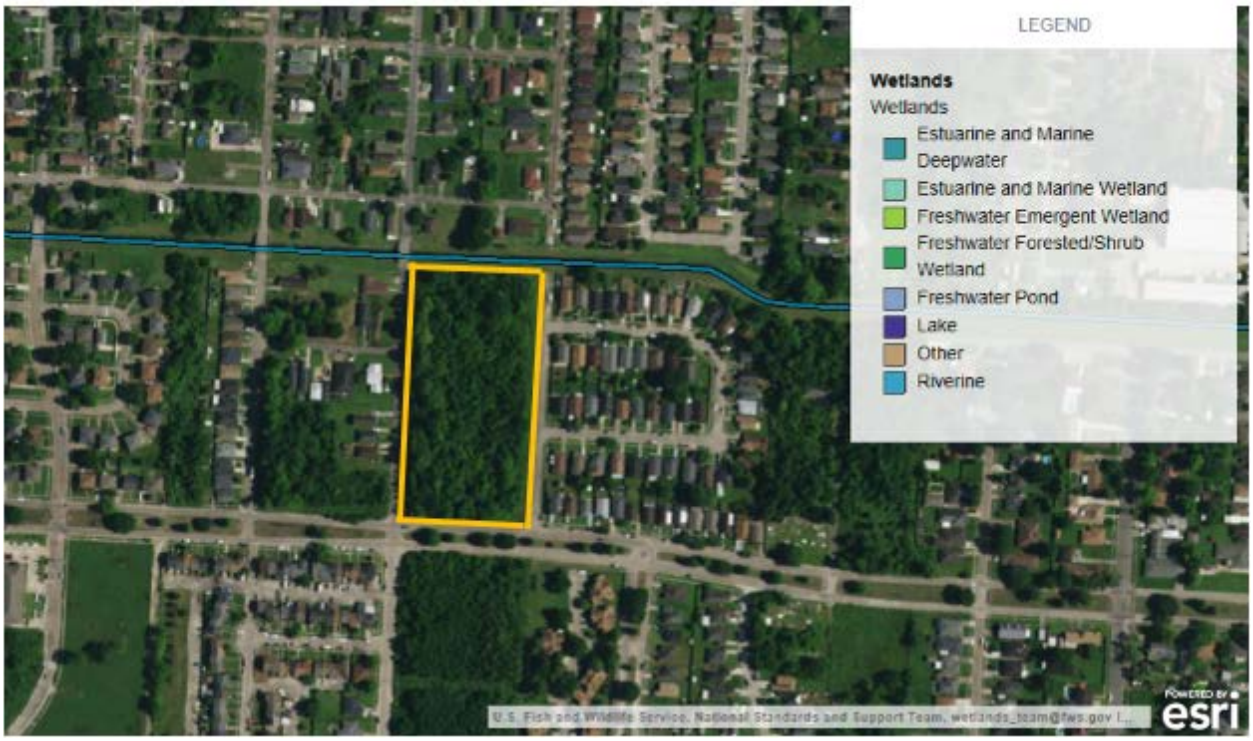

Figure 10: Image indicating that no USFWS-mapped wetlands are located within the project site boundaries (Image Source: USFWS Wetlands Viewer – Version 2)

If the project results in a discharge to offsite waters of the state, an LPDES permit may be required in accordance with the CWA and Title 33 of the Louisiana Clean Water Code. For example, if the project results in a new discharge of wastewater to an existing wastewater treatment system, that wastewater treatment system may need to modify its LPDES permit before accepting the additional wastewater. In addition, proposed construction activities may require an LDPES stormwater permit, but there is an existing general permit (LAR200000) for construction activities between one (1) and five (5) acres.

In order to minimize indirect impacts (erosion, sedimentation, dust, and other construction-related disturbances) to waters of the state or well defined drainage areas surrounding the site, the contractor should implement Best Management Practices (BMPs) that meet LDEQ permitting specifications for stormwater and also include the following into the daily construction routine: silt screens, barriers (e.g., hay bales), berms/dikes, and or fences to be placed as and where needed. Fencing should be placed to mark staging areas for storage of construction equipment and supplies, as well as for sites where maintenance/repair operations occur. In a response to FEMA's SOV dated 1 December 2016, the LDEQ had no objections to the proposed project, but provided several comments regarding discharges to waters, which are included in Section 6.0 Conditions and Mitigation Measures.

Alternative 3 – The NOPD 4th District facility remains at the current location, but renovates the interior of the existing structure

The existing site does not contain any jurisdictional wetlands or Waters of the U.S. Therefore, the interior renovation, and the continued use, of the existing NOPD 4th District facility would have no direct effect on wetlands or Waters of the U.S., as there would be no construction outside of the existing building footprint.

In order to minimize indirect impacts (erosion, sedimentation, dust, and other construction-related disturbances) to waters of the state or well defined drainage areas surrounding the site, the contractor should implement BMPs that meet LDEQ permitting specifications for stormwater and also include the following into the daily construction routine: silt screens, barriers (e.g., hay bales), berms/dikes, and or fences to be placed as and where needed. Fencing should be placed to mark staging areas for storage of construction equipment and supplies, as well as for sites where maintenance/repair operations occur.

4.3 Floodplains

4.3.1 Regulatory Setting

Executive Order 11988, Floodplain Management, requires federal agencies to avoid direct or indirect support or development within or affecting the 1% annual-chance special flood hazard area (SFHA) (i.e., 100-year floodplain) whenever there is a practicable alternative (for "Critical Actions", within the 0.2% annual chance SFHA, i.e., the 500-year floodplain). FEMA uses the National Flood Insurance Program (NFIP) Flood Insurance Rate Maps (FIRM) to determine the flood hazard zone for the proposed project location. FEMA's regulations for complying with E.O. 11988 are codified in 44 C.F.R. Part 9, Floodplain Management and Protection of Wetlands.

Section 9.6, 44 C.F.R., details an eight-step process that decision-makers must use when considering projects either located within the floodplain or with the potential to affect the floodplain. The 8-step process: assesses the action with regard to human susceptibility to flood harm and impacts to wetlands; analyzes principle flood problems, risks from flooding, history of flood loss, and existing flood protection measures; and includes public notice and opportunity for the public to have early and meaningful participation in decision-making and alternative selection. If impacts cannot be avoided, the 8-step process includes requirements to incorporate measures to minimize and mitigate potential risks from flooding and impacts to wetlands as appropriate.

Under 44 C.F.R. Part 9, FEMA is required to avoid activities in a floodplain unless it is the only practicable alternative. If undertaking a proposed project in the floodplain is the only practicable alternative, then FEMA must minimize the impacts to the floodplain and the impacts from floods to the facility or structure. Minimization techniques apply to the location of structures, equipment and building contents in floodplain areas. This could include elevating facilities or structures above the base flood elevation. Minimization techniques may include flood-proofing structures or facilities. Some of these facilities may be considered "critical actions" under this analysis because the risk of flooding might be too great. In such cases, the base flood elevation or standard for flood-proofing is the 500-year flood event.

4.3.2 Existing Conditions

Orleans Parish is comprised of the City of New Orleans and is located in southeast Louisiana at the head of the Mississippi River Delta. It is approximately 350 square miles, of which approximately roughly 199 square miles (approximately 56.9 percent) is land; the remainder, 151 square miles, is open water and marsh. Only 51% of New Orleans is at or above sea level, with the more densely populated areas generally on higher ground along the natural levee adjacent to the Mississippi and other waterways. The average elevation of the city is currently between one and two feet below sea level, with some portions of the city as high as 20 feet at the base of the river levee in Uptown and others as low as 7 feet below sea level in the farthest reaches of Eastern New Orleans.

There are approximately 1,547 miles of City-owned streets within Orleans Parish, of which approximately 60% are asphalt-topped and 40% are concrete-topped. The City's drainage system is divided into 10 drainage basins and consists of 1,287 miles of small drain lines (pipes less than 36 inches in diameter) and 65,000 drainage catch basins and inlets. The City's water distribution system consists of over 2,000 miles

of water lines and distributes approximately 144 million gallons of water each day. It also includes over 17,000 hydrants for fire protection. The City is divided into 10 sewerage service basins, with over 1,300 miles of sewer collection lines and 120 miles of sewer force mains.

New Orleans' drainage infrastructure is owned and operated by SWBNO and includes 23 drainage pump stations, 13 underpass pumping stations, 260 miles of open and covered canals, and 1,515 miles of subsurface pipes, both gravity and pressurized. With a pumping capacity of over 30 billion gallons—more than the flow rate of the Ohio River—this is the biggest stormwater removal system in the country. All rainwater is pumped to Lake Pontchartrain, the Industrial Canal, the Intracoastal Waterway and Bayou Bienvenue. Dry weather flow goes to the River, the Lake and the Intracoastal Waterway. The system also serves about 2,250 acres in Jefferson Parish.

Urban flooding occurs when rain overwhelms drainage systems and waterways and makes its way into the basements, backyards, and streets of homes, businesses, and other properties. There are several ways in which stormwater can cause the flooding of a property: overflow from rivers and streams, ponding within levee polder areas, sewage pipe backup into buildings, seepage through building walls and floors, and the accumulation of stormwater on property and in public rights-of-way. As New Orleans has developed to accommodate increasing population, more impermeable surfaces (roads, roofs, parking lots, driveways, alleys, sidewalks, and patios) have led to reduced infiltration and increased stormwater runoff. Natural drainage systems have been replaced with man-made sewer and stormwater infrastructure. This infrastructure has fallen into disrepair in many places, and increasingly heavy rainfall events are putting additional strain on the deteriorated drainage systems.

New Orleans has always faced the risk of flooding from three sources: the Mississippi River, heavy rains, and hurricane storm surge through Lake Pontchartrain and Lake Borgne. Hurricane storm surge poses the greatest threat of catastrophic flooding in New Orleans. Risk of flood damage has been modulated by several factors: increased structural flood protection in the form of flood gates and levees; increased development in low-lying, vulnerable areas; soil subsidence; and coastal erosion. Global sea level rise and the risk of stronger, more frequent hurricanes as a result of global warming may also be contributing to increased risk.

Drainage of flood waters in Orleans Parish is accomplished by a system of structures and canals which flow to pumping stations. Orleans Parish is protected from the Mississippi River by man-made levees. On the east bank of Orleans Parish, the Lake Pontchartrain and Vicinity Hurricane Protection Levee was designed to prevent flooding from hurricane storm surges from Lake Pontchartrain and Lake Borgne. Post-Hurricane Katrina, the levees in Orleans Parish, with the exception of the Mississippi River levees, although physically still in place, were compromised to the point that they were not considered sound enough to adequately protect against the 1-percent annual chance storm event.

4.3.3 Environmental Consequences

Practicable alternatives to locating the proposed action in the floodplain were identified and evaluated. Various practicability factors were considered including feasibility, social concerns, hazard reduction, mitigation costs, and environmental impacts.

Alternative 1 – No Action

The "No Action" alternative would not entail any changes to the existing NOPD Police Station or a change of location of the facility. This course would have no further adverse impacts to the floodplain.

Alternative 2 – Construct a new NOPD 4th District Police Station Co-located with a new NOFD 8th District Building along Wall Boulevard (Preferred Alternative)

Alternative 2 was reviewed for possible impacts associated with occupancy or modification to a floodplain. Although the character of the proposed site will change significantly from currently undeveloped and densely forested to developed with impervious surfaces, due to the relatively small size of the site, impacts to the nature of the floodplain itself have been determined to be negligible. Construction of the NOPD and NOFD building would not significantly affect the functions and values of the 100-year floodplain since these actions would not significantly impede or redirect flood flows.

Orleans Parish enrolled in the NFIP on 3 August 1970. This project is located within a levee-protected area of the 100-year floodplain. Effective DFIRM Panel 22071C0242F, which became effective on 30 September 2016 (*Figure 11*), indicates that a relatively small area of the proposed project site is located in Flood Zone AE (EL -1), an area levee-protected from the base flood but subject to the 1% annual chance flood, i.e. the 100-year floodplain (dark gray areas on the DFIRM); however, these areas flood-prone areas are primarily located in the southern portion of the site, where the proposed NOPD and NOFD structures would be built. The majority of site lot is located in Flood Zone Shaded "X," an area levee-protected from the base flood but subject to the 0.2% annual chance flood, i.e. the 500-year floodplain, based upon shallow ponding only (light gray areas on the DFIRM). According to Google Earth, ground elevations within the area are approximately 0 feet above sea level to 2 feet above sea level (North American Vertical Datum of 1988). In compliance with E.O. 11988, an 8-step process was completed and documentation is attached in Appendix C.

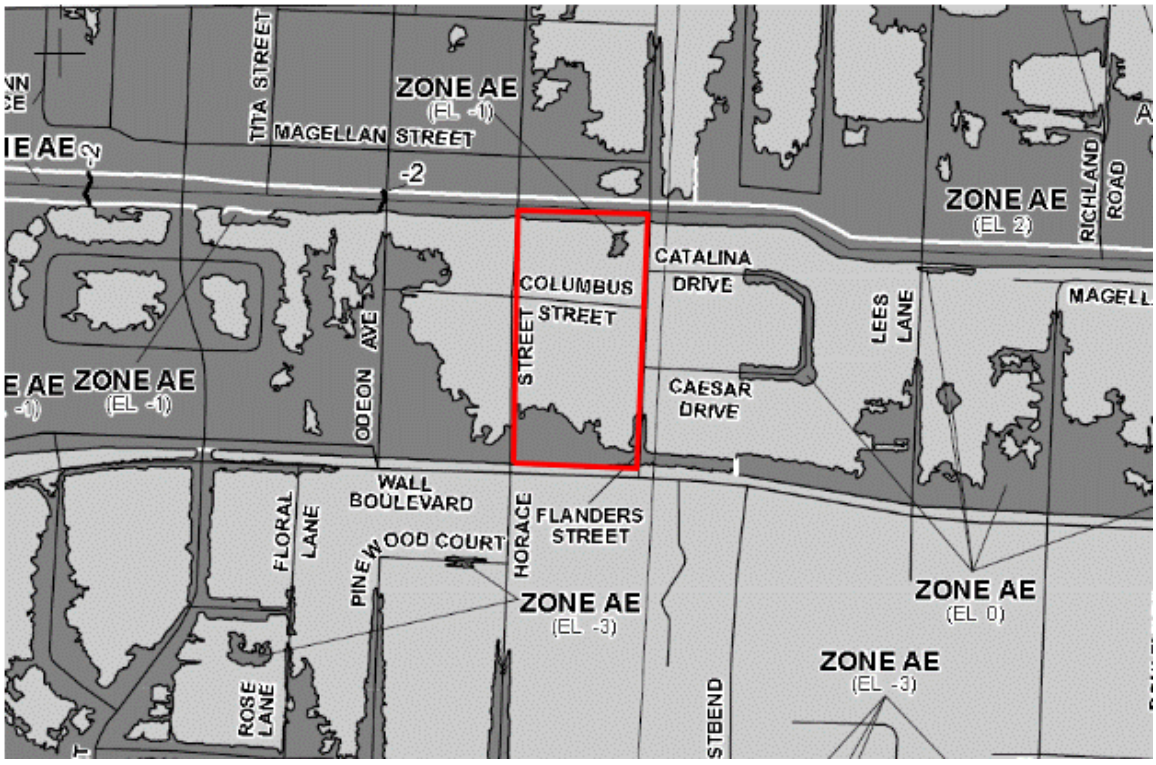

Figure 11: Effective DFIRM Panel Number 22071C0242F (Image Source: FEMA 2016). Figure depicts the flood zones for the proposed project site, which is outlined in red.

According to the current Orleans Parish Floodplain Ordinance, *Sec. 78-81. – Minimum elevation required*, (M.C.S., Ord. No. 26906, § 1, 5-5-16, effective 6-1-16), which may be accessed via the internet at: https://library.municode.com/la/new_orleans/codes/code_of_ordinances?nodeId=PTIICO_CH78FL_ARTIIFLDAPR_DIV2PE_S78-81MIELRE:

- The lowest floor elevation of new residential and non-residential construction and substantial improvements must, at a minimum, be elevated to one foot above the BFE as determined by the FIRM adopted by this article, or three feet above the highest adjacent curb (in the absence of curbing, three feet above the crown of the highest adjacent roadway), whichever is higher.
- In cases where flood-proofing is utilized for non-residential new construction or substantial improvements, proper certificates from a registered professional engineer or licensed architect shall be obtained and maintained by the director. Such structures utilizing flood-proofing measures must be flood-proofed to a minimum of one foot above the requirement established above.

In addition, according to Sec. *78-82 – Review of permits for construction* of the ordinance reference above:

- New construction or substantial improvements within special flood hazard areas must be protected against flood damage, be anchored in accordance with the building code of the City of New Orleans to prevent flotation, collapse, or lateral movement of the structure, utilize construction materials and utility equipment that is resistant to flood damage, and utilize construction methods and practices to minimize flood damage.

Although the CNO's construction plans place the proposed new NOPD 4th District Police Station and the NOFD station fully or partially within the 100-year floodplain and less hazardous locations in terms of the floodplain are available, the CNO has determined that this location is the best in terms of the centralized location within the West Bank area of New Orleans and for easy ingress and egress on to Wall Boulevard for NOPD and NOFD emergency response. Regardless of the structure's location within either the 100-year or 500-year floodplain, FEMA's NFIP, Executive Order 11900, and Orleans Parish Floodplain regulations must be followed.

Adverse effects would be minimized in accordance with FEMA's minimization standards in 44 C.F.R. § 9.11. Treatment measures would be required to reduce adverse impacts below the level of significance. New construction must be compliant with current codes and standards. Per 44 C.F.R. § 9.11(d)(6), no project should be built to a floodplain management standard that is less protective than what the community has adopted in local ordinances through their participation in the NFIP. The Sub-Recipient is required to coordinate with the local floodplain administrator regarding floodplain permit(s) prior to the start of any activities. Coordination pertaining to these activities and Sub-Recipient compliance with any conditions should be documented and copies forwarded to the Louisiana Governor's Office of Homeland Security and Emergency Preparedness (GOHSEP) and FEMA for inclusion in the permanent project files.

Based on construction plans, it appears that the lowest occupied level of the NOPD structure would be built on the ground surface, and not elevated above the ground surface, as depicted in *Figure 12*.

In order for the CNO to comply with FEMA floodplain management requirements and to eligible for project funding, after construction of the NOPD building and prior to FEMA project close-out, additional verification will be needed to ensure that proper coordination occurred regarding work within the floodplain. The following documentation will be required:

- A copy of the Post-Construction Elevation Certificate (EC) signed/sealed by licensed surveyor, engineer, or architect *as well as* the local floodplain administrator (LFA); or

- If the post-construction EC is not signed by the local Floodplain Administrator, then a Certificate of Occupancy signed by the LFA or a letter from the LFA stating the structure was built in compliance with the local floodplain ordinance.

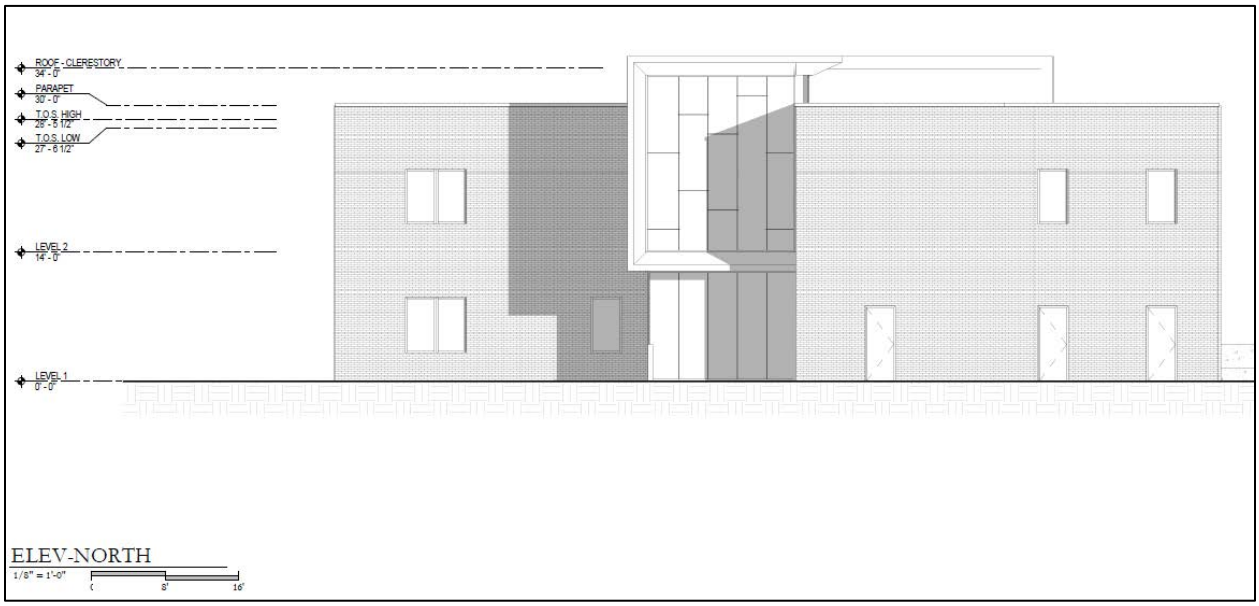

Figure 12: Depiction of the proposed north elevation showing that the lowest level of the structure would be constructed at Level 1 at 0 feet with no evidence of structure elevation. (Image Source: City Of New Orleans NOPD 4th District Station, 95% Design Development Submittal, Holly & Smith Architects.)

Alternative 3 – The NOPD 4th District facility remains at the current location, but renovates the interior of the existing structure

Effective DFIRM Panel 22071C0233F, which became effective on 30 September 2016 (*Figure 13*), indicates that the existing NOPD 4th District facility site is located in Flood Zone Shaded "X," an area levee-protected from the base flood but subject to the 0.2% annual chance flood, i.e. the 500-year floodplain, based upon shallow ponding only (light gray areas on the DFIRM). According to Google Earth, ground elevations within the area are approximately 9 feet above sea level to 11 feet above sea level (North American Vertical Datum of 1988), as the existing NOPD 4th District Police building has been constructed on the natural levee along the Mississippi River. The renovation of the interior, and the continued use, of the existing NOPD 4th District facility would have no effect on the floodplain, as there would be no construction outside of the existing building footprint. In compliance with E.O. 11988, an 8-step process was completed and documentation is attached in Appendix C.

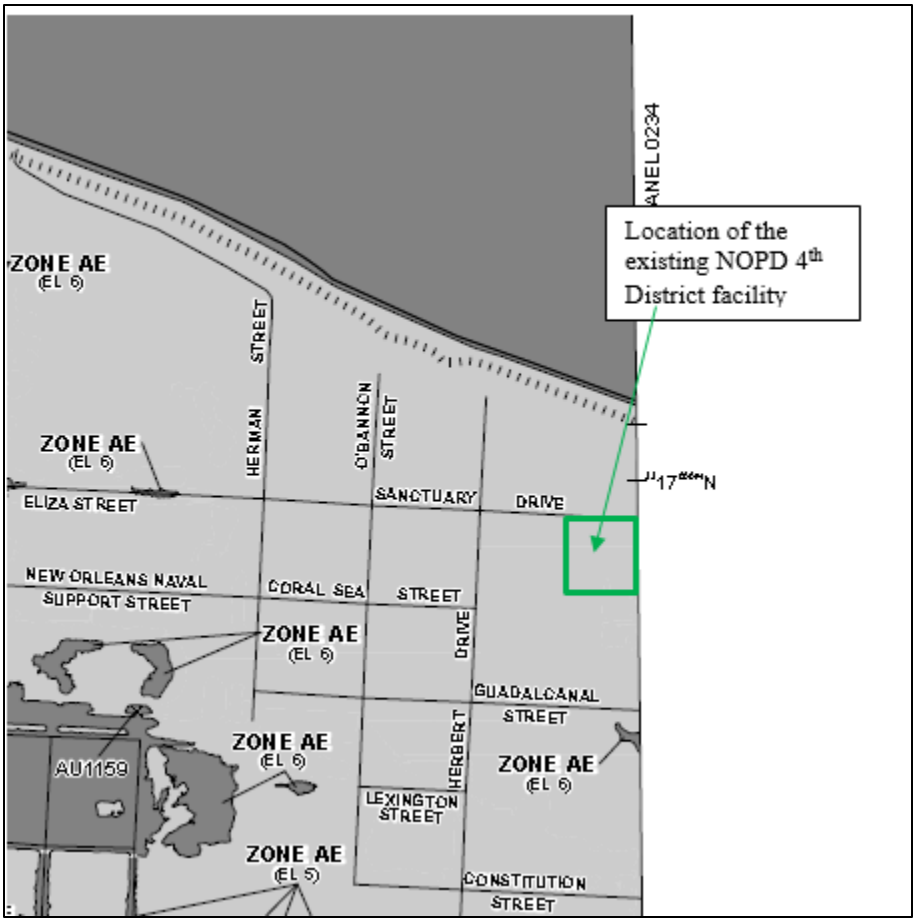

Figure 13: Effective DFIRM Panel Number 22071C0233F (Image Source: FEMA 2016). Figure depicts the flood zones for the NOPD 4th District existing site, which is outlined in green.

4.4 Coastal Resources

4.4.1 Regulatory Setting

4.4.1.1 Coastal Zone Management Act of 1972

The Coastal Zone Management Act (CZMA) of 1972 (16 U.S.C. § 1451 et seq.) is administered by the Department of Commerce's Office of Ocean and Coastal Resource Management within the National Oceanic and Atmospheric Administration (NOAA). It applies to all coastal states and to all states that border the Great Lakes. The CZMA was established to help prevent any additional loss of living marine resources, wildlife, and nutrient-enriched areas; alterations in ecological systems; and decreases in undeveloped areas available for public use. The CZMA gives states the authority to determine whether activities of governmental agencies are consistent with federally-approved coastal zone management programs. Each state coastal zone management program must include provisions protecting coastal natural resources, fish, and wildlife; managing development along coastal shorelines; providing public access to the coast for recreational purposes; and incorporating public and local coordination for decision-making in coastal areas. This voluntary federal-state partnership addresses coastal development, water quality, shoreline erosion, public access, protection of natural resources, energy facility siting, and coastal hazards.

The Federal Consistency provision, contained in § 307 of the CZMA, allows affected states to review federal activities to ensure that they are consistent with the state's coastal zone management program. This provision also applies to non-federal programs and activities that use federal funding and that require federal authorization. Any activities that may have an effect on any land or water use or on any natural resources in the coastal zone must conform to the enforceable policies of the approved state coastal zone management program. NOAA's regulations in 15 C.F.R. Part 930 provide the procedures for arriving at or obtaining a consistency determination.

The CZMA requires that coastal states develop a State Coastal Zone Management Plan or program and that any federal agency conducting or supporting activities affecting the coastal zone conduct or support those activities in a manner consistent with the approved state plan or program. To comply with the CZMA, a federal agency must identify activities that would affect the coastal zone, including development projects, and review the state coastal zone management plan to determine whether a proposed activity would be consistent with the plan.

4.4.1.2 Louisiana State and Local Coastal Resources Management Act of 1978

Pursuant to the CZMA, the State and Local Coastal Resources Management Act of 1978 (R.S. 49:214.21 et seq. Act 1978, No. 361) is the state of Louisiana's legislation creating the Louisiana Coastal Resources Program (LCRP). The LCRP establishes policy for activities including construction in the coastal zone, defines and updates the coastal zone boundary, and creates regulatory processes. The LCRP is under the authority of the Louisiana Department of Natural Resource's (LDNR) Office of Coastal Management (OCM). If a proposed action is within the Coastal Zone boundary, OCM will review the eligibility of the project concurrently with its review by other federal agencies (U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, and National Marine Fisheries Service). The mechanism employed to review these projects is the Coastal Use Permit (CUP). Per the CZMA, all proposed federal projects within the coastal zone must undergo a Consistency Determination by OCM for that project's consistency with the state's Coastal Resources Program (i.e., LCRP) (LDNR 2016).

4.4.1.3 Coastal Barrier Resources Act of 1982

The Coastal Barrier Resources Act (CBRA) of 1982 (16 U.S.C. § 3501 et seq.), administered by the U.S. Fish and Wildlife Service (USFWS), was enacted to protect sensitive and vulnerable barrier islands found 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 might support or promote coastal development, thereby discouraging development in coastal areas.

4.4.2 Existing Conditions

The existing and proposed change of location facilities are located within the coastal zone and may be required to obtain a CUP prior to construction (Appendix D). The project site is not located within a regulated CBRS unit.

4.4.3 Environmental Consequences

Alternative 1 – No Action

The "No Action" alternative would entail no undertaking and therefore, would have no impact on a coastal zone or a CBRS unit.

Alternative 2 – Construct a new NOPD 4th District Police Station Co-located with a new NOFD 8th District Building along Wall Boulevard (Preferred Alternative)

The proposed project would involve construction in a designated coastal zone. Per a letter from LDNR OCM dated 3 March 2013, the granting of federal financial assistance as defined in 15 C.F.R. § 930.91 is fully consistent with the LCRP. Consistency with the LCRP does not exempt Sub-Recipients from the need to obtain a CUP, if required. On 22 November 2016, the LDNR determined that a CUP may be required prior to initiation of project activities. The Sub-Recipient is responsible for coordinating with LDNR OCM to obtain the CUP required as a result of this project.

The project site is not located within a CBRS unit; therefore CBRA requirements do not apply.

Alternative 3 – The NOPD 4th District facility remains at the current location, but renovates the interior of the existing structure

The renovation of the interior, and the continued use, of the existing NOPD 4th District facility would have no additional effect on the Coastal Zone but may still require a CUP. The Sub-Recipient is responsible for coordinating with LDNR OCM to determine if a CUP is required as a result of this project.

The project site is not located within a CBRS unit; therefore CBRA requirements do not apply.

4.5 Federally Protected Species, Critical Habitats, and Other Biological Resources

4.5.1 Regulatory Setting

4.5.1.1 Endangered Species Act

The Endangered Species Act (ESA) of 1973 (16 U.S.C. 1531-1543) prohibits the taking of listed, threatened, and endangered species unless specifically authorized by permit from the USFWS or the NMFS. "Take" is defined in 16 U.S.C. 1532 (19) as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in any such conduct." "Harm" is further defined to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns such as breeding, feeding, or sheltering (50 C.F.R. § 17.3) (Endangered and Threatened Wildlife and Plants 1975).

Section 7(a)(2) of the ESA requires the lead federal agency to consult with either the USFWS or the NMFS, depending which agency has jurisdiction over the federally listed species in question, when a federally funded project either may have the potential to adversely affect a federally listed species, or a federal action occurs within or may have the potential to impact designated critical habitat. The lead agency must consult with the USFWS, the NMFS, or both (Agencies) as appropriate and will determine if a biological assessment is necessary to identify potentially adverse effects to federally listed species, their critical habitat, or both. If a biological assessment is required, it will be followed by a biological opinion from the USFWS, the NMFS, or both depending on the jurisdiction of the federally listed species identified in the biological assessment. If the impacts of a proposed federal project are considered negligible to federally listed species, the lead agency may instead prepare a letter to the Agencies with a "May Affect, but Not Likely to Adversely Affect" determination requesting the relevant agency's concurrence. This DEA serves to identify potential impacts and meet the ESA § 7 requirement by ascertaining the risks of the proposed action and alternatives to known federally listed species and their critical habitat, as well as providing a means for consultation with the Agencies.

4.5.1.2 Migratory Bird Treaty Act

Unless otherwise permitted by regulation, the Migratory Bird Treaty Act of 1918 (16 U.S.C. 703-712) prohibits pursuing; hunting; taking; capturing; killing; attempting to take, capture, or kill; possessing;

offering for sale; selling; offering to purchase; purchasing; delivering for shipment; shipping; causing to be shipped; delivering for transportation; transporting; causing to be transported; carrying or causing to be carried by any means whatever; receiving for shipment, transportation, or carriage; or exporting; at any time or in any manner, any migratory bird or any part, nest, or egg of any such bird, that is included on the list of protected bird species (General Provisions; Revised List of Migratory Birds 2013). The USFWS is responsible for enforcing the provisions of this Act.

4.5.2 Existing Conditions

One (1) mammal species, the West Indian manatee, two (2) fish species, the Atlantic Gulf Sturgeon (Gulf Subspecies) and the Pallid Sturgeon, and three (3) reptile species, the Loggerhead sea turtle, the Green sea turtle, and the Kemp's ridley sea turtle are federally listed as threatened or endangered and are known to occur in select waterways of Orleans Parish (*Table 2*). Within the Alternative 2 and Alternative 3 project site boundaries, critical habitat does not exist for any of the federally listed endangered and threatened species that occur in Orleans Parish. The proposed project sites are located within the Mississippi Flyway (Mississippi Flyway Council n.d.).

Table 2. Federally Listed Species Known to Occur in Orleans Parish

Common Name	Scientific Name	Federal Status	Critical Habitat	Habitat Requirements	Impact* / Rationale
Atlantic Gulf sturgeon (Gulf Subspecies)	*Acipenser oxyrinchus desotoi*	Threatened	No[1]	Anadramous fish species that spends most of its life in freshwater habitats and spawns in estuarine bays. Found in a variety of substrate areas based on age class of species.	None / Project area is not located near critical habitat areas. Any potential stormwater runoff would not significantly impact this species.
Pallid sturgeon	*Scaphirhynchus albus*	Endangered	No[1]	Prefers large, free-flowing turbid rivers. No information exists on preferred spawning habitat.	None / Less than significant impacts would occur from stormwater runoff even without proper BMPs in place at storm drain locations.
West Indian manatee	*Trichechus manatus*	Endangered	No[1]	Found in marine, estuarine, and freshwater environments with a strong preference for warm and well-vegetated waters.	None / There is no suitable habitat associated with the proposed project that is close or hydrologically connected to potential habitat for this species.
Loggerhead sea turtle	*Caretta caretta*	Threatened	No[1]	These sea turtles are most likely enter Lake Pontchartrain most often during the summer when salinity is higher.	None / There is no suitable habitat associated with the proposed project that is close or hydrologically connected to potential habitat for this species.

Common Name	Scientific Name	Federal Status	Critical Habitat	Habitat Requirements	Impact* / Rationale
Green sea turtle	*Chelonia mydas*	Endangered	No[1]	In water temperatures greater than 20°C, though their distribution can be correlated to seagrass beds, nesting beaches, and associated ocean currents.	None / There is no suitable habitat associated with the proposed project that is close or hydrologically connected to potential habitat for this species.
Kemp's ridley sea turtle	*Lepidochelys kempii*	Threatened	No[1]	Found worldwide in water temperatures greater than 20°C, though their distribution can be correlated to seagrass beds, nesting beaches, and associated ocean currents. As adults they feed almost exclusively on sea grasses (i.e. turtle grass [*Thalassia testudium*]) growing in shallow water flats.	None / There is no suitable habitat associated with the proposed project that is close or hydrologically connected to potential habitat for this species.

* Considers potential impacts of Alternatives 1 - 3.
[1] Species may occur in Orleans Parish, but not within the proposed project area.
Note: Data accessed October 2016 from USFWS IPaC Web Portal (http://ecos.fws.gov/ipac/) (USDOI 2015c).

Within the City of New Orleans the setting is decidedly urban. According to aerial photography provided by Google Earth, the proposed project site is part of an isolated plot of densely forested, primarily undisturbed land which is bisected by Wall Boulevard, and which would provide suitable habitat for many of common urban species found in the project area; however, this habitat is unsuitable for the threatened and endangered species found in Orleans Parish.

The city is home to a number of animals adapted to urban conditions, including raccoons (*Procyon lotor*), opossums (*Didelphis marsupialis*), nine-banded armadillos (*Dasypus novemcinctus*), coyotes (*Canis latrans*), Norway rats (*Rattus norvegicus*) (Allman 2011), and various species of mice, as well as reptiles such as the green anole (*Anolis carolinensis*) and amphibians such as the green treefrog (*Hyla cinerea*, the State Amphibian of Louisiana) and the Gulf Coast toad (*Bufo valliceps*). A large number of common bird species are also present, including rock pigeons (*Columba livia*), mourning doves (*Zenaidura macroura*), boat-tailed grackles (*Quiscalus major*), ruby-throated hummingbirds (*Archilochus colubris*), and American robins (*Turdus migratoius*).

4.5.3 Environmental Consequences

Alternative 1 – No Action

The "No Action" alternative would entail no undertaking and, therefore, would have no impact on species federally listed as threatened or endangered, migratory birds, or federally listed critical habitats.

Alternative 2 – Construct a new NOPD 4th District Police Station Co-located with a new NOFD 8th District Building along Wall Boulevard (Preferred Alternative)

Inspection of the proposed project did not reveal the presence of any species federally listed as threatened or endangered. Based on a review of this alternative using the USFWS ESA Technical Assistance website (2016), "the proposed project is not an activity that would affect a federally listed threatened or endangered species; nor is there proposed or designated critical habitat present within" Orleans Parish. "Therefore, a 'no effect' determination is appropriate. No further ESA coordination with the Service is necessary for the proposed action, unless there are changes in the scope or location of the proposed project or the project has not been initiated one year from the date of this letter" (Appendix D).

The proposed Alternative would have no effect on species federally listed as threatened or endangered, migratory birds, or federally listed critical habitats. USFWS has interpreted § 7(p) of the ESA to mean that restoring any infrastructure damaged or lost due to Hurricane Katrina back to its original footprint does not require ESA consultation per USFWS letter of 15 September 2005, to FEMA.

Alternative 3 – The NOPD 4th District facility remains at the current location, but renovates the interior of the existing structure

The renovation of the interior, and the continued use, of the existing NOPD 4th District facility would have no effect on threatened or endangered species.

4.6 Air Quality

4.6.1 Regulatory Setting

4.6.1.1 Clean Air Act of 1970 (Including 1977 and 1990 Amendments)

The Clean Air Act (CAA) (42 U.S.C. § 7401 et seq.) is the federal law that regulates air emissions from stationary and mobile sources. This law tasks the USEPA, among its other responsibilities, with establishing primary and secondary air quality standards. Primary air quality standards protect the public's health, including the health of "sensitive populations, such as people with asthma, children, and older adults." Secondary air quality standards protect the public's welfare by promoting ecosystem health, preventing decreased visibility, and reducing damage to crops and buildings. The USEPA also has set National Ambient Air Quality Standards (NAAQS) for the following six (6) criteria pollutants: carbon monoxide (CO), lead (Pb), nitrogen oxides (NO_x), ozone (O_3), particulate matter (less than 10 micrometers [PM_{10}] and less than 2.5 micrometers [$PM_{2.5}$]), and sulfur dioxide (SO_2).

Under the 1990 amendments to the CAA, the USEPA may delegate its regulatory authority to any state which has developed an approved State Implementation Plan (SIP) for carrying out the mandates of the CAA. The State of Louisiana's initial SIP was approved on 5 July 2011, and its CAA implementing regulations are codified in Title 33.III of the Louisiana Environmental Regulatory Code. The SIP has been revised several times since its original approval.

According to 40 C.F.R. § 93.150(a), "No department, agency or instrumentality of the Federal Government shall engage in, support in any way or provide financial assistance for, license or permit, or approve any activity which does not conform to an applicable implementation plan." In addition, 40 C.F.R. § 93.150(b) states, "A Federal agency must make a determination that a Federal action conforms to the applicable implementation plan in accordance with the requirements of this subpart before the action is taken." As a result, when FEMA provides financial assistance for a project, such as the one currently under review in this DEA, the CAA requires a General Conformity determination whenever the project site is located in a "non-attainment area" for any one (1) of the six (6) criteria pollutants (Revisions to the General Conformity Regulations 2010).

4.6.2 Existing Conditions

According to *The Green Book Nonattainment Areas for Criteria Pollutants* (USEPA 2014b), the Parish of Orleans is considered to be an "attainment area" for criteria pollutants. As a result, no General Conformity determination is required by FEMA for projects it funds within this parish.

4.6.3 Environmental Consequences

Alternative 1 – No Action

The "No Action" alternative would involve no undertaking and, therefore, would cause no short- or long-term impacts to air quality.

Alternative 2 – Construct a new NOPD 4th District Police Station Co-located with a new NOFD 8th District Building along Wall Boulevard (Preferred Alternative)

This alternative potentially includes short-term impacts to air quality resulting from construction activities, including tree removal and site grading. Particulate emissions from the generation of fugitive dust during project construction would likely be increased temporarily in the immediate project vicinity. Other emission sources on site could include internal combustion engines from work vehicles, air compressors, or other types of construction equipment. These effects would be localized and of short duration.

To reduce potential short term effects to air quality from construction-related activities, the contractor would be responsible for using BMPs to reduce fugitive dust generation and diesel emissions. For example, the contractor would be required to water down construction areas when necessary to minimize particulate matter and dust. Emissions from the burning of fuel by internal combustion engines (e.g., heavy equipment and earthmoving machinery) could temporarily increase the levels of some of the criteria pollutants, including CO_2, NO_x, O_3, and PM_{10}, and non-criteria pollutants such as volatile organic compounds. To reduce emissions of criteria pollutants, running times for fuel-burning equipment should be kept to a minimum and engines should be properly maintained. Contractors are required to follow, at a minimum, these BMPs during site work:

- implement erosion and sediment controls
- stabilize soils
- manage dewatering activities
- implement pollution prevention measures
- provide and maintain buffers around surface waters
- prohibit certain discharges, such as motor fuel and concrete washout

Increased traffic in the area after construction would likely have minor long-term impacts on air quality due to increased police, fire department, and visitor vehicles in the area and their associated emissions.

Alternative 3 – The NOPD 4th District facility remains at the current location, but renovates the interior of the existing structure

This alternative potentially includes short-term impacts to air quality resulting from construction activities. Particulate emission sources on site could include new construction materials brought onto the site, internal combustion engines from work vehicles, air compressors, or other types of construction equipment. These effects would be localized and of short duration.

To reduce potential short term effects to air quality from construction-related activities, the contractor would be responsible for using BMPs to reduce fugitive dust generation and diesel emissions. For example,

the contractor would be required to water down construction areas when necessary to minimize particulate matter and dust. Emissions from the burning of fuel by internal combustion engines (e.g., construction employee and vendor vehicles) could temporarily increase the levels of some of the criteria pollutants, including CO_2, NO_x, O_3, and PM_{10}, and non-criteria pollutants such as volatile organic compounds. To reduce emissions of criteria pollutants, running times for fuel-burning equipment should be kept to a minimum and engines should be properly maintained. Contractors are required to follow, at a minimum, these BMPs during site work:

- implement erosion and sediment controls
- stabilize soils
- manage dewatering activities
- implement pollution prevention measures
- provide and maintain buffers around surface waters
- prohibit certain discharges, such as motor fuel and concrete washout

The continued use of the existing NOPD 4th District facility as an active police station would have no long-term impact on air quality.

4.7 Noise

4.7.1 Regulatory Setting

Noise is commonly defined as unwanted or unwelcome sound and most commonly measured in decibels (dBA) on the A-weighted scale (i.e., 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. Sound is federally regulated by the Noise Control Act of 1972, which charges the USEPA with preparing guidelines for acceptable ambient noise levels. USEPA guidelines, and those of many other federal agencies, state that outdoor sound levels in excess of 55 dBA DNL are "normally unacceptable" for noise-sensitive land uses including residences, schools, or hospitals (USEPA 1974). The Noise Control Act, however, only charges implementation of noise standards to those federal agencies that operate noise-producing facilities or equipment.

The City of New Orleans Noise Ordinance (§ 66) places restrictions on any source of sound exceeding the maximum permissible sound level based on the time of day and the zoning district within which the sound is emitted. A number of exemptions exist for certain types of activities, however. In accordance with the City's Noise Ordinance § 66-138, "[n]oises from construction and demolition activities for which a building permit has been issued by the department of safety and permits are exempt from" maximum permissible sound level restrictions "between the hours of 7:00 a.m. and 11:00 p.m., except in those areas zoned as RS, RD, or RM residential districts. Construction and/or demolition activities shall not begin before 7:00 a.m. or continue after 6:00 p.m. in areas zoned as RS, RD, or RM residential districts, or within 300 feet of such residential districts. Mufflers on construction equipment shall be maintained" (CNO 2014b).

4.7.2 Existing Conditions

The Alternative 2 site under consideration in this DEA is within an area zoned as Neighborhood Open Space District "OS-N". The future land use is designated as Parkland and Open Space "P". There are residential structures adjacent to the proposed project area to the north, east, and west. There is similar densely forested open space to the south on the other side of Wall Boulevard.

The Alternative 3 site is located in a developed urban area, and is subject to typically urban noise such as that resulting from normal vehicle traffic and emergency vehicle sirens.

4.7.3 Environmental Consequences

Alternative 1 – No Action

Under the "No Action" alternative there would be no short- or long-term impact to noise levels because no construction would occur.

Alternative 2 – Construct a new NOPD 4th District Police Station Co-located with a new NOFD 8th District Building along Wall Boulevard (Preferred Alternative)

Under this alternative, tree removal and construction activities would result in short-term increases in noise during the construction period. Equipment and machinery utilized on the project site would be expected to meet all local, state, and federal noise regulations; however, due to the adjacent residential structures, in order to be exempt from the City's Noise Ordinance, work would be restricted to between the hours of 7:00 a.m. and 6:00 p.m. unless statutory ambient noise restrictions are observed.

Following completion of construction activities, operations at the newly constructed facilities would result significant episodic increases in noise levels. Police and fire department sirens originating from the site would create additional long term noise on an episodic basis.

Alternative 3 – The NOPD 4th District facility remains at the current location, but renovates the interior of the existing structure

The renovation of the interior of the existing NOPD 4th District facility may cause a temporary increase in noise levels within the existing site and in the adjacent area due to the increase in construction traffic and construction personal. The continued use of the existing NOPD 4th District facility as an active police station would not cause additional increases in noise levels beyond what is already present within the existing site or in the adjacent area.

4.8 Land Use

4.8.1 Regulatory Setting

Land use within New Orleans must be consistent with the "Land Use Plan" section of the City's Master Plan, *Plan for the 21st Century*, which "sets forth the policy framework for the physical development of the city" as adopted in the City charter. According to the Master Plan, regulated land use actions include 1) the Comprehensive Zoning Ordinance and all zoning amendments, 2) preliminary and final approval of subdivision plans and plats, 3) site plans, 4) approval of planned unit development or other site-specific development plans, and 5) variances. "c*onsistency*' means that the land use actions must further, or at a minimum not interfere with, the goals, policies and strategies in the Land Use Plan section of the Master Plan" (*emphasis original*). Among other guidelines, the Land Use Plan includes strategies to "identify commonalities and differences in the physical character of areas across the city, focusing on more than architectural style to include street organization and size, scale and massing, orientation to the street, and similar urban design features" (CNO 2010a, 2010b).

In Article 1 of the City of New Orleans' new Comprehensive Zoning Ordinance (CZO) (2015), the ordinance's stated purpose has multiple components, one of which is to "ensure that the policies set forth in City's Master Plan are implemented by the land use regulations and are consistent with the goals set forth in the Master Plan." Another is to "provide for functional public utilities and facilities, and for the

convenience of traffic and circulation of people and goods." A further purpose is to "provide for preservation, protection, development, and conservation of natural resources."

The CZO established nine (9) zoning districts that regulate such matters as "the location and use of structures, signs, water and land areas for agriculture, trade, industry, and residential use" within their specific zoning category. "These zoning districts also regulate, limit, or determine the height, bulk, and access to light and air of structures, the area of yards and other open spaces, the density of use, and the standards for site organization and layout." The nine (9) zoning types consist of 1) Open Space, 2) Rural Development, 3) Historic Core Neighborhoods, 4) Historic Urban Neighborhoods, 5) Suburban Neighborhoods, 6) Commercial Center and Institutional Campus, 7) Centers for Industry, 8) Central Business, and 9) Overlay Zoning Districts.

According to Article 6, however, the CZO "does not apply to structures located within the public right-of-way, such as utilities." In addition, Article 6 provides exemptions for essential services, stating that "[t]he following essential services may be permitted erected, constructed, altered, or maintained in any zoning district, unless otherwise indicated within this Ordinance. Development plan and design review ([Article IV,] Section 4.5) by the Executive Director of the City Planning Commission may be required." These exemptions apply to:

A. Traffic signals, fire hydrants, and similar equipment and accessories.

B. Gas, electric, communication, water supply, and transmission/distribution systems.

C. Elevated or underground water storage tanks.

D. Stormwater and sanitary sewer collection and disposal systems.

E. Utility poles, wires, mains, drains, pipes, conduits and cables reasonably necessary for the furnishing of adequate service by public utilities, municipal or other governmental agencies for the public health, safety and welfare.

F. Streets.

Finally, there are three (3) local levee districts with regulatory authority over work near the New Orleans levee system. Permits are required for certain types of work, such as excavation, within 1,500 feet of Mississippi River levees and within 300 feet of hurricane protection levees. The Orleans Levee District is the main body with regulatory jurisdiction over levees within Orleans Parish; however, work near the parish boundary could potentially require coordination with the East Jefferson Levee District to the west or the Lake Borgne Basin Levee District to the east.

4.8.2 Existing Conditions

The City of New Orleans is located entirely within the parish of Orleans, in southeastern Louisiana. New Orleans/Orleans Parish has approximately 343,829 residents according to 2010 census figures (U.S. Department of Commerce [USDOC] 2010). Orleans Parish is about 350 square miles in size, of which roughly 199 square miles (approximately 56.9 percent) is land; the remainder, 151 square miles, is open water (Trahan 1989). The parish is bordered on the east by Lake Borgne, St. Bernard Parish, and Plaquemines Parish; on the south by the Mississippi River, Plaquemines Parish, and Jefferson Parish; on the west by Jefferson Parish; and on the north by Lake Pontchartrain and St. Tammany Parish. Major transportation routes within Orleans Parish include Interstates 10 and 610 and U.S. Highways 11, 61, and 90.

Orleans Parish is primarily urban, with the exception of some areas of coastal marsh in the eastern part and woodlands on the west bank of the Mississippi River (the Lower Coast). The parish is within the

Mississippi River delta, with a subtropical, humid climate typical of coastal regions along the Gulf of Mexico. The average winter temperature is 54°F and the average summer temperature is 81°F. Orleans Parish typically receives 59 inches of rainfall annually (Trahan 1989).

Although the corporate boundary of the City of New Orleans has been unchanged since the 1800s, the city's urban footprint has expanded significantly since then. Before 1900, urbanization was confined primarily to natural levees and ridges along the Mississippi River and elsewhere (the Esplanade Ridge, for example). In 1913, construction of a levee and pump system began, which allowed for the development of lower-lying areas and the back swamp. Between 1913 and 2000, the city's urbanized footprint almost doubled to approximately 71 square miles. The extent of urbanization has been relatively unchanged since the mid-1980s, however, when development slowed considerably due to a lack of large remaining developable tracts within the city, the general economic downturn resulting from the "oil bust," and ongoing concerns about quality of life issues related to crime and public education (CNO 2010c).

Land use differs from zoning in that it groups land distribution patterns into broad general categories. Zoning, on the other hand, regulates specific activities and functions within a particular land use category. Post-Hurricane Katrina, the general pattern of land use has not changed significantly; however, many properties are now vacant or abandoned. According to the latest available data presented in the city's 2010 Master Plan, land use within New Orleans consists approximately of: Residential – 25% of the total land area; Industrial (active or vacant) – 8%; Parkland/Recreation/Open Space and Non-Urban/Wetland/ Undeveloped combined – 60%; Institutional/Public/Semi-Public – 3%; and Commercial/Mixed-Use – 4%. Within the Residential land use category, 57% is single family homes, 23% is two (2)- to four (4)-unit structures, and 29% percent is structures containing five (5) units or more. As a result of the hurricane, there were about 59,000 vacant or blighted residential lots in 2010 (CNO 2010c).

4.8.3 Environmental Consequences

Alternative 1 – No Action

Implementation of the "No Action" alternative would not adversely affect the current land use as no construction would occur.

Alternative 2 – Construct a new NOPD 4th District Police Station Co-located with a new NOFD 8th District Building along Wall Boulevard (Preferred Alternative)

The entire site under consideration for Alternative 2 is within an area zoned as Neighborhood Open Space District or "OS-N". The future land use is designated as Parkland and Open Space or "P" (City of New Orleans Property Viewer). According to the Property Viewer, the proposed project site is labeled as "Magellan Playspot". The Property Viewer indicates that the CNO is the owner of the proposed project property. There are residential structures adjacent to the proposed project area to the north, east, and west. There is similar densely forested open space to the south on the opposite side of Wall Boulevard. *Figure 14* depicts the current zoning for the proposed project site. Rezoning of the subject site may be required as a result of proposed action.

FEMA personnel visited the site on 14 November, 2016 to determine the existing site conditions. FEMA observed that the site was densely wooded and largely impenetrable. There was a cleared area on the southeast portion of the site with access to Wall Boulevard.

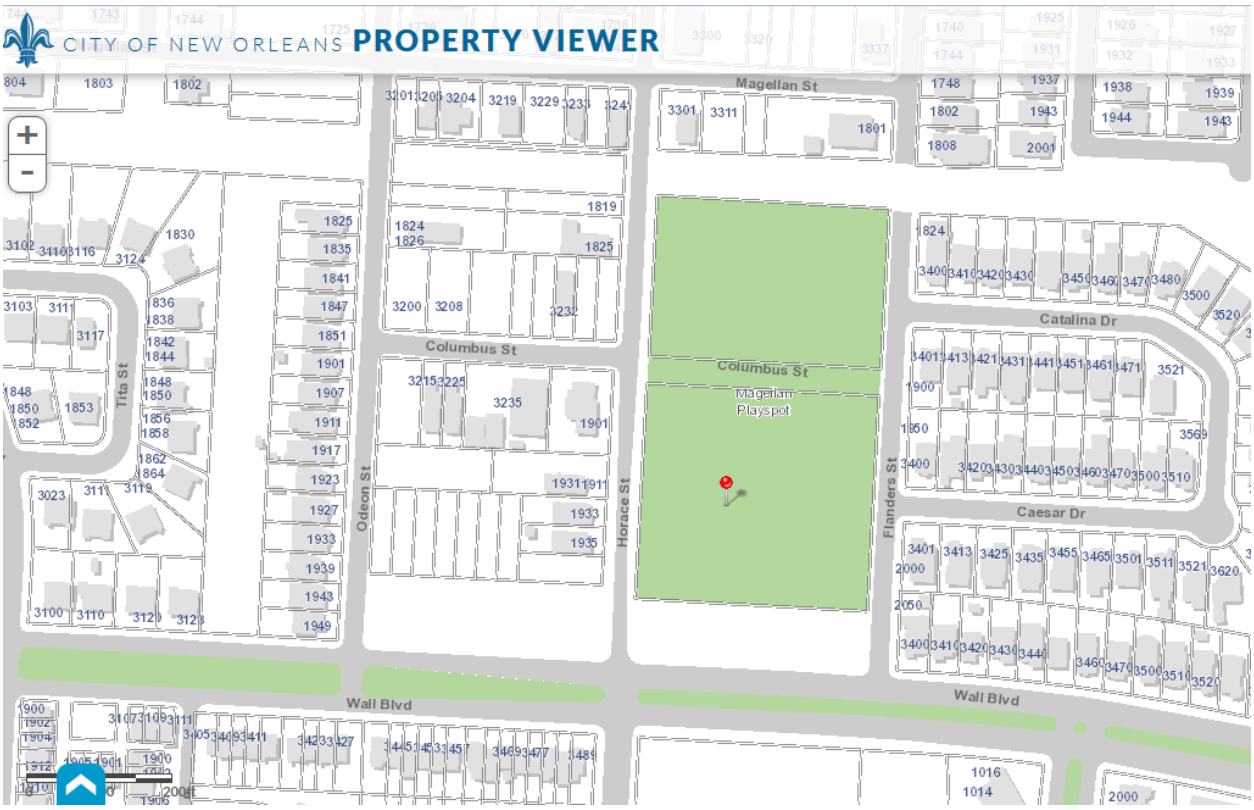

Figure 14: Current zoning map for the proposed project site (Image Source: City of New Orleans Property Viewer).

Under this action alternative, the new NOPD and NOFD buildings and associated parking lots and driveways would be constructed. There would be a substantial change in the current land use, as the land would be converted from undeveloped, forested land to fully developed land with man-made improvements for municipal use. In addition, a change in the property zoning designation would be required.

Alternative 3 – The NOPD 4th District facility remains at the current location, but renovates the interior of the existing structure

Under this action alternative, there would be no change in the current land use and no change in use of the existing structure on the site. The facility would remain an active police station.

4.9 Traffic

4.9.1 Regulatory Setting

Roads play a major role in the management of traffic, particularly in densely-populated urban areas such as New Orleans. The Louisiana Department of Transportation and Development (LaDOTD) is responsible for maintaining public transportation, state highways, interstate highways under state jurisdiction, and bridges located within the state of Louisiana. These duties include the planning, design, and building of new highways in addition to the maintenance and upgrading of current highways. Roads not part of any highway system usually fall under the jurisdiction of and are maintained by applicable local government entities; however, the LaDOTD is responsible for assuring that all local agency federal-aid projects comply with all applicable federal and state requirements (LaDOTD 2016).

At the local level, the City of New Orleans' ordinance regarding Streets, Sidewalks, and Other Public Places, Article II, § 146-36, established the Complete Streets program, which was approved on 22 December 2011 and arose from a recommendation in the Master Plan (CNO 2010). With a mandate to commence no later than 1 December 2012, the Department of Public Works, in consultation with the City Planning Commission, is responsible for overseeing and implementing the program. This ordinance requires that "all transportation improvements are planned, designed and constructed to encourage walking, bicycling and transit use, while also promoting the full use of, and safe operations for all users of the City's transportation network." The preamble to the ordinance acknowledges that "amenities, such as sidewalks, bike lanes, bike racks, crosswalks, traffic calming measures, street and sidewalk lighting; targeted pedestrian and bicycle safety improvements; access improvements in compliance with the Americans with Disabilities Act (ADA); public transit facilities accommodation including, but not limited, to pedestrian access improvement to transit stops and stations; street trees and landscaping; drainage and storm water management; and street furniture" make a positive contribution toward an effective Complete Streets program (CNO 2011). By providing and encouraging alternative pedestrian- and bicycle-friendly modes of transportation, as well as mass transit, traffic congestion potentially can be reduced.

In addition, Article IX, § 154-1561, requires that trucks exceeding five (5) tons, such as those transporting materials to and from project sites, utilize established truck routes or the shortest practical route between their point of origin or destination and the nearest designated truck route. Ordinance §§ 154-1522 and 154-1523 place further restrictions on truck sizes and weights.

Finally, with respect to the placement of traffic signals and markers, signs are subject to regulation pursuant to both City ordinance and the CZO. Ordinance Article IV, § 106-213, allows the placement of signals and signs under the authority of the federal, state, or city government. Article 24 of the CZO exempts municipal signs from permit requirements, but requires their approval by the City Council.

4.9.2 Existing Conditions

Existing site conditions pertaining to local street and traffic patterns are discussed in detail in Section 4.9.3 below for each Alternative site.

4.9.3 Environmental Consequences

Alternative 1 – No Action

Implementation of the "No Action" alternative would not adversely affect the site traffic patterns as no construction would occur.

Alternative 2 – Construct a new NOPD 4th District Police Station Co-located with a new NOFD 8th District Building along Wall Boulevard (Preferred Alternative)

Within the New Orleans West Bank neighborhood, the proposed project site is located north of Wall Boulevard west of Flanders Street, and east of Horace Street. Wall Boulevard is a major artery in the project area. Flanders Street and Horace Street are residential side streets in "good" condition. Based on the site plan provided by the Sub-Recipient, the site would be accessed from Wall Boulevard via a driveway providing access to the visitor parking lot and from Flanders Street via the new connecting drive. The NOFD vehicles would exit the site via a driveway leading to Wall Boulevard. NOPD and NOFD staff would exit their respective parking lots via the new connecting drive and Horace Street or Flanders Street. Using Horace Street, vehicles can access Wall Boulevard and areas north of the Magellan Canal via an existing bridge. Traffic exiting the site via Flanders Street can only access Wall Boulevard as there is no bridge crossing the canal.

Under this action alternative, a temporary increase in construction-related traffic during the construction of the NOPD and NOFD buildings and associated parking lots and green space would be anticipated. Once construction operations have been completed, traffic would be expected to increase somewhat over the existing traffic in the area as NOPD and NOFD staff traffic to and from the site to perform their duties. Due to the increased human activity at the newly constructed site, small long-term increases in current traffic patterns would likely occur.

During construction the contractor would be expected to take all reasonable precautions to control site access. All activities would be conducted in a safe manner in accordance with Occupational Safety and Health Administration (OSHA) work zone traffic safety requirements. The contractor would post appropriate signage and fencing to minimize foreseeable potential public safety concerns. Proper signs and barriers would be in place prior to the initiation of construction activities in order to alert pedestrians and motorists of the upcoming work and traffic pattern changes (e.g., detours or lanes dedicated for construction equipment egress).

Alternative 3 – The NOPD 4th District facility remains at the current location, but renovates the interior of the existing structure

Under this action alternative, a temporary increase in construction-related traffic during the renovation of the building would be anticipated. The continued use of the renovated NOPD 4th District facility would not result in any long-term change to the existing traffic patterns, as there would no new construction or build-out of the existing structure on the site.

During construction the contractor would be expected to take all reasonable precautions to control site access. All activities would be conducted in a safe manner in accordance with Occupational Safety and Health Administration (OSHA) work zone traffic safety requirements. The contractor would post appropriate signage and fencing to minimize foreseeable potential public safety concerns. Proper signs and barriers would be in place prior to the initiation of construction activities in order to alert pedestrians and motorists of the upcoming work and traffic pattern changes (e.g., detours or lanes dedicated for construction equipment egress).

4.10 Cultural Resources

4.10.1 Regulatory Setting

The consideration of impacts to historic and cultural resources is mandated under § 101(b)(4) of NEPA as implemented by 40 C.F.R. Parts 1501-1508. Section 106 of the National Historic Preservation Act (NHPA) requires federal agencies to take into account their effects on historic properties (i.e., historic and cultural resources, including American Indian Cultural Sites) and allow the Advisory Council on Historic Preservation (ACHP) an opportunity to comment. Additionally, it is the policy of the federal government to consult with Indian Tribal Governments on a Government-to-Government basis as required in E.O. 13175 (U.S. President 2000). FEMA has chosen to address potential impacts to historic properties through the "Section 106 consultation process" of NHPA as implemented through 36 C.F.R. Part 800.

In order to fulfill its Section 106 responsibilities, FEMA has initiated consultation on this project in accordance with the Statewide Programmatic Agreement (PA) dated December 21, 2016, between the Louisiana State Historic Preservation Officer (SHPO), the Louisiana Governor's Office of Homeland Security and Emergency Preparedness (LA GOHSEP), the Alabama-Coushatta Tribe of Texas, the Caddo Nation, the Chitimacha Tribe of Louisiana, the Choctaw Nation of Oklahoma, the Coushatta Tribe of Louisiana, the Jena Band of Choctaw Indians, the Mississippi Band of Choctaw Indians, the Quapaw Tribe of Oklahoma, the Seminole Nation of Oklahoma, the Seminole Tribe of Florida, the Tunica-Biloxi Tribe of Louisiana, and the Advisory Council on Historic Preservation (http://www.fema.gov/new-orleans-

metropolitan-area-infrastructure-projects-2#2). The 2016 Statewide Programmatic Agreement (PA) was created to streamline the § 106 review process, and may be reviewed at https://www.fema.gov/media-library/assets/documents/128322.

The "Section 106 process" outlined in the Statewide Agreement requires the identification of historic properties that may be affected by the proposed action or alternatives within the project's area of potential effects (APE). Historic properties, defined in § 101(a)(1)(A) of NHPA, include districts, sites (archaeological and religious/cultural), buildings, structures, and objects that are listed in or determined eligible for listing in the National Register of Historic Places (NRHP). Historic properties are identified by qualified agency representatives in consultation with interested parties. Below is a consideration of various alternatives and their effects on historic properties.

4.10.2 Existing Conditions – Identification and Evaluation of Historic Properties

Historic Properties within the APE were identified based on FEMA's review of the National Register of Historic Places (NRHP) database and the Louisiana Cultural Resources Map by FEMA Historic Preservation staff. This data was evaluated evaluated by FEMA using the National register (NR) Criteria.

The proposed project site is a vacant lot. FEMA determined that the proposed site of the NOPD 4th District Station is not located within a listed National Register Historic District (NRHD).

Upon consultation of data provided by SHPO on February 21, 2018, there are two recorded archaeological site within one mile of the archaeological APE: 16OR124 and 16OR671 (Figure 4). 16OR124 is an historic residence site dating to the late 1800s. It is ineligible for inclusion in the NRHP. 16OR671 is within Hufft Playspot. It is an unknown historic site dating from the early 1800s. It is ineligible for inclusion in the NRHP. Neither of these sites are within the archaeological APE and will not be affected by the current undertaking.

4.10.3 Environmental Consequences

Alternative 1 – No Action

This alternative does not include any FEMA undertaking; therefore FEMA has no further responsibilities under § 106 of the NHPA.

Alternative 2 – Construct a new NOPD 4th District Police Station Co-located with a new NOFD 8th District Building along Wall Boulevard (Preferred Alternative)

A review of this alternative was conducted in accordance with FEMA's Programmatic Agreement dated December 21, 2016. Based on research using the NRHP database, the Louisiana Cultural Resources Map on the Louisiana Division of Historic Preservation's website, and historic maps, FEMA has determined that the Undertaking is not located within a listed or eligible National Register Historic District. No standing structures and no archaeological sites are located within the APE.

FEMA has determined that there will be "No Effect" to historic properties. SHPO concurrence with this determination was received October 3, 2017 (Appendix D). Consultation with affected tribes (Alabama-Coushatta Tribe of Texas, Choctaw Nation of Oklahoma, Coushatta Tribe of Louisiana, Chitimacha Tribe of Louisiana, Eastern Shawnee Tribe of Oklahoma, Jena Band of Choctaw Indians, Kialegee Tribal Town, Mississippi Band of Choctaw Indians, Muscogee Creek Nation, Seminole Tribe of Oklahoma, Seminole Tribe of Florida, and Tunica-Biloxi Tribe of Louisiana) was conducted per FEMA's Programmatic Agreement dated December 21, 2016 (PA). The Muscogee Creek Nation submitted written concurrence with the determination. The remaining Tribes did not object within the regulatory timeframes; therefore, in accordance with Stipulation II.C.4 of the PA and 36 CFR part 800.5(c)1, FEMA may proceed with funding

the undertaking assuming concurrence. The applicant must comply with the NHPA conditions set forth in this EA. (Louisiana Unmarked Human Burial Sites Preservation Act and Inadvertent Discovery Clause).

Alternative 3 – The NOPD 4th District facility remains at the current location, but renovates the interior of the existing structure

The structure does not meet the 50-year-criterion or Criteria Consideration G of the National Register guidelines to be considered eligible for the National Register of Historic Places. The scope of work meets the criteria in Appendix B: Programmatic Allowances, Tier I, Section B (1) of FEMA's Programmatic Agreement (PA) dated December 21, 2016. In accordance with this PA, FEMA is not required to determine the National Register eligibility of properties where work performed meets the Appendix B criteria.

4.11 Hazardous Materials

4.11.1 Regulatory Setting

The management of hazardous materials is regulated under various federal and state environmental and transportation laws and regulations, including but not limited to the Resource Conservation and Recovery Act (RCRA); the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); the Toxic Substances Control Act (TSCA); the Emergency Planning and Community Right-to-Know provisions of the Superfund Amendments and Reauthorization Act (SARA); the Hazardous Materials Transportation Act; and the Louisiana Voluntary Investigation and Remedial Action statute. The purpose of the regulatory requirements set forth under these laws is to ensure the protection of human health and the environment through proper management (identification, use, storage, treatment, transport, and disposal) of these materials. Some of the laws provide for the investigation and cleanup of sites already contaminated by releases of hazardous materials, wastes, or substances.

The TSCA (codified at 15 U.S.C., Ch. 53), authorizes the USEPA to protect the public from "unreasonable risk of injury to health or the environment" by regulating the introduction, manufacture, importation, sale, use, and disposal of specific new or already existing chemicals. "New Chemicals" are defined as "any chemical substance which is not included in the chemical substance list compiled and published under [TSCA] § 8(b)." Existing chemicals include any chemical currently listed under § 8(b), including polychlorinated biphenyls (PCBs), asbestos, radon, lead-based paint, chlorofluorocarbons, dioxin, and hexavalent chromium.

TSCA Subchapter I, "Control of Toxic Substances" (§§ 2601-2629), regulates the disposal of PCB-containing products, sets limits for PCB levels present within the environment, and authorizes the remediation of sites contaminated with PCBs. Subchapter II, "Asbestos Hazard Emergency Response" (§§ 2641-2656), authorizes the USEPA to impose requirements for asbestos abatement in schools and requires accreditation of those who inspect asbestos-containing materials. Subchapter IV, "Lead Exposure Reduction" (§§ 2681-2692), requires the USEPA to identify sources of lead contamination in the environment, to regulate the amounts of lead allowed in products, and to establish state programs that monitor and reduce lead exposure.

4.11.2 Existing Conditions

Existing site conditions pertaining to hazardous materials are discussed in detail in Section 4.11.3 below for each Alternative site.

4.11.3 Environmental Consequences

Alternative 1 – No Action

The "No Action" alternative would not disturb any hazardous materials or create any additional hazards to human health.

Alternative 2 – Construct a new NOPD 4th District Police Station Co-located with a new NOFD 8th District Building along Wall Boulevard (Preferred Alternative)

USEPA database searches for the proposed project area and vicinity reveal that the EPA has no records for proposed project site nor are the any EPA sites located within 500 feet of the site.

The project site did not appear during a review of LDEQ's Electronic Document Management System (EDMS) database for other hazardous waste management and disposal, solid waste disposal, leaking USTs, enforcement, and similar databases (LDEQ). There are no recorded oil or gas wells on or near the subject property. There are no Louisiana State VRP sites in Orleans Parish located within one mile of the proposed project site (LDEQ).

Based on construction drawings, a UST for fuel storage will be installed in the parking lot north of the proposed structure, as depicted in *Figure 15*. The applicant must notify and coordinate with the LDEQ about the UST according to LDEQ UST regulations, which can found online at http://deq.louisiana.gov/page/underground-storage-tank.

To help prevent contamination caused by leaking tanks, tank owners and operators must comply with state rules for UST's. The objectives of the UST program are to ensure that UST systems are properly constructed and designed, installations, repairs, and removals are conducted and inspected by qualified individuals, active USTs are properly operated and monitored for releases, and USTs are properly closed and/or removed and the sites properly assessed for contamination. LDEQ UST registration forms are located at http://deq.louisiana.gov/resources/category/68.

Revised federal UST regulations were signed by the EPA Administrator on June 19, 2015. The revised federal UST regulations were posted in the Federal Register on July 15, 2015. The effective date of the new federal regulations is October 13, 2015 and they will immediately apply to Indian country and non-approved States. Since Louisiana has an approved UST program, the new regulations will not become effective in Louisiana until after Louisiana revises its UST regulations and adopts all of the federal revisions. Approved States have until October 13, 2018 to adopt the revised federal UST regulations and request state program approval.

The EPA provided a web link to the final Federal Register posting of the new federal UST regulations with explanations for each change, responses to comments, regulatory impact analysis, redline strikeout version of the federal UST regulations showing all changes made to the existing regulations, questions and answers, and various other resources. The EPA web link is: http://www2.epa.gov/ust/revising-underground-storage-tank-regulations-revisions-existing-requirements-and-new.

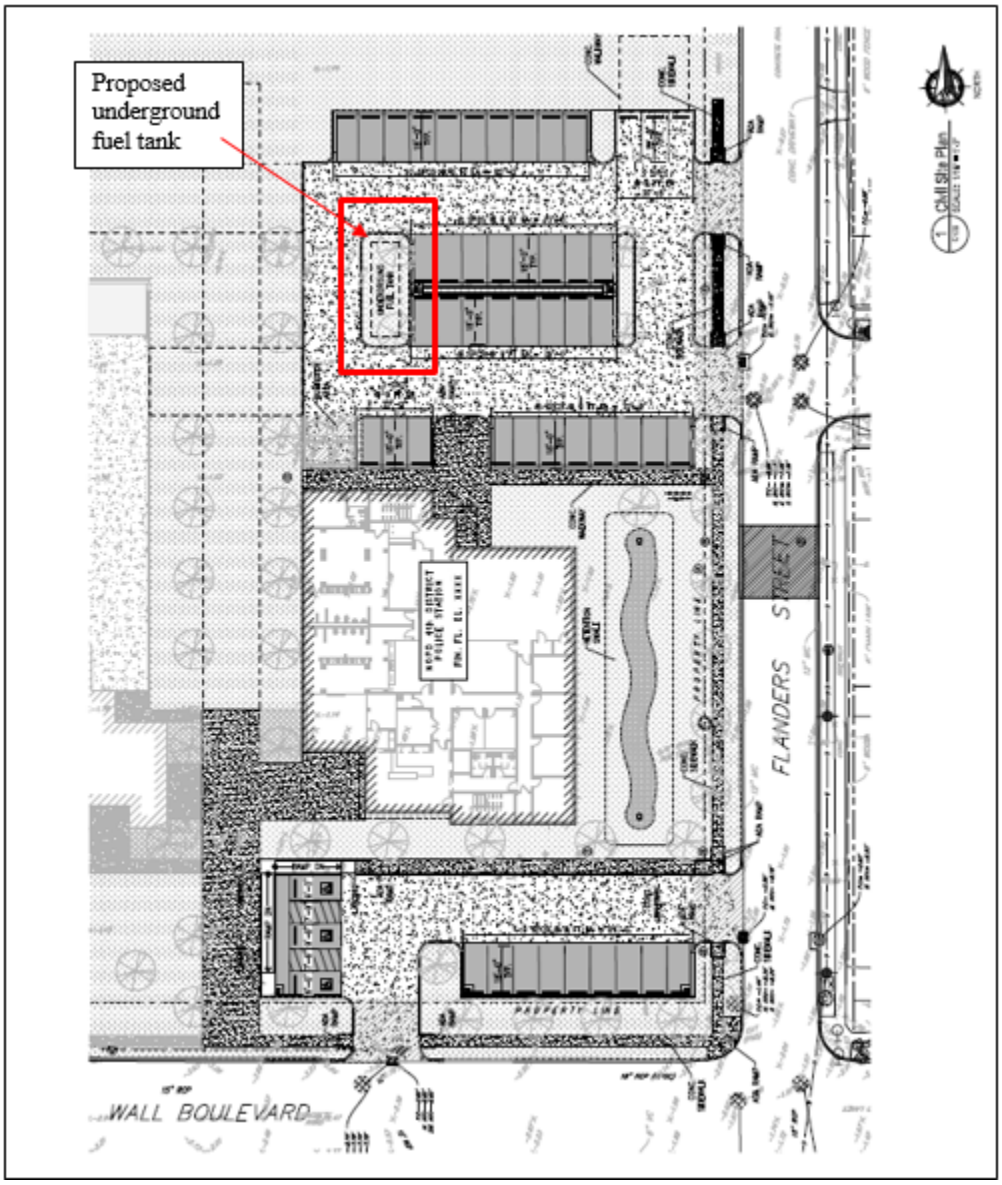

Figure 15: Location of proposed underground fuel storage tank. (Image Source: City of New Orleans NOPD 4th District Station, 95% Design Development Submittal, Holly & Smith Architects.)

Under this action alternative, there is a possibility of encountering hazardous materials or suspected hazardous materials during construction activities. During construction the contractor would be expected to take all reasonable precautions to control unauthorized site access. All activities involving the use of hazardous materials would be conducted in a safe manner in accordance with Occupational Safety and Health Administration (OSHA) safety requirements. Should unanticipated hazardous materials or suspected hazardous materials (such as buried waste drums) be encountered, the construction contractor would stop work immediately and notify the LDEQ. Work would remained stopped until LDEQ personnel could access the site and if necessary, remove hazardous materials. The Sub-Recipient would notify the public of the discovery of the hazardous material through a public notice process. In addition, any

hazardous materials would be disposed of properly at a landfill that is permitted to accept the type of materials discovered at the project site. In a response to FEMA's SOV dated 1 December 2016, the LDEQ had no objections to the proposed project, but provided several comments regarding hazardous materials, which are included in Section 6.0 Conditions and Mitigation Measures. The sub-recipient is required to coordinate with the LDEQ prior to initiating UST installation and must follow all LDEQ UST regulations, including registration of the UST.

Alternative 3 – The NOPD 4th District facility remains at the current location, but renovates the interior of the existing structure

If any asbestos containing materials, lead based paint and/or other hazardous materials are found during the renovation activities, the CNO shall comply with all federal, state and local abatement and disposal requirements under the National Emissions Standards for Hazardous Air Pollutants (NESHAP) and the Louisiana Administrative Code 33:III 5151. Renovation activities related to possible asbestos-containing materials (PACM) must be inspected for ACM/PACM where it is safe to do so. Should asbestos containing materials (ACM) be present, the Sub-Recipient is responsible for ensuring proper disposal in accordance with the previously referenced administrative orders. Notification of renovation activity involving known friable ACMs must be sent to the LDEQ before work begins.

Unusable equipment, debris and material shall be disposed of in an approved manner and location. The Sub-Recipient shall handle, manage, and dispose of petroleum products, hazardous materials and/or toxic waste in accordance with all local, state and federal agency requirements.

The Sub-Recipient is responsible for ensuring that devices containing metallic mercury such as fluorescent light tubes and thermostats are recovered, recycled, reused or sequestered in accordance with the LDEQ "Declaration of Emergency; Mercury-Containing Devices and Electronic Equipment as Universal Waste" letter dated October 3, 2005. In addition, all light ballasts that potentially contain polychlorinated biphenyls (PCBs) or Di(2-ethylhexyl)phthalate (DEHP) must be reused, recycled, or disposed of at a facility licensed to accept these wastes. All coordination pertaining to these activities should be documented and copies forwarded to the state and FEMA as part of the permanent project files.

4.12 Environmental Justice

4.12.1 Regulatory Setting

E.O. 12898, entitled "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," was signed on 11 February 1994 (U.S. President. 1994). The E.O. directs federal agencies to make achieving environmental justice part of their missions by identifying and addressing, as appropriate, disproportionately high adverse human health, environmental, economic, and social effects of their programs, policies, and activities on minority and/or low-income populations.

4.12.2 Existing Conditions

Information obtained from the U.S. Census Bureau (USDOC 2010), compiled and extrapolated by the USEPA and presented on its Enforcement and Compliance History website, indicates that the population for the project site zip code of 70114 is composed of 75.9% African-American, 20.6% White, and 3.5% other groups. Of these households, 45.1% have incomes less than $25,000 per year, with approximately 38.5% of individuals existing below the poverty level. For the 5-year dataset 2008-2012, the U.S. Census Bureau's American Community Survey (USDOC 2012) estimated median household income over the preceding 12 months for New Orleans (Orleans Parish) at $36,964 (in 2012 inflation-adjusted dollars).

4.12.3 Environmental Consequences

In compliance with E.O. 12898, the following key questions were addressed with regard to potential Environmental Justice concerns:

- Is there an impact caused by the proposed action?
- Is the impact adverse?
- Is the impact disproportionate?
- Has an action been undertaken without considerable input by the affected low-income and/or minority community?

Alternative 1 – No Action

The "No Action" alternative would not involve the implementation of a federal program, policy, or activity. As a result, there would be no disproportionately high adverse effects on low-income or minority populations.

Alternative 2 – Construct a new NOPD 4th District Police Station Co-located with a new NOFD 8th District Building along Wall Boulevard (Preferred Alternative)

Construction of the new NOPD 4th District Police Station and the NOFD building at the same location would generate no disproportionately high adverse impacts on low-income or minority populations, since pre-disaster functionality of the NOPD and NOFD in the West Bank area would be restored in an optimal location. Regardless, input from the affected low-income and/or minority community will be solicited through a public notice process.

Alternative 3 – The NOPD 4th District facility remains at the current location, but renovates the interior of the existing structure

The renovation of the interior, and continued use, of the existing NOPD 4th District Police Station would likewise generate no disproportionately high adverse impacts on low-income or minority populations, since the pre-disaster and the existing functionality of the NOPD would remain unchanged. Regardless, input from the affected low-income and/or minority community will be solicited through a public notice process.

5 CUMULATIVE IMPACTS

CEQ regulations state that the cumulative impact of a project represents 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 its comprehensive guidance on cumulative impacts analysis under NEPA, CEQ notes that "the range of actions that must be considered includes not only the project proposal, but all connected and similar actions that could contribute to cumulative effects" (Regulations for Implementing the Procedural Provisions of the NEPA 2005). The term, "similar actions," may be defined as "reasonably foreseeable or proposed agency actions [having] similarities that provide a basis for evaluating the environmental consequences together, such as common timing or geography" (40 CFR § 1508.25[a][3]).

Not all potential issues identified during cumulative effects scoping need to be included in an EA. Because some effects may be irrelevant or inconsequential to decisions about the proposed action and alternatives, the focus of the cumulative effects analysis should be narrowed to important issues of national, regional, or local significance. To assist agencies in this narrowing process, CEQ (2007) provides a list of several basic questions to be considered, including: (1) Is the proposed action one of several similar past, present, or future actions in the same geographic area?; (2) Do other activities (governmental or private) in the region have environmental effects similar to those of the proposed action?; (3) Have any recent or ongoing NEPA analyses of similar or nearby actions identified important adverse or beneficial cumulative effect issues?; and (4) Has the impact been historically significant, such that the importance of the resource is defined by past loss, past gain, or investments to restore resources?

It is normally insufficient when conducting a cumulative effects analysis to merely analyze effects within the immediate area of the proposed action. Geographic boundaries should be expanded for cumulative effects analysis and conducted on the scale of human communities, landscapes, watersheds, or airsheds. Temporal frames should be extended to encompass additional effects on the resources, ecosystems, and human communities of concern. A useful concept in determining appropriate geographic boundaries for a cumulative effects analysis is the project impact zone, that is, the area (and resources within that area) that could be affected by the proposed action. The area appropriate for analysis of cumulative effects will, in most instances, be a larger geographic area occupied by resources outside of the project impact zone (CEQ 2007).

In accordance with NEPA, and to the extent reasonable and practical, this DEA considered the combined effects of the proposed project to be undertaken by FEMA, as well as actions by other public and private entities, that affect the environmental resources the proposed action also would affect, and occur within the considered geographic area and temporal frame(s). Specifically, a range of past, present, and reasonably foreseeable future actions undertaken by FEMA within the designated geographic boundary area were reviewed: (1) for similarities such as scope of work, common timing and geography; (2) to determine environmental effects similar to those of the proposed action, if any; and (3) to identify the potential for cumulative impacts. As part of the cumulative effects analysis, FEMA also reviewed known past, present, and reasonably foreseeable future projects of federal agencies and other parties identified within the designated geographic boundary. These reviews were performed in order to assess the effects of proposed, completed, and ongoing activities and to determine whether the incremental impact of the current proposed action, when combined with the effects of other past, present, and reasonably foreseeable future projects, are cumulatively considerable or significant.

FEMA has determined the boundary of a one mile radius from the approximate center of the proposed work area constitutes an appropriate project impact zone for this cumulative impacts analysis. The one mile radius study area includes portions of the 70114 zip code.

FEMA-funded actions are subjected to various levels of environmental review as a requirement for the receipt of federal funding. A Sub-Recipient's failure to comply with any required environmental permitting or other condition is a grant violation, which can result in the loss of federal assistance, including funding.

After the devastation of the 2005 hurricane season, the USACE, Mississippi Valley Division, New Orleans District was tasked with the planning, design, and construction of a 350-mile system of levees, floodwalls, surge barriers, and pump stations to "increase public safety and enable the physical and economic recovery of the area to occur through the reduction of storm damage risk to residences, businesses, and other infrastructure from hurricanes (100-year storm events) and other high-water events within the Greater New Orleans Metropolitan Area." Referred to as the Greater New Orleans Hurricane and Storm Damage Risk Reduction System (HSDRRS), it is one of the largest civil works projects ever undertaken, at an estimated cost of $14 billion (DoA 2013a). Major drainage features associated with this infrastructure project within Orleans Parish include the Mississippi River (Waterbody ID# LA070301) and the Industrial Canal (Waterbody ID# LA041501). Except during major river flooding events, these watercourses serve to remove excess water from the local area more efficiently, providing a positive cumulative benefit to residents and businesses.

Table 3 below lists and briefly describes known present, past, and reasonably foreseeable infrastructure and recovery improvement projects, including activities identified by FEMA that may have the potential for cumulative impacts when combined with the effects of the present proposed action. The table also identifies the potential for cumulative impacts when combined with the effects of the proposed action and the rationale for that assessment.

Table 3. Projects that May Have the Potential to Contribute to Cumulative Impacts

Project Name/Status	Lead Agency or Firm	Location	Description	Cumulative Impact	Rationale
City of New Orleans City-Wide Road Repairs	City of New Orleans Department of Public Works	New Orleans City-Wide	Repairs, replacements, and improvements to roads and components damaged as a result of Hurricane Katrina. Elements include upgrades to current codes and standards including mitigation measures to reduce the risk of future damages in the next flood.	Less than significant	Effects of this project when combined with those of the proposed action will not result in significant cumulative impacts.

Project Name/Status	Lead Agency or Firm	Location	Description	Cumulative Impact	Rationale
Comprehensive Environmental Document, Phase I Study for HSDRRS	USACE	217 miles of post-Katrina HSDRRS work located within the Greater New Orleans Metropolitan Area; the area within Lake Pontchartrain and West Bank and vicinity.	Evaluates the cumulative impacts associated with the implementation of the HSDRRS; describes cumulative impacts of HSDRRS construction completed as of July 2011; and incorporates information from Individual Environmental Reports (IERs) and supplemental IERs completed as of 15 November 2010	Less than significant	Adversely affected resources for the HSDRRS project (regional soils, habitat supporting wildlife, wetlands and jurisdictional bottomland hardwood resources) are significantly different from those in the currently proposed action. Through mitigation and compensation measures, the overall socioeconomic benefits are expected to outweigh the unavoidable natural resources impacts and, thus, would not impact the proposed action.
Hurricane Storm Damage Risk Reduction System	U.S. Army Corps of Engineers	New Orleans Regional Metropolitan Area	Complete re-engineering the levee system in New Orleans and surrounding areas in order to withstand effects from a "100 year storm," or a storm that has a 1% chance of occurring each year.	Less than significant	Effects from this project reduce overall impacts in the areas levee protected from the base flood including the site of the proposed action.
New Orleans East Streetscape	HUD	Eastern New Orleans	Addition of sidewalks, street lights, trees, a bike lane, and trash receptacles	Less than significant	Restoration and improvement to existing infrastructure

Project Name/Status	Lead Agency or Firm	Location	Description	Cumulative Impact	Rationale
New Orleans Rail Gateway	Federal Railroad Administration	Rail corridors citywide	Environmental Impact Statement currently in preparation for upgrades to the city's rail system (LaDOTD 2014)	Less than significant	Although the NOPBR is adjacent to the proposed cruise terminal, close coordination will occur with the railroad to minimize traffic disruption.
New Orleans Sewer and Water Board Water Supply and Sanitary Sewer System-Wide Repairs	Sewer and Water Board of New Orleans	New Orleans City-Wide	Repairs and improvements to water and sanitary sewer system components damaged as a result of Hurricane Katrina. Elements include upgrades to current codes and standards including mitigation measures to reduce the risk of future damages in the next flood.	Less than significant	Project is conditioned to comply with minimum NFIP floodplain development regulations as adopted by the local community and will thereby reduce risk and increase protection from future damage.
Recovery School District Single Settlement Request	Recovery School District	New Orleans City Wide	Refurbishment, repair, reconstruction, and new construction for restoration of the school system	Less than significant	Project is conditioned to comply with minimum NFIP floodplain development regulations as adopted by the local community and will thereby reduce risk and increase protection from future damage.

Project Name/Status	Lead Agency or Firm	Location	Description	Cumulative Impact	Rationale
Response to Hurricanes Katrina and Rita	USACE	Orleans, St. Bernard, Jefferson, Plaquemines, St. Mary's, Terrebonne, and Lafourche Parishes	Evaluates emergency actions to dewater New Orleans Metropolitan Area; rehabilitate federally authorized levees, and restore non-federal levees and pump stations (Orleans, St. Bernard, Jefferson and Plaquemines Parishes); and flood prevention operations (St. Mary, Terrebonne, and Lafourche Parishes)	No effect	Adverse impacts to resources (wetlands) required compensatory mitigation and are significantly different from those in the currently proposed action; no similar resources associated with proposed action; no impact on proposed action
SWBNO Pump Stations	USACE	Throughout Orleans Parish	Pump station elevation	Negligible	Restoration and improvements to existing infrastructure; no impact on proposed action
Construction of a new Natatorium at Behrman Park	FEMA	West Bank of New Orleans	Construction of a new indoor swimming pool facility at Behrman Park	Negligible	Construction of new infrastructure; no impact on proposed action
Christopher Park Housing Demolition	FEMA	West Bank of New Orleans	Demolition of Housing Authority of New Orleans-owned housing development	Negligible	Demolition of existing infrastructure; no impact on proposed action

As identified in Table 3, the cumulative effect of these present, past, and reasonably foreseeable future actions is not anticipated to result in a significant impact to any resource. Each of the projects either aims to restore or improve the function of pre-existing infrastructure within an urban setting or proposes redevelopment consistent with current zoning requirements, with minimal impacts to the natural and human environment.

6 CONDITIONS AND MITIGATION MEASURES

Based upon the studies, reviews, and consultations undertaken in this DEA, several conditions must be met and mitigation measures taken by the Sub-Recipient prior to and during project implementation:

- The Sub-Recipient must follow all applicable local, state, and federal laws, regulations, and requirements and obtain and comply with all required permits and approvals prior to initiating work.
- If human bone or unmarked grave(s) are present within the project area, compliance with the Louisiana Unmarked Human Burial Sites Preservation Act (R.S. 8:671 et seq.) is required. The Sub-Recipient shall notify the law enforcement agency of the jurisdiction where the remains are located within twenty-four hours of the discovery. The Sub-Recipient shall also notify FEMA and the Louisiana Division of Archaeology at 225-342-8170 within seventy-two hours of the discovery.
- If during the course of work, archaeological artifacts (prehistoric or historic) are discovered, the Sub-Recipient shall stop work in the vicinity of the discovery and take all reasonable measures to avoid or minimize harm to the finds. The Sub-Recipient shall inform their Public Assistance (PA) contacts at FEMA, who will in turn contact FEMA Historic Preservation (HP) staff. The Sub-Recipient will not proceed with work until FEMA HP completes consultation with the SHPO, and others as appropriate.
- Project construction would involve the use of potentially hazardous materials (e.g., petroleum products, including but not limited to gasoline, diesel, brake and hydraulic fluid, cement, caustics, acids, solvents, paint, electronic components, pesticides, herbicides, fertilizers, and/or treated timber) and may result in the generation of small volumes of hazardous wastes. Appropriate measures to prevent, minimize, and control spills of hazardous materials must be taken and generated hazardous or non-hazardous wastes are required to be disposed in accordance with applicable federal, state, and local regulations.
- LDNR requires that a complete CUP Application package (Joint Application Form, location maps, project illustration plats with plan and cross section views, etc.) along with the appropriate application fee, be submitted to their office prior to construction. The Sub-Recipient is responsible for coordinating with and obtaining any required CUPs or other authorizations from the LDNR OCM's Permits and Mitigation Division prior to initiating work. The Sub-Recipient must comply with all conditions of the required permits. All documentation pertaining to these activities and Sub-Recipient compliance with any conditions should be forwarded to the state and FEMA for inclusion in the permanent project files.
- Sub-Recipient must comply with all local, state, and federal requirements related to sediment control, disposal of solid waste, control and containment of spills, and discharge of surface runoff and/or stormwater from the site.
- The EPA recommends the Sub-Recipient conduct work to determine the extent of wetlands on site. Such investigation should be completed in coordination with the New Orleans District Office of the U.S. Army Corps of Engineers. The EPA also recommends all potential impacts to wetlands and other waters of the United States be avoided and minimized to the maximum extent practicable. Compensatory mitigation will be required for impacts to jurisdictional wetlands, as authorized by a Clean Water Act Section 404 permit, to avoid a net loss of wetlands and wetland functions as a result of the proposed work.
- Care should be taken in equipment and materials storage and construction activities (including equipment and materials staging) to ensure that nearby wetlands are not adversely affected per the CWA and Executive Order 11990.

- If the project results in a discharge to waters of the State, an LPDES permit may be required in accordance with the Clean Water Act and the Louisiana Clean Water Code. If the project results in a discharge of wastewater to an existing wastewater treatment system, that wastewater treatment system may need to modify its LPDES permit before accepting the additional wastewater. In order to minimize indirect impacts (erosion, sedimentation, dust, and other construction-related disturbances) to nearby waters of the U.S. and surrounding drainage areas, the contractor must ensure compliance with all local, state, and federal requirements related to sediment control, disposal of solid waste, control and containment of spills, and discharge of surface runoff and stormwater from the site. All documentation pertaining to these activities and Sub-Recipient compliance with any conditions should be forwarded to LA GOHSEP and FEMA for inclusion in the permanent project files.
- Per 44 C.F.R. § 9.11(d)(6), no project should be built to a floodplain management standard that is less protective than what the community has adopted in local ordinances through their participation in the NFIP. Per 44 C.F.R. § 9.11(d)(9), for the replacement of building contents, materials, and equipment, where possible disaster-proofing of the building and/or elimination of such future losses should occur by relocation of those building contents, materials, and equipment outside or above the base floodplain. The Sub-Recipient is required to coordinate with the local floodplain administrator regarding floodplain permit(s) prior to the start of any activities. All coordination pertaining to these activities and Sub-Recipient compliance with any conditions must be documented and copies forwarded to the LA GOHSEP and FEMA for inclusion in the permanent project files.
- After construction of the proposed project and prior to FEMA project close-out, additional verification will be needed to ensure that proper coordination occurred regarding work within the floodplain. The following documentation will be required:
    - A copy of the Post-Construction Elevation Certificate signed/sealed by licensed surveyor, engineer, or architect *as well as* the local FP administrator; or
    - If the post-construction EC is not signed by the local Floodplain Administrator, then a Certificate of Occupancy signed by the LFA or a letter from the local Floodplain Administrator stating the structure was built in compliance with the local floodplain ordinance.
- All activities involving the remediation of known hazardous substances present in on-site soils must be conducted in accordance with LDEQ requirements and as specified in the approved Corrective Action Plan. Activities involving the remediation of as yet undiscovered hazardous substances in on-site soil and groundwater must be conducted in accordance with relevant LDEQ requirements. Remediation activities for such undiscovered contaminants may not begin until LDEQ approval has been received by the Sub-Recipient.
- All waste is to be transported by an entity maintaining a current "waste hauler permit" specifically for the waste being transported, as required by LaDOTD and other regulations.
- Unusable equipment, debris, and material shall be disposed of in an approved manner and location. The Sub-Recipient shall handle, manage, and dispose of petroleum products, hazardous materials, and/or toxic waste in accordance with all local, state, and federal agency requirements. All coordination pertaining to these activities should be documented and copies forwarded to the state and FEMA as part of the permanent project files.
- Contractor and/or Subcontractors must properly handle, package, transport and dispose of hazardous materials and/or waste in accordance with all local, state, and federal regulations, laws, and ordinances, including all OSHA worker exposure regulations covered within 29 C.F.R. **§** 1910 and 1926.

- During and following the installation of the proposed site UST, the CNO and its subcontractors will follow all LDEQ UST regulations at http://deq.louisiana.gov/page/underground-storage-tank, including registration of the UST with the LDEQ.
- Contractors are required to follow, at a minimum, these BMPs during site work:
    - implement erosion and sediment controls
    - stabilize soils
    - manage dewatering activities
    - implement pollution prevention measures
    - provide and maintain buffers around surface waters
    - prohibit certain discharges, such as motor fuel and concrete washout

7 PUBLIC INVOLVEMENT

The public is invited to comment on the proposed action. A public notice for the project will be published for three (3) days - Wednesday, May 9, 2018; Friday, May 11, 2018; and Sunday, May 13, 2018 in the *Times-Picayune*, the journal of record for Orleans Parish; and in *The Advocate-New Orleans Edition* for three (3) days - Monday, May 7, 2018 through Wednesday, May 9, 2018. Additionally, the draft Environmental Assessment will be made available for review at the New Orleans Public Library - Main Branch, 219 Loyola Avenue, New Orleans, Louisiana, 70112; and the Algiers Regional Library, 3014 Holiday Drive, New Orleans, Louisiana 70131. Hours of operation are 10:00 a.m. to 8:00 p.m. on Mondays - Thursdays; 10:00 a.m. to 5:00 p.m. on Fridays and Saturdays; and 1:00 p.m. to 5:00 p.m. on Sundays. Further, there will be a thirty (30) day comment period, beginning on Monday, May 7, 2018, concluding on Wednesday, June 6, 2018 at 4 p.m. The document also will be published on FEMA's websites. A copy of the Public Notice is attached in Appendix E.

8 AGENCY COORDINATION

Louisiana Department of Environmental Quality

Louisiana Department of Natural Resources

Louisiana Department of Wildlife and Fisheries

Louisiana State Historic Preservation Office

Tribal Historic Preservation Office and/or cultural offices

U.S. Environmental Protection Agency

U.S. Fish and Wildlife Service

U.S. Army Corps of Engineers

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