Draft Environmental Assessment

Facility Planning & Control: New Orleans City Park Golf Complex

Orleans Parish
FEMA-1603-DR-LA

New Orleans, Louisiana
May 2013

DRAFT

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

FEMA

SECTION	PAGE

TABLE OF CONTENTS	i
LIST OF ACRONYMS	iv
1.0 INTRODUCTION	1
1.1 Project Authority	1
1.2 Background	1
1.2.1 Site History	1
2.0 PURPOSE AND NEED	3
3.0 ALTERNATIVES	4
3.1 Alternative 1 – No Action	4
3.2 Alternative 2 – Repair Back to Original Configuration/Footprint	4
3.3 Alternative 3 – Repair in the Same Footprint To Different Configuration	4
3.4 Alternative 4 – Consolidate/Reconfigure in Substantially the Same Footprint	5
4.0 AFFECTED ENVIRONMENT AND IMPACTS	8
4.1 Geology and Soils	8
4.1.1 Regulatory Setting	8
4.1.2 Existing Conditions	8
4.1.3 Environmental Consequences	13
4.2 Waters of the United States and Wetlands	14
4.2.1 Regulatory Setting	14
4.2.2 Existing Conditions	14
4.2.3 Environmental Consequences	15
4.3 Floodplains	17
4.3.1 Regulatory Setting	17
4.3.2 Existing Conditions	18
4.3.3 Environmental Consequences	22
4.4 Coastal Resources	24
4.4.1 Regulatory Setting	24
4.4.2 Existing Conditions	25
4.4.3 Environmental Consequences	26
4.5 Biological Resources	26
4.5.1 Regulatory Setting	26
4.5.2 Existing Conditions	27
4.5.3 Environmental Consequences	28
4.6 Cultural Resources	29
4.6.1 Regulatory Setting	29
4.6.2 Existing Conditions	29

DRAFT

4.6.3 Environmental Consequences 30
4.7 Air Quality 31
4.7.1 Regulatory Setting 31
4.7.2 Existing Conditions 32
4.7.3 Environmental Consequences 32
4.8 Noise 33
4.9 Hazardous Materials 34
4.9.1 Regulatory Setting 34
4.9.2 Existing Conditions 35
4.9.3 Environmental Consequences 35
4.10 Environmental Justice 36
4.10.1 Regulatory Setting 36
4.10.2 Existing Conditions 37
4.10.3 Environmental Consequences 37
5.0 CUMULATIVE IMPACTS 37
6.0 CONDITIONS AND MITIGATION MEASURES 38
7.0 AGENCY CONSULTATION 40
8.0 PUBLIC INVOLVEMENT 41
9.0 LIST OF PREPARERS 41
10.0 REFERENCES 42

TABLES

Table 1 – NRCS Farmland Classification Summary – Proposed AOI 12
Table 2 – Federally Listed Species Known to Occur in Orleans Parish 27-28
Table 3 – Extant Structures APE 30

LIST OF FIGURES

1. Site Location Map 3
2. Proposed Footprint, 18-Hole Professional Level Golf Course 6
3. Acreage Plan (Reduced and Added) for Golf-Related Usage 6
4. Proposed Project Footprints 7
5. Tree Plan 7
6. General Geology Map of Louisiana 9
7. Geology Map of City Park Golf Course Complex 9
8. NRCS Soil Map – Proposed AOI 10
9. NRCS Farmland Classification Map – Proposed AOI 11
10. NRCS Map Legend 12
11. U.S. Fish and Wildlife Service National Wetlands Inventory Map 15
12. Advisory Base Floodplain Elevation Map 21
13. Revised Digital Flood Insurance Rate Map 22
14. Louisiana Coastal Zone Boundary Map 25

DRAFT

APPENDICES

Appendix A. Agency Correspondence
Appendix B. Eight-Step Decision Making Process
Appendix C. Drainage Study
Appendix D. Public Notice
Appendix E. Draft FONSI

DRAFT

LIST OF ACRONYMS

ABFE	Advisory Base Flood Elevation
ACHP	Advisory Council on Historic Preservation
APE	Area of Potential Effects
BMPs	Best Management Practices
CAA	Clean Air Act
CBRA	Coastal Barrier Resources Act
CBRS	Coastal Barrier Resources System
CFR	Code of Federal Regulations
CPIA	City Park Improvement Association
CUP	Coastal Use Permit
CWA	Clean Water Act
CZMA	Coastal Zone Management Act
DFIRM	Digital Flood Insurance Rate Map
EA	Environmental Assessment
EIS	Environmental Impact Statement
EO	Executive Order
ERA	Emergency Relief Administration
ESA	Endangered Species Act
EDMS	Electronic Document Management System
FEMA	Federal Emergency Management Agency
FONSI	Finding of No Significant Impact
FP&C	Facility Planning and Control
FT	Feet
GNO	Greater New Orleans
HEAG	Highest Existing Adjacent Grade
HSDRRS	Hurricane Storm Damage Risk Reduction System
LA GOHSEP	Louisiana Governor's Office of Homeland Security and Emergency Preparedness
LADOTD	Louisiana Department of Transportation and Development
LDAF	Louisiana Department of Agriculture and Forestry
LDEQ	Louisiana Department of Environmental Quality
LDNR	Louisiana Department of Natural Resources
LPDES	Louisiana Pollutant Discharge Elimination System
MBTA	Migratory Bird Treaty Act
MOA	Memorandum of Agreement
NAVD 88	North American Vertical Datum of 1988
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NMFS	National Marine Fisheries Service
NOAA	National Oceanic & Atmospheric Administration
NRCS	National Resources Conservation Service
NRHP	National Register of Historic Places
OCM	Office of Coastal Management
OPA	Otherwise Protected Area
PA	Public Assistance Grant Program

DRAFT

PW	Project Worksheet
RCRA	Resource Conservation and Recovery Act
RHA	Rivers and Harbors Act
SFHA	Special Flood Hazard Area
SHPO	State Historic Preservation Office/Officer
TSCA	Toxic Substances Control Act
US	United States
USACE	United States Army Corps of Engineers
USEPA	United States Environmental Protection Agency
USDA	United States Department of Agriculture
USFWS	United States Fish and Wildlife Service
WPA	Works Progress Administration

DRAFT

1.0 INTRODUCTION

1.1 Project Authority

Hurricane Katrina made landfall on August 29, 2005 near the town of Buras, Louisiana with sustained winds of more than 125 mph. President George W. Bush declared a major disaster for the State of Louisiana (FEMA-1603-DR-LA) on August 29, 2005, authorizing the Department of Homeland Security's Federal Emergency Management Agency (FEMA) to provide Federal assistance in designated areas of Louisiana. This is pursuant to the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act), PL 93-288, as amended. Section 406 of the Stafford Act authorizes FEMA's Public Assistance Program (PA) to assist in funding the repair, restoration, reconstruction, or replacement of public facilities damaged as a result of the declared disaster.

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

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).

1.2 Background

High winds, flooding and storm surge from Hurricane Katrina severely damaged the City Park Golf Course Complex, located within City Park, New Orleans, Louisiana, Orleans Parish, and bounded on the north by Robert E. Lee Boulevard, on the south by Zachary Taylor Drive, on the west by Marconi Drive, and on the east by Wisner Boulevard (*Figure 1*). City Park is owned by the City of New Orleans and operated by a not-for-profit entity, the City Park Improvement Association (CPIA). Repairs are the responsibility of the Applicant, State of Louisiana Facility Planning and Control (FP&C). City Park has 1500 acres of stately live oaks, formal gardens, and brush and field habitats, contains several fresh and brackish water lakes/lagoons, and is bordered on its eastern edge by Bayou St. John, a Louisiana historic and scenic waterway.

The Applicant submitted an application for FEMA funding under FEMA's Public Assistance Program being administered in response to FEMA-1603-DR-LA. The Golf Complex suffered damages that have been deemed eligible by FEMA for repair or restoration to pre-disaster condition as part of a non-critical facility serving the needs of the general public.

1.2.1 Site History

Pre-Katrina, the New Orleans City Park Golf Complex consisted of four (4) 18-hole golf courses (North, South, East and West), situated within a total of 526 acres of land in City Park allocated for golf uses, including water and roadways (*Figure 1*). A detailed history of the various golf courses built on the City Park Golf Complex site, and a master plan for the site, may be viewed at http://neworleanscitypark.com/downloads/nocpgolf.pdf.

DRAFT

The golf site originated in 1902 as a single 9-hole golf course known as the South Course; was redesigned and expanded to 18-holes in 1921; and redesigned and expanded again in 1922, to a 27-hole course. In 1933, federal funding from the Emergency Relief Administration (ERA), a precursor to the Works Progress Administration (WPA) (formed to help fight the Depression), was used to design and build the East Course, located between Harrison Avenue and the railroad tracks that already ran through City Park. The West Course was opened in 1957 and the North Course was opened in 1968, resulting in a total of four (4) separate golf courses at the City Park Golf Complex site. The North Course and clubhouse on Filmore Avenue were largely paid for with federal funding, as part of the Interstate Highway system. The clubhouse has been located in three (3) different sites; initially, near the statue of PGT Beauregard on Wisner Boulevard, then on Zachary Taylor Drive, West of Wisner Boulevard, now on Filmore Avenue.

Due to the site's location on extremely low-lying land, the North Course required extensive fill. In 1967, the East Course, located south of Harrison Avenue, was joined to Filmore Avenue by six (6) new holes. Some of the old East Course holes were partially or completely eliminated, and have since been used as: a softball quadriplex (the former number 3 green, number 4 tee, number 5 green, number 6 tee, and number 17 green); a soccer field (the former number 2 hole, and the number 3 tee); and occasionally, a 9-hole junior golf course (the former numbers 1 and 18 holes). At various times, the four (4) courses located at the City Park Golf Complex site were officially and unofficially known as the following: South Course, Number 2 Course, Public Golf Course at City Park, or Little Course; East Course, Number 1 Course, or Wisner Course; West Course or Championship Course; North Course or Lakeside Course. Although officially named the Bayou Oaks Golf Complex in the 1990's, the golf courses are still most commonly referred to as the North, South, East and West Courses. *See* City Park Golf Courses (New Orleans), http://en.wikipedia.org/w/index.php?title=City_Park_Golf_Courses_(New_Orleans)&oldid=539351561 (last visited Apr. 19, 2013); http://neworleanscitypark.com/downloads/nocpgolf.pdf.

The South Course discontinued operation several months prior to Katrina and will not be discussed further in this EA. The North Course was fully restored post-Katrina, in or around 2009, and is currently operational. The East and West Courses, presently configured within City Park on approximately 346 acres designated for golf usage, have not been restored or repaired, and are not currently in use. Pre-disaster irrigation for the Golf Complex included a full sprinkler system that covered the West Course tees, greens and fairways, and East Course tees and greens. The electronic controls and sprinkler heads for the irrigation systems were ruined by the storm event and are not repairable. The drainage system currently includes a 6 ft. by 9 ft. nonadjustable weir (a barrier across a river or other water source designed to alter the flow characteristics) that feeds into Pump Station #7 at the southern end of the Orleans Canal. Existing shelters and rest areas have been or will be made safe and secure or demolished. The clubhouse has been demolished.

DRAFT

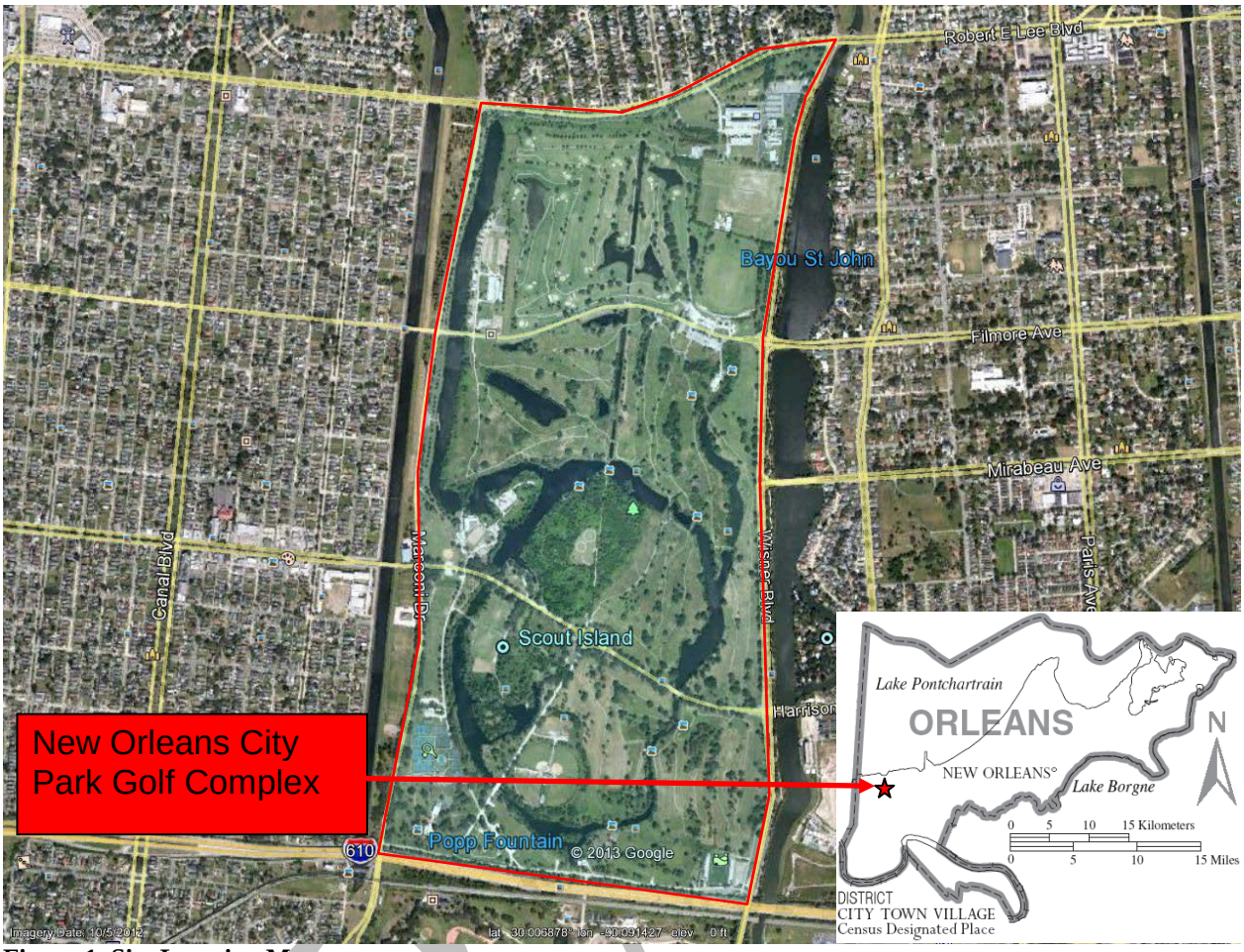

Figure 1, Site Location Map

2.0 PURPOSE AND NEED

New Orleans' City Park is one of the oldest and largest urban parks in the United States, frequented by New Orleans' locals and visitors for a variety of fee and non-fee recreational activities. Prior to Hurricane Katrina, the Golf Complex was utilized by residents of and visitors to the New Orleans area for the purpose of engaging in golf-related activities, and was one of the most integral and important recreational and revenue generating features of City Park. Historically, golf has been the top gross revenue producer for City Park, followed by Catering and Amusements. *See City Park Golf Revenue Numbers*, April 3, 2009, http://www.cityparknola.org/web/Index.asp?mode=full&id=109. As a result of Hurricane Katrina, and an inability to better manage and control drainage on the course, these important golf-related recreational activities and revenue generating features were lost.

The objective of FEMA's Public Assistance (PA) Grant Program is to provide assistance to State, Tribal and local governments, and certain types of Private Nonprofit organizations, so that communities can quickly respond to, recover from, and mitigate major disasters and emergencies. The CPIA Master Golf Plan for the City Park Golf Complex has been formulated to provide a hierarchical range of affordable golf experiences capable of maximizing revenue potential, while minimizing the impact on the park's urban forest by leaving available as much

space as possible for walking, jogging, biking, horse riding, playground activities, and other non-golf uses.

The purpose of the proposed action is the restoration of lost recreational facilities. The need for this project is defined by the current lack of functioning golf recreational facilities in the City of New Orleans. By repairing and consolidating the damaged East and West Golf Courses into a single, more compact, 18-hole professional level golf course, the CPIA hopes to restore the golf recreational experience, reduce operating costs, maximize revenue potential, and enable City Park to be more financially self-sustaining, while minimizing the amount of park land used for golf activities.

3.0 ALTERNATIVES

The NEPA process consists of an evaluation of the environmental effects of a federal undertaking, including its alternatives. This section describes alternatives proposed and considered in addressing the purpose and needs stated in Section 2.0 above. Four alternatives were evaluated: 1) No Action; 2) Repair and Reconstruct the North, West and East Golf Courses to their pre-disaster functions and capacity within their existing footprints; 3) Repair, reconstruct and reconfigure the North, West and East Golf Courses within the overall existing footprint, but to a different configuration; and 4) Retain the North Golf Course and consolidate and reconstruct the entire West Course and a portion of the East Golf Course in a different configuration within the substantially same, but reduced, footprint (Proposed Action).

3.1 Alternative 1 - No Action

Under the No Action alternative, the Golf Complex would not be repaired or reconstructed. Consequently, this area of City Park would not be restored, enhanced or upgraded for golfing and other recreational activities. This alternative does not meet the purpose and need; however, it will continue to be evaluated throughout this EA.

3.2 Alternative 2 – Repair Back to Original Configuration/Footprint

Under this alternative, the area utilized for golf prior to Hurricane Katrina, essentially, the North, East, and West Golf Courses plus the area of the driving range and clubhouse, would be repaired in the same configuration as a three course golf complex with a hierarchical distribution of golf assets, including a high quality 18-hole golf course, a moderate quality course, and a course of average playability and price. A new clubhouse would be built near the former clubhouse site. Maintenance facilities and the golf driving range would be renovated at their existing locations. This alternative meets the purpose and need of the action and will be further evaluated throughout this EA.

3.3 Alternative 3 – Repair in Same Footprint to Different Configuration

Under this alternative, the North, East, and West Golf Courses would be reconstructed within the 526 acre footprint already allocated to golf uses, and would be reconfigured as two (2) 18-hole golf courses, one of which would be of professional championship caliber. The championship level course would occupy approximately 310 of the 526 acres already allocated for golf uses. A

DRAFT

single 9-hole "par three" golf course would also be constructed, and the golf clubhouse and driving range would be relocated, all within the existing 526 acre footprint. A paved continuous golf cart path would be repaired and or improved. Golf course restrooms and a maintenance building would be repaired or reconstructed. Modifications and improvements to the Golf Course Complex irrigation and drainage systems would be accomplished through utilization of deep wells and the existing lagoon system. This alternative also meets the purpose and need of the action and will be further evaluated throughout this EA.

3.4 Alternative 4 – Consolidate/Reconfigure in Substantially Same Footprint (Proposed Action)

Under this alternative, the North Golf Course would keep its existing location and configuration and continue to operate as a moderately priced golf course offering a moderate skill level golf experience. The entire West Golf Course and a portion of the East Golf Course would be combined, reduced, reconfigured, and repaired within the existing 526 acre footprint allocated for golf uses, to form a single, professional level, 18-hole golf course capable of offering a championship golfing experience and hosting a wide variety of golf tournaments (*Figure 2*). The balance of the East Course not incorporated into the new golf course (approximately 96 acres) would be converted into green space; and five and one-half acres not previously allocated for golf uses would be added to the new golf course to provide a buffer to the fifth hole (*Figure 3*). The new professional level 18-hole golf course would not extend south of Harrison Avenue and, including the 5.5 acres of new space, would only use approximately 250 acres of the space already allocated for golf uses, instead of the 310 acres proposed under Alternative 3 (*Figures 2 and 3*). The course reconfiguration as proposed would rearrange the contours of most of the proposed site, and reshape the course with irrigation (sprinkler system) and some drainage. To accommodate the new course layout, some of the brackish water lagoons would be enlarged and, along with the existing freshwater lake, act as the reservoir for irrigation of the course. A new 34 ft. by 25 ft. pump station with a 1,000 ft. deep well would be installed adjacent to the lake for refilling. The existing nonadjustable weir would be replaced with a new adjustable 6 ft. by 21 ft. weir, which will permit draining down of water levels in advance of a hurricane or other large storm, thereby increasing the north lagoon's capability to detain and retain storm water and limiting or eliminating flooding on the course. Two bridges would be built at 12 ft. wide and 157ft. and 113 ft. lengths (*Figure 4*). A total of one-hundred-eight (108) trees would be removed or relocated throughout the proposed project site. Twenty-one (21) large live oaks would be removed, including at least fifteen (15) due to struggling health issues; four (4) of the twenty-one (21) would be relocated on site. Forty-eight (48) cypress, ten (10) pines, three (3) palms, eight (8) deciduous oak or other deciduous trees, and eighteen (18) crepe myrtles would be removed (*Figure 5*). The proposed new golf course would be consistent with the functions of the previous configuration, but better serve City Park's need to be financially self-sustaining, minimize the amount of park land used for golf activities, and provide a more storm resistant and resilient irrigation and drainage system. It would offer a hierarchical range of revenue generating golf experiences, including a championship level course, with better and more controllable drainage and irrigation, and would be more compact, thus reducing operating costs and freeing up park space for non-golf uses. This alternative also meets the purpose and need of the action and will be further evaluated throughout this EA.

DRAFT

Figure 2, Proposed Footprint, 18-Hole Professional Level Golf Course

Figure 3, Acreage Plan (Reduced and Added) For Golf-Related Usage

Figure 4, Proposed Project Footprints

Figure 5, Tree Plan

4.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL IMPACTS

4.1 Geology and Soils

4.1.1 Regulatory Setting

The Farmland Protection Policy Act (FPPA: 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 may have on the unnecessary and irreversible conversion of farmland to non-agricultural uses. It assures that, to the extent possible, federal programs and policies are administered to be compatible with state and local farmland protection policies and programs. To implement the FPPA, federal agencies are required to develop and review their policies and procedures every two years. The FPPA does not authorize the federal government to regulate the use of private or nonfederal land or, in any way, affect the property rights of owners.

The Natural Resources Conservation Service (NRCS) is responsible for protecting significant agricultural lands from irreversible conversions that result in the loss of essential food or environment sources. For purposes of the FPPA, farmland includes prime farmland, unique farmland, and land 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 1989). Farmland subject to FPPA requirements does not have to be currently used for cropland; it can be forest land, pastureland, cropland, or other land, but not water or built-up land.

4.1.2 Existing Conditions

According to the Louisiana Geological Survey (LGS), the geology in the vicinity of the site is predominantly Holocene Alluvium, sedimentary deposits composed mainly of sands, silts and clays, and deposits of the deltaic plain of the St. Bernard delta lobe, Mississippi River (LGS, 2008). Figure 6 is a generalized geology map for Louisiana showing the location of the proposed project in Orleans Parish. Figure 7 is a generalized geology map for Orleans Parish showing the location of the proposed project in City Park.

The soils in Orleans Parish vary widely in their potential for major land uses and urban development. According to the USDA, NRCS Web Soil Survey, the soils in the proposed site include Schriever clay and a small area of Harahan clay (approximately 0.6 % of the AOI [Area of Interest]) (*see Figures 8, 9 and 10, and Table 1, USDA 2013*). Schriever clay and Harahan clay consist of poorly drained, very slowly permeable hydric soils that occur in back-swamp areas separated from river systems by natural levees. Both Schriever clay and Harahan clay are considered prime or unique farmland (*Table 1, USDA*).

A total of one-hundred-eight (108) trees would be removed throughout the proposed project site. Twenty-one (21) large live oaks would be removed, including at least fifteen (15) due to struggling health issues; four (4) of the twenty-one (21) would be relocated on site. Forty-eight (48) cypress, ten (10) pines, three (3) palms, eight (8) deciduous oak or other deciduous trees, and eighteen (18) crepe myrtles would be removed (*Figure 5*).

DRAFT

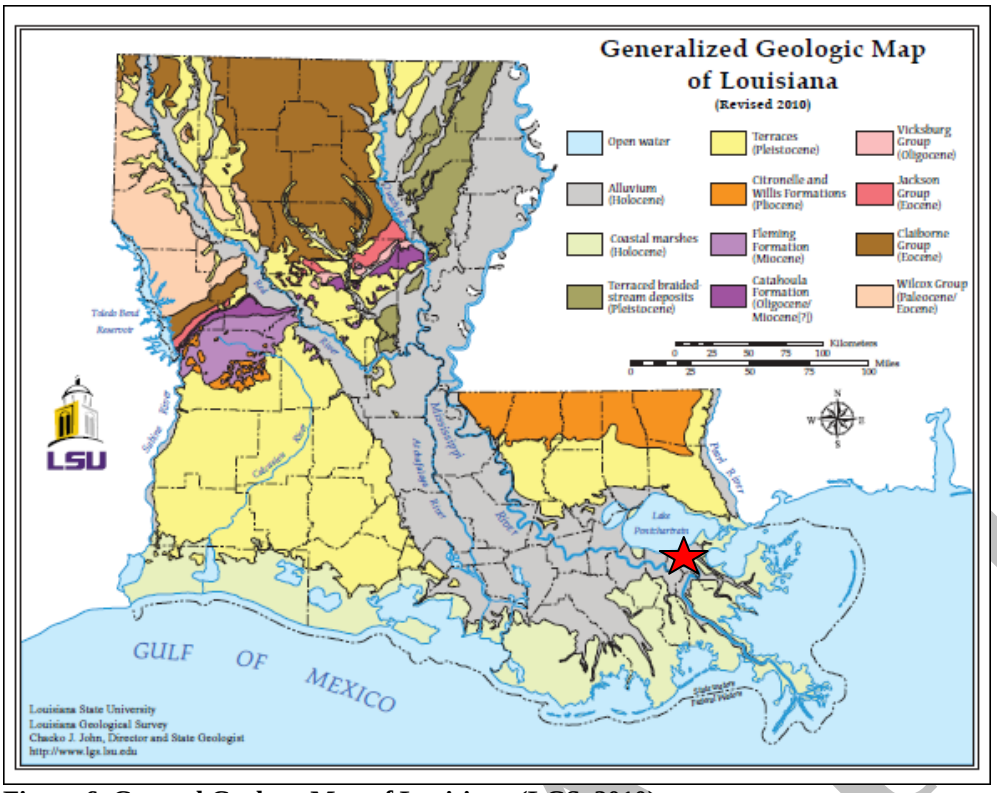

Figure 6, General Geology Map of Louisiana (LGS, 2010)

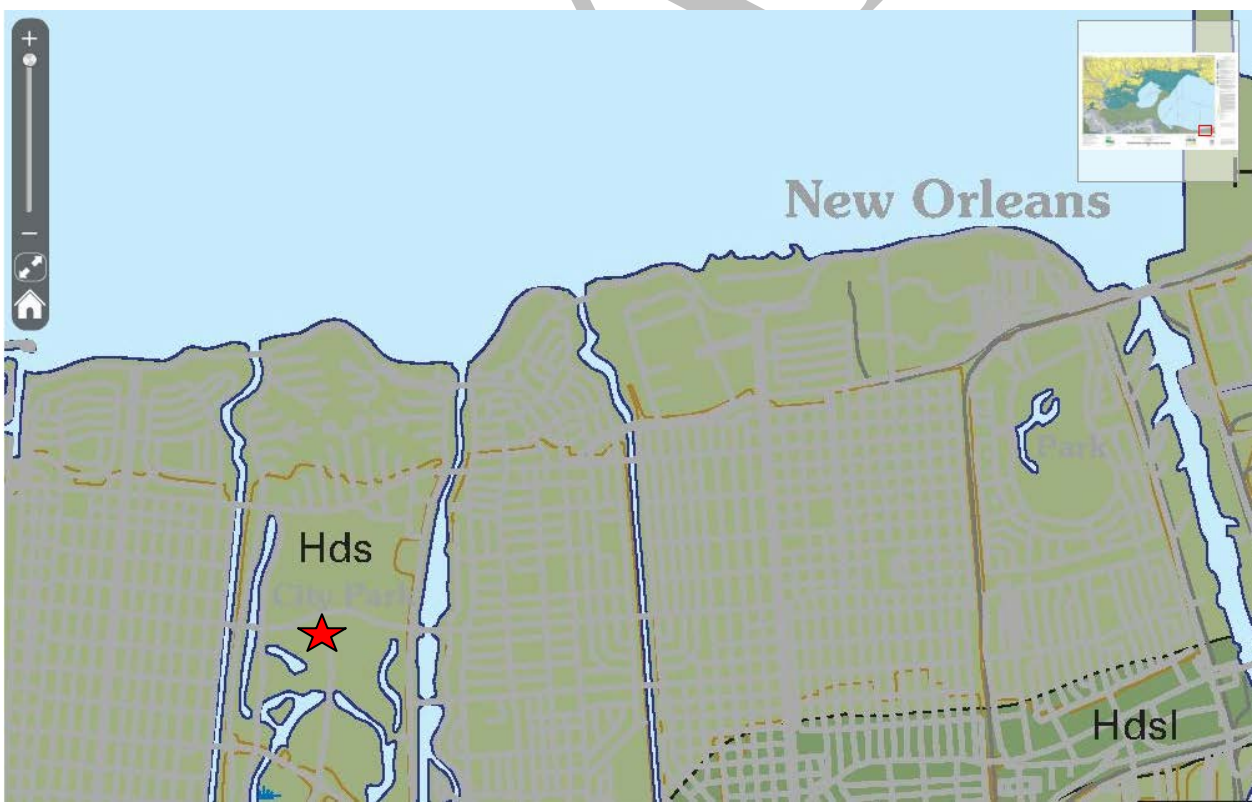

Figure 7, Geology Map of City Park Golf Course Complex (LGS, 2010)

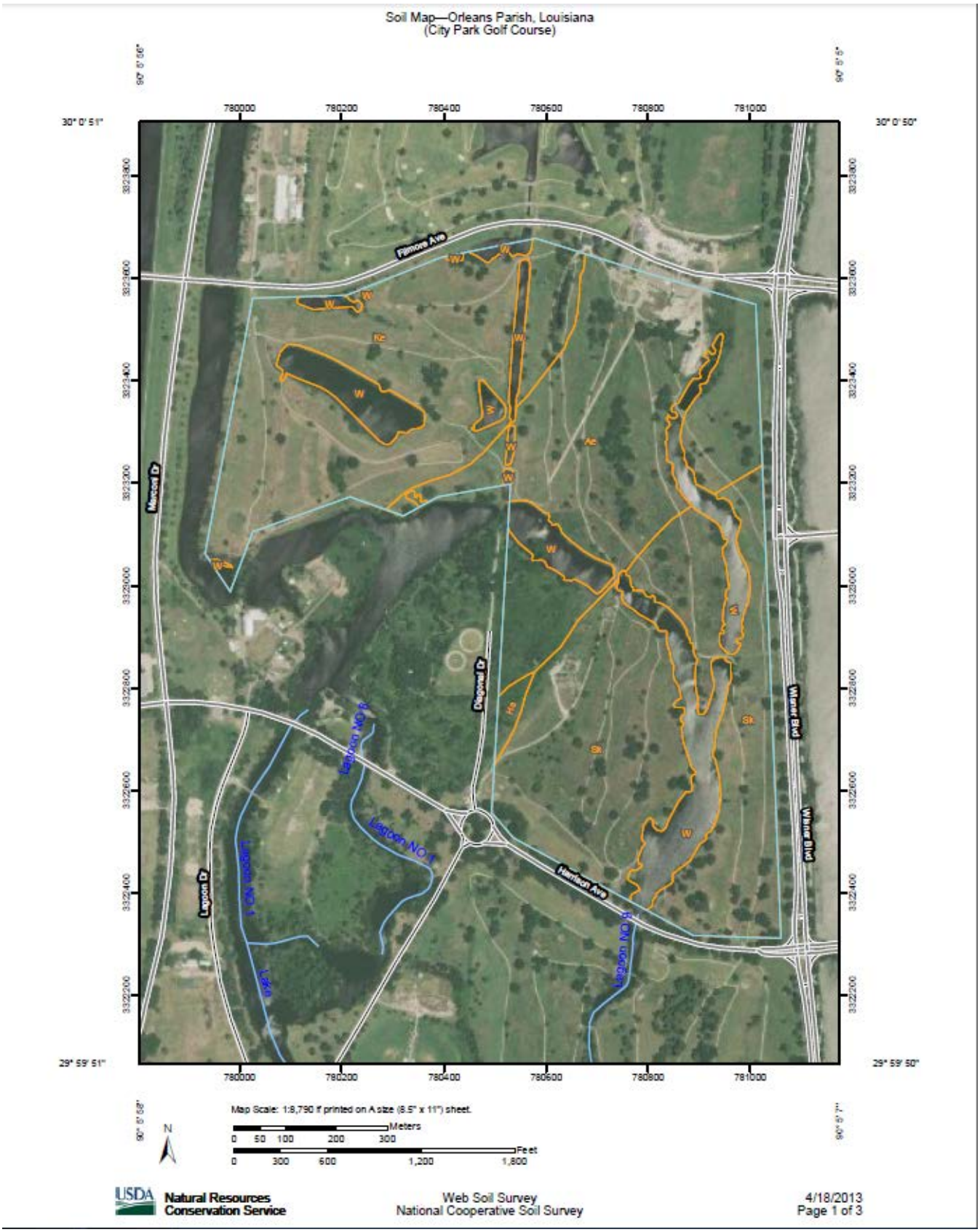

Figure 8, NRCS Soil Map – Proposed AOI

Figure 9, NRCS Farmland Classification Map - Proposed AOI

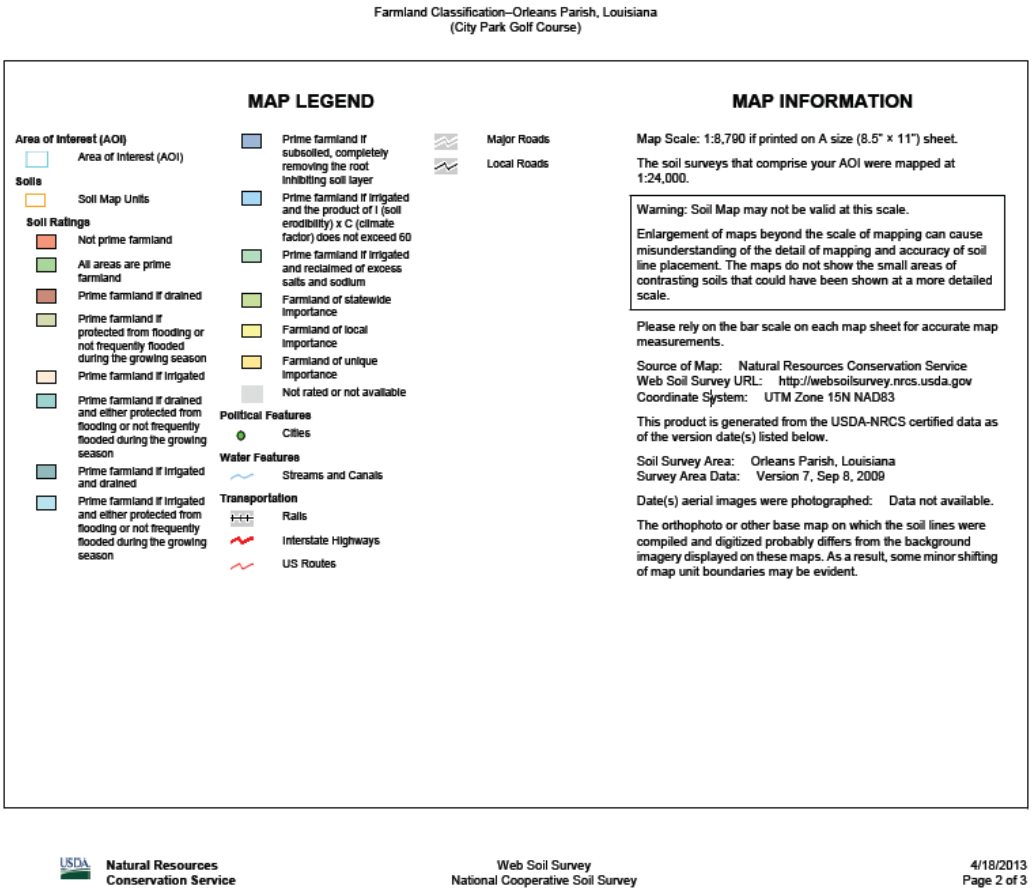

Figure 10, NRCS Map Legend

Farmland Classification–Orleans Parish, Louisiana City Park Golf Course

Farmland Classification

Farmland Classification— Summary by Map Unit — Orleans Parish, Louisiana (LA071)				
Map unit symbol	**Map unit name**	**Rating**	**Acres in AOI**	**Percent of AOI**
Ae	Allemands muck, drained	Not prime farmland	59.1	27.0%
Ha	Harahan clay	All areas are prime farmland	1.4	0.6%
Ke	Kenner muck drained	Not prime farmland	58.1	26.6%
Sk	Schriever clay	All areas are prime farmland	70.1	32.0%
W	Water	Not prime farmland	30.1	13.8%
Totals for Area of Interest			**218.9**	**100.0%**

Table 1, NRCS Farmland Classification Summary – Proposed AOI

4.1.3 Environmental Consequences

Alternative 1 – No Action
Implementation of the No Action Alternative would not impact the soils or geologic processes known for the area.

Alternative 2 – Repair Back to Original Configuration
Repair of the golf complex courses to their original configuration would temporarily impact soils during site preparation and renovation or reconstruction of the driving range, clubhouse, and maintenance facilities. The soil around the reconstruction areas may be equally or more susceptible to subsidence if adequate drainage and vegetation is not used.

Alternative 3 – Repair in Same Footprint to Different Configuration
Repair and reconstruction of the North, East and West Golf Courses, at their present locations, but in a different configuration, relocation of the clubhouse and driving range, repair or improvement of the cart path, repair or reconstruction of the restrooms and maintenance building, and modifications of or improvements to the irrigation and drainage systems would temporarily impact soils during site preparation, grading, cut and fill, and other project work. Additionally, construction of the improvements would result in compaction of some underlying soil, and the removal of other soil.

FEMA initiated consultation with the NRCS regarding potential impacts to prime and unique farmland as defined in 7 CFR § 658.2(a). In a response dated April 24, 2013, the NRCS concluded that this alternative action would be within urban areas and is exempt from the Farmland Protection Policy Act. The NRCS further stated there are no anticipated impacts to NRCS work in the vicinity. Therefore, no prime farmlands will be impacted.

Alternative 4 – Consolidate/Reconfigure in Substantially Same Footprint – Proposed Action
The Proposed Action Alternative would temporarily impact soils during site preparation, rearrangement of the contours of most of the proposed site, reshaping of the course with drainage and irrigation, incorporation of five (5) acres of previously unused soil, conversion of 96 acres of previously used soil into green space, and bridge repair or reconstruction. Soils would be exposed and or compacted during grading and tree removal or relocation, trenching for enlargement of the brackish water lagoons, and construction of the new adjustable weir, pump station and well.

FEMA initiated consultation with the NRCS regarding potential impacts to prime and unique farmland as defined in 7 CFR § 658.2(a). In a response dated April 24, 2013, the NRCS concluded that this alternative action would be within urban areas and is exempt from the Farmland Protection Policy Act. The NRCS further stated there are no anticipated impacts to NRCS work in the vicinity. Therefore, no prime farmlands will be impacted.

The proposed Action Alternative would include the removal and or relocation of one-hundred-eight trees throughout the proposed project site, including many trees proposed to be removed due to struggling health issues (*Figure 5*). FEMA initiated consultation with the Louisiana Department of Agriculture and Forestry (LDAF) on March 1, 2013. On or about March 26, 2013, LDAF responded that it had no objection to the project as proposed.

DRAFT

4.2 Waters of the United States and Wetlands

4.2.1 Regulatory Setting

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 §§ 401 and 404 of the Clean Water Act (CWA). Section 402 of the CWA, entitled National Pollutant Discharge Elimination System (NPDES), authorizes and sets forth standards for state administered permitting programs regulating the discharge of pollutants into navigable waters within the state's jurisdiction. Wetlands are identified as those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. The USACE also regulates the building of structures in waters of the U.S. pursuant to §§ 9 and 10 of the Rivers and Harbors Act (RHA). Executive Order (EO) 11990, Protection of Wetlands, directs Federal agencies to minimize the destruction, loss, or degradation of wetlands and to preserve and enhance the values of wetlands for federally funded projects. FEMA regulations for complying with EO 11990 are found at 44 CFR Part 9, Floodplain Management and Protection of Wetlands.

The Environmental Protection Agency (EPA) enforces the CWA and regulates discharges to waters of the United States through permits issued under the NPDES permitting program. On August 27, 1996, Louisiana assumed the NPDES from EPA Region VI, thus becoming a state delegated to administer the NPDES Program. Having assumed NPDES responsibilities, Louisiana may directly issue NPDES permits and has primary enforcement responsibility for facilities in this 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. LPDES requires permits for the discharge of pollutants/wastewater from any point source into waters of the state. 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 of the state of Louisiana are required to hold an LPDES permit issued by the Louisiana Department of Environmental Quality (LDEQ).

4.2.2 Existing Conditions

According to the U.S. Fish & Wildlife Service (USFWS) National Wetlands Inventory (NWI) map, the proposed project area is adjacent to or intersected by wetlands or other waters of the United States under the jurisdiction of the USACE, including: Bayou St. John (NWI Classification Code R2UBH – Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded), located within ¼ mile of the proposed project site; two or more lakes/lagoons (NWI Classification Code, L1UBHx - Lacustrine, Limnetic, Unconsolidated Bottom, Permanently Flooded, Excavated); and five or more freshwater ponds (NWI Classification Code, PUBHx - Palustrine, Unconsolidated Bottom, Permanently Flooded, Excavated) (*Figure 6, USFWS National Wetlands Inventory 2013*). FEMA conducted site visits on February 27, and April 26, 2013, and determined that several vegetated and other wetland areas are located on the site, including a wooded area on or near the five (5) acres of previously unused land proposed to be

DRAFT

added as buffer for new fairway number 5. Jurisdictional wetlands and other waters of the U.S. are subject to permitting under § 404 of the Clean Water Act.

Storm water runoff for the existing golf course area is estimated to flow generally through subsurface drainage north to south, through small culverts and ditches into two main canals and into a 60" culvert on Robert E. Lee Boulevard that drains toward the west. One canal runs on the west side of City Park, and the other along the center, connecting between Filmore Avenue and Harrison Avenue. An existing 18" culvert on the northwest corner of the park connects the west side canal, and another overflow outlet connects the center canal, helping to prevent stagnant water. From the Filmore Avenue/Harrison Avenue connection, the water can flow south following the two different canal routes which again intersect just north of Interstate 610 (I-610). Culverts on the east side of the park connect the canals with Bayou St. John, which runs along the eastern property line (Figure 11). An existing, non-adjustable, weir controls the surface water elevation in the canals at I-610, where the canals merge again. From there, overflow of water flows southward, crossing I-610 in a 54" culvert, and continuing west to Pump Station #7. The pump station pumps water north through the Orleans Canal (located on the west side of the park), out to Lake Ponchartrain. The Orleans Levee Board has jurisdiction of Bayou St. John from the mouth of the bayou at Lake Pontchartrain to Robert E. Lee Boulevard, and controls the flow of water from the lake into the bayou through sector and sluice gates.

Figure 11, U.S. Fish and Wildlife Service National Wetlands Inventory Map (USFWS, 2013)

4.2.3 Environmental Consequences

Alternative 1 – No Action

The No Action Alternative, would have no effect on wetlands or other waters of the U.S., and would not require permits under Section 404 of the CWA or Section 10 of the RHA.

Alternative 2 – Repair Back to Original Configuration

Repair and reconstruction of the Golf Complex courses and ancillary structures to their original configuration in the same footprint would not significantly impact surface water resources. During reconstruction there would be the potential to impact surface waters through minor erosion and runoff, and or through accidental spills of fluids used in construction equipment. Construction of the new clubhouse and restoration of the maintenance facilities and driving range may require excavating and trenching for utility upgrades to code. Storm water runoff could carry sediment offsite into the receiving ditches/culverts, and adjacent lagoons and bayous.

In order to minimize indirect impacts (erosion, sedimentation, dust and other construction-related disturbances) to the nearby waters of the United States and well defined drainage areas surrounding the site, the contractor should implement Best Management Practices (BMPs) that meet the Louisiana Department of Environmental Quality's (LDEQ) permitting specifications for storm water discharge regulated under §§ 401 and 402 of the CWA, and include the following into the daily operations of the construction activities: silt screens, barriers (*e.g.*, hay bales), berms/dikes, and/or fences to be placed where and as needed. Fencing will be placed for marking staging areas to store construction equipment and supplies as well as conduct maintenance/repair operations.

Alternative 3 – Repair in Same Footprint to Different Configuration

Repair and reconstruction of the Golf Complex Courses to a different configuration that includes enlargement of existing bodies of water and installation of culvert pipes within the canal system at the City Park Golf Course site would require the excavation and trenching of existing bodies of water, and the deposit or redistribution of fill material. A Department of the Army permit under § 404 of the CWA would be required for the deposit or redistribution of dredged or fill material on this site.

For this alternative, on October 19, 2011, the USACE issued a Final Determination of Eligibility letter and § 404 permit, authorizing this work as proposed, provided that all conditions of the permit are met (*Appendix B*). Said permit is valid for a period of five (5) years from the date of the Final Determination letter.

A Louisiana Pollution Discharge Elimination System (LPDES) permit may be required in accordance with the Clean Water Act and the Louisiana Clean Water Code. In order to minimize indirect impacts (erosion, sedimentation, dust and other construction-related disturbances) to the nearby waters of the United States and well defined drainage areas surrounding the site, the contractor should implement Best Management Practices (BMPs) that meet the Louisiana Department of Environmental Quality's (LDEQ) permitting specifications for storm water discharge regulated under §§ 401 and 402 of the CWA, and include the following into the daily operations of the construction activities: silt screens, barriers (*e.g.*, hay bales), berms/dikes, and/or fences to be placed where and as needed. Fencing will be placed for marking staging areas to store construction equipment and supplies as well as conduct maintenance/repair operations.

Alternative 4 – Consolidate/Reconfigure in Substantially Same Footprint (Proposed Action)

The Proposed Action Alternative includes enlargement of existing bodies of water, installation of culvert pipes within the canal system at the City Park Golf Course site, construction of a weir

DRAFT

and well system, and other work which would require excavation and trenching of existing bodies of water, and the deposit or redistribution of fill material. In correspondence dated April 2, 2013, USACE stated that a federal permit would be required for the placement or redistribution of dredged or fill material on the project site.

The USFWS NWI map indicates that the proposed project area is adjacent to or intersected by wetlands or other waters of the United States under the jurisdiction of the USACE. In comments received on or around April 2, 2013, the USACE indicated that wetlands may exist within the project site that could be adversely affected by the project.

Jurisdictional wetlands and other waters of the U.S. are subject to permitting under § 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act. Applicant would be required to conduct a wetland delineation of the proposed location and seek a jurisdictional determination from the USACE regarding the existence of wetlands and other waters of the U.S. on the proposed project site. Applicant is responsible for securing any permits under the CWA that may be required as a result of the undertaking.

A Louisiana Pollution Discharge Elimination System (LPDES) permit may be required in accordance with the Clean Water Act and the Louisiana Clean Water Code. In order to minimize indirect impacts (erosion, sedimentation, dust and other construction-related disturbances) to the nearby waters of the United States and well defined drainage areas surrounding the site, the contractor should implement Best Management Practices (BMPs) that meet the Louisiana Department of Environmental Quality's (LDEQ) permitting specifications for storm water discharge regulated under §§ 401 and 402 of the CWA, and include the following into the daily operations of the construction activities: silt screens, barriers (*e.g.*, hay bales), berms/dikes, and/or fences to be placed where and as needed. Fencing will be placed for marking staging areas to store construction equipment and supplies as well as conduct maintenance/repair operations.

4.3 Floodplains

4.3.1 Regulatory Setting

This action must be conducted in accordance with conditions for federal actions in the floodplain as set forth in Executive Order (EO) 11988, *Floodplain Management*, and the implementing regulations found at 44 Code of Federal Regulations (CFR), Part 9, *Floodplain Management and Protection of Wetlands*. These regulations apply to all agency actions which have the potential to affect floodplains or their occupants, or which are subject to potential harm by location in floodplains. Executive Order 11988 requires federal agencies to avoid direct or indirect support or development within the Special Flood Hazard Area (SFHA) base floodplain (*i.e.*, the 1 percent annual chance flood area) whenever there is a practicable alternative.

44 CFR § 9.6 details an eight-step process that decision-makers must use when considering projects that have potential impacts to or within the floodplain. The 8-step process assesses the action with regard to human susceptibility to flood harm and impacts to wetlands. The 8-step analyzes principle flood problems, risks from flooding, history of flood loss, and existing flood protection measures. The process includes public notice and opportunity for the public to have

DRAFT

early and meaningful participation in decision-making and alternative selection. In conjunction with the EA development, the 8-step process formulates and describes considered alternatives and determines their practicability as required by FEMA regulations. Lastly, the 8-step includes requirements to incorporate measures to minimize and mitigate potential risks from flooding and impacts to wetlands.

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 National Flood Insurance Program. FEMA Public Assistance grant funded projects carried out in the floodplain must be coordinated with the local floodplain administrator for a floodplain development permit prior to the undertaking, and the action must be carried out in compliance with relevant, applicable, and required local codes and standards and thereby, will reduce the risk of future flood loss, minimize the impacts of floods on safety, health, and welfare, and preserve and possibly restore beneficial floodplain values as required by EO 11988.

4.3.2 Existing Conditions

Orleans Parish has always been vulnerable to flooding during any season of the year (FEMA 2012). The principal sources of flooding are rainfall ponding and hurricane or tropical storm surges. Drainage of flood waters in Orleans Parish (included the area of the proposed action) is accomplished by a system of structures and canals which outflow to pumping stations. Orleans Parish is protected from the Mississippi River by levees. On the east bank of Orleans Parish, the Lake Pontchartrain and Vicinity Hurricane Protection Levee was designed to prevent flooding from hurricane 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 (FEMA 2012).

In July 2005, FEMA initiated a series of flood insurance studies for many of the Louisiana coastal parishes as part of the Flood Map Modernization effort through FEMA's National Flood Insurance Fund. These studies were necessary because the flood hazard and risk information shown on many Flood Insurance Rate Maps (FIRMs) was developed during the 1970s, and the physical terrain had changed significantly, to include the major loss of wetland areas. After Hurricanes Katrina and Rita, FEMA expanded the scope of these studies to include all of coastal Louisiana. The magnitude of the impacts of Hurricanes Katrina and Rita reinforced the urgency to obtain additional flood recovery data for the coastal zones of Louisiana. More detailed analysis was possible because new data obtained after the hurricanes included information on levees and levee systems, new high-water marks, and new hurricane parameters (LaMP 2007).

During an initial post-hurricane analysis, FEMA determined that the "100-Year" or 1-percent annual chance storm flood elevations, referred to as Base Flood Elevations (BFEs), on FIRMs for many Louisiana communities, were too low. FEMA created recovery maps showing the extent and magnitude of Hurricanes Katrina's and Rita's surge, as well as information on other storms over the past 25 years (LaMP 2007). The 2006 advisory flood data shown on the recovery maps for the Louisiana-declared disaster areas show high-water marks surveyed after the storm; flood limits developed from these surveyed points; and Advisory Base Flood Elevations, or ABFEs. The recovery maps and other advisory data were developed to assist

DRAFT

parish officials, homeowners, business owners, and other affected citizens with their recovery and rebuilding efforts (LaMP 2007).

Following an intensive five-year mapping initiative, FEMA provided updated preliminary flood hazard maps, known as Preliminary Digital Flood Insurance Rate Maps (DFIRMs 2008), to all of Louisiana's coast parish communities. Released in 2008, these maps are based on the most technically advanced studies ever and were subjected to multiple levels of review. The DFIRMs provided communities with a more scientific approach to economic development, hazard mitigation planning, emergency response, and post-flood recovery (LaMP 2007).

The U.S. Army Corps of Engineers (USACE) is currently working on a Hurricane and Storm Damage Risk Reduction System (HSDRRS) for the Greater New Orleans (GNO) area. This 350-mile system of levees, floodwalls, surge barriers, and pump stations reduces the flood risk associated with a storm event. A perimeter levee system protects the area from the coastal surge and the Mississippi River flooding. Pump stations are located along the perimeter levee to discharge local runoff into the exterior lakes or the Mississippi River. Local pump stations perform the same function along interior levees and discharge to marshy areas designated to collect flood water from developed areas. Two major closure complexes, the West Closure Structure Complex and the Inner Harbor Navigation Canal Complex keep the surge from entering the major canals and navigation channels within the New Orleans area. The HSDRRS is designed to protect the GNO area from the 1-percent annual chance flood.

FEMA specifies that all levees must have a minimum freeboard of three feet against 1-percent annual chance flooding to be considered a safe flood protection structure. The HSDRRS meets the FEMA freeboard requirement. In September of 2011, the USACE provided FEMA with assurances that the HSDRRS is capable of defending against a storm surge with a 1-percent annual chance event of occurring in any given year (Miller 2011).

Accordingly, in 2012 FEMA revised the preliminary DFIRMS for areas within the HSDRRS to incorporate the reduced flood risk associated with the system improvements. The 2012 Revised Preliminary DFIRMS are currently viewed as the best available flood risk data for the five GNO parishes. In many areas, the flood risk has been significantly reduced due to heightened protection. Areas protected by the HSDRRS include portions of St. Bernard, St. Charles, Jefferson, Orleans, and Plaquemines parishes (includes the entire area of the proposed action).

Orleans Parish enrolled in the NFIP on August 3, 1970. Orleans Parish Advisory Base Flood Elevation Maps (ABFEs) were issued June 2006 (FEMA, 2006). This site is shown on ABFE Panels LA-DD30, LA-DD31, LA- EE30, and LA-EE31, dated 06/05/2006, Elevation (EL) .5, or 3 feet above the Highest Existing Adjacent Grade (HEAG) (*Figure 12*). Per revised Preliminary Digital Flood Insurance Rate Map (Revised DFIRM), Panel Numbers 22071C0113F, 22071C00114F, 22071C0226F and 22071C0227F, dated 11/9/2012, portions of the site are located within Zone AE, EL -0.5 feet (above the North American Vertical Datum of 1988), areas of 1% annual chance flood within a SFHA, base flood elevation (BFE) determined (*Figure 13*). Approximate ground elevations throughout most of City Park range from 0-1 feet above the North American Vertical Datum of 1988.

DRAFT

According to the drainage study completed by Meyer Engineers, the residential area north of City Park drains north to south into a 60 inch culvert on Robert E. Lee Boulevard, which then drains west to Orleans Avenue Canal. Two small culverts convey overflow water from the north end of City Park to the culvert on Robert E. Lee Boulevard. Further, the drainage study indicates the existing golf course area drainage generally flows north to south. Drainage flows through small culverts and ditches into two main canals, one on the west side of the golf area and one along the center of the park. It is estimated that there are approximately two million gallons of water in the canals (Meyer Engineers, 2013).

The two canals flow south and connect between Filmore Avenue and Harrison Avenue. From there the waters flow south following two different canal routes, which intersect again just north of Interstate 610. On the east side of City Park, there are culverts that connect the canals with Bayou St. John. The water elevation in St. John Bayou is controlled by the New Orleans Sewerage and Water Board, which periodically allows water from Lake Pontchartrain to flow into the Bayou. Some of this water back flows into the City Park canals, thereby preventing stagnation. At Interstate 610, where the City Park canals merge, there is a weir that controls the water surface elevation at the canals. From there the overflow waters flow southward crossing Interstate 610 in a 54 inch culvert and on to New Orleans City Pump Station #7. The pump station pumps water to the north to Lake Pontchartrain through the Orleans Canal on the west side of the park (Meyer Engineers, 2013).

It is anticipated that the proposed project would require no major upgrades to City Park drainage structures that connect to the outside of the park (Meyer Engineers, p.3). The weir connecting the park canals to off-site drainage would be upgraded to allow for adjusting water elevation in the canals. Three additional canal crossings are designed into the proposed new golf course layout, two would be bridges free from obstructions and one would be an “oversized” culvert. No major changes are proposed for the park canals with the exception of the center canal, which would be widened minimally in some areas to ensure adequate flow (Meyer Engineers, p.3). The design for the proposed golf course layout includes the addition of approximately 320,000 cubic yards of fill for establishing course contours, tees, greens, and cart paths. The drainage study concludes that, with the widening of the center canal and the relatively large area receiving fill, site drainage would not be significantly affected, and the proposed course improvements would have no negative effect on the surrounding communities (Meyer Engineers, pp. 4-5).

DRAFT

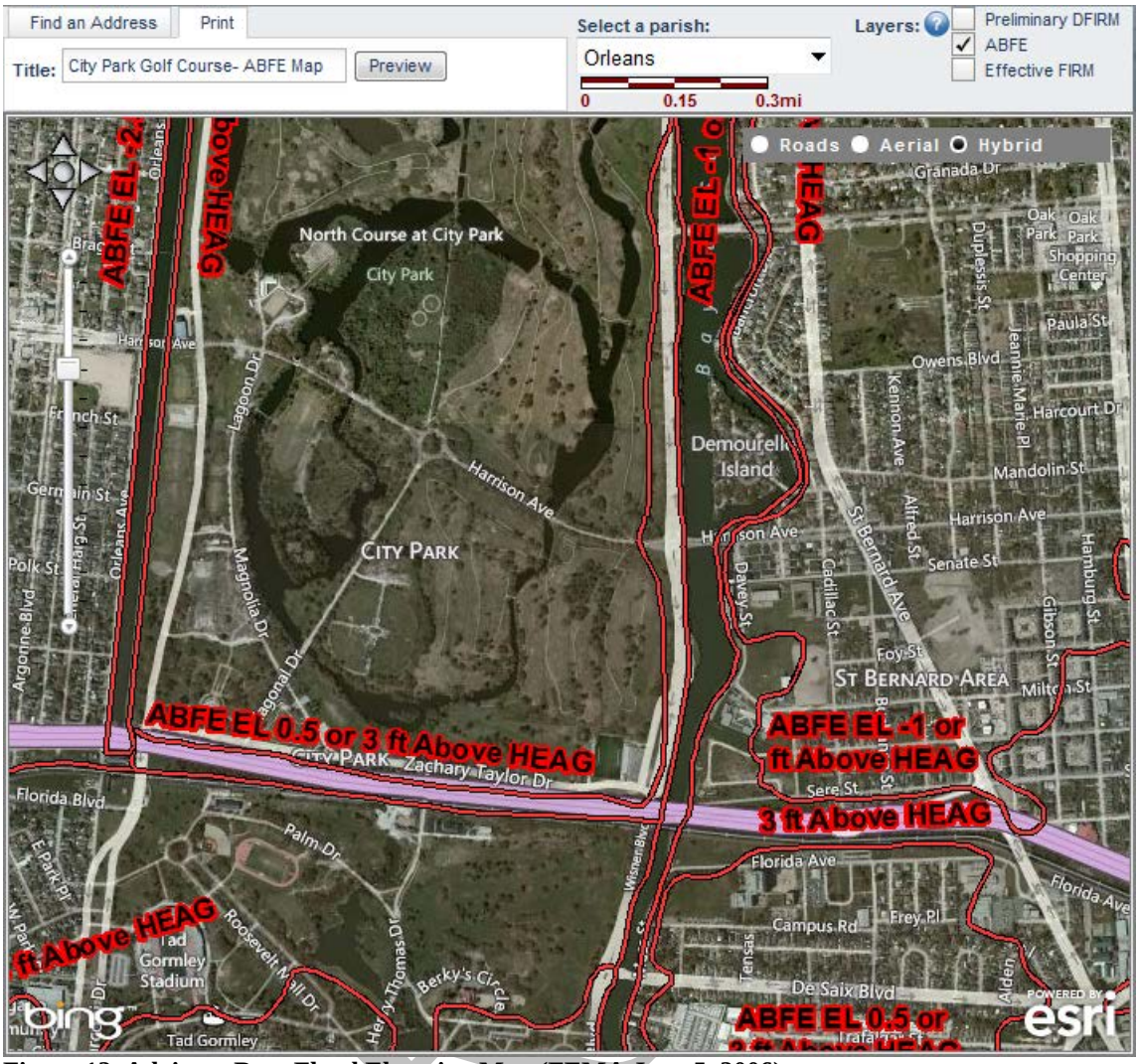

Figure 12, Advisory Base Flood Elevation Map (FEMA June 5, 2006)

DRAFT

Point	Latitude	Longitude	Flood Zone	Ground Elevation	BWS*	Panel ID
1	30.00971	-90.09583	AE, EL -5	-6.401 ft	124 mph	22071C0113F
2	30.00993	-90.08858	0.2 PCT ANNUAL CHANCE FLOOD HAZARD	-2.165 ft	124 mph	22071C0114F
3	29.9964	-90.09759	0.2 PCT ANNUAL CHANCE FLOOD HAZARD	-2.387 ft	124 mph	22071C0226F
4	29.99584	-90.0878	0.2 PCT ANNUAL CHANCE FLOOD HAZARD	-2.908 ft	124 mph	22071C0227F

*BWS = Basic Wind Speed

Figure 13, Revised Digital Flood Insurance Rate Map Panel Numbers 22071C0113F, 22071C0114F, 22071C0226F, and 22071C0227F (FEMA, Preliminary Dated November 9, 2012)

4.3.3 Environmental Consequences

Alternative 1 – No Action

Under the No Action alternative, there would be no adverse impacts within the floodplain and no additional investment at risk. Beneficial values of the base floodplain would likely be restored in previously developed areas.

Alternative 2 – Repair Back to Original Configuration

Repairing the golf complex back to original configuration and footprint would reestablish the revenue stream for City Park and restore the lost recreational benefits. The repair would accommodate the existing uses of the floodplain and reinforce existing land use patterns which

have developed without reflection on hazard and risk minimization. Repairs would also maintain a significant investment in the base floodplain and exposes facilities to flood hazards. Repairing the golf complex forgoes an opportunity to restore the natural and beneficial values of the floodplain. Repairs and reconstruction will also increase the useful life of the facilities. Repairing and replacing facilities in the floodplain would have increased costs associated with floodplain development mitigation and minimization requirements and compliance with floodplain codes and standards.

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 National Flood Insurance Program. The applicant 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 applicant compliance with any conditions should be documented and copies forwarded to the LA GOHSEP and FEMA for inclusion in the permanent project files. The replacement of building contents, materials and equipment (mechanical and electrical) should be, where possible, wet or dry-proofed, elevated, or relocated to or above the BFE.

Alternative 3 – Repair in Same Footprint to Different Configuration

Repairing the golf complex to a different configuration would restore the lost recreational benefits. Repairs would also maintain a significant investment in the base floodplain and expose facilities to flood hazards. Repairing the golf complex forgoes an opportunity to restore the natural and beneficial values of the floodplain. Repairs and reconstruction will also increase the useful life of the facilities. Repairing and replacing facilities in the floodplain would have increased costs associated with floodplain development mitigation and minimization requirements and compliance with floodplain codes and standards. Adding fill in the floodplain will alter the characteristics of flood from ponding on the site.

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 National Flood Insurance Program. The applicant 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 applicant compliance with any conditions should be documented and copies forwarded to the LA GOHSEP and FEMA for inclusion in the permanent project files. The replacement of building contents, materials and equipment (mechanical and electrical) should be, where possible, wet or dry-proofed, elevated, or relocated to or above the BFE.

Alternative 4 – Consolidate/Reconfigure in Substantially Same Footprint – Proposed Action

Plans for the proposed action have been provided by the Applicant, which have been reviewed for effects in the base floodplain. A drainage study has been conducted by the Applicant's engineer(s) to ensure the facilities are being designed to include considerations for flooding and mitigation and minimization measures that will better manage the onsite hydrologic regime thereby resulting in lowered flood risk (Meyer Engineers, 2013). In compliance with FEMA policy implementing the EO, the proposed action and project alternatives were reviewed for

DRAFT

possible impacts associated with occupancy or modification of a floodplain. In compliance with EO 11988, an 8-step process was completed and documentation is attached in Appendix B.

Consolidating and reconfiguring in substantially the same footprint would reestablish the revenue stream for City Park and restore the lost recreational benefits. Consolidating and reconfiguring would also maintain, and potentially increase, a significant investment in the base floodplain and exposes facilities to flood hazards. This revised plan for the golf complex forgoes an opportunity to restore the natural and beneficial values of the floodplain. This will also increase the useful life of the facilities. Consolidating and reconfiguring facilities in the floodplain would have increased costs associated with floodplain development mitigation and minimization requirements and compliance with floodplain codes and standards. Adding fill in the floodplain will alter the characteristics of flood from ponding on the site. Widening of the central canal will increase the onsite drainage retention capacity and may reduce demand on the nearby pump station #7 during times of flood.

The drainage study concludes that with the widening of the center canal and the relatively large area, "the addition of fill will not significantly affect the storage capacity of the drainage system" and "improvements to the golf course [as proposed] will not have a negative effect on the surrounding communities (Meyers Engineers, 2013)."

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 National Flood Insurance Program. The applicant 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 applicant compliance with any conditions should be documented and copies forwarded to the LA GOHSEP and FEMA for inclusion in the permanent project files. The replacement of building contents, materials and equipment (mechanical and electrical) should be, where possible, wet or dry-proofed, elevated, or relocated to or above the BFE.

4.4 Coastal Resources

4.4.1 Regulatory Setting

The Coastal Zone Management Act of 1972 (CZMA) encourages the management of coastal zone areas and provides grants to be used in maintaining coastal zone areas. It requires that federal agencies be consistent in enforcing the policies of state coastal zone management programs when conducting or supporting activities that affect a coastal zone. It is intended to ensure that federal activities are consistent with state programs for the protection and, where, possible, enhancement of the nation's coastal zones.

The CZMA's definition of a coastal zone includes coastal waters extending to the outer limit of state submerged land title and ownership, adjacent shorelines, and land extending inward to the extent necessary to control shorelines. A coastal zone includes islands, beaches, transitional and intertidal areas, and salt marshes. The CZMA requires that states develop a State Coastal Zone Management Plan or program and that any federal agency conducting or supporting activities

DRAFT

affecting the coastal zone conduct or support those activities in a manner consistent with the approved state plan or program. The Louisiana Department of Natural Resources (LDNR) regulates development in Louisiana's designated coastal zone through the Coastal Use Permit (CUP) Program.

The USFWS regulates federal funding in Coastal Barrier Resource System (CBRS) units under the Coastal Barrier Resources Act (CBRA). This Act protects undeveloped coastal barriers and related areas (*i.e.*, Otherwise Protected Areas [OPAs]) by prohibiting direct or indirect Federal funding of projects that support development in these areas. The Act promotes appropriate use and conservation of coastal barriers along the Gulf of Mexico.

4.4.2 Existing Conditions

The proposed project site is in Orleans Parish. By letter dated March 11, 2013, LDNR's Office of Coastal Management (OCM) advised FEMA that the proposed project is located within the Louisiana Coastal Zone (*see* Appendix A, Agency Correspondence, and Figure X). The proposed project site is not located within a regulated CBRS.

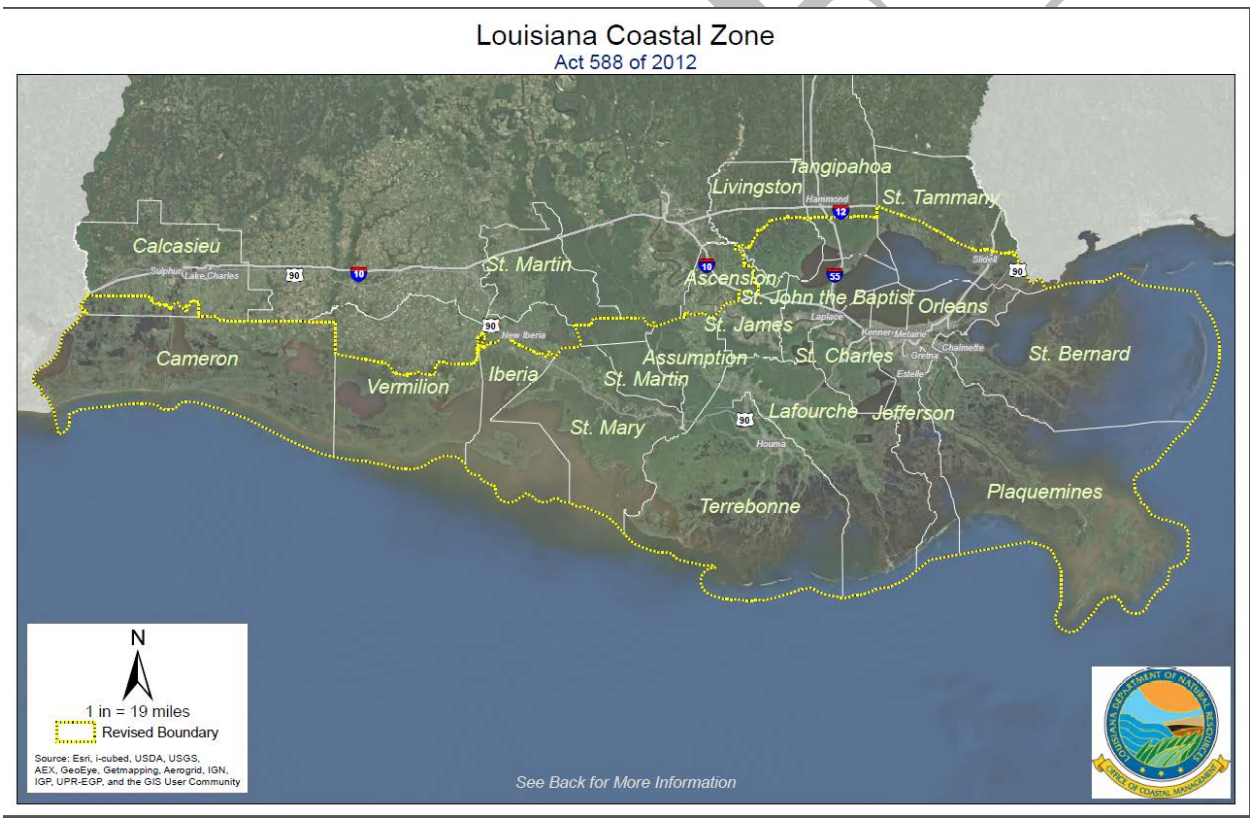

Figure 14 – Louisiana Coastal Zone Boundary Map

4.4.3 Environmental Consequences

Alternative 1 – No Action
Under the No Action alternative, there would be no impacts to the Coastal Zone or to a CBRS unit; therefore, no review is required.

Alternative 2 – Repair Back to Original Configuration
Repair and construction of the Golf Complex to its original configuration within the same footprint would involve construction activities within the Louisiana Coastal Management Zone. In a letter dated letter dated March 11, 2013, LDNR-OCM advised that OCM requires a complete CUP packet be submitted to their office for review and approval prior to construction. The applicant is responsible for coordinating with and obtaining any required CUPs or other authorizations from LDNR-OCM's Permits and Mitigation Division prior to initiating work. The original site is not within a CBRS unit; therefore, it does not trigger the CBRA.

Alternative 3 – Repair In Same Footprint to Different Configuration
Repair and reconstruction of the Golf Complex to a different configuration within the same footprint would involve construction activities within the Louisiana Coastal Management Zone.

In 2011, the Applicant submitted a CUP application and package to LDNR-OCM for review and determination relevant to this Alternative Project as proposed. In its September 27, 2011 response, LDNR-OCM advised the Applicant of its determination that the proposed activity was exempt and a Coastal use permit was not required. The 2011 determination is valid for two (2) years from the date of the determination letter. The original site is not within a CBRS unit; therefore, it does not trigger the CBRA.

Alternative 4 – Consolidate/Reconfigure in Substantially Same Footprint (Proposed Action)
The proposed action alternative would involve construction activities within the Louisiana Coastal Management Zone. In a letter dated March 11, 2013, LDNR-OCM advised that OCM requires a complete CUP packet be submitted to their office for review and approval prior to construction. The Applicant is responsible for coordinating with and obtaining any required CUPs or other authorizations from LDNR-OCM's Permits and Mitigation Division prior to initiating work. The proposed site is not within a CBRS unit; therefore, the Proposed Action Alternative does not trigger the CBRA.

4.5 Biological Resources

4.5.1 Regulatory Setting

The Endangered Species Act (ESA) of 1973 prohibits the taking of listed, threatened, and endangered species unless specifically authorized by permit from the USFWS or the National Marine Fisheries Service. "Take" is defined in ESA § 3 as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in any such conduct." "Harm," as defined by the ESA, includes 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.

DRAFT

The Migratory Bird Treaty Act (MBTA) of 1918 affirms the United States' commitment to the protection of migratory birds and their habitats and implements various international treaties and conventions (with Canada, Japan, Mexico and the former Soviet Union) for the protection of migratory bird resources. Under the MBTA, it is unlawful to pursue, hunt, take, capture, kill, or sell birds listed in the statute as "migratory birds". The MBTA does not discriminate between live or dead birds, and grants full protection to any bird parts, including feathers, eggs, and nests. Executive Order (E.O.) 13186 (Responsibilities of Federal Agencies to Protect Migratory Birds) strengthens the protection of migratory birds and their habitats by directing federal agencies to take certain actions that implement the MBTA.

4.5.2 Existing Conditions

According to the USFWS, Information, Planning, and Conservation (IPaC) online system, accessed on March 20, 2013, one mammal species, the West Indian Manatee, and two fish species, the Gulf Sturgeon and Pallid Sturgeon, are federally listed by the U.S. Fish and Wildlife Service (USFWS) as endangered or threatened and are known to occur in select waterways of Orleans Parish (Table 1) (USFWS, IPaC, 2013). An individual bird species, Sprague's Pipit, is federally listed as a candidate species and may occur in the vicinity of the proposed project. (Table 2) (USFWS, IPaC, 2013). Current data suggests the Sprague Pipit's non-breeding, overwintering range extends from central Louisiana westward to Texas, south to Mexico and northward, including the southern regions of New Mexico and Arizona (75 FR 56028 56050, 09/15/2010, Notice of 12 Month Petition Finding; Robbins and Dale, 1999). Site visits conducted on February 27 and April 12, 2013 confirmed that the proposed project site is located within a previously disturbed urban area. No listed species or critical habitats were identified present. The proposed project site is located within the Louisiana Flyway (USFWS 2013).

Common Name	Scientific Name	Federal Status	Critical Habitat	Habitat Requirements	Impact*/Rationale
Gulf Sturgeon	*Acipenser oxyrhynchus desotoi*	Threatened	Yes	Anadromous 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 / Less than significant impact could occur from storm runoff without proper BMPs in place at storm drain locations.
Pallid Sturgeon	*Scaphirhynchus albus*	Endangered	No	Prefers large, free-flowing turbid rivers. No information exists on preferred spawning habitat.	None / Less than significant impact could occur from storm runoff without proper BMPs in place at storm drain locations.
West Indian Manatee	*Trichechus manatus*	Endangered	Yes[1]	Found in marine, estuarine, and	None / There are no habitat areas

Common Name	Scientific Name	Federal Status	Critical Habitat	Habitat Requirements	Impact*/Rationale
				freshwater environments with a strong preference for warm and well vegetated waters.	that are close or hydrologically connected to potential habitat.
Sprague's Pipit	*Anthus spragueii*	Candidate	No	Grassland bird that overwinters during its non-breeding season from western Louisiana to Mexico and southwestern states	None / Project area is outside the suggested overwintering range of this species.
* - Considers potential impacts of Alternatives 1-4 1 - Critical habitat is not designated in Louisiana					

Table 2, Federally Listed Species Known to Occur in Orleans Parish
Data Accessed 03/20/2013 from USFWS IPaC Web Portal (http://ecos.fws.gov/ipac/)

4.5.3 Environmental Consequences

Alternative 1 – No Action
The No Action alternative would entail no undertaking and, therefore, would have no determinable impact on any biological resource.

Alternative 2 – Repair Back to Original Configuration
Repair of the Golf Complex courses in the same configuration would have no impact on species federally listed as threatened or endangered, migratory birds or federally listed critical habitats. The US Fish and Wildlife Service has interpreted Section 7(p) of the Endangered Species Act to mean that restoring any infrastructure damaged or lost due to the hurricane back to its original footprint does not require ESA consultation per USFWS letter of September 15, 2005.

Alternative 3 – Repair In Same Footprint to Different Configuration
Repair and reconstruction of the North, East and West Golf Courses in the same location, to a different configuration would have no impact on species federally listed as threatened or endangered, migratory birds or federally listed critical habitats.

Alternative 4 – Consolidate/Reconfigure in Substantially Same Footprint (Proposed Action)
The proposed project has been reviewed by the USFWS for effects to federal trust resources under their jurisdiction and currently protected by the Endangered Species Act of 1973. In correspondence dated March 11, 2013, the USFWS stated that the project, as proposed, would have no effect on federal trust resources under its jurisdiction and currently protected by the ESA. (*Appendix A, Agency Correspondence*). A similar review was conducted by the LDNR, Office of Wildlife, Natural Heritage Program (LNHP). In correspondence dated March 25, 2013, the LNHP stated it is not anticipated that the project as proposed would impact rare, threatened, or endangered species or critical habitats (*Appendix A, Agency Correspondence*).

DRAFT

4.6 Cultural Resources

4.6.1 Regulatory Setting

The consideration of impacts to historic and cultural resources is mandated under Section 101(b)4 of the National Environmental Policy Act (NEPA) as implemented by 40 CFR, 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) and allow the Advisory Council on Historic Preservation an opportunity to comment. FEMA has chosen to address potential impacts to historic properties through the "Section 106 consultation process" of the NHPA as implemented through 36 CFR, 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 August 17, 2009, and amended on July 22, 2011 between the Louisiana State Historic Preservation Officer (SHPO), the Louisiana Governor's Office of Homeland Security and Emergency Preparedness (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 2009 Statewide PA as amended was created to streamline the Section 106 review process.

The "Section 106 process" outlined in the PA 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 Section 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.

4.6.2 Existing Conditions

FEMA Historic Preservation Staff consulted the NRHP Database, and the Louisiana Cultural Resources Map on February 21, 2013. Although a portion of City Park is eligible for listing in the NRHP, FEMA has determined that the APE for this Undertaking is located immediately north of the district's proposed boundary. The east golf course was first opened in 1935 and the west golf course was opened in 1957. Based on research conducted during a review of the current project, this portion of City Park was undeveloped until ca. 1966 when the golf courses between Harrison and Fillmore Avenues were first designed and constructed. Six structures are currently located within the APE. None of the six structures are 50 years of age, nor do they exhibit the significance to qualify for NRHP listing under Criterion Consideration G (*Table 3*).

DRAFT

Name of Building	Date of Construction	Coordinates
West Course Pump House	c. 1966	30.009942 -90.096512
West Course Concession/Restroom	c. 1966	30.007135 -90.096656
Pavilion	1997	30.011937 -90.090084
West Course Starter House	c. 1966	30.010721 -90.089371
Maintenance Building	c. 1980	30.009816 -90.087994
West Course Shelter 1	c. 1966	30.005362 -90.089856

Table 3, Extant Structures ABE

4.6.3 Environmental Consequences

Alternative 1 – No Action

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

Alternative 2 – Repair Back to Original Configuration

Based on research using the NRHP database, the Louisiana Cultural Resources Map on the Louisiana Division of Historic Preservation's website, and agency files, FEMA has determined that the project area is not located within a listed National Register Historic District, nor is it located within the view-shed of a property individually listed in the NRHP. The structures located within the project area were found to be less than 50 years of age and do not exhibit the significance to qualify for listing under Criterion Consideration G. FEMA determined that the scope of work meets the criteria in Appendix C: Programmatic Allowances, Item I, Section A, B, C, D, E, F, and I of the PA. In accordance with this document, FEMA is not required to submit projects to the SHPO for review where the work performed meets these allowances. The applicant must comply with the NHPA conditions set forth in this draft EA (Louisiana Unmarked Human Burial Sites Preservation Act and Inadvertent Discovery Clause).

Alternative 3 – Repair In Same Footprint to Different Configuration

Based on research using the NRHP database, the Louisiana Cultural Resources Map on the Louisiana Division of Historic Preservation's website, and agency files, FEMA has determined that the project area is not located within a listed National Register Historic District nor is it located within the view-shed of a property individually listed in the NRHP. The structures located within the project area were found to be less than 50 years of age and do not exhibit the significance to qualify for listing under Criterion Consideration G. FEMA determined that 43 acres of the 526 acre footprint required archaeological survey to complete the identification of historic properties. The survey identified four archaeological sites: 16OR662, 16OR663, 16OR664, and 16OR665 (Boyko and Athens 2013). Based on the data presented in the report, FEMA has determined none of these archaeological sites are NRHP eligible. Consequently, FEMA determined that the undertaking would have "No Effect" to Historic Properties. FEMA anticipates that SHPO concurrence with this determination will be received by June 8, 2013. Consultation with affected tribes (Alabama-Coushatta Tribe of Texas, Choctaw Nation of

DRAFT

Oklahoma, Coushatta Tribe of Louisiana, Jena Band of Choctaw Indians, Mississippi Band of Choctaw Indians, Muscogee Creek Nation, Quapaw Tribe of Oklahoma, Seminole Nation of Oklahoma, and Tunica-Biloxi Tribe of Louisiana) was conducted per the PA and 36 CFR part 800.2(c)(2)(i)(B). FEMA does not anticipate any objections from the affected Tribes within the regulatory timeframes. Once the timeframes are complete, in accordance with Stipulation VIII.E(1) of the PA and 36 CFR part 800.5(c)1, FEMA will 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 4 – Consolidate/Reconfigure in Substantially Same Footprint (Proposed Action)
Based on research using the NRHP database, the Louisiana Cultural Resources Map on the Louisiana Division of Historic Preservation's website, and agency files, FEMA has determined that the project area is not located within a listed National Register Historic District nor is it located within the view-shed of a property individually listed in the NRHP. The structures located within the project area were found to be less than 50 years of age and do not exhibit the significance to qualify for listing under Criterion Consideration G. FEMA determined that 43 acres of the larger footprint required archaeological survey to complete the identification of historic properties. The survey identified four archaeological sites: 16OR662, 16OR663, 16OR664, and 16OR665 (Boyko and Athens 2013). Based on the data presented in the report, FEMA has determined none of these archaeological sites are NRHP eligible. Consequently, FEMA determined that the undertaking would have "No Effect" to Historic Properties. FEMA anticipates that SHPO concurrence with this determination will be received by June 8, 2013. Consultation with affected tribes (Alabama-Coushatta Tribe of Texas, Choctaw Nation of Oklahoma, Coushatta Tribe of Louisiana, Jena Band of Choctaw Indians, Mississippi Band of Choctaw Indians, Muscogee Creek Nation, Quapaw Tribe of Oklahoma, Seminole Nation of Oklahoma, and Tunica-Biloxi Tribe of Louisiana) was conducted per the PA and 36 CFR part 800.2(c)(2)(i)(B). FEMA does not anticipate any objections from the affected Tribes within the regulatory timeframes. Once the timeframes are complete, in accordance with Stipulation VIII.E(1) of the PA and 36 CFR part 800.5(c)1, FEMA will 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).

4.7 Air Quality

4.7.1 Regulatory Setting

The Clean Air Act (CAA) of 1963, as amended, provides for federal protection of air quality by regulating air pollutant sources and setting emissions standards for certain air pollutants. Under CAA, states adopt ambient air quality standards in order to protect the public from potentially harmful amounts of pollutants. Under the CAA, the United States Environmental Protection Agency (EPA) establishes primary and secondary air quality standards. Primary air quality standards protect the public health, including the health of "sensitive populations, such as people with asthma, children, and older adults." Secondary air quality standards protect the public welfare by promoting ecosystems health, and preventing decreased visibility and damage to crops and buildings. The EPA has set National Ambient Air Quality Standards (NAAQS) for the

DRAFT

following six criteria pollutants: ozone (O_3), particulate matter ($PM_{2.5}$, PM_{10}), nitrogen dioxide (NO_2), carbon monoxide (CO), sulfur dioxide (SO_2), and lead (Pb).

The EPA has designated specific areas as NAAQS attainment or non-attainment areas. Non-attainment areas are any areas that do not meet the quality standard for a pollutant, while attainment areas do meet ambient air quality standards.

4.7.2 Existing Conditions

In correspondence dated March 8, 2013, the LDEQ confirms that Orleans Parish is currently classified by the EPA as an attainment area and has no general conformity determination obligations (Appendix A, Agency Correspondence).

4.7.3 Environmental Consequences

Alternative 1 – No Action
Under the No Action alternative, there would be no short or long term impacts to air quality because no construction would occur.

Alternative 2 – Repair Back to Original Configuration
Under this Alternative, short-term impacts to air quality could occur during excavation and construction. Particulate emissions from the generation of fugitive dust during project excavation and construction would be increased temporarily in the immediate project area as a result of this alternative. Other emission sources on site would be internal combustion engines and heavy 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 should be responsible for using BMPs to reduce fugitive dust generation and diesel emissions. The contractor would be required to water down construction areas when necessary to minimize particulate matter and dust. Emissions from fuel-burning internal combustion engines (*e.g.*, heavy equipment and earthmoving machinery) could temporarily increase the levels of some of the criteria pollutants, including CO, NO_2 O_3, and PM_{10}, and non-criteria pollutants such as volatile organic compounds. To reduce emission criteria pollutants, fuel-burning equipment running times would be kept at a minimum and engines would be properly maintained. Long term emissions, such as those generated by small engines used for lawn maintenance and offsite generation of electrical power are expected to be comparable to emissions generated by the previously existing Golf Complex structures and functions. The impacts are expected to be minor and localized.

Alternative 3 – Repair In Same Footprint to Different Configuration
Under this Alternative, short-term impacts to air quality could occur during excavation and construction. Particulate emissions from the generation of fugitive dust during project excavation and construction would be increased temporarily in the immediate project area as a result of this alternative. Other emission sources on site would be internal combustion engines and heavy construction equipment. These effects would be localized and of short duration.

DRAFT

To reduce potential short term effects to air quality from construction related activities, the contractor should be responsible for using BMPs to reduce fugitive dust generation and diesel emissions. The contractor would be required to water down construction areas when necessary to minimize particulate matter and dust. Emissions from fuel-burning internal combustion engines (*e.g.*, heavy equipment and earthmoving machinery) could temporarily increase the levels of some of the criteria pollutants, including CO, NO_2 O_3, and PM_{10}, and non-criteria pollutants such as volatile organic compounds. To reduce emission criteria pollutants, fuel-burning equipment running times would be kept at a minimum and engines would be properly maintained. Long term emissions, such as those generated by small engines used for lawn maintenance and offsite generation of electrical power are expected to be comparable to emissions generated by the previously existing Golf Complex structures and functions. The impacts are expected to be minor and localized.

<u>Alternative 4 – Consolidate/Reconfigure in Substantially Same Footprint (Proposed Action)</u>
Under the Proposed Action Alternative, short-term impacts to air quality could occur during excavation and construction. Particulate emissions from the generation of fugitive dust during project excavation and construction would be increased temporarily in the immediate project area as a result of this alternative. Other emission sources on site would be internal combustion engines and heavy construction equipment. The effects would be localized and of short duration.

To reduce potential short term effects to air quality from construction related activities, the contractor should be responsible for using BMPs to reduce fugitive dust generation and diesel emissions. The contractor would be required to water down construction areas when necessary to minimize particulate matter and dust. Emissions from fuel-burning internal combustion engines (*e.g.*, heavy equipment and earthmoving machinery) could temporarily increase the levels of some of the criteria pollutants, including CO, NO_2 O_3, and PM_{10}, and non-criteria pollutants such as volatile organic compounds. To reduce emission criteria pollutants, fuel-burning equipment running times would be kept at a minimum and engines would be properly maintained. Long term emissions, such as those generated by small engines used for lawn maintenance and offsite generation of electrical power are expected to be comparable to emissions generated by the previously existing Golf Complex structures and functions. The impacts are expected to be minor and localized.

4.8 Noise

Noise is commonly defined as unwanted or unwelcome sound, and most commonly measured in decibels (dB) on the A-weighted scale, which is the scale most similar to the range of sounds that the human ear can hear. The Day-Night Average Sound Level (DNL) is an average measure of sound. The DNL descriptor is accepted by federal agencies as a standard for estimating sound impacts and establishing guidelines for compatible land uses. Sound is federally regulated by the Noise Control Act of 1972, which charges the EPA with preparing guidelines for acceptable ambient noise levels. EPA guidelines, and those of many other federal agencies, state that outdoor sound levels in excess of 55 dB DNL are “normally unacceptable” for noise-sensitive land uses including residences, schools, or hospitals (EPA, 1974). The Noise Control Act, however, only charges implementation of noise standards to those federal agencies that operate noise-producing facilities or equipment. FEMA, by nature of its mission, does not have statutes defining noise.

DRAFT

Orleans Parish has made it unlawful to exceed maximum permissible sound limits in residential and noise-sensitive areas of public spaces. (*See* New Orleans, Louisiana Code of Ordinances, § 66-202). The Ordinance places restrictions on any machinery, equipment or device that makes or causes a noise that exceeds 60 decibels between 7:00 a.m. and 10:00 p.m., and a noise that exceeds 55 decibels between 10:00 p.m. and 7:00 a.m., as monitored from the exterior of the property where the source of the sound is located. Repairs performed by public agencies or utility companies are exempted from this restriction.

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 – Repair Back to Original Configuration
Under this Alternative, repair and reconstruction of the Golf Complex and related structures would result in short-term increases in noise during the repair/reconstruction period. Equipment and machinery utilized on the project site would meet all local, state and federal noise regulations. Normal activities at the reconstructed golf course facilities are unlikely to affect sensitive receptors in the area.

Alternative 3 – Repair In Same Footprint to Different Configuration
Under this Alternative, repair and reconfiguration of the Golf Complex and related structures, including modifications of and improvements to the golf course drainage and irrigation systems, would result in short-term increases in noise during the repair/reconfiguration period. Equipment and machinery utilized on the project site would meet all local, state and federal noise regulations. Normal activities at the reconstructed golf course facilities are unlikely to affect sensitive receptors in the area.

Alternative 4 – Consolidate/Reconfigure in Substantially Same Footprint (Proposed Action)
Under the Proposed Action Alternative, reconstruction and reconfiguration of the East and West Golf Courses and related structures, including modifications of and improvements to the course drainage and irrigation systems, and construction of the bridges, weir and deep water well, would result in short-term increases in noise during the reconstruction/reconfiguration period. Equipment and machinery utilized on the project site would meet all local, state and federal noise regulations. Normal activities at the reconstructed golf course facilities are unlikely to affect sensitive receptors in the area.

4.9 Hazardous Materials

4.9.1 Regulatory Setting

The management of hazardous materials is regulated under various federal and state environmental and transportation laws and regulations, including the Resource Conservation and Recovery Act (RCRA); the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); the Toxic Substances Control Act of 1976 (TSCA); the Emergency Planning and Community Right-to-Know Act; the Hazardous Materials Transportation Act; and the Louisiana Voluntary Investigation and Remedial Action statute. The purpose of the

DRAFT

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 these 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 EPA 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] section 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 products, sets limits for PCB contamination of the environment, and authorizes the remediation of sites contaminated with PCB. Subchapter II, "Asbestos Hazard Emergency Response" (§§ 2641-2656), authorizes the EPA 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 EPA 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.

4.9.2 Existing Conditions

This section describes the potential for prior releases of hazardous materials to the environment on the proposed site, or close enough to the proposed site to have affected its surface soils or subsurface media (soils and groundwater). This EA also evaluates the potential for the proposed project to use hazardous materials, generate hazardous wastes, and release hazardous substances.

EPA and LDEQ database searches for the proposed project site revealed that there are no hazardous waste, Louisiana Volunteer Remedial Program (VRP)/Brownfield sites, or leaking underground storage tank sites (LUSTs) located on or in close proximity to the proposed site. No sites of concern were found during a review of the Electronic Document Management System (EDMS) database for other hazardous waste management and disposal, solid waste disposal, enforcement, and other databases on the proposed site. There are no recorded oil and gas wells on or near the proposed property.

There are several existing shelters and rest areas within the golf complex footprint that would be made safe and secure or demolished, and that may contain surfaces coated with Lead-Based Paint (LBP).

4.9.3 Environmental Consequences

Alternative 1 – No Action

The No Action Alternative would not disturb any hazardous materials or create any potential hazard to human health.

DRAFT

Alternative 2 – Repair Back to Original Configuration

No hazardous materials, wastes, or substances (including contaminated soil or groundwater) have been identified at the site. Repair of the Golf Complex to its original configuration in its same footprint would not disturb any hazardous materials or create any potential hazard to human health.

Alternative 3 – Repair In Same Footprint to Different Configuration

No hazardous materials, wastes, or substances (including contaminated soil or groundwater) have been identified at the project site. Repair of the Golf Complex in its same footprint to a different configuration, would not disturb any hazardous materials or create any potential hazard to human health. With respect to the possible presence of lead based paint, for the repair or demolition of existing shelters and rest areas, repair or renovation of restrooms and maintenance facilities, and relocation of the clubhouse, applicant would be responsible for complying with the Toxic Substances Control Act (TSCA), § 402(c)(3) requirements (15 U.S.C. § 2682[c]).

Project construction may involve the use of hazardous materials (*e.g.*, petroleum products, cement, caustics, acids, solvents, paints, electronic components, pesticides/herbicides and fertilizers, treated timber) and may result in the generation of small amounts of hazardous wastes. Best management practices and appropriate measures to prevent, minimize, and control spills of hazardous materials shall be taken, and any hazardous and non-hazardous wastes generated shall disposed of in accordance with applicable federal, state, and local requirements.

Alternative 4 – Consolidate/Reconfigure in Substantially Same Footprint (Proposed Action)

No hazardous materials, wastes, or substances (including contaminated soil or groundwater) have been identified at the proposed site. If hazardous constituents are unexpectedly encountered in the project area during the proposed construction operations, appropriate measures for the proper assessment, remediation and management of the contamination shall be initiated in accordance with applicable federal, State, and local rules and regulations. Applicant would be responsible, with respect to shelter and rest area repair or demolition activities, and the possible presence of lead based paint, for complying with Toxic Substances Control Act (TSCA, § 402(c)(3) requirements (15 U.S.C. § 2682[c]).

Project construction may involve the use of hazardous materials (*e.g.*, petroleum products, cement, caustics, acids, solvents, paints, electronic components, pesticides/herbicides and fertilizers, treated timber) and may result in the generation of small amounts of hazardous wastes. Best management practices and appropriate measures to prevent, minimize, and control spills of hazardous materials shall be taken, and any hazardous and non-hazardous wastes generated shall disposed of in accordance with applicable federal, state, and local requirements.

4.10 Environmental Justice

4.10.1 Regulatory Setting

Executive Order 12898, entitled "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," was signed on February 11, 1994. The Executive Order directs federal agencies to make achieving environmental justice part of their missions by identifying and addressing, as appropriate, disproportionately high adverse human health,

DRAFT

environmental, economic, and social effects of its programs, policies and activities on minority or low-income populations.

4.10.2 Existing Conditions

Socioeconomic and demographic data for the project area was reviewed to determine if the proposed action would have a disproportionate adverse impact on minority or low-income persons. According to the U.S. Census, the population of zip code 70124 is: White, 90.1%; Black or African American; 4.8%, and Asian, 2.1%. The population of the City of New Orleans is: 33.0% White; 60.2% Black or African American; 2.9% Asian. The median household income for zip code 70124 is $51,684, and 3.6% of families earn below the poverty level. The median household income for the City of New Orleans is $37,468, and 24.4% of families earn below the poverty level.

4.10.3 Environmental Consequences

Alternative 1 – No Action
Under the No Action Alternative, there would be no disproportionately high or adverse impacts on minority or low-income populations.

Alternative 2 – Repair Back to Original Configuration
Repair of the Golf Course Complex back to its original configuration would have no disproportionate adverse impacts to low-income or minority populations.

Alternative 3 – Repair In Same Footprint to Different Configuration
Reconstruction of the Golf Course Complex in the same footprint, but to a different configuration that provides a hierarchical range of affordable golf experiences and includes a professional level championship golf course, would have no disproportionate adverse impacts to low-income or minority populations, and is anticipated to provide positive short and long-term benefits to the socioeconomic environment present at and surrounding the project site by increasing expenditures at local businesses and property values in the surrounding communities.

Alternative 4 – Consolidate/Reconfigure in Substantially Same Footprint (Proposed Action)
The Proposed Action will have no disproportionate adverse human health, economic, or social effects on minority or low-income populations. The project would restore lost functions; provide a range of recreational golf experiences; provide improved drainage and irrigation, decreasing the susceptibility to flooding in the immediate and surrounding areas; and return a significant amount of park acreage to the community as green space for non-golf usage. Positive benefits are also anticipated in the form of increased expenditures at local businesses and increased property values. These actions are anticipated to have both short and long-term impacts, and are not disproportionate as they will provide benefits for the community at large.

5.0 CUMULATIVE IMPACTS

The Council on Environmental Quality (CEQ) regulations state that cumulative impacts represent the "impact on the environment which results from the incremental impact of the action

DRAFT

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 effects can result from individually minor but collectively significant actions taking place over a period of time (40 CFR 1508.7).

In accordance with NEPA, and to the extent reasonable and practicable, this EA considered the combined effects of the Proposed Action Alternative and other actions occurring in the vicinity of the proposed action site. There are numerous FEMA funded and non-FEMA funded repair and reconstruction projects occurring in City Park and the surrounding community to restore damaged buildings, roads, recreational and educational facilities, and public utilities. These infrastructure recovery and improvement actions, some of which have already occurred, and many of which will occur concurrent with and or subsequent to the proposed action, are necessary as a result of the unprecedented devastation caused by the 2005 hurricanes.

Although devastating, the 2005 storms created an opportunity for the Applicant to serve all City of New Orleans residents by improving the areas designated for golf within City Park, while freeing up significant acreage for other, non-golf uses; increasing the golf complex's ability to control water level amounts in and around the golf courses, thus decreasing reliance upon, and freeing up City resources for, storm water drainage during large storm events; and beneficially effecting the economy of City Park and that of the surrounding community. The incremental effects of the other infrastructure recovery and improvement actions are likely to be similar to the impacts and effects described in this EA for the present proposed action. Therefore, considered in relation to past, present, and reasonably foreseeable future actions, the cumulative impact of the proposed action to the built and natural environment would be minimal, would be beneficial rather than detrimental, and is not expected to contribute to any adverse effects or to otherwise significantly affect the human environment.

6.0 CONDITIONS AND MITIGATION MEASURES

Based upon the studies and consultations undertaken in this EA, several conditions must be met and mitigation measures must be taken by FP&C prior to and during project implementation.

- In accordance with applicable local, state, and federal regulations, the applicant is responsible for acquiring any necessary permits and/or clearances prior to the commencement of any construction related activities.

- Applicant will be required to conduct a wetland delineation of the proposed location and seek a jurisdictional determination from the USACE regarding the existence of wetlands and other waters of the U.S. on the proposed project site. Applicant is responsible for securing any permits under the CWA that may be required as a result of the undertaking. All coordination pertaining to these activities and applicant compliance with any conditions should be documented and copies forwarded to the state and FEMA for inclusion in the permanent project files.

- A Louisiana Pollution Discharge Elimination System (LPDES) permit may be required in accordance with the Clean Water Act and the Louisiana Clean Water Code. The applicant shall require its contractor to prepare, certify, and implement a construction storm water

DRAFT

pollution prevention plan approved by LDEQ to prevent sediment and construction material transport from the project site. The applicant shall comply with all conditions of the required permit. All coordination pertaining to these activities should be documented and copies forwarded to the state and FEMA as part of the permanent project files.

- The project has been found by the Louisiana Department of Natural Resources (LDNR) to be inside the Louisiana Coastal Zone. LDNR, therefore, requires that a complete Coastal Use Permit Application package (Joint Application Form, locality 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 applicant is responsible for coordinating with and obtaining any required Coastal Use Permit(s) (CUP) or other authorizations from the LDNR Office of Coastal Management's Permits and Mitigation Division prior to initiating work. The applicant must comply with all conditions of the required permits. All coordination pertaining to these activities and applicant compliance with any conditions should be documented and copies forwarded to the state and FEMA for inclusion in the permanent project files.

- The applicant is required to coordinate all construction activities with the local floodplain administrator prior to the start of any activities, and remain in compliance with formally adopted local floodplain ordinances. All coordination pertaining to these permit(s) should be documented to the local floodplain administrator and copies provided to the State and FEMA as part of the permanent project files. Per 44 CFR 9.11(d)(9), mitigation or minimization standards must be applied, where possible. The replacement of building contents, materials and equipment should be, where possible, wet or dry-proofed, elevated, or relocated to or above the community established base flood elevation. Hazardous materials need to be elevated above the 0.2% annual chance (500-year) flood elevation.

- Louisiana Unmarked Human Burial Sites Preservation Act: If human bone or unmarked grave(s) are present with the project area, compliance with the Louisiana Unmarked Human Burial Sites Preservation Act (R.S. 8:671 *et seq*.) is required. The applicant shall notify the law enforcement agency of the jurisdiction where the remains are located within twenty-four hours of the discovery. The applicant shall also notify FEMA and the Louisiana Division of Archaeology at 225-342-8170 within seventy-two hours of the discovery.

- Inadvertent Discovery Clause: If during the course of work, archaeological artifacts (prehistoric or historic) are discovered, the applicant shall stop work in the vicinity of the discovery and take all reasonable measures to avoid or minimize harm to the finds. The applicant shall inform their Public Assistance (PA) contacts at FEMA, who will in turn contact FEMA Historic Preservation (HP) staff. The applicant will not proceed with work until FEMA HP completes consultation with the SHPO, and others as appropriate.

- Lead-Based Paint (LBP) - The applicant is responsible for complying with the Toxic Substances Control Act (TSCA) Section 402(c) 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.

DRAFT

- If any asbestos containing materials, lead based paint and/or other hazardous materials are found during remediation or repair activities, the applicant shall comply with all federal, state and local abatement and disposal requirements under the National Emissions Standards for Hazardous Air Pollutants (NESHAP) and Louisiana Administrative Code 33:III 5151. Demolition 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 applicant is responsible for ensuring proper disposal in accordance with the previously referenced Administrative Orders. Demolition activity notification must be sent to the LDEQ before work begins. All coordination pertaining to these activities should be documented and copies forwarded to the state and FEMA as part of the permanent project files.

- If hazardous constituents are unexpectedly encountered in the project area during the proposed construction operations, appropriate measures for the proper assessment, remediation and management of the contamination should be initiated in accordance with applicable federal, state, and local regulations.

- Project construction may involve the use of potentially hazardous materials (*e.g.,* petroleum products, cement, caustics, acids, solvents, paint, electronic components, pesticides, herbicides, fertilizers, treated timber), and may result in the generation of small amounts of hazardous wastes. Appropriate measures to prevent, minimize, and control spills of hazardous materials must be taken and generated hazardous and non-hazardous wastes are required to be disposed in accordance with applicable Federal, state and local regulations.

- To reduce potential short term effects to air quality from construction related activities, the contractor should use BMPs to reduce fugitive dust generation and diesel emissions. The contractor should water down construction areas when necessary to minimize particulate matter and dust. To reduce emission criteria pollutants, fuel-burning equipment running times should be kept at a minimum and engines should be properly maintained.

7.0 AGENCY CONSULTATION

FEMA is the lead federal agency for conducting the NEPA compliance process for this Public Assistance project. It is the responsibility of the lead agency to conduct the preparation and review of NEPA documents in a way that is responsive to the needs of the Parish communities while meeting the spirit and intent of NEPA and complying with all NEPA provisions. As part of the development of early interagency coordination related to the proposed action, state and federal resource protection agencies were contacted and FEMA distributed an informal scoping notification through a Solicitation of Views.

These resource agencies include the Louisiana State Historical Preservation Officer, U.S. Fish and Wildlife Service, the Governor's Office of Homeland Security and Emergency Preparedness, Louisiana Department of Environmental Quality, Louisiana Department of Wildlife and Fisheries, U.S. Environmental Protection Agency, Louisiana Department of Natural Resources, Louisiana Department of Agriculture and Forestry, Natural Resource Conservation Service, and the U.S. Army Corps of Engineers.

DRAFT

FEMA has received no objections to the project as proposed. Comments and conditions received from the agencies have been incorporated into this Environmental Assessment (*see Appendix A, Agency Correspondence*).

8.0 PUBLIC INVOLVEMENT

Post-Katrina and throughout development of the proposed undertaking, the CPIA has engaged in public meetings and kept the public informed concerning redevelopment of the City Park Master Plan and of its intentions regarding the Golf Course Complex. Public hearings were held in February 2005, November 2007, March 2009, and on Tuesday, March 22, 2011. The March 22, 2011 public hearing was held at the Pavilion of the Two Sisters in the Botanical Garden in City Park and considered, *inter alia*, "amendments to the City Park Master Plan to (1) reduce the acreage allocated to golf uses by modifying the golf plan, [and] (2) modify and broaden the land use category in the land use plan pertaining to the acreage removed from golf uses pursuant to the modified golf plan …" (*see Appendix D*).

FEMA has invited the public to comment on the proposed action during a fifteen (15) day comment period. A public notice will be published for five (5) days in the local newspaper, *The Times-Picayune,* announcing the availability of this draft EA for review at the Orleans Parish Main Library at 219 Loyola Avenue, New Orleans, LA, 70112. A copy of the Public Notice is attached in Appendix D.

9.0 LIST OF PREPARERS

Tiffany Spann-Winfield	Deputy Environmental Liaison Officer, FEMA, LRO
Joseph Chauvin	Environmental Protection Specialist, FEMA, LRO
Shelly A. R. Chichester	Environmental Protection Specialist, FEMA, LRO
Wayne Berggren	Floodplain Management Specialist, FEMA, LRO
Richard Williamson	Archaeologist/Historic Preservation Specialist, FEMA, LRO

DRAFT

10.0 REFERENCES

Endangered Species Act of 1973
Website: http://epw.senate.gov/esa73.pdf

Executive Order 11988, Floodplain Management, 1977.
Website: http://www.fema.gov/plan/ehp/ehplaws/eo11988.shtm.

Executive Order 11990, Wetlands Management, 1977.
Website: http://www.fema/gov/plan/ehp/ehplaws/eo11990.shtm.

Executive Order 12898, Environmental Justice for Low Income and Minority Populations, 1994.
Website: http://www.fema.gov/plan/ehp/ehplaws/ejeo.shtm.

Federal Emergency Management Agency. 2006. *Advisory Base Flood Elevation Map, Orleans Parish, Louisiana.* Website: http://www.fema.gov/pdf/hazard/flood/recoverydata/katrina/maps/katrina_la_OR-LA-EE34.pdf.

Federal Emergency Management Agency. 2008. *Preliminary Digital Flood Insurance Rate Map (DFIRM) Preliminary Revised Map Nos. 22071C0113F, 22071C0114F, 22071C0226F, and 22071C0227F*, November 9, 2012.

Federal Emergency Management Agency. 2011. David Miller. *Guidance for Use of Best Available Data in Complying with 44 CFRPart 9 and EO 11988 for Certain Areas of Greater New Orleans*

Federal Emergency Management Agency. *Flood Insurance Study Number 22071CV000A, City of New Orleans and Orleans Parish, Louisiana*, Revised November 9, 2012.

Google Earth. 2012. Aerial Imagery.

U.S. Fish and Wildlife Service. 2013. National Wetlands Inventory Maps.
http://www.fws.gov/wetlands/Data/mapper.html.

Louisiana Department of Environmental Quality (LDEQ). 2013. Electronic Document Management System.

Louisiana Department of Natural Resources (LDNR). 2013. Permits/Mitigation Support Division. Website: http://dnr.louisiana.gov/crm/coastmgt/coastmgt.asp.

Louisiana Department of Environmental Quality. Air Quality Data.
Website: http://www.deq.louisiana.gov/portal/tabid/37/Default.aspx?Search=non-attainment+areas

Louisiana Department of Environmental Quality. Volunteer Remedial Program List.
Website: http://www.deq.louisiana.gov/portal/Portals/0/Remediation Services/VRP.

DRAFT

Louisiana Department of Environmental Quality. State Brownfield list.
Online Available: http://www.deq.louisiana.gov/portal/tabid/2620/Default.aspx.

Louisiana Department of Environmental Quality. Leaking Underground Storage Tank list. Website: http://www.deq.louisiana.gov.

Louisiana Department of Natural Resources. Coastal Zone Management Act.
Website: http://dnr.louisiana.gov/crm/coastmgt/coastmgt.asp.

Louisiana Department of Natural Resources, Office of Coastal Management.
Letter Correspondence 12/13/2011 from Karl L. Morgan, Administrator.

Louisiana Mapping Project (LaMP). 2006-2007.
Website: http://www.lamappingproject.com

Meyer Engineers, Ltd., *New Orleans City Park Drainage Study*, October 3, 2008, Revised April 4, 2013.

National Oceanic and Atmospheric Administration. Coastal Barrier Resources Act.
Website: http://www.csc.noaa.gov/cmfp/reference/Coastal_Barrier _Resources_Act.htm.

New Orleans City Park Golf Master Plan http://neworleanscitypark.com/downloads/nocpgolf.pdf

New Orleans City Park Golf Revenue Numbers, April 3, 2009
http://www.cityparknola.org/web/Index.asp?mode=full&id=109.

U.S. Environmental Protection Agency (USEPA). 2013. Currently Designated Nonattainment Areas for All Criteria Pollutants.
Website: http://www.epa.gov/oar/oaqps/greenbk/ancl.html.

U.S. Fish and Wildlife Service. Endangered Species Data.
Website: http://www.fws.gov/endangered/wildlife/htm.

Wikipedia, City Park Golf Courses.
Website:http://en.wikipedia.org/w/index.php?title=City_Park_Golf_Courses_(New_Orleans)&oldid=539351561 (last visited Apr. 19, 2013).

DRAFT

Appendix A

Agency Correspondence

DRAFT

U.S. Department of Homeland Security
FEMA-DR 1603/1607 LA
1 Seine Court
New Orleans, LA 70114

FEMA

March 1, 2013

MEMORANDUM TO: See Distribution

SUBJECT: Scoping Notification/Solicitation of Views

To Whom It May Concern:

The Department of Homeland Security's Federal Emergency Management Agency (FEMA) is mandated by the U.S. Congress to administer Federal disaster assistance pursuant to the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act), PL 93-288, as amended. The Stafford Act authorizes FEMA's Public Assistance Program to provide grant assistance to eligible applicants for, among other things, debris removal, emergency protective measures, and the repair, replacement or restoration of eligible disaster damaged facilities, and may include mitigation measures to lessen future damages.

On and around August 29, 2005, high winds, wind-driven rain and storm surge generated by hurricane Katrina caused considerable damage to the City Park Golf Complex in New Orleans, LA. Pre-disaster, the City Park Golf Complex operated as four (4) 18-hole golf courses, north, south, east and west. Operation of the south course was discontinued several months prior to Katrina. The north course was fully restored post-Katrina and is currently operational.

The Applicant, State of Louisiana, Facility Planning and Control, intends to combine, reconstruct and reconfigure the west course, a portion of the east course, and related structures into a single, 18-hole, professional tournament level golf course. The balance of the east course not incorporated into the new golf course will be converted into green space for City Park visitors, and 5.5 acres not previously included will be added as buffer to the fifth hole on the new golf course. The general address of the proposed improved project is 1 Palm Drive, New Orleans, LA 70124.

Attached is the scope of work and site plan(s) for the proposed reconstruction and reconfiguration of the east and west courses for which FEMA funding has been requested.

To ensure compliance with the National Environmental Policy Act (NEPA), Executive Orders (EOs), and other applicable Federal regulations, we will be preparing an Environmental Assessment (EA). To assist us in preparation of the EA, we request that your office review the attached documents for a determination as to the requirements of any formal consultations, regulatory permits, determinations, or authorizations.

Please respond within thirty (30) calendar days of the date of this scoping notification.

Comments may be faxed to (504) 762-2323, emailed to Shelly.Chichester@fema.dhs.gov, or mailed to the attention of Shelly A. R. Chichester, Environmental and Historical Preservation Program, at the above address.

This project has been reviewed for effects to Federal trust resources under our jurisdiction and currently protected by the Endangered Species Act of 1973 (Act). The project, as proposed,
(✓) Will have no effect on those resources
( ) Is not likely to adversely affect those resources.
This finding fulfills the requirements under Section 7(a)(2) of the Act.

Deborah A Sullen March 11, 2013

Acting Supervisor
Louisiana Field Office
U.S. Fish and Wildlife Service

Date

Bobby Jindal
Governor

State of Louisiana

Department of Wildlife & Fisheries

Robert J. Barham
Secretary

March 11, 2013

Karl Morgan, Administrator
Louisiana Department of Natural Resources
Office of Coastal Management
P.O. Box 44487
Baton Rouge, LA 70804-4487

RE: *Application Number: P20130350*
Applicant: U.S. Department of Homeland Security-FEMA
Notice Date: March 6, 2013

Dear Mr. Morgan:

The professional staff of the Louisiana Department of Wildlife and Fisheries (LDWF) has reviewed the notice referenced above. The following recommendations have been provided by the appropriate biologist(s):

Ecological Studies:
It is anticipated that the proposed activity will have minimal or no long-term adverse impacts to wetland functions and, therefore, we have no objection.

The Louisiana Department of Wildlife and Fisheries appreciates the opportunity to review and provide recommendations to you regarding this proposed activity. Please do not hesitate to contact LDWF Permits Coordinator Dave Butler at 225-763-3595 should you need further assistance.

Sincerely,

Kyle F. Balkum
Biologist Program Manager

cd/im

BOBBY JINDAL
GOVERNOR

State of Louisiana
DEPARTMENT OF WILDLIFE AND FISHERIES
OFFICE OF WILDLIFE

ROBERT J. BARHAM
SECRETARY
JIMMY L. ANTHONY
ASSISTANT SECRETARY

Date	March 25, 2013
Name	Shelly Chichester
Company	FEMA
Street Address	1 Seine Court
City, State, Zip	New Orleans, LA 70114
Project	New Orleans City Park Golf Course
Project ID	
Invoice Number	13032501

Personnel of the Habitat Section of the Coastal & Nongame Resources Division have reviewed the preliminary data for the captioned project.

Bayou St. John, which is designated as a Scenic River, is locatedwithin a ¼ mile of the proposed project. Contact Keith Cascio with the Louisiana Department of Wildlife and Fisheries at 318-343-4045 concerning this Scenic River.

After careful review of our database, no other impacts to rare, threatened, or endangered species or critical habitats are anticipated for the proposed project. No state or federal parks, wildlife refuges, scenic streams, or wildlife management areas are known at the specified site within Louisiana's boundaries.

The Louisiana Natural Heritage Program (LNHP) has compiled data on rare, endangered, or otherwise significant plant and animal species, plant communities, and other natural features throughout the state of Louisiana. Heritage reports summarize the existing information known at the time of the request regarding the location in question. The quantity and quality of data collected by the LNHP are dependent on the research and observations of many individuals. In most cases, this information is not the result of comprehensive or site-specific field surveys; many natural areas in Louisiana have not been surveyed. This report does not address the occurrence of wetlands at the site in question. Heritage reports should not be considered final statements on the biological elements or areas being considered, nor should they be substituted for on-site surveys required for environmental assessments. LNHP requires that this office be acknowledged in all reports as the source of all data provided here. If at any time Heritage tracked species are encountered within the project area, please contact the LNHP Data Manager at 225-765-2643. If you have any questions, or need additional information, please call 225-765-2357.

Sincerely,

Amity Bass, Coordinator
Natural Heritage Program

cc: Keith Cascio

From: Beth Altazan-Dixon
To: Chichester, Shelly
Subject: FW: DEQ SOV 130304/0435 New Orleans City Park Golf Course Reconfiguration
Date: Thursday, March 21, 2013 13:13:51
Attachments: image001.png

Beth

Beth Altazan-Dixon, EPS III
Performance Management
LDEQ/Office of the Secretary
Business and Community Outreach and Incentives Division
P.O. Box 4301 (602 N. 5th Street)
Baton Rouge, LA 70821-4301
Phone: 225-219-3955
Fax: 225-325-8148
Email: ***beth.dixon@la.gov***

From: Beth Altazan-Dixon
Sent: Friday, March 08, 2013 9:10 AM
To: 'shelly.chichester@fema.dhs.gov'
Subject: DEQ SOV 130304/0435 New Orleans City Park Golf Course Reconfiguration

March 8, 2013

Tiffany Spann-Winfield, Deputy Environmental Liaison Officer
FEMA-Environmental Section, 4th Floor
1 Seine Court
New Orleans, LA 70114
shelly.chidester@fema.dhs.gov

RE: 130304/0435

New Orleans City Park Golf Course Reconfiguration
FEMA Funding
Orleans Parish

Dear Ms. Spann-Winfield:

The Department of Environmental Quality (LDEQ), Business and Community Outreach Division has received your request for comments on the above referenced project.

After reviewing your request, the Department has no objections based on the information provided in your submittal. However, for your information, the following general comments have been included. Please be advised that if you should encounter a problem during the implementation of this project, you should immediately notify LDEQ's Single-Point-of-contact (SPOC) at (225) 219-3640.

- Please take any necessary steps to obtain and/or update all necessary approvals and environmental permits regarding this proposed project.
- If your project results in a discharge to waters of the state, submittal of a Louisiana Pollutant Discharge Elimination System (LPDES) application may be necessary.

- 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.
- All precautions should be observed to control nonpoint source pollution from construction activities. LDEQ has stormwater general permits for construction areas equal to or greater than one acre. It is recommended that you contact the LDEQ Water Permits Division at (225) 219-9371 to determine if your proposed project requires a permit.
- If your project will include a sanitary wastewater treatment facility, a Sewage Sludge and Biosolids Use or Disposal Permit application or Notice of Intent must be submitted no later than January 1, 2013. Additional information may be obtained on the LDEQ website at http://www.deq.louisiana.gov/portal/tabid/2296/Default.aspx or by contacting the LDEQ Water Permits Division at (225) 219- 9371.
- If any of the proposed work is located in wetlands or other areas subject to the jurisdiction of the U.S. Army Corps of Engineers, you should contact the Corps directly regarding permitting issues. If a Corps permit is required, part of the application process may involve a water quality certification from LDEQ.
- All precautions should be observed to protect the groundwater of the region.
- Please be advised that water softeners generate wastewaters that may require special limitations depending on local water quality considerations. Therefore if your water system improvements include water softeners, you are advised to contact the LDEQ Water Permits to determine if special water quality-based limitations will be necessary.
- Any renovation or remodeling must comply with LAC 33:III.Chapter 28, Lead-Based Paint Activities; LAC 33:III.Chapter 27, Asbestos-Containing Materials in Schools and State Buildings (includes all training and accreditation); and LAC 33:III.5151, Emission Standard for Asbestos for any renovations or demolitions.
- If any solid or hazardous wastes, or soils and/or groundwater contaminated with hazardous constituents are encountered during the project, notification to LDEQ's Single-Point-of-Contact (SPOC) at (225) 219-3640 is required. Additionally, precautions should be taken to protect workers from these hazardous constituents.

Currently, Orleans Parish is classified as attainment with the National Ambient Air Quality Standards and has no general conformity determination obligations.

Please send all future requests to my attention. If you have any questions, please feel free to contact me at (225) 219-3958 or by email at beth.dixon@la.gov.

Sincerely,

Beth

Beth Altazan-Dixon, EPS III
Performance Management
LDEQ/Office of the Secretary
Business and Community Outreach and Incentives Division
P.O. Box 4301 (602 N. 5th Street)
Baton Rouge, LA 70821-4301
Phone: 225-219-3955
Fax: 225-325-8148
Email: ***beth.dixon@la.gov***

United States Department of Agriculture

NRCS

Natural Resources Conservation Service
3737 Government Street
Alexandria, LA 71302

(318) 473-7751
Fax: (318) 473-7626

April 24, 2013

Shelly A. R. Chichester
FEMA Louisiana Recovery Office
1 Seine Court
New Orleans, LA 70114

RE: Orleans Parish – New Orleans City Park Golf Complex Repair/Reconfiguration

Dear Ms. Chichester,

I have reviewed the above referenced project for potential requirements of the Farmland Protection Policy Act (FPPA) and potential impact to Natural Resource Conservation Service projects in the immediate vicinity.

Projects are subject to FPPA requirements if they may irreversibly convert farmland (directly or indirectly) to nonagricultural use and are completed by a federal agency or with assistance from a federal agency. For the purpose of FPPA, farmland includes prime farmland, unique farmland, and land of statewide or local importance. Farmland subject to FPPA requirements can be forest land, pastureland, cropland, or other land, but not water or urban built-up land.

The project map and narrative submitted with your request indicates that the proposed construction areas are within urban areas and therefore are exempt from the rules and regulations of the Farmland Protection Policy Act (FPPA)—Subtitle I of Title XV, Section 1539-1549. Furthermore, we do not predict impacts to NRCS work in the vicinity.

For specific information about the soils found in the project area, please visit our Web Soil Survey at the following location: http://websoilsurvey.nrcs.usda.gov/

Please direct all future correspondence to me at the address shown above.

Respectfully,

Sarah Haymaker
Acting State Conservationist

DEPARTMENT OF THE ARMY
NEW ORLEANS DISTRICT, CORPS OF ENGINEERS
P. O. BOX 60267
NEW ORLEANS, LOUISIANA 70160-0267

REPLY TO
ATTENTION OF

APR 0 2 2013

Operations Division
Operations Manager,
Completed Works

Ms. Shelly A. R. Chichester
U.S. Department of Homeland Security
FEMA-DR 1603/1607 LA
1 Seine Court
New Orleans, LA 70114

Dear Ms. Chichester:

This is in response to your Solicitation of Views request dated March 1, 2013, on behalf of the New Orleans City Park Golf Complex, concerning the reconstruction and reconfiguration of the City Park Golf Complex in Orleans Parish, Louisiana.

We have reviewed your request for potential Department of the Army regulatory requirements and impacts on any Department of the Army projects.

We do not anticipate any adverse impacts to any Corps of Engineers projects.

We have reviewed your project as proposed and determined that a Department of the Army permit under Section 404 of the Clean Water Act will be required.

You are advised that this approved jurisdictional determination is valid for a period of five years from the date of this letter unless new information warrants revision prior to the expiration date or the District Commander has identified, after public notice and comment, that specific geographic areas with rapidly changing environmental conditions merit re-verification on a more frequent basis.

Off-site locations of activities such as borrow, disposals, haul-and detour-roads and work mobilization site developments may be subject to Department of the Army regulatory requirements and may have an impact on a Department of the Army project.

You should apply for said permit well in advance of the work to be performed. The application should include sufficiently detailed maps, drawings, photographs, and descriptive text for accurate evaluation of the proposal.

Please contact Mr. Robert Heffner, of our Regulatory Branch by telephone at (504) 862-1288, or by e-mail at Robert.A.Heffner@usace.army.mil for questions concerning wetlands determinations or need for on-site evaluations. Questions concerning regulatory permit requirements may be addressed to Mr. Michael Farabee by telephone at (504) 862-2292 or by email at Michael.V.Farabee@usace.army.mil.

Future correspondence concerning this matter should reference our account number MVN-2010-00068-1-SQ. This will allow us to more easily locate records of previous correspondence, and thus provide a quicker response.

Sincerely,

Karen L. Clement

Karen L. Clement
Solicitation of Views Manager

FILE

B. LaBorde x2225

Operations Division
Eastern Evaluation Section

OCT 19 2011

City Park Improvement Association
1 Palm Drive
New Orleans, Louisiana 70124

Gentlemen,

This letter constitutes a Final Determination of Eligibility.

The final determination is as follows:

a. The proposed work for improvements to the lagoon system of the City Park Golf Course, in Orleans Parish, Louisiana, as shown on the attached drawings, is **authorized** under NOD-22 provided that all conditions of the permit are met. This approval to perform work is valid for 5 years from the date of this letter.

b. Prior to commencing work on your project, you must obtain approvals from state and local agencies as required by law and by terms of this permit. These approvals include, but are not limited to, a permit or waiver from the Coastal Management Division of the Louisiana Department of Natural Resources and a water quality certification from the Louisiana Department of Environmental Quality.

c. The following special condition is added to the permit:

1. If the proposed project requires any additional work not expressly permitted herein, or if there are any future plans for construction on the site, the permittee must apply for an amendment to this authorization.

2. Permittee is aware that this office may re-evaluate its decision on this permit at any time the circumstances warrant.

3. The Chitimacha Tribe of Louisiana has stated that the project area is part of the aboriginal Chitimacha homelands. If during the course of work at the site, prehistoric and/or historic aboriginal cultural materials are discovered, the permittee shall contact the Chitimacha Tribe of Louisiana at P.O. Box 661, Charenton, LA 70523, and the US Army Corps of Engineers, New Orleans District, Regulatory Branch (CEMVN). CEMVN, Regulatory Branch will initiate the required federal, state, and tribal coordination to determine the significance of the cultural materials and the need, if applicable, for additional cultural resource investigations.

d. Your Department of the Army permit authorization number for this project is MVN-2011-1775-EOO.

The New Orleans District Regulatory Branch is committed to providing quality and timely service to our customers. In an effort to improve customer service, please take a moment to complete and return the attached Customer Service Survey or go to the survey found on our web site at http://per2.nwp.usace.army.mil/survey.html.

Should you have any further questions concerning this matter, please call Brad LaBorde at (504) 862-2225.

Sincerely,

M.FARABEE
OD-SE

SERIO
OD-S

Pete J. Serio
Chief, Regulatory Branch

Enclosure

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS TX 75202-2733

March 25, 2013

Shelly Chichester
Environmental and Historical Preservation Program
U.S. Department of Homeland Security
FEMA-DR 1603/1607 LA
1 Seine Court
New Orleans, Louisiana 70114

Dear Ms. Chichester:

The U.S. Environmental Protection Agency (EPA) has completed your request of a review of the scoping notification and solicitation of views concerning the New Orleans City Park Golf Complex. The scope of the work for the project includes the construction of a single, 18-hole, professional tournament level golf course, including green space and buffers. The comments that follow are being provided relative to the EPA's *404(b)(1) Guidelines for Specification of Disposal Sites for Dredged or Fill Material (40 CFR Part 230).*

Our preliminary review revealed that jurisdictional waters of the U.S. may occur on site. At this time, the EPA does not object to the project as proposed and recommends coordination with the U.S. Army Corps of Engineers at the New Orleans District Office to verify if jurisdictional waters of the U.S. do occur on site and which permits, if any, are needed. Thanks for the opportunity to review the proposed project. If you have any questions or would like to discuss the issue further, please do not hesitate to contact me at Gutierrez.raul@epa.gov or 214-665-6697.

Sincerely yours,

Raul Gutierrez, Ph.D.
Wetlands Section
Water Quality Protection Division

BOBBY JINDAL
GOVERNOR

STEPHEN CHUSTZ
INTERIM SECRETARY

State of Louisiana

DEPARTMENT OF NATURAL RESOURCES

OFFICE OF COASTAL MANAGEMENT

03/11/2013

U.S. DEPARTMENT OF HOMELAND SECURITY - FEMA
1 SEINE COURT
NEW ORLEANS, LA 70114

RE: P20130350, Solicitation of Views
U.S. DEPARTMENT OF HOMELAND SECURITY - FEMA
Description: Reconstruct/reconfigure the City Park Golf Complex in New Orleans
Location: Lat 30º 00' 26.19"N / Long -90º 05' 30.97"W; 1 Palm Drive New Orleans, 70124
Orleans Parish, LA

Dear Shelly A.R. Chichester:

We have received your Solicitation of Views for the above referenced project, which has been found to be inside the Louisiana Coastal Zone. In order for us to properly review and evaluate this project, we require that a complete Coastal Use Permit Application packet (Joint Application Form, locality maps, project illustration plats with plan and cross section views, etc.) along with the appropriate application fee be submitted to our office. Using your complete application, we can provide you with an official determination, and begin the processing of any Coastal Use Permit that may be required for your project. You may obtain a free application packet by calling our office at (225) 342-7591 or (800)-267-4019, or by visiting our website at http://www.dnr.state.la.us/crm/coastmgt/cup/cup.asp.

We recommend that, during your planning process, you make every effort to minimize impacts to vegetated wetlands. As our legislative mandate puts great emphasis on avoiding damages to these habitats, in many cases the negotiations involved in reducing such disturbances and developing the required mitigation to offset the lost habitat values delay permit approval longer than any other factor. Additionally, the following sensitive features may require additional processing time by the appropriate resource agencies:

1. Chitimacha Tribe of Louisiana -- The area where the project is located is understood to be part of the aboriginal homelands of the Chitimacha Tribe of Louisiana. Please contact Kimberly S. Walden (Cultural Director) or Melanie Aymond (Research Coordinator) at (337) 923-9923 or (337) 923-4395.

2. Scenic/Historic River, Bayou St. John -- Please contact Keith Cascio of Louisiana Dept. of Wildlife and Fisheries, (318) 343-4045.

3. Please contact Gerard J. Gillen with the Orleans Levee District to coordinate on the issue of any construction permit in relation to levee proximity, (504) 286-3100 ext. 1007, or ggillen@orleanslevee.com.

Should you desire additional consultation with our office prior to submitting a formal application, we recommend that you call and schedule a pre-application meeting with our Permit Section staff. Such a preliminary meeting may be helpful, especially if a permit application that is as complete as possible is presented for evaluation at the pre-application meeting.

If you have any questions, would like to request an application packet or would like to schedule a pre-application meeting, please contact Ed Britton at (225) 342-7941 or ed.britton@la.gov.

Sincerely,

Karl L. Morgan
Administrator

Karl L. Morgan/eb

Attachments

Final Plats:

1) P20130350 Final Plats 03/04/2013

cc: Orleans Levee District w/plats
Jessica Diez, OCM w/plats
Tim Killeen, CMD/FI w/plats
Orleans Parish w/plats

BOBBY JINDAL
GOVERNOR

STEPHEN CHUSTZ
INTERIM SECRETARY

State of Louisiana

DEPARTMENT OF NATURAL RESOURCES

OFFICE OF COASTAL MANAGEMENT

03/06/2013

U.S. DEPARTMENT OF HOMELAND SECURITY - FEMA
1 SEINE COURT
NEW ORLEANS, LA 70114

RE: P20130350, Solicitation of Views
U.S. DEPARTMENT OF HOMELAND SECURITY - FEMA
Description: Reconstruct and reconfigure the City Park Golf Complex at 1 Palm Drive in New Orleans
Location: Lat 30º 00' 26.19"N / Long -90º 05' 30.97"W; 1 Palm Drive New Orleans, 70124
Orleans Parish, LA

Dear Shelly A.R. Chichester:

You are hereby advised that your application for a Coastal Use Permit (CUP) has been determined to be complete and review by the State for compliance with the Louisiana Coastal Resource Program (LCRP) and consistency with the federal Coastal Zone Management Act (CZMA) has begun. Additionally, it has been determined that your proposed activity is a use of state concern in accordance with Louisiana Revised Statue 49:214.5.

All correspondence and calls regarding this application should reference the Coastal Use Permit Number (P#) indicated above. Please note that all information concerning your application is in our database and is updated throughout the day as changes to the status of the application occur.
Your application can be found on our Webpage.

Should you have any questions, please check the online database or contact the assigned permit analyst: Ed Britton at (225) 342-7941 or ed.britton@la.gov. Be sure to reference the above Coastal Use Permit Number.

Chris Melt

Permit Coordinator

CM

Post Office Box 44487 • Baton Rouge, Louisiana 70804-4487
617 North Third Street • 10th Floor • Suite 1078 • Baton Rouge, Louisiana 70802
(225) 342-7591 • Fax (225) 342-9439 • http://www.dnr.louisiana.gov
An Equal Opportunity Employer

cc: Martin Mayer, COE

U.S. DEPARTMENT OF HOMELAND SECURITY - FEMA

BOBBY JINDAL
GOVERNOR

SCOTT A. ANGELLE
SECRETARY

State of Louisiana

DEPARTMENT OF NATURAL RESOURCES

OFFICE OF COASTAL MANAGEMENT

09/21/2011

CITY PARK IMPROVEMENT ASSOCIATION
1 PALM DRIVE
NEW ORLEANS, LA 70124

RE: P20111206, Coastal Use Permit Application
CITY PARK IMPROVEMENT ASSOCIATION
Description: See Attached document for project description.
Location: Lat 30° 0' 36.58"N / Long -90° 05' 29.61"W; Filmore Ave New Orleans, 70124
Orleans Parish, LA

Dear Bob Becker:

You are hereby advised that your application for a Coastal Use Permit (CUP) has been determined to be complete and review by the State for compliance with the Louisiana Coastal Resource Program (LCRP) and consistency with the federal Coastal Zone Management Act (CZMA) has begun. Additionally, it has been determined that your proposed activity is a use of state concern in accordance with Louisiana Revised Statue 49:214.5. This letter also acknowledges receipt of your payment of the application fee.

The Office of Coastal Management (OCM) has sent a copy of this permit application to the New Orleans District Corps of Engineers (NOD/COE). The NOD/COE and OCM will each process this application separately. Please be advised that if your project is located outside of the New Orleans District, it is your responsibility to apply to the appropriate COE District.

All correspondence and calls regarding this application should reference the Coastal Use Permit Number (P#) indicated above. Please note that all information concerning your application is in our database and is updated throughout the day as changes to the status of the application occur.
Your application can be found on our Webpage.

Should you have any questions, please check the online database or contact the assigned permit analyst: Sharon Mccarthy at (225) 342-6140 or Sharon.McCarthy@la.gov. Be sure to reference the above Coastal Use Permit Number.

Sincerely,

Chris Nelson

Permit Coordinator

CM

Post Office Box 44487 • Baton Rouge, Louisiana 70804-4487
617 North Third Street • 10th Floor • Suite 1078 • Baton Rouge, Louisiana 70802
(225) 342-7591 • Fax (225) 342-9439 • http://www.dnr.louisiana.gov
An Equal Opportunity Employer

cc: Pete Serio, COE

CITY PARK IMPROVEMENT ASSOCIATION

DEPARTMENT OF NATURAL RESOURCES
OFFICE OF COASTAL MANAGEMENT
P.O. BOX 44487
BATON ROUGE, LOUISIANA 70804-4487

(225) 342-7591
1-800-267-4019

COASTAL USE AUTHORIZATION/CONSISTENCY DETERMINATION

C.U.P No.: **P20111206**

NAME : **CITY PARK IMPROVEMENT ASSOCIATION**
CITY PARK IMPROVEMENT ASSOCIATION
1 PALM DRIVE
NEW ORLEANS, LA 70124

LOCATION: **Orleans Parish, LA**
Lat 30° 00' 36.58"N / Long -90° 05' 29.61"W; City Park Gulf Course, off of Filmore Ave., New Orleans, 70124.

DESCRIPTION: Proposed golf course renovations consisting of enlarging existing bodies of water to provide strategic enhancement for golf play and the installation of two sets of 500' double culvert pipes within the canal system of City Park Gulf Course site. Project includes the excavation of approximately 40,000 cubic yards to enlarge existing bodies of water and 22,000 cubic yards of hauled in fill material consisting of gravel and batture sand for the culvert installations.

Pursuant to the State and Local Coastal Resources Management Act of 1978, as amended (La. R.S. 49:214.34.A), the proposed activity is exempt and a Coastal Use Permit is not required.

This determination is valid for two (2) years from the date of this letter. If the proposed activity is not initiated within this two year period, this determination will expire. The applicant will notify the Office of Coastal Management of the date on which initiation of the proposed activity began by entering a commencement date through the online system, or by mailing said information to OCM. Initiation does not include preparatory activities, such as movement of equipment onto the Coastal Use site, expenditure of funds, contracting out of work, or performing activities which by themselves do not require a permit. In addition, Permittee must, in good faith and with due diligence, reasonably progress toward completion of the project once the Coastal Use has been initiated.

This determination has been made on the basis of information provided by your application. If it is later established that you furnished erroneous data, you may be directed to alter or modify your plans, to remove structures you have installed, and/or to restore the work area to pre-project conditions at your own expense. If it is established that you knowingly furnished erroneous data, you could also be subject to legal action.

Permittee shall, prior to commencement of the herein permitted activities, contact Orleans Levee District, Attn: Mr. Gerard Gillen, III Address: 6920 Franklin Avenue New Orleans, LA 70122 ggillen@orleanslevee.com to determine if a construction permit will be required from the local levee district. This determination does not eliminate the need to obtain a permit from the United States Army, Corps of Engineers or any other Federal, state or local approval that may be required by law. The drawings submitted with your referenced application are attached hereto and made a part of the record. If you have any questions regarding this authorization, please contact our office (225) 342-7591 or (800) 267-4019.

******* End of Determination *******

By accepting this determination the applicant agrees to its terms and conditions.

I affix my signature and issue this determination this 27th day of September, 2011.

DEPARTMENT OF NATURAL RESOURCES

Karl L Mor

Karl L. Morgan, Acting Administrator
Office of Coastal Management

This agreement becomes binding when signed by the Administrator of
the Office of Coastal Management Permits/Mitigation Division, Department of Natural Resources.

Attachments

Final Plats:

1) P20111206 Final Plats 09/15/2011

cc: Pete Serio, COE w/attachments
Dave Butler, LDWF w/attachments
Orleans Levee District, LD w/attachments
Peggy Rooney, OCM w/attachments
Tim Killeen, OCM/FI w/attachments
Orleans Parish w/attachments

Appendix B

Eight-Step Decision Making Process

DRAFT

FLOODPLAIN 8-STEP PLANNING DOCUMENT
FACILITY PLANNING AND CONTROL
NEW ORLEANS CITY PARK GOLF COMPLEX
ORLEANS PARISH
ENVIRONMENTAL ASSESSMENT

Date: 5/6/2013
Prepared by: Wayne Berggren, CFM, FEMA, Floodplain Specialist
Applicant: Louisiana Facility Planning and Control
Project Title: New Orleans City Park Golf Complex
Request for: Improved Project - A/I Database #: 1977; FEMA-DR-LA: 1603
FIPS #: 000-UXL4N-00;
Latitude: 30.01010 **Longitude:** -90.09090

Background and Regulatory Setting

Hurricane Katrina, DR-1603, impacted Orleans Parish Louisiana and resulted in a presidentially declared major disaster. The Golf Complex at the New Orleans City Park in Orleans Parish (*Figure 1*) was damaged by storm flooding and wind. These facilities were deemed eligible for repair and/or replacement by the Federal Emergency Management Agency (FEMA) Public Assistance Grant Program. The objective of this program is to provide assistance to State, Tribal and local governments, and certain types of private nonprofit organizations, so that communities can quickly respond to, recover from, and mitigate major disasters and emergencies.

The City Park Improvement Association (CPIA) Master Golf Plan for the City Park Golf Complex has been to provide a hierarchical range of affordable golf experiences capable of maximizing revenue potential, while minimizing the impact on the park's urban forest by leaving available as much space as possible for walking, jogging, biking, horse riding, playground activities, and other non-golf uses. Prior to Hurricane Katrina, the Golf Complex was one of the most integral and important recreational and revenue generating features of City Park.

The Applicant, Louisiana Facility Planning and Control (FP&C) is requesting, through the Governor's Office of Homeland Security and Emergency Preparedness (GOHSEP), grant funding for an "*Improved Project*" to reconstruct the facilities in a different configuration with a revised site plan. The facilities will be upgraded to better meet the objectives of the action.

The purpose of the proposed action is fulfillment of the Master Plan objectives through repair of the Golf Complex and restoration of the lost function of a range of hierarchical, revenue-generating, golf experiences. By consolidating the damaged East and West Golf Courses into a single, more compact, 18-hole professional level golf course (*Figure 2*), the CPIA hopes to restore the hierarchical golf experience, while also maximizing revenue potential and minimizing the amount of park land used for golf activities.

The Applicant's plans for the proposed action have been reviewed for effects in the base floodplain and are incorporated by reference herein). A drainage study has been conducted by the Applicant's engineer(s) to ensure the facilities are being designed to include considerations for flooding and mitigation and minimization measures that will better manage the onsite hydrologic regime thereby resulting in lowered flood risk (Meyer Engineers, Ltd., October 3, 2008, Revised April 4, 2013).

FEMA is preparing a National Environmental Policy Act (NEPA) Environmental Assessment (EA), incorporated by reference herein, to analyze potential environmental impacts of the proposed project, including those affecting facilities in the base floodplain and protection of wetlands. FEMA will use the findings in the EA to determine whether to prepare an Environmental Impact Statement (EIS) or a Finding of No Significant Impact (FONSI), and to support the floodplain and wetland "8-step" planning and public participation requirements in 44 CFR Part 9.

This project must be conducted in accordance with conditions for federal actions in the floodplain as set forth in presidential Executive Order 11988, *Floodplain Management* and presidential Executive Order 11990, *Protection of Wetlands* and the implementing regulation found at 44 Code of Federal Regulations (CFR) Part 9, *Floodplain Management and Protection of Wetlands*. These regulations apply to all Agency actions which have the potential to affect floodplains or wetlands or their occupants, or which are subject to potential harm by location in floodplains.

FEMA Public Assistance grant funded projects carried out in the floodplain should be coordinated with the local floodplain administrator for a floodplain development permit prior to the undertaking, and the action must be carried out in compliance with all relevant, applicable and required local codes and standards, so as to reduce the risk of future flood loss, minimize the impacts of floods on safety, health, and welfare, and preserve and possibly restore beneficial floodplain values as required by Executive Order 11988.

Furthermore, it is the policy of FEMA to provide leadership in floodplain management and the protection of wetlands. Specifically, FEMA shall take action to:

(1) Avoid long- and short-term adverse impacts associated with the occupancy and modification of floodplains and the destruction and modification of wetlands;

(2) Avoid direct and indirect support of floodplain development and new construction in wetlands wherever there is a practicable alternative;

(3) Reduce the risk of flood loss;

(4) Promote the use of nonstructural flood protection methods to reduce the risk of flood loss;

(5) Minimize the impact of floods on human health, safety and welfare;

(6) Minimize the destruction, loss or degradation of wetlands;

(7) Restore and preserve the natural and beneficial values served by floodplains;

(8) Preserve and enhance the natural values of wetlands;

(9) Involve the public throughout the floodplain management and wetlands protection decision-making process;

(10) Adhere to the objectives of the Unified National Program for Floodplain Management; and

(11) Improve and coordinate the Agency's plans, programs, functions and resources so that the Nation may attain the widest range of beneficial uses of the environment without degradation or risk to health and safety.

44 CFR 9.6 details an eight-step process that decision-makers must use when considering projects that have potential impacts to or within the floodplain. The 8-step process assesses the action with regard to human susceptibility to flood harm and impacts to wetlands. The 8-step analyzes principle flood problems, risks from flooding, history of flood loss, and existing flood protection measures. The process includes public notice and opportunity for the public to have early and meaningful participation in decision-making and alternative selection. In conjunction with the EA development, the 8-step process formulates and describes considered alternatives; determines their practicability; and includes requirements to incorporate measures to minimize and mitigate potential risks from flooding and impacts to wetlands.

Existing Conditions

In July 2005, FEMA initiated a series of flood insurance studies for many of the Louisiana coastal parishes as part of the Flood Map Modernization effort through FEMA's National Flood Insurance Fund. These studies were necessary because the flood hazard and risk information shown on many Flood Insurance Rate Maps (FIRMs) was developed during the 1970s, and the physical terrain had changed significantly, to include the major loss of wetland areas. After Hurricanes Katrina and Rita, FEMA expanded the scope of these studies to include all of coastal Louisiana. The magnitude of the impacts of hurricanes Katrina and Rita reinforced the urgency to obtain current flood data for the coastal zones of Louisiana. New data obtained after the hurricane – including information on levees and levee systems and high water mark information – allowed for a more detailed analysis (LaMP, 2007).

During an initial post-hurricane analysis, FEMA determined that the "100-Year" or 1-percent annual chance storm flood elevations, referred to as Base Flood Elevations, on FIRMs for many Louisiana communities, were too low. FEMA created recovery maps showing the extent and magnitude of hurricanes Katrina's and Rita's surge, as well as information on other storms over the past 25 years (Lamp 2007). The 2006 advisory flood data shown on the recovery maps for the Louisiana-declared disaster areas show high-water marks surveyed after the storm; flood limits developed from these surveyed points; and Advisory Base Flood Elevations, or ABFEs.

The recovery maps and other advisory data were developed to assist parish officials, homeowners, business owners, and other affected citizens with their recovery and rebuilding efforts (LaMP 2007).

Following an intensive five-year mapping initiative, FEMA provided updated preliminary flood hazard maps, known as Preliminary Digital Flood Insurance Rate Maps (DFIRMs), to all of Louisiana's coast parish communities. Released in 2008, these maps are based on the most technically advanced studies ever and were subjected to multiple levels of review. The DFIRMs provided communities with a more scientific approach to economic development, hazard mitigation planning, emergency response, and post-flood recovery (LaMP 2007).

The U.S. Army Corps of Engineers (USACE) is currently working on a Hurricane and Storm Damage Risk Reduction System (HSDRRS) for the Greater New Orleans (GNO) area, designed to protect the GNO area from the 1-percent annual chance of flood. This 350-mile system of levees, floodwalls, surge barriers, and pump stations reduces the flood risk associated with a storm event. A perimeter levee system protects the area from the coastal surge and the Mississippi River flooding. Pump stations are located along the perimeter levee to discharge local runoff into the exterior lakes or the Mississippi River. Local pump stations perform the same function along interior levees and discharge to marshy areas designated to collected flood water from developed areas. Two major closure complexes, the West Closure Structure Complex and the Inner Harbor Navigation Canal Complex, keep the surge from entering the major canals and navigation channels within the New Orleans area.

FEMA specifies that all levees must have a minimum freeboard of three (3) feet against 1-percent annual chance flooding to be considered a safe flood protection structure. The HSDRRS meets the FEMA freeboard requirement and in September of 2011, the USACE provided FEMA with assurances that the HSDRRS is capable of defending against a storm surge with a 1-percent annual chance event of occurring in any given year (Miller 2011).

Accordingly, in 2012 FEMA revised the preliminary DFIRMS for areas within the HSDRRS to incorporate the reduced flood risk associated with the system improvements. The 2012 Revised Preliminary DFIRMS are currently viewed as the best available flood risk data for the five GNO parishes. In many areas, the flood risk has been significantly reduced due to heightened protection. Areas protected by the HSDRRS include portions of St. Bernard, St. Charles, Jefferson, Orleans, and Plaquemines parishes (includes the entire area of the proposed action).

Impacts of Flooding

In compliance with FEMA policy implementing EO 11988, Floodplain Management, the proposed project was reviewed for possible impacts associated with occupancy or modification to a floodplain or wetland. 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 National Flood Insurance Program.

Orleans Parish enrolled in the NFIP on August 3, 1970. Orleans Parish Advisory Base Flood Elevation Maps (ABFEs) were issued in June 2006 (FEMA, 2006). This site is shown on ABFE

Panels LA-DD30, LA-DD31, LA- EE30, and LA-EE31, dated 06/05/2006, Elevation (EL) .5, or 3 feet above the Highest Existing Adjacent Grade (HEAG) (*Figure 3*). Per revised Preliminary Digital Flood Insurance Rate Map (Revised DFIRM), Panel Numbers 22071C0113F, 22071C00114F, 22071C0226F and 22071C0227F, dated 11/9/2012 (Figure 4), portions of the site are located within Zone AE, EL -0.5 feet above the North American Vertical Datum of 1988, areas of 1% annual chance flood within a Special Flood Hazard Area (SFHA) base flood elevation determined. Approximate ground elevations throughout most of City Park range from 0-1 foot above the North American Vertical Datum of 1988.

Orleans Parish has always been vulnerable to flooding during any season of the year (FEMA 2012). The principal sources of flooding are rainfall ponding and hurricane or tropical storm surges. Drainage of flood waters in Orleans Parish (included the area of the proposed action) is accomplished by a system of structures and canals which outflow to pumping stations. The system prior to Hurricane Katrina consisted of 15 major drainage pumping stations and 5 minor pumping stations which provided drainage for approximately 57,145 acres of land. The stations housed over 100 pumps with a combined capacity of approximately 48,500 cubic feet per second. Orleans Parish is protected from the Mississippi River by levees. On the east bank of Orleans Parish, the Lake Pontchartrain and Vicinity Hurricane Protection Levee was designed to prevent flooding from hurricane 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 (FEMA 2012).

<u>Meyer Engineers Drainage Study, April 2013</u>

The drainage study completed by Meyer Engineers shows that the residential area north of City Park drains north to south into a 60 inch culvert on Robert E. Lee Boulevard, which then drains west to Orleans Avenue Canal. Two small culverts convey overflow water from the north end of City Park to the culvert on Robert E. Lee Boulevard. The drainage study further indicates that the existing golf course area drainage generally flows north to south. Drainage flows through small culverts and ditches into two main canals, one on the west side of the golf area and one along the center of the park (Figure 5). It is estimated that there are approximately two million gallons of water in the canals. The two canals flow south and connect between Filmore Avenue and Harrison Avenue. From there, the waters flow south following two different canal routes, which intersect again just north of Interstate 610.

On the east side of City Park, culverts connect the canals with Bayou St. John. The water elevation in St. John Bayou is controlled by the New Orleans Sewerage and Water Board, which periodically allows water from Lake Pontchartrain flow into the Bayou. Some of this water back flows into the City Park canals, thereby preventing stagnation. At Interstate 610, where the City Park canals merge, there is a weir that controls the water surface elevation at the canals. From there the overflow waters flow southward crossing Interstate 610 in a 54 inch culvert and into New Orleans City Pump Station #7. The pump station pumps water to the north to Lake Pontchartrain through the Orleans Canal on the west side of the park (*Figure 6*).

It is anticipated that the proposed project would require no major upgrades to City park drainage structures that connect to the outside of the park (Meyer Engineers, p.3). The weir connecting the park canals to off-site drainage would be upgraded to allow for adjusting water elevation in the canals. Three additional canal crossings are planned in the new golf course layout, two will be bridges free from obstructions and one will be an "oversized" culvert. No major changes are proposed for the park canals, with the exception of the center canal, which would be widened minimally in some areas to ensure adequate flow (Meyer Engineers, p.3).

The design for the proposed golf course layout includes the addition of approximately 320,000 cubic yards of fill for establishing course contours, tees, greens, and cart paths. The drainage study concludes that with the widening of the center canal and the relatively large area, "the addition of fill will not significantly affect the storage capacity of the drainage study" and "improvements to the golf course [as proposed] will not have a negative effect on the surrounding communities" (Meyers Engineers, 2013).

Wetlands

According to the U.S. Fish & Wildlife Service (USFWS) National Wetlands Inventory (NWI) map, the proposed project area is adjacent to or intersected by wetlands or other waters of the United States under the jurisdiction of the USACE, including: Bayou St. John (NWI Classification Code R2UBH), located within ¼ mile of the proposed project site; two or more lakes/lagoons (NWI Classification Code, L1UBHx); and five or more freshwater ponds (NWI Classification Code, PUBHx) (Figure 7, USFWS National Wetlands Inventory 2013). FEMA conducted site visits on February 27 and April 26, 2013, and determined that several vegetated and other wetland areas are located on the site, including a wooded area on or near the five (5) acres of previously unused land proposed to be added as buffer for new fairway number 5. Jurisdictional wetlands and other waters of the U.S. are subject to permitting under § 404 of the Clean Water Act.

STEP 1 **Determine whether the proposed action is located in a wetland and/or the 100-year floodplain (500-year floodplain for critical actions [44 CFR 9.4]), or whether it has the potential to affect or be affected by a floodplain or a wetland (see 44 CFR 9.7).**

☒ The projects are located in a floodplain as mapped by:
Effective FIRM Panel #225203 0095E, dated 03/01/1984, and shows this site in zone A6, with Base Flood Elevations determined as (EL 0.5')
Preliminary FIRM Panels: 22071C0113 F, 22071C0114F, 22071C0226F and 22071C0227F (dated 11/09/12) places location in a Flood Zone AE (EL -5 feet above North American Vertical Datum of 1988) and Flood Zone Shaded X, protected by Levee.

☒ The project is located in a wetland as identified by:

The U.S. Fish and Wildlife National Wetland Inventory indicates portions of the proposed action are located in a mapped wetland or U.S. waters.

STEP 2 **Notify the public at the earliest possible time of the intent to carry out an action in a floodplain or wetland, and involve the affected and interested public in the decision making process (see 44 CFR 9.8).**

☐ Not applicable - Project is not located in a floodplain or in a wetland.

☒ Applicable - Notice will be or has been provided by: A cumulative Public Notice was published in the New Orleans Times Picayune, Baton Rouge Advocate, Lafayette Daily Advertiser, Lake Charles American Press and the Hammond Star on November 7th - November 9th, 2005.

Post-Katrina and throughout development of the proposed undertaking, the CPIA has engaged in public meetings and kept the public informed concerning redevelopment of the City Park Master Plan and its intentions regarding the Golf Course Complex. Public hearings were held in February 2005, November 2007, March 2009, and on Tuesday, March 22, 2011. The March 22, 2011 public hearing was held at the Pavilion of the Two Sisters in the Botanical Garden in City Park and considered, *inter alia*, "amendments to the City Park Master Plan to (1) reduce the acreage allocated to golf uses by modifying the golf plan, [and] (2) modify and broaden the land use category in the land use plan pertaining to the acreage removed from golf uses pursuant to the modified golf plan.

FEMA has invited the public to comment on the proposed action during a fifteen (15) day comment period. A public notice will be published for three (3) days in the local newspaper, *The Times-Picayune*, announcing the availability of this draft EA for review at the Orleans Parish Main Library at 219 Loyola Avenue, New Orleans, LA, 70112, and the Mid-City Branch at 3700 Orleans Ave, New Orleans, Louisiana 70119.

STEP 3 **Identify and evaluate practicable alternatives to locating the proposed action in a floodplain or wetland (including alternative sites, actions and the "no action" option) [see 44 CFR 9.9]. If a practicable alternative exists outside the floodplain or wetland, FEMA must locate the action at the alternative site.**

☐ Not applicable - Project is not located in a floodplain or in a wetland.

☒ Applicable - Alternative identified in the EA Document or is described below:

- **Alternative 1:** Under the No Action alternative, the Golf Complex would not be repaired or reconstructed. Consequently, this area of City Park would not be restored, enhanced or upgraded for golfing and other recreational activities.

- **Alternative 2:** Under this alternative, the North, East, and West Golf Courses plus the area of the driving range and clubhouse, would be repaired in the existing configuration and footprint. A new clubhouse would be built near the former clubhouse site. Maintenance facilities and the golf driving range would be renovated at their existing locations.

- **Alternative 3:** Under this alternative, the North, East, and West Golf Courses would be repaired reconfigured within the approximate same existing footprint, as two (2) 18-hole golf courses, and a single, 9-hole, course. One of the new 18-hole courses would be of professional championship caliber, and occupy approximately 310 of the 526 acres of space already allocated to golf uses. The golf clubhouse and driving range would be relocated within the existing footprint. A paved continuous golf cart path, restrooms, and a maintenance building would be repaired or reconstructed. Modifications and improvements to the irrigation and drainage systems would be accomplished through utilization of deep wells and the existing lagoon system.

- **Alternative 4:** Under this alternative, the damaged West and East Golf Courses would be repaired and reconstructed at essentially the same location as they presently exist within the golf complex at City Park, New Orleans, LA, but with a different orientation and configuration, by combing the two courses into a single, 18-hole professional tournament level golf course. The new 18-hole golf course would utilize the entire old West Course and a portion of the old East Course, convert the unused portion of the East Course (approximately 96 acres) into green space for park visitors, and convert for golf uses an additional 5.5 acres of previously unused park space. This action would rearrange the contours of the proposed site and reshape the course with irrigation and improved drainage, by rearranging the greens and fairways; enlarging or reshaping brackish and freshwater lagoons/lakes; installing a new pump station and 1,000 foot deep water well; and replacing the existing weir with a new, adjustable, weir. Two bridges would be built, and one-hundred-eight (108) trees would be removed or relocated throughout the project site.

STEP 4 **Identify the full range or potential direct or indirect impacts associated with, the occupancy or modification of floodplains and wetlands and the potential direct and indirect support of floodplain and wetland development that could result from the proposed action (see 44 CFR 9.10).**

☐ Not applicable - Project is not located in a floodplain or in a wetland.

☒ Applicable - Alternatives are described below:

Alternative 1 - No Action

Under the No Action alternative, there would be no adverse impacts within the floodplain and no additional investment at risk. Beneficial

values of the base floodplain would likely be restored in previously developed areas.

Alternative 2 – Repair Back to Original Configuration/Footprint

Repairing the golf complex back to original configuration and footprint would reestablish the revenue stream for City Park and restore the lost recreational benefits. The repair would accommodate the existing uses of the floodplain and reinforce existing land use patterns which have developed without reflection on hazard and risk minimization. Repairs would also maintain a significant investment in the base floodplain and exposes facilities to flood hazards. Repairing the golf complex forgoes an opportunity to restore the natural and beneficial values of the floodplain. Repairs and reconstruction will also increase the useful life of the facilities. Repairing and replacing facilities in the floodplain would have increased costs associated with floodplain development mitigation and minimization requirements and compliance with floodplain codes and standards.

Alternative 3 – Repair in Same Footprint to Different Configuration

Repairing the golf complex to a different configuration would reestablish the revenue stream for City Park and restore the lost recreational benefits. Repairs would also maintain a significant investment in the base floodplain and exposes facilities to flood hazards. Repairing the golf complex forgoes an opportunity to restore the natural and beneficial values of the floodplain. Repairs and reconstruction will also increase the useful life of the facilities. Repairing and replacing facilities in the floodplain would have increased costs associated with floodplain development mitigation and minimization requirements and compliance with floodplain codes and standards. Adding fill in the floodplain will alter the characteristics of flood from ponding on the site.

Alternative 4 – Consolidate/Reconfigure in Substantially Same Footprint-Proposed Action

Consolidating and reconfiguring in substantially the same footprint would reestablish the revenue stream for City Park and restore the lost recreational benefits. Consolidating and reconfiguring would also maintain and potentially increases a significant investment in the base floodplain and exposes facilities to flood hazards. This revised plan for the golf complex forgoes an opportunity to restore the natural and beneficial values of the floodplain. This will also increase the useful life of the facilities. Consolidating and reconfiguring facilities in the floodplain would have increased costs associated with floodplain development mitigation and minimization requirements and compliance

with floodplain codes and standards. Adding fill in the floodplain will alter the characteristics of flood from ponding on the site. Widening of the central canal will increase the onsite drainage retention capacity and may reduce demand on the nearby pump station #7 during times of flood.

STEP 5 **Minimize the potential adverse impacts and support to or within floodplains and wetlands to be identified under step # 4, restore and preserve the natural and beneficial values served by floodplains, and preserve and enhance the natural and beneficial values served by wetlands (see 44 CFR 9.11).**

☐ Not applicable - Project is not located in a floodplain or in a wetland.

☒ Applicable – Reconstruction/Reconfiguration shall be completed in accordance with all local floodplain ordinances with applicable codes and standards applied to mitigate and minimize adverse effects (compliance with minimum National Flood Insurance Program standards and requirements). In order to minimize indirect impacts (erosion, sedimentation, dust and other construction-related disturbances) to the nearby waters of the United States and well-defined drainage areas surrounding the site, the contractor should implement Best Management Practices (BMPs) that meet the Louisiana Department of Environmental Quality's (LDEQ's) permitting specifications for storm water discharge regulated under §§ 401 and 402 of the CWA, and include the following into the daily operations of the construction activities: silt screens, barriers (*e.g*., hay bales), berms/dikes, and/or fences to be placed where and as needed. Fencing will be placed for marking staging areas to store construction equipment and supplies as well as to conduct maintenance/repair operations.

STEP 6 **Reevaluate the proposed action to determine first, if it is still practicable in light of its exposure to flood hazards, the extent to which it will aggravate the hazards to others. And its potential to disrupt floodplain and wetland values and second, if alternatives preliminarily rejected at step # 3 are practicable in light of the information gained in steps # 4 and # 5. FEMA shall not act in a floodplain or wetland unless it is the only practicable location (see 44 CFR 9.9).**

☐ Not applicable - Project is not located in a floodplain or in a wetland.

☒ Applicable - The proposed action is the only practicable alternative based upon a review of possible adverse effects on the floodplain and community and socioeconomic expectations.

STEP 7 **Prepare and provide the public with a finding and public explanation of any final decision that the floodplain or wetland is the only practicable alternative (see 44 CFR 9.12).**

☐ Not applicable - Project is not located in a floodplain or in a wetland.

☒ Applicable - Finding is or will be prepared as described below:

A Public Notice will be published as part of the NEPA Environmental Assessment for the proposed action.

STEP 8 **Review the implementation and post-implementation phases of the proposed action to ensure that the requirements of the order are fully implemented. Oversight responsibility shall be integrated into existing processes.**

☐ Not applicable - Project is not located in a floodplain or in a wetland.

☒ Applicable –

Review the implementation and post-implementation phase of the proposed action to ensure that the requirement stated in 9.11 are fully implemented.

☐ Applicable - Oversight responsibility established as follows:

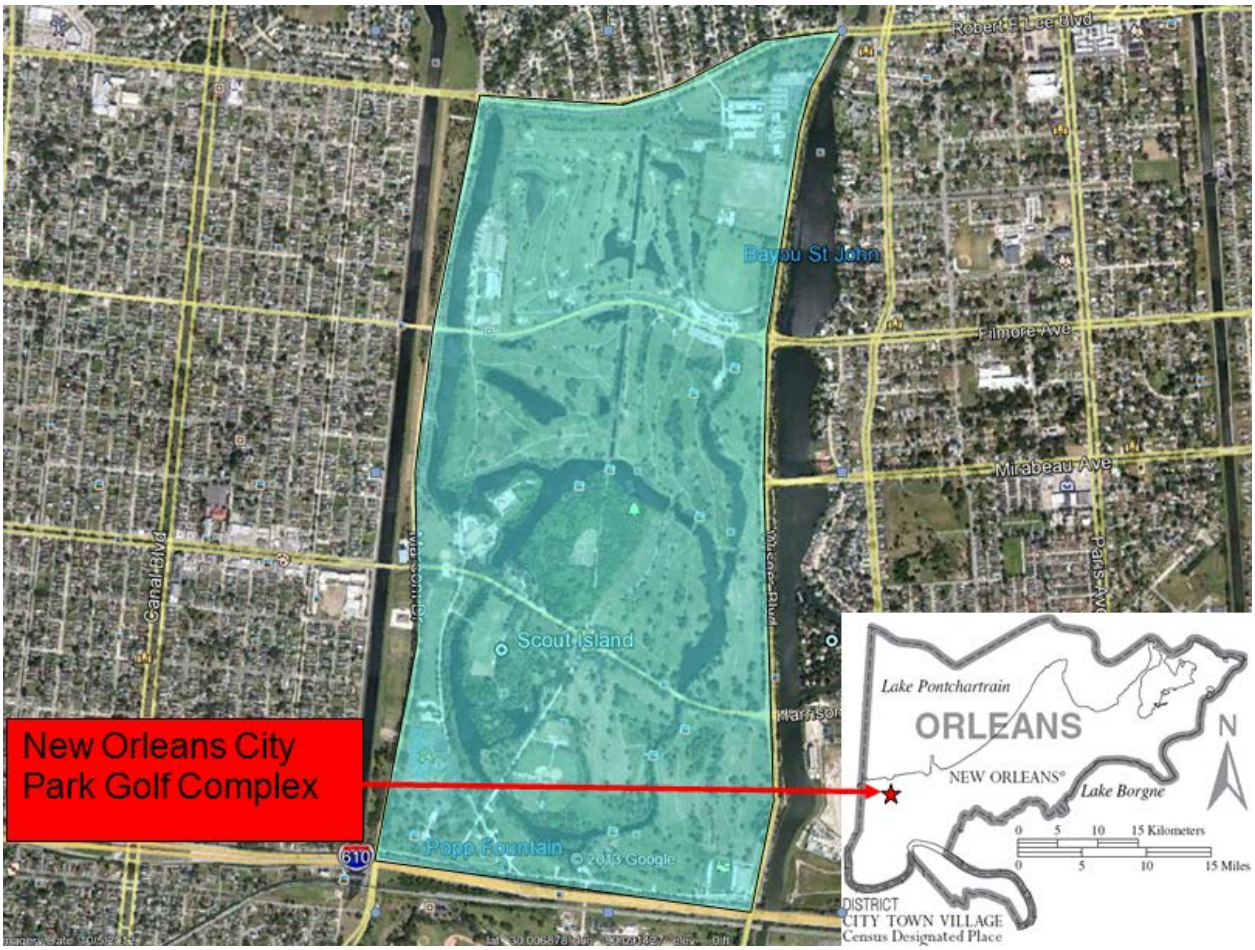

Figure 1 - New Orleans City Park Golf Complex

Figure 2 - Proposed Footprint, 18-Hole Professional Level Golf Course

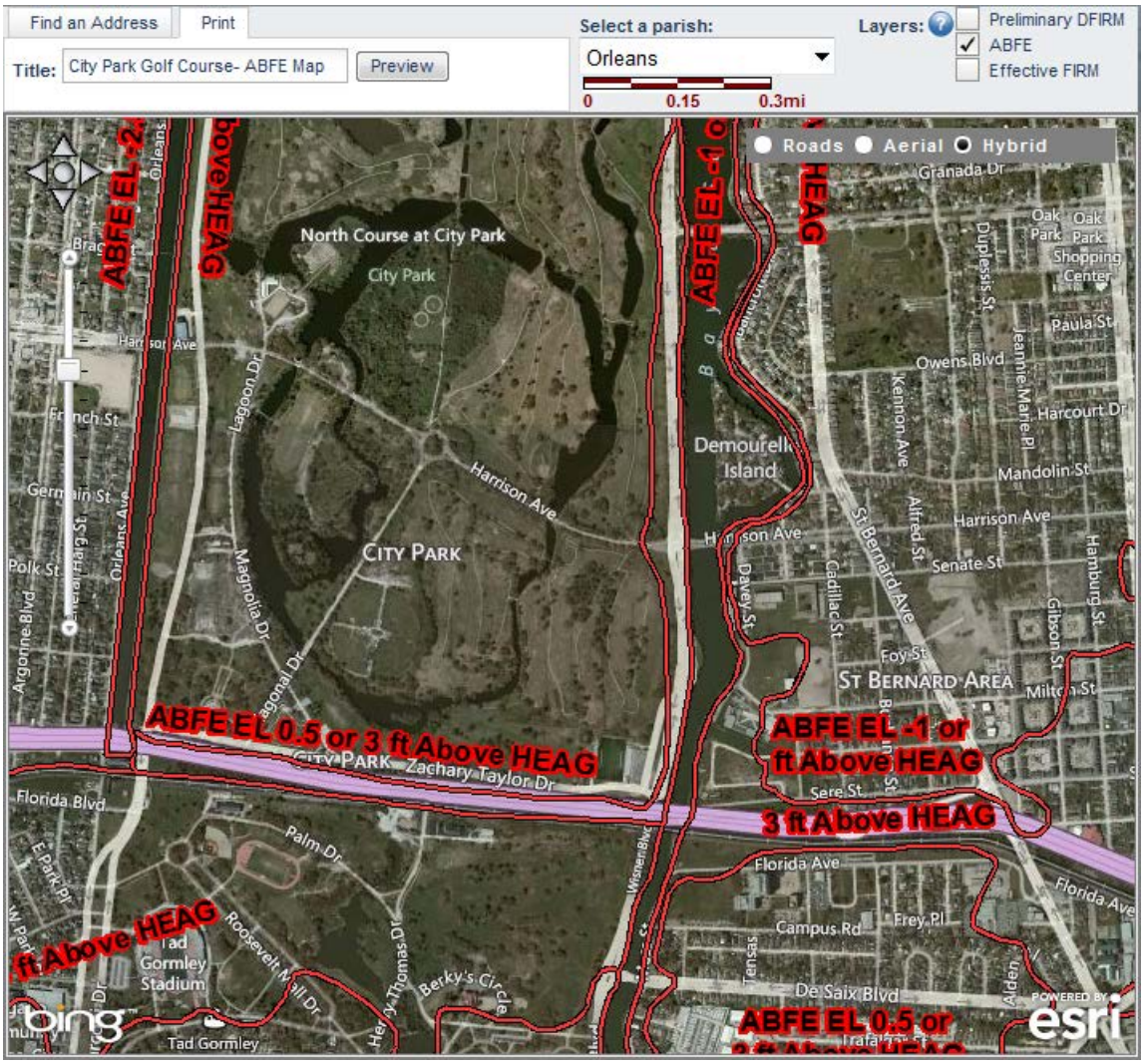

Figure 3 - Advisory Base Flood Elevation Map (FEMA June 5, 2006)

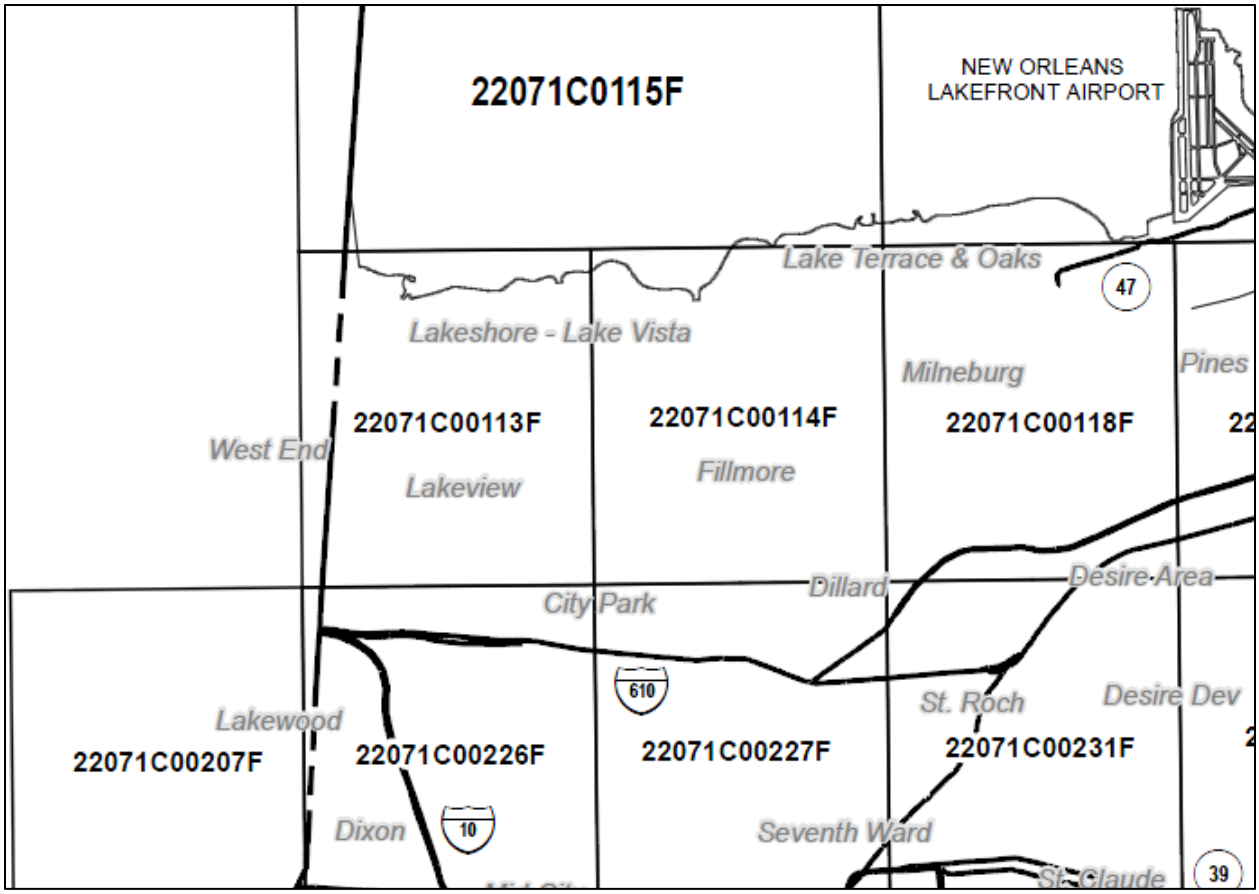

Figure 4 - 2012 Revised Preliminary Flood Insurance Rate Map - Orleans Parish Index (Best Available Data, FEMA November 9, 2012)

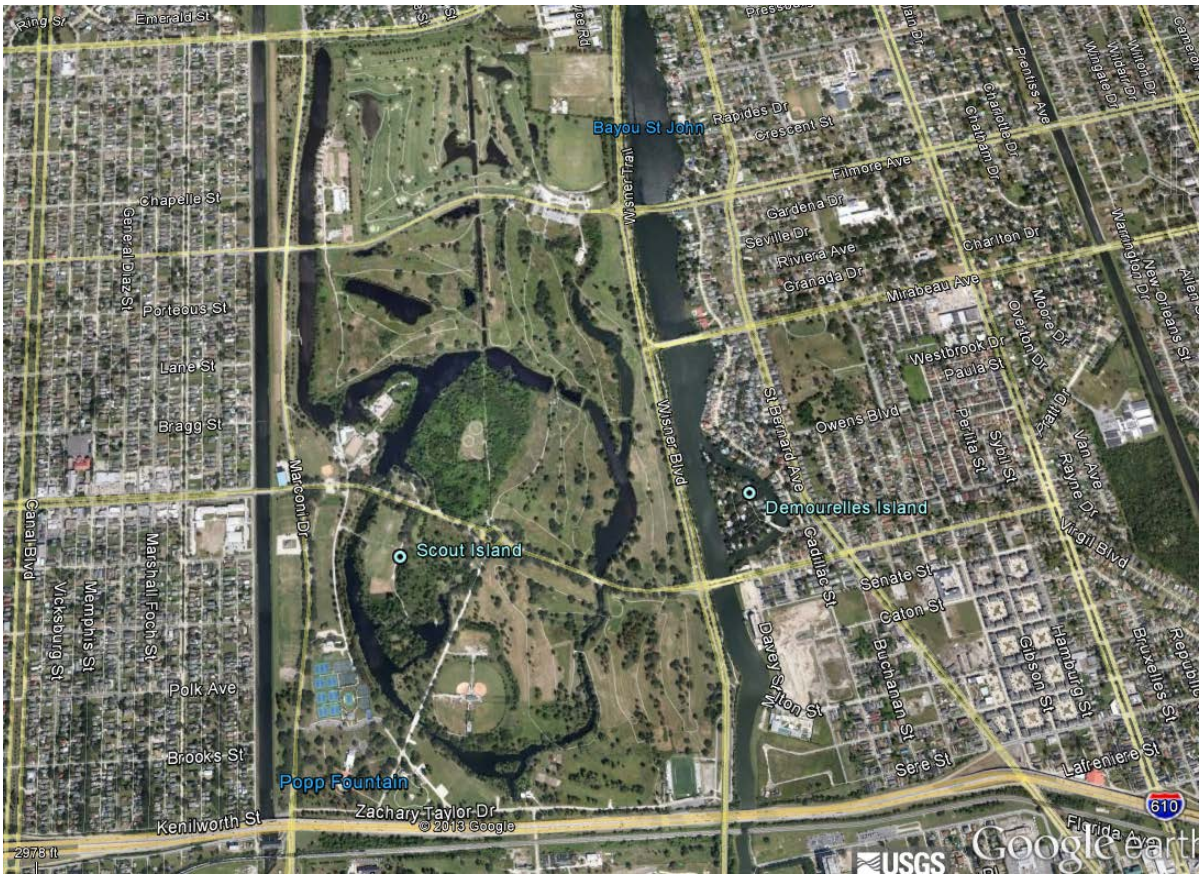

Figure 5 - City Park Canals

Figure 6 - Pump Station #7 and Drainage Outfall through Orleans Avenue Canal to Lake Pontchartrain (Yellow hexagons represent pump station locations)

Figure 7 – U.S. Fish and Wildlife Service National Wetlands Inventory Map (USFWS, 2013)

Appendix C

Drainage Study

DRAFT

NEW ORLEANS CITY PARK DRAINAGE STUDY

Prepared for:
TORRE DESIGN CONSORTIUM, LTD.
5005 Magazine Street
New Orleans, LA 70115

Prepared by:
MEYER ENGINEERS, Ltd.
Engineer and Architect
4937 Hearst Street, Suite 1B
Metairie, LA 70001

STATE OF LOUISIANA
Mark A. Schutt
REG. No. 30528
REGISTERED
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
4-4-2013

OCTOBER 3, 2008
REVISED APRIL 4, 2013

A/E PROJECT NO. 20-0829A

TABLE OF CONTENTS

SECTION		PAGE
I.	EXISTING DRAINAGE CONDITIONS	1
II.	DRAINAGE RECOMMENDATIONS	3
III.	COST ESTIMATE FOR CULVERT INSTALLATION	6

APPENDIX

APPENDIX A – TRAPEZOIDAL CHANNEL FLOW ESTIMATES

NEW ORLEANS CITY PARK DRAINAGE STUDY

I. EXISTING DRAINAGE CONDITIONS

The area of City Park where the proposed golf courses will be located was analyzed to determine the existing drainage patterns. The residential area north of the park generally drains through subsurface drainage north to south into a 60" culvert on Robert E. Lee Boulevard. The 60" culvert drains towards the west.

There are two locations where there are drainage structures that convey overflow water to the drainage on Robert E. Lee Boulevard. On the northwest corner of the park there is an existing 18" culvert that connects the canal along the west side of the park; and, towards the center of the north end of the park, there is another overflow outlet that connects the canal along the center of the park. These two outlets help prevent stagnant water.

The existing golf course area generally flows north to south. The drainage along the golf course drains through small culverts and ditches into two main canals. Assuming an average 7' depth, it is estimated that there are 200 million gallons of water in the canal system. One of the canals runs on the west side of the park and the other along the center. These two canals connect between Filmore Avenue and Harrison Avenue. From there the water can flow south following two different canal routes, which intersect again just north of Interstate 610.

On the east side of the park, there are culverts that connect the canals with Bayou St. John. The New Orleans Sewerage and Water Board controls the water surface elevation in Bayou St. John. Periodically, they let water from Lake Pontchartrain flow into Bayou St. John through a drainage structure north of Robert E. Lee Boulevard; and, consequently, some of the water flows into the golf course canals. This helps prevent the City Park canals from becoming stagnant.

At Interstate 610, where the canals merge again, there is a weir that controls the water surface elevation in the canals. From there, the overflow of water flows southward crossing Interstate 610 in a 54” culvert and then continues west to Pump Station #7. The pump station pumps water to the north to Lake Pontchartrain through the Orleans Canal, which is on the west side of the park.

II. DRAINAGE RECOMMENDATIONS

For the construction of the golf course, it is anticipated that no major upgrade to the drainage structures that connect to areas outside of the park will be necessary. The weir close to Interstate 610 will be reconstructed and will be made adjustable. However, the canals will still be kept at the same water surface elevation as the existing canals. In the proposed design there will not be a substantial change to the canal layouts. The flow out of the park will still be limited by the 54" culvert at the reconstructed weir by Interstate 610.

Many existing cart path crossings will be used; however, three additional crossings over the existing canals will be constructed. It is understood that there will be two new bridges constructed for the crossings, and one canal crossing will be spanned with culverts. Using bridges is aesthetically pleasing, provides unobstructed drainage flow through the crossings, and minimizes maintenance requirements.

Except for the canal running north to south in the center of the golf course, no major changes to the canals are anticipated. This canal will be widened in some areas. The requirements for the side slopes of the canals (as determined by a geotechnical engineer), as well as the capacity of the 54" outlet culvert at Interstate 610, will determine the minimum width of the canals at the crossings. The table below shows various recommended minimum widths based on side slopes.

Minimum Canal Widths*

Side Slope	Minimum Canal Width (ft.)
1.0:2.0	15.0’
1.0:2.5	17.0’
1.0:3.0	19.0’

* See Appendix A for calculations.

The southern end of the canal that is being widened will be spanned using culverts. Since these culverts will always be partially submerged, it is recommended that these culverts be oversized to prevent maintenance issues. Therefore, it is recommended that two 60” culverts be used at this crossing. Also, additional site drainage will be necessary to adequately drain all areas around the golf course. A preliminary cost estimate for the culvert crossings and site drainage is given in Section III of this report.

Once the final layout and grading of the golf course is complete and site drainage calculations have been done, it is recommended that additional drainage calculations be performed to verify the recommended sizes for the canal sections and culverts are adequate.

The canals should be kept networked in order to avoid dead ends for the water flow, preventing problematic stagnant water areas. The existing flow from Bayou St. John into the canals should be kept in the drainage system to keep water flowing.

It is anticipated that 320,000 CY of fill will be added to the site for the construction of the golf course. With the widening of the center canal and the total area encompassed by this project, the addition of the fill will not significantly

affect the storage capacity in the drainage system. The improvements to the golf course will not have a negative effect on the surrounding communities.

There is one non-brackish water pond that provided irrigation to the old golf course. It is understood that the non-brackish water pond will be used for irrigation of the proposed golf course. It is recommended that any ponds not used for irrigation should be connected to the canal system to prevent stagnant water.

III. COST ESTIMATE FOR CULVERT INSTALLATION

The following cost estimate was prepared for installation of site drainage along the golf course and for the culverts at canal crossings not spanned by proposed bridges. These are preliminary figures and could change considerably depending on the topography and final layout of the new golf course.

Drainage Cost Estimate

Golf Course Drainage Culverts	4,500 LF	@	$100	=	$450,000
Canal Culvert Crossings	400 LF	@	$300	=	$120,000
Total					$570,000

APPENDIX A

APPENDIX A

Trapezoidal Channel Flow Estimates

Flow Q (cf/sec)	Type	Manning's n	Bottom Width b (ft)	Side Slope Rise	Side Slope Run	Depth d (ft)	**Top Width (ft)**	z (ft)	Area A (sf)	Wet Perimeter P (ft)	Hydraulic Radius Rh (ft)	Channel Slope Se (ft/ft)
2.0:1.0 Slope Keep Minimum 15.0' Width												
33.16	Earthen	0.022	0.0	1.0	2.0	3.0	**12.0**	2.0	18.00	13.42	1.34	0.00050
58.01	Earthen	0.022	0.0	1.0	2.0	3.7	**14.8**	2.0	27.38	16.55	1.65	0.00050
71.41	Earthen	0.022	0.0	1.0	2.0	4.0	**16.0**	2.0	32.00	17.89	1.79	0.00050
129.48	Earthen	0.022	0.0	1.0	2.0	5.0	**20.0**	2.0	50.00	22.36	2.24	0.00050
210.55	Earthen	0.022	0.0	1.0	2.0	6.0	**24.0**	2.0	72.00	26.83	2.68	0.00050
317.60	Earthen	0.022	0.0	1.0	2.0	7.0	**28.0**	2.0	98.00	31.30	3.13	0.00050
2.5:1.0 Slope Keep Minimum 17.0' Width												
42.50	Earthen	0.022	0.0	1.0	2.5	3.0	**15.0**	2.5	22.50	16.16	1.39	0.00050
59.33	Earthen	0.022	0.0	1.0	2.5	3.4	**17.0**	2.5	28.90	18.31	1.58	0.00050
91.52	Earthen	0.022	0.0	1.0	2.5	4.0	**20.0**	2.5	40.00	21.54	1.86	0.00050
165.93	Earthen	0.022	0.0	1.0	2.5	5.0	**25.0**	2.5	62.50	26.93	2.32	0.00050
269.83	Earthen	0.022	0.0	1.0	2.5	6.0	**30.0**	2.5	90.00	32.31	2.79	0.00050
407.02	Earthen	0.022	0.0	1.0	2.5	7.0	**35.0**	2.5	122.50	37.70	3.25	0.00050
3.0:1.0 Slope Keep Minimum 19.0' Width												
51.73	Earthen	0.022	0.0	1.0	3.0	3.0	**18.0**	3.0	27.00	18.97	1.42	0.00050
56.46	Earthen	0.022	0.0	1.0	3.0	3.1	**18.6**	3.0	28.83	19.61	1.47	0.00050
111.41	Earthen	0.022	0.0	1.0	3.0	4.0	**24.0**	3.0	48.00	25.30	1.90	0.00050
202.00	Earthen	0.022	0.0	1.0	3.0	5.0	**30.0**	3.0	75.00	31.62	2.37	0.00050
328.47	Earthen	0.022	0.0	1.0	3.0	6.0	**36.0**	3.0	108.00	37.95	2.85	0.00050
495.48	Earthen	0.022	0.0	1.0	3.0	7.0	**42.0**	3.0	147.00	44.27	3.32	0.00050

55 **54" RCPA @ 0.1% (At Outfall)**

Appendix D

Public Notice

DRAFT

FEMA'S PUBLIC NOTICE OF AVAILABILITY FOR THE CITY PARK GOLF COMPLEX REPAIR/RECONFIGURATION PROJECT, ORLEANS PARISH, LOUISIANA, DRAFT ENVIRONMENTAL ASSESSMENT AND DRAFT FINDING OF NO SIGNIFICANT IMPACT

Interested parties are hereby notified that the Federal Emergency Management Agency (FEMA) has prepared a Draft Environmental Assessment (DEA) for a proposed repair and reconfiguration of the Hurricane Katrina damaged City Park Golf Complex, located in New Orleans, Louisiana. The City Park Golf Complex is generally located at 1 Palm Drive, in City Park, New Orleans, Louisiana, and its approximate "four-corner" Latitude/Longitude coordinates are: 30.011292, -90.096904; 30.010944, -90.086468; 29.999248, -90.086714; 30.002004, -90.092668; 30.007274, -90.091935; and 30.006420, -90.097973.

The proposed action would repair and reconfigure the West Golf Course, a portion of the East Golf Course, and related structures into a single, 18-hole, professional tournament level golf course. The balance of the East Golf Course not incorporated into the new golf course would be converted into green space for City Park visitors, with 5.5 acres added as a buffer to the new fifth hole. Site contours for the golf course, including bodies of water (*e.g.*, freshwater and brackish lakes/lagoons), roadways and bridges, would be repaired, reshaped and or rearranged. Improved irrigation and drainage features would include a new pump station, 1,000 ft. deep well, and adjustable weir. Existing shelters and rest areas would be made safe and secure or demolished. Approximately one-hundred-four (104) trees would be removed, some due to struggling health issues. Four (4) large live oaks would be removed and relocated on site.

The State of Louisiana, Facility Planning and Control, seeks federal grant funds for this action eligible under a Presidential Disaster Declaration, signed on August 29, 2005 (FEMA-1603-DR-LA). Per the National Environmental Policy Act (42 U.S.C. 4371 *et seq.*), and associated environmental statutes, a DEA has been prepared to evaluate the action's potential impacts on the human and natural environment. This DEA summarizes the purpose and need, site selection process, alternatives to the proposed action, affected environment, and potential environmental consequences associated with the proposed action.

The DEA and draft Finding of No Significant Impact (FONSI) will be available for public review at the Orleans Parish Main Library at 219 Loyola Avenue, New Orleans, Louisiana 70112 (hours are 10:00 AM to 6:00 PM, Mon.-Thurs. and 10:00 AM to 5:00 PM Fri. & Sat.) and the Mid-City Branch at 3700 Orleans Ave, New Orleans, Louisiana 70119 (hours are 10:00 AM to 7:00 PM, Mon.-Thurs. and 10:00 AM to 5:00 PM Sat.). The DEA can be viewed and downloaded from FEMA's website: http://www.fema.gov/environmental-planning-and-historic-preservation-program/environmental-documents-public-notices-2. The public notice will run on May 22, 24, and 26, 2013. The comment period will begin May 27, 2013 and ends June 10, 2013 at 4 pm. Written comments on the DEA/Draft FONSI or related matters can be faxed to FEMA's Louisiana Recovery Office at (504) 762-3232; or mailed to FEMA Louisiana Recovery Office, EHP – City Park Golf Complex EA, 1 Seine Court, New Orleans, Louisiana 70114.

Based on FEMA's findings to date, no significant adverse environmental effects are anticipated. However, if FEMA receives new information that results in a change from no adverse effects then FEMA would revise the findings and issue a second public notice allowing time for additional comments. However, if there are no changes, this DEA will become the Final EA.

If no substantive comments are received, the DEA and associated draft FONSI will become final and this initial Public Notice will also serve as the final Public Notice. Substantive comments will be addressed as appropriate in the final documents.

Appendix E

Draft FONSI

DRAFT

U.S. Department of Homeland Security
Louisiana Recovery Office
1 Seine Court
New Orleans, Louisiana 70114

FEMA

DRAFT FINDING OF NO SIGNIFICANT IMPACT
NEW ORLEANS CITY PARK GOLF COMPLEX
NEW ORLEANS, ORLEANS PARISH, LOUISIANA
FEMA-1603-DR-LA

Introduction

As a result of damages from Hurricane Katrina on August 29, 2005, the Federal Emergency Management Agency (FEMA) was authorized under a Presidential disaster declaration (FEMA-1603-DR-LA) to provide Federal assistance to designated disaster areas in Louisiana. The Robert T. Stafford Disaster Relief and Emergency Assistance Act (PL 93288), Section 406, authorizes FEMA's Public Assistance (PA) Program to provide financial and other forms of assistance to State and local governments to support response, recovery, and mitigation efforts following Presidentially declared disasters.

In accordance with 44 CFR Part 10, FEMA regulations to implement the National Environmental Policy Act (NEPA), an Environmental Assessment (EA) was prepared. The purpose of the EA was to analyze the potential environmental impacts associated with the repair and reconfiguration of the City Park Golf Complex courses and ancillary structures, and to determine whether to prepare an Environmental Impact Statement (EIS) or Finding of No Significant Impact (FONSI).

The proposed project aims to restore various City Park Golf Complex functions and capacity lost on August 29, 2005, as a result of Hurricane Katrina. The damaged golf courses and their related structures are integral parts of the important recreational activities offered to residents and other park visitors, and provided City Park with essential recreational functions and operating revenue. Repair and reconfiguration of the Golf Complex courses is needed for the City Park Improvement Association to fulfill the Master Golf Plan and achieve restoration of the lost functions of a hierarchical range of golf experiences, while reducing park operating costs, maximizing revenue potential, and minimizing the amount of park land used for golf activities. The alternatives considered include: 1) the No Action Alternative; 2) Repair of the golf courses back to their original configuration in the same footprint; 3) Repair of the golf courses in the same footprint, but to a different configuration; and 4) Restoration and reconfiguration of the West Golf Course and a portion of the East Golf Course into a single 18-hole golf course at essentially the same location, with improved drainage and irrigation.

Proposed Action

The proposed action is for the repair of the damaged West and East Golf Courses at essentially the same location as they presently exist within the golf complex at City Park,

New Orleans, LA, but with a different orientation and configuration, by combing the two courses into a single, 18-hole professional tournament level golf course. The new 18-hole golf course would utilize the entire old West Course and a portion of the old East Course, convert the unused portion of the East Course (approximately 96 acres) into green space for park visitors, and convert for golf uses an additional 5.5 acres of previously unused park space. This action would rearrange the contours of the proposed site and reshape the course with irrigation and improved drainage, by rearranging the greens and fairways; enlarging or reshaping brackish and freshwater lagoons/lakes; installing a new pump station and 1,000 foot deep water well; and replacing the existing weir with a new, adjustable, weir. Two bridges would be built, and one-hundred-eight (108) trees would be removed or relocated throughout the project site.

Findings

FEMA has evaluated the proposed project for significant adverse impacts to geology and soils, water resources (wetlands, floodplains and other waters), coastal resources, biological resources, cultural resources, air quality, noise, hazardous materials and environmental justice. During the construction period, short-term impacts to water quality, air quality, and noise are anticipated. Also, lead based paint and or other hazardous substances may be discovered; however, Toxic Substance Control Act (TSCA) § 402(c) compliance would be required to limit any potential impacts. All short-term impacts require conditions to minimize and mitigate impacts to the proposed project site and surrounding areas.

Conditions

The following conditions must be met as part of the implementation of the project. Failure to comply with these conditions may jeopardize federal funds:

- In accordance with applicable local, state, and federal regulations, the applicant is responsible for acquiring any necessary permits and/or clearances prior to the commencement of any construction related activities.

- Applicant will be required to conduct a wetland delineation of the proposed location and seek a jurisdictional determination from the USACE regarding the existence of wetlands and other waters of the U.S. on the proposed project site. Applicant is responsible for securing any permits under the CWA that may be required as a result of the undertaking. All coordination pertaining to these activities and applicant compliance with any conditions should be documented and copies forwarded to the state and FEMA for inclusion in the permanent project files.

- A Louisiana Pollution Discharge Elimination System (LPDES) permit may be required in accordance with the Clean Water Act and the Louisiana Clean Water Code. The applicant shall require its contractor to prepare, certify, and implement a construction storm water pollution prevention plan approved by LDEQ to prevent sediment and construction material transport from the project site. The applicant shall comply with all conditions of the required permit. All coordination pertaining to

these activities should be documented and copies forwarded to the state and FEMA as part of the permanent project files.

- The project has been found by the Louisiana Department of Natural Resources (LDNR) to be inside the Louisiana Coastal Zone. LDNR, therefore, requires that a complete Coastal Use Permit Application package (Joint Application Form, locality 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 applicant is responsible for coordinating with and obtaining any required Coastal Use Permit(s) (CUP) or other authorizations from the LDNR Office of Coastal Management's Permits and Mitigation Division prior to initiating work. The applicant must comply with all conditions of the required permits. All coordination pertaining to these activities and applicant compliance with any conditions should be documented and copies forwarded to the state and FEMA for inclusion in the permanent project files.

- The applicant is required to coordinate all construction activities with the local floodplain administrator prior to the start of any activities, and remain in compliance with formally adopted local floodplain ordinances. All coordination pertaining to these permit(s) should be documented to the local floodplain administrator and copies provided to the State and FEMA as part of the permanent project files. Per 44 CFR 9.11(d)(9), mitigation or minimization standards must be applied, where possible. The replacement of building contents, materials and equipment should be, where possible, wet or dry-proofed, elevated, or relocated to or above the community established base flood elevation. Hazardous materials need to be elevated above the 0.2% annual chance (500-year) flood elevation.

- Louisiana Unmarked Human Burial Sites Preservation Act: If human bone or unmarked grave(s) are present with the project area, compliance with the Louisiana Unmarked Human Burial Sites Preservation Act (R.S. 8:671 et seq.) is required. The applicant shall notify the law enforcement agency of the jurisdiction where the remains are located within twenty-four hours of the discovery. The applicant shall also notify FEMA and the Louisiana Division of Archaeology at 225-342-8170 within seventy-two hours of the discovery.

- Inadvertent Discovery Clause: If during the course of work, archaeological artifacts (prehistoric or historic) are discovered, the applicant shall stop work in the vicinity of the discovery and take all reasonable measures to avoid or minimize harm to the finds. The applicant shall inform their Public Assistance (PA) contacts at FEMA, who will in turn contact FEMA Historic Preservation (HP) staff. The applicant will not proceed with work until FEMA HP completes consultation with the SHPO, and others as appropriate.

- Lead-Based Paint - The applicant is responsible for complying with the Toxic Substances Control Act (TSCA) Section 402(c)(3) 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.

- If any asbestos containing materials, lead based paint and/or other hazardous materials are found during remediation or repair activities, the applicant shall comply with all federal, state and local abatement and disposal requirements under the National Emissions Standards for Hazardous Air Pollutants (NESHAP) and Louisiana Administrative Code 33:III 5151. Demolition 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 applicant is responsible for ensuring proper disposal in accordance with the previously referenced Administrative Orders. Demolition activity notification must be sent to the LDEQ before work begins. All coordination pertaining to these activities should be documented and copies forwarded to the state and FEMA as part of the permanent project files.

- If hazardous constituents are unexpectedly encountered in the project area during the proposed construction operations, appropriate measures for the proper assessment, remediation and management of the contamination should be initiated in accordance with applicable federal, state, and local regulations.

- Project construction may involve the use of potentially hazardous materials (*e.g.*, petroleum products, cement, caustics, acids, solvents, paint, electronic components, pesticides, herbicides, fertilizers, treated timber), and may result in the generation of small amounts of hazardous wastes. Appropriate measures to prevent, minimize, and control spills of hazardous materials must be taken and generated hazardous and non-hazardous wastes are required to be disposed in accordance with applicable Federal, state and local regulations.

- To reduce potential short term effects to air quality from construction related activities, the contractor should use BMPs to reduce fugitive dust generation and diesel emissions. The contractor should water down construction areas when necessary to minimize particulate matter and dust. To reduce emission criteria pollutants, fuel-burning equipment running times should be kept at a minimum and engines should be properly maintained.

Conclusion

The results of these evaluations, as well as consultations and input from other federal and state agencies, are presented in the EA. Based on the information analyzed, FEMA has determined that the implementation of the proposed action would not result in significant adverse impacts to the quality of the natural and human environment. In addition, the

proposed project does not appear to have the potential for significant cumulative effects when combined with past, present and reasonably foreseeable future actions. As a result of this FONSI, an EIS will not be prepared (per 44 CFR Part 10) and the proposed project as described in the EA may proceed.

Public Review and Comment

The Draft EA can be viewed and downloaded from FEMA's website at: http://www.fema.gov/environmental-planning-and-historic-preservation-program/environmental-documents-public-notices-2. The Draft EA will also be available for public review at the Orleans Parish Main Library at 219 Loyola Avenue, New Orleans, LA, and the Mid-City Branch at 3700 Orleans Ave., New Orleans, LA 70119. A legal notice will be posted in the local newspaper, *The Times-Picayune*, on the following dates: May 22, 24, and 26, 2013. If no substantive comments are received, the Draft EA will become final and the initial Public Notice will also serve as the final Public Notice.

Approval:

_____

Kevin Jaynes, Regional Environmental Officer Date
FEMA Region VI
FEMA-1603/1607-DR-LA

_____

Andre Cadogen, Deputy Director of Programs Date
Louisiana Recovery Office
FEMA-1603/1607-DR-LA