

## **Flood Zone**

### *Direct Impacts*

Since the Tulane/Gravier sites are located within the 100-year flood zone, all new construction activities would result in adverse impacts to floodplains as described in EO 11988 (USEPA 1977). Project planners would coordinate with FEMA as well as the local floodplain administrator regarding mitigation measures to minimize impacts due to construction within the regulated floodplain.

Site design measures, including properly sized storm drain inlets to allow for adequate drainage of storm water runoff and non-storm water discharges (i.e., fire hydrant testing), would help to minimize impacts to the flood zone. Working in conjunction with the New Orleans Sewerage and Water Board (S&WB) would also help to determine the best way to tie into the existing drainage system.

Another mitigation measure would be to elevate certain functions of the hospitals above the 500-year elevations. The facility design may require the import of fill material to ensure that the base elevation of all occupied structures is above the 500-year elevation. The elevation methods, including the potential for the use of fill, will be evaluated in the site-specific analysis.

The median between the north-bound and south-bound lanes of Galvez Street, which runs between the proposed VAMC and LSU AMC sites, is designated as a drainage canal. Construction in the median would impact the drainage pattern of the surrounding area.

### *Indirect Impacts*

No indirect adverse impacts to the flood zone within the area of the Proposed Actions are anticipated. However, storm water management efforts in the surrounding areas could be adversely affected if storm water control measures designed for the site are inadequate.

### **3.1.2.3 Impacts of Alternatives # 2 through # 4**

## **Geology and Soils**

In general, the direct and indirect impacts to the physical environment from implementing Alternatives # 2 and # 3 would be the same as those described under the Proposed Actions because each alternative involves the construction of two new facilities. Demolition and construction BMPs, the use of NPDES permits and SWPPPs, and facility design and construction would mitigate adverse impacts under each alternative. Under Alternative # 4, however, only one new construction project would take place. Therefore, under Alternative # 4, the potential for direct impacts to soils would be less than that for Alternatives # 1, # 2, or # 3.

## **Flood Zone**

Under Alternative # 2, the VAMC would be built at the Lindy Boggs location and the LSU AMC would be constructed at the proposed Tulane/Gravier site. Because both locations are within the 100-year flood zone, and therefore the 500-year floodplain, the direct and indirect impacts of this alternative are considered to be the same as those described for the Proposed Actions.

Under Alternative # 3, the VAMC would be built at the Ochsner location and the LSU AMC would be constructed at the proposed Tulane/Gravier site. As stated in Section 3.1.1.3, most of the Ochsner site is located above the 100-year flood zone but within the 500-year floodplain. If this site is selected, VA will seek technical assistance from FEMA on measures to mitigate impacts to or from the floodplain. These impacts may include elevation of certain functions of the hospital.

Under Alternative # 4, which includes renovation of the existing Charity Hospital and construction at one of the three VAMC sites, the impacts to the flood zone would be less than under the other alternatives or the Proposed Actions. In Alternative # 4, the flood zone at the Charity Hospital site would be impacted if excavations are required for new construction at the site. Due to the limited availability of vacant land at the existing facility's location, flood zone impacts would be small. However, improper design of storm water control measures could adversely impact storm water management.

## **3.2 WATER AND COASTAL RESOURCES**

The Coastal Zone Management Act (CZMA) encourages states/tribes to preserve, protect, develop, and where possible, restore or enhance valuable natural coastal resources such as wetlands, floodplains, estuaries, beaches, dunes, barrier islands, and coral reefs, as well as the fish and wildlife using those habitats (USEPA 2007). In its reauthorization of the CZMA in 1990, Congress identified nonpoint source pollution as a major factor in the continuing degradation of coastal waters and called upon approved coastal zone management programs to develop and implement coastal nonpoint pollution control programs to address five major sources of nonpoint pollution: 1) urban runoff, 2) agriculture runoff, 3) forestry runoff, 4) marinas and recreational boating, and 5) altering the natural flow of water through a landscape (hydromodification) (USEPA 2007).

The Louisiana Department of Natural Resources Coastal Management Division (LDNR/CMD) is the lead agency implementing the Louisiana Coastal Resources Program (LCRP) to protect, develop, and restore or enhance resources of the Louisiana coastal zone. The coastal zone of Louisiana varies from 16 to 32 miles from the Gulf of Mexico inland (NOAA 2004). Orleans Parish and Jefferson Parish are entirely within the Louisiana coastal zone; therefore, all of the proposed and alternative sites are located within the Louisiana coastal zone (LDNR 2002). Review of proposed projects by the LDNR/CMD for consistency with the LCRP is required for Federal agencies whose activities (including new policies or regulations) may affect the land use, water use, or natural resources of the Coastal Zone; parish or local governments receiving Federal grants or loans, such as HUD Block grants; and anyone whose activities, even those occurring outside of the Coastal Zone, might affect the land use, water use, or natural resources of the Coastal Zone.

A Request for Determination of the proposed project consistency with the LCRP was submitted on 25 August 2008 (appendix C). In a letter dated 22 September 2008, the LDNR/CMD determined that the proposed activity was exempt and a Coastal Use Permit was not required (appendix C). The State OFPC sent a Solicitation of Views request to the U.S. Army Corps of Engineers (USACE), New Orleans District, on 25 August 2008, concerning the request for determination regarding alternative site locations for the proposed VAMC and LSU AMC. In a letter dated 6 October 2008, the USACE determined that no adverse impacts to USACE projects are anticipated from the VA / LSU AMC projects and that a Section 404 permit was not required (appendix C).

### **3.2.1 Existing Conditions – Water and Coastal Resources**

The existing VAMC and Charity Hospital sites, the proposed sites, and the alternative sites do not contain natural bodies of water or streams. The sites are located within the highly urbanized Eastern Louisiana Coastal Watershed, which serves Orleans, Jefferson, Plaquemines, St. Charles, St. Tammany, and St. Bernard Parishes (NWS 1984).

Due to the urban nature of the area, drainage, channeling, and removal of natural water features, such as streams or wetlands, have been utilized to control storm water runoff. Surface runoff, including storm water runoff and non-storm water discharge, flows via storm water inlets into a network of underground pipes and man-made canals managed by New Orleans S&WB. Most of the City of New Orleans' runoff water is then pumped into Lake Pontchartrain, with the following exceptions: two West Bank pumping stations and two stations in eastern New Orleans pump surface runoff into the Intracoastal Waterway or the Industrial Canal.

In the southernmost parts of Louisiana, drinking water is supplied from surface water sources rather than groundwater. The drinking water source for New Orleans is the Mississippi River. This water is treated at the Carrollton Water Treatment Plant for East Bank customers and at the Algiers Water Treatment Plant for West Bank customers. In 2007, the Carrollton Water Plant provided an average of 129 million gallons of drinking water per day to an estimated population of 246,260 (S&WB 2008). The Algiers Water Plant provided an average of 13 million gallons of drinking water per day to an estimated population of 55,931 (S&WB 2008).

The geology in southern Louisiana consists largely of riverine-derived sediments, silts, and clays (USGS 2008). Layers of sand store groundwater between layers of clay, which confine the groundwater layer. The Chicot, Evangeline, Jasper, Southern Hills, and New Orleans (Mississippi Alluvium) aquifer systems located in southern Louisiana generally consist of alternating beds of unconsolidated and semi-consolidated sand, gravel, silt, and clay deposited in fluvial, deltaic, and near-shore marine environments (USGS 2008). Groundwater flow in southern Louisiana is generally toward the south and east. Precipitation in the recharge area to the north provides the primary source of recharge. Salt water infiltration occurs in the aquifers in the New Orleans area, making groundwater an undesirable source for drinking water.

#### **3.2.1.1 Existing and Proposed Tulane/Gravier Locations**

The existing VAMC and Charity Hospital (Alternative # 4) and the proposed new Tulane/Gravier sites (Alternative # 1) do not contain natural bodies of water or streams. The

sites are located approximately 1.0 to 1.25 miles west of the Mississippi River and 1.0 to 1.5 miles southeast of Bayou St. John, which flows from Lake Pontchartrain.

### **3.2.1.2 Alternative # 2 – Lindy Boggs Location**

The Lindy Boggs site does not contain any natural bodies of water. However, the southern terminus of Bayou St. John is located just northeast of the site across Jefferson Davis Parkway.

### **3.2.1.3 Alternative # 3 – Ochsner Location**

The Ochsner site does not contain any natural bodies of water. The site is located 0.26 mile south of Hoey's Canal, which currently drains to Lake Pontchartrain via the 17<sup>th</sup> Street Canal, and 0.33 mile north of the Mississippi River. Currently, there are plans under consideration for draining Hoey's Canal to the Mississippi River. Surface runoff follows the surface topography toward the north-northeast, is captured by storm water inlets, and is eventually directed into the City's drainage system.

## **3.2.2 Discussion of Impacts – Water and Coastal Resources**

### **3.2.2.1 Impacts of the No Action Alternative**

Since no construction would occur at the existing sites, there would be no adverse direct or indirect impacts to water or coastal resources within or near the project area under the No Action alternative. However, the existing sites would continue to be vulnerable to damages from flooding during storm events, and the existing conditions described in Section 3.2.1 would continue.

### **3.2.2.2 Impacts of the Proposed Actions**

#### **Direct Impacts**

No long-term direct impacts to water resources and/or water quality would be anticipated from the Proposed Actions at the Tulane/Gravier locations. During demolition and construction at the sites, any temporary disturbance to surface soils could cause short-term impacts to water resources. However, as described in Section 3.1.2.2, a NPDES permit would be required to minimize the potential impacts to water resources. An accompanying SWPPP would contain BMPs for erosion and sediment control as described previously.

Storm water runoff captured by storm water inlets would flow into the City's existing drainage system. In order to maintain the integrity and design of the existing drainage system, VA and the State would work with the New Orleans S&WB to determine the best way to tie into the system. The large drainage box culvert on Galvez Street would provide sufficient drainage capacity for the Tulane/Gravier locations (VA 2007c). If construction results in an increase in impervious areas, a hydraulics/hydrology study would be conducted prior to the design of the sites. This study would determine the proper sizing and requirements for storm water removal and treatment facilities and ensure adequate storm water drainage.

No direct impacts to the coastal zone would occur under the Proposed Actions because the Tulane/Gravier locations do not contain coastal wetlands.

### **Indirect Impacts**

No adverse indirect impacts to water or coastal resources within or near the area of the Proposed Actions are anticipated.

#### **3.2.2.3 Impacts of Alternatives # 2 through # 4**

The impact on water and coastal resources at the existing Charity Hospital site (Alternative # 4) and alternative Lindy Boggs (Alternative # 2) and Ochsner (Alternative # 3) sites would be similar to the impacts at the Tulane/Gravier sites for the Proposed Actions with one notable exception: the Lindy Boggs site is close to the southern terminus of Bayou St. John.

Under the Proposed Actions, the localized direct impacts on storm water runoff and sediment transport would be larger due to acreage disturbed if the two demolition and construction projects occurred simultaneously at the proposed Tulane/Gravier sites for the VAMC and the LSU AMC. These local impacts may be somewhat reduced if the VAMC is constructed at one of the alternative sites because they would be geographically separated from the proposed new Tulane/Gravier LSU AMC site. However, BMPs would be implemented to minimize these impacts to the maximum extent practicable. In comparison, the combined impact on the individual projects under the Proposed Actions and Alternatives # 2 and # 3 would be similar.

Under Alternative # 4, the impacts would be less than the impacts of the Proposed Actions because only one site is being disturbed to the extent that storm water runoff and sediment transport would be a concern.

### **3.3 LAND USE**

#### **3.3.1 Existing Conditions – Land Use**

##### **3.3.1.1 Existing Locations**

For planning purposes, the New Orleans City Planning Commission (NOCP) divided the City into 13 planning districts and 72 individual neighborhoods within these districts. The existing VAMC and Charity Hospital facilities are located in the Central Business District Neighborhood within Planning District 1, which also includes the French Quarter Neighborhood (figure 3-4). Major land uses in the Central Business District include commercial offices, medical facilities, Federal and state government offices, retail, travel and tourism services, parking lots, and vacant property. Residential land use occupies only 10 percent of the total area within Planning District 1 (NOCP 1999). The Louisiana Superdome is located one city block south of the existing VAMC site and the Tulane Health Science Center is to the northeast across Tulane Avenue from Charity Hospital.

The Unified New Orleans Plan was developed as a city-wide recovery plan following Hurricane Katrina by a grassroots team led by the New Orleans Community Support Foundation (NOCSF)

and the Community Support Organization. The existing VAMC and Charity Hospital sites are located within the area designated in the plan as the New Orleans Medical District, which is identified as having significant economic development opportunity. The plan's recommendations for these locations include rebuilding and expanding medical facilities in this part of the Central Business District (NOCSF 2007). In the City of New Orleans, land use is regulated by the Comprehensive Zoning Ordinance. The existing VAMC and Charity Hospital sites are zoned Central Business District (NOCPD 2006).

### **3.3.1.2 Alternative # 1 – Proposed Actions – Tulane/Gravier Locations**

The proposed VAMC and LSU AMC sites are located in City Planning District 4, in the Tulane/Gravier area (figure 3-4). District 4, which is northwest of the Central Business District and French Quarter Neighborhoods, is characterized as historic based on local and state criteria. Residential, which occupies 51 percent of the land area, is the dominant land use in the district followed by commercial (19 percent), industrial (12 percent), and institutional (10 percent). Public land uses in the district include Xavier University and Orleans Parish Law Enforcement Headquarters (NOCPD 1999).

Under the City's Comprehensive Zoning Ordinance, most of the central portion of the proposed VAMC site is zoned for two-family residential use, with areas of commercial, office, neighborhood business, and heavy industrial (Dixie Brewing Company) around the perimeter of the site. The proposed LSU AMC site is zoned primarily for commercial use, with an area of two-family residential and a small light industrial area in the interior portion. The property at the corner of Canal Street and South Claiborne Avenue (the vacant New Orleans Grand Palace Hotel) is zoned as Central Business District (NOCPD 2006). A recent land use evaluation conducted by USRM (USRM 2008a) determined that 69 percent of the parcels that comprise the proposed VAMC site are residential, 18 percent are commercial, and 13 percent are empty lots, which include green space, parking lots, and demolished building areas, with 57 percent of the lots vacant.

The proposed LSU AMC site is located within the area designated in the Unified New Orleans Plan as the New Orleans Medical District, which is identified as an area of significant growth that is intended to serve as the core of a competitive cluster of new and existing hospitals and medical research facilities of regional and national significance. The plan's recommendations for the Tulane/Gravier locations include development of an "LSU / VA Regional Medical Center" on the LSU AMC site and revitalization of the Tulane Avenue and Galvez Street commercial corridors along the perimeter of the proposed replacement Tulane/Gravier VAMC site (NOCSF 2007). A recent land use evaluation conducted by USRM (USRM 2008b) determined that 21 percent of parcels that comprise the proposed LSU AMC site are residential, 16 percent are commercial, and 63 percent are empty lots, which include green space, parking lots, and demolished building areas, with 79 percent of the lots vacant.



Figure 3-4. City of New Orleans Planning District 4

## **VAMC**

The Tulane/Gravier location offered by the RPC for construction of a new VAMC facility consists of 30 acres located in densely-developed downtown New Orleans in the Tulane/Gravier area. The site is bounded by Canal Street to the northeast, South Galvez Street to the southeast, Tulane Avenue to the southwest, and South Rocheblave Street to the northwest (see figure 2-1). Land use on the site includes residences, small retail buildings, office buildings, a service station, auto sales and repair facilities, the former Dixie Brewing Company facility, parking lots, green space, and vacant properties. The majority of the commercial properties are located on Canal Street, South Galvez Street, and Tulane Avenue. Surrounding land uses are primarily commercial and residential, including commercial office buildings, a hotel, small retail and commercial buildings, automobile sales and repair facilities, and residences (URS Group, Inc. [URS] 2008a).

The proposed VAMC site includes 12 city blocks, designated under the City's numbering system as blocks 523 through 526 and 549 through 556. Based on a recent land use evaluation conducted by USRM (USRM 2008a), the site contains 184 parcels of land (figure 3-5). Figure 3-5 shows that, at the time of the reconnaissance and ground-truthing (July 2008), there were 63 occupied residential parcels and 16 active commercial parcels. About one-third of the occupied residential parcels contain two-family units with the other containing single-family units. The remaining parcels include 65 uninhabited residential parcels, 17 inactive commercial parcels, and 23 vacant lots, for a total of 105 (57 percent) vacant parcels (USRM 2008a).

## **LSU AMC**

The proposed site for construction of the new LSU AMC consists of 37 acres with the inclusion of city streets and rights-of-way, in the Tulane/Gravier area of New Orleans bounded by Canal Street to the northeast, South Claiborne Avenue to the southeast, Tulane Avenue to the southwest, and South Galvez Street to the northwest. The proposed LSU AMC site is located directly across South Galvez Street from the proposed VAMC site (see figure 2-1). Land use on the site includes office buildings (including medical offices and the Blood Center of New Orleans), retail buildings, auto sales and repair facilities, residences, a large inactive hotel, green space, parking lots, and vacant properties. Most of the residences are located in the interior portion of the site. The area surrounding the proposed LSU AMC site is characterized primarily by commercial development, as well as institutional and residential land uses, including office buildings, retail and commercial buildings, automobile sales and repair facilities, service stations, a church, LSU Health Sciences Center facilities, and residences. I-10 borders the site to the southeast with an exit ramp onto South Derbigny Street within the site.

The LSU AMC site includes 15 city blocks, designated under the City's numbering system as blocks 433 through 438, 466 through 471, and 520 through 522. During a recent site evaluation in May 2008, the site contained 276 parcels of land, including 31 occupied residential parcels, 27 occupied commercial parcels, 27 vacant residential parcels, 17 vacant commercial parcels, and 174 empty lots, for a total of 218 (79 percent) vacant/unoccupied parcels (figure 3-6) (USRM 2008b).

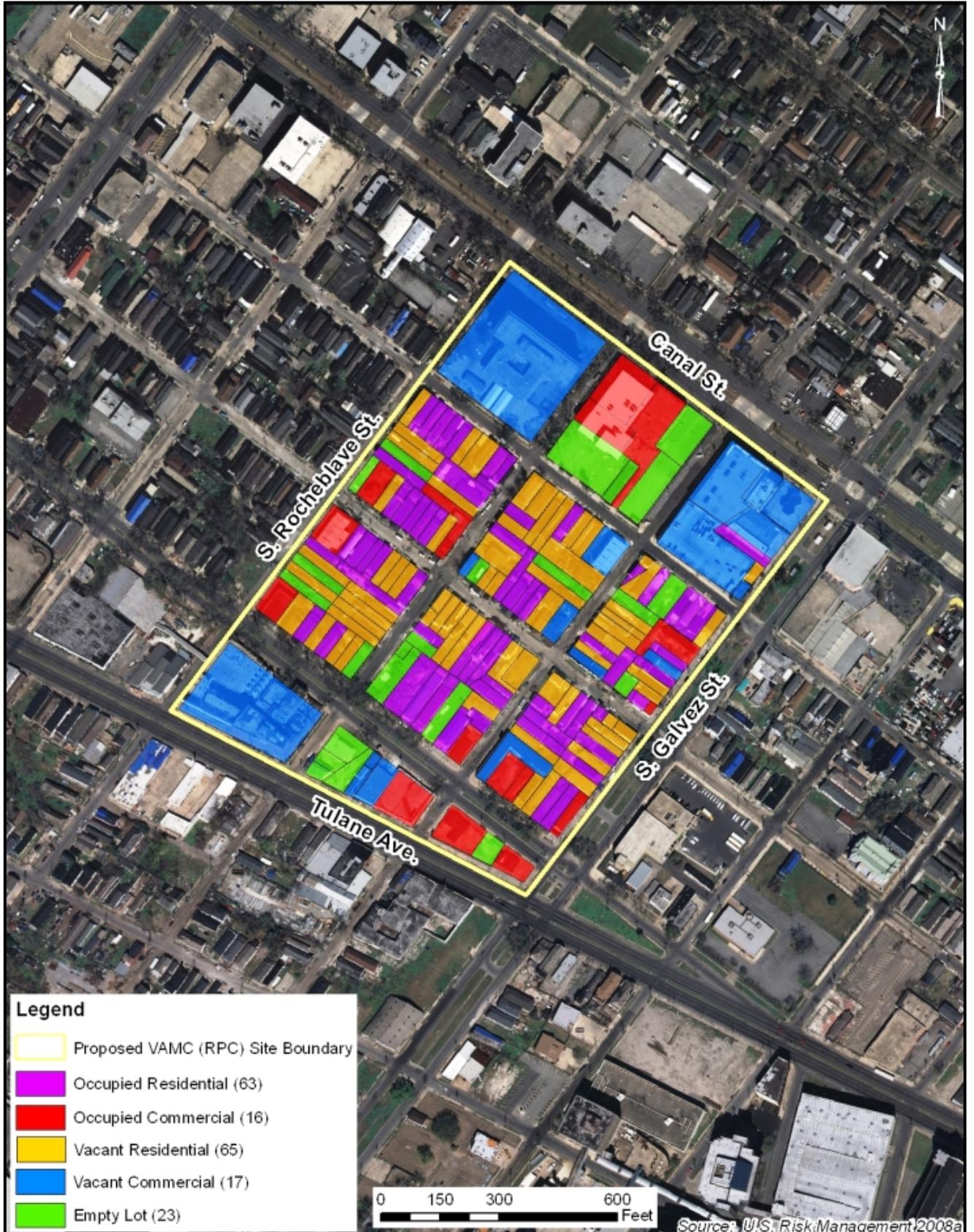


Figure 3-5. Land Use – VAMC Site

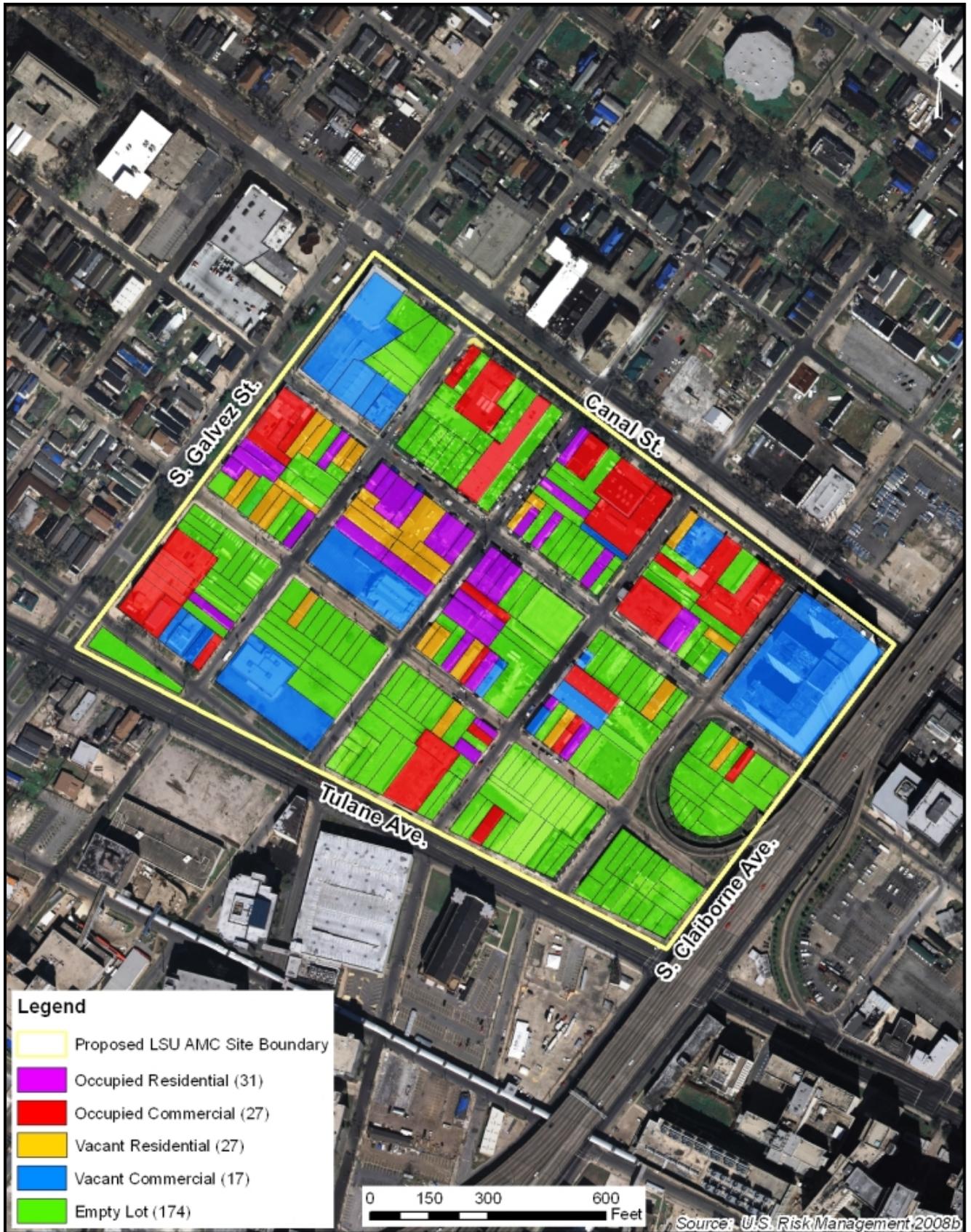


Figure 3-6. Land Use – LSU AMC Site

### **3.3.1.3 Alternative # 2 – Lindy Boggs Location**

The Lindy Boggs location offered by VREI for the construction of the VAMC facility consists of 39.8 acres located in a commercial area within the Mid-City neighborhood of New Orleans in Orleans Parish. The site is bounded by Carrollton Avenue and North Pierce Street on the northwest, Toulouse Street and St. Louis Street on the northeast, Jefferson Davis Parkway on the southeast, and Bienville Street and Conti Street on the southwest (figure 2-2). The site includes 15 city blocks, designated under the City's numbering system as blocks 455A, 456, 475, 476A, 481A, 482, 500, 501, 502A, 507, 508, 509, 527A, 529A, and 530 (DDG 2008).

Land use on the site is commercial, with a mixture of retail (grocery and hardware stores), industrial (warehouses and abandoned railroad facilities), and office (hospital and general office). The former LBMC occupies approximately 26 acres of the proposed site. Surrounding land uses are primarily office, commercial, and industrial with some residential single and multi-family homes and apartments. Bayou St. John terminates on the northeast corner of the proposed site.

In the City of New Orleans, land use is regulated by the Comprehensive Zoning Ordinance. Most of the proposed Lindy Boggs site, approximately 25.9 acres, is zoned heavy industrial; about 8 acres are zoned General Office, and about 6 acres are zoned Commercial (NOCP 2006). Following Hurricane Katrina, the New Orleans Neighborhoods Rebuilding Plan (NONRP) was developed by local residents and approved by the City Council of New Orleans and the Louisiana Recovery Authority. The City of New Orleans Office of Recovery Management incorporated details of the Neighborhoods Rebuilding Plan as it developed plans for city-wide recovery implementation. In the District 4/Mid-City Plan, residents suggested development of a Mid-City Community Health Clinic and Senior Housing on the site of the damaged LBMC. The motivation was to reuse the existing facility and foster neighborhood revitalization (NONRP 2006).

The abandoned Norfolk Southern Railroad line passes through the site on the northwestern side and serves as boundary on the northeastern side. The abandoned railroad line is part of the proposed Lafitte Corridor Greenway Project (Lafitte Greenway) to allow safe, alternative pathways for non-motorized transportation between major neighborhoods and landmarks within the Mid-City, Tremé, Lakeview, and Vieux Carré communities. Through the proposed VAMC site, the proposed Lafitte Greenway would be the width of a city street. At the juncture of Jefferson Davis Parkway and Bayou St. John on the northeast corner of the proposed Lindy Boggs site is a major connecting node for the Lafitte Greenway, allowing access to and from the corridor to major roadways and nearby points of interest. A second node is located at the intersection of St. Louis Street and Carrollton Avenue in the northwest section of the proposed site (FOLC 2007).

### **3.3.1.4 Alternative # 3 – Ochsner Location**

The site offered by the Ochsner Health Systems for construction of the VAMC facility encompasses 26 acres located in eastern Jefferson Parish, and is approximately 3.5 miles west of the Tulane/Gravier New Orleans area (figure 2-3). The site is occupied by two warehouses, a

large parking lot, two helicopter landing pads (one inactive) constructed by Ochsner Health Systems, an unpaved parking area, and part of an abandoned railroad spur (leased to the Louisiana Steam Train Organization). The site is bordered by railroad tracks and the Earhart Expressway to the north; a large vacant warehouse, a paved parking lot, and a boat storage yard to the east; Jefferson Highway to the south; and residences to the west (URS 2008b). The Ochsner Medical Center New Orleans is located across Jefferson Highway from the site. Land uses in the surrounding area include residences, retail establishments, a hotel, and commercial facilities, with industrial development farther north across Earhart Expressway and to the east along the rail lines.

In Jefferson Parish, land use is regulated by the Comprehensive Zoning Ordinance. The Ochsner site is designated for M1 Industrial use with Commercial Parkway Overlay Zone (Jefferson Parish 2008a). Envision Jefferson 2020, the Jefferson Parish Comprehensive Plan, guides future development and redevelopment within the parish by identifying the locations and intensities of desired future land uses. The Ochsner site is located within the area designated in the plan as hospital land use. The adjacent properties to the east and west are designated Neighborhood Mixed-Use (Jefferson Parish 2008b). The mixed-use land use designation adjacent to the Ochsner Hospital Campus area provides flexibility to permit expansion of the medical facilities while also integrating residential development in the area (Jefferson Parish 2003).

### **3.3.2 Discussion of Impacts – Land Use**

#### **3.3.2.1 Impacts of the No Action Alternative**

Under the No Action alternative, there would be no construction of medical facilities either at the existing locations used by the VAMC and MCLNO or at any of the alternative locations. The functions currently performed and the existing land uses at the existing locations would continue as described for existing conditions. Consequently, there would be essentially no changes in land use. However, the condition of the vacant facilities on the existing VAMC and Charity Hospital sites likely would continue to degrade. This could reduce the attractiveness of adjacent areas for commercial or residential uses, potentially causing limited disinvestment and changes in land use in those areas. Overall, there would be no changes that would result in substantial direct, indirect, or cumulative impacts on land uses under the No Action alternative.

#### **3.3.2.2 Impacts of the Proposed Actions**

##### **Direct Impacts**

Under the Proposed Actions, the existing mixture of land uses on the proposed Tulane/Gravier VAMC and LSU AMC sites, described in Section 3.3.1.2, would be directly impacted. The existing residential, commercial, and other structures on these properties would be removed, medical-related buildings would be constructed in their place, and the land use on these sites would become medical. Thus, the existing land uses on the sites would be substantially affected. However, the majority of the area within these sites is vacant land, vacant structures, or surface parking lots. Less than half of the areas within these sites are currently utilized for inhabited residential or active commercial land uses (USRM 2008a and 2008b). In addition, the

conversion of these sites to medical land use would be consistent with the development plans for this area. The proposed VAMC and LSU AMC sites are within the planned boundaries of the New Orleans Medical District. The draft Master Plan for the Medical District (RPC 2008) incorporates concepts from economic development plans, land use plans, and other plans relevant to the district and provides recommendations for the district's physical development. The plan provides a vision and a physical foundation for the development of a premier healthcare community in the district, which would provide an array of health services, medical education, and biosciences research and would include transportation, housing, and other services supporting these activities (RPC 2008). The land use changes associated with the Proposed Actions would be consistent with the Medical District Master Plan and would complement its development goals, providing beneficial effects on land use planning.

As a direct result of these changes in land use, the current residents of the proposed VAMC and LSU AMC sites would be displaced and required to move elsewhere, and commercial business and other activities currently occurring on these sites also would be required to relocate. These changes may have either adverse or beneficial effects on those involved. Land uses in the areas adjacent to and surrounding the VAMC and LSU AMC sites would not be directly affected by the Proposed Actions.

### **Indirect Impacts**

Under the Proposed Actions, the change in land use on the Tulane/Gravier VAMC and LSU AMC sites to medical uses likely would have indirect impacts on adjacent land uses. As a result of the intensive development and creation of jobs at these sites that currently are substantially vacant, land use patterns in some of the surrounding areas could be affected. The change in land use within the sites would reduce the total amount of available land zoned for residential and commercial uses in the Tulane/Gravier area. However, there are numerous areas of open space, surface parking lots, and damaged structures available for redevelopment in the vicinity. The availability of these nearby areas of land for residential and commercial development would be likely to minimize the indirect effects of the land use changes on the Tulane/Gravier VAMC and LSU AMC sites. Land in the other three quadrants of the New Orleans Medical District, adjoining the VAMC and LSU AMC sites to the south and southeast, currently is owned predominantly by medical-related or government institutions.

Conversion of the VAMC and LSU AMC sites to medical land use would complement the current and planned medical land uses in other sections of the Medical District and may indirectly promote further development of the Medical District. This may be considered a beneficial effect on land use because it would be in accordance with development plans for the district. The increase in employment associated with the new facilities and resulting demand for services in the vicinity would be expected to stimulate business in surrounding commercial areas. This would be a beneficial effect in accordance with land use plans calling for commercial use in areas surrounding the sites in line with the goals of Medical District planning, which include a vision of the district as a magnet for economic development in the area.

The demand for housing for displaced residents and for workers at the new medical facilities on these sites may promote the redevelopment of existing residential neighborhoods or the creation

of new areas of residential land use in the vicinity. The compatibility of new development supporting the medical centers with existing land uses and the general character of surrounding areas was considered in the 1999 Land Use Plan (NOCP 1999) and the Unified New Orleans Plan (NOCSF 2007). If sufficient residential housing becomes available in residential areas planned for compatibility with adjacent medical and commercial land uses, the effect on land use would be beneficial. If such housing does not become available in sufficient quantity to meet the demand from displaced residents, the indirect impact of the Proposed Actions on land use could be considered adverse with respect to residential land use. Indirect impacts on land use are discussed in more detail in conjunction with the evaluation of cumulative impacts in Section 4.3.2.

### **3.3.2.3 Impacts of Alternatives # 2 through # 4**

#### **Alternative # 2 – Lindy Boggs Site**

Direct and indirect impacts of this alternative on land use from development of the LSU AMC site at the Tulane/Gravier location would be the same as described for the Proposed Actions, though of smaller magnitude in proportion to the smaller size of the development for one medical complex instead of two.

Development of the VAMC facility at the Lindy Boggs location would have the direct effect of changing the current land uses on that site, which include commercial (a mixture of retail, including grocery and hardware stores), industrial (warehouses and abandoned railroad facilities), office, and medical uses. The medical use occurred historically on approximately 26 acres at the southeast corner of the proposed site, where the LBMC hospital operated prior to being damaged by Hurricane Katrina. The current, non-medical land uses on the site would change to medical use under this alternative. Surrounding land uses also are primarily industrial, commercial, and office, with some residential use, consisting of single and multi-family homes and apartments. Surrounding land uses would not be directly affected by this alternative.

As discussed for the existing environment, planning for this area has included continued medical use at the LBMC site, with the goals of reusing the existing facility and fostering neighborhood revitalization. Thus, medical land use on the Lindy Boggs site would be compatible with off-site residential land use in the vicinity. Accordingly, as described for the Proposed Actions, this alternative likely would have indirect, beneficial effects on development and revitalization of residential and commercial land uses in adjacent areas and would not adversely impact adjacent industrial and general office land uses. Effects of the VAMC facility on the proposed Lafitte Greenway corridor, which as currently planned would pass through the northern part of the site, would be addressed in conjunction with the evaluation of design alternatives for this site, should it be selected. Only at that subsequent stage of the process could it be determined how the design of the facility may affect or avoid the proposed greenway.

#### **Alternative # 3 – Ochsner Site**

The direct and indirect impacts of this alternative on land use from development of the LSU AMC site at the Tulane/Gravier location would be the same as described for the Proposed

Actions, though of smaller magnitude due to the smaller size of the development for a single medical facility.

Development of the VAMC facility on the Ochsner site would change the current land use on that site from industrial/commercial, mainly warehouses and surface parking lots, to medical use. However, the Jefferson Parish Comprehensive Plan already designates the area of this site for hospital land use, and the site is adjacent to existing medical land uses, including the main campus of the Ochsner Medical Center to the south across Jefferson Highway and the Ochsner for Children Pediatric Ambulatory Care Center and Lieselotte Tansey Breast Center adjoining the east boundary of the site. Land uses in the area surrounding the Ochsner site include residential, retail, and commercial, with industrial uses farther north and east. Thus, construction of the VAMC facility at this location would not result in direct impacts on residential land use as would occur under the Proposed Actions, and it would be consistent with designated future uses of the site and with existing adjacent uses. Only a few businesses actively utilizing the site would need to relocate.

#### **Alternative # 4 – Modification/Renovation of Charity Hospital**

The direct and indirect impacts of this alternative on land use from development of the VAMC site at the Tulane/Gravier, Lindy Boggs, or Ochsner locations would be the same as described above for those alternatives. Redevelopment of the Charity Hospital site for use by the LSU AMC would have no direct impact on land use because it would result in a continuation of the historical land use at that location. Land in this quadrant of the New Orleans Medical District currently is owned predominantly by medical-related or government institutions, including the VAMC, LSU Medical Center, University Hospital, Tulane University Hospital, and City of New Orleans municipal complex. Therefore, reuse of Charity Hospital as the new LSU AMC would complement the historical and planned medical land uses in this and other quadrants of the Medical District. The indirect impacts of this alternative would be largely the same as those described for Alternative # 1. However, Alternative # 4 would have a lower potential to adversely impact residential land use because residents would not be displaced from the Charity Hospital site.

### **3.4 INFRASTRUCTURE/UTILITIES**

#### **3.4.1 Existing Conditions – Infrastructure/Utilities**

The infrastructure at the existing VAMC and Charity Hospital locations, the proposed Tulane/Gravier locations, and the alternative Lindy Boggs and Ochsner locations includes utility systems as well as communication systems. The systems identified for these locations are described below.

City-wide, New Orleans has an aging water and sewer system. The City's 3,200 miles of pipelines are old and leaky and were in need of improvement well before Hurricane Katrina. In 2007, the S&WB estimated that at least 50 million gallons of water a day were being lost to leaks, approximately 2.5 times pre-Katrina levels (USAToday.com 2007). Also, while the extent of the problem is uncertain, S&WB officials believe that raw sewage is leaking out in places.

Some repairs have been made to the system since Hurricane Katrina, but, as the City's population continues to rebound, the stress on the system is expected to increase.

The S&WB has undertaken a multi-year program, the Sewer System Evaluation and Rehabilitation Program, to identify and address structural and mechanical deficiencies in the wastewater collection system and to ensure that the system has adequate capacity. These improvements, currently estimated to cost \$499.1 million over a 10-year period, are required to comply with Section XV, Clean Water Act Remedial Measures: Comprehensive Collection System Remedial Program, of the Consent Decree between the S&WB and the USEPA (S&WB 2008).

### **3.4.1.1 Existing and Proposed Tulane/Gravier Locations**

The existing VAMC, Charity Hospital (Alternative # 4), and the proposed Tulane/Gravier locations (Alternative # 1), all located in Orleans Parish, are served by the same utility companies and communication system providers. Services include potable water, sewerage, storm drainage, electrical, natural gas, solid waste collection, cable television, and wired and cellular communications.

The existing and proposed Tulane/Gravier locations currently receive water from the S&WB (CNO 2008a). As described in Section 3.2.1, the New Orleans waterworks facilities consist of two separate water treatment systems, one serving the East Bank of the Mississippi River and the other serving the West Bank. The existing and proposed Tulane/Gravier locations are located on the East Bank and served by the Carrollton Water Treatment Plant. Treated water from the Mississippi River serves as the drinking water source and is distributed to homes and businesses on the East Bank through six main arteries (underground pipes) ranging from 30 to 50 inches in diameter (B&V 2006).

The S&WB also handles wastewater for the existing and proposed medical center locations. The sanitary sewer system conveys wastewater through a primarily gravity-driven collection system consisting of lateral and trunk sewers, ranging in size from 6 inches to 7 feet in diameter, through a series of pump and lift stations to the Orleans Parish East Bank Sewage Treatment Plant (B&V 2006). A sewer pumping station is located along Rocheblave Street near the proposed VAMC Tulane/Gravier site. The treated water is then discharged to the Mississippi River and eventually reaches the Gulf of Mexico. Veolia Water North America is contracted to operate, maintain, and manage the East Bank Wastewater Treatment Plant for the City (B&V 2006).

The S&WB manages the drainage system in Orleans Parish, which consists of covered canals and pumping stations and includes both pressurized and gravity pipes to remove storm water from inside the levee system. Storm water, including water from the existing and proposed Tulane/Gravier sites, is pumped out of the City into Lake Pontchartrain, Bayou Bienvenue, the Industrial Canal, and the Intracoastal Waterway. Dry weather flow is discharged into Lake Pontchartrain, the Mississippi River, and the Intracoastal Waterway.

Electric and natural gas services are provided by Entergy New Orleans, Inc. (LDNR 2008). Solid waste collection is provided by the City's Department of Sanitation (CNO 2008a). Three

major companies provide communication services in the area. AT&T (formerly Bell South) provides telephone and internet service (Bell South 2008) and Comcast and Cox Communications provide bundled services including telephone, internet, and cable television (Cox 2008).

#### **3.4.1.2 Alternative # 2 – Lindy Boggs Location**

The alternative Lindy Boggs site is located in Orleans Parish and is served by the same utility companies and communication system providers that serve the existing and proposed Tulane/Gravier locations. Services include potable water, sewerage, storm drainage, electrical, natural gas, solid waste collection, cable television, and wired and cellular communications.

Potable water is distributed to the Lindy Boggs site via a 50-inch water main along South Carrollton Avenue and Conti Street. Wastewater is collected from the site via 8-inch lines, most of which feed a 21-inch line along North Cortez Street. The nearest pumping station is located approximately 0.5 mile west of the Lindy Boggs site at the intersection of Palmyra and South Solomon Streets.

Storm water from the Lindy Boggs site and vicinity is collected through various storm water drains and pipes that empty into large drainage boxes along Orleans Avenue, South Carrollton Avenue, and North Jefferson Davis Parkway.

#### **3.4.1.3 Alternative # 3 – Ochsner Location**

The alternative Ochsner site is located in Jefferson Parish. The Jefferson Parish Department of Water provides water for this property and the Jefferson Parish Department of Sewage collects and treats sewage and wastewater (Jefferson Parish 2008c). Wastewater is conveyed through a primarily gravity-driven collection system of lateral and trunk sewers through a series of pump and lift stations to the Jefferson Parish East Bank Sewage Treatment Plant. The treated water is then discharged to the Mississippi River and eventually reaches the Gulf of Mexico.

The Jefferson Parish Department of Drainage maintains and manages the Parish-wide Drainage and Flood Control System (Jefferson Parish 2008c). All storm water runoff is conveyed by a gravity-fed system of subsurface drainage lines and canals into the suction bays of various pump stations and is then pumped into surrounding water bodies outside of the flood protection system.

Entergy Corporation provides electric service to the Ochsner site and Atmos Energy Corporation provides natural gas service. The Jefferson Parish Waste Management Department collects trash in the area. AT&T provides telephone service while Cox Communications provides both telephone and cable television service (Jefferson Parish 2008c).

### **3.4.2 Discussion of Impacts – Infrastructure/Utilities**

#### **3.4.2.1 Impacts of the No Action Alternative**

Since no construction would occur at the proposed or existing sites, there would be no adverse direct, indirect, or cumulative impacts to the infrastructure within the project area under the No Action alternative. However, the existing conditions described in Section 3.4.1.1 would continue.

#### **3.4.2.2 Impacts of the Proposed Actions**

##### **Direct Impacts**

Construction and operation of the proposed VAMC and LSU AMC facilities would substantially increase the demands on the existing infrastructure from current levels to near or above pre-Katrina levels. As discussed below, the existing systems and services are thought to be adequate for the proposed facilities. If upgrades to these systems are required to support the new facilities, these upgrades would be designed to increase the systems' overall performance and reliability.

The S&WB maintains that existing utility services provide reliable sources of water, sewer, and drainage at the site, and are ready for use. According to the S&WB, an existing 20-inch water main on Gravier Street would provide a sufficient source of potable water for the proposed VAMC and LSU AMC facilities at the Tulane/Gravier sites. A 12-inch gravity-fed sewer main on Rocheblave Street and a nearby sewer station would meet the needs of the proposed facilities, and the East Bank Wastewater Treatment Plant should have sufficient capacity to meet the facilities' requirements in place of existing business and residential needs at this Tulane/Gravier sites (VA 2007c). Additionally, a drainage box on Galvez Street should provide significant drainage capacity during rain events (VA 2007c).

According to Entergy New Orleans, Inc., electric service is adequate for the proposed Tulane/Gravier sites, and high pressure natural gas is available to service the needs of a hospital site comparable in size and load as the current VAMC (VA 2007c).

Solid waste generated on the proposed sites would continue to be collected and handled by the City Department of Sanitation, with no expected long-term adverse impacts on the capacity of receiving landfills. Communications services for the proposed sites, including telephone and internet access, would not pose adverse impacts to the responsible companies, although expansion of services may be necessary.

Building demolition activities at the Tulane/Gravier sites would generate solid waste, including wood, drywall, cardboard, metals, concrete, and roofing materials. Building materials would be separated and recycled to the extent possible. Demolition debris that cannot be recycled would be disposed at a designated off-site location. Within Orleans Parish, Gentilly Landfill is a designated "Type III" landfill that accepts only construction and demolition debris. The landfill is located approximately 11 miles east of the proposed VAMC and LSU AMC Tulane/Gravier sites.

Other landfills that could receive the waste include the River Birch and Killona facilities. The River Birch facility is located in Westwego, Louisiana, about 20 miles from the Tulane/Gravier sites, and the Killona facility is located in Killona, Louisiana, about 25 miles from these sites.

Demolition and site clearing at the proposed VAMC and LSU AMC sites, mostly consisting of commercial and residential structures (15.4 tons per 1,000 square feet) and concrete floors and paved surfaces (53 tons per 1,000 square feet), would create about 137,000 tons of solid waste, with approximately two-thirds coming from the LSU AMC site. About 80 percent of the waste would be from paved surfaces and concrete floors.

To determine the potential impact that site selection would have on landfill resources, the worst-case scenario of sending all waste (even recyclable waste) to the closest landfill was analyzed. While a large volume of waste would be recycled or beneficially reused, the cursory analysis shows that even the worst-case scenario does not have a significant impact. Therefore, further detailed analysis of solid waste impacts is not needed for evaluating site selection.

The 198-acre Gentilly Landfill has a remaining life expectancy of about 17 years and a current capacity of approximately 11.4 million tons. The life expectancy estimate includes waste estimates from other major on-going and planned demolitions projects which have already contracted with the landfill. Based on the approximate amount of debris that would be generated from the sites (137,000 tons) and the remaining capacity at the landfill, the volume would have a measurable impact on the lifespan of the landfill. The demolition debris from the sites would contribute about 20 percent of a single year's intake at the landfill and about 1.2 percent of the total remaining capacity. However, as previously stated, waste would be diverted for recycling or reuse and could be diverted to other facilities. A waste management plan would be developed following site selection to minimize adverse impacts.

While traditional demolition is the standard method for removing structures following an acquisition, alternative options are available. The selective dismantling or removal of materials from buildings, known as deconstruction, is a technique that is becoming a popular new approach to demolition and site clearance. Considered a 'greener' alternative to demolition, the deconstruction process consists of salvaging readily available building components and extracting additional materials such as flooring, stair treads, and structural timbers from homes and buildings. Compared to standard demolition, deconstruction allows for the preservation and possible reuse of materials that yield economic and environmental benefits. However, deconstruction can be an expensive, time-consuming process with no guarantee that all materials will be reused.

The deconstruction process has several benefits including landfill waste reduction, environmental management, lower equipment rental costs, historic preservation, and job creation; however, disadvantages do exist. Deconstruction is a slow, labor-intensive process that is often met by a limited demand for recycled building materials and an unstable recovered materials market. If the disassembled structure materials are not resold or reused, they will eventually be disposed of in landfills in the same manner as demolition waste. The limited pool of experienced building dismantlement companies available and the specialized training required for work of this nature can increase costs and add length to project schedules. This contributes to

the high labor costs associated with deconstruction. Furthermore, materials that have been exposed to floodwater contamination may be unusable, especially in healthcare facilities.

From a cost perspective, area-specific labor rates, demolition costs, and landfill tipping fees can vary significantly between different regions in the United States (U.S.), thus making it difficult to accurately estimate the average costs of demolition and deconstruction. While deconstruction data are still being developed, initial cost-related studies indicated that deconstruction was generally a more costly process than demolition. A case study of an urban area in Maryland conducted by the USEPA Urban and Economic Development Division found the estimated cost of standard demolition to be \$3.50 to \$5.00 per square foot compared to a total cost of deconstruction at \$4.50 to \$5.40 per square foot (Lund and Yost 1997). Similarly, an analysis of cost and duration of deconstruction versus demolition in a residential area of Massachusetts found that deconstruction costs could be 17-25 percent higher than demolition costs.

A recent review of the construction industry in New Orleans reports that deconstruction is often cost-competitive with demolition (Browning et al. 2006). A November 2006 article in the New York Times reports that the deconstruction of five houses in New Orleans conducted by Mercy Corps and a local group, Green Project, cost \$6,000 to \$10,000 per house, a figure the authors claim is “well within the range the federal government expects to reimburse contractors for demolition” (Beck and Browning 2006). Currently, the average cost for the FEMA-funded demolition of residential structures in New Orleans is approximately \$15,000 per house. However, these costs can vary depending on whether or not a structure contains asbestos (Rankin 2008).

Deconstruction duration is another important factor to consider when the project site is slated for redevelopment. Assuming that the deconstruction time depends partly on the labor that is utilized, several case studies were analyzed and the reported time to deconstruct a residential building (1000-2000 square feet) ranges from 10 to 15 working days using a crew of 5 to 6 workers (Dantata et al. 2005). Demolition of a comparable building may be completed in one-fifth to one-third of the time of deconstruction (Air Force Center for Environmental Excellence 2003; Cosper 2000). Deconstruction could potentially be completed in a shorter time frame if a larger, more experienced crew was employed. In New Orleans, FEMA reports that on average, a single crew can demolish one house per day (Rankin 2008).

Pursuing deconstruction would address only 20 percent of the potential solid waste that would be generated by this alternative given that approximately 80 percent of the generated waste is estimated to be paved surfaces and concrete floors. For the demolition activities, the agencies will pursue the sorting and recycling of the generated waste, as well as selective salvage of materials pursuant to the PA under Section 106 of the NHPA. Based on these considerations, as well as consideration of the amount of time that deconstruction would take and the absence of significant impacts from the generated waste, the agencies have determined that deconstruction would not be valuable or meaningful in this particular case and therefore, demolition will be pursued instead.

## **Indirect Impacts**

No long-term, adverse, indirect impacts to infrastructure within the project area are anticipated under the Proposed Actions. However, there could be short-term disruptions to services, either planned or accidental, during site demolition and construction. Positive impacts may include upgraded utilities servicing off-site locations with better performance and reliability. The costs of necessary upgrades are considered a negative impact.

### **3.4.2.3 Impacts of Alternatives # 2 through # 4**

The direct and indirect impacts for Alternatives # 2 and # 3 would be similar to those described under the Proposed Actions. However, under the alternative actions, new facilities would be constructed at different locations where the existing conditions and existing demands differ from those at the proposed Tulane/Gravier sites. Therefore, the impacts of the alternative action would vary slightly with site selection.

If the pre-Katrina infrastructure that supported Charity Hospital was adequate and the demand on the system under Alternative # 4 would require minimal upgrades, the impacts of this alternative may be less than the impacts of the other alternatives and the Proposed Actions.

As described previously, a cursory, worst-case analysis was performed to determine the impact of site selection on landfill resources assuming no recycling or reuse of waste and the use of only the closest landfill to the site. Even under these conservative assumptions, the impacts from each alternative would be small with respect to the total impact on the life expectancy of the local Type III landfills. The actual influx of waste into the landfills, following the diversion of materials to be recycled or reused, in a short period would be unlikely to have a noticeable impact on normal operating conditions.

#### **Alternative # 2**

As under the Proposed Actions, under Alternative # 2, demolition debris from the Lindy Boggs site is assumed to go to the Gentilly Landfill. Demolition and site clearing at the Lindy Boggs site, consisting mostly of commercial buildings, the old LBMC, and paved areas, would create approximately 102,000 tons of solid waste. About 86,000 tons would be from paved surfaces and concrete floors, and about 8,000 tons would come from the LBMC. An additional 89,000 tons would come from the LSU AMC Tulane/Gravier site.

Based on the approximate amount of debris that would be generated from the sites and the remaining capacity at the Gentilly Landfill, the volume would have a minimal impact on the lifespan of the landfill. Under the worst-case scenario, the demolition debris from the sites would contribute only about 28 percent of a single year's intake at the landfill and about 1.7 percent of the total remaining capacity.

### Alternative # 3

Under Alternative # 3, demolition debris from the Ochsner site in Jefferson Parish would likely go to the Highway 90 landfill. The Highway 90 landfill, located about 10 miles southwest of the site, is a Type III facility accepting only construction and demolition debris. The landfill has an approximate 45-year life expectancy with a current capacity of 16 million tons. The life expectancy estimate includes waste estimates from other major on-going and planned demolitions projects that have already contracted with the landfill. Demolition and site clearing at the Ochsner site, consisting mostly of commercial buildings and paved areas, would create approximately 70,000 tons of solid waste.

Based on the approximate amount of debris that would be generated from the sites and the remaining capacity at the Highway 90 landfill, the volume would have a minimal impact on the lifespan of the landfill. The demolition debris from the sites would contribute only about 19 percent of a single year's intake at the landfill and less than 0.5 percent of the total remaining capacity. Under Alternative # 3, an additional 89,000 tons from the LSU AMC Tulane/Gravier site would go to the Gentilly Landfill, contributing less than 0.8 percent of the total remaining capacity of the landfill.

### Alternative # 4

Alternative # 4, which would include renovation and rehabilitation of Charity Hospital, would have less impact than the other alternatives due to the fact that less demolition debris would result from the project. Waste from the selected VAMC site would have some impact, as described under the other alternatives.

## **3.5 CULTURAL RESOURCES**

The NEPA process is designed to examine the wide range of impacts on the human environment that could potentially occur as a result of Federal undertakings. In August 1978, the U.S. adopted a policy to "protect and preserve for American Indians their inherent right of freedom to believe, express, and exercise the traditional religions of the American Indian, Eskimo, Aleut, and Native Hawaiians" (42 USC 1996). This policy, called the American Indian Religious Freedom Act (AIRFA), was amended in 1996 to include EO 13007, which calls for the government to avoid adversely affecting the physical integrity of sacred sites.

Section 106 of the NHPA (16 USC 470) is specifically designed to address the effects of Federal and/or Federally-funded projects on both built resources (such as buildings, bridges, and levees) and underground (archaeological) resources. These resources, collectively called "cultural resources," are then evaluated for their eligibility for inclusion in the NRHP. For the current projects, the largest environmental impacts will affect cultural resources. VA and FEMA, in consultation with the Louisiana SHPO and the ACHP, have identified a number of historic properties inside the range of alternatives under evaluation. Each of the alternatives has the potential to cause adverse effects to historic properties.

### 3.5.1 Section 106 Background

The NHPA provided for a national program to support both public and private efforts to identify, evaluate, and protect the nation's historic and archaeological resources. The NRHP is a list of buildings, districts, sites, structures, and objects significant to local, state, or national history. Properties may qualify for inclusion in the NRHP under one of four criteria:

- *Criterion A*: association with events that have made a significant contribution to the broad patterns of American history. This criterion includes literature, ethnic heritage, health/medicine, transportation, and many others.
- *Criterion B*: association with the life of significant persons. Examples of NRHP properties nominated under *Criterion B* include George Washington's Mt. Vernon estate.
- *Criterion C*: embodiment of the distinctive characteristics of a type, period, or method of construction. This inclusion also includes the works of a master or buildings that possess high artistic value. *Criterion C* applies to architecture.
- *Criterion D*: properties that have yielded or may be likely to yield information important in history or prehistory. This category is often abbreviated archaeology.

A NRHD derives its importance from being a diverse group of resources unified by one or more of the above criteria. A district can reflect one principal purpose, such as a medical district, or a grouping of archaeological sites related by common elements. NRHDs can also represent a collection of buildings with a common type or style that, as a group, embodies the characteristics of construction within a period. New Orleans has one of the highest concentrations of historic districts in the U.S.

### 3.5.2 Consultation for Proposed Actions

Section 106 of the NHPA (16 USC 470) requires Federal agencies to take into account the effects of their undertakings on historic properties (36 CFR Part 60), and to afford the ACHP an opportunity to comment. The ACHP's regulations for implementing Section 106 (Title 36 CFR Part 800) require Federal agencies to: 1) consult with the appropriate SHPOs and Federally-recognized Native American tribes for undertakings with the potential to affect historic properties; 2) identify those historic properties that may be affected by an undertaking; and 3) avoid, minimize, or mitigate adverse effects to historic properties. The current undertaking is governed by NHPA because of VA, FEMA, and HUD participation.

Section 110 of the NHPA requires Federal agencies to manage or maintain historic properties under their ownership or control in a way that "considers the preservation of their historic, archaeological, architectural, and culture values in compliance with Section 106." The existing VAMC is subject to Section 110 compliance. FEMA, as a funding agency, does not have ownership of or control over historic buildings within the MCLNO complex that are owned by the State.

Because of the complex nature of the current undertakings, cultural resource analysis is being conducted at several stages of the process. The current stage, site selection and site preparation, requires the examination of every alternative for cultural resources. At a later time,

archaeological properties will be identified and evaluated. The Federal agencies have chosen to use a PA to memorialize the consultation process and resolve adverse effects. A PA is a legally binding document that establishes a process for consultation, review, and compliance. PAs are often used in Section 106 for complex or multiple undertakings when the effects of those undertakings are not fully known. Development of a PA involves the Federal agencies, SHPO, ACHP, Native American tribes, and other interested parties. Compliance with the stipulations outlined in the PA satisfies a Federal agency's Section 106 responsibilities. For more information on PAs, see the ACHP regulations 36 CFR Part 800.14(b).

The current undertakings include parts of the Mid-City NRHD; the proposed New Orleans Medical Historic District (NOMHD); and the Parkview NRHD. In addition, four individual properties that are listed in the NRHP are located in the APEs: St. Louis Cemetery No. 2, Sister Stanislaus Memorial Hospital, St. James African Methodist Episcopal (AME) Church, and the Pan-American Life Insurance Company Building. In 2005, the SHPO concurred with FEMA's determination that Charity Hospital was eligible for individual listing. Additionally, VA and FEMA have determined that the following nine properties are eligible for individual listing: Orleans House, Deutsches Haus, Dixie Brewery, Falstaff Brewery, Grace United Church, McDonough No. 11 School, McDonough No. 30 School, and St. Joseph's Catholic Church.

As a result of damages from Hurricane Katrina, VA decided to repair or replace the existing New Orleans VAMC addressed at 1601 Perdido Street (VA Undertaking). On 17 July 2008, VA notified SHPO that it was initiating consultation pursuant to Section 106 of the NHPA for this undertaking (appendix C).

As a result of damages from Hurricanes Katrina (DR-1603-LA) and Rita (DR-1607-LA), FEMA received a request from the State OFPC to provide assistance to MCLNO located at 1532 Tulane Avenue (FEMA Undertaking). On 17 July 2008, FEMA notified SHPO that it was initiating consultation pursuant to Section 106 of the NHPA for this undertaking (appendix C).

HUD Environmental Review regulations (24 CFR Part 58) require the recipient of CDBG assistance to assume responsibility for "environmental review, decision making, and action that would otherwise apply to HUD under NEPA and other provisions of law that further the purposes of NEPA." HUD granted the State of Louisiana CDBG Disaster Assistance funds for the purposes of reestablishing the healthcare system and medical training centers damaged by Hurricane Katrina in New Orleans, Louisiana, specifically the VAMC and MCLNO. The State, in turn, will grant a portion of those funds to the City for acquisition of the VAMC site.

As the sub-grantee of CDBG Disaster Assistance funds, the City is designated the "Responsible Entity" for purposes of HUD environmental compliance, including HUD's compliance with Section 106 of the NHPA. The City has been involved in the Section 106 consultation process for the VAMC and MCLNO Section 106 projects from the beginning and has fully and actively participated in every aspect of the historic review process, including consulting party meetings, review of the draft PA, and extensive discussions of appropriate mitigation measures. The City sent a letter of intent to adopt the current historic review process as its own in fulfillment of all legal obligations under HUD regulations on 7 October 2008 (appendix C). For more information, see 24 CFR Part 58 and 36 CFR Part 800.2(a).

VA and FEMA initiated consultation with consulting parties on 24 June 2008, in a meeting in New Orleans. In accordance with 36 CFR Part 800, the Federal agencies identified consulting parties in consultation with SHPO, including organizations that had participated in previous meetings with VA, as well as owners of individually listed or eligible properties within the footprints of the alternatives. At the first meeting held 24 June 2008, VA and FEMA outlined their separate undertakings, responded to questions and concerns about the undertakings, and outlined the Section 106 compliance process. VA and FEMA convened a second consultation meeting in New Orleans on 23 July 2008, to discuss the APEs for each of the alternatives and to identify and evaluate the historic properties located within the APEs.

VA and FEMA convened a third consultation meeting on 12 August 2008 to update the consulting parties regarding 1) the inclusion of the Lindy Boggs alternative site for the VAMC, 2) the status of the methodology for review of archaeological properties, 3) discussion of the anticipated adverse effects to historic buildings and structures within the APEs (except for the area associated with the Lindy Boggs site), and 4) consulting party suggestions for treatment measures to resolve anticipated adverse effects. A fourth meeting was held on 25 September 2008. The primary focus of this meeting was the current status of the draft PA. A fifth meeting was held on 27 October 2008 to allow consulting parties to comment on the revised draft PA.

In addition to comments and questions presented during the meetings, consulting parties were given the opportunity to provide written comments in the two weeks following each meeting, with the exception of the fourth meeting after which consulting parties had five days to comment. Following the posting of the PA on 16 October 2008, consulting parties were given seven days to submit written comments for discussion during the fifth consultation meeting. After the meeting they also had until 15 November 2008, the close of the public comment period on the draft PEA, to provide any additional comments on the PA. Requests for input regarding potential effects, notices of identification and evaluation of historic properties, and findings of potential adverse effects were printed in the local daily newspaper, *The Times-Picayune*, the local weekly paper, *Louisiana Weekly*, as well as on the project website.

### **3.5.3 Historic Buildings**

#### **3.5.3.1 Existing Conditions – Historic Buildings**

##### **Existing Locations**

The eligible NOMHD is a collection of hospitals, medical schools, and associated support facilities located in downtown New Orleans near the Lower Central Business District. Roughly bounded by Tulane Avenue, South Liberty Street, Gravier Street, LaSalle Street, Perdido Street, and South Claiborne Avenue, the district includes 15 contributing elements and three non-contributing elements. These facilities, built between 1920 and 1950, are eligible for the NRHP as a district under *Criterion A: Health/Medicine* for their “role in providing healthcare to the people of New Orleans and training the state’s medical personnel” (Slattery 2006). On 16 January 2006, FEMA sent a determination of eligibility to the SHPO for the eligible NOMHD to be listed in the NRHP (appendix C). The SHPO concurred with FEMA’s findings on 23 January 2006 (appendix C).

The existing New Orleans VAMC, which lies within the boundaries of the eligible NOMHD, was determined to be eligible as a contributing element to the district. The existing VAMC was constructed in 1952 with 11 stories above grade, a basement, and a sub-basement. The facility also included a six-story Managers’ and Nurses’ Quarters, which has since been converted into administrative offices. The Managers’ and Nurses’ Quarters is also a contributing element to the eligible NOMHD. The campus was expanded to include a boiler plant in the 1950s, a nine-story research clinic in 1982, and a multi-story parking structure in the 1990s (VA 2006). In all, the VAMC campus encompasses approximately 10 acres in the area bounded by Freret Street, Gravier Street, Perdido Street, and South Claiborne Avenue. Properties within the existing VAMC campus and their contributing status within the eligible NOMHD are presented in Table 3-1.

**Table 3-1. Buildings Comprising the Existing VAMC Campus and their Contributing Status within the National Register eligible NOMHD**

Building	Address	Contributing Status
VA Hospital	1601 Perdido Street	Contributing element to eligible NOMHD
VA Managers and Nurses Quarters	Gravier Street	Contributing element to eligible NOMHD
Clinical Addition	Gravier Street at Freret Street	Noncontributing
Parking Garage	Perdido Street at Freret Street	Noncontributing
Boiler Plant	Freret Street	Noncontributing

Charity Hospital is one of 23 buildings that comprise the MCLNO campus (illustrated by the buildings outlined in orange, purple, and yellow on figure 1-1). Like the existing VAMC, Charity Hospital is within the eligible NOMHD and is considered the cornerstone of the district. The eligibility statuses of all 23 MCLNO buildings are provided in Table 3-2.

The current Charity Hospital was constructed in 1939 and is one of the premier examples of Art Deco style in the State. It features a limestone exterior with stylized reliefs and lettering, some rounded corners on the first story, a highly decorative entry, and aluminum embellishment. At its tallest point, Charity is 20 stories high. The building was designed by the architectural firm of Weiss, Dreyfous, and Seiferth, a favored company of Governor Huey P. Long. Long also commissioned the firm to design the State Capitol in Baton Rouge, completed in 1929 (Slattery 2005). Although management of Charity has frequently shifted between Tulane and LSU, Charity became a permanent part of LSU in 1997 and was renamed the MCLNO. Frequent renovations have not diminished its historical integrity and the building was determined eligible by FEMA in 2005 under *Criterion C: Architecture*, as well as under *Criterion A: Health/Medicine*.

**Table 3-2. Historic and Non-Historic Properties within the MCLNO Campus**

<b>Building</b>	<b>Address</b>	<b>Contributing Status</b>
Charity Hospital	1532 Tulane Avenue	Determined individually eligible for listing in the NRHP by FEMA in 2005
Dibert Memorial Building	340 Claiborne Avenue	Contributing element to eligible NOMHD
Lapeyre-Miltenberger Building	1550 Tulane Avenue	Contributing element to eligible NOMHD
General Services Building	1508 Gravier Street	Contributing element to eligible NOMHD
Power House	422 Freret Street	Contributing element to eligible NOMHD
Maintenance	433-435 LaSalle Street	Contributing element to eligible NOMHD
Delgado Building	1545 Tulane Avenue	Contributing element to eligible NOMHD
Butterworth Building	1541 Tulane Avenue	Contributing element to eligible NOMHD
Laundry Building	405 LaSalle Street	Contributing element to eligible NOMHD
Warehouse	1523 Perdido Street	Not contributing to NOMHD
East Pavillion	422 Freret Street	Not contributing to NOMHD
West Pavillion	1532 Tulane Avenue	Not contributing to NOMHD
Emergency Generator Building #1	1508 Gravier Street	Not contributing to NOMHD
New Generator Building	1550 Tulane Avenue	Not contributing to NOMHD
Twin Generator Building	1532 Tulane Avenue	Not contributing to NOMHD
Serving Tunnels	1532 Tulane Avenue	Not contributing to NOMHD
LSU Interim Hospital	2021 Perdido Street	Not contributing to NOMHD
Power Plant	2015 Gravier Street	Not contributing to NOMHD
Laboure Building	505-509 South Johnson Street	Not contributing to NOMHD
Seton Professional Building	2025 Gravier Street	Not contributing to NOMHD
OB/GYN Building	2100 Perdido Street	Not contributing to NOMHD
Pediatric Emergency Center	2010 Gravier Street	Not contributing to NOMHD
Beasley Building	136 South Roman Street	Not contributing to NOMHD

In the days following Hurricane Katrina, the buildings in the downtown area flooded, including the basement and sub-basement of both the VA Hospital and Charity Hospital. The facilities went without electrical power for weeks. Without air conditioning, mildew and mold spread throughout both facilities. At Charity Hospital, the storm damaged the roof and windows, allowing water to leak into the building, and patients and staff were forced to remain without power or sewer functions (Blitch Knevel Architects 2008). Following the evacuation, doctors,

nurses, and military personnel spent a month decontaminating and cleaning Charity Hospital's first three floors with the intent of returning some hospital functions. However, the extent of the damages prevented Charity Hospital from re-opening and it has not been occupied by patients since it was evacuated following the hurricane. Other historic buildings within the MCLNO campus have continued to operate at a reduced capacity. Since December 2005, the VAMC has operated a primary care clinic on the tenth floor of the parking structure; the ninth and tenth floors formerly housed the VAMC's nursing home facility. A specialty clinic opened in March 2006 on the ninth floor (VA 2006).

### **Alternative #1 – Proposed Actions – Tulane/Gravier Locations**

The proposed VAMC Tulane/Gravier site, as provided by RPC, is bounded to the northeast by Canal Street, the southeast by South Galvez Street, the southwest by Tulane, and the northwest by South Rocheblave Street. The proposed LSU AMC site is bounded by Canal Street on the northeast, Tulane Avenue to the southwest, South Galvez Street to the northwest, and I-10/Claiborne Avenue to the southeast (figure 3-6). The proposed VAMC and LSU AMC sites are adjacent to one another, separated by South Galvez Street.

The proposed VAMC and LSU AMC sites are located in the Tulane/Gravier area northwest of the Central Business District and southwest of the Mid-City neighborhood (figure 3-4). South Broad Street, two blocks northwest of South Rocheblave Street, is the dividing line between the Tulane/Gravier and the Mid-City neighborhoods.

The Mid-City NRHD, listed in the NRHP in 1993, is roughly bounded by Derbigny Street, City Park Avenue, Conti Street, and I-10/Claiborne Avenue and consists of approximately 8,500 acres (figure 3-7). The district contains a collection of buildings, primarily residential, that represent the building types and styles from 1860 to 1943. When nominated in 1993, a survey by Koch and Wilson found that 85 percent of the buildings in the district were contributing elements. Of the 4,489 buildings in the NRHD at the time of nomination, nearly half were a form of shotgun house, a narrow gable-front dwelling which is one-room wide and predominantly located in urban areas. Double shotguns are two adjacent shotguns with a family on each side. A distinctly southern type of home, shotguns in New Orleans are unique in that most are stylized. At the time of nomination, approximately 83 percent of Mid-City buildings displayed a form of architectural style. These styles include but are not limited to Eastlake, Greek Revival, Queen Anne revival, and bungalow (Craftsman). Other types of buildings in Mid-City include creole cottages, a gable-ended 18<sup>th</sup> and 19<sup>th</sup> century style of home 1.5 stories tall, with sidehalls, often described as shotguns with a hallway to the left or right; bungalows, single living units one story high and two rooms wide; and New Orleans raised basements, a bungalow set atop another story. Mid-City was also comprised of commercial buildings representing 12 percent of the total building stock and institutional buildings, many highly stylized, comprising 2 percent of the total number of buildings.

As a treatment measure to mitigate adverse effects of another undertaking, FEMA sent teams of *Secretary of the Interior* qualified architectural historians to survey the Mid-City NRHD in 2007. At the time of the evaluation it had been 14 years since the district was nominated and many of the buildings had been damaged by natural forces. While the total number of buildings in the

district dropped from 4,489 to 4,339, 85 percent of buildings in Mid-City still contributed to the NRHD. Shotguns and double shotguns now represent nearly 60 percent of the total building stock. The 2007 survey determined that 40 percent of the district still possesses architectural style

In 2008, VA and FEMA in consultation with SHPO approached the Keeper of the NRHP to determine whether the NRHD displayed additional areas of significance, needed an extended period of significance, or had experienced a loss of integrity. The Keeper determined that while the area did not display any additional areas of significance and there was no reason to expand the period of significance, portions of 13 blocks on the periphery of the Mid-City NRHD had experienced a loss of integrity so significant as to warrant their removal from the district. Six of these blocks lie within the footprint of the LSU AMC site. Six of the fifteen blocks comprising the LSU AMC site remain within the Mid-City NRHD boundary recommended by the Keeper. The VAMC site lies entirely within this boundary. The current boundaries of the Mid-City NRHD, the National Park Service (NPS) recommended revised boundaries, and the proposed VAMC and LSU AMC sites are shown in figure 3-7.

VA and FEMA, in consultation with SHPO, determined that of the 3,710 contributing buildings in the Mid-City NRHD, 123 (3.3 percent) lie within the boundaries of the proposed VAMC site and 42 (1.1 percent) lie within the boundaries of the proposed LSU AMC site. Structures that are individually listed or eligible for listing in the NRHP are briefly discussed below and detailed information on additional properties is provided in tables D-1 through D-4 in appendix D.

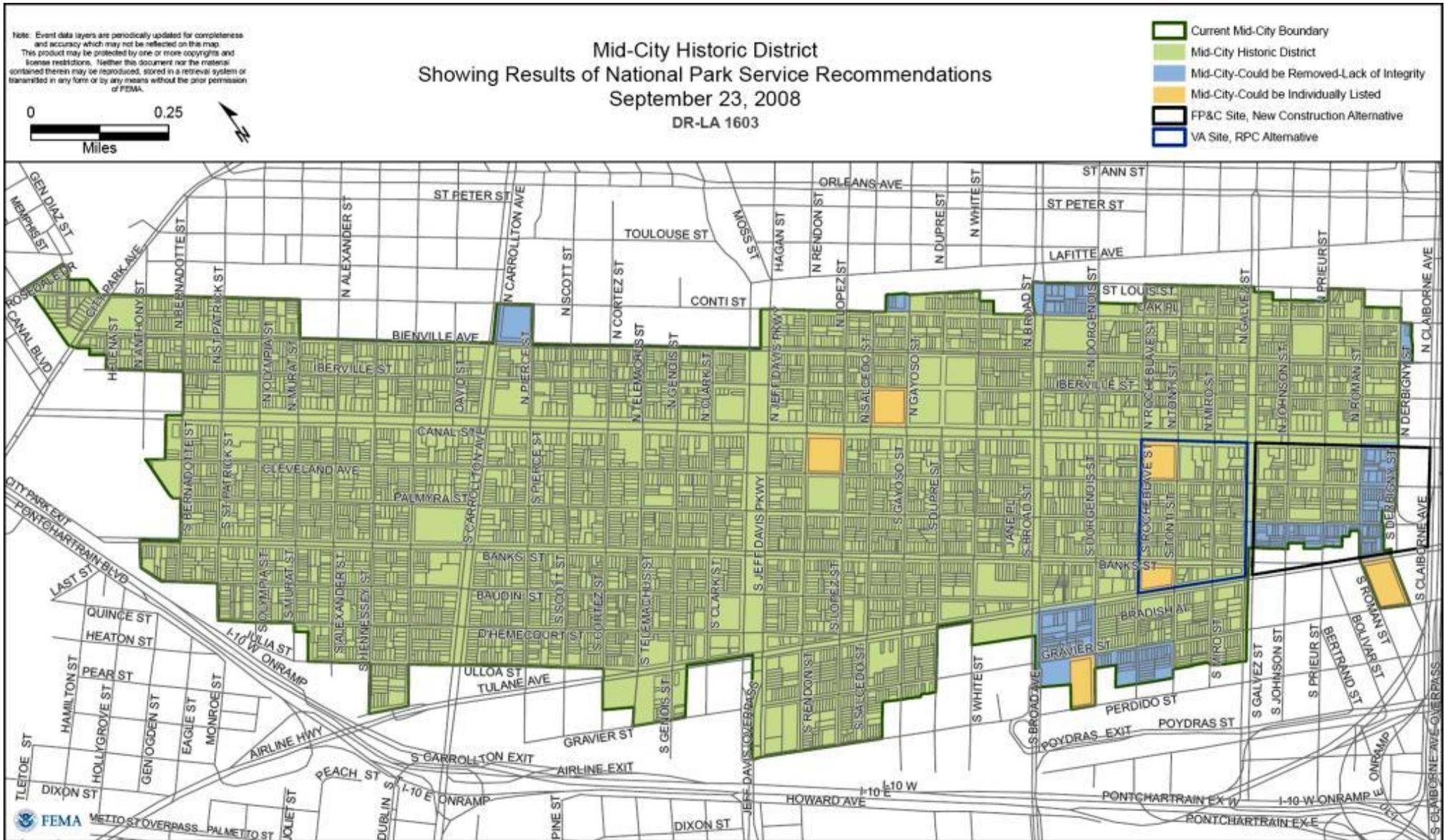


Figure 3-7. Current Mid-City NRHD Boundaries with National Park Service Recommendations and the Proposed Site Boundaries

## Individually Listed or Eligible Buildings

### VAMC

VA and FEMA have determined that within the proposed VAMC site footprint, Dixie Brewery at 2401 Tulane Avenue is eligible for inclusion in the NRHP.

The Pan American Life Insurance Building is a six-story office/commercial structure of steel frame, glass, and aluminum with a two-story rear wing. It is located at 2400 Canal Street and occupies an entire city block (2.2 acres). Built between 1950 and 1952, the structure is architecturally significant because it is one of the few International Style buildings within Louisiana and one of three buildings in Louisiana designed by the internationally-renowned New York and Chicago firm of Skidmore, Owings and Merrill. It is listed in the NRHP under *Criterion C: Architecture* (LNRHP 2007).

Beer brewing was a thriving industry in New Orleans for almost 100 years. Valentine Merz opened Dixie Brewery on Halloween of 1907 (Lind 2006). A six-story brick building with white stone trim, round arches, a central mansard dome, and a corner turret, Dixie Brewery is one of the two extant buildings from the city's early 20<sup>th</sup> century brewery district. Dixie Brewery continued to brew until damaged by Hurricane Katrina in 2005. The property has been embroiled in litigation and currently sits abandoned (Lind 2006). Before Katrina and subsequent looting, Dixie Brewery possessed some unique elements including the large, solid-copper kettle that beer was brewed in (that Walt Disney emulated for its brewpub at Disney World) and the row of open cypress tanks that beer was fermented in. The building also sported large grain silos on the roof painted to look like Dixie Beer cans (Brand 2007). The Dixie property, which occupies 1.3 acres and is bounded by Banks Street, Tulane Avenue, South Tonti Street, and South Rocheblave Street, is completely within the proposed VAMC site.

### LSU AMC

There are no individually listed properties currently within the footprint of the proposed LSU AMC site. VA and FEMA have determined that three properties within the footprint of the proposed LSU AMC site are eligible for individual inclusion in the NRHP: the Deutsches Haus at 200 South Galvez Street, the former McDonogh No. 11 School building at 2001 Palmyra Street, and the Orleans House at 1800 Canal Street.

The Deutsches Haus is a two-story brick structure with little exterior ornamentation except a row of dentils beneath a white cornice and a classical door overhang. It was built between 1910 and 1912 and was owned by the Cumberland Telephone and Telegraph Company. The Southern Bell Telephone and Telegraph Company bought the property in 1926 and sold it to the Deutsches Haus in January 1928 (Stewart and Woodruff no date). The structure is significant because of the important and unique contributions of Germans and their beneficent societies to the development of New Orleans. This location is the most notable example of the ethnic group's efforts to preserve its cultural identity. The property was determined eligible for individual listing in the NRHP by VA and FEMA under *Criterion A: German Cultural History*.

The former McDonogh No. 11 School building is located at the corner of South Prieur and Palmyra Streets (2001 Palmyra Street). The McDonogh schools were funded at the bequest of John McDonogh, a New Orleans philanthropist, when he died in 1850. The building is within the footprint of the proposed LSU AMC site and was determined eligible for listing in the NRHP by VA and FEMA. The building was renovated following Hurricane Katrina and was reopened in August 2008 as the Priestly School of Architecture and the P.M. School.

The Orleans House is an asymmetrical, two-story house that features a corner tower, jutting bay, decorative wood work and Queen Anne and Eastlake style influences. It was built in 1899 for Charles Orleans, a cemetery memorial builder (Huber et al. 1974). The house stands as one of the few remaining residential style structures dating to the late 19<sup>th</sup> century along the section of Canal Street. The Historic District Landmarks Commission lists the structure as a Local Landmark. In 2008, the Louisiana Landmarks Society listed the house as one of the Nine Most Endangered Sites in New Orleans (Louisiana Landmarks Society 2008). The property was determined eligible for listing in the NRHP by VA and FEMA under *Criterion C: Architecture*. Currently, the property is operated as a bed-and-breakfast inn.

### Surrounding Area

The APE for the proposed Tulane/Gravier VAMC and LSU AMC sites was developed by VA and FEMA in consultation with SHPO and the ACHP. The APE for the proposed actions is bounded by Broad Street from the I-10 overpass to St. Louis Street, St. Louis Street from Broad Street to North Robertson Street, North Robertson Street from St. Louis Street to Tulane Avenue, around the New Orleans Medical District, and Perdido Street and I-10 from LaSalle Street to Broad Street as shown in figure 3-8.

The APE contains portions of the existing Mid-City NRHD and the eligible NOMHD. In all, there are roughly 760 buildings in the APE but only 264 will be directly affected by the preferred alternatives. The properties individually listed or eligible for listing in the NRHP within the APE are listed in table 3-3. Table 3-4 provides the listed or eligible NRHDs at least partially located within the APE.

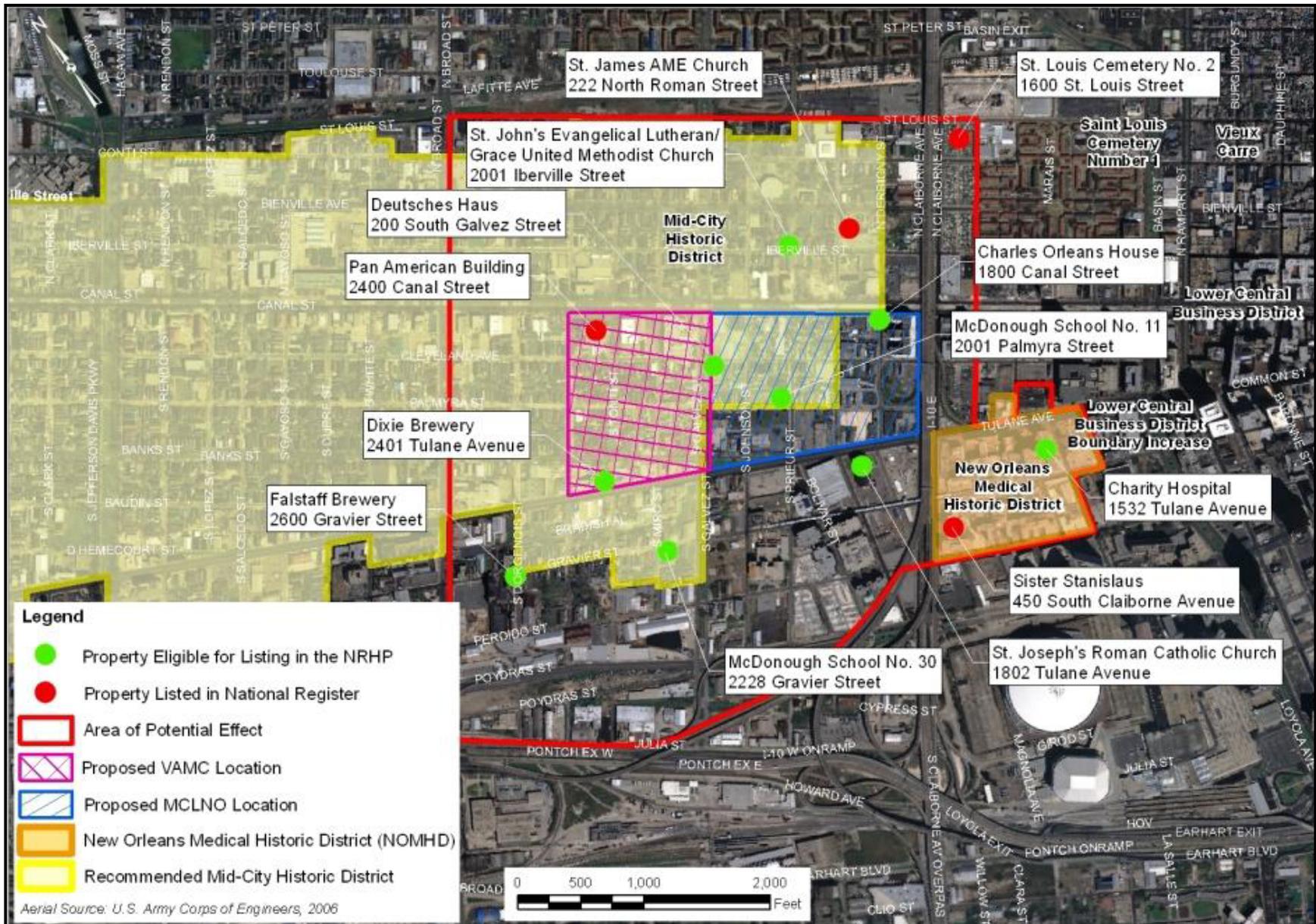


Figure 3-8. APE for VAMC and LSU AMC Tulane/Gravier Proposed Sites (Proposed Actions)

**Table 3-3. Properties within the VAMC/LSU AMC APE that are Individually Listed or Have Been Determined to be Eligible for Listing in the NRHP**

Building Name	Date in Register or Date Determined Eligible	Address
<b>Listed Properties</b>		
Pan American Building	2007	2400 Canal Street
St. James AME Church	1982	222 North Roman Street
St. Louis Cemetery No. 2	1975	1600 St. Louis Street
Sister Stanislaus Memorial Building	2003	450 South Claiborne Avenue
<b>Eligible Properties</b>		
Charity Hospital	2005	1532 Tulane Avenue
Falstaff Brewery <sup>a</sup>	NA	2600 Gravier Street
Dixie Brewery <sup>a</sup>	NA	2401 Tulane Avenue
Deutsches Haus <sup>a</sup>	NA	200 South Galvez Street
St. Joseph's Catholic Church <sup>a</sup>	NA	1802 Tulane Avenue
McDonogh School No. 11 <sup>a</sup>	NA	2001 Palmyra Street
McDonogh School No. 30 <sup>a</sup>	NA	2228 Gravier Street
Charles Orleans House <sup>a</sup>	NA	1800 Canal Street
St. John's Evangelical Lutheran/Grace United Methodist Church <sup>a</sup>	NA	2001 Iberville Street

Notes: <sup>a</sup> FEMA submitted a letter to the SHPO on 14 November 2008 requesting concurrence for finding of individual eligibility for listing in the NRHP (appendix C).

**Table 3-4. Historic Districts within the VAMC/LSU AMC APE that are Listed or Have Been Determined to be Eligible for Listing in the NRHP**

Name	Date in Register or Date Determined Eligible	Boundaries
<b>Listed Districts</b>		
Mid-City NRHD	1993	Roughly bounded by Derbigny Street, Conti Street, City Park Avenue, and I-10.
<b>Eligible Districts</b>		
New Orleans Medical Historic District	2006	Bounded by Tulane Avenue, South Liberty Street, Gravier Street, LaSalle Street, Perdido Street, and South Claiborne Avenue.

Historical properties within the APE but not the footprint include: St. James AME Church, St. Louis Cemetery No. 2, and the Sister Stanislaus Memorial Building. These properties are included in the NRHP.

St. Joseph's Roman Catholic Church, located at 1802 Tulane Avenue, is the largest historical church in New Orleans. The building is Romanesque style with several important architectural details. The structure was finished in 1892, almost 30 years after construction started (Christovich et al. 1998). The church is listed by the Historic District Landmarks Commission as a Local Landmark. The property was determined eligible for listing in the NRHP by VA and FEMA under *Criterion C: Architecture*.

Falstaff was one of the three major breweries in New Orleans, including Dixie Brewery and the Jackson Brewery (Inside Northside 2006). The Falstaff Brewery is addressed at 2600 Gravier Street. It is believed the original building was constructed circa 1911 by the National Brewing Company (1908 Sanborn; 1936 Sanborn). In 1936, the St. Louis, Missouri-based Falstaff Brewing Corporation bought the National Brewing Company and its New Orleans plant and began embarking on plans to expand the facility. Most of the buildings on site date to Falstaff's refurbishment and expansion of the brewery (Thomas 2006). It is believed that the iconic vertical Falstaff sign and weather ball were added to the brewery in 1950 (Inside Northside 2006). The brewery sat abandoned from 1978 to 2006 when it was purchased by developers. The brewery has since been converted into 149 mixed-income apartments and retail space. The Falstaff office building at 2601 Gravier Street was demolished as part of the project. The brewery still retains two of its landmark features – the statue of King Gambrinus, the patron of beer, and most notably, the vertical Falstaff sign that rises above the building. The statue of King Gambrinus stands atop the corner entrance of the original structure. The vertical sign, which sits atop the bottling plant, is capped with a weather ball that has not functioned continuously since the brewery closed. The Falstaff is a Historic Districts Landmarks Commission (HDLC) local landmark and was determined eligible under *Criterion A: Industry* by FEMA.

The Saint James AME Church is a Victorian Gothic Revival, stuccoed brick, basilican plan structure located at 222 North Roman Street. It was built in 1848 and remodeled in 1903. It is architecturally significant because it is an unusually opulent and “high style” example of an AME church within the context of Louisiana. The property is individually listed in the NRHP under *Criterion C: Architecture* (LNRHP 1982).

Saint Louis Cemetery No. 2 incorporates three blocks bounded by North Claiborne Avenue, Robertson Street, St. Louis Street, and Iberville Street. It was established in August 1823 and is the second oldest extant cemetery in New Orleans. The aboveground tombs are made of brick, marble, granite, and combined varieties and are often decorated with sculpture and cast and wrought ironwork. Styles of tombs include neo-Classical, neo-Gothic, and Egyptian Revival. Brick wall vaults, often referred to as “ovens,” are also present in the cemetery. The wall vaults are three and four tiers tall and create an architectural buffer to the surrounding streets and unify the squares. The property is individually listed in the NRHP under *Criterion C: Architecture* (LNRHP 1975).

Sister Stanislaus Memorial Building is a steel frame, masonry structure located at 450 South Claiborne Avenue and was built in 1938 to house the Charity Hospital School of Nursing with funding through the New Deal's Public Works Administration. It is architecturally significant because it is one of Louisiana's finest expressions of the Modernistic taste (Art Deco). Of the roughly 40 examples of Art Deco buildings in Louisiana, this structure ranks highly due to its

scale, complexity, and dynamism of its massing. It was designed by Weiss, Dreyfous and Seiferth, a firm known for many projects during the Huey P. Long administration. A notable exterior alteration is the defacement of one side elevation with the construction of an unsympathetic addition that reads as a separate building. It is excluded from the nominated acreage. The property is individually listed in the NRHP under *Criterion C: Architecture* (LNRHP 2003).

### **Alternative # 2 – Lindy Boggs Location**

The Lindy Boggs alternative is 39.8 acres of contiguous land situated between the borders of the Mid-City NRHD and the Parkview NRHD. The site is bordered by Carrollton Avenue to the west, Jefferson Davis Highway to the east, Bienville Street to the south, and Toulouse Street to the north (figure 3-9). The project area is comprised of the LBMC and a collection of warehouses. The Lindy Boggs Hospital, formerly Mercy Hospital, was determined to not possess the qualities of individual eligibility under any criterion in a letter from VA to SHPO on 9 September 2008.

The 1883 *Robinson Atlas* shows little development past South Galvez Street (Robinson 1883). After the installation of a pumping station at Broad Avenue in 1899, development of the area progressed. In 1908, some development occurred along North Carrollton Avenue in the vicinity of the proposed Lindy Boggs site. The majority of the development, however, was initiated by the New Orleans Terminal Company, which constructed railroad tracks and a Round House on St. Louis Street between North Cortez and North Scott Streets. At the time, all residential buildings were between Canal and Bienville Streets (Sanborn 1908).

The Sisters of Mercy built Mercy Hospital in phases, beginning in the 1950s and continuing through the 1980s (Environ 2006). The Sisters operated Mercy Hospital until 1990 when it was purchased by Tenet Health Care and merged with Southern Baptist Hospital. Mercy Hospital was later renamed LBMC. Hurricane Katrina severely damaged the facility and Tenet Health Care chose not to reopen the hospital. In 2007, Tenet Health Care sold the LBMC to Victory Real Estate Investments (New Orleans City Business 2007).

### **Surrounding Area**

The APE for the Lindy Boggs alternative was defined by VA in consultation with SHPO. The APE is bounded by Orleans Avenue, Bayou St. John, North Rendon Street, Canal Street, North Scott Street, Iberville Street, and North Hennessey Street as illustrated in figure 3-9. Although not indicated on the figure, the APE also includes the existing VAMC addressed at 1601 Perdido Street. The APE contains portions of the existing or eligible historic districts listed in table 3-5.

VA, in consultation with the SHPO, has determined that of the 472 properties within the Lindy Boggs APE, 399 contribute to a listed or eligible NRHD. Of the 399 properties, 216 contribute to the Mid-City NRHD and 183 properties contribute to the Parkview NRHD. These properties will not be directly affected by the selection of the Lindy Boggs alternative. Detailed information on these properties, including their architectural and constructions styles, is provided in tables D-5 and D-6 in appendix D.

**Table 3-5. Historic Districts within the Lindy Boggs APE that are Listed or Have Been Determined to be Eligible for Listing in the NRHP**

District	Date in Register or Date Determined Eligible	Boundaries
<b>Listed Districts</b>		
Parkview NRHD	1995	Bounded roughly by City Park Avenue, Bayou St. John, Orleans Avenue, Rocheblave Street, Lafitte Street, and St. Louis Street.
Mid-City NRHD	1993	Bounded roughly by Derbigny Street, Conti Street, City Park Avenue, and I-10.
<b>Eligible Districts</b>		
New Orleans Medical Historic District	2006	Bounded by Tulane Avenue, South Liberty Street, Gravier Street, LaSalle Street, Perdido Street, and South Claiborne Avenue.



**Figure 3-9. APE for the Lindy Boggs Location**

### **Alternative # 3 – Ochsner Location**

The Ochsner Site is located in Jefferson Parish approximately 1 mile west of the Jefferson-Orleans Parish line. The site encompasses 28 acres between Jefferson Highway and the Earhart Expressway. It is in an area of mixed residential, commercial, and institutional use, the most notable being the main campus of the Ochsner Medical Center.

Despite the expansion of New Orleans into Jefferson Parish and the numerous railroads that crossed the area, the project site remained on the fringe of expansion until the 20<sup>th</sup> century. The completion of Airline Highway in 1930 paved the way for the residential development that exploded in Jefferson Parish in the latter half of the 20<sup>th</sup> century (White 2006). It was quickly followed by roads such as Metairie, Napoleon, and Causeway Boulevard (Bezou 1973). Commercial and industrial development occurred along the major roadways. Single family homes flooded smaller streets. Ochsner Hospital moved to its present location on Jefferson Highway in June of 1954 to serve these new residents. Increased development in the western part of the Parish occurred when I-10 was completed in the 1970s.

In the 1950s, a railroad spur was completed on the Ochsner site to serve four newly constructed warehouses. Demolition and reconstruction of these and other buildings on the project site occurred throughout the remainder of the 20<sup>th</sup> century. Currently, there are three warehouses on the project site. The structures are made of brick, metal, and concrete and not considered historic as stated by VA in the 17 July 2008 letter to SHPO. The site also houses a collection of historic trains owned by a hobby club in the area. One of these trains, Southern Pacific Locomotive Number 745, is listed in the NRHP and believed to be the only remaining 2-8-2 locomotive constructed at the Southern Pacific Railroad's Algiers Shop.

### **Surrounding Area**

The APE for this alternative was defined by VA, in consultation with the SHPO, in a letter dated 17 July 2008. The boundaries of the APE for the Ochsner site alternative are the railroad tracks to the north, Jules Avenue and Jefferson Highway to the east, River Road to the south, and Deckbar Avenue to the west, as illustrated in figure 3-10. Although not illustrated on the figure, the APE includes the existing VAMC located at 1601 Perdido Street.

Southern Pacific Locomotive Number 745 is listed in the NRHP and believed to be the only remaining 2-8-2 locomotive constructed at the Southern Pacific Railroad's Algiers Shop. It is housed in a warehouse on the Ochsner site and will be moved prior to any demolition.

The surrounding residences within the APE are primarily frame single-family homes constructed in the mid-20<sup>th</sup> century. Many have been altered by the addition of vinyl or aluminum siding and windows. The area is not a NRHD and does not possess the necessary qualities of significance as stated by VA in the 17 July 2008 letter to SHPO.



**Figure 3-10. APE for the Ochsner Location**

#### **Alternative # 4 – Modification/Repair of MCLNO Facilities**

The John Dibert Memorial Tuberculosis Building is a 4-story building on South Claiborne Avenue. It was built in 1926 and named after the husband of a prominent Charity Hospital patron, Mrs. Eve Butterworth Dibert. The Butterworth building was completed in 1950 in the International style. The Delgado Building is adjacent to the Butterworth Building. It was built in the early part of the 20<sup>th</sup> century and used as the Charity Nurses' Home in the 1950s. Also included in the MCLNO campus is the Lapeyre-Miltenberger Convalescent Home, also known as the L&M Building, at 1550 Tulane Avenue. Built in 1933, the L&M Building is another example of Art Deco style. Other buildings related to the function of Charity Hospital include the General Services Building, completed circa 1938, the power house, completed in 1938, the laundry building, completed circa 1938, the Maintenance Building, completed in 1950, and an accompanying maintenance shop, completed circa 1930. Each of these buildings is a contributing element to the eligible NOMHD. A warehouse for Charity Hospital at 1523 Perdido Street is not a contributing element to the district (Slattery 2006). The remaining buildings of the MCLNO campus do not meet the criteria for inclusion in the NRHP. For a list of all buildings in the MCLNO campus and their contributing status, see table 3-2.

### Area of Potential Effect

The APE for Alternative # 4 consists of the existing footprints of the current MCLNO facilities (figure 3-11). The APE is based on assumptions that repair work will not require pile driving and that no new construction will take place. In the event that new construction is deemed necessary, FEMA will consult with the SHPO on a revised APE.

#### **3.5.3.2 Discussion of Impacts – Historic Buildings**

Regulation 36 CFR Part 800.5 requires Federal agencies, in consultation with SHPO and interested tribes, to apply the criteria of adverse effects or impacts to historic properties within the APE. An adverse effect is defined by 36 CFR Part 800.5 as an aspect of “an undertaking that may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the NRHP in a manner that would diminish the integrity of the property’s location, design, setting, materials, workmanship, feeling, or association.” Adverse impacts may also include reasonably “foreseeable effects caused by the undertaking that may occur at a later time.” The current impacts to the cultural resources described for each alternative relate to site selection and site preparation.

#### **Impacts of the No Action Alternative**

Under the No Action alternative, the existing VAMC and/or MCLNO complex would not be rehabilitated. The conditions of both the existing VAMC and MCLNO have deteriorated due to damage sustained during Hurricane Katrina. The existing VAMC, which currently provides some outpatient services, would continue to operate at a reduced capacity.

Two buildings that are part of the VAMC campus are eligible for inclusion in the NRHP as contributing elements to the eligible NOMHD. If not properly vented and secured, the buildings would continue to suffer from neglect, which would adversely impact their integrity and contributing status.

Charity Hospital is eligible for inclusion in the NRHP under *Criterion A and C* as well as a contributing element to the eligible NOMHD. Selection of the No Action alternative would result in the Charity Hospital continuing to sit idle and no longer operating as a hospital. Such a change in the use of the building could constitute an adverse impact, as noted in 36 CFR Part 800.5(a)(2)(iv), which states: “change of the character of the property’s use...that contribute to its historical significance.” The building would also suffer from neglect if not properly and continually vented and secured, which would eventually adversely impact the building, and potentially the NOMHD. In addition, other buildings within the MCLNO campus that are listed as contributing elements to the eligible NOMHD would suffer similar adverse effects if not properly secured and ventilated.

#### **Impacts of the Proposed Actions**

Measures to avoid, minimize, and mitigate the potential adverse impacts for each alternative can be found in the PA in appendix B and additionally in Chapter 5, Mitigation.

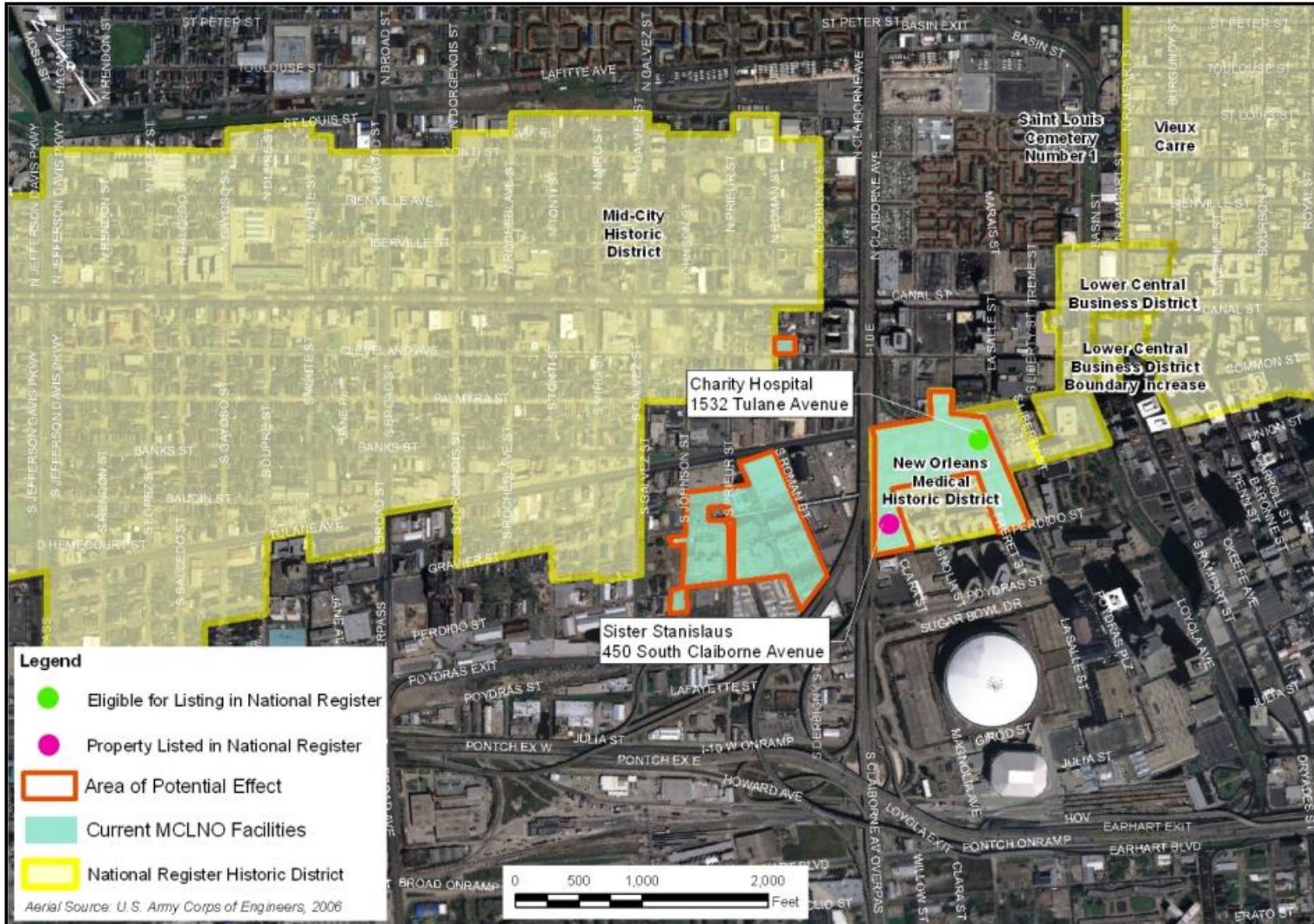


Figure 3-11. APE for Alternative # 4

## *VAMC*

The APE for the Tulane/Gravier VAMC site contains portions of the existing Mid-City NRHD and the eligible NOMHD. It also contains five properties individually listed in the NRHP (see table 3-3). In addition, FEMA and VA have determined nine buildings within the APE to be individually eligible for inclusion in the NRHP.

The Proposed Actions include the construction of the VAMC in the 12-block area bounded by Tulane Avenue, Canal Street, South Galvez Street, and South Rocheblave Street. All 12 blocks fall entirely inside the boundaries of the Mid-City NRHD. The 12 blocks represent only 4 percent of the total number of blocks in the Mid-City NRHD. Dixie Brewery will be assessed for stability and, if found stable, be integrated as well. If it is determined that the brewery's condition prohibits integration, important architectural features will be saved and integrated. The Pan-American Life Insurance Building will not be demolished but integrated into the design of the new VAMC. These two buildings occupy approximately 12 percent (3.5 acres of the total 30-acre site) of the total area of the proposed VAMC site.

Though some funds will be provided to move some contributing elements which have historical and structural integrity, implementation of this alternative will require the demolition of other properties that contribute to the significance of the Mid-City NRHD and are located within the project area. This will adversely affect the contributing properties and the Mid-City NRHD itself (36 CFR Part 800.5(a)(2)(i)). Although it may be possible to avoid the adverse effects associated with demolition through the retention of certain historic buildings, these actions also have the potential to meet the adverse effect criteria because they may change the character of the property's setting that contributes to its historic significance (36 CFR Part 800.5(a)(2)(iv)). The retention of Dixie Brewery and the Pan-American Life Insurance Building reduces the number of acres the VA will need to clear.

This Alternative will introduce visual, atmospheric, and audible elements that may diminish the integrity of the Mid-City NRHD (36 CFR Part 800.5(a)(2)(v)). In the event that VA fails to secure and ventilate the existing VAMC, adverse effects may occur while the VA seeks alternative uses for the facilities (36 CFR Part 800.5(a)(2)(vi)). It is possible that adverse effects could result from future uses of the VAMC buildings if such uses change their character and historic use (36 CFR Part 800.5(a)(2)(iv)). Should the OFPC choose to construct a new medical center on the adjacent LSU AMC site, additional adverse effects to the Mid-City NRHD would occur.

Treatment measures to resolve these adverse effects were developed by VA, FEMA, and the City through consultation among the ACHP, the SHPO, the OFPC, the Mississippi Band of Choctaw Indians (MBCI), and interested preservation and neighborhood organizations. These treatment measures are set forth in the PA (appendix B), and a discussion of these measures can be found in Section 5.1.