

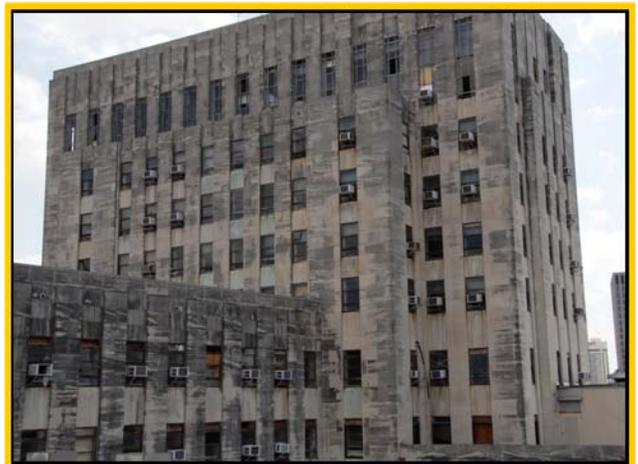
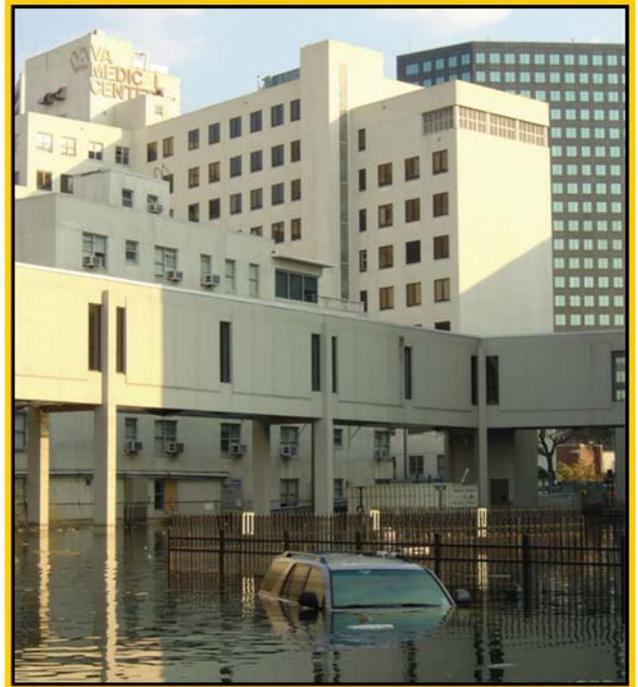
DRAFT

**PROGRAMMATIC
ENVIRONMENTAL
ASSESSMENT FOR
SITE SELECTION**

**VETERANS AFFAIRS
MEDICAL CENTER (VAMC)**

AND

**LOUISIANA STATE UNIVERSITY
ACADEMIC MEDICAL CENTER
OF
LOUISIANA (LSU AMC)**



OCTOBER 2008

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LIST OF ACRONYMS AND ABBREVIATIONS

ABFE	Advisory Base Flood Elevation
ACBM	asbestos-containing building materials
ACHP	Advisory Council on Historic Preservation
A.D.	anno Domini
Adams	Adams Management Services Corporation
AIRFA	American Indian Religious Freedom Act
AME	African Methodist Episcopal
APE	Area of Potential Effect
ASD	Acceptable Separation Distance
AST	aboveground storage tank
B.C.	before Christ
BMP	best management practice
B.P.	Before the Present
CAA	Clean Air Act of 1963
CDBG	Community Development Block Grant
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
City	City of New Orleans
CPRMP	Coastal Protection and Restoration Master Plan
CZMA	Coastal Zone Management Act
dB	decibel
dba	A-weighted decibel
DNL	day-night average sound level
EA	Environmental Assessment
EDR	Environmental Data Resources, Inc.
EIS	Environmental Impact Statement
EO	Executive Order
Environ	Environ International Corporation
ESA	Environmental Site Assessment
ESRI	Environmental Systems Research Institute, Inc.
FEMA	Federal Emergency Management Agency
FHBM	Flood Hazard Boundary Maps
FHWA	Federal Highway Administration
FIRM	Flood Insurance Rate Map
FONSI	Finding of No Significant Impact
FPPA	Farmland Protection Policy Act
GIS	Geographic Information System
GNOCDC	Greater New Orleans Community Data Center
GNOHSDRRS	Greater New Orleans Hurricane Storm Damage Risk Reduction System
HDLC	Historic Districts Landmarks Commission
HEAG	highest existing adjacent grade
HMGP	Hazard Mitigation Grant Program
HUD	U.S. Department of Housing and Urban Development
HVAC	heating, ventilation, and air-conditioning

LIST OF ACRONYMS AND ABBREVIATIONS (Continued)

I-10	Interstate 10
IER	Individual Environmental Report
IHNC	Inner Harbor Navigation Canal
JeT	Jefferson Transit
LA RS	Louisiana Revised Statutes
LBMC	Lindy Boggs Medical Center
LCRP	Louisiana Coastal Resources Program
LDEQ	Louisiana Department of Environmental Quality
LDNR/CMD	Louisiana Dept. of Natural Resources Coastal Management Division
LHFA	Louisiana Housing Finance Agency
LPV	Lake Pontchartrain and Vicinity
LRA	Louisiana Recovery Authority
LSU	Louisiana State University
LSU AMC	Louisiana State University Academic Medical Center
LUST	leaking underground storage tank
MBCI	Mississippi Band of Choctaw Indians
MCLNO	Medical Center of Louisiana at New Orleans
MMG	Materials Management Group, Inc.
MSA	Metropolitan Statistical Area
msl	mean sea level
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act of 1969
NESHAP	National Emission Standards for Hazardous Air Pollutants
NHPA	National Historic Preservation Act
NOCP	New Orleans City Planning Commission
NOCSF	New Orleans Community Support Foundation
NOMHD	New Orleans Medical Historic District
NONRP	New Orleans Neighborhoods Rebuilding Plan
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NRHD	National Register Historic District
NRHP	National Register of Historic Places
OCD	Office of Community Development
OFPC	Office of Facility Planning and Control
OSHA	Occupational Safety and Health Administration
PA	Programmatic Agreement
PCB	polychlorinated biphenyl
PEA	Programmatic Environmental Assessment
ppm	parts per million
PSI	Professional Services, Inc.
RCRA	Resource Conservation and Recovery Act
RECAP	Risk Evaluation/Corrective Action Program
RPC	Regional Planning Commission
RTA	Regional Transit Authority

LIST OF ACRONYMS AND ABBREVIATIONS (Continued)

SCS	Soil Conservation Service
SELA	Southeast Louisiana Urban Flood Control Program
SHPO	State Historic Preservation Office/Officer
SLVHCS	Southeast Louisiana Veterans Health Care System
S&WB	Sewerage and Water Board
State	State of Louisiana
SWPPP	Storm Water Pollution Prevention Plan
$\mu\text{g}/\text{m}^3$	micrograms per cubic meter
UNOP	Unified New Orleans Plan
URA	Uniform Relocation Act
URS	URS Group, Inc.
U.S.	United States
USACE	U.S. Army Corps of Engineers
USC	United States Code
USCB	U.S. Census Bureau
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USRM	U.S. Risk Management, LLC
UST	underground storage tank
VA	Department of Veterans Affairs
VAMC	New Orleans Veterans Affairs Medical Center
VREI	Victory Real Estate Investments, LLC

EXECUTIVE SUMMARY

The healthcare infrastructure of New Orleans remains in critical condition due to extensive damage caused by Hurricane Katrina in August 2005. The storm surge from Category 3 Katrina damaged levees resulting in flooding throughout much of the City of New Orleans (City). The New Orleans Veterans Affairs Medical Center (VAMC) and Charity Hospital experienced severe damage due to extended submersion lasting several weeks. The Department of Veterans Affairs (VA) and the State of Louisiana (State) propose to rebuild the hospitals at new, adjacent locations. The new VA facility will still be referred to as the VAMC. For the purpose of this document, the new State facility will be called the Louisiana State University Academic Medical Center (LSU AMC). The Proposed Actions described in this draft Programmatic Environmental Assessment (PEA) are to site these two facilities at adjacent locations in the Tulane/Gravier area of New Orleans. These sites are located on a total of 27 city blocks northwest of the existing locations of the VAMC and Charity Hospital, north of Tulane Avenue and west of Interstate 10.

Federal agencies are required to evaluate the potential environmental impacts of any proposals for major Federal action pursuant to the National Environmental Policy Act of 1969 (NEPA) and the Act's implementing regulations promulgated by the Council on Environmental Quality (CEQ). For purposes of conducting this PEA, VA and the Federal Emergency Management Agency (FEMA) are co-lead Federal Agencies and the City of New Orleans has been designated as the "Responsible Entity" (Cooperating Agency) under the U.S. Department of Housing and Urban Development (HUD) regulations as the recipient of grant funding. This will require the City to incorporate the findings of this PEA and develop its own Finding of No Significant Impact (FONSI) or to conduct its own Environmental Assessment (EA). The State also is a Cooperating Agency as the proponent of the FEMA-funded action. Both Cooperating Agencies provide specific expertise and knowledge to the NEPA and National Historic Preservation Act (NHPA) processes.

The Proposed Actions of constructing a new VAMC and the LSU AMC also involve Federal regulations specific to VA (including Title 38 of the Code of Federal Regulations [CFR] Part 26, *Environmental Effects of the Department of Veterans Affairs Actions*), FEMA (44 CFR Part 10, *FEMA Environmental Considerations*), and HUD (24 CFR Part 50, *Protection and Enhancement of Environmental Quality*).

The CEQ NEPA regulations encourage agencies to prepare "tiered" environmental analyses to assist in the evaluation of a large-scale program or projects involving a series of related decisions. Preparation of a programmatic NEPA document, such as this PEA, promotes the consideration of cumulative impacts that might otherwise be ignored in assessments prepared on a case-by-case basis (Sigal and Webb 1989). The lead Federal Agencies have determined that a PEA is the appropriate level of documentation for this project because decision-making related to site selection must be made first, while further decisions concerning actual development and construction are not yet ripe.

While the VAMC and the LSU AMC projects are separate and severable, VA, FEMA, and the State have adopted the following statements of purpose and need for the Proposed Actions:

The purpose of the Proposed Actions is to reestablish the healthcare system and medical training centers for the community, the people of New Orleans, and for veterans throughout the Gulf Coast Region. The need for the Proposed Actions is to meet the purpose in a manner that addresses the area's current and future healthcare capacity needs, meets security and emergency standards for modern facilities, meets accreditation requirements for academic medical centers, and restores medical training and healthcare delivery on an expedited basis.

Identifying and analyzing alternatives is an important part of the NEPA decision-making process. As part of the alternatives analysis, a range of preliminary alternatives was identified. These alternatives were screened against the project purpose and need as well as other screening criteria. Through this process, nine alternatives were eliminated from further consideration, the remaining alternatives were studied in detail as part of the NEPA review process, and a preferred alternative was identified.

The rationale for identifying the preferred alternative, or Proposed Actions, is based on consideration of the degree to which the alternatives satisfied multiple objectives related to the purpose of and need for the project. The principal objectives include adequate space, adequate accessibility, proximity to medical affiliates, and minimizing environmental and socioeconomic impacts.

This draft PEA evaluates the environmental and socioeconomic impacts of the first tier – site selection and site preparation. A site-specific environmental analysis will be tiered from this document, and will focus on the environmental and socioeconomic impacts of project design, construction, and operation of the facilities. These analyses may be conducted jointly between the Federal co-lead and Cooperating Agencies or may be conducted separately by VA and FEMA.

This draft PEA contains the results of a systematic evaluation of the consequences of the Proposed Actions and alternative actions. The alternative actions evaluated as part of this PEA include other potential sites for the replacement of the VAMC and the LSU AMC, the repair and renovation of Charity Hospital, and a No Action alternative. This PEA evaluates 11 primary environmental issues for anticipated direct and indirect impacts of the Proposed Actions, the No Action alternative, and other site selection alternatives identified herein. These environmental issues include: the physical environment, water and coastal resources, land use, infrastructure and utilities, cultural resources, socioeconomics, transportation, human health and safety, biological resources, air quality, and noise.

Consistent with CEQ regulations, the cumulative impacts of past, present, and reasonably foreseeable future actions were considered, regardless of whether those actions were or are initiated by governmental entities or private parties. For purposes of this analysis, the cumulative impacts identified in this PEA were determined via a trend analysis using existing land use plans for Jefferson and Orleans Parishes. In addition, significant ongoing or anticipated hurricane recovery projects were incorporated into the cumulative impact analysis.

The Proposed Actions are the preferred alternative because they best meet the principal objectives of the project. While the Proposed Actions and the Lindy Boggs and Ochsner alternatives would provide adequate space for the needed facilities, the Proposed Actions provide more favorable accessibility to major transportation routes than the other two alternatives. Additionally, the Proposed Actions provide the optimal degree of proximity to medical affiliates above the other alternatives. Environmental and socioeconomic impacts could potentially occur at the locations of the Proposed Actions to a greater degree than at other alternative sites (primarily impacts to cultural resources); however, these impacts would be mitigated in such a way that they would not be significantly greater than the impacts at the other alternative locations. Therefore, the Proposed Actions were the most effective at meeting all site selection factors (adequate space, accessibility, proximity to medical affiliates, and minimal impacts).

1.0 INTRODUCTION

The healthcare infrastructure of New Orleans remains in critical condition due to extensive damage caused by Hurricane Katrina. The Category 3 hurricane struck the Gulf Coast Region on August 29, 2005 and the subsequent storm surge damaged levees, resulting in flooding throughout much of the City of New Orleans (City). The New Orleans Veterans Affairs Medical Center (VAMC) and Charity Hospital experienced severe damage due to extended submersion lasting several weeks. The VAMC is the main New Orleans campus of the Southeast Louisiana Veterans Health Care System (SLVHCS). Charity is the main hospital within the Medical Center of Louisiana at New Orleans (MCLNO), which serviced the region with the only Level 1 trauma center. These facilities, along with other area medical facilities, are shown in figure 1-1.

University Hospital and the VAMC were temporarily closed in the aftermath of Katrina; Charity Hospital remains closed. University Hospital reopened as the Louisiana State University (LSU) Interim Hospital with limited emergency capacity and the SLVHCS operates an outpatient clinic at the VAMC. As a result of the severely damaged healthcare infrastructure, patient care in New Orleans has been seriously disrupted with veterans, the indigent, and the under-insured being the hardest hit. Many patients are forced to endure long wait times for treatment or must travel to other cities and states for critical healthcare needs. As the population continues to grow, increased demands will be placed on these interim services, causing services to become more strained because of both the lack of physical space provided and the limited amount of medical staff available. In addition to the shortfall of available and affordable healthcare, both hospitals previously served as medical training facilities for numerous medical programs within the State of Louisiana (State), another function that has been seriously curtailed.

Revitalization of the healthcare infrastructure in New Orleans is vital to the City, its residents, veterans, and the entire Gulf Coast Region. Toward this end, the U.S. Department of Veterans Affairs (VA) is proposing to construct a new VAMC within the New Orleans Metropolitan Area. Should VA select the Tulane/Gravier site for the VAMC, the City has offered to assist VA by providing funding through the U.S. Department of Housing and Urban Development (HUD) Office of Community Development Block Grant (CDBG) program. Additionally, the State Office of Facility Planning and Control (OFPC) has requested funding from the Federal Emergency Management Agency (FEMA) through the Public Assistance Grant Program to restore the function of the Charity Hospital.

The Federal government's involvement in these efforts trigger the requirements of the National Environmental Policy Act of 1969 (NEPA), which requires Federal agencies to evaluate the potential impact of proposed major Federal actions and consider such impacts during the decision making process. VA and FEMA are conducting this Programmatic Environmental Assessment (PEA) to comply with NEPA and its implementing procedures found in Title 40 of the Code of Federal Regulations (CFR) Parts 1500 through 1508 (Council on Environmental Quality's [CEQ] NEPA implementing regulations), 38 CFR Part 26.4(a) (VA's NEPA procedures), 44 CFR Part 10 (FEMA's NEPA procedures), and 24 CFR Part 58 (HUD's NEPA procedures for the CDBG program).

VA, FEMA, the City, and the State, hereinafter “the parties”, are working collaboratively to restore the healthcare infrastructure needed in the New Orleans area. For purposes of conducting this PEA, VA and FEMA are co-lead Federal Agencies and the City of New Orleans is considered a Cooperating Agency. As the designated Responsible Entity pursuant to 28 CFR Part 58, the City has a unique role to assume the Federal responsibility of HUD for compliance with environmental and historic preservation requirements. This will require the City to incorporate the findings of this PEA and develop its own Finding of No Significant Impact (FONSI) or to conduct its own Environmental Assessment (EA). The State also is a Cooperating Agency as the proponent of the FEMA-funded action. Both Cooperating Agencies provide specific expertise and knowledge to the NEPA and National Historic Preservation Act (NHPA) processes.

Although the projects have been reviewed and evaluated jointly, the VA project to replace its medical facilities and the LSU project to repair or replace healthcare services and medical training (for the purposes of this document, the proposed new facility is called the LSU Academic Medical Center [LSU AMC]) are separate projects, and each may be commenced, built, and completed independently of the other.

1.1 PURPOSE AND NEED

1.1.1 Purpose

The purpose of the Proposed Actions is to reestablish the healthcare system and the medical training centers for the community, the people of New Orleans, and for veterans throughout the Gulf Coast Region.

1.1.2 Need

The need for the Proposed Actions is to meet the purpose in a manner that addresses the area's current and future healthcare capacity needs, meets security and emergency standards for modern facilities, meets accreditation requirements for academic medical centers, and restores medical training and healthcare delivery on an expedited basis.

1.1.2.1 VAMC

Before Katrina, the VAMC consisted of a 206-bed facility located at 1601 Perdido Street in downtown New Orleans, Orleans Parish, Louisiana. Over 39,000 patients were treated at the VAMC in fiscal year 2005. Pre-Katrina statistics included staffing of over 1,700 employees and more than 600 volunteers.

Following Hurricane Katrina, the New Orleans VAMC was no longer operational and the SLVHCS was reorganized to meet the needs of southern Louisiana veterans. Though operating with about 50 percent of its pre-Katrina staff system-wide, the SLVHCS is currently accomplishing 90 percent of its pre-Katrina workload at the six community-based clinics located in New Orleans, Slidell, Hammond, St. John Parish, Houma, and Baton Rouge. In New Orleans, at the existing VAMC campus, the SLVHCS is currently operating only an outpatient clinic; it is unable to provide ambulatory surgery and procedures or inpatient services. Complex care, including ambulatory surgery and inpatient services, is provided at other VA facilities or purchased in the community through non-VA vendors. Veterans are often required to travel substantial distances to receive healthcare. Reestablishing centralized and comprehensive care for veterans is the principal goal for full recovery of VA in New Orleans, and thus is a motivating factor for the Proposed Actions.

In addition, all new and existing mission-critical VA facilities (i.e., a facility that cannot tolerate intervention, compromise, or shutdown) are now required to meet standards of the Physical Security Design Manual for Mission Critical Facilities (VA 2007a). These design standards include standoff distances, perimeter fences, vehicle and pedestrian screening, vehicle barriers, and parking and lighting requirements.

1.1.2.2 LSU AMC

Before Katrina, MCLNO operated 550 patient beds, including a substantial number of psychiatric and mental healthcare beds, at Charity Hospital, located at 1532 Tulane Avenue. The City's primary trauma center, and the region's only Level 1 trauma center, was located at Charity

Hospital. On November 17, 2006, MCLNO reopened University Hospital as the LSU Interim Hospital. This hospital currently operates 245 inpatient beds (including 38 behavioral health beds operating off-campus at the former DePaul Hospital). However, because Charity Hospital remains closed, MCLNO is only operating at approximately 45 percent of its pre-Katrina capacity.

Prior to Katrina, the Adams Management Services Corporation (Adams) completed an assessment and master plan for the MCLNO, which concluded that a new hospital must be constructed to avoid a loss of accreditation (Adams 2003, 2005). In order to address accreditation concerns, Adams provided a MCLNO Strategic/Financial Campus Master Plan for new and consolidated inpatient and outpatient facilities. Following Katrina, Adams updated their preliminary Master Plan. The Plan estimated that the service area population would be 82 percent of its pre-Hurricane Katrina population by 2016 and total admissions would be 86 percent of pre-Katrina levels. The Adams report calculated a net need of 900 to 1,000 additional beds needed in the region by 2016. It also indicated that there was an immediate need for 310 to 416 medical and surgical beds and 52 to 68 mental health beds. The updated Master Plan continued to recommend a new facility for MCLNO in order to meet current accreditation standards (Adams 2007). These studies concluded that it is not feasible to upgrade the existing Charity facility to meet current standards of hospital care and recommended that a new facility be constructed. More recently, Governor Jindal requested a review of the MCLNO business plan to reassess the medical needs for the area. This review, using revised demographics, approved and recommended a new facility with 364 medical and surgical beds and 60 mental health beds for a total of 424 beds.

Prior to Katrina, MCLNO facilities operated with a medical staff of 1,400. Currently, the active medical staff is 805 personnel, which consists of primary and specialty care physicians and nurse practitioners. The shortage of medical professionals has resulted in patients being forced to travel out of the area for medical treatment or having to wait longer for patient care (diagnostics and treatment). This has reduced the quality of medical care available to a substantial portion of the region, including the indigent, the uninsured, the elderly, as well as private pay patients, and has further resulted in the reduction of access to medical care for all residents in the region.

1.1.3 Site Criteria to Achieve Purpose and Need

The parties established the following site selection criteria to ensure that the actions meet the identified purpose and need (Adams 2005; VA 2007a):

- Provide sufficient contiguous acreage to construct a new facility to meet current and future capacity needs for the VAMC facility (a minimum of 25 acres);
- Provide sufficient contiguous acreage to construct a new facility to meet current and future capacity needs for the LSU AMC facility (between 25 and 40 acres to allow for current and future facility needs);
- Provide sufficient acreage for the VA to meet current Federal requirements, including standoff distance, hardening, and storage of fuel, food, and water for self-sufficient operations;

- Allow for reestablishment of a Level 1 trauma center, with ease of access from interstate highways, other major thoroughfares, and public transportation; and
- Allow for operational synergies and possible integration with other major healthcare facilities, LSU and Tulane medical schools, and bio-medical research facilities by locating the proposed facilities in immediate proximity to existing facilities, recognizing the continued roles of those existing facilities as part of the overall healthcare delivery and medical training mission.

1.2 SCOPE OF THIS PROGRAMMATIC ENVIRONMENTAL ASSESSMENT

Although an EA or Environmental Impact Statement (EIS) may be required for an individual action by a Federal agency, where Federal programs involve a multiplicity of individual actions, the CEQ has endorsed the concept of performing programmatic analysis or “tiering.” The CEQ NEPA regulations encourage agencies to prepare “tiered” environmental analyses to assist in the evaluation of a large-scale program or project involving a series of related decisions.

Programmatic environmental reviews may cover basic policy issues so that these issues do not need to be repeated in subsequent NEPA analyses prepared for the individual actions within a program. Also, programmatic environmental reviews promote consideration of cumulative environmental impacts that might be ignored in assessments prepared on a case-by-case basis (Sigal and Webb 1989).

The parties have determined that a “comprehensive and programmatic” EA is the appropriate document for assessing these actions based on the following:

- The overall actions are complex and must evaluate activities from site selection all the way through to facility construction;
- The site selection and site preparation decisions will affect future development of the design and construction, each with separate impacts requiring separate evaluations; and
- The two projects could have greater cumulative impacts when evaluated in conjunction with each other due to the combined operational requirements associated with multiple healthcare facilities.

The first tier is a broad review to identify and evaluate key resources of concern and the impacts to those resources to guide the current issue ripe for decision -- site selection. This first tier review will be used to identify specific areas that will need further in-depth analysis, once the density, intensity, and location of improvements are proposed for the selected site. The construction and operational details available at the second tier review will permit and require more detailed analysis and clarification of some resources outlined in this document. At this time, the parameters of the site, including density and site and structure design, are unknown. These additional details will also permit a more comprehensive approach to cumulative impacts for the specific site. Evaluating these factors in more detail at the second tier will allow the site design ultimately selected to address needed mitigation measures, with these and other environmental and socioeconomic factors in mind.

This PEA will evaluate the impacts of the first tier (site selection and site preparation) to the human environment. The particular elements that are evaluated in this PEA are:

- Site selection;
- Title search and obtaining rights of entry;
- Acquisition of properties;
- Transfer of titles;
- Staging of construction equipment after the staging location has been evaluated in accordance with the archaeological methodology stipulated in the Section 106 Programmatic Agreement (PA);
- Demolition of properties, including historic properties, or properties whose demolition could adversely affect other historic properties, in accordance with the executed PA and those measures outlined to avoid, minimize or mitigate adverse effects;
- Slab removal in accordance with the stipulations established in the Section 106 PA when such action will have adverse effects on historic properties and after the archaeological methodology that is stipulated in the PA has been completed;
- Site excavation and site grading once archaeological reviews are completed and in accordance with the stipulations established in the Section 106 PA;
- Removal, containment, or remediation, as applicable, of environmental liabilities (e.g., underground storage tanks, asbestos, lead-based paint, hazardous pollutant discharge) in accordance with the archaeological stipulations in the PA to avoid, minimize, and mitigate adverse effects to archeological resources;
- Assessment and repair of existing off-site utility infrastructure to the extent that it does not increase their current capacity;
- Removal of improvements and pavements as long as they do not adversely affect historic structures and in accordance with the archaeological stipulations in the PA to avoid, minimize, and mitigate adverse effects to archeological resources; and
- Removal of improvements and pavements in accordance with the stipulations established in the Section 106 PA when the action would have adverse effects to historic properties and in accordance with the archaeological stipulations in the PA to avoid, minimize, and mitigate adverse effects to archeological resources.

A site-specific EA will be tiered from this document, which will evaluate the environmental impacts of the design, construction, and operation of the facilities. This site-specific EA may be conducted jointly between the Federal co-lead and Cooperating Agencies or may be conducted separately by VA, the City, and/or FEMA. This EA(s) will be undertaken pursuant to stipulations established in the PA. In particular, the tiered EA will evaluate the environmental impacts of the following elements:

- Design of the facilities, including utility connections;
- Staging of construction equipment after the staging location has been evaluated in accordance with the archaeological methodology that is stipulated in the PA;
- Ground elevation through fill, if applicable;
- Enhancement of utilities to increase current capacity, if applicable;
- Enhancement of transportation systems, if applicable;
- Construction of facilities;

- Landscaping; and
- Operation of facilities.

VA will develop another site-specific environmental document that will be tiered from this PEA to address the final disposition of the existing VAMC building. FEMA will evaluate the environmental impacts of the final disposition of the existing MCLNO facilities in accordance with Public Assistance Policy 9525.13¹. The disposition of all facilities will be undertaken pursuant to the stipulations established in the PA.

1.3 PUBLIC AND AGENCY INVOLVEMENT

Extensive public and agency involvement has been sought in preparing this PEA. Table 1-1 provides a listing of Federal, State, Tribal, City, and local agencies and communities that were contacted and consulted during the preparation of this PEA.

Table 1-1. Federal, State, Tribal, City, and Local Agency and Community Involvement

<u>Lead Agencies</u>	<u>NHPA Section 106 Status</u>
Federal Emergency Management Agency	Signatory
United States Department of Veterans Affairs	Signatory
<u>Cooperating Agencies</u>	
City of New Orleans	Signatory
State of Louisiana Division of Administration	Invited Signatory
NEPA Involvement	
<u>Other Federal Agencies</u>	
U.S. Department of the Interior, Fish and Wildlife Service	N/A
U.S. Department of the Interior, National Park Service	N/A
U.S. Environmental Protection Agency, Region VI	N/A
Council on Environmental Quality	N/A
U.S. Department of Housing and Urban Development	Delegated Authority to City of New Orleans
<u>State of Louisiana Agencies</u>	
State of Louisiana Department of Environmental Quality	N/A
State of Louisiana Department of Wildlife and Fisheries	N/A
NHPA Involvement	
<u>Other Federal Agencies</u>	
Advisory Council on Historic Preservation	Signatory
U.S. Department of Housing and Urban Development	Delegated Authority to City of New Orleans

¹ http://www.fema.gov/government/grant/pa/9525_13.shtm

Table 1-1. Federal, State, Tribal, City, and Local Agency and Community Involvement

<u>Tribal Governments</u>	
Mississippi Band of Choctaw Indians	Invited Concurring Party
<u>State of Louisiana Agencies</u>	
Governor's Office of Homeland Security and Emergency Preparedness	Concurring Party
Louisiana State University	Consulting Party
Division of Administration, Office of Community Development	Consulting Party
Division of Administration, Office of Facility Planning and Control	Invited Signatory
State Historic Preservation Office	Signatory
<u>City of New Orleans and other local Agencies</u>	
Downtown Development District of New Orleans	Consulting Party
Historic District Landmarks Commission	Consulting Party
City Council	Consulting Party
Mayor's Office	Consulting Party
Office of Recovery Management	Consulting Party
Regional Planning Commission	Consulting Party
Sewerage & Water Board	Consulting Party
<u>NHPA Section 106 Consulting Parties</u>	
2400 Canal LLC	Consulting Party
Committee to Reopen Charity	Consulting Party
Common Knowledge	Consulting Party
Deutsches Haus	Consulting Party
Foundation for Historical Louisiana	Consulting Party
Friends of New Orleans Cemeteries	Consulting Party
Friends of the Lafitte Corridor	Consulting Party
Louisiana Chapter of Documentation and Conservation of Building Sites and Neighborhoods of the Modern Movement	Consulting Party
Louisiana Landmarks Society	Consulting Party
Lower Mid-City Residents and Business Owners	Consulting Party
LSU Site United Property Owners	Consulting Party
Mid-City Neighborhood Organization	Consulting Party
National Trust for Historic Preservation	Consulting Party
Orleans Parish School Board	Consulting Party
Parkview Neighborhood Association	Consulting Party
Phoenix of New Orleans	Consulting Party
Preservation Resource Center	Consulting Party
Tulane/Canal Neighborhood Development Corporation	Consulting Party

1.3.1 Public Involvement

Extensive public involvement has been sought in preparing this PEA. In determining the scope for this PEA, the lead agencies solicited input from all potentially affected parties, including individual members of the public, public interest groups, and Federal, State, and local agencies. Public participation was afforded through public scoping meetings held in Mid-City New Orleans and Jefferson Parish. Dates and locations for the public meetings were published in local newspapers and advertised on local radio stations and the project website. In addition, fliers announcing the meetings were distributed to Mid-City businesses located within and along the VAMC and LSU AMC site boundaries, posted throughout the Tulane/Gravier area, and delivered to leaders of community organizations who then distributed them to the members of their organizations. The purpose of the meetings was to gather information from members of the public about the issues they would like to see addressed.

These public meetings were held on 26 June 2008 (afternoon and evening meetings) and 11 August 2008 (evening meeting only) at Grace Episcopal Church, 3700 Canal Street, New Orleans and on 17 July 2008 at the American Legion, 3001 River Road, Jefferson Parish (evening meeting only). A total of 308 individuals registered their attendance at the four meetings; however, there were a number (in excess of 500) of non-registered attendees present as well. Oral and written comments were recorded. In addition, concerned parties were able to mail or e-mail written comments and provide verbal comments in person. Fifty-six e-mail comments were received and one individual provided additional comments in person. A summary of public comments and their responses is located in Appendix A. Comments were categorized by topic, and the topics are presented in order of their frequency of occurrence to help facilitate their evaluation in this PEA. Specific remarks are summarized under each topic and then a general response is provided.

Additional public comments were received through the consultation process for Section 106 of the NHPA, which requires Federal agencies to take into account the effects of their undertakings on historic properties (36 CFR Part 60). VA, FEMA, and the City initiated joint 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 the Louisiana State Historic Preservation Office (SHPO). Consulting parties included organizations that had participated in previous meetings with VA as well as owners of individual properties within the footprints of the proposed alternatives. In total, 34 organizations participated in the Section 106 process: five signatories, one invited signatory, two concurring parties, and 26 consulting parties. An additional 20 organizations and agencies did not accept an invitation to participate as consulting parties.

Four Section 106 consultation meetings were held (24 June, 23 July, 12 August, and 25 September 2008). Oral comments were recorded at the meetings. In addition, concerned parties were able to e-mail written comments to be shared within the group. All comments received as part of this process were responded to as part of the development of the PA among the VA, FEMA, the City, the Louisiana SHPO, and the Advisory Council on Historic Preservation (ACHP) regarding the funding to repair or replace healthcare facilities comprising the VAMC and the MCLNO.

1.3.2 Agency Involvement

Preparation of this PEA has been coordinated with appropriate Congressional, Federal, State, Tribal, and additional local interests, as well as environmental and historic preservation groups and other interested parties listed below. A partnering team was established for this project in which Federal, State, and City agency staff played an integral part in the project planning and alternatives analysis associated with this PEA. Specifically, these agencies included:

- FEMA;
- VA;
- State of Louisiana, Division of Administration; and
- City of New Orleans.

2.0 DESCRIPTION OF PROPOSED ACTIONS AND ALTERNATIVES

Identifying and analyzing alternatives is an important part of the NEPA decision making process. As part of the alternatives analysis, a range of preliminary alternatives are identified. These alternatives are then screened against the project purpose and need as well as other screening criteria. Through this process, some alternatives are eliminated from further consideration and the remaining alternatives are studied in detail as part of the NEPA review process.

2.1 PRELIMINARY ALTERNATIVES

In April 2007, VA issued a request for expressions of interest for the acquisition of land for construction of a new medical center in New Orleans (VA 2007a). Three offers were received in response to VA's advertisement, including the Ochsner site and the Regional Planning Commission's (RPC's) Tulane/Gravier site. A third site was considered ineligible because the property was only 2 acres in size and did not meet the size requirements specified in VA's advertisement.

During scoping public meetings held during June, July, and August 2008, the public expressed concerns that additional sites were not being considered in the site selection process. VA staff explained to the public that an advertisement for the acquisition of land had been published in April 2007 and that the RPC and Ochsner sites were the only viable responses received. VA also indicated that they were willing to consider additional sites if offers were received in a timely manner and met the requirements as published in VA's original advertisement. On 25 August 2008, Victory Real Estate Investments, LLC (VREI) offered another site (Lindy Boggs) to VA for site selection consideration. Although other potential site locations have been mentioned by the public, no other viable offers were submitted to VA for consideration. Therefore, no other alternative site locations for the VAMC are being considered in this PEA.

Through the NEPA process, a number of preliminary alternatives (figure 2-1) were identified for the reestablishment of healthcare through modification/renovation, demolition/reconstruction, and new construction of the VAMC and the LSU AMC.

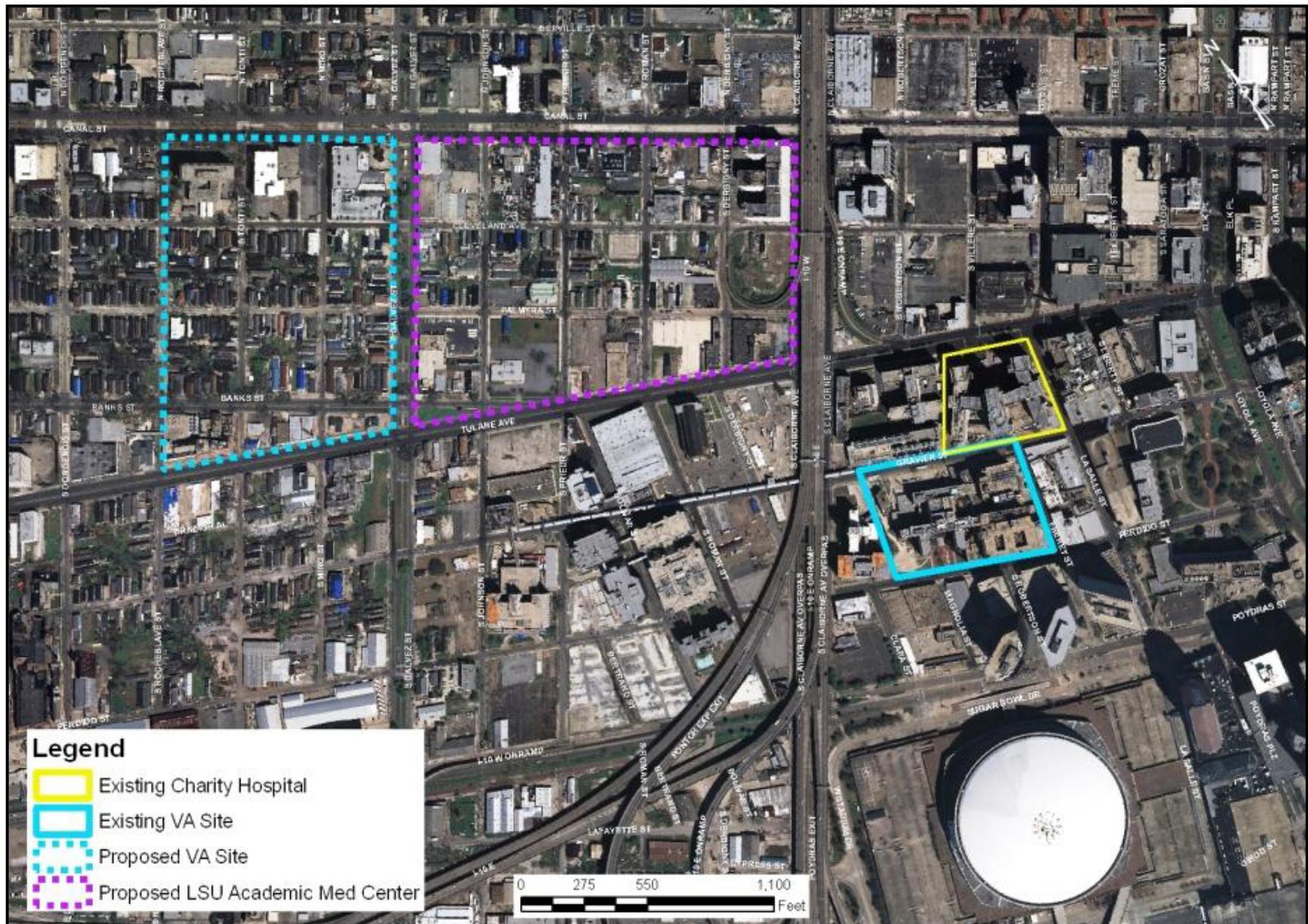


Figure 2-1: Existing and Proposed VAMC and LSU AMC Sites

2.2 ALTERNATIVES RETAINED FOR DETAILED ANALYSIS

All of the preliminary alternatives were assessed against the site selection criteria for meeting the identified purpose and need. The following alternatives were retained for detailed analysis.

2.2.1 No Action Alternative

Under the No Action alternative, the existing VAMC and/or MCLNO complex, which were severely damaged as a result of Hurricane Katrina, would not be rehabilitated or replaced. There would be no construction of new facilities or modification of the existing structures and medical services would continue to be provided using the interim arrangements currently in use. The existing VAMC, which is currently providing only outpatient services, would continue to operate at a much reduced capacity. Other services, including ambulatory, inpatient, and surgical care, would continue to be provided outside of the New Orleans area and veterans would have to travel to locations in southeast Louisiana and beyond. Healthcare delivery and training formerly provided at Charity Hospital would continue, on a reduced level, at the LSU Interim Public Hospital, which was established following Hurricane Katrina. LSU is operating a trauma center at the LSU Interim Public Hospital (formerly University Hospital), but the severe shortage of affordable medical care (including overall care, mental health, and ambulatory care) and medical training opportunities would continue.

2.2.2 Alternative # 1: Proposed Actions (Preferred Alternative)

The Proposed Actions, or Preferred Alternative, consists of the construction of a new VAMC and the construction of the LSU AMC on two separate but adjacent sites northwest of the existing VAMC and Charity Hospital and north of University Hospital in the Tulane/Gravier area. The overall area of the two sites is approximately 67 contiguous acres (30 acres for the VAMC site and 37 acres for the LSU AMC site) located in downtown New Orleans, bounded by Canal Street to the northeast, Claiborne Avenue to the southeast, Tulane Avenue to the southwest, and South Rocheblave Street to the northwest (figure 2-1). The approximate acreage includes streets and associated rights-of-way.

2.2.2.1 Tulane/Gravier Site for VAMC

Under the Proposed Actions, the New Orleans VAMC would be replaced with a new facility at the Tulane/Gravier site proposed by the RPC. Land would be acquired to relocate and construct the VAMC at that location. The proposed site consists of 30 acres located in downtown New Orleans, Orleans Parish, in the Tulane/Gravier area, within the Mid-City National Register Historic District (NRHD). It 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 (figure 2-1). The site is comprised of both residences and businesses, many of which were severely damaged during Hurricane Katrina. As of July 2008, vacant residential and commercial lots comprised approximately 45 percent of all parcels within the proposed VAMC site boundary (U.S. Risk Management, LLC [USRM] 2008a). Surrounding land uses are primarily residential and commercial (small businesses).

The proposed VAMC would include approximately 1 million gross square feet, 200 medical/surgical/psychiatric/extended care beds, outpatient capacity to receive 410,000 visits per year, mixed structured and surface parking facilities, and one helipad to accommodate emergency access by air. Enhanced backup systems for power, water, sewer, and heating, ventilation, and air conditioning would provide four days of service in the event of disruption of city infrastructure during a major storm event or other natural disaster (VA 2007b).

Site preparation activities at the Tulane/Gravier site would include the activities defined in Section 1.2 of this document. Although these site preparation activities would not be performed or funded by VA, the activities are considered part of this alternative and would be conducted in compliance with applicable Federal, State, Tribal, and local regulations. Also, it is anticipated that the City will use all or a portion of its CDBG funds for site acquisition. The City is the designated Responsible entity for HUD and as such, is a Federal Cooperating Agency to this PEA. The use of CDBG funds by the City will require the City to incorporate the findings of this PEA and develop their own FONSI or, in the alternative, to conduct their own EA.

After the storm, VA de-watered the basement of the existing VAMC buildings and performed mold remediation throughout the entire facility. VA continues to conduct mold remediation as persistent mold growth occurs. VA also performs work to prevent deterioration of the unoccupied portions of the existing facilities. Renovations to the building envelope, including window repairs and replacement of various roof components, have been completed. Projects to restore life-safety measures are currently underway. These projects include replacing damaged fire protection systems, restoring fire-rated separation walls, providing emergency lighting capabilities, restoring operation of electronically-controlled doors and locks, and isolating plumbing and piping systems to prevent water damage.

Final disposition of the existing VAMC by VA has not yet been determined. However, VA and the City have a memorandum of understanding that presents a range of options for disposition. VA will comply with NEPA and NHPA regulations in deciding upon and executing the disposition action. The PA, which has been prepared in accordance with the NHPA through the Section 106 Consultation Process (Appendix B), includes a procedure for the resolution of adverse effects to the VAMC pending decisions regarding final disposition of that building.

2.2.2.2 Tulane/Gravier Site for LSU AMC

Under the Proposed Actions, the new LSU AMC would replace the functions that were formerly serviced by Charity Hospital, part of the MCLNO complex. Most of the various medical resources that supported the hospital would be provided in a contiguous footprint. The new medical facility would include 364 medical and surgical beds and 60 dedicated mental health beds, for an initial total of 424 beds with additional capacity for future expansion (MCLNO Business Plan Review 2008).

The potential site for construction of the LSU AMC considered under this alternative consists of 37 acres in the Tulane/Gravier area adjacent to the proposed VAMC site. The proposed LSU AMC site is bounded by Galvez Street to the northwest, Canal Street to the northeast, Claiborne Avenue to the southeast, and Tulane Avenue to the southwest (figure 2-1). This site was

proposed in 2005, prior to Hurricane Katrina (Adams 2005). The site is partially occupied by office buildings (including medical offices and the Blood Center of New Orleans), retail buildings, auto sales and repair facilities, residences, a large inactive hotel, parking lots, and vacant properties. As of May 2008, vacant residential and commercial lots comprised approximately 16 percent of all parcels within the proposed LSU AMC site boundary, and approximately 63 percent of the parcels are empty lots, including green space, parking lots, and demolished building areas (USRM 2008b).

Site preparation activities at the Tulane/Gravier site would include the activities defined in Section 1.2 of this document. These activities are considered part of this alternative and would be conducted in compliance with applicable Federal, State, Tribal, and local regulations.

Final disposition of the MCLNO facilities has not yet been determined. Charity Hospital will be ventilated to control moisture and secured against unauthorized access while the feasibility of reuse or renovation by the State is evaluated. The PA, which has been prepared in accordance with the NHPA through the Section 106 Consultation Process (Appendix D), includes a procedure for the resolution of adverse effects to the Charity pending decisions regarding final disposition of that building.

2.2.3 Alternative # 2: Lindy Boggs Site for VAMC

Under this alternative, the existing VAMC would be replaced with a new facility at VREI's Lindy Boggs location. VA would acquire land and demolish existing structures including the Lindy Boggs hospital and construct the VAMC, which would provide full medical services to veterans that meet or exceed the services provided by the New Orleans VAMC prior to Hurricane Katrina. This alternative would consist of construction of a medical center to support the projected healthcare needs of veterans in southeast Louisiana.

The 39.8-acre Lindy Boggs site is bordered by North Carrollton Avenue to the northwest, Jefferson Davis Parkway to the southeast, Bienville Street to the southwest, and Toulouse Street to the northeast (figure 2-2). Comparable to the Proposed Actions, the proposed VAMC would include approximately 1 million gross square feet, 200 medical/surgical/psychiatric/extended care beds, outpatient capacity to receive 410,000 visits per year, mixed structured and surface parking facilities, and one helipad to accommodate emergency access by air. Enhanced backup systems for power, water, sewer, and heating, ventilation, and air conditioning would provide four days of service in the event of disruption of city infrastructure during a storm event (VA 2007b).

Site preparation activities at the Lindy Boggs site would include the activities defined in Section 1.2 of this document. These site preparation activities are considered part of this alternative and would be conducted in compliance with applicable Federal, State, Tribal, and local regulations.

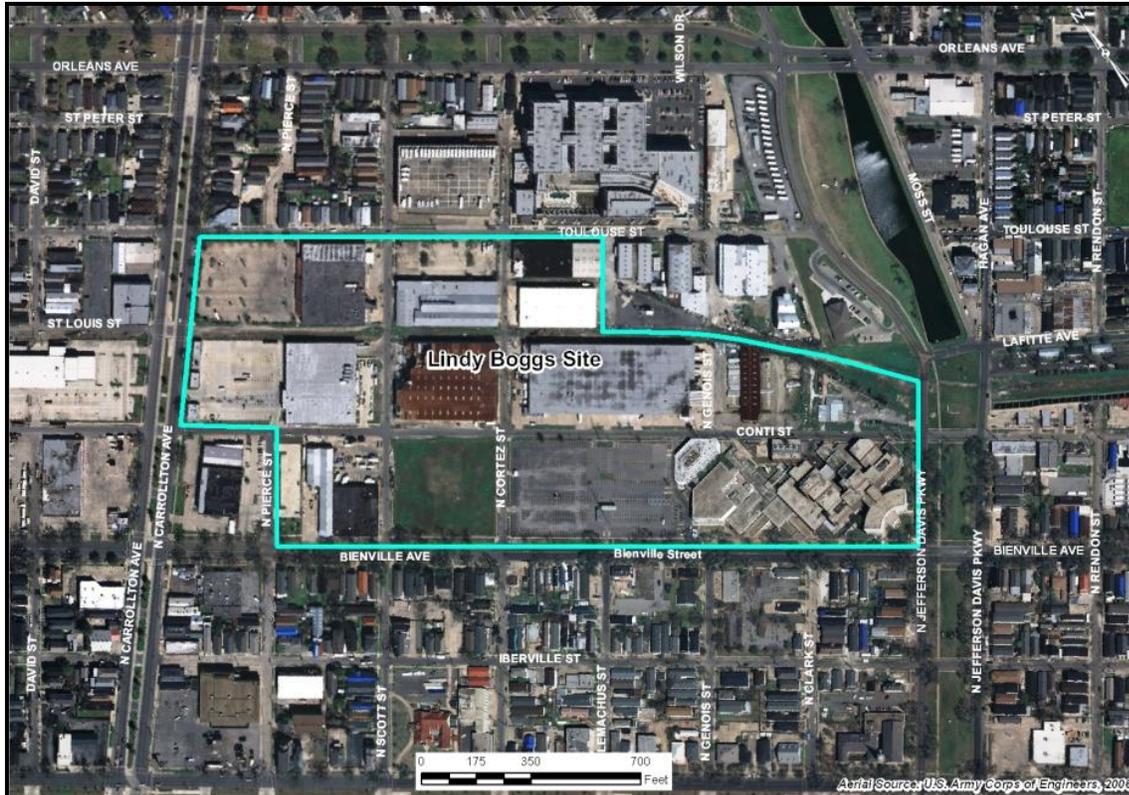


Figure 2-2. Lindy Boggs Site

Final disposition of the existing VAMC by VA has not yet been determined. The facility will be ventilated to control moisture and to secure against further deterioration by neglect, and the additional initiatives related to preserving building structure that were outlined for Alternative # 1 would also occur under Alternative # 2. The PA, which has been prepared in accordance with the NHPA through the Section 106 Consultation Process (Appendix B), includes a procedure for the resolution of adverse effects to the VAMC pending final disposition of that building.

Under this alternative for the VAMC, the State may select the No Action alternative, choose to construct the new LSU AMC at the Tulane/Gravier site, or modify/renovate Charity Hospital.

2.2.4 Alternative # 3: Ochsner Site for VAMC

Under this alternative, the New Orleans VAMC would be replaced with a new facility at the Ochsner site (figure 2-3), which is a 28-acre parcel owned by Ochsner Health Systems (formerly Alton Ochsner Medical Foundation). The Ochsner site is located in Jefferson Parish approximately 3.5 miles west of the downtown New Orleans area, adjacent to the Ochsner Medical Center (Main Campus) on Jefferson Highway (figure 2-3). It is bordered by railroad tracks and the Earhart Expressway to the north, healthcare facilities to the east and south, and residential housing to the west. The site is currently occupied by three warehouses, two helipads, a parking lot, and a railroad spur.

Comparable to the Proposed Actions, the proposed VAMC would include approximately 1 million gross square feet, 200 medical/surgical/psychiatric/extended care beds, outpatient capacity to receive 410,000 visits per year, mixed structured and surface parking facilities, and one helipad to accommodate emergency access by air. Enhanced backup systems for power, water, sewer, and heating, ventilation, and air conditioning would provide four days of service in the event of disruption of city infrastructure during a storm event (VA 2007b).

Site preparation activities at the Ochsner site would include the activities defined in Section 1.2 of this document. These site preparation activities are considered part of this alternative and would be conducted in compliance with applicable Federal, State, Tribal, and local regulations.

Final disposition of the existing VAMC has not yet been determined. The facility will be ventilated to control moisture and to secure against further deterioration by neglect, and the additional initiatives related to preserving building structure that were outlined for Alternative # 1 would also occur under Alternative # 3. The PA, which has been prepared in accordance with the NHPA through the Section 106 Consultation Process (Appendix B), includes a procedure for the resolution of adverse effects to the VAMC pending final disposition of that building.

Under this alternative for the VAMC, the State may select the No Action alternative, choose to construct the new LSU AMC at the Tulane/Gravier site, or modify/renovate Charity Hospital.



Figure 2-3. Ochsner Site

2.2.5 Alternative # 4: Modification/Renovation of Charity Hospital for LSU AMC

Under the modification/renovation alternative, the existing Charity Hospital would be modified or renovated for use as the new LSU AMC facility, consolidating the majority of the medical resources housed in the current MCLNO complex into a single facility. Comparable to the Proposed Actions, the modified/renovated Charity Hospital would replace the healthcare services and medical education and research facilities currently located within the MCLNO complex. The new medical facility would include 364 medical and surgical beds and 60 dedicated mental health beds, for an initial total of 424 beds with additional capacity for future expansion (MCLNO Business Plan Review 2008).

Charity Hospital sustained significant damage from the hurricane, including flooding and roof damage. Heavy winds from the hurricane caused significant damage throughout the building. Broken and/or cracked windows in the building led to water intrusion. The facility's entire infrastructure, including mechanical, electrical, and plumbing systems, would need to be replaced. These systems would also need to be brought into compliance with current building codes. Environmental hazards such as asbestos, lead-based paint, and mold would need to be fully assessed and abated prior to the modification/renovation of the building.

Prior to Katrina, the MCLNO complex, including Charity Hospital, was evaluated and those studies documented significant deficiencies and continued difficulty with meeting healthcare standards. Low Life Safety Code scores were issued by the Joint Commission of Healthcare Organizations in December 2002. The 2002 Accreditation Decision Report (Joint Commission of Healthcare Organizations 2002) cites the following concern:

Leadership needs to rethink the present process of continually seeking funding to fix and repair the buildings... Also, patient privacy and infection control are being compromised due to the building's environment. Leadership needs to strongly consider seeking from the state a more modern facility to improve patient safety, environmental safety, patient privacy and infection control.

The existing Charity Hospital is located on approximately 4.3 acres with an additional 4.3 acres of non-contiguous building locations scattered in the vicinity accommodating support and maintenance functions. Although the size of this site is considerably less than the minimum 25 to 40 acres specified by the State in the Preliminary Alternative Analysis for Site Selection document (VA 2008), this modification/renovation alternative is being carried through detailed analysis because of the historic significance of Charity Hospital.

Under this alternative for the LSU AMC, VA may select the No Action alternative or choose to construct the new VAMC at the Tulane/Gravier site, the Lindy Boggs site, or the Ochsner site.

2.3 ALTERNATIVES CONSIDERED AND ELIMINATED FROM DETAILED ANALYSIS

As part of the alternatives analysis, nine of the preliminary alternatives were eliminated from further consideration and will not be carried forward for detailed study in the PEA. These include modification/renovation of the existing VAMC facilities, demolition and reconstruction at the existing VAMC or MCLNO facilities, and construction of LSU AMC in one of six alternative site locations. The following sections document the basis for these decisions.

2.3.1 Modification/Renovation of Existing VAMC Facilities

Modification/renovation of the existing New Orleans VAMC facility was considered but eliminated from further consideration. Hurricane Katrina caused extensive damage to the VAMC facility rendering the existing facility unacceptable for continued use as a medical facility. The basement and sub-basement of the facility were flooded and the water remained for several weeks. Approximately 750,000 square feet of the 1 million square-foot facility remains unoccupied and mold control is an ongoing problem. VA's *Report to Congress on Plans for Re-establishing a VA Medical Center in New Orleans* states that "Reuse of the existing complex may be acceptable for a non-medical facility but not for a hospital with patients susceptible to infection." The report goes on to state that "The options addressing the existing facility are deemed too risky for future patient care and are unacceptable [to] the Department" (VA 2006). Furthermore, the existing VAMC facility, which was built in 1952, does not satisfy several standards of the Physical Security Design Manual for Mission Critical Facilities (VA 2007b) because construction and design standards have changed since the existing facility was built.

Some of the standards that the existing facility does not meet include: standoff distance (the distance away from a building that a vehicle is allowed to park or travel), emergency utilities provisions, and the need to store food supplies, potable and industrial water, fuel, and sewage.

The VAMC facility's utilities infrastructure, including electrical, plumbing, and mechanical systems, would need to be evaluated and either repaired or replaced. These systems would also need to be brought into compliance with current building codes. Environmental hazards such as asbestos, lead-based paint, and mold would need to be assessed in all of the buildings at the VAMC campus and remediation would have to be performed before the buildings could be renovated. The cost of abatement activities would increase the overall cost of providing a new facility, but would not add value to or improve facility design and layout.

In addition, the existing location is approximately 7 acres. This acreage is significantly less than the minimum 25 acres specified in the April 2007 solicitation issued by VA for the acquisition of land for construction of a new medical center in New Orleans (VA 2007a). The limited acreage of the existing site would not provide sufficient acreage to construct new state-of-the-art facilities, would not provide additional land for future expansion, and would not provide sufficient acreage to meet current Federal requirements (e.g., standoff distances).

Therefore, based on ongoing mold concerns, current design requirements, size (acreage) constraints, costs, environmental hazards, and time consideration, modification/renovation of the existing New Orleans VAMC facility was dismissed as not feasible.

2.3.2 Demolition and Reconstruction at Existing VAMC Location

Demolition of the existing facility and reconstruction at the existing New Orleans VAMC location was considered but eliminated from further consideration. Demolition and reconstruction at the existing location would eliminate a number of the issues associated with modification/renovation at the existing site. However, the existing location is still only 7 acres. This acreage is significantly less than the 25-acre minimum specified in the April 2007 solicitation issued by VA for the acquisition of land for construction of a new medical center in New Orleans (VA 2007a). The limited acreage of the existing site would not provide sufficient acreage to construct new state-of-the-art facilities to meet or exceed the capacity of the existing facilities, would not provide additional land for future expansion, and would not provide sufficient acreage to meet current Federal requirements (e.g., standoff distances). Therefore, based on current design requirements and size (acreage) constraints, demolition and reconstruction of the existing New Orleans VAMC facility was dismissed as not feasible.

2.3.3 Demolition and Reconstruction at Existing LSU AMC Location

Demolition of the existing facilities and reconstruction at the existing Charity Hospital location was considered but eliminated from further consideration. The footprint of the existing Charity Hospital is 4.3 acres. The size of the existing site would not provide sufficient acreage to construct a new state-of-the-art facility to meet or exceed the capacity of the existing facility and would not provide additional land for future expansion.

Another critical factor that was considered in eliminating this alternative was the historic significance of Charity Hospital. Based on current design requirements and size (acreage) constraints, costs of demolition and reconstruction, and the existing facility's historic significance, this alternative was dismissed as not feasible.

2.3.4 Construction of LSU AMC at Other Alternative Sites

Six alternative site locations (figure 2-4) were considered as potential locations for the LSU AMC complex and were subsequently eliminated from further consideration based on evaluation against the site selection criteria for meeting the identified purpose and need. Using the American Institute of Architects guidelines and the Academic Medical Center planning standards as a foundation for patient space planning, the limited acreage of these sites would not provide sufficient acreage to construct new state-of-the-art facilities to meet or exceed the capacity of the existing facilities or provide additional land for future expansion and growth.

Therefore, based on the current design requirements and size (acreage) constraints, each of these locations discussed below was dismissed as not feasible for delivering long-term healthcare services to the community. A more detailed explanation for eliminating each of these sites from further consideration is provided below.

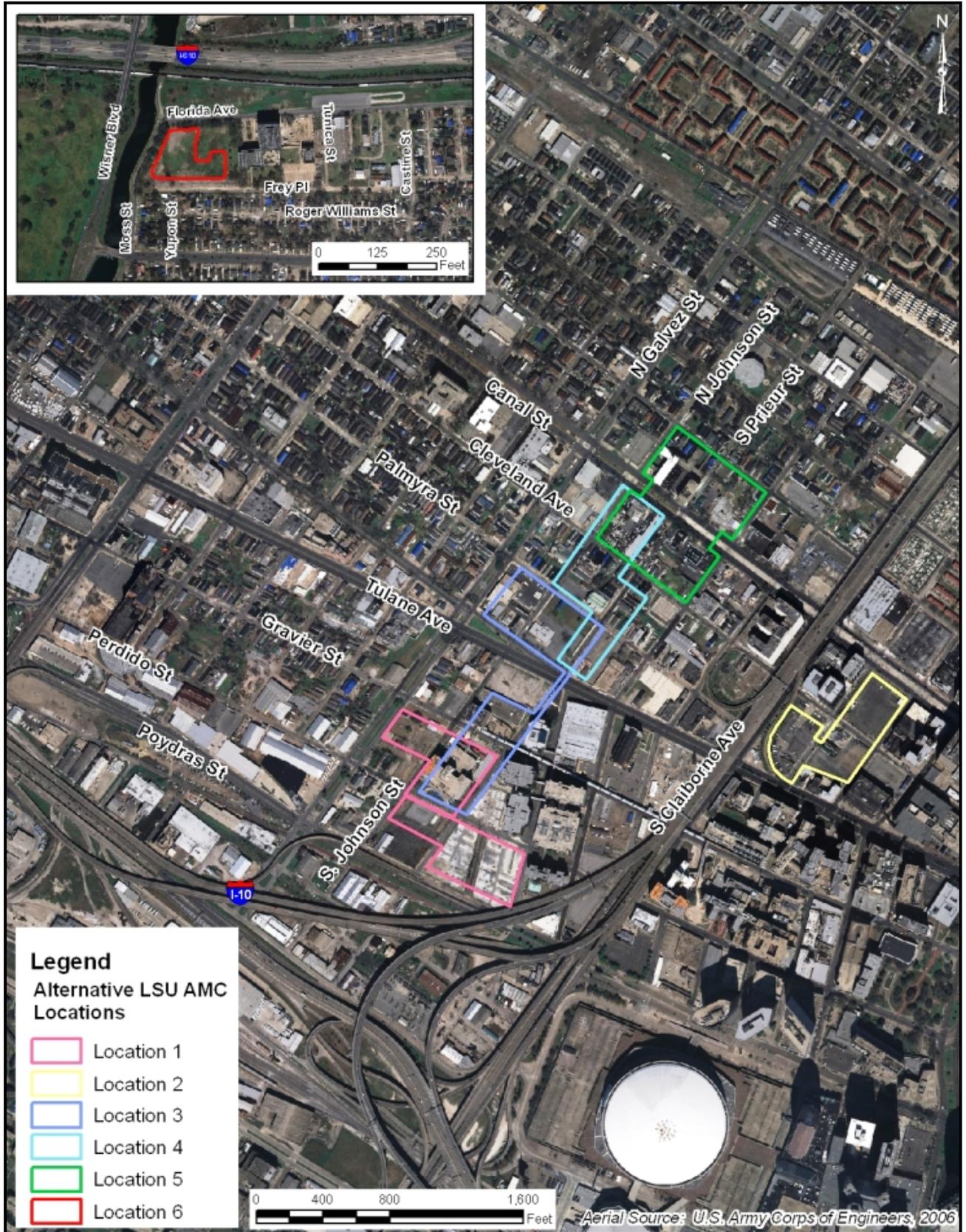


Figure 2-4: Alternative LSU AMC Sites Considered

Location 1: East of Galvez Street, North of Poydras Street, South of Gravier Street, immediately adjacent to University Hospital and LSU Health Sciences Center. This site consists of 10.4 acres, which is less than the acreage specified in the site selection criteria. A strong attribute of this location is the connection to the surrounding Health Sciences Center structures and facilities; however, the lack of property available limits the ability to meet the spacing demands for future expansion and growth potential necessary for sustaining a state-of-the-art hospital and teaching facilities. In addition, utilization of this area by LSU AMC would block future expansion of the LSU Health Sciences Center. This site was extensively evaluated; however, this site did not meet the size criteria necessary to meet the critical healthcare needs of the region post-Katrina.

Location 2: North of Tulane Avenue, east of Claiborne Avenue, adjacent to Tulane Hospital. This site consists of 4.8 acres, which is considerably less than the acreage specified in the site selection criteria. Although this site's connection to the existing campus and close proximity to Interstate 10 (I-10) and public transportation would be assets, the site was eliminated from further consideration due to its small size and limited room for expansion.

Location 3: Adjacent to the west side of University Hospital and across from Tulane Avenue. This site consists of 10.4 acres, which is less than the acreage specified in the site selection criteria. This site is adjacent to University Hospital, close to the existing campus and medical school, and offers space to grow across Tulane Avenue. However, this location would not meet the site criteria to accommodate all LSU AMC hospital services efficiently within one contiguous area. In addition, this location also limits the medical school's expansion capability.

Location 4: Between Canal Street and Tulane Avenue and between Johnson Street and South Roman Street. This site consists of 8.1 acres offering ease of access to health services and public transportation. While this site has been dismissed from consideration as a stand-alone site because of its small size, this site's footprint has been incorporated into a larger site as proposed in this action to accommodate the sizing requirements for a new hospital and teaching facility.

Location 5: Sites on both sides of Canal Street and between Johnson Street and Roman Street. This site consists of 10.8 acres. This location was eliminated because it did not meet the site selection criteria to accommodate all LSU AMC hospital services efficiently under one roof or within one contiguous area, as this site is farther away from the LSU Health Science Center.

Location 6: On the site of the LSU Dental School near I-10 and Florida Avenue. This site consists of 3 acres and is therefore substantially smaller than the acreage specified in the site selection criteria. This site offers close proximity to I-10 and public transportation; however, the site was eliminated from further consideration based on its distance from the LSU Health Sciences Center, limited size, and limited growth opportunities. In addition, selection of this site would limit the LSU Dental School's expansion opportunities.

2.4 SUMMARY COMPARISON OF ALTERNATIVES

This section summarizes the overall conclusions regarding the possible direct, indirect, or cumulative impacts for each alternative on the components of the existing environment and the potential for these impacts to be significant. The alternatives can have impacts on resources which are adverse, beneficial, or both adverse and beneficial. The environmental resources potentially affected by the alternatives and the direct and indirect impacts on each resource from each alternative are described in Chapter 3, Affected Environment and Environmental Consequences. Chapter 4, Cumulative Impacts, describes the potential cumulative impacts that may be associated with each alternative. This phased approach ensures that all direct and indirect effects will be identified, and options to avoid, minimize, or mitigate those adverse impacts will be considered. Table 2-1 summarizes the conclusions reached for each alternative in Chapters 3 and 4.

Table 2-1: Summary of Potential Environmental Impacts

Resource	No Action Alternative	Alternative 1: Proposed Actions - Construction of VAMC and LSU AMC at Tulane/Gravier Site	Alternative 2: Construction of VAMC at Lindy Boggs Site¹	Alternative 3: Construction of VAMC at Ochsner Site¹	Alternative 4: Modification/ Renovation of Charity Hospital for LSU AMC²
Physical Environment					
Geology and Soils	No construction would occur, so there would be no impacts on geology and soils.	Demolition and construction would disturb soils, but erosion control practices would minimize offsite transport. Operational and design measures would prevent/ minimize soil contamination from fuel leaks or spills. Adverse impacts would be minimal.	Impacts essentially the same as Alternative 1.	Impacts essentially the same as Alternative 1.	Impacts essentially the same as Alternative 1, but the smaller footprint of the Charity Hospital site would further minimize impacts.
Flood Zone	No construction would occur in flood zone, so there would be no impacts.	Construction would be within 100-year flood zone. Design measures, such as raising base elevation above the flood zone, would minimize impacts.	Impacts essentially the same as Alternative 1.	Most of site is outside the 100-year flood zone; with design measures, impacts would be negligible.	Impacts essentially the same as Alternative 1, but the smaller footprint of the Charity Hospital site would further minimize impacts.
Water and Coastal Resources	No construction would occur, so there would be no impacts.	There would be no impacts on surface waters or wetlands.	There would be no impacts on surface waters or wetlands.	There would be no impacts on surface waters or wetlands.	There would be no impacts on surface waters or wetlands.

Table 2-1: Summary of Potential Environmental Impacts

Resource	No Action Alternative	Alternative 1: Proposed Actions - Construction of VAMC and LSU AMC at Tulane/Gravier Site	Alternative 2: Construction of VAMC at Lindy Boggs Site¹	Alternative 3: Construction of VAMC at Ochsner Site¹	Alternative 4: Modification/Renovation of Charity Hospital for LSU AMC²
Land Use	No construction would occur, so there would be no project-related impacts on land use. Future land use at the four locations considered would likely develop in accordance with existing land use plans.	Land use on the site would be converted to medical, displacing residential and commercial uses. These changes would be consistent with planning for the site, compatible with adjacent land uses, and would promote the goals of Medical District development and economic redevelopment of surrounding areas. Although short-term loss of residential and commercial uses on the sites may be adverse, long-term impacts overall would be beneficial.	Impacts would be similar to those under Alternative 1. However, there would be no direct adverse impact due to displacement of on-site residential land use, and the overall beneficial impact may be reduced due to the distance of this site from the Medical District.	Impacts would be similar to those under Alternative 1. However, there would be no direct adverse impact due to displacement of on-site residential land use, and the overall beneficial impact may be reduced due to the distance of this site from the Medical District.	Land use on site would remain the same. There would be no direct adverse impact due to displacement of on-site residential or commercial land
Infrastructure	No construction would occur, so there would be no impacts on infrastructure.	Existing utilities would be adequate for the proposed facilities or would be upgraded to increase performance, and landfill space would be reduced by demolition debris. Overall impact on infrastructure would be small.	Impacts would be similar to those for Alternative 1.	Impacts would be similar to those for Alternative 1.	Impacts would be similar to those for Alternative 1, but there would be less demolition debris for disposal.

Table 2-1: Summary of Potential Environmental Impacts

Resource	No Action Alternative	Alternative 1: Proposed Actions - Construction of VAMC and LSU AMC at Tulane/Gravier Site	Alternative 2: Construction of VAMC at Lindy Boggs Site¹	Alternative 3: Construction of VAMC at Ochsner Site¹	Alternative 4: Modification/ Renovation of Charity Hospital for LSU AMC²
Cultural Resources					
Historic Buildings	The existing VAMC/MCLNO buildings that are NRHP-eligible have flood and hurricane damage. The disrepair, neglect, and change in historic operations, which threaten their historical integrity and National Register eligibility, would continue.	The footprints of the proposed VAMC and LSU AMC would adversely impact the Mid-City NRHD. Additionally, the abandonment of Charity Hospital for medical use could change the character of the property's use, which contributes to its historical significance. VAMC would cease to function as a hospital; an adverse impact to its NRHP eligibility.	No historic buildings would be directly impacted. The new VAMC could indirectly impact portions of two historic districts within the APE. The existing VAMC would cease to function as a hospital; an adverse impact to its NRHP eligibility.	No historic buildings would be directly impacted. The APE does not include any NR listed or eligible structures. The existing VAMC would cease to function as a hospital; an adverse impact to its NRHP eligibility.	If the integrity of the eligible and listed properties is maintained, the effect would be beneficial. If property renovations do not comply with applicable standards, NRHP eligibility would be threatened, an adverse impact.
Archaeology	No archaeological properties would be directly or indirectly impacted.	No known archaeological sites in the proposed project footprint. Site-specific analyses to be performed in next phase. Potential for intact prehistoric sites within the project footprint is very low; potential for intact historical (late 19 th and 20 th centuries) archaeological sites is high. Investigations would be conducted.	No known archaeological sites in the project footprint. Low potential for intact prehistoric or historic archaeological sites. Investigation of northeast corner near Bayou St. John may be warranted.	No known archaeological sites in the project footprint. Almost no potential for undisturbed archaeological sites and no additional investigation recommended.	No known archaeological sites in the project footprint. Low potential for intact prehistoric or historic sites within the project footprint. If undeveloped areas near Charity Hospital are to be used in design, investigations would be

Table 2-1: Summary of Potential Environmental Impacts

Resource	No Action Alternative	Alternative 1: Proposed Actions - Construction of VAMC and LSU AMC at Tulane/Gravier Site	Alternative 2: Construction of VAMC at Lindy Boggs Site¹	Alternative 3: Construction of VAMC at Ochsner Site¹	Alternative 4: Modification/ Renovation of Charity Hospital for LSU AMC²
					conducted.
Socioeconomics					
Population and Housing	There would be no construction of new medical facilities, thus there would be no direct adverse impacts on population or housing. However, this alternative could have an adverse impact on population due to the lack of adequate health care delivery, as well as due to cumulative adverse effects in conjunction with other facilities and services degraded by storm damage.	The Proposed Action would have adverse impacts due to displacement of residents, demolition of existing onsite housing, and reduced community cohesion. However, residents likely would remain in the City. Effects on housing demand from employees could have beneficial impact on property values and redevelopment, but could have adverse impacts if adjacent housing is displaced by related development.	There would be no direct effects on population or housing at Lindy Boggs because there are no current residents on the site. Indirect impacts at Lindy Boggs site and impacts from the LSU AMC at Tulane/Gravier would be similar to Alternative 1. Effects on housing demand from employees could have beneficial impact on property values and redevelopment, but could have adverse impacts if adjacent housing is displaced by related development.	Impacts would be similar to those described for Alternative 2.	Impacts would be similar to those described for Alternative 1. However, no residents would be adversely impacted by being displaced from the site.

Table 2-1: Summary of Potential Environmental Impacts

Resource	No Action Alternative	Alternative 1: Proposed Actions - Construction of VAMC and LSU AMC at Tulane/Gravier Site	Alternative 2: Construction of VAMC at Lindy Boggs Site¹	Alternative 3: Construction of VAMC at Ochsner Site¹	Alternative 4: Modification/Renovation of Charity Hospital for LSU AMC²
Community Facilities and Services	There would be no construction of new medical facilities or provision of improved healthcare services at any of the alternative locations. Consequently, community healthcare facilities and services would continue to be significantly impacted by the damage sustained as a result of Hurricane Katrina.	The Proposed Actions would provide substantial beneficial direct impacts on medical facilities and the delivery of medical services in the City. Local public safety and school services would be adequate to support possible increased demand from development associated with the proposed facilities.	Impacts from this alternative would be predominantly beneficial and essentially the same as described for Alternative 1.	Impacts from this alternative would be predominantly beneficial and essentially the same as described for Alternative 1.	Impacts from this alternative would be predominantly beneficial and essentially the same as described for Alternative 1.
Environmental Justice	There would be adverse impacts due to continued impairment of healthcare delivery to the uninsured, minority, and low-income populations.	Potential adverse impacts due to displacement of minority and low-income residents from the sites would be mitigated through government relocation assistance. Beneficial impacts would result from improved access to and quality of healthcare, as well as increased opportunities for employment.	There would be no displacement of residents of an environmental justice community of concern from the Lindy Boggs site. Therefore, environmental justice concerns are minor.	There would be no displacement of residents of an environmental justice community of concern from the Ochsner site. Therefore, environmental justice concerns are minor.	There would be no displacement of residents of an environmental justice community of concern from the Charity Hospital site. Therefore, environmental justice concerns are minor.

Table 2-1: Summary of Potential Environmental Impacts

Resource	No Action Alternative	Alternative 1: Proposed Actions - Construction of VAMC and LSU AMC at Tulane/Gravier Site	Alternative 2: Construction of VAMC at Lindy Boggs Site¹	Alternative 3: Construction of VAMC at Ochsner Site¹	Alternative 4: Modification/Renovation of Charity Hospital for LSU AMC²
Transportation	No construction would occur, so there would be no impacts on transportation.	Existing roads expected to be sufficient for any increase in traffic associated with the project. Local streets within sites would be closed, and changes in traffic patterns could adversely affect nearby residents and businesses. These effects may be offset by improved public transportation, and cycling and pedestrian improvements.	Existing road access is more limited than at the Alternative 1 location. Impacts would be similar to those described for Alternative 1.	Existing road access is more limited than at the Alternative 1 location. Impacts would be similar to those described for Alternative 1.	Impacts would be similar to those described for Alternative 1.
Human Health and Safety	No construction would occur, so there would be no impacts on health and safety.	Sites contain several USTs, an LUST, and numerous sites of potential hazardous material releases. There would be occupational health and safety hazards for remediation, demolition, and construction workers. Completed project would have a substantial beneficial impact on human health in the community.	Impacts would be similar to those described for Alternative 1.	Impacts would be similar to those described for Alternative 1.	Impacts would be similar to those described for Alternative 1.

Table 2-1: Summary of Potential Environmental Impacts

Resource	No Action Alternative	Alternative 1: Proposed Actions - Construction of VAMC and LSU AMC at Tulane/Gravier Site	Alternative 2: Construction of VAMC at Lindy Boggs Site¹	Alternative 3: Construction of VAMC at Ochsner Site¹	Alternative 4: Modification/Renovation of Charity Hospital for LSU AMC²
Biological Resources					
Biological Environment	There would be essentially no impacts on the biological environment.	There would be essentially no impacts on the biological environment.	There would be essentially no impacts on the biological environment.	There would be essentially no impacts on the biological environment.	There would be essentially no impacts on the biological environment.
Air Quality	No construction would occur, so there would be no project-related impacts air quality.	Impacts on air quality would be minimal.	Impacts on air quality would be minimal.	Impacts on air quality would be minimal.	Impacts on air quality would be minimal.
Noise	No construction would occur, so there would be no project-related impacts on noise.	Construction-related noise during the relatively short-term period of construction could have a minor adverse impact on nearby residents. During the long-term operational period, episodic noise from sirens and medical helicopters may reach adverse levels for short periods.	Noise impacts would be similar to those described for Alternative 1. However, the separation of the two facilities would reduce the total noise impacts at each location.	Noise impacts would be similar to those described for Alternative 1. However, the separation of the two facilities would reduce the total noise impacts at each location.	Noise impacts would be similar to those described for Alternative 1. However, the renovation activities at Charity Hospital would produce less noise than construction at the Alternative # 1 location, and the separation of the two facilities would reduce the total noise impacts at the Alternative # 1 location.

¹ Construction of VAMC only is addressed here. LSU AMC impacts are addressed under Alternative # 1.

² Modification/renovation of Charity Hospital only is addressed here. VAMC impacts are addressed under Alternatives # 1, 2, and 3.

3.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

As discussed in the previous chapters, multiple projects are being considered collectively in this PEA. VA, FEMA, the State, and the City recognize and acknowledge that the VAMC and LSU AMC projects are separate and severable and each may proceed independently to completion. This PEA assesses the following alternatives, in addition to the No Action alternative:

- Alternative # 1 (Proposed Actions) – Construction of new VAMC and LSU AMC facilities in the Tulane/Gravier area;
- Alternative # 2 – Construction of a new VAMC at the Lindy Boggs site and a new LSU AMC at the Tulane/Gravier site (or the alternative location [Charity Hospital]);
- Alternative # 3 – Construction of a new VAMC at the Ochsner site and a new LSU AMC at the Tulane/Gravier site (or the alternative location [Charity Hospital]); and
- Alternative # 4 – Rehabilitation and renovation of Charity Hospital as the new LSU AMC and construction of a new VAMC at the Tulane/Gravier site (or one of the alternative locations [Lindy Boggs or Ochsner]).

This chapter describes the environments of the existing VAMC and Charity Hospital locations, the proposed Tulane/Gravier location, and the alternative locations. This chapter also addresses, for each potentially affected environmental component, the consequences (impacts) of constructing the projects at each of the alternative locations.

Given that the locations of the existing facilities and the proposed Tulane/Gravier VAMC and LSU AMC sites are in close proximity, the discussions regarding the existing environment at these locations are often combined in the same section to simplify the discussion and to avoid repetition. While the Lindy Boggs site is located only about 1 mile from the proposed Tulane/Gravier locations and has some similarities to these sites, the existing environment at this alternative location is discussed separately. The existing environment of the Ochsner site, which is located farther from the other sites, also is addressed separately.

Under Alternatives # 2 and # 3, the LSU AMC, if built, could be located at either of two locations (Tulane/Gravier or Charity Hospital). Under Alternative # 4, the VAMC, if built, could be located at any of three locations (Tulane/Gravier, Lindy Boggs, or Ochsner). When evaluating the impacts associated with these alternatives in this chapter, it was assumed that under Alternatives # 2 and # 3, the LSU AMC would be built at the Tulane/Gravier site and under Alternative # 4, the VAMC would be built at the Tulane/Gravier site. These assumptions were employed to simplify the evaluation of the multiple combinations of sites possible under these alternatives. Thus, the impacts of locating the LSU AMC at Charity Hospital under Alternative # 2 or # 3 are presented under Alternative # 4, and the impacts of locating the VAMC at the Lindy Boggs or Ochsner sites under Alternative # 4 are presented under Alternatives # 2 and # 3, respectively.

The existing environment of each alternative site is described below by presenting descriptions of the environmental resources that make up the environment at each site. Following the description of the individual environmental resources, the impacts of the No Action alternative, the Proposed Actions, and other alternatives are evaluated. First, the No Action alternative is

discussed in order to provide a description of impacts currently occurring under existing, baseline conditions. The assessment of the full range of impacts from future project tiers, including facility design, site preparation, and construction, is not within the scope of this PEA. Those impacts will be further evaluated in the future in order to ensure that all direct and indirect impacts will be identified.

The CEQ regulations implementing NEPA require an evaluation of the significance of an impact based on both its context, including consideration of local and regional effects as well as short-term and long-term effects, and its intensity or severity. The regulations provide 10 considerations that, if applicable, must be considered in evaluating the significance of impacts (40 CFR Part 1508.27):

- 1) Is the impact adverse or beneficial?
- 2) Does the impact affect public health or safety?
- 3) Does the area affected have unique characteristics such as historic or cultural sites, farmlands, parklands, wetlands, wild and scenic rivers, or ecologically critical areas?
- 4) Is the impact highly controversial?
- 5) Is the impact highly uncertain or unknown?
- 6) Does the effect of the action establish a precedent for future actions with significant effects?
- 7) Is the impact related to other impacts that are individually insignificant but cumulatively significant?
- 8) Does the impact adversely affect scientific, cultural, or historical resources?
- 9) Does the impact adversely affect an endangered or threatened species or its habitat?
- 10) Does the impact threaten a violation of Federal, state, or local laws or regulations for the protection of the environment?

Impact evaluations also include consideration of mitigation measures. If relevant, the final assessment is based on the impacts that remain after mitigating measures have been taken into consideration (see Chapter 5). Chapter 4 addresses possible cumulative impacts from the Proposed Actions and the alternatives that may not be individually significant but could be significant when considered in conjunction with other actions that impact the same resources (e.g., other construction projects in the area).

Once an alternative has been selected by VA, FEMA, and the City, more detailed, site-specific studies will be conducted to further evaluate some resources. These studies will evaluate the impacts of the selected alternative on environmental resources that cannot be addressed in detail until the site has been selected and facility construction has entered the planning phase. Site-specific resources that would be evaluated later in greater detail are listed below. In the PEA, these resources are discussed in more general terms.

- Infrastructure/utilities, which cannot be fully evaluated until specific needs are determined;
- Archaeology, which cannot be fully evaluated until excavation of the sites is possible;
- Traffic, which cannot be fully studied until the facilities are laid out and commuting and emergency vehicle routes are determined;
- Noise, which cannot be fully studied until emergency medical transportation patterns (land and air) can be predicted and the distances between stationary construction/demolition noise sources and receptors can be determined;
- Socioeconomics, which will be dependent on the timing of the projects, which in turn will be based on factors such as funding, permitting, etc.; and
- Acceptable Separation Distances (ASDs) from the hazardous substances defined in 24 CFR Part 51.201.

There is no requirement that construction of the VAMC and LSU AMC occur simultaneously. In fact, based on administrative requirements, funding mechanisms, permitting, etc., it is highly unlikely that the two projects would proceed with identical schedules. However, there is a potential for some overlap in the projects.

3.1 PHYSICAL ENVIRONMENT

The physical environment includes the site locations, the geology and soils of the area, and the site elevations with respect to flood zones. These aspects of the physical environment are discussed below for the existing VAMC and Charity Hospital locations, the proposed Tulane/Gravier locations, and alternative locations for the VAMC at the Lindy Boggs and Ochsner sites.

3.1.1 Existing Conditions – Physical Environment

3.1.1.1 Site Descriptions

Existing and Proposed Tulane/Gravier Locations

The existing VAMC and Charity Hospital (Alternative # 4) sites and the proposed Tulane/Gravier sites (Alternative # 1) lie within the same geographical area of the City of New Orleans. The sites are located near I-10 (figure 2-1) in an urban area that is heavily developed with residential and commercial buildings.

Alternative # 2 – Lindy Boggs Location

The Lindy Boggs site, a proposed alternative location for the VAMC, is located along the northern boundary of the historic Mid-City neighborhood, a heavily developed area of central New Orleans (figure 2-2). The site is currently occupied by the abandoned Lindy Boggs Medical Center (LBMC), a Home Depot Store and parking lot, a large undeveloped lot, and other industrial/warehouse properties.

Alternative # 3 – Ochsner Location

The Ochsner site, a proposed alternative location for the VAMC, is located in a heavily developed area of Jefferson Parish. It is bordered by railroad tracks and the Earhart Expressway to the north, Ochsner Medical Center facilities to the east and south, and residential housing to the west (figure 2-3). The site is currently occupied by three warehouses, two helipads, a parking lot, and a railroad spur.

3.1.1.2 Geology and Soils

Existing and Proposed Tulane/Gravier Locations

Geologically, the existing medical facility sites and proposed Tulane/Gravier sites lie in the Mississippi River Deltaic Plain within the Gulf Coastal Plain physiographic province. The region is underlain by unconsolidated sedimentary deposits (primarily formed by sand and gravel) underlain by silt and clay. The geology in the area is characterized by silty and clayey layers ranging in age from Cenozoic to Quaternary (NWS 1984). These layers formed deposits of black swamp sediment and natural levees to the Mississippi River. These sediments occur between 60 and 100 feet below land surface and are considered bedrock.

According to the Orleans Parish Soil Survey, the existing medical facility sites and proposed VAMC and LSU AMC Tulane/Gravier sites are underlain by Schriever clay soils (USDA/SCS 1989). Schriever clay soils are characterized by poorly drained to somewhat poorly drained soils having a clayey or loamy surface layer and clayey subsoil. These types of soils are listed as prime farmland by the Natural Resources Conservation Service (NRCS 2007). The Farmland Protection Policy Act (FPPA; P.L. 97-98, Sec. 1539-1549; 7 USC 4201, et seq.) states Federal agencies must “minimize the extent to which Federal programs contribute to the unnecessary conversion of farmland to nonagricultural uses.” However, the NRCS considers sites with soils that are significantly altered or obscured by urban processes and development to be Urban Land (NRCS 2007). Because the area containing the existing and proposed Tulane/Gravier sites is Urban Land, the FPPA does not apply (NRCS 1994).

Alternative # 2 – Lindy Boggs Location

The Lindy Boggs site is geologically similar to the existing and proposed Tulane/Gravier locations, as previously described, and the site is also underlain by Schriever clay soils (USDA/SCS 1989). Furthermore, the NRCS considers the site Urban Land and, therefore, the FPPA does not apply (NRCS 1994).

Alternative # 3 – Ochsner Location

The Ochsner site is geologically similar to the existing Tulane/Gravier locations described previously and the site is also underlain by Schriever clay soils (USDA/SCS 1983). Furthermore, the NRCS considers the site Urban Land and, like the other sites, the FPPA does not apply (NRCS 1994).

3.1.1.3 Flood Zone

The 100-year floodplain designates the area inundated during a large storm having a 1 percent chance of being equaled or exceeded in any given year. Floodplains are established by FEMA and are shown on Flood Insurance Rate Maps (FIRMs) or Flood Hazard Boundary Maps (FHBMs) for all communities that are members of the National Flood Insurance Program.

Existing and Proposed Tulane/Gravier Locations

The topography of the area surrounding the existing medical facilities and the proposed Tulane/Gravier sites is relatively flat, with elevations ranging from 0 to 5 feet above mean sea level (msl; USGS 1998). Mid-City is the only NRHD in New Orleans below sea level (Campanella 2002), and all of the existing facilities and proposed locations are within the FEMA 100-year floodplain.

According to the FIRM, the Tulane/Gravier sites are entirely within the FEMA-designated Zone A1 100-year floodplain except for a small part of the proposed new LSU AMC site south of Canal Street and west of North Claiborne Street/I-10, which is in Zone B (FEMA 1984a). The Hurricanes Katrina and Rita Surge Inundation and Advisory Base Flood Elevation (ABFE) for the proposed Tulane/Gravier sites is 0 feet above msl or 3 feet above Highest Existing Adjacent Grade (HEAG; FEMA 2006a). The ABFE for the existing facility sites is 2.5 feet above msl or 3 feet above HEAG (FEMA 2006a). Executive Order (EO) 11988 (Floodplain Management) requires Federal agencies to minimize the occupancy of and modification to the floodplain unless there is no practicable alternative (United States Environmental Protection Agency [USEPA] 1977).

Alternative # 2 – Lindy Boggs Location

The topography around the alternative Lindy Boggs site is relatively flat, with elevations ranging from 0 to 5 feet above msl (USGS 1998). According to the FIRM, the topography around the proposed Lindy Boggs site is flat and located at msl (0 feet above msl). The entire site is within the 100-year floodplain within FEMA-designated flood zone A4 (FEMA 1984b). As illustrated on the Hurricanes Katrina and Rita Surge Inundation and ABFE Map, the ABFE for the Lindy Boggs site is 0 feet above msl or 3 feet above HEAG (FEMA 2006b, 2006c).

Alternative # 3 – Ochsner Location

The topography around the alternative Ochsner site is relatively flat, with elevations ranging from 0 to 10 feet above msl (USGS 1998). According to the FIRM, the Ochsner site property is located at 0 feet above msl, with approximately 26.8 of the site's 28 acres located outside of the 100-year floodplain within FEMA-designated flood Zone X and approximately 1.2 acres in the northwestern corner of the site located within the 100-year floodplain in FEMA-designated flood Zone AE (FEMA 1995). Properties adjacent to the Ochsner site, and those to the north and south, are also within Zone AE (FEMA 1995). The ABFE for the Ochsner site is 0 feet above msl or 3 feet above HEAG (FEMA 2006d).

3.1.2 Discussion of Impacts - Physical Environment

3.1.2.1 Impacts of the No Action Alternative

Since no construction would occur, there would be no adverse direct, indirect, or cumulative impacts to physical setting within 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 3.1.1 would continue.

3.1.2.2 Impacts of the Proposed Actions

Geology and Soils

Direct Impacts

During the demolition of existing on-site structures, upgrading of infrastructure, and construction of new buildings at the Tulane/Gravier sites, minor temporary adverse direct impacts to the soils at the proposed locations would be anticipated. Ground-disturbing activities such as grading, clearing, filling, and excavation may cause soil erosion and, subsequently, the transport of sediment via storm water.

A National Pollutant Discharge Elimination System (NPDES) permit would have to be obtained from the Louisiana Department of Environmental Quality (LDEQ) for demolition and construction activities. The NPDES permit would include a Storm Water Pollution Prevention Plan (SWPPP) containing site-specific best management practices (BMPs) to be implemented for temporary and permanent erosion and sediment control. BMPs may also include mitigation measures such as mulching, revegetation, erosion control blankets/mats (to protect bare soils from erosion), silt fencing, fiber rolls, and other sediment control measures to further prevent the movement of sediment off-site. Permanent landscaping vegetation and revegetation of disturbed areas would be established immediately following final grading.

Spills and/or leaks of fuels from vehicles/equipment may impact soils during demolition and construction. The site-specific SWPPP should also include BMPs for vehicle/equipment fueling and maintenance, and spill prevention and control measures to be implemented to further reduce potential impacts on soils during construction activities.

Indirect Impacts

No adverse indirect impacts to the geology or soil are anticipated as a result of implementing the Proposed Actions. There would likely be aboveground and/or underground fuel tanks on site to supply emergency generators once the medical facilities are constructed; however, any aboveground fuel storage tanks will be located beyond the minimum ASD. These tanks would be constructed and maintained using BMPs and in accordance with regulations designed to reduce the likelihood of leaks that would impact the environment. Some indirect impacts could result from runoff from parking areas.

The Louisiana Department of Agriculture and Forestry, Office of Soil and Water Conservation Commission had no comments on the project as expressed in a letter dated 1 November 2007 (Appendix C). Furthermore, the NRCS stated no objection to the project and concluded that there would be no impact to prime farmland, as expressed in a letter dated 6 November 2007 (Appendix C).

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 all new construction above the ABFE of 0 feet above msl (or 3 feet above HEAG) in accordance with the Louisiana State Uniform Construction Code Council, effective date 1 January 2007 (FEMA 2007).

The facility design may require the import of fill material to ensure that the base elevation of all occupied structures is at least 2 feet above the 100-year flood zone. All fill brought onto the property must meet Louisiana's Risk Evaluation/Corrective Actions Program (RECAP) standards for residential soil. Increasing the elevation in the project area would change the existing runoff patterns. Studies will be necessary to assess the impacts of these changes as part of the construction plans.

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, 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. As a result, if demolition and construction activities are planned and implemented with the intention of preserving the flood zone designation, this alternative would have less of an impact than the Proposed Actions.

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. The primary impacts to the flood zone under this alternative would occur at the VAMC site, unless the Ochsner site is selected, as described in the previous paragraphs.

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).

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 17th 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 3-1). 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 (NOCP 2006).



Figure 3-1: City of New Orleans Planning District 4

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 3-1). 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 (NOCP 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 (NOCP 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.

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 3-2). Figure 3-2 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 3-3) (USRM 2008b).

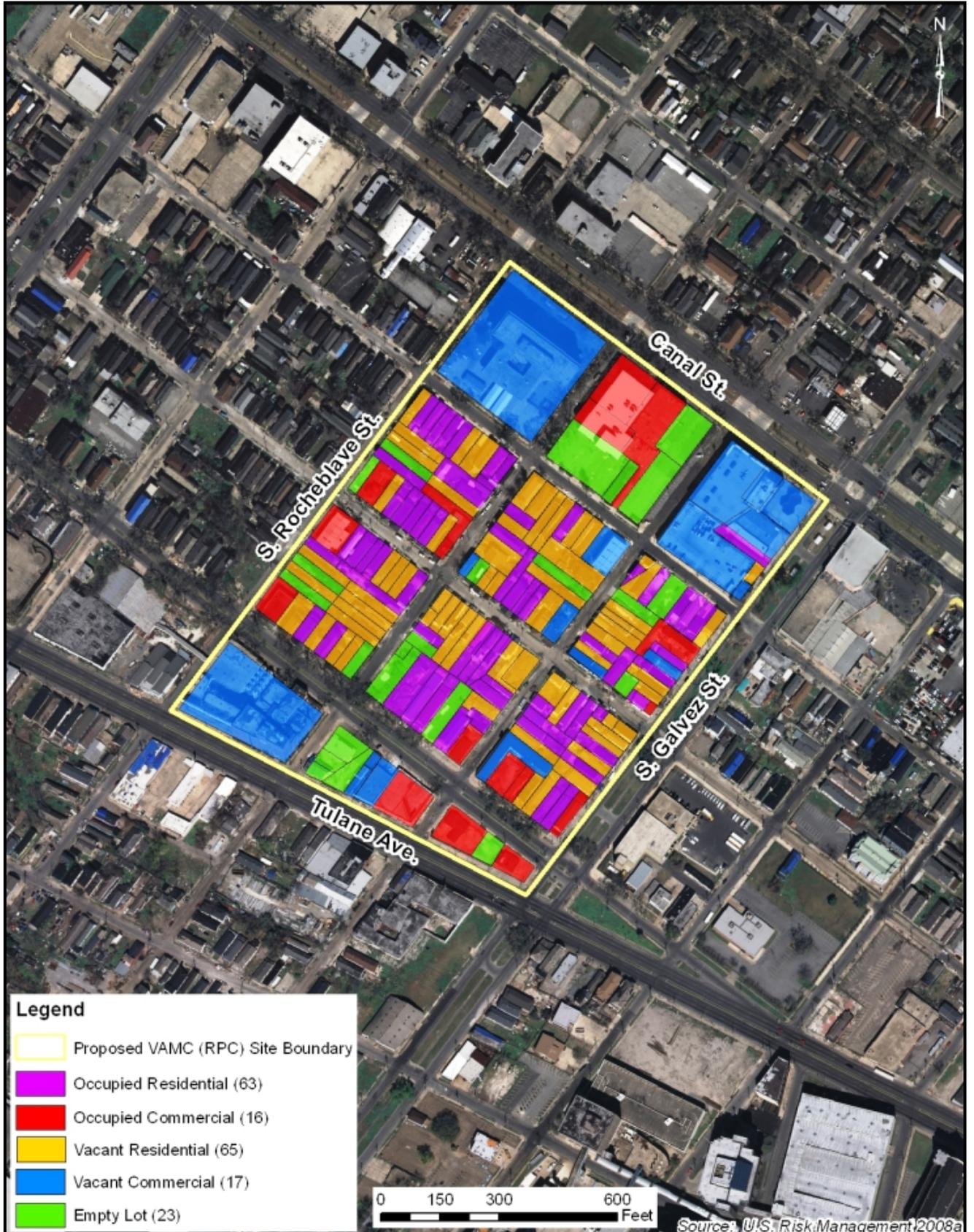


Figure 3-2. Land Use – VAMC Site

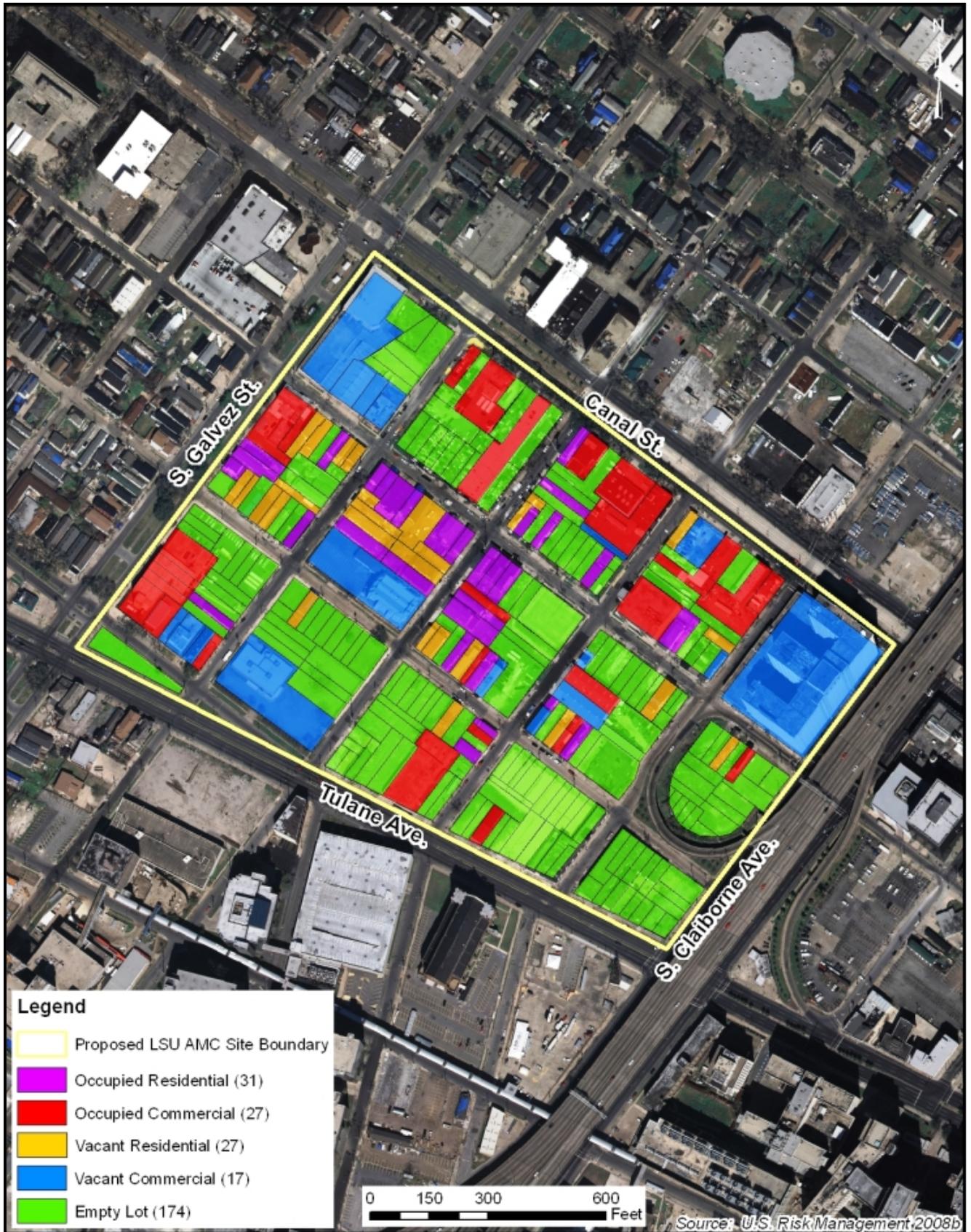


Figure 3-3. Land Use – LSU AMC Site

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 no changes that would result in 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 as 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.

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 United States (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 United States Code [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.

In 1994, President Clinton issued EO 12898, a policy ensuring that Federal agencies make environmental justice part of its mission “by identifying and addressing... disproportionately high and adverse human health or environmental effects of its programs... on minority populations and low-income populations.” The social and economic effects of the alternatives are addressed in Section 3.6, Socioeconomics.

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 National Register of Historic Places (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 National Register 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 National Register 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 jurisdiction over historic buildings within the MCLNO complex that are owned by the State.

Because of the complex nature of the current undertaking, 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 complete their Section 106 responsibilities with a PA. A PA is a legally binding document between Federal agencies 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, Tribal Historic Preservation Officer, Native American tribes, consulting parties, and other interested parties. Compliance with the procedures outlined in an approved 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 undertaking includes 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 Areas of Potential Effect (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,