U.S. Department
of Veterans Affairs

SUPPLEMENTARY ENVIRONMENTAL ASSESSMENT FOR

Phase 4 New Bed Tower and Infrastructure Improvements Project
James A. Haley Veterans' Hospital, Tampa, Florida

DRAFT July 10, 2015

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List of Acronyms, Abbreviations, and Definitions

µg/m^3	micrograms per cubic meter
ACHP	Advisory Council on Historic Preservation
ACM	Asbestos-Containing Materials
ADT	Average Daily Traffic
AIRFA	American Indian Religious Freedom Act
amsl	above mean sea level
APE	Area of Potential Effect
AQCR	Air Quality Control Region
ARPA	Archaeological Resources Protection Act
ASTM	American Society for Testing and Materials
BMP	Best Management Practice
CAA	Clean Air Act
CEMP	VA Contractor Environmental Management Plan
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CMP	Coastal Management Program
CO	Carbon Monoxide
CO_2	Carbon Dioxide
CUP	Central Utility Plant
CZMA	Coastal Zone Management Act
D-B	Design-Build
dBA	A-weighted Decibels
DNI	Day-Night Average Sound Level
DOPAA	Description of Proposed Actions and Alternatives
EA	Environmental Assessment
EDR	Environmental Data Resources
EIS	Environmental Impact Statement
EMS	Emergency Medical Services
EO	Executive Order
ERP	Environmental Resource Permit
ESA	Environmental Site Assessment
FAA	Federal Aviation Administration
FCMP	Florida Coastal Zone Management Program
FDEP	Florida Department of Environmental Protection
FDOT	Florida Department of Transportation
FEMA	Federal Emergency Management Agency
FFWCC	Florida Fish and Wildlife Conservation Commission
FIRM	Flood Insurance Rate Map
FLUCFCS	Florida Land Use, Cover, Form Classification System
FM	Force Main
FNAI	Florida Natural Features Inventory
FONSI	Finding of No Significant Impact
FY	Fiscal Year
GEMS	Green Environmental Management System
GHG	Greenhouse Gas
GPD	Gallons per day
GSF	Gross Square Feet
HAP	Hazardous Air Pollutant
HART	Hillsborough Area Regional Transit
HVAC	Heating, Ventilation, Air Conditioning
ICU	Internal Care Unit
JAHVH	James A. Haley Veterans' Hospital
kV	Kilovolt
LEED	Leadership in Energy and Environmental Design
mg/m^3	milligrams per cubic meter
MOT	Maintenance of Traffic
MS&N	Medical, Surgical and Nursing
MVA	Megavolt Amperes

MW	Megawatt
NAAQS	National Ambient Air Quality Standards
NAGPRA	Native American Graves Protection and Repatriation Act
NANSR	Non-Attainment Major New Source Review
NEPA	National Environmental Policy Act of 1969
NGVD	National Geodetic Vertical Datum
NHPA	National Historic Preservation Act
NO_2	Nitrogen Dioxide
NOA	Notice of Availability
NOAA	National Oceanic and Atmospheric Association
NOI	Notice of Intent
NO_X	Nitrogen Oxides
NPDES	National Pollution Discharge Elimination System
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NSR	New Source Review
O_3	Ozone
OSHA	Occupational Safety and Health Administration
Pb	Lead
PM	Particulate matter
ppm	parts per million
PSD	Prevention of Significant Determination
RCRA	Resource Conservation and Recovery Act
REC	Recognized Environmental Condition
ROI	Region of Influence
SEA	Site-Specific Environmental Assessment
SHPO	Florida Department of Historical Resources (State Historic Preservation Office)
SIP	State Implementation Plan
SO_2	Sulfur dioxide
SSPP	Strategic Sustainability Performance Plan
SWFWMD	Southwest Florida Water Management District
SWPPP	Stormwater Pollution Prevention Plan
TECO	Tampa Electric Company
TPY	Tons per year
USACE	United States Army Corps of Engineers
USDA	United States Department of Agriculture
USEPA	United States Environmental Protection Agency
USF	University of South Florida
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
UST	Underground Storage Tank
VA	Department of Veterans Affairs
VOC	Volatile Organic Compounds
YD^3	Cubic yard

Executive Summary

BACKGROUND

The James A. Haley Veterans' Hospital (JAHVH) Medical Center is located at 13000 Bruce B. Downs Boulevard in Tampa, Florida (Figure 1). The JAHVH is a tertiary care teaching hospital providing services and patient care to the veterans of Central Florida. The hospital also provides to veterans a full range of inpatient and outpatient care including medicinal, surgical, psychological, and neurological care.

Due to favorable economic conditions in 2010, the New South Bed Tower and Infrastructure Improvements were introduced as a scope change into the VA's internal scope review process to improve medical care at the JAHVH. The New South Bed Tower was proposed as an alternative to the original "Phase 4" renovation of existing patient bed units in the Building 1 bed tower. The New South Bed Tower and Infrastructure Improvements scope would better address the JAHVH's substantial deficiency in the number of available beds necessary for the JAHVH to provide adequate medical care to veterans in Central Florida.

PURPOSE AND NEED FOR THE PROPOSED PROJECT

The existing Building 1 bed tower was built in 1972 and the infrastructure is aging and unable to be modified to meet the VA's and the healthcare industry's family-focused model of care, which requires additional support space, as opposed to patient bedrooms with minimal support space. The existing bed tower's footprint is insufficient to support adequately-sized and functionally-efficient inpatient units. Although bed unit renovations within Building 1 (the existing bed tower) were completed within the last several years, there was insufficient space for the renovations to include support space for staff physicians, therapists, and case workers, and the family-oriented space called for in today's patient and family-focused model of care. The Proposed Action results from a defined need to improve hospital care at JAHVH, now and in future decades. The purpose of the New South Bed Tower is to modernize inpatient hospital bed units and the supporting facilities and infrastructure.

PROPOSED ACTION

The Propose Action includes the New South Bed Tower, a six level, 220,000 gross square feet (GSF) bed tower connected to the east side of Building 1 (Figures 5 and 6). The tower would contain 100 Medical, Surgical and Nursing (MS&N) inpatient beds, 40 intensive care unit (ICU) beds, associated support space, lobby, public amenities, Main Security Office, patient drop-off and entry, and connection to Building 1. The New South Bed Tower would serve as the new main entry for the hospital. Site work and utilities associated with construction of the new tower would be necessary, including reconfiguration of the existing Diamond surface parking lot and a new entry drive.

The New South Bed Tower would be state-of-the-art, meeting all current VA and industry standards for size, function, and infrastructure. It would be designed to maximize programmatic flexibility and anticipate future trends in healthcare design. Quality of care would be enhanced by allowing for the most efficient unit sizes and providing optimal adjacencies between spaces. For example, the standard 24-bed MS&N units would be

located adjacent to their companion ICU bed units to promote patient and staff safety by minimizing patient movement.

The New South Bed Tower would allow the existing Building 1 bed tower to undergo a less costly and more programmatically-appropriate future renovation providing outpatient diagnostic and testing services and support functions that serve the hospital. The New South Bed Tower is also intended to serve as the new main entry for the hospital, improving campus wayfinding and patient access, as well as presenting a new "face" to the Tampa Bay community and reaffirming the VA's commitment to caring for our Nation's heroes at the highest level.

The proposed Satellite Central Utility Plant (CUP) is considered necessary because renovating the existing plant (Building 39) would be problematical.

NO ACTION ALTERNATIVE

Under the No Action Alternative, the VA would not implement the Proposed Action. The current level of medical care and inadequate number of private patient rooms would remain unchanged. The No Action Alternative would avoid the direct, short-term, minimal-to-moderate adverse impacts associated with construction of Proposed Action related to aesthetics; air quality; geology and soils; hydrology and water resources; floodplains; solid waste and hazardous materials; traffic and parking; and noise. Likewise, the No Action Alternative would avoid the direct, long-term, minimal-to-moderate adverse impacts associated with operation of Proposed Action related to floodplains. However, the No Action Alternative would not realize the direct, short-term, beneficial-and-not-significant impacts associated with construction of the Proposed Action on socioeconomics and environmental justice. Likewise, the No Action Alternative would not realize the direct, long-term, beneficial-and-not-significant impacts associated with operation of the Proposed Action on aesthetics, traffic, and community services.

ENVIRONMENTAL ASSESSMENT

An Environmental Assessment (EA) was prepared in January 2010 for the Polytrauma Expansion & Bed Tower Upgrade project that included four phases: Phase 1 – a new 1500-space parking garage; Phase 2 – expansion of the Polytrauma facility; Phase 3 – a new therapy pool building; and Phase 4 – upgrades to the Bed Tower. A Finding of No Significant Impact (FONSI) was signed on January 21, 2010. Since the VA now proposes to construct a new bed tower under Phase 4, the VA has prepared a Supplementary Environmental assessment (SEA) in accordance with the regulations for implementing the procedural provisions of the National Environmental Policy Act (NEPA), (Public Law 91-190, 42 USC 4321-4347 January 1, 1970), amendments, and VA's Implementing Regulations (38 CFR Part 26). The SEA, entitled "U. S. Department of Veterans Affairs, Supplementary Environmental assessment for Phase 4 New Bed Tower and Infrastructure Improvements Project, James A. Haley Veterans' Hospital, Tampa, Florida, 2015" is incorporated by reference in its entirety into this FONSI.

In addition to the proposed action, a No Action Alternative was evaluated in the SEA.

This environmental assessment methodology uses the following terms in assessing environmental impacts:

- *Short-term Impact:* Short-term impacts are those that would occur only with respect to a particular activity, for a finite period, or only during the time required for construction or installation activities.
- *Long-term Impact:* Long-term impacts are those that are more likely to be persistent and chronic.
- *Direct Impact:* A direct impact is caused by an action and occurs around the same time at or near the location of the action.
- *Indirect Impact:* An indirect impact is caused by an action and might occur later in time or be farther removed in distance but still be a reasonably foreseeable outcome of the action.
- *Beneficial-and-not-significant:* This impact represents an improvement in existing conditions and an Environmental Impact Statement (EIS) is not required.
- *None-to-negligible:* A potential impact of this severity would be barely detectable and an EIS is not required for this impact.
- *Minimal-to-moderate:* A potential impact that is less-than-significant and would not require specific mitigation measures, other than those dictated by regulatory and permitting requirements and an EIS is not required for this impact.
- *Significant-if-not-mitigated:* A potential impact of this severity would require specific mitigation measures beyond those associated with permit requirements but an EIS is not required for this effect.
- *Significant-and-immitigable:* A potential impact of this severity would have to be evaluated in an EIS.

Environmental impacts may be either significant or not significant environmental impacts. The following environmental impacts are not significant environmental impacts because an Environmental Impact Statement is not required for these environmental impacts:

- Beneficial-and-not-significant;
- None-to-negligible;
- Minimal-to-moderate; and
- Significant-if-not-mitigated.

Summary of Environmental Impacts is as follows:

Construction

- *Beneficial-and-not-significant:* Socioeconomics (ST); Environmental Justice (ST).
- *None-to-negligible:* Land Use and Zoning (ST); Cultural Resources (ST); Topography, Geology and Soils (ST for topography); Wildlife and Habitat (ST); Floodplains, Wetlands and Coastal Zone Management (ST for wetlands and CZM); Community Services (ST); Traffic, Transportation and Parking (ST for transportation); Utilities (ST); Alternative Energy (ST); Cumulative Impacts (LT for those listed here); Potential for Generating Substantial Controversy (ST).
- *Minimal-to-moderate:* Aesthetics (ST); Air Quality (ST); Topography, Geology and Soils (ST for geology and soils); Noise (ST); Hydrology and Water Resources (ST); Wetlands and Coastal Zone Management (ST for floodplains); Solid Waste and Hazardous Materials (ST); Transportation and Parking (ST for traffic and parking); Cumulative Impacts (ST for those listed here).

- *Significant-if-not-mitigated:* None.
- *Significant:* None.

Operations (All impacts are Long-Term)

- *Beneficial-and-not-significant:* Aesthetics; Community Services (medical services); Traffic, Transportation and Parking (traffic); Cumulative Impacts (traffic, transportation, and parking).
- *None-to-negligible:* Land Use and Zoning; Air Quality; Cultural Resources; Topography, Geology and Soils; Noise; Hydrology and Water Resources; Wildlife and Habitats; Floodplains, Wetlands and Coastal Zone Management (wetlands and CZM); Socioeconomics; Community Services (all with the exception of medical services); Solid Waste and Hazardous Materials; Traffic, Transportation and Parking (transportation and parking); Utilities; Alternative Energy Sources; Environmental Justice; Cumulative Impacts (all others except traffic, transportation, and parking).
- *Minimal-to-moderate:* Wetlands and Coastal Zone Management (floodplains).
- *Significant-if-not-mitigated:* None.
- *Significant:* None.

PUBLIC INVOLVEMENT

A Notice of Availability of the draft Description of Proposed Action and Alternatives (DOPAA) was published in the *Tampa Bay Tribune* on 27 through 29 March 2015 and in the *University of South Florida Oracle* on 26 and 30 March 2015. A public meeting was held on April 9, 2015 to obtain public input on DOPAA that was prepared to conduct a SEA. The VA finalized DOPAA on May 15, 2015. A NOA for draft SEA and draft FONSI will be published in the *Tampa Bay Tribune*. A public meeting for the draft SEA and draft FONSI is scheduled on July 29, 2015.

DETERMINATION

Resources that have been analyzed in this SEA include aesthetics; land use and zoning; air quality; cultural resources; topography, geology, and soils; hydrology and water resources; wildlife and habitat; floodplains, wetlands, and coastal zone management; socioeconomics; community services; solid waste and hazardous materials; traffic, transportation, and parking; utilities; alternative energy sources; noise; environmental justice; cumulative impacts; and potential for generating substantial controversy. Constructing and operating the Proposed Action would have no significant impact—adverse or beneficial—on any of these resource areas. A summary of environmental impacts for each of the resources during construction and operation of the Proposed Action is provided in the following executive summary.

Aesthetics. **Direct, short-term, minimal-to-moderate adverse impacts would occur during construction of the Proposed Action.** Aesthetic impacts would be similar to those of modern commercial/industrial new construction, including the presence of temporary safety fencing and construction vehicles. The Proposed Action would have no significant impact on a pedestrian's experience of the area because the majority of the pedestrian view is already dominated by existing JAHVH buildings and other structures

in the surrounding highly urbanized area. According to the Florida State Historic Preservation Officer (SHPO), there are no aesthetically important structures at the JAHVH or in the surrounding area. **Direct, long-term, beneficial-and-not-significant impacts would occur during operation of the Proposed Action.** The proposed New South Bed Tower would provide a new modern façade and entrance for patients, visitors, and staff at the JAHVH. The architecture of the New South Bed Tower would more closely match the new JAHVH polytrauma addition and parking garage, as well as the new USF dormitories currently under construction on the parcel adjacent to the southeast border of the JAHVH campus. New signage at the proposed new entrance along Richard Silver Way would also improve the aesthetic appearance of the facility.

Land Use and Zoning. **Construction of the Proposed Action would have none-to-negligible adverse impact on land use and zoning.** Likewise, **operation of the Proposed Action would have none-to-negligible adverse impact on land use and zoning.** The Proposed Action would not result in a direct displacement of any site or area land uses and would not change the site's zoning. Construction and operation of the Proposed Action would be consistent with the existing land uses. The Proposed Action would not alter or accelerate development patterns in the area, would not change off-site land uses, and would not be in conflict with existing or anticipated future land use planning and zoning criteria.

Air Quality. **Direct, short-term, minimal-to-moderate adverse impacts would occur during construction of the Proposed Action.** Emissions from construction activities would only last the duration of the construction activities, anticipated to be approximately 29 months. Construction activities would generate particulate emissions as fugitive dust from ground-disturbing activities, combustion of fuels in construction equipment, and demolition. Construction activities would incorporate BMPs to minimize fugitive particulate matter emissions. **Direct, long-term, none-to-negligible adverse impacts would occur during operation of the Proposed Action.** Operation of the Proposed Action would include the use of one new 2-megawatt (MW) generator for emergency backup power. The generator would only be used during emergencies and routine maintenance. Intermittent use of the generator would not contribute significantly to the area's nonattainment status for sulfur dioxide. No other new sources of emissions would be generated during operation of the Proposed Action.

Cultural Resources. **Construction of the Proposed Action would have direct, short-term, none-to-negligible adverse impacts on cultural resources.** Prior cultural resources surveys concluded there are no culturally significant buildings or known artifacts at the JAHVH, and communications from the Florida SHPO and Native American Tribes concurred with those conclusions. However, the VA will immediately notify the SHPO and Native American Tribes should artifacts be encountered during construction of the Proposed Action. **Direct, long-term, none-to-negligible adverse impacts would occur during operation of the Proposed Action.** Operation of Proposed Action has no mechanisms that involve physical subsurface disturbances that could potentially impact cultural resources within or beyond the JAHVH campus boundary.

Topography, Geology, and Soils. **Direct, short-term, minimal-to-moderate adverse impacts would occur to geology and soils during construction of the Proposed**

Action, and a none-to-negligible adverse impact on topography. Construction will require cut and fill of up to 8,860 cubic yards (YD^3) of soil, but will not significantly alter the current site topography, which has been substantially altered since 1972, when the site was first developed as the JAHVH campus. Construction could cause soil erosion and dust generation, sedimentation of the stormwater system, or soil contamination by petroleum releases from equipment. General construction BMPs would be followed to control and minimize soil erosion and siltation. Due to relict and potential sinkhole activity, soil and geologic conditions will be rendered suitable with in-situ foundation support systems for the proposed New South Bed Tower. Bedrock would not be impacted by the Proposed Action because excavations for the proposed New South Bed Tower would not extend to bedrock. **Direct, long-term, none-to-negligible adverse impacts would occur to soils, geology, and topography during operation of the Proposed Action.** There would be no long-term soil erosion or sedimentation impacts because no soils would be exposed during operation. Soils in landscaped areas will be anchored by vegetation and not susceptible to erosion by wind or stormwater. During operation, JAHVH maintenance staff will routinely inspect grounds for signs of subsidence and proper functioning of sewer pipes and stormwater systems to ensure these systems do not promote potential sinkhole activity.

Hydrology and Water Resources. **Direct, short-term, minimal-to-moderate adverse impacts would occur during construction of the Proposed Action.** During construction, the existing drainage south of Building 30 would need to be modified to allow for the construction of the proposed New South Bed Tower. Overall drainage patterns would remain, avoiding the need for large-scale stormwater design. Potential sedimentation (from soil erosion) of the existing stormwater management system would be managed by installing silt fences and hay bales around construction areas. All construction would be performed under an FDEP-approved Generic Permit for Stormwater Discharge from Construction Activities (for disturbing more than one acre of land) and under JAHVH's existing and modified Environmental Resource Permits (ERP). **Direct, long-term, none-to-negligible adverse impacts would occur during operation of the Proposed Action.** The existing stormwater drainage and conveyance system will be adequate to serve the needs of the JAHVH campus, including the Proposed Action. Operation of the Proposed Action has no mechanisms that involve contact with groundwater underlying the JAHVH campus. Operation of the Proposed Action will not impact surface water because surface water is not present at the JAHVH campus.

Wildlife and Habitat. **Direct, short-term, none-to-negligible adverse impacts would occur during construction of the Proposed Action.** Impacts on biological resources during construction of the Proposed Action would be minimal as no regulated wildlife or habitat resources are present, as confirmed by the US Fish and Wildlife Service in correspondence dated May 22, 2015. The JAHVH campus does not contain any natural habitat that supports wildlife outside of incidental occurrences of gray squirrels, songbirds, insects, and the Cuban anole. Management actions during construction (and operation) include preserving, relocating or replanting palms and any other ornamental plants, as necessary to accommodate the Proposed Action. Any replanted vegetation would be native to the area and require low-level maintenance. **Direct, long-term, none-to-**

negligible adverse impacts would occur during operation of the Proposed Action. As previously described, the JAHVH campus does not contain habitat for, or presence of, regulated wildlife. Additionally, landscaped areas associated with the Proposed Action would not provide suitable or sufficient habitat for regulated wildlife.

Floodplains, Wetlands, and Coastal Zone Management. **Construction of the Proposed Action will have a direct, short-term, minimal-to-moderate impact on floodplains, resulting from the proposed construction of the Satellite CUP within the 100-year floodplain.** The remainder of the Proposed Action (New South Bed Tower) will be constructed outside of both the 100-year and 500-year floodplains. During construction, management actions will be taken to avoid potential flooding impacts at the construction work site, including applying best management practices (BMPs) during the design process to ensure the Satellite CUP is constructed in a manner that prevents significant damage during a flood event, such as elevating the ground level above the 100-year flood elevation, and constructing the Satellite CUP outside of traditionally wet seasons when the potential for flooding is greatest. **Direct, short-term, none-to-negligible adverse impacts to wetlands and coastal zone management would occur during construction of the Proposed Action.** There are no wetlands on site, and the construction of the Proposed Action is consistent with the Florida Coastal Zone Management Program. **Direct, long-term, minimal-to-moderate adverse impacts would occur during operation of the Satellite CUP because it is located within the 100-year floodplain.** During operation, the strategy for mitigating flood impacts at the Satellite CUP would consist of actions designed to assist staff in their preparatory and recovery responses to flood events. An emergency preparedness plan would be implemented to properly train staff to carry out contingency and emergency flood-proofing along with post-flood recovery actions. **Direct, long-term, none-to-negligible adverse impacts to wetlands and coastal zone management would occur during operation of the Proposed Action.**

Socioeconomics. **Construction of the Proposed Action would cause direct, short-term, beneficial-and-not-significant impacts on socioeconomics.** Construction will requiring temporary construction staff, spending on construction supplies and equipment at local businesses, and temporary construction workers may spend money for personal supplies at local businesses. A daily average of approximately 205 construction workers will be needed over the estimated 29 month construction period. Construction of the Proposed Action would not directly displace any residents or business employees and would not result in indirect displacement of area residences or businesses. **Operation of the Proposed Action system would have a direct, long-term, none-to-negligible impact on socioeconomics.** The Proposed Action will not require hiring additional employees to staff and maintain the New South Bed Tower or Satellite CUP. The Proposed Action will ensure the veteran population with continuity of access to local quality health care within the Central Florida area, avoiding potential costs if a veteran had to travel outside of this area for medical care. The Proposed Action will also improve the aesthetic appearance of the JAHVH campus, potentially maintaining or increasing property values of adjacent residences. The Proposed Action is not likely to increase or decrease the number of persons employed at other businesses outside of the JAHVH campus.

Community Services. **Construction of the Proposed Action would have a direct, short-term, none-to-negligible impact on community services.** Construction could result in injuries to workers or trespassers, requiring additional response from local police and fire departments, and medical services by non-VA hospitals. The Proposed Action would not physically displace or alter any schools, libraries, child care centers, health care facilities, Hillsborough County Fire Department firehouse or Emergency Medical Services (EMS) stations, or City of Tampa and Hillsborough County Police Departments. **Operation of the Proposed Action would have a direct, long-term, beneficial-and-not-significant impact on the quality of medical services available to veterans and their eligible family members in central western Florida, but none-to-negligible adverse impact on all other community services.** Other community services include medical care available at non-VA hospitals, area schools, police and fire services, libraries, and other community-based service programs. Operation of the Proposed Action would not require municipal agencies to hire new workers to support the added physical infrastructure associated with the Proposed Action.

Solid Waste and Hazardous Materials. **Construction of the Proposed Action would have direct, short-term, minimal-to-moderate adverse impacts associated with the generation of construction debris and demolition waste.** Construction would result in the generation and transportation of additional solid waste in the form of typical construction-related debris. Elements of the proposed construction could result in the short-term generation and transportation of hazardous substances, petroleum products, or hazardous waste if these materials are encountered during construction. Asbestos requiring removal would be managed under the existing JAHVH Asbestos Management Plan, which requires abatement and disposal by licensed contractors. **Operation of the Proposed Action would have direct, long-term, none-to-negligible impacts on solid waste and hazardous materials management at the JAHVH.** Operation of the Proposed Action will not significantly alter the quantities, characteristics, or management procedures of solid wastes and hazardous materials currently generated and managed by the JAHVH GEMS Coordinator. Operation of the Proposed Action will not change the small quantity generator status at the JAHVH. Solid waste generated during operation of the Proposed Action would continue to be managed under the current JAHVH waste management procedures and policies, and a private hauler would continue to transport and dispose of any additional wastes at an appropriate landfill.

Traffic, Transportation, and Parking. **During construction, direct, short-term, minimal-to-moderate adverse impacts would occur to traffic and parking, but none-to-negligible adverse impacts on transportation.** Traffic patterns and parking availability would be modified from current conditions; the current facility entrance would be closed and a new entrance would be constructed along Richard Silver Way; and the Diamond and Opal parking lots would be removed from service, though valet parking services would remain available and the parking garage has capacity to account for the loss in parking spaces. Construction would not alter or restrict pedestrian access or bus service along Bruce B. Downs Boulevard or 131th Street. **Operation of the Proposed Action would result in direct, long-term, beneficial-and-not-significant impacts by improving traffic flow entering and exiting the JAHVH, as well as improving traffic flow within the JAHVH. Operation would have a direct, long-term, none-to-**

negligible adverse impact on transportation and parking. The new JAHVH main entrance at Richard Silver Way will include new facility signage, and allow vehicles more direct access to the JAHVH parking garage. The existing JAHVH parking garage has sufficient capacity to account for the loss of parking spaces, and future parking upgrades would be managed over time as part of existing longer-term parking upgrade plans at the JAHVH.

Utilities. **Construction of the Proposed Action would have a direct, short-term, none-to-negligible impact on utilities.** Construction would not interrupt existing utility services to buildings within the JAHVH campus, or to utility customers outside of the JAHVH campus. During construction, mechanical (HVAC chilled water), plumbing, and fire protection (fire mains) would be modified, re-routed, and/or newly installed for service to the New South Bed Tower. Public utility providers are capable of serving the Proposed Action without causing a decrease in service levels to other current or future customers. The VA's Design-Build contractor will be required to conduct construction activities in a manner that minimizes risks of damaging utilities that are to be left in place. Any existing older utility infrastructure will be replaced with new, modern materials. A new 2-megawatt emergency generator would be added to provide additional backup emergency electrical power. **Operation of the Proposed Action would have a direct, long-term, none-to-negligible impact on utilities.** The operation of the infrastructure improvements installed during construction of the Proposed Action (as previously described) would not result in loss or decrease in utility service to other buildings at the JAHVH or to other utility customers outside of the JAHVH campus. Utilities in the area have sufficient capacity to serve the Proposed Action without reducing service levels to existing customers.

Alternative Energy Sources. **Construction of the Proposed Action would have a direct, short-term, none-to-negligible adverse impact on alternative energy sources.** Construction activities would generate greenhouse-gas emissions, though the amount contributed would be negligible within Hillsborough County, the state of Florida, or the US. Construction will not obtain energy from any on-site renewable energy sources. **Operation of the Proposed Action would have a direct, long-term, none-to-negligible adverse impact on alternative energy sources.** Operation of the Proposed Action would not significantly impact consumption or the transmission of energy. The Proposed Action does not incorporate alternative energy sources (solar panels, wind) into the building designs, and there are no existing on-site alternative energy sources available for operational use. However, the Proposed Action is designed to achieve a U.S. Green Business Council LEED Silver rating, and the Proposed Action incorporates energy-efficient design to utilize energy more efficiently than the existing Building 1 main hospital. However, the overall operational energy efficiency improvements of the Proposed Action are minimal.

Noise. **Direct, short-term, minimal-to-moderate adverse impacts on nearby residential receptors, JAHVH staff/patients/visitors, and construction workers would be caused by the noise generated during construction of the Proposed Action.** Noise would be controlled and minimized by conducting construction activities between 7:30 AM and 6:00 PM, equipping construction equipment with sound-muffling devices, requiring hearing protection for workers, and implementing routine best

management practices to reduce and limit construction noise. **Direct, long-term, none-to-negligible adverse impacts would occur during operation of the Proposed Action.** Operational noise levels would be similar to those currently generated at the JAHVH, and would not result in a noticeable increase above existing noise levels at nearby residential receptors or within the JAHVH campus.

Environmental Justice. **Direct, short-term, beneficial-and-not-significant impacts on Environmental Justice would occur during construction of the Proposed Action.** This is due to the need for local construction workers and increased spending by construction contractors at local businesses. Construction of the Proposed Action is estimated to require a daily average of 205 workers throughout the estimated 29 month construction period. Construction of the Proposed Action would not cause minority populations to experience disproportionately high adverse human health or environmental effects as compared to the general population because construction activities would be temporary and transitory in nature, and similar to construction projects in the area. **Operation of the Proposed Action would have a direct, long-term, none-to-negligible impact on Environmental Justice.** The Proposed Action would not cause minority, low-income, or youth populations to experience disproportionately high adverse human health or environmental effects. The Proposed Action will not require hiring additional employees to staff and maintain the New South Bed Tower or Satellite CUP. Existing staffing levels are sufficient to serve any additional increase in the number of veterans seeking care at the JAHVH. Spending at local area businesses in not anticipated to markedly increase or decrease during operation of the Proposed Action.

Cumulative Impacts. The following projects were identified as having the potential for cumulative impacts: (1) new USF Dormitory construction and operation; (2) Hillsborough County's long-term transportation plan for a light rail along Bruce B. Downs Boulevard with a transit stop near the existing JAHVH raised pedestrian bridge; (3) potential JAHVH North Bed Tower; and (4) a potential JAHVH 1,500-vehicle parking garage.

This SEA concluded there would be no significant impacts, adverse or beneficial, from construction and operation of the Proposed Action. Taken cumulatively, the minimal-to-moderate adverse impacts for selected resource topics during construction and operation of the Proposed Action and other potential future projects would not rise to the level of significant-if-not-mitigated, due to the highly developed and urbanized environment and lack of natural resources in the areas where these projects would occur. Accordingly, the cumulative impacts from construction the Proposed Action and potential future projects would be direct, short-term, minimal-to-moderate adverse for selected resource topics; however, these short-term construction-related impacts would cease when construction ends and decrease to long-term, direct, none-to-negligible adverse levels. The cumulative impacts from operation of the Proposed Action and potential future projects would be direct, long-tern, beneficial-and-not-significant for traffic, transportation, and parking, and direct, long-term, none-to-negligible for all other resource topics.

Potential for Generating Substantial Controversy. There are no known or anticipated issues likely to generate substantial controversy among the JAHVH stakeholders, regulatory agencies, or the general public, during construction or operation of the Proposed Action. Therefore, no significant adverse impact is anticipated. Accordingly, a

detailed examination of the potential for generating substantial controversy has been omitted from this SEA.

The environmental assessment of all project attributes considered did not find any "Significant impact" during construction and operations. Also, the environmental assessment of all project attributes considered did not find any "significant-if-not-mitigated impacts" during construction and operations.

FINDING OF NO SIGNIFICANT IMPACT

Upon reviewing the final SEA after the public comments period, it is expected that the implementation of the proposed project as described would not constitute a major Federal action that would have significant impact upon the quality of the human environment within the meaning of Section 102(2)(C) of NEPA of 1969. Accordingly, the preparation of an Environmental Impact Statement for the proposed action is not required. This FONSI becomes a federal document when evaluated and signed by the responsible VA official.

1 Introduction

This National Environmental Policy Act (NEPA) Supplemental Environmental Assessment (SEA) describes the Proposed Action set forth by the U.S. Department of Veterans Affairs (VA) to design, construct and operate the New South Bed Tower and Infrastructure Improvements at the James A. Haley Veterans' Hospital (JAHVH) Medical Center in Tampa, Florida. This SEA also describes alternatives to this Proposed Action, including the No Action Alternative. The objective of this SEA is to disclose and analyze the potential for significant impacts on the environment from implementation of the Proposed Action and alternatives.

1.1 Project Background

The James A. Haley Veterans' Hospital Medical Center is located at the southwest corner of 13000 Bruce B. Downs Boulevard and 131st Avenue in Tampa, Hillsborough County, Florida (Figure 1). The geodetic location is in the SE ¼ of the NW ¼ of Section 8, Township 28S, Range 19E, in the central portion of the Sulphur Springs USGS 7.5-minute series quadrangle. The JAHVH is identified by the Hillsborough County Tax Assessor under Folio Number 36287.0000 (Figure 2). The JAHVH campus occupies an approximately 42.7-acre parcel located in a highly urbanized area, and abutting the western periphery of the University of South Florida (USF) campus and medical school (Figure 3). An aerial photograph of current conditions at the JAHVH is provided in Figure 4.

The JAHVH is a tertiary care teaching hospital providing services and patient care to the veterans and their eligible family members in Central Florida. The JAHVH also provides a full range of inpatient and outpatient care including medicinal, surgical, psychological, and neurological care. This inpatient and outpatient care is provided via the following major groups: Medicine (134 beds), Surgical (60 beds), Psychiatry (40 beds), Neurology (2 beds), a 100-bed spinal cord injury service, and a 66-bed comprehensive rehabilitation center.

Due to favorable economic conditions in 2010, the New South Bed Tower and Infrastructure Improvements was introduced as a scope change into the VA's internal scope review process. It was proposed as an alternative to the renovation of existing patient bed units of the original Building 1.

In January 2010, the VA completed a NEPA Environmental Assessment (EA) for the JAHVH Polytrauma Expansion & Bed Tower Upgrades, which concluded with a Finding of No Significant Impacts (FONSI) for the construction and operation of four proposed actions, including: Phase 1, a new 1,500 space parking garage; Phase 2, an expansion of the Polytrauma facility; Phase 3, new therapy pool building; and Phase 4, upgrades to the existing 1970's-era Building 1 Bed Tower (e.g. interior renovations). The VA subsequently completed construction of Phases 1, 2 and 3 between November 2011 and August 2014 and currently operates these new facilities. However, the Phase 4 upgrades (Building 1 renovations) were not implemented as previously discussed. The New South Bed Tower and Infrastructure Improvements scope was described in the November 2010 South Bed Tower Study (HDR, 2010) and proposed as an alternative to the original Phase 4 action (renovation of existing patient bed units of the original Building 1). The New

South Bed Tower and Infrastructure Improvements would better address the JAHVH's substantial deficiency in the number of available beds necessary for the VA to provide adequate medical care at the JAHVH.

Accordingly, in 2014 the VA prepared a "New Bed Tower Pre-Design Study," describing the design elements required for the proposed New South Bed Tower and Infrastructure Improvements (HDR, 2014). The proposed 220,000 GSF New South Bed Tower would be located adjacent to the east side of Building 1 and would provide 140 new private rooms, each with a private toilet and shower (Figure 5 and Figure 6). The proposed New South Bed Tower would significantly improve the environment of care for patients served at the JAHVH. Construction of the Proposed Action is estimated to cost approximately $98 million and is anticipated to begin on May 1, 2016 and end on October 1, 2018.

As a result of this Proposed Action by the VA, a federal agency, this SEA has been prepared to analyze the potential impacts on the environment from the project-specific design, construction, and operation of the proposed New South Bed Tower and Infrastructure Improvements that would be wholly confined to the existing JAHVH property. Where appropriate and applicable, this SEA tiers off of the prior 2010 EA to examine project-specific individual and cumulative impacts previously identified. The Council on Environmental Quality (CEQ) encourages agencies to use a tiering process to reduce or eliminate redundant and duplicative analyses and effectively address cumulative impacts. The SEA is the appropriate level of NEPA analysis for this project, based in part on the FONSI determination from the 2010 EA.

1.2 Purpose and Need

The purpose of the New South Bed Tower and Infrastructure Improvements is to modernize inpatient hospital bed units and the supporting facilities and infrastructure. This is needed to improve medical care at JAHVH, now and in future decades.

The existing Building 1 bed tower was built in 1972 and the infrastructure is aging and unable to be modified to meet the VA's and the healthcare industry's family-focused model of care, which requires additional support space, as opposed to patient bedrooms with minimal support space. The location of Building 1 relative to other facilities within the JAHVH is depicted in Figures 5 and 6. A building location map of the current JAHVH campus is provided in Figure 7.

The New South Bed Tower would be state-of-the-art, meeting all current VA and industry standards for size, function, and infrastructure. It would be designed to maximize programmatic flexibility and anticipate future trends in healthcare design. Quality of care would be enhanced by allowing for the most efficient unit sizes and providing optimal adjacencies between spaces. For example, the standard 24-bed MS&N units would be located adjacent to their companion ICU bed units to promote patient and staff safety by minimizing patient movement.

The existing bed tower (Building 1) footprint is insufficient to support adequately sized and functionally efficient inpatient units. Renovations have been made within Building 1 within the last several years, but Building 1 lacks space for the renovations needed to

provide support areas for staff physicians, therapists, and case workers, and the family-oriented areas called for in today's patient and family-focused model of care.

The New South Bed Tower would allow the existing tower to undergo a less costly and more programmatically appropriate future renovation providing outpatient diagnostic and testing services and support functions that serve the hospital. The New South Bed Tower is also intended to serve as the new main entry for the hospital, improving campus wayfinding and patient access, as well as presenting a new "face" to the Tampa Bay community and reaffirming the VA's commitment to caring for our Nation's heroes at the highest level.

The proposed Satellite CUP is considered necessary because renovating the existing plant (Building 39) would be problematical.

2 Assessment Methodology

2.1 VA Goals and Objectives

The VA Goals and Objectives identify the following healthcare industry trends and best practices on which the model of care for the New South Bed Tower will be developed:

- Private Patient Rooms and Bathrooms
- Integrated Family Spaces
- Decentralized Nursing Approach
- Interdisciplinary Team Work Model With Strong Community Outreach and Relationships
- Enhanced Patient and Staff Safety

Objectives of the Supplementary Environmental assessments for Phase 4 New South Bed Tower at the JAHVH are as follows:

- Document the NEPA process in support of compliance with the NEPA regulations;
- Inform decision-makers and public, including agencies, of possible environmental consequences of the proposed action and its considered alternatives, as well as mitigation measures to eliminate, minimize, or reduce adverse impacts;
- Allow for input from the public and agencies into the decision-making; and
- Allow for informed decision-making by the VA.

2.2 Regulatory Framework

Under NEPA, the VA is required to evaluate proposed action's compliance with existing environmental laws to determine whether or not the proposed action would result in unnecessary or undue degradation of the potentially affected environment. The VA's specific requirements under NEPA are listed under 38 Code of Federal Regulations (CFR) Part 26.4, which states the following:

> "(a) Veterans Administration (VA) must act with care in carrying out its mission of providing services for veterans to ensure it does so consistently with national environmental policies. Specifically, VA shall ensure that all practical means and measures are used to protect, restore and enhance the quality of the human environment; to avoid or minimize adverse environmental consequences, consistently with other national policy considerations; and to retain the following objectives:
>
> (1) Achieve the fullest possible use of the environment, without degradation, or undesirable and unintended consequences;
>
> (2) Preserve historical, cultural and natural aspects of our national heritage, while maintaining, where possible, an environment that supports diversity and variety and individual choice;

(3) Achieve a balance between the use and development of resources, within the sustained capacity of the ecological system involved; and

(4) Enhance the quality of renewable resources, while working toward the maximum attainable recycling of nonrenewable resources.

(b) VA element shall:

(1) Interpret and administer the policies, regulations and public laws of the United States in accordance with the policies set forth in the NEPA and CEQ (Council on Environmental Quality) Regulations;

(2) Prepare concise and clear environmental documents which shall be supported by documented environmental analyses;

(3) integrate the requirements of NEPA with Department planning and decision-making procedures;

(4) Encourage and facilitate involvement by affected agencies, organizations, interest groups and the public in decisions which affect the quality of the human environment; and

(5) Consider alternatives to the proposed actions which are encompassed by the range of alternatives discussed in relevant environmental documents and described in the environmental impact statement."

The NEPA requires that this evaluation be completed prior to construction. The VA is preparing the following documents in response to the proposed action, including:

- This Supplement Environmental Assessment (SEA), to assess potential impacts of the proposed action and to identify mitigation measures
- A "Finding of No Significant Action" or a recommendation that the proposed action should be further evaluated by requiring preparation of an Environmental Impact Statement (EIS).

This SEA provides the necessary information to allow the VA to make the required determinations on the potential environmental impacts of the proposed action, under the CEQ and NEPA requirements.

2.2.1 Federal Environmental Requirements

Applicable Federal requirements are discussed throughout each resource area in Section 5. Additionally, Table 15 in Section 5.19 includes applicable Federal Legal Authorities and an evaluation of compliance for the Proposed Action.

2.2.2 State and Environmental Requirements

Applicable State environmental requirements are discussed throughout each resource area in Section 5.

2.2.3 Integration of Other Environmental Statutes and Regulations

The JAHVH is in the City of Tampa service area for water and sewer service. Applications are made to the City for services including a Water Service application and a Sanitary Sewer Service application.

Bruce B. Downs Boulevard (County Road 581) is a Hillsborough County roadway. A Right-of-Way and/or Driveway Permit would be required for any improvements such as new curb cuts for entrances and any acceleration-deceleration lanes for construction access or future use. In addition, the County would require a Maintenance of Traffic (MOT) plan during construction.

2.3 Matrix Scoring System for Evaluation of Alternatives

A matrix scoring system for evaluating the proposed action and alternatives is presented in Table 1.

Table 1. Matrix Scoring System for Evaluation of Alternatives

Criteria	Priority Value	Effectiveness Of Alternative			
Quality Of Healthcare	5	3	5	15	25
Meet All Current VA And Industry Standards For Size, Function, Flow, Efficiency And Infrastructure	5	1	5	5	25
Accommodate PACT Module Planning	5	2	4	10	20
Co-locate With Other Facilities (Domiciliary, Nursing Home Care Unit, etc.)	5	3	5	15	25
Create Clear Clinical Footprint	5	3	5	15	25
Maximize Natural Light	5	1	5	5	25
Clear Way Finding To Patient Care Areas	5	3	5	15	25

Criteria	Priority Value	Effectiveness Of Alternative			
Single Point Of Entry For Patients And Visitors	5	3	5	15	25
Separate Staff And Service Circulation	5	1	5	5	25
Private Patient Rooms And Bathroom	5	1	5	5	25
Access To Primary Care	5	1	1	5	5
Access To Specialty Care	5	2	4	10	20
Access To Tertiary Care (4 Hours Commute Time)	5	5	5	25	25
Correct Space Deficit	5	1	5	5	25
Correct Deficiencies Identified In CARES Facility Condition Assessment	5	2	5	10	25
Continuum of Care to Veterans	5	2	5	10	25
Sub-Total	**80**	**34**	**74**	**170**	**370**

Cost Effective	20	2	5	40	100
Availability Of Funds	20	5	5	100	100
Sub-Total	**40**	**7**	**10**	**140**	**200**
Phasing – Clinical Fit Over Time	5	2	4	10	20
Phasing – Infrastructure Continuity	5	2	5	10	25
Phasing – Consistent With $ Available Over Time	5	1	5	5	25
Site Improvement Requirements	5	5	3	25	15
Flexibility for Future Expansion	5	1	3	5	15
Sustainability	5	5	5	25	25
Energy Efficient	5	1	5	5	25

Criteria	Priority Value	Effectiveness Of Alternative (1 To 5 Points)		Rank Value				
Better Segregation of Traffic and Parking				5	2	4	10	20
Better Security Control				5	2	5	10	25
Improved Access				5	1	4	5	20
Limited Traffic Impact				5	1	1	5	5
Least Disruption to Current Facility Operations				5	1	4	5	20
Sub-Total				**60**	**24**	**48**	**120**	**240**
Compliance With National Historic Preservation Act (36 CFRs)				20	5	5	100	100
Compliance With EPA Regulations (40 CFRs and VA's 38 CFR 26)				20	2	5	40	100
Compliance With Other Federal And State Environmental Regulations (e.g., 49 CFRs)				20	2	5	40	100
Sub-Total				**60**	**9**	**15**	**180**	**300**
Compliance With OSHA Regulations (29 CFRs)				60	2	5	120	300
Sub-Total				**60**	**2**	**5**	**120**	**300**
Total				**300**	**76**	**152**	**730**	**1410**

2.4 Environmental Assessment Methodology

2.4.1 Environmental Impacts

The terms Effects and Impacts are used interchangeably in this document. Effects includes ecological (such as the effects on natural resources and on the components, structures, and functioning of affected ecosystems), aesthetic, historic, cultural, economic, social, or health, whether direct, indirect, or cumulative. Effects may also include those resulting from actions which may have both beneficial and detrimental effects, even if on balance the agency believes that the effect will be beneficial (40 CFR 1508.8).

This environmental assessment methodology uses the following terms in assessing environmental impacts:

- **Short-term Impact**: Short-term impacts are those that would occur only with respect to a particular activity, for a finite period, or only during the time required for construction or installation activities.
- **Long-term Impact**: Long-term impacts are those that are more likely to be persistent and chronic.

- **Direct Impact**: A direct impact is caused by an action and occurs around the same time at or near the location of the action.
- **Indirect Impact**: An indirect impact is caused by an action and might occur later in time or be farther removed in distance but still be a reasonably foreseeable outcome of the action.
- **Beneficial-and-not-significant**: This impact represents an improvement in existing conditions and an Environmental Impact Statement (EIS) is not required.
- **None-to-negligible**: A potential impact of this severity would be barely detectable and an EIS is not required for this impact.
- **Minimal-to-moderate**: A potential impact that is less-than-significant and would not require specific mitigation measures, other than those dictated by regulatory and permitting requirements and an EIS is not required for this impact.
- **Significant-if-not-mitigated**: A potential impact of this severity would require specific mitigation measures beyond those associated with permit requirements but an EIS is not required for this effect.
- **Significant-and-immitigable**: A potential impact of this severity would have to be evaluated in an EIS.

Environmental impacts may be either significant or not significant environmental impacts. The following environmental impacts are not significant environmental impacts because an Environmental Impact Statement is not required for these environmental impacts:

- Beneficial-and-not-significant;
- None-to-negligible;
- Minimal-to-moderate; and
- Significant-if-not-mitigated.

2.4.2 Criteria for Assessing Significant Environmental Impacts

The NEPA regulations (at 40 CFR 1508.27) define significantly in terms of context and intensity.

Context. This means that the significance of an action must be analyzed in several contexts such as society as a whole (human, national), the affected region, the affected interests, and the locality. Significance varies with the setting of the proposed action. For instance, in the case of a site-specific action, significance would usually depend upon the effects in the locale rather than in the world as a whole. Both short- and long-term effects are relevant.

Intensity. This refers to the severity of impact. Responsible officials must bear in mind that more than one agency may make decisions about partial aspects of a major action. The following should be considered in evaluating intensity:

1. Impacts that may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that on balance the effect will be beneficial.

2. The degree to which the proposed action affects public health or safety.
3. Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.
4. The degree to which the effects on the quality of the human environment are likely to be highly controversial.
5. The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.
6. The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.
7. Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts.
8. The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources.
9. The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.
10. Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.

3 Alternatives

3.1 Alternatives Considered

The VA's original Major Project contract VA101-CFM-P0001 defined Phase 4 as an in-place, interior renovation to the existing Building 1 Bed Tower. The intent was to renovate and modernize existing bed units on Floors 4, 5, 6, and 7 in multi-phased construction. As previously described, this Alternative was considered until the first quarter of 2010 and then placed on-hold. In its place, VA conceived of constructing and operating a replacement Phase 4 Bed Tower Addition.

3.2 Design Concept Alternatives

The Phase 4 Bed Tower Addition was defined by HDR Architecture in 2010 as an internal VA scope change to the Major Project contract VA101-CFM-P0001. A 2010 update to the 2008 Master Plan Study was issued defining this scope change as the "South Bed Tower Study" (HDR, 2010). The study defined a 240,000 GSF bed tower addition containing 96 MS&N unit beds and 40 ICU beds, with supporting functions and other publicly oriented programmatic spaces.

3.2.1 Development of Design Concepts

The proposed location of future bed tower additions at the JAHVH was studied in the 2008 Master Plan Study (HDR, 2008). There were two bed tower additions located at the east side of the campus and connected physically to the Building 1 Bed Tower.

3.2.2 Design Concepts Considered

The Phase 4 Bed Tower Addition was defined in the 2010 Master Plan Update to determine that the 240,000 GSF could fit on the site proposed and tie into the surrounding neighborhood's existing context and urban fabric. The "South Bed Tower Study" was a three-dimensional massing study to verify that building's feasibility on the specified site. The intent was to develop alternative concepts on the same site in a schematic design phase for the VA's consideration. This is still the intent of the VA, although through an alternative project delivery method of Design-Build (D-B) team procurement. An AE2 firm, independent of the AE1 firm (HDR Architecture), will be part of the D-B team responsible for developing additional alternative concepts for consideration--concepts that will programmatically (in size and scope) be similar (in size and configuration) to the concept design depicted in the "South Bed Tower Study" (HDR, 2010). The AE1 firm is not under contract to develop additional alternatives and/or refinements to the 2010 "South Bed Tower Study" concept as part of the DOPAA for the overall project delivery procurement.

3.2.3 Evaluation of Design Concepts Using Matrix Scoring System

As previously stated, the AE1 firm was not contracted to produce additional design concepts after the 2010 Bed Tower Study was produced. The current design-build delivery process (using a performance-based methodology) is set up for the D-B team to produce additional design concepts.

3.2.4 Selection of Optimum Design

The Phase 4 New Tower and Infrastructure Improvements alternative, a direct outgrowth of the "South Bed Tower Study," was selected to develop and replace the 136 inpatient beds in Building 1 at the JAHVH campus. Building a new modern bed tower (to replace the 43-year old Building 1 patient bed tower) is a common method to provide modernized space for patient care. It provides significantly less disruption to building occupants than a renovation executed floor by floor or wing by wing. It also allows the existing hospital to have continuity of care in Building 1 while the new addition is being built.

3.3 Alternatives Eliminated

The in-place, interior renovation to the existing Building 1 Bed Tower option was eliminated in 2010 when the "South Bed Tower Study" option was proposed as a scope change within the VA system. It was eliminated because the building's footprint is insufficient to support adequately sized and functionally efficient inpatient units. The existing Building 1 structural configurations of column locations and column bay proportions does not allow for the requisite support space for clinical staff, nor the family-oriented space indicated for today's patient and family-focused model of care. The "South Bed Tower Study" option would enable the JAHVH to address the space-needs deficit currently existing on campus by consolidating space into the existing buildings (via a series of minor projects). This would allow for the reduction and/or complete elimination of the temporary trailer inventory (which are energy inefficient, unsightly and currently reside all over the campus).

3.4 Alternatives Retained for Detailed Analysis

The No Action Alternative and the "South Bed Tower Study" option (the Preferred Alternative) were retained for future detailed analysis.

3.4.1 Alternative 1 – No Action Alternative

Alternative 1, the no-build option, is the "No Action Alternative." This alternative had a serious deficiency, as the remaining bed units in Building 1 (the existing bed tower) would eventually need to be renovated to provide modernized space for patient care, the requirements for which have changed significantly through improvements in patient care and evolution of technology.

3.4.2 Alternative 2 – Proposed Action (Preferred Alternative)

Alternative 2, the Phase 4 New South Bed Tower and Infrastructure Improvements option, is the Preferred Alternative; it is the Proposed Action the VA intends to take to satisfy the purpose and need identified in Section 1.2, and is the preferred solution to improve in-patient care at the JAHVH. The D-B team may make minor adjustments to the existing concept, or create a fresh concept and transition it to the final design that may be occupied in the future.

4 Description of Proposed Action

4.1 Summary of Proposed Action

4.1.1 New South Bed Tower Building Addition

The Phase 4 New South Bed Tower Addition would consist of a six-level, 220,000 GFS bed tower connected to the east side of the Main Hospital's Building 1. The tower would contain 100 MS&N in-patient beds, 40 ICU beds, associated support space, lobby, public amenities, Main Security Office, patient drop-off and entry, and connection to Building 1. The tower would serve as the new main entry for the hospital. Site work and utilities associated with construction of the new tower would be necessary, including reconfiguration of the existing Diamond surface parking lot and a new entry drive (Figure 5 and Figure 6).

The Phase 4 Bed Tower Addition is the first major project identified in the 2010 Master Plan Update and would replace the currently authorized existing Building 1 Bed Tower Renovation.

<u>New South Bed Tower Design Drivers</u>

- Space Requirements and Functional Adjacencies
- Community Connectivity
- Environmental Impacts
- Building Envelope and Orientation
- Energy Efficiency and Sustainability
- Physical Security/Disaster and Hurricane Preparedness
- Building Height and High-Rise Non-Requirement

<u>Building Massing</u>

The new tower would be a significant addition to the JAHVH campus building volume. It consists of four patient floors atop a two-level "base" that would house the lobby, public amenities, and support space. Due to the greater floor-to-floor heights required for contemporary Heating/Ventilation/Air Conditioning (HVAC) systems, the floor elevations of the new levels would not all match those of Building 1. The new tower's height may be close to that of Building 1, despite having fewer floor levels. Exact coordination of floor levels would occur during the Project's design phase.

The New South Bed Tower would be located much nearer to Bruce B. Downs Boulevard (County Road 581), dramatically increasing visibility of the JAHVH on the heavily travelled traffic artery. Long-range transportation plans for the area call for a light rail line to run alongside Bruce B. Downs Boulevard with a proposed transit stop near the Pedestrian Bridge to serve JAHVH and the USF campus.

4.1.2 Satellite Central Unit Plant and Emergency Generator Plant Expansion

A new Satellite Central Utility Plant (CUP) would be constructed in the Pearl parking lot in the southern area of the JAHVH campus. Two 1,250 ton chillers to provide expanded chilled water capacity would be housed within this plant, along with a control room, restroom, and shower facilities. The Satellite CUP would include equipment to support only the New South Bed Tower. Plant design would be planned to accommodate future infrastructure needs as listed in the JAHVH 2010 Master Plan Update. The Satellite CUP would be added in lieu of expanding Building 39 (existing Central Energy Plant). New equipment (2-MW emergency generator) for back-up power needs would be added to the current Emergency Generator plant building to support the proposed new 220,000 GSF New South Bed Tower.

4.1.3 Related Building and Site Element Modifications

4.1.3.1 New Building 30 Entry

Reconfiguration of the entry to Building 30 (Community Living Center & Inpatient Mental Health) would be required to accommodate the New South Bed Tower (Figure 7). The temporary relocation of the current entries to Buildings 1 and 30 during construction would also be required. A new entry to Building 30 would be provided to its north, avoiding conflict with the New South Bed Tower. This may also serve as the temporary entry to Building 1 during construction.

4.1.3.2 Removal of Building T-74

Removal of Building T-74, a modular building housing the Geriatric Clinic, and relocation of the Geriatric Program to currently vacant space in Building 1 (Main Hospital) would be required.

Building T-74 is located within the footprint of the proposed New South Bed Tower. The Geriatric Program would move to Building 1 near its connection to Building 30 and be accessed through the New South Bed Tower lobby when completed.

4.1.3.3 Emergency Department Entry Modifications

Expansion of vehicle drives and patient parking adjacent to Building 1's Emergency Department would be required. A newly configured ambulance entrance addition would be provided, which would also require minor renovations to the existing building. The newly configured ambulance entrance is required to avoid congestion with the New South Bed Tower drop-off and entry and comply with VA Mission Critical Facility Security Requirements.

4.1.3.4 Modifications to USF Pedestrian Bridge

Partial demolition and renovation of the existing pedestrian bridge linking the JAHVH Building 1 to the USF College of Medicine would be required to facilitate continuous operation of the bridge, construction of the New South Bed Tower, and subsequent connection of the bridge to the New South Bed Tower.

JAHVH and USF have a strong relationship with numerous collaborative projects and a large number of shared staff. The pedestrian bridge spans the six-lane Bruce B. Downs

Boulevard. Much of the VA's portion of the bridge lies within the footprint of the New South Bed Tower. Modifications would include partial demolition (the portion within the JAHVH campus), connection to the New South Bed Tower lobby, and construction of a stair and elevator near the JAHVH campus property line to allow use during construction. The stair and elevator would be incorporated into the final New South Bed Tower design.

4.2 Detailed Project Elements

4.2.1 Sustainable Design Components

The VA has set a goal of obtaining a U.S. Green Business Council Leadership in Energy & Environmental Design (LEED) Silver rating for the New South Bed Tower and the satellite CUP and Emergency Generator Plant Improvements. The LEED criteria relevant to the New South Bed Tower are listed in the Description of Proposed Actions and Alternatives (DOPAA) Appendix A (HDR, 2015). The anticipated sustainable design components to be provided by the D-B team for the New Construction and Major Renovation/CUP Phase 4 are listed in DOPAA Appendix B (HDR, 2015).

4.2.2 Pedestrian and Vehicle Access and Circulation

The pedestrian bridge linking JAHVH to the USF College of Medicine would remain. A new stair and elevator tower would be added to the bridge on the west side of Bruce B. Downs Boulevard on the JAHVH campus.

The Richard Silver Way main entrance to JAHVH at the southeast corner of the campus would be kept open during construction. Richard Silver Way would become the new main entrance to the JAHVH under the Proposed Action.

4.2.3 Landscaping

Landscape development would be provided that complements the architecture, preserves designated site features, facilitates vehicular and pedestrian access, creates open areas and vegetative screens of security elements, and consists of plant material that promotes a sustainable campus. Hardscape elements such as paving materials, colors, textures, lighting, signage, and furnishings also have a significant role in creating a cohesive campus atmosphere and would be provided as part of the Proposed Action.

General planting design criteria would include provisions for vegetation that will be an aid to aesthetics and safety; that will aid in lowering construction and maintenance costs; that creates interest, usefulness, and beauty for the pleasure and satisfaction of people on the JAHVH campus; and that ensures a sustainable landscape through the "Florida Friendly Landscape" plant palette.

If the VA determines that the campus should comply with Hillsborough County landscape requirements, all vehicular-use areas adjacent to rights-of-way and abutting parcels should have landscape buffers and screens as delineated in the Landscaping, Irrigation and Buffering Requirements of the Hillsborough County Land Development Code (Part 6.06.00).

In a campus environment, it is important to select the appropriate plant types for particular conditions. The plant material location, spacing, and species selection will be affected by

microclimates, vehicular and pedestrian circulation, maintenance requirements, and light fixture locations.

Hardscape elements can also provide cohesiveness through the basics of physical design such as pattern, color, rhythm, and texture. These elements, manifested in sidewalk surface treatments, light fixtures, benches and other furnishings, and signage, can help mitigate the impacts that historically unbalanced development has created on the JAHVH campus.

4.2.4 Parking

The current Diamond lot would be substantially reduced in size and the Opal lot (for valet parking) would be eliminated due to the Proposed Action. Additionally, although a series of trailers installed in the Pearl parking lot in 2010 and 2011 would be removed as part of the construction of the new Satellite CUP, this lot would not become available again for parking, as it would be part of the security buffer around the new Satellite CUP.

An October 2010 parking study update for the New South Bed Tower Study/Master Planning Update determined existing and projected parking space availability and needs of the JAHVHH campus (Walker Parking Consultants, 2010). According to that study, the existing parking space inventory at the JAHVH campus (excluding the remote parking areas at the University Mall and Mental Health Clinic and Building 42) is approximately 2,382. The current on-campus parking deficit is an estimated 548 spaces. Several impacts (positive and negative) to the on-campus parking supply and demand are projected to occur by 2018. These include the addition of 1,510 spaces in the recently completed parking garage in the southwest part of the JAHVH campus (positive), the addition of the proposed South Bed Tower (negative; removes parking spaces), the relocation of some existing off-site services to the JAHVH campus (negative), the addition of the new Juliet lot (positive), the elimination of the remote parking at the University Mall (negative), and the projected growth in patients, physicians, and employees (negative). The 2018 on-campus parking deficit is projected to be 814 spaces, an increase primarily due to the on-site relocation of currently off-site services. By 2025, this parking deficit is projected to increase to 2,127 spaces.

The 2010 parking study identified two sites, and possibly a third, that might be available to offset some of the parking deficit. The existing Romeo lot and the portion of the Diamond lot remaining after the proposed South Bed Tower is built would be available. In addition, the sites currently occupied by Buildings 2, 41, and 68 might become available in the future for a parking garage. The study recommended the addition of parking structures at the remaining Diamond lot and at the Romeo lot. The Romeo lot was considered a suitable location for a parking structure that would meet the projected 2018 and 2025 parking needs. The Diamond parking structure would add 300-plus spaces; the Romeo parking structure would add 600-plus spaces with a potential to increase to 1,800+ spaces if the structure is expanded.

A complete redesign of the current main hospital entrance and the Diamond parking lot would be required to accommodate the New South Bed Tower. The current main hospital entrance would be relocated to the southeast corner of the site and the current ambulance entrance would be reconfigured. The existing Diamond surface parking lot would be

reconfigured as required to accommodate the new entry drive and patient drop-off. A new, dedicated parking lot for the existing Fisher House building would be provided west of the entry drive with the remaining area east of the entry drive dedicated to patient parking. It is likely that, given the available area, much or all of this would be parking to serve handicapped motorists. All drives and parking would be located beyond the required 50-foot security standoff per VA requirements.

It is anticipated that general patient parking would continue to be supported by complimentary valet service, with vehicles stored remotely. Patient drop-off lanes would be designed to allow for sufficient volume at the valet station.

4.2.5 Storage of Construction Materials

Limited unimproved or unused open space suitable as a construction staging area is available on the JAHVH campus. The likely staging location would be the southern portion of the Diamond parking lot. Other potential areas that could be approved by the JAHVH facilities staff include the Juliet lot (the wooded area north of the Main Hospital) or a very small area to the northwest of the Richard Silver Way loop road on the very west side of the campus. In addition, the D-B team could be required to rent off-site space to store construction materials and bring them to the site as needed, related to the construction work sequencing.

4.2.6 Utility Improvements

Mechanical (HVAC chilled water), plumbing, and fire protection (fire mains) would have to be modified, re-routed, and/or newly installed for service to the New South Bed Tower.

The JAHVH campus is serviced by connections to sanitary and potable water lines owned, operated, and maintained by City of Tampa. There are adequate water and sewer connections along Bruce B. Downs Boulevard and 131st Avenue for the Proposed Action.

Water distribution and fire protection systems will be designed in accordance with Florida Department of Environmental Protection (FDEP) regulations, pursuant to Chapters 62-555, F.A.C. or the utility provider's requirements, whichever is more stringent. Any proposed sanitary sewer collection system improvements will be designed in compliance with FDEP regulations, Chapter 62-604, F.A.C. or the utility provider's requirements, whichever is more stringent.

4.2.6.1 Wastewater

Currently the JAHVH campus wastewater needs are serviced by five connections and four separate zones, as described in the original 2009 Site Infrastructure Report (HOK, 2008) as a complement to the original 2008 Master Plan. No new connection would be required to the 16-inch diameter City of Tampa Force Main (FM) sewer line along Bruce B. Downs Boulevard. Consistent with the 2008 Site Infrastructure Report, the recommendations to connect the proposed building to the existing 8-inch diameter FM along the southeast corner of the site remain. A lift station would need to be designed along with the New South Bed Tower to allow for the sanitary sewer conveyance to the FM. In addition, as described in the Site Infrastructure Utility Report, an investigation into the existing Pump Stations 1 and 2 would need to be conducted to determine if the

increases in system head from the new pump station would require changes to the existing pump stations.

As part of the new "Mission Critical Facility" requirements, a minimum of four days of sewer storage is required to be provided in case of an emergency when the off-site utilities are unavailable. The D-B team will need to coordinate with the VA (facility owner) to develop the criteria for specific on-site sanitary sewer storage requirements to accommodate an emergency or natural disaster event.

4.2.6.2 Potable Water Supply

Currently the JAHVH campus is serviced by three connections and four separate zones, as described in the 2008 Site Infrastructure Report.

The 2008 Site Infrastructure Report states that the current system is sufficiently sized to handle the New South Bed Tower, but there are concerns regarding the fire flow and residual system pressures. The demand analysis developed by the Mechanical, Plumbing, and Electrical Engineer would confirm deficiencies, if any, and propose improvements to building fire and pump systems.

As part of the new "Mission Critical Facility" requirements, a minimum of four days of potable water storage is required to be provided in case of an emergency when the off-site utilities are unavailable. The D-B team will need to coordinate with the VA (facility owner) to develop the criteria for specific on-site potable water and fire protection storage requirements to accommodate an emergency or natural disaster event. The campus currently has a well that has been permitted for an average daily use of 17,670 gallons per day (GPD) with a peak usage of 208,000 GPD. The D-B team will need to determine, in coordination with the facility owners, the limitations, if any, for operating the well system to meet the emergency parameters.

4.2.6.3 Electrical Supply

The New South Bed Tower would add approximately 2.50 megavolt amperes (MVA) of load and additional chiller capacity will add approximately 1.50 MVA to the campus system. This 4.0 MVA of new demand would cause the total campus load of 11.25 MVA to increase to 15.25 MVA.

4.2.6.3.1 Electrical Infrastructure Needs to Support New South Bed Tower and Chiller Capacity

- Tampa Electric Company's (TECO) 12.0 MVA of capacity is less than the required 15.25 MVA.
- TECO would need to bring in additional redundant 6.0 MVA circuits. This would give the campus 18.0 MVA (12.0 MVA + 6.0 MVA) of circuit capacity.
- One spare 6-inch conduit exists from both Bruce B. Downs Boulevard and 131st Street that can be used for the new TECO conductors.
- New TECO switchgear would be needed at the JAHVH campus power (generator) plant to support the new circuit capacity.

- The TECO switchgear would feed new 13.2 kilovolt (kV) power plant switchgear. The new Power Plant switchgear would need to be connected to the existing power plant 13.2 kV switchgear infrastructure.
- Since the 15.25 MVA load is above the rating limit of standby generation capacity (15.0 MVA), a new 2-MW/2.5-MVA standby generator would be needed to support the new load. The new total backup generator capacity will be at N+1: 17.5 MVA.
- The campus electrical distribution system should support the anticipated 10-second electrical loads.
- One new 12,000-gallon above-ground storage tank for diesel fuel would be needed to maintain the JAHVH campus's four-day fuel supply. The tank would be contained internally within the limits of Building 54.

4.2.6.3.2 Electrical Feeders and Bed Tower Electrical Distribution System

- The New South Bed Tower would be connected to the existing campus 13.2 kV 'Normal' and 'Essential' 13.2 kV systems. Connections would be made at the spare fuse switches in 'E1A2', 'E2A2', 'N1B2', and 'N2B2'.
- New concrete-encased feeders would head south underground from the above-identified switches to the new unit substation rooms in the New South Bed Tower.

4.2.6.4 Other Infrastructure

4.2.6.4.1 Existing Stormwater

The site is located within the Duck Pond Watershed, which is a closed basin serving an extensive drainage area surrounding the JAHVH campus. Currently the site drainage is conveyed through stormwater pipes and inlets, and treatment and attenuation is provided within several retention ponds on the hospital site. No stormwater deficiencies were identified at the JAHVH campus. As part of the New South Bed Tower construction, the existing drainage south of Building 30 would need to be modified to allow for the construction of the New South Bed Tower. Overall drainage patterns would remain, minimizing the need for large-scale stormwater redesign.

The site proposed for the New South Bed Tower is located within Flood Zone X (outside of the 100-year and 500-year floodplains), according the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) Panels 12057C0210H and 12057C0216H (effective date August 28, 2008) (Figure 10). However, the site for the proposed Satellite CUP is located within Flood Zone AE (within the 100-year floodplain) (Figure 10). Accordingly, the D-B team will incorporate appropriate design features to avoid flood impacts.

4.2.6.4.2 Civil Engineering Utility Design Standards

The New South Bed Tower would result in the modification of the existing onsite stormwater system, water and wastewater services, pollutant discharge, and right-of-way access management. The following permits are anticipated to be obtained by the D-B team for the planned site improvements *and prior to construction*:

- SWFWMD Environmental Resource Permit (ERP) – A Standard General ERP (per Rule 40E-4, F.A.C.) is anticipated to be required for the permit modification of the existing stormwater management system to serve the proposed improvements (less than 100 acres of contiguous property owned and less than one acre of wetland impacts). The SWFWMD ERP also covers permitting of impacts to existing wetlands and floodplains. The JAHVH has existing ERP permits; these would be modified/updated to account for the Proposed Action.
- FDEP Water Permit – The extension of an existing fire protection system or the addition of domestic water service lines outside of the building footprints would require a permit for the construction of the proposed facilities. The permit would need to be submitted to the Hillsborough County Health Department, which is the designated regulatory authority for the FDEP.
- City of Tampa Potable Water Application – A permit to utilize existing utilities for this project would need to be submitted to the City of Tampa Water Department.
- FDEP Wastewater Permit – the construction of a sanitary sewer collection system for the new building would require a permit for the proposed facilities. The permit would need to be submitted to the Hillsborough County Environmental Protection Commission, which is the designated regulatory authority for the FDEP.
- City of Tampa Sewer Service Application – A permit to utilize existing utilities for this project would have to be submitted to the City of Tampa Wastewater Department.
- Access Management Permit – new driveway connections to adjacent roadways may require a Driveway Connection Permit to be issued by the right-of-way owner (Hillsborough County). Right-of-Way Use permitting may be required for utilities connections to facilities within the adjacent public rights-of-way.
- FDEP General Construction Permit – A General Construction Permit (for disturbing more than one acre of land) application and a Notice of Intent (NOI) application for all storm water discharge operations would need to be submitted to the FDEP prior to construction. The General Construction Permit application will include a Stormwater Pollution Prevention Plan (SWPPP).

4.2.6.4.3 Communications & Security Technology

- Part of the site telecommunications infrastructure and campus feeds from Verizon are located under the proposed New South Bed Tower. Verizon penetrates the site from Bruce B. Downs Boulevard and enters the pipe basement in the main hospital. The duct bank was installed in approximately 1970 and contains two manholes. This feed contains both copper and fiber optic cabling. Once inside the pipe basement, the Verizon feed is routed to an old building entrance room where it is then spliced and fed to the Telephone Room. For the New South Bed Tower, the site would undergo significant construction. Therefore, during the design phase, the Verizon feed would need to be relocated.

- There is a secondary feed from Bright House Networks entering the building from the north near the existing nursing home. The feed enters the site from 131st Street. This feed contains fiber optic cabling that provides data and cable television service. This feed should not be affected by the renovation work.
- The JAHVH has a large computer room with enough capacity to support the renovations. From the new facilities, fiber would need to be provided to the Computer Room. There are no spare conduits in this area of the JAHVH campus. Smaller conduits would need to be installed for the data fiber feed in the pipe tunnel.
- The campus phone system serves the facility using a NEC 2400 IPX UMG phone system. The system operates through a PBX fiber backbone located in the existing telephone room. The computer room servers are connected through the fiber data backbone. The existing equipment has capacity to support the renovations. The existing bed tower and nursing home are supported by the existing telephone switch. In addition, the JAHVH campus provides voice and data support to the current lease space. However, expansion of existing equipment would be required.

4.2.7 Project Phasing, Estimated Cost, and Construction Start-End Dates

Temporary Relocation of the Entries to Buildings 1 and 30 During Construction

The main entrance to the JAHVH facility would likely be relocated west to the entrance to Building 38 (SCI Center/Polytrauma and Rehabilitation Center). This location currently has valet parking, as do the current main entrance at Buildings 1 and 30. The Building 38 entrance is within a short walking distance of a 1,510-car parking garage dedicated for JAHVH campus use.

Construction Phasing and Facility Operational Maintenance

Construction phasing and facility operational maintenance are anticipated to follow an overall plan such as this managed and implemented by the D-B team:

- *PHASE 4a*: Temporary Measures. Maintenance of Operations and Contractor Staging Areas. This would be turned over to the owner for occupancy prior to the start of Phase 4b.
- *PHASE 4b*: Site Utility Infrastructure Upgrade and Relocation Phase.
- *PHASE 4c*: Construct New South Bed Tower, Satellite Central Utility Plant and Emergency Generator Plant Expansion.

Estimated Construction Start and End Dates

Construction of the New South Bed Tower, the Satellite CUP, and associated infrastructure improvements is anticipated to take 29 months and to begin on May 1, 2016 and end on October 1, 2018.

Estimated Construction and Operational Costs

The VA's currently published estimate of construction cost, which was released on www.fbo.gov on December 24, 2014, is $98,000,000. The operational cost for occupying the New South Bed Tower will be estimated by VA.

5 Affected Environment and Environmental Consequences

This section includes the definitions of the resource, description of existing conditions at the project site, and a detailed assessment of the potential effects of the No Action Alternative and the Proposed Action. All environmental resource areas were initially evaluated for potential consequences. As a result of an initial comparison of the 2010 EA analysis to the current Proposed Action (construct and operate the New South Bed Tower and Infrastructure Improvements), the following Technical Resource Areas are analyzed in detail: aesthetics; land use and zoning; air quality; cultural resources; topography, geology, and soils; hydrology and water resources; wildlife and habitat; floodplains, wetlands, and coastal zone management; socioeconomics; community services; solid waste and hazardous materials; traffic, transportation, and parking; utilities; alternative energy sources; noise; environmental justice; and cumulative impacts. Only a simple brief update is provided for the Potential for Generating Substantial Controversy.

5.1 Aesthetics

Urban design and visual resources contribute to a pedestrian's experience of a public space by connecting the public realm to significant natural or built features. The features of visual resources include views of the distinct buildings or groups of buildings, and natural resources, and the features of urban design include the form, arrangement, bulk, and streetscape of the urban environment that defines a pedestrian's immediate environment.

The aesthetics study area includes the view from streets adjacent to the JAHVH campus, including Bruce B. Downs Boulevard and East 131st Avenue. A detailed analysis is not warranted because there are no nearby important visual resources adjacent to or within the JAHVH campus.

5.1.1 Regulatory Requirements

There is no specific city, state, or Federal statutes, regulations, or standards governing the analysis of visual character.

5.1.2 Existing Conditions

The existing aesthetic setting of the area surrounding and within the JAHVH campus was discussed in the 2010 EA. Following 2010, changes to the aesthetics surrounding the JAHVH included the demolition in 2014 of the former Sunset Square Apartment complex located adjacent to the southern boundary of the JAHVH Diamond parking lot; the USF is constructing a new 183-unit, 653-bed college dormitory to open in the summer or fall of 2016 (see Appendix I for news articles).

Within the JAHVH campus, aesthetic changes after 2010 included construction of the 5-story parking garage in the southwest corner of the campus, the two-story addition to the polytrauma building, and construction of the therapy pool building. No other changes to visual corridors have occurred since the aesthetic analysis was completed for the 2010 EA.

There are no significant visual resources nearby or within the JAHVH campus. Likewise, there are no important view corridors, no significant natural resources, no public

recreational areas or parks, no landmark structures or districts, and no distinct buildings or group of buildings nearby or within the JAHVH campus.

5.1.3 Environmental Impacts

An adverse effect is found when a project would result in a change to the built environment's arrangement, appearance, or functionality such that the change would negatively affect a pedestrian's experience of the area. Important considerations in assessing the impact of a project on aesthetics are whether the project would obstruct important visual resources, whether such obstruction would be permanent, seasonal, or temporary, and whether the views that would be affected are unique or there are similar views that can be seen from other locations.

5.1.3.1 No Action Alternative

The No Action Alternative would have no significant impact on aesthetics. The existing built environment and visual conditions at the JAHVH campus would remain the same as previously described under existing conditions. The architecturally outdated exterior façade of Building 1 (constructed in 1972) would continue to be the "face" greeting visitors and staff at the JAHVH campus, and as viewed from Bruce B. Downs Boulevard and East 131st Avenue. Therefore, the No Action Alternative would have direct, long-term, none-to-negligible adverse impacts on aesthetics.

5.1.3.2 Proposed Action (Preferred Alternative)

Construction. Construction of the Proposed Action would have no significant impact on aesthetics. Aesthetic impacts would be similar to those of modern commercial/industrial new construction, including the temporary presence of construction vehicles, phased building construction from interior framing to exterior finishing, and construction safety fencing around the Diamond parking lot and the Opal parking lot. These construction activities would be visible to JAHVH staff, visitors and patients on the southern and far eastern portions of the JAHVH campus, and to a lesser degree to pedestrians and vehicle passengers driving along Bruce B. Downs Boulevard. The construction activities would last approximately 29 months (May 1, 2016 through October 1, 2018). Upon completion of construction, all equipment would be removed. Therefore, direct, short-term, minimal-to-moderate adverse impacts would occur during construction of the Proposed Action at the JAHVH.

Operation. Operation of the Proposed Action would have no significant impact on aesthetics. The New South Bed Tower would be a significant addition to the existing JAHVH building massing. The New South Bed Tower would obstruct the view of the outdated eastern façade of Building 1 and provide a new modern entrance for patients, visitors and staff at the JAHVH campus. The new tower's height would be close to that of Building 1, despite the new tower having fewer floor levels. The New South Bed Tower would be visible from Bruce B. Downs Boulevard, improving the visual appearance of the JAHVH campus from this heavily travelled road. Additionally, the architecture of the New South Bed Tower would more closely match the recently constructed polytrauma addition and parking garage at the JAHVH, as well as the planned new construction of USF dormitories located immediately adjacent to the JAHVH campus. The new JAHVH

entranceway at Richard Silver Way would include new visual signage to help vehicles and pedestrians better identify the JAHVH entrance.

The Proposed Action landscaping would consist of trees, shrubs, and turf grass, with native plant materials used where possible. The landscaping would enhance or replace existing vegetation. To the extent practicable, any newly planted vegetation will comply with the "*Approved Tree and Hedge Materials Lists*" issued by Hillsborough County, Florida.

Therefore, direct, long-term, beneficial-and-not-significant impacts would occur during operation of the Proposed Action.

5.2 Land Use and Zoning

The term "land use" refers to real property classifications that indicate either natural conditions or the types of human activity occurring on a parcel, or within the structures that occupy the parcel. Types of land uses include residential, retail, commercial, industrial, vacant land, and parks. In many cases, land use descriptions are codified in local zoning laws. Zoning focuses on how land is currently being used and how it will be used in the future. The goal is to provide for public safety and protect the character of neighborhoods. The foremost factor affecting a proposed project in terms of land use is its compliance with applicable land use or zoning regulations. Other relevant factors include matters such as existing land use at the project site, the types of land uses on adjacent properties and their proximity to the project site, and the duration of a proposed activity and its permanence. Consideration of these factors is essential to understanding the impacts of a proposed project in the context of overall land use plans.

This section addresses land use, zoning, and policies that define the existing conditions for the area wherein the Proposed Action would occur and potentially result in impacts. The following descriptions of the existing land uses and affecting policies are provided to facilitate understanding of the impacts posed by implementing the Proposed Action and to inform the analyses of other technical areas of concern.

5.2.1 Regulatory Requirements

Land Use and Zoning requirements are established by the Hillsborough County Development Services Department. This department dictates the use, density and bulk of developments within Hillsborough County. Projects in Hillsborough County must comply with the Hillsborough County Comprehensive Plan.

5.2.2 Existing Conditions

Existing land use and zoning conditions have not changed since the 2010 EA and FONSI. According to Hillsborough County land use and zoning mapping, the JAHVH land use group is classified as Institutional, and zoning is classified as Special Public Interest-University Community (SPI-UC-2) (see Figures 2 and 3). The Hillsborough County Adopted 2025 Future Land Use classification is Public/Quasi-Public (effective December 3, 2014) (a copy of the map is provided in Appendix E). Several adjacent properties carry the same land use and zoning designations, including the USF campus and affiliated

medical treatment and research facilities east of the JAHVH. Other adjacent and nearby land uses include single- and multi-family housing, and light and heavy commercial.

5.2.3 Environmental Impacts

The significance of potential land use and zoning effects is based on the level of land use sensitivity in areas affected by a proposed project and the compatibility of a proposed project with existing conditions. Analysis of a proposed project should determine whether it would be consistent with existing land uses, alter existing development patterns, directly displace any land use, or result in public policy that could change land uses. A proposed project could have a significant effect with respect to land use if any the following were to occur:

- Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project including, but not limited to, the general plan, specific plan, local coastal program, or zoning ordinance adopted for the purpose of avoiding or mitigating an environmental effect.
- Result in significant material changes to existing regulations or policies.
- Physically divide an established community.
- Conflict with any applicable habitat conservation plan or natural community conservation plan.

Changes in land use conditions could create impacts in other resource areas; however, this potential to result in impacts on other resource areas should not necessarily be confused with a land use impact. Therefore, the analysis of the effect of land use changes is often used to determine whether the land use changes could lead to impacts in other resource areas.

5.2.3.1 No Action Alternative

The No Action alternative would have no significant impact on land use and zoning. Under the No Action Alternative, the existing land uses and zoning classifications would remain the same as previously described under existing conditions.

5.2.3.2 Proposed Action

Construction. Construction of the Proposed Action would have no significant impact on land use and zoning. The Proposed Action construction activities are allowable and consistent with the Hillsborough County Comprehensive Plan and Hillsborough County land zoning classifications for the site. All construction would occur within the existing JAHVH campus boundary, and land use designations within and outside of the JAHVH campus would not change as a result of constructing the Proposed Action. Therefore, construction of the Proposed Action would have none-to-negligible adverse impact on land use and zoning.

Operation. Operation of the Proposed Action would have no significant impact on land use and zoning. The Proposed Action would not result in a direct displacement of any land uses and would not change the JAHVH campus zoning. Operation of the Proposed Action would be consistent with the existing land uses within and outside of the JAHVH

campus, such as medical buildings at the adjacent USF facility. The Proposed Action would not alter or accelerate development patterns in the area. Off-site land uses and zoning would not change as a result of operating the Proposed Action.

The Proposed Action would not conflict with planning criteria established to ensure the safety and protection of human life and property. Additionally, operation of the Proposed Action would be consistent with the Hillsborough County 2025 Future Land Use classification.

Therefore, operation of the Proposed Action would have none-to-negligible adverse impact on land use and zoning.

5.3 Air Quality

In accordance with Federal Clean Air Act (CAA) requirements, the air quality in a given region or area is measured by the concentration of various pollutants in the atmosphere. The measurements of these "criteria pollutants" in ambient air are expressed in units of parts per million (ppm), milligrams per cubic meter (mg/m^3), or micrograms per cubic meter ($\mu g/m^3$). The air quality in a region is a result not only of the types and quantities of atmospheric pollutants and pollutant sources in an area, but also surface topography, the size of the topological "air basin," and the prevailing meteorological conditions.

5.3.1 Regulatory Requirements

National Ambient Air Quality Standards. Under the CAA, the USEPA developed numerical concentration-based standards, or National Ambient Air Quality Standards (NAAQS), for six "criteria" pollutants that have been determined to affect human health and the environment. The NAAQS represent the maximum allowable concentrations for ozone (O_3), carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), respirable particulate matter (including particulate matter equal to or less than 10 microns in diameter [PM_{10}] and particulate matter equal to or less than 2.5 microns in diameter [$PM_{2.5}$), and lead (Pb) (40 CFR §50). The CAA also gives the authority to states to establish air quality rules and regulations stricter than the Federal standards. Florida has adopted the NAAQS, and the FDEP regulates air quality for Florida. The NAAQS are available at the EPA website: http://www.epa.gov/air/criteria.html.

In 2013, the President issued EO 13653, *Preparing the United States for the Impacts of Climate Change*, to build upon the progress made by agencies subsequent to EO 13514. EO 13653 requires that agencies update their climate change adaptation policies and plans. In June 2014, the VA fulfilled this requirement by preparing the *Climate Change Adaptation Plan* (VA, 2014).

Attainment Status of Hillsborough County. The USEPA classifies the air quality in an Air Quality Control Region (AQCR), or in subareas of an AQCR, according to whether the concentrations of criteria pollutants in ambient air exceed the NAAQS. Areas within each AQCR are therefore designated as either "attainment," "nonattainment," "maintenance," or "unclassified" for each of the six criteria pollutants. Attainment means that the air quality within an AQCR is better than the NAAQS. Nonattainment indicates that criteria pollutant levels exceed NAAQS. Maintenance indicates that an area was previously designated nonattainment but is now attainment. An unclassified air quality designation

by USEPA means that there is not enough information to classify an AQCR appropriately, so the area is considered attainment. The USEPA has delegated the authority for ensuring compliance with the NAAQS in Florida to the FDEP. In accordance with the CAA, each state must develop a State Implementation Plan (SIP), which is a compilation of regulations, strategies, schedules, and enforcement actions designed to move the state into compliance with all NAAQS.

The General Conformity Rule (CAA §176(c)(4)) applies to all Federal actions in nonattainment or maintenance areas. This rule requires that any Federal action meet the requirements of a SIP or Federal Implementation Plan. More specifically, CAA conformity is ensured when a Federal action would not cause a new violation of the NAAQS; contribute to an increase in the frequency or severity of violations of NAAQS; or delay the timely attainment of any NAAQS, interim progress milestones, or other milestones toward achieving compliance with the NAAQS.

Greenhouse Gas Emissions. Greenhouse gases (GHGs) are gaseous emissions that trap heat in the atmosphere. These emissions occur from natural processes and human activities. The most common GHGs emitted from human activities include carbon dioxide (CO_2), methane, and nitrous oxide. GHGs are primarily produced by the burning of fossil fuels and through industrial and biological processes. On September 22, 2009, the USEPA issued a final rule for mandatory GHG reporting from large GHG emissions sources in the United States. The purpose of the rule is to collect comprehensive and accurate data on CO_2 and other GHG emissions that can be used to inform future policy decisions. In general, the threshold for reporting is 25,000 metric tons or more of CO_2 equivalent GHG emissions per year; however, that excludes mobile source emissions.

Section 8 of Executive Order (EO) 13514, *Federal Leadership in Environmental, Energy, and Economic Performance*, was signed in October 2009 and requires Federal agencies to set goals for reducing GHG emissions. One requirement within EO 13514 is the development and implementation of an agency Strategic Sustainability Performance Plan (SSPP) that prioritizes agency actions based on lifecycle return on investment. Each SSPP is required to identify, among other things, "agency activities, policies, plans, procedures, and practices" and "specific agency goals, a schedule, milestones, and approaches for achieving results, and quantifiable metrics" relevant to the implementation of EO 13514. On September 1, 2010, the VA publicly released its SSPP, which describes specific actions the VA will take to achieve its individual GHG reduction targets, reduce long-term costs, and meet the full range of goals of the EO. All SSPPs segregate GHG emissions into three categories: Scope 1, Scope 2, and Scope 3 emissions. Scope 1 GHG emissions are those directly occurring from sources that are owned or controlled by the agency. Scope 2 emissions are indirect emissions generated in the production of electricity, heat, or steam purchased by the agency. Scope 3 emissions are other indirect GHG emissions that result from agency activities but from sources that are not owned or directly controlled by the agency. The GHG goals in the VA SSPP (updated June 30, 2014) include reducing Scope 1 and Scope 2 GHG emissions by 29.8% by 2020, relative to Fiscal Year (FY) 2008 emissions, and reducing Scope 3 GHG emissions by 10% by 2020, relative to FY 2008 emissions (VA, 2014b).

5.3.2 Existing Conditions

The JAHVH is located in Hillsborough County, which is located in the West Central Florida Intrastate AQCR. West Central Florida Intrastate AQCR includes Citrus, Hardee, Hernando, Hillsborough, Levy, Manatee, Pasco, Pinellas, Polk, and Sumter Counties. Within this AQCR, Hillsborough County has been designated as a non-attainment area for sulfur dioxide (as of 2010).

The most recent emissions inventories for Hillsborough County and the West Central Florida AQCR are shown in Table 2. Table 2 also includes the estimated air emissions for existing conditions at the JAHVH, including combustion from vehicle emissions for approximately 4,500 current employees; three liquid propane gas-fired 500-horsepower steam-generating boilers; and eight diesel fuel-powered emergency backup generators. Backup calculations are provided in Appendix I.

Hillsborough County is considered the local area of influence, and the West Central AQCR is considered the regional area of influence for the air quality analysis. O_3 is not a direct emission; it is generated from reactions of volatile organic compounds (VOCs) and nitrogen oxides (NOx), which are precursors to O_3. Therefore, for the purposes of this air quality analysis, VOCs and NOx emissions are used to represent O_3 generation.

The JAHVH currently has an Air Permit (Permit No.: 0570088-005-AO) to operate the three 500-horsepower steam boilers and the eight emergency backup generators through February 27, 2018, from the Environmental Protection Commission of Hillsborough County, Florida. The permit was issued to the JAHVH on July 24, 2007. A copy of the permit is provided in Appendix A.

Table 2. Air Emissions Inventories for Hillsborough County and Local Region

Source/Area	NO_x (tpy)	VOC (tpy)	CO (tpy)	SO_2 (tpy)	PM_{10} (tpy)	$PM_{2.5}$ (tpy)	CO_2 (tpy)
Combustion (current vehicle emissions)	48.86	67.14	631.59	-	0.28	0.26	26,223.9
3 - 500/bhp Boilers	0.32	0.01	0.09	0.10	0.01	-	26,626.7
8 - 2,190 HP Backup Generators	6.85	0.19	1.82	2.16	0.21	-	353.1
Existing Emission JAHVH Totals	56.03	67.34	633.5	2.26	0.501	0.259	53,203.7
Hillsborough County	36,936	63,721.2	198,159.3	16,437	16,701	6,897.3	15,236,695
West Central Florida Intrastate AQCR	125,058	363,683.5	753,621.7	69,289.8	90,135.3	35,903.9	50,851,572

Sources: USEPA 2011v2 National Emissions Inventory; USEPA Greenhouse Gas Reporting Program Dataset as of August 18, 2014.
TPY – tons per year
BHP – Boiler horsepower
HP - Horsepower

5.3.3 Environmental Impacts

The significance criteria are dependent on whether a project is located in an attainment, nonattainment, or maintenance area for criteria pollutants. Other significance criteria include whether New Source Review (NSR) air quality construction permitting is triggered or Title V operating permitting is triggered. Major NSR air quality construction permitting is divided into Nonattainment Major NSR (NANSR) for nonattainment pollutants and Prevention of Significant Deterioration (PSD) permitting for attainment pollutants. All of these significance criteria are discussed in the following paragraphs.

Attainment Area Pollutants. The attainment area pollutants for the project site are CO, Pb, NO_2, TSP, PM_{10}, $PM_{2.5}$, O_3 and Hydrocarbons. The impact in NAAQS "attainment" areas would be considered significant if the net increases in these pollutant emissions from the Federal action would result in any one of the following scenarios:

- Cause or contribute to a violation of any national or state ambient air quality standard
- Expose sensitive receptors to substantially increased pollutant concentrations
- Exceed any Evaluation Criteria established by a SIP or permit limitations/requirements

Impacts on ambient air quality were assessed by comparing the increase in emissions under the proposed project to the county and AQCR emissions inventory.

Nonattainment or Maintenance Area Pollutants. The nonattainment area pollutant for Hillsborough County is SO_2. Effects on air quality in NAAQS "nonattainment" areas are considered significant if the net changes in these project-related pollutant emissions result in any of the following scenarios:

- Cause or contribute to a violation of any national or state ambient air quality standard
- Increase the frequency or severity of a violation of any ambient air quality standard
- Delay the attainment of any standard or other milestone contained in the SIP

With respect to the General Conformity Rule, effects on air quality would be considered significant if the proposed Federal action emissions exceed *de minimis* threshold levels established in 40 CFR 93.153(b) for individual nonattainment pollutants or for pollutants for which the area has been redesignated as a maintenance area.

Table 3 presents the General Conformity *de minimis* thresholds, by regulated pollutant. As shown in this table, *de minimis* thresholds vary depending on the severity of the nonattainment area classification. Note that emissions sources subject to NANSR, PSD, or even Minor NSR air permitting are not required to be counted towards the General Conformity *de minimis* thresholds. The reasoning for this is they would already be required to go through an approval process with the appropriate Federal, state, or local air quality regulatory authority.

Table 3. General Conformity *de minimis* Emissions Thresholds

Pollutant	Status	Classification	*De minimis* Limit (typ)
O_3 (measured as NO_x or VOCs)	Nonattainment	Extreme	10
		Severe	25
		Serious	50
		Moderate/marginal (inside ozone transport region)	50 (VOCs)/100 (NO_x)
		All others	100
	Maintenance	Inside ozone transport region	50 (VOCs)/100 (NO_x)
		Outside ozone transport region	100
CO	Nonattainment/ maintenance	All	100
PM_{10}	Nonattainment	Serious	70
		Moderate	100
	Maintenance	No Special Classification	100
		All	100
$PM_{2.5}$ (measured directly, or as SO_2, NO_x, or VOCs as significant precursors)	Nonattainment/ maintenance	All	100
SO_2	Nonattainment/ maintenance	All	100
NO_x	Nonattainment/ maintenance	All	100
VOCs	Nonattainment/ maintenance	All	100
Pb	Nonattainment/ maintenance	All	25

Source: 40 CFR 93.153, as of January 9, 2012
TPY – Tons per year

Nonattainment Major NSR Permits. The following factors were considered in determining the significance of air quality impacts with respect to NANSR permitting requirement:

- If the net increase in stationary source emissions qualify as a NANSR major source. This major source threshold varies from 10 tpy to 100 tpy for nonattainment pollutants depending on the severity of the nonattainment classification and the pollutant (40 CFR 51.165).

PSD and Title V Permits. The following factors were considered in determining the significance of air quality impacts with respect to PSD permitting requirements prior to construction:

- If the net increase in stationary source emissions qualify as a PSD major source. This includes 250 tpy emissions per attainment pollutant (40 CFR 52.21(b) (1) and 40 CFR 52.21(a)(2)), or 75,000 tpy emissions of GHGs.
- If the net increase in stationary source emissions qualify as a significant modification to an existing PSD major stationary source, (i.e., change that adds 10 to 40 tpy of criteria pollutants to the PSD major source's potential to emit depending on the pollutant, or adding 75,000 tpy of GHGs).
- If the proposed project occurs within 10 kilometers of a Class I area and if it would cause an increase in the 24-hour average concentration of any regulated pollutant in the Class I area of 1 µg/m3 or more (40 CFR 52.21[b][23][iii] and 40 CFR 52.21[a][2]).

The following factor was considered in determining the significance of air quality impacts with respect to Title V operating permit requirements (40 CFR 71.2 and 40 CFR 71.3):

- If the increase in stationary source emissions qualify as a Title V major source. This includes the potential to emit 100 tpy for criteria pollutants, or 10 tpy of any individual hazardous air pollutant (HAP), or 25 tpy of all HAPs combined, or 100,000 tpy of GHGs.

The proposed project would not be subject to the above significance criteria for these permit programs because no permanent stationary sources would be installed, and construction emissions are typically not subject to these significance criteria. Existing JAHVH emergency generators are considered exempt under the JAHVH's current air permit issued by the Environmental Protection Commission of Hillsborough County, Florida; therefore, it is anticipated that installation of the proposed 2-MW emergency generator to support the Proposed Action would also be exempt.

5.3.3.1 No Action Alternative

The No Action alternative would have no significant impact on air quality. Existing conditions would remain the same as described under existing conditions. No new effects on regional or local air quality would occur.

5.3.3.2 Proposed Action

Construction. Construction of the Proposed Action will have no significant impact on air quality. The quantity of uncontrolled fugitive dust emissions from a construction site is proportional to the area of land being worked and the level of activity. Emissions from construction activities would be produced only for the duration of construction activities, which, for the purposes of this air quality analysis, is conservatively assumed to be 630 workdays (5 days per week) or 29 calendar months (May 1, 2016 through October 1, 2018).

Construction of the Proposed Action would generate air pollutant emissions from site-disturbing activities and operation of construction equipment, as well as travel to and from the site by construction workers. Construction activities would also generate particulate emissions as fugitive dust from ground-disturbing activities and from the combustion of fuels in construction equipment. There would be some selective demolition/removal of

specific building elements on the exterior of Building 38, Building 1, and demolition of Building T-78 and the portion of the pedestrian bridge on the JAHVH campus.

A Dust Control Plan would be included as part of construction documents. Construction activities would incorporate BMPs to minimize fugitive particulate matter emissions. Additionally, the work vehicles are assumed to be well-maintained and would use diesel particle filters to reduce emissions. Construction workers commuting daily to and from the job site in their personal vehicles would also create regulated pollutant air emissions. The daily average number of construction workers is estimated to be 205 workers for the estimated 29 month duration for constructing the Proposed Action. Prevention of any potential release of asbestos fibers during abatement or removal will be addressed in the JAHVH Asbestos Abatement Plan, approved by the Environmental Protection Commission of Hillsborough County, and in compliance with the existing JAHVH Asbestos Operations and Management Plan (JAHVH, 2011; a copy is provided in Appendix A).

Therefore, direct, short-term, minimal-to-moderate adverse impacts would occur during construction of the Proposed Action.

Air emissions from construction activities under the Proposed Action are summarized in Table 4. Applicable significance criteria also are summarized in Table 4. Appendix C contains detailed calculations and the assumptions used to estimate the air emissions.

Table 4. Estimated Air Emissions Resulting from Construction of the Proposed Action

Activity	NO_x (tpy)	VOC (tpy)	CO (tpy)	SO_2 (tpy)	PM (total)[a]	PM_{10}[b]	$PM_{2.5}$[c]	CO_2 (tpy)
Combustion (Construction equipment)	8.670	3.797	6.170	0.010	0.616	0.000	0.000	851.14
Fugitive Dust	--	--	--	--	87.600	13.87000	1.38700	--
Haul Truck On-Road	0.004	0.000	0.001	0.00002	-	0.0002	0.00012	1.87
Commuter (Construction Workers)	3.544	3.801	35.738	0.058	-	0.497	0.321	5967.12
Total Construction Emissions	**12.218**	**7.599**	**41.909**	**0.068**	**88.216**	**14.367**	**1.709**	**6,820.13**
General Conformity *de minimis* thresholds	**100**	**50**	**100**	**NA**	**NA**	**100**	**100**	**NA**

Notes:
a - Fugitive dust based on 1.2 tons/acre/month for construction (USEPA, 1995).
b – Based on General Construction Activities Emission Factor of 0.19 ton PM_{10}/acre/month (MRI 1996; EPA 2001; EPA 2006)
c - $PM_{2.5}$ emissions are estimated by applying a particle size multiplier of 0.10 to PM_{10} emissions. This methodology is consistent with the procedures documents for the National Emission Inventory (EPA 2006).
TPY – tons per year

Operation. Operating of the Proposed Action will have no significant impact on air quality. Operation of the Proposed Action would include the use of one new diesel-fuel powered 2-MW generator for emergency backup power. The diesel fuel for this generator would be stored in a new 12,000-gallon above-ground storage tank to maintain the JAHVH campus four-day fuel supply. The tank would be contained internally within the limits of Building 54. The generator would be only used for emergencies and as required for routine maintenance testing, estimated at 4 hours per year. Therefore, it is anticipated that the use of the proposed generator would not contribute significantly to the nonattainment area status.

Under the facility's current Air Permit, JAHVH operates exempt sources of air emissions, which includes existing emergency generators. However, the proposed new generator would require a reevaluation of the current permit to ensure compliance. Emissions estimates from the proposed generator are included in Table 5.

No new employees would be required to staff the New South Bed Tower. Therefore, no new vehicle emissions would be generated relative to existing operating conditions.

General Conformity. The JAHVH is located in Hillsborough County, which has been designated as nonattainment area for sulfur dioxide (as of 2010). Therefore, the General Conformity Rule requirements are potentially applicable for sulfur dioxide. Table 5 lists the estimated air emissions for 12 hours of operation per year of the proposed 2-MW generator and compares these to the General Conformity Rule *de minimis* thresholds. As shown in Table 5, estimated air emissions from the emergency generator are well below *de minimis* threshold limits; therefore, a General Conformity determination would not be required.

Table 5. Estimated Operational Generator Emissions for the Proposed Action

Activity	NO_x (tpy)	VOC (tpy)	CO (tpy)	SO_2 (tpy)	PM_{10} (tpy)	CO_2 (tpy)
Total Calculated Emissions for Proposed 2-MW Generator Emergency	0.0109	0.0003	0.003	0.003	0.00034	0.563
Total Additional Future Emissions	0.0109	0.0003	0.003	0.003	0.00034	0.563
General Conformity *de minimis* thresholds	100	50	100	NA	100	NA

Source: USEPA 1996, USEPA 2008.
TPY – tons per year

Greenhouse Gases. The Proposed Action would contribute directly to emissions of GHGs from the combustion of fossil fuels. Because CO_2 emissions account for approximately 92% of all GHG emissions in the United States, they are used for analyses of GHG emissions in this assessment. The USEPA estimates that 2013 gross CO_2 emissions in Florida was 127.9 million metric tons (http://ghgdata.epa.gov; accessed February 16, 2015) and in the United States (in 2012, most recent data available) was 6,526 million metric tons

(http://www.epa.gov/climatechange/ghgemissions/ usinventoryreport.html). Table 6 summarizes the estimated amount of CO_2-equivalent emissions from construction and operation of the Proposed Action; the Proposed Action emissions represent an insignificant contribution towards the statewide and national GHG inventories.

In summary, direct, long-term, none-to-negligible adverse impacts would occur during operation of the Proposed Action.

Table 6. Estimated CO_2-Equivalent Air Emissions from the Proposed Action

Activity	CO_2 Equivalent Emissions MT	Florida CO_2 MT (2013)	US CO_2 Emissions MT (2012)	Percent of Florida's CO_2 Emissions	Percent of U.S. CO_2 Emissions
Proposed Action – Construction	6,187.12			0.0048%	0.000095%
Proposed Action - Operation	0.51	127,900,000	6,526,000,000	0.000004%	0.00000001%

Source: USEPA 2014. Inventory of U.S. Greenhouse Gas Emissions and Sinks 1990-2012. EPA 430-R-14-003. April 2014.
MT - Metric tons.

5.4 Cultural Resources

"Cultural resources" is an umbrella term for many heritage related resources, including prehistoric and historic archaeological sites, buildings, structures, districts, or certain objects. Cultural resources are discussed in terms of archaeological resources, architectural resources, or resources of traditional cultural significance.

5.4.1 Regulatory Requirements

Federal cultural resources laws applicable to this project include the National Historic Preservation Act (NHPA), the Archaeological and Historic Preservation Act (1974), the American Indian Religious Freedom Act (1978), the Archaeological Resources Protection Act (1979), and the Native American Graves Protection and Repatriation Act (1990).

The National Register of Historic Places (NRHP) is the official list of the properties in the United States that are significant in terms of prehistory, history, architecture, or engineering. The NRHP is administered by the National Park Service. Generally, resources must be more than 50 years old to be considered eligible for the NRHP. To meet the evaluation criteria for eligibility to the NRHP, a property needs to be significant under one or more NRHP evaluation criteria (36 CFR Part 60.4), and retain historic integrity expressive of the significance. More recent structures might be eligible for listing in the NRHP if they are of exceptional importance or if they have the potential to gain significance in the future per special NRHP considerations.

Section 106 of the NHPA requires a Federal agency official to take into account the effects of its undertaking on historic properties, and afford the Advisory Council on Historic Preservation (ACHP), an independent Federal agency, an opportunity to comment. This is done in accordance with the regulations of the ACHP implementing Section 106 process, 36 CFR Part 800. The Section 106 review requires an assessment of the potential impact of an undertaking on historic properties that are within the proposed

project's Area of Potential Effect (APE). The APE is defined as the geographic area(s) "within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist." Consultation with the Florida SHPO and consulting parties including local governments is required regarding the identification and evaluation of potentially affected historic properties, determination of potential effects of an undertaking on historic properties, and resolution of any adverse effects. Under the Section 106 process, the Florida SHPO would be a consulting party for the Proposed Action.

5.4.2 Existing Conditions

Pursuant to Section 106 of the NHPA, the VA conducted a cultural resource assessment of the JAHVH APE as part of the 2010 EA (HDR, 2009). No known archeological or historical resources were located within or immediately adjacent to the JAHVH; these findings are still applicable for the current Proposed Action at the JAHVH. The JAHVH campus site has undergone extensive ground disturbances over the past four decades. In addition, the immediate area has a low potential for archeological sites. There are no known historic structures on campus or in the immediately surrounding areas; nearly all of the standing structures were constructed between the 1960s and the 1990s.

Based on this information, the Florida SHPO concurred in writing that the 2010 EA Proposed Action would have no effect on cultural resources listed on, or eligible for listing on, the National Register of Historic Places. See the 2010 EA - Appendix B for the concurrence letter.

Also pursuant to Section 106 of the NHPA, during the preparation of the 2010 EA the VA initiated consultation with the following Native American tribes who may attach religious or cultural significance to the project site:

- Miccosukee Tribe of Indians of Florida
- Seminole Tribe of Florida
- Seminole Nation of Oklahoma, and
- Muscogee (Creek) Nation of Oklahoma.

Letters to the Native American Tribes were mailed on July 22, 2009. In a letter dated July 29, 2009, the Seminole Tribe of Florida's Tribal Historic Preservation Officer concurred with VA's finding of "no historic properties affected" but asked that the Tribe be notified if any archeological and/or historical resources be discovered during construction. In an email correspondence dated August 19, 2009, the Miccosukee Tribe of Indians of Florida "determined that there is no cultural, historical, or religious site of the Tribe at this location." The VA has not received responses from the other tribal organizations. Correspondence sent to, and received from, the Native American tribal organizations related to the 2010 EA are reproduced in the 2010 EA - Appendix A.

Following these consultations associated with the 2010 EA, the VA conducted additional architectural, archaeological, and traditional cultural property surveys at the JAHVH as part of an effort to develop a programmatic agreement for the 10 medical centers owned by the VA in Florida; the results were reported in the "*Site Survey and National Register*

Eligibility Evaluation, James A. Haley Veterans 'Hospital, Tampa, Florida," dated March 17, 2014 (Labatte, 2014). The Site Survey report also reviewed information presented in previous cultural resource assessment surveys and evaluated the accuracy of the conclusions presented therein. The Site Survey report confirmed the results of past surveys that determined that there are no known historic properties listed, or eligible for listing, in the NRHP located within, or in the immediate vicinity of, the JAHVH. The Site Survey report mentioned that the Sunset Square Apartments (adjacent to the Diamond parking lot on the southern site border) at 12708 Bruce B. Downs Boulevard may likely be eligible for listing in the NRHP; however, on June 25, 2014, USF purchased the apartment complex and subsequently demolished it in preparation of construction of new USF student housing (scheduled to be completed in the summer or fall of 2016) (see Appendix I for news articles).

The Site Survey report also confirmed that the potential for archaeological resources at the JAHVH campus had been delineated based upon a site visit by a professional archaeologist. The majority of the JAHVH campus has been extensively disturbed in the past and would not require further investigation, including the area for the proposed New South Bed Tower and associated upgrades. Two small, seemingly undisturbed wooded parcels in the northeast and northwest quadrants of the property would require a Phase I archaeological survey if ground disturbance is proposed in these areas; however, the current Proposed Action is not near these areas and would have no impact on these areas. The remainder of JAHVH campus may have a potential to contain archaeological resources, but subsurface testing cannot be conducted due to prior construction activities. The Site Survey recommended that future ground-disturbing projects should be monitored, due to the potential for preserved archaeological deposits. The Site Survey conclusions confirmed that the JAHVH does not contain any cultural resources and is not eligible for the National Register. The Florida SHPO provided concurrence with these findings in a letter dated August 20, 2014; a copy of the letter is provided in Appendix I.

As part of the current NEPA consultation process for the current Proposed Action, a copy of the 2014 Site Survey report and a description on the Proposed Action was provided to the Florida SHPO and selected Native American Tribes for review and comment. Copies of the letters sent to and comments received from these organizations are included in Appendix D. On June 2, 2015, the Florida SHPO informed the VA that the Proposed Action has little potential to effect historic properties, and therefore will have no effect on properties eligible for listing or listed on the National Register of Historic Places (Appendix D). On July 8, 2015, the Seminole Tribe of Florida informed the VA that they had no objection to the Proposed Action (Appendix D). Oo other responses from Native American Tribes were received during preparation of the Draft SEA. If correspondence from other Native American Tribes is received during the 30-day public comment period, it will be summarized and included in the Final SEA.

5.4.3 Environmental Impacts

The criteria of adverse effect at 36 CFR 800.5(a) to a significant historic resource were applied to assess the environmental consequences of a proposed project on cultural resources. An adverse effect is found when an characteristics that qualify a property for the NRHP in a manner that would diminish the integrity of the property's location, design,

setting, materials, workmanship, feeling, or association. Adverse effects might include reasonably foreseeable effects caused by the undertaking that might occur later in time, be further removed in distance, or be cumulative. Thus, damage or destruction of a historic property, visual effects that would alter its setting or feeling, or other types of impacts would be considered adverse under this definition.

5.4.3.1 No Action Alternative

The No Action Alternative would have no significant impact on cultural resources. Existing conditions would remain the same as previously described under existing conditions. No new effects on cultural resources would occur.

5.4.3.2 Proposed Action

Construction. Based on the prior cultural resources survey findings that cultural resources are not present at the JAHVH, and concurrence from the Florida SHPO and selected Native American Tribes regarding these findings relative to Proposed Action, construction of the Proposed Action would have no significant impact on cultural resources. Copies of concurrence letters and correspondence from these organizations is provided in Appendix D. Should any artifacts or remains be encountered during construction activities, the VA will notify the SHPO and Native American Tribes.

Therefore, direct, short-term, none-to-negligible adverse impacts would occur during construction of the Proposed Action.

Operation. Operation of the Proposed Action would have no significant impact on cultural resources. Operation of the proposed action has no mechanisms that involve subsurface disturbance, excavation, or similar types of physical impacts that could impact any potential cultural resources, which are considered to be absent from the footprint of the Proposed Action.

Therefore, direct, long-term, none-to-negligible adverse impacts would occur during operation of the Proposed Action.

5.5 Topography, Geology and Soils

This section describes the underlying formations that are present within the project site. The existing geology, topography, and soils can be described relative to bedrock composition, depth to bedrock, surficial materials, landscape, and soils. A review of published geological information regarding the area of the project site was conducted including geotechnical service reports in 2008 and 2009 during the Phase II evaluation for the parking garage and Polytrauma expansion (HSA, 2008, 2009). Additional geotechnical evaluation was performed in 2010 to evaluate the proposed New South Bed Tower (HSA, 2010).

5.5.1 Regulatory Requirements

There are no regulatory requirements specific to topography, geology and soils.

5.5.2 Existing Conditions

Geology. The JAHVH campus is located within the Gulf Coastal Lowlands physiographic area, which is generally very swampy with many lakes (White, 1970). The Gulf Coastal

Lowlands lie between Tampa Bay and the Polk Uplands, with land elevations ranging from sea level to approximately 90 ft. above sea level. Relict features, such as bars and barrier islands, formed during ancient stands of sea level are found in the Gulf Coastal Lowlands.

The geology of west-central Florida, including the JAHVH campus, is comprised of a thick sequence of sedimentary deposits ranging in age from Recent to Eocene. Geologic formations include (in descending order) the undifferentiated Holocene and Pleistocene deposits, the Miocene Hawthorne Group (including the Tampa Member of the Arcadia Formation), the Suwannee Limestone, the Ocala Limestone, and the Avon Park Formation (SWFWMD, 2006). The JAHVH campus is located in a geologic region referred to as covered karst terrain. In this geologic setting, the presence of sinkholes can have an effect on planned construction activities.

Site-specific subsurface evaluations were performed in October of 2010 at the proposed New South Bed Tower location (HSA, 2010). The investigations included soil borings, soil condition identification, surficial water table evaluation, and potentiometric water elevations. In general, the soil borings revealed soil profiles (in HSA 2010, see HAS Figure 2 for boring locations, labeled as SPT-1, SPT-2, and SPT-3) with variations typical of the area. The surface limestone layer was encountered at the shallowest depth in boring SPT-3, whereas the deepest depth to limestone was encountered in boring SPT-1. The deeper clay layers covering the limestone surface appeared thickest at the SPT-2 location, and the near surface layers were the thickest at the SPT-1 location. The density /consistency of the sand and clay deposits varied at each location, with the loosest near surface sands present at boring SPT-3 and a very soft clay overlying the limestone indicated in boring SPT-1. Indications of incipient sinkhole activity were identified in all three boring locations (HSA 2010).

Soils. Two soil types occur at the JAHVH campus within the Phase IV project area: Candler fine sand (0-5% slopes), and Zolfo fine sand (USDA-SCS 1989; USDA-NRCS 2006) (Figure 8). These soils generally occur in the drier sandhill areas of Hillsborough County. Candler fine sand is a gently sloping, excessively drained rapidly permeable sandy soil, with very limited organic matter content and deep seasonal high water tables (greater than 80 inches below surface). Zolfo fine sand is a nearly level, somewhat poorly drained rapidly to moderately permeable soil, with very limited organic matter content and relatively deep seasonal high water tables (between 24 and 40 inches during the wetter months and dropping to 60 inches during the drier months).

Based on the USDA Natural Resource Conservation Service (NRCS) Soil Survey information, encountered soil stratigraphy and inferred groundwater levels, the estimated normal wet seasonal high groundwater level at the boring locations is preliminarily estimated to occur at elevation ± 40ft (National Geodetic Vertical Datum [NGVD] 1929) near boring SPT-1 and at elevation ±35ft (NGVD 1929) near borings SPT-2 and SPT-3, or about 10 to 12 feet below the average ground surface elevation. At the time of field activities, the surficial groundwater table level was not encountered within 6, 8, and 10 feet of the ground surface in borings SPT-1, Spt-2, and SPT-3, respectively. Generally saturated soils were encountered near a depth of 15 feet in each boring, which is estimated to be near the groundwater table elevation.

Topography. The Proposed Action area is already developed, and therefore has been mass graded to eliminate any significant topographical relief that may have been present prior to site improvements (Figure 9). The proposed New South Bed Tower footprint occurs within an elevation range of 39-41 feet (NGVD 1929). The Satellite CUP footprint occurs on an elevation of 36 feet (NGVD 1929).

5.5.3 Environmental Impacts

5.5.3.1 No Action Alternative

The No Action Alternative would have no significant impact on geology, topography, or soils. Under to No Action Alternative, no construction would occur. The existing facility development and impervious surfaces would remain unchanged, making any impacts to subsurface materials highly unlikely. In the absence of construction, the No Action Alternative would avoid potential adverse impacts to soil quality related to construction equipment fuel spills and soil disturbance.

5.5.3.2 Proposed Action

Construction. Construction of the Proposed Action would have no significant impact on topography, geology or soils. While construction of the Proposed Action will require approximately 8,860 YD^3 of cut and fill, there will be no overall change in site topography. The construction of the Proposed Action may be affected by the geologic conditions at the site, such as relict sinkholes and potential sinkhole activity requiring that precautions be taken during construction of structures and stormwater facilities. The subsurface conditions do not favor a simple or straightforward approach to foundation support of a multi-story structure. The soil and rock conditions (loose sands, soft clays, softer rock and incipient sinkhole activity) will require in-situ improvement and/or will affect allowable foundation capacities. However, the soil borings indicate that the proposed New South Bed Tower location can be rendered suitable for the planned structure provided the proper foundation support is developed (HSA, 2010). Accordingly, foundations will likely be deep pier and/or mat-slab foundations in areas with less suitable soil conditions.

Geotechnical investigations done in 2008, 2009 and 2010 concluded that the future project phases within the JAHVH would not be likely to affect natural or altered soils (HSA, 2008, 2009, 2010). However, the activities occurring during construction could pose a temporary risk to on-site soils. Soils exposed during construction are susceptible to surface runoff, which has the potential to result in increased sedimentation in the on-site stormwater management systems, and the potential for off-site discharges of sediment-laden runoff. The exposed soil would be susceptible to erosion by wind, increasing the amount of dust in the air, causing potential short-term respiratory hazard and visual nuisance. Potential accidental releases of petroleum-based fluids from construction equipment could also impact soils. General construction BMPs would be implemented to avoid such releases (e.g. inspect and maintain equipment in good working order), and/or limit the extent of impacts should a release occur (use spill kits to contain releases).

Therefore, direct, short-term, minimal-to-moderate adverse impacts would occur to geology and soils during construction of the Proposed Action. Direct, short-term, none-

to-negligible adverse impacts would occur to topography during construction of the Proposed Action.

Operation. Operation of the Proposed Action would have no significant impact on topography, geology or soils. During operation of the Proposed Action, there would be no long-term erosion or sedimentation impacts. There would be no long-term soil erosion or sedimentation impacts because, apart from limited landscaped areas, the New South Bed Tower footprint is entirely impervious; therefore no soils would be exposed. Soils in the landscaped areas will be anchored by vegetation, minimizing the susceptibility of soil erosion due to wind or stormwater impacts.

Future operational JAHVH facilities maintenance activities would follow existing operation procedures, where maintenance and grounds staff routinely inspect and observe any facility operations that could contribute to sinkhole activity, such as leaking sewer pipes and improper stormwater system functioning that could cause underground pooling of water within the voids typical of karst topography. The extra weight of water pools, in addition to the weight of surface structures, could cause the underground features to fail, resulting in a sinkhole. Additionally, JAHVH facilities maintenance staff would continue to be vigilant of any signs of ground subsidence, such as circular cracks in the soil or parking lots and any unusual cracks in the building structures.

However, operations of the Proposed Action have no mechanisms by which underlying geology would be altered or contacted. Likewise, operations of the Proposed Action would have mechanisms to alter grades.

Therefore, direct, long-term, none-to-negligible adverse impacts would occur to soils, geology, and topography during operation of the Proposed Action.

5.6 Hydrology and Water Resources

Water resources are natural and man-made sources of water that are available for use by and for the benefit of humans and the environment. Water resources include groundwater and surface water. Hydrology concerns the distribution of water through the processes of atmospheric transport, precipitation, surface runoff and flow, and subsurface flow. Climatic factors, such as temperature, wind direction and speed, topography, soil and geologic conditions have the ability to affect the hydrology of the site.

5.6.1 Regulatory Requirements

The Southwest Florida Water Management District (SWFWMD) requires new development that results in the creation of impervious surfaces to capture the stormwater runoff and store it for purposes of mitigating potential downstream flooding and improving water quality. The SWFWMD is responsible for issuing an ERP for the storage and treatment of stormwater runoff. The Proposed Action will likely require the modification of one of the JAHVH's existing SWFWMD ERP permits for on-site stormwater management. The Proposed Action would be built over an area that is currently developed and impervious. Stormwater throughout the JAHVH is currently managed in an existing on-site stormwater management system (Mabbett, 2015; see Appendix A). A General Construction Permit (for disturbing more than one acre of land) application including a Stormwater Pollution Prevention Plan (SWPPP) and a Notice of Intent (NOI)

application for all storm water discharge operations would need to be submitted to the FDEP prior to construction.

5.6.2 Existing Conditions

The JAHVH campus is approximately 43 acres in size and lies within the Duck Pond watershed. The watershed is a closed basin, meaning surface water flows do not leave the watershed. As previously described, stormwater throughout the JAHVH is currently managed in an existing on-site stormwater management system. Four existing detention ponds receive the majority of stormwater from the site, all of which discharge to an east-west ditch located along the southern boundary of the campus. The ditch flows westward approximately ¼ mile and discharges into Duck Pond. There are no known deficiencies in the existing stormwater system at the JAHVH campus.

5.6.3 Environmental Impacts

5.6.3.1 No Action Alternative

The No Action Alternative would have no significant impact on hydrology or water resources. Under the No Action Alternative, no construction would occur on site. Accordingly, there would be no soil disturbance or impacts to the water resources on site or within the Duck Pond watershed.

5.6.3.2 Proposed Action

Construction. Construction of the Proposed Action would have no significant impact on hydrology and water resources. During construction, the existing drainage south of Building 30 would need to be modified to allow for the construction of the Proposed Action. Overall drainage patterns would remain, minimizing the need for large-scale redesign of the existing stormwater management system.

During construction there would be a temporary disturbance to surface soils. Any potential sedimentation would be short-term and would likely not cause any adverse significant impacts to downstream water quality. To mitigate potential impacts to water sources, BMPs such as installation of silt fence and haybales around construction areas, would be employed. Additionally, as previously described, prior to construction, a General Construction Permit application including a SWPPP for all storm water discharge actions, along with an NOI application, would need to be submitted to the FDEP prior to construction of the Proposed Action. Furthermore, the Proposed Action will likely require the modification of one of the JAHVH's existing SWFWMD ERP permits for on-site stormwater management.

Therefore, direct, short-term, minimal-to-moderate adverse impacts would occur during construction of the Proposed Action.

Operation. Operation of the Proposed Action would have no significant impact on hydrology and water resources. The existing stormwater drainage and conveyance system would be adequate to serve the needs of the existing JAHVH facilities and including the Proposed Action. There would be no operational impacts to surface water because surface water is not present at the site. There would be no operational impacts to hydrology because there are no operational mechanisms that involve contact or

interaction with underlying hydrological resources. The JAHVH would continue to maintain existing stormwater management systems and associated ERP permits for facility-wide activities, inclusive of the Proposed Action.

Therefore, direct, long-term, none-to-negligible adverse impacts would occur during operation of the Proposed Action.

5.7 Wildlife and Habitat

Biological resources consist of ecological communities and the species potentially using those communities as habitat. The Florida Natural Areas Inventory (FNAI) database is used to assist in the identification of known occurrences of threatened plant and animal species. In addition to FNAI, the Florida Land Use, Cover, Form Classification System (FLUCFCS; FDOT 1999; SWFWMD 2011) is the identification system used to define biological communities in the state of Florida. The FLUCFCS map is provided in Figure 12.

5.7.1 Regulatory Requirements

Upon the identification of the presence of a state or federally protected species, co-ordination with the Florida Fish and Wildlife Conservation Commission (FFWCC) and/or the U.S. Fish and Wildlife Service (USFWS) is required in order to determine the appropriate permitting and best management practices in order to prevent impacts to listed species.

5.7.2 Existing Conditions

A determination of not likely to adversely affect protected species was concluded during the 2010 EA, and the USFWS concurred with this determination in letter dated July 30, 2009 provided in the 2010 EA.

In January 2015, an on-site survey for wildlife and habitat was performed by Mabbett at the JAHVH campus (Mabbett, 2015) (Appendix A). The survey concluded that wildlife and habitat conditions at the JAHVH have not changed since the 2010 EA. The existing JAHVH campus is entirely developed urban area and supports no significant biological resources beyond incidental planted oaks, palms, turf-grass, and minor landscaping. The surrounding landscape is a mix of residential, commercial, and industrial land use, contributing minimal quality habitat for the support of wildlife. There are no wetlands, lakes or rivers on site. The site is developed and covered by buildings, asphalt, and other various impervious surfaces inhospitable to wildlife dependent upon natural vegetation for habitat and forage. Mammals that can be expected to utilize the JAHVH campus include gray squirrels (*Sciurus carolinensis)*, common birds including the mockingbird (*Mimus polyglottos)*, mourning dove (*Zenaida macroura)*, northern cardinal (*Cardinalis cardinalis)*, and on a seasonal basis some migratory passerines (perching song birds), and common reptiles include the Cuban anole and potentially the green anole.

A review of the FNAI element occurrence database has revealed no documented species occurrence currently on the site (Figure 11). One record for the gopher tortoise (*Gopherus polyphemus)*, a state listed threatened species, indicates an occurrence near to and south

of the JAHVH campus. All other element occurrences of listed species were one to two miles north of the JAHVH campus.

Additionally, on May 5, 2015, the JAHVH requested USFWS review of the Proposed Action; on May 22, 2015, the USFWS provided a letter response indicating that the JAHVH parcel does not have any habitat conducive to any listed species, and the proposed action are not likely to affect resources protected by the Endangered Species Act of 1973 (Appendix D).

5.7.3 Environmental Impacts

5.7.3.1 No Action Alternative

The No Action Alternative would have no significant impact on wildlife or habitat. Under the No Action Alternative, wildlife and habitat conditions would not significantly change compared with the existing conditions. The quality and quantity of existing or anticipated future wildlife and habitat would not be altered under the No Action Alternative.

5.7.3.2 Proposed Action

Construction. Construction of the Proposed Action would have no significant impact on wildlife and habitat. The JAHVH campus does not contain any natural habitat that supports wildlife outside of incidental occurrences of gray squirrels, songbirds, insects, and the Cuban anole.

Management actions during construction would include preserving, relocating or replanting palms and any other ornamental plants, as necessary to accommodate the Proposed Action. Any replanted vegetation would be native to the area and require low-level maintenance. To the extent practicable, any newly planted vegetation will comply with the "Hillsborough County, Florida, *Approved Tree and Hedge Materials Lists*" (Appendix I).

Therefore, direct, short-term, none-to-negligible adverse impacts would occur during construction of the Proposed Action.

Operation. Operation of the Proposed Action will have no significant impact on wildlife and habitat. As previously described, the JAHVH campus does not contain habitat for or the presence of regulated wildlife. Accordingly, no resources are present that could be impacted during operation of the Proposed Action. During operation, landscaped areas will be maintained to provide habitat for common urban wildlife.

Therefore, direct, long-term, none-to-negligible adverse impacts would occur during operation of the Proposed Action.

5.8 Floodplains, Wetlands and Coastal Zone Management

Floodplains are the low, flat, periodically flooded lands adjacent to rivers, lakes, and oceans. The regulatory floodplain is generally viewed as all lands that could be reached by flood waters of a 100-year storm event. Wetlands are lands where saturation with water is the dominant factor determining the nature of soil development and the types of plant and animal communities living in the soil and on its surface. The coastal

management zone is the area along a waterfront where development activities are regulated under the Coastal Zone Management Act (CZMA) of 1972.

5.8.1 Regulatory Requirements

Wetlands. Wetland impacts as a result of activities at the JAHVH would be regulated by the SWFWMD and the U.S. Army Corps of Engineers (USACE). Applications for activities resulting in wetland impacts must demonstrate avoidance and minimization of these impacts within the proposed design, and any adverse impacts to wetlands must be mitigated.

Floodplains. FEMA has the responsibility to delineate major floodplains in support of the National Flood Insurance Program. As part of the effort, FEMA defines the base flood resulting from a storm having a 1 percent probability of occurring in any one year. These areas are commonly referred to as the 100-year floodplain. Areas located within floodplains are subject to FEMA National Floodplain Insurance Program requirements. Areas with a 0.2 percent probability of occurring in any one year are referred to as the 500-year floodplain. The VA recommends all new buildings to be located outside of the 500-year floodplain.

Coastal Zone Management. If a state with an approved coastal management program determines that an activity conducted by or on behalf of the federal government is inconsistent with the requirements of its approved program, the federal agency may not proceed with the activity, unless full consistency with the state's program is prohibited by federal law. The CZMA federal consistency provisions address the need for federal agencies to consider state and territorial coastal management policies when carrying out federal projects and programs.

The Florida Coastal Management Program (FCMP) was approved by the National Oceanic and Atmospheric Administration (NOAA) in 1981 and is codified at Chapter 380, Part II, F.S. The State of Florida's coastal zone includes the area encompassed by the state's 67 counties and its territorial seas. The FCMP consists of a network of 24 Florida Statutes administered by eight state agencies and five water management districts. Prior to construction of the Proposed Action, details of the Proposed Action need to be submitted to the Florida Clearinghouse for a review of the project's consistency with the FCMP. Continued concurrence will be based on the activities' compliance with FCMP authorities, including federal and state monitoring of the activities to ensure their continued conformance, and the adequate resolution of any issues identified during subsequent regulatory reviews. The state's final concurrence of the project's consistency with the FCMP will be determined during the environmental permitting process, in accordance with Section 373.428, Florida Statutes.

5.8.2 Existing Conditions

Floodplains. Approximately 23.3 acres of the JAHVH campus is within the FEMA 100-year floodplain, at elevation 36.8 feet (NGVD) or less.

However, the New South Bed Tower footprint is located within Flood Zone X, which is outside of the 100-year flood zone, according to the FEMA FIRM Panels 12057C0210H and 12057C0216H (effective date August 28, 2008) (Figure 10). Additionally, the New

South Bed Tower footprint is located outside of the 500-year floodplain. However, the proposed Satellite CUP is located within the 100-year floodplain.

As previously described, the current elevation of the area for the proposed New South Bed Tower ranges from 39-41 feet above mean sea level (amsl), and 36 feet amsl for the Satellite CUP area.

Wetlands. As previously described in Section 5.7, Wildlife and Habitat, there are no wetlands, lakes, or rivers on the JAHVH campus (Figure 11). The surrounding landscape is a mix of residential, commercial, and industrial land uses.

Coastal Zone Management. The entire state of Florida is located within a designated coastal zone (NOAA, 2011). On June 17, 2015, Mabbett submitted details of the Proposed Action to the Florida Clearinghouse for review; on June 18, 2015, the Florida Clearinghouse issued an email stating that the Proposed Action is consistent with the FCMP (Appendix D). The Florida Clearinghouse email also indicated that continued concurrence will be based on the activities' compliance with FCMP authorities, including federal and state monitoring of the activities to ensure their continued conformance, and the adequate resolution of any issues identified during subsequent regulatory reviews. The state's final concurrence of the project's consistency with the FCMP will be determined during the environmental permitting process, in accordance with Section 373.428, Florida Statutes.

5.8.3 Environmental Impacts

5.8.3.1 No Action Alternative

The No Action Alternative will have no significant impact on wetlands, floodplains, or a coastal zone management area. Existing conditions at the JAHVH will remain unchanged, and no construction will occur at the JAHVH under this alternative. Therefore, the No Action Alternative would result in no impacts to wetlands, floodplains, or a coastal zone management area.

5.8.3.2 Proposed Action

Construction. The Proposed Action will not result in a significant adverse impact to floodplains, wetlands, or coastal zone management.

Floodplains. The proposed New South Bed Tower would be constructed outside of the 100-year and 500-year floodplains. However, the Satellite CUP would be constructed within the 100-year floodplain. During construction, BMPs would be taken to avoid potential flooding impacts on the construction process; these include halting construction during predicted storm events anticipated to result in 100-year floods at the JAHVH campus; placing physical barriers (sandbags) around construction activities occurring in areas where the ground elevation is low enough to become flooded during less than 100-year flood events.

Additionally, the D-B team will design the Satellite CUP in a manner that prevents significant damage during a 100-year flood event; design considerations that could be applied include: suitable anchorage to prevent building flotation during a flood event, establishing a minimum protection elevation for the first floor of the structure, requiring

electrical outlets and mechanical equipment to be above the regulatory flood level, restrict the use of materials that deteriorate when wetted, and the use of a structural design that that can safely withstand the effects of water pressure and flood velocities. Flood protection could also be achieved by constructing the building on pilings or an elevated fill pad to raise the ground floor elevation to above the 100-year flood level.

Wetlands. The Proposed Action will not result in any impacts to wetlands, as there are no wetlands on site.

Coastal Zone Management. The Proposed Action will not result in any impacts to coastal zone management areas, as indicated in correspondence from the Florida Clearinghouse on June 18, 2015 (Appendix D). Additionally, continued coordination with FCMP will occur to ensure the Proposed Action will not result in actions contrary to the FCMP.

Therefore, direct, short-term, minimal-to-moderate adverse impacts to floodplains would occur during construction of the Proposed Action. Direct, short-term, none-to-negligible adverse impacts to wetlands and Coastal Zone Management would occur during construction of the Proposed Action.

Operation. Operation of the Proposed Action would have no significant impacts on floodplains, wetlands, or Coastal Zone Management. However, during operation of the Satellite CUP, the strategy for mitigating flood losses would consist of actions designed to assist staff in their preparatory and recovery responses to flood events. An emergency preparedness plan would be implemented to properly train staff in order to carry out contingency and emergency flood-proofing along with post-flood recovery actions.

Therefore, direct, long-term, minimal-to-moderate adverse impacts would occur during operation of the Satellite CUP because it is located within the 100-year floodplain. Operation of the Proposed Action would have direct, long-term, none-to-negligible adverse impacts on wetlands and Coastal Zone Management.

5.9 Socioeconomics

Socioeconomics is the basic attributes and resources associated with the human environment. Three fundamental socioeconomic indicators (i.e., population, housing, and economic activity) are the primary focus of this analysis.

Population size and demographics identify the population levels and changes to population levels of a region. Economic activity typically encompasses employment, personal income, and industrial or commercial growth. Data on employment might identify gross numbers of employees, employment by industry or trade, and unemployment trends. Data on personal income in a region can be used to compare the "before" and "after" effects of any jobs created or lost as a result of a proposed project. Data on industrial or commercial growth or growth in other sectors provide baseline and trendline information about the economic health of a region. Changes in demographic and economic conditions are typically accompanied by changes in other community components, such as housing availability and the provision of community services. Community services are discussed in Section 5.10. Environmental Justice is discussed in Section 16.

5.9.1 Regulatory Requirements

No specific regulations apply to evaluate socioeconomic impacts. Regulations related to Environmental Justice are discussed in Section 5.16.

5.9.2 Existing Conditions

The geographic area that includes the JAHVH campus and adjacent area in which a majority of the socioeconomic effects of a proposed project and alternatives would occur is the socioeconomic study area. For this analysis, the socioeconomic study area includes the census tract that encompasses the JAHVH campus (census tract 108.14), which is inclusive of the Proposed Action, and, where appropriate, the four census tracts immediately adjacent to the JAHVH campus (census tracts 108.15, 108.16, 108.05, 109). Comparative data for Hillsborough County (i.e., where JAHVH is located) and Florida are also provided, when appropriate.

Population. The population of the socioeconomic study area (census tract 108.14, 108.15, 108.16, 108.05, 109) in 2013 (most recent census population data available) was 18,601 persons, which represents 5.6% increase since 2010, and a 26.2% increase since 2000 (US Census, 2013). A similar population increase of 29% occurred within Hillsborough County, Florida from 2000 to 2013. The socioeconomic study area population accounts for 1.4% of the total population of Hillsborough County.

The civilian veterans population (18 years and over) was approximately 94,536 in Hillsborough County (2009-2013), representing an 11% increase since 2000 (US Census, 2013). Population data are presented in Table 7.

Table 7. Population Data, 2000, 2010, 2013

Geographic Area	Population			% Change (2000-2010)	% Change (2010-2013)	% Change (2000-2013)
	2000	2010	2013			
Socioeconomic Study Area	14,737	17,609	18,601	19%	6%	21%
Census Tract 108.14 (JAHVH campus)	2,656	2,331	3,177	-12%	36%	16%
Census Tract 108.15	1,814	1,592	2,023	-12%	27%	10%
Census Tract 108.16	4,083	3,583	4,537	-12%	27%	10%
Census Tract 108.05	3,643	4,943	4,572	36%	-8%	20%
Census Tract 109	2,541	5,160	4,292	103%	-17%	41%
Hillsborough County	998,948	1,229,226	1,291,578	23%	5%	23%

Source: US Census, 2013

Housing. In 2013 (most recent census housing data available), the socioeconomic study area had 6,423 housing units, of which 1,062 units were vacant (US Census, 2010). This represented a homeowner vacancy rate of 6.5% and an average rental vacancy rate of 15%. The average household size (i.e., average number of people per household) in the socioeconomic study area is 2.96 people, which is slightly higher than that of Hillsborough

County (2.6 people). See Table 8 for housing data within the JAHVH census tract 108.14, Hillsborough County, and for the entire state of Florida.

Table 8. Housing Data, 2013

Geographic Area	Total Units	Vacant Units	Homeowner Vacancy Rate	Average Household Size
Census Tract 108.14 (JAHVH)	1,593	380	31%	2.89
Hillsborough County	536,092	62,062	13%	2
Florida	18,801,310	1,568,778	17%	2

Source: US Census, 2013

Income. The estimated median household incomes in the socioeconomic study area ($19,245 in census tract 105.05, $26,924 in census tract 108.14, $20,875 in census tract 108.15, and $15,426 in census tract 108.16) were lower than those in Hillsborough County ($49,596). No data were available for census tract 109. Median monthly rents in the socioeconomic study area range from $674 to $841, which is slightly lower than $952 per month for Hillsborough County.

Economic Activity. The labor force within the socioeconomic study area is 7,340 people, of which 77% were employed within all labor categories. This is slightly lower than the 89% employment rate for all of Hillsborough County. Economic data are summarized in Table 9.

Table 9. Overview of Employment by Industry, 2009-2013

Employment Status	Hillsborough County, Florida	Census Tract 108.05, Hillsborough County, Florida	Census Tract 108.14, Hillsborough County, Florida	Census Tract 108.15, Hillsborough County, Florida	Census Tract 108.16, Hillsborough County, Florida	Census Tract 109, Hillsborough County, Florida
Population 16 years and over	995,811	3,006	2,379	1,424	3,256	4,292
In labor force	658,206	2,035	1,404	780	1,903	1,218
Civilian labor force	652,682	2,035	1,404	780	1,903	1,218
Employed	580,852	1,560	1,254	575	1,220	1,043
Unemployed	71,830	475	150	205	683	175
Armed Forces	5,524	0	0	0	0	0
Not in labor force	337,605	971	975	644	1,353	3,074
Percent Employed Persons in Labor Force (By Industry)						
Agriculture, forestry, fishing and hunting, and mining	1.30%	0.0%	0.0%	0.0%	0.0%	1.0%
Construction	6.30%	14.6%	2.8%	18.3%	10.7%	0.5%
Manufacturing	5.40%	2.2%	0.0%	2.3%	4.4%	0.0%
Wholesale trade	3.20%	3.0%	2.8%	0.0%	3.0%	0.0%
Retail trade	12.00%	12.8%	3.2%	16.5%	10.2%	24.4%
Transportation and warehousing, and utilities	4.50%	1.5%	4.4%	7.8%	0.0%	0.0%
Information	2.70%	0.0%	4.1%	0.0%	2.6%	2.1%

Employment Status	Hillsborough County, Florida	Census Tract 108.05, Hillsborough County, Florida	Census Tract 108.14, Hillsborough County, Florida	Census Tract 108.15, Hillsborough County, Florida	Census Tract 108.16, Hillsborough County, Florida	Census Tract 109, Hillsborough County, Florida
Finance and insurance, and real estate and rental and leasing	10.30%	8.3%	3.2%	6.1%	5.7%	0.0%
Professional, scientific, and management, and administrative and waste management services	13.40%	11.4%	4.2%	5.9%	9.5%	2.6%
Educational services, and health care and social assistance	21.60%	18.8%	20.8%	24.5%	25.1%	38.3%
Arts, entertainment, and recreation, and accommodation and food services	10.40%	19.2%	42.3%	9.0%	23.3%	28.1%
Other services, except public administration	4.80%	5.3%	7.9%	5.9%	5.6%	2.1%
Public administration	4.10%	2.9%	4.3%	3.7%	0.0%	1.0%

Source: US Census, 2013.

5.9.3 Environmental Impacts

Socioeconomic changes can occur when a proposed project directly or indirectly changes population, housing, and economic activity. A proposed project can result in significant adverse socioeconomic impacts if direct or indirect displacement of residential populations or existing businesses and institutions would occur, or if adverse effects on specific industries would result. Socioeconomic changes are disclosed if they would affect land use patterns, low-income populations, the availability of goods and services, or economic investment in a way that changes the socioeconomic character of the area.

Additionally, effects on the local economy can be assessed through construction expenditures. The magnitude of potential effects can vary greatly, depending on the location of a proposed project. For example, implementation of an action that creates 10 employment positions might go unnoticed in an urban area, but could have considerable effects in a rural region. If potential socioeconomic changes were to result in substantial shifts in population trends, local business volume, or employment or a decrease in regional spending or earning patterns, those effects would be considered adverse.

5.9.3.1 No Action Alternative

Under the No Action Alternative, socioeconomic conditions would not significantly change compared with current conditions. The level of employment within the socioeconomic area would not increase, as is anticipated for the Proposed Action. Therefore, if no other

development occurred in the socioeconomic area, a none-to-negligible adverse impact on socioeconomics would occur under the No Action Alternative, as no new employment opportunities would be created.

5.9.3.2 Proposed Action

Construction. Construction of the Proposed Action would have no significant impact on socioeconomics. The Proposed Action would benefit the local economy by providing temporary construction jobs. A daily average of approximately 205 construction workers will be needed over the estimated 29 month construction period. Special preference for potential job opportunities would be given to veterans and local qualified workers. The total estimated project construction cost is $98,000,000. Construction is anticipated to take 29 months and begin on May 1, 2016 and end October 1, 2018.

The Proposed Action would not directly displace any residents or business employees. The Proposed Action would be constructed inside the JAHVH property lines. No existing residential housing units, business establishments (commercial and industrial), or other institutions would be displaced. Additionally, the Proposed Action would not add or remove any off-site residential housing units, off-site commercial/industrial space, or any other inhabitable structures. The Proposed Action would not result in any other changes that would adversely affect conditions within a specific industry.

Construction of the Proposed Action would not result in indirect displacement of residences or businesses because it would not accelerate a trend in the area toward new uses or result in an increase to property values to a degree that it would indirectly displace local businesses or residents. Increases in local business volume and employment could be expected within the socioeconomic study area, due to expenditures from construction of the Proposed Action and local spending by construction workers on personal supplies. The use of local construction workers would result in increases in local sales volumes, payroll taxes, and purchases of goods and services in the local economy. It is likely the existing pool of construction workers in Hillsborough County or central western Florida would be adequate to meet the construction demands of the Proposed Action.

The Proposed Action would not result in indirect displacement of businesses because construction activities would not introduce trends that would make it difficult for businesses to remain in the area, or impair the economic viability of local businesses or industries. Similarly, the Proposed Action would not result in indirect displacement of residences because it would not introduce trends that would adversely affect residential uses, or increase property values to a degree that it would indirectly displace residents.

Therefore, direct, short-term, beneficial-and-not-significant impacts on socioeconomics would occur during construction of the Proposed Action.

Operation. Operation of the Proposed Action would have no significant impact on socioeconomics. The Proposed Action will not require hiring additional employees to staff and maintain the New South Bed Tower or Satellite CUP. Existing staffing levels are sufficient to serve any additional increase in the number of veterans seeking care at the JAHVH. However, the proposed increase in the number of available patient rooms would help to decrease wait times and improve level of care and service to patients within the

community. The Proposed Action would also improve the aesthetic appearance of the JAHVH campus, potentially maintaining or increasing property values of adjacent residences. Operation of the Proposed Action would not directly or indirectly displace any residents or businesses. The Proposed Action is not likely to increase or decrease the number of persons employed at other businesses outside of the JAHVH campus. Additionally, the increase in the number of patients and visitors at the JAHVH is not likely to increase or decrease spending by these additional persons at local businesses in the community.

Therefore, operation of the Proposed Action would result in direct, long-term, none-to-negligible impacts on socioeconomics at and in the vicinity of the JAHVH campus.

5.10 Community Services

Community services are services and facilities offered by cities, municipalities, quasi-public entities, and other groups for use by community members. Community services include emergency response, fire and rescue, law enforcement, hospital and medical, and public transportation. Community facilities include schools, libraries, child care, health care, and fire and police. The capacity of community services and facilities to support growth is generally regarded as essential to the social and economic health of an area. Consideration of a proposed project's effect on community services is important to determine if the action changes the demand for services and facilities.

This section focuses on the potential impact of the Proposed Action on schools, libraries, child care centers, health care facilities, and fire and police protection. Public transportation is discussed under Transportation, Traffic and Parking in Section 5.12. Public utility services provided to the community are discussed under Utilities in Section 5.13.

5.10.1 Existing Conditions

Schools. The JAHVH is located in Hillsborough County. The public school system is operated by Hillsborough County. The JAHVH is located within Hillsborough County School District "6". The nearest schools (including those within and immediately outside this district) include:

- Muller Elementary Magnet School, 13615 North 22nd Street
- Witter Elementary School, 10801 North 22nd Street
- Mosi Partnership Elementary School, 4801 East Fowler Avenue
- USF/Patel Partnership Elementary School, 11801 USF Bull Run Drive
- Pizzo Elementary School, 11701 USF Bull Run Drive
- Shaw Elementary School, 11311 North 15th Street
- Community Charter School of Excellence, 11602 North 15th Street
- Miles Elementary School, 317 East 12th Street
- West University Charter High School, 11602 North 15th Street

- Brooks Debartolo Collegiate High School, 10948 North Central High School
- Gates Senior High School, 15316 North Florida Avenue
- Chamberlain High School, 9401 North Boulevard
- Bower-Whitley Career Center, 13609 North 22nd Street

Police and Fire Departments. The JAHVH provides their own police service within the campus limits. Outside of the JAHVH campus, Hillsborough County provides fire rescue services. The nearest Hillsborough County fire station is Engine 14, which is located on 131st Avenue just west of the JAHVH. The City of Tampa Sherriff's office provides police services to this area of Hillsborough County; the Sheriff's office is located at 2008 E. 8th Avenue, Tampa, Florida, 33605. The City of Tampa police also provide policing service, if needed, to the JAHHV; the City of Tampa Police headquarters is located at 306 East Jackson Street, Tampa, Florida, 33602.

Libraries. Library services are provided by the Hillsborough County Public Library Cooperative. The nearest major public library is the North Tampa Branch Library, 8916 North Boulevard, Tampa, Florida, 33604.

Hospitals. There are numerous hospitals in the City and County providing a diversity of services ranging from general to specialist services. The nearest public hospital is the Florida Hospital, Tampa, located at 3100 East Fletcher Avenue, Tampa, Florida, 33613.

5.10.2 Environmental Impacts

A proposed project can affect community services due to direct or indirect effects on the capacity and provision of services by the associated community facilities (i.e., schools, libraries, child care centers, health care facilities, and fire and police stations). Direct effects would occur if a proposed project would physically eliminate, displace, or alter community facilities. Indirect effects would occur if a proposed project would cause a change in population that could create additional demand on the provision of community services that could not be met by the existing community facilities.

5.10.2.1 No Action Alternative

Under the No Action Alternative, existing community services and facilities would remain unchanged. However, the No Action Alternative would have a direct, long-term, minimal-to-moderate adverse impact on the quality of medical care available at the JAHVH to veterans and their eligible family members in central western Florida. This adverse impact would be the result of patient overcrowding and outdated mode of care available at the JAHVH.

5.10.2.2 Proposed Action

Construction. Construction of the Proposed Action would have no significant impact on community services. Construction could result in injuries to workers or trespassers, requiring additional response from local police and fire departments, and medical services by non-VA hospitals. These impacts would be managed by maintaining a safe work area, placing fencing around the construction area, and securing equipment at the end of the

work day to avoid theft. Therefore, construction of the Proposed Action would have a direct, short-term, none-to-negligible impact on community services.

Operation. Operation of the Proposed Action would have no significant impact on community services. However, the Proposed Action would provide direct improvements in the quality, accessibility, and modes of medical care available at the JAHVH. Operation of the Proposed Action would have no impact on all other community services, including medical care available to non-veterans, as well as schools, police and fire protection, libraries, or other community-based service programs. There would be no displacement or increases of any populations, including school-aged children, to result in change in demand on school resources. The JAHVH police department would continue to operate normally during construction and operation, and would not be required to modify its operations or staffing levels to account for the Proposed Action. The fire department would not be required to modify its operations or staffing levels to account for the Proposed Action.

Therefore, operation of the Proposed Action would have a direct, long-term, beneficial-and-not-significant impact on the quality of medical services available to veterans and their eligible family members in central western Florida, but none-to-negligible adverse impact on all other community services.

5.11 Solid Waste and Hazardous Materials

Solid waste management primarily relates to the availability of systems and landfills to support a population's short-term and long-term needs. Hazardous materials are substances that pose a threat to human health or the environment. Substances that might be of concern include the following:

- Heavy metals
- VOCs
- Semi-volatile organic compounds (SVOCs)
- Methane
- Polychlorinated biphenyls (PCBs)
- Pesticides
- Polychlorinated dibenzodioxins and dibenzofurans (commonly referred to as dioxins)
- Hazardous wastes.

5.11.1 Regulatory Requirements

Hazardous materials and wastes are regulated in Florida by the FDEP. On February 12, 1985, Florida received final authorization from the USEPA to administer its own hazardous waste management and regulatory program under the Resource Conservation and Recovery Act (RCRA). The FDEP Hazardous Waste Regulation Section is responsible for implementing the hazardous waste regulatory portion of RCRA. The

FDEP also regulates underground storage tanks and solid waste disposal facilities in Florida.

5.11.2 Existing Conditions

As part of the SEA, a Limited Phase 2 Environmental Site Assessment (Phase 2 ESA) within the proposed Bed Tower expansion area was performed in general conformance with the scope and limitations of ASTM Standard Practice E1903-11 (Mabbett, 2015) (Appendix I).

The Limited Phase 2 ESA provided quantitative analytical soil quality data within the planned development area. Limited Phase 2 ESA activities included a review of an environmental database report, an interview with the JAHVH Green Environmental Management System (GEMS) Coordinator (Ms. Victoria Cockrell), site reconnaissance, geophysical survey for subsurface utilities, and subsurface sample collection, analysis and reporting.

During the Limited Phase 2 ESA, Ms. Cockrell confirmed there are no underground storage tanks (USTs) within the footprint of the Proposed Action (Mabbett, 2015). Additionally, no evidence of subsurface anomalies resembling underground storage tanks were observed during the subsurface geophysical survey. Consistent with previous findings reported in the 2010 EA, the Limited Phase 2 ESA confirmed there were no recognized environmental conditions (RECs) identified within the subject property during the review of the environmental database report; the site visit performed on January 9, 2015; or during the subsurface investigation on January 19, 2015. A copy of the Limited Phase 2 ESA is provided in Appendix I.

Consistent with prior findings reported in the 2010 EA, the JAHVH is listed as a small quantity generator of hazardous waste, which includes various laboratory and medical waste generated from patient tests. The VA has defined programs for collecting, handling, and disposal of this waste. Hazardous waste is delivered to a state or federally regulated hazardous waste management facility; a management facility permitted, licensed, or registered by a state; or a facility that uses, reuses, or legitimately recycles hazardous waste.

Following the 2010 EA, the only notable environmental incident at the JAHVH occurred on January 12, 2015, when approximately 1,400 gallons of diesel fuel was released from the diesel fuel tank that serves the JAHVH main generators. The JAHVH staff contacted FDEP, and JAHVH hired a remediation contractor to delineate and remediate fuel-contaminated soil. Additionally, groundwater monitoring wells were installed to assess whether the fuel release impacted groundwater. The location of the release was not within the footprint of the proposed New South Bed Tower or the Satellite CUP. Accordingly, the release will not have an impact on the health and safety of construction workers, staff, patients, or visitors at the JAHVH.

Asbestos. The JAHVH currently maintains an *Asbestos Operations and Maintenance Program*, dated December 2011, which establishes the policy governing identification, control, maintenance, removal, and disposal of all Asbestos-Containing Material (ACM) potentially present at the JAHVH and its Outpatient locations.

As described in the 2010 EA, the results of an asbestos survey performed in 2007 indicated the presence of asbestos at Building 1, Building 2, Building 30, Building 32, and Building 39. Material found to contain asbestos included:

- Asbestos sprayed fireproofing
- Asbestos vinyl tiles and mastic
- Asbestos thermal insulation

According to the JAHVH GEMS Coordinator, there is ACM present in the main hospital in Building 1, in the research area in Building 2. The ACM is mainly located on the ground floor, 1st and 2nd floors with smaller amounts scattered in the rest of the building. All of these materials were reported to be in good condition during the survey and any abatement or removal has/has not been required. According to the GEMS Coordinator, the ACM reports and drawings are updated quarterly.

Other Solid Waste and Hazardous Materials. The JAHVH has a current Hazardous Materials and Waste Management Program (JAHVH Hospital Policy Memorandum No. 138018, August 2012) (see Appendix A). This Program was developed to establish written policies and procedures to be followed in order to protect patients, visitors, hospital personnel, and the environment in general from the potential hazards related to hazardous materials and waste. This is achieved by assuring that all hazardous materials and waste are properly managed at the time of entry into the JAHVH, and/or from the point of generation within the JAHVH, to the point of final disposal.

Ms. Cockrell indicated there are no hazardous materials currently used or stored within the footprint of the proposed New South Bed Tower or Satellite CUP. Ms. Cockrell stated that the JAHVH is registered with USEPA as a Small Quantity Generator of hazardous waste, including waste from hazardous medicines, lab waste, engineering shop chemical waste and miscellaneous items from other services. All hazardous wastes generated at the facility are managed and disposed in designated hazardous waste storage containers and locations. All hazardous waste disposal is documented and managed by Ms. Cockrell's office. There have been no reported or reportable releases of hazardous materials at the JAHVH campus. JAHVH contracts with Earthsmart for off-site transport and disposal of hazardous materials generated at the JAHVH for medical treatments.

The JAHVH does not have a solid waste management facility on site. There is no solid waste and sanitation infrastructure within or immediately adjacent to the JAHVH. Solid wastes generated at the JAHVH are disposed of in designated bins and dumpsters. The JAHVH contracts Earthsmart for off-site transportation and disposal of these solid wastes at appropriate EPA-approved disposal facilities.

5.11.3 Environmental Impacts

A proposed action would have a significant effect on solid waste if the following were to occur: exceed capacity of a utility, violate a permit condition, or violate an approved plan for a solid waste utility.

Effects on hazardous materials and wastes are assessed by evaluating the degree to which a proposed action could cause worker, resident, or visitor exposure to hazardous

materials; whether the Proposed Action would lead to noncompliance with applicable Federal or state regulations or increase the amounts generated or procured beyond current waste management procedures and capacities; and whether the Proposed Action would disturb a hazardous waste site, create a hazardous waste site, or contribute to a hazardous waste site resulting in adverse effects on human health or the environment.

A proposed action could have a significant effect with respect to hazardous materials if the following were to occur:

- Noncompliance with applicable Federal and state regulations
- Disturbance or creation of contaminated sites resulting in substantial adverse effects on human health or the environment
- Inability to accommodate management policies, procedures, and handling capacities, impacting fuel management.

Hazardous materials might contaminate a site through several pathways:

- Present in soil, groundwater, soil vapor, or buildings and structures as the residue of current or past uses
- Imported to the site as fill or grading material over the years
- Migrate to the site from offsite areas as a result of an upgradient source
- Incorporated in onsite buildings and structures.

A direct impact is an immediate consequence to the environmental or construction program as a result of the proposed project. For this proposed project, direct impacts would include encountering existing contamination or generating regulated materials during site preparation and operation of the New South Bed Tower.

An indirect impact related to hazardous materials and wastes would occur when the proposed project has the potential to affect existing contamination or produce additional sources or contamination or waste materials. Beneficial impacts would include addressing contamination encountered during the construction in accordance with state or Federal regulations.

5.11.3.1 No Action Alternative

Under the No Action Alternative, existing solid waste and hazardous materials conditions at the JAHVH would remain unchanged, as discussed in Section 5.11.2.

5.11.3.2 Proposed Action

Construction. Construction of the Proposed Action would have no significant impact on solid waste or hazardous materials. Construction of the Proposed Action would have direct, short-term, minimal-to-moderate adverse impacts associated with the generation of construction debris and demolition waste. These wastes would be segregated by material type (e.g. metals, wood, concrete), staged within the JAHVH campus, and then transported and disposed at an appropriate off-site landfill by private waste haulers in accordance with the JAHVH's existing solid waste management plan.

Construction of the Proposed Action would result in the removal of up to 8,860 YD^3 of soil and the removal of trees, landscaping brick walls, paving, curbs and gutters, lighting poles, and utility lines. These material would be reused or recycled to the extent practicable at the JAHVH. Additionally, in accordance with EO 13423 and EO 13524, recyclable construction waste would be diverted to appropriate recycling facilities. All soil removed that cannot be reused on site would be transported to a facility for reuse as fill or daily cover.

Elements of the proposed construction could result in the short-term generation and transportation of hazardous substances, petroleum products, or hazardous waste, if these materials are encountered during construction.

During construction, spills or leaks of petroleum products might result from operation of construction equipment or during refueling of the equipment. In the event a release or contamination encountered during construction, the construction contractor would notify the JAHVH, and the JAHVH would perform the required notifications to FDEP. Contaminated media (e.g., soil and groundwater) would be characterized and properly disposed off-site at a facility licensed to accept contaminated material for treatment or disposal. The construction contractor would develop a plan for the temporary locations and procedures for staging and handling contaminated and non-contaminated soils.

Excavation dewatering may be necessary to complete the Proposed Action. In the event that it is, a project discharge permit from FDEP would be required. A chemical analysis would verify the water quality of any encountered groundwater and surface stormwater runoff. Based on the chemical analysis results, excess groundwater and surface stormwater runoff, upon meeting the established acceptable water quality parameter levels, would be discharged to the municipal sewers. Non-compliant water would be containerized and disposed off-site at a licensed disposal facility.

Asbestos. Ms. Cockrell indicated that the A/E contractor would be required to provide an Asbestos Management Plan consistent with the existing JAHVH ACM Management Plan prior to connecting the proposed New South Bed Tower to Building 1, which would require abatement or removal of Building 1 asbestos prior to construction. An Abatement Plan would specify the means and methods for abatement or collection of asbestos, would be prepared by contractor selected by the JAHVH, and would be submitted to the EPCHC for approval prior to any abatement work. Any asbestos removed would be disposed of properly by a licensed contractor on behalf of the JAHVH.

Therefore, construction of the Proposed Action would have direct, short-term, minimal-to-moderate adverse impacts associated with the generation of construction debris and demolition waste.

Operations. Operation of the Proposed Action would have no significant impact on solid wastes or hazardous materials generated at the JAHVH. Operation of the Proposed Action will not significantly alter the quantities, characteristics, or management procedures of solid wastes and hazardous materials currently generated and managed by the JAHVH GEMS Coordinator. Operation of the Proposed Action will not change the small quantity generator status at the JAHVH. Solid waste generated during operation of the Proposed Action would continue to be managed under the current Hazardous

Materials and Waste Management Program (JAHVH Hospital Policy Memorandum No. 138018, August 2012) (see Appendix A). A waste hauler would continue to be contracted by JAHVH to transport and dispose of solid and hazardous wastes at an appropriate off-site disposal facility.

Therefore, operation of the Proposed Action would have direct, long-term, none-to-negligible impacts on solid waste and hazardous materials management at the JAHVH.

5.12 Traffic, Transportation and Parking

This section includes an analysis of the proposed project on following impact areas:

- Traffic Flow and Operating Conditions
- Pedestrian Facilities
- Parking Conditions
- Transportation Conditions During Construction of the proposed project

5.12.1 Regulatory Requirements

Bruce B. Downs Boulevard (County Road 581) is a Hillsborough County roadway. Hillsborough County Development Services requires a Driveway Connection Permit for new connections between driveways and adjacent roadways owned by Hillsborough County, and for any improvements such as new curb cuts for entrances and any acceleration-deceleration lanes for construction access or future use. Right-of-Way Use permitting may be required for utility connections to facilities within the adjacent public rights-of-way. Additionally, Hillsborough County requires a Maintenance of Traffic (MOT) plan prior to and during construction.

5.12.2 Existing Conditions

Traffic. The main entrance to the JAHVH is along Bruce B. Downs Boulevard. There is not a traffic light or separate turn lane for vehicles entering or exiting the JAHVH from this primary entrance. The main entrance does not have traffic signal at its intersection with Bruce B. Downs Boulevard. Two secondary access roads are present along East 131st Street; there is a traffic signal along East 131st Street at both access roads. Another secondary access road is present approximately 300 feet south of the main entrance along Bruce B. Downs Boulevard; this access way is named Richard Silver Way. There is no turn lane or traffic signal at the intersection of Richard Silver Way and Bruce B. Downs Boulevard. Richard Silver Way is the primary road for vehicles traveling within the JAHVH campus to access the new parking garage.

According to a traffic study performed at the JAHVH, the average daily traffic (ADT) on Bruce B. Downs Boulevard for the northbound and southbound approaches was 23,060 and 24,602 vehicles per day, respectively (URS, 2014). A copy of the 2014 traffic study is provided in Appendix I. A total of 2,946 daily vehicles traveled on the eastbound and westbound approaches of Richard Silver Way. Approximately 50,608 vehicles enter the intersection on an average weekday.

Based on an analysis of 12 vehicles crashes from 2009-2014, the intersection between the main entrance and Bruce B. Downs Boulevard appears to have sufficient sustained vehicular demand to require a traffic signal. Accordingly, the Traffic Study recommended that a traffic signal at this intersection be added as part of the new proposed bed tower upgrade (URS, 2014). A new traffic signal is not part of the Proposed Action.

Once on the JAVHA campus, vehicles travel along asphalt-paved two-way access roads. From the main entrance, vehicles may travel to the traffic circle in front of Build 1 for valet parking, or self-park in the Diamond lot adjacent to the entry road, or drive past the Diamond lot to the new 1,510-space parking garage in the southwest corner of the facility.

Pedestrians traveling to and from parking lots or the parking garage use marked pedestrian sidewalks to reach their desired destination within the JAHVH.

Pedestrians also use the elevated pedestrian bridge that crosses above Bruce B. Downs Boulevard and connects Building 1 to the USF campus (on the east side of Bruce B. Downs Boulevard).

Transportation. Public transportation is provided by the Hillsborough Area Regional Transit Authority (HART). HART busses 5, 18, and 57 make designated stops along the northern or eastern borders of the JAHVH, either along Bruce B. Downs Boulevard or East 131st Street. Pedestrians may enter the JAHVH near these stops, then walk within the campus.

Parking. As previously described, the JAHVH has parking capacity for 2,382 vehicles. This includes the new parking garage (1,510 spaces), and existing asphalt-paved parking lots within the JAHVH campus.

5.12.3 Environmental Impacts

Significant adverse impacts on traffic operations, transportation systems, and parking could occur if any of the following would occur as a result of the proposed project:

- Result in the increase of traffic volumes and decrease in travel speeds on roadways
- Increase the demand for or reduce the supply of parking spaces with no provisions for accommodating the resulting parking deficiencies
- Conflict with planned transportation projects in the project area.

5.12.3.1 No Action Alternative

Under the No Action Alternative, the existing transportation and traffic infrastructure would remain unchanged. None of the long-term, direct, beneficial-and-not-significant improvements to traffic (vehicle flow) within the JAHVH would be made, nor would the new main entrance and signage at Richard Silver Way be created. However, the No Action Alternative would avoid the direct, short-term, minimal-to-moderate adverse impacts to traffic, and the direct, long-term, minimal-to-moderate adverse impacts on parking associated with constructing and operating the Proposed Action.

5.12.3.2 Proposed Action

Construction. Construction of the Proposed Action would have no significant impact on traffic, transportation, and parking. Construction for the Proposed Action is anticipated to last approximately 29 months (May 1, 2016 to October 1, 2018). The Diamond parking lot and the Opal valet lot would be permanently closed, but the new parking garage at the JAHVH has sufficient capacity for these lost parking spaces, and valet services would continue uninterrupted; valet-parked cars would be located at an existing lot near Building 38.

The existing main entrance and access roadway would be closed, but Richard Silver Way would become the new main entrance; upgrades to this new entrance would be made during the construction phase, including new entrance signage. A new traffic signal has been suggested for the new entrance, but a new signal is not part of the Proposed Action. If the traffic signal is installed, it likely would be located at the intersection of Richard Silver Way and Bruce B. Downs Boulevard.

There would be no impact to public transportation routes or accessibility to existing bus stops along East 131St or Bruce B. Downs Boulevard. No sidewalks would be closed.

Partial demolition and renovation of the existing pedestrian bridge linking JAHVH to the USF College of Medicine would be required to facilitate continuous operation of the bridge, construction of the New South Bed Tower, and connection of the bridge to the New South Bed Tower. However, construction of a stair and elevator near the JAHVH property line will allow pedestrians to continue using the remaining portion of the pedestrian bridge during construction of the New South Bed Tower. The stair and elevator would be incorporated into the final design of the New South Bed Tower.

Therefore, direct, short-term, minimal-to-moderate adverse impacts would occur to traffic, transportation, and parking during construction.

Operation. Operation of the Proposed Action would have no significant impact on traffic, transportation, and parking. The Proposed Action would create a new main entrance to the facility at Richard Silver Way. The new entrance will include new signage at Richard Silver Way, allowing patients and visitors to more readily identify both the facility and the entrance way. Utilizing Richard Silver Way as the main entrance also improves traffic within the JAHVH facility by creating a more direct route to the JAHVH parking garage. Richard Silver Way is a straight roadway from Bruce B. Downs Boulevard to the JAHVH parking garage; vehicles would no longer have to wind through the facility roadways to reach the garage. Although the Proposed Action will result in the permanent loss of parking spaces in the Diamond and Opal lots, the existing JAHVH parking garage has sufficient parking capacity, and future parking capacity would be managed as part of longer-term parking upgrades, as previously described.

The Proposed Action would not require any change in public transportation bus service in the study area and, consequently, would not no impact on public transit.

Therefore, operation of the Proposed Action would result in direct, long-term, beneficial-and-not-significant impacts by improving traffic flow entering and exiting the JAHVH, as

well as improving traffic flow within the JAHVH. Operation of the Proposed Action would have direct, long-term, none-to-negligible impact on transportation and parking.

5.13 Utilities

This section assesses the potential impact of the Proposed Action on electrical power supply distribution system, natural gas, and steam, solid waste and sanitation, water supply and sewer infrastructure, and telecommunications systems. Discussion in this section provides a brief overview of each service component that occurs in proximity to the project site and that might be reasonably impacted by implementation of the Proposed Action.

5.13.1 Existing Conditions

Existing conditions for utilities at the JAHVH were described in the 2010 EA. The utility conditions have not substantively changed since then. A brief overview of utilities is provided below.

Water and Sanitary Sewer Infrastructure. The JAHVH is serviced by connections to sanitary and potable water lines owned, operated and maintained by City of Tampa. There are three potable water connections along Bruce B. Downs Boulevard and 131st Avenue. Potable water is distributed to four separate zones within the JAHVH. There are five wastewater connections and four separate zones along Bruce B. Downs Boulevard and 131st Avenue.

Stormwater Infrastructure. The JAHVH is located within the Duck Pond Watershed, which is a closed basin serving an extensive drainage area surrounding the JAHVH campus.

Stormwater from impervious surfaces drains into one of three on-site drainage basins located in the south and southwestern portions of the facility. Two stormwater basins are present along the southern portion of the facility; these are identified as the "Pearl Lot" basins. An overflow weir is present on the south side of the basins; stormwater overflow drains through the weir into an off-site concrete-lined surface water drainage channel running parallel to the southern border of JAHVH campus. The third drainage basin is located beneath the JAHVH parking garage. Stormwater from the parking garage is directed to this basin and treated using exfiltration via subsurface tanks (located under the parking garage), which is a stormwater management practice commonly used in urban areas in central and south Florida.

Electrical Supply. Electricity is supplied by Tampa Electric Company. The current JAVHH electrical load is approximately 11.25 MVA.

Telecommunications Infrastructure. Telecommunications services are provided by Verizon. Cables owned by Verizon enter the site from Bruce B. Downs Boulevard and continues underground to a pipe basement in Building 1. The duct bank was installed in approximately 1970 and contains two manholes. This feed contains both copper and fiber optic cabling. Once inside the pipe basement, the Verizon feed is routed to an old building entrance room where it is then spliced and fed to the Telephone Room.

There is a secondary feed from Bright House Networks entering the Building 1 from the north near the existing nursing home. The feed enters the site from 131st Street. This feed contains fiber optic cabling that provides data and cable television service.

The campus phone system serves the facility using a NEC 2400 IPX UMG phone system. The system operates through a PBX fiber backbone located in the existing telephone room. The computer room servers are connected through the fiber data backbone. The existing equipment has capacity to support the renovations. The existing bed tower and nursing home are supported by the existing telephone switch. In addition, the JAHVH campus provides voice and data support to the current lease space.

5.13.2 Environmental Impacts

Impacts on utilities are evaluated for their potential to disrupt or improve existing levels of service and create additional needs for those utilities. An effect could be significant if the proposed project resulted in any of the following:

- Exceeded capacity of a utility
- A long-term interruption of the utility
- A violation of a permit condition
- A violation of an approved plan for that utility

5.13.2.1 No Action Alternative

Under the No Action Alternative, the existing utility infrastructure would not change. Existing infrastructure is capable of serving the needs of the JAHVH as long as utilization does not significantly increase beyond current conditions. Routine maintenance to existing infrastructure would continue to ensure services are not interrupted.

5.13.2.2 Proposed Action

Construction. Construction of the Proposed Action would have no significant impact on utilities.

Mechanical (HVAC chilled water), plumbing, and fire protection (fire mains) would have to be modified, re-routed, and/or newly installed for service to the New South Bed Tower.

Water distribution and fire protection systems will be designed in accordance with FDEP regulations, pursuant to Chapters 62-555, F.A.C. or the utility provider's requirements, whichever is more stringent. Any proposed sanitary sewer collection system improvements will be designed in compliance with FDEP regulations, Chapter 62-604, F.A.C. or the utility provider's requirements, whichever is more stringent. This will insure uninterrupted water and fire protection services during construction and operation.

Wastewater. No new connection would be required to the 16-inch diameter City of Tampa FM sewer line along Bruce B. Downs Boulevard. Consistent with the 2008 Site Infrastructure Report (HOK, 2008), the recommendations to connect the proposed New South Bed Tower to the existing 8-inch FM along the southeast corner of the JAHVH remain. A lift station would need to be designed along with the New South Bed Tower to allow for the sanitary sewer conveyance to the FM. In addition, as described in the 2008

Site Infrastructure Utility Report, an investigation into the existing Pump Stations 1 and 2 would need to be conducted to determine if the increases in system head from the new pump station would require changes to the existing pump stations.

As part of the new "Mission Critical Facility" requirements, a minimum of four days of sewer storage is required to be provided in case of an emergency when the off-site utilities are unavailable. The D-B team will need to coordinate with the facility owner to develop the criteria for specific on-site sanitary sewer storage requirements to accommodate an emergency or natural disaster event.

***Potable Water Supply*.** The 2008 Site Infrastructure Report states that the current system is sufficiently sized to handle the new building addition, but there are concerns regarding the fire flow and residual system pressures (HOK, 2008). The demand analysis developed by the Mechanical, Plumbing, and Electrical Engineer would confirm deficiencies, if any, and propose improvements to building fire and pump systems.

As part of the new "Mission Critical Facility" requirements, a minimum of four days of potable water storage is required to be provided in case of an emergency when the off-site utilities are unavailable. The D-B team will need to coordinate with the facility owner to develop the criteria for specific on-site potable water and fire protection storage requirements to accommodate an emergency or natural disaster event. The JAHVH campus currently has a well that has been permitted for an average daily use of 17,670 GPD with a peak usage of 208,000 GPD. The D-B team will need to determine, in coordination with the facility owners, the limitations, if any, for operating the well system to meet the emergency parameters.

***Electrical Supply*.** The New South Bed Tower would add approximately 2.50 MVA of load, and additional chiller capacity will add approximately 1.50 MVA to the JAHVH system. This 4.0 MVA of new demand would cause the total JAHVH campus load of 11.25 MVA to increase to 15.25 MVA.

The Proposed Action would have no significant adverse impact on the continuity of electrical supply during construction or operation because the current electrical supply would not be shut down during construction, and the additional electrical supply will meet the needs of the Proposed Action. Furthermore, a new 2-MW emergency backup generator would be installed to provide electrical capacity to support the New South Bed Tower in the event of a facility-wide outage. The additional electrical capacity provided by the new generator would ensure there is sufficient capacity for the entire JAHVH facility.

***Stormwater Infrastructure*.** No stormwater deficiencies were identified at the JAHVH campus. As part of the New South Bed Tower construction, the existing drainage south of Building 30 would need to be modified to allow for the construction of the New South Bed Tower. Overall drainage patterns would remain, minimizing the need for large-scale stormwater redesign.

***Telecommunications*.** Verizon has sufficient capacity to support the Proposed Action without requiring a loss in current or future service to the JAHVH or other customers. However, during the design and construction phase of the Proposed Action, the Verizon

feed would need to be relocated from the footprint of the proposed New South Bed Tower. This will be done by the D-B team in coordination with Verizon.

The JAHVH has a large computer room with enough capacity to support the renovations. From the new facilities, fiber would need to be provided to the Computer Room. There are no spare conduits in this area of the JAHVH campus. Smaller conduits would need to be installed for the data fiber feed in the pipe tunnel.

The campus phone system has capacity to support the renovations. However, expansion of existing equipment would be required.

Therefore, construction of the Proposed Action would have a direct, short-term, none-to-negligible impact on utilities.

Operations. Operation of the Proposed Action would have no significant impact on utilities. The operation of the infrastructure improvements installed during construction of the Proposed Action (as previously described) would not result in loss or decrease in utility service to other buildings at the JAHVH or to other utility customers outside of the JAHVH campus. Therefore, operation of the Proposed Action would have a direct, long-term, none-to-negligible impact on utilities.

5.14 Alternative Energy Sources

Executive Order 13693, Planning for Federal Sustainability in the Next Decade, states that Federal agencies should:

- Ensure regional agency actions consider and are consistent with, sustainability and climate preparedness priorities of States, local governments, and tribal communities where agency facilities are located;
- Include in the planning for new buildings or leases cost-effective strategies to optimize sustainable space usage and consideration of existing community transportation planning and infrastructure, including access to public transit;
- Ensure that all new construction, major renovation, repair, and alteration of agency buildings includes appropriate design and deployment of fleet charging infrastructure;
- Include the incorporation of climate-resilient design and management elements into the operation, repair, and renovation of existing agency buildings and the design of new agency buildings;
- Ensure, beginning in fiscal year 2020 and thereafter, that all new construction of Federal buildings greater than 5,000 gross square feet that enters the planning process is designed to achieve energy net-zero and, where feasible, water or waste net-zero by fiscal year 2030.

5.14.1 Existing Conditions

The existing JAHVH facilities do not currently utilize on-site alternative energy sources, such as wind or solar power, to generate electricity. The majority of buildings on campus were constructed in the 1970's and lack energy-efficient design, including the main hospital in Building 1, which was constructed in 1972.

5.14.2 Environmental Impacts

Environmental impacts are evaluated on the basis of whether a project utilizes alternative energy sources and is designed to be energy efficient. An effect could be significant if the proposed project excluded alternative energy sources or energy-efficient design, resulting in increased operating costs, inefficient energy use, and non-sustainable operations.

5.14.2.1 No Action Alternative

Under the No Action Alternative, the existing facility infrastructure would remain unchanged. Building 1 would continue to serve as the main hospital and no energy-efficiency upgrades would be made. The amount of energy used at the facility would not increase, but the efficiency of energy use would not be improved.

5.14.2.2 Proposed Action

Construction. Construction of the Proposed Action would have no significant impact on alternative energy sources. Construction activities would generate greenhouse-gas emissions, as previously described in Section 5.3 - Air Quality. However, the contribution of greenhouse-gas emissions from construction is considered negligible within Hillsborough County, the state of Florida, or the US. Construction of the Proposed Action would not utilize energy obtained from on-site solar or wind sources. Construction of the Proposed Action would not significantly impact energy consumption or the transmission of energy. Therefore, construction of the Proposed Action would have a direct, short-term, none-to-negligible adverse impact on alternative energy sources.

Operation. Operation of the Proposed Action would have no significant impact on alternative energy sources. The VA has set a goal of obtaining a U.S. Green Business Council LEED Silver rating for the Proposed Action. The LEED criteria relevant to the New South Bed Tower are listed in Appendix A of the DOPAA (HDR, 2015), and for the Satellite CUP in Appendix B of the DOPAA (HDR, 2015). Although the Proposed Action would not utilize on-site renewable energy sources (e.g. solar or wind) and would utilize more energy than the No Action Alternative, the Proposed Action would utilize energy more efficiently than the No Action Alternative. However, the overall operational energy efficiency improvements of the Proposed Action are minimal. Additionally, operation of the Proposed Action would not significantly impact energy consumption or the transmission of energy.

Therefore, operation of the Proposed Action would have a direct, long-term, none-to-negligible adverse impact on alternative energy sources.

5.15 Noise

Sound is defined as a particular auditory effect produced by a given source, for example the sound of rain on a rooftop. Noise and sound share the same physical aspects, but noise is considered a disturbance while sound is defined as an auditory effect. Noise is defined as any sound that is undesirable because it interferes with communication, is intense enough to damage hearing, or is otherwise annoying. Noise can be intermittent or continuous, steady or impulsive, and can involve any number of sources and

frequencies. It can be readily identifiable or generally nondescript. Human response to increased sound levels varies according to the source type, characteristics of the sound source, distance between source and receptor, receptor sensitivity, and time of day. How an individual responds to the sound source determines if the sound is viewed as music to one's ears or as annoying noise. Affected receptors are specific (e.g., schools, churches, or hospitals) or broad areas (e.g., nature preserves or designated districts) in which occasional or persistent sensitivity to noise above ambient levels exists.

5.15.1 Noise Metrics and Regulations

Although human response to noise varies, measurements can be calculated with instruments that record instantaneous sound levels in decibels. A-weighted decibel (dBA) is used to characterize sound levels that can be sensed by the human ear. "A-weighted" denotes the adjustment of the frequency range to what the average human ear can sense when experiencing an audible event. The threshold of audibility is generally within the range of 10 to 25 dBA for normal hearing. The threshold of pain occurs at the upper boundary of audibility, which is normally in the region of 135 dBA (USEPA 1981). Table 10 compares common sounds and shows how they rank in terms of the effects of hearing. As shown, a whisper is normally 30 dBA and considered to be very quiet while an air conditioning unit 20 feet away is considered an intrusive noise at 60 dBA. Noise levels can become annoying at 80 dBA and very annoying at 90 dBA. To the human ear, a change in noise levels of 5 dBA is generally discernible while a change of 10 dBA is perceived by the human ear as either a doubling or halving of noise levels (USEPA 1981).

Table 10. Common Sound Noise Levels and Effects

Noise Level (dBA)	Common Sounds	Effect
10	Just audible	Negligible
30	Soft whisper (15 feet)	Very quiet
50	Light auto traffic (100 feet)	Quiet
60	Air conditioning unit (20 feet)	Intrusive
70	Noisy restaurant or freeway traffic	Telephone use difficult
80	Alarm clock (2 feet)	Annoying
90	Heavy truck (50 feet) or city traffic	Very annoying, Hearing damage (8 hours)
100	Garbage truck	Very annoying
110	Pile drivers	Strained vocal effort
120	Jet takeoff (200 feet) or auto horn (3 feet)	Maximum vocal effort
140	Carrier deck jet operation	Painfully loud

Source: USEPA, 1981

Construction Sound Levels. Demolition and construction work can cause an increase in sound that is well above the ambient level. A variety of sounds are emitted from loaders, trucks, saws, and other work equipment. As previously described, Table 10 lists noise levels associated with common types of construction equipment. Construction equipment usually exceeds the ambient sound levels by 20 to 25 dBA in an urban environment and up to 30 to 35 dBA in a quiet suburban area.

To predict how construction activities would potentially impact adjacent populations, noise from the probable work areas was estimated (Table 11). Additionally, construction will typically involve several pieces of equipment in use simultaneously. The cumulative noise

from the construction equipment, during the busiest day, was estimated to determine the total impact of noise from construction activities at a given distance based on typical construction equipment.

Examples of expected construction noise, during daytime hours, at specified distances are shown in Table 11. These sound levels were predicted at 50-1,500 feet from the source of the noise. These sound levels were estimated by calculating the anticipated noise from several pieces of equipment and then estimating the decrease in noise levels at various distances from the source of the noise. Noise is a logarithmic function and is not calculated as simply an additive function.

Table 11. Estimated Noise Levels from Construction and Demolition Activities

Distance from Construction Equipment (Feet)	Predicted Noise Level (dBA)
50	90 to 94
100	84 to 88
150	81 to 85
200	78 to 82
400	72 to 76
800	66 to 70
1,500	Less than 64

Federal Regulations. Sound levels, resulting from multiple single events, are used to characterize noise effects from vehicle activity and are measured in Day-Night Average Sound level (DNl). The DNl noise metric incorporates a "penalty" for nighttime noise events to account for increased annoyance. DNl is the energy-averaged sound level measured over a 24-hour period, with a 10-dBA penalty assigned to noise events occurring between 10:00 p.m. and 7:00 a.m. DNl values are obtained by averaging sound exposure levels over a given 24-hour period. DNl is the designated metric of the Federal government for measuring noise and its impacts on humans. According to the Federal Aviation Administration (FAA) and the U.S. Department of Housing and Urban Development criteria, residential units and other noise-sensitive land uses are "clearly unacceptable" in areas where the noise exposure exceeds 75 dBA DNl, "normally unacceptable" in regions exposed to noise between 65 and 75 dBA DNl, and "normally acceptable" in areas exposed to noise of 65 dBA DNl or less. The Federal Interagency Committee on Noise developed land use compatibility guidelines for noise in terms of DNl (FICON 1992). For outdoor activities, the USEPA recommends 55 dBA DNl as the sound level below which there is no reason to suspect that the general population would be at risk from any of the effects of noise (USEPA, 1974).

Department of Veterans Affairs Environmental Protection Specifications. The VA also has prepared requirements to mitigate noise in the VA specification "Environmental Protection" controlling noise levels (VA, 2009). Section 01568, EP-5 (F) of VA's environmental protection specifications includes specific mitigating actions that would be required of any development on VA property to reduce construction-related noise. In particular, construction activities would mainly be limited to between the hours of 7:30 AM and 6:00 PM and would abide by Hillsborough County noise ordinances, unless otherwise permitted. In addition, all equipment is required to be properly maintained and muffled

such that noise levels of specific equipment would not exceed the predicted noise levels shown in Table 12. VA also requires monitoring of noise levels at least once every 5 days during high-noise generating construction activities.

County Regulations. The Hillsborough County Noise Control Ordinates (Section 36-429, Ord. No. 12-12, §1, 6-27-2012), went into effect in June 2012, regulates noise emissions in Hillsborough County. The ordinance limits construction activity for which Hillsborough County has issued all applicable permits, or which is exempt from County permits, provided such activity occurs between 6:00 AM and 8:30 PM.

Table 12. Predicted Noise Levels for Construction Equipment

Construction Category and Equipment	Predicted Noise Level at 50 feet (dBA)
Clearing and Grading	
Bulldozer	80
Grader	80–93
Truck	83–94
Roller	73–75
Excavation	
Backhoe	72–93
Jackhammer	81–98
Construction	
Concrete mixer	74–88
Welding generator	71–82
Crane	75–87
Paver	86–88

Source: USEPA, 1971

5.15.2 Existing Conditions

The ambient noise environment for the project site is mainly affected by a high population density and high traffic volumes, which are approximately 50,000 vehicles per day on Bruce B. Downs Boulevard (URS, 2014). Natural sounds from wind, the movement of vegetation, birds, and other natural sources of sound are present but do not have a substantial effect on existing noise environment; transportation noise sources and fixed-equipment noise sources are the dominant noise sources. Existing noise sources in this area include vehicle traffic on Bruce B. Downs Boulevard and East 131st Street.

In an urban environment, noise levels change from moment to moment. Transportation sources, such as automobiles, trucks, trains, and aircraft, are the principal sources of noise in the urban environment. Along major transportation corridors, noise levels can reach 80 dBA DNI, while along arterial streets, noise levels typically range from 65 to 70 dBA DNI (USEPA 1974). Noise-sensitive receptors in the vicinity of the project site include the JAHVH and residences adjacent to the southern and western borders of the facility.

5.15.3 Environmental Impacts

Noise impact analyses typically evaluate potential changes to the existing noise environment that would result from implementation of a proposed project. Potential changes in the acoustical environment can be beneficial (i.e. if they reduce the number of sensitive receptors exposed to unacceptable noise levels or reduce the ambient sound

level), negligible (i.e. if the total number of sensitive receptors to unacceptable noise levels is essentially unchanged), or adverse (i.e. if they result in increased sound exposure to unacceptable noise levels or ultimately increase the ambient sound level). Projected noise effects were evaluated qualitatively for the alternatives considered and calculated based on proposed construction equipment.

5.15.3.1 No Action Alternative

Under the No Action Alternative, existing noise conditions would remain the same as currently exist. There would be no planned activities causing a significant increase or decrease to current or future noise levels. The No Action Alternative would not involve any new construction, thereby avoiding the direct, short-term, minimal-to-moderate adverse impact on noise generated during construction activities.

5.15.3.2 Proposed Action

Construction. Construction of the Proposed Action would have no significant impact on noise. The Proposed Action would consist of demolition and construction activities for the proposed New South Bed Tower and infrastructure improvements. Noise from these activities would vary depending on the type of equipment being used, the area the action would occur in, and the distance from the noise source.

The noise from construction equipment would be localized, short-term, and intermittent during machinery operations. Heavy construction equipment would be used periodically during construction; therefore, noise levels from the equipment would fluctuate throughout the day. The proposed construction would be expected to result in noise levels comparable to those indicated in Tables 11 and 12.

Receptors potentially affected by increased noise levels from construction activities would include JAHVH patients, visitors and staff, and residential populations abutting the southern and western borders of the JAHVH campus. These individuals would be expected to experience noise levels comparable to those indicated in Tables 11 and 12, depending on their proximity to construction activities. However, the noise impact would be minimal to the residential population located adjacent to the western border of the JAHVH campus because this population is located approximately 1,200 feet away from the Proposed Action construction area and due to the presence of a permanent 12-foot high privacy barrier located along the western border of the JAHVH campus. Noise levels would be anticipated to be approximately less than 64 dBA. The residential population located along the southern boundary of the JAHVH campus is located approximately 800 feet from the Proposed Action construction area, and may be accustomed to noise generated from the on-going construction of the USF dormitory building (expected to be completed in 2016). Noise levels associated with construction would be anticipated to be approximately 66-70 dBA.

Increases in ambient noise levels would occur intermittently during the construction period. The additional traffic resulting from construction vehicles would likely cause minor increases in noise levels on noise-sensitive populations adjacent to the roadways; however, these impacts would not be considered significant because they are short-term

and similar to existing ambient background noise levels generated by traffic along Bruce B. Downs Boulevard.

Typical construction techniques used provide a minimum of approximately 20 dBA of noise reduction from outdoor to indoor areas. However, noise generation would last only for the duration of construction activities and would be isolated to normal working hours (i.e. between 7:30 AM and 6:00 PM). Construction noise would diminish as the distance between the receptor and the construction activities increased. Generally, noise levels decrease by approximately 6 dBA for every doubling of distance for point sources (such as a single piece of construction equipment), and approximately 3 dBA for every doubling of distance for line sources (such as a stream of motor vehicles on a busy road at a distance). In addition, construction equipment would be equipped with appropriate sound-muffling devices (i.e., from the original equipment manufacturer or better), and would be maintained in good operating condition at all times.

Construction workers would be working in close proximity to construction equipment and could be exposed to noise levels above 90 dBA. This is above the permissible noise exposure level defined by the Occupational Safety and Health Administration (OSHA). These levels would be reduced to permissible levels through feasible administrative or engineering controls, and/or the use of BMPs such as the use of hearing protection equipment. Therefore, noise effects on construction workers would be in compliance with applicable OSHA standards.

Noise Management Measures. During construction, the D-B team will provide sound-deadening devices on equipment and take noise abatement measures necessary to comply with VA's noise control requirements (VA 2009) and specified in the D-B contract, consisting of, but not limited to, the following noise management BMPs:

- Use shields or other physical barriers to restrict noise transmission.
- Provide soundproof housings or enclosures for noise producing machinery.
- Use efficient silencers on equipment air intakes.
- Use efficient intake and exhaust mufflers on internal combustion engines that are maintained so equipment performs below noise levels specified.
- Line hoppers and storage bins with sound deadening material.
- Conduct truck loading, unloading, and hauling operations so that noise is kept to a minimum.

Therefore, implementing these noise management measures would result in construction noise not exceeding a direct, short-term, minimal-to-moderate adverse impact on nearby residential receptors, JAHVH staff/patients/visitors, and construction workers.

Operations. Operation of the Proposed Action would have no significant impact on noise. New operational noise sources include the 2-MW emergency backup generator, which would be operated during routine monthly maintenance. This noise level would be similar to existing JAHVH generators operating at the JAHVH campus. Other operational noises generated by the Proposed Action would also be similar to noises currently emitted

from medical activities, including sirens from arriving ambulances. However, the number of arriving ambulances is not expected to increase as a result of the Proposed Action.

Therefore, direct, long-term, none-to-negligible adverse impacts would occur during operation of the Proposed Action.

5.16 Environmental Justice

EO 12898, Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations, stipulates that "…each Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations…". According to the USEPA, "Environmental justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies" (USEPA 2013). The USEPA defines minority populations as those identified in census data as Hispanic or Latino, Black or African American, Asian, Native Hawaiian and other Pacific Islander, some other race, or two or more races. Low-income populations are families that are living below the U.S. poverty threshold; for the 2012 Census, the US Census Bureau determined that $23,283 was the weighted average poverty threshold for a four-person household.

EO 13045, Protection of Children from Environmental Health Risks and Safety Risks, states that each Federal agency "(a) shall make it a high priority to identify and assess environmental health risks and safety risks that may disproportionately affect children; and (b) shall ensure that its policies, programs, activities, and standards address disproportionate risks to children that result from environmental health risks or safety risks." Children (youths) are defined as populations 16 years of age or younger.

Details on community demographics were analyzed using Federal census tract data. Census tracts are small, uniquely numbered areas that typically encompass an average of 4,000 inhabitants; tract inhabitants can range from 0 to as many as 8,000 inhabitants. Census tract data can be used to indicate population statistics for each tract, or combined to provide population statistics for an entire county, state, or the country. The US Census Bureau collects, maintains, and publishes demographics data for the populations within each tract.

Potential Environmental Justice Areas are based on the 2010 US Census block groups of 250 to 500 households that had populations that met or exceeded at least one of the following statistical thresholds:

- At least 51 percent of the population in an urban area reported to be members of minority groups;
- At least 33.8 percent of the population in a rural area reported to be members of minority groups; and
- At least 23.59 percent of the population in an urban or rural area had household incomes below the Federal poverty level.

5.16.1 Existing Conditions

To establish existing conditions to assess environmental justice impacts, the SEA examined income, poverty status, ethnicity, and race at the census-tract level in comparison to the United States, Florida State, and Hillsborough County averages. The JAHVH is located entirely within Census Tract 108.14 (US Census 2013).

The minority population within Census Tract 108.14 is approximately 53%, which is a greater than the approximate minority population levels for Hillsborough County (29%), Florida State (25%), and the United States (22%) (US Census 2013). The percentage of families below the poverty level within Census Tract 108.14 was approximately 45%, which is greater than those in Hillsborough County (19%), Florida State (17%) and the United States (14.5%) (US Census 2013).

Based on these data, the area including and immediately surrounding the JAHVH would be designated as a potential Environmental Justice Area. See Table 13 for a summary of Environmental Justice data.

Table 13. Environmental Justice Summary Data

Characteristic	Census Tract 108.14	Hillsborough County	Florida	United States
Total Population	2,331	1,291,578	19,600,311	308,745,538
Population under 16 years of age	52.8%	23.4%	20.6%	21.2
Percentage White	46.0%	75.6%	78.1%	63.7
Percentage Black or African American	41.4%	17.4%	16.7%	12.2
Percentage American Indian & Alaska Native	0.3%	0.5%	0.5%	0.7
Percentage Asian	1.6%	3.9%	2.7%	4.7
Percentage Native Pacific Islander	0.1%	0.1%	0.1%	0.2
Percentage Some Other Race	6.9%	2.5%	1.9%	0.2
Percentage Two or More Races	3.7%	26.0%	23.6%	1.9
Percentage Hispanic or Latino	19.0%	0.5%	0.5%	16.3
Families below poverty level (percentage) (2007-2011)	26.5%	16.8%	16.3%	10.5
Median Household Income (2009-2013)	$26,924	$49,596	$46,956	$52,752

Source: US Census, 2010, 2013

5.16.2 Environmental Impacts

To have an impact under EO 12898, the impact must have an adverse effect on human health or environment, and the impact must occur in a way that has a disproportionate impact on minority and low-income populations. Environmental justice impacts would be considered significant if a proposed action would result in disproportionate impacts on minority, low-income, or youth populations.

5.16.2.1 No Action Alternative

Under the No Action Alternative, impacts on minority or low-income populations could occur due to the loss in potential construction jobs and increased facility staffing needs. Additionally, the No Action Alternative could result in a decrease in quality of medical service, leading to a decrease in patient populations and the staffing levels needed to

support a smaller patient population at the JAHVH. Therefore, the No Action Alternative would not offer the direct, short- and long-term, beneficial-and-not-significant impacts that would occur under the Proposed Action.

5.16.2.2 Proposed Action

Construction. Construction of the Proposed Action would have no significant impact on Environmental Justice. Construction of the Proposed Action will require local construction workers and increased spending by construction worker at local businesses. Construction of the Proposed Action is estimated to require a daily average of 205 workers throughout the estimated 29 month construction period.

Census Tract 108.14 generally reported higher percentages of minority populations and low-income and youth populations in Census Tract 108.14 than those reported for the county and state's total populations (Table 13). Despite the higher percentage of minority residents in Census Tract 108.14, construction of the Proposed Action would not cause minority populations to experience disproportionately high adverse human health or environmental effects as compared to the general population because construction activities would be temporary and transitory in nature. Impacts from construction of the Proposed Action would be similar to those resulting from routine construction activities in Hillsborough County; construction impacts would be similar to the on-going demolition and construction of the new USF dormitory located adjacent to the southern boundary of the JAHVH facility. Construction noise and dust from the proposed activities would temporarily affect adjacent areas, including residents located south of JAHVH facility; however, construction activities would only be temporary.

Therefore, construction of the Proposed Action is anticipated to have a direct, short-term, beneficial-and-not-significant impact on environmental justice due to the need for local construction workers and increased spending by construction contractors at local businesses.

Operation. Operation of the Proposed Action will have no significant impact on Environmental Justice. The proposed project would not cause minority, low-income, or youth populations to experience disproportionately high adverse human health or environmental effects. Operation of the Proposed Action is not anticipated to require hiring of new employees to staff the new facility. Therefore, operation of the Proposed Action is anticipated to have a direct, long-term, none-to-negligible impact on employment opportunities for residents within Census Tract 108.14, as previously described under Socioeconomics in Section 5.9.

5.17 Cumulative Impacts

CEQ regulations stipulate that the cumulative effects analysis should consider the potential environmental effects resulting from "the incremental impacts of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency or person undertakes such other actions" (40 CFR 1508.7). Cumulative impacts can result from individually minor, but collectively substantial, actions undertaken over a period of time by various agencies (Federal, state, and local) or individuals. Informed decision making is served by consideration of cumulative impacts resulting from

projects that are proposed, under construction, recently completed, or anticipated to be implemented in the reasonably foreseeable future.

Past activities are those actions that occurred within the geographic scope of cumulative effects that have shaped the current environmental conditions of the project site. For many resource areas, the effects of past actions are now part of the existing environment and are included in the description of the affected environment.

The scope of the cumulative effects analysis involves the timeframe and geographic extent to which effects could be expected to occur, and a description of the resources that could be cumulatively affected. The geographic Region of Influence (ROI) is an important consideration when discussing cumulative effects from construction and operations. For the purposes of this analysis, the ROI was determined to be the JAHVH campus and the adjacent blocks. An effort was undertaken to identify other projects for evaluation in the context of the cumulative effects analysis. This was further developed through review of public documents and information gained from the coordination with various applicable agencies.

5.17.1 Projects with the Potential for Cumulative Effects

The following projects were identified as having the potential for cumulative effects:

- University of South Florida, Tampa campus dormitory construction and operation adjacent to the southern boundary of the JAHVH campus.
- The Hillsborough County Imagine 2040 Long Range Transportation Plan for a light rail line to run alongside the Bruce B. Downs Boulevard, with a proposed transit stop near the JAHVH Pedestrian Bridge to serve JAHVH and the University of South Florida, Tampa campus (Hillsborough County, 2015).
- The JAHVH 2025 Master Plan, Section Four, calls for the next envisioned major expansion project to be the North Bed Tower (HDR, 2013). The North Bed Tower would connect to the South Bed Tower and complete the connection to Building 1's new "Main Street" on its three levels.
- Additionally, the JAHVH 2025 Master Plan calls for a second 1,500-car garage to be located on the existing Romeo surface parking lot site, north of 131st Street, with a pedestrian bridge connection to the proposed North Bed Tower (HDR, 2013).

5.17.2 Cumulative Effects Analysis

Table 14 summarizes potential cumulative impacts on resources from construction and operation of the Proposed Action when combined with other past, present, and reasonable foreseeable future activities. Coordination with the Hillsborough County Center for Development Services would occur to limit any potential future impacts.

Table 14. Summary of Cumulative Impacts on Resources

Resource	Past Actions	Current Background Activities/ Conditions	Proposed Project	Known Future Actions	Cumulative Effects
Aesthetics	The area is a highly developed urban environment with no significant natural features, landmark structures, or distinct buildings.	Majority of the pedestrian view is of the JAHVH facility.	Pedestrian view of natural or built features primarily along Bruce B. Downs Blvd. would not be limited during construction and operation.	Construction of USF dormitory.	As the pedestrian view is already dominated by current development, additional structures would have no significant impact on aesthetics.
Land Use and Zoning	Past development practices have extensively modified land use.	A mix of residential and commercial (medical) districts.	No change in overall land use or zoning.	No changes to current zoning.	No significant impact on land use or zoning.
Air quality	Hillsborough County is a non-attainment area for SO_2	Emissions from vehicles and stationary sources at JAHVH and from surrounding facilities owned by others.	Potential dust generation during construction activities. No significant impact would result.	Additional construction activities and increases in the volume of traffic.	Cumulatively, construction and operation of future new facilities would have a none-to-negligible impact on regional air quality.
Cultural Resources	The JAHVH is not eligible for the NRHP and has no documented cultural resources. No nearby NRHP properties.	The presence and operation of the JAHVH has no significant impact.	No significant impact would result. A construction cultural resources protection plan would be implemented in the event cultural artifacts are discovered during construction.	General ongoing development may impact undocumented archaeological resources.	No significant impact on cultural resources.

Resource	Past Actions	Current Background Activities/ Conditions	Proposed Project	Known Future Actions	Cumulative Effects
Topography, Geology, and Soils	Extensive development throughout the area.	The presence and operation of the JAHVH has no significant effects.	Construction and operating will have no significant impact on bedrock, depth to bedrock, topography or soils.	Continued development of urban area with similar commercial or residential redevelopment.	No significant impact on topography, geology or soils.
Hydrology and Water Resources	The area is made up predominantly of impervious surfaces. Majority of rainfall is conveyed to the combined sewer system.	Pollution from residential, commercial and municipal sources.	No significant change to existing drainage patterns or water usage during construction or operation.	Continued development of the area and construction of additional commercial and residential redevelopment.	No significant impact on drainage patterns or water resources.
Wildlife and Habitat	Extensive development.	Wildlife in the area is limited because the area is highly urbanized. The site is primarily composed of buildings, parking lots, and landscaped areas, with limited suitable wildlife habitat.	No significant impacts on biological resources from construction and operation of the New South Bed Tower because there is no habitat for wildlife within the project footprint, and limited wildlife habitat on the JAHVH campus.	Limited impact on biological resources in highly urbanized area.	No significant impact on wildlife and habitat.
Floodplains, Wetlands, and Coastal Zone Management	Extensive development in floodplain.	Impervious surfaces in floodplain. Limited flooding protection.	No wetlands or CZM effects. Construct Satellite CUP base floor above 100-year floodplain.	Additional loss of floodplain storage.	No significant impact on long-term floodplain storage.

Resource	Past Actions	Current Background Activities/ Conditions	Proposed Project	Known Future Actions	Cumulative Effects
Socioeconomics	JAHVH contributes to the local economic community.	Continued support of the local community.	Minimal-to-moderate beneficial contribution to local construction industry and medical/support staff during operation. Not a significant impact.	Continued development of medical infrastructure. Minimal-to-moderate contribution to local construction and medical/support staff industry.	Cumulatively, construction and operation of future new facilities would have a none-to-negligible impact socio-economics.
Community Services	Operation of the JAHVH utilizes and supports community services. Community services have expanded to serve the entire community, including JAHVH.	Community services are capable of supporting the entire community, including JAHVH activities.	No significant impact on utilization of community services during construction or operation.	Potential increase in need community services if the surrounding population increases.	No significant impact on community services.
Solid Waste and Hazardous Materials	Reportable releases of petroleum have occurred on the property; releases were remediated and closed per state requirements.	Presence and operation of the JAHVH, including generation of solid waste and medically-related hazardous materials.	Small quantities of materials used and wastes generated from construction and operation. No significant impact from minimal increase in contribution of solid waste and hazardous material during operation of New South Bed Tower.	Future construction activities in the area would increase solid waste generated, but within levels that can be managed by current practices. No known increase in hazardous material generation.	No significant impact on the quantity of solid waste or hazardous materials.

Resource	Past Actions	Current Background Activities/ Conditions	Proposed Project	Known Future Actions	Cumulative Effects
Traffic, Transportation, and Parking	The property is bounded on two sides by major arterials (high-capacity urban roads).	Current high traffic levels due to high population density.	Construction and operation activities require loss of parking spaces within Diamond lot, but existing JAHVH campus has available capacity to account for this loss. Existing entrance to close; new entrance with improved visibility and dedicated turn lane will improve facility access.	Future development at the JAHVH campus could result in loss of additional on-site parking lots. Continued development of surrounding community would have no significant impact on traffic, transportation or parking at the JAHVH.	Cumulatively, current and future projects would have a beneficial-and-not-significant impact on traffic, transportation, and parking.
Utilities	Utilities and infrastructure developed to support the current facility.	JAHVH continues to use existing utilities.	No significant impact. Minimal-to-moderate impacts associated with utility relocation during construction; increased use of utilities during operation would have a none-to-negligible impact.	Utility improvements as municipal and private utility providers make routine upgrades to infrastructure systems.	Cumulatively, construction and operation of future new facilities would have a none-to-negligible impact on availability of utilities.
Noise	The area is primarily affected by a high population density and high traffic volumes.	High population density and high traffic volumes and very limited natural sounds.	Short-term noise impacts from construction.	Continued increase in population density and traffic volumes.	Population density and traffic volumes would remain high. No significant impact on noise.

Resource	Past Actions	Current Background Activities/ Conditions	Proposed Project	Known Future Actions	Cumulative Effects
Environmental Justice	Operation of JAHVH does not contribute to disproportionately high adverse human health or environmental effects.	The area is not identified as an Environmental Justice zone.	No disproportionately high adverse human health or environmental effects.	No disproportionately high adverse human health or environmental effects, but increased construction noise and traffic due to USF housing and increased JAHVH patient and visitor population.	Cumulatively, construction and operation of future new facilities would have a none-to-negligible impact on Environmental Justice.
Alternative Energy Sources	JAHVH does not utilize renewable energy resources.	JAHVH does not utilize renewable energy resources.	No impact on energy consumption or transmission. LEED Silver will reduce energy consumption. No renewable energy systems on JAHVH campus.	Additional infrastructure improvements will utilize non-renewable energy sources, but future systems are generally more efficient that current facilities. Future improvements may incorporate renewable energy sources.	No significant impact on alternative energy sources.
Potential for Generating Substantial Controversy	None.	None.	No known or anticipated issues among the JAHVH stakeholders, regulatory agencies, or the general public.	Future facility improvements and nearby improvements not likely to cause substantial controversy.	No significant impact on potential for generating substantial controversy.

5.17.3 Unavoidable Adverse Effects

Unavoidable adverse impacts would result from construction and operation of the Proposed Action; however, none of these impacts would be significant, and none exceed the none-to-negligible level.

Energy Resources. The use of nonrenewable resources during construction and operation of the Proposed Action is an unavoidable occurrence. Construction and operation of the Proposed Action would require the use of fossil fuels, a non-renewable

natural resource. Energy supplies, although relatively small, would be committed to the Proposed Action.

Construction. The cumulative impact from constructing the Proposed Action, in combination with potential future development, would be direct, short-term, none-to-negligible on energy resources. The amount of energy to be utilized during construction of the Proposed Action would be similar to standard industrial construction projects; the use of this energy will not decrease the amount of energy available for other current or potential future projects.

Operation. The cumulative impact from operating the Proposed Action, in combination with potential future development, would be long-term, direct, none-to-negligible on energy resources. The amount of energy to be utilized during operation of the Proposed Action would be similar to standard medical facilities, though the proposed New South Bed Tower incorporates energy-efficient designs (LEED silver) to use energy more efficiently than existing JAHVH buildings. Overall, the use of this energy during operations will not decrease the amount of energy available for potential future projects.

5.17.4 Compatibility of Proposed Project and Alternatives with the Objectives of Federal, Regional, State, and Local Land Use Plans, Policies, and Controls

As demonstrated in the analyses included in this SEA, construction and operation of the Proposed Action would conform to all applicable land use ordinances and policies, to the extent practicable.

5.17.5 Relationship Between the Short-Term Use of the Environment and Long-Term Productivity

Short-term uses of the biophysical components of the human environment include direct effects, usually related to construction activities that occur over a period of less than five years. Long-term uses of the human environment include those effects that occur over a period of more than five years, including permanent resource loss.

Construction. Construction of the Proposed Action is anticipated to take 29 months, from May 1, 2016 through October 1, 2018. During construction of the Proposed Action, there would be potential direct, short-term, none-to-negligible and minimal-to-moderate adverse impacts on the human environment. The minimal-to-moderate impacts from constructing the Proposed Action are related to aesthetics; air quality; geology and soils; hydrology and water resources; floodplains; solid waste and hazardous materials; traffic and parking; and noise. These impacts would cease once construction is complete, with the exception of the loss of parking. Construction of the Proposed Action would also have direct, short-term, beneficial-and-not significant impacts on socioeconomics and environmental justice, due to the need to hire local construction workers and potential spending on construction supplies from businesses within the JAHVH community.

During the time period for construction of the Proposed Action, the only other project with the potential for cumulative impacts is construction of the USF dormitory, which is expected to be completed and open for USF students in the summer or fall of 2016. The potential impacts from construction of the USF dormitory are anticipated to be similar to construction of the Proposed Action. Accordingly, the cumulative impacts from the

potential overlapping construction these two projects (Proposed Action and the USF dormitory) would not increase above direct, short-term, minimal-to-moderate adverse levels.

Construction of other proposed future development projects would also be anticipated to have direct, short-term, minimal-to-moderate adverse impacts. However, considered cumulatively and over the long-term, these construction-related impacts would ultimately decrease to a none-to-negligible adverse level because the adverse impacts would cease once construction ends and the area where the projects would occur is already highly developed, urbanized, and lacking in significant natural resources and features.

Operations. Operating the Proposed Action would help to ensure that the JAHVH has the necessary capacity and quality medical facilities to improve the quality of care to current and future veterans in the surrounding community. During operation of the Proposed Action, there would be no significant adverse impacts. Direct, long-term, minimal-to-moderate adverse impacts would result to floodplains, due to the location of the proposed Satellite CUP in the 100-year floodplain. Operation of the Proposed Action would also have direct, long-term, beneficial-and-not significant impacts on aesthetics, traffic, and community services (medical services).

Operation of other identified potential future projects is not anticipated to result in significant adverse impacts or the loss of any permanent resources. Accordingly, the cumulative adverse impacts from operating the Proposed Action in addition to those anticipated from future potential projects are not anticipated to be above none-to-negligible levels. However, the beneficial impacts from cumulative operations of potential future developments are anticipated to be at beneficial-and-not-significant levels relative to traffic, transportation, and parking.

5.17.6 Irreversible and Irretrievable Commitment of Resources

The irreversible environmental changes that would result from construction and operation of the Proposed Action involve the consumption of material resources and energy resources. The use of these resources is considered to be permanent.

Irreversible and irretrievable resource commitments are related to the use of non-renewable resources and the impacts that use of these resources would have on future generations. Irreversible effects primarily result from use or destruction of a specific resource that cannot be replaced within a reasonable timeframe (e.g. energy and minerals).

Material Resources. Material resources used for the construction of the Proposed Action include building materials, concrete and asphalt, and various material supplies that would be irreversibly lost. Most of the materials that would be consumed are not in short supply, would not limit other non-related construction activities, and therefore the consumption of these material resources has no significant adverse impact on availability of these resources for other projects.

Energy Resources. No significant impacts would be expected on energy resources used as a result of the construction and operation of the Proposed Action, though any energy resources consumed would be irretrievably lost. These include petroleum-based

products (e.g. gasoline and diesel) and electricity. Consumption of these energy resources would have no significant adverse impact on the availability of these resources throughout the community.

Human Resources. The use of human resources for construction and operation for the Proposed Action is considered an irretrievable loss, only in that it would preclude such personnel from engaging in other work activities. However, the use of human resources for the construction of the Proposed Action represents employment opportunities and is considered to be a direct, short-term, beneficial-and-not-significant impact on socioeconomics and Environmental Justice. Operation of the Proposed Action would not require new staffing and therefore would have a none-to-negligible adverse impact on socioeconomics and Environmental Justice. Cumulatively, the impacts on availability of human resources during construction or operation of potential future developments would be at the none-to-negligible adverse level.

5.18 Potential for Generating Substantial Controversy

There are no known or anticipated issues likely to generate substantial issues among JAHVH stakeholders, regulatory agencies, or the general public from the construction or operation of the Proposed Action. No significant adverse impacts from construction or operation of the Proposed Action on any of the Technical Resource Areas have been identified. No concerns regarding the construction or operation of the Proposed Action were raised during agency consultations in relation to the project description and the environmental review process, and no concerns were identified during a public meeting regarding the DOPAA on April 19, 2015. With respect to resources, no issues arose that are believed to create conflicts with humans or with the environment that would appear to be controversial. Accordingly, a detailed examination of the potential for generating substantial controversy has been omitted from this SEA.

5.19 VA Checklist for Project Compliance with Federal Legal Authorities

This checklist, provided at Table 15, has been completed as required by the VA to confirm that the VA will be in compliance with all requirements of Federal legal authorities that are applicable to the proposed action covered under this SEA.

Table 15. VA Checklist for Project Compliance with Federal Legal Authorities

Compliance Codes	
FI – Requires Further Investigation	
MR – Mitigation Required, Non Compliance Anticipated	
CA – Compliance Anticipated	
NA – Not Applicable	
Compliance Status	**Federal Legal Authority**
	Executive Orders
CA	EO 11988, Floodplain Management (100-year and 500-year)
NA	EO 11990, Protection of Wetlands
NA	EO 11987, Exotic Organisms
CA	EO 12088, Federal Compliance with Pollution Control Standards
CA	EO 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-income Populations.

Compliance Codes	
NA	EO 13006, Locating Federal Facilities on Historic Properties in Our Nation's Central Cities
CA	EO 13007, Indian Sacred Sites
CA	EO 13175, Indian Tribes
NA	EO 13287, Preserve America
CA	EO 13423, Strengthening Federal Environmental, Energy, and Transportation Management
CA	EO 13514, Federal Leadership in Environmental, Energy, and Economic Performance
	Federal Laws and Regulations
CA	Advisory Council on Historic Preservation Regulations, Protection of Historic and Cultural Properties (36 CFR 800)
CA	Clean Air Act (CAA)
NA	Coastal Barrier Resources Act (PL 93-523) (16 USC 3501 et seq)
CA	Coastal Zone Management Act (16 USC 1451 et. Seq.), amended by PL 101-508)
CA	Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)
CA	Determination of No Hazard to Air Navigation (FAA Advisory Circular 70/7460-1 K Change 2)
CA	Emergency Planning and Community Right-to-Know Act (EPCRA)
CA	Endangered Species Act (ESA) as amended (PL 93-205)
CA	Energy Independence and Security Act of 2007 (EISA) (high performance federal buildings and lighting)
CA	EPA Regulations on Determination of Reportable Quantities for Hazardous Substance (40 CFR 117)
NA	EPA Regulations on Discharge of Dredged or Fill Material into Navigable Waters (40 CFR 230)
NA	EPA Regulations on Polychlorinated Biphenyls Manufacturing, Processing, Distribution in Commerce and Use Prohibitions (40 CFR 761)
CA	EPA Regulations on the National Pollutant Discharge Elimination System (40 CFR 122)
NA	Farmland Protection Policy Act (FPCRA)
NA	Federal Environmental Pesticide Act (FEPCA)
NA	Federal Food, Drug and Cosmetic Act (FFDCA)
NA	Federal Insecticide, Fungicide and Rodenticide Act (FIFRA)
CA	Federal Water Pollution Control Act, Sec 313, as amended by Clean Water Act of 1977 (33 USC 1323) (see page 166-168)
NA	Food Quality Protection Act (FQPA)
NA	Marine Mammal Protection Act (MMPA)
NA	Migratory Bird Treaty Act (MBTA)
CA	National Environmental Policy Act (NEPA)
CA	National Historic Preservation Act (NHPA)
CA	Native American Graves Protection and Repatriation Act (NAGPRA)
CA	Noise Control Act of 1972
CA	Oil Pollution Act (OPA)
NA	Resource Conservation and Recovery Act (RCRA)
CA	Safe Drinking Water Act (SDWA), Sec 1447 (PL 93-523) (see pages 445-448)
CA	Spill Prevention, Control and Countermeasure Plans (SPCC)
CA	Toxic Substance Compliance Act
NA	Wild and Scenic Rivers Act (16 USC 1274 et seq.)

5.20 VA Checklist for Environmental Assessment

This checklist, provided at Table 16, has been completed as required by the VA to summarize environmental resources and their applicable project attributes considered in this SEA and the resulting environmental impacts for each environmental resource.

Table 16. VA Checklist for Environmental Assessment

Project Name	Supplemental Environmental Assessment for Bed Tower Expansion and Early Site Work, VAMC Tampa, FL
Project Site	VAMC Tampa, James A. Haley Medical Center 1300 Bruce B. Downs Boulevard, Tampa, FL
Consultant Responsible for Environmental Assessment	Mabbett & Associates, Inc. Contract Number: VA101F-12-D-0056 Task Order Number: VA101F-15-J-0065 awarded on December 18, 2014
DEFINITIONS:	
Short-term Impact (ST)	Short-term impacts are those that would occur only with respect to a particular activity, for a finite period, or only during the time required for construction or installation activities.
Long-term Impact (LT)	Long-term impacts are those that are more likely to be persistent and chronic.
Direct Impact (DI)	A direct impact is caused by an action and occurs around the same time at or near the location of the action.
Indirect Impact (IDI)	An indirect impact is caused by an action and might occur later in time or be farther removed in distance but still be a reasonably foreseeable outcome of the action.
Beneficial-and-not-significant	This impact represents an improvement in existing conditions and an Environmental Impact Statement (EIS) is not required.
None-to-negligible	None-to-negligible impact would be barely detectable and an EIS is not required for this impact.
Minimal-to-moderate	Minimal-to-moderate impact is a potential impact that is less than significant and would not require specific mitigation measures, other than those dictated by regulatory and permitting requirements and an EIS is not required for this impact.
Significant-if-not-mitigated	Significant-if-not-mitigated would require specific mitigation measures beyond those associated with permit requirements but an EIS is not required for this impact.
Significant-and-immitigable	Significant-and-immitigable impact would have to be evaluated in an EIS.
Adverse Impact	Adverse effect is one having unfavorable or undesirable outcomes on the manmade or natural environment.
Beneficial Impact	A beneficial effect is one having positive outcomes on the man-made or natural environment.
Instructions	• Please mark "LT" to indicate overall long-term impact of each resource during construction and operations. Also, please mark "ST' and "IDI" when applicable. • Please mark "X" in applicable cells for each resource below to indicate **presence** of applicable Project Attributes. Mark "NP" if Project Attribute is *Not Present.*

RESOURCE TOPIC	Project Attributes	Impact - No Action		Impact - Proposed Action	
		Construction	Operation	Construction	Operation
Aesthetics					
Impacts					
Beneficial-and-not-Significant					LT
None-to-negligible		LT	LT		
Minimal-to-moderate				ST	

RESOURCE TOPIC	Project Attributes	Impact - No Action		Impact - Proposed Action	
		Construction	Operation	Construction	Operation
Significant-if-not-mitigated					
Significant-and-immitigable					
Project Attributes					
Vegetation Removal	X				
Building Restoration	X				
Landscape Alteration	X				
Utility or Service Area Development	X				
Open Space Altered	NP				
Ground Improvement Amenities	NP				
Public Parks	NP				
Landmark Structures and Districts	NP				
Waterfront and View Corridors	NP				
Obstruction of Natural Resources	NP				
New Building Construction	X				
Land Use and Zoning					
Impacts					
Beneficial-and-not-Significant					
None-to-negligible		LT	LT	ST	LT
Minimal-to-moderate					
Significant-if-not-mitigated					
Significant-and-immitigable					
Project Attributes					
Encroachment on Existing Land Use	X				
Sewage-Waste Treatment Facility	X				
Change to Land Use Pattern	X				
Utilities	X				
Service and Operational	X				
Roads and Parking	X				
Hospital-Medical Facility	X				

RESOURCE TOPIC	Project Attributes	Impact - No Action		Impact - Proposed Action	
		Construction	Operation	Construction	Operation
Recreational	NP				
Laboratories-Clinics	X				
Ground Improvements	X				
Administrative Facility	X				
Cemetery					
Zoning	X				
Community-Based Plans	NP				
Air Quality					
Impacts					
Beneficial-and-not-Significant					
None-to-negligible		LT	LT		LT
Minimal-to-moderate				ST	
Significant-if-not-mitigated					
Significant-and-immitigable					
Project Attributes					
Ambient Air Quality	X				
The General Conformity Rule	X				
Presence of Odors	X				
Photochemical Oxidants	X				
Particulate Emissions	X				
Greenhouse Gas Emissions	X				
Attainment Area	X				
PSD and Title V Permits	X				
Fuel Burning	X				
Stationary Gasoline/Diesel tanks	X				
Incinerator	NP				
Ozone depleting refrigerants (sources may include chillers, freezers, refrigerators, water fountains, vending machines)	NP				

RESOURCE TOPIC	Project Attributes	Impact - No Action		Impact - Proposed Action	
		Construction	Operation	Construction	Operation
Cultural Resources					
Impacts					
Beneficial-and-not-Significant					
None-to-negligible		LT	LT	ST	LT
Minimal-to-moderate					
Significant-if-not-mitigated					
Significant-and-immitigable					
Project Attributes					
National Registry Property	NP				
Criteria of Adverse Effect	X				
Action Requires Tribal Coordination	X				
Action Requires SHPO Coordination	X				
Eligible Property	NP				
Architecturally Significant Property	NP				
Section 106 Report	NP				
Topography, Geology and Soils					
Impacts					
Beneficial-and-not-Significant					
None-to-negligible		LT	LT	ST (topography)	LT
Minimal-to-moderate				ST (geology and soils)	
Significant-if-not-mitigated					
Significant-and-immitigable					
Project Attributes					
Seismic Safety Building Codes and Standards	X				
Boulders and Ledge Outcrops	NP				
Farmland	NP				
Disturbance of Geology and Soils	X				
Storm Water and Sediments	X				
Dewatering	X				

RESOURCE TOPIC	Project Attributes	Impact - No Action		Impact - Proposed Action	
		Construction	Operation	Construction	Operation
Contaminated Soil	NP				
Contaminated Groundwater	NP				
Abandoned Underground Storage Tanks	NP				
Hydrology and Water Resources					
Impacts					
Beneficial-and-not-Significant					
None-to-negligible		LT	LT		LT
Minimal-to-moderate				ST	
Significant-if-not-mitigated					
Significant-and-immitigable					
Project Attributes					
Potential for Erosion and/or Sedimentation (NPDES)	X				
Alteration/Quality Change of Surface Water Drainage	X				
Potential for Contamination of Water Regime (From Hazardous/Toxic Wastes)	X				
Alteration/Quality Change of Groundwater Regime	X				
Wetlands					
Land disturbance of more than 1 acre	X				
Wildlife and Habitat					
Impacts					
Beneficial-and-not-Significant					
None-to-negligible		LT	LT	ST	LT
Minimal-to-moderate					
Significant-if-not-mitigated					

RESOURCE TOPIC	Project Attributes	Impact - No Action		Impact - Proposed Action	
		Construction	Operation	Construction	Operation
Significant-and-immitigable					
Project Attributes					
Presence of Endangered or Threatened Wildlife Species	NP				
Tree Removal	X				
Groundcover Removal	X				
Presence of Significant Wildlife	NP				
Floodplains, Wetlands and Coastal Zone Management					
Impacts					
Beneficial-and-not-Significant					
None-to-negligible		LT	LT	ST (wetlands and CZM)	LT (wetlands and CZM)
Minimal-to-moderate				ST (floodplains)	LT (floodplains)
Significant-if-not-mitigated					
Significant-and-immitigable					
Project Attributes					
100-Year Floodplain	X				
Coastal Zone Management Area	X				
500-Year Floodplain	X				
Critical Environmental Area of Wetlands	NP				
Critical Action (EO 11988)	X				
Socioeconomics					
Impacts					
Beneficial-and-not-Significant				ST	
None-to-negligible		LT	LT		LT
Minimal-to-moderate					
Significant-if-not-mitigated					
Significant-and-immitigable					

RESOURCE TOPIC	Project Attributes	Impact - No Action		Impact - Proposed Action	
		Construction	Operation	Construction	Operation
Project Attributes					
Reduction to Wages to Area	NP				
Local Purchase of Goods and Services	X				
Additional Wages Will be Available to Area	X				
Increase or Decrease in Direct Workforce	X				
Community Services					
Impacts					
Beneficial-and-not-Significant					LT (medical services)
None-to-negligible		LT	LT	ST	LT (all other services)
Minimal-to-moderate					
Significant-if-not-mitigated					
Significant-and-immitigable					
Project Attributes					
Alteration of Public Facilities	X				
Alteration of Public Services	X				
Alteration of Public Utilities	X				
Parks, Schools and Libraries	NP				
Child Care Centers and Health Care Centers	X				
Fire and police Protection	X				
Solid Waste and Hazardous Materials					
Impacts					
Beneficial-and-not-Significant					
None-to-negligible		LT	LT		LT
Minimal-to-moderate				ST	
Significant-if-not-mitigated					

RESOURCE TOPIC	Project Attributes	Impact - No Action		Impact - Proposed Action	
		Construction	Operation	Construction	Operation
Significant-and-immitigable					
Project Attributes					
Street Removal/Demolition	X				
Construction Site Stockpiling	X				
Bulk Operational Waste	X				
Earth and/or Rock Debris	X				
Concrete Debris	X				
Hazardous Waste	X				
PCB Containing Material	X				
Asbestos Containing Material	X				
Lead Containing Material	X				
Radioactive Waste	X				
Hazardous Material	X				
Traffic, Transportation and Parking					
Impacts					
Beneficial-and-not-Significant					LT (traffic)
None-to-negligible		LT	LT	ST (transport-ation)	LT (transportation and parking)
Minimal-to-moderate				ST (traffic and parking)	
Significant-if-not-mitigated					
Significant-and-immitigable					
Project Attributes					
Alteration of Public Transportation	X				
Alteration of Existing On-Site Roads or Parking	X				
Alteration of Facility Access Roads	X				
Construction of New Roads or Parking	X				
Utilities					
Impacts					

RESOURCE TOPIC	Project Attributes	Impact - No Action		Impact - Proposed Action	
		Construction	Operation	Construction	Operation
Beneficial-and-not-Significant					
None-to-negligible		LT	LT	ST	LT
Minimal-to-moderate					
Significant-if-not-mitigated					
Significant-and-immitigable					
Project Attributes					
Water System, Supply	X				
Incinerator	NP				
Storm Water Drainage	X				
Air Conditioning and Refrigeration	X				
Sanitary sewers	X				
Electrical	X				
Excavation	X				
Heat Generation	X				
Maintenance and Repair	X				
Chilled Water	X				
Steam and Condensate	X				
Underground Storage Tanks	X				
Telephone and Fiber Optic Cables	X				
Gas	X				
Drinking Water Storage, Distribution and Treatment	X				
Medical Gas System (Oxygen, Vacuum and Medical Air)	X				
Alternative Energy Sources					
Impacts					
Beneficial-and-not-Significant					
None-to-negligible		LT	LT	ST	LT
Minimal-to-moderate					
Significant-if-not-mitigated					
Significant-and-immitigable					

RESOURCE TOPIC	Project Attributes	Impact - No Action		Impact - Proposed Action	
		Construction	Operation	Construction	Operation
Project Attributes					
Solar Panels	NP				
Solar Heater	NP				
Geo-thermal	NP				
Wind Power	NP				
Noise					
Impacts					
Beneficial-and-not-Significant					
None-to-negligible		LT	LT		LT
Minimal-to-moderate				ST	
Significant-if-not-mitigated					
Significant-and-immitigable					
Project Attributes					
Utility Source Generation	X				
Operational	X				
Traffic	X				
Vibrations	X				
Construction	X				
Environmental Justice					
Impacts					
Beneficial-and-not-Significant				ST	
None-to-negligible		LT	LT		LT
Minimal-to-moderate					
Significant-if-not-mitigated					
Significant-and-immitigable					
Project Attributes					
Impact on Minority and Low Income Population Under EO 12898.	X				
Impact on Children Under EO 13045	X				
Cumulative Impacts					
Impacts					
Beneficial-and-not-Significant					LT (traffic, transportation, and parking)

RESOURCE TOPIC	Project Attributes	Impact - No Action		Impact - Proposed Action	
		Construction	Operation	Construction	Operation
None-to-negligible		LT	LT	LT (short-term impacts cease once construction ends)	LT (all other resource topics)
Minimal-to-moderate				ST	
Significant-if-not-mitigated					
Significant-and-immitigable					
Project Attributes					
The Geographic Region of Influence (ROI)	X				
Past and Current Projects	X				
Known Future Actions	X				
Potential for Generating Substantial Controversy					
Impacts					
Beneficial-and-not-Significant					
None-to-negligible		LT	LT	ST	LT
Minimal-to-moderate					
Significant-if-not-mitigated					
Significant-and-immitigable					
Project Attributes					
Indirect or Direct Effects on Community Organizations	X				
Interpretation of How the Action will Effect Community Response is in Question	X				
Consistent with Profile of Community	X				

6 Agency Coordination and Public Involvement

NEPA requirements help ensure that environmental information is made available to the public during the decision-making process and prior to actions being taken. The premise of NEPA is that the quality of Federal decisions will be enhanced if proponents provide information to the public and involve the public in the planning process. The Intergovernmental Coordination Act and EO 12372, Intergovernmental Review of Federal Programs, require Federal agencies to cooperate with and consider state and local views in implementing a Federal proposal.

Through the coordination process, the VA will notify relevant Federal, state, and local agencies of the Proposed Action and provide them sufficient time to make known their environmental concerns. Agency responses will be incorporated into this SEA. The VA will coordinate with such agencies as SHPO; Florida State Agencies (through the Florida Clearinghouse); and Hillsborough County municipal agencies. Appendix D includes all coordination letters and responses.

A notice of Availability (NOA) of Draft Description of Proposed and Alternatives (DOPAA) dated 24 March 2015 was published in the *Tampa Bay Tribune* on 27 through 29 March 2015 and in the *University of South Florida Oracle* on 26 and 30 March 2015. A public meeting was held on 9 April 2015 to obtain public input on the draft DOPAA that was prepared to conduct a SEA. The VA finalized on May 15, 2015 the final DOPAA dated 15 April 2015. A NOA for the draft SEA and draft FONSI will be published in the *Tampa Bay Tribune*. A public meeting is scheduled on 29 July 2015. Once the Draft SEA is finalized after a 30-day comment period, the VA intends to finalize a Finding of No Significant Impact (FONSI). The VA intends to publish a NOA for the FONSI.

7 Management and Mitigation Measures

The Proposed Action would have no significant adverse impacts on the quality of human health or the environment. Accordingly, no "mitigation measures" are required for construction or operation of the Prosed Action. Mitigation measures are defined as project-specific requirements not routinely implemented as part of development projects and which are necessary to reduce potentially significant adverse impacts to less-than-significant levels.

However, construction and operation of the Proposed Action will incorporate "management measures" identified in Table 17. Management measures are defined as routine BMPs/environmental protection measures and/or regulatory compliance measures that are regularly implemented as part of proposed activities, as appropriate, across Florida. In general, implementation of BMPs/environmental protection measures, would maintain minimal-to-moderate adverse impacts at acceptable levels (e.g. less than a significant impact) for all resource areas analyzed. Per established protocols, procedures, and requirements, the VA (and VA's D-B team) would implement the identified management measures and would satisfy all applicable regulatory requirements in association with the design, construction, and operation of the Proposed Action.

Implementation of the management measures summarized in Table 17 would ensure that implementing the Propose Action would have no significant impact on the technical resource areas analyzed in this SEA.

Table 17. Environmental Protection Measures/Best Management Practices for the Proposed Action

Technical Resource Area	Environmental Protection Measures/Best Management Practices
Aesthetics	As applicable, comply with the Hillsborough County Tree Ordinance as applied to trees and vegetation removed during demolition and construction and operation.
	Create and routinely maintain landscaped areas, buildings, roadways, and signage.
	Implement the construction-related BMPs for dust control described for Air Quality.
Land Use and Zoning	Conform to extent practicable with the Hillsborough County Comprehensive Plan.
Air Quality	Apply for a permit exemption for the backup generator under JAHVH's existing air permit, issued by the Hillsborough County Environmental Protection Commission.
	Use appropriate dust suppression methods during on-site construction activities. Available methods include application of water, dust palliative, or soil stabilizers; use of enclosures, covers, silt fences, or wheel washers; and suspension of earth-moving activities during high wind conditions. Conform with the VA MF04 specifications.
	Maintain an appropriate speed to minimize dust generated by vehicles and equipment on unpaved surfaces.
	Cover haul trucks with tarps.
	Stabilize previously disturbed areas through re-vegetation or mulching if the construction area would be inactive for several weeks or longer.
	Visually monitor all construction activities regularly, particularly during extended periods of dry weather, and implement dust control measures when appropriate.

Technical Resource Area	Environmental Protection Measures/Best Management Practices
Cultural Resources	Properly address any unknown cultural resources discoveries during site development. To accomplish this, VA will contact the Florida SHPO and selected Native American Tribes if any unknown cultural resources are discovered during site development.
	Comply with the NHPA, ARPA, NAGPRA, AIRFA, 36 CFR Part 79, and EO 13007 during the proposed site development.
Topography, Geology, and Soils	Design paved areas to drain to the existing stormwater management system.
	Sinkholes encountered during construction activities, if any, would be inspected by an experienced geotechnical engineer, who would recommend stabilization measures to prevent erosion into any such feature. During operations, JAHVH staff to visually inspect ground for evidence of subsidence or sinkhole activity.
	During construction install and monitor erosion-prevention measures, such as silt fences and water breaks, detention basins, filter fences, sediment berms, interceptor ditches, straw bales, rip-rap, and/or other sediment control structures; re-spread stockpiled topsoil; and seed/re-vegetate areas temporarily cleared of vegetation. Conform with the VA MF04 specifications.
	Retain on-site vegetation to the maximum extent possible.
	Plant and maintain soil-stabilizing vegetation on disturbed areas.
	Use native vegetation to re-vegetate disturbed soils.
	The construction contractor would obtain all required FDEP permits before any proposed construction activities commence, and would adhere to permit conditions during all on-site construction activities. These include BMPs under a General Construction Permit.
Hydrology and Water Resources	Inspect and maintain construction vehicles in good working order, and maintain a spill kit during construction, to avoid accidental releases of petroleum-based fluids from contaminating groundwater.
	Complete a Stormwater Concurrency as part of the design and construction activities.
	Implement Stormwater Management Facilities (SWMFs) and other related stormwater management infrastructure for the site.
	Address the potential for sinkhole formation and the potential for direct discharge to the aquifer (i.e., groundwater table).
	Prior to construction, submit a Notice of Intent (NOI) application and a General Construction Permit application (for disturbing more than one acre of land) application including a Stormwater Pollution Prevention Plan (SWPPP) for all storm water discharge actions to FDEP for approval.
	Develop a site design that prevents surface water runoff from reaching the adjacent stormwater drainage ditch.
	Develop a site design that accounts for pre/post 100-year volume stormwater drainage, and implement pre/post 100-year volume stormwater retention.
Wildlife and Habitat	Native species would be used to the extent practicable when re-vegetating land disturbed by construction, to avoid the potential introduction of non-native or invasive species.
Floodplains, Wetlands, and Coastal Zone Management	Develop a site design that avoids 100-year and 500-year floodplains to the maximum extent possible. For the Satellite CUP, prepare and implement flood action plan to minimize potential impacts from a 100-year flood event.
	Coordinate with the FDEP – Coastal Management Program (CMP) to ensure that the Proposed Action remains consistent with the CMP's Coastal Zone Management Program.
	Develop a site design that avoids additional fill or provides compensatory storage for unavoidable fill within the 100-year floodplain.
	Comply with existing VA SOPs and applicable Federal and State laws governing the use, generation, storage, or transportation of solid or hazardous materials.

Technical Resource Area	Environmental Protection Measures/Best Management Practices
Solid and Hazardous Materials	Avoid or limit the use of hazardous materials, including building material products, during construction and operation of the proposed New South Bed Tower and Infrastructure Improvements. If hazardous materials are required during construction and/or operation, store in locations designated for hazardous materials (e.g. locked and labeled metal cabinets).
	If hazardous substances are release to the Site during construction or operation, these applicable Federal and State requirements must be followed in response and cleanup.
	Comply with existing VA SOPs and applicable federal and state laws governing the use, generation, storage, or transportation of solid or hazardous materials.
Traffic, Transport-ation and Parking	Coordinate with the Florida Department of Transportation (FDOT) to ensure that construction and operational traffic are considered in the planning of future transportation improvements in this vicinity.
	Work with FDOT to identify and implement roadway improvements, as necessary, such as turn lanes and signals.
	Ensure debris and/or soil is not deposited on local roadways during the construction period.
	Ensure construction activities do not adversely affect traffic flow on local roadways; construction would be timed to avoid peak travel hours.
Noise	Coordinate proposed construction activities in advance with adjacent sensitive receptors (residents). Let the local residents know construction times, including when operations would start and finish each day. Post signage, updated daily, at the entry points of the site, with the current construction information, including schedule and activity.
	Limit, to the extent possible, construction and associated heavy truck traffic to occur between 7:30 AM and 6:00 PM during normal, weekday work hours. This measure would reduce noise effects during sensitive nighttime hours.
	Select material transportation routes as far away from sensitive receptors as possible.
	Maintain noisy equipment per manufacturer's recommendations.
	Per VA requirement, monitor noise levels at least once every 5 days during high-noise generating construction activities.
	Encourage construction personnel to operate equipment in the quietest manner practicable (e.g., retarder brake restrictions, engine speed restrictions, etc.).
	Observe Hillsborough County noise ordinance at all times.
	Locate stationary operating equipment as far away from surrounding residents as possible. Shut down heavy equipment and other noise emitters when it is not in use.

8 SEA Conclusions

The Proposed Action for the construction and operation of the Phase 4 New South Bed Tower and Infrastructure Improvements Project at the JAHVH is expected to have no significant impacts, adverse or beneficial, on human health or the environment. The addition of improved medical facilities and infrastructure meets the purpose and need of the Proposed Action by ensuring the continuity of access to quality health care by veterans and their eligible family members in central western Florida. Construction of the Proposed Action would have direct, short-term, beneficial-and-not-significant impacts on socioeconomics and environmental justice, due to the need for local construction workers and related construction spending at local area businesses. Operation of the Proposed Action would have direct, long-term, beneficial-and-not-significant impacts on aesthetics, socioeconomics, environmental justice, community services, and traffic. Additionally, the Proposed Action would have a low carbon footprint and energy-efficient design because the buildings will achieve the US Green Building Council LEED Silver level.

Construction of the Proposed Action would result in direct, short-term, minimal-to-moderate adverse impacts to aesthetics; air quality; geology and soils; hydrology and water resources; floodplains; solid waste and hazardous materials; traffic and parking; and noise. Operation of the Proposed Action would result in direct, long-term, minimal-to-moderate adverse impacts to floodplains. Increases in the intensity or length of time of these impacts would be avoided and minimized by strict adherence and monitoring of the VA's Master Construction Specifications (MF04) for construction standards for temporary environmental controls, demolition, and waste management; application of standard construction BMPs; and design of the Satellite CUP to minimize impacts from a potential 100-year flood.

This SEA concludes that a FONSI is appropriate, and that an EIS is not required.

9 Preparers and Reviewers

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U.S. Department of Veterans Affairs Office of Construction & Facilities Management

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M. Larimore, PE	Environmental Engineer, Document Preparation and Review	13
K. Benbow	Subject-Matter Expert, Document Preparation and	6
N. Scroggins, PG	Professional Geologist	15
P. Steinberg, PE, LSP	Program Manager, Document Review	25

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Appendix A – Existing Conditions Documentation

Appendix B – Maps and Figures

Figure 1. Site Location Map

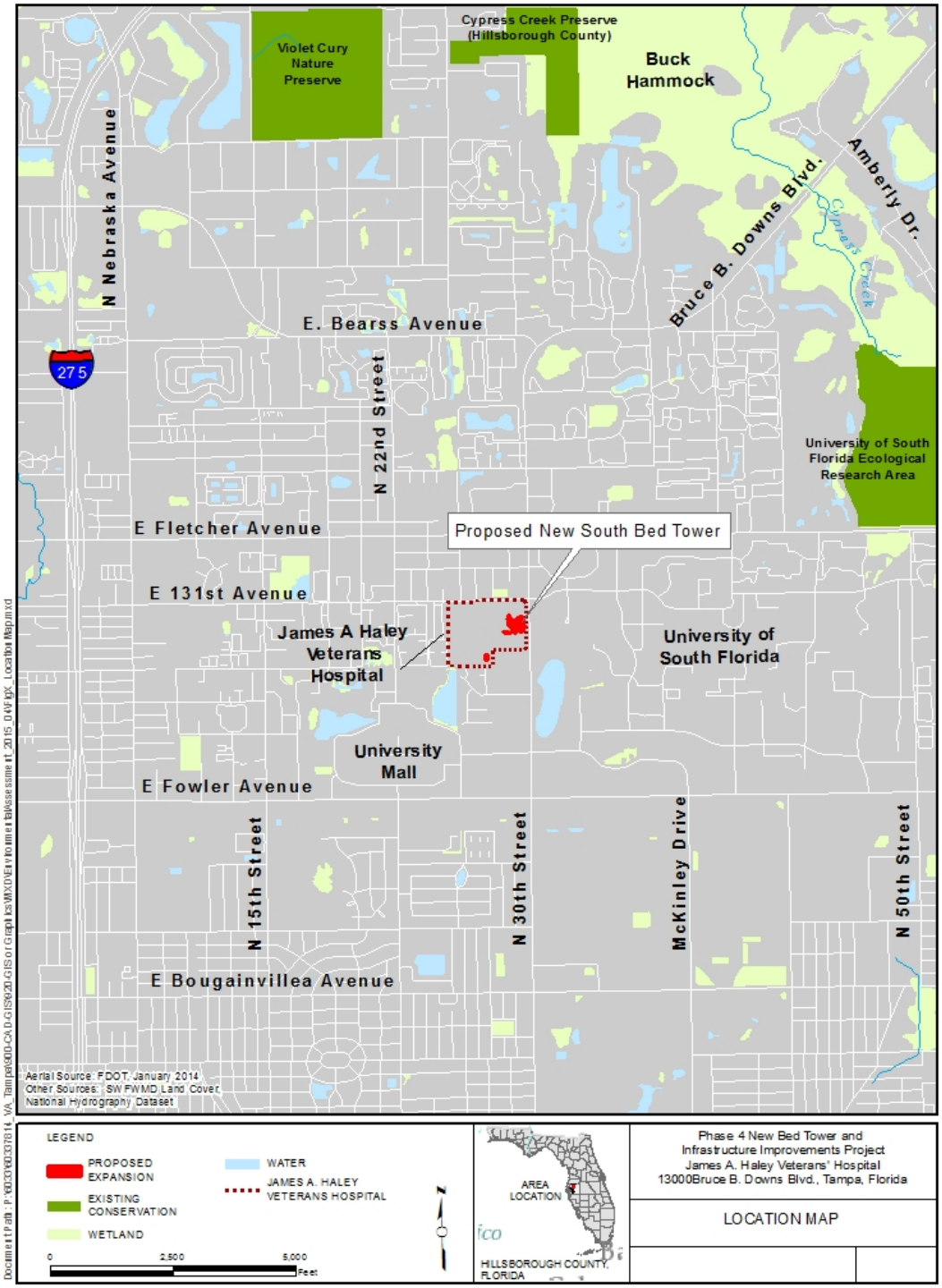


Figure 2. Aerial Parcel Map

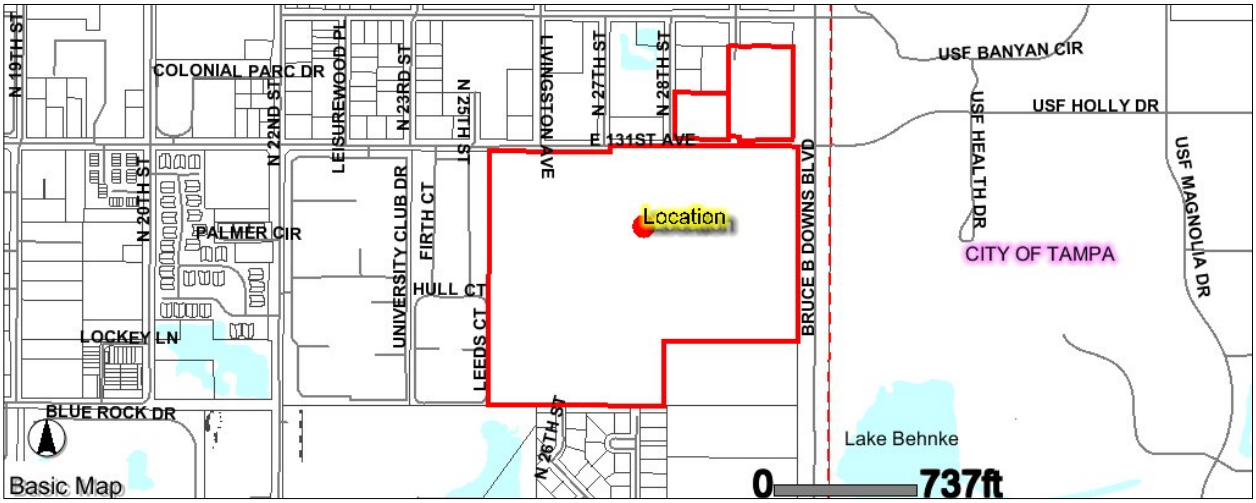


Figure 3. Land Use and Zoning Map

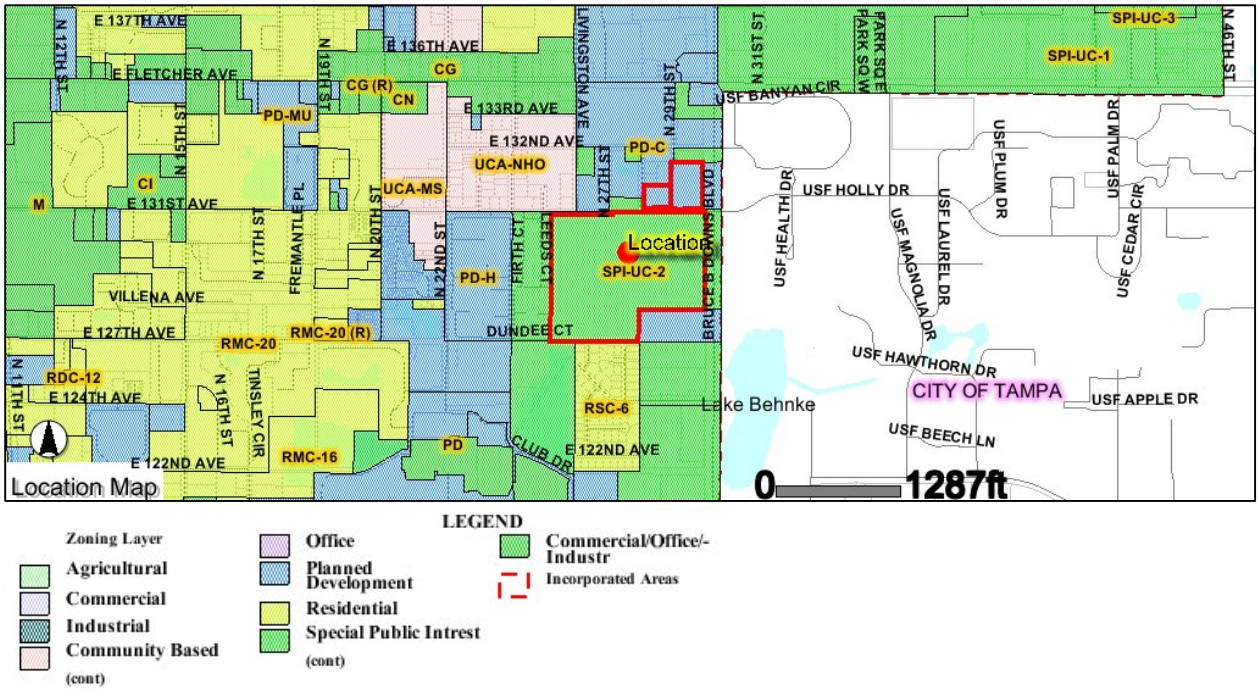


Figure 4. Current Conditions – Aerial Photograph

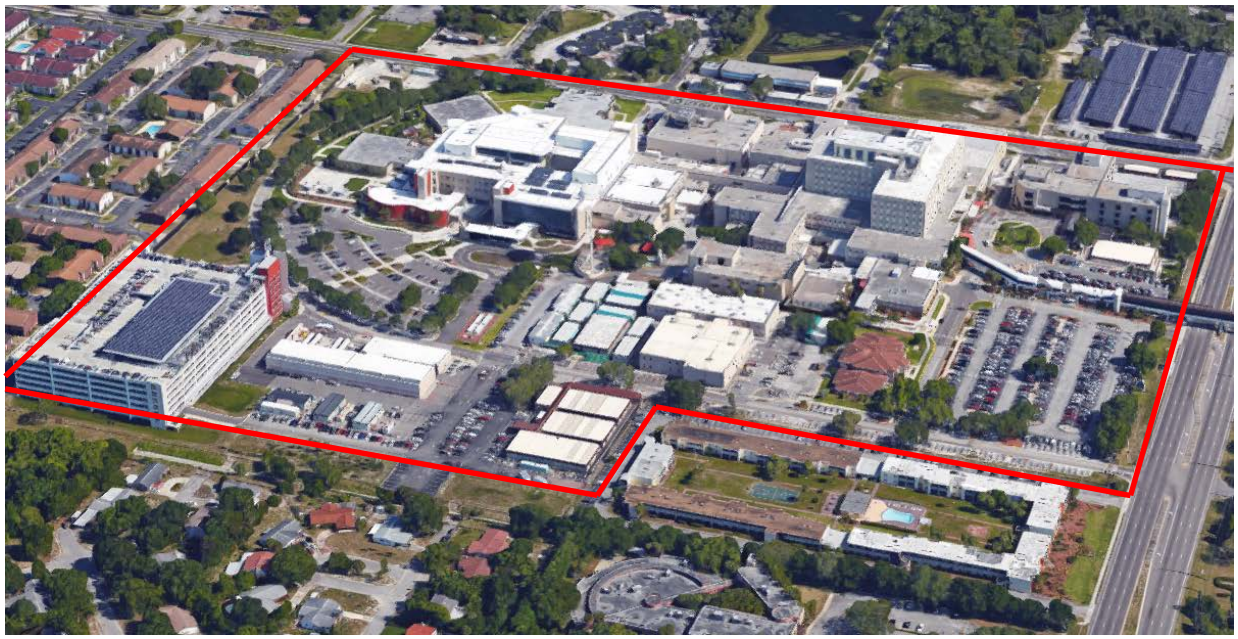


Figure 5. Site Plan - Proposed New South Bed Tower and Infrastructure Improvements

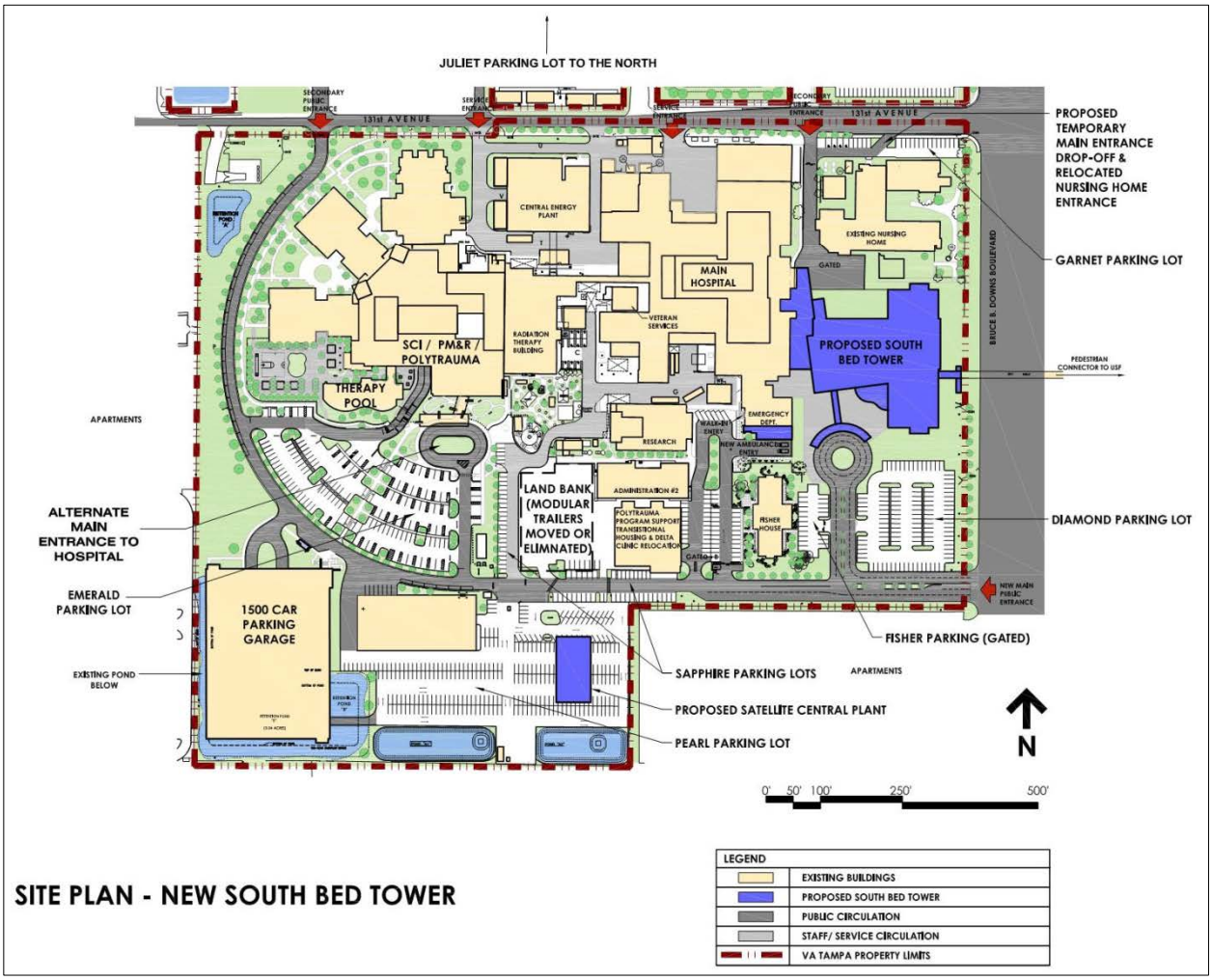


Figure 6. Model View - Proposed New South Bed Tower and Infrastructure Improvements

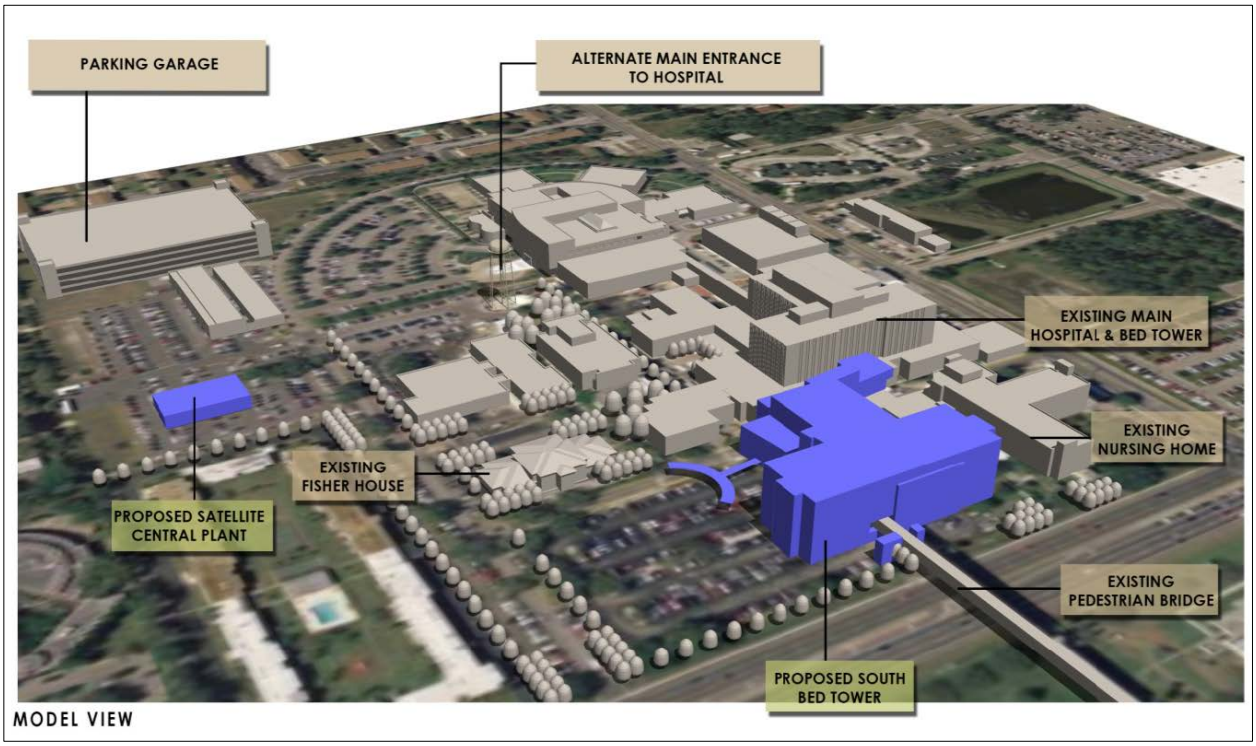
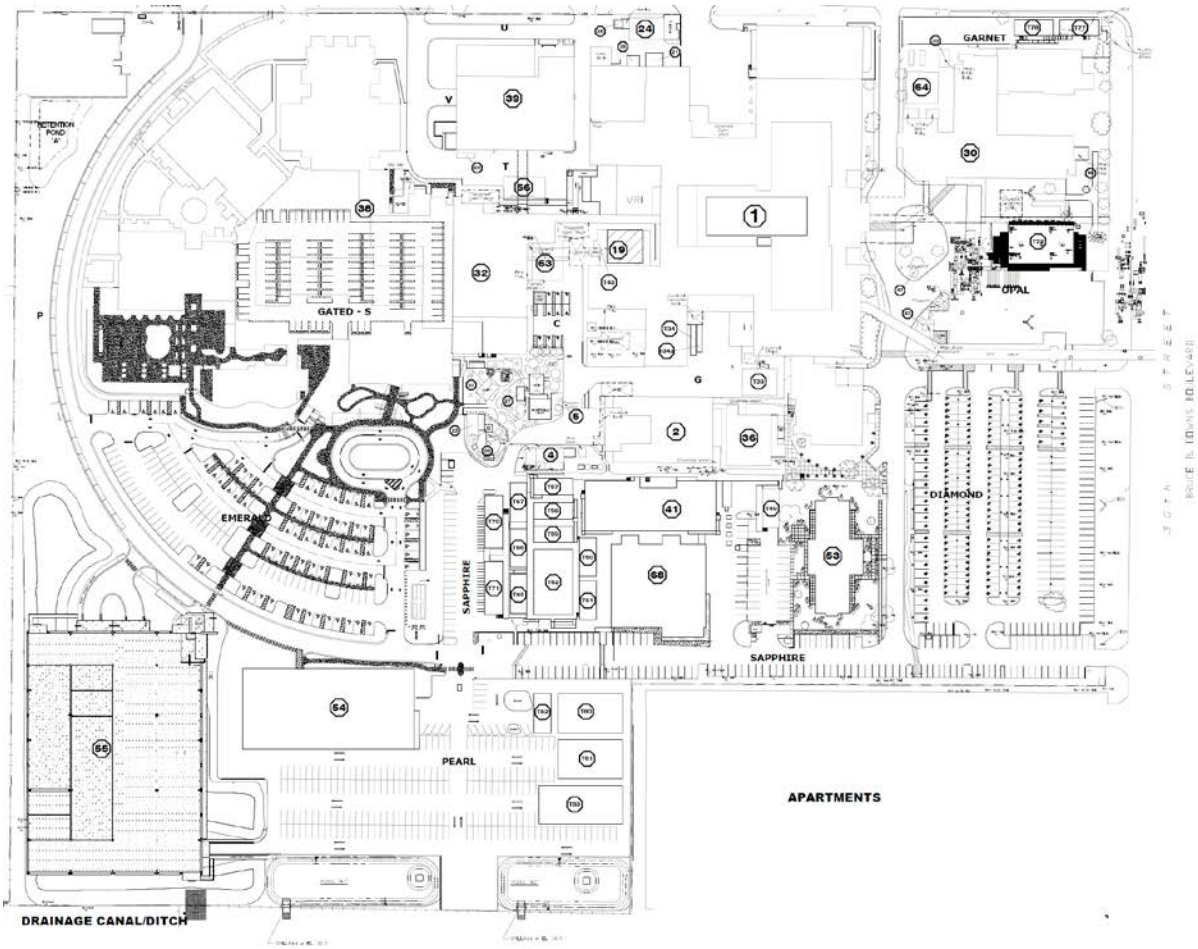


Figure 7. Building Location Map and Number Reference Key



Building Reference Key

1 – Main Hospital
2 – Research
19 – Florida Department of Veterans Affairs
30 – Geriatric Clinic/Nursing Home Care Unit
32 - Radiology
36 – Ophthalmology Clinic
38 – Spinal Cord Injury Clinic

41- Human Resources, Mental Health Clinic, Nursing Service, Psychology
56 – PET/CT Scan
68 – Adaptive Sports Program
T-33 – Social Work Services
T-62 – Women's Health Center
T-65 – Diabetes

Figure 8. Existing Conditions - Soil Map

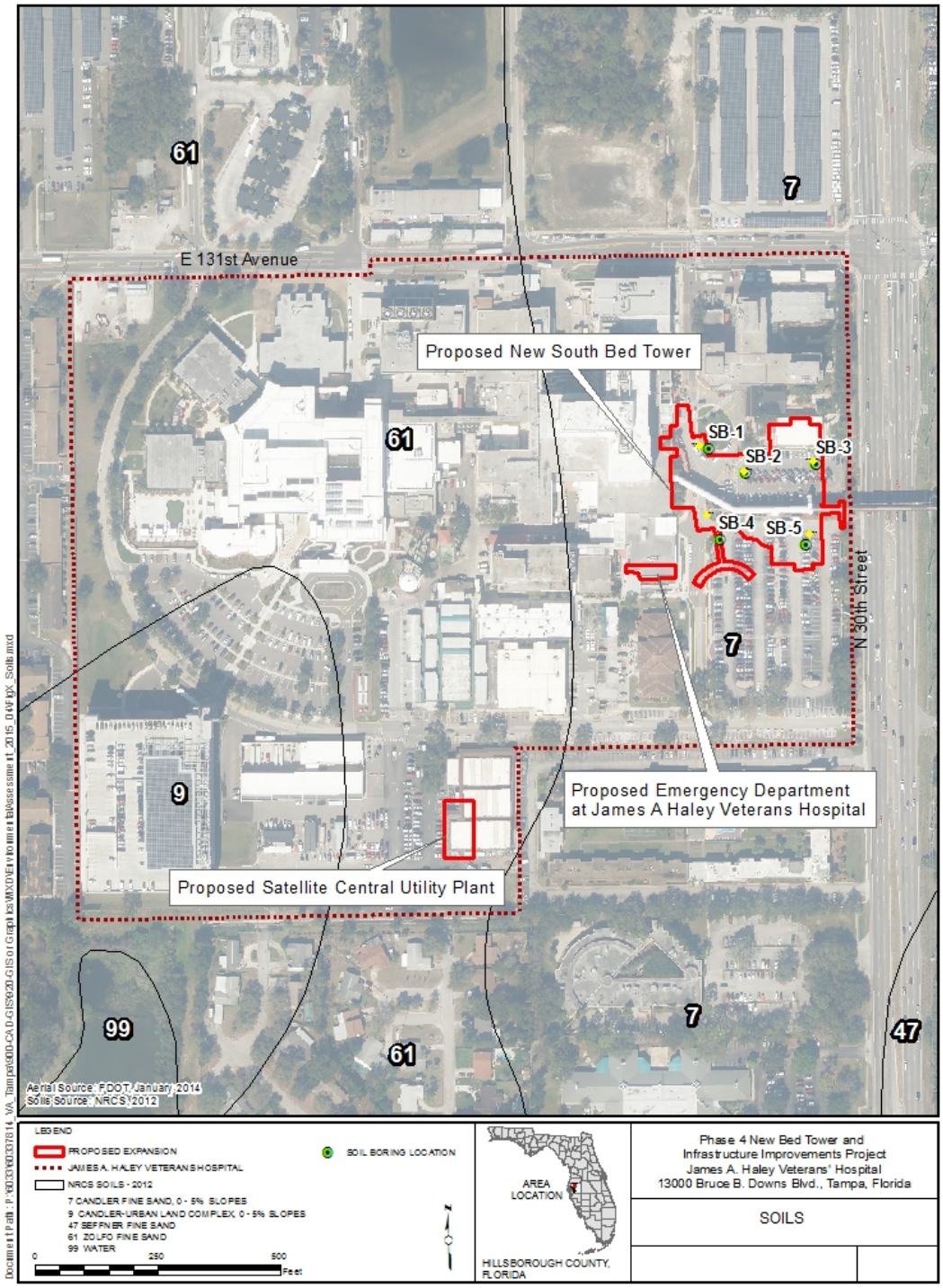


Figure 9. Existing Conditions, Topography

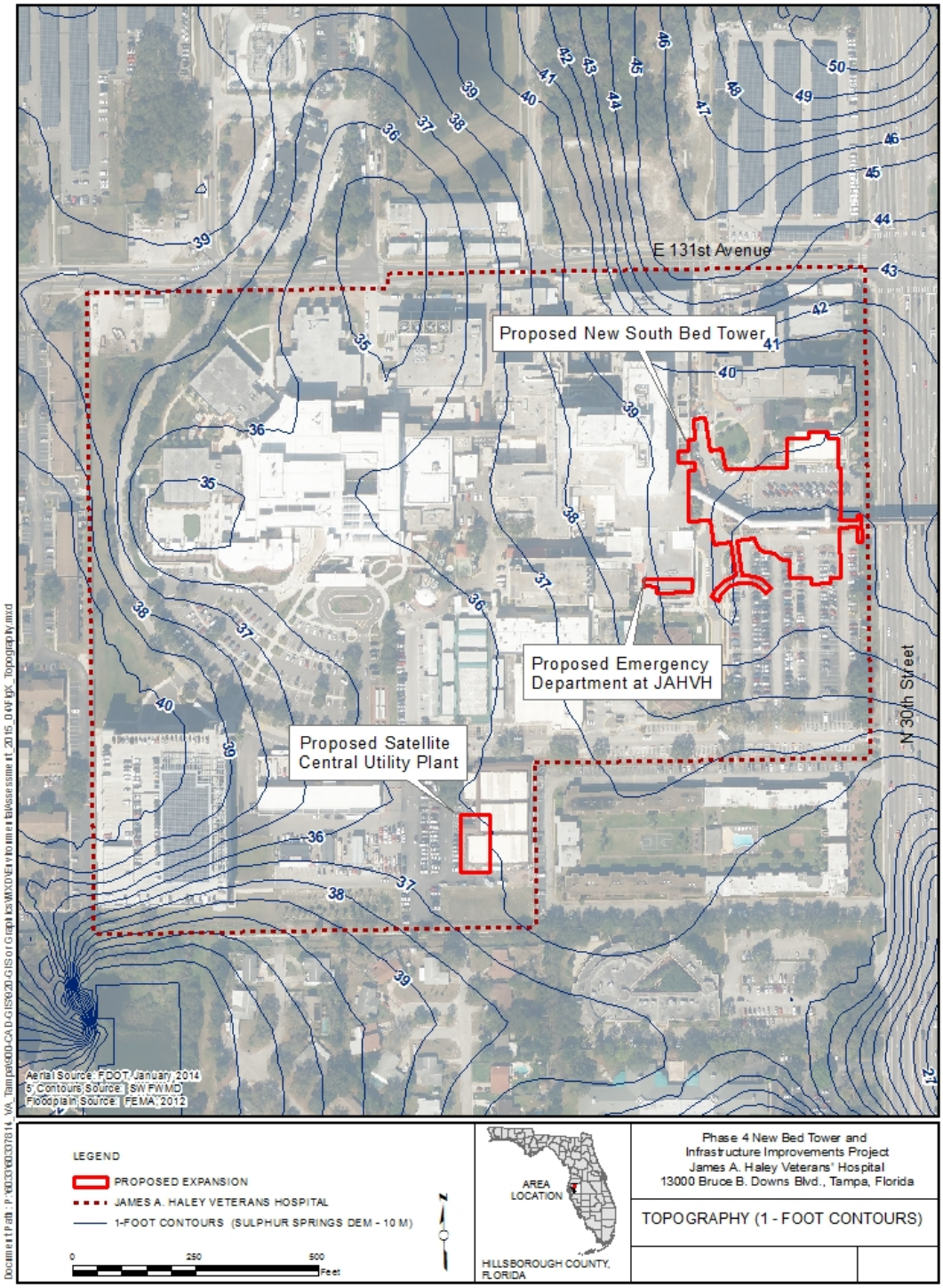


Figure 10. Existing Conditions, 100-Year Floodplain Map

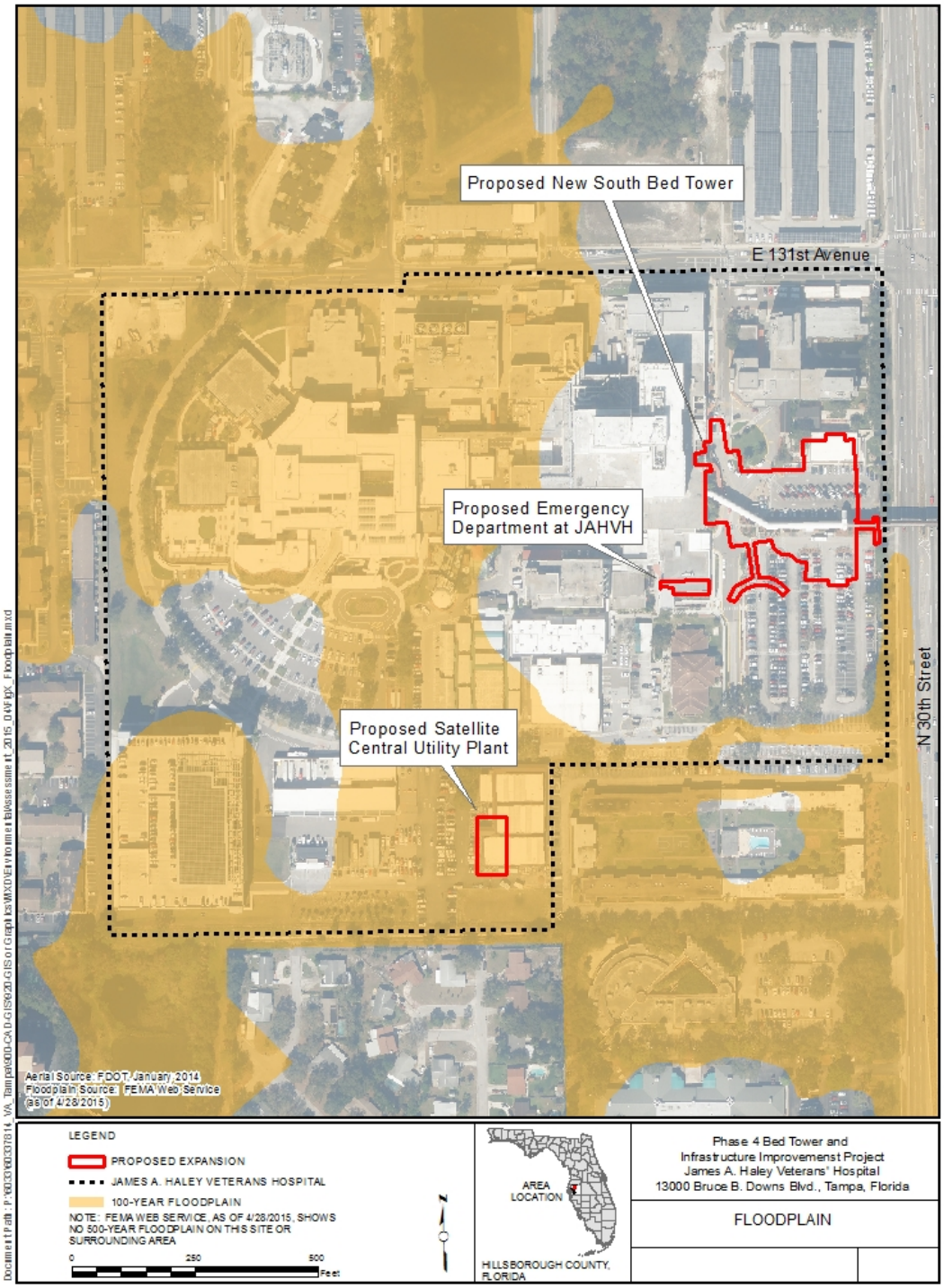
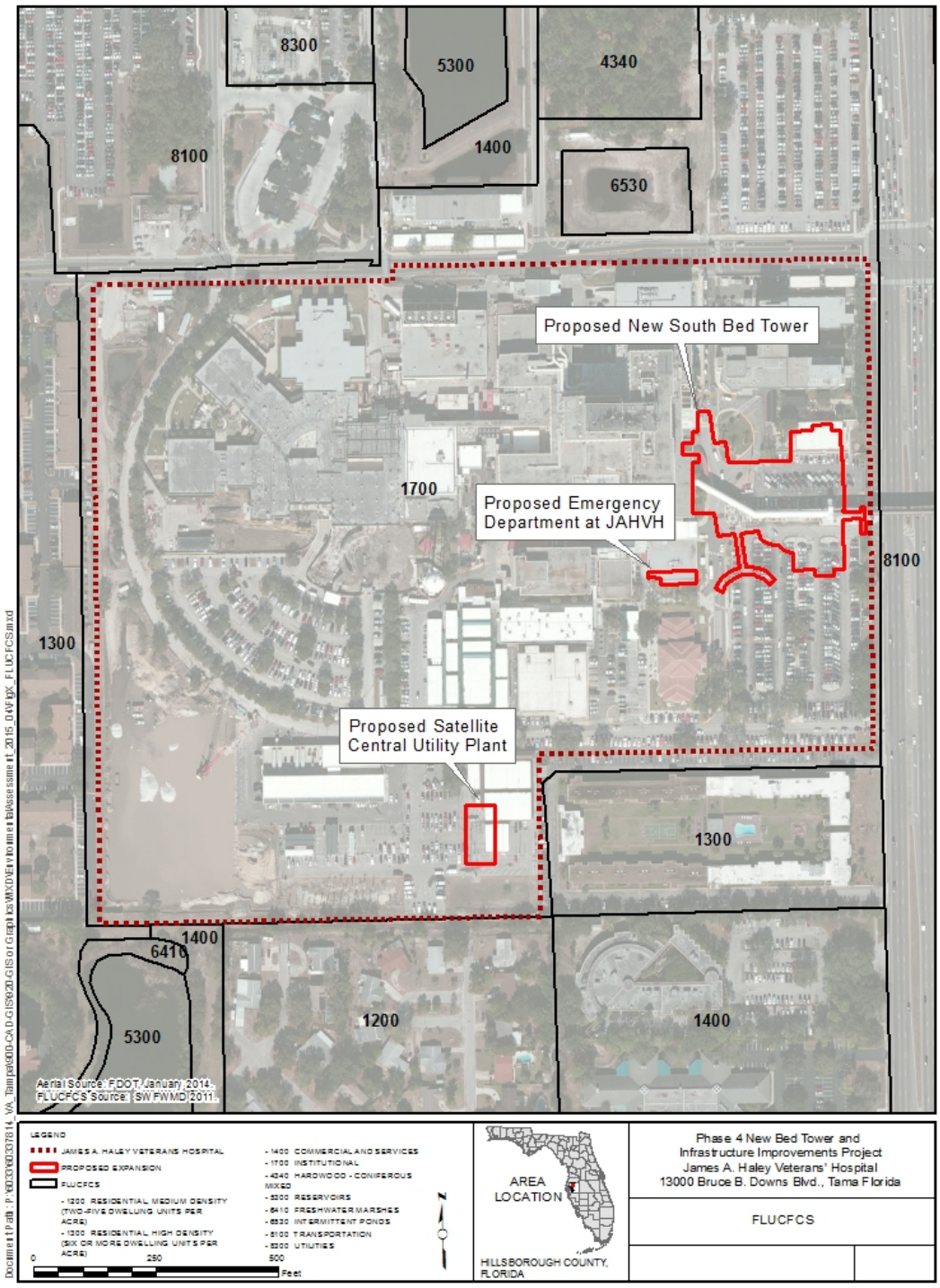


Figure 11. Existing Conditions, Wetlands and Sensitive Receptor Map

Figure 12. Florida Land Use, Cover, Form Classification System Map



Appendix C – Proposed Action Documentation

Appendix D – Agency Correspondence

Appendix E – Current and Future JAHVH Projects

Appendix F – List of Permits Required

Permit, Approval, or Certification	Responsible Agency	Applicable Criteria	Required Actions	Permitting Schedule	Comments	Phase to Obtain (Design, Construction, Operation)
Federal						
Federal Aviation Administration (FAA), Determination of No Hazard to Air Navigation	Federal Aviation Administration, Southeast Region, Atlanta, Georgia	Crane and building height details	Submittal of FAA application form	4 to 6 weeks for review and approval	FAA Determination of No Hazard to Air Navigation issued for construction and operation on June 30, 2015 (see Appendix D)	Effective through construction and operation
State Environmental						
Environmental Resource Permit (ERP)	Southwest Florida Water Management District (SWFWMD)	Required for projects which affect surface waters, wetlands, or sovereign submerged lands. FDEP coordinates review with other state agencies to address natural resource and cultural resource issues.	Conduct a Pre-Application Meeting with the lead engineer at the Tampa Service Office to ensure that the proposed design meet stormwater discharge requirements. Submit an ERP permit application including the stormwater calculations and construction level drawings for review and approval prior to starting construction.	1 month to prepare application. Agency review takes approx. 3 months.		Obtain during Design, effective through construction and operation

Permit, Approval, or Certification	Responsible Agency	Applicable Criteria	Required Actions	Permitting Schedule	Comments	Phase to Obtain (Design, Construction, Operation)
FDEP Generic Permit for Stormwater Discharge from Construction Activities (includes Stormwater Pollution Prevention Plan (SWPPP))	Florida Department of Environmental Protection (FDEP)	Construction of any facility that disturbs 1 acre or more	Prepare a Notice of Intent (NOI) and SWPPP for construction. Submit NOI at least 1 week prior to construction	2 weeks to prepare, 2 days to achieve permit coverage	The NOI gets submitted to FDEP in Tallahassee	Obtain during Design, effective through construction and operation
Determination of Hazard to Air Navigation made by Florida Department of Transportation (FDOT) and Hillsborough County Aviation Authority	Florida Department of Transportation (FDOT) and Hillsborough County Aviation Authority	Crane and building height details	D-B team to contact FDOT and Hillsborough County Aviation Authority and request determination	4 to 6 weeks for review and approval	D-B team will need to provide design information and request determination from FDOT and Hillsborough County prior to construction	Design, effective through construction and operation
Local Permitting/Approvals						
City of Tampa Sanitary Sewer Service Application	City of Tampa	Projects that are located within the City of Tampa service area for sewer service	Submit application to the City of Tampa	1 week to prepare application; approximately 10 days to receive service commitment	Application is concurrent with application for water services, however issuance of commitment statements is separate.	Obtain during Design, effective through construction and operation

Permit, Approval, or Certification	Responsible Agency	Applicable Criteria	Required Actions	Permitting Schedule	Comments	Phase to Obtain (Design, Construction, Operation)
City of Tampa Water Service Application	City of Tampa	Projects that are located within the City of Tampa service area for water service	Submit application to the City of Tampa.	1 week to prepare application; approximately 10 days to receive service commitment	Application is concurrent with application for sewer services, however issuance of commitment statements is separate.	Obtain during Design, effective through construction and operation
Hillsborough County Right-of-Way/Driveway Permit	Hillsborough County	Required for any improvements such as new curb cuts, acceleration or deceleration lanes for construction access or future use.	Submit application to Hillsborough County Development Services Department.	1 week to prepare application; approximately 30 days to receive approval	County requires a Maintenance of Traffic (MOT) plan during construction	Obtain during Design, effective through construction and operation
Other Permits/ Approvals						
Hillsborough County Land Development Code: Article VI - Design Standards and Improvement Requirements	Hillsborough County	Compliance with the LDC is required for projects that affect street access and design				Obtain during Design, effective through construction and operation
Hillsborough County Land Development Code: Article IV - Natural Resources and Adequate Public Facilities	Hillsborough County	Compliance with the LDC is required for projects that affect tree preservation and replacement				Obtain during design, effective during construction

Appendix G – Public Comments

Appendix G-1 – Copy of NOA Publication
Appendix G-2 – Minutes of Public Meeting (to be added to Final SEA)
Appendix G-3 – SEA Public Comments Log (to be added to Final SEA)

Appendix H – List of Regulators and Other Government Agencies Contacted

Agency and Contact Person (Alphabetical)
City of Tampa Police Department Mr. Eric Ward, Chief of Police 9330 N 30th St Tampa, FL 33612 (813) 931-6500
City of Tampa Wastewater Department Mr. Eric A. Weiss, P.E., Director 2545 Guy N. Verger Boulevard Tampa, FL 33605 813-274-8078
City of Tampa Water Department Mr. Brad L. Baird, P.E., Director 306 East Jackson Street, 5E Tampa, Florida 33602 Phone: (813) 274-8121
Environmental Protection Commission Of Hillsborough County Mr. Hooshang Boostani, PE Waste Management Roger P. Stewart Center 3629 Queen Palm Dr. Tampa, FL 33619 Phone: (813) 627-2600
Federal Aviation Administration Southwest Regional Office Obstruction Evaluation Group 2601 Meacham Boulevard Fort Worth, TX 76193
Florida Department of Environmental Protection Ms. Mary Yeargan Southwest District 13051 N. Telecom Parkway Temple Terrace, Fl. 33637 Phone: (813) 470-5700
Florida Department of Environmental Protection NPDES Stormwater Permitting Program Ms. Borja Crane-Amores, Program Administrator 2600 Blair Stone Road, MS #3585 Tallahassee, FL 32399-2400 Phone: (850) 245-7522 Email: NPDES-stormwater@dep.state.fl.us
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Agency and Contact Person (Alphabetical)
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US Department of the Interior **US Fish and Wildlife Service** Mr. David L. Hankia 7915 Baymeadows Way, Suite 200 Jacksonville, Florida 32256-7517
VAMC Tampa, James A. Haley Medical Center Ms. Victoria Cockrell Industrial Hygienist/GEMS Coordinator James A. Haley Veterans' Hospital 13000 Bruce B. Downs Blvd. Tampa, FL 33612

Appendix I – Supporting Reports and Documents