FINAL
Site-Specific Environmental Assessment of the 100-Acre Supplement Expansion Project Florida National Cemetery, Bushnell, Florida

U.S. Department of Veterans Affairs
425 I Street, NW
Washington, DC 20001

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EXECUTIVE SUMMARY AND CONCLUSIONS

In this Site-Specific Environmental Assessment (SEA), the U.S. Department of Veterans Affairs (VA), National Cemetery Administration (NCA), identifies, analyzes, and documents the potential physical, environmental, cultural, and socioeconomic impacts associated with the Proposed Action to construct and operate an approximately 100-acre cemetery expansion phase within the existing Florida National Cemetery (FNC) located at 6502 SW 102nd Avenue, Bushnell, Sumter County, Florida.

Since first accepting interments in 1988, FNC has undergone several phased expansions to address the continual need for burial opportunities at a National Cemetery in central Florida. Under the Proposed Action, new burial areas would be created within a portion of an approximately 100-acre undeveloped area in the northeastern portion of FNC; no new property would be acquired. The Proposed Action would provide new casket, columbarium, and in-ground cremation burial sites; roadways connecting the existing cemetery to the new burial area; and expanded infrastructure, including stormwater management, irrigation, and landscaping improvements at the new burial area. The Proposed Action would provide VA with the opportunity to utilize an unimproved area within the boundary of the existing FNC as a potential future cemetery expansion.

Accordingly, the ***purpose*** of the Proposed Action is to enable NCA to continue providing interment benefits to eligible Veterans and their family members by further extending the longevity of FNC.

The Proposed Action is ***needed*** to allow NCA to continue meeting its goal of providing eligible Veterans and their family members with reasonable access to VA burial options in central Florida.

If the Proposed Action is not implemented, the longevity of FNC would not be extended, and future generations of eligible Veterans and their families would be increasingly faced with a lack of long-term, reasonable access to burial benefits at a National Cemetery in central Florida. These Veterans and their families seeking interment at a National Cemetery would be required to travel to the nearest National Cemetery, which is the Sarasota National Cemetery approximately 110 miles south of FNC; Cape Canaveral National Cemetery, located approximately 120 miles to the east in Titusville, Florida; Jacksonville National Cemetery, located approximately 170 miles to the northeast; Tallahassee National Cemetery, located approximately 225 miles to the northwest; and South Florida National Cemetery, located in Lake Worth, Florida, approximately 250 miles to the southeast of FNC.

Two alternatives are analyzed in this SEA:

- The ***Proposed Action*** is to provide VA with the opportunity to utilize an approximately 100-acre unimproved area as a potential future cemetery expansion. The expansion would occur in the northeastern portion within the boundary of the existing FNC that is currently in an undeveloped state. The Proposed Action would provide additional burial sites (e.g. pre-placed crypts, in-ground cremains, columbaria); roadways connecting new burial sections to existing FNC roadways; landscaping; stormwater management to accommodate run-off; and extension of irrigation utilities to support landscaping in new burial sections. The Proposed Action would extend the longevity of FNC and accommodate long-term burial needs of future generations of Veterans and their families in central Florida. Therefore, the Proposed Action would meet the purpose and need for action.
- The ***No Action*** alternative is to maintain the 100-acre area as it presently exists and without future development. Under the No Action alternative, FNC would be closed to new interments once depletion of existing gravesites occurs. Future generations of Veterans and their eligible family members would not have long-term, reasonable access to burial benefits at a National Cemetery in central Florida. Therefore, the No Action alternative would not meet the purpose and need for action.

The following table summarizes the potential environmental impacts of the Proposed Action and the No Action alternatives.

Resource / Issue	Proposed Action	No Action
Meets Purpose of and Need for Action	Yes.	No.
Aesthetics	Short-term, less-than-significant, adverse impact from presence of heavy equipment during construction. Receptors limited to visitors. Long-term, beneficial impact during operation due to expansion of park-like setting and enhanced visibility of Sand Pond.	No impact.
Air Quality	Short-term, less-than-significant, adverse impact from particulate emissions during construction; this and all other criteria pollutants would be below *de minimis* thresholds. Long-term, less-than-significant beneficial impacts during operation by extending the longevity of FNC and reducing travel outside of the region for visitors. Less-than-significant adverse impact from expanded maintenance equipment emissions.	No impact.
Cultural Resources	No cultural resources identified in the expansion area. VA would implement Inadvertent Discovery Plan should artifacts or remains be encountered during construction, following proper management procedures to ensure short-term, less-than-significant adverse impacts.	No impact.
Geology, Topography, and Soils	No impact on geology. Negligible long-term adverse impact on topography due to grading/modifying existing slopes to meet NCA design standards for burial areas and roadways. Short-term, less-than-significant, adverse impact on soil due to potential for erosion and accidental release of petroleum-based operating fluids during construction.	No impact.
Hydrology and Water Quality	Negligible impact to surface water quality in Sand Pond from construction run-off; impacts minimized by implementing stormwater run-off controls and avoiding work within 25-foot seasonal high-water buffer zone. Short-term, less-than-significant adverse impact to groundwater quality in the event of an accidental release of petroleum-based fluids during construction. No impacts during operation; preplaced crypts and subsurface drainage galley would be above seasonal high groundwater table.	No impact.
Wildlife and Habitat	Short- and long-term, less-than-significant, adverse impact due to loss of habitat from clearing existing forest and converting to professionally maintained landscape. Impacts to state-listed gopher tortoise (*Gopherus polyphemus*) and Federally-listed eastern indigo snake (*Drymarchon couperi*) would be avoided through relocation of individual animals. No listed flora present.	No impact.
Noise	Short-term, less-than-significant, adverse impacts due to heavy machinery associated with clearing and grading during construction. Receptors limited to visitors within FNC. Long-term, negligible adverse impacts due to grounds maintenance equipment in the expansion area.	No impact.
Land Use	No impact on land use. Expansion is consistent with existing zoning and land use conditions.	No impact.
Floodplains, Wetlands, and Coastal Zone Management	Development avoids wetlands and 25-foot buffer surrounding Sand Pond. Potential zone A floodplain would be developed, but no reasonable alternative exists. Expansion is consistent with coastal zone management requirements.	No impact.

Resource / Issue	Proposed Action	No Action
Socioeconomics	Short-term, negligible localized beneficial impacts through construction worker hiring and material/supply purchases from local or regional vendors. Negligible beneficial impact by reducing travel costs for visitors to FNC who also live in central Florida.	No impact.
Community Services	Long-term, significant beneficial impact by extending the longevity of FNC, benefiting Veterans and their families and visitors throughout central Florida. No significant adverse impact on other community services.	Long-term, significant adverse impact because FNC longevity will not be extended, requiring Veterans and their families in central Florida to travel longer distances for burial and visitation. Not in compliance with *Service Members Civil Relief Act*.
Solid and Hazardous Materials	Short-term, less-than-significant adverse impact due to increase in solid waste generation (excess construction materials that cannot be recycled). Negligible impact during operation; no new types of wastes, and only minimal quantities of memorial markers (floral arrangements, sanitary waste) would be generated.	No impact.
Transportation and Parking	Short-term, less-than-significant adverse impact from increased construction traffic traveling on roads leading to and from, and within, FNC. Negligible impact during operation, as expansion would not yield a cumulative increase in traffic, and roadways leading to and within FNC would not exhibit a decrease in levels of service.	No impact.
Utilities	No impact during construction, as utilities would not be consumed. Operation would have a long-term, negligible adverse impact on the existing irrigation water utility, due to increased utilization of groundwater and surface water to irrigate the new expansion area. No impact to other utilities, as their use would not substantively increase during operation.	No impact.
Environmental Justice	No impact on Environmental Justice communities.	No impact.
Potential for Generating Substantial Controversy	The community is considered to be in favor of extending the longevity of FNC.	Substantial adverse reaction if expansion is not implemented, due to a decrease in longevity of FNC.

Based on the analyses presented in this SEA, the individual impacts from the Proposed Action, when considered on a cumulative basis with impacts from past projects and probable future projects at and in the vicinity of FNC, remain at less-than-significant adverse levels for the environmental resources analyzed in this SEA. Likewise, the No Action alternative would remain at a significant adverse level on a cumulative basis due to the unmitigated impact on Community Services—namely, decreased longevity of FNC and a lack of burial opportunities at a National Cemetery in central Florida. Additionally, the No Action alternative does not meet the purpose and need for action.

The Draft SEA has been made available for a 30-day review period. Comments from regulatory agencies, Native American Tribes, and the public will be addressed and documented in the final SEA.

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ACRONYMS AND ABBREVIATIONS

Acronym/Abbreviation	*Meaning*
ACS	American Community Survey
BMP	Best Management Practice
CAA	Clean Air Act
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CO	Carbon Monoxide
CR	County Road
CWA	Clean Water Act
CZMA	Coastal Zone Management Act
EA	Environmental Assessment
EIS	Environmental Impact Statement
EISA	Energy Independence and Security Act
EO	Executive Order
ERP	Environmental Resource Permit
FAC	Florida Administrative Code
FCMP	Florida Coastal Management Program
FDACS	Florida Department of Agriculture and Consumer Services
FDEM	Florida Division of Emergency Management
FDEO	Florida Department of Economic Opportunity
FDEP	Florida Department of Environmental Protection
FDOH	Florida Department of Health
FDNR	Florida Department of Natural Resources
FDOT	Florida Department of Transportation
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
FLUCFCS	Florida Land Use, Cover, and Forms Classification System
FNAI	Florida Natural Areas Inventory
FONSI	Finding of No Significant Impact
FPPA	Farmland Protection Policy Act
FWC	Florida Fish and Wildlife Conservation Commission
GIS	Geographic Information System
GPD	gallons per day
MG	million gallons
NAAQS	National Ambient Air Quality Standards
NAGPRA	Native American Graves Protection and Repatriation Act
NCA	National Cemetery Administration
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NO_2	Nitrogen Dioxide
NO_x	Nitrous Oxides
NOA	Notice of Availability
NOAA	National Oceanic and Atmospheric Administration
NOI	Notice of Intent

NPDES	National Pollutant Discharge Elimination System
NPS	National Park Service
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
O_3	Ozone
Pb	Lead
PM	Particulate Matter
ROG	Reactive Organic Gases
SCAB	South Coast Air Basin
SCAQMD	South Coast Air Quality Management District
SCH	Florida State Clearinghouse
SEA	Site-Specific Environmental Assessment
SESC	Soil Erosion and Sedimentation Control
SHPO	State Historic Preservation Officer
SIP	State Implementation Plan
SO_x	Sulfur Oxides
SOP	Standard Operating Procedure
SWFWMD	Southwest Florida Water Management District
SWPPP	Stormwater Pollution Prevention Plan
tpy	tons per year
U.S.	United States
USACE	U.S. Army Corps of Engineers
USC	United States Code
USDA	United States Department of Agriculture
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Services
USGS	United States Geological Survey
VA	U.S Department of Veterans Affairs
VOC	Volatile Organic Compound
WAR	Water and Air Research, Inc.

1.0 INTRODUCTION

The U.S. Department of Veterans Affairs (VA) National Cemetery Administration (NCA) honors Veterans and their families with final resting places in National Shrines and with lasting tributes that commemorate their service and sacrifice to the nation. VA operates 138 national cemeteries and 33 soldiers' lots and monument sites in 40 states and Puerto Rico. More than 4 million Americans, including Veterans of every war and conflict, are buried in VA's National Cemeteries (NCA, 2019). The mission of VA's Office of Construction and Facility Management is to advance VA's larger mission supporting the nation's Veterans by planning, designing, constructing, and acquiring major facilities, and by setting design and construction standards.

This Site-Specific Environmental Assessment (SEA) analyzes the environmental impacts of constructing and operating a phased expansion at the Florida National Cemetery (FNC).

1.1 Background

In 1980, VA announced that it would establish a new National Cemetery in Florida. Two properties for the proposed cemetery were evaluated: Cross Florida Barge Canal (1,083 acres) in Ocala, and Withlacoochee State Forest (1,245 acres) in Bushnell (VA, 1983). VA planned to provide either 295,444 grave sites (on 338 acres) at the Barge Canal site, or 256,727 grave sites (on 294 acres) at the Withlacoochee site through planned expansion phases through the year 2040.

VA evaluated the potential to adversely affect physical, biological, and cultural resources by constructing and operating FNC at either site, documenting the results in an Environmental Impact Statement (EIS) (VA, 1983). The Withlacoochee site, although more environmentally sensitive, was ultimately selected and purchased. The Withlacoochee site encompasses the 100-acre area that is evaluated within this SEA.

Construction began on the initial phase of FNC in 1986, and the first interment occurred in 1988 (VA, 2017b). The initial and subsequent phases of development provided supporting infrastructure for much of FNC, including an administration/public information center, roadways, site furnishings, landscaping, drainage and irrigation systems, a maintenance facility, and a main entrance. By 1999, VA recognized that the burial capacity within the original FNC acreage could be reached by 2006, approximately 20 years sooner than anticipated due to faster gravesite depletion rates. In response, VA purchased an approximately 137-acre tract located adjacent to and west of the original FNC property boundary, providing additional acreage for future burial areas. VA has since completed several expansions in this tract and plans to start construction of a 30-acre expansion within the remainder of this tract; this expansion is anticipated to provide approximately 20 years of additional burial capacity at FNC. However, once gravesites are depleted there, FNC either would close to new interments or new land would need to be identified for a future expansion phase. Thus, VA identified a need for action to address the future longevity of FNC.

VA gives preference for potential future expansion phases to grounds located within the current FNC property boundary. As part of the longer-term planning to extend the longevity of FNC, VA identified an approximately 100-acre area located within the northeast portion of current FNC property that has remained unimproved, with the exception of an approximately 4-acre area that FNC staff use for stockpiling excess soils and woody debris, a gravestone carving shop, and three temporary storage containers. This 100-acre area encompasses Sand Pond, an approximately 15-acre natural pond that is fed primarily by groundwater, with additional inputs including precipitation and stormwater run-off from the immediately adjacent burial areas along Apalachee Way.

Therefore, VA has identified this 100-acre area as a potential future burial expansion area at FNC. However, VA must first determine the developmental suitability of the 100-acre area by identifying current physical, environmental, and cultural conditions of the area, and assessing whether these conditions present constraints or regulatory limitations that must be considered in any subsequent master planning and development design, construction, and operation.

Accordingly, in this SEA, VA identifies, analyzes, and documents the potential physical, environmental, cultural, and socioeconomic impacts associated with the Proposed Action to construct and operate a typical cemetery expansion within the 100-acre area, excluding Sand Pond. Based on similar expansion phases elsewhere within FNC and at other National Cemeteries, anticipated construction activities include vegetation clearing, earth moving and grading, construction of burial facilities, roadways, installation of drainage and irrigation systems, and landscaping. Anticipated operational activities include infrastructure and grounds maintenance, memorial service planning, and visitor management. This SEA also considers the No Action alternative, whereby the alternative of taking no action is evaluated, providing a baseline against which the impacts associated with the Proposed Action can be compared.

In summary, the two alternatives analyzed in this SEA are:

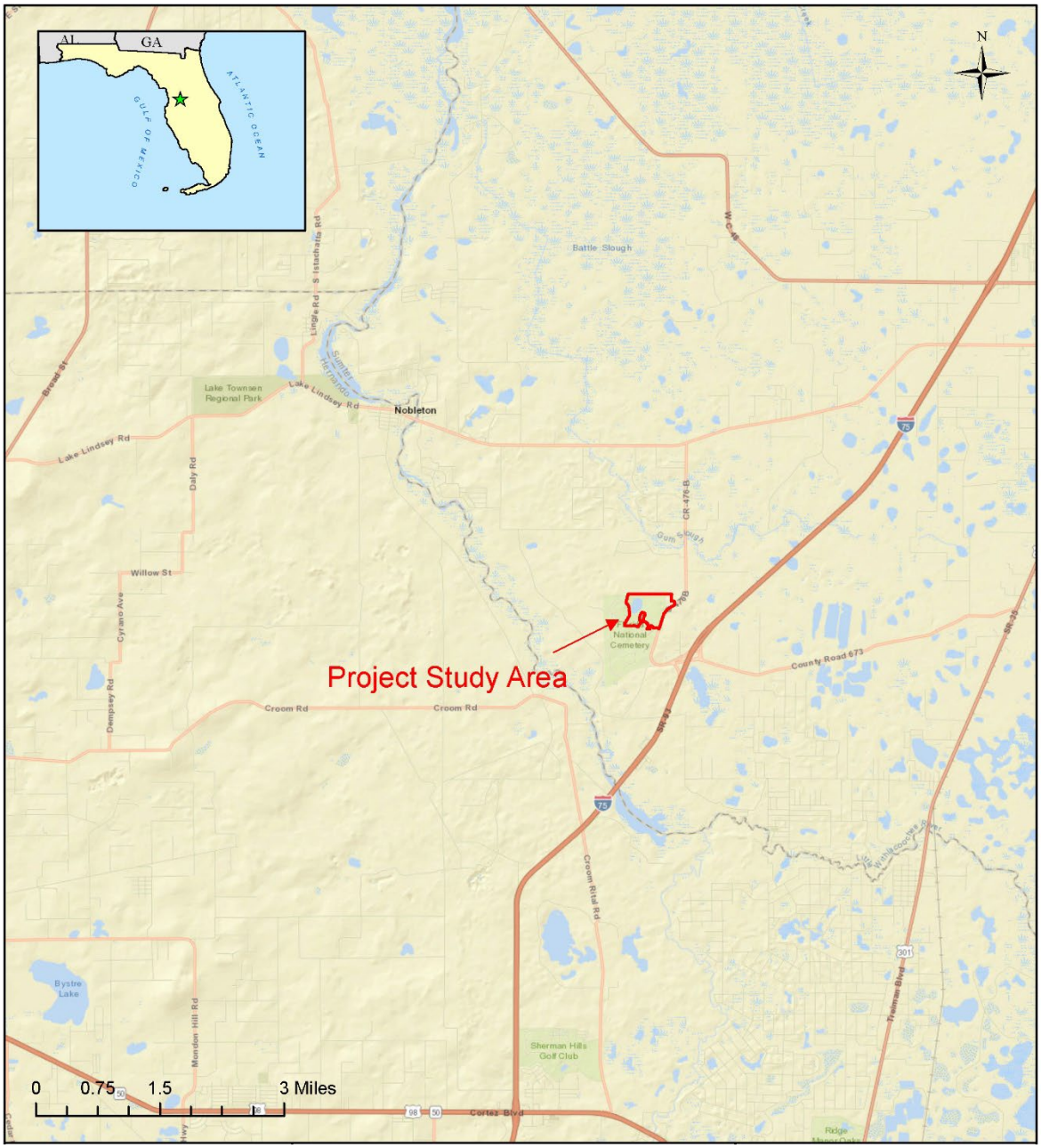
- The ***Proposed Action*** is to provide VA with the opportunity to utilize an approximately 100-acre unimproved area as a potential future cemetery expansion. The expansion would occur in the northeastern portion within the boundary of the existing FNC that is currently in an undeveloped state. The Proposed Action would provide additional burial sites (e.g. pre-placed crypts, in-ground cremains, columbaria); roadways connecting new burial sections to existing FNC roadways; landscaping; stormwater management to accommodate run-off; and extension of irrigation utilities to support landscaping in new burial sections. The Proposed Action would extend the longevity of FNC and accommodate long-term burial needs of future generations of Veterans and their families in central Florida. Therefore, the Proposed Action would meet the purpose and need for action.
- The ***No Action*** alternative is to maintain the 100-acre area as it presently exists (in an undeveloped state) and not open the 100-acre area to future development. Under the No Action alternative, FNC would be closed to new interments once depletion of existing gravesites occurs. Future generations of Veterans and their eligible family members would not have long-term, reasonable access to burial benefits at a National Cemetery in central Florida. Therefore, the No Action alternative would not meet the purpose and need for action.

1.2 Regulatory Basis

This site-specific analysis is conducted in accordance with the *National Environmental Policy Act* of 1969 (NEPA) (42 United States Code [USC] 4321 et seq.), the White House Council on Environmental Quality (CEQ) "Regulations Implementing the Procedural Provisions of NEPA" (40 Code of Federal Regulations [CFR] 1500-1508), VA's NEPA regulations titled "Environmental Effects of the Department of Veterans Affairs Actions" (38 CFR Part 26), and VA's NEPA Interim Guidance for Projects (VA, 2010). These requirements specify that VA must evaluate the potential environmental impacts of VA facilities, operations, and related funding decisions prior to taking action. VA must apply the NEPA review process and use the information to make an informed decision prior to undertaking a proposed action. An EA provides sufficient evidence and analysis for determining whether an action would cause significant environmental impacts (requiring an EIS) or the agency can issue a finding of no significant impact (FONSI) (40 CFR 1508.9). A FONSI is a decision document that briefly presents the reasons an action would not have a significant effect on the human environment (40 CFR 1508.13). As required by NEPA and the implementing regulations from CEQ and VA, the alternative of taking no action is evaluated, providing a baseline for comparison of potential impacts from the action alternative(s).

This SEA tiers to selected portions of the 1983 Final EIS (VA, 1983). This approach is in full compliance with CEQ regulations that state that NEPA documents should be "analytic rather than encyclopedic" (40 CFR Part 1502.2a) and that scoping should be used to "identify and eliminate from detailed study the issues which are not significant or which have been covered by prior environmental review (40 CFR Part 1506.3), narrowing the discussion of these issues in the statement [EA] to a brief presentation of why they would not have a significant effect on the human environment or providing a reference to their coverage elsewhere" (40 CFR Part 1501.7(a)(3)).

Figure 1. Site Location Map



Accordingly, VA is using "Incorporation by Reference" per 40 CFR Part 1502.21 and "Tiering" per 40 CFR Part 102.20 to reduce the volume of this SEA and rely on information previously developed and analyzed in the Final EIS (VA, 1983).

1.3 Purpose and Need

The ***purpose*** of the Proposed Action is to enable NCA to continue providing interment benefits to eligible Veterans and their families by further extending the longevity of FNC.

Due to gravesite depletion, the Proposed Action is ***needed*** to allow NCA to continue meeting its goal of providing eligible Veterans with reasonable access to VA burial options in central Florida. Without the Proposed Action, the longevity of FNC would not be extended, and future generations of eligible Veterans and their families would be increasingly faced with a lack of long-term, reasonable access to burial benefits at a National Cemetery in central Florida. These Veterans and their families would be required to travel outside of central Florida to obtain burial benefits at another National Cemetery, the nearest of which is the Sarasota National Cemetery, located 110 miles south of FNC; Cape Canaveral National Cemetery, located approximately 120 miles to the east in Titusville, Florida; Jacksonville National Cemetery, located approximately 170 miles to the northeast; Tallahassee National Cemetery, located approximately 225 miles to the northwest; and South Florida National Cemetery, located in Lake Worth, Florida, approximately 250 miles to the southeast of FNC.

1.4 Existing Site Details

FNC is located at 6502 Southwest 102nd Avenue, Bushnell, Florida, Parcel R04-100, within Sections 32-33 of Township 21 South, Range 21 East and Sections 4-5 of Township 22 South, Range 21 East. It is within Sumter County Zone PIE (public/institution/education), in a rural area bounded on the north by the Sumter Correctional Institute and undeveloped lands, and on the northwest, west, and south by SW 60th Street, which is an unimproved rural road, and the Withlacoochee State Forest beyond. The southeast side is bordered by undeveloped lands, CR 476 and Interstate 75 (I-75).

To date, approximately 168,000 interments have been completed at FNC (VA, 2019c). On average, the cemetery performs 26 burials per day and 6,000 per year, with a greater number of burials performed on Mondays and Fridays (VA, 2019c). Approximately 60 percent of the burials are for Veterans and are accompanied by a three-to five-gun salute; the remaining 40 percent of burials are for Veterans' relatives.

1.5 Decision Making

This SEA has been prepared to identify, analyze, and document the potential physical, environmental, cultural, and socioeconomic effects associated with VA's Proposed Action to construct and operate an expansion phase within an approximately 100-acre unimproved area at FNC. This SEA tiers to and updates the analyses and findings of VA's 1983 EIS for the initial siting, construction, and operation of FNC (VA, 1983).

VA, as a Federal agency, is required to incorporate environmental considerations into its decision-making process for the actions it proposes to undertake. This is done in accordance with the regulations and guidance identified in Section 1.0. Accordingly, this SEA:

- Informs the public of the possible environmental impacts of the Proposed Action and its considered alternatives, as well as methods to reduce these impacts,
- Provides for public, state, inter-agency, and tribal input into VA's planning and evaluation,
- Documents the NEPA process, and
- Supports informed decision-making by the Federal government.

As the decision document for this proposed Federal undertaking, this SEA also identifies the actions to which VA would commit to minimize environmental effects, as required under NEPA, its implementing

regulations from CEQ (40 CFR 1500–1508) and VA (38 CFR Part 26), and VA's NEPA guidance (VA, 2010). The decision to be made is whether, having considered the potential physical, environmental, cultural, and socioeconomic effects, VA should implement the Proposed Action including, as appropriate, measures to reduce adverse effects.

2.0 DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES

NEPA, and the regulations of CEQ and VA for implementing NEPA, require all reasonable alternatives to be rigorously explored and objectively evaluated. Accordingly, this chapter summarizes the process used to develop alternatives and provides a description of the subsequently selected Proposed Action and its alternatives, as well as alternatives considered but ultimately eliminated from further analysis, and the reasons for elimination.

2.1 Development of Alternatives

The expansion area evaluated under the Proposed Action is within the boundary of the original proposed site evaluated in the 1983 EIS (VA, 1983). To date, approximately 100 acres of forested area in the northeast portion of FNC remains available for development. Accordingly, the Proposed Action represents VA's anticipated development for this remaining area.

2.2 Alternatives

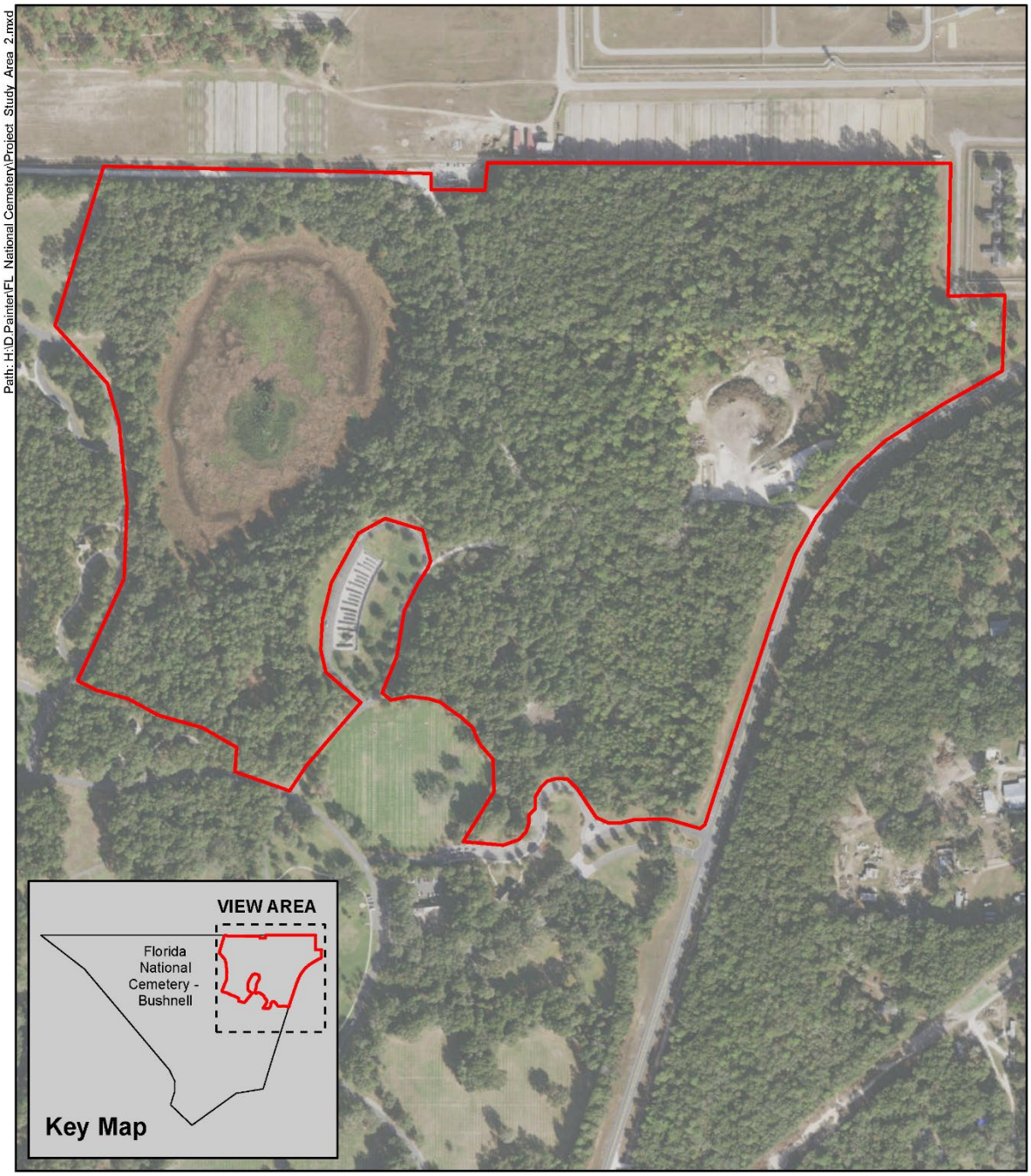
The alternatives evaluated in this SEA are the Proposed Action and No Action. The No Action alternative serves as the baseline for identifying the impacts from the Proposed Action.

2.2.1 Proposed Action

Under the Proposed Action, the expansion would occur within the approximately 100-acre undeveloped area located within the northeastern portion of FNC (Figure 2). Approximately 85 acres would be developed, while approximately 15 acres associated with Sand Pond and its peripheral wetlands, plus a 25-foot buffer extending upland from the seasonal high-water line, would remain undeveloped. Forested buffers are included in the development elements. The specific burial capacity of the future expansion would be specified in a master plan/engineering design document which would be completed prior to development. However, based on similar expansion projects at FNC and other National Cemeteries, the expansion would include the following general elements.

- Columbarium – Columbarium sites would be graded and have multiple sections of niches 4 to 5 inches high (approximately 7-8 feet high) with a border of landscaped grounds and existing forest. Columbarium capacity would be determined in an engineering design document which would be completed prior to development.
- In-Ground Cremains – Sites would be graded and separated from other interment areas using landscaped vegetation. Capacity would be determined in an engineering design document which would be completed prior to development.
- Pre-Placed Crypts – Crypt sections would be graded and constructed according to the engineering design document. Each crypt section would be landscaped with grass and decorative shrubs. Capacity would be determined in an engineering design document which would be completed prior to development.
- Roadways and Parking – New roadways would be constructed to extend access from existing roadways to the new interment area. Visitors would be allowed to park on the roadway shoulders but off of the grass.
- Landscaping/Irrigation – The expansion area would be landscaped in a manner consistent with the overall cemetery appearance, for visual aesthetics, and to provide privacy. Planted vegetation would include shrubs (ex. *Loropetalums* cultivars), trees (ex. Crepe Myrtle), and turf (ex. St. Augustine grass), which are currently planted at FNC. Irrigation water would be supplied from a combination of existing and/or new groundwater wells at FNC and the existing surface water pond located in the southern portion of FNC.

Figure 2. Project Study Area



The following elements describe associated major design elements incorporated into the Proposed Action that would be protective of the natural environment.

- *Avoidance of Environmentally Sensitive Areas.* Approximately 15 acres associated with Sand Pond and its peripheral wetlands, plus a 25-foot buffer extending upland from the seasonal high-water line, would remain undeveloped. FEMA-designated floodplains would be avoided to the extent practicable. Where floodplains cannot be avoided, the development design would incorporate compensatory storage and grading above the base flood elevation.
- *Avoidance and Protection of Listed Species.* Prior to construction, VA would conduct surveys for gopher tortoises (*Gopherus polyphemus*) and eastern indigo snakes (*Drymarchon couperi)*; if present, individual animals would be relocated to an approved off-site recipient location under a Florida Fish and Wildlife Conservation permit.
- *Stormwater Management.* The Proposed Action would create new impervious surfaces, primarily from new roadways. The development would be graded to direct stormwater away from burial areas but manage stormwater to prevent erosion and sedimentation of run-off. Additionally, VA would comply to the maximum extent technically feasible with the U.S. Environmental Protection Agency's (USEPA) Technical Guidance on Implementing the Stormwater Run-off Requirements for Federal Projects under Section 438 of the *Energy Independence and Security Act* (EISA) (USEPA, 2009). Under EISA, VA would reduce stormwater run-off by using a variety of stormwater management practices often referred to as "green infrastructure" or "low impact development" practices, including, for example, reducing impervious surfaces and porous pavements.
- *Utility Requirements – Irrigation Water Supply*. Irrigation water would be obtained from a combination of existing groundwater supply wells and surface water pond that are currently used to supply irrigation water at the cemetery, and possibly from a new groundwater well to be installed within FNC. The specific volume of irrigation water has not been determined at this time, as the actual landscaped area would be determined as part of the master plan/engineering design. However, VA would obtain a permit to install and operate a new groundwater supply well from the Southwest Florida Water Management District (SWFWMD) and a modification of the existing Water Use Permit modification (SWFWMD Application 20008675-006, dated July 1, 2018) to withdraw additional volume from the existing surface water pond. Measures to increase irrigation water efficiency would be developed and implemented per VA standard operating procedures.

2.2.2 No Action Alternative

The No Action alternative serves as a benchmark against which the effects of the Proposed Action can be evaluated, as required under the CEQ Regulations (40 CFR Part 1502.14). For this project, No Action is defined as not implementing the Proposed Action.

The No Action alternative would challenge NCA's goal of continuing to provide eligible Veterans and their family members with reasonable access to VA burial options in central Florida and, therefore, would not meet the purpose and need for action.

Under the No Action alternative, long-term, reasonable access to burial benefits would not be provided to the estimated 470,000 Veterans living in central Florida and their families (VA, 2017d). These Veterans and their families seeking interment at a National Cemetery would be required to travel to the nearest National Cemetery, which is the Sarasota National Cemetery, located 110 miles south of FNC; Cape Canaveral National Cemetery located approximately 120 miles to the east in Titusville, Florida; Jacksonville National Cemetery, located approximately 170 miles to the northeast; Tallahassee National Cemetery, located approximately 225 miles to the northwest; and South Florida National Cemetery, located in Lake Worth, Florida, approximately 250 miles to the southeast of FNC.

Because the nearest National Cemetery is approximately 110 miles away, Veterans and their families residing in central Florida would be underserved once FNC reaches full capacity in the future. At that point, VA would not be in compliance with the requirements of the *Service Members Civil Relief Act*. Furthermore, due to the distances between homes and the burial sites, the No Action alternative would result in a hardship for the survivors attending the funerals and for grave visitations of deceased Veterans interred in other National Cemeteries. If Veterans and their families must resort to private burials, they are deprived of the honor and privilege bestowed upon them by a grateful nation for their service to the country.

2.3 Alternatives Identified but not Evaluated in Detail

No other reasonable alternatives meeting the purpose and need for expanded burial capacity, necessary to extend the longevity of FNC, have been identified.

3.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

3.1 Aesthetics

3.1.1 Existing Environment

Historically, the Project Study Area was once pine flatwoods and xeric, longleaf pine communities that have changed over time due to historical logging practices. Currently, this area consists of xeric oak and hardwood hammocks with few pine trees along with the large pond and associated wetlands. The land uses immediately adjacent to FNC primarily consist of the Sumter Correctional Institute and undeveloped lands to the north, and on the northwest, west, and south by SW 60th Street, an unimproved rural road, and the Withlacoochee State Forest. The southeast side is bordered by undeveloped lands, CR 476 and I-75. Only the eastern border of the Project Study Area is only visible from CR 476.

The Project Study Area is outside of conservation easements that prohibit future development (Figure 3). Additionally, the Project Study Area lies outside the Withlacoochee State Forest, which is managed in cooperation with the Florida Forest Service.

There are no designated wild or scenic rivers or scenic roadways at or in the vicinity of the Project Study Area or at FNC.

3.1.2 Environmental Consequences

3.1.2.1 Proposed Action

Construction. Construction of the expansion area would require the use and presence of heavy construction equipment for tree clearing, grading, and filling of the soil spoil pile area. The heavy equipment phase of construction typically requires four to six months but would not necessarily be one continuous period.

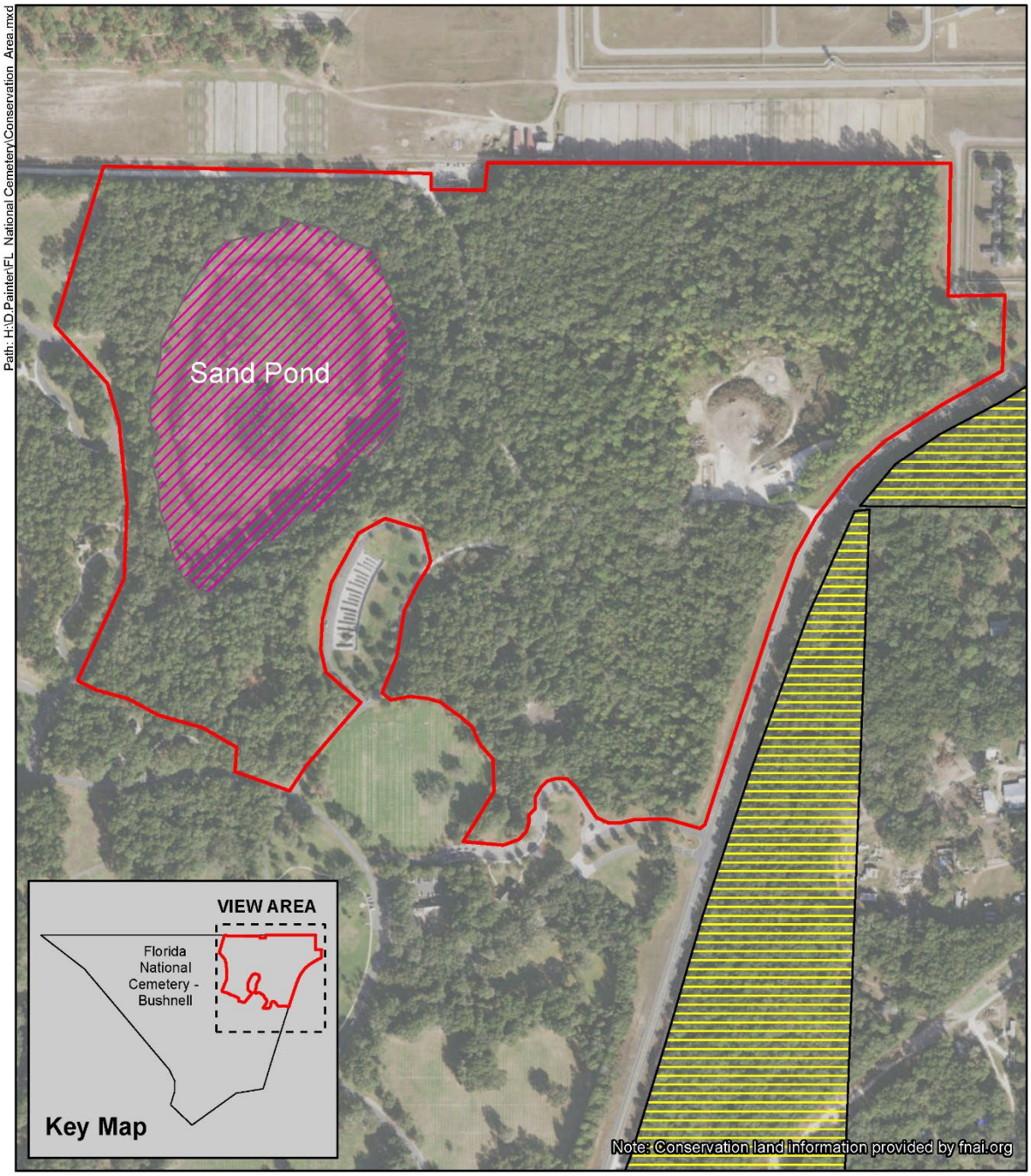
Construction fences and privacy screens would be erected to minimize views of the active construction site by visitors. Land clearing and grading would expose underlying soils and increase the potential for fugitive dust generation to the air and mud/dirt on the cemetery roadways, which can lead to nuisance concerns about the appearance of FNC. The potential for fugitive dust emissions and roadway effects would be limited by using water trucks to prevent dust emissions and gravel-covered access roads to remove dirt from the tires of vehicles leaving the construction area.

The appearance of the expansion area would change from forest with a sparse understory to park-like setting with a manicured landscape with forested borders, such that the expansion area has the character of a national shrine. The appearance of the landscaped area would be similar to and consistent with adjacent areas of the existing cemetery. The structures (columbaria, crypts) and roadways in the expansion area would have the same character as those in the existing cemetery.

The perception of the changes to the view for visitors within FNC would likely be neutral or positive, as they would contribute to the solemnity and tranquility of the property, as well as display the expected consistent appearance of FNC with other National Cemeteries. The expansion area would be graded in concert with the existing generally flat contours. Additionally, no new nighttime lighting is proposed.

Therefore, considering the few visual receptors and viewsheds due to the location of the expansion area, retention of existing forested borders, installation of construction privacy fencing, and incorporation of construction best management practices (BMPs) to reduce dust generation, the adverse construction impacts are considered to be short-term, minor, and not significant.

Figure 3. Conservation Area



Operation. Operation of the expansion area would provide direct, long-term, less-than-significant beneficial aesthetic effects by expanding the National Cemetery's park-like National Shrine setting and retaining vegetative borders. Operations within the expansion area would include routine and scheduled professional landscape maintenance to ensure the upkeep of the park-like appearance of the grounds and associated physical infrastructure (e.g. roads, interment areas).

Management practices to limit and further reduce potential construction-related impacts are summarized in Section 5.0 in this SEA.

3.1.2.2 No Action

No changes to the existing aesthetic or visual character of the Project Study Area would occur from implementation of the No Action alternative. While the less-than-significant adverse impacts associated with construction would be avoided, the beneficial impacts to aesthetics, associated with operations, also would not occur. Baseline conditions would remain, as described above.

3.2 Air Quality

3.2.1 Regional Climate

Weather and climate are important influences on air resources. The Florida National Cemetery is located in Sumter County approximately 25 miles east of the Gulf of Mexico and at an elevation of approximately 70 feet above mean sea level. According to the Koppen climate system, Sumter County is located in the temperate moist continental climate (ISC-Audubon, 2018). The average summer (July) temperature is 82 degrees Fahrenheit (°F) and humid (82%), with approximately 6.5 inches of rainfall; and in winter (January) the average temperature is 59°F and less humid (70%), with approximately 3.4 inches of rainfall. Annual average temperature is 71°F and humid (75%), with approximately 52 inches of precipitation. August is the wettest month (average 7.2 inches) and October is the driest (average 2.1 inches) for years 1981-2010 (NOAA, 2018).

3.2.2 National Ambient Air Quality Standards

The *Clean Air Act* (CAA) and its subsequent amendments require the USEPA to establish the National Ambient Air Quality Standards (NAAQS) for pollutants that may endanger public health or welfare. The USEPA has promulgated primary and secondary NAAQS for six criteria pollutants including carbon monoxide (CO), nitrogen dioxide (NO_2), ozone (O_3), lead (Pb), particulate matter (PM), particulate matter sized 10 microns or less (PM_{10}), particulate matter sized 2.5 microns or less ($PM_{2.5}$), and sulfur dioxide (SO). Primary standards set limits to protect public health, and secondary standards set limits to protect public welfare. The State of Florida ambient air quality standards are the same as the NAAQS. Area that comply with the NAAQS are designated "attainment" area by the USEPA, while area where the standards are not met are designated as "non-attainment" area.

The Florida National Cemetery is within the West Central Florida Intrastate Air Quality Control Region (40 CFR 81.96), which is an attainment area for all criteria pollutants (USEPA, 2018).

3.2.3 Existing Emissions Sources

The Florida National Cemetery does not have any regulated emission sources.

There are two regulated stationary air pollution emission sources in Bushnell, Florida; a commercial screen-printing company (Pride Enterprises/Sumter Furniture) and a limestone quarry (Cemex Construction Materials) (USEPA Envirofacts, 2019). To date, these emission sources have not resulted in reported adverse effects on air quality in the region.

3.2.4 Sensitive Receptors

CEQ's NEPA regulations require evaluation of the degree to which the proposed action affects public health (40 CFR 1508.27). Children, elderly people, and people with illnesses are especially sensitive to the effects

of air pollutants; therefore, hospitals, schools, convalescent facilities, and residential area are considered to be sensitive receptors for air quality impacts.

The nearest residential area is located approximately 0.56 miles north of FNC (NEPAssist, 2019). No schools, hospitals, or religious institutions are located within one mile of FNC. Bushnell Elementary School, the nearest school, is approximately 7 miles northeast from FNC; Brooksville Regional Hospital, the nearest hospital, is 14 miles west; and Indian Hill Church, the nearest religious institution, is approximately 2.5 miles north from FNC (NEPAssist, 2019).

3.2.5 Environmental Consequences

3.2.5.1 Proposed Action

Construction. Earthwork activities associated with land clearing, grading using on-site and off-site fill, installation of pre-placed crypt fields, and construction of roadways. These activities typically occur in phases over an approximately 36-month period. It is anticipated that land clearing and grading would occur during the first 12-month period, followed by pre-placed crypt installations and road construction over the following 24-month period.

Particulates are the main air pollutant of concern from construction projects. Construction activities would generate both coarse and fine particulate emissions during land clearing, grading, and road construction. The amount of particulate emissions can be estimated from the amount of ground surface exposed, the type and intensity of activity, soil type and conditions, wind speed, and dust control measures used. As described in Section 3.1, construction BMPs, generally including water- or chemical-based dust suppression, would be implemented to reduce fugitive dust generation and further prevent it from becoming airborne.

Total suspended particulates were calculated using the emission factor for heavy construction activity operations from "AP-42, Compilation for Air Pollutant Emission Factors" (USEPA, 1995), to provide a conservative estimate of PM emissions. Estimates are shown in Table 1.

Table 1. Estimate of Annual Non-Road Emissions of Criteria Pollutants during Construction of the Proposed Action

Total Area (acres)	Exposed Area (acres)	Construction Duration (months)	Emission Factor (tons/acre/month)[1]	Control Efficiency (%)	Total Suspended Particulate Emissions (tons/year)
100	85	36	**80**	**0.5**	**0.88**

Notes:
1 - Emission factor for "Heavy Construction Operations" (USEPA, 1995)

Non-road construction vehicles would emit criteria pollutants during construction. Criteria pollution emissions from construction equipment were calculated assuming the use of six backhoes, two graders, two bulldozers, smaller support equipment, operating for approximately eight hours per day for a total of 260 weekdays (approximately 12 months). Emissions were estimated using "Off-Road – Model Mobile Source Emission Factors" from the California South Coast Air Quality Management District (SCAQMD, 2019) because Florida and federal emission factors are not available. Emission factors for year 2022 were used in these calculations, though it is understood that construction activities may commence several years from now; emission factors typically decrease over time as new, more efficient equipment is brought to market. Therefore, using year 2022 factors represents a conservative estimate of potential emissions. Table 2 through 4 show estimated annual emissions, projected equipment operating hours, and equipment emission factors, while Table 5 shows the annual emissions during the 36-month construction period. Lead has been removed as a diesel and gasoline additive; therefore, lead is excluded from combustion engine emission estimates. Emissions of criteria pollutants are below *de minimis* thresholds; therefore, a General Conformity determination is not required.

Table 2. Estimate of Annual Non-Road Emissions of Criteria Pollutants during Construction of the Proposed Action

Criteria Pollutant[1]	SO_x	NO_x	VOCs(2)	CO	PM(3)
Emissions (tons/year)[4]	0.010	4.147	0.642	4.248	0.193
de minimis threshold (tons/year)	100	100	100	100	100

Notes:
1 - PM emissions from non-road construction vehicles are included in the general construction emissions factor applied in the estimates in Table 1, and therefore non-road emissions of PM are not included in this table.
2 - VOCs are considered equivalent to Reactive Organic Gases (ROG) for calculating non-road construction equipment emissions.
3 – PM emissions represent combined PM_{10} and $PM_{2.5}$ estimates.
4 - Calculated using "Off-road Mobile Source Emission Factors (Scenario Year 2022) (SCAQMD, 2019).

Table 3. Estimated Annual Operational Hours for Non-Road Construction Equipment

Equipment Type	Number	Hours/Day	Total Days	Total Hours
Air compressor	2	8	260	4,160
Forklifts	2	8	260	4,160
Generator sets	2	8	260	4,160
Tractors/Loaders/Backhoes	6	8	260	12,480
Welders	1	8	260	2,080
Rubber Tired Dozers	2	8	260	4,160
Excavators	4	8	260	8,320
Graders	2	8	260	4,160
Pavers	1	8	30	240
Paving Equipment	1	8	30	240
Rollers	1	8	30	240

Table 4. SCAB Fleet Average Emission Factors (Diesel)

Equipment/Emission Factor(1)	SOx (lbs/hr)	NOx (lbs/hr)	VOC(2) (lbs/hr)	CO (lbs/hr)	PM(3) (lbs/hr)
Air compressor	0.0007	0.2677	0.0414	0.3041	0.0138
Excavators	0.0013	0.3171	0.0648	0.5104	0.0136
Forklifts	0.0006	0.1265	0.0274	0.2146	0.0044
Generator Sets	0.0007	0.2783	0.0340	0.2694	0.0117
Graders	0.0015	0.4657	0.0807	0.5732	0.0218
Pavers	0.0009	0.4750	0.0870	0.4840	0.0296
Paving Equipment	0.0008	0.4137	0.0666	0.4042	0.0261
Rollers	0.0008	0.3198	0.0500	0.3799	0.0181
Rubber Tire Dozer	0.0025	1.3612	0.1919	0.7353	0.0536
Tractors/loaders/backhoes	0.0008	0.2302	0.0384	0.3599	0.0095
Welders	0.0003	0.1557	0.0260	0.1773	0.0078

Notes:
1 – South Coast Air Basin (SCAB), emission factor year 2022. Composite emission factors used.
2 - VOCs are considered equivalent to ROGs for calculating non-road construction equipment emissions.
3 - PM emissions represent combined PM_{10} and $PM_{2.5}$ estimates.

Table 5. Total Criteria Pollutant Emissions from Non-Road Construction Vehicles

Equipment	Emissions (tons per year)				
	CO	NOx	PM	SO2	VOC
Grading/Site Preparation					
Excavators	2.123244689	1.319059274	0.0567783	0.0054719	0.2697459
Graders	1.192161645	0.96871837	0.0453096	0.0031118	0.1678022
Rubber Tire Dozer	1.529322998	2.831205646	0.1115748	0.0050991	0.3992333
Construction Support Equipment					
Air compressor	0.632538707	0.556906673	0.0286727	0.0014796	0.0861285
Forklifts	0.446376906	0.263216787	0.009141	0.0012539	0.0569921
Generator Sets	0.560406769	0.578897095	0.0242321	0.0014518	0.0707781
Tractors/loaders/backhoes	2.245550604	1.436296631	0.0595292	0.0048363	0.2394611
Welders	0.184389518	0.161963218	0.0080695	0.0003302	0.0270447
Paving					
Pavers	0.0580745	0.05699731	0.0035546	0.0001074	0.0104372
Paving Equipment	0.048505717	0.049644592	0.0031377	9.516E-05	0.0079934
Rollers	0.045587079	0.038376229	0.0021707	9.234E-05	0.0059994
Annual total per year, tons	**9.066159131**	**8.261281824**	**0.3521702**	**0.0233295**	**1.341616**
***de minimis* threshold, tons per year**	**100**	**100**	**100**	**100**	**100**

Based on these estimates, the annual emissions emitted during construction would not exceed *de minimis* thresholds; therefore, a significant adverse impact would not be anticipated, and a conformity determination is not required.

Dust generated during construction could have an adverse impact on air quality, should its generation be uncontrolled. To reduce and control dust generation, and to minimize the potential adverse impact of its generation to less-than-significant levels, the following measures would be incorporated into the Proposed Action. Many of these measures are identified as BMPs in the Soil Erosion and Sedimentation Control (SESC) Plan, as noted in the Soils heading under Section 3.4.2.1.

- Implement dust suppression methods to include application of water or dust palliatives (as discussed in Section 3.1.2.1) and construction scheduling (avoid earthwork during extremely windy and dry periods).
- Stabilize exposed soil with vegetation or mulching to minimize erosion and potential dust generation.
- Construction vehicles traveling on paved roads within FNC and vicinity would follow posted speed limits. This will minimize dust generated by vehicles and equipment on paved surfaces.
- On unpaved surfaces at the site, vehicle speeds will be maintained at or below 5 miles per hour to prevent dust generation of any exposed soil. Additionally, should any vehicles transport soil, the soil will be covered with haul tarps.
- Visually monitor construction activities daily, and particularly during extended periods of dry weather; implement additional dust control measures as needed.

Operation. Operational sources of air emissions would include vehicles visiting the new expansion area and FNC maintenance vehicles (mowers, backhoes, pressure washers) performing routine upkeep of grounds at the new expansion area. The Proposed Action would result in a negligible increase in visitor vehicle traffic and maintenance vehicle operations. However, by extending the longevity of FNC, visitors and families would not be required to travel the longer distances to reach other National Cemeteries outside of the central Florida region, as they would under the No Action alternative.

Therefore, overall operation of the Proposed Action would result in no net long-term adverse or beneficial impacts on air quality.

3.2.5.2 No Action

Under the No Action alternative, there would be no short-term changes in air quality compared to current conditions. However, emissions associated with visitors and families would begin to increase once capacity was reached at FNC, as these groups would then travel greater distances to visit or obtain burial benefits at a National Cemetery outside of central Florida.

3.3 Cultural Resources

3.3.1 Existing Environment

Cultural resources refer to places, buildings, structures, districts, archaeological sites, manmade objects, or natural resources considered important by local or regional communities for scientific, traditional, religious, or other reasons. Cultural resources that meet certain criteria are protected under several Federal laws and executive orders, including the *National Historic Preservation Act* (NHPA) (1966, as amended), the *Archaeological and Historic Preservation Act* (1974), the *American Indian Religious Freedom Act* (1978), the *Archaeological Resources Protection Act* (1979), the *Native American Graves Protection and Repatriation Act* (NAGPRA) (1990), and Executive Order (EO) 13007, Indian Sacred Sites (24 May 1996).

FNC, along with all National Cemeteries, is considered exceptionally significant as a result of their Congressional designation as nationally significant places of burial and commemoration. This means they meet the special requirements set forth in the National Register Criterion Considerations for cemeteries, graves, commemorative properties, and resources less-than-50 years of age. The baseline age established by NHPA for historic resources is 50 years of age or older. However, the NPS has provided guidance that unimproved portions of a National Cemetery that have only been set aside for future use and not ready to receive burials are not eligible for the NRHP. (NPS, 2011)

Based on the 1983 EIS (VA, 1983), prehistoric cultural resources within the vicinity of the Project Study Area are located around off-site seasonal or permanent water sources, with the closest being located approximately 800 feet beyond the cemetery boundary. Based on historical and archaeological review, no evidence of historic occupation has been discovered within the Project Study Area. There are no known standing structures on the Project Study Area. Historical records indicate activity has focused primarily on the naval stores industry (lumbering, turpentine operations) (1880s - 1940s), phosphate mining, and limerock mining. An attempt was made at phosphate mining in the late 1880s but was abandoned shortly thereafter. One limerock lease was awarded in 1938 and it appeared to be near completion by 1944. While the management of some forested portions of FNC for prior timber harvesting is evident, there is no remaining evidence of any of the historical mining activities within the Project Study Area.

Previous archaeological investigations in 1982 (prior to purchase and development of the property) were conducted by Water and Air Research, Inc. (WAR) across a 513-acre parcel that encompasses FNC property and encompasses the currently proposed Project Study Area. Based on that investigation, no significant cultural resources were identified (including the Project Study Area), and the State Historic Preservation Officer (SHPO) and the Advisory Council on Historic Preservation concurred that development of the property (that subsequently became FNC) for use as a cemetery would not affect any historic properties.

As part of the Section 106 consultation process for the Proposed Action analyzed in this SEA, the VA mailed a letter on November 15, 2019 to the Florida SHPO to request concurrence that no adverse effects would be anticipated as a result of the Proposed Action. To date, the SHPO has not provided a response.

Additionally, on November 15, 2019, VA mailed letters soliciting input about the Proposed Action to the following five federally recognized Native American Tribes who may attach religious or cultural significance to the property affected by the Proposed Action, in accordance with NEPA, NHPA, NAGPRA, and EO 13175. Copies of the letters are provided in Appendix A.

- Miccosukee Tribe of Indians of Florida
- Muscogee Creek Nation
- Coushatta Tribe of Louisiana
- Seminole Tribe of Florida
- The Seminole Nation of Oklahoma

To date, only the Seminole Tribe of Florida provided a response; the Tribe requested a copy of the 1983 EIS, which VA subsequently provided. The Tribe concluded that they had no objections to the Proposed Action, and requested notification should archaeological sites be inadvertently discovered, particularly because the original archaeological survey conducted in 1983 no longer met the more stringent state requirements for transect spacing and shovel test diameter. Copies of correspondence are provided in Appendix A.

3.3.2 Environmental Consequences

The Section 106 Criteria for Adverse Effect (36 CFR 800.5) defines an undertaking (action) as having an adverse effect on historic properties if the undertaking would alter, directly or indirectly, any of the characteristics that qualify a property for inclusion in the NRHP in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. The analysis considers potential effects to cultural resources located in and within view of the project area.

3.3.2.1 Proposed Action

Construction. Based on prior cultural resources investigations, no archeological sites or historical properties are known to exist within the Project Study Area (VA, 1983). To ensure that the Proposed Action would avoid impacts to undiscovered cultural resources, VA would implement an “Inadvertent Discovery” plan. Under this plan, if prehistoric or historic artifacts that could be associated with Native American, early European, or American settlement are encountered at any time within the project site area, VA would cease all activities involving subsurface disturbance in the vicinity of the discovery. The Florida Department of State, Division of Historical Resources, Compliance Review Section and aforementioned federally recognized Native American Tribes would be contacted, and project activities would not resume without verbal and/or written authorization. In the event that unmarked human remains are encountered during permitted activities, all work would stop immediately, and the proper authorities notified in accordance with Section 872.05, *Florida Statutes*.

These management measures would ensure that the Proposed Action would not have a significant adverse impact on cultural resources.

Operation. Excavations for individual burial sites pose the same possibility of inadvertent discovery of human remains or cultural resources described above for construction impacts. Because the likelihood of discovery is considered low, no potential impacts are anticipated. However, should there be an inadvertent discovery, VA would implement the Inadvertent Discovery plan as previously described.

Therefore, VA has concluded that no historic properties would be affected by the undertaking (i.e. the Proposed Action) per 36 CFR Part 800 and E) 13175.

3.3.2.2 No Action

No changes to the Project Study Area would occur from implementation of the No Action alternative; therefore, no impacts to cultural resources would occur. Baseline conditions would remain, as described above.

3.4 Geology, Topography, and Soils

3.4.1 Existing Environment

3.4.1.1 Geology

The Project Study Area is located within the central Florida physiographic zone on the east edge of the Brooksville Ridge region and consists mostly of medium, fine sand and silt soils. The Brooksville Ridge is about 110 miles long and divided into two equal parts by the valley of the Withlacoochee River at Dunnellon, Florida. The largest portion of the southern zone is approximately 60-miles long and varies between 10- and 15-miles wide. The northern portion is approximately 50-miles long and is between 4- and 6-miles wide. This region is typically above the piezometric surface. The elevations on the Brooksville Ridge vary in short distances from 70 to 200 feet. Little surface drainage occurs in this region, and the ground surface comprises sand a few feet thick and underlain with red clastic sediments of the Bone Valley and Alachua formations (FDNR, 1970).

FNC is bordered on the west by the floodplain of the Withlacoochee River and on the east by an expansive system of lakes and prairies. The Ocala Limestone of Eocene Age is the uppermost rock unit found at FNC, which is underlain by other limestone units to a depth of approximately 2,500-feet below ground. Its surface is highly weathered, and the depth to the top of rock is quite variable. It is found at or just below land surface and is estimated to average about 12-feet below land surface over the entire property, including the Project Study Area.

The karstic nature of the Ocala Limestone in the area is attested to by numerous sinkholes on and around FNC. Residual clays lie atop the eroded surface of the Ocala Limestone, but may be breached by sinkholes, rock pinnacles, and erosional pinchouts (VA, 1983). According to the United States Geological Survey (USGS, 1985), FNC lies within sinkhole "Area I," which is defined by fewer sinkholes as compared to Area II, III, and IV; however, when sinkholes form, they are generally shallow and broad, and form gradually over time. Solution sinkholes, which occur when water percolates through the shallow soil cover into bedrock and slowly dissolves it over time, are the most dominant sinkhole type within this area. Many lakes are formed when overburden materials settle into cavities in the underlying Ocala Limestone.

A sinkhole was identified by FNC staff in the central eastern portion of the property in 2014. This sinkhole was repaired by VA in early 2016 (VA, 2017c). Another sinkhole was identified in the western portion of FNC in circa 2017. Neither sinkhole is within the Project Study Area.

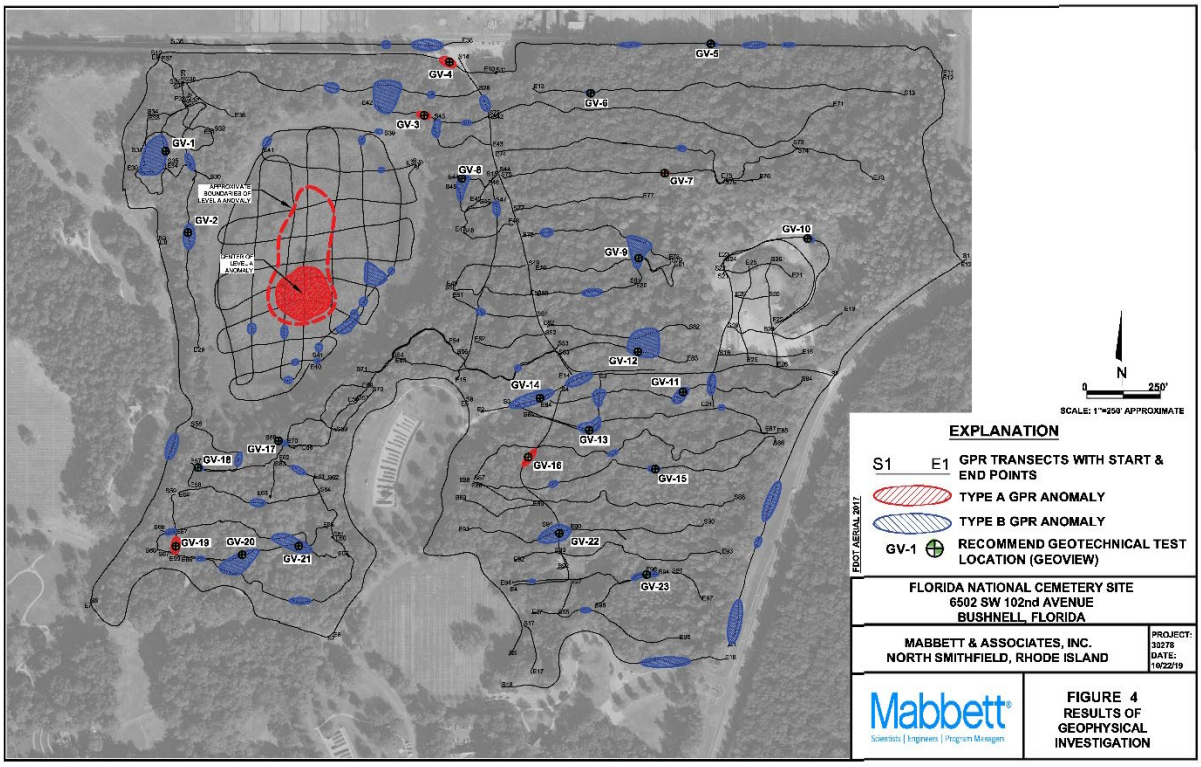
To further assess geology within the Project Study Area, geophysical and geotechnical investigations were completed in October and November 2019. The purpose of the investigations was to help characterize near-surface geological conditions and to identify subsurface geological features related to potential karst activity and evaluate the potential for soil subsidence and sinkhole formation that would create constraints for future development in the Project Study Area.

The geophysical investigation within the Project Study Area used ground penetrating radar (GPR) to identify potential subsurface anomalies both on land and across Sand Pond. A description of the GPR technique, methods employed for geological characterization studies and associated limitations are detailed in Appendix B. Multiple GPR-identified geological anomalies were identified on land and characterized as Type A and Type B (Figure 4). Type A anomalies are considered to be the most significant and Type B anomalies are considered to be the least significant. A large Type A anomaly was observed within Sand Pond's center, suggesting karst-related geological features in the middle of the pond and Type B anomalies

along the perimeter; it is suspected that Sand Pond is most likely a karst-related geological feature. Sand Pond was estimated have a maximum water depth of 10 to 13 feet. On land, both Type A and B anomalies were identified, as depicted on Figure 4.

Based on the GPR data, a geotechnical engineering investigation was completed to ground-truth 20 of the most suspect GPR anomalies for potential for collapse or subsidence. The geotechnical engineering investigation advanced subsurface borings to limestone or very dense soil. The geotechnical engineering investigation found that while few locations showed evidence of relic sinkholes, the majority of subsurface anomalies did not have evidence of sinkhole activity. A copy of the Geotechnical Engineering Report is provided in Appendix B.

Figure 4. Geophysical Survey Findings



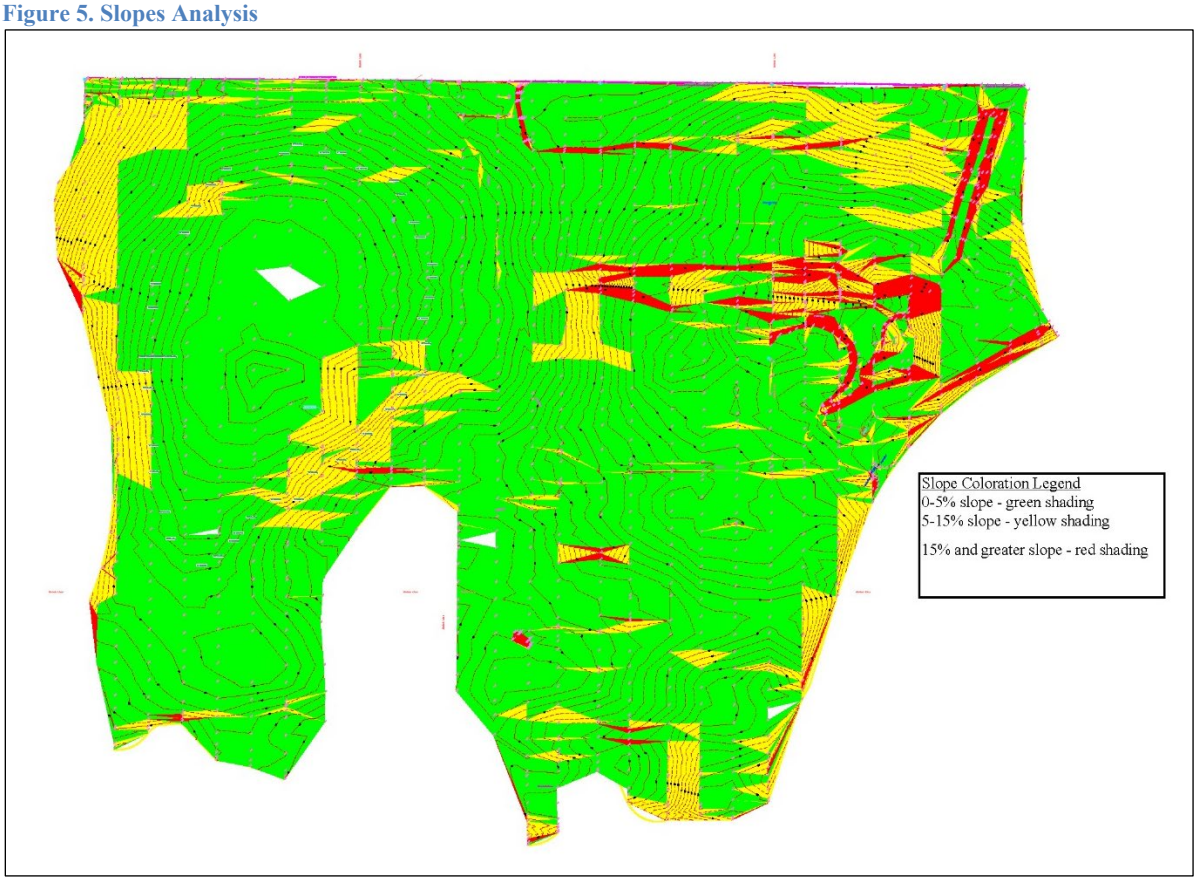
3.4.1.2 Topography

Overall, the topography of the Project Study Area is relatively flat. Based on the USGS topographical map, slope classes mapped on Figure 5 are <1%, 1-5%, 5-10%, and greater than 10%. Approximately 90% of the property has less than a 5% slope. Isolated steep slopes are present around the perimeter of the spoils area, and to the northeast, where a steep earthen berm extends to the northeast corner of FNC.

A site-specific topographic survey was performed at the Project Study Area from October to December 2019. The topographic survey data are still under preparation.

Section 10.6 (Grading Guidelines) from the latest NCA Design Guidelines (November 2016) has a requirement that interment area be located on slopes of 15% or less. These same design guidelines establish a maximum slope of 25% for mowed slopes.

Figure 5. Slopes Analysis



3.4.1.3 Soils

Soil information was obtained from the U.S. Department of Agriculture – Natural Resources Conservation Service (USDA-NRCS, 2012), and further confirmed by on-site soil profiling conducted throughout the Project Study Area on September 18 and 19, 2019. A list of soils present within the Project Study Area is presented in Table 6 .. Soils mapped within the Project Study Area by the NRCS and confirmed during profiling are indicated on Figure 6. Based on the *Hydric Soils of Florida Handbook* (Hurt, 2007), two of the soils mapped within the Project Study area are classified as hydric soils; Okeelanta muck and Ona-Ona wet, fine sand.

Table 6. USDA-NRCS Soils within the Project Study Area

Soil Map Unit	Soil Map Unit Name	Drainage Class	Hydric (Yes/No)	Prime Farmland (Y/N)	Acres within Project Study Area
4	Candler sand, 0-5% slopes	Excessively drained	No	N	8.6
5	Candler sand, 5-8% slopes	Excessively drained	No	N	12.2
13	Tavares fine sand, 0-5% slopes	Moderately well drained	No	N	10.1
18	Okeelanta muck	Very poorly drained	Yes	N	8.6
23	Ona-Ona wet, fine sand, 0 to 2 percent slopes	Poorly drained	Yes	N	4.3
27	Sumterville fine sand, boulder subsurface, 0-5% slopes	Somewhat poorly drained	No	N	3.7

Soil Map Unit	Soil Map Unit Name	Drainage Class	Hydric (Yes/No)	Prime Farmland (Y/N)	Acres within Project Study Area
39	Mabel fine sand, boulder subsurface, 0-5% slopes	Somewhat poorly drained	No	N	14.3
40	Millhopper sand, boulder subsurface, 0-5% slopes	Moderately well drained	No	N	30.1
57	Pits-Dumps	Well drained	No	N	6.4
65	Candler sand, boulder subsurface, 0-5% slopes	Excessively drained	No	N	0.7
TOTAL					**100.00**

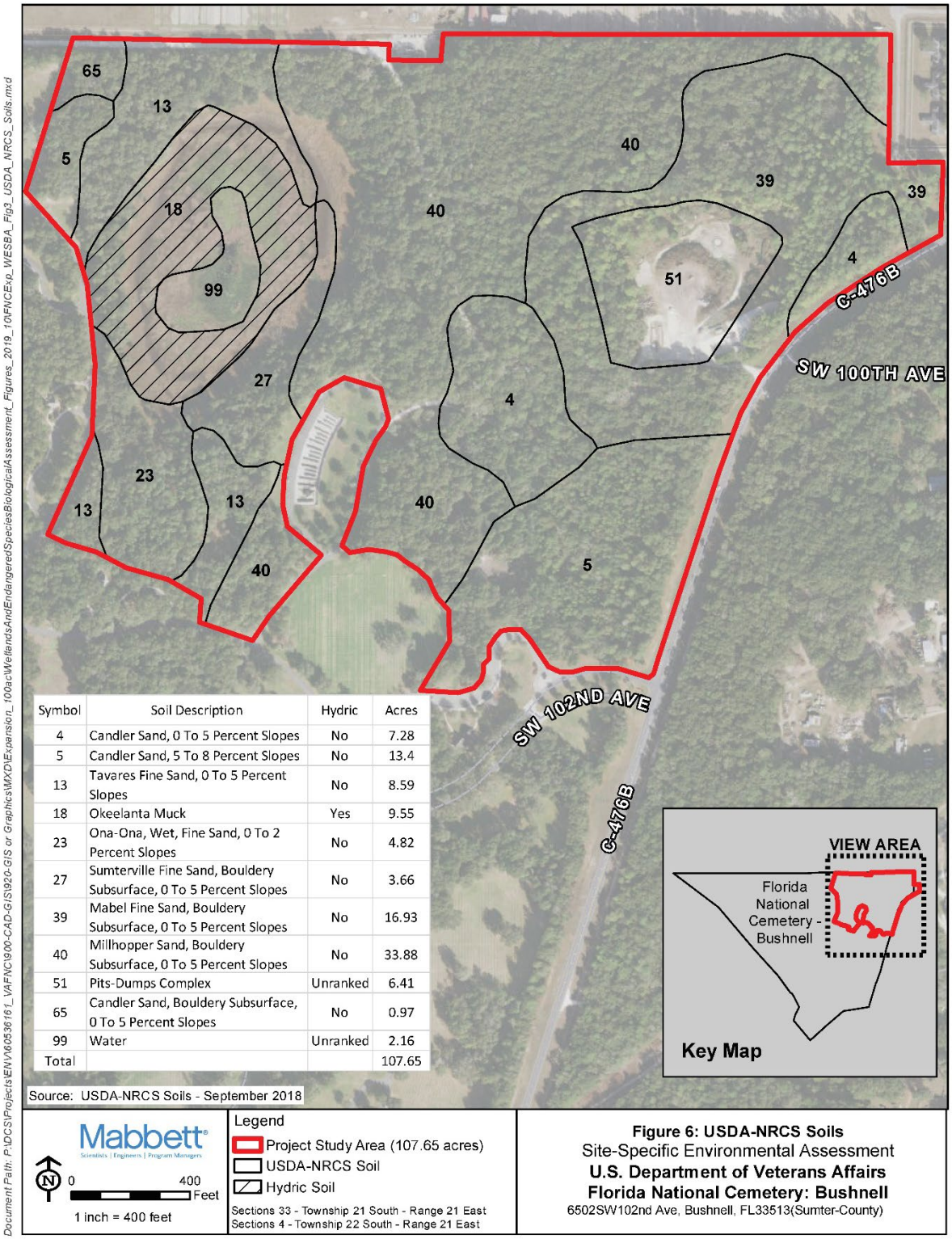
1 - Reported by USDA-NRCS Soil Survey of Sumter County (2019).

Prime Farmland

Farmland in the United States is protected by the *Farmland Protection Policy Act* (FPPA) (7 USC 4201) to maintain agricultural production capacity. The USDA-NRCS implements the policies associated with FPPA. The NRCS uses Farmlands classifications to identify soils according to their suitability for producing food, feed, fiber, forage, and oilseed crops. The FPPA defines Prime farmland as "land that has the best combination of physical and chemical characteristics for producing food, feed, fiber, forage, oilseed, and other agricultural crops with minimum inputs of fuel, fertilizer, pesticides, and labor, and without intolerable soil erosion." Unique farmlands are defined by USDA as "land other than prime farmland that is used for the production of specific high-value food and fiber crops. It has the special combination of soil quality, location, growing season, and moisture supply needed to economically produce sustained high-quality and/or high yields of a specific crops when treated and managed according to acceptable farming methods."

The NRCS Web Soil Survey indicated that none of the soils in the Project Study Area are classified as farmland of unique or local importance (USDA-NRCS 2019).

Figure 6. USDA-NRCS Soil Map



Symbol	Soil Description	Hydric	Acres
4	Candler Sand, 0 To 5 Percent Slopes	No	7.28
5	Candler Sand, 5 To 8 Percent Slopes	No	13.4
13	Tavares Fine Sand, 0 To 5 Percent Slopes	No	8.59
18	Okeelanta Muck	Yes	9.55
23	Ona-Ona, Wet, Fine Sand, 0 To 2 Percent Slopes	No	4.82
27	Sumterville Fine Sand, Bouldery Subsurface, 0 To 5 Percent Slopes	No	3.66
39	Mabel Fine Sand, Bouldery Subsurface, 0 To 5 Percent Slopes	No	16.93
40	Millhopper Sand, Bouldery Subsurface, 0 To 5 Percent Slopes	No	33.88
51	Pits-Dumps Complex	Unranked	6.41
65	Candler Sand, Bouldery Subsurface, 0 To 5 Percent Slopes	No	0.97
99	Water	Unranked	2.16
Total			107.65

3.4.2 Environmental Consequences

3.4.2.1 Proposed Action

Construction.

Geology

Construction of the Proposed Action is not anticipated to require or result in impacts to the existing geology underlying the Project Study Area. Site preparation for burial area, columbarium, roadways, and other construction activities are not anticipated to require excavation to or contact with limestone bedrock.

Topography

The Proposed Action would require minimal modifications to the current topography, particularly within the spoil areas. It is also noted that no development would occur within Sand Pond. Topographic modifications would be required to ensure the grade for roadways, interment areas, and the columbarium does not result in ponding of stormwater. Therefore, the overall topographic conditions of the expansion area would be similar to existing conditions, and the impact of the Proposed Action on topography would be negligible.

Soils

Construction of the Proposed Action would require earthwork to clear vegetation and grade the terrain; it is emphasized that no development would occur within Sand Pond or within a 25-foot buffer extending landward from the seasonal high-water line. These activities would disturb and expose the soil surface. Additionally, off-site fill is anticipated to be needed to fill the spoils area and areas where the current elevation would be raised; the specific volume of fill has not been determined at this time; the volumes would be determined during a future master planning and engineering design phase.

Exposed soil that has not been compacted or re-stabilized with vegetation or hardscape may be susceptible to erosion by wind and precipitation, potentially resulting in off-site discharges of sediment-laden runoff. Additionally, compaction can reduce the infiltration rate of the soil, leading to increased run-off potential and increased erosion of the downgradient surrounding soils.

These potential adverse effects would be prevented or minimized to less than significant through utilization of appropriate erosion and sedimentation BMPs, and adherence to the terms of the Florida Department of Environmental Protection (FDEP) National Pollutant Discharge Elimination System (NPDES) General Permit for Construction Activity and the SWFWMD Environmental Resource Permit (ERP) (Chapter 62-330, FAC). The ERP would include an SESC plan would be prepared by an Architecture-Engineer firm and implemented by the construction contractor; the SESC plan would incorporate BMPs to prevent and reduce soil erosion and sedimentation during construction, including the use of silt fencing, synthetic hay bales, specified loading and unloading area, covering exposed soils during anticipated storm events, and revegetating soils with temporary and/or permanent non-invasive vegetation as soon as construction conditions allow. BMPs would also include measures to prevent dust emissions from disturbed soil at each expansion area and on construction vehicles leaving and entering each area.

Additionally, construction vehicles and equipment could accidentally release fuel and fluids that degrade soil quality at the site, if the release is not immediately remediated. To avoid such potential releases and impacts, construction equipment would be properly maintained in good working order and equipped with emergency spill kits. This would ensure that construction contractors are prepared to respond to an emergency release of petroleum-based fluids, contain the release, and prevent impacts to soil. Additionally, construction equipment would be refueled in a designated maintenance area with impervious surfaces to avoid impacting soil quality.

To address and limit the adverse effects of construction on soil quality, the expansion project would be designed to comply with EISA 438 to the maximum extent technically feasible through engineering and

design controls, such as minimizing the creation of new impervious surfaces, directing stormwater run-off to retention basins, and allowing precipitation to infiltrate into the ground surface to the maximum extent possible. This measure would also be consistent with the SWFWMD requirement that the post-development site conditions have a combined site and soil stormwater storage equivalent to the pre-development condition. Depending on the depth of the groundwater encountered at the Project Study Area and the design of the cemetery expansion, filling of the site would be required to avoid interaction with the groundwater, to compensate for stormwater storage requirements by the SWFWMD, and to accommodate for burial sites. These measures also limit adverse impacts on surface water quality, which is discussed separately in Section 3.5.

Therefore, construction would have a short-term, less-than-significant adverse impact on soil quality.

Operation. Operation of the Proposed Action would have no mechanisms to impact geological resources and would not further modify topography. During operation, soil impacts would be limited to excavation for individual burial sites. Excavated soil would be temporarily stockpiled and returned to the burial site from which it was obtained, and then sodded to prevent erosion.

During operation, VA would conduct routine landscaping to ensure any exposed soil is rapidly revegetated and stabilized to prevent erosion.

Based on a soil agricultural investigation conducted in the Project Study Area on September 18 and 19, 2019, agronomic fertilizer recommendations for lime and other nutrients were developed for ornamental trees and shrubs and for turf that would be established and maintained during the operational phase of the Proposed Action. The recommendations would be utilized to the extent practicable to ensure fertilization applications are optimized for the selected plantings.

Therefore, operation would have a negligible, short-term, and less-than-significant adverse impact on soil quality.

3.4.2.2 No Action

No changes to the Project Study Area would occur from implementation of the No Action alternative; therefore, no impacts to geology, topography, or soils would occur. Baseline conditions would remain, as described above.

3.5 Hydrology and Water Quality

3.5.1 Existing Environment

3.5.1.1 Surface Waters

This section covers the effects on surface waters; a discussion of wetlands is presented in Section 3.9.

The Project Study Area includes one surface water pond, “Sand Pond,” which is approximately 15 acres in area. Sand Pond is fed primarily by groundwater, with additional inputs including precipitation and stormwater run-off from the immediately adjacent burial areas along Apalachee Way. The horizontal dimensions of Sand Pond change with the amount of precipitation and temperature during the year, with more rain and cooler temperatures resulting in a larger surface water volume.

Based on data from the site-specific geophysical and geotechnical engineering study at the Project Study Area in October and November 2019, Sand Pond is considered a sink hole feature.

The nearest surface water body located outside the Project Study Area, but within FNC, is an approximately 1.3-acre irrigation pond located near Memorial Area 329 in the southern portion of FNC.

Outside of FNC, the Withlacoochee River is the nearest perennial stream, located approximately 5,000-feet southwest of FNC. The Withlacoochee River flows to the northwest, and discharges into the Gulf of Mexico. As summarized in VA’s 1983 EIS prepared to select the FNC site, the river received some surface

water run-off from the site (now FNC) and may receive shallow aquifer groundwater seepage from the site in areas where perched water tables exist along the river (VA, 1983). The amount of shallow aquifer seepage is negligible, as there appears to be little sandy overburden along the river and because water in the sandy overburden on the property tends to move downward to the Floridan aquifer rather than laterally toward the river. Once in the Floridan aquifer, the water flows in a westerly direction, under the river, toward the Gulf coast (VA, 1983).

The 2019 EPA Envirofacts database lists FNC as having an active National Pollutant Discharge Elimination System (NPDES) general permit (FLR 20AU15, expires July 1, 2021). Nine other facilities with NPDES permits exist within a 5-mile radius of FNC, the nearest being the Sumter County Correctional Institute. Activities at these other facilities are not anticipated to have an impact on surface water quality at FNC due to their distance from FNC and lack of a direct hydrologic connection.

3.5.1.2 Groundwater

FNC is located in the Withlacoochee watershed (hydrologic unit 03100208) (USGS, 2017).

Groundwater at FNC occurs principally within the Floridan aquifer (VA, 1983). The Floridan aquifer is composed of the limestones and dolomites of the Ocala, Avon Park, and Lake City Limestones, extending to a depth of about 1,200 to 1,500 feet below land surface. Water occurs primarily within pore spaces and solution openings in the limestone. Where the Floridan aquifer is overlain by fairly consistent sections of clay that confine it hydraulically from the sandy overburden above, the aquifer is artesian. Where the aquifer is not confined by overlying clays, it usually exists under water table conditions.

A site-specific geotechnical engineering study was conducted in the Project Study Area in November 2019. The depth to seasonal high groundwater was measured at twenty discrete subsurface boring locations. Groundwater was measured at approximately 2-feet below the ground surface in borings located nearest Sand Pond. In upland locations, the depth to seasonal high groundwater increased to 3-5-feet below ground and in many locations was deeper than 6-feet below the ground surface.

Based on data obtained from SWFWMD, the depth to groundwater ranged from 43.80 to 44.60 below grade in groundwater wells located in the general vicinity of FNC (SFWMD, 2019).

3.5.2 Environmental Consequences

3.5.2.1 Proposed Action

<u>Surface Water</u>

Construction. Development within Sand Pond and a 25-foot buffer zone around the seasonal high-water line is not currently proposed for development. Construction of the upland portions of the Project Study Area would require tree clearing and grading, which would expose soils, making them susceptible to erosion which in turn could lead to sedimentation of stormwater run-off. To prevent sediment-laden stormwater run-off from reaching Sand Pond, stormwater engineering controls specified in the ERP SESC plan (previously described under the Soils heading) would be implemented at the start of the construction period and continuously maintained until construction is complete and soils are stabilized. Additionally, construction equipment and supplies would be staged and operated outside of the 25-foot wetland buffer zone to avoid compacting soils and increasing stormwater run-off that can result from compaction.

Additionally, the expansion would be designed to comply with USEPA Technical Guidance on Implementing the Stormwater Run-off Requirements for Federal Projects under Section 438 of the Energy Independence and Security Act (EISA) (USEPA, 2009a) to the maximum extent technically feasible through engineering and design controls, such as minimizing the creation of new impervious surfaces, directing stormwater runoff to designated storage basins, and allowing precipitation to infiltrate into the ground to the maximum extent possible.

VA would construct stormwater management systems that adhere to these design requirements, such that during operation, the Proposed Action would not have a significant adverse impact on stormwater management or surface water quality. Stormwater management systems may include infiltration basins and trenches, bioretention basins, vegetated filter strips, and vegetated swales to promote sheet flow of captured run-off and reduce erosion and channelization at discharge locations. The stormwater management systems and the volume of run-off have not been defined for this SEA because a design/engineering plan is not available at this time. However, stormwater management systems would be appropriately designed to manage the anticipated increase in stormwater run-off rate and volume, and in compliance with an approved ERP and with NCA design guidelines.

The Withlacoochee River would not be impacted by construction activities at the Project Study Area due to the distance (approximately 5,000 feet) separating these areas; the presence of dense forest between the river and the Project Study Area; and implementation of the aforementioned soil erosion and sedimentation controls.

Therefore, construction of the Proposed Action would have a short-term, direct, less-than-significant adverse impact on surface water quality.

Operation. Operation of the Proposed Action would generate stormwater run-off from the new impervious surfaces, namely new roadways and other hardscapes. Any new stormwater management systems installed during the construction phase would be properly maintained during operation on a routine basis by FNC maintenance staff.

Additionally, vegetation in landscaped areas would be maintained to prevent exposure of underlying soils. These design features and stormwater management measures would minimize the potential for sedimentation of run-off, which could adversely impact surface water resources.

During operation, pesticide/herbicide applications (as part of routine maintenance activities) would be performed by licensed applicators to the minimum extent necessary and in accordance with manufacturer specifications, thereby avoiding impacts to surface water resources, namely Sand Pond.

Therefore, operation of the Proposed Action would have a long-term, direct, negligible adverse impact on surface water quality.

Groundwater

Construction. Typical excavation depths for cemetery construction can vary from 3- to 10-feet below grade. Therefore, groundwater could be encountered during construction activities where the depth to groundwater is within 10 feet of the ground surface. Additionally, the groundwater table could affect over-excavation efforts, especially for over-excavation and replacement of lower strength soils. A temporary dewatering system consisting of sumps with pumps could be necessary to achieve the recommended depth of over-excavation. However, if the graded surface elevation is raised to facilitate installation of pre-placed crypts and a drainage gallery, then it is possible that construction activities would not encounter groundwater and dewatering would not be necessary. Thus, the potential to directly encounter groundwater would depend on the future grading/elevation design and engineering plan.

Similar to soil impacts, a release of petroleum-based fluids from construction equipment could adversely impact groundwater quality. To avoid such potential releases and impacts, construction equipment would be properly maintained in good working order and equipped with emergency spill kits, with workers trained in the proper deployment and use of these kits. This would ensure that construction contractors are prepared to respond to an emergency release of petroleum-based fluids, contain the release, and prevent impacts to groundwater from occurring. Additionally, construction equipment would be refueled in a designated maintenance area equipped with impervious surfaces to avoid potential releases to impervious surfaces and the underling groundwater.

Operation. Based on standard modern burial practices, it is unlikely that embalming fluid or other

decomposition products would be released into the soil and/or groundwater during operation of the burial expansion sections. The standard NCA design incorporates (for full casket burials) subsurface concrete crypts, an entire section of which would be installed during site construction. Using this technique, the caskets are not buried directly in the soils, rather they are set in a pre-placed concrete crypt. Modern embalming fluids are markedly less toxic as the primary active ingredients are no longer arsenic based. Additionally, as selection of either cremains interment or columbaria placement increases, the potential for groundwater contamination commensurately decreases, as no embalming fluids are used in these processes.

Additionally, any future crypt fields would utilize an adequate underdrainage system designed to keep groundwater from reaching the inside of the lowest crypt. As a result, operation of crypt fields is not anticipated to encounter groundwater, or, if groundwater is present, the contact period would be temporary.

As previously described for surface water, operational herbicide/pesticide applications would be conducted to the minimum extent necessary and in accordance with manufacturer specifications, resulting in minimal impacts to underlying groundwater resources.

It is anticipated that future irrigation water demand associated with the Proposed Action would be supplied from the existing surface water irrigation pond near the maintenance facility, and a new groundwater supply well installed within FNC (further details of the irrigation supply system are provided under the Utility heading in Section 3.14). To account for the additional water consumption, VA would request a modification to the existing FNC Consumptive Water Use Permit issued from the SWFWMD (permit 20008675-006) to ensure groundwater consumption does not adversely impact availability of this resource to others in the surrounding community.

Accordingly, construction and operation of the Proposed Action would have short-term, less-than-significant adverse impacts on groundwater.

3.5.2.2 No Action

No changes to the Project Study Area would occur from implementation of the No Action alternative; therefore, no impacts to hydrology or water quality would occur. Baseline conditions would remain, as described above.

3.6 Wildlife and Habitat

3.6.1 Existing Environment

Federally-listed species are those plant and animal species protected by the federal government pursuant to the *Endangered Species Ac*t of 1973, as amended. Federally-listed species are classified as endangered or threatened. State-listed species are those plant and animal species managed by the State of Florida pursuant to Chapter 5B-40 FAC and Chapter 68A-27 FAC, respectively. State-listed species are classified as endangered, threatened, species of special concern (animals), or commercially exploited (plants).

The Project Study Area was assessed by a review of species accounts and agency listings (via readily available online geographic information system [GIS] sources) of species known to occur or potentially occurring within one mile of the Project Study Area. Online sources include websites of the USFWS (http://endangered.fws.gov/), Florida Fish and Wildlife Conservation Commission (FWC) (http://floridaconservation.org/pubs/endanger) https://myfwc.com/media/1945/threatend-endangered-species.pdf, and Florida Natural Area Inventory (FNAI) (http://www.fnai.org). In addition, the FWC's online bald eagle nest locator database (http://myfwc.com/eagle/eaglenests/nestlocator.aspx) was searched for the presence of documented bald eagle nests within one mile of the Project Study Area. Based on this information, an on-site survey for potential habitat and occurrences of federally-listed and state-listed plant and animal species was conducted at the Project Study Area on September 18 and 19, 2019.

The following sections present the findings of research, desktop analysis and field studies of the vegetation and wildlife at and in the vicinity of the Project Study Area.

3.6.1.1 Vegetation

The Project Study Area was assessed during on the on-site survey on September 18 and 19, 2019, for the occurrence of Critical Habitat as defined by 17 CFR 35.1532. No federally-designated Critical Habitat occurs within the Project Study Area for any federally-listed species.

Vegetative habitats and land use within the Project Study Area were classified using the Florida Land Use, Cover, and Forms Classification System (FLUCFCS) (FDOT, 1999). Wetland and surface water habitats were also classified using the USFWS Classification of Wetlands and Deepwater Habitats of the United States (Cowardin et al., 1979). A list of land use and vegetative cover types present within the Project Study Area is presented in Table 7. The land use and vegetative cover types mapped within the Project Study Area are indicated on Figure 7.

Table 7. Land Use/Vegetative Cover within the Project Study Area

FLUCFCS Code[1]	FLUCFCS Description[1]	Acres within Project Study Area
148	Cemeteries	3.9
421	Xeric Oak	68.31
631	Sand spoil pile	0.009
631	Wetlands as defined by USFWS NWI Map	27.78
TOTAL		**100**

1 - FDOT, 1999

A review of the listed species information contained within the various sources previously referenced determined that ten state endangered plant species occur within Sumter County and that the Project Study Area contains suitable habitat for federally-listed and state-listed flora. Table 8 shows the listed species that have the potential to occur within the Project Study Area based on the presence of suitable habitat.

Table 8. Listed Floral Species Potentially Occurring within Project Study Area

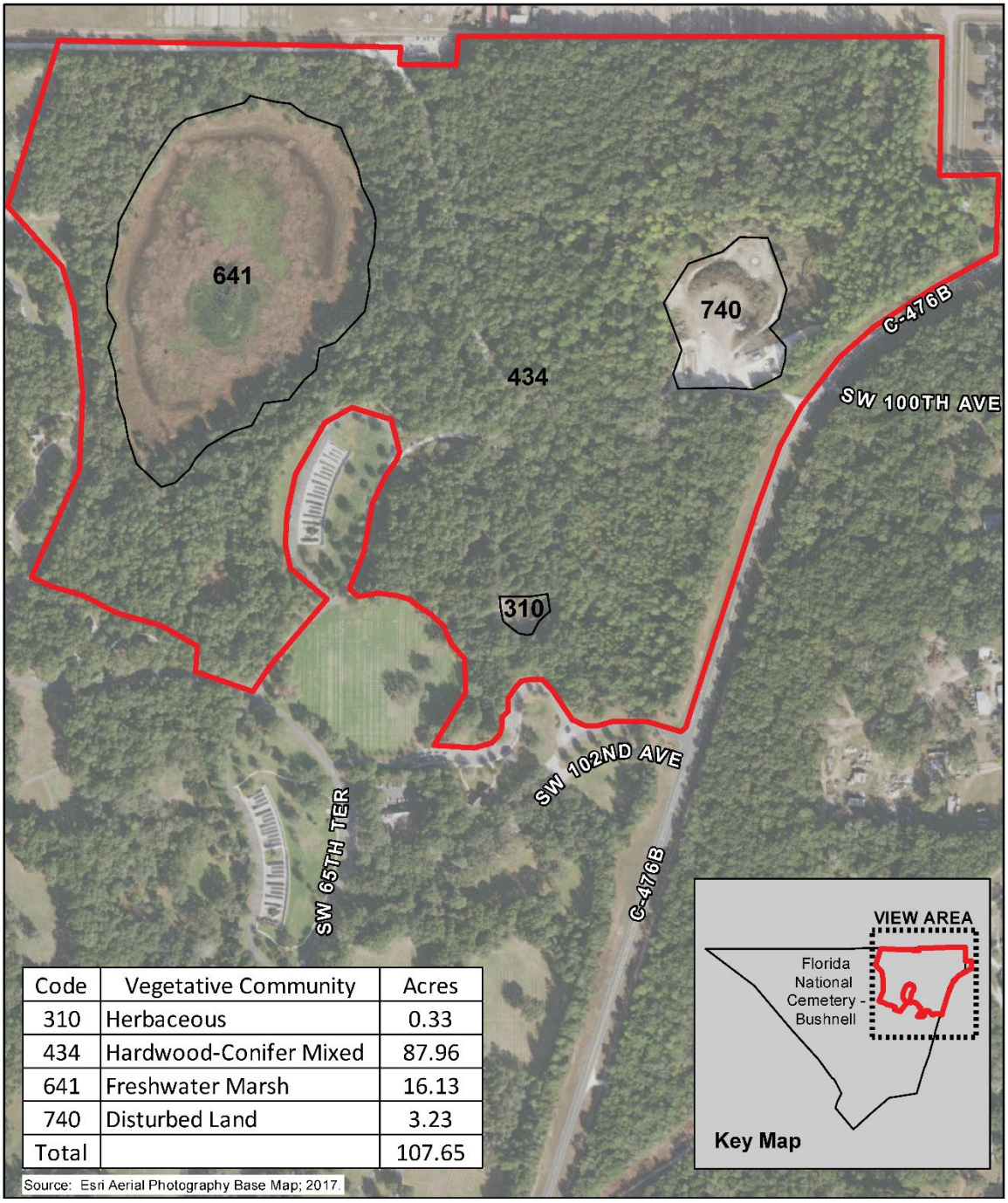
Scientific Name	Common Name	Federal Status	State Status
Centrosema Arenicola	Sand butterfly pea	NL	E
Dicerandra christmanii	Garrett's mint	E	E
Pteroglossaspis ecristata	Giant orchid	NL	T
Justicia cooleyi	Cooley's water-willow	E	E

Notes:
T = Threatened; E = Endangered; NL = Not Listed

Two federally-listed plant species and four state-listed plant species have the potential to occur within the Project Study Area and include the sand butterfly pea (*Centrosema arenicola*), Garrett's mint (*Dicerandra christmanii*), and giant orchid (*Pteroglossaspis ecristata*) and Cooley's water-willow (*Justicia cooleyi).* However, none of the listed plant species have been reported in FNAI databases as occurring within one mile of the Project Study Area.

The lands within the Project Study Area are comprised mostly of upland, xeric oak habitat with a small cemetery area, a sand pond and a sand spoil pile. Approximately 13.37 acres of nontidal wetlands were delineated. This palustrine forested, semi-permanently flooded/saturated fringe wetland is a large feature known as the Sand Pond in the northwest portion of the Project Study Area. Other than the delineated area no wetlands or other surface waters were identified in the Project Study Area. The feature identified by the USFWS National Wetland Inventory Map as a sand spoil pile was ground-truthed during the September 18 and 19, 2019 delineation. It was not identified as a wetland.

Figure 7. Vegetation Cover Types



Code	Vegetative Community	Acres
310	Herbaceous	0.33
434	Hardwood-Conifer Mixed	87.96
641	Freshwater Marsh	16.13
740	Disturbed Land	3.23
Total		107.65

Source: Esri Aerial Photography Base Map; 2017.

The Project Study Area is composed largely of hardwood-conifer mixed forest with a dense understory. The dominant vegetative species include laurel oak (*Quercus laurifolia*) and slash pine (*Pinus elliotttii*). Other vegetative species include cabbage palm (*Sabal palmetto*), water oak (*Quercus nigra*), red cedar (*Juniperus virginiana*), dogfennel (*Eupatorium* spp.), muscadine (*Vitis rotundifolia*), saw palmetto (*Serenoa repens*), tailed bracken (*Pteridium aquilinum*), partridge pea (*Chamaecrista fasciculata*), American pokeweed (*Phytolacca Americana*), common ragweed (*Ambrosia artemisiifolia*), and Johnsongrass (*Sorghum halepense*). Cogongrass (*Imperata cylindrica*), which is an invasive Category 1 plant species, as identified by the Florida Exotic Pest Plant Council (FLEPPC 2019), was observed throughout the Project Study Area along access roads, adjacent to the disturbed sand spoil area in a substantial patch northeast of the columbarium that is located just outside of the Project Study Area. A portion of the Project Study Area comprises two palustrine wetland areas as defined by the USFWS National Wetland Inventory Maps. These two wetland areas are approximately 27.78 acres in area as mapped by the USFWS. The acreage of the USFWS National Wetland Inventory Maps varies from ground-truthing field delineations since the maps are based upon aerial photography.

3.6.1.2 Wildlife

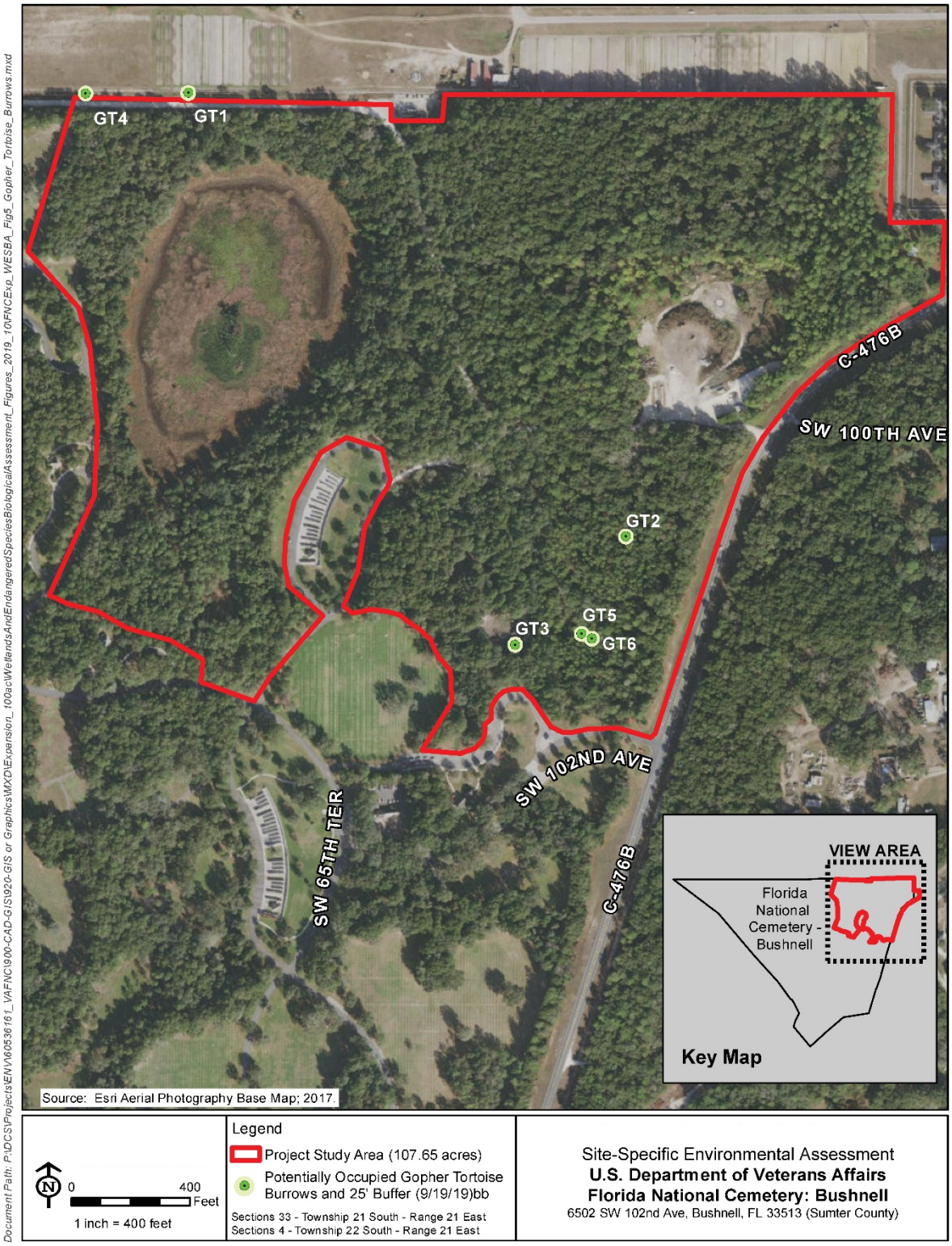
Based on review of the listed species information contained within the various sources listed previously, it was determined that the Project Study Area contains suitable habitat for federally-listed and state-listed species. The USFWS and the Florida Department of Conservation's Natural Heritage Program provides information on the listed species that have the potential to occur within the Project Study Area based on the presence of suitable habitat.

Table 9. Listed Faunal Species Potentially Occurring within Project Study Area

Scientific Name	Common Name	Federal Status	State Status
Reptiles			
Drymarchon couperi	Eastern indigo snake	FT	FT
Gopherus polyphemus	Gopher tortoise	C	T
Lampropeltis extenuate	Short-tailed snake	NL	T
Pituophis melanoleucus	Florida pine snake	NL	T
Birds			
Picoides borealis	Red-cockaded woodpecker	FT	SE
Grus canadensis pratensis	Florida sandhill crane	NL	ST
Mycteria Americana	Wood stork	FT	ST
Aphelocoma coerulescens	Florida scrub jay	FT	ST
Falco sparverius Paulus	Southeastern American kestrel	NL	ST
Mammals			
Sciurus niger shermani	Sherman's fox squirrel	NL	SSC
Other Species of Concern			
Haliaeetus leucocephalus	Bald eagle	NL	NL
Ursus americanus floridanus	Florida black bear	NL	NL

Notes:
F = Federal; T = Threatened; SSC = Species of Special Concern; NL = Not Listed; C = Candidate

Figure 8. Gopher Tortoise Burrows



Eastern Indigo Snake

The eastern indigo snake (*Drymarchon couperi*) is listed as threatened by the USFWS. The indigo snake can be found in a variety of habitats, including mesic flatwoods, swamps, wet prairies, xeric pinelands, and scrub area. Suitable habitat is available for this species in the Project Study Area within the xeric oak communities. Based on review of FNAI data, the eastern indigo snake has been documented within Sumter County, but not within one mile of the Project Study Area. No eastern indigo snakes were observed during the field survey. However, approximately 25 acres of suitable habitat for this species exists within the Project Study Area. To reduce correspondence for effect determinations and responses, the USFWS has provided an Eastern Indigo Snake Effect Determination Key (updated in 2010). Using this key, the following steps were followed to determine the effect of the proposed expansion project on the indigo snake:

A. The project is not solely located in open water or salt marsh.

B. The permit authorizing the proposed expansion will be conditioned for use of the USFWS Standard Protection Measures for the Eastern Indigo Snake during site preparation and project construction.

C. There are gopher tortoise burrows, holes, cavities, or other refugia where a snake could be buried or trapped and injured during project activities.

D. The project will impact more than 25 acres of xeric habitat.

Based on this assessment, it has been determined that the Proposed Action "may affect" the eastern indigo snake. Coordination with USFWS prior to engaging in land development activities is required. In order to reduce the affect, the Proposed Action may have on the eastern indigo snake, VA would incorporate the *Standard Protection Measures for the Eastern Indigo Snake* in their construction plans, in addition to excavating possible underground refugia (i.e., gopher tortoise burrows) prior to commencing construction.

Gopher Tortoise

The gopher tortoise (*Gopherus polyphemus*) is listed as threatened by the FWC and is a candidate for listing by the USFWS. The gopher tortoise requires well-drained, loose, sandy soils for burrowing, and low-growing herbs and grasses for food. These conditions can be found in a number of habitats, including dry prairies, pine flatwoods, and disturbed or maintained sites such as roadsides.

During the field survey on September 18 and 19, 2019, suitable habitat within the Project Study Area was surveyed. Six potentially occupied gopher tortoise burrows were observed within the Project Study Area (Figure 8). Gopher tortoises are somewhat mobile and may excavate new burrows or re-excavate abandoned burrows throughout the year. It is possible that additional potentially occupied burrows are likely present within the Project Study Area.

Because gopher tortoises or burrows found in or within 25 feet of the proposed development area, coordination with the FWC to secure permits needed to relocate the gopher tortoises and associated listed species would be required prior to construction. Based on the recent survey, a recommendation was made that the proposed expansion project "may affect but is not likely to adversely affect" the gopher tortoise.

Short-Tailed Snake and Florida Pine Snake

Both the short-tailed snake (*Lampropeltis extenuate*) and the Florida pine snake (*Pituophis melanoleucus*) are listed by the FWC as threatened. These snakes typically inhabit dry upland habitats, typically sandhill, xeric hammock, and sand pine scrub. The pine snake often coexists with gopher tortoises and pocket gophers within suitable habitat. During the field survey, no snakes were observed. If a short-tailed snake or Florida pine snake is observed prior to or during construction, coordination with FWC would occur to implement the proper conservation measures. For these reasons, a determination was made that the Proposed Action would have "no effect" on the short-tailed snake or the Florida pine snake.

Red cockaded woodpecker

The red cockaded woodpecker (*Picoides borealis*) is listed by the FWC as threatened. The species is associated with open mature pine woodlands and, rarely, with deciduous or mixed pine-hardwoods. The optimal habitat is a broad savanna with a scattered overstory of large pies and a dense groundcover consisting of diverse forbs, grass and shrub species. The optimal habitat for the red-cockaded woodpecker is not present at the Project Study Area.

Florida Sandhill Crane

The Florida sandhill crane (*Grus canadensis pratensis*) is listed by the FWC as threatened. The sandhill crane is associated with shallow freshwater area, pasture, and open wood habitats. Habitats such as wet and dry prairies, marshes, and marshy lake margins are optimal for the sandhill crane. Marginally suitable foraging habitat for the sandhill crane is available within the stormwater detention basins. However, no suitable nesting habitat is available within the Project Study Area. During the field survey, no sandhill cranes were observed. Due to its mobility and ability to use adjacent habitats, it has been determined that the Proposed Action "may affect but is not likely to adversely affect" the Florida sandhill crane.

Wood Stork

The wood stork (*Mycteria americana*) is listed by the FWC as threatened. Its preferred habitats are freshwater marshes, swamps, lagoons, ponds, flooded fields, and occasionally brackish wetlands. The species nests in the upper branches of cypresses, mangroves or dead hardwoods over water or on islands along streams or adjacent to shallow lakes. There appears to be suitable habitat for the species within the Project Study Area.

Florida Scrub Jay

The Florida scrub jay (*Aphelocoma coerulescens*) is listed by the FWC as threatened. The optimal habitat for this species is oak scrub growing on white, drained sand, in open areas without a dense canopy and with a canopy less than six feet in height. Palmetto, sand pine and rosemary are often found in this habitat. Fire suppressed scrubs with dense and tall understory or encroaching pine canopies provide poor habitat. Areas allowed to experience periodic fires are preferred. There does not appear to be suitable habitat for the species within the Project Study Area.

Southeastern American Kestrel

The Southeastern American kestrel (*Falco sparverius paulus*) is listed as threatened by the FWC. This species prefers open woodlands, sandhill, and pine-xeric oak habitats. However, it will also use pastures and open fields. Within these habitats, kestrels will nest in cavities excavated in large dead trees by woodpeckers. Marginal foraging habitat is available for this species within the Project Study Area in the open land and forested uplands. However, no documented occurrences have been reported by FNAI within one mile of the Project Study Area. Prior to construction of the proposed expansion project, surveys would be conducted for the presence of the Southeastern American kestrel. If nests are observed, coordination with the FWC would be implemented. With this commitment, it has been determined that the Proposed Action would have "no effect" on the Southeastern American kestrel.

Sherman's Fox Squirrel

The Sherman's fox squirrel (*Sciurus niger shermani*) is listed as a species of special concern by FWC. This species' optimal habitat is high pine sandhills, pine flatwoods, pastures, and other open, ruderal habitats with scattered pines and oaks. Suitable habitat for the Sherman's fox squirrel is available within the Project Study Area. Due to its mobility and ability to use adjacent upland habitats for foraging, it has been determined that the Proposed Action would have "no effect" on the Sherman's fox squirrel.

Bald Eagle

Though the bald eagle (*Haliaeetus leucocephalus*) is no longer state or Federally listed, it is still Federally protected by the *Bald and Golden Eagle Protection Act* in accordance with 16 USC 668. The bald eagle typically uses riparian habitat associated with coastal area, lake shorelines, and riverbanks. The nests are generally located near bodies of water that provide a dependable food source. As stated in the 1983 EIS (VA, 1983), the bald eagle may occasionally forage within the vicinity and is commonly observed along the Withlacoochee River. Pursuant to FWC bald eagle guidelines, any disturbance within 660 feet of a bald eagle nest requires additional coordination and potential permitting with the FWC. According to the FWC's online bald eagle nest locater, no nests were located within one mile of the Project Study Area and none were observed during the field survey. The nearest documented nest is SU026, located approximately 1.61 miles northwest of the northwestern boundary of the Project Study Area. For these reasons, it has been determined that the Proposed Action would not affect the bald eagle.

Florida Black Bear

Although the Florida black bear (*Ursus americanus floridanus*) has been removed from the state list, it is still protected and managed by the FWC pursuant to the Florida Black Bear Conservation Rule 68A-4.009, FAC. The Florida black bear can be found statewide in a number of habitats, including mixed hardwood pine communities, cabbage palm hammock, and forested wetland systems. This species tends to den alone within tree cavities, riverbanks, logs, or caves. They will also seek shelter on the ground in palmetto thickets, gallberry (*Ilex glabra*), fetterbush (*Lyonia lucida*), and sweet pepperbush (*Clethra alnifolia*). Marginal suitable habitat for the black bear is available within the Project Study Area. However, according to FWC, the Project Study Area is not located within the FWC-designated Primary or Secondary Florida black bear range. No black bears were observed during the field survey. For these reasons, it has been determined that the Proposed Action would have "no effect" on the Florida black bear.

3.6.2 Environmental Consequences

3.6.2.1 Proposed Action

The following section presents the analyses of potential impacts from the Proposed Action on both wildlife and habitat in a single discussion.

Construction. The Proposed Construction would avoid development of Sand Pond and a 25-foot buffer extending upland from the season high-water table. Outside of this buffer, construction would permanently clear existing forested vegetation, while a forested border would likely be retained to the north (between FNC and Sumter County Correctional Institute) and the east (along CR 476). The specific clearing acreage would be determined in an engineering design document which would be completed prior to development. Clearing would have no impact on federally or state listed **vegetation**, as none were identified during the field survey of the Project Study Area. However, clearing and construction would displace listed and common **wildlife** that inhabit or use the Project Study Area for nesting, foraging, or cover, and potentially cause direct mortality of less mobile subterranean species, such as moles.

The typical terrestrial wildlife species that could be impacted are widely distributed; thus, loss of some individuals and their habitat would not measurably impact population abundance or distribution throughout their range. The state-listed gopher tortoise is confirmed present and the federally-listed eastern indigo snake is assumed present within the Project Study Area. Due to the confirmed presence of potentially occupied gopher tortoise burrows at the Project Study Area, prior to any clearing and earthwork, VA would conduct 15% and 100% surveys for gopher tortoise burrows according to FWC requirements, and VA would either avoid burrows (including a minimum 25-foot radius buffer), or capture and relocate the tortoises.

Through the adoption of the *Standard Protection Measures for the Eastern Indigo Snake* and the avoidance and/or excavation of underground refugia (i.e., gopher tortoise burrows), the potential to impact the eastern

indigo snake would also be greatly reduced. It is anticipated that these measures would result in a reduction in effect determination from "may affect" to "may affect, not likely to adversely affect" for this species. VA has requested concurrence of this determination from USFWS as part of the Draft SEA review process; the USFWS determination will be included in the final SEA.

Therefore, construction of the Proposed Action is anticipated to have a short-term, less-than-significant adverse impact on wildlife and habitat.

Operation. Following clearing and grading, VA would establish native, non-invasive, drought-tolerant vegetation in landscaped areas. Lawn areas would primarily be seeded or sodded with St. Augustine grass, while perimeter shrubs and trees would include *Loropetalum* cultivars and Crepe Myrtle. This landscaping would provide habitat to common wildlife (birds, mammals). Listed species would not be anticipated to utilize the landscaped habitat, as this type of habitat and the frequent presence of visitors and staff in landscaped area would not be suitable for these species.

Operation of the Proposed Action would include professional maintenance of planted vegetation to achieve the same aesthetic appearance as other areas throughout FNC. Cemetery operations would continue the responsible use of pesticides/herbicides, keeping usage to the lowest quantities possible and thereby reducing potential indirect impacts to wildlife and their habitat.

Therefore, operation of the Proposed Action would have long-term, less-than-significant adverse impacts on wildlife and habitat.

3.6.2.2 No Action

No changes to the Project Study Area would occur from implementation of the No Action alternative; therefore, no impacts to wildlife or habitat would occur. Baseline conditions would remain, as described above.

3.7 Noise

3.7.1 Existing Environment

Sound occurs when vibrations that travel through a medium are interpreted by the biological elements of the ear. Noise occurs when sounds become undesirable, unpleasant, or damaging. Noise-sensitive receptors are residences, hospitals, libraries, recreation areas, and religious institutions.

Sound pressure levels are quantified in decibels (dB), which is dependent on both frequency and intensity, and is given a level on a logarithmic scale. The way the human ear hears sound intensity is quantified in A-weighted decibel (dBA), which are level "A" weights according to weighting curves. Sound levels for common activities and construction work are presented in Table 10. Noise levels and durations from these activities would vary depending on the specific equipment being used, and the impact from this noise on a receptor would depend on the distance between the receptor and the source of the noise. Generally, noise levels decrease by approximately 6 dBA for every doubling of distance for point sources (such as construction activity in a fixed area), 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).

The National Institute for Occupational Safety and Health (NIOSH) recommends that individuals working in an environment of 85 dBA or louder for an eight-hour workday limit their exposure to this noise level and wear protective earwear to help manage and prevent hearing loss due to noise exposure.

Table 10. Common Household, Industrial, and Construction Sound Levels

Sound Level (dBA)	Common Sounds	Effect
140	Jet engine	Painful
130	Near air-raid siren	Painful
120	Jet plane takeoff, siren	Painful
110	Chain saw, Thunder, Garbage Truck	Extremely Loud
100	Hand drill	Extremely Loud
90	Subway, passing motorcycle	Extremely Loud
85	Backhoe, Paver	Very Loud
80	Blow-dryer, kitchen blender, food processor, cement mixer, power saw	Very Loud
70	Busy traffic, vacuum cleaner, alarm clock	Loud
60	Typical conversation, dishwasher, clothes dryer	Moderate
50	Moderate rainfall	Moderate
40	Quiet room	Moderate
30	Whisper, quiet library	Faint

Noise Receptors

Noise-sensitive receptors are defined as properties where frequent human use occurs and where a lowered noise level would be of benefit. These noise-sensitive receptors are considered to be residences, hospitals, libraries, recreation areas, religious institutions, nursing homes, and day care facilities. As previously discussed in Section 3.2.4, with the exception of residences, none of the other receptors is present within a 1-mile radius of the Project Study Area (NEPAssist, 2019). The nearest residential receptors are located along CR 476, directly opposite of FNC.

Current Noise Conditions

Outside of FNC, noise is generated from passenger vehicles traveling on CR 476, from recreational trail vehicles traveling on SW 60th Street along the southwest border of FNC, and from limited hunting sounds (rifles) from within the Withlacoochee State Forest. To the north, the Sumter Correctional Institute conducts boot camp training, marches, and outdoor exercise programs for the inmate population; these noises are not readily discernable at FNC.

Within FNC, noise is currently generated during normal weekday operating hours (8 A.M. to 4:30 P.M.) and includes ceremonial rifle salutes during memorial services at committal shelters, routine maintenance activities (mowing, burials, etc.), and visitor traffic within the cemetery grounds. Due to the relatively isolated location of FNC and the presence of abutting forested buffers, there are few surrounding receptors that may hear these operational noises. To date, operation of the cemetery (including ceremonial rifle salutes) has not resulted in noise complaints from neighboring residents or other receptors.

As detailed in Table 11, the A-weighted maximum levels (Lmax dBA) for blanks from rifle salutes at various distances and angles from a source decrease with both angle and distance (VA, 2014b). These sound levels correspond to firing directly (0 degrees) or at different angles to the receptor, and do not account for sound shielding from tree lines, berms, and other buffers; thus, actual sound levels at a receptor site are expected to be lower than those shown. For comparison purposes, speech ranges from approximately 50 to 80 dBA. The nearest of the six current committal shelters (committal shelter F) is located approximately 550 meters (1,800 feet) east of the nearest residential area along CR 476 and is separated from it by a forested area. The rifle salute sound level potentially experienced at this residential area would be approximately 38-49 dBA. Due to traffic along CR 476B, the rifle salute sound would be an infrequent and minor contributor to overall sounds experienced in this area.

Table 11. Azimuth Predicted Noise Levels from Rifle Salutes

Distance from Source	A-Weighted Maximum Sound Level (Lmax, dBA), Degrees from Source		
Meters	**0º**	**90º**	**180º**
50	66-76	64-74	64-74
100	60-70	58-68	58-68
200	53-63	51-61	51-61
400	39-49	38-48	38-48
800	31-41	30-40	30-40
1,600	21-31	20-30	20-30

3.7.2 Environmental Consequences

3.7.2.1 Proposed Action

Construction. Construction of the expansion area would generate noise from the heavy equipment used for land clearing, grading, road and infrastructure construction, preparation of crypt sites, from construction workers driving to and from the site, and vehicles transporting materials and equipment to and from the expansion area. These noises would cease at the conclusion of the approximately 30-month construction phase.

Noise levels from these activities would vary depending on the duration and type of specific equipment being used, while the impact from this noise on a receptor would depend on how far the receptor is from the noise source. Noise from construction activities is variable and depends on the type of equipment being used, the area where the action occurs, and the distance from the noise source to the receptor. The noise associated with a typical cemetery expansion phase was estimated for several pieces of construction equipment (e.g., bulldozers and trucks) operating simultaneously in a given area. The noise level at different distances from the noise source was then estimated to assess the potential impact. The anticipated construction noise during daytime hours at specified distances are shown in Table 12.

Table 12. Estimated Noise Levels from Construction Activities

Distance from Noise Source in feet (meters)	Estimated Noise Level in dBA
50 (15.2)	90–94
100 (30.5)	84–88
150 (45.7)	81–85
200 (61.0)	78–82
400 (121.9)	72–76
800 (243.8)	66–70
1,200 (365.8)	< 64

A previously described, the nearest residences are located approximately 700 feet (210 meters) east of the Project Study Area boundary and separated from it by forests and CR 476B. However, much of the Project Study Area interior is over 1,200 feet from the nearest residence. Thus, construction noises at approximately 100 dBA at the Project Study Area would be anticipated to decrease to 70 and consistently less than 64 dBA at the nearest residence. Construction noise levels would be further minimized by equipping construction equipment with appropriate sound-muffling devices (i.e. from the original equipment manufacturer or better) and limiting engine idling to less than 5 minutes. Construction work would also be performed during normal weekday operating hours. As a result, noise from construction activities may be apparent for a short period while work occurs along the eastern border of the Project Study Area, but for the majority of the construction phase noise would not be readily discernable over ambient levels (vehicles traveling on CR 476B) at the residential area.

Receptors to construction noise within FNC include visitors and staff. Construction activities would be scheduled to minimize impacts to interment ceremonies to the extent possible. Construction would take place during daylight hours unless there is a specific activity that would directly impact the current operation of FNC, in which case the activity would occur outside of the normal construction schedule. Construction

workers would be equipped with hearing protection when working near loud equipment in accordance with OSHA requirements.

Therefore, construction of the Proposed Action would have a short-term, less-than-significant adverse impact on sensitive noise receptors, visitors, staff, and construction workers.

Operation. The design of the expansion area has not yet been determined. It is possible the expansion would include a new committal shelter where ceremonial rifle salutes occur. Based on the configuration of the Project Study Area, a committal shelter would be at least 200 meters from the nearest residential receptor. Therefore, the noise from ceremonial rifle salutes would be at or less than 63 dBA from the nearest residence.

Routine operations noises in the expansion area would be generated from maintenance activities and visitor traffic. The noise generated from these activities would be similar to noises currently generated by cemetery operations (e.g. mowing, power washing, short-term intermittent use of construction machinery). These noises have not generated complaints from nearby receptors. As such, operation of the Proposed Action would result in negligible, intermittent, long-term, adverse impacts.

3.7.2.2 No Action

Under the No Action Alternative, the cemetery expansion would not occur, and no additional noise impacts would result. Ceremonial rifle salutes would continue until the cemetery capacity is reached, and grounds maintenance activities would continue thereafter.

3.8 Land Use

3.8.1 Existing Environment

FNC is located at 6502 Southwest 102nd Avenue, Bushnell, Sumter County, Florida, within Sections 32-33 of Township 21 South, Range 21 East and Sections 4-5 of Township 22 South, Range 21 East. Sumter County identifies the zoning district as "A10C," which permits cemeteries as a special use (Sumter County Code of Ordinances, Chapter 13, Article IV, Division 3, Section 13-633).

FNC and all of the expansion area is owned by VA. FNC property is reserved for public use for funeral services, visitation, and occasional ceremonies only. No recreational use is permitted, in keeping with its use as a national shrine.

As previously described, land uses surrounding the Project Study Area include the Sumter Correctional Institute and the Withlacoochee State Forest. The Project Study Area lies outside the Withlacoochee State Forest, which is managed in cooperation with the Florida Forest Service. The land uses immediately adjacent to FNC primarily consist of the Sumter Correctional Institute and Croom Wildlife Management Area tract of the Withlacoochee State Forest to the west, south, and north, and low-density, rural residential and pastureland properties to the east. Based on Sumter County planning documents, current and future land uses are intended to generally remain unchanged for the foreseeable future (Figure 9).

Figure 9. Land Use Map

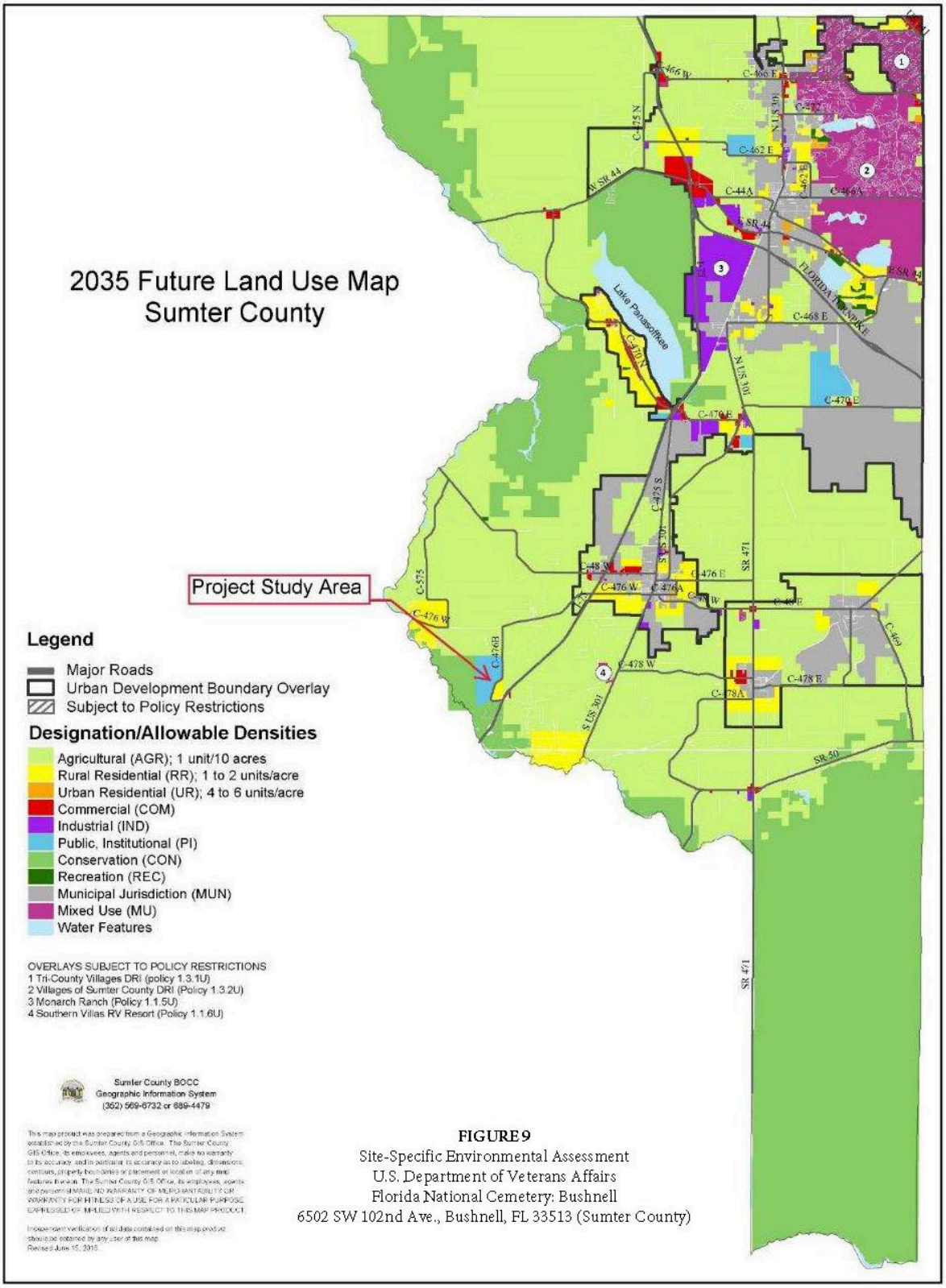


FIGURE 9
Site-Specific Environmental Assessment
U.S. Department of Veterans Affairs
Florida National Cemetery: Bushnell
6502 SW 102nd Ave., Bushnell, FL 33513 (Sumter County)

3.8.2 Environmental Consequences

3.8.2.1 Proposed Action

Construction and Operation. Construction and operation of the proposed expansion area within FNC would not impact the current or planned uses of surrounding lands. The proposed conversion of currently forested area into a cemetery is compatible with the existing land use and zoning. Therefore, the Proposed Action would have no impact on land use.

3.8.2.2 No Action

No changes to the Project Study Area land use would occur from implementation of the No Action alternative; therefore, no impacts on land use would occur. Baseline conditions would remain, as described above.

3.9 Floodplains, Wetlands, and Coastal Zone Management

3.9.1 Existing Environment

Floodplains

Executive Order (EO) 12148 (Federal emergency management), which amended EO 11988 (Floodplain Management), directs all federal agencies to avoid, if possible, development and other activities in the 100-year base floodplain. Where the base floodplain cannot be avoided, special considerations and studies for new facilities and structures are needed. Design and siting are to be based on scientific, engineering, and architectural studies; consideration of human life, natural processes, and cultural resources; and the planned lifespan of the project. Federal agencies are required to:

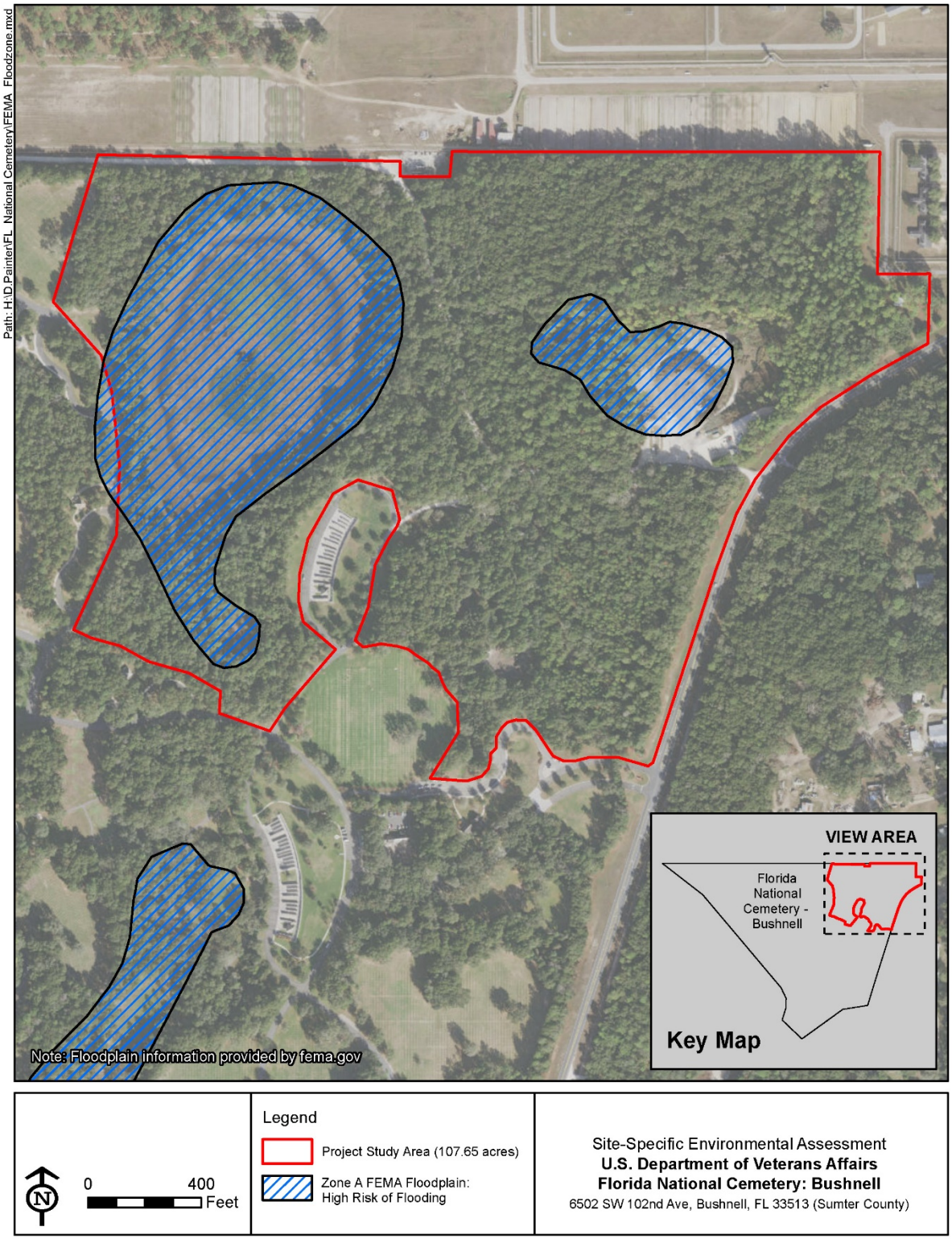
- Reduce the risk of flood loss;
- Minimize the impact of floods on human safety, health, and welfare; and
- Restore and preserve the natural and beneficial values served by floodplains in carrying out agency responsibility.

If a federal agency has determined to, or proposes to, conduct, support, or allow an action to be located in a floodplain, the agency shall consider alternatives to avoid adverse effects and incompatible development in the floodplains. If the head of the agency finds that the only practicable alternative requires sitting in a floodplain, the agency shall, prior to taking action, (i) design or modify its action in order to minimize potential harm to or within the floodplain, and (ii) prepare and circulate a notice containing an explanation of why the action is proposed to be located in the floodplain.

Based on review of available Federal Emergency Management Agency (FEMA) GIS data layers, the Project Study Area is primarily located within a FEMA flood zone X (area of minimal flood hazard), which is outside of the 100-year (1% annual chance flood hazard, Zone A), but a small portion is also located within Zone A (Figure 10). The portions of the Project Study Area within Zone A include Sand Pond and the spoils area. The Zone A acreage associated with the spoils area is in man-made topographic low that was also negative for wetland indicators and

According to the SWFWMD floodplain map, the Project Study Area is not located in a SWFWMD-regulated floodplain.

Figure 10. FEMA Floodplain Map



Wetlands

Wetlands within the region occur along the floodplains of the Withlacoochee River, its tributaries, and within depressions in the landscape that have formed over time due to the dissolution of the limestone subsurface, typical of the karstic geology of the region.

On September 18 and 19, 2019, VA conducted a survey for wetlands and other surface waters in the Project Study Area using the procedures within Chapter 62-340 Delineation of the Landward Extent of Wetlands and Surface Waters, Florida Administrative Code (F.A.C.) (FAC 1994), and the criteria found within the USACE Regional Supplement to the USACE Wetlands Delineation Manual: Atlantic and Gulf Coastal Plain Region (USACE, 2010). USACE jurisdiction was determined pursuant to the U.S. Army Corp of Engineers Jurisdictional Determination Form Instructional Guidebook (USACE/EPA 2007). Full details of the combined wetland and biological survey were presented in the Wetlands and Endangered Species Biological Assessment for the Site-Specific Environmental Assessment for the Florida National Cemetery, Bushnell, Florida, dated October 27, 2019.

One emergent freshwater marsh was identified within the Project Study Area; this marsh surrounds Sand Pond (Figure 7). The edges of the freshwater marsh were dominated by maidencane (*Panicum hemitomon*) with bushy bluestem (*Andropogon glomeratus*), yelloweyed grass (*Xyris* sp.), umbrellasedge (*Fuirena* sp.), witchgrass (*Dichanthelium* sp.), spikerush (*Eleocharis* sp.), common persimmon (*Diospyros virginiana*), creeping primrosewillow (*Ludwigia repens*), bogbutton (*Lachnocaulon* sp.), and common buttonbush (*Cephalanthus occidentalis*). American white waterlily (*Nymphaea odorata*) and spatterdock (*Nuphar advena*) were observed in the deepest portions of the marsh. Carolina willow (*Salix caroliniana*) and broadleaf cattail (*Typha latifolia*) were observed near a stormwater conveyance ditch outfall. Soil saturation and hydric soil indicators were observed during the site review.

Subsequent to the wetland delineation, VA submitted a request for a jurisdictional determination to USACE on December 12, 2019. Based on VA's plan to avoid development of Sand Pond and the surrounding wetlands, including a 25-foot buffer upland of the seasonal high water table, USACE issued a "No Permit Required" letter pursuant to Section 10 of the River and Harbors Act (there are no navigable waters) and Section 404 of the Clean Water Act (there will be no discharge of dredged or fill materials) on January 8, 2020 (a copy is included in Appendix A). However, should VA change course and plan to impact the wetland, then consultation with USACE would be required to determine whether a permit may be required.

Coastal Zone Management

The *Coastal Zone Management Act* (CZMA) was enacted in 1972 to preserve, protect, develop, and, where possible, restore and enhance the resources of the nation's coastal zone. Coastal states are encouraged to develop state coastal management programs, and comprehensively manage and balance competing uses of and impacts to coastal resources. The U.S. Department of Commerce National Oceanic and Atmospheric Administration (NOAA) approves coastal management programs. The Florida Coastal Management Program (FCMP) was approved by NOAA in 1981 and is codified at Chapter 380, Part II, FS. Under this program, the entire state of Florida is located within a designated coastal zone. The CZMA requires that any federal actions affecting any land or water use, or natural resource of the coast be consistent with the enforceable policies of a state's federally-approved coastal management program. Consistency evaluations in Florida are conducted by the FDEP Coastal Management Program in coordination with the environmental review process per Section 373.428, F.S.

The Florida State Clearinghouse (SCH) administers the intergovernmental coordination and review process for federal projects. The SCH is Florida's single point of contact for coordinating state agencies reviews. The Draft SEA has been made available to SCH to initiate the review for consistency with the FCMP. SCH's findings will be included in the final SEA.

3.9.2 Environmental Consequences

3.9.2.1 Proposed Action

Construction.

Floodplains

Construction and Operation. This section describes VA's decision-making process regarding development within the Zone A floodplain in compliance with EO 12148. As previously described, the proposed expansion is anticipated to include development within those portions of the FEMA Zone A floodplain that are outside of Sand Pond and the 25-foot upland buffer. Based on the preference to utilize acreage within FNC for future expansions, the Project Study Area provides a suitable location for such an expansion. While the area of development within the Zone A floodplain nearest Sand Pond may vary depending on VA's future needs, the Zone A area encompassing the spoils area would likely be entirely developed into manicured grounds in order to maintain and extend a consistent aesthetic appearance throughout FNC. No reasonable alternative to this anticipated development approach has been identified; a "no action" approach is described in Section 3.9.2.2. The direct impact associated with development of the floodplain would be to encroach on Zone A floodplain and potentially increase the volume of surface water run-off, which could lead to flooding in adjacent areas. To minimize this adverse impact, VA would design the expansion to be consistent with NCA Design Guidelines; final grades would be above the base flood elevation and sufficient compensatory storage for excess run-off would be established (such as directing run-off to Sand Pond or an engineered stormwater management system within FNC). These management measures would allow VA to maximize the Project Study Area for burial capacity, which in turn would extend the longevity of FNC for Veterans and their families for several decades. Additionally, in compliance with EO 12148, notice of the availability of this SEA will be published in a local newspaper to allow for early public review of the Proposed Action. Comments received from the public will be addressed and included in the final SEA; a notice of availability of the final SEA will also be published in a local newspaper.

Additionally, VA would provide design plans to SWFWMD under the ERP permitting process to confirm whether compensatory storage would be required for development and to ensure compliance with state floodplain management regulations.

Therefore, the Proposed Action would have a long-term, less-than-significant adverse impact on floodplain management.

Wetlands

Construction and Operation. To avoid impacting the wetlands located in the Project Study Area, the Proposed Action does not include development of Sand Pond or the peripheral wetlands and a 25-foot buffer extending upland from the seasonal-high water line. Additionally, all construction equipment and material staging would occur outside of this buffer zone. Therefore, no direct impacts to wetlands would occur. The erosion control measures specified in the ERP, including installing silt fencing and synthetic haybales around the buffer, would be implemented to further avoid impacts to the wetlands.

Therefore, the Proposed Action would have no impact on wetlands.

Coastal Zone Management

Construction and Operation. The Proposed Action is not anticipated to adversely affect the coastal zone management area. The Project Study Area is not directly connected or proximate to any surface water bodies or coastal features that could directly or indirectly be affected by construction or operational activities associated with the Proposed Action. As previously described under the Soils heading, the Proposed Action incorporates construction and operational BMPs to minimize erosion and sedimentation of run-off that could potentially impair or degrade the environmental quality of coastal zone resources.

Results from the Florida SCH review of the consistency of the Proposed Action with the Florida Coastal Management Program will be included here.

3.9.2.2 No Action

No changes to existing floodplains, wetlands, or coastal resources at the Project Study Area would occur from implementation of the No Action alternative; therefore, no impacts would occur. Baseline conditions would remain, as described above. It is noted that while impacts to floodplains would not occur under the No Action alternative, VA would not be able to expand burial opportunities within FNC, leading to a decrease in the longevity of FNC for future Veterans and their family members in central Florida.

3.10 Socioeconomics

3.10.1 Existing Environment

The data presented herein is from the U.S. Census 2010, U.S. Census Bureau's 2011-2016 American Community Survey (ACS) 5-year Summary, U S. Census Bureau's 2017 and the U.S. Department of Labor, Bureau of Labor Statistics. Relevant socioeconomic data for Sumter County and the state of Florida are presented in Table 13 and Table 14.

Population Dynamics

The Project Study Area is located in unincorporated Sumter County, Florida. The socioeconomic conditions of this area are influenced by the range of industries present, which includes agriculture, small and large retail and commercial industries in more urban areas in the Villages retirement complex and Bushnell, which is also the county seat. The population in the county has increased substantially in the past three decades, increasing from approximately 31,577 in 1990, to 93,420 by 2010, and 128,754 in 2018. This increase is due in large part to expansion of The Villages retirement community in northeast Sumter County. Between 2010 and 2017, The Villages was the fastest growing metropolitan area in the United States, growing 32.8%, from 94,279 in 2010, to 125,165 by 2017 (Stebbins, 2019).

Income and Employment

Households in Sumter County have a median annual income of $54,771, which is less than the median annual income of $61,937 across the entire United States. This is in comparison to a median income of $52,594 in 2016, which represents a 4.14% annual growth. The economy of Sumter County employs 23,900 people. The largest industries in Sumter County include retail trade (3,975 people), health care & social assistance (3,268 people), and construction (1,735 people), and the highest paying industries are utilities ($59,440), mining, quarrying, & oil & gas extraction ($51,190), and Manufacturing ($40,519).

Race and Ethnicity

The most common racial or ethnic group living below the poverty line in Sumter County is White, followed by Black and Hispanic. In 2017, there were 11.6 times more White Alone residents (98.9k people) in Sumter County than any other race or ethnicity. There were 8.55k Black or African American Alone and 6.61k Hispanic or Latino residents, the second and third most common racial or ethnic groups.

Housing

The median home price in Bushnell is $47,200, significantly less than the Sumter County median home price of $239,800 and the state median of $178,700. The US Census statistical testing tool was applied to home prices to ascertain statistical significance of variations in home price.

Table 13. Demographic Data for State of Florida and Sumter County

Location	Total Population[1]	Median Age	Population under age 18[1]	Minority Population[1,2]	High School Graduates[3,4]	Veterans[3]
State of Florida	421,299,325	42.2	4,249,865 (20.0%)	10,010,683 (47%)	13,40,393 (88.5%)	1,439,606
Sumter County	128,754	67.5	9,257 (7.2%)	19,314 (15%)	106,024 (91.5%)	18,703

Notes:
[1]U.S. Census 2017 (2018 estimate)
[2]Minority includes all race/ethnicity categories except non-Hispanic White persons
[3]ACS 2011-2018e
[4]Includes equivalency

Table 14. Economic Data for the State of Florida and Sumter County

Location	Number of Households[1]	Population below poverty level[1]	Unemployment Rate[2]
State of Florida	7,809,358	2,840,977 (13.61%)	7.2%
Sumter County	62,854	10,300 (8.2%)	6.6%

Notes:
[1]U.S. Census 2017 (2018 estimate)
[2]ACS 2012-2017; not seasonally adjusted

3.10.2 Environmental Consequences

3.10.2.1 Proposed Action

Construction. VA would contract with qualified firms to construct the various phases of the expansion, from clearing and grading, to installation of pre-placed crypts, roadways, and landscaping. Constructing the cemetery expansion would require employment of skilled and non-skilled labor during the approximately 30-month work period, as well as purchase of materials (ex. aggregate, plantings) from local or regional suppliers.

The temporary increase in employment and spending on materials would have a short-term, direct, negligible, beneficial impact on the local economy during the construction period. These construction-related beneficial impacts would end once the construction phases are completed.

Operation. Operation of the cemetery expansion would not produce direct, significant, long-term beneficial or adverse socioeconomic impacts. The current workforce at FNC is anticipated to be sufficient to maintain and operate this cemetery expansion. If needed, additional staff could be hired.

The Proposed Action would increase the interment capacity, and therefore the longevity, of FNC. Over time, this would lead to a slight increase in the number of visitors to this area of central Florida. These visitors could potentially utilize area businesses (restaurants, lodging, service stations, etc.) during visits. Although the potential increase in spending has not been quantified for this SEA, the increase would be anticipated to have a negligible beneficial impact on the socioeconomic conditions in Sumter County. Additionally, the Proposed Action would increase the longevity of FNC, allowing residents of central Florida to remain in the area and avoid the need to travel greater distances to another National Cemetery elsewhere in Florida.

As such, the Proposed Action would produce long-term, less-than-significant beneficial impacts on socioeconomics.

3.10.2.2 No Action

Under the No Action alternative, the Proposed Action would not be implemented, and the longevity of FNC would not be extended. The benefits associated with the Proposed Action would not be realized. Therefore, the No Action alternative would have a long-term, less-than-significant adverse impact on socioeconomics.

3.11 Community Services

3.11.1 Existing Environment

FNC has provided burial services for Veterans and their families in central Florida since 1988. There is not a National Cemetery within 75-miles of FNC. The nearest National Cemetery is the Sarasota National Cemetery, located 110 miles south of the FNC; Cape Canaveral National Cemetery, located approximately 120 miles to the east in Titusville, Florida; Jacksonville National Cemetery, located approximately 170 miles to the northeast; Tallahassee National Cemetery located approximately 225 miles to the northwest; and South Florida National Cemetery, located in Lake Worth, Florida, approximately 250 miles to the southeast of FNC.

There is not a public transportation route within a mile of FNC. However, Sumter County operates a public transportation system, which offers reservation-based transportation to eligible residents within Sumter County.

Other community services are provided by Sumter County and include police and fire protection, ambulatory service, schools, health care, and parks and recreation. Because no additional load is expected to be placed on the fire or police departments, and changes are not expected in use of or access to other public or community services as a result of the Proposed Action, impacts to community services other than Veterans' burial benefits were not analyzed in this SEA.

3.11.2 Environmental Consequences

3.11.2.1 Proposed Action

Construction and Operation. Construction and operation of the Proposed Action would extend the longevity of FNC by providing new interment sites. Due to changes in burial frequencies over time, the date when capacity could be reached is not calculated by FNC. However, the increase in the longevity of FNC would result in a long-term, significant beneficial impact on burial services in central Florida. Increased burial capacity at FNC would also extend the longevity of burial capacity at private cemeteries in the region.

3.11.2.2 No Action

Under the No Action alternative, an increase in the capacity of burial sites at FNC would not occur as described under the Proposed Action. Therefore, the longevity of FNC would not be extended. Upon reaching capacity, residents in central Florida would be required to travel longer distances for new burial benefits and visitation at another National Cemetery, or resort to a burial at a private cemetery. Thus, the No Action alternative would not comply with the *Service Members Civil Relief Act*. Therefore, the No Action alternative would result in a long-term, significant adverse impact on burial opportunities for Veterans and their families in central Florida.

3.12 Solid Wastes and Hazardous Materials

3.12.1 Existing Environment

The Project Study Area includes the spoils area and a headstone engraving shop. During site reconnaissance on September 18, 2019, Mabbett observed three trail-behind portable generators, six five-gallon containers labeled diesel fuel stored on impervious ground, a metal cabinet labeled "flammable," one portable diesel fuel storage tank (for the bed of a dump truck or pickup truck), and a dust collector to capture granite fines.

The spoils area also contains several hundred cubic yards of excess soil, mulch, and tree branches stockpiled here from other areas at FNC. No other solid wastes or hazardous materials were present at the Project Study Area. No known or reported releases of regulated wastes or hazardous wastes have occurred at the Project Study Area. Therefore, development of the Project Study Area is not reasonably anticipated to pose a risk to construction workers or visitors.

Outside of the Project Study Area, minimal quantities of hazardous materials are stored at the FNC maintenance complex. These materials include diesel and gasoline in separate aboveground storage tanks, and temporary storage of waste oil that is transported and disposed of off-site by a third-party vendor. Other minimal quantities of hazardous materials may be brought on-site by contractors on an as-needed basis for activities such as pest control and weed management.

Current operations at FNC generate non-hazardous solid waste, including office debris, flowers and other items left behind at burial sites, and container waste associated with minor vehicle maintenance activities. These solid wastes are managed by VA and transported by a licensed contractor for off-site disposal.

3.12.2 Environmental Consequences

3.12.2.1 Proposed Action

Construction. Construction of the expansion within the Project Study Area would generate solid wastes consisting of cleared vegetation, excess soils, and excess construction materials and packaging. Cleared vegetation would be transported off-site for composting. Excess soils could be reused on-site as fill to raise the elevation of burial areas or for other beneficial uses, if deemed suitable during future engineering studies. Excess construction material and packaging would be containerized in a designated area within the construction site, and then transported off-site for recycling; materials that cannot be recycled would be landfilled off-site. The nature of the solid wastes generated during construction would be similar to a typical construction project (e.g. packaging, hardscape supplies, etc.), and the volumes generated are not anticipated to make a major contribution to the overall solid waste volume generated and disposed of in Sumter County or the central Florida region.

Additionally, all construction contractors would comply with VA's solid waste and hazardous materials SOPs and management measures described in the NCA Master Construction Specifications. These management measures would ensure that potential adverse impacts from construction of the expansion area would remain at short-term, direct, less-than-significant levels.

Operation. Operation of the Proposed Action would result in a negligible increase above the volume of solid wastes currently generated at FNC. These future operational wastes would include flowers and other debris left behind at memorial sites and excess soil generated during in-ground burials. The solid waste management program currently in place at FNC is capable of handling additional debris without impacting ongoing operations, while excess soil is anticipated to be stockpiled either in the central satellite maintenance area or in primary southern maintenance area. The headstone engraving operation would be relocated to another maintenance area within FNC.

Hazardous materials used during operation of the Proposed Action would be limited to approved pesticides and/or herbicides, applied by licensed applicators according to the manufacturers' labeled instructions. These materials would be used for insect control and weed management in burial areas with landscaped vegetation and/or built structures (e.g. columbaria). Therefore, operation of the Proposed Action would have a direct, negligible adverse impact on solid wastes and hazardous materials.

3.12.2.2 No Action

No changes to solid waste and hazardous materials management at FNC would occur under the No Action alternative; therefore, no impacts would occur. The spoils area in the Project Study Area would continue to be utilized to stockpile excess soils and vegetation, and to house the headstone engraving operation. Baseline conditions would remain, as described above.

3.13 Transportation and Parking

3.13.1 Existing Environment

FNC is accessible from a main entrance located on Sumter County Road (CR) 476B (Level of Service A). The main entrance intersection is a short distance from the Interstate 75/CR 473 Interchange, making FNC accessible to nearby metropolitan areas to the north and south. CR 476B is a two-lane asphalt-paved road with relatively low traffic volumes, which primarily consists of local residential traffic, correctional facility employees, and FNC visitors and staff. A designated FNC maintenance entrance is located approximately 0.3 miles south of the main entrance. The Project Study Area is accessible from an unpaved roadway located approximately 0.2 miles north of the main entrance; this unpaved roadway does have a locking utility gate to prevent unauthorized entry.

Within FNC, a series of asphalt-paved roadways allows visitors and staff to access burial areas, maintenance buildings, and administrative offices. Use of these roadways is restricted to cemetery visitors and staff. No recreational uses are permitted. Visitors are allowed to park on the side of the roadways, but not on the grass-covered shoulder. A cortege area near the main entrance provides a designated parking area for visitors attending a memorial service.

FNC has no other developed parking areas, and there are no public parking facilities in vicinity of FNC.

There is no scheduled public transit service available in the vicinity of FNC. However, Sumter County provides reservation-based transit service throughout Sumter County to at-need residents.

The 1983 EIS concluded that the impact of a National Cemetery on day-to-day transportation would be minimal (VA, 1983). Operation of FNC, to date, has not resulted in significant adverse impacts to the area transportation network.

3.13.2 Environmental Consequences

3.13.2.1 Proposed Action

Construction. Construction of the expansion area would result in a temporary increase in the number of vehicles (including both trucks and workers' vehicles) currently using roadways in the immediate vicinity of FNC. This increase in traffic (approximately 20-30 vehicles) would be negligible (less than a 1 percent increase in overall traffic volume) and last only as long as the anticipated 30-month construction phase. Additionally, the construction traffic may be non-continuous. The existing area roadway infrastructure (CR 476B, CR 673) is adequate for handling the temporary increase in roadway use, and no modifications to these roadways or traffic patterns would be required.

Construction vehicles would enter and exit the Project Study Area from the unpaved roadway along CR 476B. Flaggers may be utilized to notify oncoming traffic of slower construction vehicles entering or exiting CR 476B from the maintenance road, if needed. Construction vehicles generally would remain within the Project Study Area and would not require extensive travel on roadways within FNC. However, should travel be required within FNC, the roadways can adequately handle the temporary increase in construction traffic without needing physical or pattern modifications. All construction vehicle traffic traveling on FNC roadways would be scheduled and routed to avoid disrupting the solemnity of committal services and processions. Additionally, construction vehicles and materials would be staged in the Project Study Area, away from existing burial areas.

To ensure that construction vehicles do not degrade the quality of the roadways within and outside of FNC, a gravel-covered construction pad would be established at the exit of each construction area to ensure dirt is removed from construction vehicle tires before exiting the area.

Therefore, construction activities associated with the Proposed Action would have a short-term, less-than-significant adverse impact on transportation and parking within or in the vicinity of FNC.

Operation. The Proposed Action would result in the creation of new roadways within the Project Study Area. These roadways would connect to existing roadways within FNC, providing visitors and staff access to the new interment areas from within the cemetery. No modifications to existing roadways would be required. No new parking area would be created; visitors would continue to be allowed to park along the side of roadways within FNC.

Operation of the new expansion area would not result in a substantial increase in the number of visitors traveling to and from FNC. This is because once the new expansion area is open, other burial areas at FNC would be closed to new burials. Thus, the overall number of visitors traveling to FNC for new burials would remain relatively unchanged compared with the current number. Therefore, overall operation of the Proposed Action would have no impact on traffic and parking.

3.13.2.2 No Action

Under the No Action alternative, no changes to current transportation use levels would occur; therefore, no impacts would result. Baseline conditions would remain, as described above.

3.14 Utilities

3.14.1 Existing Environment

Utilities Outside of FNC

FNC is in a rural part of Sumter County. The closest water/sewer system is in the city of Bushnell, which is also the county seat. The Bushnell water infrastructure does not extend south of FL 48 or west of I-75. There are stormwater gravity mains running under CR 476B. Stormwater gravity main locations are at the following coordinates: 28° 36’ 24.52” N, 82° 12’ 32.872” W; 28° 36’ 38.998” N 82° 12’ 27.907” W. The first gravity main location cited above is approximately 115 feet due south of FNC and the second gravity main location is approximately 49 feet southeast of FNC (GIS Specialist Kevin Hill, GIS Department, Sumter County, Florida, 2019c).

Utilities within FNC

Utility services within FNC include electric, communication, sanitary waste disposal, stormwater management, potable water, and irrigation water. Private utility providers include Sumter Electric Cooperative (SECO) Energy (electric) and Spectrum (communications). Sanitary waste generated at FNC is managed using on-site septic tanks. Potable and irrigation water are obtained from three VA-owned and operated on-site wells, all screened from 100- to 180-feet below grade in the Floridan aquifer. No fire hydrants are present at FNC (SWFWMD, 2019). Stormwater that does not infiltrate into the ground is captured in catch basins, which then discharge the stormwater away from burial areas.

The existing irrigation system includes on-site groundwater aquifer supply wells, an effluent water source, irrigation water retention pond, pumping system, and a distributed irrigation system that has been constructed in multiple phases. Three on-site groundwater wells pump water directly into the on-site irrigation pond. These wells are currently permitted by the SWFWMD (Consumptive Water Use Permit 8675.005) to provide up to an average of 419,900 GPD with a peak of 1,553,200 GPD. In prior years, and as needed, the Sumter Correctional Institute has provided as much as 7.6 MG per month of effluent water to FNC (a total of 50.3 MG of effluent was provided in 2004) to supply irrigation water.

Although the on-site well water has high iron concentrations, the blending of the well water with the highly

chlorinated effluent water has prevented water quality problems for the irrigation system and potential staining of monuments. Chlorine is also injected directly into the irrigation pond to prevent algal blooms.

The use of these utilities has not caused a documented decrease in service levels to other users outside of FNC.

3.14.2 Environmental Consequences

3.14.2.1 Proposed Action

The irrigation system would be the only utility to be impacted during construction and operation. Therefore, the following analysis is limited to this utility.

Under the Proposed Action, a new groundwater supply well would likely be installed at FNC to help meet the anticipated increase in demand for water needed to irrigate landscaping at new burial areas. Prior to installing the well, VA would submit a Consumptive Water Use application to SWFWMD for approval. The application would identify well construction details, an estimate of groundwater withdrawal volumes, and measures to increase irrigation efficiency.

Construction. During construction of the Proposed Action, the existing irrigation system lines would be extended from the nearest connection points to the expansion area. Establishing these new connections would not impact the existing irrigation utility system, because new line extensions would be established from T-connectors. During times when irrigation is not needed, temporary shutdowns are anticipated. The groundwater supply well discussed in Section 2.2.1 ("Proposed Action") would be integrated into the existing irrigation supply system upon approval of a modified SWFWMD CUP application.

Operation. To minimize operational groundwater withdrawals, VA would continue implementing measures to increase the FNC irrigation system efficiency. These measures include the use of soil moisture meters to help determine when irrigation is needed; using rain gauges to measure and time irrigation volumes; better targeting of irrigation water to landscaped area; streamlining the process to receive reclaimed water from the Sumter County Correctional Institute; modifying irrigation volumes to specific vegetation growth rates; fertilizing during natural rain events; and installing a weather station to further improve irrigation efficiencies.

Additionally, VA would adhere to SWFWMD CUP requirements regarding water conservation and groundwater utilization.

Therefore, the Proposed Action would have a long-term, negligible adverse impact on the irrigation water utility, and no impact on other utilities.

3.14.2.2 No Action

Under the No Action alternative, no changes to the existing utilities or use levels would occur. Baseline conditions would remain, as described above.

3.15 Environmental Justice

3.15.1 Existing Environment

EO 12898 "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations" was enacted in 1994 to focus Federal agencies attention on the environmental and human health conditions in minority communities and low-income communities with the goal of achieving environmental protection for all communities. Under this EO, Federal agencies must identify and address the human health or environmental effects of its actions on disproportionately minority and low-income populations.

For this analysis, data on minority and low-income populations within Sumter County were compared to data available for the state of Florida.

Based on guidance from the CEQ, minority populations should be identified where either (a) the minority population of the area exceeds 50 percent (%), or (b) the minority population percentage of the affected area is meaningfully greater than the minority population percentage in the general population or other

appropriate unit of geographic analysis (CEQ 1997). Low-income populations are defined as those below the federal poverty thresholds identified using statistical poverty thresholds from the U.S. Census.

Applying this methodology, the percentage of low-income and minority populations within the Census Tract 9106.02, which encompasses FNC and the community to its immediate north, was compared to the percentage of low-income and minority populations located within Sumter County and the state of Florida based on available US Census data.

Minority Population

The population of Census Tract 9106.02 is 2,995, approximately 80% of which is Caucasian or White. Census Tract 9106.02 has a lower percentage of minority populations than the state of Florida (47% minorities), but higher than Sumter County (15%). Thus, the minority population is not greater than 50%, and not meaningfully greater than the surrounding county.

Poverty Levels

The population below the poverty level in Census Tract 9106.02 is 19.9% (599 people), which is higher the Sumter County (8.2%; 10,300 people) or the state of Florida (13.6%; 2.8M people) (US Census, 2017) (Table 12). Additionally, Census Tract 9106.02 had a higher percentage of children under the age of 18 living in poverty and a higher percentage of adults aged 65 and over living in poverty in comparison to Sumter County and Florida.

Based upon the large percentage of children and seniors living in poverty compared to Sumter County or the state of Florida, the criteria for an environmental justice community are met in Census Tract 9106.02.

Table 15. Minority and Low-Income Population Location

Location	Total Population[1]	Minority Population[1,2]	Population below poverty level[3]
State of Florida	21,299,325	10,010,683 (47%)	2,840,977 (13.6%)
Sumter County	128,754	19,314 (15%)	10,300 (8.2%)
Census Tract 9106.02	2,995	599 (20%)	599 (19.9%)

Notes:
[1]U.S. Census 2017 (2018 estimate)
[2]Minority includes all race/ethnicity categories except non-Hispanic White persons
[3]ACS 2017 (2018 estimate)

Table 16. Low-Income Seniors and Children Under 18 Population Location

Location	Total Senior Population [1]	Total Senior Population below poverty level[2]	Total Population Under 18[2]	Total Under 18 below poverty level[2]
State of Florida	4,259,865 (20%)	5,485 (13.6%)	4,249,865 (20%)	86,973 (20%)
Sumter County	73,390 (57%)	2,202 (3%)	90,128 (7%)	25,236 (28%)
Census Tract 9106.02	599 (20%)	132 (22%)	569 (19%)	182 (32%)

Notes:
[1]U.S. Census 2017 (2018 estimate)
[2]ACS 2017 (2018 estimate)

3.15.2 Environmental Consequences

3.15.2.1 Proposed Action

Construction and Operation. The Proposed Action would occur entirely within FNC; no direct impacts would occur in the surrounding community. The Proposed Action is not anticipated to have a disproportionate impact on low-income or minority groups in Sumter County. The Proposed Action would cause no direct or indirect changes in population, income levels, housing, access to medical, emergency or educational services or food and fiber production, local tax revenues, or other non-cemetery community services. No direct benefit to low-income populations is anticipated. However, as previously described, the Proposed Action may provide a temporary increase in local employment should the contractor selected to develop the expansion area hire skilled workers from the local community; this could result in a minor beneficial impact on socioeconomics within this immediate area. Likewise, operation of the Proposed Action could have a negligible beneficial impact on local economic conditions when visitors and staff obtain food, lodging, and supplies from area businesses that employ local residents.

3.15.2.2 No Action

Under the No Action alternative, no changes at FNC would occur. The No Action alternative would have no impacts on environmental justice, and baseline conditions would remain as described above.

3.16 Cumulative Impacts

According to the CEQ regulations for implementing NEPA (40 CFR Part 1508.7), cumulative impacts are defined as "…the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions." Cumulative impacts accumulate over time, from one or more sources, and can result in the degradation of important resources. In general, cumulative impacts are difficult to assess due to the uncertainty associated with foreseeing future actions.

3.16.1 Existing Conditions

For this SEA, the existing conditions previously described in this section reflect the cumulative effects of the past and present actions. In general, the following major historical activities influenced the current conditions at FNC:

- In the years prior to 1983, the state of Florida harvested wood from FNC.
- Based on historical and archaeological evidence documented during the 1983 EIS associated with the original site selection process, no historic occupation has occurred within FNC (VA, 1983). Cultural activity has been limited to the naval stores (lumbering, turpentine operations) industry, which started in the late 1800s. All the virgin timber has been removed. An attempt was made at phosphate mining in the late 1880s, but was abandoned shortly thereafter (VA, 1983).
- Past phases of construction at FNC, resulting in near full build-out of all suitable area within the property boundary.

The Sumter County Municipal Service Area/Joint Planning Area for the City of Bushnell, Florida (Sumter County, 2016) identifies potential future development through 2035 in the area including and proximate to FNC (Sumter County, 2016). The "2035 Future Land Use Map" indicates that the area where FNC is located would continue to be used as "public, institutional" and "conservation," which is consistent with current land use (Sumter County, 2016). No other known or anticipated future development is identified for this area.

3.16.2 Environmental Consequences

3.16.2.1 Proposed Action

The Proposed Action expansion would occur within the existing boundary of FNC and result in activities that are consistent with both existing and future land uses at the parcel and county levels. The Proposed Action avoids impacts to Sand Pond and the surrounding wetlands and 25-foot buffer zone, and avoids impacting listed species. The Proposed Action would not have any significant adverse impact on other resource area analyzed in this SEA. Therefore, the impacts from implementing the Proposed Action in combination with those from past and reasonably anticipated future development would not be expected to generate additional adverse impacts or increase the intensity of adverse impacts above a less-than-significant level on the resources analyzed in this SEA. The Proposed Action is consistent with current and anticipated future land uses and regional land development trends and would maintain or improve socioeconomics in the surrounding area and community services in central Florida.

Any unforeseen adverse cumulative impacts would be offset or minimized through consultation and compliances with statutory and regulatory processes already in place in the state of Florida.

3.16.2.2 No Action

Under the No Action alternative, the conditions in the Project Study Area would remain as they currently exist for the foreseeable future. The No Action alternative would decrease the longevity of FNC, causing a long-term, significant adverse effect on community services (e.g. lack of burial opportunities at a National Cemetery within central Florida). However, on a cumulative basis, this impact and others associated with the No Action alternative are not anticipated to generate additional adverse impacts or increase the level of adverse impacts on other resources analyzed in this SEA.

3.17 Potential for Generating Substantial Controversy

The Proposed Action is not anticipated to generate substantial controversy or lead to negative public reaction. The Proposed Action is anticipated to be widely accepted in the community because it would extend the longevity of FNC for at least another 10 years (following depletion of current burial capacity) and allow NCA to continue providing essential burial benefits at FNC to eligible Veterans and their families throughout central Florida.

Substantial public controversy would be anticipated under the No Action Alternative because the longevity of FNC would not be extended, leading to a lack of burial benefits at the only National Cemetery within the central Florida region.

4.0 AGENCY COORDINATION AND PUBLIC INVOLVEMENT

The VA invites public participation in decision-making on new proposals through the NEPA process. Public participation with respect to decision-making on the Proposed Action is guided by 38 CFR Part 26, VA's policy for implementing NEPA. Additional guidance is provided in VA's Environmental Compliance Management handbook (VA, 2012) and VA's NEPA Interim Guidance for Projects (VA, 2010). Consideration of the views and information of all interested persons promotes open communication and enables better decision-making. Agencies, organizations, and members of the public with a potential interest in the Proposed Action, such as minority, low-income, and disadvantaged persons, are urged to participate. The following sections describe agency coordination and public involvement efforts associated with the Draft SEA and the Final SEA.

4.1 Federal, State, and Local Agency Coordination

As part of the NEPA process, VA contacted select federal, state, and local agencies to inform them about the Proposed Action and the opportunity to provide input on the Draft SEA. Accordingly, concurrent with the publication of the Draft SEA, VA provided a copy of the Notice of Availability (NOA) for the Draft SEA and a request for comment during the 30-day review period to the agencies identified in the following list. Input from these agencies on the Draft SEA have been addressed and incorporated into this Final SEA.

- USFWS
- USEPA – Region 4
- U.S. Army Corps of Engineers
- U.S. Department of Agriculture, Natural Resources Conservation Service,
- Chassahowitzka National Wildlife Refuge
- Sumter County, County Administrator
- Florida State Clearinghouse (SCH) (which represents the following state agencies):
    - Florida Coastal Office (Coastal Zone Management Program)
    - Florida Department of Environmental Protection (FDEP)
    - Florida Fish and Wildlife Conservation Commission (FWC)
    - Florida Division of Historical Resources of the Florida Department of State (SHPO)
    - Florida Department of Transportation (FDOT)
    - Florida Department of Health (FDOH)
    - Florida Department of Agriculture and Consumer Services (FDACS)
    - Florida Department of Economic Opportunity (FDEO)
    - Florida Division of Emergency Management (FDEM)
    - Southwest Florida Water Management District (SWFWMD)

On April 24, 2020, the Florida State Clearinghouse informed VA that the Proposed Action could proceed without further review, and that a SWFWMD permit may be required. No other agency provided comments. Copies of correspondence on the Draft SEA are included in Appendix A.

4.2 Native American Tribal Coordination

In accordance with 36 CFR 800.2 and EO 13175, "Consultation and Coordination with Indian Tribal Governments", dated November 6, 2000, VA coordinated with federally-recognized Native American Tribes having current or historical ties to the area by requesting their early input on the Proposed Action and its potential impact on Native American resources. The Native American Tribes consulted include:

- Miccosukee Tribe of Indians of Florida
- Muscogee Creek Nation
- Coushatta Tribe of Louisiana
- Seminole Tribe of Florida
- The Seminole Nation of Oklahoma

As previously described under the Cultural Resources analysis in Section 3.3.1, VA solicited input from these Native American Tribes during development of the Draft SEA and upon its publication for a 30-day review period. A response was received only from the Seminole Tribe of Florida. The Tribe requested a copy of the 1983 EIS, which VA subsequently provided. The Tribe concluded that they had no objections to the Proposed Action, and requested notification should archaeological sites be inadvertently discovered, particularly because the original archaeological survey conducted in 1983 no longer met the more stringent state requirements for transect spacing and shovel test diameter. Copies of correspondence are provided in Appendix A.

4.3 Public Involvement

4.3.1 Public Review of the SEA

Draft SEA

VA, as the federal proponent of the Proposed Action, made the Draft SEA available for a 30-day review and comment period. A NOA announcing the availability of the Draft SEA was published in the *Villages Daily Sun* on March 11 and 15, 2020, and marked the start of the 30-day public review period, which ended April 15, 2020. A copy of the NOA is provided in Appendix C. A printed copy of the Draft SEA was available for review at the FNC Public Information Center, and the Bushnell Public Library at 402 North Florida Street, Bushnell, Florida, 33513, and an electronic copy is available for download from VA's website at http://www.cem.va.gov/cem/EA.asp.

Final SEA

Based on comments received from regulatory agencies, Tribes, and the public on the Proposed Action, VA has completed this Final SEA without requiring substantive changes relative to the Draft SEA. As previously concluded in the Draft SEA and reiterated in this Final SEA, the Proposed Action would have no significant impact of an adverse nature on the environmental resources presented herein.

Additional information about the Proposed Action may be requested by writing to: Mr. Fernando Fernandez, U.S. Department of Veterans Affairs, Construction & Facilities Management Office, 425 I (eye) Street, NW, Room 6W317d, Washington, D.C., 20001; by email at fernando.fernandez@va.gov; or by telephone at (202) 632-5529.

An administrative record of the Draft and Final SEA and supporting documents is maintained at VA OCFM in Washington, D.C.

5.0 BEST MANAGEMENT PRACTICES AND MONITORING

This section consolidates the BMPs, avoidance, impact minimization techniques, on-site monitoring activities, and off-site compensation commitments (as well as monitoring of those off-site compensation commitments), as previously described in Section 3, to maintain the potential impacts associated with implementing the Proposed Action at less-than-significant adverse levels for the environmental resources analyzed in this SEA. A list of environmental permits and approvals potentially required for construction and operation of the Proposed Action is provided in Table 17.

AESTHETICS
Construction
• Control fugitive dust emissions through routine construction BMPs, including using water trucks to prevent dust emissions and gravel-covered access roads to remove dirt from the tires of vehicles leaving the construction area in the Proposed Action site.
• Erect temporary privacy fence and screening around the construction zone and maintain the existing vegetative buffers around the perimeter of the Project Study Area. Erect temporary privacy fencing during construction in the Project Study Area along areas visible from the highway.
Operation
• Routine and scheduled professional landscape maintenance to ensure the upkeep of the park-like appearance of the grounds and associated physical infrastructure (e.g. roads, interment area).
AIR QUALITY
Construction
• Implement dust suppression methods to include application of water, construction scheduling, and maintaining limited and decreased on-site vehicle speed limits.
• Stabilize exposed soil with vegetation or mulching to minimize erosion and subsequent dust generation.
• Construction vehicles will travel on paved roads within FNC and vicinity at speeds at or below posted limits. This will minimize dust generated by vehicles and equipment on paved surfaces. On unpaved surfaces at the site, vehicle speeds will be maintained at or below 5 miles per hour to prevent dust generation of exposed soil. Haul trucks transporting soil will be covered with haul tarps.
• Visually monitor all construction activities on a daily basis, and particularly during extended periods of dry weather; implement additional dust control measures as needed.
CULTURAL RESOURCES
Construction and Operation
• Implement an "Inadvertent Discovery" plan: If prehistoric or historic artifacts that could be associated with Native American, early European, or American settlement are encountered at any time within the project site area, VA will cease all activities involving subsurface disturbance in the vicinity of the discovery. The Florida Department of State, Division of Historical Resources, Compliance Review Section and Federally-recognized Native American Tribes in the region, who may attach religious or cultural significance to the property affected by the Proposed Action will be contacted, and project activities will not resume without verbal and/or written authorization. In the event that unmarked human remains are encountered during permitted activities, all work will stop immediately, and the proper authorities will be notified in accordance with Section 872.05, *Florida Statutes*.

GEOLOGY, SOILS, AND TOPOGRAPHY
Construction
• Design the expansion area to comply with EISA 438 to the maximum extent technically feasible through engineering and design controls, such as minimizing the creation of new impervious surfaces, directing stormwater run-off to retention basins, and allowing precipitation to infiltrate into the ground surface to the maximum extent possible. Ensure the design is also consistent with Southwest Florida Water Management District (SWFWMD) requirement that the post-development site conditions have a combined site and soil stormwater storage equivalent to the pre-development condition.
• Develop a soil erosion and sediment control (SESC) plan as part of the SWFWMD ERP.
• Per an approved ERP, install and maintain sedimentation and erosion control measures, including the use of silt fencing, synthetic hay bales, specified loading and unloading area, covering exposed soils during anticipated storm events, and revegetating soils with temporary and/or permanent non-invasive vegetation as soon as construction conditions allow.
• Implement measures to prevent dust emissions from disturbed soil and on construction vehicles leaving and entering the Project Study Area
• Revegetate disturbed area as soon as construction is completed. Use native, non-invasive vegetation. Professionally maintain vegetation during operation.
• Apply for and adhere to the terms of the FDEP National Pollutant Discharge Elimination System (NPDES) General Permit for Construction Activity, and the SWFWMD ERP.
• Maintain spill kits to rapidly respond to and limit impacts from accidental releases of equipment fluids or chemicals. Report releases of regulated quantities of regulated chemicals to VA and FDEP. Perform cleanup according to applicable regulatory requirements.
Operation
• Conduct routine landscaping to ensure soil remains vegetated and stabilized to prevent erosion.
• Temporarily stockpile excavated soil for individual burial sites and return to the burial site from which it was obtained. Sod new burial site to prevent erosion.
HYDROLOGY AND WATER QUALITY
Construction and Operation
• Implement the BMPs listed above for Geology, Soils, and Topography.
• Utilize native, non-invasive, drought-resistant vegetation for area landscaping to reduce irrigation requirements.
• Route stormwater run-off from impervious surfaces to designated stormwater retention and drainage area.
• Implement spill and leak prevention and response procedures, including maintaining a complete spill kit at the project area, to reduce the impacts of incidental releases of vehicle fluids to groundwater quality.
• Design and operate the irrigation system to maximize efficiency and conserve water resources in accordance with VA's design guidelines and SOPs and in accordance with the existing SWFWMD Consumptive Water Use Permit and any subsequent modifications.

HABITAT AND WILDLIFE
Construction
• Survey suitable habitat within the proposed expansion area within the Project Study Area prior to construction, as listed below.
• In order to reduce the effect, the Proposed Action may have on the eastern indigo snake, VA would incorporate the Standard Protection Measures for the Eastern Indigo Snake in their construction plans, in addition to excavating all possible underground refugia (i.e., gopher tortoise burrows) prior to commencing construction. Coordinate with the USFWS on concurrence prior to initiating construction.
• Conduct 15% and 100% surveys for gopher tortoise burrows according to FWC requirements prior to any clearing and earthwork.
• Prior to construction of the proposed expansion, conduct surveys for the presence of the Southeastern American kestrel. Coordinate with the FWC if any Southeastern American kestrel nests are observed.
Operation
• Utilize native, non-invasive, drought-resistant vegetation for area landscaping to reduce irrigation requirements.
• Lawn area will primarily be seeded or sodded with St. Augustine grass, while perimeter shrubs and trees will include *Loropetalum* cultivars and Crepe Myrtle.
NOISE
Construction
• Schedule construction activities to minimize impacts to interment ceremonies to the extent possible unless there is a specific activity that would directly impact the current operation of the cemetery, in which case schedule the activity outside of the normal construction schedule.
• Equip construction equipment with noise dampening equipment (mufflers, noise shields) and turn equipment off when not in use.
• Comply with OSHA requirements to protect workers' hearing around loud equipment.
FLOODPLAINS, WETLANDS AND COASTAL ZONE MANAGEMENT
Construction and Operation
• Ensure any future improvements are above the 100-year floodplain base elevation.
• Implement BMPs specified for Soils.
SOLID WASTE AND HAZARDOUS MATERIALS
Construction
• Reutilize excavated soils on-site in accordance with site design specifications. Utilize excess soils off-site.
• Recycle excess construction materials off-site.
• Manage solid and hazardous waste according to VA's solid and hazardous materials SOPs and management measures specified in NCA Master Construction Specifications, and applicable Federal and state laws.
• Implement management measures for incidental releases specified under Soils.
Operation
• Manage solid wastes in designated area and establish routine pickup and disposal to appropriate landfill facilities by qualified vendors, consistent with current practices to maintain the National Shrine aesthetics at FNC.
• Apply pesticides/herbicides according to label instructions by licensed applicators.

TRANSPORTATION AND PARKING
Construction
• Construction vehicles will use the existing maintenance road (along CR 476B) to enter and exit FNC. If required, flaggers will be utilized to notify oncoming traffic of slower construction vehicles entering or exiting CR 476B from the maintenance road.
• Stage construction equipment at the site to ensure construction equipment is not readily visible to visitors and maintains the solemnity of FNC.
• Establish gravel area at the exit of construction area to remove dirt/soil from construction vehicle tires prior to entering the roadways within FNC.
UTILITIES
Operation
• Adhere to the current SWFWMD Consumptive Water Use Permit or subsequent modifications. Follow the water conservation management plan activities and groundwater water withdrawal limitations under the existing permit, and all requirements under a new permit for a new groundwater well.

Table 17. Environmental Permits and Approvals Potentially Required

Permit, Approval, or Certification	Responsible Agency	Applicable Criteria	Required Actions	Permitting Schedule	Comments
Federal and State Environmental					
Individual Permit (IP; greater than 0.5 acre of impact)/Nationwide Permit (NWP; less than 0.5 acre of impact) http://cdm16021.contentdm.oclc.org/utils/getfile/collection/p16021coll11/id/1753	U.S. Army Corps of Engineers (USACE)	Adverse impacts would be mitigated in consultation with the USACE who serves as the project manager for Federal agency coordination.	Request a formal Preliminary Jurisdictional Determination (PJD) with the USACE through the submission of a PJD application. Completion of ENG 4345 and preparation of supplemental information necessary to evaluate the extent and characteristics of the affected wetland communities and/or impacts to habitat deemed suitable for occupation by Federally listed species.	1 month to prepare application. Agency review takes approximately 9-12 months.	No permit required UNLESS development occurs within the Sand Pond wetland.
Environmental Resource Permit (ERP) https://www.swfwmd.state.fl.us/business/epermitting/environmental-resource-permit	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 a district engineer or environmental specialist to ensure that the proposed design meets 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.	An existing valid conceptual permit ERP permit exists but a construction permit is necessary to authorize phased construction.
Consumptive Water Use Permit (CUP) https://www.swfwmd.state.fl.us/business/epermitting/water-use-permit https://www.swfwmd.state.fl.us/business/epermitting/well-construction-permits	Southwest Florida Water Management District (SWFWMD)	Required for projects which trip water use regulations, including thresholds for well size, water use rate, and maximum water withdrawal capacity of system. Permit also required for new well installation.	Submit a permit application including a water conservation plan, providing measures to reduce water use and preserve water resources for other beneficial uses. Investigate and use the lowest acceptable quality source of water such as using reclaimed water or storm water when available instead of higher quality potable groundwater.	2 weeks to 2 months depending upon the type of permit sought.	Not determined if this will be required until water consumption from existing wells is evaluated. Permit would be required for new well installation.
Section 401 Water Quality Certification (Clean Water Act)	Florida Department of Environmental Protection (FDEP)	Projects with potential to impact waters of the United States		No separate application required. Approx. 3 months as part of ERP Permit processing.	This certification will be issued with the ERP Permit listed above.
NPDES *Construction* Stormwater Permit /Stormwater Pollution Prevention Plan (SWPPP) http://www.fldepportal.com/go/apply-build/ http://www.dep.state.fl.us/water/stormwater/npdes/	Florida Department of Environmental Protection (FDEP)	Construction of any facility that disturbs 1 acre or more	Investigate and use the lowest acceptable quality source of water. For example, golf courses and other large users of water for landscape irrigation are required to use reclaimed water or storm water when available instead of higher quality potable groundwater.	2 weeks to prepare, 2 days to achieve permit coverage	The NOI gets submitted to FDEP in Tallahassee
Conservation Permit	Florida Fish and Wildlife Conservation Commission (FFWCC)	Required for projects which impact gopher tortoises, their burrows, and their nests.	Potentially occupied gopher tortoise burrows were identified within the project area during the 100% survey of suitable gopher tortoise habitat conducted on September 18 and 19, 2019. Survey results are valid for 90 days. Therefore, within 90 days, but no less than 72 hours prior to construction and/or burrow excavation, a 100% survey must be performed and submitted to FWC. All tortoises captured must be transported to the recipient site identified within the permit. Applicant must obtain a reservation letter from a permitted recipient site to relocate the population offsite.	1 month to prepare application. Agency review takes approx. 3 months.	VA to obtain and coordinate under separate contract

Other Permits/Approvals					
Endangered Species Act Concurrence	United States Fish and Wildlife Service (USFWS)	Proposed project results in an effect determination of "may affect" under the Endangered Species Act. The effect determination must be reduced to "May affect, not likely to adversely affect."	Consultation with USFWS is required. VA can propose to adopt the Standard Protection Measures for the Eastern Indigo Snake and/or excavate potential underground refugia.	1 month to prepare documentation. The USFWS has 135 days from the time of a "complete application" to provide comments to the USACE pursuant to Section 7 policies.	Section 7 Consultation
Section 106 Concurrence	Florida State Historic Preservation Office and Native American Tribes	Federal undertakings that may impact cultural resources.	Consultation with SHPO and Tribes is required to obtain concurrence that the Proposed Action is likely to have "No Adverse Affect" on cultural resources.	Florida SHPO may take up to 60 days to respond. Tribes typically have 30 days to respond.	Section 106 Coordination
ASSUMPTIONS:					
Local permits will not be obtained.					

6.0 LIST OF PREPARERS

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7.0 REFERENCES

Council on Environmental Quality (CEQ). 1997. Environmental Justice Guidance under the National Environmental Policy Act. http://www.nepa.gov/nepa/regs/ej/justice.pdf. December 10, 1997.

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of Wetlands and Deepwater Habitats of the United States. U.S. Department of the Interior, Fish and Wildlife Service, Washington, D.C. 131pp.

Executive Order 12898. 1994. Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations. February 16, 1994.

Federal Emergency Management Agency Flood Insurance Rare Map for 6502 S 102nd Avenue, Bushnell, Florida. Map Panel 12119CO277D

https://msc.fema.gov/portal/search?AddressQuery=6502%20sw%20102nd%20avenue%20bushnell%20fl#searchresultsanchor

Florida National Cemetery web page. https://www.cem.va.gov/cems/nchp/florida.asp

Florida Department of Agriculture and Consumer Services Endangered Plant Inventory Accessed September 2019.

https://www.freshfromflorida.com/Divisions-Offices/Plant-Industry/Bureaus-and-Services/Bureau-of-Entomology-Nematology-Plant-Pathology/Botany/Florida-s-Endangered-Plants

Florida Department of Natural Resources (FDNR), 1970. The Geomorphology of the Florida Peninsula. Geological Bulletin No. 51. Bureau of Geology, Division of Interior Resources, Florida Department of Natural Resources. Tallahassee, Florida.

Florida Department of Transportation (FDOT), 1999. Florida Land Use, Cover and Forms Classification System (FLUCFCS) Handbook, 3rd Edition, Florida Department of Transportation.

Florida Times Union, 1999. "Veterans Win Battle for Bushnell Cemetery," newspaper article dated October 27, 1999. Accessed on www.Jacksonville.com

FWC, 2008. Bald Eagle Management Plan, *Haliaeetus leucocephalus*. Florida Fish and Wildlife Conservation Commission. Adopted April 9, 2008.

FWC, 2012. Florida Black Bear Management Plan. Florida Fish and Wildlife Conservation Commission, Tallahassee, FL. 215 pp. June 27, 2012.

FWC, 2019. Eagle Nest Locator website, Florida Fish and Wildlife Conservation Commission Database, Accessed September 2019 from http://myfwc.maps.arcgis.com/apps/webappviewer/index.html?id=253604118279431984e8bc3ebf1cc8e9

FWC, 2017. Florida Fish and Wildlife Conservation Commission pursuant to Rules 68A-27.003 through 68A-27.005, F.A.C. (http://myfwc.com/wildlifehabitats/imperiled/) updated January 2017.

FWC, 2017. Gopher Tortoise Permitting Guidelines, Florida Fish and Wildlife Conservation Commission. Accessed March 2017 from http://myfwc.com/media/4126898/GT-Permitting-Guidelines.pdf.

Florida Natural Heritage Program, 2019. List of Florida's Endangered and Threatened Species. Accessed December 2019 from https://myfwc.com/media/1945/threatend-endangered-species.pdf

Florida Natural Area Inventory web site. Accessed September 2019.

http://www.fnai.org).

Hurt, 2007. Hydric Soils of Florida Handbook, 4th Edition, Florida Association of Soil Scientists, March 2007.

International Sustainability Council (ISC)-Audubon, 2018. Deciduous Forest Biomes. Accessed at http://www.thesustainabilitycouncil.org.USACE. 2010. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain Region (Version 2.0), ed. J.S. Wakeley, R.W. Lichvar, and C.V. Noble. ERDC/EL TR-10-20. Vicksburg, MS: U.S. Army Engineer Research and Development Center.

Kartesz, J.T. 1994. A synonymized checklist of the vascular flora of the United States, Canada, and Greenland. 2nd edition. 2 vols. Timber Press, Portland, OR.

Kral, R. 1983c. A report on some rare, threatened, or endangered forest-related vascular plants of the South. U.S. Dept. of Agriculture Forest Service Technical Publication R8-TP2, Athens, GA. 1305 pp.

Mabbett, 2017. Conversation between Mabbett and Mr. Ed Brown, General Foreman, Florida National Cemetery. March 10, 2017.

National Conference of State Legislatures, List of Federal and State Recognized Tribes. http://www.ncsl.org/research/state-tribal-institute/list-of-Federal-and-state-recognized-tribes.aspx

National Oceanic and Atmospheric Administration (NOAA), 2018. National Centers for Environmental Information. Accessed at https://www.ncei.noaa.gov.

National Park Service (NPS), 2011. National Register Eligibility of National Cemeteries – A Clarification of Policy (9/8/2011) Accessed At https://www.nps.gov/nr/publications/guidance/Final_Eligibility_of_VA_cemeteries_A_Clarification_of_Policy_rev.doc

South Coast Air Quality Management District (SCAQMD), 2014. Off-Road – Model Mobile Source Emission Factors.

Sumter County, 2016. Municipal Serve Area/Joint Planning Area, City of Bushnell, Florida. June 14, 2016.

Sumter County web page, Sumter County Utilities. Accessed September 2019

https://sumtercountyfl.gov/105/GIS http://lansa.sumtercountysc.org/about/utilities

Sumter County, 2019 c. Geographic Information Systems Specialist Kevin Hill, personal communication.

SWFWMD, 2011. Florida Land Use Cover and Forms GIS Database. Southwest Florida Water Management District.

SWFWMD, 2018. Florida National Cemetery Consumptive Water Use Permit 8675.005.

SWFWMD, 2019. GIS, Maps and Surveys Water Management Information System. GIS<https://www.swfwmd.state.fl.us/resources/data-maps/gis-maps-survey

U. S. Census Bureau. 2019. Factfinder. Accessed December 2019. Website accessed at https://factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtml?src=bkmk

U.S. Census Bureau. 2019. Statistical Testing Tool. Website accessed September 2019. https://www.census.gov/programs-surveys/acs/guidance/statistical-testing tool.html.

USACE, 2007. *U.S. Army Corps of Engineers Jurisdictional Determination Form Instructional Guidebook.*

USDA-NRCS, 2019. Soil Survey of Sumter County. U.S. Department of Agriculture, National Resources Conservation Service. Accessed September 2019 at

https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx.

USEPA Envirofacts, 2019. Emissions Sources in Bushnell, Florida. Accessed September 2019 at https://enviro.epa.gov/index.html

USEPA Envirofacts Facility Data Florida National Cemetery. Accessed September 2019. https://enviro.epa.gov/enviro/multisys2_v2.get_list?facility_uin=110069474571

USEPA NEPAssist, 2019. Review for Bushnell, Florida. Accessed at https://www.epa.gov/nepa/nepassist.

USEPA, 1995. AP-42, Compilation for Air Pollutant Emission Factors.

USEPA, 2009. Technical Guidance on Implementing the Stormwater Runoff Requirements for Federal Projects under Section 438 of the Energy Independence and Security Act. EPA 841-B-09-001. December 2009.

USEPA, 2018. Nonattainment Area for Criteria Pollutants (Green Book). Current as of June 30, 2018. Accessed at https://www.epa.gov/green-book.

USFWS, 2010. U.S. Fish and Wildlife Service and U.S. Army Corps of Engineers 2010 Eastern Indigo Snake Consultation Key.

USFWS, 2013. U.S. Fish and Wildlife Service, 50 Code of Federal Regulations (CFR) 17 (http://www.fws.gov/endangered/), updated March 2013.

USFWS, 2019. Information for Planning and Conservation (IPAC) Accessed September 2019. https://ecos.fws.gov/ipac.

USFWS, 2019. National Wetlands Inventory Maps. Accessed September 2019. https://www.fws.gov/wetlands/

USGS, 1985. Sinkhole Type, Development, and Distribution in Florida. United States Geological Survey, Florida Department of Environmental Regulation, Bureau of Water Resources Management, and Florida Department of Natural Resources, Bureau of Geology. Map Series 110.

USGS, 1985. U.S. Geological Survey 7.5-minute Topographical Quadrangle Map, Saint Catherine, Florida, 1985.

USGS, 2019. Water Resource Links for: 03100208 – Withlacoochee. United States Geological Survey. Watershed Information Network. Accessed at https://water.usgs.gov/lookup/getwatershed?03100208

VA, 1983. Final Environmental Impact Statement: National Cemetery, Florida. Bushnell, Florida.

VA, 2004. Environmental Assessment of the Western Expansion, Florida National Cemetery.

VA, 2005b. Site Characteristics Report. Florida National Cemetery Expansion, Bushnell Florida. August 30, 2005.

VA, 2010. NEPA Interim Guidance for Projects. September 30, 2010.

VA, 2012. Environmental Compliance Management. VA Handbook 0062. January 10, 2012.

VA, 2017a. National Cemetery Administration Facts. Accessed at www.cem.va.gov. Updated January 2017.

VA, 2017b. National Cemetery Administration, Florida National Cemetery website. Accessed at https://www.cem.va.gov/cems/nchp/florida.asp.

VA, 2019c Conversation between Mabbett and FNC Assistant Director. September 25, 2019.

VA, 2017d. National Center for Veterans Analysis and Statistics. "VetPop2014" County-level Veteran population by State, 2013-2043.

VA, 2018. National Register of Historic Places and Designated National Historic Landmarks. Accessed at https://www.cem.va.gov/CEM/history/nationalregister.asp

8.0 GLOSSARY

Sources:

- Army NEPA Glossary, http://aec.army.mil/portals/3/nepa/glossary00.pdf.
- Glossary of Terms Used in Department of Energy NEPA Documents, http://energy.gov/sites/prod/files/NEPA_Glossary%2008_2011.pdf.
- NEPA Glossary, U.S. Fish and Wildlife Service, http://www.fws.gov/r9esnepa/Intro/Glossary.PDF.

Aesthetic resources: The components of the environment as perceived through the visual sense only. Aesthetic specifically refers to beauty in both form and appearance.

Affected environment: A portion of the NEPA document that succinctly describes the environment of the area(s) to be affected or created by the alternatives under consideration. Includes the environmental and regulatory setting of the proposed action.

Alternative: A reasonable way to fix the identified problem or satisfy the stated need.

Attainment area: An area that the Environmental Protection Agency has designated as being in compliance with one or more of the National Ambient Air Quality Standards (NAAQS) for sulfur dioxide, nitrogen dioxide, carbon monoxide, ozone, lead, and particulate matter. An area may be in attainment for some pollutants but not for others.

Conformity analysis: The *Clean Air Act* requires the Environmental Protection Agency to promulgate rules to ensure that Federal actions conform to the appropriate state implementation plans (SIPs) for air quality. Two sets of rules (one for transportation and one for all other actions) developed by EPA establish the criteria and procedures governing the determination of this conformity. A conformity analysis follows these criteria and procedures to quantitatively assess whether a proposed Federal action confirms with the SIP.

Council on Environmental Quality (CEQ): Established by Congress within the Executive Office of the President as part of the *National Environmental Policy Act of 1969*, CEQ coordinates Federal environmental efforts and works closely with agencies and other White House offices in the development of environmental policies and initiatives. The Council's Chair, who is appointed by the President with the advice and c consent of the Senate, serves as the principal environmental policy adviser to the President. The CEQ reports annually to the President on the state of the environment, oversees Federal agency implementation of the environmental impact assessment process, and acts as a referee when agencies disagree over the adequacy of such assessments.

Criteria pollutant: An air pollutant that is regulated by National Ambient Air Quality Standards (NAAQS). Criteria pollutants include sulfur dioxide, nitrogen dioxide, carbon monoxide, ozone, lead, and two size classes of particulate matter, PM_{10} and $PM_{2.5}$ New pollutants may be added to, or removed from, the list of criteria pollutants as more information becomes available.

Cumulative effect (cumulative impact): The impact on the environment that results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless

of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

Decibel (dB): A unit for expressing the relative intensity of sounds on a logarithmic scale from zero for the average least perceptible sound to about 130 for the average level at which sound causes pain to humans. For traffic and industrial noise measurements, the A-weighted decibel (dBA), a frequency-weighted noise unit, is widely used. The A-weighted decibel scale corresponds approximately to the frequency response of the human ear and thus correlates well with the loudness perceived by people.

Effects: Effects and impacts, as used in NEPA, are synonymous. Effects include 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 that may have both beneficial and detrimental effects, even if on balance the agency believes that the effect would be beneficial. There are direct effects and indirect effects. Direct effects are caused by the action and occur at the same time and place. Indirect effects are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect effects may include growth-inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems.

Endangered species: Plants or animals that are in danger of extinction through all or a significant portion of their ranges and that have been listed as endangered by the U.S. Fish and Wildlife Service or the National Marine Fisheries Service following the procedures outlined in the *Endangered Species Act* and its implementing regulations.

Environmental assessment (EA): A concise public document for which a Federal agency is responsible that serves to briefly provide sufficient evidence and analysis for determining whether to prepare an environmental impact statement (EIS) or a finding of no significant impact; aid an agency's compliance with NEPA when no environmental impact statement is necessary; or facilitate preparation of an EIS when one is necessary. Includes brief discussions of the need for the proposal, of alternatives, of the environmental impacts of the proposed action and alternatives, and a listing of agencies and persons consulted.

Environmental impact statement (EIS): A detailed written statement required by Section 102(2)(C) of NEPA, analyzing the environmental impacts of a proposed action, adverse effects of the project that cannot be avoided, alternative courses of action, short-term uses of the environment versus the maintenance and enhancement of long-term productivity, and any irreversible and irretrievable commitment of resources.

Environmental justice: 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. Fair treatment means that no group of people, including racial, ethnic, or socioeconomic groups, should bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal, and commercial operations or the execution of Federal, state, local, and tribal programs and policies. Executive Order 12898 directs Federal agencies to make achieving environmental justice part of their missions by identifying and addressing disproportionately high and adverse effects of agency programs, policies, and activities on minority and low-income populations.

Finding of no significant impact (FONSI): A public document issued by a Federal agency briefly presenting the reasons why an action for which the agency has prepared an environmental assessment has no potential to have a significant effect on the human environment and, thus, would not require preparation of an environmental impact statement.

Floodplain: The lowland and relatively flat area adjoining inland and coastal waters including flood- prone area of offshore islands, including at a minimum, that area subject to a one percent or greater chance of flooding in any given year.

Fugitive emissions: Emissions that do not pass through a stack, vent, chimney, or similar opening where they could be captured by a control device. Any air pollutant emitted to the atmosphere other than from a stack. Sources of fugitive emissions include pumps; valves; flanges; seals; area sources such as ponds, lagoons, landfills, and piles of stored material (such as coal); and road construction area or other area where earthwork is occurring.

Hazardous material: Any material that poses a threat to human health and/or the environment. Hazardous materials are typically toxic, corrosive, ignitable, explosive, or chemically reactive.

Historic property: Any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties. The term includes properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization and that meet the National Register criteria.

Impacts: see Effects.

Impervious surface: A hard surface area that either prevents or retards the entry of water into the soil or causes water to run off the surface in greater quantities or at an increased rate of flow. Common impervious surfaces include, but are not limited to, rooftops, walkways, patios, driveways, parking lots, storage area, concrete or asphalt paving, and gravel roads.

National Ambient Air Quality Standards (NAAQS): Standards defining the highest allowable levels of certain pollutants in the ambient air (i.e., the outdoor air to which the public has access). Primary standards are established to protect public health; secondary standards are established to protect public welfare (for example, visibility, crops, animals, buildings).

National Pollutant Discharge Elimination System (NPDES): A provision of the *Clean Water Act* that prohibits discharge of pollutants into waters of the United States unless a special permit is issued by the Environmental Protection Agency, a state, or, where delegated, a tribal government on an Indian reservation.

National Register of Historic Places: The nation's inventory of known historic properties that have been formally listed by the National Park Service (NPS). The National Register of Historic Places is administered by the NPS on the behalf of the Secretary of the Interior. National Register listings include districts, landscapes, sites, buildings, structures, and objects that meet the set of criteria found in 36 CFR 60.4.

No action alternative: The alternative where current conditions and trends are projected into the future without another proposed action.

Particulate matter (PM), PM_{10}, $PM_{2.5}$: Any finely divided solid or liquid material, other than uncombined (that is, pure) water. A subscript denotes the upper limit of the diameter of particles included. Thus, PM_{10} includes only those particles equal to or less than 10 micrometers (0.0004 inch) in diameter; $PM_{2.5}$ includes only those particles equal to or less than 2.5 micrometers (0.0001 inch) in diameter.

Proposed action: In a NEPA document, this is the primary action being considered. Its impacts are analyzed together with the impacts from alternative ways to achieve the same objective and the required no action alternative, which means continuing with the status quo.

Runoff: The portion of rainfall or irrigation water that flows across ground surface and is eventually returned to streams. Runoff can pick up pollutants from the air or the land and carry them to streams, lakes, and oceans.

Scope: Consists of the range of actions, alternatives, and impacts to be considered in an environmental analysis. The scope of an individual statement may depend on its relationships to other statements (also see tiering).

Scoping: An early and open process for determining the extent and variety of issues to be addressed and for identifying the significant issues related to a proposed action (40 CFR §1501.7). The scoping process helps not only to identify significant environmental issues deserving of study, but also to deemphasize insignificant issues, narrowing the scope of the NEPA process accordingly, and for early identification of what are and what are not the real issues (40CFR §1500.5(d)). The scoping process identifies relevant issues related to a proposed action through the involvement of all potentially interested or affected parties (affected Federal, state, and local agencies; recognized Indian tribes; interest groups, and other interested persons) in the environmental analysis and documentation.

Significantly: As used in NEPA, requires considerations of both context and intensity.

> *Context*— significance of an action must be analyzed in its current and proposed short- and long-term effects on the whole of a given resource (for example, affected region).
>
> *Intensity*—refers to the severity of the effect.

Solid waste: Non-liquid, non-soluble materials ranging from municipal garbage to industrial wastes that contain complex and sometimes hazardous substances. Solid wastes also include sewage sludge, agricultural refuse, demolition wastes, and mining residues. Technically, solid waste also refers to liquids and gases in containers.

Tiering: A process under NEPA that seeks to eliminate repetitive discussions of the same issues and to focus on the actual issues ripe for decision at each level of environmental review.

Wetlands: Those area that are inundated by surface water or groundwater with a frequency sufficient to support, and under normal circumstances do, or would support, a prevalence of vegetative or aquatic life that requires saturated or seasonally saturated soil conditions for growth and reproduction. Wetlands generally include swamps, marshes, bogs, and similar areas.

Jurisdictional wetlands are those wetlands protected by the *Clean Water Act*. They must have a minimum of one positive wetland indicator from each parameter (vegetation, soil, and hydrology). The U.S. Army Corps of Engineers requires a permit to fill or dredge jurisdictional wetlands.

APPENDICES

Appendix A – Regulatory Communications

Appendix B – Environmental Survey Reports

Appendix C – Notice of Availability and Public Involvement

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