

**FINAL**

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# **ENVIRONMENTAL ASSESSMENT**

## **JEFFERSON BARRACKS NATIONAL CEMETERY PROPOSED SYLVAN SPRINGS EXPANSION SAINT LOUIS COUNTY, MISSOURI**



**U.S. DEPARTMENT OF VETERANS AFFAIRS**  
OFFICE OF CONSTRUCTION AND FACILITIES MANAGEMENT  
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WASHINGTON, DC 20001

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## EXECUTIVE SUMMARY

This Environmental Assessment (EA) has been prepared in accordance with the National Environmental Policy Act (NEPA) of 1969 (42 United States Code 4321 et seq.), the President's Council on Environmental Quality Regulations Implementing the Procedural Provisions of NEPA (40 Code of Federal Regulations 1500-1508), VA's NEPA regulations (38 CFR 26), and the VA NEPA Interim Guidance for Projects (VA 2010).

### Proposed Action

The United States Department of Veterans Affairs (VA) has prepared an EA to analyze the potential environmental impacts associated with the Proposed Action to expand north onto VA owned land currently leased by St. Louis County and utilized for Sylvan Springs Park and construct a columbarium at Jefferson Barracks National Cemetery (JBNC) in the City of St. Louis, St. Louis County, Missouri. VA National Cemetery Administration (NCA) operates the cemetery. The proposed expansion would occur on a site that consists of one 37.6-acre parcel acquired by VA in 2018 consisting of restroom/concession building, picnic shelter, and paved and gravel parking lots. Additionally, a new columbarium and associated parking would be added within the existing JBNC.

### Purpose and Need

The purpose of the Proposed Action is to provide additional burial sites at JBNC for eligible individuals by expanding north onto the VA owned 37.6-acre parcel and constructing a columbarium within the current JBNC in order to meet the needs of Veterans and family members.

The need for the Proposed Action is to address the projected depletion of remaining interment capacity at JBNC by providing a larger, expanded cemetery. The existing JBNC is the only National Cemetery in the region that is open to new interments, with the next closest that is accepting new burials being Camp Butler National Cemetery located more than 115 miles from JBNC in Springfield, Illinois. JBNC is nearing its burial capacity; VA estimates that the existing burial space at the cemetery will be depleted in approximately five years. The Proposed Action would provide VA additional capacity needed to meet its burial objectives for eligible Veterans in the regional St. Louis area.

### Alternatives

Approximately 37.6 acres of land north of the existing JBNC, the southern portion of the approximately 70-acre Sylvan Springs Park, are currently owned by the VA for cemetery expansion and leased to St. Louis County. The Proposed Action would proceed with expansion onto this parcel to provide additional capacity needed at JBNC. This EA examines two alternatives, the Proposed Action Alternative, and the No Action Alternative, defined as follows:

Proposed Action Alternative: VA would expand north onto VA owned land currently leased by St. Louis County and utilized for Sylvan Springs Park and construct a columbarium at JBNC located in St. Louis, St. Louis County, Missouri. The proposed expansion would occur on a site that consists of one 37.6-acre parcel acquired by VA in 2018 for the intended purposes of developing it for NCA interments and consisting of restroom/concession building and picnic shelter, paved and gravel parking lots. Additionally, a new columbarium and associated parking would be added within the existing Jefferson Barracks National Cemetery.

No Action Alternative: Under the No Action Alternative, the Proposed Action would not be implemented. Veterans and their families in the regional St. Louis area would continue to use the JBNC until interment options are no longer available. In the future, VA would likely seek other land to expand the JBNC but may not be able to acquire land contiguous with or near the existing JBNC. The Site likely would continue to be leased by St. Louis County and utilized as a County Park.

The Proposed Action Alternative effectively provides additional space and interment options in order to continue to serve the veterans of the regional St. Louis area and meet VA cemetery requirements. The No Action Alternative would not enable VA to provide adequate, cemetery facilities in the St. Louis region. However, the No Action Alternative is assessed in this EA to provide a comparative baseline analysis, as required under the CEQ Regulations.

Table 1 summarizes the resource areas analyzed in this EA and the potential environmental effects of the Proposed Action Alternative and the No Action Alternative. A detailed analysis of the potential effects to these resource areas is provided in Section 3.0 Affected Environment and Environmental Consequences.

**Table 1. Summary of Resource Area Impacts**

Resource Area	Proposed Action Alternative	No Action Alternative
<b>Aesthetics</b>	<ul style="list-style-type: none"> <li>Minor temporary adverse impacts during construction.</li> </ul>	<ul style="list-style-type: none"> <li>No Impacts.</li> </ul>
<b>Air Quality</b>	<ul style="list-style-type: none"> <li>Temporary minor adverse impacts during construction.</li> <li>Minor adverse impacts from increased traffic as cemetery builds out.</li> </ul>	<ul style="list-style-type: none"> <li>No Impacts.</li> </ul>
<b>Cultural Resources</b>	<ul style="list-style-type: none"> <li>No adverse effect to surrounding NRHP-Eligible properties/districts including existing JBNC.</li> <li>Adverse effect to 1952 Ordinance Shelter mitigated via MOA with SHPO and Consulting Parties as described in Section 3.3 Cultural Resources. MOA is available in Appendix B. Agency Coordination and Consultation.</li> </ul>	<ul style="list-style-type: none"> <li>No Impacts.</li> </ul>
<b>Geology, Topography, and Soils</b>	<ul style="list-style-type: none"> <li>No adverse impacts anticipated if BMPs and recommendations are followed to avoid impacts to karst features in the vicinity.</li> </ul>	<ul style="list-style-type: none"> <li>No Impacts.</li> </ul>
<b>Hydrology and Water Quality</b>	<ul style="list-style-type: none"> <li>Implement BMPs to limit adverse impacts during construction related to soil erosion and sedimentation.</li> <li>Designed stormwater features and systems will be utilized to avoid impacts to downstream water resources.</li> </ul>	<ul style="list-style-type: none"> <li>No Impacts.</li> </ul>
<b>Wildlife and Habitat</b>	<ul style="list-style-type: none"> <li>No adverse impacts eagles and migratory birds if BMPs are implemented.</li> <li>No adverse effects to ESA listed species.</li> </ul>	<ul style="list-style-type: none"> <li>No Impacts.</li> </ul>
<b>Noise</b>	<ul style="list-style-type: none"> <li>Temporary adverse effect during construction mitigated with BMPs.</li> <li>Minor adverse impact from traffic, burial gun salutes similar to existing conditions directly south at existing JBNC.</li> </ul>	<ul style="list-style-type: none"> <li>No Impacts.</li> </ul>
<b>Land Use</b>	<ul style="list-style-type: none"> <li>Changing from park to cemetery, no adverse impacts to land use.</li> </ul>	<ul style="list-style-type: none"> <li>No Impacts.</li> </ul>
<b>Floodplains, Wetlands, Coastal Zone Management</b>	<ul style="list-style-type: none"> <li>No adverse impacts to floodplains or designated coastal zones.</li> <li>Potential minor adverse impact in existing JBNC for wetland impacts, Section 404 and additional permitting as needed.</li> </ul>	<ul style="list-style-type: none"> <li>No Impacts.</li> </ul>

<b>Socioeconomics</b>	<ul style="list-style-type: none"> <li>• Positive impacts to regional economy via design, construction, and maintenance jobs.</li> </ul>	<ul style="list-style-type: none"> <li>• No Impacts.</li> </ul>
<b>Community Services</b>	<ul style="list-style-type: none"> <li>• Minor adverse impact from loss of parkland.</li> </ul>	<ul style="list-style-type: none"> <li>• No Impacts.</li> </ul>
<b>Solid Waste and Hazardous Materials</b>	<ul style="list-style-type: none"> <li>• Temporary adverse impacts during demolition and construction. Mitigation via BMPs detailed in Section 4.0 to lessen impacts to less than significant.</li> <li>• No adverse impacts anticipated during operation.</li> </ul>	<ul style="list-style-type: none"> <li>• No Impacts.</li> </ul>
<b>Transportation and Parking</b>	<ul style="list-style-type: none"> <li>• Temporary adverse impacts during construction as vehicles and equipment go to and from the site.</li> <li>• Minor increases anticipated during operation of cemetery, but roadways have capacity to handle additional traffic.</li> <li>• All parking would be designed for the expansion to accommodate additional visitors.</li> </ul>	<ul style="list-style-type: none"> <li>• No Impacts.</li> </ul>
<b>Utilities</b>	<ul style="list-style-type: none"> <li>• No impacts.</li> </ul>	<ul style="list-style-type: none"> <li>• No Impacts.</li> </ul>
<b>Environmental Justice</b>	<ul style="list-style-type: none"> <li>• No impacts.</li> </ul>	<ul style="list-style-type: none"> <li>• No Impacts.</li> </ul>
<b>Cumulative Impacts</b>	<ul style="list-style-type: none"> <li>• No anticipated impacts, Proposed Action has been planned by St. Louis County and VA.</li> </ul>	<ul style="list-style-type: none"> <li>• No Impacts.</li> </ul>

### Agency and Public Involvement

VA consulted the federal, state, local, tribal, and elected officials listed in **Section 5.0 Public Involvement** as part of an initial scoping process. A scoping notice was also posted to the VA website and published in the St. Louis Post Dispatch on February 10 and 12, 2023. The Draft EA was published for a 30-day public comment period as announced by a Notice of Availability (NOA) provided to the stakeholders consulted and published in the St. Louis Post Dispatch on June 9 and 11, 2023. The draft EA and NOA was also posted to the VA website and hard copies made available at both JBNC and the St. Louis County Library – Cliff Cave Branch.

Comments were received from the Miami Tribe of Oklahoma, Missouri Department of Natural Resources, Missouri Department of Transportation, Osage Nation, U.S. Environmental Protection Agency (EPA), and U.S. Fish and Wildlife Service (FWS). Stakeholder information and comments have been incorporated into this EA, where and as appropriate. Additional details can be found in **Section 5.0 Public Involvement** and copies of relevant correspondence can be found in **Appendix B. Agency Coordination and Consultation**.

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## ACRONYMS AND ABBREVIATIONS

ACHP	Advisory Council on Historical Preservation
ACM	Asbestos Contaminated Materials
ADT	Average Daily Traffic
AIRFA	American Indian Religious Freedom Act
APE	Area of Potential Effect
AQI	Air Quality Index
ARPA	Archeological Resource Protection Act
BMP	Best Management Practices
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CLA	Clean Air Act
CLAA	Clean Air Act Amendments
CO	Carbon Monoxide
CSR	Code of State Regulation
dba	a-Weighted Decibel
DOT	Department of Transportation
EA	Environmental Assessment
EPA	Environmental Protection Agency
ESA	Environmental Site Assessment
FONSI	Finding of No Significant Impacts
FPPA	Farmland Protection Policy Act
HUD	United States Department of Housing and Urban Development
IBC	International Business Code
IPaC	Information for Planning and Consultation
LBP	Lead Based Paint
LDTL	Lowest Default Target Levels
MDC	Missouri Department of Conservation
MDNR	Missouri Department of Natural Resources
MOA	Memorandum of Agreement
MODOT	Missouri Department of Transportation
MTSTL	Metro Transit – St. Louis
NAAQS	National Ambient Air Quality Standards
NAGPRA	Native American Grave Protection and Reparation Act
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NOAA	National Oceanic and Atmospheric Association
NOx	Nitrogen Oxides
NPDES	National Pollutant Discharge Elimination System
NPS	National Park Service
NRCA	Natural Resource Conservation Act
NRHP	National Registry of Historic Places
NWI	National Wetland Inventory
O & M	Natural Resource Conservation Service
O3	Ozone
OSHA	Occupational Safety and Health Administration

PA	Programmatic Agreement
Pb	Lead
PM	Particulate matter
RBTL	Risk Based Target Levels
RCRA	Resource Conservation and Recovery Act
REC	Recognized Environmental Conditions
ROI	Region of Influence
SHPO	State Historic Preservation Office
SLCDOT	St. Louis County Department of Transportation
SMARS	Site Management Reporting System
SO <sub>2</sub>	Sulfur Dioxide
SPCC	Spill Prevention Control and Countermeasures
SWPPP	Stormwater Pollution and Prevention Plan
TDAT	Tribal Directory Assessment Tool
TRI	Toxic Release Inventory
URA	Uniform Relocation Act
U.S.	United States
USACE	United States Army Corp of Engineers
USC	United States Code
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
VA	Veterans Affairs
VISN	Veterans Integrated Service Network

## 1.0 INTRODUCTION

The United States 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 155 national cemeteries and 34 soldiers' lots and monument sites in 42 states and Puerto Rico. More than 4 million Americans are buried in VA's national cemeteries. VA's Office of Construction and Facility Management's mission is to advance VA's mission in support of the nation's Veterans by planning, designing, constructing, acquiring major facilities, and setting design and construction standards.

### 1.1 Background

The VA has prepared this EA to analyze the potential environmental impacts associated with the Proposed Action to expand north onto VA owned land currently leased by St. Louis County and utilized for Sylvan Springs Park and construct a columbarium at Jefferson Barracks National Cemetery (JBNC) in St. Louis, St. Louis County, Missouri. NCA operates the cemetery. The proposed expansion would occur on a site that consists of one 37.6-acre parcel acquired by VA in 2018 consisting of restroom/concession building and picnic shelter, paved and gravel parking lots. Additionally, a new columbarium and associated parking would be added within the existing JBNC.

### 1.2 Purpose and Need

The purpose of the Proposed Action is to provide additional burial sites at JBNC for eligible individuals by expanding north onto the VA owned 37.6-acre parcel and constructing a columbarium within the current JBNC in order to meet the needs of Veterans and family members.

The need for the Proposed Action is to address the projected depletion of remaining interment capacity at JBNC by providing a larger, expanded cemetery. The existing JBNC is the only National Cemetery in the region that is open to new interments, with the next closest that is accepting new burials being Camp Butler National Cemetery located more than 115-miles from JBNC in Springfield, Illinois. JBNC is nearing its burial capacity; VA estimates that the existing burial space at the cemetery will be depleted in approximately five years. The Proposed Action would provide VA additional capacity needed to meet its burial objectives for eligible Veterans in the regional St. Louis area.

### 1.3 Decision Making

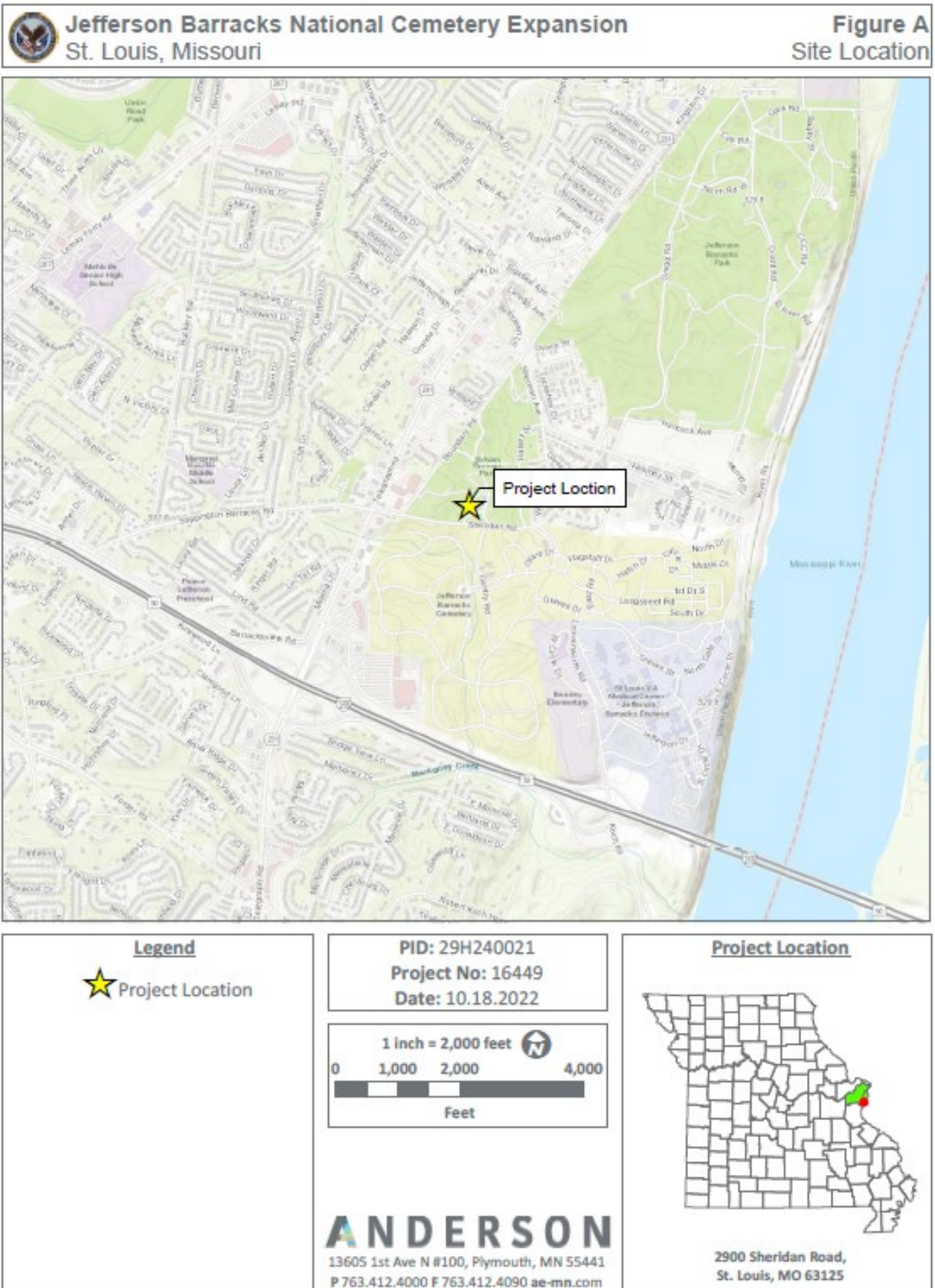
As a federal agency, the VA is required to incorporate environmental considerations into their decision-making process for the actions they propose to undertake. This is done in accordance with the previously identified law, regulation, and guidance in Section 1.0.

This EA has been developed to:

- Inform decision-makers and the public of the possible environmental effects of the Proposed Action and alternatives, as well as methods to reduce these effects.
- Document the NEPA process.
- Allow for public input into the decision-making process.
- Allow for informed decision-making by the Federal government.
- Evaluate the potential effects.

This NEPA process includes identifying the actions that the government would commit to undertake to minimize environmental effects, as required under NEPA, the CEQ regulations, VA's NCA Facilities Design Guide, Title 38 CFR– §39.60 General Requirements for Site Selection and Construction of Veterans Cemeteries and VA's NEPA regulations. The intent of the document is to provide VA with appropriate information to make an informed decision on whether to implement the alternatives proposed in Section 2.0 Alternatives.





## 2.0 ALTERNATIVES

This section describes the Proposed Action and its alternatives, including those that VA initially considered, but eliminated, and the reasons for eliminating them. The screening criteria and process developed and applied by VA to hone the number of reasonable alternatives is described, providing VA's rationale in retaining for analysis one action alternative, the Proposed Action, which best meets VA's purpose of and need for the Proposed Action.

In accordance with the NEPA, CEQ Regulations, and 38 CFR Part 26; reasonable alternatives need to be evaluated. Alternatives that are eliminated from detailed study must be identified along with a brief discussion of the reasons for eliminating them. An alternative was considered reasonable only if it would accomplish the primary mission of providing an expanded cemetery and interment options that meet the purpose and need for the Proposed Action. Eliminated alternatives would not enable VA to meet the purpose of and need for the Proposed Action.

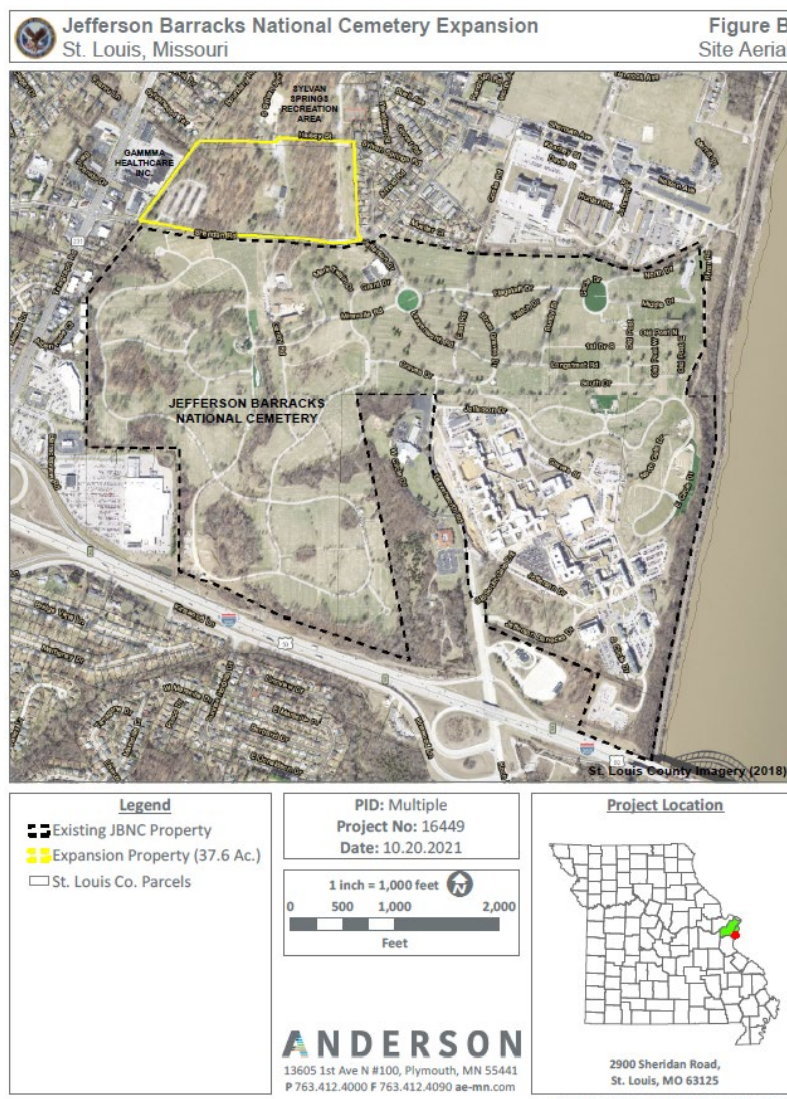
The existing JBNC is the only National Cemetery in the region that is open to new interments, with the next closest that is accepting new burials being Camp Butler National Cemetery located more than 115-miles from JBNC in Springfield, Illinois. JBNC is nearing its burial capacity; VA estimates that the existing burial space at the cemetery will be depleted in approximately five years. The Proposed Action would provide VA additional capacity needed to meet its burial objectives for eligible Veterans in the regional St. Louis area.

The NCA Final Land Acquisition Fact Sheet, dated April 2012, states adjacent/contiguous property is considered to be the first and best option for cemetery expansion. National Cemetery expansion onto adjacent land is the most cost effective and operationally efficient manner to expand an existing National Cemetery. Doing so promotes efficiencies and allows the new gravesite areas to be operated by the same staff that operates the existing grounds, with no need for remote staff, remote buildings, and remote equipment. It also eliminates visitor directional and wayfinding confusion that may occur with a remotely located property.

In 2018, as detailed in the Final EA prepared for VA by TTL Associates, Inc.; VA sought various opportunities to expand the JBNC on to adjacent/contiguous properties. In approximately 2012, NCA opened discussions with the Mehlville School District (3131 Koch Road) adjoining to the east of the JBNC and the DOD Military Reserve Base adjoining to the north of the JBNC; however, both the school district and DOD indicated that none of their properties were available for sale. St. Louis County offered VA the southern approximately 37.6-acres of the northerly adjacent Sylvan Springs Park, which is underutilized as a park, for expansion of JBNC. VA reviewed the remaining land adjacent to and surrounding the existing JBNC and found that the County-offered Park land was the only remaining potentially feasible adjacent land option available for future cemetery expansion. With this information, the VA acquired the Sylvan Springs County Park southern parcel in 2018 with the intent to allow St. Louis County to continue leasing and utilizing as parkland until the expansion was necessary. As such, the two alternatives that remain; the Proposed Action Alternative and No Action Alternative, are detailed below.

## 2.1 Proposed Action Alternative

The Proposed Action would expand north onto VA owned land currently leased by St. Louis County and utilized for Sylvan Springs Park and construct a columbarium at JBNC in St. Louis, St. Louis County, Missouri. The VA National Cemetery Administration (NCA) operates the cemetery. The proposed expansion would occur on a site that consists of one 37.6-acre parcel acquired by VA in 2018 consisting of restroom/concession building and picnic shelter, paved and gravel parking lots outlined in yellow in Figure B Site Aerial below. Additionally, a new columbarium and associated parking would be added within the existing JBNC. VA would follow the NCA Facilities Design Guide in the JBNC expansion design. Prior to construction, VA would obtain all applicable Federal, State, and local permits for the proposed cemetery development from appropriate government authorities. VA would avoid any significant onsite environmental resources through sensitive site design, including avoidance of significant natural resources.



## 2.2 No Action Alternative

Under the No Action Alternative, the VA would not expand onto the VA-owned Sylvan Springs expansion parcel. If the land cannot be utilized by the VA for cemetery expansion, it would most likely be sold. JBNC would continue operation until all space had been utilized in the existing cemetery and then cease accepting new burials. This alternative would not meet the purpose and need of the project but is retained to allow comparative study.

### 3.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

This section describes the existing physical, environmental, cultural, and socioeconomic conditions at the Cemetery and its general vicinity, with emphasis on those resources potentially affected by the Proposed Action. In this EA, effects are identified as either significant, minor (that is, common effects that would not be of the context or intensity to be considered significant under NEPA or CEQ Regulations), less-than-significant, or no effect. Where appropriate and clearly discernible, each effect is identified as either adverse or beneficial.

The potential of the Proposed Action to significantly affect the human environment is based on considerations of both *context* and *intensity*, as specified in CEQ Regulation (40 CFR 1508.27):

**Context.** The significance of an action must be analyzed in several contexts such as society (human, national), the affected region, the affected interests, and the locality. Both short- and long-term effects are relevant.

**Intensity.** This refers to the severity of impact and the following should be considered in evaluating intensity:

- If the impact is beneficial, adverse, or both (adverse effects may occur in the short term, but mitigation or replacement will benefit in the long term).
- The degree to which the proposed action affects public health or safety.
- Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.
- The degree to which the effects on the quality of the human environment are likely to be highly controversial.
- The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.
- Whether the action is related to other actions with individually insignificant but cumulatively significant impact on the environment.
- The degree to which the action may adversely affect listed or eligible for listing in the National Register of Historic Places or may cause loss to destruction of significant scientific, cultural, or historical resources.
- The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act.
- Whether the action threatens a violation of federal, state, or local law or requirements imposed for the protection of the environment.



### 3.1 Aesthetics

#### 3.1.1 Background

The Proposed Action area occurs in a mixed-use area; with residential suburbs to the east and northwest, commercial uses to the west, the existing JBNC to the south and an approximately 37.6-acre portion of Sylvan Springs County Park to the north. The area consists of primarily unimproved grassy lands with a moderate amount of mature tree cover. The ordinance shelter, beverage garden, multiple reservable picnic sites, a restroom and paved and gravel parking lots are located within the project area. The site is composed of high elevations along both the eastern and western sides and slopes towards the lower elevation in the center. The skate park, tennis courts, splash pad, cavalry shelter and associated pavilions, parking, picnic sites and restrooms are located north of the proposed action area and Halsey Street.

#### 3.1.2 Effects of the Proposed Action Alternative

Site construction and earthwork activities would temporarily convert existing vegetation to exposed soil during construction. Upon completion of earthwork, managed turf, landscaped features, and other planned improvements would be established and installed. Construction activities temporarily affecting aesthetics may include parked construction equipment, excavation/grading, mud after rain events, heavy equipment and contractor vehicles using the adjoining roads, and perimeter control/silt fences surrounding the project area.

Following construction into the operation phase, the appearance of the expansion area would improve dramatically and have long-term beneficial impacts to aesthetics. The area would take on the peaceful and park-like characteristics of a National Shrine. Construction equipment would be removed, construction contractor traffic would subside, and temporary effects would be minimized. Exposed soil would be graded to the design standard, and the area planted with native trees, shrubs and grasses to prevent erosion and reduce water usage. Turf grass would be planted in the sections designated for casket plots, as well as the assembly areas, surrounding the memorial walls, and where the columbarium would be located. Silt fences would be removed after final stabilization of vegetation. Manicured shrubs and hedgerows would be placed around certain features (that is, memorial walls) to instill a sense of privacy and seclusion. Stormwater ponds would be located within the expansion area and vegetated by native grasses, possibly attracting birds and wildlife.

#### 3.1.3 Effects of the No Action Alternative

Under the No Action Alternative, no aesthetic impacts would result from VA's actions. The area would most likely continue to operate as a county park.

### 3.2 Air Quality

#### 3.2.1 Background

National Ambient Air Quality Standards are mandated by the Clean Air Act and administered by the US EPA, with monitoring and enforcement delegated to state authorities and state-level Air Quality Control Regions (AQCRs). Established standards identify health-based concentrations for ambient air. Regulated criteria pollutants include carbon monoxide, nitrogen dioxide, ozone, sulfur dioxide, particulate matter measuring less than 2.5 and 10 micrometers in diameter, and lead. Local AQCRs that exceed the National Ambient Air Quality Standards are deemed in non-attainment of the standard.

An emitter is classified as a major source if actual or potential emission of a hazardous air pollutant (HAP) is greater than 10 tons per year or 25 tons per year of any combination of HAPs. Lower thresholds apply in non-attainment areas, but only for those HAP(s) in non-attainment. A Title V permit is required for major sources of HAP. Non-major sources, excluding certain industrial, manufacturing and mining sources, are not typically required to obtain permits.

The JBNC is under the jurisdiction of the Missouri Department of Natural Resources – Air Pollution Control Program and the US Environmental Protection Agency. Ozone is a colorless gas formed through photochemical reactions involving sunlight, heat, and precursor compounds such as reactive organic compounds and nitrogen oxides. Sources of local precursor emissions are likely derived from vehicle emissions and industrial processes within the AQCR.

In accordance with EO 13045 on children's health, EPA recommends operators and workers using diesel-powered equipment pay particular attention to worksite proximity to where children may learn, play, or live and to impose diesel emission reduction measures near these locations. Possible sensitive air quality receptors adjacent to the JBNC and Sylvan Springs expansion area are listed in Section 3.2.2 Sensitive Receptors.

All vehicles in the Cemetery's fleet were/would be purchased through General Services Administration and vehicles must comply with air emissions standards, to include properly functioning exhaust systems. In addition, in accordance with VA Directive 0637, no unnecessary vehicle idling is permitted.

### **3.2.2 Sensitive Receptors**

Sensitive receptors associated with areas adjacent to the proposed action areas that children may learn, play or live include:

- Residential neighborhoods to the east and northwest across Boundary Road
- The remainder of Sylvan Springs County Park to the north
- Beasley Elementary School south of the existing JBNC
- John Cary Early Childhood Center south of the existing JBNC

### **3.2.3 Effects of the Proposed Action Alternative**

Short term less than significant adverse impacts to air quality are anticipated as part of the construction of the Proposed Action. Demolition and construction activities would be performed in accordance with Federal and State air quality requirements. Demolition and construction-related emissions are generally short term, but may still have adverse impacts on air quality, primarily due to the production of dust and vehicle/equipment emissions. Dust from demolition and construction can lead to adverse health effects and nuisance concerns. Utilizing BMPs for dust control measures can help reduce adverse impacts to the surrounding area. Construction-related emissions also include the exhaust from the operation of construction equipment, including diesel particulate matter (DPM). The use of newer construction equipment with emissions controls and minimizing the time that the equipment is idling reduce construction equipment exhaust emissions. Implementation of BMPs, discussed in **Section 4.0 Mitigation**, would minimize these anticipated less-than-significant adverse, short-term, construction-related, air quality impacts.

During operation of the Proposed Action, as additional areas are utilized for interment, it is anticipated the number of visitors would increase over time. However, the increased number of vehicle trips (See **Section 3.13 Transportation and Parking**) is minor and not anticipated to result in significant adverse impacts to air quality. The operation of the cemetery is not anticipated to generate air pollutants beyond temporary construction emissions identified above and slight increase in traffic overtime as the cemetery is built out and utilized.

### **3.2.4 Effects of the No Action Alternative**

Under the No Action Alternative, no air quality impacts associated with the Proposed Action would occur. The continued use of the site as a park would not result in additional air quality impacts above the existing traffic emissions resulting from current park use.

### 3.3 Cultural Resources

#### 3.3.1 Background

##### Agency Coordination

As part of the National Historic Preservation Act (NHPA) of 1966 Section 106 process, and to supply additional information for the NEPA cultural resources assessment, Terracon Consultants, Inc. prepared a Desktop Review and Assessment and windshield level historic resources survey for VA in July of 2021. The review included the Missouri inventory of archaeological sites, recorded structures, and cultural resources surveys available through the Archaeology Viewer database maintained by SHPO. The project area was previously surveyed in 2018, by Environmental Research Group, LLC (ERG) in partial fulfillment of an EA study to comply with the National Environmental Policy Act (NEPA) of 1969 (Pritchard 2018) (SHPO Number 333-SL-12). ERG documented one archaeological site within the proposed expansion project area. Site 23SL2416 is a prehistoric lithic and historical-period artifact scatter. Pritchard (2018) recommended Site 23SL2416 as not eligible for listing in the National Register of Historic Places (NRHP).

Information on historic resources identified within the APE or within one mile of the APE was obtained from the Historic Districts and Sites architectural database and Archaeology Viewer, maintained by SHPO. While no above-ground resources have previously been recorded with the SHPO within the Proposed Action Area, a 2016 survey did identify the one historic resource within the project APE, a 1952 Ordnance Shelter, as NRHP eligible. The study also identified a 1939 Beverage Garden as NRHP eligible – the site is outside of the 37.6-acre project APE, but within a one-mile radius of the project area. There are four additional individually eligible historic resources within a one-mile radius of the project area and three historic districts containing multiple contributing resources.

VA initiated Section 106 consultation with the SHPO and consulting parties by hard copy mailing on May 12, 2022. The VA determined that the 1952 Ordnance Shelter is NRHP eligible and as part of the future JBNC expansion, the Ordnance Shelter would need to be demolished. Therefore, the VA determined that a historic property identified in the APE would be adversely affected by the undertaking pursuant to 36 CFR 800.5(d)(2) and proposed that the VA, SHPO, and consulting parties develop and negotiate a Memorandum of Agreement (MOA) to address the adverse effects and appropriate mitigation measures.

As requested by SHPO; VA directed Terracon Consultants, Inc. to prepare an additional Historic Resources Survey Report to provide more detailed historic-age resource evaluations and detailed accounts of prior cultural resource reviews and studies. This report was packaged and submitted to the SHPO on December 23, 2022.

The SHPO responded on January 18, 2023, concurring with the Adverse Effect to the NHRP Eligible Ordnance Shelter. A final MOA was signed by the VA and SHPO on 7/27/2023 and is included in **Appendix B. Agency Coordination and Consultation**.

##### Tribal Coordination

As part of NHRP Section 106 process, consultation was initiated by the VA on May 12, 2022, via hard copy mailing. The Osage Nation and Miami Tribe of Oklahoma requested to be consulting parties.

In addition to the Section 106 process detailed above, stakeholder scoping was conducted for the NEPA process. The SHPO and consulting parties were included in this mailing on February 3, 2023, as detailed in **Section 5.0 Public Involvement**. A Notice of Availability was sent to all the stakeholders June 6, 2023, containing a link to the Public Draft EA posted on the VA website.

#### 3.3.2 Effects of the Proposed Action Alternative

Under the Proposed Action Alternative, the 1952 Ordnance Shelter would be demolished in order to expand the cemetery. VA has found, and the SHPO has concurred, that the Proposed Action will have an adverse effect on

the Ordinance Shelter, a historic resource. Based on this finding and concurrence, the VA, SHPO, Osage Nation and Miami Tribe of Oklahoma developed the MOA and included stipulations that the Proposed Action will implement in order to take into account the effect on the historic property. These stipulations are summarized in **Section 4.0 Mitigation Measures and Monitoring** and included in the MOA located in **Appendix B. Agency Coordination and Consultation**.

Due to the distance and visual barriers from the expansion area to the surrounding NRHP-listed properties/districts, no adverse indirect impacts are anticipated. The existing JBNC is NRHP-listed, and the Proposed Action would be visually consistent with the existing JBNC to avoid any significant impacts to the existing JBNC viewscape.

### **3.3.3 Effects of the No Action Alternative**

Under the No Action Alternative, the Ordinance Shelter would remain, and no impacts would occur to cultural resources.

## **3.4 Geology, Topography and Soils**

### **3.4.1 Background**

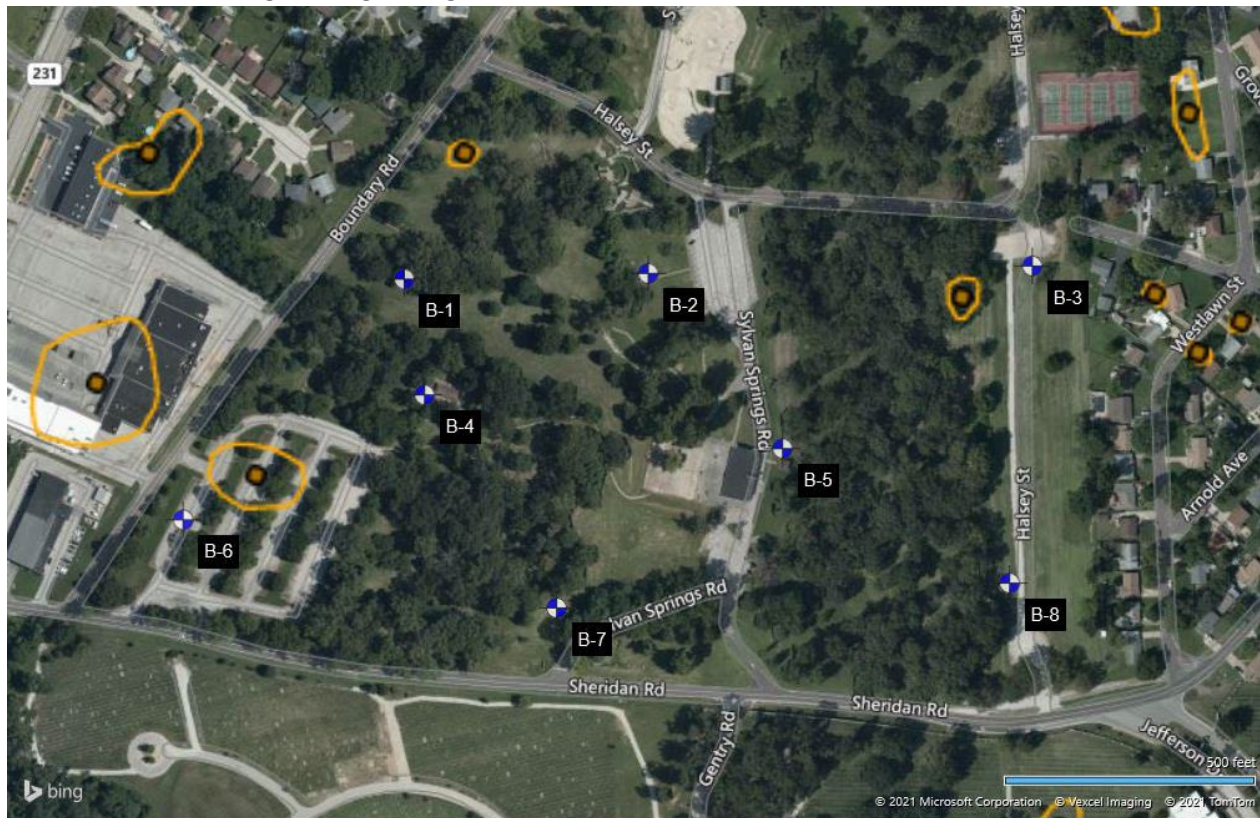
#### Geotechnical Engineering Report

Terracon Consultants, Inc. completed a Geotechnical Engineering Report dated September 3, 2021. The Proposed Action area generally slopes down towards the center with approximately 35 feet of relief across the site. Based on the 2007 Geological Map of Missouri provided by the Missouri Department of Natural Resources, the subject site is located over the Mississippian, Meramecian Series bedrock unit. The Mississippian, Meramecian Series bedrock consist primarily of limestone with little to no minor rock units. Solution features such as sinkholes, are commonly present in the Mississippian, Meramecian Series bedrock unit in this area. Known, mapped sinkholes and geotechnical investigation field boring locations are shown on Figure C below. Site grading and drainage may alter site conditions and could possibly cause sinkholes in areas that have no history of this activity.

Eight standard penetration borings were conducted at depths ranging from 14.3 feet to 18.5 feet. Subsurface conditions encountered in the borings consisted of topsoil overlaying clay soils generally comprised of traces of sand and limestone fragments in specific areas. This soil type is generally classified as hydraulic soil Type D with a poor infiltration rate that are not conducive for infiltration practices. Ground water was not encountered during drilling operations. Boring B-6 encountered bedrock at a depth of approximately 13.5 feet.



Figure C. Geotechnical Engineering Borings and Karst Features



#### Missouri Department of Natural Resources

The MO DNR provided comments during initial scoping regarding site conditions.

Local water and monitoring well borehole logs show the shallow subsurface geology is categorized as clay/fatty clay. The U.S. Department of Agriculture soil study for the county defines it as the Menfro soil, with textures consisting of silt loam, and silty clay loam.

There are 82 sinkholes and 3 springs near the project area. The Proposed Action area is located in the Webster Groves quadrangle, which has a cave density of 28. Other geologic hazards include liquefaction and flooding due to its proximity to the Missouri River. Springs, sinkholes, and caves are features on the landscape associated with karst topography that can act as direct conduits of surface water and pollutants to groundwater. As such, extra precaution should be taken to minimize disturbance of land in or around these features, and to avoid the introduction of pollutants to sensitive groundwater resources. Karst areas may also present the possibility of potential collapse.

#### **3.4.2 Effects of the Proposed Action Alternative**

The Proposed Action is anticipated to have less than significant adverse impacts to geology and soils. No significant changes to topography or drainage are expected as part of the Proposed Action. Paved areas would be designed to drain to a suitable, on-site, properly engineered and designed, stormwater management system, which would ultimately discharge to the existing storm sewer system currently onsite.

During demolition and construction activities associated with the Proposed Action, the potential for soil erosion and sedimentation impacts would be possible. Construction activities would disturb some soil surfaces and compact the soil. The soil would then be susceptible to erosion by wind and surface runoff. Increased

sedimentation into the existing stormwater features and infrastructure is possible when soils are exposed and manipulated during construction practices. Utilization of BMPs identified in **Section 4.0 Mitigation** and adherence to the terms of approved National Pollutant Discharge Elimination System (NPDES) and land disturbance permits, including the development and implementation of a site-specific Stormwater Pollution Prevention Plan (SWPPP) would help to limit/avoid significant adverse impacts to soils and water resources onsite and downstream.

Once construction activities are completed, the expansion area would have limited impervious surfaces and not need long term erosion or sediment controls other than the engineered stormwater features and infrastructure.

Recommendations detailed in the Geotechnical Engineering Report would be incorporated into the cemetery design to ensure the stability of the development and appropriate stabilization of grave site areas. In addition, the site design would include management measures to reduce any potential sinkhole development.

### **3.4.3 Effects of the No Action Alternative**

Under the No Action Alternative, no impacts to geology, topography, or soils would occur by VA.

## **3.5 Hydrology and Water Quality**

### **3.5.1 Background**

A Hydrology/Stormwater Summary Report was completed by Anderson Engineering of Minnesota, LLC on September 29, 2021.

The Sylvan Springs expansion area follows the existing topography and drains towards the center of the Proposed Project area and from there is conveyed to the south of the site. Hard surface or impervious surface makes up for approximately 18.5% of the site with the majority being lightly forested open space. Drainage from the west sheet drains from the existing parking lot located in the southwest corner of the site and is conveyed into private and Metropolitan St. Louis Sewer District (MSD) owned storm sewer. Drainage from the east side of the site sheet drains to the west. There are numerous spots along the steep hill that rilling has occurred before discharging into the private storm sewer network. Offsite drainage has also been observed coming from the commercial complex and neighborhood to the west, and from the park area to the north. This offsite drainage accounts for approximately 60 acres. Drainage from the Proposed Project Area and the offsite contributions converge near the middle south of the site. Stormwater is collected into the MSD owned stormwater inlets just north of Sheridan Road and is carried offsite towards the Mississippi River.

Elevations range from 520 ft. located at the east and west side to 462 ft. located in the middle center of the property. Slopes found on site typically range from 1% to 25%.

The storm water system found on site are made up of a variety of privately owned and MSD owned structures. Pipe material generally found onsite are of the reinforced concrete pipe (RCP) type with sizes ranging from 12 to 60-inch diameter. A large MSD owned concrete structure is located at the low point in the site and collects all stormwater for the proposed site. Two independent pipe networks run north to south located at the toe of the east and west slopes respectively. These two runs collect stormwater draining off the slopes and is directed into the large MSD owned concrete structure. An MSD owned 60-inch diameter RCP is located within a 15' wide easement that cuts through the property from the west and heading east and south. The 60-inch diameter storm sewer discharges into the aforementioned MSD owned concrete structure.

The Franview Plaza drainage area is located near the intersection of Sheridan Road and Telegraph Road. This area makes up for 12.71-acres of land where stormwater is collected on the east side of telegraph Road via manholes and 12-inch diameter RCP. Also collected within the commercial site via private storm before outflowing into the MSD owned 60-inch diameter RCP that crosses under Boundary Road and continues across the Proposed Action

area. Drainage from the Franview Plaza will need to be conveyed/controlled/managed within the Proposed Action area.

The Sylvanwood Terrace Neighborhood drainage area is located north of the Franview Plaza, between Telegraph Road and Boundary Road, and encompasses 6.36 acres. Stormwater flows east across the drainage area, where it is collected via 12-inch diameter RCP. It then runs under Boundary Road, where it then outlets into the Proposed Project Area into an open channel drainage way. This drainage way is approximately 12 feet in width and extends 300 feet into the Proposed Action area where it is captured via 36-inch diameter RCP MSD owned storm sewer. Drainage from the Sylvanwood Terrace Neighborhood will need to be conveyed/controlled/managed within the Proposed Project area.

The North Sylvan Springs Park Drainage is 42.98-acres of land that drains directly onto the Proposed Project area. This drainage area includes the park area directly to the north of the expansion area up to the intersection of Sherman Avenue and Boundary Road and also includes the neighborhoods to the west of Boundary Road. Stormwater enters the site from the north via overland flow, culverts, and MSD owned RCP. Drainage from the North Sylvan Springs Park will need to be conveyed/controlled/managed within the project site.

A Geotechnical Investigation was completed by Terracon Consultants Inc. in July 2021 where 8 standard penetration borings were conducted at depths ranging from 14.3 feet to 18.5 feet. Subsurface conditions encountered in the borings consisted of topsoil overlaying clay soils generally comprised of traces of sand and limestone fragments in specific areas. This soil type is generally classified as hydraulic soil Type D with a poor infiltration rate that are not conducive for infiltration practices. Ground water was not encountered during drilling operations. Boring B-6 encountered bedrock at a depth of approximately 13.5 feet.

### **3.5.2 Effects of the Proposed Action Alternative**

During the construction portion of the Proposed Action, BMPs listed in **Section 4.0 Mitigation** would be implemented to limit construction related soil erosion and sedimentation and provide proper stormwater management for the Proposed Action. No groundwater impacts are anticipated as part of the Proposed Action. All federal, state, and local regulations that apply to the Proposed Action will be followed to limit adverse impacts to hydrology and water quality.

Based on standard modern burial practices, it is unlikely that toxic embalming fluid or other decomposition byproducts would be released into the soil and/or groundwater. The standard NCA design incorporates (for full casket burials) sub-surface concrete crypts, an entire section of which is installed during site construction, above the water table. Using this technique, the caskets are not buried directly in the soil, rather set in a pre-placed concrete crypt (established turf and soil temporarily removed, crypt lid removed, casket placed, followed by the reverse process to complete). Modern embalming fluids are markedly less toxic as the primary active ingredients are no longer arsenic based. Modern embalming fluids are commonly biodegradable. Additionally, as selection of either cremains interment or columbaria placement increases, and green burials increase, the potential for soil or groundwater contamination commensurately decreases as no embalming fluids are used.

### **3.5.3 Effects of the No Action Alternative**

Under the No Action Alternative, no impacts to hydrology or water quality would occur.

## **3.6 Wildlife and Habitat**

### **3.6.1 Background**

#### USFWS IPaC Review

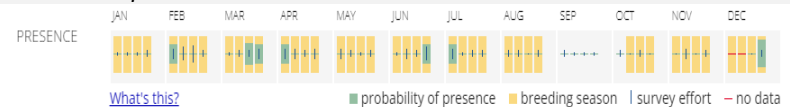
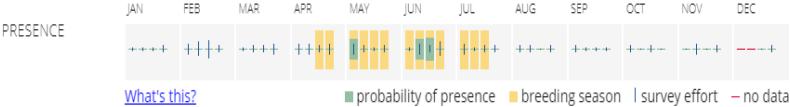
An IPaC review was conducted on March 20, 2023 (Project Code: 2022-0006151) to provide a list of threatened and endangered species that may occur in the proposed project location or may be affected by the project. IPaC

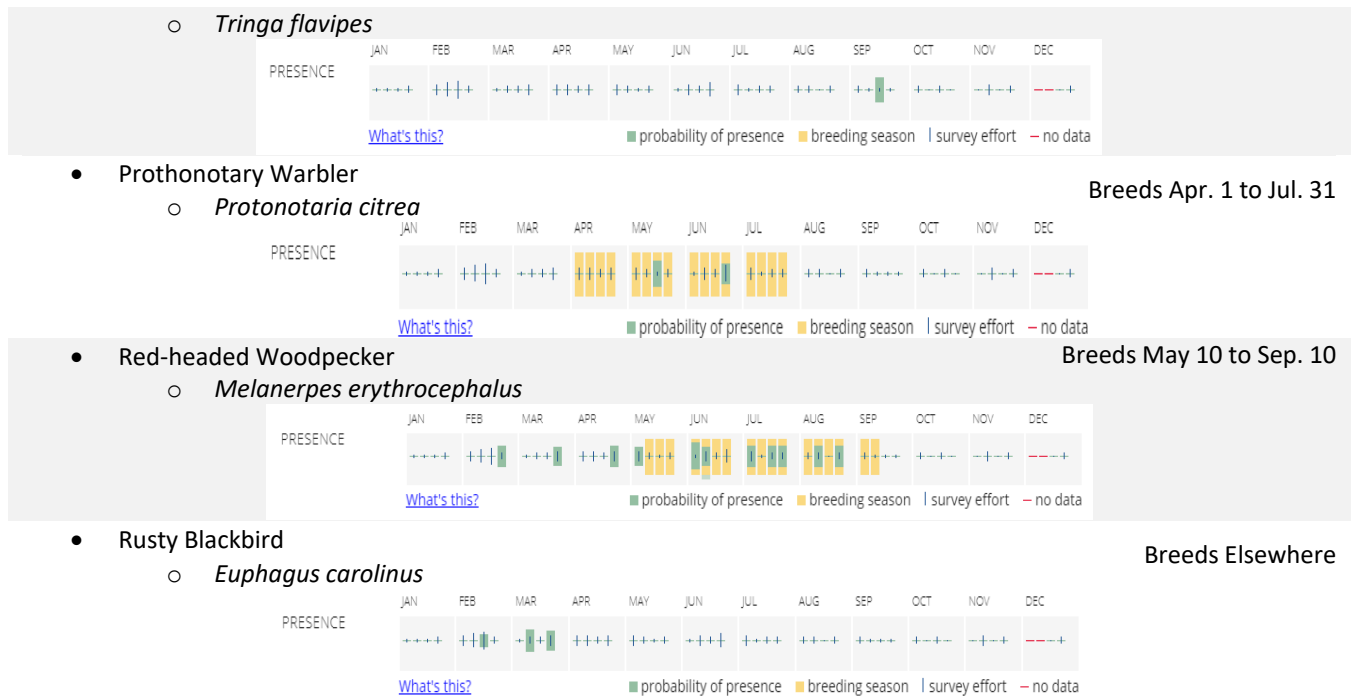
did not identify critical habitats, National Wildlife Refuge lands or fish hatcheries within the project extent. Review of the National Wetland Inventory (NWI) indicates three wetlands within the existing JBNC including a freshwater pond and two riverine wetlands. The review developed a species list that contains a total of seven threatened, endangered or candidate species listed below.

• Gray Bat	Endangered
○ <i>Myotis grisescens</i>	
• Indiana Bat	Endangered
○ <i>Myotis sodalis</i>	
• Northern long-eared Bat	Endangered
○ <i>Myotis septentrionalis</i>	
• Tricolor Bat	Proposed Endangered
○ <i>Perimyotis subflavus</i>	
• Decurrent False Aster	Threatened
○ <i>Boltonia decurrens</i>	
• Pallid Sturgeon	Endangered
○ <i>Scaphirhynchus albus</i>	
• Monarch Butterfly	Candidate
○ <i>Danaus plexippus</i>	

In addition to the IPaC species list, a consistency letter was completed for the Northern Long Eared Bat (NLEB) determination. The IPaC submission and standing analysis for the determination key reached a determination of "May Affect" on the NLEB. If a proposed Federal action may affect a listed species or designated critical habitat, formal consultation is required except when the Service concurs, in writing, that the action "is not likely to adversely affect" the species or designated critical habitat [50 CFR §402.02, 50 CFR§402.13]. The NLEB was uplisted to endangered on January 26, 2023. USFWS reviewed the Draft EA and requested additional information regarding the Proposed Action on June 8, 2023. After coordination and providing USFWS with additional information, USFWS requested on July 12, 2023, that VA conduct an acoustic bat survey. VA contracted Bat Call Identification (BCI) to conduct an acoustic bat detector survey within the Proposed Action area. The survey took place between the nights of July 30 and August 6, 2023. A report was prepared by BCI on behalf of the VA dated August 28, 2023, stating there is unlikely to be any colonies of Indiana bats or NLEBs living on the Proposed Action area. After review of the report, USFWS concluded "*we do not believe impacts to listed species are likely to occur. The U.S. Fish and Wildlife Service has reviewed this project and based on the submitted information does not have any concerns about impacts to species listed under the Endangered Species Act.*"

As certain birds are protected under the Migratory Bird Treaty Act of 1918 and the Bald and Golden Eagle Act of 1940, the IPaC review found six bird species that are of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in the project location.

• Bald Eagle	Breeds Oct. 15 to Aug. 31
○ <i>Haliaeetus leucocephalus</i>	
 <p>What's this?</p>	
• Cerulean Warbler	Breeds Apr. 21 to Jun. 20
○ <i>Dendroica cerulea</i>	
 <p>What's this?</p>	
• Lesser Yellowlegs	Breeds Elsewhere



#### Missouri Department of Conservation – Natural Heritage Review

A Natural Heritage Review level two report: State Listed Endangered Species and/or Missouri Species/Natural Communities of Conservation Concern was completed on October 20, 2021, through the Missouri Department of Conservation. A summary of the findings is described below.

Indiana bats (*Myotis sodalis*, federal- and state-listed endangered) and Northern long-eared bats (*Myotis septentrionalis*, federal-listed threatened) may occur near the project area. Both of these species of bats hibernate during winter months in caves and mines. During the summer months, they roost and raise young under the bark of trees in wooded areas, often riparian forests, and upland forests near perennial streams. During project activities, avoid degrading stream quality and where possible leave snags standing and preserve mature forest canopy. If any trees need to be removed for your project, please contact the USFWS for further coordination under the Endangered Species Act.

The Proposed Action area is within the geographic range of nesting Bald Eagles in Missouri. Bald Eagles (*Haliaeetus leucocephalus*) may nest near streams or water bodies in the project area. Nests are large and fairly easy to identify. Adults begin nesting activity in late December and January and young birds leave the nest in late spring to early summer. While no longer listed as endangered, eagles continue to be protected by the federal government under the Bald and Golden Eagle Protection Act. Work managers should be alert for nesting areas within 1500 meters of project activities and follow federal guidelines if eagle nests are seen.

The Proposed Action area is within the range of the Gray Myotis (i.e., Gray Bat) in Missouri. Depending on habitat conditions of your project's location, Gray Myotis (*Myotis grisescens*, federal and state-listed endangered) could occur within the project area, as they forage over streams, rivers, lakes, and reservoirs. Avoid entry or disturbance of any cave inhabited by Gray Myotis and when possible, retain forest vegetation along the stream and from the cave opening to the stream. The Proposed Action area is located within or adjacent to the Mississippi or Missouri rivers.

Pallid Sturgeons (*Scaphirhynchus albus*, federal- and state-listed endangered) are big river fish that range widely in the Mississippi and Missouri River system (including parts of some major tributaries). Any project that modifies big river habitat or impacts water quality should consider the possible impact to pallid sturgeon populations.

Invasive Exotic Species are a significant issue for fish, wildlife, and agriculture in Missouri. Seeds, eggs, and larvae may be moved to new sites on boats or construction equipment.

### **3.6.2 Effects of the Proposed Action Alternative**

The Proposed Action would not impact water quality or modify big river habitat and is not anticipated to affect Pallid Sturgeons. The Proposed Action area and existing JBNC does not contain habitat identified on the USFWS guidance for Decurrent False Aster and is not anticipated to adversely impact the species.

The Proposed Action would convert the existing county park into cemetery. The current county park is primarily open grassy land with some mature tree coverage and impervious surfaces at pavilions, parking areas, and the beverage garden. The expansion area and existing JBNC are surrounded by developed areas. Tree clearing would need to occur in order to proceed with the Proposed Action and should be limited, to the extent practicable, to overwintering periods to avoid impacts to nesting migratory birds identified above. If bald eagle nests are identified onsite, they should be avoided, and follow federal guidance for avoiding and minimizing adverse impacts. Consultation has been concluded with USFWS stating there are no concerns about impacts to species listed under the ESA. Additional consultation may be needed if the scope, timing, or manner of activity change.

### **3.6.3 Effects of the No Action Alternative**

Under the No Action Alternative, no impacts to wildlife or habitat are anticipated. The site would continue to be utilized as a county park.

## **3.7 Noise**

### **3.7.1 Background**

The current site is a relatively quiet park setting with no significant noise generation sources. Minor noise is associated with surrounding roadways and traffic (Sheridan Road, Boundary Road and Halsey Street) and nearby residential and commercial land uses. In addition, ceremonial gun salutes associated with interments at the adjacent JBNC are audible at the site and surrounding area. The short bursts of noise from the salutes are intermittent and only occur during weekday business hours. No other notable noise-generating sources are present in the immediate vicinity of the site.

### **3.7.2 Sensitive Noise Receptors**

Sensitive noise receptors near the proposed project site include:

- Residential Areas adjacent to the West
- Residential Areas to the Northeast across Boundary Street
- JBNC to the South
- Remainder of Sylvan Springs Park to the North

### **3.7.3 Effects to Proposed Action Alternative**

As the Proposed Action area is currently utilized as a county park and has traffic and pedestrian use currently associated with it; the proposed action utilizing this area as cemetery is not anticipated to create significant long term noise impacts. The proposed action would have short term impacts associated with construction activities. All noise generating sources would be associated with standard construction practices, equipment uses, and construction transportation to and from the site.



The most prevalent noise source at typical construction sites comes from internal combustion engines. General construction equipment using engines includes but is not limited to heavy, medium, and light equipment such as excavators; roller compactors; front-end loaders; bulldozers; graders; backhoes; dump trucks; water trucks; concrete trucks; pump trucks; utility trucks; cranes; sheet pile drivers; man lifts; forklifts; and lube, oil, and fuel trucks.

Peak noise levels vary at a given location based on line of sight, topography, vegetation, and atmospheric conditions. In addition, peak noise levels would be variable and intermittent because each piece of equipment would only be operated when needed. However, peak construction noise levels would be considerably higher than existing noise levels. Relatively high peak noise levels in the range of 93 to 108 dBA (decibels, A-weighted scale) would occur on the active construction site, decreasing with distance from the construction areas. At 0.25 miles, construction noise levels would generally be low enough to be considered insignificant, although transient noise levels may be noticeable at times. Table 2 presents peak noise levels that could be expected from a range of construction equipment during proposed construction activities.

*Table 2. Peak Noise Levels Expected from Typical Construction Equipment*

Source	Peak Noise Level (dBA, attenuated)							
	Distance from Source (feet)							
	0	50	100	200	400	1,000	1,700	2,500
Heavy Truck	95	84-89	78-93	72-77	66-71	58-63	54-59	50-55
Dump Truck	108	88	82	76	70	62	58	54
Concrete Mixer	108	85	79	73	67	59	55	51
Jack-hammer	108	88	82	76	70	62	58	54
Scraper	93	80-89	74-82	68-77	60-71	54-63	50-59	46-55
Bulldozer	107	87-102	81-96	75-90	69-84	61-76	57-72	53-68
Generator	96	76	70	64	58	50	46	42
Crane	104	75-88	69-82	63-76	55-70	49-62	45-48	41-54
Loader	104	73-86	67-80	61-74	55-68	47-60	43-56	39-52
Grader	108	88-91	82-85	76-79	70-73	62-65	58-61	54-57
Pile driver	105	95	89	83	77	69	65	61
Forklift	100	95	89	83	77	69	65	61
<b>Worst-Case Combined Peak Noise Level (Bulldozer, Jackhammer, Scraper)</b>								
<b>Combined Peak Noise Level</b>	Distance from Source (feet)							
	<b>50</b>	<b>100</b>	<b>200</b>	<b>¼ Mile</b>		<b>½ Mile</b>		
	103	97	91	74		68		

Source: Tipler 1976

Proposed noise impacts post construction and during future operation of the expanded cemetery would include traffic to and from the site, equipment used for interment site preparation, maintenance, and upkeep, and periodic ceremonial rifle discharges. These activities would be similar to the existing cemetery operation at JBNC directly south of the proposed action area. Thus, no significant adverse impact associated with noise levels during operation are anticipated as part of the proposed action.

### 3.7.4 Effects to No Action Alternative

Under the No Action Alternative, current operation would continue at JBNC, and the Proposed Action Area would remain a county park. The continued use of these areas would result in no/negligible noise impacts.

## 3.8 Land Use

### 3.8.1 Background

The Proposed Action area was included as part of the 1,700-acre Jefferson Barracks military reservation from 1826 to 1950. In 1939 the Beverage Garden and other recreational facilities were developed in the area. The area was transferred from the Federal Government to St. Louis County in 1950. Since 1954 the area was utilized as Sylvan Springs County Park. In 2018, the southern 37.6-acre portion of the park was transferred into VA ownership with

the intent to expand to provide additional interment space for the existing JBNC. VA currently leases the area to St. Louis County to continue as park land until the Proposed Action is intended to be completed. This Proposed Action is the intended use and continuation of this process.

### 3.8.2 Effects of the Proposed Action Alternative

The Proposed Action Alternative would result in a 37.6-acre portion of the current Sylvan Springs Park currently owned by the VA and leased to St. Louis County being converted to cemetery. A portion of the park would remain to the north, and the cemetery expansion area would be consistent with the existing land use of JBNC south of the expansion area.

### 3.8.3 Effects of the No Action Alternative

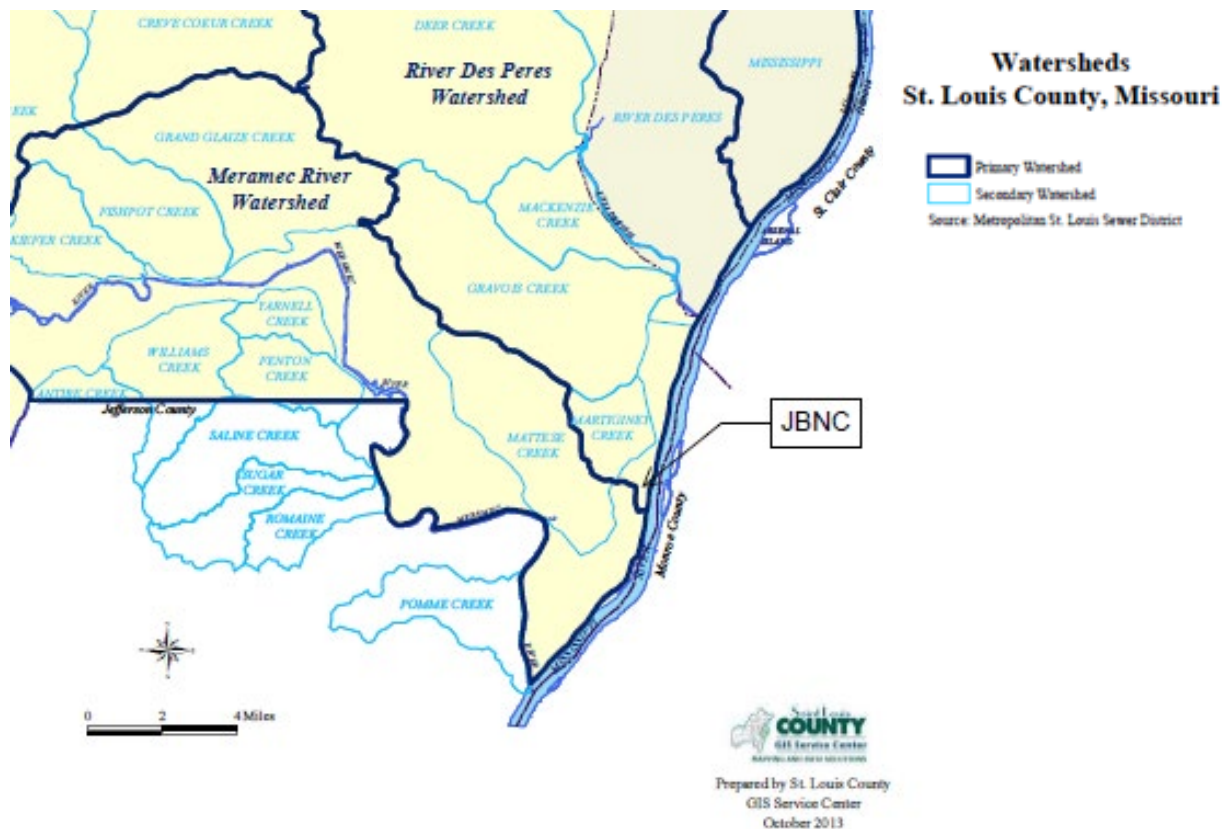
Under the No Action Alternative, no land use impacts would occur. If the site remains in its current land use as a county park, no impacts to land use are anticipated.

## 3.9 Floodplains, Wetlands, and Coastal Zone Management

### 3.9.1 Background

The proposed expansion area falls within the River Des Peres Watershed that ultimately outfalls into the Mississippi River to the east. Per the Federal Emergency Management Agency Flood Rate Insurance Map (FEMA FIRM), the entire property falls within a Zone X, or area of minimum flood hazard area.

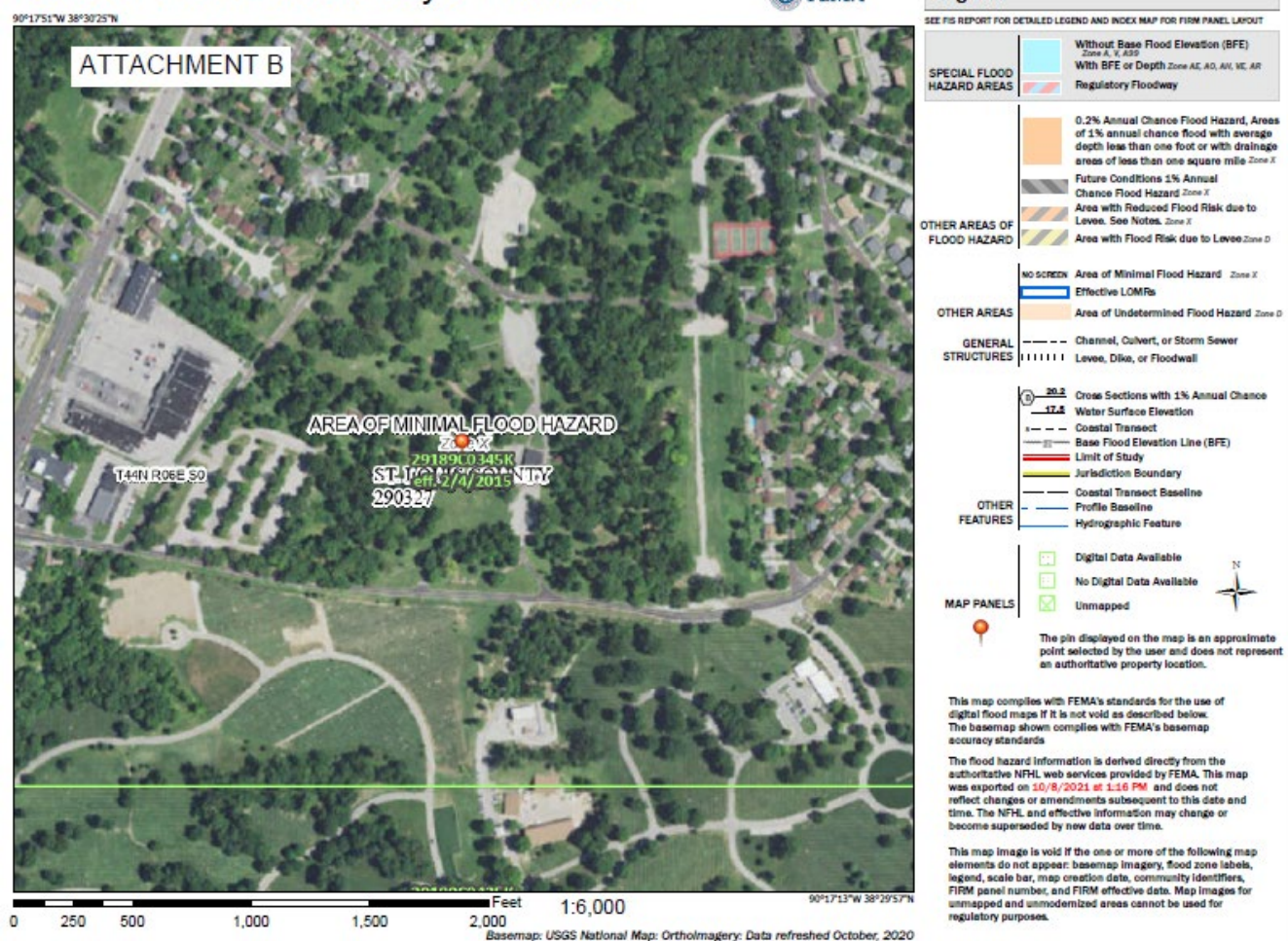
Figure D. Watersheds of St. Louis County





Figures E. FEMA FIRM Map

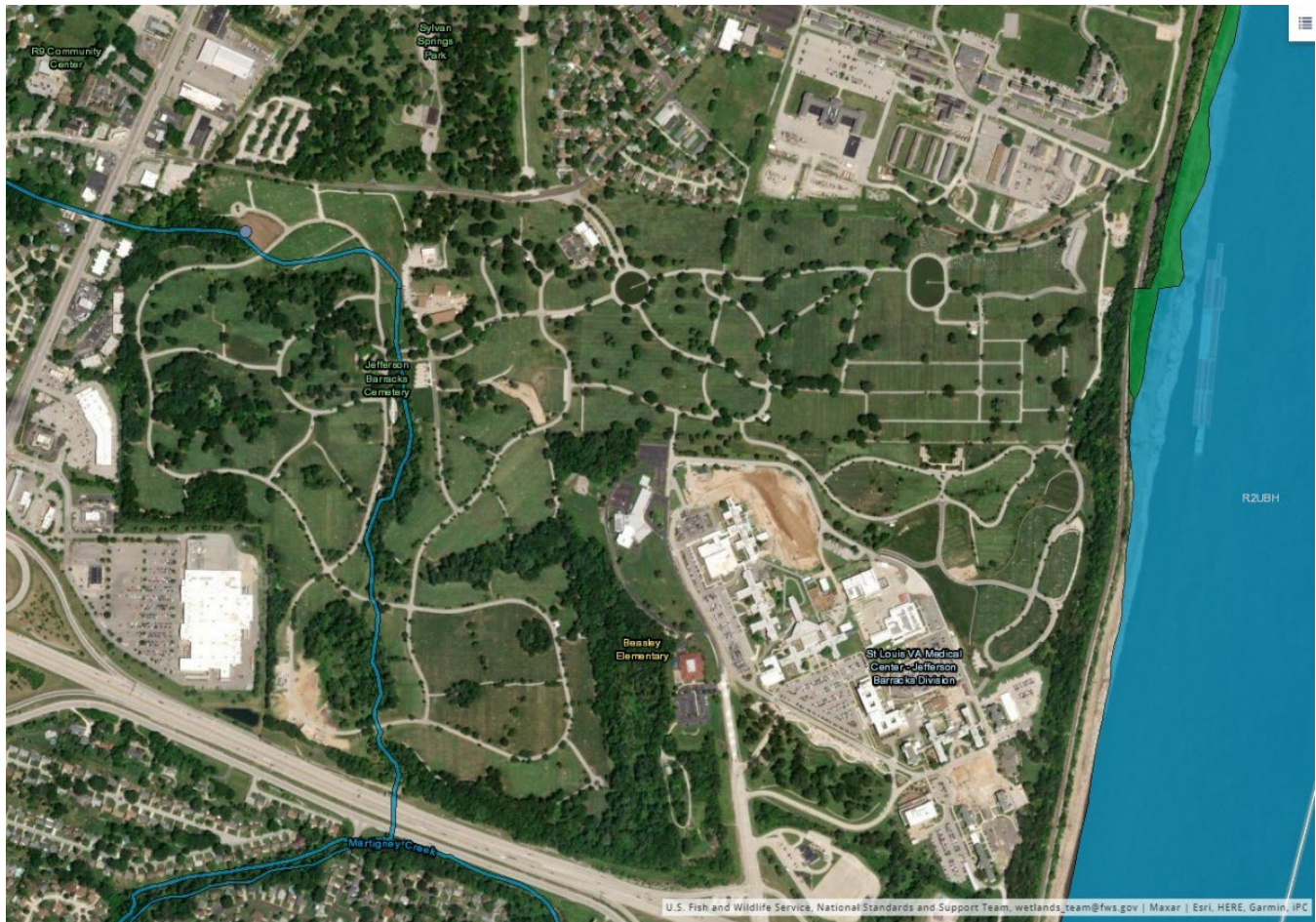
## National Flood Hazard Layer FIRMette



The USFWS National Wetland Inventory (NWI) does not depict wetlands within the Proposed Action area. The NWI depicts a riverine resource (R5UBH; R2UBG) that begins northwest of JBNC, flows east 0.48 miles into JBNC, turns South and continues 0.60 miles through JBNC until it flows under Interstate 255 into Martigney Creek. Martigney Creek flows east into the Mississippi River. NWI also depicts a 0.10-acre freshwater pond (PUBFh) in the northwest portion of JBNC.



Figure F. USFWS NWI Map



According to the National Oceanic and Atmospheric Association (NOAA), St. Louis County is not located within a designated coastal zone (NOAA 2018).

### 3.9.2 Effects of the Proposed Action Alternative

The Proposed Action is not located in designated coastal zone. The Proposed Action falls within an area of minimum flood hazard area and is not anticipated to result in floodplain impacts. No wetlands were identified within the Sylvan Springs expansion area; however, a riverine resource and freshwater pond were identified in the western portion of JBNC. If the construction of columbarium within the existing JBNC impacts the riverine or freshwater pond resource, additional permitting would be required. No adverse impacts to floodplain, wetlands, or designated coastal zones are anticipated under the Proposed Action.

### 3.9.3 Effects of the No Action Alternative

Under the No Action Alternative, no impacts to floodplains, wetlands, or designated coastal zones would occur.

## 3.10 Socioeconomics

### 3.10.1 Background

The following tables identify the socioeconomic environment of St. Louis County where JBNC occurs and compare it to the entire state of Missouri. All data was collected from U.S. Census Bureau and U.S. Bureau of Labor statistics. St. Louis County has an estimated population of 997,187 with approximately 22.1% under the age of 18 years old and 18.8% over the age of 65 years old. These percentages are similar to the state of Missouri where 22.4% of the total population are under the age of 18 years old and 18.8% of the population are over the age of 65 years old.

St. Louis County has a slightly higher amount of high school graduates than the state as a whole, 94.1% compared to 91.0%. Approximately 377,127 veterans reside in the state of Missouri with 51,659 of them residing in St. Louis County. The median household income in St. Louis County is much higher than that of the entire state, \$72,562 compared to \$61,043. The population below the poverty level (annual income of \$26,500 or less for a family of 4 according to the U.S. Department of Health and Human Services, 2021) is lower in St. Louis County, 10.5% compared to the state's 12.7%. Unemployment rates are similar for each.

**Table 3. Demographic Data for St. Louis County and Missouri**

Area	Population Estimates (2022)	Population Under 18 Age Years (2022)	Population Over 65 Age Years (2022)	Minority Populations (2022)	High School Graduates (2017-2021)	Veterans (2017-2021)
State of Missouri	6,177,957	22.4%	17.6%	17.4%	91.0%	377,127
St. Louis County, MO	997,187	22.1%	18.8%	32.6%	94.1%	51,659

*Source: United States Census Bureau, Profile of General Demographic Characteristics, 2017-2022*

**Table 4. Regional Income for St. Louis County and Missouri**

Area	Number of Households	Median Household Income	Population Below Poverty Level	Unemployment Rate (Jan. 2023)
State of Missouri	2,433,819	\$61,043	12.7%	2.7%
St. Louis County, MO	412,858	\$72,562	10.5%	2.7%

*Source: United States Census Bureau, Profile of General Demographic Characteristics, 2017-2021 (In 2021 Dollars) and U.S. Bureau of Labor Statistics*

In order to prevent children from suffering disproportionately from environmental health risks and safety risks, EO 13045, Protection of Children from Environmental Health Risks and Safety Risks, was introduced in 1997 to prioritize the identification and assessment of environmental health risks and safety risks that may affect children and to ensure that Federal agencies' policies, programs, activities, and standards address environmental risks and safety risks to children. Parks, schools, and residential areas where children may reside, play, and learn are identified as sensitive receptors throughout the EA and detailed in **Section 3.11 Community Services**.

### 3.10.2 Effects of the Proposed Action Alternative

The Proposed Action would result in short and long term positive socioeconomic impacts to the region. Construction of the Proposed Action would provide temporary construction and planning jobs benefiting local and nationwide employment and income, in addition to the purchasing of construction materials from regional suppliers and transporters. Once completed the cemetery expansion would provide interment options for Veterans and their families in the region and potentially provide additional job opportunities related to cemetery maintenance and operation.

### 3.10.3 Effects of the No Action Alternative

Under the No Action Alternative, the VA would not be able to expand north onto the currently VA owned portion of Sylvan Springs County Park. As the majority of the surrounding areas are currently developed, minimal to no options are available for cemetery expansion. VA would not be able to meet its long-term cemetery needs for the region, resulting in a significant long-term impact to US Veterans and their families.

### **3.11 Community Services**

#### **3.11.1 Background**

The Mehlville School District currently serves the area. The only school within one mile of the site is the Beasley Elementary School located south of the existing JBNC and approximately 0.5 miles from the Sylvan Springs Expansion area. The Mehlville School District offices are located in the same area.

The St. Louis County - Mehlville Fire Protection District provides fire protection and emergency medical services to the surrounding area. The St. Louis County Police and Sheriff's Department provide police protection for the surrounding area.

The Missouri Department of Transportation and St. Louis County Department of Transportation provide local road and bridge maintenance to the surrounding area.

The Jefferson Barracks VAMC is located adjacent to the existing JBNC to the South. The next closest major medical facility is the Mercy Medical South General Hospital located approximately 4.75 miles east of the site.

Several parks are located within 0.75 miles of the proposed project area including the remainder of Sylvan Springs County Park adjacent north, Jefferson Barracks Park approximately 0.45 miles to the northeast, and Circle Park 0.74 miles to the west.

Public transportation is provided by the Metro Transit – St. Louis for the greater St. Louis area. The MetroBus Full-Service Route 9 serves the area surrounding Sylvan Springs County Park and JBNC and has stops along Telegraph Avenue approximately 500 feet west of the proposed action area.

#### **3.11.2 Effects of the Proposed Action Alternative**

The Proposed Action is not anticipated to provide additional load on the community services in the area. As the area is currently utilized as the Sylvan Springs County Park, and the proposed action would convert the park into cemetery, the public transportation to the area and traffic on the roadways would be similar to existing use and isn't anticipated to result in a significant adverse impact.

#### **3.11.3 Effects of the No Action Alternative**

Under the No Action Alternative, no community service impacts from VA would occur. The area would continue to operate as it is currently.

### **3.12 Solid Waste and Hazardous Waste**

#### **3.12.1 Background**

A Phase 1 Environmental Site Assessment (ESA) was completed on August 20, 2021, for the proposed action by Terracon Consultants, Inc. and a subsequent Limited Site Investigation on November 3, 2021.

#### Phase 1 ESA

Based on a review of historical resources, the site was utilized as Jefferson Barracks Seventh Infantry Woods as early as 1933 and a concert and sports area for the USO by 1939. Apparent residential buildings associated with Jefferson Barracks were constructed on the eastern portion of the site from approximately 1949 until 1953. The site was conveyed to St. Louis County for Sylvan Springs in the 1950s and operated as a carnival picnic area. The restroom/concession building on the site was constructed in 1955. The site has operated as a recreation and picnic area since that time.

The area to the north of the site was wooded land associated with Jefferson Barracks and recreational property as early as 1933 until the mid-1940s when it was declared surplus and conveyed to the St. Louis County Parks

department and has been used as a recreation area since that time. The area east of the site was improved with Jefferson Barracks as early as 1933 until the late 1950s when the area was redeveloped with residences. South of the site consisted of wooded land associated with Jefferson Barracks as early as 1933 until the Jefferson Barracks Cemetery was apparent in the 1940s. The area to the west of the site appeared to be residential until the mid-1960s when it was developed with the current-day commercial/retail buildings.

The Phase 1 ESA found through records review that JBNC is listed as a Resource Conservation and Recovery Act-Small Quantity Generator (RCRA-SQG) for ignitable and corrosive hazardous waste. There were multiple reported RCRA violations reported for this facility in 1999 and 2015; however, they were brought to compliance the same day. This facility is also listed in the National Pollutant Discharge Elimination System (NPDES) and in the Site Management Reporting System (SMARS) databases. These listings are associated with the stormwater treatment. Based on regulatory status and topographic gradient from the site, this facility is not considered a REC.

Franview Cleaners / One Hour Martin (2928 Telegraph Rd) was located in the west adjoining retail strip mall and cross- to up-gradient from the proposed action area. It was listed in the historical dry cleaners, RCRA-NLR, and Drycleaners databases. This facility was classified as a dry-cleaning plant and was listed as One Hour Martinizing from 1982 until 1988, Fran View Cleaners from 1993 until 1996, and Bang Myung in 2004 and 2005. Fran View Cleaners was a registered RCRA generator of halogenated solvents including tetrachloroethylene (PCE), methylene chloride, and trichloroethylene (TCE). There were no reported RCRA violations associated with this facility. Although the facility is located in the adjoining strip mall, the tenant space was approximately 250 feet from the proposed project area. Chlorinated solvents (TCE/PCE) are highly prolific and move readily through groundwater. Based on the proximity to the site, 20+ years of operation, and gradient, potential impact to the site from this facility is considered a REC. The remaining facilities listed in the database report do not appear to represent RECs to the site at this time based upon regulatory status, apparent topographic gradient, and/or distance from the site.

During the site reconnaissance, Terracon observed a pipeline marker, interior floor drains, and two pole-mounted transformers. Terracon reviewed the National Pipeline Mapper System to further assess the potential for pipelines in the vicinity of the site; based on this review, a hazardous liquid pipeline was identified along the western border of the site. Minor releases associated with pipelines often go unnoticed; however, small releases over time can cause exponential impact; therefore, potential impact to the site from former on-site/north adjoining pipeline is considered a REC. The pipeline is owned by Phillips 66. If a release were to be identified, Phillips 66 would be responsible for remediation activities.

Because of the findings of the Phase 1 ESA, Terracon recommended additional investigation to evaluate subsurface conditions associated with the identified RECs. VA authorized Terracon to conduct the Limited Site Investigation to evaluate the presence (above regulatory levels) of indicator contaminants associated with the RECs identified by the Phase 1 ESA.

#### Limited Site Investigation

Terracon's field activities began on October 1, 2021, and concluded on October 4, 2021. Four soil boring were advanced on the site. Groundwater was encountered in only TSP-4 on the first day of drilling. Groundwater was encountered in TSP-2 approximately 72 hours after drilling. However, not enough groundwater was recovered from TSP-2 for laboratory analysis. In lieu of groundwater, a soil sample from the probe refusal depth was submitted to the laboratory for analysis, as the strata most likely to have come in contact with groundwater at TSP-1 through TSP-3. The soil samples and groundwater samples were submitted for laboratory analysis of VOCs, PAHs, and TPH-GRO/ORO/DRO. Constituents of concern were not detected above the laboratory reporting limits. Based on the laboratory analytical results from soil and groundwater samples tested to address the former

adjacent dry cleaners and the adjacent high pressure petroleum pipeline during this investigation, additional investigation of the site does not appear warranted at this time.

### **3.12.2 Effects of the Proposed Action Alternative**

The Proposed Action would result in the removal of existing site improvements and cemetery expansion activities that could result in short-term, less than-significant adverse impacts due to the increased presence and use of petroleum and hazardous substances during construction. A temporary increase in construction vehicle traffic would increase the likelihood for release of vehicle operating fluids (e.g., oil, diesel, gasoline, antifreeze, etc.) and maintenance materials. A less-than-significant, temporary adverse impact is possible during construction.

Implementation of standard construction BMPs identified in **Section 4.0 Mitigation** would serve to ensure this impact is further minimized. No significant adverse long-term impacts during operation of the expanded cemetery are anticipated. Long-term operational solid and hazardous materials would be managed in accordance with applicable Federal and State laws and VA standards. The Proposed Action is not anticipated to result in a substantial increase in the generation of solid or hazardous substances or wastes, increase the exposure of persons to hazardous or toxic substances, increase the presence of hazardous or toxic materials in the environment, or place substantial restrictions on property use due to hazardous waste, materials, or site remediation.

### **3.12.3 Effects of the No Action Alternative**

Under the No Action Alternative, no solid or hazardous materials use or effects from VA's activities would occur.

## **3.13 Transportation and Parking**

### **3.13.1 Background**

S<sup>2</sup> Traffic Solutions, LLC completed a traffic study for the Proposed Action dated March 9, 2022.

The Proposed Action area is located approximately 500 feet west of Telegraph Road, and is to the north of Sheridan Road, while the existing JBNC is to the south of Sheridan Road. The 37.6-acre expansion area is bordered on the south by Sheridan Road, on the west by Boundary Road, and on the north by Halsey Street. Access would be provided via a new driveway from Sheridan Road consolidating the existing one-way Sylvan Springs Park accesses driveways into one driveway with a 40-foot median separating the inbound and outbound traffic: and via the existing access to Sylvan Springs Park from Halsey Street.

The Traffic Study documented the existing conditions, the anticipated site-generated traffic, and its distribution, and reviews the traffic operations at the following intersections for the year 2032, representing the 10-year planning horizon associated with VA Cemetery developments:

- Telegraph Rd & Sheridan Rd
- Sheridan Rd & Boundary Rd
- Sheridan Rd & Existing Park Exit
- Sheridan Rd & Existing Park Entrance
- Sheridan Rd & Jefferson Blvd
- Boundary Rd & Park Access
- Boundary Blvd & Halsey St
- Halsey St & Park Access

It is noted, cemetery developments generated the greatest traffic volumes during Sundays when visitors come to visit their loved ones, weekday traffic for cemeteries typically do not peak during the commuter peak times and are associated with funerals, which often have their own traffic control. Weekday traffic impacts are generally

minimal. Therefore, the Traffic Study was focused on the greatest site traffic times which occur on Sundays and the impacts to the surrounding roadways.

The Traffic Study found the existing weekday Average Daily Traffic (ADT) is 19,102 trips per day on Telegraph Road and 2,407 trips per day on Sheridan Road. The 2032 estimated ADT is 22,490 on Telegraph Road and 2,834 on Sheridan Road.

### **3.13.2 Effects of the Proposed Action Alternative**

Temporary adverse impacts to the surrounding area traffic are anticipated during construction periods as equipment and materials are hauled on and off site and workers travel to and from the construction site. The increased traffic associated with construction would be during daytime work hours and follow standard construction BMPs listed in **Section 4.0 Mitigation** to avoid additional adverse impacts to noise, air quality, etc.

The Proposed Action during operation would add 524 trips per day to Telegraph Road and Sheridan Road. With the new traffic, Telegraph Road would have 23,014 trips per day and Sheridan Road would have 3,358 trips per day. As stated above, the increased traffic isn't likely to occur at peak commuter traffic times and would be intermittent depending on funeral services and visitor traffic.

The Proposed Action has appropriate access to the site and to the surrounding roadway network. The traffic operational analysis indicates there is available capacity on the roadways surrounding the site to accommodate site-generated traffic. The proposed action would be designed and constructed to provide cemetery parking on site. As such, no significant adverse impacts are anticipated as part of construction or operation of the proposed action.

### **3.13.3 Effects of the No Action Alternative**

Under the No Action Alternative, the existing parking and traffic conditions would remain the same and result in no/negligible traffic or parking impacts.

## **3.14 Utilities**

### **3.14.1 Background**

A Utilities Identification and Capacity report was completed by Anderson Engineering of Minnesota, LLC dated September 29, 2021.

#### Electric

Ameren Missouri Electric provides electricity to JBNC and the surrounding communities. Overhead electric lines enter the site on the east side and run west before splitting into overhead and underground. The overhead line continues northwest while the underground electric line runs southwest.

The existing electric lines that serve the site are 12 KV lines with 3-phase and single-phase power. Various transformers are located within the Proposed Action area.

#### Telecommunication

AT&T has underground fiber optic, telephone, and television lines in the Proposed Action area. AT&T telecommunication lines enter the site in the southeast corner on the north side of Sheridan Road and run parallel to the road for several hundred feet.

#### Petroleum Pipeline

Phillips 66 Pipeline, LLC has an underground petroleum pipeline that runs north and south along Boundary Road, to the west of the proposed project area. The pipe is located within a 25-ft wide easement to Phillips Pipeline as

depicted on the ALTA/NSPS Land Title Survey completed by Sherril Associates, Inc. dated May 21, 2018. Petroleum is not an anticipated need for cemetery expansion and is included for informational purposes.

#### Natural Gas

Spire MO East has underground natural gas lines located in the southeast corner of the site, north of Sheridan Road. Although natural gas is proximal to the site, available capacities are unknown. Spire MO East did not respond to Anderson's request for capacity calculations. With the proposed land use of the Cemetery, it is anticipated that natural gas will be available for this project.

#### Sanitary and Storm Sewers

St. Louis Metropolitan Sewer District (MSD) has a 60-inch diameter RCP storm sewer pipe from Boundary Road running through the proposed project area and ends roughly in the middle of the southern project boundary along Sheridan Road, where it crosses in a 60-inch diameter RCP outlet pipe. This storm sewer pipe lies within a 15-foot wide easement to the MSD as depicted on the ALTA/NSPS Land Title Survey completed by Sherril Associates, Inc. dated May 21, 2018.

Additionally, two 36-inch diameter RCP storm sewer pipes run north and south through the middle portion of the Proposed Action Area, ending at the same 60-inch diameter RCP outlet pipe. There are two culverts within the Proposed Action Area; a 36-inch diameter vitrified clay pipe (VCP) that runs east and west under the existing shelter entrance, and an 18-inch diameter VCP that runs north and south under Halsey Street, in the northeast corner of the Proposed Action area. Additional storm pipe information has been provided by MSD in the form of as-built drawings.

St. Louis MSD also has an 8-inch diameter VCP sanitary pipe that enters the site in the northwest corner under Boundary Road, and transitions into a 10-inch diameter VCP pipe that runs to the middle of the site, before turning south on the west side of the existing shelter and continuing to the outlet under Sheridan Road. A 10-inch diameter PVC sanitary line enters the Proposed Action area in the northeast corner and runs south along an existing path and under Sheridan Road. Additional sanitary sewer pipe information has been provided by MSD in the form of as-built drawings. Access to area storm and sanitary sewers to serve the Proposed Action Area is evident by the existing utilities.

#### Water Distribution

Field survey of the Proposed Action area resulted in location of one watermain pipe in the southeast corner. However, as-built drawings from 1985 provided by the St. Louis County Department of Parks & Recreation, depict a waterline of unknown size and capacity entering the Proposed Action area near the parking lot in the northeast corner and running east and west before turning to the northwest. Additionally, a 15-foot wide easement to St. Louis County Water Co. runs from north to south in the east portion of the property as depicted on the ALTA/NSPS Land Title Survey completed by Sherril Associates, Inc. dated May 21, 2018.

Missouri American Water Company has watermain lines that serve the JBNC and surrounding areas. The proposed conditions will closely resemble the existing land use for this property, and it is anticipated that there is available capacity to the Proposed Action area.

### **3.14.2 Effects of the Proposed Action Alternative**

The Proposed Action would require the use of utilities, including electricity, potable water, sanitary sewer discharges and stormwater sewer discharges. The proposed action is anticipated to have minimal utility needs, similar to existing conditions currently utilized by the Sylvan Springs County Park. All major utility services are located at the expansion area or within close proximity.



It is anticipated the Proposed Action would continue to utilize the stormwater system currently onsite and implement additional stormwater management features, as necessary, for the cemetery development. No significant adverse impacts are anticipated because of the Proposed Action.

### **3.14.3 Effects of the No Action Alternative**

Under the no action alternative, no utility impacts would occur by VA. The expansion area would continue to operate as a county park.

## **3.15 Environmental Justice**

### **3.15.1 Background**

In addition to considering socioeconomic information for the area surrounding the Proposed Action, federal agencies are required through Executive Order 12898 set forth in 1994 to focus attention to minority and low-income communities that may be adversely affected by environmental conditions and impacts to human health at a disproportionately higher rate than other communities.

Minority Populations: Population of people who are not single-race white and not Hispanic. Populations of individuals who are members of the following population groups: American Indian or Alaskan Native; Asian or Pacific Islander; Black, not of Hispanic origin; or Hispanic. (US Census Bureau, 2020)

Low Income Populations: families living at or below the poverty line, based on an annual income of \$26,500 or less for a family of 4. (US Department of Health and Human Services, 2021)

### **3.15.2 Effects of the Proposed Action Alternative**

The Proposed Action would have less than significant adverse impacts to surrounding low-income and minority populations. BMPs limiting adverse impacts related to construction activities (noise, air quality, etc.) would be followed to minimize adverse impacts to surrounding residential areas. Operation of the expanded cemetery would be similar to the existing cemetery directly south of the expansion area, and not result in significant adverse impacts as discussed in this EA. Potential positive impacts related to increased design, construction, and maintenance jobs and incomes are possible with the proposed action.

### **3.15.3 Effects of the No Action Alternative**

Under the No Action Alternative, no environmental justice effects would occur. The continued use of the area as park is not anticipated to result in environmental justice impacts.

## **3.16 Cumulative Impacts**

### **3.16.1 Background**

As defined by CEQ Regulations in 40 CFR Part 1508.7, cumulative impacts are those which “result from the incremental impact of the Proposed Action when added to other past, present, and reasonably foreseeable future actions, without regard to the agency (Federal or non- Federal) or individual who undertakes such other actions.” Cumulative impact analysis captures the effects that result from the Proposed Action in combination with the effects of other actions taken during the duration of the Proposed Action in the same geographic area. Because NEPA requires the analysis of cumulative environmental effects of a Proposed Action, or set of actions, on resources that may often be manifested only at the cumulative level, such as traffic congestion, air quality, noise, biological resources, cultural resources, socioeconomic conditions, utility system capacities, and others.

The approximately 37.6-acre expansion area is located in a mixed-use area, located in an unincorporated portion of St. Louis County. The area adjacent to the south of the expansion area is currently occupied by the existing JBNC. The area adjacent to the north of the expansion area is currently occupied by additional portions of the Sylvan Springs County Park. The area adjacent to the east is currently occupied by a residential neighborhood. The

area adjacent to the west, across Boundary Road, is currently occupied by a residential neighborhood and commercial properties. The northerly adjacent part of Sylvan Springs Park was established in 1954; while the area south of the Site was developed as the JBNC in the early 2000s. Most of the residential and commercial development to the east and west of the Site occurred in the 1950s and 1960s.

Further potential development in the area is limited due to the nearly fully developed nature of the surrounding area and St. Louis County as a whole. Most potential future development in the area would likely be a result of the replacement of older developments that have reached the end of their effective useful lives.

The Proposed Action Alternative would result in the impacts identified in **Section 3.0 Affected Environment and Environmental Consequences of the Alternatives**. The studied areas include aesthetics, air quality, cultural resources, geology and soils, hydrology and water quality, wildlife and habitat, noise, land use, floodplains, wetlands, and coastal zone management, community services, solid and hazardous materials, transportation and parking, utilities, and environmental justice. All identified impacts are less-than-significant and would be further reduced through careful implementation of the general BMPs, management and minimization measures, and compliance with regulatory requirements as identified in **Section 4.0 Mitigation**. Given the nature of the Proposed Action and the limited potential future development in the immediate surrounding area, no significant cumulative adverse effects to any of these resource areas are anticipated.

#### **3.16.2 Effects on Proposed Action Alternative**

No significant adverse cumulative impacts are anticipated because of implementation of the Proposed Action. Coordination between VA, Federal, State, and local agencies, and community representatives would serve to manage and control cumulative effects within the region.

#### **3.16.3 Effects on No Action Alternative**

Under the No Action Alternative, no cumulative impacts would likely occur, as the Site would likely remain an underutilized park.

### **3.17 Potential for Generating Substantial Public Controversy**

As identified in **Section 5.0 Public Involvement**, VA has solicited input from various Federal, State, and local government agencies regarding the Proposed Action. A single comment was received from the Missouri Department of Conservation providing background and mitigation measures for several environmental factors. No responses were received from the public scoping notice published in the St. Louis Post Dispatch on February 10 and 12, 2023.

VA understands that some members of the public may be disappointed that the southern portion of Sylvan Springs Park would close for the proposed cemetery expansion. The most prominent recreational facilities associated with Sylvan Springs Park (playground, splash pad, tennis courts, and skate park) are located in the northern portion of the park and would be retained by St. Louis County for continued use. The southern portion of the Sylvan Springs County Park was sold to the VA in 2018 with the intent of converting the underutilized park into cemetery. This Proposed Action is also part of the St. Louis County Department of Parks master plan. The need for additional burial capacity at JBNC is imminent, and necessary to provide proper funeral services for U.S. Veterans and their families.

## 4.0 MITIGATION MEASURES AND MONITORING

This section will summarize and compile the identified BMPs and minimization measures for each affected environment in **Section 3.0 Affected Environment and Environmental Consequences of the Alternatives**.

VA and its contractors would implement BMPs and satisfy all applicable regulatory requirements in association with the design, construction, and operation of the cemetery expansion and columbarium construction. These mitigation measures are described in this EA and are included as components of the Proposed Action Alternative. In general, implementation of such mitigation measures would maintain impacts at acceptable levels for all resource areas analyzed.

<b>Table 5. Best Management Practices and Minimization Measures for the Proposed Action</b>	
<b>Affected Environment Area</b>	<b>BMPs/Minimization Measures</b>
Aesthetics	<ul style="list-style-type: none"> <li>• Develop the cemetery in concert with the Site's natural topography. Maintain some natural treed areas.</li> <li>• Use vegetative buffers to enhance viewscape, particularly near adjacent residential properties.</li> <li>• Comply, to the extent practicable, with the development standards of the St. Louis County Code of Ordinances (SLCOO).</li> </ul>
Air Quality	<ul style="list-style-type: none"> <li>• Complete pre-demolition asbestos surveys and remove identified asbestos containing materials (ACM) from buildings prior to demolition.</li> <li>• Use appropriate dust suppression methods (such as the use of water, dust, palliative, covers, suspension of earth moving in high wind conditions) during onsite demolition/construction activities.</li> <li>• Ensure fugitive particulate matter emissions, such as dust, resulting from the project do not remain on surfaces or in the air beyond the property line of origin. 10 CSR 10-6.170 restricts the emission of particulate matter to the ambient air beyond the premises of origin.</li> <li>• Stabilize disturbed area through re-vegetation or mulching if the area would be inactive for several weeks or longer.</li> <li>• Implement measures to reduce DPM emissions from construction equipment, such as reducing idling time and using newer equipment with emissions controls.</li> <li>• The open burning of refuse and trade waste is restricted according to 10 CSR 10-6.045. Construction, demolition, and trade waste cannot be open burned, except for untreated wood. Brush from land clearing activities may be burned if the burning is conducted outside the city limits and greater than 200 yards from the nearest occupied structure.</li> <li>• According to the St. Louis County Revised Ordinances Title VI Chapter 612.345, St. Louis County prohibits or restricts open burning of any waste material.</li> <li>• Comply with the applicable MDNR and St. Louis County Air Quality Regulations. Secure any required minor air emissions permits from MDNR, as appropriate and prior to construction.</li> </ul>
Cultural Resources	<ul style="list-style-type: none"> <li>• Follow the stipulations documented in the MOA signed 7/28/2023.</li> </ul>
Geology and Soils	<ul style="list-style-type: none"> <li>• Control soil erosion and sedimentation impacts during construction by implementing erosion prevention measures and complying with the</li> </ul>

	<p>MSD National Pollution Discharge Elimination System (NPDES) permitting process.</p> <ul style="list-style-type: none"> <li>• Implement effective controls per a site-specific Stormwater Pollution Prevention Plan (SWPPP).</li> <li>• The NPDES permit would require stormwater runoff and erosion management using BMPs, such as earth berms, vegetative buffers and filter strips, and spill prevention and management techniques. The construction contractor would implement the sedimentation and erosion control measures specified in the NPDES permit and the SWPPP to protect surface water quality.</li> </ul>
Hydrology and Water Quality	<ul style="list-style-type: none"> <li>• Control soil erosion and sedimentation impacts during construction by complying with the MSD NPDES permit and the SWPPP.</li> <li>• Design cemetery to maintain existing Site drainage, including buffer of undisturbed land around stormwater drainage channels.</li> <li>• Improvements would be designed in accordance with the requirements of EO 13514/EISA Section 438 with respect to stormwater runoff quantity and characteristics.</li> <li>• Ensure the design of the cemetery includes sufficient on-site stormwater management so as not to adversely affect the water quantity/quality in receiving waters and/or offsite areas. Obtain appropriate permits for off-site stormwater discharges.</li> </ul>
Wildlife and Habitat	<ul style="list-style-type: none"> <li>• Conduct seasonal tree clearing, to the extent practicable, to prevent potential impacts to nesting migratory birds.</li> <li>• If it is not practical to conduct seasonal clearing, a qualified biologist would survey the site prior to tree and brush clearing to ensure that no identified species or active nests are disturbed.</li> <li>• Native species should be used to the extent practicable when re-vegetating land disturbed by construction to avoid the potential introduction of non-native or invasive species.</li> <li>• Proper cleaning of construction equipment should be done to the extent practicable, to prevent the spread of non-native/invasive species.</li> </ul>
Noise	<ul style="list-style-type: none"> <li>• Post signage at the entry points of the Site providing current construction information, including schedule and activity. Limit, to the extent possible, construction and associated heavy truck traffic to occur between 8:00 a.m. and 6:00 p.m. on Monday through Friday, or during normal, weekday, work hours.</li> <li>• Locate stationary operating equipment as far away from sensitive receptors as possible.</li> <li>• Select material transportation routes as far away from sensitive receptors as possible.</li> <li>• Shut down noise-generating heavy equipment when it is not needed and maintain equipment per manufacturer's recommendations to minimize noise generation.</li> <li>• Encourage construction personnel to operate equipment in the quietest manner practicable (e.g., speed restrictions, retarder brake restrictions, engine speed restrictions, etc.).</li> </ul>
Land Use	<ul style="list-style-type: none"> <li>• None required.</li> </ul>

Floodplains, Wetlands, and Coastal Zone Management	<ul style="list-style-type: none"> <li>• If construction within the existing JBNC will have wetland impacts, complete appropriate permitting under Section 404 of the CWA and any other applicable permits.</li> </ul>
Socioeconomics	<ul style="list-style-type: none"> <li>• None required.</li> </ul>
Community Services	<ul style="list-style-type: none"> <li>• None required.</li> </ul>
Solid and Hazardous Waste	<ul style="list-style-type: none"> <li>• Remove any identified ACM from buildings prior to demolition.</li> <li>• Comply with VA Standard Operating Procedures and applicable Federal and State laws governing the use, generation, storage, transportation, and disposal of solid and hazardous materials.</li> </ul>
Transportation and Parking	<ul style="list-style-type: none"> <li>• Work with the MODOT and St. Louis County, as applicable, during the cemetery expansion design to identify and implement roadway improvements, if necessary.</li> <li>• Coordinate with the MODOT and St. Louis County to ensure that construction and operational traffic are considered in the planning of future transportation improvements in this vicinity.</li> <li>• Ensure demolition and construction activities do not adversely affect traffic flow on local roadways; construction would be timed to avoid peak travel hours.</li> <li>• Ensure debris and/or soil is not deposited on local roadways during the demolition and construction activities.</li> </ul>
Utilities	<ul style="list-style-type: none"> <li>• Complete a Site design that retains existing stormwater system and includes new stormwater management features, as necessary, so as to not adversely affect water quality/quantity onsite and downstream.</li> <li>• Obtain appropriate permits for stormwater discharges.</li> <li>• Submit detailed design plans to each utility provider to determine the specific connection/extension requirements and implement the necessary requirements.</li> </ul>
Environmental Justice	<ul style="list-style-type: none"> <li>• None required.</li> </ul>

## 5.0 PUBLIC PARTICIPATION, COORDINATION, AND CONSULTATION

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 26, VA's policy and regulations for implementing NEPA. Additional guidance is provided in the 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 area residents, interested organizations, and disadvantaged persons are urged to participate.

### 5.1 Public Involvement

VA published a project scoping notice in the St. Louis Post Dispatch on Friday, February 10 and Sunday, February 12, 2023. VA posted the scoping notice to the VA Office of Construction and Facilities Maintenance (CFM) website <https://www.cfm.va.gov/environmental/> and emailed scoping notices to the federal, state, tribal and local stakeholders identified in **Section 5.3 Agencies and Persons Consulted**.

The Draft EA was published and distributed for a 30-day public comment period as announced by a NOA provided to the stakeholders consulted and published in the St. Louis Post Dispatch on June 9 and 11, 2023. The draft EA and NOA was also posted to the VA CFM website and hard copies made available at the St. Louis County Library – Cliff Cave Branch and the JBNC.

### 5.2 Stakeholder Coordination

Interagency coordination of environmental planning regarding major federal proposed actions is a federally mandated requirement for informing and coordinating with other governmental agencies and stakeholders. As part of the NEPA process, public agencies were consulted to provide preliminary input on potential environmental effects on resources under their jurisdiction within the Proposed Action area. Below is a list of agencies contacted as part of this EA. In addition, a sample of the scoping letter, NOA, and any pertinent received comments from the stakeholders are contained in Appendix B.

### 5.3 Agencies and Persons Consulted

#### Federal Agencies

- US Fish and Wildlife Service – Missouri Ecological Services Field Office
- US Environmental Protection Agency – Region 7
- US Army Corps of Engineers – St. Louis District
- Natural Resource Conservation Service – St. Peters Service Center
- Bureau of Indian Affairs – Eastern Region

#### State Agencies

- Missouri Department of Conservation
- Missouri Department of Natural Resources – Division of Environmental Quality
- Missouri Department of Natural Resources – Air Pollution Control Program
- Missouri Department of Natural Resources – Environmental Services Program
- Missouri Department of Natural Resources – Environmental Remediation Program
- Missouri Department of Natural Resources – Soil and Water Conservation Program
- Missouri Department of Natural Resources – Water Protection Program
- Missouri Department of Natural Resources – Water Resources Center
- Missouri Department of Natural Resources – State Historical Preservation Office
- Missouri Department of Natural Resources – Cultural Resources Management Program
- Missouri Department of Natural Resources – Human Resources Program

- Missouri Department of Natural Resources – Division of Energy
- Missouri Department of Natural Resources – St. Louis Regional Office
- Missouri Department of Natural Resources – Waste Management Program
- Missouri Department of Natural Resources – Missouri Geological Survey
- Missouri Department of Natural Resources – Natural Resource Management Program
- Missouri Department of Natural Resources – Planning and Development Program
- Missouri Department of Transportation

#### Tribes

- Apache Tribe of Oklahoma
- Miami Tribe of Oklahoma
- Osage Nation
- Peoria Tribe of Indians of Oklahoma
- Quapaw Tribe of Indians
- Seneca-Cayuga Nation

#### Local Agencies

- St. Louis County Council -- District 6
- County Executive
- St. Louis County Department of Transportation and Public Works
- St. Louis County Department of Planning
- St. Louis County Parks and Recreation Department
- St. Louis County Soil and Water Conservation District
- St. Louis County Department of Public Health
- Mehlville Fire Protection District
- St. Louis County Police Department
- St. Louis Metropolitan Sewer District
- St. Louis Water Division
- East-West Gateway Council of Governments
- St. Louis Community Development Association
- St. Louis Street Division
- St. Louis Cultural Resource Office
- St. Louis Forestry Division
- St. Louis Health Department
- St. Louis Building Division
- St. Louis Public Utilities Department
- St. Louis Development Corporation
- St. Louis Parks, Recreation and Forestry
- St. Louis Office of Veterans Affairs
- St. Louis Parks Division
- St. Louis Planning and Urban Agency
- St. Louis Water Division
- St. Louis Zoning

Elected Officials

- US House of Representatives – Missouri’s 2nd Congressional District
  - Representative Ann Wagner
- US Senate – Senior Senator for Missouri
  - Senator Josh Hawley
- US Senate – Junior Senator for Missouri
  - Senator Eric Schmitt
- Missouri Senate – 1st Senatorial District
  - Senator Doug Beck
- Missouri House of Representatives – District 094
  - Representative Jim Murphy

**5.4 Responses to Comments**

Comments received during the initial scoping period and the Public Draft EA comment period are included in Appendix B. VA received comments from the USFWS, US EPA, MO DNR, MO DOT, Osage Nation, Quapaw Nation, and Miami Tribe of Oklahoma. Received comments are included in Appendix B, and VA has addressed pertinent comments within this EA and/or through additional, direct consultation with the stakeholder.



## 6.0 LIST OF PREPARERS

### **U.S. Department of Veterans Affairs**

Fernando Fernandez - Environmental Engineer; Office of Construction & Facilities Management

### **Anderson Engineering of Minnesota, LLC**

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Wyatt Benton - Environmental Scientist

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St. Louis Park, Minnesota 55426

Vernon Swing – Owner/CFO

### **Terracon Consultants, Inc.**

5307 Industrial Oaks Boulevard, Suite 160

Austin, Texas 78735

Ann M. Scott – Principal

Nicole Azmanov - Senior Environmental Scientist

Travis J. Kassebaum – Geotechnical Engineer

S. Elizabeth Valenzuela – Principal Investigator

Estefanía Barreto – Report Contributor

## 7.0 REFERENCES CITED

- 38 CFR Part 26. Environmental Effects of the Department of Veterans Affairs Actions. 1 July 2008.
- ALTA/NSPS Land Title Survey, May 2018.
- Association of Natural Burials, 2011 and 2012.
- City of St. Louis, Missouri, 2018.
- Clean Air Act of 1970 (42 U.S. Code [USC] 7401 et. seq.; 40 CFR Parts 50-87) Section 176(c).
- Council on Environmental Quality. 40 CFR Parts 1500-1508, Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act (NEPA).
- Department of Veterans Affairs 1998. Environmental Compliance Manual. Last updated July 1998.
- EO 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations. 1994.
- EO 13045, Protection of Children From Environmental Health Risks and Safety Risks. 1997.
- EO 13175, Consultation and Coordination with Indian Tribal Governments. 6 November, 2000.
- Farmland Protection Policy Act (FFPA) (7 USC 4201, et seq.), 1994.
- Highway Functional Classification Concepts, Criteria, and Procedures, 2013 Edition, U.S. Department of Transportation, Federal Highway Administration.
- Missouri Department of Conservation, 2021.
- Pritchard, James C., *RPA Revised End of Fieldwork Memorandum: Phase I Archeological Survey in Support of the Proposed Jefferson Barracks National Cemetery Expansion Project, St. Louis County, Missouri*. 2018
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- Trautt, Meredith Hawkins, John Klein, and Joe Harl *Cultural Resource Survey* 2012.
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- U.S. Department of Agriculture, Natural Resources Conservation Service Web Soil Survey, 2022.
- U.S. Environmental Protection Agency (USEPA), 2022.
- U.S. Fish and Wildlife Service (USFWS), 2018.
- USFWS National Wetlands Inventory Online Mapper, 2018.

## 8.0 GLOSSARY

**100-Year Flood** – A flood event of such magnitude that it occurs, on average, every 100 years; this equates to a one percent chance of its occurring in a given year.

**Aesthetics** – Pertaining to the quality of human perception of natural beauty.

**Ambient** - The environment as it exists around people, plants, and structures.

**Ambient Air Quality Standards** - Those standards established according to the CAA to protect health and welfare (AR 200-1).

**Aquifer** - An underground geological formation containing usable amounts of groundwater which can supply wells and springs.

**Asbestos** - Incombustible, chemical-resistant, fibrous mineral forms of impure magnesium silicate used for fireproofing, electrical insulation, building materials, brake linings, and chemical filters. Asbestos is a carcinogenic substance.

**Attainment Area** - Region that meets the National Ambient Air Quality Standard (NAAQS) for a criteria pollutant under the CAA.

**Bedrock** - The solid rock that underlies all soil, sand, clay, gravel and loose material on the earth's surface.

**Best Management Practices (BMPs)** - Methods, measures, or practices to prevent or reduce the contributions of pollutants to U.S. waters. Best management practices may be imposed in addition to, or in the absence of, effluent limitations, standards, or prohibitions (AR 200-1).

**Commercial land use** – Land use that includes private and public businesses (retail, wholesale, etc.), institutions (schools, churches, etc.), health services (hospitals, clinics, etc.), and military buildings and installations.

**Compaction** - The packing of soil together into a firmer, denser mass, generally caused by the pressure of great weight.

**Contaminants** - Any physical, chemical, biological, or radiological substances that have an adverse effect on air, water, or soil.

**Council on Environmental Quality (CEQ)** - An Executive Office of the President composed of three members appointed by the President, subject to approval by the Senate. Each member shall be exceptionally qualified to analyze and interpret environmental trends, and to appraise programs and activities of the Federal Government. Members are to be conscious of and responsive to the scientific, economic, social, aesthetic, and cultural needs of the Nation; and to formulate and recommend national policies to promote the improvement of the quality of the environment.

**Criteria Pollutants** - The CAA of 1970 required the USEPA to set air quality standards for common and widespread pollutants in order to protect human health and welfare. There are six "criteria pollutants": ozone (O<sub>3</sub>), carbon monoxide (CO), sulfur dioxide (SO<sub>2</sub>), lead (Pb), nitrogen dioxide (NO<sub>2</sub>), and particulate matter.

**Cultural Resources** - The physical evidence of our Nation's heritage. Included are archaeological sites; historic buildings, structures, and districts; and localities with social significance to the human community.

**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 (40 CFR 1508.7).

**Decibel (dB)** - A unit of measurement of sound pressure level.

**Direct Impact** - A direct impact is caused by a Proposed Action and occurs at the same time and place.

**Emission** - A release of a pollutant.

**Endangered Species** - Any species which is in danger of extinction throughout all or a significant portion of its range.

**Environmental Assessment (EA)** - An EA is a publication that provides sufficient evidence and analyses to show whether a proposed system will adversely affect the environment or be environmentally controversial.

**Erosion** - The wearing away of the land surface by detachment and movement of soil and rock fragments through the action of moving water and other geological agents.

**Fauna** - Animal life, especially the animal characteristics of a region, period, or special environment.

**Flora** - Vegetation; plant life characteristic of a region, period, or special environment.

**Floodplain** - The relatively flat area or lowlands adjoining a river, stream, ocean, lake, or other body of water that is susceptible to being inundated by floodwaters.

**FONSI** - Finding of No Significant Impact, a NEPA document.

**Fugitive Dust** - Particles light enough to be suspended in air, but not captured by a filtering system. For this document, this refers to particles put in the air by moving vehicles and air movement over disturbed soils at construction sites.

**Geology** - Science which deals with the physical history of the earth, the rocks of which it is composed, and physical changes in the earth.

**Groundwater** - Water found below the ground surface. Groundwater may be geologic in origin and as pristine as it was when it was entrapped by the surrounding rock, or it may be subject to daily or seasonal effects depending on the local hydrologic cycle. Groundwater may be pumped from wells and used for drinking water, irrigation, and other purposes. It is recharged by precipitation or irrigation water soaking into the ground. Thus, any contaminant in precipitation or irrigation water may be carried into groundwater.

**Hazardous Substance** - Hazardous materials are defined within several laws and regulations to have certain meanings. For this document, a hazardous material is any one of the following:

Any substance designated pursuant to section 311 (b)(2)(A) of the Clean Water Act.

Any element, compound, mixture, solution, or substance designated pursuant to Section 102 of Comprehensive Environmental Response, Compensation and Liability Act (CERCLA).

Any hazardous substance as defined under the Resource Conservation and Recovery Act (RCRA).

Any toxic pollutant listed under TSCA.

Any hazardous air pollutant listed under Section 112 of CAA. Any imminently hazardous chemical substance or mixture with respect to which the EPA Administrator has acted pursuant to Subsection 7 of TSCA.

The term does not include: 1) Petroleum, including crude oil or any thereof, which is not otherwise specifically listed or designated as a hazardous substance in a above. 2) Natural gas, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas). A list of hazardous substances is found in 40 CFR Part 302.4.

**Hazardous Waste** - A solid waste which, when improperly treated, stored, transported, or disposed of, poses a substantial hazard to human health or the environment. Hazardous wastes are identified in 40 CFR Part 261.3 or applicable foreign law, rule, or regulation.

**Hazardous Waste Storage** - As defined in 40 CFR Part 260.10, "the holding of hazardous waste for a temporary period, at the end of which the hazardous waste is treated, disposed of, or stored elsewhere".

**Indirect Impact** - An indirect impact is caused by a Proposed Action that occurs later in time or farther removed in distance but is still reasonably foreseeable. Indirect impacts may include induced changes in the pattern of land use, population density or growth rate, and related effects on air, water, and other natural and social systems. For example, referring to the possible direct impacts described above, the clearing of trees for new development may have an indirect impact on area wildlife by decreasing available habitat.

**Jurisdictional Wetland** - Areas that meet the wetland hydrology, vegetation, and hydric soil characteristics, and have a direct connection to the Waters of the US. These wetlands are regulated by the USACE.

**Listed Species** - Any plant or animal designated as a State or Federal threatened, endangered, special concern, or candidate species.

**Mitigation** - Measures taken to reduce adverse impacts on the environment.

**Mobile Sources** - Vehicles, aircraft, watercraft, construction equipment, and other equipment that use internal combustion engines for energy sources.

**Monitoring** - A process of inspecting and recording the progress of mitigation measures implemented.

**National Ambient Air Quality Standards (NAAQS)** - Nationwide standards set up by the USEPA for widespread air pollutants, as required by Section 109 of the Clean Air Act (CAA). Currently, six pollutants are regulated by primary and secondary NAAQS: carbon monoxide (CO), lead (Pb), nitrogen dioxide (NO<sub>2</sub>), ozone (O<sub>3</sub>), particulate matter, and sulfur dioxide (SO<sub>2</sub>).

**National Environmental Policy Act (NEPA)** - U.S. statute that requires all Federal agencies to consider the potential effects of Proposed Actions on the human and natural environment.

**Non-attainment Area** - An area that has been designated by the EPA or the appropriate State air quality agency as exceeding one or more National or State ambient air quality standards.

**Parcel** - A plot of land, usually a division of a larger area.

**Particulates or Particulate Matter** - Fine liquid or solid particles such as dust, smoke, mist, fumes, or smog found in air.

**Pollutant** - A substance introduced into the environment that adversely affects the usefulness of a resource.

**Potable Water** - Water which is suitable for drinking.

**Prime Farmland** - A special category of highly productive cropland that is recognized and described by the US Department of Agriculture's Soil Conservation Service and receives special protection under the Surface Mining Law.

**Remediation** - A long-term action that reduces or eliminates a threat to the environment.

**Riparian Areas** - Areas adjacent to rivers and streams that have a high density, diversity, and productivity of plant and animal species relative to nearby uplands.

**River Basin** - The land area drained by a river and its tributaries.

**Sensitive Receptors** - Include, but are not limited to, asthmatics, children, and the elderly, as well as specific facilities, such as long-term health care facilities, rehabilitation centers, convalescent centers, retirement homes, residences, schools, playgrounds, and childcare centers.

**Significant Impact** - According to 40 CFR Part 1508.27, "significance" as used in NEPA requires consideration of both context and intensity.

Context. The significance of an action must be analyzed in several contexts such as society as a whole (human, national), the affected region, the affected interests, and the locality. Significance varies with the setting of the Proposed Action. For instance, in the case of a site-specific action, significance would usually depend upon the effects in the locale rather than in the world as a whole. Both short- and long-term effects are relevant. Intensity. This refers to the severity of impact. Responsible officials must bear in mind that more than one agency may make decisions about partial aspects of a major action.

**Soil** - The mixture of altered mineral and organic material at the earth's surface that supports plant life.

**Solid Waste** - Any discarded material that is not excluded by section 261.4(a) or that is not excluded by variance granted under sections 260.30 and 260.31.

**Threatened species** - Any species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.

**Topography** - The relief features or surface configuration of an area.

**Toxic Substance** - A harmful substance which includes elements, compounds, mixtures, and materials of complex composition.

**Waters of the United States** - Include the following: (1) All waters which are currently being used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide. (2) All interstate waters including interstate wetlands. (3) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds; the use, degradation or destruction of which could affect interstate or foreign commerce.

**Watershed** - The region draining into a particular stream, river, or entire river system.

**Wetlands** - Areas that are regularly saturated by surface or groundwater and, thus, are characterized by a prevalence of vegetation that is adapted for life in saturated soil conditions. Examples include swamps, bogs, fens, marshes, and estuaries.

**Wildlife Habitat** - Set of living communities in which a wildlife population lives.

# Appendix A: Permits

**Appendix A: Permits.** This EA has been prepared in accordance with the NEPA, the CEQ Regulations Implementing the Procedural Provisions of NEPA, and VA's regulations for implementing NEPA (38 CFR Part 26). In addition, the EA has been prepared as prescribed in VA's NEPA Interim Guidance for Projects (VA 2010). The following Federal, State, and/or Local environmental permits that may be required as part of the Proposed Action are identified within this EA and summarized below:

- St. Louis Metropolitan Sewer District, National Pollution Discharge Elimination System.
- MODNR Water Protection Program Land Disturbance Permit.
- Other required environmental permits will be determined during the cemetery design.

# Appendix B: Agency Correspondence and Consultation

**Appendix B: Agency Correspondence and Consultation.** This appendix contains the correspondence and consultation documents referenced throughout the Final EA; including an example scoping letter, Draft EA Notice of Availability letter, newspaper affidavits, comments received from stakeholders detailed in the below table, and the Memorandum of Agreement signed by VA and the MO SHPO.

Stakeholder	Comment Date	VA Response to Comments
Osage Nation – Andrea A. Hunter; THPO	3/17/2023	Osage Nation was included in MOA development and as a signatory, a Draft EA and NOA was provided as part of the public comment period. Stipulations in the MOA reflect those provided in the comment letter.
Miami Tribe of Oklahoma – Diane Hunter; THPO	2/17/2023	Miami Tribe of Oklahoma was included in MOA development and as a signatory. Stipulations in the MOA reflect those provided in the comment letter.
MO DNR Director's Office – Hannah Humphrey; Deputy Director	3/2/2023	BMP's and information provided by the MO DNR are included in the Final EA and <b>Section 4.0 Mitigation Measures and Monitoring</b> .
MO DOT – Ryan Pearcy	6/22/2023	No Response Necessary.
US EPA – Mike Sedlacek; Environmental Scientist	7/5/2023	BMP's and information provided by the US EPA are included in the Final EA and <b>Section 4.0 Mitigation Measures and Monitoring</b> .
Quapaw Nation – Cheyenne Greenup	7/13/2023	Three reports were sent to Cheyenne Greenup on 6/29/2023 via email. 1.) Historic Resources Survey Report completed December 2022 2.) End of Fieldwork Memorandum Phase I Archaeological Survey dated September 24, 2018 3.) Cultural Resource Survey Completed August 2012
USFWS - Kris Budd	6/8/2023 9/11/2023	A biological assessment and further documentation were emailed to Kris Budd on 6/29/2023 in response to the 6/8/2023 request. As requested by USFWS, VA hired a contractor to conduct an acoustic bat survey. This report was sent to USFWS on 8/28/2023. USFWS response on 9/11/2023 concluding consultation.





**U.S. DEPARTMENT OF VETERANS AFFAIRS**  
**Office of Construction & Facilities Management**  
**Washington DC 20420**

January 26, 2023

*Sent via email*

**SUBJECT: Scoping Notice for the Draft Environmental Assessment for the Proposed Sylvan Springs Expansion and Columbaria Construction at Jefferson Barracks National Cemetery located at 2900 Sheridan Road in St. Louis County, Missouri**

Dear Valued Stakeholder:

The U.S. Department of Veterans Affairs (VA) is preparing a Draft Environmental Assessment (EA) to analyze the potential environmental impacts associated with the Proposed Action to expand north onto VA owned land currently leased by St Louis County and utilized for Sylvan Springs Park and construct a columbarium at Jefferson Barracks National Cemetery (JBNC) in St. Louis, St. Louis County, Missouri (see attached **Project Location Map**). VA National Cemetery Administration (NCA) operates the cemetery. The proposed expansion would occur on a site that consists of one 37.6-acre parcel acquired by VA in 2018 consisting of restroom/concession building and picnic shelter, paved and gravel parking lots outlined in yellow in the **Project Area Map**. Additionally, a new columbarium and associated parking would be added within the existing Jefferson Barracks National Cemetery.

The purpose of the Proposed Action is to provide additional burial sites at JBNC for eligible individuals by expanding north onto the VA owned 37.6-acre parcel and constructing a columbarium within the current JBNC in order to meet the needs of Veterans and family members. The Proposed Action is needed to provide accessible interment services to Veterans and their families.

Concurrent with this mailing, this scoping notice will also be published in the St. Louis Post-Dispatch to inform and solicit input from the public. The notice is also available on the VA website at <https://www.cfm.va.gov/environmental>.

VA will prepare the Draft EA according to the National Environmental Policy Act (NEPA) of 1969 (42 U.S. Code 4321-4370h), the Council on Environmental Quality Regulations Implementing the Procedural Provisions of NEPA (40 Code of Federal Regulations [CFR] 1500-1508), and VA Implementing Regulations (38 CFR Part 26).

VA recognizes that you as an identified Stakeholder and/or your organization may have comments on the scope of issues for analysis or information relevant to the Proposed Action for consideration in the Draft EA. Please submit your comments/information via email within 30-days following receipt of this notice to [vacoenvironment@va.gov](mailto:vacoenvironment@va.gov) with the subject line "Jefferson Barracks National Cemetery EA Scoping".

Through this notice, VA is also providing the public with information about the undertaking and seeking public comment and input about the undertaking's effects on historic properties pursuant to Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended (54 USC § 306108), and its implementing regulations (36 CFR Part 800 – Protection of Historic Properties). VA is using its procedures for public involvement under NEPA in lieu of public involvement requirements in subpart B of the Section 106 regulations per 36 CFR 800.2(d)(3). This notice does not serve as an invitation to consult under Section 106, it is solely to seek and consider the views of the public. VA will initiate its Section 106 review and send invitations to consulting parties separately.

VA will address and incorporate relevant comments in the Draft EA. Once VA completes the Draft EA, it will be published and made available for a 30-day public review and comment period. VA will announce the start of this review period by publishing a Notice of Availability (NOA) of the Draft EA in the St. Louis Post-Dispatch. VA will concurrently notify stakeholders with instructions on how to submit comments.

For additional information or questions, please contact Fernando Fernandez at [fernando.fernandez@va.gov](mailto:fernando.fernandez@va.gov) with the subject line “Jefferson Barracks National Cemetery EA Scoping”.

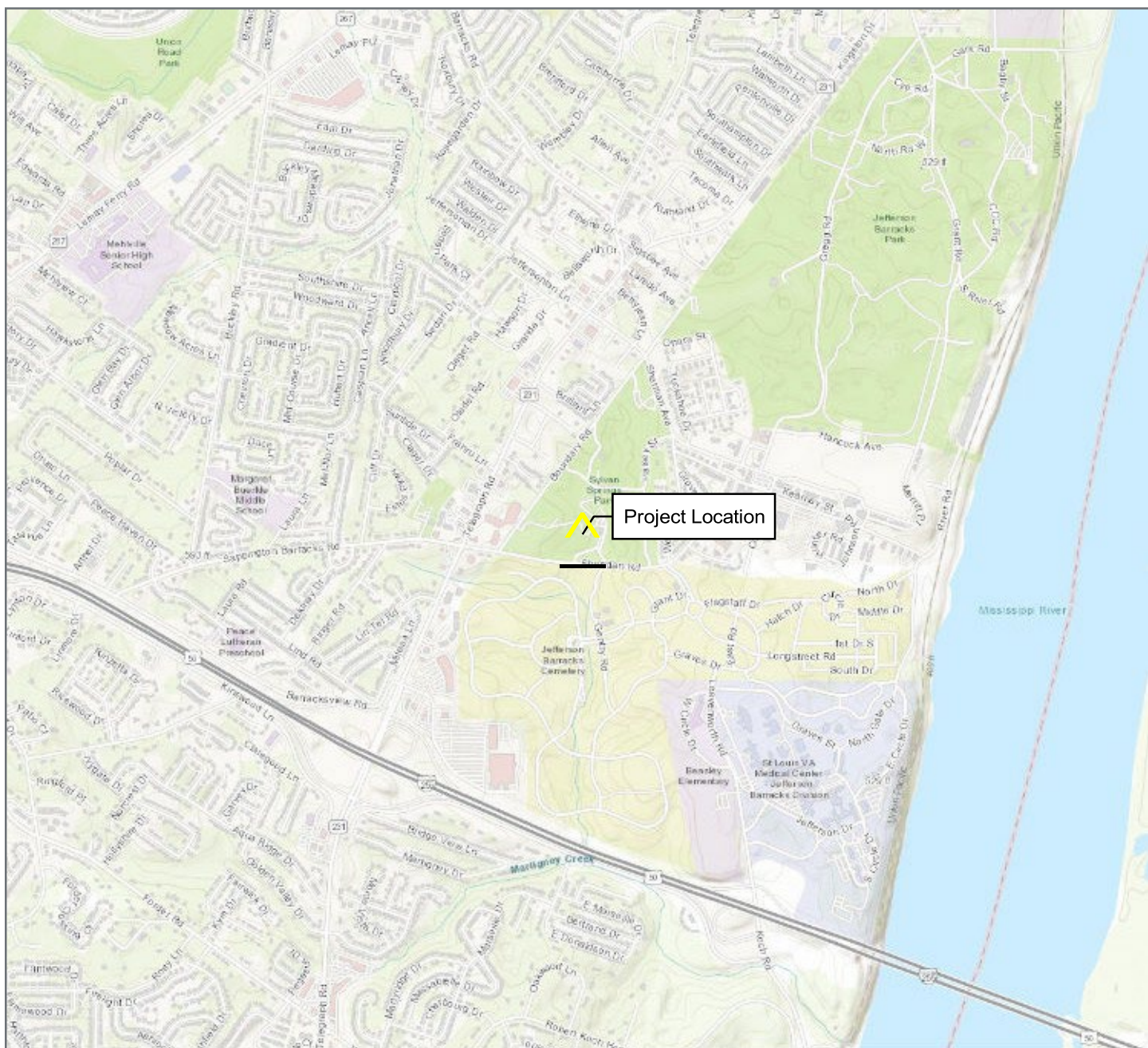
Respectfully,

Glenn Elliott  
Director, Environmental Program Office  
Office of Construction and Facilities Management



# Jefferson Barracks National Cemetery Expansion St. Louis, Missouri

**Figure A**  
Project Location



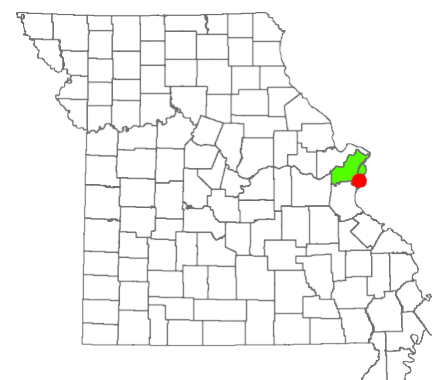
## Legend

- Existing JBNC Property
- Expansion Property (37.6 Ac.)
- St. Louis Co. Parcels

PID: 29H240021  
Project No: 16449  
Date: 12.21.2022

1 inch = 2,000 feet  
0 1,000 2,000 4,000  
Feet

## Project Location



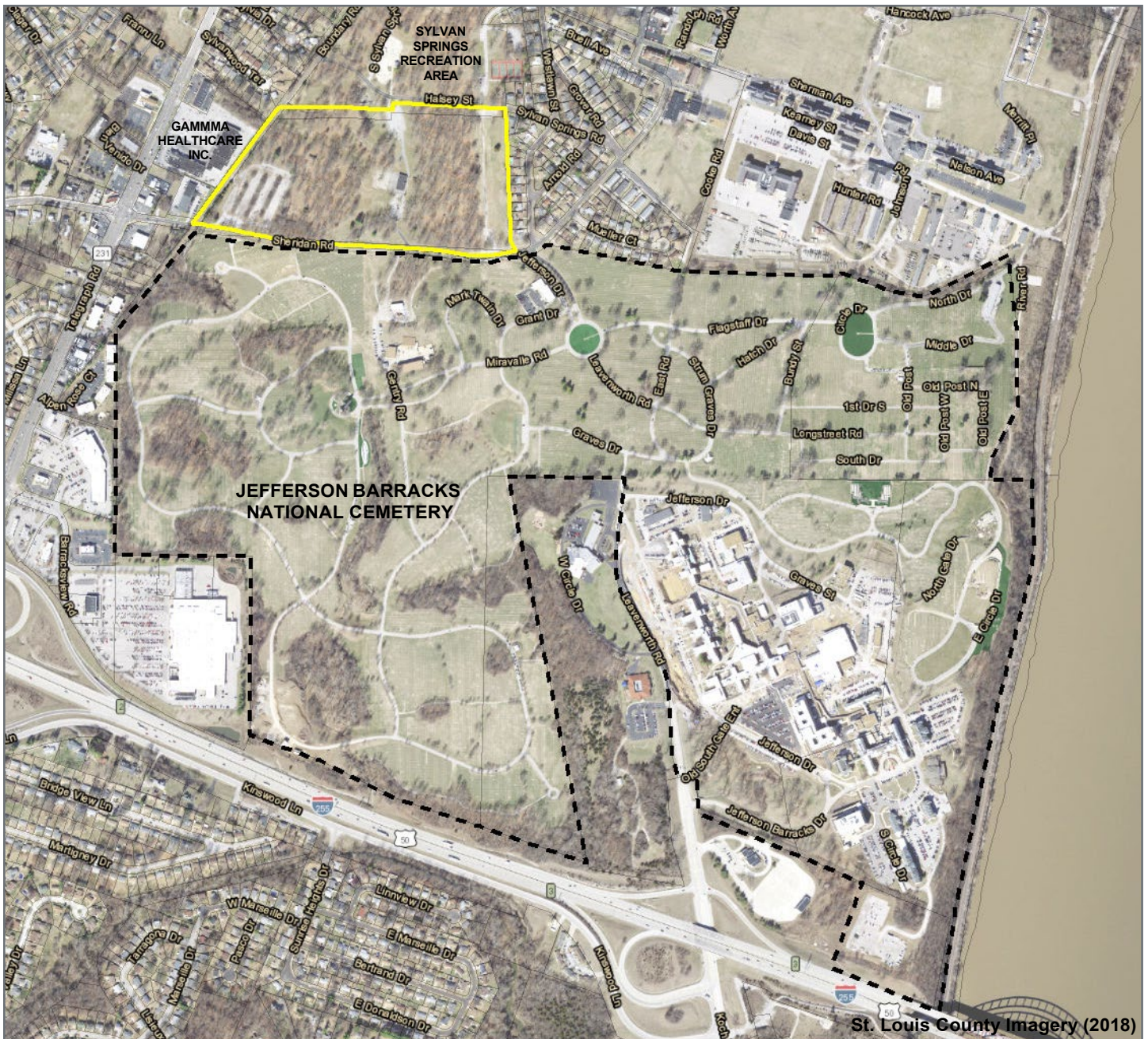
2900 Sheridan Road,  
St. Louis, MO 63125





# Jefferson Barracks National Cemetery Expansion St. Louis, Missouri

**Figure B**  
Project Area



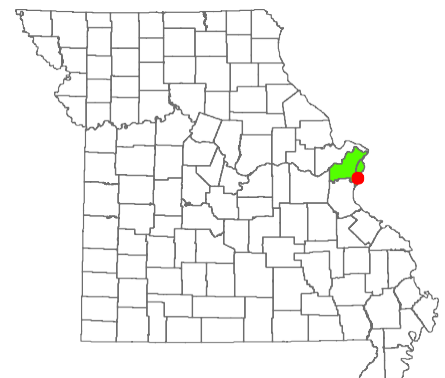
## Legend

- Existing JBNC Property
- Expansion Property (37.6 Ac.)
- St. Louis Co. Parcels

PID: Multiple  
Project No: 16449  
Date: 12.21.2022

1 inch = 1,000 feet  
0 500 1,000 2,000  
Feet

## Project Location



2900 Sheridan Road,  
St. Louis, MO 63125





# ST. LOUIS POST-DISPATCH

## AFFIDAVIT OF PUBLICATION

ANDERSON / Department of Veterans Affairs  
Wyatt Benton  
13605 1st Ave N, Suite 100  
Plymouth, NM 55441

Attn: NEWSPAPER LEGAL NOTICE - Affidavit Enclosed

Ad # 103975 – Wyatt Benton

### NEWSPAPER LEGAL NOTICE OF INTENT/SCOPING

The Department of Veterans Affairs (VA) intends to prepare an Environmental Assessment (EA) for the Proposed Sylvan Springs Expansion and Columbaria Construction at the existing Jefferson Barracks National Cemetery located at 2900 Sheridan Road, St. Louis County, Missouri.

The Jefferson Barracks National Cemetery is proposing to expand and develop north onto 37.6-acres of VA-owned land currently leased by St. Louis County and utilized for Sylvan Springs Park.

Through this notice, VA is also providing the public with information about the undertaking and seeking public comment and input about the undertaking's effects on historic properties pursuant to Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended, (54 USC § 306108), and its implementing regulations (36 CFR Part 800 – Protection of Historic Properties). VA is using its procedures for public involvement under the National Environmental Policy Act (NEPA) in lieu of public involvement requirements in subpart B of the Section 106 regulations per 36 CFR 800.2(d)(3). This notice does not serve as an invitation to consult under Section 106, it is solely to seek and consider the views of the public. VA has initiated its Section 106 review and invited consulting parties to participate via a separate communication.

VA greatly appreciates your participation in this matter and asks that you let us know if you have an interest in the proposed project within 30-days from the date when this notice was posted pursuant to NEPA, (Public Law 91-190, 42 USC 4321-4347 January 1, 1970) and VA's Implementing Regulations (38 CFR Part 26). If you would like to comment on the proposed project at this time, please contact VA at [VAOEnvironment@va.gov](mailto:VAOEnvironment@va.gov) and

THE ATTACHED ADVERTISEMENT WAS PUBLISHED  
In the St. Louis Post-Dispatch and online at [STLToday.com](http://STLToday.com)  
On the following date(s): February 10, 12, 2023

Liz Ducey

*Liz Ducey*

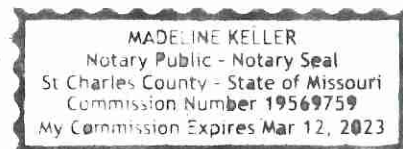
COMPANY REPRESENTATIVE

SWORN TO AND SUBSCRIBED BEFORE ME  
THIS February 12, 2023

*Madeline Keller*

NOTARY PUBLIC, CITY OF ST. LOUIS

AFFIDAVIT CHARGE \$5.00 EACH



TENTH ST., ST LOUIS MO 63101

PHONE 314-340-8000



**U.S. DEPARTMENT OF VETERANS AFFAIRS**  
**Office of Construction & Facilities Management**  
**Washington DC 20420**

June 2, 2023

*Sent via email*

**SUBJECT: Notice of Availability for the Draft Environmental Assessment for the Proposed Sylvan Springs Expansion and Columbaria Construction at Jefferson Barracks National Cemetery located at 2900 Sheridan Road in St. Louis County, Missouri**

Dear Valued Stakeholder:

The U.S. Department of Veterans Affairs (VA) announces the availability of the Draft Environmental Assessment (EA) for the Proposed Sylvan Springs Expansion and Columbaria Construction at Jefferson Barracks National Cemetery (JBNC) in St. Louis, St. Louis County, Missouri (see attached **Figure A -Project Location**).

The proposed expansion would occur on a site that consists of one 37.6-acre parcel acquired by VA in 2018 consisting of restroom/concession building and picnic shelter, paved and gravel parking currently leased by St. Louis County and utilized as the Sylvan Springs Park (see attached Figure B-**Project Area**).

The purpose of the Proposed Action is to provide additional burial sites at JBNC for eligible individuals by expanding north onto the VA owned 37.6-acre parcel and constructing a columbarium and additional parking within the existing JBNC grounds. The Proposed Action is needed to provide continued access to interment services for Veterans and their families.

Concurrent with this mailing, Notice of Availability will be published in the St. Louis Post-Dispatch (<https://www.stltoday.com/>). Notice of Availability will be posted and hard copies of the Draft EA will be made available at both the St. Louis County Library – Cliff Cave Branch located at 5430 Telegraph Road and at Jefferson Barracks National Cemetery located at 2900 Sheridan Road for review and comment from the public. The Draft EA is also available on the VA website at <https://www.cfm.va.gov/environmental/index.asp>

VA has prepared the Draft EA according to the National Environmental Policy Act (NEPA) of 1969 (42 U.S. Code 4321-4370h), the Council on Environmental Quality Regulations Implementing the Procedural Provisions of NEPA (40 Code of Federal Regulations [CFR] 1500- 1508), and VA Implementing Regulations (38 CFR Part 26).

Please submit your comments on the Draft EA via email within 30-days following receipt of this notice to [vacoenvironment@va.gov](mailto:vacoenvironment@va.gov) with the subject line “Jefferson Barracks National Cemetery Draft EA”. VA will address and incorporate relevant comments in the Final EA.

For additional information or questions, please contact Fernando Fernandez at [fernando.fernandez@va.gov](mailto:fernando.fernandez@va.gov) with the subject line “Jefferson Barracks National Cemetery Draft EA”.

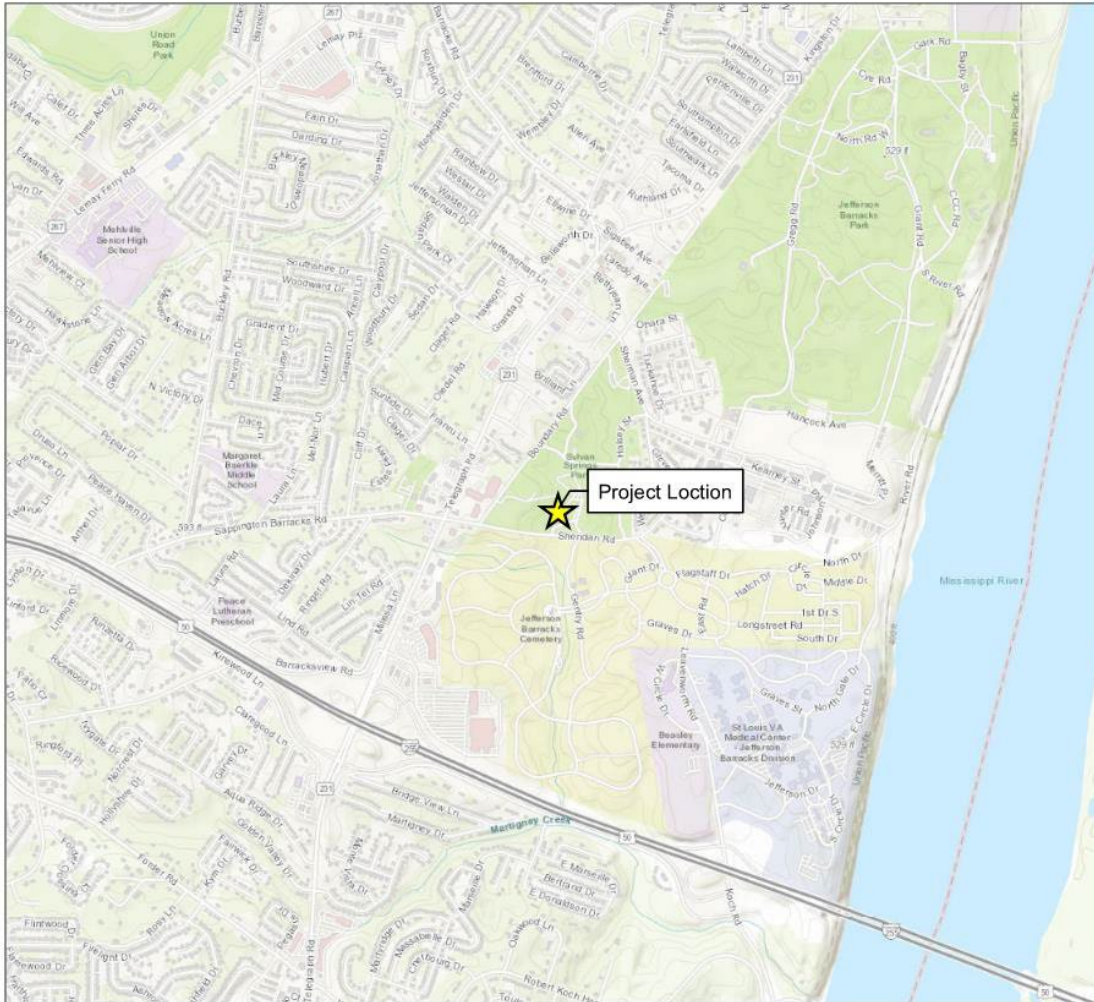
Respectfully,

Patrick Read  
Acting Director, Environmental Program Office  
Office of Construction and Facilities Management



# Jefferson Barracks National Cemetery Expansion St. Louis, Missouri

**Figure A**  
Site Location



## Legend

 Project Location

PID: 29H240021  
Project No: 16449  
Date: 10.18.2022

1 inch = 2,000 feet



**ANDERSON**  
13605 1st Ave N #100, Plymouth, MN 55441  
P 763.412.4000 F 763.412.4090 ae-mn.com

## Project Location



2900 Sheridan Road,  
St. Louis, MO 63125

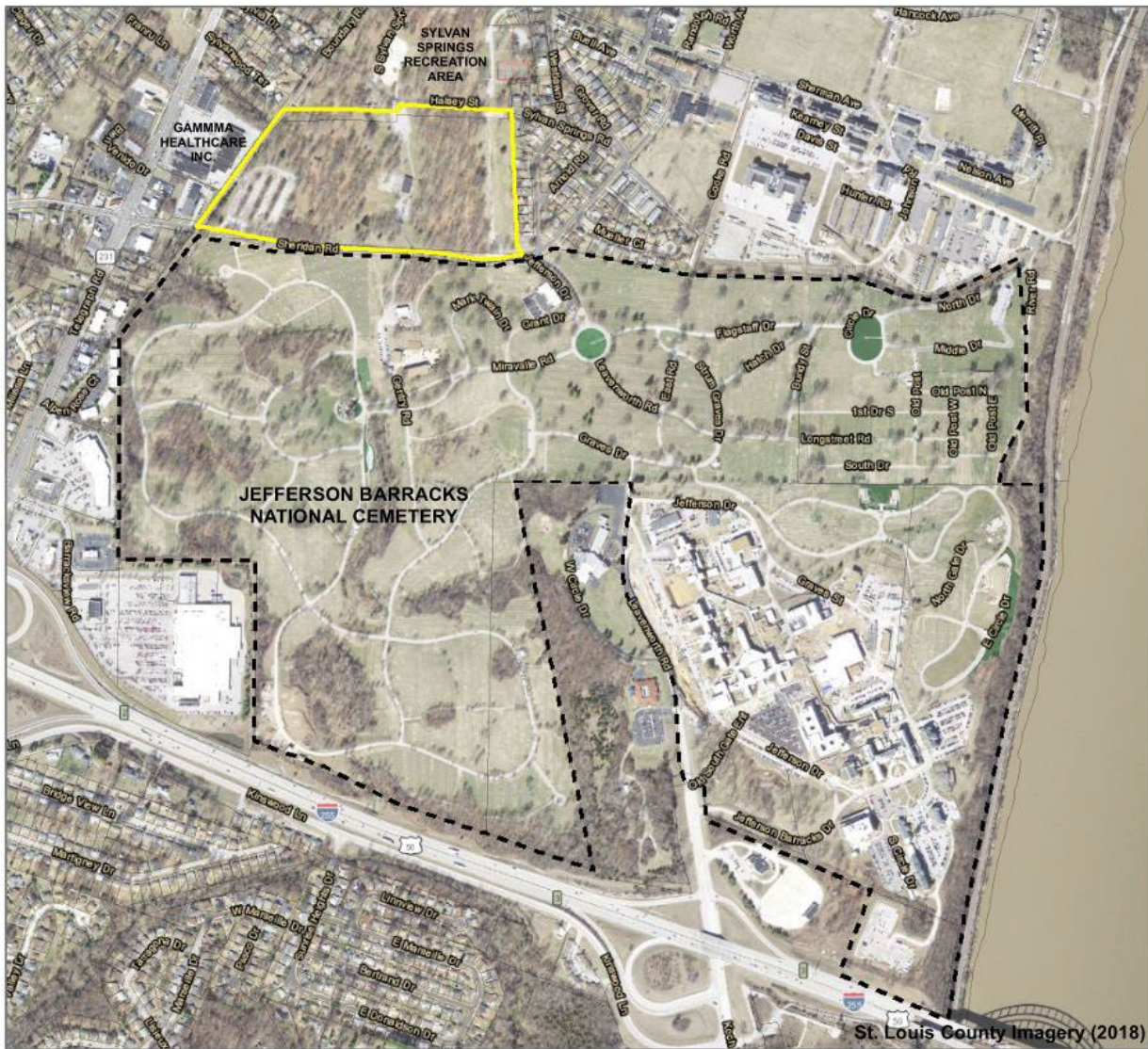
SOURCE: MGNR, USDA, ESRI, TIGER, Bing, St. Louis Co., Anderson Engineering





# Jefferson Barracks National Cemetery Expansion St. Louis, Missouri

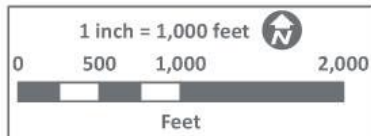
Figure B  
Site Aerial



## Legend

- Existing JBNC Property
- Expansion Property (37.6 Ac.)
- St. Louis Co. Parcels

PID: Multiple  
Project No: 16449  
Date: 10.20.2021



# ANDERSON

13605 1st Ave N #100, Plymouth, MN 55441  
P 763.412.4000 F 763.412.4090 ae-mn.com

## Project Location



2900 Sheridan Road,  
St. Louis, MO 63125

SOURCE: MDNR, USDA, ESRI, TIGER, Bing, St. Louis Co., Anderson Engineering





# ST. LOUIS POST-DISPATCH

## AFFIDAVIT OF PUBLICATION

ANDERSON

13605 1st Ave N, Suite 100

Plymouth, MN 55441

Attn: Joseph Aden

(Affidavit Enclosed)

Ad Number: 111456 PO: Joe Aden Description: NEWSPAPER LEGAL NOTICE OF AVAIL

### NEWSPAPER LEGAL NOTICE OF AVAILABILITY OF DRAFT ENVIRONMENTAL ASSESSMENT

The U. S. Department of Veterans Affairs (VA) announces the availability of the Draft Environmental Assessment (EA) for the Proposed Sylvan Springs Expansion and Columbaria Construction at Jefferson Barracks National Cemetery located at 2900 Sheridan Road, St. Louis, Missouri. The Jefferson Barracks National Cemetery is proposing to expand and develop north onto 37.6-acres of VA-owned land currently leased by St. Louis County and utilized for Sylvan Springs Park. The Draft EA has been prepared in accordance with the regulations for implementing the procedural provisions of the National Environmental Policy Act (NEPA), (Public Law 91-190, 42 USC 4321-4347 January 1, 1970), amendments, and VA's Implementing Regulations (38 CFR Part 26).

The Draft EA is available for public review at both the St. Louis County Library - Cliff Cave Branch located at 5430 Telegraph Road and at the Jefferson Barracks National Cemetery located at 2900 Sheridan Road. The Draft EA is also available on the VA website at <https://www.dlm.va.gov/environmental/index.asp>

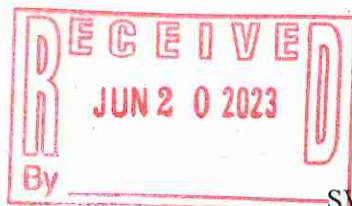
Public comments on the Draft EA should be submitted within 30-days of this published notice via email to [vacoenvironment@va.gov](mailto:vacoenvironment@va.gov) with the subject line "Jefferson Barracks National Cemetery Draft EA". VA will address and incorporate relevant comments in the Final EA.

Comments may also be submitted to VA at the following mailing address:

Department of Veterans Affairs  
Office of Construction & Facility  
Management  
425 I Street, NW  
Washington, DC 20001

THE ATTACHED ADVERTISEMENT WAS PUBLISHED  
In the St. Louis Post-Dispatch on the following date(s): June 9, 11

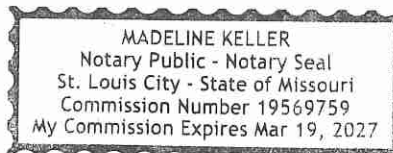
A version of the ad also appeared on STLtoday.com Starting: June 9



*Joe Aden*  
\_\_\_\_\_  
COMPANY REPRESENTATIVE

SWORN TO AND SUBSCRIBED BEFORE ME  
THIS June 15, 2023

*Madeline Keller*  
\_\_\_\_\_  
NOTARY PUBLIC, CITY OF ST. LOUIS



901 N. TENTH ST., ST LOUIS MO 63101

PHONE 314-340-8000



## Osage Nation Historic Preservation Office

W[A][E] KOSY KY] E A

Date: March 17, 2023

National Cemetery Administration  
William Hooker  
Washington, D.C. 20420

**RE: VA, National Cemetery Administration, Jefferson Barracks National Cemetery Proposed Site Expansion (Sylvan Springs) and Improvements, St. Louis County, Missouri (ONHPO#2223-2143MO-10)**

***SENT VIA EMAIL***

Dear Mr. Hooker,

The Osage Nation Historic Preservation Office has received notification and accompanying information for the proposed project listed as VA, National Cemetery Administration, Jefferson Barracks National Cemetery Proposed Site Expansion (Sylvan Springs) and Improvements, St. Louis County, Missouri. **The Osage Nation requests a copy of the Draft Environmental Assessment (EA) for review and comment.**

In accordance with the National Historic Preservation Act, (NHPA) [54 U.S.C. § 300101 et seq.] 1966, undertakings subject to the review process are referred to in 54 U.S.C. § 302706 (a), which clarifies that historic properties may have religious and cultural significance to Indian tribes. Additionally, Section 106 of NHPA requires Federal agencies to consider the effects of their actions on historic properties (36 CFR Part 800) as does the National Environmental Policy Act (43 U.S.C. 4321 and 4331-35 and 40 CFR 1501.7(a) of 1969).

The Osage Nation has a vital interest in protecting its historic and ancestral cultural resources. **The Osage Nation anticipates reviewing and commenting on the Draft Environmental Assessment for the proposed VA, National Cemetery Administration, Jefferson Barracks National Cemetery Proposed Site Expansion (Sylvan Springs) and Improvements, St. Louis County, Missouri.**



Should you have any questions or need any additional information please feel free to contact me at the number listed below. Thank you for consulting with the Osage Nation on this matter.

Andrea A. Hunter, Ph.D.  
Director, Tribal Historic Preservation Officer

Michaela Conway, MA, RPA  
Archaeologist



## Miami Tribe of Oklahoma

3410 P St. NW, Miami, OK 74354 • P.O. Box 1326, Miami, OK 74355  
Ph: (918) 541-1300 • Fax: (918) 542-7260  
[www.miamination.com](http://www.miamination.com)



Via email: [Fernando.Fernandez@va.gov](mailto:Fernando.Fernandez@va.gov)

February 17, 2023

Department of Veterans Affairs (003C2A)  
Fernando Fernandez  
425 I Street NW (6W.317D)  
Washington, DC 20420

Re: Barracks National Cemetery - Sylvan Spring Park, St. Louis County, Missouri – Comments of the Miami Tribe of Oklahoma

Dear Mr. Fernandez:

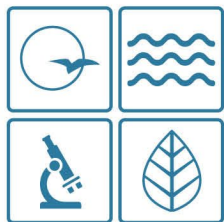
Aya, kweehsitoolaani– I show you respect. The Miami Tribe of Oklahoma, a federally recognized Indian tribe with a Constitution ratified in 1939 under the Oklahoma Indian Welfare Act of 1936, respectfully submits the following comments regarding Barracks National Cemetery - Sylvan Spring Park in St. Louis County, Missouri.

The Miami Tribe offers no objection to the above-referenced project at this time, as we are not currently aware of existing documentation directly linking a specific Miami cultural or historic site to the project site. However, given the Miami Tribe's deep and enduring relationship to its historic lands and cultural property within present-day Missouri, if any human remains or Native American cultural items falling under the Native American Graves Protection and Repatriation Act (NAGPRA) or archaeological evidence is discovered during any phase of this project, the Miami Tribe requests immediate consultation with the entity of jurisdiction for the location of discovery. In such a case, please contact me at 918-541-8966 or by email at [THPO@miamination.com](mailto:THPO@miamination.com) to initiate consultation.

The Miami Tribe accepts the invitation to serve as a consulting party to the proposed project. In my capacity as Tribal Historic Preservation Officer I am the point of contact for consultation.

Respectfully,

Diane Hunter  
Tribal Historic Preservation Officer



**MISSOURI**  
DEPARTMENT OF  
NATURAL RESOURCES

Michael L. Parson  
Governor

Dru Buntin  
Director

March 2, 2023

Patrick Read  
U.S. Department of Veterans Affairs  
Office of Construction and Facilities Management  
Washington DC 20420

Dear Patrick Read:

The Missouri Department of Natural Resources appreciates the opportunity to review the materials for the Proposed Sylvan Springs Expansion and Columbaria Construction at Jefferson Barracks National Cemetery Project. The Department offers the following comments for consideration.

**Project Location**

The proposed project location is approximately 1 mile west from the Missouri River. The area is bound by constraints of the existing Jefferson Barracks National Cemetery on the southern and eastern edge, Halsey Street on the north edge, and Boundary Road in the eastern edge. The following geographic descriptions apply to the approximate location of the study area.

**Geographic Coordinates:**

15S 736076 E, 4265117 N

**Public Land Survey System:**

Landgrant03344

**8-Digit Hydrologic Unit Code:**

Cahokia-Joachim (07140101)

**Ecological Drainage Unit:**

Ozark/Apple/Joachim

**Geology and Geospatial Data**

Please note that information gathered for this review is from various Missouri Geological Survey (MGS) datasets and does not account for data gaps or unforeseen geological hazards. Most information from MGS databases can be viewed using MGS's Geosciences Technical Resource Assessment Tool (GeoSTRAT) located at <http://dnr.mo.gov/geostrat>.

Local water and monitoring well borehole logs show the shallow subsurface geology is categorized as clay/fatty clay. The U.S. Department of Agriculture soil study for the county defines it as the Menfro soil, with textures consisting of silt loam, and silty clay loam. The project area is mapped as St. Louis Limestone (Upper Mississippian, Meramecian), with interspersed pockets of Pennsylvanian Cherokee Group in the west, as shown on the USGS 30' by 40' geologic bedrock quadrangle map.



If a full Geologic Assessment is required for a project, the MGS can be contacted directly at 800-361-4827. Other maps showing natural and cultural resources can be found at <https://dnr.mo.gov/land-geology/maps-data-research>.

#### *Karst Topography*

There are 82 sinkholes and 3 springs near the project area. The project area is located in the Webster Groves quadrangle, which has a cave density of 28. Other geologic hazards include liquefaction and flooding due to its proximity to the Missouri River. Springs, sinkholes, and caves are features on the landscape associated with karst topography that can act as direct conduits of surface water and pollutants to groundwater. As such, extra precaution should be taken to minimize disturbance of land in or around these features, and to avoid the introduction of pollutants to sensitive groundwater resources. Karst areas may also present the possibility of potential collapse.

#### *Wells*

There are 41 abandoned, soil, and other public wells near the project area. Wells can act as conduits of pollutants to groundwater resources. Abandoned wells should be plugged prior to any land disturbance, and care should be taken to utilize appropriate best management practices to protect any currently operating wells. For more information on locating and plugging wells, or on private domestic wells, please visit the link below for the Department's Wellhead Protection Section webpage or contact the Department's Geological Survey Program directly. <https://dnr.mo.gov/water/business-industry-other-entities/permits-certification-engineering-fees/wells-drilling>.

#### *Public Land:*

There are no public lands located near the project area.

#### *Conservation Opportunity Areas:*

There are no Conservation Opportunity Areas (COA's) near the project area. Both terrestrial and aquatic COAs are identified by the Missouri Department of Conservation (MDC) and its conservation partners as priority areas that support and conserve viable populations of wildlife and the ecological systems on which they depend. Designated COAs are located statewide and may consist of a combination of public and private resources. Please contact the MDC at 573-751-4115 for more information.

### **Water Protection**

#### **Best Management Practices**

Best management practices should be utilized during project activities to limit the amount of sediment and other pollutants entering waters of the state, and to protect the water's chemical, physical, and biological characteristics. These practices include, but are not limited to, conducting work during low flow conditions whenever possible, keeping heavy equipment out of the water, and taking all necessary precautions to avoid the release of fuel or other waste products to streams and other waters. In addition, the Department encourages the preservation of existing riparian or buffer areas around each water resource to limit the amount of sediments or other pollutants entering the water. Any stream banks, riparian corridors, lake shores, or wetlands denuded of vegetation should be stabilized and re-vegetated as soon as is practicable.

#### **Watershed Conditions**

##### *Public Drinking Water*

There are no intakes, drinking water wells, or tanks near the project area. Proposed project personnel should be aware of nearby Public Drinking Water Districts. Work associated with any project should take into consideration the protection of surface and groundwater public drinking water supplies, implementing appropriate best management practices as necessary. For additional information regarding



source water protection, please contact Ken Tomlin of the Department's Public Drinking Water Branch at 573-526-0269.

### Designated Uses

#### *Water Bodies with Specific Designated Uses*

The proposed project area is located in the Cahokia-Joachim watershed. Water bodies are assigned specific designated uses according to State of Missouri Water Quality regulations at 10 CSR 20-7.031(2). These waters are protected by numeric water quality criteria outlined in 10 CSR 20-7.031(5) and Table A, as well as general water quality criteria outlined at 10 CSR 20-7.031(4). Designated uses of the nearby rivers and streams include the following:

- Protection and propagation of fish, shellfish and wildlife – warm water habitat (WWH)
- Human health protection (HHP)
- Irrigation (IRR)
- Livestock and wildlife protection (LWP)
- Secondary contact recreation (SCR)
- Whole body contact recreation – Category A (WBC-A)
- Whole body contact recreation – Category B (WBC-B)
- Drinking water supply (DWS)
- Industrial water supply (IND)

#### *Water Bodies without Specific Designated Uses*

Water bodies that are not assigned specific designated uses are still protected by general water quality criteria outlined at 10 CSR 20-7.031(4), and are subject to the acute toxicity criteria of Tables A and B, as well as whole effluent toxicity conditions.

According to the National Wetlands Inventory <https://www.fws.gov/wetlands/>, there is the likelihood of freshwater wetlands and ponds within the riparian corridors of the Mississippi River. This project has the potential to impact wetlands, ponds, and the aforementioned tributaries and headwater streams to be impacted, depending on their proximity to land disturbance activities. Project sponsors should avoid such impacts through alternatives analysis before compensatory mitigation is considered. If wetlands, ponds, headwaters, or tributaries are not directly impacted but are near any land disturbance, project sponsors should take care to protect water quality. While these water bodies are not assigned specific designated uses, they are protected by Missouri's general water quality criteria.

### Sensitive Waters

There are no known sensitive waters in the following categories near project area: Sensitive waters include waters designated for Cold Water Habitat, Outstanding National Resource Waters, Outstanding State Resource Waters, biocriteria reference locations, and losing streams.

#### *Table F, Metropolitan No-Discharge Streams:*

Project personnel should maintain compliance with 10 CSR 20-7.031(7) for any land disturbance activities that are within a Metropolitan No-Discharge stream's watershed. Discharge to metropolitan no-discharge streams is prohibited, except as specifically permitted at 10 CSR 20-7.031(7). These exceptions include uncontaminated cooling water, permitted stormwater discharges in compliance with permit conditions, and excess wet-weather bypasses not interfering with designated uses. Gravois Creek near the project area is a Metropolitan No-Discharge Stream.

*303(d) Impaired and 305(b) Threatened Waters:*

Waters assessed by the Department as threatened or impaired could potentially be impacted by projects. Project personnel should ensure that activities related to the project do not cause an increase in the pollutants impairing these waters nor re-suspend any pollutants that might be bound to sediment. Additional information can be found by contacting the Department's Water Protection Program at 573-526-1446 or by visiting the link below.

<https://dnr.mo.gov/water/what-were-doing/water-planning/quality-standards-impaired-waters-total-maximum-daily-loads/impaired-waters>

Martigney Creek near the Project area is listed as impaired for *E. Coli* from urban runoff/storm sewers.

*Waters with Approved Total Maximum Daily Loads:*

Impairments should not be made worse by this project's activities. The Department staff may require extra protections when developing permits or certifications in order to comply with total maximum daily load and wasteload allocations. Additional information can be found by contacting the Department's Water Protection Program at 573-526-1446 or by visiting the link below.

Gravois Creek near the project area has an EPA-approved Total Maximum Daily Loads (TMDL) for bacteria, and Mississippi River near the project area has an EPA approved TMDL for Chlordane and PCB.

<https://dnr.mo.gov/water/what-were-doing/water-planning/quality-standards-impaired-waters-total-maximum-daily-loads/tmdls>

Permitting Obligations

*Clean Water Act Sections 401 and 404*

A Clean Water Act Section 404 Permit Authorization from the U.S. Army Corps of Engineers (USACE), and Section 401 Water Quality Certification from the Department may be required for projects that have the potential to discharge fill or dredged material into a jurisdictional water of the United States. More information about these permits can be found at the following links. <https://www.epa.gov/cwa-404/section-404-permit-program>

<https://dnr.mo.gov/water/business-industry-other-entities/permits-certification-engineering-fees/section-401-water-quality>

If discharge into water has occurred, or will occur, project personnel should immediately contact the appropriate USACE District (link below) and the Department's Operating Permits Section at 573-522-4502 for more information.

<http://www.mvr.usace.army.mil/Portals/48/docs/regulatory/MORegBound.pdf>

*Mitigation*

An alternatives analysis would need to be submitted prior to any impacts to jurisdictional waters as part of the avoidance and minimization measures that precede mitigating unavoidable impacts.

Mitigation for wetlands should be in conformance with the *Missouri Wetland Mitigation Method*,

[http://www.nwk.usace.army.mil/Portals/29/docs/regulatory/mitigation/2017-11-17\\_MWMM.pdf](http://www.nwk.usace.army.mil/Portals/29/docs/regulatory/mitigation/2017-11-17_MWMM.pdf) while

mitigation for streams should be in conformance with *Missouri Stream Mitigation Method*,

[http://www.mvm.usace.army.mil/Portals/51/docs/regulatory/May\\_2013\\_Missouri\\_Stream\\_Mitigation\\_Method.pdf](http://www.mvm.usace.army.mil/Portals/51/docs/regulatory/May_2013_Missouri_Stream_Mitigation_Method.pdf).

Any mitigation plans must be in conformance with the *Compensatory Mitigation for Losses of Aquatic Resources*, <https://www.epa.gov/cwa-404/compensatory-mitigation>.



This rule establishes a hierarchy for mitigation, with the purchase of credits from a mitigation bank at the top of that hierarchy. The rule also emphasizes in-kind and in-watershed mitigation; to go outside the watershed may result in a higher credit purchase calculation. The applicant should receive mitigation plan approval from the Department prior to certification.

#### *Land Disturbance*

Acquisition of a Section 401 Certification should not be interpreted to mean that the requirements for other permits are replaced or superseded, including Clean Water Act Section 402 National Pollutant Discharge Elimination System Permits. Work disturbing an area of one acre or more requires issuance of a land disturbance permit prior to any earth work. Disturbance to valuable resource waters, including springs, sinkholes and losing streams, could require additional conditions or a site-specific permit.

Information and application for online land disturbance permits are located at <https://dnr.mo.gov/water/business-industry-other-entities/permits-certification-engineering-fees/stormwater/construction-land-disturbance>.

Questions regarding permit requirements may be directed to the appropriate Department Regional Office <https://dnr.mo.gov/about-us/division-environmental-quality/regional-office>.

#### **Demolition and Construction Waste Management**

Additional information on managing construction and demolition waste can be found at the following link <https://dnr.mo.gov/print/document-search/pub2045>.

#### **Hazardous Waste**

Although there does not appear to be documentation with regard to the use of munitions or ordnance at the proposed site, please be aware of a Formerly Used Defense Site (FUDS) adjacent to the Jefferson Barracks Military Installation on the Mississippi River (Former Jefferson Barracks Post Dumping Grounds) that was remediated to address legacy WWI era munitions. Based on this we recommend consultation with the USACE Kansas City District, prior to conducting subsurface construction activities. The USACE point of contact is Matthew Ward 816-389-2382. We also recommend consultation with the environmental staff at the Jefferson Barracks Military Post and the Jefferson Barracks Community Council with regard to historical military use of the Jefferson Barracks Military Post and VA owned property.

Additional information on hazardous waste and petroleum tanks can be found at <https://dnr.mo.gov/waste-recycling/long-term-stewardship-lts/environmental-site-tracking-research-tool-e-start>.

During the project, if any underground tanks or contaminated soil is discovered, workers should withdraw to a safe distance and notify the Department's spill line at 573-634-2436.

It is the generator's responsibility to determine if materials generated during construction and demolition are hazardous wastes. Demolition-related waste categories typically include: paint residue (paint chips, paint scrapings, etc.); demolition debris (metal and boards that have been painted with lead-based or other heavy metal-based paint); and scrap metal (metal objects that contain lead or other heavy metals). A hazardous waste determination is not required for materials that will be reused or recycled without additional processing.

### Asbestos

Prior to demolition activities, regulated structures must be thoroughly inspected by a Missouri-certified asbestos inspector to determine if any Asbestos Containing Materials are present and a notification made to the Department at least 10 working days prior to demolition. Regulated structures include any building which has been used as a commercial, institutional or industrial building (even if it was historic use), and projects involving two or more residential structures. In addition, this includes but is not limited to the following “non-building” structures: bridges, pipelines, cooling towers, chimneys, dams, and tunnels. Any asbestos found must be properly managed to prevent release of asbestos fibers.

### Solid Waste

Information about solid waste uncovered during construction activities can be found at the following link. <https://dnr.mo.gov/document-search/managing-solid-waste-encountered-during-excavation-activities-pub2192/pub2192>.

No waste may be buried on-site or at an alternate site, except for clean fill. Clean fill is defined by the Revised Statutes of Missouri as “uncontaminated soil, rock, sand, gravel, concrete, asphaltic concrete, cinder blocks, brick, minimal amounts of wood and metal and inert (non-reactive) solids for fill, reclamation or other beneficial use.” Clean fill must not contain protruding metals or demolition debris. Although not regulated as waste, placement of clean fill materials may be subject to requirements of the Department’s Water Protection Program if it is placed in contact with surface or subsurface waters of the state, or would otherwise violate water quality standards.

### Air Pollution

#### Dust

Ensure fugitive particulate matter emissions, such as dust, resulting from the project do not remain on surfaces or in the air beyond the property line of origin. 10 CSR 10-6.170 restricts the emission of particulate matter to the ambient air beyond the premises of origin. Additional information on general dust emissions may be found here <https://dnr.mo.gov/print/document-search/pub2200>.

#### Open Burning

The open burning of refuse and trade waste is restricted according to 10 CSR 10-6.045. Construction, demolition, and trade waste cannot be open burned, except for untreated wood. Brush from land clearing activities may be burned if the burning is conducted outside the city limits and greater than 200 yards from the nearest occupied structure. Additional information on open burning can be found at <https://dnr.mo.gov/print/document-search/pub2047>.

According to the St. Louis County Revised Ordinances Title VI Chapter 612.345, St. Louis County prohibits or restricts open burning of any waste material.

### Historic Preservation

Project personnel should check with the Department’s State Historic Preservation Office to determine if a Section 106 Review is needed. Information on the Section 106 Review can be found on the Department’s web site at <https://mostateparks.com/page/84371/state-historic-preservation-office>.

### Additional Considerations

#### Floodplain

For information concerning flood plains in Missouri, contact the Missouri State Emergency Management Agency, Floodplain Management and Mitigation Branch, at 573-526-9100 or 2302 Militia Drive, Jefferson City, MO 65101.

Patrick Read

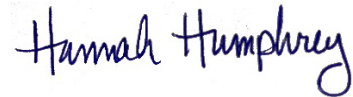
Page 7

Endangered Species

The MDC is responsible for collecting and managing information on the location and status of endangered species in the state. Contact MDC's Endangered Species Coordinator at 573-751-4115 or P.O. Box 180, Jefferson City, MO 65102 for general information.

We appreciate the opportunity to provide comments for the proposed project. If you have any questions or need clarification, please feel free to contact me at 573-522-6211.

Sincerely,

A handwritten signature in blue ink that reads "Hannah Humphrey". The signature is written in a cursive, flowing style.

Hannah Humphrey  
Deputy Director

HH/man

## Missouri Department of Transportation Comments

From: RYAN J PEARCY <[Ryan.Pearcy@modot.mo.gov](mailto:Ryan.Pearcy@modot.mo.gov)>  
Sent: Thursday, June 22, 2023 9:36 AM  
To: VACO Environment <[VACOEnvironment@va.gov](mailto:VACOEnvironment@va.gov)>  
Subject: [EXTERNAL] Opportunity to Comment: Expansion at the Jefferson Barracks National Cemetery

Morning,

Thank you for the opportunity to review and comment on the expansion of the Jefferson Barracks National Cemetery. MoDOT does not have any concerns regarding the expansion as it is currently proposed. If it is deemed necessary to modify the geometrics or signal at the 231 and Sheridan/Sappington Barracks intersection please reach out to the Area Team to work through the review and permit process. Thanks!

Sincerely,

**Ryan J. Percy, P.E.**

Area Engineer

Southwest St. Louis County

(314) 453-5086

M-W-F 7am-3:30pm T-Th 6am-2:30pm



"Our mission is to provide a world-class transportation system that is safe, innovative, reliable and dedicated to a prosperous Missouri."

## United States Environmental Protection Agency Comments

From: Sedlacek, Michael <[Sedlacek.Michael@epa.gov](mailto:Sedlacek.Michael@epa.gov)>  
Sent: Wednesday, July 5, 2023 10:02 AM  
To: VACO Environment <[VACOEnvironment@va.gov](mailto:VACOEnvironment@va.gov)>  
Subject: [EXTERNAL] EPA Comments - Jefferson Barracks National Cemetery Draft EA

Dear Mr. Fernandez:

The U.S. Environmental Protection Agency Region 7 has reviewed the Draft Environmental Assessment for Expansion of the Jefferson Barracks National Cemetery. The following comments were prepared in accordance with our responsibilities under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act.

### Electronic Recordkeeping

In order to comply with the National Archives' electronic records regulations, the EPA Region 7 NEPA Program has set up an inbox to receive future projects. Our email address is: [R7\\_NEPA@epa.gov](mailto:R7_NEPA@epa.gov).

### Climate Change Resiliency

We understand the proposed project will include existing stormwater management features that will continue to drain stormwater within the proposed project's footprint into the local stormwater collection system. We encourage VA to consider installing additional "green" stormwater management features, such as stormwater retention/detention basins, permeable pavement, rain gardens, rainwater cisterns, and/or over-sized culverts and bridges (see: <https://www.epa.gov/green-infrastructure>.)

### Renewable Energy

We recommend, where feasible, installation of renewable energy sources, such as solar panels.

### Consultation Documents

We appreciate VA including consultation records from the Missouri Department of Natural Resources. EPA recommends attaching to the forthcoming NEPA document inter-agency consultation documents regarding historic and cultural resources (Missouri State Historic Preservation Office), wetlands and streams (U.S. Army Corps of Engineers), and Federal threatened and endangered species (U.S. Fish and Wildlife Service).

We appreciate your consideration of our recommendations. These comments are intended to help ensure a thorough assessment of the project's environmental impacts, adequate public disclosure, and an informed decision-making process. If you have any questions concerning our review, please contact Mike Sedlacek at (913) 551-7208 or [sedlacek.michael@epa.gov](mailto:sedlacek.michael@epa.gov).

Sincerely,

Mike Sedlacek

Environmental Scientist

Office of Intergovernmental Affairs

US Environmental Protection Agency, Region 7

11201 Renner Boulevard

Lenexa, Kansas 66219

(913) 551-7208

[Sedlacek.michael@epa.gov](mailto:sedlacek.michael@epa.gov)

## Quapaw Nation Comments

From: Cheyenne Greenup <[cheyenne.greenup@quapawnation.com](mailto:cheyenne.greenup@quapawnation.com)>

Sent: Monday, June 12, 2023 4:12 PM

To: VACO Environment <[VACOEnvironment@va.gov](mailto:VACOEnvironment@va.gov)>

Subject: [EXTERNAL] Notice of Availability for the Draft Environmental Assessment for the Proposed Sylvan Springs Expansion and Columbaria Construction at the Jefferson Barracks National Cemetery

Good afternoon,

Before we send our determination has there been any previous CRS done for the APE?

Thank you,

Cheyenne Greenup

Section 106 Research Coordinator

Quapaw Nation

P.O. Box 765

Quapaw, OK 74363

(W) 918-238-3100

## United States Fish and Wildlife Service Comments

From: Budd, Kris R <[kris\\_budd@fws.gov](mailto:kris_budd@fws.gov)>

Sent: Thursday, June 8, 2023 11:44 AM

To: VACO Environment <[VACOEnvironment@va.gov](mailto:VACOEnvironment@va.gov)>

Subject: [EXTERNAL] Jefferson Barracks National Cemetery Draft EA

Thank you for the opportunity to review the draft EA for the Jefferson Barracks National Cemetery. Please see comments from the USFWS below:

- The Northern Long-eared bat was uplisted to endangered on January 26<sup>th</sup> 2023, (Effective March 31, 2023) and therefore the 4(d) ruling was revoked at that time. Projects using the interim consultation framework would need to be completed by April 1, 2024; otherwise projects will need to proceed through the standard ESA section 7 consultation process for this species .
- 25-acres of tree removal were proposed as part of the IPAC questionnaire. This will likely have impacts to bat species and will require additional consultation.
- To reduce potential impacts to listed bat species (Indiana bat, Northern long-eared bat and Tricolored bat), all tree clearing should be completed during the winter inactive seasons from Nov 1<sup>st</sup> to April 1<sup>st</sup>

Please let me know if you have any questions or concerns.

Thank you,

**Kris Budd, PhD**

Fish and Wildlife Biologist

Missouri Ecological Services

US Fish and Wildlife Service

## Re: [EXTERNAL] Jefferson Barracks National Cemetery Acoustic Survey



Budd, Kris R <[kris\\_budd@fws.gov](mailto:kris_budd@fws.gov)>

To: ○ RYAN ALLEN

Cc: ● Ben Hodapp; ● Wyatt Benton



Reply



Reply All



Forward



Mon 9/11/2023 10:29 AM

If there are problems with how this message is displayed, click here to view it in a web browser.

[EXTERNAL E-MAIL]

Thank you as always for your thorough work Ryan.

Ben and Wyatt,

With Ryan's completed survey, we do not believe impacts to listed species are likely to occur. The U.S. Fish and Wildlife Service has reviewed this project and based on the submitted information does not have any concerns about impacts to species listed under the Endangered Species Act. Should the scope, timing, or manner of activity change, please contact the USFWS Missouri Ecological Services Field office. Please let me know if you have any additional questions or concerns.

**Kris Budd, PhD**

Missouri Ecological Services

US Fish and Wildlife Service

New Phone: 573-507-8924



**MEMORANDUM OF AGREEMENT  
BETWEEN  
THE NATIONAL CEMETERY ADMINISTRATION  
OF THE U.S. DEPARTMENT OF VETERANS AFFAIRS  
AND  
THE MISSOURI STATE HISTORIC PRESERVATION OFFICER  
FOR  
THE EXPANSION OF THE JEFFERSON BARRACKS NATIONAL CEMETERY AT  
2900 SHERIDAN ROAD, ST. LOUIS, ST. LOUIS COUNTY, MISSOURI**

**WHEREAS**, the National Cemetery Administration (NCA) of the U.S. Department of Veterans Affairs (VA) proposes a major construction project at the federally-owned 37.7-acre parcel called the Sylvan Springs expansion located at 2900 Sheridan Road, St. Louis, Missouri (MO). The proposed project will convert the Sylvan Springs Park into burial plots and associated infrastructure for an extension of the Jefferson Barracks National Cemetery (JBNC) north of Sheridan Road. In addition, columbaria will be constructed within the boundaries of the current JBNC as part of the same project (the Undertaking; Attachment A); and

**WHEREAS**, in accordance with 36 CFR § 800.3(a), NCA has determined that the Project is a federal action that meets the definition of an undertaking per 36 CFR § 800.16(y), and is the type of activity that has the potential to cause effects on historic properties, and therefore subject to review under Section 106 of the National Historic Preservation Act (NHPA), as amended, (54 USC Section 306108), and its implementing regulations (36 CFR Part 800 – Protection of Historic Properties); and

**WHEREAS**, a park structure located within the proposed Sylvan Springs expansion of the Jefferson Barracks National Cemetery (JBNC), historically known as the Ordnance Shelter, constructed in 1952, and determined eligible for inclusion on the National Register of Historic Places (NRHP), is proposed for demolition; and

**WHEREAS**, in accordance with 36 CFR § 800.2(c)(1), NCA has consulted with the MO State Historic Preservation Officer (MO SHPO), an office of the MO Department of Natural Resources, MO State Parks Division; and

**WHEREAS**, NCA invited the following federally recognized Indian tribes (Tribes) that might attach religious and cultural significance to historic properties in the city of St. Louis and St. Louis County, pursuant to 36 CFR § 800.4(c)(2), to participate in consultation: Apache Tribe of Oklahoma, Miami Tribe of Oklahoma, Osage Nation, Peoria Tribe of Indians of Oklahoma, Quapaw Tribe of Indians, and the Seneca-Cayuga Nation; and,

**WHEREAS**, the Osage Nation and the Miami Tribe of Oklahoma have elected to participate and are consulting parties, and they are invited signatories to this MOA; and,

1 **WHEREAS**, in accordance with 36 CFR § 800.2(c)(2 through 5), NCA has invited the following to be  
2 consulting parties (CPs): the Landmarks Association of St. Louis and the City of St. Louis Cultural  
3 Resource Office and none have elected to participate; and,  
4

5 **WHEREAS**, in accordance with 36 CFR § 800.2(d), NCA provided the public with information about the  
6 Undertaking and its effects on historic properties and sought comment and public input through postings  
7 February 10-12, 2023, in the local newspaper, the St. Louis Post-Dispatch, and online at STLToday.com  
8 and received no public comments regarding effects to historic properties; and,  
9

10 **WHEREAS**, in accordance with 36 CFR § 800.4(a)(1), NCA, in consultation with the MO SHPO, has  
11 determined the undertaking's area of potential effects (APE) to include the current boundaries of JBNC and  
12 the area of the proposed Sylvan Springs expansion, which is identified in Attachment A; and  
13

14 **WHEREAS**, in accordance with 36 CFR § 800.5(a), NCA has found, and the MO SHPO has concurred,  
15 that the undertaking will have an adverse effect on the Ordnance Shelter, a historic property located within  
16 the project's APE; and,  
17

18 **WHEREAS**, in accordance with 36 CFR § 800.6, NCA has consulted to evaluate alternatives or  
19 modifications to the undertaking that could avoid, minimize, or mitigate adverse effects on historic  
20 properties and has chosen to resolve the adverse effect through mitigation; and,  
21

22 **WHEREAS**, on April 27, 2023, via notification using the Electronic Section 106 Documentation Submittal  
23 System (e106), NCA invited the Advisory Council on Historic Preservation (ACHP) to participate in the  
24 development and execution of this Agreement and the ACHP declined to participate on May 5, 2023; and,  
25

26 **WHEREAS**, NCA, MO SHPO, the Osage Nation, and the Miami Tribe of Oklahoma agree that NCA shall  
27 fulfill its Section 106 responsibilities for the undertaking through the development and implementation of  
28 this memorandum of agreement (MOA) pursuant to 36 CFR § 800.6(b)(2); and,  
29

30 **NOW, THEREFORE**, NCA, MO SHPO, the Osage Nation, and the Miami Tribe of Oklahoma agree that  
31 the undertaking shall be implemented in accordance with the following stipulations in order to take into  
32 account the effect of the undertaking on historic properties.  
33

### 34 **STIPULATIONS**

35  
36 To the extent of its legal authority, NCA will ensure that the following terms are carried out:  
37

#### 38 **I. Applicability**

39 A. NCA is responsible for ensuring implementation of the stipulations in this MOA associated  
40 with the undertaking.

41 B. The Anti-Deficiency Act, 31 U.S.C. 1341, prohibits federal agencies from incurring an  
42 obligation of funds in advance of or in excess of available appropriations. Accordingly, the  
43 parties agree that any requirement for the obligation of funds arising from the terms of this  
44 MOA shall be subject to the availability of appropriated funds for that purpose, and that this

1 agreement shall not be interpreted to require the obligation of funds in violation of the Anti-  
2 Deficiency Act.

## 3 **II. General**

- 4 A. For the purposes of this MOA, the definitions provided in 36 CFR § 800.16(a) through (z) shall  
5 apply.
- 6 B. To the extent required under applicable federal laws and regulations, NCA will make available  
7 to the public documents developed pursuant to this Agreement; provided, however, that to the  
8 extent permitted by applicable law, proprietary information pertaining to the Project shall  
9 remain confidential.
- 10 C. Electronic mail (email) will serve as the official correspondence method for all  
11 communications regarding this Agreement and its provisions. See Attachment B for a list of  
12 contacts and email addresses. Contact information in Attachment B may be updated as needed  
13 without an amendment to this Agreement. It is the responsibility of each signatory to  
14 immediately inform NCA of any change in name, address, email address, or phone number of  
15 any point-of-contact. NCA will forward this information to all signatories by email. Failure of  
16 any party to this Agreement to notify NCA of any change to a point-of-contact's information  
17 shall not be grounds for asserting that notice of a proposed action was not received.
- 18 D. All standard response timeframes established by 36 CFR Part 800 will apply to this Agreement,  
19 unless an alternative response timeframe is agreed to by the Signatory parties and/or MO SHPO  
20 on a case-by-case basis, as applicable.
- 21 E. All time designations will be in calendar days. If any party does not comment within the agreed  
22 upon timeframes, NCA may assume that party's concurrence with NCA's determination, and  
23 will notify all consulting parties of the action and proceed in accordance with this Agreement.

## 24 **III. Standards**

25 NCA shall ensure that federal or contractor staff who meet the applicable Secretary of the  
26 Interior's *Professional Qualification Standards* for architectural history, history, archeology,  
27 architecture, and historic architecture (36 CFR § 61), participate in the review and  
28 implementation of the measures required as part of this MOA. In addition, where individual  
29 reviews are performed and require adherence to the *Professional Qualifications Standards*, NCA  
30 shall ensure that a staff member or contractor who meets the appropriate standard is included in  
31 the demolition process.  
32  
33  
34  
35

## 36 **IV. Resolution of Adverse Effects**

37 NCA shall ensure that the following measures are carried out prior to demolition of the Ordnance  
38 Shelter:  
39  
40

- 41 A. HABS LEVEL II DOCUMENTATION: Prior to its demolition, NCA will document the  
42 Ordnance Shelter at JBNC, in accordance with HABS Level II Documentation. The HABS



Documents shall be prepared by personnel whose qualifications satisfy the applicable standards set forth in Stipulation II above. HABS documentation is intended to adequately illustrate what is significant or valuable about the historic building and is produced in archivally stable format, to be made available to future researchers. Within a period of 120 days after this Agreement is fully executed, NCA will complete the HABS Level II documentation package "HABS Documents" which includes:

1. Historical Report - following the updated Guidelines for Historical Reports found at <https://www.nps.gov/hdp/standards/HABS/HABSHistoryGuidelines.pdf>
2. Drawings - reproduction of existing architectural drawings on archival bond (instead of mylar).
3. Photographs – according to the HABS/HAER/HALS Photography guidelines, November 2011 and updated June 2015 found at <https://www.nps.gov/hdp/standards/PhotoGuidelines.pdf>.

- B. REVIEW AND APPROVAL: Prior to demolition of the Ordnance Shelter, NCA will submit the HABS Level II documentation in draft form to the MO SHPO for review. NCA will take any timely comments into consideration in preparation of the final documentation. NCA will distribute final and approved HABS Level II documentation in paper and digital form to the MO SHPO.

## V. Unanticipated Discoveries and Effects

- A. The following language shall be included in demolition plans and specifications related to the removal of the Ordnance Shelter:

*When a previously unidentified cultural resource, including but not limited to archeological sites, standing structures, and properties of traditional religious and cultural significance to Tribes, is discovered during the execution of an Undertaking, NCA shall immediately secure the vicinity, make a reasonable effort to avoid or minimize harm to the resource, and notify consulting parties of the discovery as applicable. All activities shall cease within a minimum of 50 feet from the inadvertent discovery (50-foot radius "no work" buffer) until restart is authorized by NCA.*

- B. During demolition activities, should inadvertent or unknown archaeological resources be discovered, or unanticipated effects identified, work in the impacted area shall cease and an archaeologist meeting the SOI *Professional Qualification Standards* (Federal Register Volume 61, No. 119, pg. 33713, 33719, 1977) (SOI qualified archaeologist) will evaluate the finding.
1. If the archeologist recommends the cultural resource is not eligible for the NRHP, nor is it significant as a traditional religious and cultural property, then the suspension of work will end.

2. If the archeologist recommends the cultural resource is potentially eligible or eligible to the NRHP, or it is significant as a traditional religious and cultural property, NCA will consult with tribes and the MO SHPO per Stipulation IV.D below.

C. NCA shall implement any additional reasonable measures necessary to avoid or minimize effects to the resource. Any previously unidentified cultural resource will be treated as though it is eligible for the NRHP until such other determination may be made.

D. NCA shall immediately notify the MO SHPO and Consulting Tribes, if applicable, within 24 hours of the finding and request consultation to resolve potential adverse effects.

1. If MO SHPO and Consulting Tribes, if applicable, agree that the cultural resource is not eligible for the NRHP, then the suspension of work will end.

2. If MO SHPO and Consulting Tribes, if applicable, agree that the cultural resource is eligible for the NRHP, then the suspension of work will continue, and the NCA, in consultation with MO SHPO and Consulting Tribes, will determine actions to avoid, minimize, or mitigate adverse effects to the historic property and will ensure that the appropriate actions are carried out.

E. If NCA, the MO SHPO, and Consulting Tribes cannot agree on an appropriate course of action to address an unanticipated discovery or effects situation, then NCA shall initiate the dispute resolution process set forth in Stipulation IX.

## **VI. Discovery of Human Remains**

A. If human remains are discovered, NCA will contact the local police department and coroner to determine if the location is a crime scene or of modern forensic context. If the local police department determines the discovery is a crime scene or of modern forensic context, investigation of the discovery as such will supersede its treatment as a historic property, but such treatment will resume, if applicable once police investigation has been completed.

B. If the local police department determines that the discovery is not a crime scene and NCA, in consultation with VA's FPO and the MO SHPO, determines the human remains, funerary objects, sacred objects, or objects of cultural patrimony are Native American or based on the preponderance of evidence are likely to be Native American, NCA will comply with the Native American Graves Protection and Repatriation Act (NAGPRA) and its implementing regulations.

## **VII. Duration**

This MOA will expire if its terms are not carried out within ten (10) years from the date of its execution. Prior to such time, NCA may consult with the other signatories to reconsider the terms of the MOA and amend it in accordance with Stipulation X below.

## **VIII. Monitoring and Reporting**

1 Each year following the execution of this MOA, until it expires or is terminated, NCA shall provide  
2 all parties to this MOA a summary report detailing work undertaken pursuant to its terms. Such  
3 report shall include any scheduling changes proposed, any problems encountered, and any disputes  
4 and objections received in the NCA's efforts to carry out the terms of this MOA.

## 5 6 **IX. Dispute Resolution**

7  
8 Should any signatory or invited signatory to this MOA object at any time to any actions proposed  
9 or the manner in which the terms of this MOA are implemented, NCA shall consult with such party  
10 to resolve the objection. If NCA determines that such objection cannot be resolved, NCA will:

11  
12 A. Forward all documentation relevant to the dispute, including NCA's proposed resolution, to  
13 the ACHP. The ACHP shall provide NCA with its advice on the resolution of the objection  
14 within thirty (30) days of receiving adequate documentation. Prior to reaching a final decision  
15 on the dispute, NCA shall prepare a written response that takes into account any timely advice  
16 or comments regarding the dispute from the ACHP, signatories and invited signatories and  
17 provide them with a copy of this written response. NCA will then proceed according to its final  
18 decision.

19  
20 B. If the ACHP does not provide its advice regarding the dispute within the thirty (30) day period,  
21 NCA may make a final decision on the dispute and proceed accordingly. Prior to reaching such  
22 a final decision, NCA shall prepare a written response that takes into account any timely  
23 comments regarding the dispute from the signatories and invited signatories to the MOA and  
24 provide them and the ACHP with a copy of such written response.

25  
26 C. NCA's responsibility to carry out all other actions subject to the terms of this MOA that are  
27 not the subject of the dispute remain unchanged.

## 28 29 **X. Amendments**

30  
31 This MOA may be amended when such an amendment is agreed to in writing by all signatories.  
32 The amendment will be effective on the date a copy signed by all of the signatories is filed with the  
33 ACHP.

## 34 35 **XI. Termination**

36  
37 A. If NCA determines that it cannot implement the terms of this MOA, or if the MO SHPO or  
38 invited signatories determine that this MOA is not being properly implemented, a signatory  
39 or invited signatory may propose to the other parties that this MOA be terminated

40  
41 B. The party proposing termination shall so notify the other signatory or invited signatories to  
42 this MOA explaining the reasons for termination and affording at least thirty (30) days to  
43 consult and seek an alternative to termination.  
44

1 C. Should such consultation fail, and the MOA is terminated, NCA shall notify all consulting  
2 parties and shall either consult to develop a new agreement, in accordance with 36 CFR §  
3 800.6 or request the comments of ACHP under 36 CFR § 800.7(a).  
4

5 **EXECUTION AND IMPLEMENTATION** of this MOA and implementation of its terms evidence  
6 NCA has taken into account the effects of this undertaking on historic properties and afforded the ACHP  
7 an opportunity to comment. NCA will submit a copy of the executed MOA to the ACHP prior to  
8 approving the undertaking in accordance with 36 CFR § 800.6(b)(1)(iv).  
9  
10  
11  
12

1                                   **MEMORANDUM OF AGREEMENT**  
2                                   **BETWEEN**  
3                                   **THE NATIONAL CEMETERY ADMINISTRATION**  
4                                   **OF THE U.S. DEPARTMENT OF VETERANS AFFAIRS**

5                                   **AND**  
6                                   **THE MISSOURI STATE HISTORIC PRESERVATION OFFICER**  
7                                   **FOR**  
8                                   **THE EXPANSION OF THE JEFFERSON BARRACKS NATIONAL CEMETERY AT**  
9                                   **2900 SHERIDAN ROAD, ST. LOUIS, ST. LOUIS COUNTY, MISSOURI**

10  
11 **SIGNATORY:**

12  
13 **U.S. Department of Veterans Affairs, National Cemetery Administration**

14  
15 **MARTY**  
16  
17 **FURY**

Digitally signed by  
MARTY FURY  
Date: 2023.07.28  
09:19:42 -05'00'

Date

20 **Marty A. Fury / Executive Director, Jefferson Barracks National Cemetery**  
21  
22  
23

1                                   **MEMORANDUM OF AGREEMENT**  
2                                   **BETWEEN**  
3                                   **THE NATIONAL CEMETERY ADMINISTRATION**  
4                                   **OF THE U.S. DEPARTMENT OF VETERANS AFFAIRS**  
5                                   **AND**  
6                                   **THE MISSOURI STATE HISTORIC PRESERVATION OFFICER**  
7                                   **FOR**  
8                                   **THE EXPANSION OF THE JEFFERSON BARRACKS NATIONAL CEMETERY AT**  
9                                   **2900 SHERIDAN ROAD, ST. LOUIS, ST. LOUIS COUNTY, MISSOURI**

10  
11 **SIGNATORY:**

12  
13 **Missouri State Historic Preservation Officer**  
14  
15  
16  
17  
18



19 \_\_\_\_\_ 07/27/2023 \_\_\_\_\_ Date  
20 **Brian Stith / Deputy Missouri State Historic Preservation Officer**  
21  
22  
23  
24  
25  
26

**MEMORANDUM OF AGREEMENT  
BETWEEN  
THE NATIONAL CEMETERY ADMINISTRATION  
OF THE U.S. DEPARTMENT OF VETERANS AFFAIRS  
AND  
THE MISSOURI STATE HISTORIC PRESERVATION OFFICER  
FOR  
THE EXPANSION OF THE JEFFERSON BARRACKS NATIONAL CEMETERY AT  
2900 SHERIDAN ROAD, ST. LOUIS, ST. LOUIS COUNTY, MISSOURI**

**INVITED SIGNATORY:**

## Osage Nation

Date \_\_\_\_\_

**Geoffrey Standing Bear / Principal Chief**

**MEMORANDUM OF AGREEMENT  
BETWEEN  
THE NATIONAL CEMETERY ADMINISTRATION  
OF THE U.S. DEPARTMENT OF VETERANS AFFAIRS  
AND  
THE MISSOURI STATE HISTORIC PRESERVATION OFFICER  
FOR  
THE EXPANSION OF THE JEFFERSON BARRACKS NATIONAL CEMETERY AT  
2900 SHERIDAN ROAD, ST. LOUIS, ST. LOUIS COUNTY, MISSOURI**

**INVITED SIGNATORY:**

## Miami Tribe of Oklahoma

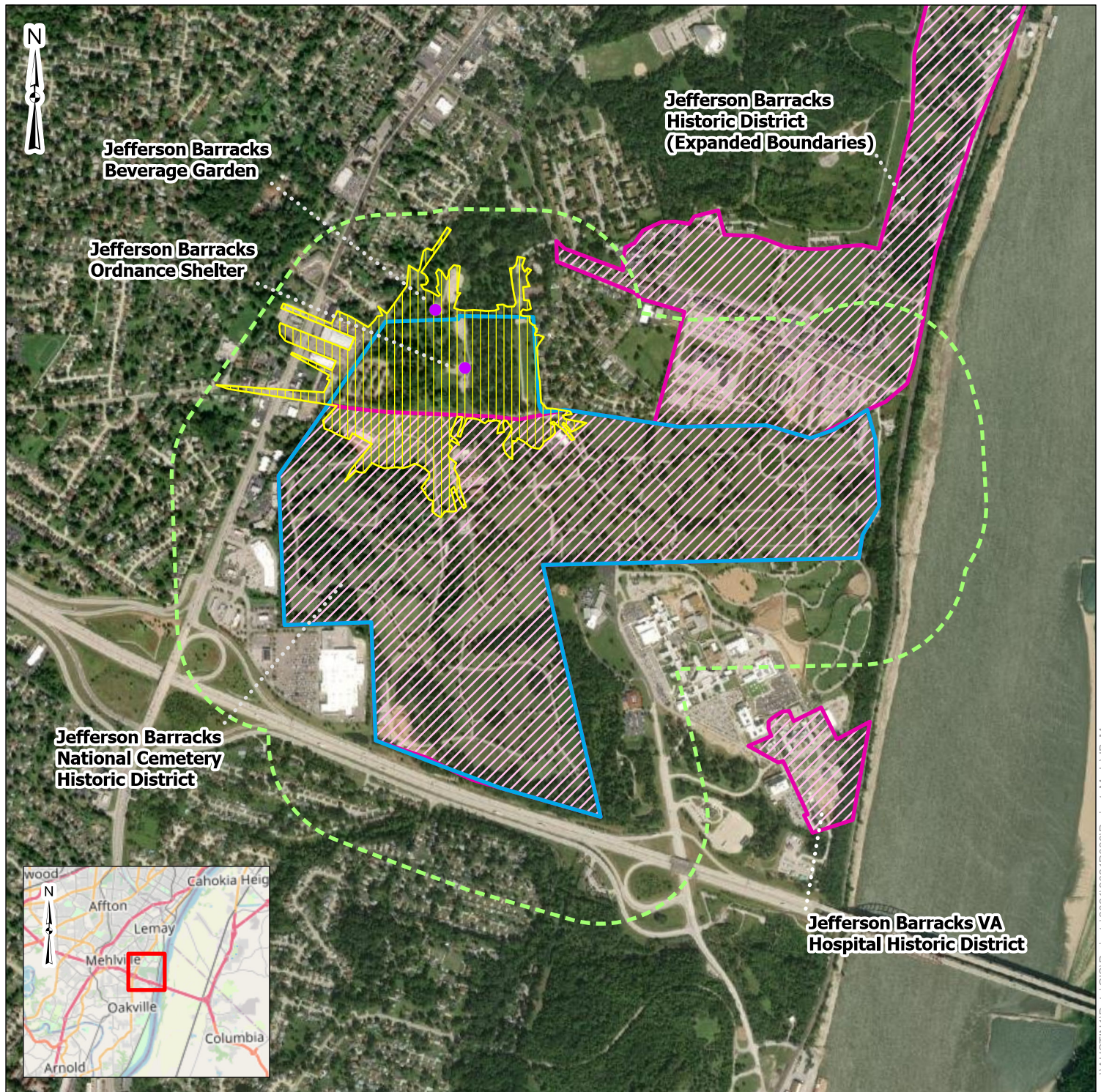
\_\_\_\_\_  
Date  
**Diane Hunter / Tribal Historic Preservation Officer**



1  
2  
3  
4

**ATTACHMENT A**

Map illustrating Area of Potential Effects



## Legend

- NRHP Eligible (Individual)
- Project APE
- Viewshed
- Parcel boundaries
- NRHP Listed Properties (Historic District)

Feet  
0 500 1,000 2,000

DATA SOURCES:  
FEMA - National Flood Hazard Layer  
ESRI WMS - World Aerial Imagery, OpenStreetMap

Project No.:	9621P099
Date:	Oct 2022
Drawn By:	SEV
Reviewed By:	JDH

# Terracon

5307 Industrial Oaks Blvd, Ste. 160 Austin, TX 78735  
(512) 442 1122 terracon.com

## Area of Potential Effects

Section 106 Coordination  
Jefferson Barracks National Cemetery  
2900 Sheridan Road  
St. Louis, MO 63125

1 ATTACHMENT B

2  
3  
4 CONTACT INFORMATION FOR SIGNATORIES

5  
6 SIGNATORIES:

7  
8 U.S. Department of Veterans Affairs

9 Marty A. Fury

10 Executive Director

11 Jefferson Barracks National Cemetery

12 2900 Sheridan Road

13 St. Louis, MO 63125

14 Office: 314-845-8320

15 Cell: 314-793-0089

16 [Marty.Fury@va.gov](mailto:Marty.Fury@va.gov)

17  
18  
19 Missouri State Historic Preservation Officer

20 Brian Stith, Deputy Missouri State Historic Preservation Officer

21 State Historic Preservation Office

22 P.O. Box 176

23 Jefferson City, Missouri 65102

24 573-751-9392

25 [brian.stith@dnr.mo.gov](mailto:brian.stith@dnr.mo.gov)

26  
27  
28  
29 INVITED SIGNATORIES:

30  
31 Osage Nation

32 Dr. Andrea A. Hunter, Director

33 Tribal Historic Preservation Officer

34 Historic Preservation Office

35 100 W. Main

36 Pawhuska, Oklahoma 74056

37 918-287-5328

38 [ahunter@osagenation-nsn.gov](mailto:ahunter@osagenation-nsn.gov)

39  
40  
41 Miami Tribe of Oklahoma

42 Diane Hunter, Tribal Historic Preservation Officer

43 Historic Preservation Office

44 3410 P. Street NW

45 Miami, Oklahoma 74354

46 918-541-8966

47 [dhunter@miamination.com](mailto:dhunter@miamination.com)