
FINAL ENVIRONMENTAL ASSESSMENT

OHIO WESTERN RESERVE NATIONAL CEMETERY PHASE 4 GRAVESITE DEVELOPMENT, CEMTERY IMPROVEMENTS, AND MASTER PLANNING MEDINA COUNTY, OHIO



U.S. DEPARTMENT OF VETERANS AFFAIRS
OFFICE OF CONSTRUCTION AND FACILITIES MANAGEMENT
425 I STREET, NW
WASHINGTON, DC 20001

October 7, 2024

EXECUTIVE SUMMARY

This Final Environmental Assessment (EA) is 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 U.S. Department of Veterans Affairs (VA) has prepared this Final EA to analyze the potential environmental impacts associated with the Proposed Action: Phase 4 Gravesite Development and Cemetery Improvements Project and Master Planning at the Ohio Western Reserve National Cemetery (OWRNC) located at 10175 Rawiga Road in Seville, Medina County, Ohio. VA National Cemetery Administration (NCA) operates the existing OWRNC. The OWRNC is the second national cemetery built in Ohio and the 119th in the national cemetery system.

Purpose and Need

The purpose of the Proposed Action is to develop additional gravesites, make improvements to the existing cemetery, and master plan for future expansions in order to provide additional burial sites for eligible individuals once the existing OWRNC is at capacity. The Proposed Action would allow VA to continue to provide interment options for eligible Veterans in the region.

The need for the Proposed Action is to address the projected depletion of remaining interment capacity at OWRNC, in addition to providing necessary improvements to the existing cemetery and planning for future expansions. The Proposed Action would provide VA additional capacity to meet its burial objectives for eligible Veterans in the region. Currently, OWRNC has capacity for new interments through the construction of the proposed Phase 4 project.

Alternatives

This EA examines two alternatives, the Proposed Action Alternative, and the No Action Alternative, defined as follows:

Proposed Action Alternative

The Proposed Action would develop additional gravesites and make improvements to the existing cemetery in Phase 4, in addition to master planning the rest of the VA owned land for future phased expansion and improvements. The Proposed Action is needed to continue to provide accessible interment services to Veterans and their families and maintain the existing Ohio Western Reserve National Cemetery.

No Action Alternative

Under the No Action Alternative, the Proposed Action would not be implemented. Veterans and their families in the region would continue to use the OWRNC until interment options are no longer available. In the future, VA would likely seek other land to expand the OWRNC but may not be able to acquire the land contiguous with or near the existing OWRNC. The No Action Alternative would not enable VA to provide adequate, cemetery facilities in the region when OWRNC reaches interment capacity. However, the No Action Alternative is assessed in this EA to provide a comparative baseline analysis, as required under the Council on Environmental Quality (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
Aesthetics	<ul style="list-style-type: none"> Minor temporary adverse impacts during construction. 	<ul style="list-style-type: none"> No Impacts.
Air Quality	<ul style="list-style-type: none"> Minor temporary adverse impacts during construction. 	<ul style="list-style-type: none"> No Impacts.
Cultural Resources	<ul style="list-style-type: none"> No Impacts. 	<ul style="list-style-type: none"> No Impacts.
Geology, Topography, and Soils	<ul style="list-style-type: none"> Utilize recommendations from Geotechnical Report to avoid adverse impacts to soils. No adverse impacts anticipated if BMPs and recommendations are followed. 	<ul style="list-style-type: none"> No Impacts.
Hydrology and Water Quality	<ul style="list-style-type: none"> Implement BMPs to limit adverse impacts during construction related to soil erosion and sedimentation. Designed stormwater features and systems will be utilized to avoid impacts to downstream water resources. 	<ul style="list-style-type: none"> No Impacts.
Wildlife and Habitat	<ul style="list-style-type: none"> Minor, less than significant adverse impacts to wildlife. Utilize BMPs from USFWS and ODNR. 	<ul style="list-style-type: none"> No Impacts.
Noise	<ul style="list-style-type: none"> Minor temporary adverse impacts during construction. Minor adverse impacts from traffic, site maintenance, and burial gun salutes similar to existing conditions at existing OWRNC. 	<ul style="list-style-type: none"> No Impacts.
Land Use	<ul style="list-style-type: none"> No impacts to Phase 4 expansion. Minor impacts from master planning future phases in the agricultural field to the east and Rawiga Golf Club to the south. 	<ul style="list-style-type: none"> No Impacts.
Floodplains, Wetlands, Coastal Zone Management	<ul style="list-style-type: none"> Minor, less than significant impacts to floodplain around Tommy Run where bank stabilization will occur. Potential long-term benefits to Tommy Run from bank stabilization and erosion prevention. 	<ul style="list-style-type: none"> No Impacts.
Socioeconomics	<ul style="list-style-type: none"> Positive beneficial impact to regional economy via design, construction, and maintenance jobs. 	<ul style="list-style-type: none"> No Impacts.
Community Services	<ul style="list-style-type: none"> No impacts. 	<ul style="list-style-type: none"> No Impacts.
Solid Waste and Hazardous Materials	<ul style="list-style-type: none"> Potential minor temporary adverse impacts during construction. Mitigation via BMPs in Section 4.0 to lessen impacts. 	<ul style="list-style-type: none"> No Impacts.
Transportation and Parking	<ul style="list-style-type: none"> Temporary adverse impacts during construction as vehicles and equipment go to and from the site. Minor increases anticipated during operation of cemetery, but existing roadways have capacity to handle additional traffic. All parking would be designed for the expansion to accommodate additional visitors. 	<ul style="list-style-type: none"> No Impacts.
Utilities	<ul style="list-style-type: none"> No impacts. 	<ul style="list-style-type: none"> No Impacts.
Environmental Justice	<ul style="list-style-type: none"> No impacts. 	<ul style="list-style-type: none"> No Impacts.
Cumulative Impacts	<ul style="list-style-type: none"> No impacts. 	<ul style="list-style-type: none"> No Impacts.

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, and again during the posting of the Draft EA. A scoping notice was posted to the VA website and published in the Medina Gazette on February 17 and 20, 2024. The Public Draft EA was posted to the VA website and Notice of Availability (NOA) letters sent on July 11, 2024. The NOA was posted to the Medina Gazette on July 13 and 16, 2024. Additional details can be found in **Section 5.0 Public Involvement**.

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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
AQCR	Air Quality Control Region
AQI	Air Quality Index
ARPA	Archeological Resource Protection Act
AST	Above Ground Storage Tank
ASTM	American Society for Testing and Materials
BCC	Birds of Conservation Concern
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
CWA	Clean Water Act
dBA	a-Weighted Decibel
DoAQ	Department of Air Quality
DOT	Department of Transportation
DOW	Division of Wildlife
DPM	Diesel Particulate Matters
EA	Environmental Assessment
EPA	Environmental Protection Agency
ESA	Environmental Site Assessment
FONSI	Finding of No Significant Impacts
FPPA	Farmland Protection Policy Act
GHG	Greenhouse Gas
GSV	Ground Surface Visibility
HAP	Hazardous Air Pollutant
HUC	Hydrological Unit Code
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
MC	Moisture Content
MOA	Memorandum of Agreement
NAAQS	National Ambient Air Quality Standards
NAGPRA	Native American Grave Protection and Reparation Act
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NLEB	Northern Long Eared Bat

NOAA	National Oceanic and Atmospheric Association
NOA	Notice of Availability
NOx	Nitrogen Oxides
NPDES	National Pollutant Discharge Elimination System
NPS	National Park Service
NRCA	Natural Resource Conservation Act
NRCS	Natural Resource Conservation Service
NRHP	National Registry of Historic Places
NWI	National Wetland Inventory
O & M	Natural Resource Conservation Service
O3	Ozone
ODNR	Ohio Department of Natural Resources
ODOT	Ohio Department of Transportation
OGS	Ohio Genealogical Cemetery
OSHA	Occupational Safety and Health Administration
OVAI	Ohio Valley Archaeological, Inc.
OWRNC	Ohio Western Reserve National Cemetery
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
SMARS	Site Management Reporting System
SO2	Sulfur Dioxide
SPCC	Spill Prevention Control and Countermeasures
SPT	Standard Penetration Testing
SWPPP	Stormwater Pollution and Prevention Plan
TDAT	Tribal Directory Assessment Tool
TMDL	Total Maximum Daily Load
TRI	Toxic Release Inventory
USACE	United States Army Corp of Engineers
USC	United States Code
USDA	United States Department of Agriculture
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
UST	Underground Storage Tank
URA	Uniform Relocation Act
VA	Veterans Affairs
VISN	Veterans Integrated Service Network

1.0 INTRODUCTION

The U.S. Department of Veterans Affairs (VA) National Cemetery Administration (NCA) honors Veterans and their families with final resting places in national shrines and with lasting tributes that commemorate their service and sacrifice to the nation. VA operates 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 U.S. Department of Veterans Affairs (VA) has prepared this Final EA to analyze the potential environmental impacts associated with the Proposed Action: Phase 4 Gravesite Development and Cemetery Improvements Project and Master Planning at the Ohio Western Reserve National Cemetery (OWRNC) located at 10175 Rawiga Road in Seville, Medina County, Ohio. VA National Cemetery Administration (NCA) operates the existing OWRNC. The OWRNC is the second national cemetery built in Ohio and the 119th in the national cemetery system.

1.2 Purpose and Need

The purpose of the Proposed Action is to develop additional gravesites, make improvements to the existing cemetery, and master plan for future expansions in order to provide additional burial sites for eligible individuals once the existing OWRNC is at capacity. The Proposed Action would allow VA to continue to provide interment options for eligible Veterans in the region.

The need for the Proposed Action is to address the projected depletion of remaining interment capacity at OWRNC, in addition to providing necessary improvements to the existing cemetery and planning for future expansions. The Proposed Action would provide VA additional capacity to meet its burial objectives for eligible Veterans in the region. Currently, OWRNC has capacity for new interments through the construction of the proposed Phase 4 project.

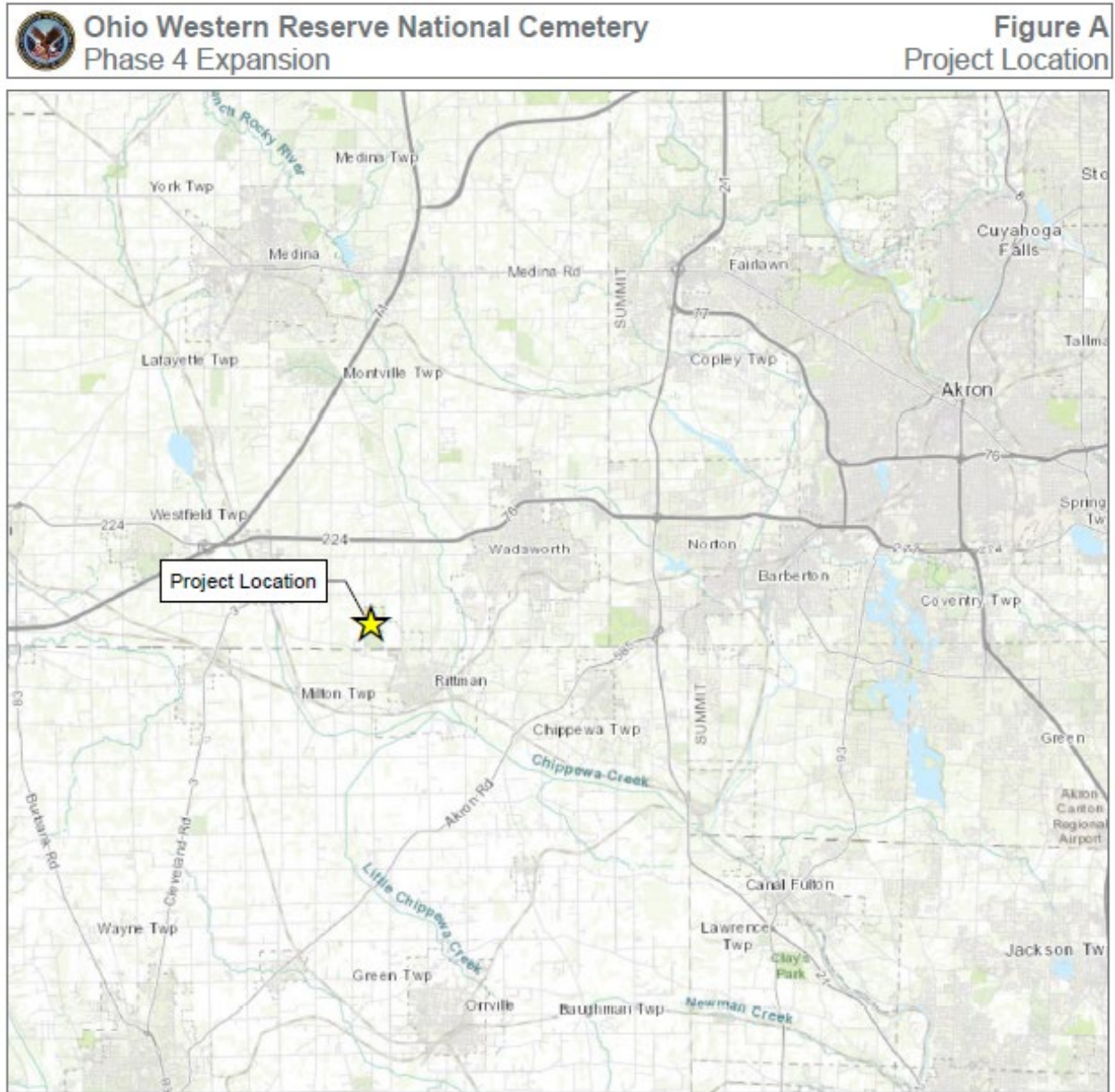
1.3 Decision Making

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.

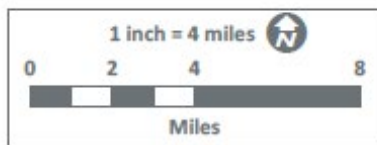
This NEPA process includes identifying the actions that the government would commit to undertake to minimize environmental effects, as required under NEPA, the CEQ regulations, VA's NCA Facilities Design Guide, Title 38 CFR– §39.60 General Requirements for Site Selection and Construction of Veterans 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.



Legend

★ Project Location

Address: 10175 Rawiga Rd
 Seville, OH 44273
Lat/Long: 40.99906, -81.81197
PID: Multiple
Project No: 17477
Date: 10.4.2023



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

Project Location

Rittman City
 Medina County, OH

SOURCE: XX DNR, USDA, ESRI, THIER, Bing, JOCKEE Co., Anderson Engineering

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.

Ohio Western Reserve National Cemetery is the second national cemetery built in Ohio and the 119th in the national cemetery system. Burial operations began on June 19th, 2000, and has served as a burial place for members of all branches of the armed forces. Currently, there are more than one million veterans living in the State of Ohio and approximately 540,000 residing in the cemetery's service area. The first two phases of construction, covering 65 acres of the 273-acre cemetery, include 21,000 gravesites, 10,100 columbaria niches and 3,800 inground garden niches for cremated remains. Phase 3 is undergoing construction through the Spring of 2024.

Ohio Western Reserve National Cemetery lies approximately 45 miles south of Cleveland in Medina County near the town of Seville. The cemetery's name refers to the part of the Northwest Territory formerly known as the Connecticut Western Reserve, a tract of land in Northeast Ohio reserved by the State of Connecticut when it ceded its claims for western lands to the U.S. government in 1786. In October 2022, the VA purchased Rawiga Golf Club to the south adding roughly 150 acres to the cemetery for a total of approximately 423 acres. Official cemetery use of the Golf Club will not begin for another 10-15 years or when the land becomes needed.

The Ohio Western Reserve National Cemetery is a VA owned 273-acre parcel that will be utilized to provide additional interment areas for the cemetery. The property is bound to the west Rawiga Road (CR 133), to the east by Acme Road (CR 100), and to the North and South by private property.

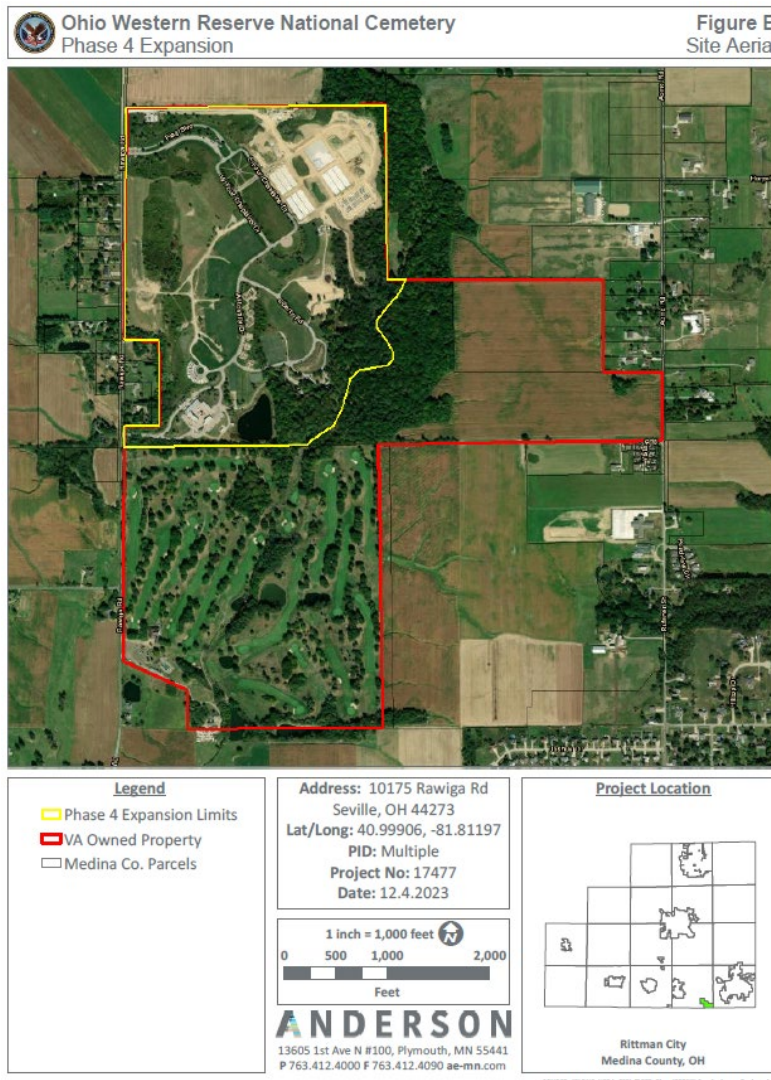
The NCA Final Land Acquisition Fact Sheet, dated April 2012, states adjacent/contiguous property is considered to be the first and best option for cemetery expansion. National Cemetery expansion onto adjacent land is the most cost effective and operationally efficient manner to expand an existing National 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.

2.1 Proposed Action Alternative

The proposed Phase 4 Gravesite Development and Cemetery Improvements (Proposed Action) will include development of the remaining usable land within the current cemetery extents (between Rawiga Rd and Tommy Run). The Proposed Action would develop 6,555 pre-placed crypts, 5,100 in-ground cremain sites, 417 traditional burial sites, and 10,422 columbarium niches. The Proposed Action is expected to contain site elements consistent with the existing cemetery including vehicle and pedestrian pavements, burial sites, columbaria courts, irrigation, storm sewer, and other site infrastructure included but not limited to utilities, roads, signage, and site furnishing. Phase 4 will also include bank stabilization along portions of Tommy Run. The Proposed Action also includes the Master Planning for future phases of expansion onto VA owned lands east of Tommy Run that includes an active agricultural field VA owns and leases for active crop production, and the Rawiga Golf Club to the south of the OWRNC.

VA would follow the NCA Facilities Design Guide while preparing for the Proposed Action. Prior to construction, VA would obtain all applicable Federal, State, and local permits for the Proposed Action from appropriate government authorities. VA would avoid any significant onsite environmental resources through sensitive site design, including avoidance of significant natural resources.

Figure B. Site Aerial



2.2 No Action Alternative

Under the No Action Alternative, the Proposed Action Alternative and Master Planning would not be implemented. Veterans and their families in the region would continue to use the OWRNC until interment options are no longer available. In the future, VA would likely seek other land to expand the OWRNC but may not be able to acquire the land contiguous with or near the existing OWRNC. With the No Action Alternative, the VA would not be able to continue offering interment options to the veterans and families within the service area after current burial options are full.

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.

Aesthetics

3.1.1 Background

The Proposed Action Alternative area consists of the existing OWRNC. Much of the existing OWRNC has been developed as cemetery ground, with patches of trees and various structures and buildings located across the OWRNC. A portion on the east end of the cemetery is forested that borders Tommy Run and consists of moderate to abrupt topographic changes. The remaining VA owned lands included in the master planning consist of a neighboring agricultural field to the east currently leased and utilized for crop production, and the Rawiga Golf Club to the south. The surrounding land uses are primarily agricultural fields, with single family residential properties bordering the VA owned land to the east and west. The proposed action area has gradual to moderate topographic change, varying from approximately 1104 feet to 1170 feet in elevation. Much of the surrounding area lies at a similar elevation.

3.1.2 Effects of the Proposed Action Alternative

The Proposed Action Phase 4 would not change the current land use and aesthetic as it would occur within the existing OWRNC grounds and match the current use. The master planning for future phases of expansion would utilize the neighboring VA owned farm field and golf course, which would convert them to a similar aesthetic and land use as the existing OWRNC grounds.

Once the Proposed Action Phase 4 area was to be utilized for expansion, site construction and earthwork activities would begin. 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 Proposed Action Alternative 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. Silt fences would be removed after final stabilization of vegetation. Manicured shrubs and hedgerows would be placed around certain features to instill a sense of privacy and seclusion. If needed, stormwater ponds would be located within the proposed action area and vegetated by native grasses, possibly attracting birds and wildlife. Structure and buildings improvements would be designed similar to the existing structures and buildings onsite and match the existing exterior façade to the best extent possible to limit alterations to the overall viewscape of the OWRNC. This would limit any long-term aesthetic effects over subsequent development phases.

3.1.3 Effects of the No Action Alternative

Under the No Action Alternative, no aesthetic impacts would result from VA's actions.

Air Quality

3.2.1 Background

National Ambient Air Quality Standards are mandated by the Clean Air Act (CAA) and administered by the US Environmental Protection Agency (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. 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. Local AQCRs that exceed the National Ambient Air Quality Standards are deemed in non-attainment of the standard. Areas that have been classified as non-attainment but are now in compliance can be re-designated maintenance status if the state completes an air quality planning process for the area.

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. Nonmajor sources, excluding certain industrial, manufacturing and mining sources, are not typically required to obtain permits. The National Cemetery is under the jurisdiction of the Ohio EPA and the US EPA.

According to the USEPA Green Book website (March 31, 2024), Medina County is a designated moderate non-attainment area for 8-hour ozone (2015) and marginal maintenance area for 8-hour ozone (2008) and PM_{2.5} (2006) and is in attainment for the remaining NAAQS pollutants. Wayne County is in full attainment of the national air quality standards for the NAAQS pollutants.

3.2.2 Greenhouse Gases and Climate Change

CEQ 2023 interim guidance (88 FR 1196) recommends that agencies consider both the potential effects of the Proposed Action on climate change, as indicated by its estimated greenhouse gas emissions (GHG), and the implications of climate change for the environmental effects of a Proposed Action. CEQ NEPA guidance provides instruction on covering climate change considerations when completing NEPA reviews. CEQ recommended that agencies consider 25,000 metric tons of CO₂e emissions on an annual basis as a reference point below which a quantitative analysis of GHG is not recommended unless it is easily accomplished based on available tools and data.

The EPA issued the Final Mandatory Reporting of Greenhouse Gases Rule on September 22, 2009. Under the rule, suppliers of fossil fuels or industrial GHGs, manufacturers of mobile sources and engines, and facilities that emit 25,000 metric tons or more per year of GHG emissions as CO₂e are required to submit annual reports to the EPA.

3.2.3 Sensitive Receptors

Sensitive receptors for air quality impacts are the areas where persons that are the most sensitive to pollution effects, such as the very young, elderly, or people with respiratory and other related illnesses live, work or play. 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.

Sensitive receptors near the Proposed Action area include:

- Existing OWRNC
- Rawiga Golf Club
- Apostolic Christian Faith of Sterling
- Single Family Residences to the east and west of the OWRNC

3.2.4 Effects of the Proposed Action Alternative

The Proposed Action Alternative would have minor, less than significant adverse impacts to air quality during construction and operation. Short term less than significant adverse impacts to air quality are anticipated as part of construction activities. Temporary releases of fugitive dust (PM₁₀), gaseous emissions of CO, volatile organic compounds (VOC), NO₂, SO₂, and PM_{2.5} from the combustion of fuel used by equipment and vehicles are anticipated during construction. These construction activities would be performed in accordance with Federal and State air quality requirements. 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. VA will utilize the Construction Emission Control Checklist provided by the EPA, in addition to EPA BMPs to mitigate air impacts and minimize exposure to workers and sensitive receptors. 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. When hauling materials, to the best extent possible, routes that avoid the sensitive receptors listed above should be utilized to avoid air quality impacts as well as reduce the possibility of vehicle-pedestrian accidents. When possible, the utilization of carbon-intensive Portland cement products should be replaced with recycled materials to limit the amount of CO₂ emissions, as cement production emits 2.6 times more than the next largest subsector. Implementation of BMPs, discussed in **Section 4.0 Mitigation**, would minimize these anticipated less-than-significant adverse, short-term, construction-related, air quality impacts. In addition, construction activities would adhere to the air resource protection requirements included in the NCA Master Construction Specifications (VA, 2023).

During operation of the cemetery, similar conditions as the existing OWRNC would be anticipated. 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. 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 expanded 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. GHG emissions from the temporary use of construction equipment would be negligible and cease after the cemetery expansion is completed. The indirect GHG emissions from traffic to and from the cemetery would also be negligible, with the potential GHG emissions from construction and operation of the expanded cemetery being well below the threshold of 25,000 metric tons of carbon dioxide annually as defined by CEQ.

3.2.5 Effects of the No Action Alternative

Under the No Action Alternative, no additional air quality impacts are anticipated.

Cultural Resources

3.3.1 Background

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, Ohio Valley Archaeology, Inc. (OVAI) prepared for the VA a Cultural Resource Records Review completed January 23, 2024, and a subsequent Phase I Cultural Resource Survey for 22.7 acres completed February 9, 2024. Summaries of these reports are detailed below, in addition to a summary of SHPO, Tribal, and other consulting parties' coordination.

Cultural Resource Records Review

Ohio Valley Archaeology, Inc. (OVAI) completed a Cultural Resource Records Review for an approximately 130-acre project area associated with the OWRNC. The purpose of this review was to evaluate the potential for cultural resources within the proposed project area based on the current State Historic Preservation Office (SHPO) database and a review of historical maps and aerial photographs.

The approximately 130-acre project area is comprised of open, cemetery areas; some forest; and an agricultural field currently planted with corn. Much of the Phase 4 expansion area falls within the current boundaries of the cemetery. The entire project area is east of Rawiga Road and west of Rufener Street. The cemetery is located

approximately 1.78 mi (2.86 km) northwest of the City of Rittman. The general project vicinity includes agricultural fields, dispersed rural residences, and a golf course, in addition to the rest of the cemetery infrastructure.

Review of the online Ohio SHPO database for this project area found several previously recorded archaeological sites (OAI), historic-era buildings and structures (OHI), and cemeteries within 1.6 km (1.0 mi) of the project area. Eight OAIs, one OHI, and the cemetery itself are located within the project area. SHPO data also show that much of the project area was previously surveyed in 1993. Aerial photographs from 1960 to the present day were reviewed and show that the project area was formerly agricultural with small, forested areas until cemetery development began in the 1990s. OVAI completed a field visit on August 17, 2023, to assess the potential for cultural resources that may be impacted by the cemetery expansion project.

The OWRNC itself is listed as an Ohio Genealogical Society (OGS) cemetery (OGS ID# 14919) and is also eligible for the National Register of Historic Places (NRHP) under Criterion A as per the policy issued by the Keeper of the NRHP in 2011 (Keeper 2011:2). VA understands that all proposed new development will become contributing resources to the OWRNC once built. As a result, the proposed undertakings do not trigger the criteria of adverse effect, and instead, the addition of new burial spaces will serve to enhance both the significance and integrity of the OWRNC as a historic property. It also bears noting that VA is committed to ensuring that proposed development will be similar in design, materials, and scale to the existing resources in the cemetery and thus will not diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association.

The extent and degree of subsurface disturbance due to continual development in the western side of the project area makes it highly unlikely that NRHP-eligible, intact resources will be present there. Ninety-nine acres were surveyed at the Phase I level in 1993, and the Ohio SHPO has agreed that there are no listed or eligible NRHP resources within that area. OVAI did recommend that the need for a Phase I survey of the remaining previously unsurveyed acres be considered.

Phase I Cultural Resource Survey

OVAI completed a Phase I cultural resource survey of an approximate 22.7-acre area for the OWRNC in Rittman Township, Medina County, Ohio. The project area consists of an open, rectangular-shaped agricultural field bounded by sparse private residences and farmsteads, woods, and agricultural fields and horse pasture. The general vicinity also includes the OWRNC approximately 0.42 km (0.26 mi) to the west, and the Rawiga Golf Course 0.39 km (0.24 mi) to the southwest.

Review of the online Ohio State Historic Preservation Office (SHPO) database for this project area found several previously recorded archaeological sites in the Ohio Archaeological Inventory (OAIs), several previously recorded post-contact buildings/structures in the Ohio Historic Inventory (OHIs), and several Ohio Genealogical Society (OGS) cemeteries within 1.6 km (1.0 mi) of the project area. Pre-contact resources are primarily temporally unassigned lithic scatters and isolated lithics. Post-contact resources consist of farmsteads from the late nineteenth through late twentieth centuries. Aerial photographs from 1960 to the present day were reviewed and show that the project area has remained agricultural land with no visible changes throughout the twentieth century.

The Phase I Cultural Resource Survey consisted of a pedestrian survey supplemented with systematic shovel testing with methods commensurate with the Archaeology Guidelines published by the Ohio SHPO (SHPO 1994). A total of 382 shovel tests were excavated within the project area. Typical shovel tests exhibited a 20-35 cm thick brown (Munsell 10YR4/3) silt loam plowzone over a yellowish-brown (Munsell 10YR5/6) silty clay subsoil, with occasional subsoil mottling (i.e., light brownish gray, Munsell 10YR6/2) and 1-3% natural gravel. No archaeological materials or layers were encountered.

The OWRNC is not visible from the Phase-1 survey area, as it is obscured by woods and a small ridge. One private residence along Acme Road that appears to be 50 years old or older (Medina County Auditor 2023) is only partially visible from the Phase-1 survey area. It exhibits signs of modern late-twentieth century modifications and is unlikely to be eligible for the NRHP. In summary, no further archaeological work is recommended for this project area. All OWRNC land has now been surveyed for archaeological resources.

SHPO, Tribal, and Other Consulting Parties Coordination

A hard copy mailing was completed to the Ohio State Historic Preservation Office (SHPO), and all tribes and consulting parties identified as part of the NHRP Section 106 process on March 19, 2024. Per SHPO guidelines, an electronic submittal was also completed on March 19, 2024. The Ohio Archaeological Council responded via email on April 5, 2024, accepting the invitation to be a consulting party and requested the cover letter and reports be sent in a digital format for further review. These documents were emailed to the Ohio Archaeological Council on April 5, 2024. Additional comments and questions were provided by the Ohio Archeological Council on May 6 and 7, 2024 regarding methodology of the survey and report findings. VA responded to all comments provided by the Ohio Archaeological Council on June 11, 2024. The Ohio History Connection (SHPO) responded on April 17, 2024, concurring with the NCA finding of No Adverse Effect to historic properties including the OWRNC. Forest County Potawatomi responded August 5, 2024, offering a finding of No Historic Properties Affected.

3.3.2 Effects of the Proposed Action Alternative

Based on the studies completed and recommendation from OVAI; the VA NCA has made a determination of No Adverse Effect to historic properties from the undertaking pursuant to 36 CFR 800.5 (b). These reports and determination were sent to the SHPO, Tribes and other consulting parties as part of the consultation process for the NHPA Section 106. The SHPO responded on April 17, 2024, and concurred with the determination of No Adverse Effect to historic properties including the OWRNC. In the case of inadvertent discovery of human remains and/or archaeological materials, construction will be halted, and the consulting parties will be contacted to participate in consultation regarding treatment and recovery protocols, prior to removal, with appropriate state and federal agencies.

3.3.3 Effects of the No Action Alternative

Under the No Action Alternative, no impacts to cultural resources would occur.

Geology, Topography and Soils

3.4.1 Background

According to the ODNr Division of Geological Survey, the Proposed Action area is located with the Cuyahoga geological unit. The Cuyahoga Formation, formed approximately during the Mississippian Period (359-323 MYA) is composed of alternating beds of shale, sandstone, and siltstone bedrock.

Elevations within the existing developed cemetery area range from 1160 feet to 1090 feet and from 1170 feet to 1104 feet within the Proposed Action area. Slopes found on site typically range from 1% to 25% with steeper areas along Tommy Run Creek. A Web Soil Survey was conducted for the OWRNC. Most of the site consisting of Rittman silt loam soils. This soil type is usually well drained but hold more moisture than sandy soils. These soils are easily compacted, and belongs in Hydrologic Soil Group D.

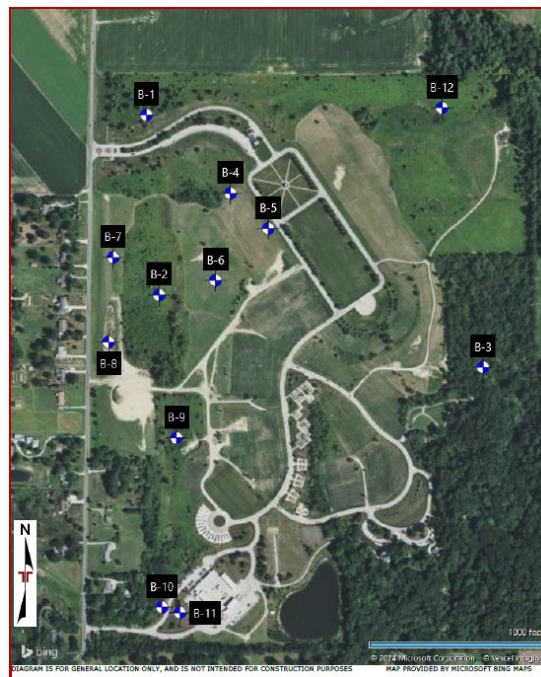
Terracon completed a Geotechnical Engineering Report on January 11, 2024, to evaluate the Proposed Action area for the Phase 4 expansion. Terracon performed 12 test borings to a nominal depth of 15 feet below grade. Laboratory testing was also performed on select samples to aid in soil classification and engineering analysis. Mapping by the Natural Resources Conservation Service (NRCS) indicates a seasonal high groundwater level within 12 inches of ground surface. Groundwater conditions may change because of seasonal variations in rainfall, runoff, and other conditions not apparent at the time of drilling. Perched water may be present at the site within sand or

silt seams within native clay layers, and/or in cohesionless native soils overlying lower permeability cohesive soils. Table 2 generally describes the subsurface profile found during investigation. Figure C shows the location of the soil borings.

Table 2. Subsurface Profile Summary

Model Layer	Layer Name	General Description
1	Surface Cover	Topsoil
2	Cohesive Soil 1	Soft to Medium Stiff Clay
3	Cohesive Soil 1	Stiff to Hard Clay or Silt
4	Granular Soil	Medium Dense to Dense Sand

Figure C. Geotechnical Boring Locations



The seismic design requirements for buildings and other structures are based on Seismic Design Category. Site Classification is required to determine the Seismic Design Category for a structure. The Site Classification is based on the upper 100 feet of the site profile defined by a weighted average value of either shear wave velocity, standard penetration resistance, or undrained shear strength in accordance with Section 20.4 of ASCE 7 and the International Building Code (IBC). Based on the soil properties observed at the site and as described on the exploration logs and results, Terracon determined that a Seismic Site Classification of D be considered for the project. Subsurface explorations at this site were extended to a maximum depth of 15 feet. The site properties below the boring depth to 100 feet were estimated based on Terracon’s experience and knowledge of geologic conditions of the general area.

3.4.2 Effects of the Proposed Action Alternative

The Proposed Action Alternative 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 of the Proposed Action. Minor, less than significant impacts may occur during construction of the Phase 4 expansion. Paved areas would be designed to drain to a suitable, on-site, properly engineered and designed, stormwater management system. Construction activities would disturb some soil surfaces and compact the soil. The soil would then be susceptible to erosion by wind and surface runoff. 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 during construction of the Phase 4 expansion.

Once construction activities are completed, the cemetery would not need short term construction erosion or sediment controls other than any necessary engineered stormwater features and infrastructure designed for the Proposed Action. Recommendations detailed in the Preliminary Geotechnical Engineering Report would be incorporated into the cemetery design to ensure the stability of the development and appropriate stabilization of grave site areas.

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 actions.

Hydrology and Water Quality

3.5.1 Background

This section contains the affected environment, regulatory considerations, and potential impacts for the Proposed Action Alternatives for hydrology and water quality. See **Section 3.9 Floodplains, Wetlands, and Coastal Zone Management** for discussion on these topics.

The Federal Clean Water Act (CWA), governs the control of water pollution in the U.S. The CWA authorizes the US EPA to regulate point sources that discharge pollutants into waters of the United States (WOTUS). The Ohio EPA implements the NPDES stormwater permitting program in Ohio. The 1972 Clean Water Act (CWA) Section 303(d) requires states, territories, and authorized tribes to develop lists of impaired waters and developing Total Maximum Daily Loads (TMDLs) for these waterbodies. A TMDL establishes the maximum amount of a constituent of concern (pollutant).

Anderson Engineering of Minnesota, LLC produced a Hydrology / Stormwater Report for the VA on October 31, 2023.

Existing Drainage

Since this is an existing Cemetery, only those facilities and infrastructure elements necessary to support the added maintenance, operations, and burial capacity will comprise this phase of construction. Everything south-east of Loyalty Drive and all the admin and maintenance complex drains directly to Tommy Run Creek. Approximately 30 acres of the existing cemetery drains to the irrigation pond adjacent to the admin and maintenance complex. Per discussion with cemetery staff, there are drainage issues along the Avenue of Flags which appear to be worsened by an undersized storm sewer network. The replacement of this storm sewer is proposed as part of the Phase 4 Expansion construction work.

In addition to stormwater runoff, the irrigation pond is fed by two wells. One of these wells utilizes the storm sewer network to carry pumped water from the northeast corner of the cemetery to the pond. These pumps are set to supply irrigation water to the pond when the pond level is below an elevation of 1106'.

An additional stormwater pond was constructed during the Phase 3 Expansion Project and collects most of the runoff in the northeast portion of the site but is not connected to the irrigation pond. Current overflow for Pond 5P discharges to Tommy Run Creek. The proposed Phase 4 design will evaluate options to connect this Pond 5P to the irrigation pond.

The existing hardcover surface for the Cemetery is approximately 11%. Similar cemetery expansions throughout the country typically range from 15% to 20% hardcover surface. Proposed stormwater runoff rates are not anticipated to increase dramatically due to the cemetery expansion.

Proposed Action Drainage

It is anticipated that the proposed development will follow the existing topography and drain towards Tommy Run Creek which also provides drainage conveyance from the Rawiga Golf Course property. Offsite drainage has not been observed. A portion of Tommy Run Creek is causing streambank erosion which could pose an issue to previous cemetery development of Committal Shelter #2. This area is proposed to be stabilized as part of Proposed Action. Addition design phases within the master planning will need additional hydrology and water quality design and review.

Existing Stormwater Treatment

The stormwater pond adjacent the maintenance complex receives approximately 30 acres of the cemetery's drainage and is used to provide irrigation water for the entire cemetery. There is an irrigation pump house adjacent to the pond. The current Phase 3 construction project also added a new stormwater pond which receives immediate runoff from most of the northeast portion of the site.

Proposed Action Stormwater Treatment

To conform with the rules and regulations laid out within Chapter 3 of the Medina County Stormwater Management Regulations and Erosion & Sediment Control Regulations, it is likely a stormwater detention pond will be required to reduce the proposed runoff rates to match historic runoff rates. The AE of Record could elect to accomplish this by employing one large pond or several ponds placed throughout the project site. It is likely that due to the topography and the general flow towards the center of the site, a stormwater pond or permanent retention basin will be located at this area before discharging into Tommy Run Creek. This detention pond may also be used for irrigation of the expansion area.

Topography and Soils

Elevations within the existing developed cemetery area range from 1160 feet to 1090 feet and from 1170 feet to 1104 feet within the expansion area. Slopes found on site typically range from 1% to 25% with steeper areas along Tommy Run Creek. A Web Soil Survey was conducted for the OWRNC. Most of the site consisting of Rittman silt loam soils. This soil type is usually well drained but hold more moisture than sandy soils. These soils are easily compacted, and belongs in Hydrologic Soil Group D. See **Section 3.4 Geology, Topography and Soils** for additional details.

Groundwater

Mapping by the Natural Resources Conservation Service (NRCS) indicates a seasonal high groundwater level within 12 inches of ground surface. Groundwater conditions may change because of seasonal variations in rainfall, runoff, and other conditions not apparent at the time of drilling. Perched water may be present at the site within sand or silt seams within native clay layers, and/or in cohesionless native soils overlying lower permeability cohesive soils.

3.5.2 Effects of the Proposed Action Alternative

Minor, less than significant impacts related to hydrology and water quality are anticipated as part of the Proposed Action Alternative. During construction of the Proposed Action, BMPs listed in **Section 4.0 Mitigation** would be implemented to limit construction related soil erosion and sedimentation. The expanded cemetery development would provide any necessary stormwater management to prevent sediment and pollutant runoff. All federal, state, and local regulations that apply to the Proposed Action would be followed, as well as the BMPs mentioned to limit adverse impacts to hydrology and water quality. Permits that may be applicable to the Proposed Action are listed in Appendix A. The use of permeable or porous pavers, limiting carbon-intensive Portland cement, and

using green stormwater management practices will be evaluated and implemented to the best extent practicable to avoid adverse impacts to downstream water resources.

3.5.3 Effects of the No Action Alternative

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

Wildlife and Habitat

3.6.1 Background

A review of the United States Fish and Wildlife Services online planning tool, Information for Planning and Consultation (IPaC) was conducted on April 17, 2024 (Project Code: 2024-0078760) to provide a list of threatened and endangered species that may occur in the Proposed Action Alternative area or may be affected by the project. IPaC does not identify any critical habitats, National Wildlife Refuge lands or fish hatcheries within the Proposed Action area. The IPaC review resulted in a species list that contains a total of six endangered or candidate species listed below.

<ul style="list-style-type: none"> Indiana Bat <ul style="list-style-type: none"> <i>Myotis sodalis</i> 	Endangered
<ul style="list-style-type: none"> Northern long-eared Bat <ul style="list-style-type: none"> <i>Myotis septentrionalis</i> 	Endangered
<ul style="list-style-type: none"> Tricolored Bat <ul style="list-style-type: none"> <i>Perimyotis subflavus</i> 	Proposed Endangered
<ul style="list-style-type: none"> Salamander Mussel <ul style="list-style-type: none"> <i>Simpsonaias ambigua</i> 	Proposed Endangered
<ul style="list-style-type: none"> Monarch Butterfly <ul style="list-style-type: none"> <i>Danaus plexippus</i> 	Candidate
<ul style="list-style-type: none"> Eastern Prairie Fringed Orchid <ul style="list-style-type: none"> 	Threatened

In addition, 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 identified ten 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**
 - Haliaeetus leucocephalus*Breeds Mid-October to Late August

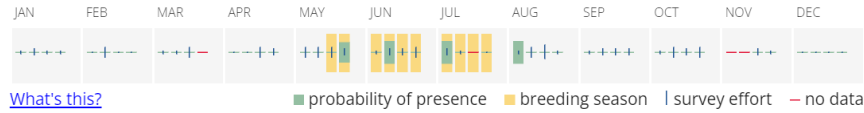
PRESENCE JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC
 What's this? probability of presence breeding season survey effort no data
- Belted Kingfisher**
 - Megaceryle alcyon*Breeds Mid-March to Late July

JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC
 What's this? probability of presence breeding season survey effort no data
- Black-billed Cuckoo**
 - Coccyzus erythrophthalmus*Breeds Mid-May to Mid-October

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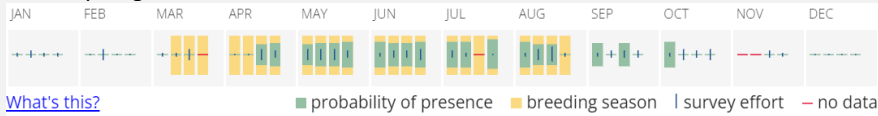
- Bobolink Breeds Mid-May to Late July

- Dolichonyx oryzivorus*



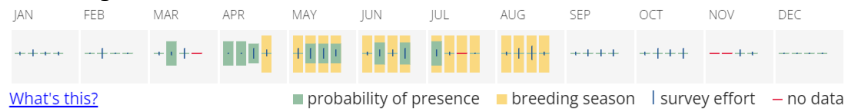
- Chimney Swift Breeds Mid-March to Late August

- Chaetura pelagica*



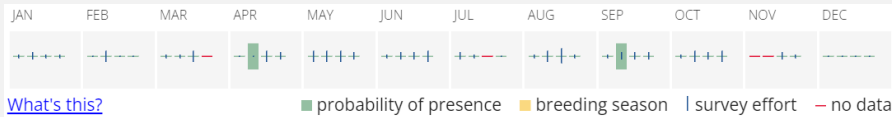
- Eastern Meadowlark Breeds Late April to Late August

- Sturnella magna*



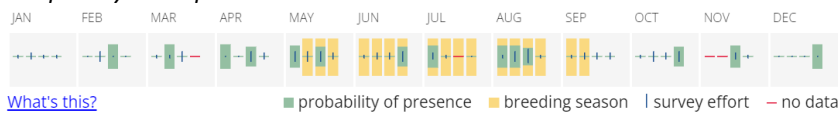
- Pectoral Sandpiper Breeds Elsewhere

- Calidris melanotos*



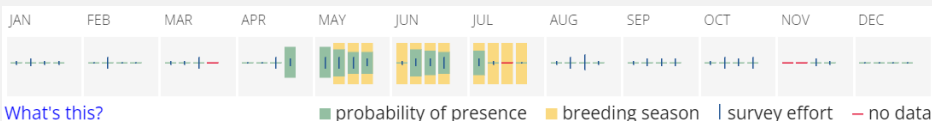
- Red-headed Woodpecker Breeds Mid-May to Mid-September

- Melanerpes erythrocephalus*



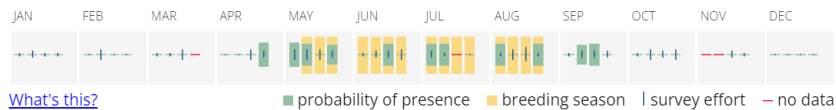
- Rose-breasted Grosbeak Breeds Mid-May to Late July

- Pheucticus ludovicianus*



- Wood Thrush Breeds Mid-May to Late August

- Hylocichla mustelina*



On September 20, 2023, a submittal for project review was emailed to the Ohio Ecological Services Field Office including Project limits, IPaC and site-specific photos and field observations. On October 11, 2023, the USFWS responded with recommendations to assist in minimizing and avoiding adverse impacts to threatened, endangered, and proposed species. The following information was provided for the listed bat species identified above. The letter states USFWS does not anticipate adverse effects to any other federally endangered, threatened, or proposed species. The following recommendations and Best Management Practices (BMPs) were provided in the USFWS letter:

Should the proposed Project site contain trees ≥3 inches Diameter Breast Height (dbh) we recommend avoiding tree removal wherever possible. If any caves or abandoned mines may be disturbed, further coordination with this office is requested to determine if fall or spring portal surveys are warranted. If no caves or abandoned mines are present and trees ≥3 inches dbh cannot be avoided, we recommend removal of any trees ≥3 inches dbh only occur

between October 1 and March 31. Seasonal clearing is recommended to avoid adverse effects to Indiana bats and northern long-eared bats.

If implementation of this seasonal tree cutting recommendation is not possible, a summer presence/absence survey may be conducted for Indiana bats and northern long-eared bats. If Indiana bats and northern long-eared bats are not detected during the survey, then tree clearing may occur at any time of the year. Surveys must be conducted by an approved surveyor and be designed and conducted in coordination with the Ohio Field Office. Surveyors must have a valid federal permit. Please note that in Ohio summer mist net surveys may only be conducted between June 1 and August 15.

If there is a federal nexus for the Project (e.g., federal funding provided, federal permits required to construct), then no tree clearing should occur on any portion of the Project area until consultation under section 7 of the ESA, between the Service and the federal action agency, is completed. We recommend the federal action agency submit a determination of effects to this office, relative to the Indiana bat and northern long-eared bat, for our review and concurrence.

The VA sent a Section 7 consultation letter and package to the USFWS Ohio Ecological Services Field Office on September 20, 2024, which included an Endangered Species Biological Survey, determination of effects for the listed species, an updated IPaC Species List, and prior correspondence from the USFWS and the ODNR (See Appendix B for consultation package and responses from USFWS). On September 23, 2024, a response from the USFWS was received concurring with the VA’s determination of effect and stated:

The Service has reviewed your project description and concurs with your determination that the project, as proposed, is not likely to adversely affect the federally endangered Indiana bat (Myotis sodalis) and Northern Long-eared Bat (Myotis septentrionalis). This is based on the commitment to cut all trees ≥3 inches diameter at breast height only between October 1 and March 31 in order to avoid adverse effects to the Indiana bat and northern long-eared bat.

Ohio Department of Natural Resources

On September 9, 2023, an environmental review and natural heritage database review request was submitted to the Ohio Department of Natural Resources (ODNR). An inter-disciplinary review and comments were received on October 27, 2023. Additional review of the listed plant and wildlife species list for Medina County is included below.

Table 3. Medina County, Ohio Listed Plant Species

Scientific Name	Common Name	Last Observed	State Status
<i>Acorus americanus</i>	American Sweet-flag	1998-08-04	Potentially Threatened
<i>Baptisia lactea</i>	Prairie False Indigo	1965-08	Potentially Threatened
<i>Carex bushii</i>	Bush's Sedge	1997-06-10	Threatened
<i>Carex cephaloidea</i>	Thin-leaved Sedge	1997-06-19	Potentially Threatened
<i>Phegopteris connectilis</i>	Long Beech Fern	1997-10-15	Potentially Threatened

Table 4. Medina County, Ohio Listed Wildlife Species

Scientific Name	Common Name	Group	State Status
<i>Antigone canadensis</i>	Sandhill Crane	Bird	Threatened
<i>Cygnus buccinator</i>	Trumpeter Swan	Bird	Threatened
<i>Setophaga cerulea</i>	Cerulean Warbler	Bird	Species of Concern
<i>Setophaga magnolia</i>	Magnolia Warbler	Bird	Special Interest
<i>Vireo solitarius</i>	Blue-headed Vireo	Bird	Special Interest
<i>Ischnura kellicotti</i>	Lilypad Forktail	Damselfly	Species of Concern
<i>Aeshna tuberculifera</i>	Black-tipped Darner	Dragonfly	Species of Concern
<i>Cordulegaster erronea</i>	Tiger Spiketail	Dragonfly	Species of Concern
<i>Phanogomphus spicatus</i>	Dusky Clubtail	Dragonfly	Species of Concern
<i>Condylura cristata</i>	Star-nosed Mole	Mammal	Species of Concern
<i>Lasmigona compressa</i>	Creek Heelsplitter	Mollusk	Species of Concern
<i>Regina septemvittata</i>	Queensnake	Reptile	Species of Concern
<i>Terrapene carolina carolina</i>	Woodland Box Turtle	Reptile	Species of Concern

Review of the Natural Heritage Database indicates there are no records of state or federally listed plants or animals within one mile of the specified project area. The ODNR Division of Wildlife (DOW) provided the following comments on September 9, 2023, and August 7, 2024.

The DOW recommends that impacts to streams, wetlands and other water resources be avoided and minimized to the fullest extent possible, and that Best Management Practices be utilized to minimize erosion and sedimentation. The project is within the vicinity of records for the northern long-eared bat. Because presence of state endangered bat species has been established in the area, summer tree cutting is not recommended, and additional summer surveys would not constitute presence/absence in the area. However, limited summer tree cutting inside this buffer may be acceptable after further consultation with DOW.

*In addition, the entire state of Ohio is within the range of the Indiana bat, the northern long-eared bat, the little brown bat (*Myotis lucifugus*), and the tricolored bat. During the spring and summer (April 1 through September 30), these bat species predominately roost in trees behind loose, exfoliating bark, in crevices and cavities, or in the leaves. However, these species are also dependent on the forest structure surrounding roost trees. The DOW recommends tree cutting only occur from October 1 through March 31, conserving trees with loose, shaggy bark and/or crevices, holes, or cavities, as well as trees with DBH ≥ 20 if possible. The DOW also recommends that a desktop habitat assessment is conducted, followed by a field assessment if needed, to determine if a potential hibernaculum is present within the project area. Direction on how to conduct habitat assessments can be found in the current USFWS "Range-Wide Indiana Bat & Northern Long-Eared Bat Survey Guidelines." If a habitat assessment finds that a potential hibernaculum is present within 0.25 miles of the project area, please send this information to the ODNR for project recommendations. If a potential or known hibernaculum is found, the DOW recommends a 0.25-mile tree cutting and subsurface disturbance buffer around the hibernaculum entrance,*

however, limited summer or winter tree cutting may be acceptable after consultation with the DOW. If no tree cutting or subsurface impacts to a hibernaculum are proposed, this project is not likely to impact these species.

The DOW recommends no in-water work in perennial streams from March 15 through June 30 to reduce impacts to indigenous aquatic species and their habitat. If no in-water work is proposed in a perennial stream, this project is not likely to impact aquatic species.

*The project is within the range of the northern harrier (*Circus hudsonius*), a state endangered bird. This is a common migrant and winter species. Nesters are much rarer, although they occasionally breed in large marshes and grasslands. Harriers often nest in loose colonies. The female builds a nest out of sticks on the ground, often on top of a mound. Harriers hunt over grasslands. If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of May 15 to August 1. If this habitat will not be impacted, this project is not likely to impact this species. Due to the potential of impacts to federally listed species, as well as to state listed species, we recommend that this project be coordinated with the US Fish & Wildlife Service.*

The Division of Water Resources provided the following comments. The local floodplain administrator should be contacted concerning the possible need for any floodplain permits or approvals for this project.

3.6.2 Effects of the Proposed Action Alternative

The Proposed Action Alternative is anticipated to have minor, less than significant impacts to threatened and endangered species. The Phase 4 expansion occurs primarily within the previously disturbed areas of the existing OWRNC and isn't anticipated to alter these species or their habitat. The work done around and near Tommy Run may result in tree clearing and creek stabilization. In addition, several areas of mature trees would be removed within the existing cemetery for access and viewscape purposes. In total, 7.96 acres of tree clearing spread over multiple areas would occur as part of the Phase 4 efforts. However, 200 trees are anticipated to be planted as part of the Phase 4 Gravesite Development and Cemetery Improvements Project to mitigate the loss and add to the aesthetic value of the cemetery. As requested by the EPA, to the best extent possible, trees will be disposed of in a non-burning manner. The proposed project area does not contain the habitat detailed above for the northern harrier and is not anticipated to adversely impact the northern harrier. Utilization of the above recommended BMPs and limiting tree clearing to non-active seasons for bat species (October 1 – March 31) will limit these adverse impacts to less than significant.

3.6.3 Effects of the No Action Alternative

Under the No Action Alternative, no impacts to wildlife or habitat are anticipated.

Noise

3.7.1 Background

The Proposed Action area for the Phase 4 expansion completely occurs within the existing OWRNC and noise levels would be similar to the existing use. The VA owned land included in the master planning consists of an active agricultural field and Rawiga Golf Club. The VA owned agricultural field, and much of the surrounding area that is utilized for agricultural use on surrounding properties, has noise generation that includes agricultural equipment traveling on surrounding roadways and equipment being utilized on site for tilling, planting, spraying, harvesting, etc. The golf club has similar noise levels of an existing cemetery, including landscaping and maintenance equipment noise, traffic noise, and everyday use by visitors. Minor noise is associated with traffic on the roadway to the west and east of the Proposed Action Area. Traffic is primarily associated with local traffic to and from residential areas and uses of the golf club and cemetery. Ceremonial gun salutes associated with interments at the existing OWRNC 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 Action area include:

- Existing OWRNC
- Rawiga Golf Club
- Apostolic Christian Faith of Sterling
- Single Family Residences to the east and west of the OWRNC

3.7.3 Effects to Proposed Action Alternative

The Proposed Phase 4 expansion would result in minor, less than significant changes to the existing noise levels or generation sources.

Expansion for Phase 4 and any future phases included in the master plan 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 5 presents peak noise levels that could be expected from a range of construction equipment during proposed construction activities.

Table 5. 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
Jackhammer	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
Worst-Case Combined Peak Noise Level (Bulldozer, Jackhammer, Scraper)								
Combined Peak Noise Level	Distance from Source (feet)							
	50	100	200	¼ Mile		½ Mile		
	103	97	91	74		68		

Source: Tipler 1976

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

3.7.4 Effects to No Action Alternative

Under the No Action Alternative, the Proposed Action area would continue to be an operational cemetery and would result in no/negligible noise impact changes.

Land Use

3.8.1 Background

The Proposed Action Phase 4 expansion area would occur within the existing OWRNC grounds and match the existing cemetery land use. The areas being master planned that are owned by the VA consist of an agricultural field to the east and the Rawiga Golf Club to the South. The agricultural field is currently leased and in active crop production. The Rawiga Golf Club is an operating golf course consisting of manicured turf grass, strips of trees and small forested areas, and several small ponds. The surrounding area land use is primarily agricultural fields with several residential properties bordering the cemetery and VA owned land on the east and west.

3.8.2 Effects of the Proposed Action Alternative

The Proposed Action Phase 4 expansion would not result in adverse impacts to land use as the land would continue to be cemetery grounds and match the existing OWRNC. Future master planning phases would convert the VA owned agricultural field and Rawiga Golf Club to cemetery grounds as needed for burial needs and cemetery infrastructure/improvements. These conversions to cemetery would match the existing OWRNC, and be contiguous with its existing borders, limiting adverse effects of land use alterations. The future master planning phases would result in minor, less than significant changes to land use.

3.8.3 Effects of the No Action Alternative

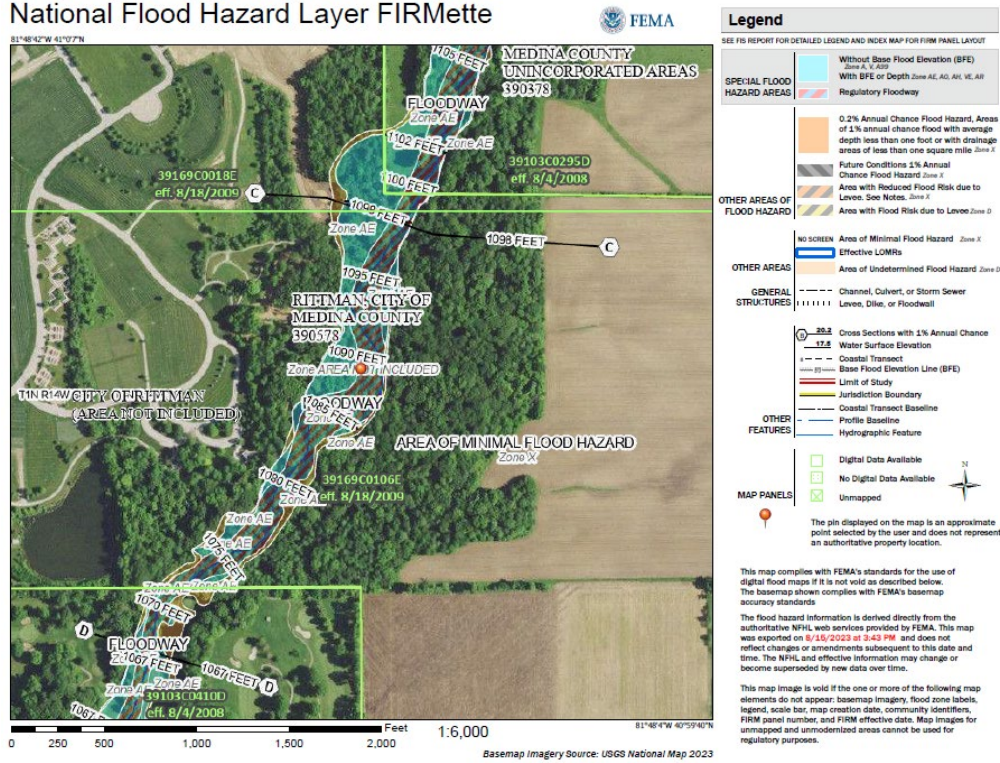
Under the No Action Alternative, no land use impacts would occur.

Floodplains, Wetlands, and Coastal Zone Management

3.9.1 Background

A review of the FEMA National Flood Hazard Layer FIRMette shows Tommy Run is a regulatory floodway with Special Flood Hazard Area (SFHA) bordering it. A Permit for Floodplain Development and Letter of Map Revision is required before construction or development begins within any SFHA. If FEMA has not defined the SFHA within a community, the community shall require permits for all proposed construction or other development in the community, so that it may determine whether such construction or other development is proposed within flood-prone areas. Permits are required to ensure that proposed development projects meet the requirements of the NFIP and the community's floodplain management ordinance. A Letter of Map Revision (LOMR) is a document that officially revises a portion of the effective NFIP map according to requirements and procedures outlined in Part 65 of the NFIP regulations. See Figure D. FEMA National Flood Hazard Layer FIRMette below for depiction of floodplain onsite. No Coastal Zone Management areas are present onsite.

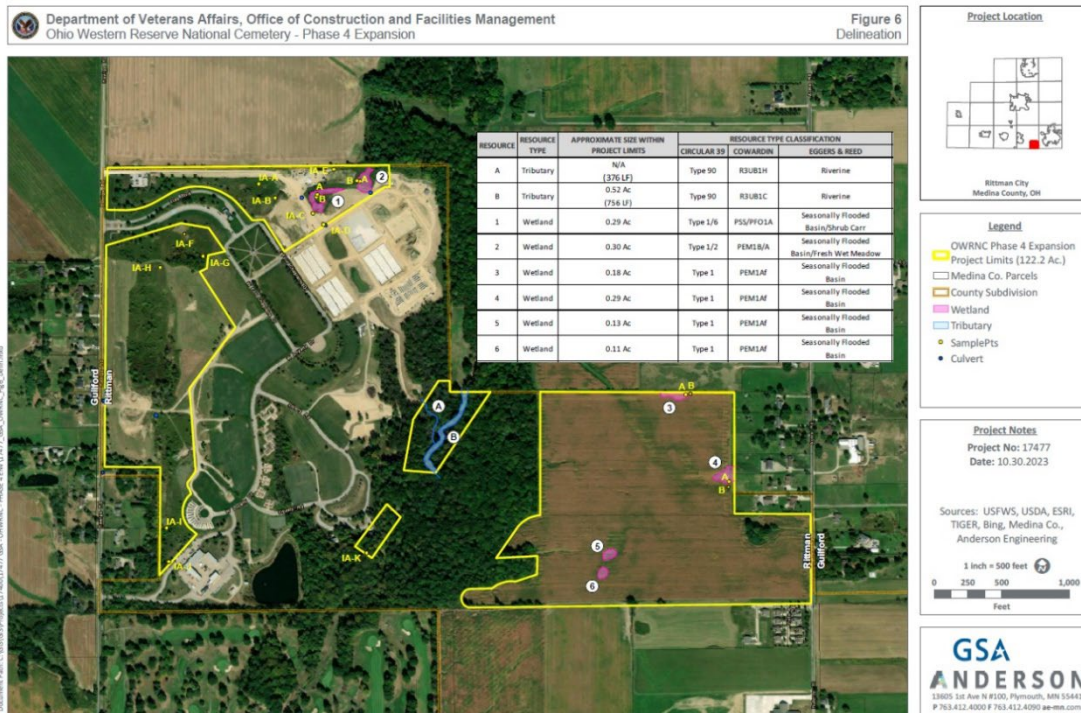
Figure D. FEMA National Flood Hazard Layer FIRMette
National Flood Hazard Layer FIRMette



Wetlands

Anderson Engineering of Minnesota, LLC completed a Wetland Delineation Report on December 5, 2023, for the VA in order to delineate potential wetlands onsite. Six wetlands and two tributaries were identified within the project investigation areas and are described below in Figure E. Wetland Delineation.

Figure E. Wetland Delineation



An Approved and Preliminary Jurisdictional Determinations for the resources identified were received from the USACE Huntington District on April 16, 2024. The two tributaries are regulated as WOTUS, and the wetlands delineated are not. However, these isolated basins are regulated by the Ohio EPA. If impacts are proposed to these isolated basins, Isolated Wetland Permit is required.

3.9.2 Effects of the Proposed Action Alternative

To stabilize Tommy Run Creek along the oxbow bend, a comprehensive erosion control plan will be developed. Initially, a temporary construction access that is blocked off from the public and indicated with proper signage will be established for the mobilization of equipment. This will be followed by the removal of limited trees within the area of disturbance to provide clear access for equipment and grading. A key feature of the stabilization will be the construction of a six foot by six foot filled rock trench/gabion wall at the base of the hill, adjacent to the normal water level of Tommy Run Creek. This structure is designed to provide robust support and prevent further erosion along the streambank. The proposed surface grading from the gabion wall to the extents of disturbance will be at a 2:1 slope until blended with the existing grade. This stabilization method ensures the integrity of the stream bank, preventing future erosion and replenishing the natural aesthetics of Tommy Run Creek. Once the stabilization work is complete, the temporary construction access road shall be removed. Because of potential impacts to Tommy Run Creek and associated floodplain, coordination with the USACE, Ohio EPA, FEMA, and the local floodplain administrator will be required to assess the potential need for permits.

VA will acquire all necessary permits from the USACE, OEPA, FEMA, ODNR, and local floodplain administrator as required and implement compensatory mitigation measures, if required. BMPs relating to erosion control and sediment runoff as described in **Section 3.5 Hydrology and Water Quality** will be utilized during construction and operation to avoid impacts to resources onsite and downstream. Potential beneficial impacts would occur once bank stabilization is complete by limiting current erosion and sediment runoff concerns for Tommy Run and downstream resources.

3.9.3 Effects of the No Action Alternative

The No Action Alternative would have no impacts to floodplain, wetlands, or coastal zone management.

Socioeconomics

3.10.1 Background

The following tables identify the socioeconomic environment of Medina County where the Proposed Action Alternative occurs and compares them to the entire state of Ohio. All data was collected from U.S. Census Bureau and U.S. Bureau of Labor statistics. Medina County has a population of 184,042 individuals with approximately 21.1% under the age of 18 and 19.9% over the age of 65. These percentages are similar to Ohio as a whole, where of the total population of 11,785,935 individuals, 21.8% are under the age of 18 and 18.4% are over the age of 65. The percentage of minority populations is higher in Ohio than that of Medina County (4.9% in Medina County compared to 19.1% in the State of Ohio). Medina County has a slightly higher percentage of high school graduates (95.0% compared to the state of Ohio's 91.4%). Approximately 644,363 veterans reside in the State of Ohio with 9,385 of those veterans residing in Medina County. The median household income for the state of Ohio in 2022 dollars is \$66,990 with the median household income in Medina County being higher: \$89,968. 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 Medina County, 6.8% compared to the states 13.4%. Unemployment rates are similar for each.

Table 6. Demographic Data for Medina County and Ohio

Area	Population Estimates (2023)	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 Ohio	11,785,935	21.8%	18.4%	19.1%	91.4%	644,363
Medina County, Ohio	184,042	21.1%	19.9%	4.9%	95.0%	9,835

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

Table 7. Regional Income for Medina County and Ohio

Area	Number of Households (2018-2022)	Median Household Income (2018-2022; in 2022 dollars)	Population Below Poverty Level (2017-2021)	Unemployment Rate (June 2023)
State of Ohio	4,789,408	\$66,990	13.1%	3.7%
Medina County, Ohio	72,097	\$89,968	6.8%	4.0%

Source: United States Census Bureau, Profile of General Demographic Characteristics, 2018-2022 (In 2022 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

Short and long term positive socioeconomic impacts to the region would be expected with the Phase 4 expansion and future expansions within the master plan. Construction of the Proposed Action Phase 4 expansion 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. Master planning for the remainder of VA owned land surrounding the existing OWRNC would provide future phased options of construction and growth that would result in similar short and long term positive socioeconomic impacts.

3.10.3 Effects of the No Action Alternative

Under the No Action Alternative, the VA would not expand the existing cemetery and not master plan for addition phases of construction in the future. The VA would need to find additional land, potentially not contiguous to the existing OWRNC, delaying future site design and planning and potentially limited any future development if land cannot be found. VA may 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.

Community Services

3.11.1 Background

The Cloverleaf Local School District and Rittman School District currently serves the area. The nearest school is the Rittman High School and Rittman Elementary School located 1.14 miles southeast. The Cloverleaf Elementary, Middle, and High School are located approximately 8 miles northwest of the Proposed Action area.

The Proposed Action area falls within the Seville and Rittman Police Departments and the Seville-Guilford and Rittman Fire Department and is served by all four departments. The Cass County Sheriff's Department provide police protection for the surrounding area.

The Ohio Department of Transportation (ODOT), Wayne County Engineer, and Medina County Highway Department provide local road and bridge maintenance to the surrounding area.

The nearest medical facility to the proposed action area is the Summa-Wadsworth-Rittman/Akron General Hospital located approximately 3.5 miles northeast.

The nearest park is Memorial Park in Seville, Ohio approximately 2.5 miles northwest. No park is located within 2 miles of the Proposed Action area.

No current public transportation is available to the OWRNC area. The nearest airport is the Wadsworth Municipal Airport located 2.8 miles east of the Proposed Action area.

3.11.2 Effects of the Proposed Action Alternative

The Proposed Action Alternative is not anticipated to provide any major additional load to the community services in the area. As the existing OWRNC is already present, no significant changes to community services uses are anticipated. Minor, less than significant impacts to traffic and roadways is anticipated but would happen incrementally in the future when expansion was to occur. These impacts are further discussed in **Section 3.13 Transportation and Parking**.

3.11.3 Effects of the No Action Alternative

Under the No Action Alternative, no community service impacts from VA action would occur.

Solid Waste and Hazardous Waste

3.12.1 Background

Hazardous materials include, but are not limited to, hazardous and toxic substances and waste, and any materials that pose a potential hazard to human health and the environment due to their quantity, concentration, or physical and chemical properties. Hazardous materials and wastes, if not controlled, may cause, or significantly contribute to an increase in mortality, serious irreversible illness, or incapacitating reversible illness; or pose a substantial threat to human health or the environment.

Castle Hill Associates, LLC completed a Phase One Environmental Site Assessment Report in September 2023 of the Proposed Action Alternative area and neighboring VA owned land to the east, to include the VA owned agricultural field. The OWRNC was previously utilized as farmland and farm homesteads until development as a National Cemetery in 1998-99. There was no evidence of any prior use of the adjoining properties or VA owned ground having an environmental impact on the site. Prior to development, the only known previous uses of the adjoining properties and VA owned land are farmlands and residential. No hazardous materials were observed onsite, and no evidence of prior dumping of hazardous wastes or signs of oil spills are present onsite during the site visit. Concrete, stone, soil, and vegetation has been stockpiled on the west side of the Phase 4 expansion area by the VA. No hazardous materials were observed in the fill material. The site visit did not reveal any evidence of

improper dumping of wastes or signs of oil spills. There was no evidence of improper dumping of hazardous wastes or signs of oil spills, stained concrete, or stressed vegetation. There were no indications of current or former PCB's on the site. Adjoining properties do have petroleum storage and/or delivery facilities, and there are AST's associated with the National Cemetery which are properly maintained and have leak protection. The Phase 1 ESA identified no Recognized Environmental Conditions (REC's) associated with the subject site.

3.12.2 Effects of the Proposed Action Alternative

When Phase 4 expansion activities and any additional phases were to begin in the future, temporary, less than-significant adverse impacts may occur 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.

Implementation of standard construction BMPs identified in **Section 4.0 Mitigation** would serve to ensure these impacts are 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 Alternative 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.

Transportation and Parking

3.13.1 Background

S2 Traffic Solutions, LLC (S2) prepared a Traffic Impact Study for the VA on January 25, 2024 (see Appendix B for full report). The below information and conclusions were determined based on this study.

Sunday Midday and PM Peak Pour traffic operations were analyzed for the existing conditions, and for the year 2064 conditions without and with the Phase 4 Expansion Proposed Action. The Phase 4 Expansion will include approximately 21,200 future burial sites on 20 acres. For this analysis it is assumed all of the burial sites will be occupied. The Phase 4 Expansion is forecast to generate 53 trips (26 entering and 27 exiting) during the critical Sunday Peak Hour, and 279 Sunday Daily trips. It is noted that this level of traffic is less than the threshold included in PART 26—ENVIRONMENTAL EFFECTS OF THE DEPARTMENT OF VETERANS AFFAIRS (VA) ACTIONS 26.6 Environmental documents. (2) Specific Criteria for Typical Classes of Action Which Normally Do Require Environmental Impact Statements: (ii) An increase in average daily vehicle traffic volume of at least 20 percent on access roads to the site or the major roadway network.

Results of the traffic analysis for the existing and 2064 design year conditions without the Phase 4 Expansion indicate acceptable operations with minimal vehicle delay and back-ups at adjacent intersections. Results of the traffic analysis for the 2064 design year with the Phase 4 Expansion indicate acceptable operations with minimal vehicle delay and back-ups. No mitigation measures at adjacent intersections and at the access intersection are necessary.

3.13.2 Effects of the Proposed Action Alternative

Expansion would produce temporary adverse impacts to the surrounding area traffic 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 operation of the expanded cemetery would create minor, less than significant adverse impacts to local traffic, as additional site visitors and staff travel into and out of the site as shown in the Traffic Impact Study. No additional mitigation measures were recommended by S2. Parking would be planned and designed prior to construction to provide all necessary parking needed within the OWRNC, preventing any adverse parking related impacts.

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.

Utilities

3.14.1 Background

Anderson Engineering of Minnesota, LLC prepared a Utilities Identification and Capacity Report for the VA on October 24, 2023, to identify and evaluate capacities of the existing utilities onsite.

Electric

The City of Wadsworth provides electricity to the OWRNC and surrounding area. Overhead electric lines run North-South along the east side of Rawiga Road and enter the west side of the cemetery where they transition to underground. Various transformers are located within the Proposed Action area. The existing electric lines that serve the cemetery are 3-phase 1/0 Raven ACSR lines and rated for 230 Amps. The City of Wadsworth predicts that the cemetery should not have any concerns with the power capacity for the Phase 4 expansion.

Communications

Spectrum has underground fiber optic, telephone, and television lines that currently service the administration and maintenance complex. Spectrum service comes off Rawiga Road at the southern entrance and runs parallel to road serving the admin and maintenance complex. Committal Shelters 1 and 2 as well as the Public Information C (PIC) are served via cemetery network. The existing service was unable to be determined, although Anderson was able to determine an internet speed of 10mb/sec is what is provided. Telecommunications that serve the site are of inadequate size and must be replaced. Fiber line from the administration building to the Public Information Center is currently installed as a multimode line and must be converted to single mode. It is requested to increase the broadband to 100mb/sec speed. It is also requested for there to be separate networks for HVAC & controls, fire alarm and Security cameras from internet.

Natural Gas

Columbia Gas of Ohio has an underground 4" natural gas main line running parallel with Rawiga Road and a 2" underground service line located in the south-west corner of the site, running parallel along the south of the entrance road towards the administration and maintenance complex. Columbia Gas of Ohio also has an underground 3" natural gas main line running parallel with Acme Road. Record site analysis plans from 1996 show existing gas lines running through the area that is now developed cemetery and the eastern Master Planning included area. Columbia Gas of Ohio stated with a line pressure of 2 psi, the service should have a capacity of 4.2 million Btu. With the proposed land use of the Cemetery, it is anticipated that natural gas will be available for this project. Any changes or expansion of the load servicing the cemetery must be submitted to the engineers at Columbia Gas of Ohio for load testing and approval.

Storm Sewer

Storm sewer structures and pipes serve the existing cemetery area, mostly within the roadway. Approximately 30 acres captured by this storm sewer network is routed to the irrigation pond adjacent to the admin and

maintenance complex. The irrigation pond, which is used to capture, distribute, and store water that is then pumped for irrigation throughout the cemetery. The irrigation pond discharges to Tommy Run Creek in larger events. All of the cemetery south-east of Loyalty Drive, including committal shelters #1 and #2, Liberty Road and the Memorial Walk, gets captured into various storm sewer networks, drainage ditches and culverts, and all discharges directly into Tommy Run Creek. The Phase 3 expansion area (currently under construction) has a separate stormwater pond that treats immediate runoff in the north-east portion of the cemetery. Similar to the irrigation pond, the newly constructed stormwater pond in Phase 3 also discharges into Tommy Run Creek. For additional information, see **Section 3.5 Hydrology and Water Quality**. The cemetery has noted issues with storm sewer capacity along Flag Boulevard which is believed to be undersized. The design team will need to review the existing storm network and calculate available capacity. There are two 200 ft wells located on site that are used to flush water through the storm system to refill the pond when water levels get too low. This irrigation pond has an emergency overflow that ultimately discharges into Tommy Run Creek. Some areas on the site have drainage issues and need regrading. Both ponds are believed to be properly sized to control the rates and volume of stormwater runoff leaving the site.

Sanitary Sewer

There is an existing septic drain field north of the administration and maintenance building to the south-east of the cemetery. The public information center has its own septic tank drain field. It is assumed that existing septic systems are functioning as designed and that they have capacity for the existing uses.

Water Distribution

Domestic water for the cemetery is provided by the City of Rittman. This service is strictly for domestic use and use for irrigation is forbidden. The existing domestic water service is provided from a 12" watermain that enters the eastern expansion area off Acme Road and runs along the southern property border. The watermain serves the admin and maintenance complex and from there service is provided to other cemetery buildings.

Irrigation water is provided via stormwater reuse which is supplemented with well water. When stormwater reuse cannot meet the needs of the cemetery, the irrigation pond is refreshed via 2 onsite wells. Well #1 is located northeast of the flagpole and well #2 is located adjacent the irrigation pond. Well #1 output is routed via existing storm sewer network into the irrigation pond, while well #2 outputs directly into the irrigation pond.

The domestic water service is a 12" watermain with a static pressure between 60-65 psi. The cemetery believes this service to be adequate for their needs. Discussion with cemetery staff has revealed issues with pressure and flow at the satellite restroom building, however, these issues are believed to be a result of an undersized service line coming from the maintenance complex, and not due to any issue with the main water service into the property. The irrigation wells are both drilled to approximate depths of 200 feet and exhibit maximum flows of 55 gal/min (Well #1) and 42 gal/min (Well #2). The irrigation designer will need to analyze the existing and proposed irrigation needs of the cemetery to determine if adequate capacity is currently available.

3.14.2 Effects of the Proposed Action Alternative

Utility impacts are anticipated to be minor, less than significant for the Phase 4 Cemetery Expansion. Master planning future phases will need to consider utility capacities and adjustments as needed in design to make sure adequate capacity is available.

3.14.3 Effects of the No Action Alternative

The No Action Alternative would have no VA caused impacts to utilities.

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 and 14096, and by utilizing CEQs NEPA Implementing regulations, to focus attention to minority and low-income communities that may be disproportionately and adversely affected by environmental conditions and impacts to human health associated with the Proposed Action.

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)

An EPA Environmental Justice Screening was conducted on October 1, 2024, to analyze environmental and socioeconomic indicators. An analysis of a one-mile buffer area around the VA owned land was utilized. The EJScreen Community Report shows that 29% of the community qualifies as low income, compared to 33% state average and 30% national average. 8% of the community consists of people of color, compared to 24% state average and 40% national average. The selected variables analyzed, including environmental burden indicators and socioeconomic indicators, show that all values for the community are at or below the state and national average with the exception of drinking water non-compliance (points) at a state level. The analyzed community has a value of 1.4 on average, compared to the 0.77 state average and 2.2 at a national average. The report does identify a critical services gap of transportation access burden and food desert for the surrounding community. The area around the VA owned property is a rural farming community, consisting mainly of agricultural fields and single-family housing as further discussed in Sections above. The EJScreen reports are included in Appendix B for reference.

3.15.2 Effects of the Proposed Action Alternative

The Proposed Action Alternative is not anticipated to have adverse impacts to low-income and minority populations. The Proposed Action area is not located in an area with elevated low-income or minority populations, and the Proposed Action would have minor, less than significant impacts to residents in the area.

Construction activities of future expansion would create temporary, less than significant adverse impacts related to noise, air quality, etc. BMP's limiting adverse impacts related to these construction activities would be followed to minimize impacts to the surrounding residents.

Operation of the expanded cemetery would be similar to the existing cemetery, 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. Planned stormwater management systems would benefit downstream resources and help benefit water quality.

3.15.3 Effects of the No Action Alternative

Under the No Action Alternative, no environmental justice effects would occur.

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 OWRNC is located in a rural area approximately 1.75 miles northwest of the City of Rittman. The surrounding area is primarily made up of agricultural and low-density single-family residences. The most recent changes to the surrounding area have been the construction of a few houses along existing roadways for the last 25 years and the development of a residential subdivision southeast of the site in the early 2000s. The OWRNC was constructed in 2000 and has had a second and third phase of construction (active burials began in November 2023). Development of the area is anticipated to continue at a slow pace, as much of the surrounding land is still undeveloped agricultural land. No development plans for off-site properties in the immediate vicinity were identified during preparation of the reports and NEPA documents.

The Proposed Action Alternative could result in 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 expected 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 Alternative. Coordination between VA, Federal, State, and local agencies, and community representatives would serve to manage and control cumulative effects within the region. Implementing effective resource management plans and programs, and continued coordination will help to minimize and eliminate potential cumulative impacts to the environment as OWRNC continues to expand through the phased constructions in the Master Plan.

3.16.3 Effects on No Action Alternative

Under the No Action Alternative, no cumulative impacts would likely occur.

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. No responses from public scoping have been received, and all comments received from the listed stakeholders do not pose concern or issue with the Proposed Action Alternative. No substantial public controversy has been encountered or is anticipated as part of the Proposed Action.

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.

Table 8. Best Management Practices and Minimization Measures for the Proposed Action	
Affected Environment Area	BMPs/Minimization Measures
Aesthetics	<ul style="list-style-type: none"> •Use vegetative buffers to enhance viewscape. • Utilize VA Design Guidelines and match to the best extent possible existing exterior facades onsite.
Air Quality	<ul style="list-style-type: none"> •Use appropriate dust suppression methods (such as the use of water, dust, palliative, covers, suspension of earth moving in high wind conditions) during onsite construction activities. •Stabilize disturbed area through re-vegetation or mulching if the area would be inactive for several weeks or longer. •Implement measures to reduce DPM emissions from construction equipment, such as reducing idling time and using newer equipment with emissions controls. •Comply with any applicable ND DEQ and US EPA / OEPA regulations. Utilize the EPA Construction Emission Control Checklist. •Comply with NCA Construction Air Quality Requirements.
Cultural Resources	<ul style="list-style-type: none"> •If buried archaeological resources are discovered during construction, cease operation, and contact SHPO/Consulting Parties.
Geology and Soils	<ul style="list-style-type: none"> •Control soil erosion and sedimentation impacts during construction by implementing erosion prevention measures and complying with the National Pollution Discharge Elimination System (NPDES) permitting process. •Implement effective controls per a site-specific Stormwater Pollution Prevention Plan (SWPPP). •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.
Hydrology and Water Quality	<ul style="list-style-type: none"> •Control soil erosion and sedimentation impacts during construction by complying with the NPDES permit and the SWPPP. •Improvements would be designed in accordance with the requirements of EO 13514/EISA Section 438 with respect to stormwater runoff quantity and characteristics. •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.
Wildlife and Habitat	<ul style="list-style-type: none"> •Native species should be used to the extent practicable when revegetating land disturbed by construction to avoid the potential introduction of non-

	<p>native or invasive species.</p> <ul style="list-style-type: none"> •Proper cleaning of construction equipment should be done to the extent practicable, to prevent the spread of non-native/invasive species. •Avoid impacts to water resources to the best extent possible. Utilize BMPs to minimize erosion and sedimentation. •Tree clearing must occur between October 1 and March 31 to minimize impacts to listed bat species. •To the best extent possible, conserve trees with loose, shaggy bark and/or crevices, holes, or cavities, as well as trees with DBH ≥ 20. •If a potential or known hibernaculum is found, the DOW recommends a 0.25-mile tree cutting and subsurface disturbance buffer around the hibernaculum entrance. •The DOW recommends no in-water work in perennial streams from March 15 through June 30 to reduce impacts to indigenous aquatic species and their habitat.
Noise	<ul style="list-style-type: none"> •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. •Locate stationary operating equipment as far away from sensitive receptors as possible. •Select material transportation routes as far away from sensitive receptors as possible. •Shut down noise-generating heavy equipment when it is not needed and maintain equipment per manufacturer’s recommendations to minimize noise generation. •Encourage construction personnel to operate equipment in the quietest manner practicable (e.g., speed restrictions, retarder brake restrictions, engine speed restrictions, etc.).
Land Use	<ul style="list-style-type: none"> •None Required.
Floodplains, Wetlands, and Coastal Zone Management	<ul style="list-style-type: none"> •Permits will be required if impacts to floodplain or wetlands are proposed from FEMA, USACE, OEPA, and ODNR. •Coordinate permitting activities with the local floodplain administrator. •Utilize proper erosion and sediment controls around water resources to avoid impacts to onsite resources and downstream resources.
Socioeconomics	<ul style="list-style-type: none"> •None Required.
Community Services	<ul style="list-style-type: none"> •None Required.
Solid and Hazardous Waste	<ul style="list-style-type: none"> •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.
Transportation and Parking	<ul style="list-style-type: none"> •Ensure demolition and construction activities do not adversely affect traffic flow on local roadways; construction would be timed to avoid peak travel hours. •Ensure debris and/or soil is not deposited on local roadways during the demolition and construction activities.
Utilities	<ul style="list-style-type: none"> •Contact applicable utility providers as needed if utility work or larger uses are proposed.
Environmental Justice	<ul style="list-style-type: none"> •None Required.

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 Medina Gazette on February 17 and 20, 2024. VA posted the scoping notice to the VA Office of Construction and Facilities Management Environmental Program website: [website https://www.cfm.va.gov/environmental/](https://www.cfm.va.gov/environmental/) and emailed and/or hard copy mailed scoping notices and to the federal, state, tribal and local stakeholders identified in **Section 5.3 Agencies and Persons Consulted**.

VA has published and distributed the Draft EA for a 30-day public comment period, as announced by a Notice of Availability (NOA) published in the Medina Gazette on July 13 and 16, 2024. A copy of the Draft EA was made available for public review on the VA Office of Construction and Facilities Management Environmental Program website: (<https://www.cfm.va.gov/environmental/index.asp>) and in hard copy at the OWRNC, Seville Public Library located at 45 Center Street Seville, Ohio 44273, and the Wayne County Public Library – Rittman Branch located at 75 N Main Street Rittman, Ohio 44270 . VA sent notification of the availability of the draft EA for review and comment via email or paper mailing to each of the stakeholders that were contacted during the NEPA scoping and Section 106 consultation. VA has responded to all agency and public comments within the Final EA (See Appendix B and Final EA Narrative).

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 shall be 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 and the scoping comments from the stakeholders are contained in Appendix A.

5.3 Agencies and Persons Consulted

Federal Agencies

- United States Fish and Wildlife Service – Ohio Ecological Services Field Office
- United States Environmental Protection Agency – Region 5
- United States Army Corps of Engineers – Huntington Regulatory District
- Natural Resources Conservation Service – Medina Service Center
- Bureau of Indian Affairs – Eastern Region
- Federal Emergency Management Agency – Region 5

State Agencies

- Ohio Department of Natural Resources
 - Division of Forestry
 - Division of Geological Survey
 - Division of Natural Areas and Preserves
 - Division of Water Resources
 - Division of Wildlife
 - Office of Real Estate and Land Management

- Ohio Environmental Protection Agency – Northeast District Office
- Ohio Department of Transportation
- Ohio History Connection – SHPO

Tribes

- Absentee-Shawnee Tribe of Indians of Oklahoma
- Citizen Potawatomi Nation
- Delaware Nation
- Delaware Tribe of Indians
- Eastern Shawnee Tribe of Oklahoma
- Forest County Potawatomi Community, Wisconsin
- Hannahville Indian Community, Michigan
- Miami Tribe of Oklahoma
- Ottawa Tribe of Oklahoma
- Peoria Tribe of Indians of Oklahoma
- Pokagon Band of Potawatomi
- Prairie Band Potawatomi Indians
- Seneca Nation of Indians
- Seneca-Cayuga Nation
- Shawnee Tribe
- Tonawanda Nation (Tonawanda Band of Seneca)
- Turtle Mountain Band of Chippewa Indians (of North Dakota)
- Wyandotte Nation

Local Agencies

- Medina County Planning Department
- Medina County Engineer's Permit Department
- Medina County Soil and Water Conservation District
- Medina County Transportation Department
- Medina County Historical Society
- County Commission Board
- Akron Regional Air Quality Management District
- Rittman Historical Society
- Ohio Archaeological Council
- Rawiga Golf Club
- Apostolic Christian Faith of Sterling
- Neighboring Landowners

Elected Officials

- US House of Representatives – Ohio 7th Congressional District
 - Representative Max Miller
- US Senate – Senior Senator for Ohio
 - Senator Sherrod Brown
- US Senate – Junior Senator of Ohio
 - Senator J.D. Vance
- Ohio Senate – District 22
 - Senator Mark Romanchuk
- Ohio House of Representatives – District 66
 - Representative Sharon Ray

5.4 Responses to Comments

Copies of correspondence received during the initial scoping period and Public Draft EA comment period are included in Appendix B.

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9.0 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 (O₃), carbon monoxide (CO), sulfur dioxide (SO₂), lead (Pb), nitrogen dioxide (NO₂), 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 taken action 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 (NO₂), ozone (O₃), particulate matter, and sulfur dioxide (SO₂).

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.