

FINAL

ENVIRONMENTAL ASSESSMENT
OF THE PROPOSED LAND ACQUISITION
FOR THE EXPANSION OF THE
FORT LOGAN NATIONAL CEMETERY
DENVER, COLORADO



DEPARTMENT OF VETERANS AFFAIRS
425 I STREET, NW
WASHINGTON, D.C. 20001

PREPARED BY:
TTL Associates, Inc.

JUNE 12, 2019

EXECUTIVE SUMMARY

This Environmental Assessment (EA) has been prepared to identify, analyze, and document the potential physical, environmental, cultural, and socioeconomic impacts associated with the Department of Veterans Affairs (VA) proposed acquisition of approximately 49.4 acres of land (Site) located adjacent to the southeast of Fort Logan National Cemetery (FLNC) in the City and County of Denver, Colorado for the future expansion of the cemetery. As a Federal action, preparation of this EA is required by the National Environmental Policy Act of 1969 ([NEPA]; 42 United States Code [USC] 4321 *et seq.*), the President's Council on Environmental Quality (CEQ) Regulations Implementing the Procedural Provisions of NEPA (40 Code of Federal Regulations [CFR] 1500-1508), and *Environmental Effects of the Department of Veterans Affairs Actions* (38 CFR Part 26). This EA has also been prepared in accordance with the VA NEPA Interim Guidance for Projects dated 30 September 2010.

VA intends to acquire the Site, currently owned by the State of Colorado, in 2019 and hold it until such date when the expansion of the FLNC becomes necessary in approximately five years. At that time, and as part of the cemetery design process, VA will perform a supplemental NEPA analysis to reanalyze and reevaluate the potential effects of the construction and operation of the expanded cemetery at the Site. VA will incorporate the avoidance, management, and minimization measures identified in this EA into that future design process and supplemental NEPA analysis to minimize potential adverse environmental effects.

As such, this EA assesses the potential effects of VA's acquiring the Site for the ultimate expansion of the FLNC, and preliminarily assesses the effects of the future proposed construction and operation of the expanded cemetery on the Site. Potential effects of the construction and operation of the proposed expanded FLNC on the Site will be reanalyzed and reevaluated in a subsequent NEPA analysis concurrent with Site design, when the expansion of the FLNC becomes necessary.

PROPOSED ACTION

VA's Proposed Action is to acquire land adjacent to the existing FLNC for the future expansion of the cemetery. The future FLNC expansion would provide VA additional capacity to continue providing National Cemetery burial benefits to the regional Veteran community.

VA would acquire the Site in 2019 and would hold it until such a date that expansion of the FLNC is necessary. It is anticipated that the expanded cemetery design and initial development would begin in approximately five years. Design details of the proposed FLNC expansion do not exist at this time; however, future grave site expansion on to the Site would be designed to be similar in appearance to the existing grounds of FLNC, located adjacent to the Site.

PURPOSE AND NEED

The purpose of the Proposed Action is to expand the FLNC to provide a National Cemetery of sufficient size and capacity to serve the projected interment needs of Veterans in the Denver, Colorado region for up to 50 years after the current FLNC burial space is depleted.

A larger, expanded FLNC is needed to continue providing National Cemetery burial benefits to the regional Veteran community. VA estimates space remaining for burials at the FLNC will be fully depleted in approximately ten years. The nearest National Cemetery to FLNC that is accepting new burials is Pikes Peak National Cemetery, located more than 60 miles from FLNC in Colorado Springs, Colorado.

One of the primary objectives of the VA burial program is to ensure that burial needs of Veterans and eligible family members are met. NCA further defines this objective on the assumption that the burial needs of a Veteran are met if they have reasonable access to a burial option (whether for caskets, remains, or cremated remains, either in-ground or in a columbarium) in a National or State Veterans Cemetery within 75 miles of the Veteran's place of residence. The Proposed Action would provide VA additional capacity needed to meet its burial objectives for eligible Veterans in the regional Denver area.

ALTERNATIVES

VA considers adjacent/contiguous property to be the first and best option for cemetery expansion as it is the most cost effective and operationally efficient and reduces way finding confusion for visitors. Approximately 49.4 acres of land adjacent to the southeast of the FLNC has been offered to VA by the State of Colorado for the cemetery expansion, as this land is mostly unutilized. VA reviewed the other land adjacent to and surrounding FLNC and found that the State-offered land was the only remaining potentially feasible adjacent land available for future cemetery expansion.

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

- **Proposed Action Alternative:** VA would acquire approximately 49.4 acres of land adjacent to southeast of the FLNC that is owned by the State of Colorado and associated with the Colorado Mental Health Institute at Fort Logan (CMHIFL), for future expansion of the FLNC. The Site is mostly vacant grassy land with scattered trees. Four small buildings, several former building foundations, and roads remain at the Site. The Site would remain in its current configuration after VA's acquisition; however, CMHIFL's current limited on-site operations (storage, landscape equipment storage, and maintenance activities) would cease. It is anticipated that the cemetery design and initial development would begin in approximately five years. The majority of the Site would be developed (in phases) with the expanded cemetery.
- **No Action Alternative:** Under the No Action Alternative, the Proposed Action would not be implemented. Veterans and their families residing in the regional Denver area would continue to use the FLNC until space is no longer available. In the future, VA would likely seek other land to expand or replace FLNC, but may not be able to acquire land contiguous

with or near the existing FLNC. The Site likely would remain mostly unused, State-owned land.

The Proposed Action effectively provides additional land necessary to meet the regional National Cemetery requirements of VA. The No Action Alternative would not enable VA to provide adequate National Cemetery facilities in the Denver region. However, the No Action Alternative is assessed in this EA to provide a comparative baseline analysis, as required under the CEQ Regulations.

AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

The affected environment of the Proposed Action Site and its immediate surroundings, or the Region of Influence (ROI) of the Proposed Action is discussed in Section 3 of this EA.

The two considered alternatives, the Proposed Action Alternative and the No Action Alternative, are evaluated in this EA to determine their potential direct or indirect impact(s) on the physical, environmental, cultural, and socioeconomic aspects of the Proposed Action's ROI. Technical areas evaluated in this EA include:

- *Aesthetics*
- *Air Quality*
- *Cultural Resources*
- *Geology, Topography, and Soils*
- *Hydrology and Water Quality*
- *Wildlife and Habitat*
- *Noise*
- *Land Use*
- *Floodplains, Wetlands, and Coastal Zone Management*
- *Socioeconomics*
- *Community Services*
- *Solid and Hazardous Materials*
- *Transportation and Parking*
- *Utilities*
- *Environmental Justice*
- *Cumulative Impacts*
- *Potential for Generating Substantial Controversy*

Proposed Action Alternative

The Proposed Action would result in the impacts identified throughout Section 3 and summarized in Table 7 of this EA. These include potential adverse impacts to aesthetics, air quality, cultural resources, geology and soils, hydrology and water quality, wildlife and habitat, noise, land use, solid and hazardous materials, transportation, utilities, and environmental justice. These potential impacts are less than significant and would be further reduced through careful implementation of the general Best Management Practices (BMPs), management measures, and compliance with regulatory requirements as identified in Section 5.

The FLNC and the approximately 49.4-acre Site were both formerly part of the 940-acre Fort Logan Military Reservation, which was established in 1887 to protect nascent Denver and was later home to a recruitment center, dirigible squadron, battalions of engineers, a supply camp for the Civilian Conservation Corps, and a large receiving station for newly enlisted personnel. The Fort closed in 1946, after World War II. In 1946, the Site and surrounding lands remained owned by the Federal government and were used by VA as a temporary health care facility for Veterans until the VA hospital in Denver was completed. In 1960, approximately 308 acres of the military reservation (including the Site) were transferred to the State of Colorado to construct

a new mental health center (CMHIFL). The majority of the on-site buildings were razed over years. Two of the remaining Site buildings, Building 64 (Garage and Repair shop, constructed in 1939) and Building 180 (Combined Filling Station and Oil House, constructed in 1941), were determined to be contributing resources to the National Register of Historic Places (NRHP)-eligible CMHIFL National Register Historic District (NRHD).

VA's acquisition of the Site would have no adverse effect on cultural resources. The future expansion of the FLNC at the Site would have adverse effects on historic properties as VA would demolish Buildings 64 and 180 to more fully use the Site as a cemetery. In May 2019, VA executed a Memorandum of Agreement (MOA) with the Colorado State Historic Preservation Office (SHPO) under Section 106 of the National Historic Preservation Act (NHPA) to mitigate the adverse effects of the demolition of Buildings 64 and 180. Historic Denver and the Sheridan Historical Society signed the MOA as concurring parties. The Advisory Council on Historic Preservation (ACHP) chose not to participate. NHPA mitigation measures agreed upon in the MOA include historic resource documentation of Buildings 64 and 180 prior to demolition for inclusion in SHPO's files as well as the Sheridan Historical Society's and Fort Logan Field Officer's Museum's archives. Per the MOA, VA would continue consultation with the Sheridan Historical Society and other consulting parties when the design phase of the FLNC expansion begins to avoid and/or minimize additional adverse impacts to historic properties. With the completion of the NHPA mitigation measures agreed upon in the MOA, cultural resources impacts would be less than significant.

The Proposed Action Alternative provides VA additional capacity to continue to provide National Cemetery burial benefits to the regional Veteran community, contiguous with the existing FLNC, a significant beneficial socioeconomic effect.

No Action Alternative

Under the No Action Alternative, the Proposed Action would not be implemented. Veterans and their families residing in the regional Denver area would continue to use the FLNC until space is no longer available. In the future, VA would likely seek other land to expand or replace FLNC, but may not be able to acquire land contiguous with or near the existing FLNC. The Site likely would remain mostly unused State-owned land.

Cumulative Impacts

The EA also examines the potential cumulative effects of implementing each of the considered alternatives. This analysis finds that the Proposed Action Alternative, with the implementation of the management and minimization measures specified in this EA, would not result in significant adverse cumulative impacts to onsite or regional natural or cultural resources, and would maintain the socioeconomic environment of the area through long-term provision of required cemetery facilities for regional Veterans. The No Action Alternative would not produce these potential positive socioeconomic gains.

AGENCY AND PUBLIC INVOLVEMENT

VA consulted with the following agencies during the preparation of this EA: US Fish and Wildlife Service (USFWS), US Environmental Protection Agency (USEPA), US Army Corps of

Engineers (USACE), United States Department of Agriculture (USDA Natural Resources Conservation Service (NRCS), Colorado State Historic Preservation Office (SHPO), Colorado State Forest Service (CSFS), Colorado Department of Natural Resources (CDNR), Colorado Department of Public Health & Environment (CDPHE), Colorado Department of Transportation (CDOT), Denver Community Planning and Development (DCPD), Denver Development Services (DDS), Denver Department of Environmental Health (DDEH), Colorado Department of Human Services (CDHS), Denver Department of Public Works (DDPW), Denver Department of Wastewater Management (DDWM), Denver Parks & Recreation (DPR), Friends of Historic Fort Logan (FHFL), and Denver Regional Air Quality Council (DRAQC). Responses were received from USFWS, USACE, USDA NRCS, SHPO, CDPHE, CDNR, and DDEH. Agency information and comments have been incorporated into this EA, as and where appropriate, and are summarized in Section 4. Copies of relevant correspondence can be found in Appendix A.

Eight Federally-recognized Native American tribes were identified as having possible ancestral ties to the Site area. VA invited these tribes to provide input regarding the Proposed Action. A response was received from the Southern Ute Indian Tribe. Tribal information and comments have been incorporated into this EA (Section 3.4) as appropriate. Tribal input is summarized in Section 4. Tribal correspondence is provided in Appendix B.

VA published and distributed the Draft EA for a 30-day public comment period as announced by a Notice of Availability (NOA) published in the Denver Post from May 5 through 7, 2019. A copy of the Draft EA was also made available for public review at the Bear Valley Branch Library and on the VA National Cemetery Administration website (www.cem.va.gov/cpm/EA.asp). VA received no public comments regarding the Draft EA.

CONCLUSIONS

The analysis performed in this EA concludes there would be no significant adverse impact, either individually or cumulatively, to the local environment or quality of life associated with the Proposed Action, provided the management and minimization measures, and regulatory compliance measures described in this EA are implemented. This EA's analysis determines, therefore, that an Environmental Impact Statement (EIS) is unnecessary for implementation of the Proposed Action, and that a Finding of No Significant Impact (FONSI) is appropriate.

TABLE OF CONTENTS

<u>SECTION</u>	<u>PAGE</u>
EXECUTIVE SUMMARY	E-1
1.0 INTRODUCTION	1
1.1 INTRODUCTION	1
1.2 BACKGROUND	2
1.3 PURPOSE AND NEED	2
1.4 DECISION-MAKING	3
2.0 DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES	8
2.1 INTRODUCTION	8
2.2 PROPOSED ACTION	8
2.3 ALTERNATIVES ANALYSIS	9
3.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES	12
3.1 INTRODUCTION	12
3.2 AESTHETICS	13
3.3 AIR QUALITY	16
3.4 CULTURAL RESOURCES	19
3.5 GEOLOGY AND SOILS	21
3.6 HYDROLOGY AND WATER QUALITY	23
3.7 WILDLIFE AND HABITAT	25
3.8 NOISE	26
3.9 LAND USE	29
3.10 WETLANDS, FLOODPLAINS, AND COASTAL ZONE MANAGEMENT	32
3.11 SOCIOECONOMICS	35
3.12 COMMUNITY SERVICES	37
3.13 SOLID AND HAZARDOUS MATERIALS	38
3.14 TRANSPORTATION AND PARKING	42
3.15 UTILITIES	44
3.16 ENVIRONMENTAL JUSTICE	45
3.17 CUMULATIVE IMPACTS	46
3.18 POTENTIAL FOR GENERATING SUBSTANTIAL PUBLIC CONTROVERSY	47
4.0 PUBLIC INVOLVEMENT	48
4.1 AGENCY COORDINATION	48
4.2 NATIVE AMERICAN CONSULTATION	50
4.3 PUBLIC REVIEW	50
5.0 MANAGEMENT AND MINIMIZATION MEASURES	51
6.0 SUMMARY AND CONCLUSIONS	56

7.0 LIST OF PREPARERS	61
8.0 REFERENCES CITED	62
9.0 LIST OF ACRONYMS AND ABBREVIATIONS	65
10.0 AGENCIES AND INDIVIDUALS CONSULTED	67
11.0 LIST OF ENVIRONMENTAL PERMITS REQUIRED	70
12.0 GLOSSARY	72

LIST OF TABLES

<u>TABLE</u>		<u>PAGE</u>
Table 1.	Peak Noise Levels Expected from Typical Construction Equipment	28
Table 2.	Estimated M-16 Rifle Blank Noise Levels at Varying Distances	29
Table 3.	Demographic Data for Denver and Colorado	35
Table 4.	Regional Income for Denver and Colorado	35
Table 5.	Area Roadways	43
Table 6.	Best Management Practices and Minimization Measures Incorporated into the Proposed Action	51
Table 7.	Summary of Site Characteristics and Potential Impacts Associated with the Proposed Action Alternative	56

LIST OF FIGURES

<u>FIGURE</u>		<u>PAGE</u>
Figure 1.	Regional Location Map	4
Figure 2.	Vicinity Location Map	5
Figure 3.	Topographic Location Map	6
Figure 4.	Aerial Location Map	7
Figure 5.	Site Sketch	14
Figure 6.	Surrounding Land Uses Map	15
Figure 7.	Current Zoning Map	31
Figure 8.	Wetlands Map	34

LIST OF APPENDICES

APPENDIX A — Agency Correspondence

APPENDIX B — Native American Consultation

APPENDIX C — Photograph Log

APPENDIX D — Other Relevant Environmental Data

APPENDIX E — Public Notices and Comments

SECTION 1: INTRODUCTION

1.1 Introduction

This Section provides the reader with necessary introductory and background information concerning the Proposed Action for proper analytical context; identifies the purpose of and need for the Proposed Action; and describes the Federal decision to be made concerning the Proposed Action. Section 4 provides a summary of public and agency involvement (and key issues and concerns identified). Section 11 identifies Federal, State, and local regulations applicable to the Proposed Action.

This Environmental Assessment (EA) has been prepared to identify, analyze, and document the potential physical, environmental, cultural, and socioeconomic effects associated with the Department of Veterans Affairs' (VA's) Proposed Action to acquire land adjacent to the existing Fort Logan National Cemetery (FLNC), located at 4400 West Kenyon Avenue, in the City and County of Denver, Colorado, for the future expansion of the cemetery.

Preparation of this EA is required in accordance with the National Environmental Policy Act of 1969 ([NEPA]; 42 United States Code [USC] 4321 *et seq.*), the President's Council on Environmental Quality (CEQ) Regulations Implementing the Procedural Provisions of NEPA (40 Code of Federal Regulations [CFR] 1500-1508), and *Environmental Effects of the Department of Veterans Affairs Actions* (38 CFR Part 26). This EA has been prepared in accordance with VA's *NEPA Interim Guidance for Projects* (2010).

VA intends to acquire the approximately 49.4-acre Site, located adjacent to the southeast of the FLNC, in 2019 and hold it until such date when the expansion of the FLNC becomes necessary in approximately five years. At that time, and as part of the cemetery design process, VA will perform a supplemental NEPA analysis to reanalyze and reevaluate the potential effects of the construction and operation of the expanded cemetery at the Site. VA will incorporate the avoidance, management, and minimization measures identified in this EA into that future design process and supplemental NEPA analysis to minimize potential adverse environmental effects.

This approach is fully consistent with the NEPA and CEQ Regulations. In cases such as these, the CEQ Regulations establish and recommend a "tiered" approach to the environmental impact analysis process: "Agencies are encouraged to tier their environmental (documents)...to focus on the actual issues ripe for decision at each level of environmental review....Tiering may also be appropriate for different stages of actions" (40 CFR Part 1502.20). These regulations specify that such potentialities (i.e., the ultimate construction and operation of the expanded cemetery) should be introduced, but can be deferred to future analyses and documentation when they have "ripened," or when more complete information becomes available.

As such, this EA assesses the potential effects of acquiring the Site for the ultimate expansion of the FLNC, and preliminarily assesses the effects of the future proposed construction and operation of the cemetery on the Site. Potential effects of the construction and operation of the proposed expanded FLNC on the Site will be reanalyzed and reevaluated in a supplemental

NEPA analysis concurrent with Site design, when the expansion of the FLNC becomes necessary.

1.2 Background

VA is proposing to purchase approximately 49.4 acres of land adjacent to the southeast of the FLNC (the Site), currently owned by the State of Colorado, for the future expansion of the FLNC.

The FLNC and the Site were both formerly part of the 940-acre Fort Logan Military Reservation, which was established in the late 1880s and closed in 1946. During that time, the Site was occupied by railroad tracks, many buildings (barracks; officers' quarters; rail dock buildings; warehouses; maintenance support buildings); oil, coal, and ice storage areas; artillery magazines; and a small-arms firing range. The Site also included areas of vacant, unimproved land.

In 1946, the Site and surrounding lands remained owned by the Federal government and were used by VA as a temporary health care facility for Veterans until the VA hospital in Denver was completed. In 1960, approximately 308 acres of Fort Logan (including the Site) were transferred to the State of Colorado to construct a new mental health center (Colorado Mental Health Institute at Fort Logan or CMHIFL). The primary mental health buildings are located east of the Site. The majority of the on-site buildings were razed over the years. The Site is currently mostly vacant with grassy vegetation and scattered trees. Four buildings, several former building foundations, and roads remain at the Site. CMHIFL uses the current Site buildings for storage, and automotive and landscaping maintenance support. The Site location and features are depicted on Figures 1-4.

In 1950, FLNC was established on the western 160 acres of the former Fort Logan grounds. FLNC was later expanded to 214 acres. FLNC provides National Cemetery burial benefits to Veterans and their families in the Denver area and is operated by the VA National Cemetery Administration (NCA). VA estimates approximately ten years of remaining burial capacity on existing FLNC land before additional gravesite capacity for interments is needed to be able to continue providing National Cemetery burial benefits to the regional Veteran community.

The 49.4-acre Site is located adjacent to FLNC and has been offered to VA by the State of Colorado, as the Site is currently mostly unused. VA would acquire the Site during 2019 and would hold it until such time that expansion of the FLNC is necessary. It is anticipated that cemetery design and initial development would begin in approximately five years.

1.3 Purpose and Need

The purpose of the Proposed Action is to expand the FLNC to provide a National Cemetery of sufficient size and capacity to serve the projected interment needs of Veterans in the Denver, Colorado region for up to 50 years after the current FLNC burial space is depleted.

A larger, expanded FLNC is needed to continue providing National Cemetery burial benefits to the regional Veteran community. VA estimates space remaining for burials at the FLNC will be

fully depleted in approximately ten years. The nearest National Cemetery to FLNC that is accepting new burials is Pikes Peak National Cemetery, located approximately 60 miles from FLNC in Colorado Springs, Colorado.

One of the primary objectives of the VA burial program is to ensure that burial needs of Veterans and eligible family members are met. NCA further defines this objective on the assumption that the burial needs of a Veteran are met if they have reasonable access to a burial option (whether for caskets, remains, or cremated remains, either in-ground or in a columbarium) in a National or State Veterans Cemetery within 75 miles of the Veteran's place of residence. The Proposed Action would provide VA additional capacity needed to meet its burial objectives for eligible Veterans in the regional Denver area.

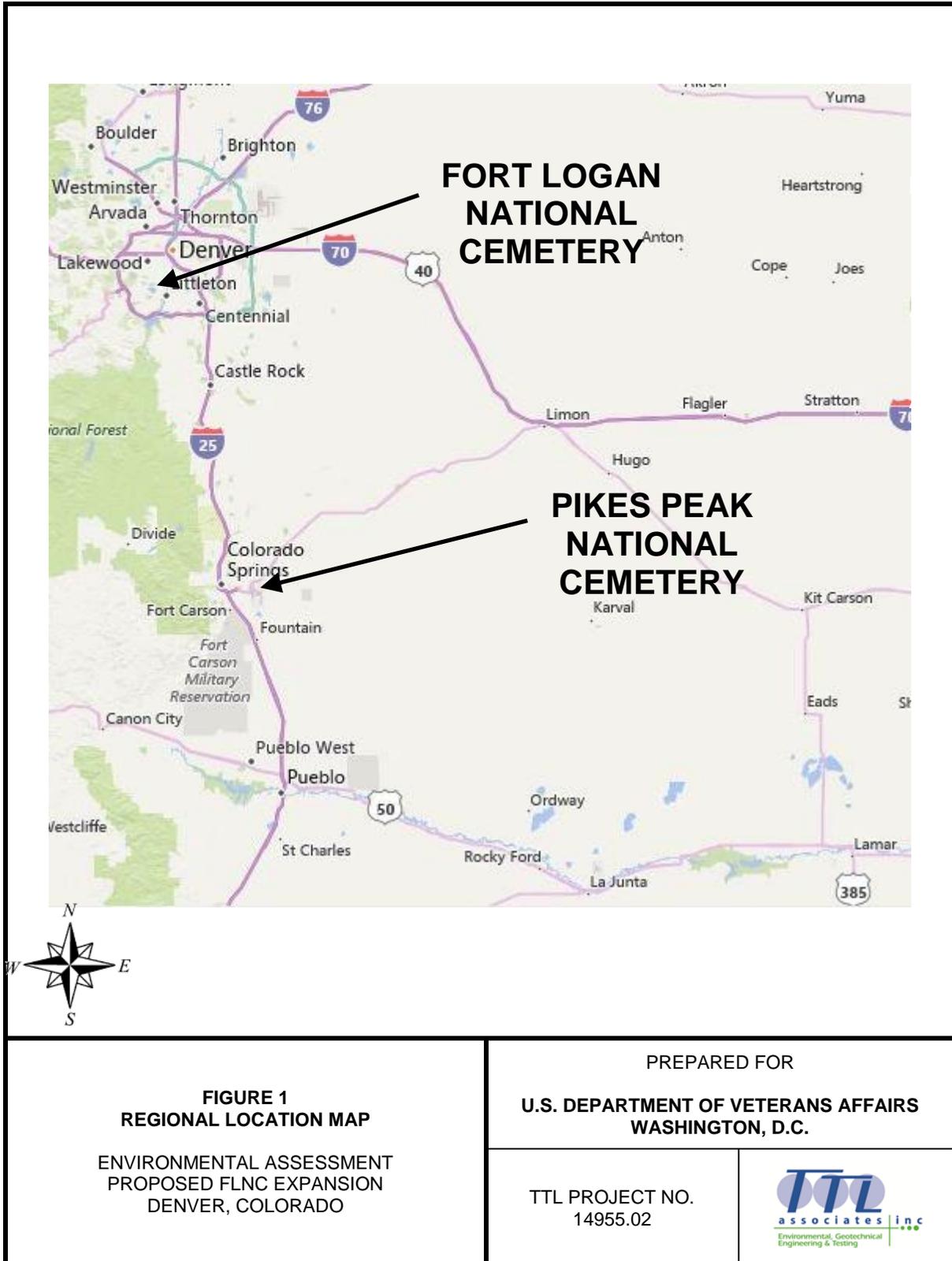
1.4 Decision-Making

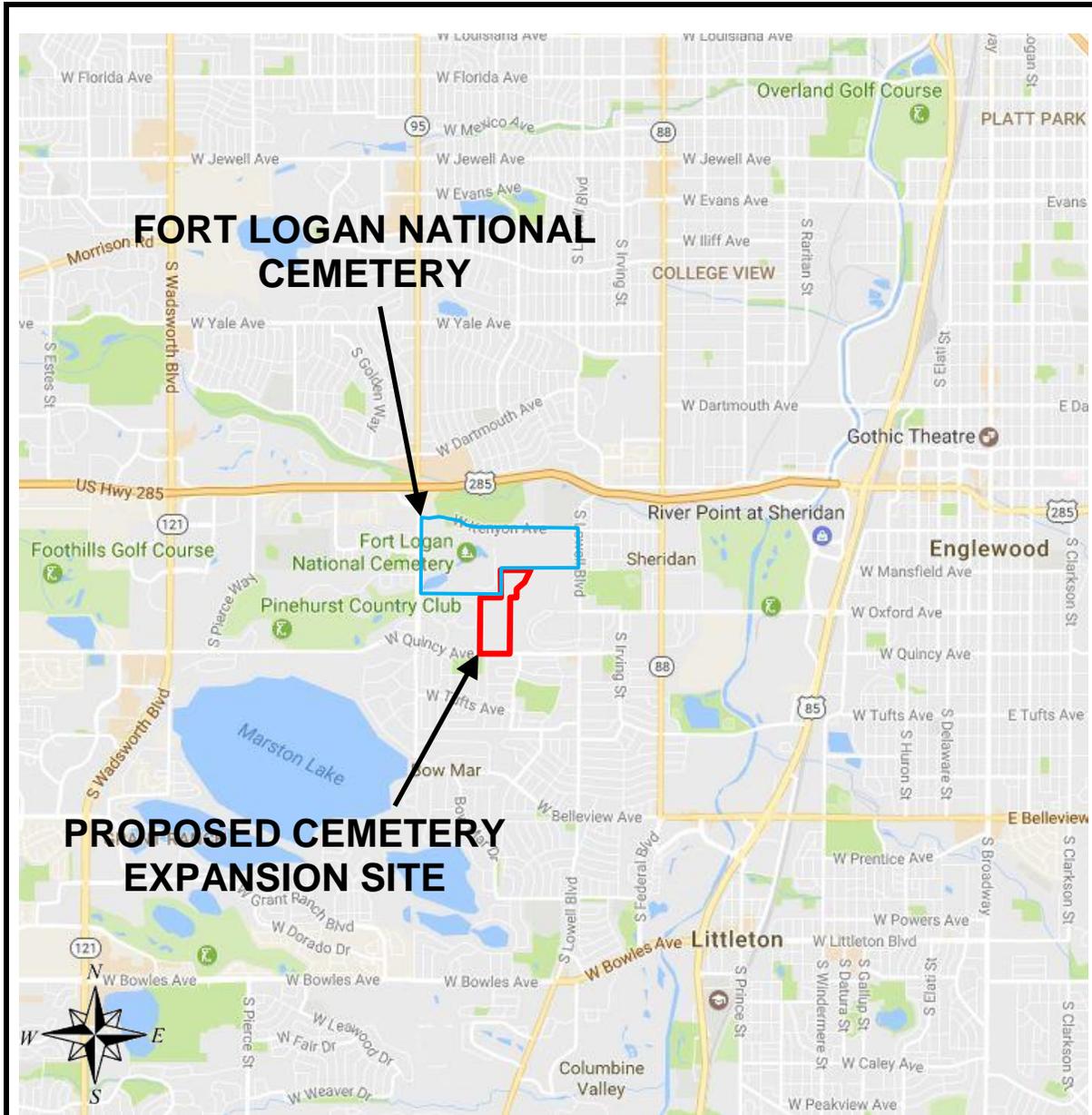
This EA has been prepared to identify, analyze, and document the potential physical, environmental, cultural, and socioeconomic effects associated with VA's proposed acquisition of approximately 49.4 acres of land located adjacent to the FLNC for the future expansion of the cemetery.

VA, as a Federal agency, 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 regulations identified in Section 1.1.

In accordance with the NEPA regulations described above, this EA: allows for public input into the Federal decision-making process; provides Federal decision-makers with an understanding of potential environmental effects of their decisions, before making these decisions; identifies measures the Federal decision-maker could implement to reduce potential adverse environmental effects; and documents the NEPA process.

Ultimately, VA will decide, in part based on the analysis presented in this EA and after having taken potential physical, environmental, cultural, and socioeconomic effects into account, whether VA should implement the Proposed Action, and, as appropriate, carry out management, avoidance, and mitigation (if necessary) measures to reduce effects to the environment.





FORT LOGAN NATIONAL CEMETERY

PROPOSED CEMETERY EXPANSION SITE

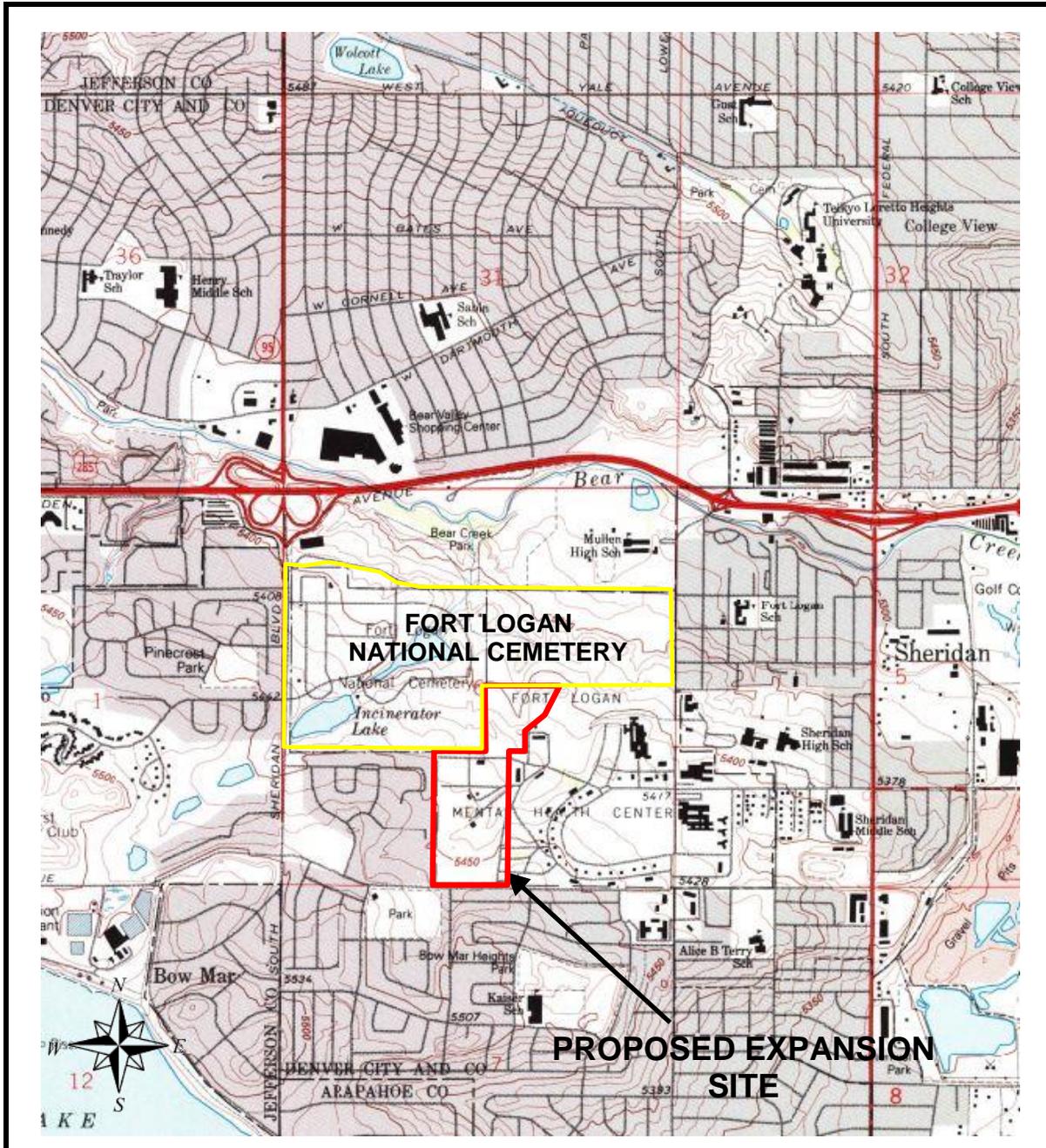
**FIGURE 2
VICINITY LOCATION MAP**

ENVIRONMENTAL ASSESSMENT
PROPOSED FLNC EXPANSION
DENVER, COLORADO

PREPARED FOR
**U.S. DEPARTMENT OF VETERANS AFFAIRS
WASHINGTON, D.C.**

TTL PROJECT NO.
14955.02





<p>FIGURE 3 TOPOGRAPHIC LOCATION MAP</p> <p>ENVIRONMENTAL ASSESSMENT PROPOSED FLNC EXPANSION DENVER, COLORADO</p>	<p>PREPARED FOR</p> <p>U.S. DEPARTMENT OF VETERANS AFFAIRS WASHINGTON D.C.</p>	
	<p>TTL PROJECT NO. 14955.02</p>	 <p>Environmental, Geotechnical Engineering & Testing</p>



**FIGURE 4
AERIAL LOCATION MAP**

ENVIRONMENTAL ASSESSMENT
PROPOSED FLNC EXPANSION
DENVER, COLORADO

PREPARED FOR
**U.S. DEPARTMENT OF VETERANS AFFAIRS
WASHINGTON, D.C.**

TTL PROJECT NO.
14955.02



SECTION 2: DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES

2.1 Introduction

This Section provides the reader with necessary information regarding 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 are described, providing the reader with an understanding of VA's rationale in ultimately retaining the Proposed Action Alternative, that best meets VA's purpose of and need for the Proposed Action, for analysis.

2.2 Proposed Action

VA's Proposed Action is to acquire land adjacent to the existing FLNC for the future expansion of the cemetery. The future FLNC expansion would provide VA additional capacity to continue providing National Cemetery burial benefits to the regional Veteran community.

VA estimates the existing FLNC land contains adequate space for burials for approximately five years. VA would acquire the Site in 2019 and would hold it until such a date that expansion of the FLNC is necessary. It is anticipated that the expanded cemetery design and initial development would begin in approximately five years. Design details of the proposed FLNC expansion do not exist at this time; however, future gravesite expansion onto the Site would be designed to be similar in appearance to the existing cemetery grounds of the adjacent FLNC.

VA would follow the NCA *Facilities Design Guide* in the FLNC expansion design. Based on the *Design Guide*, the proposed FLNC expansion would generally include the following components:

- Roads connecting to the existing FLNC through the northern and/or western portions of the Site. Roadways would be approximately 28 feet wide and would wind throughout the cemetery in harmony with the natural grade and environmental features of the land. Roadways would loop back around the property to maintain a complete, simple traffic pattern around the cemetery. All of the roadways would have a speed limit of 15 miles per hour (mph).
- The acquired land would be developed in phases. Each phase would develop enough gravesites and columbarium niches as needed to accommodate approximately 10 years of burial demand. Cremation sites, casket gravesites, and columbaria would be developed in each subsequent phase. The size of each phase, and the total number of phases, is currently unknown.

- Environmentally constrained areas, such as wetlands, and areas that are otherwise difficult to develop (e.g., steeper slopes) would be left undeveloped and remain as scenic locations at the cemetery. The utilized portions of the Site would be developed to within 20 feet of the Site boundaries.
- The standard for NCA design is to achieve on-site cut-and-fill soil balance as much as practical. Proposed development would primarily be located in relatively level areas, following natural contours to the extent possible. Areas may be minimally leveled to develop a consistent grade with each phase. Development would include the installation of grave sites, which would consist of gravel base, drainage piping, and pre-placed concrete vault/crypt system. Approximately 20-22 inches of soil would be placed on top of each vault/crypt. This design would provide the most space-efficient option. Each grave site would be marked with a small, upright marble headstone.
- Utilities, including potable and irrigation water, sewer, electric, and other supporting infrastructure would be extended throughout the site, as required.

Prior to construction, VA would obtain all applicable Federal, State, and local permits for the proposed cemetery development from appropriate government authorities. VA would avoid any significant on-site environmental resources through sensitive site design, including avoidance of significant natural resources.

2.3 Alternatives Analysis

The NEPA, CEQ Regulations, and 38 CFR Part 26 require reasonable alternatives to be explored and objectively evaluated. Alternatives that are eliminated from detailed study must be identified along with a brief discussion of the reasons for eliminating them. For purposes of analysis, an alternative was considered “reasonable” only if it would enable VA to accomplish the primary mission of providing a suitable expanded cemetery site that meets the purpose of and need for the Proposed Action, including availability at a price consistent with the fair market value based on an independent appraisal. “Unreasonable” alternatives would not enable VA to meet the purpose of and need for the Proposed Action.

2.3.1 Alternatives Development

VA estimates approximately five years of remaining burial capacity on the existing FLNC lands. Additional land is needed to continue providing National Cemetery burial benefits for area Veterans in the future.

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 potential for visitor directional and wayfinding confusion that can occur with a remotely located property.

Additionally, the regional Veteran community has indicated that they strongly prefer and support the expansion of FLNC onto adjacent/contiguous property rather than expanding the National Cemetery elsewhere on remote “annex” land. As such, VA would only consider the closure of the FLNC and the acquisition and construction of a new FLNC Annex in a new remote location once all opportunities for the acquisition of adjacent/contiguous land have been exhausted.

The State of Colorado offered VA up to 66 acres of underutilized land adjacent to the southeast of the FLNC for the future expansion of FLNC. VA evaluated the 66 acres and determined that approximately 49.4 acres (the Site) were suitable for expansion of FLNC. VA reviewed the other land adjacent to and surrounding the existing FLNC and found that the State-offered land was the only remaining potentially feasible adjacent land available for future cemetery expansion.

2.3.2 Evaluated Alternatives

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

Proposed Action Alternative

VA would acquire approximately 49.4 acres of land adjacent to southeast of the FLNC that is owned by the State of Colorado and associated with the CMHIFL, for future expansion of the FLNC. The Site is mostly vacant, grassy land with scattered trees. Four small buildings, several former building foundations, and roads remain at the Site. The Site would remain in its current configuration after VA’s acquisition until such a time that expansion of the FLNC is necessary; however, CMHIFL’s current limited on-site operations (storage, landscape equipment storage, and maintenance activities) would cease. It is anticipated that the cemetery design and additional development would begin in approximately five years. The majority of the Site would be developed (in phases) with the expanded cemetery. The Proposed Action would be implemented as described in Section 2.2.

The Proposed Action effectively provides additional land necessary to meet the regional National Cemetery requirements of VA.

No Action Alternative

Under the No Action Alternative, the Proposed Action would not be implemented. Veterans and their families residing in the regional Denver area would continue to use the FLNC until space is no longer available. In the future, VA would likely seek other land to expand or replace FLNC, but may not be able to acquire land contiguous with or near the existing FLNC. The Site likely would remain mostly unused, State-owned land.

While the No Action Alternative would not satisfy the purpose of or need for the Proposed Action, this alternative was retained to provide a comparative baseline against which to analyze the effects of the Proposed Action, as required under the CEQ Regulations (40 CFR Part 1502.14). The No Action Alternative reflects the *status quo* and serves as a benchmark against which the effects of the Proposed Action can be evaluated.

2.3.3 Alternatives Eliminated From Detailed Consideration

As described in Section 2.3.1, VA was presented the opportunity to acquire from the State of Colorado, up to 66 acres of underutilized land located adjacent to the southeast of FLNC for future expansion of the cemetery. VA determined that approximately 49.4 acres of this land (the Site) were suitable for expansion of FLNC. VA concluded that acquiring the Site in the short-term, while available, would secure the land necessary to meet its long-term cemetery needs. No other land adjacent to the FLNC was offered to VA or identified as available for acquisition.

Closure of the FLNC when it reaches its capacity and acquisition and development of a new FLNC Annex at a remote location would not be cost effective or operationally efficient, would create way finding confusion for visitors, and would only be considered once all opportunities for cemetery expansion on adjacent land have been exhausted.

SECTION 3: AFFECTED ENVIRONMENT & ENVIRONMENTAL CONSEQUENCES

3.1 Introduction

This Section describes the baseline (existing) physical, environmental, cultural, and socioeconomic conditions of the proposed FLNC expansion Site (see Figures 1-4) and its general vicinity (i.e., the Proposed Action's Region of Influence (ROI)), with emphasis on those resources potentially affected by the Proposed Action. Appendix C provides photographs, with captions, of the Site and its vicinity. Under each resource area (Sections 3.2 through 3.16), the potential direct and indirect effects of the Proposed Action Alternative and the No Action Alternative are identified. Potential cumulative impacts are discussed in Section 3.17.

In this EA, impacts are identified as either significant, less than significant (i.e., common impacts that would not be of the context or intensity to be considered significant under the NEPA or CEQ Regulations), or no/negligible impact. As used in this EA, the terms "effects" and "impacts" are synonymous. Where appropriate and clearly discernible, each impact is identified as either adverse or beneficial.

The CEQ Regulations specify that in determining the significance of effects, consideration must be given to both "*context*" and "*intensity*" (40 CFR 1508.27):

Context refers to the significance of an effect to society as a whole (human and national), to an affected region, to affected interests, or to just the locality. Significance varies with the setting of the proposed action.

Intensity refers to the magnitude or severity of the effect, whether it is beneficial or adverse.

In this EA, the significance of potential direct, indirect, and cumulative effects has been determined through a systematic evaluation of each considered alternative in terms of its effects on each individual environmental resource component.

Resource areas considered in this EA are as follows:

- *Aesthetics*
- *Air Quality*
- *Cultural Resources*
- *Geology and Soils*
- *Hydrology and Water Quality*
- *Wildlife and Habitat*
- *Noise*
- *Land Use*
- *Floodplains, Wetlands, and Coastal Zone Management*
- *Socioeconomics*
- *Community Services*
- *Solid and Hazardous Materials*
- *Transportation and Parking*
- *Utilities*
- *Environmental Justice*

3.2 Aesthetics

The approximately 49.4-acre Site is situated in a mixed-use area in the southwestern portion of the City of Denver, Colorado, approximately 7 miles southwest of the center of Denver. The Site is located adjacent to the southeast of the FLNC, and is mostly unused land associated with the CMHIFL. The primary mental health buildings are located east of the Site. The Site is currently mostly vacant with grassy vegetation and scattered trees. Four small buildings (Buildings 64, 65, 69 and 180), several former building foundations, and roads remain at the Site. CMHIFL uses the current Site buildings for storage, and automotive and landscaping maintenance support. The Site features are depicted on Figure 5.

The area adjacent to the north of the Site is currently occupied by developed and undeveloped portions of the FLNC. The area located east of the Site is occupied by the remainder of the CMHIFL. The area immediately adjacent to the Site is mostly vacant grassy land with scattered trees and a few small buildings, former building foundations and roads (similar to the Site). Farther east are CMHIFL mental health buildings and several former residences now predominantly occupied by state run programs/agencies. The area to the south of the Site is occupied by West Quincy Avenue (within a 100 feet wide right-of-way), beyond which is a residential neighborhood (south) and Pinehurst Park (southwest). The area adjacent to the west of the Site is occupied by developed areas of the FLNC (north) and a residential neighborhood (west). The surrounding land uses are depicted on Figure 6.



**FIGURE 5
SITE SKETCH**

ENVIRONMENTAL ASSESSMENT
PROPOSED FLNC EXPANSION
DENVER, COLORADO

PREPARED FOR

**U.S. DEPARTMENT OF VETERANS AFFAIRS
WASHINGTON, D.C.**

TTL PROJECT NO.
14955.02





3.2.1 Effects of the Proposed Action Alternative

The Site would remain in its current configuration after VA's acquisition; however, current, limited CMHIFL on-site operations would cease. The initial unused nature of the Site as mostly unimproved grassy land with scattered trees prior to the expanded cemetery development would result in no/negligible aesthetic impacts.

Future expansion of the FLNC on the Site would produce visual changes, including the installation of roads, maintained grassy burial areas, and possibly one or two small, single-story structures. The proposed expanded cemetery design has not been completed, but it is anticipated that the cemetery expansion would be visually consistent with the existing, adjacent FLNC. VA would develop the Site in concert with the Site's natural topography and features and would maintain some natural areas. No significant grade changes are anticipated. Landscaping would be installed/maintained along the western Site boundary to reduce visual impacts of the cemetery development on the adjacent residences.

The cemetery expansion would be designed to comply, to the extent practicable, with the Denver Zoning Code (DZC) development standards. Given that the proposed cemetery would be designed to blend with the existing topography and landscape, and would be visually consistent with the existing adjacent FLNC, no significant adverse aesthetics effects would occur.

3.2.2 Effects of the No Action Alternative

Under the No Action Alternative, no aesthetics impacts would result from VA's actions. The likely continued use of the Site by CMHIFL as mostly unimproved land would result in no aesthetic impacts.

3.3 Air Quality

3.3.1 Ambient Air Quality

The ambient air quality in an area can be characterized in terms of whether or not it complies with the primary and secondary National Ambient Air Quality Standards (NAAQS). The Clean Air Act, as amended (CAA and CAAA) requires the USEPA to set NAAQS for pollutants considered harmful to public health and the environment. NAAQS are provided for the principal pollutants, called "criteria pollutants", which include carbon monoxide, lead, nitrogen oxides, ozone, particulate matter, and sulfur dioxide.

Areas are designated by the USEPA as "attainment", "non-attainment", "maintenance", or "unclassified" with respect to the NAAQS. Regions in compliance with the standards are designated as "attainment" areas. In areas where the applicable NAAQS are not being met, a "non-attainment" status is designated. 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.

According to the USEPA Green Book (January 2019), Denver County is currently designated as a moderate non-attainment area for 8-hour ozone (2008), and a marginal non-attainment area for 8-Hour Ozone (2015). Denver County is also listed as a maintenance area for carbon monoxide and particulate matter (PM-10).

3.3.2 State and Local Regulations

The Denver Regional Air Quality Council (RAQC) and Denver Department of Environmental Health (DDEH) Environmental Quality Division are responsible for air quality planning for the Denver Metropolitan area; however, the permitting agency is the Colorado Department of Public Health and Environment (CDPHE) Air Quality Control Commission (AQCC). The AQCC approves and issues Construction Permits to Emit for land development activities and greenhouse gas (GHG) permits for stationary sources emitting more than 100,000 tons per year of equivalent carbon dioxide and 100 tons per year of GHGs. The CDPHE requires an Air Pollutant Emissions Notice for projects that disturb 25 acres or more in area.

In response to a request for agency input regarding the Proposed Action, the CDPHE requested that VA ensure that all AQCC regulations are followed during the construction of the cemetery. Specifically, AQCC Regulations 8, 15, and 19 regarding the proper handling of asbestos, lead-based paint, and chlorofluorocarbons (CFCs) if the existing buildings on the property are going to be removed or renovated and AQCC Regulation 3 regarding land development.

In addition, the City of Denver maintains an Air Pollution Control ordinance (Chapter 4 of the Denver Code of Ordinances or DCO) that requires permits from the City for stationary sources and open burning, and details reasonable measures regarding the control of fugitive particulate emissions. Permits are issued by the DDEH Environmental Quality Division.

3.3.3 Sensitive Receptors

Sensitive air quality receptors in the vicinity of the Site include the residential neighborhood adjacent to the west, the residential neighborhood and Pinehurst Park located to the south of the Site across West Quincy Avenue, and the CMHIFL and soccer facilities located east of the Site (see Figure 6).

3.3.4 Effects of the Proposed Action Alternative

Air emissions generated from the Proposed Action would be expected to have less-than-significant direct and indirect, short-term and long-term impacts to the air quality environment around the Site. No change to air quality is anticipated during the initial unused nature use of the Site as mostly undeveloped, grassy land with scattered trees. Short-term increased air emission levels would occur as a result of the construction of each expansion area of the cemetery. Long-term emissions would occur during the operation of the expanded cemetery.

Demolition and construction activities would be performed in accordance with Federal, State and local air quality requirements. Demolition and construction-related emissions are generally short-term, but may still have adverse impacts on air quality, primarily due to the production of dust. Dust can result from a variety of activities, including excavation, grading, and vehicle travel

on paved and unpaved surfaces. Dust from demolition and construction can lead to adverse health effects and nuisance concerns, such as reduced visibility on nearby roadways. The amount of dust is dependent on the intensity of the activity, soil type and conditions, wind speed, and dust suppression activities used. Implementing dust control measures (BMPs) significantly reduces dust emissions from construction. 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 (BMPs) reduce construction equipment exhaust emissions. Implementation of BMPs, discussed in Section 5, would minimize these anticipated less-than-significant adverse, short-term, construction-related, air quality impacts.

The structures at the Site may contain asbestos-containing materials (ACM). Pre-demolition asbestos surveys would be conducted for each of the structures to be demolished as part of the Proposed Action. The surveys would identify and quantify ACMs, which would be removed by licensed asbestos abatement contractors in accordance with the National Emission Standards for Hazardous Air Pollutants (NESHAP) and State of Colorado requirements prior to building demolition. Asbestos abatement procedures require the removal of ACM with various controls and monitoring to prevent asbestos emissions.

In the future, when the Site would be utilized to expand the FLNC, vehicle trips to the Site associated with interments would likely be similar to current conditions at the adjacent, existing FLNC; the rate of interments per week is not anticipated to increase as a result of the Proposed Action. As additional areas of the FLNC are developed at the Site, the number of visitors to the FLNC would increase; however, the increased number of vehicle trips associated with visitors is likely to be minor. Increased vehicle air emissions associated with the expanded cemetery would be less-than-significant.

The Site is located in an 8-hour ozone (moderate and marginal) non-attainment area, as well as a maintenance area for carbon monoxide and particulate matter (PM-10); as such, VA would be subject to the General Conformity Rule of the Clean Air Act. Based on preliminary air quality modeling of cemetery development construction activities, air emissions are anticipated to be well below the de minimis levels for moderate and marginal 8-hour ozone non-attainment areas, carbon monoxide maintenance areas, and PM-10 maintenance areas (100 tons/year for each criteria pollutant). As such, a Conformity Determination is unlikely to be necessary. VA would confirm this during the completion of Site design. VA would secure any required, individual minor air emissions permits from the CDPHE and DDEH, as appropriate, and based on the Site design.

3.3.5 Effects of the No Action Alternative

Under the No Action Alternative, no air quality impacts associated with VA's Proposed Action would result. The likely continued use of the Site by CMHIFL as mostly unimproved land would result in negligible air quality impacts.

3.4 Cultural Resources

The FLNC and Site were both formerly part of the 940-acre Fort Logan Military Reservation, which was established in 1887 to protect nascent Denver and was later home to a recruitment center, a dirigible squadron, battalions of engineers, a supply camp for the Civilian Conservation Corps, and a large receiving station for newly enlisted personnel. During that time, the Site was occupied by railroad tracks, and many buildings (barracks; officer's quarters; rail dock buildings; warehouses; maintenance support buildings); oil, coal, and ice storage areas; artillery magazines; and a small-arms firing range. The Fort closed in 1946, after World War II.

In 1946, the Site and surrounding lands remained owned by the Federal government and were used by VA as a temporary health care facility for Veterans until the VA hospital in Denver was completed. In 1960, approximately 308 acres of the Fort Logan Military Reservation (including the Site) were transferred to the State of Colorado to construct a new mental health center (CMHIFL). The majority of the on-site buildings were razed between the 1950s and 1970s. The Site is currently mostly vacant with grassy vegetation and scattered trees. Four buildings, several former building foundations, and roads remain at the Site. The current Site buildings include Building 64: Garage and Repair Shop (constructed in 1939), Building 65: Storage Building (constructed in 2000), Building 69: Post Engineer Garage (constructed in 1943), and Building 180: Combined Filling Station and Oil House (constructed in 1941). Figure 5 depicts the locations of the current Site buildings and Site features.

Row 10 Historic Preservation Solutions (Row 10) conducted an Initial Cultural Resources Impact Prediction (ICRIP) of the Site on behalf of VA in January 2017. The ICRIP included a records and literature search of Colorado Office of Archeology and Historic Preservation (State Historic Preservation Office or SHPO) files and National Register of Historic Places (NRHP) data, and a pedestrian survey of the Site by an architectural historian. The ICRIP identified the Site to be within the boundaries of the NRHP-eligible CMHIFL National Register Historic District (NRHD). Two of the Site buildings (Building 64 – Garage and Repair Shop and Building 180 – Combined Filling Station and Oil House) were determined (in consultation with the Colorado SHPO) to be contributing resources to the NRHP-eligible CMHIFL NRHD. Additionally, the FLNC was identified on the NRHP.

In July 2017, Environmental Research Group, LLC (ERG) and Historical Research Associates, Inc. (HRA) completed a Draft Class III Cultural Resources Inventory (Class III CRI) for the proposed FLNC expansion. As part of the Class III CRI, ERG and HRA conducted an intensive pedestrian archaeological survey and associated shovel probes of the Site. ERG and HRA identified nine areas with surface features, one surface artifact scatter, and one subsurface artifact scatter. The Class III CRI concluded that all eleven archaeological resources identified lacked integrity due to having been bulldozed. Based on the lack of integrity, all archaeological resources identified at the Site were recommended to be noncontributing resources to the CMHIFL NRHD.

In 2017 VA initiated Section 106 consultation with the Colorado SHPO regarding the proposed FLNC expansion. VA provided SHPO information regarding historic properties at the Site, including the Draft Class III CRI. Between 2017 and 2018, VA and SHPO exchanged correspondence regarding the Site and the Proposed Action as part of the Section 106

consultation process. Ultimately, VA and SHPO agreed that two buildings at the Site (Building 64 and Building 180) are contributing resources to the NRHP-eligible CMHIFL NRHD and the archaeological resources identified at the Site do not contribute to the CMHIFL NRHD.

On August 6, 2018, VA submitted an Invitation for Section 106 Consultation regarding the Proposed Action to the Advisory Council on Historic Preservation (ACHP); SHPO; Friends of Fort Logan; CMHIFL; Colorado Commission on Indian Affairs; Historic Denver; Sheridan Historical Society; Apache Tribe of Oklahoma; Arapaho Tribe of the Wind River Reservation, Wyoming; Cheyenne and Arapaho Tribes, Oklahoma; Comanche Nation, Oklahoma; Fort Belknap Indian Community of the Fort Belknap Reservation of Montana; Northern Cheyenne Tribe of the Northern Cheyenne Indian Reservation, Montana; Ute Mountain Tribe; and Southern Ute Indian Tribe. The Invitation identified the Area of Potential Effect (APE) of the Proposed Action and the NRHP-eligible historic properties within the APE. The Invitation stated that because the expansion of the FLNC would result in an adverse effect to two contributing elements of the CMHIFL NRHD (Buildings 64 and 180), VA intended to execute a Memorandum of Agreement (MOA) to fulfill its NHPA Section 106 obligations. SHPO, Historic Denver, Sheridan Historical Society and the Southern Ute Indian Tribe all responded as interested consulting parties. The ACHP and other invited parties chose not to participate.

3.4.1 Effects of the Proposed Action Alternative

After VA's acquisition, the Site would remain in its current configuration until VA is ready to expand the FLNC. VA's initial ownership and mostly unchanged use of the Site would result in no cultural resources impacts.

The future expansion of the FLNC at the Site would have direct adverse impacts on Buildings 64 and 180, located in the central portion of the Site and identified as contributing resources to the NRHP-eligible CMHIFL NRHD eligible for listing on the NRHP. VA would demolish Buildings 64 and 180 to more fully utilize the Site as cemetery. Based on the results of the Class III CRI archaeological survey (no NRHP-eligible resources identified), the Proposed Action is not likely to have significant adverse effects on archaeological resources.

In May 2019, VA executed an MOA with the SHPO under Section 106 of the NHPA to mitigate the adverse effects of the demolition of Buildings 64 and 180 (Appendix A). Historic Denver and the Sheridan Historical Society signed the MOA as concurring parties. NHPA mitigation measures agreed upon in the MOA include historic resource documentation of Buildings 64 and 180 prior to demolition, for inclusion in SHPO's files as well as the Sheridan Historical Society's and Fort Logan Field Officer's Museum's archives. Per the MOA, VA would continue consultation with the Sheridan Historical Society and other consulting parties when the design phase of the FLNC expansion begins to avoid and/or minimize additional adverse impacts to historic properties. The MOA also specifies procedures that would be implemented if properties that may be historically significant are found during the cemetery development. With the completion of the NHPA mitigation measures agreed upon in the MOA, cultural resources impacts would be less than significant.

The Proposed Action would also impact the adjacent NRHP-listed FLNC, as the boundaries of the FLNC would be altered to include the Site. However, the expansion of the FLNC onto the Site would be consistent with the existing cemetery. The impacts resulting from the expansion of the FLNC at the Site would be less-than-significant.

3.4.2 Effects of the No Action Alternative

Under the No Action Alternative, no cultural resources impacts by VA would occur. The likely continued use of the Site by CMHIFL as mostly unimproved land would result in negligible cultural resource impacts.

3.5 Geology and Soils

A review of the Fort Logan, Colorado United States Geological Survey (USGS) Topographic Quadrangle (dated 1965, revised 1994) indicates that surficial topography in the Site's vicinity generally slopes down to the north and northeast. Elevations at the Site range from approximately 5,460 feet above mean sea level (amsl) along the southern boundary to approximately 5,390 feet amsl in the northern portion. The Site slopes in the direction of Bear Creek (approximately 5,300 feet amsl), located approximately 2,100 feet north of the Site.

According to the Colorado Geological Survey (CGS) Earthquake and Late Cenozoic Fault and Fold Maps Server, no active faults are known extend through the subsurface geology in the Site area. According to the CGS, the Site is not located in an area where karst conditions and associated sinkholes are common.

According to the geologic map of the Fort Logan Topographic Quadrangle, published by the USGS and dated 1978, the approximately 49.4-acre Site includes one small area of artificial fill in the northern portion and two small areas of artificial in the southeastern portion. Each of these areas is identified as a depression or low-lying area on historical topographic maps that was later filled. The geologic map indicates Piney Creek Alluvium – Holocene (Qp) occurs in bands across the southern portion and in the northern portion of the Site and Slocum Alluvium – Pleistocene occurs in the remaining areas of the Site. Piney Creek Alluvium is described as interbedded sand, silt, and clay. Slocum Alluvium is described as well-stratified, pebbly clay and silt interlayered with gravel, cobbles, and boulders.

The United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) has not mapped the soils at the Site.

Pickering, Cole, and Hivner, LLC (PCH) conducted a geotechnical investigation of the Site for VA in 2017. Several of the soil borings explored the filled areas identified on the USGS maps. Soils encountered during the geotechnical investigation generally consisted of fill materials (sandy lean clay with varying amounts of sand, gravel, and clayey sand) from just below topsoil up to 13 feet below ground surface (bgs). Except near the ground surface, no non-soil fill materials were found in the soil borings. Natural, undisturbed soils beneath the fill generally were found to consist of sandy clay to a depth of approximately 9 to 16 feet bgs. The clay was underlain by sand in several borings. Sandy claystone bedrock was encountered approximately 13 to 28 feet bgs.

TTL conducted a Phase II Environmental Site Assessment (Phase II ESA) of the Site on behalf of VA in September and October 2017. The Site stratigraphy encountered during the Phase II ESA generally consisted of silty sand from the ground surface to depths ranging from approximately 1 to 8 feet bgs. At many soil boring locations, the upper portion of the silty sand layer (generally less than 3 feet bgs, but deeper in some areas) contained gravel, coal fragments, and/or coal ash, and appeared to be previously graded/disturbed soil. The silty sand was generally underlain by silty clay that extends to the top of bedrock (sandy claystone), which is present at depths ranging from 4 to more than 25 feet bgs. In some borings, silt and/or gravelly sand intervals were encountered within the clay layer, beneath the silty sand, and/or between the clay and bedrock. The soils above the bedrock contained varying amounts of weathered sandy claystone.

3.5.1 Prime and Unique Farmland Soils

Prime and Unique Farmlands are regulated in accordance with the Farmland Protection Policy Act (FPPA) to ensure preservation of agricultural lands that are of statewide or local importance. Soils designated as prime farmland are capable of producing high yields of various crops when managed using modern farming methods. Prime farmland is land that has the best combination of physical and chemical characteristics for producing food, feed, fiber, forage, oilseed, and other agricultural crops with minimum inputs of fuel, fertilizer, pesticides, and labor, and without intolerable soil erosion. Unique farmlands are also capable of sustaining high crop yields and have special combinations of favorable soil and climate characteristics that support specific high-value foods or crops.

Although the Site soils are not mapped by the USDA NRCS, area soils are generally characterized as “not prime farmland” with limited areas of prime farmland, if irrigated. The Site is located in the City of Denver, has been associated with military and institutional operations since the late 1800s, and has not been actively farmed during that time span. In addition, the Site is located in an area identified by the U.S. Census Bureau as an “urbanized area” and is exempt from the FPPA. The USDA NRCS indicated the Proposed Action is unlikely to impact prime farmland.

3.5.2 Effects of the Proposed Action Alternative

The Site would remain in its current configuration after VA’s acquisition; however, current, limited CMHIFL operations at the Site would cease. The initial continued use of the Site as mostly unimproved grassy land with scattered trees prior to the cemetery development would result in no geology and soils impacts.

The future expansion of the FLNC at the Site is anticipated to result in less-than-significant impacts to geology and soils. No significant changes to topography or drainage are expected at the Site. The proposed cemetery expansion would be designed in concert with the natural topography and current drainage patterns. Limited paved areas would be designed to drain to a suitable, on-site, properly engineered and designed, stormwater management system.

Cemetery construction activities would disturb the soil surface and compact the soil. The soil would then be susceptible to erosion by wind and surface runoff. Exposure of the soils during construction has the potential to result in increased sedimentation to existing stormwater management systems and offsite discharges of sediment-laden runoff. However, such potential adverse erosion and sedimentation (E&S) effects would be prevented through utilization of appropriate BMPs as described in Section 5 and adherence to the terms of approved CDPHE Stormwater Discharge Associated with Construction Activities and land disturbance permits, including the development and implementation of a site-specific Stormwater Management Plan (SWMP), and an approved Denver Construction Activities Stormwater Discharge permit.

No long-term E&S impacts would be anticipated due to the nature of the Proposed Action. No long-term soil erosion impacts would occur as a result of increased impervious surfaces onsite; there would be limited impervious surfaces associated with the cemetery development and long-term soil erosion impact would be managed by maintaining appropriately designed stormwater management features associated with the proposed cemetery.

No active faults are known extend through the subsurface geology in the Site area. As such, no significant impacts associated with seismic hazards are identified. The Site is not located in an area where karst conditions and associated sinkholes are common. As such, no significant impacts associated with potential sinkholes are identified. No significant impacts to mineral resources are anticipated, as the Proposed Action would not involve the commercial extraction of mineral resources, nor affect mineral resources considered important on a local, State, national, or global basis.

3.5.3 Effects of the No Action Alternative

Under the No Action Alternative, no impacts to soils, topography, or geology would occur. The likely continued limited use of the Site by CMHIFL would result in no/negligible soil, topography, or geology impacts.

3.6 Hydrology and Water Quality

3.6.1 Surface Waters

The Site is located in the South Platte River Watershed. The Fort Logan, Colorado USGS Topographic Quadrangle (dated 1965, revised 1994) indicates that surficial topography in the Site's vicinity slopes in the direction of Bear Creek, located approximately 2,100 feet north of the Site.

The Site includes an intermittent stormwater drainage ditch that crosses the southern portion of the Site (Figure 5). The ditch originates approximately 40 feet north of the southern boundary of the Site, where a 24-inch diameter reinforced concrete stormwater outfall (from off-site to the south) is located. The ditch flows to the north approximately 500 feet before angling to the northeast, broadening to a less defined low-lying area, and flowing off-site. No surficial connection to other surface water bodies was observed. The southern portion of the drainage ditch includes a wetland area (see Section 3.10).

Based on a review of historic topographic maps and aerial photographs, it appears that the intermittent drainage ditch was formerly (late 1800s) a natural intermittent tributary to Bear Creek that was altered during the development of Fort Logan and subsequent development. No current connection to surface water was identified. Therefore, it appears that the intermittent stormwater drainage ditch is isolated and not a Water of the US under the jurisdiction of the US Army Corps of Engineers (USACE); however, USACE must make this formal determination.

The intermittent stormwater drainage ditch may be considered a “State Water” and may be subject to standard water quality regulations overseen by the CDPHE Water Quality Control Division (WQCD) and the Denver Department of Public Works (DDPW) Wastewater Management Division (WMD).

3.6.2 Groundwater

According to the Groundwater Atlas of the United States, the Site is underlain by the Denver aquifer system, characterized by moderately consolidated, interbedded shale, claystone, siltstone, and sandstone between 600 and 1,100 feet thick. The Colorado DNR Division of Water Resources (DWR) indicated the Denver Basin aquifers are generally confined; however, the uppermost aquifer in the Site area may or may not be confined, depending upon the geology of the Site.

PCH reported that groundwater was generally not encountered during the geotechnical drilling, but was observed at depths ranging from approximately 16 feet bgs to more than 30 feet bgs approximately one week following the drilling. Groundwater was generally encountered at depths of at least 27 feet bgs in the northern portion of the Site and at least 16 feet bgs in the southern portion of the Site.

3.6.3 Effects of the Proposed Action Alternative

The Site would remain in its current configuration after VA’s acquisition; however, CMHIFL operations would cease. The initial unused nature of the Site while owned by VA would result in no/negligible hydrology and water quality impacts.

The future development of the expanded cemetery at the Site could result in direct or indirect impacts to the isolated surface water (intermittent stormwater drainage ditch) in the southern portion of the Site that may be considered a “State Water” and may be subject to standard water quality regulations overseen by the CDPH WQD and the Denver DPW WMD. VA anticipates that through environmentally sensitive site design and following good engineering practices, potential surface water impacts would be avoided, to the extent possible. VA anticipates the cemetery expansion design would maintain a buffer of undisturbed land around the intermittent stormwater drainage ditch. VA would follow standard CDPH WQD and Denver DPW WMD water quality regulations, as applicable. By following the permit requirements and implementing general BMPs, as described in Section 5, surface water impacts would be less-than-significant. These BMPs would control construction-related impacts of soil erosion and sedimentation and would provide proper stormwater management following the development of the cemetery.

It is not anticipated that groundwater would be significantly impacted by the proposed cemetery expansion. Based on the geotechnical investigation, groundwater at the Site is greater than 16 feet bgs and is unlikely to be encountered during the cemetery development.

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

3.6.4 Effects of the No Action Alternative

Under the No Action Alternative, no impacts to hydrology or water quality by VA would occur. The likely continued use of the Site by CMHIFL would result in no/negligible hydrology or water quality impacts.

3.7 Wildlife and Habitat

3.7.1 Vegetation and Wildlife

The Site is mostly vacant land with grassy vegetation and scattered trees and has been associated with military and institutional operations since the late 1800s. Four small buildings, several former building foundations, and roads remain at the Site. No undisturbed natural habitat remains at the Site. Vegetative communities on the Site and surrounding area support wildlife species associated with suburban areas of Denver County.

3.7.2 Threatened and Endangered Species

As part of the preparation of this EA, the U.S. Fish and Wildlife Service (USFWS) and various State natural resources' agencies were contacted to identify the potential for the presence of State or Federally-listed species on or in the vicinity of the Site. The USFWS stated that they have no comments pertaining to the Proposed Action. Colorado Parks and Wildlife (CPW) did not respond to the request.

According to the USFWS Information for Planning and Conservation (IPaC) internet application, two Federally-listed endangered bird species (Least Tern and Whooping Crane), one Federally-listed endangered fish species (Pallid Sturgeon), one Federally-listed threatened bird species (Piping Plover), and two Federally-listed threatened plant species (Ute Ladies' Tresses and Western Prairie Fringed Orchid) were identified for the general Site vicinity. The IPaC report did not identify critical habitat for these protected species at the Site. Based on available information, including the USFWS Official Species List, the USFWS Environmental

Conservation Online System (ECOS) and the habitat requirements of these species, none of these Federally-protected species are likely to occur at the Site or the immediate vicinity of the Site.

The IPaC report also identified various bird species protected under the Migratory Bird Treaty Act that may nest in the Site area. Based on their association with aquatic habitats and/or low relatively probability of presence, these birds are unlikely to nest at the Site.

A list of Colorado protected threatened and endangered species was obtained from the CPW website. One amphibian, eight birds, fourteen fish, and eight mammals are protected by the State of Colorado. The CPW website provided information regarding the general range of these species in Colorado and their habitat requirements. Based on this information and the Site conditions, none of the Colorado protected species are likely to be present at the Site.

3.7.3 Effects of the Proposed Action Alternative

The Site would remain in its current configuration after VA's acquisition; however, CMHIFL operations would cease. The initial unused nature of the Site while owned by VA would result in no/negligible wildlife and habitat impacts.

The future development of the expanded cemetery at the Site is not likely to have adverse effects on State or Federally-listed protected species or their critical habitats. No protected species are likely to be present at the Site. In addition, the Site has mostly been disturbed during its previous long military and institutional use, with very little remaining natural habitat. The Proposed Action would result in less-than-significant wildlife and habitat impacts.

3.7.4 Effects of the No Action Alternative

Under the No Action Alternative, no construction by VA would occur. No impacts to vegetation or wildlife habitat would occur as a result of VA's actions. The likely continued use of the Site by CMHIFL would result in no/negligible vegetation or wildlife habitat impacts.

3.8 Noise

The Site is located in a mostly developed suburban area consisting of primarily residential, institutional, and recreational properties. The existing noise environment around the Site is relatively quiet with limited noise associated with vehicle traffic along West Quincy Avenue (southern boundary) and other nearby local roads. There is distant noise associated with Highway 285, located approximately 3,000 feet north of the Site. In addition, ceremonial gun salutes associated with interments at FLNC 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.

3.8.1 Sensitive Receptors

Sensitive noise receptors in the vicinity of the Site include residential areas located adjacent to the west and south (across West Quincy Avenue) of the Site, the CMHIFL facilities east of the Site, and the existing FLNC.

3.8.2 Effects of the Proposed Action Alternative

Based on the proposed initial unused nature of the Site by VA after acquisition and the future use of the Site as a cemetery, no significant long-term noise impacts would be anticipated. The Proposed Action would have future short-term impacts to the existing noise environment during the removal of existing improvements and cemetery expansion construction activities. Noise generating sources during demolition and construction activities would be associated primarily with standard construction equipment and construction equipment transportation. These increased noise levels could directly affect the neighboring area.

Construction activities generate noise by their very nature and are highly variable, depending on the type, number, and operating schedules of equipment. Construction projects are usually executed in stages, each having its own combination of equipment and noise characteristics and magnitudes. Construction activities are expected to be typical of other similar construction projects and would include mobilization, site preparation, excavation, placing foundations, utility development, heavy equipment movement, and paving roadways and parking areas.

The most prevalent noise source at typical construction sites is the internal combustion engine. 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; 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 demolition and 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. Table 1 presents peak noise levels that could be expected from a range of construction equipment during proposed construction activities.

Generally speaking, peak noise levels within 50 feet of active construction areas and material transportation routes would most likely be considered “striking” or “very loud”, comparable to peak crowd noise at an indoor sports arena. At approximately 200 feet, peak noise levels would be loud - approximately comparable to a garbage disposal or vacuum cleaner at 10 feet. At 0.25-mile, construction noise levels would generally be quiet enough so as to be considered insignificant, although transient noise levels may be noticeable at times.

Combined peak noise levels, or worst-case noise levels when several loud pieces of equipment are used in a small area at the same time as described in Table 1, are expected to occur rarely,

if ever, during the project. However, under these circumstances, peak noise levels could exceed 90 dBA within 200 feet of the construction area, depending on equipment being used.

Although noise levels would be quite loud in the immediate area, the intermittent nature of peak construction noise levels would not create the steady noise level conditions for an extended duration that could lead to hearing damage. Construction workers would follow standard Federal Occupational Safety and Health Administration (OSHA) requirements to prevent hearing damage.

Areas that could be most affected by noise from construction include those closest to the construction footprint, including the residential areas located west and south of the Site. However, indoor noise levels would be expected to be 15-25 decibels lower than outdoor levels. In addition, construction noise impacts would be temporary and would be minimized through BMPs outlined in Section 5.

Indirect impacts include noise from workers commuting and material transport. Area traffic volumes and noise levels would increase slightly as construction employees commute to and from work at the project area, and delivery and service vehicles (including trucks of various sizes) transit to and from the Site. Because trucks are present during most phases of construction and leave and enter the Site via local thoroughfares, truck noises tend to impact more people over a wider area. For this Proposed Action, persons in the area near the Site would experience temporary increases in traffic noise during day-time hours. These effects are not considered significant because they would be temporary and similar to existing traffic noise levels in the area.

Table 1. Peak Noise Levels Expected from Typical Construction Equipment

Source	Peak Noise Level (dBA, attenuated)							
	Distance from Source (feet)							
	0	50	100	200	400	1,000	1,700	2,500
Heavy Truck	95	84-89	78-93	72-77	66-71	58-63	54-59	50-55
Dump Truck	108	88	82	76	70	62	58	54
Concrete Mixer	108	85	79	73	67	59	55	51
Jack-hammer	108	88	82	76	70	62	58	54
Scraper	93	80-89	74-82	68-77	60-71	54-63	50-59	46-55
Bulldozer	107	87-102	81-96	75-90	69-84	61-76	57-72	53-68
Generator	96	76	70	64	58	50	46	42
Crane	104	75-88	69-82	63-76	55-70	49-62	45-48	41-54
Loader	104	73-86	67-80	61-74	55-68	47-60	43-56	39-52
Grader	108	88-91	82-85	76-79	70-73	62-65	58-61	54-57
Pile driver	105	95	89	83	77	69	65	61
Forklift	100	95	89	83	77	69	65	61
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 future operational activities of the expanded cemetery would include vehicle traffic to and from the Site, use of powered equipment for grave site preparation, maintenance, and upkeep, and periodic (during weekday, day-time hours) ceremonial rifle discharges. Estimated ceremonial rifle salute noise levels at varying distances based on US Army estimates are provided in Table 2. These activities would not produce excessive noise, are consistent with the existing adjacent FLNC, and would not produce a significant adverse noise impact on surrounding land uses. The facility would be a relatively quiet cemetery.

Distance (meters)	A-Weighted Exposure Level (dBA)	A-Weighted Maximum Level (dBA)
50	67	76
100	61	70
200	54	63
400	40	49
800	32	41
1,600	22	31

3.8.2 Effects of the No Action Alternative

Under the No Action Alternative, the noise environment surrounding the Site would not be altered by activities of VA. The likely continued limited use of the Site by CMHIFL would result in negligible noise impacts.

3.9 Land Use

The Site was part of Fort Logan from the late 1880s until 1946, was used by VA as a health care facility from 1946 through the 1950s, and has been owned by the State of Colorado and used as part of CMHIFL since 1960. The primary mental health buildings are located off-site to the east. Most of the former Site buildings were demolished between 1950 and 1970. The Site is currently mostly vacant with grassy vegetation and scattered trees. Four buildings, several former building foundations, and roads remain at the Site. The current Site buildings are used by CMHIFL for storage, and automotive and landscaping maintenance support.

According to the City of Denver, the Site is currently zoned Campus Healthcare 2 (CMP-H2). Cemeteries are not a listed permitted use under the CMP-H2 zoning designation (Denver Zone Code).

The property adjoining to the north of the Site (FLNC) is zoned Open Space Recreation (OS-B). The property adjoining to the east of the Site (CMHIFL) is currently zoned CMP-H2. The residential properties adjoining to the south of the Site across West Quincy Avenue are currently zoned Suburban Neighborhood – Single Unit Residential. The residential properties adjoining to

the west of the Site are currently zoned Suburban Neighborhood – Single Unit Residential and Residential (R-2). Pinehurst Park, located southwest of the Site across West Quincy Avenue, is zoned Open Space – Public Parks (OS-A). The current zoning designations of the Site and the surrounding properties are depicted on Figure 7.

3.9.1 Effects of the Proposed Action Alternative

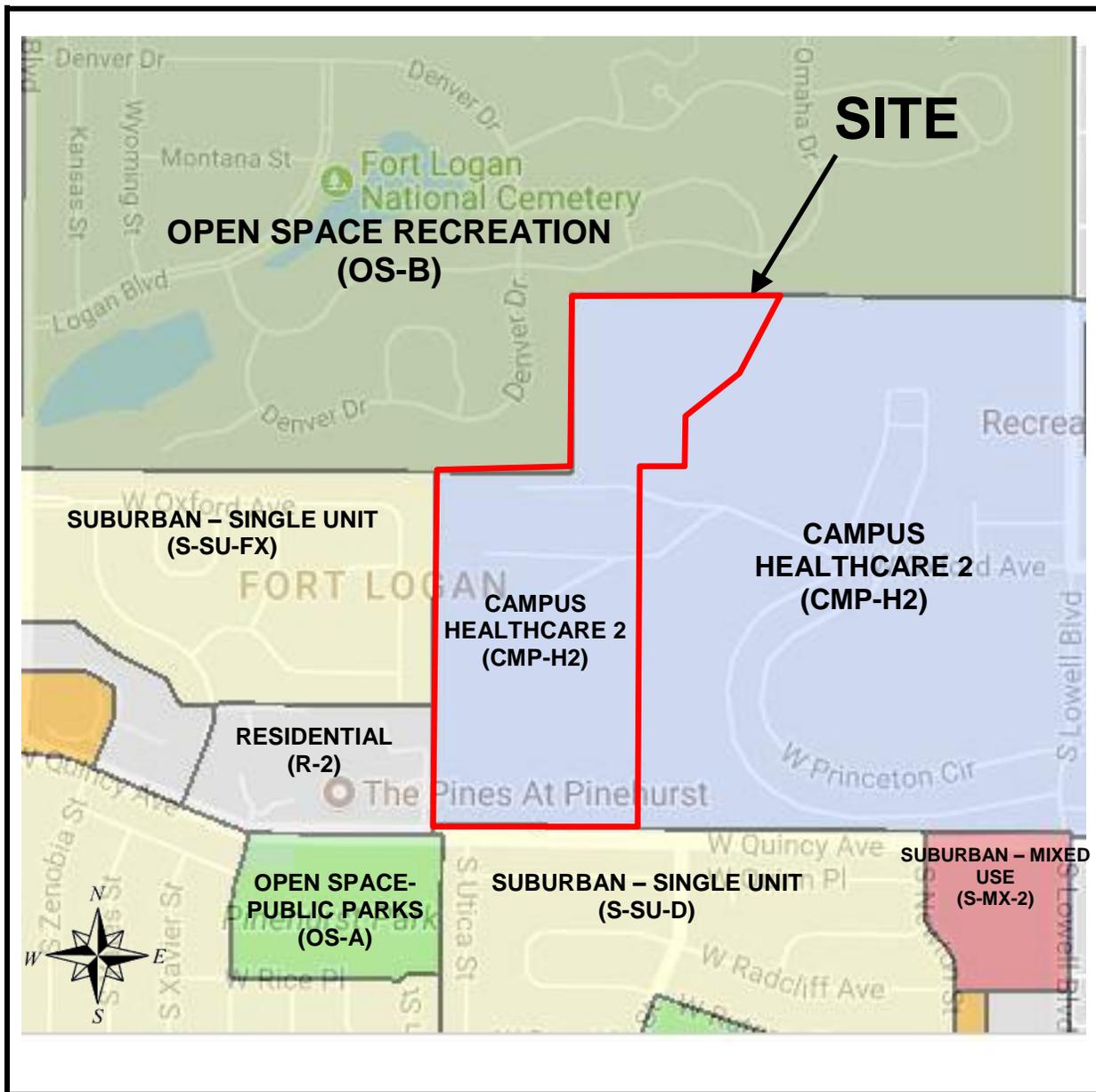
The Site would remain in its current configuration after VA's acquisition; however, CMHIFL operations would cease. The initial unused nature of the Site while owned by VA would result in negligible land use impacts.

The future expansion of the FLNC at the Site would have land use effects as the Site is converted from mostly vacant, institutional land to a cemetery. However, this is not a significant impact as the Site is currently mostly unused and the proposed cemetery use is consistent with the existing, adjacent FLNC.

As a Federal agency, VA is not subject to local zoning regulations. Future use of the Site as a cemetery would be compatible with the current surrounding land uses, and consistent with the northerly adjacent FLNC.

3.9.2 Effects of the No Action Alternative

Under the No Action Alternative, no land use impacts due to VA's Proposed Action would occur. The likely continued use of the Site by CMHIFL would result in no land use impacts.



<p align="center">FIGURE 7 CURRENT ZONING MAP</p>	<p align="center">PREPARED FOR U.S. DEPARTMENT OF VETERANS AFFAIRS WASHINGTON, D.C.</p>	
<p align="center">ENVIRONMENTAL ASSESSMENT PROPOSED FLNC EXPANSION DENVER, COLORADO</p>	<p align="center">TTL PROJECT NO. 14955.02</p>	

3.10 Wetlands, Floodplains, and Coastal Zone Management

3.10.1 Wetlands

This section discusses wetlands at or near the Site and surface waters (streams) as they pertain to wetlands. Additional information regarding surface waters is provided in Section 3.6.

The USFWS National Wetland Inventory (NWI) Mapper indicates a freshwater emergent/forested/shrub wetland is located in the southern portion of the Site (Figure 8). The wetland depicted on the NWI map is associated with the intermittent stormwater drainage ditch that crosses the southern portion of the Site. The ditch originates approximately 40 feet north of the southern boundary of the Site, where a 24-inch diameter concrete stormwater outfall (from the south) is located. The ditch flows to the north approximately 500 feet then angling to the northeast, where it broadens to a less-defined low-lying area that extends off-site. PCH completed a Wetland Delineation for the Site in March 2017. The Wetland Delineation identified the southern portion of the intermittent drainage ditch (approximately 0.8 acre) as a wetland. No other wetlands were identified at the Site. PCH noted the low-lying area northeast of the drainage ditch appears to convey/hold water during storm events and/or spring runoff. The wetland and drainage area identified by PCH are depicted on Figure 8. PCH indicated the 0.8-acre wetland and associated drainage may or may not be considered Waters of the U.S. and recommended further discussion with USACE to determine if these areas are USACE-jurisdictional.

Based on a review of historic topographic maps and aerial photographs, it appears that the intermittent drainage ditch was formerly (late 1800s) a natural intermittent tributary to Bear Creek that was altered during the development of Fort Logan and subsequent development. No current connection to surface water was identified. Therefore, it appears that the 0.8-acre wetland and associated drainage are isolated and not USACE jurisdictional; however, USACE must make this formal determination.

3.10.2 Floodplains

According to available FEMA floodplain mapping (FIRM Map Number 0800460193G, dated November 17, 2005), the Site is not located in the 100-year or 500-year floodplain (Zone X). Areas adjacent to the Site are also not included in the 100-year or 500-year floodplain.

3.10.3 Coastal Zone

The Coastal Zone Management Act (CZMA) was promulgated to control nonpoint pollution sources that affect coastal water quality. The CZMA of 1990, as amended (16 USC 1451 *et seq.*) encourages States to preserve, protect, develop, and where possible, restore or enhance valuable natural coastal resources such as wetlands, floodplains, estuaries, beaches, dunes, barrier islands, and coral reefs, as well as the fish and wildlife using those habitats. The State of Colorado does not have a Coastal Management Program; the Site is not located within a designated coastal zone.

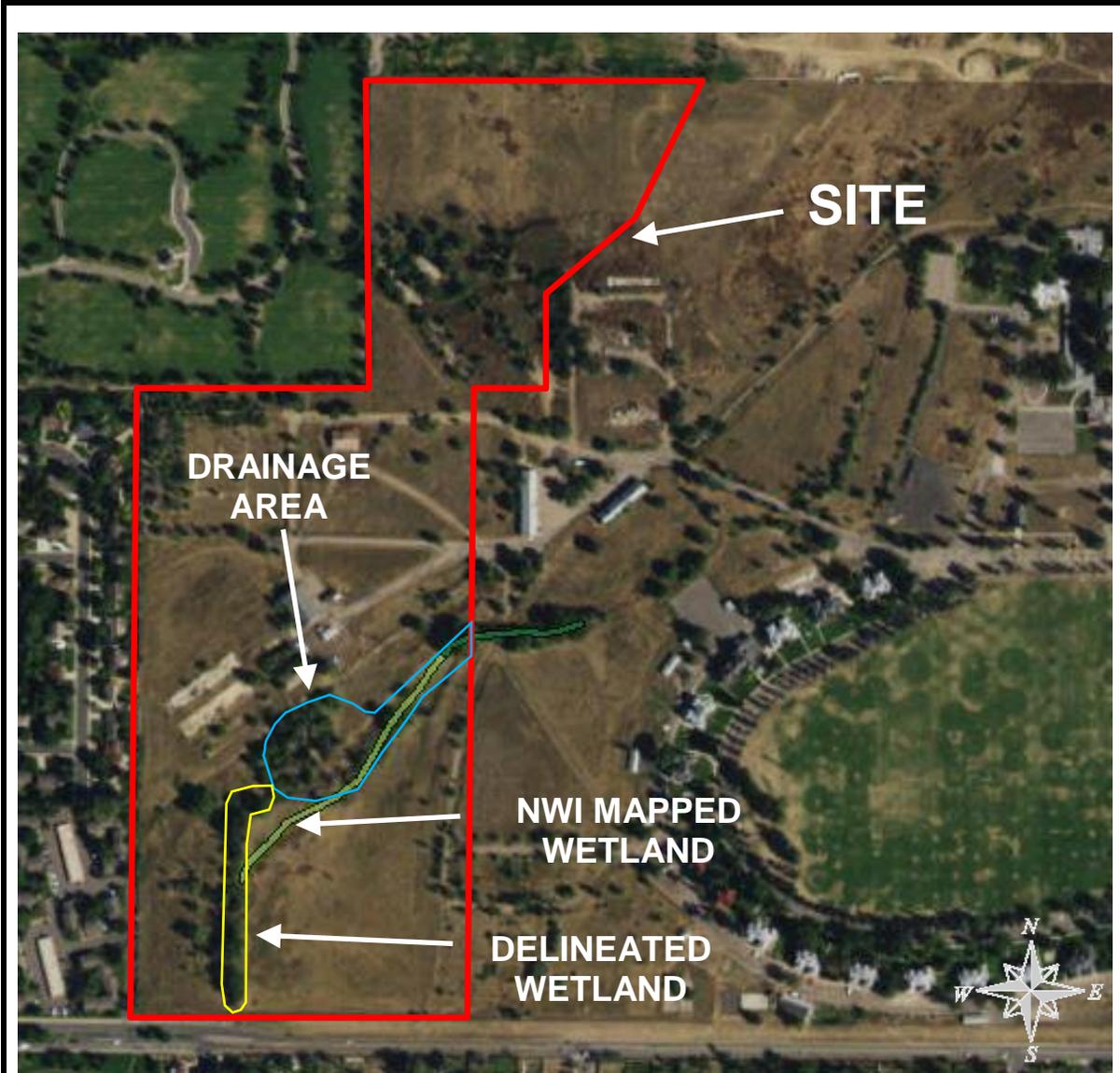
3.10.4 Effects of the Proposed Action Alternative

The Site is not located within a floodplain or designated coastal zone; the Proposed Action would have no floodplain or coastal zone management effects. The initial unused nature of the Site after acquisition by VA would have no wetland impacts.

The future development of the cemetery at the Site would not result in significant impacts to wetlands. As part of the Site design, VA would request a jurisdictional determination by the USACE for the 0.8-acre wetland and associated drainage area. If USACE determines the features are Waters of the U.S., VA would obtain a Section 404 of the Clean Water Act (CWA) permit from USACE and CWA Section 401 water quality certification from the CDPHE for any cemetery development activities that would impact these features. However, VA anticipates the cemetery expansion design would maintain a buffer of undisturbed land around the wetland. As discussed in Section 3.6, the wetland associated drainage area may be considered State Water and may be subject to standard water quality regulations overseen by the CDPH WQD and the Denver DPW WMD. VA would follow standard water quality regulations, as applicable. By following the permit requirements and implementing general BMPs, as described in Section 5, wetlands/surface water impacts would be less-than-significant.

3.10.5 Effects of the No Action Alternative

No impacts to wetlands, floodplains or coastal zones resources would occur.



**FIGURE 8
WETLANDS MAP**

ENVIRONMENTAL ASSESSMENT
PROPOSED FLNC EXPANSION
DENVER, COLORADO

PREPARED FOR

U.S. DEPARTMENT OF VETERANS AFFAIRS
WASHINGTON, D.C.

TTL PROJECT NO.
14955.02



3.11 Socioeconomics

The following subsections identify and describe the socioeconomic environment of the City and County of Denver and the State of Colorado. Presented data provide an understanding of the socioeconomic factors that have developed the area. Socioeconomic areas of discussion include the local demographics of the area, regional and local economy, local housing, and local recreation activities. Data used in preparing this section were collected from the 2010 Census of Population and Housing (US Census Bureau 2010), subsequent US Census Bureau data, and the US Department of Commerce Bureau of Economic Analysis (BEA).

3.11.1 Demographics

The City and County of Denver's estimated population in 2017 was 704,621 residents. The estimated population total for the State of Colorado in 2017 was 5,607,154 residents (Table 3). Age distribution and high school graduation rates are generally similar for Denver and the State of Colorado. Minority populations for Denver are higher than that of the State of Colorado as a whole. Minority population rates specific to the Site area are discussed in Section 3.16 (Environmental Justice).

Area	All Individuals (2017 Estimate)	Population Under 18 Age Years (2010)	Population Over 65 Age Years (2010)	Minority (2016)	High School Graduates (2012-16)	Veterans (2016)
Colorado	5,607,154	22.5%	13.8%	31.2%	91.0%	383,699
Denver	704,621	19.9%	11.6%	45.8%	86.4%	30,957

Source: US Census Bureau, 2010 Census, Profile of General Demographic Characteristics, 2012-2016.
N/A – Not Available

3.11.2 Income

Denver has a slightly lower median household income and a higher population below the poverty line than the State of Colorado as a whole (Table 4). Household incomes specific to the Site area are discussed in Section 3.16.

Area	Number of Households	Median Household Income	Population Below Poverty Level	Unemployment Rate July 2018
Colorado	2,051,616	\$ 62,520	11.0%	2.8%
Denver	281,072	\$ 56,258	14.0%	2.9%

Source: US Census Bureau, 2010 Census, Profile of General Demographic Characteristics, 2012-2016.
N/A – Not Available

3.11.3 Commuting Patterns

Residents of Denver are largely dependent on personal automobiles for transportation to and from work. Other methods of transit include public transportation [Regional Transportation District (RTD)], carpooling, and walking. The average commuting time in Denver was approximately 25 minutes in 2016.

3.11.4 Protection of Children

Because children may suffer 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.

Children are not regularly present at the Site. However, children are present in the residential areas adjoining or near the Site (south and west) and are periodically present at Pinehurst Park located approximately 100 feet southwest of the Site across West Quincy Avenue, Riverside Soccer Club located approximately 600 feet east of the Site, and Bow Mar Heights Park located approximately 900 feet southeast of the Site. No schools are located within 1,000 feet of the Site.

3.11.5 Effects of the Proposed Action Alternative

The Site would remain in its current configuration after VA's acquisition; however, the limited CMHIFL Site operations would cease. The initial unused nature of the Site while owned by VA would result in no socioeconomic effects.

Future construction of the proposed cemetery at the Site is anticipated to result in minor short-term beneficial socioeconomic impacts to local employment and personal income by providing temporary construction jobs. However, due to the intermittent and finite nature of these construction projects, no long-term impacts to the construction labor force are anticipated.

The Proposed Action would result in long-term significant beneficial socioeconomic impacts by providing a regionally proximate National Cemetery of sufficient size to US Veterans and their families.

No adverse health or safety risks to children are anticipated to result from construction or operation of the cemetery at the Site. Children would only be present at the Site as visitors. Construction areas would be secured to prevent unauthorized access by children from the nearby residential areas. The construction contractor would limit and control construction dust and noise as discussed in Section 5, thereby minimizing adverse effects to children in the area.

3.11.6 Effects of the No Action Alternative

Under the No Action Alternative, the Site would likely continue to be used on a limited basis by CMHIFL with no socioeconomic change to the Site area. However, VA would not secure land

necessary to meet its long-term cemetery needs for the region, which could result in a future significant adverse, long-term, impact to US Veterans and their families. The absence of an open National Cemetery in Denver would require Veterans and their families to travel much longer distances (up to 60 miles farther) to the nearest National Cemetery for interment; at increased cost and time, and would reduce the frequency of subsequent visits.

3.12 Community Services

The Site is located within the Sheridan School District. High schools and elementary schools are located in the general Site area, but none are located within 1,000 feet of the Site (Google Earth, 2019).

The Denver Police Department provides police protection to the Site and its vicinity. The Denver Fire Department provides fire protection and emergency medical services to the Site and its vicinity.

The Colorado Department of Transportation (CDOT) and the Denver Department of Public Works provide local road and bridge maintenance services in the Site vicinity. Other than the CMHIFL located to the east of the Site, no major medical facilities are located within two miles of the Site.

Public transportation in the City of Denver is provided by RTD. The nearest public transportation stops (Bus Route 51) are located along West Kenyon Avenue, along the northern boundary of the FLNC.

Developed recreational facilities in the vicinity of the Site include Pinehurst Park located approximately 100 feet southwest of the Site across West Quincy Avenue, Riverside Soccer Club located approximately 600 feet to the east, Bow Mar Heights Park located approximately 900 feet southeast, and Bear Creek Park located approximately 1,400 feet north of the Site. There are no other developed recreational facilities in the immediate vicinity of the Site.

3.12.1 Effects of the Proposed Action Alternative

The initial unused nature of the Site once acquired by VA would have no community service impacts.

The future development of the expanded cemetery at the Site would have negligible community service impacts. No additional load is expected to be placed on the fire or police departments as the result of the Proposed Action. Use of other public or community services as a result of the proposed future cemetery development is not expected.

3.12.2 Effects of the No Action Alternative

Under the No Action Alternative, no community services impacts from VA would occur. The likely continued limited use of the Site by CMHIFL would result in no community services impacts.

3.13 Solid and Hazardous Materials

Hazardous and toxic materials or substances are generally defined as materials or substances that pose a risk (through either physical or chemical reactions) to human health or the environment.

The Site was a portion of the 940-acre former Fort Logan Military Reservation, which was established in the late 1880s and closed in 1946. During that time, the Site was occupied by railroad tracks, up to 34 buildings, including: barracks, officer's quarters, rail dock buildings, warehouses, maintenance support buildings (two vehicle repair and two gasoline stations); oil, coal, and ice storage areas; artillery magazines; and a small-arms firing range. The Site also included areas of vacant, unimproved land. In 1946, the Site and surrounding lands were used by VA as a temporary health care facility for Veterans until the VA hospital in Denver was completed. In 1960, the Site was transferred to the State of Colorado for use as part of the CMHIFL. The majority of the on-site buildings were razed between 1950 and 1970. The Site is currently mostly vacant with grassy vegetation and scattered trees. Four buildings, several former building foundations, and roads remain at the Site. The current Site buildings are used for storage, and automotive and landscaping maintenance support. The Site features are depicted on Figure 5.

TTL completed a Phase I Environmental Site Assessment (Phase I ESA) of approximately 66 acres of land, including the 49.4-acre Site, on behalf of VA (dated May 2017). Based upon the information obtained and evaluated as part of the Phase I ESA, the following Recognized Environmental Conditions (RECs) were identified in association with the 49.4-acre Site:

- Building 119 (constructed between 1920 and 1940 and demolished sometime after 1960) and Building 180 (constructed in 1941 and remaining at the Site) were/are located in the central portion of the Site and used as gasoline stations. No additional information pertaining to the gasoline station at Building 119 was identified. An underground storage tank (UST) Closure Report was provided by the Colorado Department of Labor and Employment, Division of Oil and Public Safety (OPS) for two 10,000-gallon gasoline USTs removed from the vicinity of Building 180 in 1995. No field evidence of impacts was identified. Low concentrations of benzene, toluene, ethylbenzene, and xylenes (BTEX) were detected in soil samples collected from the UST system excavations, below the Colorado OPS Tier I Risk-Based Screening Levels; however, the area had not been fully investigated. The former use of Buildings 119 and 180 as gasoline stations was considered to be a REC.
- Buildings 37 and 190, formerly located in the central and northern portions of the Site, were constructed between 1920 and 1940 and demolished between 1946 and 1960, and were used as paint shops. No additional information regarding the former paint shops was identified. The former paint shops were considered to be RECs.
- A coal storage shed (Building 58), a coal trestle (Area 111), and a coal yard were formerly located in the central and southwestern portions of the Site. Blackened areas are evident in the vicinity of the coal trestle in a 1937 aerial photograph and in the coal yard in 1950 and 1954 aerial photographs. Based on the typical presence of elevated concentrations of

metals and polynuclear aromatic hydrocarbons (PAHs) in coal, the former outdoor storage of coal in these areas was considered to be a REC.

- Building 64 was constructed in 1939 as an automotive repair shop and remains functional in that use. Building 64 has one car wash bay and three repair bays. Two floor drains were observed in the building, one in the repair area and one in the car wash area, and an historic trench drain was reported. The floor drains discharge to the ground surface on the side of the hill east of Building 64. Two aboveground hydraulic lifts were observed in the repair area; however, CMHIFL representatives indicated two in-ground hydraulic lifts were previously located in the repair area and it is unknown if the oil reservoirs were removed when the lifts were removed. The use of Building 64 for vehicle maintenance and repair since 1939 was considered to be a REC.
- Building 69 was originally constructed in 1920 as a hospital vehicle maintenance garage. This building is currently utilized as a storage warehouse for landscaping materials and miscellaneous maintenance equipment. The former use of Building 69 for vehicle maintenance and repair was considered to be a REC.
- Building 82 (constructed prior to 1919 and demolished between 1940 and 1946) and Area 69B (1940 to sometime after 1960) were located in the central portion of the Site and were used as oil storage. No additional information was identified. The former oil storage in these areas was considered to be a REC.
- Areas 155 and BB were identified as locations of former gasoline tanks. No additional information was identified. It is unknown if the gasoline tanks were above ground tanks (ASTs) or USTs. The former gasoline tanks were considered to be RECs.
- A small-arms firing range (Area GR) was located in the south-central portion of the Site when it was operated as part of Fort Logan. Based on available information, it appears that it was an outdoor range. Outdoor firing ranges often result in lead-impacted soil. The former firing range was considered to be a REC.
- A salvage lot was present in the northern portion of the Site during its use as part of Fort Logan. It is unknown what materials were stored in the salvage lot; however, salvage lots typically include vehicles and equipment in poor condition that may leak petroleum products and/or hazardous substances, and may include vehicle/equipment dismantling operations. The former salvage lot was considered to be a REC.
- Several former railroad spurs served Fort Logan from about 1890 to 1950. Some of these rail lines remain in place and were covered with asphalt pavement instead of being removed. Creosote preserved railroad ties likely remain at the Site and were considered to be a REC in connection with the Site.
- CMHIFL representatives indicated that demolished buildings on the Fort Logan campus (off-Site to the east, near the parade grounds) were backfilled into basement or foundation areas and the soil in the vicinity of these demolition debris filled areas had tested positive for asbestos. The asbestos-impacted fill had to be remediated prior to construction or earth

moving activities. It is unknown if former on-site structures were demolished into basement areas. The potential presence of asbestos-impacted demolition debris fill on the Site was considered to be a REC.

TTL conducted a Phase II ESA at the Site in August through October 2017 to assess whether the Site has been impacted by the RECs identified in the Phase I ESA. The Phase II ESA included a geophysical survey to assess for possible abandoned USTs and backfilled basements, 55 soil borings ranging in depth from 4 to 25 feet bgs, 6 deeper soil borings (30 to 35 feet bgs) to install temporary monitoring wells, and the collection of 40 soil samples and 6 groundwater samples for laboratory analysis. Samples were analyzed for volatile organic compounds (VOCs), PAHs, metals, and/or total petroleum hydrocarbons (TPH), based on the potential contaminants of concern associated with each REC. The Phase II ESA report is included in Appendix D.

Based on the results of the Phase II ESA geophysical survey, it does not appear that abandoned USTs remain in the vicinity of the former on-site gasoline station buildings (Buildings 119 and 180), former gasoline tank areas (Areas 155 and BB), the current vehicle maintenance building (Building 64), or the former vehicle maintenance building (Building 69). No abandoned USTs are suspected to remain at the Site.

Numerous buildings were formerly located on the Site. Little or no information was available regarding their construction (whether they had basements) or their demolition. Based on the presence of concrete building slabs in many of the former building locations, it appears that many of the buildings were built slab-on-grade. The locations of former buildings that were reported or suspected to have contained basements (east and west of Building 69 and in the southeastern portion of the Site) were assessed during the geophysical survey. Evidence of a basement filled with demolition debris was identified in the southeastern portion of the Site. No evidence of demolition debris filled basements was identified in the area near Building 69. Although a comprehensive evaluation of all of the former buildings was not conducted, it appears that most former on-site buildings either did not have basements or did not have demolition debris filled basements. However, some demolition debris filled basements, such as the building in the southeastern portion of the Site, may be present. The nature of the demolition debris in this basement is unknown, however, concrete and other building debris was observed at the ground surface in this area.

Based on the Phase II ESA field observations and analytical results, it appears that current and the historical Site operations have had only minor impact on Site soil. TPH was identified in shallow soil near the discharge pipe located southeast of Building 64 (GP-14), in excess of the Colorado OPS Screening Levels (500 ppm) that triggers PAH analysis, but no PAHs were detected in this sample in excess of the CDPHE Soil Screening Values. None of the 40 soil samples collected from the Site were found to contain contaminants in excess of the CDPHE Soil Screening Values.

At many Phase II ESA soil boring locations, the upper soils (generally less than 3 feet bgs, but deeper in some areas) contained gravel, coal fragments and/or coal ash and appeared to be previously disturbed/graded soil. Based on the widespread use of coal for heating the former buildings, residual coal and/or coal ash is likely present in other areas of the Site. Construction debris (concrete, asphalt, etc.) was also observed at the ground surface in many areas. PAHs

and slightly elevated metals concentrations were noted in soil samples that contained coal/coal ash, but were not detected in excess of the CDPHE Soil Screening Values.

Field observations of petroleum impacted groundwater were observed in MW-3 and MW-6 (located near former gasoline station Building 119) and MW-5 (located southwest of former Building 119, between Building 119 and former gasoline station Building 180). Groundwater was found at a depth of approximately 26 to 29 feet at these locations, within the weathered sandy claystone bedrock. Based on these field observations, it appears that one or both of these former gasoline stations has impacted Site groundwater. However, only minor petroleum impacts were identified in the groundwater samples collected from these locations, only in the sample collected from MW-3 and all below the Colorado Water Quality Commission Groundwater Quality Standards (GWQS).

The Phase II ESA recommended no further Site investigation. However, the Phase II ESA stated that shallow soil at the Site contains coal, coal ash and some construction debris. Although no soil impacts in excess of the CDPHE Soil Screening Values were identified, localized areas of impacted soil may be present. The Phase II ESA recommended that soil excavated from the Site during cemetery development should be properly managed; stating that excess soil that cannot be reused on-site, if any, should be characterized prior to off-site disposal. The Phase II ESA also stated that non-soil materials excavated from the Site during Site redevelopment (such as from backfilled basements) should be properly managed and disposed of.

3.13.1 Effects of the Proposed Action Alternative

The Site would remain in its current configuration after VA's acquisition; however, CMHIFL operations would cease. The initial unused nature of the Site while owned by VA would result in no solid and hazardous effects.

The Proposed Action could have short-term, less-than-significant adverse solid and hazardous materials effects. Specifically, the future expansion of the FLNC on the Site could increase the exposure of persons to hazardous or toxic substances and/or increase the presence of hazardous or toxic materials in the environment during demolition and ground-disturbing construction activities.

The structures to be demolished at the Site during the cemetery development may contain ACM. Pre-demolition asbestos surveys by licensed inspectors would be conducted for each of the structures to be demolished as part of the Proposed Action. The surveys would identify and quantify ACMs, which would be removed by licensed asbestos abatement contractors in accordance with the NESHAP and State of Colorado requirements prior to building demolition to prevent release and exposure to asbestos during demolition.

Shallow soil at the Site contains coal, coal ash, and some construction debris. Although no soil impacts in excess of the CDPHE Soil Screening Values were identified during the Phase II ESA, localized areas of impacted soil may be present. VA would inform construction contractors of the potential presence of impacted soil at the Site and would ensure that any excavated soil is properly handled. It is anticipated that most soil at the Site would be reused on-site. VA would

ensure that any soil exported from the Site is managed according to the applicable Federal and State regulations.

In addition, a former building basement that appears to have been filled with demolition debris was identified in the southeastern portion of the Site. Although none are known at this time, other former buildings with basements filled with demolition debris may also be present at the Site. Any non-soil materials excavated from the Site during the cemetery development would be properly managed and disposed of.

The future cemetery expansion activities could also result in short-term, less-than-significant adverse impacts due to the increased presence and use of petroleum and hazardous substances during construction. A small increase in construction vehicle traffic would increase the likelihood for release of vehicle operating fluids such as oil, diesel, gasoline, antifreeze, etc. and maintenance materials. As such, a less-than-significant, direct, short-term adverse impact is possible. Implementation of standard construction BMPs (Section 5) would serve to ensure this impact is further minimized.

No significant adverse long-term impacts during operation of the expanded cemetery are anticipated. Long-term operational solid and hazardous materials would be managed in accordance with applicable Federal and State laws and VA's SOPs. The development and operation of the cemetery at the Site would not 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. As noted in Section 3.6.3, based on standard modern burial practices, it is unlikely that embalming fluid would be released into the soil or groundwater.

3.13.2 Effects of the No Action Alternative

Under the No Action Alternative, no solid and hazardous materials use or effects from VA's activities at the Site would occur. The Site would likely continue to be used by CMHIFL with the potential for minor solid and hazardous materials impacts.

3.14 Transportation and Parking

Access to the Site is currently provided by West Oxford Avenue from the east, which intersects with South Lowell Boulevard approximately 2,000 feet east of the Site. West Quincy Avenue borders the Site to the south, but there is currently no access drive to the Site from West Quincy Avenue. The main entrance and a secondary entrance to FLNC are located on South Sheridan Boulevard, a north-south oriented road located approximately 2,000 feet west of the Site. Another secondary entrance to FLNC and the maintenance entrance are located on West Kenyon Avenue, an east-west oriented road located approximately 1,300 feet north of the Site. Traffic to FLNC is primarily provided by US Route 285, which intersects with South Sheridan Boulevard approximately one-half mile north of the main FLNC entrance. Roads in the Site area are depicted on Figures 2-6.

According to the Colorado Department of Transportation (CDOT) and the Denver Regional Council of Governments (DRCOG), South Sheridan Boulevard has an average daily traffic (ADT) in the Site vicinity of 13,178 vehicles, West Kenyon Avenue has an ADT in the Site vicinity of 3,702 vehicles, West Quincy Avenue has an ADT in the Site vicinity of 11,304 vehicles, and South Lowell Boulevard has an ADT in the Site vicinity of 4,748 vehicles. No ADT information was identified for West Oxford Avenue. Local roadway characteristics are shown in Table 5.

Traffic in the Site area is regulated by CDOT and the Denver Department of Public Works (DDPW). Under current conditions, all of the adjacent roadways appear to operate above acceptable Level of Service¹ (LOS) ratings.

Type	Route	Direction	Road Width (feet)	Lanes	Average Daily Traffic (vehicles)	Level of Service
Arterial	South Sheridan Boulevard	North-South	90	4 (paved and divided)	13,178 (2011)	C or better
Collector	West Kenyon Avenue	East-West	25	2 (paved)	3,702 (2015)	B or better
Collector	West Quincy Avenue	East-West	35	2 (paved) and center turn lane	11,304 (2013)	C or better
Collector	South Lowell Boulevard	North-South	30	2 (paved)	4,748 (2015)	B or better
Access	West Oxford Avenue	East-West	25	2 (paved)	N/A	B or better

Traffic Volume Data: CDOT via DRCOG, 2017
 N/A – not available
 Other Data Source: TTL Site Reconnaissance, February 2017

3.14.1 Effects of the Proposed Action Alternative

The Site would remain in its current configuration after VA's acquisition; however, CMHIFL's minor on-site operations would cease. The initial unused nature of the Site while owned by VA would result in a minor reduction in traffic to the Site.

In the future, when the Site would be developed with the expanded cemetery, vehicle trips associated with burials would likely be similar to current conditions at the FLNC. The burial rate is not expected to increase as a result of the expanded cemetery. Burial traffic would continue to use the main entrance to the FLNC located along South Sheridan Boulevard when the expanded cemetery is developed. It is anticipated that the Site would be connected to the

¹ **Level of Service** – LOS represents a set of qualitative descriptions of a transportation system's performance. The Federal Highway Administration Highway Capacity Manual defines levels of service for intersections and highway segments, with ratings that range from A (best) to F (worst). Generally, a LOS of D or higher is considered acceptable by transportation planning agencies.

existing, internal FLNC roads. Based on the anticipated similar amount of burial traffic and traffic patterns as currently exists at the FLNC, the traffic impacts associated with burials at the expanded cemetery would be less-than-significant.

As additional areas of the FLNC are developed and utilized, the number of visitors to the cemetery is likely to increase; however, the increased number of vehicle trips associated with visitors is likely to be minor. Visitors would use the main FLNC entrance as well as secondary entrances located along South Sheridan Boulevard, West Kenyon Avenue, and possibly a new secondary entrance to the Site from West Quincy Avenue.

No parking impacts are anticipated. The proposed FLNC expansion would be designed and constructed to accommodate all cemetery parking within the cemetery grounds.

3.14.2 Effects of the No Action Alternative

Under the No Action Alternative, no action by VA would occur and the existing traffic and parking conditions would remain. The likely continued use of the Site by CMHIFL would result in no/negligible traffic or parking impacts.

3.15 Utilities

Basic utilities in the Site area (i.e., water, sewer, electric, and natural gas) are provided by various utility providers. As part of the preparation of this EA, local utility providers were researched to determine the availability of required utilities in the vicinity of the Site.

The **City of Denver** supplies potable water to the FLNC and the Site area. FLNC buildings and current CMHIFL Site buildings are connected to the municipal water system. VA uses the municipal water service, as necessary, to irrigate the existing developed areas of the cemetery. The existing irrigation system would be expanded to the Site as part of the cemetery development. The potable water service in the vicinity of the Site is likely adequate for the Proposed Action. VA's practice is to minimize the use of irrigation water. VA would coordinate with the City of Denver to expand the FLNC potable water service to the Site.

The **City of Denver** supplies sanitary sewer service to the FLNC and the Site area. The sanitary sewer service in the vicinity of the Site is likely adequate for the Proposed Action. The expanded cemetery would require minimal sanitary sewer service. VA would coordinate with the City of Denver to connect to the existing sanitary sewer service at the Site.

The **City of Denver** also supplies stormwater sewer service to the Site area. The stormwater sewer service at the Site is likely adequate for the Proposed Action as the proposed cemetery development would not significantly increase impervious surfaces at the Site. VA would coordinate with the City of Denver regarding stormwater management and sewer service at the Site.

Xcel Energy supplies the electric and natural gas services to the FLNC and the Site. The electrical and natural gas services in the vicinity of the Site is likely adequate for the Proposed Action. The cemetery expansion would require minimal electrical and natural gas service. VA

would coordinate with Xcel Energy prior to expanding the FLNC electrical and natural gas services to the Site.

Various companies provide telecommunication services to the Site vicinity. It is not anticipated that telecommunication services would be used at the expanded cemetery.

3.15.1 Effects of the Proposed Action Alternative

The Site would remain in its current configuration after VA's acquisition; however, CMHIFL operations would cease. The initial unused nature of the Site while owned by VA would result in no utility impacts.

Expansion of the FLNC at the Site would result in the consumption of utilities; however, the expanded cemetery would have generally minor utility needs. Water, provided by the City of Denver, is anticipated to have the largest demand due to the need for maintaining landscaped areas of the cemetery. Low-moisture-tolerant species suited to the Denver area would be used to minimize irrigation needs. The expanded cemetery design would include on-site stormwater retention to prevent impacts to off-site water quality and hydrology. Utility impacts would be less than significant.

3.15.2 Effects of the No Action Alternative

Under the No Action Alternative, no utility impacts by VA would occur. The likely continued use of the Site by CMHIFL would result in no/negligible utility impacts.

3.16 Environmental Justice

In 1994, EO 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, was issued to focus attention of Federal agencies on human health and environmental conditions in minority and low-income communities and to ensure that disproportionately high and adverse human health or environmental effects on these communities are identified and addressed.

According to the USEPA-developed EJSCREEN (an environmental justice mapping and screening internet application), the Site is located in an area with a higher minority population (42 percent) than the State of Colorado as a whole (31 percent). The low-income population in the Site area (26 percent) is similar to that of the State of Colorado as a whole (29 percent).

3.16.1 Effects of the Proposed Action Alternative

The Site would remain in its current configuration after VA's acquisition; however, CMHIFL operations would cease. The initial unused nature of the Site while owned by VA would result in no/negligible environmental justice impacts.

The future cemetery development at the Site would have less-than-significant environmental justice effects. Although the Site is located in an area with a larger than average minority population, the Proposed Action would have only minor impacts on the residents in the area.

During construction, effects on nearby residential land uses, such as through noise and dust, would be limited and controlled through BMPs described in Section 5, thereby minimizing adverse effects to populations within the ROI.

3.16.2 Effects of the No Action Alternative

Under the No Action Alternative, no action by VA would occur at the Site and there would be no environmental justice effect by VA. The likely continued use of the Site by CMHIFL would result in no environmental justice impacts. However, VA would not secure land necessary to meet its long-term cemetery needs for the region. The absence of an open National Cemetery in the Denver area could have a disproportionate effect on local minority populations in the region.

3.17 Cumulative Impacts

As defined by the 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 of extensive influences of multiple forces, cumulative effects are the most difficult to analyze.

The approximately 49.4-acre Site is located in a mixed-use area that was formerly part of the Fort Logan Military Reservation. The Site area is almost fully developed with residential, institutional, and recreational and limited commercial properties. There have been no major new developments in the Site area, other than the expansion of the FLNC, in the past 20 years. The area adjacent to the north and northwest of the Site is currently occupied by the FLNC. Most of the cemetery is developed with limited remaining burial space north and northeast of the Site. The area located to the east of the Site is occupied by the remainder of the CMHIFL. The area immediately adjacent to the Site is mostly vacant, grassy land with scattered trees and a few small buildings, former building foundations and roads, and a landfill. Farther east are CMHIFL mental health buildings, and former residences now predominantly occupied by state-run programs/agencies. The area located to the south and southwest of the Site beyond West Quincy Avenue has been occupied by a residential neighborhood and Pinehurst Park since the 1960s. The area located to the west of the Site has been occupied by a residential neighborhood since the 1960s. Further potential development in the Site area is limited due to the nearly fully developed nature of the area. Additional unimproved, underutilized land associated with the CMHIFL is present adjacent to the east of the Site; however, portions of the unimproved land are not useable (landfill). Some of the area east of the Site appears to be usable; however, no development plans for this area were identified. Most potential future development in the area would likely be a result of the replacement of older developments that have reached the end of their effective useful lives. No additional specific development plans for the immediate Site area were identified.

The Proposed Action Alternative would result in the impacts identified in Section 3.2 through 3.16. These include potential impacts to aesthetics, air quality, cultural resources, geology and soils, hydrology and water quality, wildlife and habitat, noise, land use, wetlands, solid and

hazardous materials, transportation, utilities and environmental justice. These potential 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 5. Given the nature of the Proposed Action and the limited potential future development in the immediate Site area, no significant cumulative adverse effects to any of these resource areas are anticipated. No adverse effects to floodplains or coastal zones, socioeconomics, community services or parking are anticipated with the Proposed Action. As such, no cumulative adverse effects to any of these resource areas are anticipated.

No significant adverse cumulative impacts to the environment, induced by the Proposed Action, are anticipated within the region. Coordination between VA, Federal and State agencies, the City of Denver, and community representatives would serve to manage and control cumulative effects within the region, including managing regional transportation increases with adequate infrastructure. Implementation of local land use and resource management plans would serve to control the extent of environmental impacts, and continued planning would ensure future socioeconomic conditions maintain the quality of life the area's residents currently enjoy. Implementation of effective resource management plans and programs should minimize or eliminate any potential cumulative degradation of the natural ecosystem, cultural or human environment within the ROI of the Proposed Action.

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

3.18 Potential for Generating Substantial Public Controversy

As discussed in Section 4, VA has solicited input from various Federal, State, and local government agencies regarding the Proposed Action. Several of these agencies have provided input; none of the input has identified opposition or controversy related to the Proposed Action. VA published and distributed the Draft EA for a 30-day public comment period; no comments were received from the public. Based on the significant positive effects of the Proposed Action and the findings of this EA (no significant adverse environmental impact), it is not anticipated that there will be substantial public controversy regarding the Proposed Action.

SECTION 4: PUBLIC INVOLVEMENT

VA invites public participation in decision-making on new proposals through the NEPA process. Public participation with respect to decision-making on the Proposed Action is guided by 38 CFR Part 26, VA's policy for implementing the 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 minority, low-income, and disadvantaged persons, are urged to participate. A record of agency coordination and public involvement associated with this EA is provided in Appendix A and Appendix E, respectively.

4.1 Agency Coordination

VA consulted with the following agencies during the preparation of this EA: USFWS, USEPA, USACE, USDA NRCS, Colorado SHPO, Colorado State Forest Service (CSFS), Colorado Department of Natural Resources (CDNR), Colorado Department of Public Health & Environment (CDPHE), Colorado Department of Transportation (CDOT), Denver Community Planning and Development (DCPD), Denver Development Services (DDS), Denver Department of Environmental Health (DDEH), Colorado Department of Human Services (CDHS), Denver Department of Public Works (DDPW), Denver Department of Wastewater Management (DDWM), Denver Parks & Recreation (DPR), Friends of Historic Fort Logan (FHFL), and Denver Regional Air Quality Council (DRAQC).

VA received responses from the following agencies: USFWS, USACE, USDA NRCS, Colorado SHPO, CDPHE, CDNR, and DDEH. Input provided by these agencies is addressed in the appropriate resource sub-sections of Section 3. Written correspondence from the agencies is provided in Appendix A. The following summarizes that input, which VA used to focus this EA's analysis:

- **USFWS** indicated that they have no comments pertaining to the Proposed Action.
- **USACE** provided generic information regarding Waters of the U.S. and Section 404 of the Clean Water Act permit requirements and stated that they should be notified if Waters of the US would be impacted (through dredging, filling, or excavation) as a result of the Proposed Action.
- **USDA NRCS** stated that soils at the Site have not been mapped by USDA NRCS. USDA NRCS stated the Proposed Action is unlikely to affect surface or groundwater resources, threatened and endangered species, natural areas, scenic rivers, migratory bird habitat, soils, prime and unique farmland, traffic, noise, or air quality. USDA NRCS stated that cultural resources may be present due to the historic use of the Site; however, since the area has already been developed, USDA NRCS sees no issues with the Proposed Action.

- In 2017, VA initiated Section 106 consultation with the **Colorado SHPO** regarding the proposed FLNC expansion at the Site. VA provided SHPO information regarding historic properties at the Site, including a Class III Cultural Resources Inventory. Between 2017 and 2018, VA and the SHPO exchanged correspondence regarding the Site and the Proposed Action as part of the Section 106 consultation process. Ultimately, VA and SHPO agreed that two buildings at the Site (Building 64 and Building 180) are contributing resources to the CMHIFL NRHD and would be adversely affected by the Proposed Action. An MOA was developed to address the adverse effects (see Section 3.4).
- **CDPHE** stated that VA would need to follow Section 5 of 6 CCR 1007-2, Part 1, the *Regulations Pertaining to Solid Waste Sites and Facilities* for management of asbestos waste associated with the demolition of existing Site buildings. The CDPHE also requested that VA ensure that all Air Quality Control Commission (AQCC) regulations are followed during the construction of the cemetery. Specifically, AQCC Regulations 8, 15 and 19 regarding the proper handling of asbestos, lead-based paint, and chlorofluorocarbons if existing Site buildings are going to be demolished or renovated and AQCC Regulation 3 regarding land development.
- **CDNR** Division of Water Resources stated that minimal water resources are located on the Site; however, water resources are located in the Site vicinity, including stormwater detention facilities west of the Site and Bear Creek north of the Site. CDNR noted that permitted water wells are located in the Site area, but most are for monitoring water quality/quantity. The CDNR also stated that the Site is located within the boundaries of the Denver Basin aquifers and the uppermost aquifer may not be confined, dependent on location and geology. The CDNR stated that water for the expanded cemetery must be provided by a municipal water supplier, or if an irrigation well is desired, VA must first obtain a Plan for Augmentation through the Colorado Division One Water Court.
- **DDEH** Division of Environmental Quality stated that the Site is not a likely source of petroleum or hazardous waste contamination; however, areas of historical fill are present in several locations across the Site; therefore, there is a potential for the presence of solid waste, regulated materials and compaction issues; and an historical leaking underground storage tank (LUST) may have been located at 4390 West Oxford Avenue (central portion of the Site). DDEH recommended that the soil be tested in the fill areas if excavation or construction is planned and recommended proper handling and disposal if contaminated materials are encountered. The primary fill area identified by DDEH was located within the northeastern portion of the 66-acre initial study area. VA investigations identified this area to contain a landfill, as such, it has been excluded from the 49.4-acre Site. Other smaller fill areas identified by DDEH were investigated during VA's geotechnical and Phase II ESA investigations and were found not to contain large quantities of deleterious fill. No soil samples collected during the Phase II ESA contained contaminants in excess of the CDPHE Soil Screening Values. The Colorado Division of Oil and Public Safety (OPS) provided information regarding the two USTs removed from 4390 West Oxford Avenue (Building 180). No impacts above the OPS Tier 1 Risk-Based Screening Levels were identified and OPS issued a clean closure determination.

4.2 Native American Consultation

VA consulted with eight Federally-recognized Native American tribes as part of this NEPA process, in accordance with 36 CFR Part 800.2 and EO 13175, *Consultation and Coordination with Indian Tribal Governments*, 6 November 2000. These tribes, identified as having possible ancestral ties to the area, were invited by VA to participate in the EA process as Sovereign Nations per EO 13175. VA sent a coordination and consultation letter to each of these tribes. A sample letter sent to the tribes is included in Appendix B. Section 10 contains a list of the tribes invited to consult. Written correspondence from the tribes is provided in Appendix B.

The Southern Ute Indian Tribe responded that the proposed FLNC expansion at the Site would have no adverse effect on properties of cultural or religious significance to the Southern Ute Indian Tribe. However, the Tribe requested that they be contacted in the event of inadvertent discoveries. VA invited the Southern Ute Indian Tribe to be a consulting party for the MOA.

No other tribal responses have been received.

4.3 Public Review

VA published and distributed the Draft EA for a 30-day public comment period as announced by a Notice of Availability (NOA) published in the Denver Post from May 5 through 7, 2019. A copy of the Draft EA was also made available for public review at the Bear Valley Branch Library and on the VA National Cemetery Administration website (www.cem.va.gov/cpm/EA.asp). VA received no public comments regarding the Draft EA.

SECTION 5: MANAGEMENT AND MINIMIZATION MEASURES

This section summarizes the management and minimization measures that are proposed to minimize and maintain potential adverse effects of the Preferred Action Alternative at acceptable, less-than-significant levels. A supplemental NEPA analysis will be conducted for the construction and operation of the expanded cemetery in approximately five years, during the Site design. The management, minimization, and avoidance measures in this section would be included into the future process and analysis.

Per established protocols, procedures, and requirements, VA and its contractors would implement BMPs and would satisfy all applicable regulatory requirements in association with the design, construction, and operation of the expanded cemetery at the Site. These “management measures” are described in this EA, and are included as components of the Proposed Action Alternative. “Management measures” are defined as routine BMPs and/or regulatory compliance measures that are regularly implemented as part of proposed activities, as appropriate throughout the Denver Colorado area. In general, implementation of such management measures would maintain impacts at acceptable levels for all resource areas analyzed. These are different from “mitigation measures,” which are defined as project-specific requirements, not routinely implemented as part of development projects, necessary to reduce identified potentially significant adverse environmental impacts to less-than-significant levels.

The routine BMP, management measures and minimization measures summarized in Table 6 would be included in the Proposed Action Alternative to minimize and maintain adverse effects at less-than-significant levels.

Table 6. Best Management Practices and Minimization Measures Incorporated into the Proposed Action	
Technical Resource Area	Best Management Practice/Minimization Measure
Aesthetics	Develop the cemetery in concert with the Site’s natural topography. Maintain some natural areas.
	Use vegetative buffers to enhance viewscapes, particularly near adjacent residential properties.
	Comply, to the extent practicable, with the development standards of the Denver Code of Ordinances (DCO) and Denver Zoning Code (DZC).

Table 6. Best Management Practices and Minimization Measures Incorporated into the Proposed Action (continued)	
Technical Resource Area	Best Management Practice/Minimization Measure
Air Quality	Complete pre-demolition asbestos surveys and remove identified asbestos-containing materials (ACM) from Site buildings prior to demolition.
	Use appropriate dust suppression methods (such as the use of water, dust, palliative, covers, suspension of earth moving in high wind conditions) during onsite demolition/construction activities.
	Stabilize disturbed area through re-vegetation or mulching if the area would be inactive for several weeks or longer.
	Implement measures to reduce diesel particulate matter (DPM) emissions from construction equipment, such as reducing idling time and using newer equipment with emissions controls.
	Comply with the applicable Colorado Department of Public Health and Environment (CDPHE) Air Quality Control Commission (AQCC) regulations. Secure any required minor air emissions permits from CDPHE AQCC, and the Denver Department of Environmental Health (DDEH) Environmental Quality Division as appropriate and prior to construction.
Cultural Resources	Complete the historic resource documentation of Buildings 64 and 180 prior to demolition as agreed upon in the Natural Historic Preservation Act (NHPA) Memorandum of Agreement (MOA) with the Colorado SHPO to mitigate historic properties effects. Adhere to the terms of the MOA during the implementation of the Proposed Action.
	Should potentially historic or culturally significant items be discovered during project construction, the construction contractor would immediately cease work in the area until VA, a qualified archaeologist, the SHPO, and other consulting parties are contacted to properly identify and appropriately treat discovered items in accordance with applicable State and Federal law(s).
Geology, Topography, and Soils	Control soil erosion and sedimentation impacts during construction by implementing erosion prevention measures and complying with the CDPHE Stormwater Discharge Associated with Construction Activities and land disturbance permits, including the development and implementation of a site-specific Stormwater Management Plan (SWMP), and complying with the Denver Construction Activities Stormwater Discharge permit. The CDPHE Stormwater Discharge 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 CDPHE Stormwater Discharge permit, SWMP, and a Denver Stormwater Discharge permit to protect surface water quality.

Table 6. Best Management Practices and Minimization Measures Incorporated into the Proposed Action (continued)	
Technical Resource Area	Best Management Practice/Minimization Measure
Hydrology and Water Quality	Control soil erosion and sedimentation impacts during construction by complying with the CDPHE Stormwater Discharge Associated with Construction Activities permit, SWMP, and Denver Construction Activities Stormwater Discharge permit.
	Design cemetery to maintain a buffer of undisturbed land around the intermittent stormwater drainage ditch on the southern portion of the Site, to the extent possible. If cemetery design requires disturbance of State Water, obtain necessary permits from the CDPHE Water Quality Control Division, as applicable.
	Improvements would be designed in accordance with the requirements of 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	Design cemetery to maintain a buffer of undisturbed land around the stormwater drainage ditch, to the extent possible. Maintain some natural areas.
	Native species should be used to the extent practicable when re-vegetating land disturbed by construction to avoid the potential introduction of non-native or invasive species.
Noise	Limit, to the extent possible, construction and associated heavy truck traffic to occur between 7:00 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.
	Maintain equipment per manufacturer's recommendations to minimize noise generation.
	Encourage construction personnel to operate equipment in the quietest manner practicable (such as speed restrictions, retarder brake restrictions, engine speed restrictions).
Land Use	None required.

Table 6. Best Management Practices and Minimization Measures Incorporated into the Proposed Action (continued)	
Technical Resource Area	Best Management Practice/Minimization Measure
Wetlands, Floodplains, and Coastal Zone Management	Request a jurisdictional determination by the US Army Corps of Engineers (USACE) for the 0.8-acre wetland and associated drainage area in the southern portion of the Site.
	Develop a site design that avoids interaction with onsite and adjacent wetlands and surface waters, to the extent possible. It is anticipated that the cemetery design would include a buffer of undisturbed land around the wetland. If the cemetery design requires the disturbance of Waters of the US, obtain necessary permits from the USACE and CDPHE.
Socioeconomics	None required.
Community Services	None required.
Solid and Hazardous Materials	Complete a pre-demolition asbestos survey and remove identified ACM from Site buildings prior to demolition.
	Inform construction contractors of the potential presence of impacted soil at the Site and ensure that any excavated soil is properly handled.
	Ensure that any soil exported from the Site is managed according to the applicable Federal and State regulations.
	Properly manage and dispose of any non-soil materials excavated from the Site during the cemetery development.
	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	Work with the Colorado Department of Transportation (CDOT) and the Denver Department of Public Works (DDPW), as applicable, during the cemetery expansion design to identify and implement roadway improvements, if necessary.
	Coordinate with the CDOT and DDPW to ensure that construction and operational traffic are considered in the planning of future transportation improvements in this vicinity.
	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	Contact the local utility providers to determine the connection/extension requirements and implement the necessary requirements.
	Plant low-moisture-tolerant vegetation suited to the Denver area to minimize irrigation needs.
Environmental Justice	None required.

VA's acquisition of the Site would not affect cultural resources. However, the future expansion of the FLNC at the Site would have adverse effects on historic properties as VA would demolish Buildings 64 and 180, contributing resources to the CMHIFL NRHD. VA executed an MOA with the SHPO under Section 106 of the NHPA to mitigate the adverse effects of the demolition of Buildings 64 and 180. With the completion of these NHPA mitigation measures, cultural resources impacts would be less than significant.

SECTION 6: SUMMARY AND CONCLUSIONS

This EA evaluates VA’s Proposed Action to acquire land adjacent to the existing FLNC, located at 4400 West Kenyon Avenue, in the City and County of Denver, Colorado, for the future expansion of the cemetery. This EA discusses two alternatives: (1) *Proposed Action Alternative* – Acquire approximately 49.4 acres of land adjacent to the southeast of the FLNC that is owned by the State of Colorado and associated with CMHIFL for the future expansion of the FLNC; and (2) the *No Action Alternative*. This EA evaluates possible effects to aesthetics; air quality; cultural resources; geology and soils; hydrology and water quality; wildlife and habitat; noise; land use; floodplains, wetlands, and coastal zone management; socioeconomics; community services; solid and hazardous materials; transportation and parking; utilities; and environmental justice.

This EA assesses the potential effects of acquiring the Site for the ultimate expansion of the FLNC, and preliminarily assesses the effects of the future proposed construction and operation of the cemetery on the Site. Potential effects of the construction and operation of the proposed expanded FLNC on the Site will be reanalyzed and reevaluated in a supplemental NEPA analysis concurrent with Site design in approximately five years, when the expansion of the FLNC becomes necessary. The management and minimization measures identified in this EA would be incorporated into that future process and analysis.

Table 7 provides a summary of the characteristics and potential environmental effects associated with the Proposed Action Alternative.

Table 7. Summary of Site Characteristics and Potential Impacts Associated with the Proposed Action Alternative	
Technical Resource Area	Proposed Action Alternative
Aesthetics	<p>Approximately 49.4 acres of mostly vacant, gently sloping land with grassy vegetation and scattered trees. Four small buildings, several former building foundations, and roads remain at the Site. The current Site buildings are used by CMHIFL for storage, and automotive and landscaping maintenance support for their off-site operations to the east. Mixed use, almost fully developed area consisting of primarily residential, institutional, and recreational properties.</p> <p>No significant grade changes are anticipated. Landscaping would be installed/maintained along western and southern boundaries to reduce visual impacts to adjacent residents.</p> <p>Less-than-significant Impacts</p>

Table 7. Summary of Site Characteristics and Potential Impacts Associated with the Proposed Action Alternative (continued)	
Technical Resource Area	Proposed Action Alternative
Air Quality	<p>Short-term impacts due to construction dust and particulate matter (managed through BMPs) and long-term due to vehicle emissions (similar to existing conditions).</p> <p>Less-than-significant Impacts</p>
Cultural Resources	<p>The Site and the FLNC were both formerly part of the Fort Logan Military Reservation, which was established in 1887 and closed in 1946. The Site has been part of CMHIFL since 1960. Two remaining Site buildings (Building 64 and 180) are contributing elements of the NRHP-eligible CMHIFL NRHD.</p> <p>Buildings 64 and 180 would be demolished for the cemetery development. VA executed an MOA with the SHPO to mitigate the adverse effects of the demolition of Buildings 64 and 180. With the completion of the NHPA mitigation measures agreed upon in the MOA, cultural resources impacts would be less than significant.</p> <p>Less-than-significant Impacts, if mitigated under NHPA.</p>
Geology, Topography, and Soils	<p>Site slopes gently to the north. Soils generally consist of layers of silty sand and silty clay underlain by clay stone bedrock, which was typically encountered at depths between 13 and 28 feet bgs. Soil erosion and sediment impacts would be managed through BMPs.</p> <p>Less-than-significant Impacts</p>
Hydrology and Water Quality	<p>An intermittent stormwater drainage ditch (former intermittent tributary of Bear Creek) crosses the southern portion of the Site. No current surficial connection to other surface water bodies was observed. The intermittent drainage ditch may be considered a "State Water" and may be subject to standard water quality regulations overseen by the CDPHE WQCD and the DDPW WMD. Cemetery design would retain existing stormwater drainage features and include on-site stormwater management, as necessary, so as not to adversely affect water quantity/quality of receiving waters or off-site areas.</p> <p>Stormwater runoff during construction and CBOC operations would be managed through BMPs.</p> <p>Less-than-significant Impacts</p>
Wildlife and Habitat	<p>Site is mostly vacant land with grassy vegetation and scattered trees and has been associated with military and institutional operations since the late 1800s. No undisturbed natural habitat remains at the Site.</p> <p>The Site is not likely to support the presence of Federal or State-protected species.</p> <p>Less-than-significant Impacts</p>

Table 7. Summary of Site Characteristics and Potential Impacts Associated with the Proposed Action Alternative (continued)	
Technical Resource Area	Proposed Action Alternative
Noise	<p>Short-term noise impacts during cemetery development activities controlled through construction BMPs.</p> <p>Minor operational impacts associated with vehicle traffic and intermittent ceremonial rifle fire during weekday business hours, consistent with current FLNC operations.</p> <p>Less-than-significant Impacts</p>
Land Use	<p>Site is located in an almost fully developed, mixed use area consisting of primarily residential, institutional and recreational properties. Site is mostly vacant with grassy vegetation and scattered trees. Four small buildings, several former building foundations, and roads. The Site buildings are used by CMHIFL for storage, and automotive and landscaping maintenance support.</p> <p>Site is currently zoned Campus Healthcare 2 (CMP-H2). Cemeteries are not a listed permitted use under the CMP-H2 zoning designation. However, the Federal government is not subject to local zoning. Future use of the Site as a cemetery would be compatible with surrounding land uses and consistent with the adjacent FLNC.</p> <p>No/Negligible Impacts</p>
Wetlands, Floodplains, and Coastal Zone Management	<p>The southern portion of the Site includes an approximately 0.8 acre wetland (intermittent stormwater drainage) and an associated drainage area that appear to be isolated and not Waters of the US. USACE must confirm jurisdiction. It is anticipated that the Cemetery expansion design would maintain a buffer of undisturbed land around the wetland/Waters of the US.</p> <p>The Site and adjacent properties are not located in floodplains or a coastal zone.</p> <p>Less-than-significant Impacts</p>
Socioeconomics	<p>Minor beneficial impacts to local economy as a result of temporary construction jobs.</p> <p>Long-term beneficial socioeconomic impacts by providing a regionally proximate National Cemetery of sufficient size to US Veterans and their families.</p>
Community Services	<p>Community services are provided to the Site area. Expanded FLNC would not put an additional load on these services.</p> <p>No/Negligible Impacts</p>

Table 7. Summary of Site Characteristics and Potential Impacts Associated with the Proposed Action Alternative (continued)	
Technical Resource Area	Proposed Action Alternative
Solid and Hazardous Materials	<p>The Site was a portion of the 940-acre former Fort Logan Military Reservation between the late 1880s and 1946. During that time, the Site was occupied by railroad tracks, up to 34 buildings including barracks, officer's quarters, rail dock buildings, warehouses, maintenance support buildings (two vehicle repair and two gasoline stations); oil, coal, and ice storage areas, artillery magazines, and a small-arms firing range. In 1946, the Site and surrounding lands were used by VA as a temporary health care facility for Veterans until the VA hospital in Denver was completed. In 1960, approximately 308 acres of Fort Logan (including the Site) were transferred to the State of Colorado to construct a new mental health center (CMHIFL). The majority of the on-site buildings were razed between 1950 and 1970.</p> <p>Phase II ESA of the Site identified numerous RECs. However, no soil or groundwater impacts above Colorado Screening Values/Standards were detected during the Phase II ESA. Phase II ESA identified coal, coal ash and construction debris in shallow soil and one or more former building basements filled with demolition debris. VA would ensure that any soil exported from the Site is managed according to the applicable Federal and State regulations.</p> <p>Potential impacts from petroleum/hazardous substance handling during construction and operation would be managed through standard BMPs and VA SOPs. ACM, if present, would be removed from buildings prior to demolition.</p> <p style="text-align: center;">Less-than-significant Impacts</p>
Transportation and Parking	<p>Primary access to the FLNC is provided by South Sheridan Boulevard. Cemetery traffic would continue to use the main FLNC entrance. The expanded cemetery on the Site would be accessed via internal FLNC roadways. Traffic volumes and patterns are anticipated to be similar to those that currently exist at the FLNC.</p> <p style="text-align: center;">Expanded FLNC would include adequate on-site parking.</p> <p style="text-align: center;">Less-than-significant Impacts</p>
Utilities	<p>Utilities likely adequate for the proposed expanded cemetery already located at the Site and/or surrounding area. Primary utility demand, irrigation water, would likely be obtained through an extension from the existing FLNC irrigation system (supplied by the City of Denver municipal water system). Drought tolerant species suited to the Denver area would be planted to minimize irrigation needs.</p> <p style="text-align: center;">Less-than-significant Impacts</p>
Environmental Justice	<p>Site is located in an area with a larger than average minority population. The Proposed Action would have only minor impacts on the residents in the area.</p> <p style="text-align: center;">Less-than-significant Impacts</p>

The analysis performed in this EA concludes there would be no significant adverse impact, either individually or cumulatively, to the local environment or quality of life associated with the Proposed Action, provided the management and minimization measures, and regulatory compliance measures described in this EA are implemented. This EA's analysis determines, therefore, that an Environmental Impact Statement (EIS) is unnecessary for implementation of the Proposed Action, and that a Finding of No Significant Impact (FONSI) is appropriate.

SECTION 7: LIST OF PREPARERS

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 National Cemetery Administration

Ms. Marianne Marinucci

Realty Specialist/Project Manager
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TTL ASSOCIATES, INC. (CONSULTANTS)

Name	Role	Degree	Years of Experience
Carrie Hess	Research and Data Gathering, Site Reconnaissance	B.S., Geology 2003	12
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Robin Clark	Project Manager, Technical Lead Technical QA/QC Review, Program Management/Project Coordination	B.S., Aquatic Environments/Environmental Science, 1985	32

SECTION 8: REFERENCES CITED

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- Clean Air Act of 1970 (42 U.S. Code [USC] 7401 et. seq.; 40 CFR Parts 50-87) Section 176(c).
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- Colorado Department of Natural Resources: <https://www.cdnr.us>
- Colorado Department of Public Health & Environment: <http://www.coepht.dphe.state.co.us>
- Colorado Department of Transportation: <https://www.codot.gov>
- Colorado Department of Human Services: <https://sites.google.com/a/state.co.us/humanservices/>
- Denver Regional Air Quality Council: <http://www.raqc.org>
- FEMA Flood Hazard Insurance Map: <http://msc.fema.gov/portal>
- Friends of Historic Fort Logan: <http://www.friendsofhistoricfortlogan.org/>

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<http://cfpub.epa.gov/supercpad/cursities.htm>

National Wetlands Inventory: Colorado Environmental Protection Agency: <http://www.calepa.ca.gov/>

US Bureau of Census (2000, 2010 and 2013 US Census Data): <http://www.census.gov>

USDA NRCS Web Soil Survey: <http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>

US Geological Survey:

[http://store.usgs.gov/b2c_usgs/usgs/maplocator/\(ctype=areaDetails&xcm=r3standardpitrex_prd&care=%24ROOT&layout=6_1_61_48&uiarea=2\)/.do](http://store.usgs.gov/b2c_usgs/usgs/maplocator/(ctype=areaDetails&xcm=r3standardpitrex_prd&care=%24ROOT&layout=6_1_61_48&uiarea=2)/.do)

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SECTION 9: LIST OF ACRONYMS AND ABBREVIATIONS

ACA	Air Compliance Assurance	EA	Environmental Assessment
ACHP	Advisory Council on Historic Preservation	EDR	Environmental Data Resources
ADA	Americans with Disabilities Act of 1990	EIS	Environmental Impact Statement
AIRFA	American Indian Religious Freedom Act	EO	Executive Order
amsl	above mean sea level	ERP	Environmental Resource Permit
ARPA	Archaeological Resources Protection Act	ESA	Endangered Species Act
AST	Aboveground Storage Tank	FEMA	Federal Emergency Management Agency
BEA	Bureau of Economic Analysis	FHFL	Friends of Historic Fort Logan
BMP	Best Management Practice	FIRM	Flood Insurance Rate Map
CAA	Clean Air Act	FONSI	Finding of No Significant Impact
CDHS	Colorado Department of Human Services	FPPA	Farmland Protection Policy Act
CDNR	Colorado Department of Natural Resources	HAP	Hazardous Air Pollutant
CDOT	Colorado Department of Transportation	IICEP	Interagency and Intergovernmental Coordination for Environmental Planning
CDPHE	Colorado Department of Public Health & Environment	LOS	Level of Service
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act	NAAQS	National Ambient Air Quality Standards
CEQ	Council on Environmental Quality	NAGPRA	Native American Graves Protection and Repatriation Act
CFR	Code of Federal Regulations	NEPA	National Environmental Policy Act of 1969
CMP	Coastal Management Program	NHPA	National Historic Preservation Act
CO	Carbon Monoxide	NOA	Notice of Availability
CSFS	Colorado State Forest Service	NOAA	National Oceanic and Atmospheric Association
CWA	Clean Water Act	NO _x	Nitrogen Oxides
CZMA	Coastal Zone Management Act	NPDES	National Pollution Discharge Elimination System
DCPD	Denver Community Planning and Development	NPS	National Park Service
DDEH	Denver Department of Environmental Health	NRCS	Natural Resources Conservation Service
DDPW	Denver Department of Public Works	NRHP	National Register of Historic Places
DDS	Denver Development Services	NWI	National Wetland Inventory
DDWM	Denver Department of Wastewater Management	O ₃	Ozone
DPR	Denver Parks & Recreation	OSHA	Occupational Safety and Health Administration
DRAQC	Regional Air Quality Council	Pb	Lead
E&S	Erosion and Sedimentation	PBF	Public Buildings and Facilities
		PM	Particulate matter
		ppm	parts per million

PTE	Potential to emit
RCRA	Resource Conservation and Recovery Act
RI	Remedial Investigation
ROD	Record of Decision
RONA	Record of Non-applicability
SFHA	Special Flood Hazard Area
SHPO	History Colorado (State Historic Preservation Office)
SIP	State Implementation Plan
SO ₂	Sulfur dioxide
SWPPP	Storm Water Pollution Prevention Plan
TPY	Tons per year
USACE	United States Army Corps of Engineers
USC	United States Code
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
VA	Department of Veterans Affairs

SECTION 10: AGENCIES AND INDIVIDUALS CONSULTED

Agencies Consulted

US Army Corps of Engineers – Omaha District

9307 South Wadsworth Boulevard
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**USDA Natural Resources Conservation Service
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US Environmental Protection Agency, Region 8

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US Fish and Wildlife Service

**Mountain-Prairie Region
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Denver Federal Center
P.O. Box 25486
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US Fish and Wildlife Service

Colorado Fish and Wildlife Conservation Office

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Colorado State Forest Service

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Denver Development Services

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Denver Department of Environmental Health**Environmental Quality**

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Colorado Department of Human Services**Colorado Mental Health Institute at Fort Logan**

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Denver Department of Public Works

201 West Colfax Avenue, Department 608
Denver, Colorado 80202
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Denver Department of Wastewater Management

2000 West 3rd Avenue
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Phone: (303) 446-3400

Denver Parks & Recreation

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Friends of Historic Fort Logan

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Regional Air Quality Council

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Native American Tribes Consulted

Southern Ute Indian Tribe	Clement Frost, Chairman	PO Box 737	Ignacio	CO	81137	970-563-0100 x2319
Ute Mountain Tribe	Manuel Heart, Chairman	General Delivery	Towoac	CO	80203	970-565-3751 x201
Apache Tribe of Oklahoma	Lyman Guy, Chairman	PO Box 1330	Anadarko	OK	73005	(405) 247-9493
Arapaho Tribe of the Wind River Reservation, Wyoming	Devin B. Oldman, THPO	PO Box 67	Stevens	WY	82524	(307-856-1628)
Cheyenne and Arapaho Tribes, Oklahoma	Virginia Richey, THPO	100 Red Moon Circle	Concho	OK	73022	(405) 422-7630
Comanche Nation, Oklahoma	Martina Callahan, THPO	6 SW D Avenue	Lawton	OK	73502	(580) 595-9618
Fort Belknap Indian Community of the Fort Belknap Reservation of Montana	Michael Blackwolf, THPO	656 Agency Main Street	Harlem	MT	59526	(406) 353-8471
Northern Cheyenne Tribe of the Northern Cheyenne Indian Reservation, Montana	Teanna Limpy, THPO	PO Box 128	Lame Deer	MT	59043	(406) 477-4839

SECTION 11: LIST OF ENVIRONMENTAL PERMITS REQUIRED

11.1 Regulatory Framework

This EA has been prepared under the provisions of, and in accordance with the NEPA, the CEQ Regulations Implementing the Procedural Provisions of NEPA, and VA's regulations for implementing NEPA (38 CFR Part 26). In addition, the EA has been prepared as prescribed in VA's *NEPA Interim Guidance for Projects* (VA 2010b). Federal, State, and local laws and regulations specifically applicable to this Proposed Action are specified, where appropriate, within this EA, and include:

- Endangered Species Act (ESA) of 1973, as amended (7 USC 136; 16 USC 1531 et seq.).
- Executive Order 11988, *Floodplain Management* (24 May 1977).
- Executive Order 11990, *Protection of Wetlands* (24 May 1977).
- Executive Order 12898, *Environmental Justice* (11 February 1994).
- Energy Independence Security Act (EISA) Section 438.
- Executive Order 13423, *Strengthening Federal Environmental, Energy, and Transportation Management* (24 January 2007).
- Executive Order 13514, *Federal Leadership in Environmental, Energy, and Economic Performance* (5 October 2009).
- Farmland Protection Policy Act (FPPA) (7 USC 4201, et seq.)
- Federal Clean Air Act (CAA) of 1990 (42 USC 7401 et seq., as amended).
- Federal Clean Water Act (Federal Water Pollution Control Act) of 1948, as amended (1972, 1977) (33 USC 1251 et seq.); Sections 401 and 404.
- Migratory Bird Treaty Act (MBTA; 16 USC 703-712, 3 July 1918; as amended 1936, 1960, 1968, 1969, 1974, 1978, 1986, and 1989).
- Native American Graves Protection and Repatriation Act, as amended (NAGPRA) (25 USC 3001 et seq.).
- National Historic Preservation Act (NHPA) of 1949.4, as amended (36 CFR Part 800).

- National Emission Standards for Hazardous Air Pollutants.
- Colorado Department of Public Health and Environment Air Quality Control Commission Regulations.
- Colorado Asbestos Regulations.
- Denver Regional Air Quality Council Regulations.
- Denver Department of Environmental Health Air Pollution Control Division Regulations.
- Colorado Department of Public Health and Environment Water Quality Control Division Regulations.
- Denver Department of Public Works (DPW) Wastewater Management Division Regulations.
- Denver Code of Ordinances.
- Denver Zoning Code.

11.2 Environmental Permits Required

In addition to the regulatory framework of the NEPA, the CEQ Regulations Implementing the Procedural Provisions of NEPA, VA's regulations for implementing NEPA (38 CFR Part 26), and VA's *NEPA Interim Guidance for Projects*, the following Federal, State, and/or local environmental permits are required as part of this Proposed Action, and include:

- Denver Construction Activities Stormwater Discharge Permit.
- Colorado Department of Public Health and Environment Stormwater Discharge Associated with Construction Activities Permit.
- Colorado Department of Public Health and Environment Land Disturbance Permits.
- Colorado Department of Public Health and Environment Air Quality Control Commission Air Pollutant Emissions Notice.
- Colorado Department of Public Health and Environment Air Quality Control Commission Construction Permits to Emit.
- Denver Environmental Quality Department permits for stationary sources and open burning.

SECTION 12: 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 reasonable 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.

Farmland - Cropland, pastures, meadows, and planted woodland.

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".

Hydric Soil - A soil that is saturated, flooded, or ponded long enough during the growing season to develop anaerobic (oxygen-lacking) conditions that favor the growth and regeneration of hydrophytic vegetation. A wetland indicator.

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.

Industrial Land Use - Land uses of a relatively higher intensity that are generally not compatible with residential development. Examples include light and heavy manufacturing, mining, and chemical refining.

Isolated Wetland - Areas that meet the wetland hydrology, vegetation, and hydric soil characteristics, but do not have a direct connection to the Waters of the US.

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.

Physiographic Region - A portion of the Earth's surface with a basically common topography and common morphology.

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.

Small quantity generator - A generator who generates greater than 220 pounds but less than 2,200 pounds of hazardous waste in a calendar month and who does not accumulate more than 13,200 pounds of hazardous waste at any one time (if either threshold is exceeded, the generator becomes a large quantity generator). A small quantity generator may accumulate hazardous waste up to 180 days from the accumulation start date.

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.