

FINAL



LAND USE CONTROL IMPLEMENTATION PLAN

RESTRICTION OF GROUNDWATER USE

SHEPLEY'S HILL LANDFILL

FORMER FORT DEVENS ARMY INSTALLATION, DEVENS, MA

AUGUST 2014

**Prepared for:
US Army Corp of Engineers
New England District
Concord, Massachusetts**

**Prepared by:
Sovereign Consulting Inc.
Contract No.: W912WJ-10-D-0003
Delivery Order: 0002**





NOTICE

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Land Use Control Implementation Plan

FINAL

Devens, Massachusetts

August 2014

CERTIFICATION:

I hereby certify that the enclosed Plan, shown and marked in this submittal, is that proposed to be incorporated with Contract Number W912WJ-10-D-0003 DO#0002. This Document has been prepared in accordance with USACE Scope of Work and is hereby submitted for Government Approval.

Reviewed By:

A handwritten signature in black ink, appearing to read "Raelul S. Saeng".

27 August 2014

Sovereign Project Manager

Date

A handwritten signature in black ink, appearing to read "E. D. Smith".

27 August 2014

Sovereign Quality Control Manager

Date

Received By:

27 August 2014

USACE Project Manager

Date

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ABBREVIATIONS, ACRONYMS, AND SYMBOLS

AOC	Area of Contamination
BOH	Board of Health
BRAC	Base Realignment and Closure
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CSM	Conceptual Site Model
DPW	Department of Public Works
DRMO	Defense Reutilization and Marketing Office
ESD	Explanation of Significant Differences
FS	Feasibility Study
ICs	Institutional Controls
LUC	Land Use Control
LUCIP	Land Use Control Implementation Plan
MassDEP	Massachusetts Department of Environmental Protection
MCL	Maximum Contaminant Level
NAE	New England District
NCP	National Contingency Plan
NIA	North Impact Area
NTCRA	Non-Time Critical Removal Action
PVC	Polyvinyl Chloride
RAO	Remedial Action Objectives
RI	Remedial Investigation
ROD	Record of Decision
SHL	Shepley's Hill Landfill
Sovereign	Sovereign Consulting Inc.
USACE	United States Army Corp of Engineers
USEPA	United States Environmental Protection Agency
VOC	Volatile Organic Compound

1.0 INTRODUCTION AND PURPOSE

Pursuant to the Contract Modification for #W912WJ-10-D-0003 Task Order 0002, Sovereign Consulting Inc. (Sovereign), on behalf of the US Army Corps of Engineers New England District (USACE-NAE) and the Army Base Realignment and Closure (BRAC) Environmental Office at Devens, Massachusetts, hereafter referred to as the Army, has completed this Land Use Control Implementation Plan (LUCIP) for the restriction of groundwater use north of Shepley's Hill Landfill (SHL) in the Town of Ayer Massachusetts (**Figure 1**). This document describes the procedures for implementing the institutional controls required by the SHL Operable Unit Record of Decision (ROD), dated September, 1995 (USAEC, 1995) as amended by the Explanation of Significant Differences (ESD) dated December 2013 (Sovereign, 2013b). The ESD introduced additional Land Use Controls (LUCs) on non-Army owned properties to restrict the use of groundwater from a portion of the Town of Ayer, located north of SHL, referred to as the Northern Impact Area (NIA) (**Figure 2**). The NIA includes properties in Ayer along West Main Street and is presented in **Figure 3**.

1.1 Objectives and Plan Organization

The objectives of this LUCIP is to:

- Summarize the site description and historical background; and
- Summarize how the Army will implement Land Use Controls (LUCs) and supporting requirements specified in the ESD.

This plan has been divided into the following sections:

- **Section 2.0** of this plan summarizes site details, including a description and the history of the site.
- **Section 3.0** of this plan presents the LUCs with the definition of LUCs, land affected, Institutional Controls (ICs) in place for the NIA and performance objectives of the ICs and Affirmative Measures.
- **Section 4.0** summarizes the implementation of LUCs, which entails public outreach and communication with local government departments.
- **Section 5.0** summarizes the LUCIP maintenance and reporting requirements.
- **Section 6.0** describes the responsibilities encompassed by the LUC; including ICs and Affirmative Measures.
- **Section 7.0** provides information regarding any modifications or the termination of the LUC. **Section 8.0** provides enforcement requirements.
- **Section 9.0** summarizes the approval and notification process. And,
- **Section 10.0** provides a list of references.

2.0 SITE BACKGROUND

The former Fort Devens is located 35 miles west of Boston in north-central Massachusetts within the towns of Ayer and Shirley in Middlesex County, and the towns of Harvard and

Lancaster in Worcester County. Prior to realignment and closure in 1996, Fort Devens included 9,280 acres divided into North Post, Main Post, and South Post. **Figure 1** depicts the location of the various areas of the former base. The North and Main Posts are separated from the South Post by Massachusetts Route 2. The area around the former Fort Devens is primarily rural/residential with the Nashua River running through the North, Main and South Posts. Currently, the U.S. Army Garrison Fort Devens (formerly the Devens Reserve Forces Training Area) consists of 5,196 acres primarily on South Post.

SHL encompasses approximately 84 acres in the northeast corner of the former Main Post at Fort Devens (**Figure 1**). It is situated between the bedrock outcrop of Shepley's Hill on the west and Plow Shop Pond on the east. Nonacoicus Brook drains Plow Shop Pond and flows through a low-lying wooded area at the north end of the landfill. The southern end of the landfill borders an area formerly occupied by the Defense Reutilization and Marketing Office (DRMO) yard, motor repair shops, and a warehouse. Areas previously mapped as wetlands have been filled by waste materials. The landfill waste material was placed over peat deposits and a sandy aquifer that overlies bedrock and/or till. SHL includes three Areas of Contamination (AOCs): AOC 4, the sanitary landfill incinerator; AOC 5, sanitary landfill No. 1 or SHL; and AOC 18, the asbestos cell. AOCs 4, 5, and 18 are all located within the capped area at SHL. The three AOCs are collectively referred to as Shepley's Hill Landfill Operable Unit (**Figure 4**).

The landfill was closed in five phases between 1987 and 1992-93 in accordance with Massachusetts Regulations at 310 CMR 19.000. The Massachusetts Department of Environmental Protection (MassDEP) approved the closure plan in 1985. Closure consisted of installing a 30 to 40-mil polyvinyl chloride (PVC) membrane cap, covered with soil and vegetation and incorporating gas vents. Closure also included installation of wells to monitor groundwater quality around the landfill, and construction of drainage swales to control surface water runoff. MassDEP issued a Landfill Capping Compliance Letter approving the closure in February 1996.

Subsequent to closure of the landfill, remedial investigations (RIs) completed under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) evaluated soil, sediment, surface water, and groundwater conditions at and in the immediate vicinity of the landfill. The results confirmed the presence of various contaminants, particularly certain inorganics including arsenic and volatile organic compounds (VOCs), in groundwater, sediment, and surface water at or adjacent to SHL. A Feasibility Study (FS) and ROD resulted in a remedial action that required long term monitoring and maintenance of the existing landfill cap and groundwater monitoring.

The ROD (USAEC, 1995) required the Army to perform groundwater monitoring and five-year reviews to evaluate the effectiveness of the selected remedial action, which relied heavily on the previously installed landfill cap, to attain groundwater cleanup goals by 2008 and to reduce potential exposure risks. If groundwater contaminant concentrations, primarily arsenic, met risk-based performance standards (cleanup goals) over time, the ROD did not require further action; however, if cleanup goals were not met, the ROD required implementation of a groundwater extraction contingency remedy. Due to continued elevated contaminant concentrations, the Army installed and operated a groundwater extraction and treatment system in March 2006 as a contingency remedy to address groundwater contamination emanating from the northern portion of the landfill (Sovereign, 2011).

The AOC 72 RI (AMEC, 2011) results suggested that groundwater discharge contributes concentrations of arsenic in sediments of Plow Shop Pond that may accumulate to levels resulting in conditions that pose unacceptable risks to ecological receptors. Therefore, remedies that minimize such arsenic-in-groundwater flux to Red Cove were deemed to be most protective. All available data indicate that the current remedies (landfill capping and groundwater extraction) have not eliminated groundwater flow and arsenic migration from SHL into Red Cove / Plow Shop Pond, identified as AOC 72. Consequently, in 2012 a low-permeability groundwater barrier wall was installed between the SHL and AOC 72 as part of a Non-Time Critical Removal Action (NTCRA) to mitigate arsenic flux from groundwater flow from the SHL to Red Cove/Plow Shop Pond. Documentation of the barrier wall installation was provided in the Removal Action Completion Report (Sovereign, 2013a).

Since the time of the ROD, a more comprehensive understanding of the remedy Conceptual Site Model (CSM) (Draft LTMMP (Sovereign, 2013c), groundwater chemistry in particular, has developed which indicates that a large amount of arsenic is being mobilized by both natural as well as landfill-induced conditions. Groundwater in the NIA would pose an unacceptable risk to human health if used for drinking water or irrigation purposes. Therefore, the Army has established the area of Land Use Controls to restrict the extraction and use of groundwater through the implementation of the ESD. The LUC objectives (to restrict access to groundwater, prohibit withdrawal and/or future use of water, and maintain the integrity of any current or future monitoring system), and the established area of LUC are detailed below.

Although the majority of the Town of Ayer is connected to a public water supply whose source is outside the NIA and therefore is not at risk of impact from groundwater discharge from under SHL, additional protective measures have been implemented to protect any future potential groundwater users. The NIA ESD for the ROD presented the following conclusions:

- Post-ROD investigations documented impacted groundwater within the NIA.
- The ROD did not specifically address LUCs for any non-Army properties located north of the landfill (i.e. NIA) because the extent of the impact was not defined at the time.
- Groundwater in the NIA poses an unacceptable human health risk if used as drinking water, and potentially poses an unacceptable risk if used for irrigation purposes.
- An Area of Land Use Controls was established via the ESD where the use of groundwater will be restricted based on the defined limits of groundwater contamination as documented during previous site investigations (**Figure 3**).

As prescribed in the ESD, a LUCIP would be developed to ensure the proper implementation of the Land Use controls to meet the performance objectives. The following sections will detail these controls and the plan to communicate them to the public.

3.0 LAND USE CONTROL

3.1 Definition of Land Use Controls

Land Use Controls in regard to real property are broadly interpreted to mean:

any restriction or control, arising from the need to protect human health and the environment, that limits use of and/or exposure to any portion of that property, including water resources. This

term encompasses 'institutional controls,' such as those involving real estate interests, governmental permitting, zoning, public advisories, deed notices, and other 'legal' restrictions. The term may also include restrictions on access, whether achieved by means of engineered barriers such as a fence or concrete pad, or by 'human' means, such as the presence of security guards. Additionally, the term may involve both affirmative measures to achieve the desired restriction (e.g., night lighting of an area) and prohibitive directives (e.g., no drilling of drinking water wells).

The LUCs for a property will provide a blueprint for how the property should be used in order to maintain the level of protection intended by the remedial alternative.

3.2 Land Affected

The boundary of the LUCs was determined by taking the defined limits of groundwater contamination as documented by the site investigations included in the ESD and then set approximately 400 feet from the horizontal limits of groundwater contamination in order to conservatively establish the restricted area. These properties are not owned by the Army and are located with the Town of Ayer. The Area of LUCs affected under this LUCIP is shown on **Figures 3 and 4**. The SHL and surrounding Army controlled properties (**Figure 2**) are not addressed under these additional LUCs since these properties are addressed in the initial ROD.

A narrative description of the NIA is included as **Appendix A**. An aerial plan of the Impact Area is included as **Figures 3**, and a figure with property information for each parcel within the NIA is included as **Figure 4**.

3.3 Land Use Control Performance Objectives

Groundwater in the NIA would pose an unacceptable risk to human health if used for drinking water and may cause unacceptable risk to human health if used for irrigation purposes. Therefore, administrative and/or legal land use controls known as "LUCs" have been incorporated as a component of the selected groundwater remedy for the Site.

The performance objectives of the LUCs are to:

- Restrict access to groundwater so the potential exposure pathway to the contaminants remain incomplete.
- Prohibit the withdrawal and/or future use of water, except for monitoring, from the aquifer within the identified groundwater LUC boundary (**Figure 3**).
- Maintain the integrity of any current or future monitoring programs.

To meet these objectives, the Army has established the Area of Land Use Controls where the use of groundwater will be restricted (See **Appendix A** and **Figure 3**). This area is based on the defined limits of groundwater contamination as documented by the site investigations referenced in Section 3.1. The LUC boundary limits were then set an additional approximately 400 feet from the horizontal limits of groundwater contamination in order to include an additional buffer zone thereby conservatively establishing the restricted area. The SHL and surrounding Army controlled property, also shown on **Figure 2**, are *not* addressed under these additional LUCs since this property is addressed in the initial ROD (USAEC, 1995). Also, it is noted that the Army property is within the Devens Regional Enterprise Zone (under jurisdiction of Devens) and the NIA is within the Town of Ayer jurisdiction.

3.4 Land Use Controls – Institutional Controls

To meet the LUC performance objectives, the following Institutional Controls in the form of governmental permitting, zoning, public advisories, prohibitive directives (e.g., no drilling of drinking water or irrigation wells) and other ‘legal’ restrictions are currently established within the NIA. A more detailed description of each institutional control is included in the Section 3.1.2 of the ESD, which is included in **Appendix B** of this plan.

- *The Zoning By-Laws of the Town of Ayer* - Town of Ayer Subdivision Control Regulations and Town of Ayer Building Department Permitting Requirements. Town of Ayer zoning, permitting and building requirements to which the use of all new or existing buildings, other structures or land must comply.
- *Moratorium on Groundwater Use within the Area of Land Use Controls* - The Ayer Board of Health (BOH) has issued a Moratorium on Groundwater Use (Attached as **Appendix B**).
- *The Ayer Board of Health (BOH) Well Regulations (Adopted January 10, 2001)* - Town of Ayer permitting requirements for the installation and use of new drinking water wells.
- *The Massachusetts Drinking Water Regulation 310 CMR 22.00* - the state regulatory permitting and approval process for any new drinking water supply wells in Massachusetts that propose to service more than 25 customers or exceed a withdrawal rate of 100,000 gallons per day.

The Army will notify the USEPA and MassDEP of any changes in LUC management responsibilities. An implementation schedule has been included as **Appendix D**. All LUCs will be maintained until the concentrations of contaminants of concerns in the groundwater are at such levels as to allow unrestricted use and exposure.

3.5 Land Use Controls - Affirmative Measures

In addition to the land use controls described above, the Army will implement the following affirmative measures, under this LUCIP to further ensure that the LUC performance objectives are being met.

- Public education and outreach via ongoing periodic distribution of educational materials and groundwater use surveys to be distributed to all property owners and residents with the stated goal of confirming that no groundwater wells are in use within the entire Area of LUCs.
- Meet with town officials (Ayer BOH, Department of Public Works (DPW), etc.) annually, or more frequently if necessary.
- Distribution of the LUCIP to local and federal parties.

The following sections are a more detailed description of the affirmative measures presented above.

4.0 LUC IMPLEMENTATION

4.1 Public Education and Outreach

The Army will contact land owners and residents in the Area of LUCs to explain the groundwater contamination distribution in the aquifer. A list of land owners and residents within the Area of the LUCs will be generated using public town records obtained from the Town of Ayer (BOH, DPW, Assessor's Office, etc.). Land owners and residents will be informed of the health impacts that may result from drinking contaminated groundwater, using contaminated groundwater for irrigation or otherwise contacting contaminated groundwater. It will be made clear that the installation of wells that draw groundwater from the contaminated aquifer is prohibited. Use of any existing wells must be discontinued and the Army, with permission of the landowner, will be responsible for properly decommissioning any identified wells still in use. Private property owners have an independent obligation to comply with the applicable statutes, regulations, and zoning requirements.

The Army will conduct a door to door survey of land owners and residents in the Area of LUCs to verify that all properties have water meters (i.e. are connected to municipal water), to ensure that no undocumented private/irrigation wells are present, and to document a property ownership list to certify that both owners and renters are informed of the ICs. For example, if a property owner is not the primary resident, they would be contacted by mail, where as the renter would be contacted at the Ayer address, during the door to door survey and by mailings to the home/residence. The Army, with permission of the landowner, will properly decommission any wells discovered during the survey to ensure remedy integrity. In addition to the door to door survey, the Army will provide a pamphlet (**Appendix C**) with supplemental educational materials and contact information. Following the initial door to door survey a survey will be conducted every five years or sooner if required by changes to the LUCIP. Reminder mailings will be sent out annually to account for changes in ownership/occupancy.

If the Army identifies any private wells (i.e. decommissioned wells, including wells not currently in use) that are within the Area of Land Use Controls, and the landowner refuses the Army's offer to decommission the well, then the Army bring the instance of the Groundwater Moratorium to the attention of the Ayer BOH to issue warnings to the property owner and any other person with access to the well (such as a lessee or licensee). The Army will decommission any private well and if none exists, provide a connection to the public water system in Ayer, at the Army's expense. In each instance, the Army will monitor the implementation of the enforcement action by the BOH as described in Section 8 of this LUCIP.

4.2 Coordination with the Ayer Board of Health

In 2013, the Army worked with the Town of Ayer Board of Health to implement the Moratorium on Groundwater Use within the Area of Land Use Controls that was signed in May 2013. Through an EPA Technical Assistance Grant and meetings with the Army, the Town of Ayer was able draft language to restrict use of groundwater in the Town of Ayer without the boards review and approval.

The Army will meet with the Town of Ayer BOH, to discuss the implementation of LUCs and provide an updated Area of Land Use Control map(s) that document the current and projected location of groundwater contamination within the Town of Ayer. While **Figures 3 and 4** show

the current area of the NIA where the LUCs apply, the Ayer BOH or the Army may modify the areas based on new information, and all LUCs will apply to such areas based on revisions. The Army will meet with the BOH annually, or if a change in the groundwater contamination distribution in the aquifer occurs (i.e. plume area change). Upon request, the Army will coordinate with the BOH to provide information to post on the BOH website regarding the LUCs.

4.3 Coordination with the Ayer Department of Public Works and Building Department

The Army will periodically meet with the Town of Ayer DPW and Building Department to discuss the implementation of LUCs, ensure that the installation of any wells that draw groundwater from the contaminated aquifer is prohibited, and to verify that all properties within the Area of LUCs are connected to municipal water and do not contain private/irrigation wells. The Army will properly decommission any wells that draw groundwater from the contaminated aquifer to ensure remedy integrity.

4.4 Distribution of LUCIP

Within 30 days of receiving USEPA approval and MassDEP concurrence of this LUCIP, in accordance with their respective legal authorities, the Army will undertake the following specific actions:

- Send a copy of this LUCIP to the following Agencies of the Town of Ayer, Massachusetts for their records:
 - Board of Health
 - Department of Public Works
 - Building Department
- Place a copy of this LUCIP in the central Army repository and the public libraries for the Town of Ayer, Massachusetts.
- Include a copy of this LUCIP with the initial survey of land owners and educational pamphlet distribution to all property owners within the Area of LUCs affected under this LUCIP.

5.0 LUCIP MAINTENANCE AND REPORTING

The Army is responsible for ensuring that LUCs are maintained through monitoring and reporting. In the case of LUCs in the form of Institutional Controls (ICs), the Army will work with the Town of Ayer to monitor and implement their enforcement. Following the initial implementation of the LUC, all LUCs will be maintained until the concentrations of contaminants of concerns in the groundwater are at such levels as to allow unrestricted use and exposure. Maintenance and reporting of the LUCs, in the form of Affirmative Measures the Army is implementing, shall occur on an annual basis, or every five years as specified below, or if a change in the land use or groundwater contamination distribution in the aquifer occurs.

5.1 Monitoring and Maintenance of Plan

The following Monitoring and Maintenance activities will occur annually to ensure the performance objectives of the LUCs are met:

- Intuitional Controls
 - The Area of LUCs is actively monitored in accordance with the SHL Long Term Monitoring & Maintenance Plan (LTMMMP) and any required changes to the area of LUCs will be made to the plan and **Figure 3**; and
 - Monitor and report on the implementation and enforcement of the ICs by the Town of Ayer and MA DEP, including the restriction of groundwater extraction and use within the NIA; record any instances where the groundwater use was identified and corrective actions taken.
- Affirmative Measures
 - Reminder mailings of the pamphlet (**Appendix C**) with supplemental educational materials and contact information will be distributed annually;
 - A list of all property owners and resident addresses within the Area of LUCs will be generated for implementation of the LUCIP actions noted;
 - Distribution of the LUCIP to appropriate parties; and
 - The Army will meet with the BOH annually, or if a change in the groundwater contamination distribution in the aquifer occurs.

The following Monitoring and Maintenance activities will occur every five (5) years:

- Intuitional Controls
 - In accordance with CERCLA, Section 121(c), a five-year review will be conducted to assure that human health and the environment are being protected by the remedy and to document maintenance of the LUCs.
- Affirmative Measures
 - With information from the Department of Public Works, the Army will verify that all residents within the area of LUCs are connected to town water: and
 - Following the initial door to door survey of land owners and residents, a survey will be conducted every five (5) years, or sooner if required by changes to the LUCIP. The purpose of the survey is to confirm that all properties are connected to municipal water, to ensure that no undocumented private/irrigation wells are present, and to document a property ownership list to certify that both owners and renters are informed of the LUCs. The Army will provide a pamphlet (**Appendix C**) with supplemental educational materials and contact information, which will be handed out during each survey.

Any corrective actions noted, will be reported in accordance with Section 5.2 below. If for any reason the Town of Ayer is unable to enforce or maintain the LUCs that fall under their jurisdiction, the Army will ensure that the LUCs are enforced and maintained, to protect public health. The implementation and maintenance of Affirmative Measures are the responsibility of the Army. A summary of the implementation schedule is included as **Appendix D**.

5.2 LUCs Reporting

Institutional Controls

An annual LUC compliance review, utilizing the Annual Checklist presented in Appendix E, will be documented in the SHL annual report and will be provided by the Army to the USEPA, MassDEP, MassDevelopment, and the Town of Ayer, Massachusetts. The annual review will include a summary of the items reviewed from the checklist, identification of deviations from this LUCIP, corrective actions necessary due to implementation issues or as a result of changes in site conditions or land use, and proposed changes to the plan and reporting frequency. If any deficiency(ies), including any violations of the ICs, should be found during the annual review, a written explanation will be prepared indicating the deficiency and what efforts or measures have or will be undertaken to correct the deficiency. The correction and enforcement of such deficiencies shall follow the requirements under **Section 8.0 Enforcement**. If there is to be a delegation of performance of duties by the Army, the Army will promptly notify USEPA, MassDEP, MassDevelopment, and the Town of Ayer, Massachusetts.

Affirmative Measures

The annual review will include items identified on the attached Annual Review Checklist in **Appendix E**. This checklist will be followed as a guideline to review required tasks and any updates that may be necessary due to changing circumstances over that year. The annual report will also address whether the use restrictions and controls referenced in this LUCIP were communicated appropriately via public outreach and education, whether the owners and state and local agencies were notified of the restrictions and controls affecting SHL and the NIA, and whether use of the area has conformed to such restrictions and controls.

The annual reports will also be placed in the central Army document repository at Fort Devens and the public library for the Town of Ayer, Massachusetts. Property owners and resident addresses within the Area of LUCs will receive notification of the availability of the annual reports, to be included with the annual reminder mailings and supplemental educational materials.

6.0 LUCS AND AFFIRMATIVE MEASURES RESPONSIBILITIES

The Army is responsible for ensuring that LUCs are established and maintained through monitoring and reporting on the implementation, maintenance, and enforcement of land use controls, and coordination with federal, state, and local governments and owners and occupants of properties subject to land use controls.

The Army will provide notice of the groundwater contamination and any land use restrictions referenced in the ESD. The Army will send these notices to the federal, state and local governments involved at this site and the owners and occupants of the properties subject to those use restrictions and land use controls. The Army remains responsible for ensuring that the remedy remains protective of human health and the environment. The Army will fulfill its responsibility and obligations under CERCLA and the National Contingency Plan (NCP) as it implements, maintains, and reviews the selected remedy.

The Army is responsible for the implementation of the Affirmative Measures presented in Section 4.0. The Army will complete the public education and outreach to the affected citizens of Ayer, and coordinate with appropriate town officials of Ayer to ensure the effective implementation of the ICs.

7.0 LUC MODIFICATIONS AND TERMINATION

The LUCs reflected in this LUCIP are expected to remain in place until the concentrations of contaminants of concern in the groundwater are at such levels as to allow unrestricted use and exposure. If groundwater conditions change, land use objectives change, or remedial goals are met, the Army shall propose modifications through an ESD or a ROD amendment. The Army will decide whether to modify or discontinue a LUC with the review and approval of USEPA and MassDEP. If LUCs are no longer needed, as determined in an ESD or a ROD amendment, the owners of Areas of LUCs, including the Town of Ayer, Massachusetts, will be notified and LUCs will be discontinued.

8.0 ENFORCEMENT

If the Army determines that LUCs are not being complied with, its actions may range from informal resolutions with the owner/renter or violator, to the institution of judicial action. Any activity that is inconsistent with the LUC objectives or use restrictions, or any other action that may interfere with the effectiveness of the LUCs will be addressed by the Army as soon as practicable, but in no case will the process be initiated later than ten (10) days after the Army becomes aware of the breach. The Army will notify USEPA and MassDEP as soon as practicable but no longer than ten (10) days after discovery of any activity that is inconsistent with the LUC objectives or use restrictions, or any other action that may interfere with the effectiveness of the LUCs. The Army will notify USEPA and MassDEP regarding how the Army has or will address the breach within ten (10) days of sending USEPA and MassDEP notification of the breach. Should the Army become aware that a user of the Areas of LUCs or Impact Area has violated any LUC requirement where a local agency may have independent jurisdiction (local regulations and permits), the Army will also notify the agencies of such violations and work cooperatively with them to re-establish owner/user compliance with the LUC.

9.0 APPROVALS AND NOTICES

9.1 Approvals

Changes to the LUCIP can only be approved through the process set forth in **Section 7.0**. Where the approval of a party (hereafter, the “approval party”) is required under this LUCIP for non-substantive changes that may be made without amending of this LUCIP as provided herein, the Army (or its designee) shall give the approval party notice thereof, along with any information to be included in such notice pursuant to the terms of this LUCIP. If the approval party fails to respond to the request for approval within thirty (30) days after said request is made, the Army (or its designee) will send the approval party a second request. If the approval party fails to respond to such second request within ten (10) days after said second request is made, the approval party will be deemed to have approved such request.

9.2 Notices

All notices, responses, requests, approvals and other communications required or permitted under this LUCIP between or among MassDevelopment, USEPA, MassDEP, the Town of Ayer, Massachusetts, and/or the Army shall be in writing and shall be sent by postage pre-paid certified or registered mail (return receipt requested) or by recognized overnight courier (such as DHL, Federal Express, UPS), with delivery charges prepaid, to the following respective address:

If to the Army:

Department of the Army, Fort Devens, BRAC Division, 30 Quebec Street, Room 100, Devens, MA 01432-4479, Attn: BRAC Environmental Coordinator

If to USEPA:

U.S. Environmental Protection Agency, Region I, 5 Post Office Square, Federal Facilities Superfund Section, Suite 100 (HBT), Mail Code OSRR07-3, Boston, MA 02019, Attn: Remedial Project Manager

If to MassDEP:

Massachusetts Department of Environmental Protection, Bureau of Waste Site Cleanup, One Winter Street, Boston, MA 02108, Attn: Superfund Federal Facilities, Section Chief

If to the Town of Ayer, Massachusetts:

- Board of Health, Town of Ayer, 1 Main Street, Ayer, MA 01432, Attn: Chairperson
- Department of Public Works, Town of Ayer, 25 Brook Street, Ayer, MA 01432, Attn: Superintendant
- Building Department, Town of Ayer, Town of Ayer, 1 Main Street, Ayer, MA 01432, Attn: Building Commissioner

A party may change its address for notice by notice to the other parties in accordance with this Section.

10.0 REFERENCES

AMEC 2011. *Draft Final Remedial Investigation for AOC 72*. Prepared for USACE-NAE. March.

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FIGURES

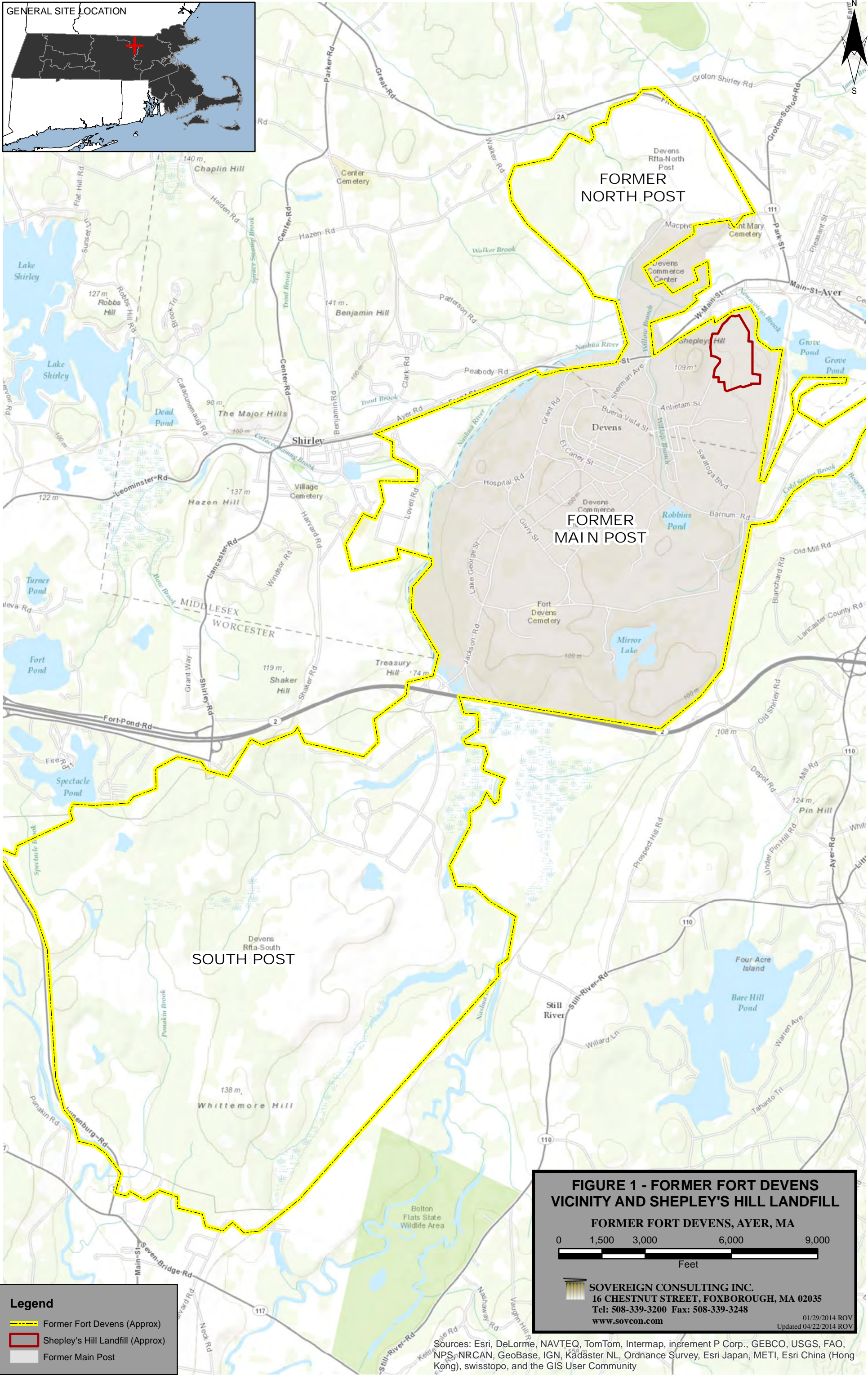
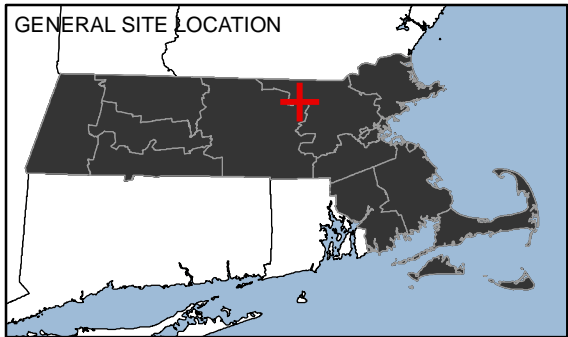



FIGURE 1 - FORMER FORT DEVENS VICINITY AND SHEPLEY'S HILL LANDFILL

FORMER FORT DEVENS, AYER, MA

0 1,500 3,000 6,000 9,000

Feet

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Sources: Esri, DeLorme, NAVTEQ, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, and the GIS User Community

NEAREST PUBLIC WATER SUPPLY:



TOWN OF
AYER

FLOW SHOP
POND

GROVE
POND

SHEPLEY'S HILL
LANDFILL

TOWN OF
AYER

AYER
HARVARD

Legend

- Community Groundwater Source
- Hydrological Feature
- Devens Regional Enterprise Zone (DREZ)
- Landfill Cap Boundary (Approx.)
- Army Property Boundary (Approx.)
- Area of Land Use Controls
- Town Boundary (Approx.)

FIGURE 2 - SHEPLEY'S HILL LANDFILL
OVERALL SITE PLAN WITH NORTH
IMPACTED AREA

FORMER FORT DEVENS, AYER, MA



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