

FINDING OF NO SIGNIFICANT IMPACT (FONSI)
FOR
LEAD SERVICE LINES REPLACEMENT AT
HANSCOM AIR FORCE BASE, MASSACHUSETTS

Pursuant to provisions of the National Environmental Policy Act (NEPA), Title 42 United States Code (USC) Sections 4321 to 4347, implemented by Council on Environmental Quality (CEQ) Regulations, Title 40, Code of Federal Regulations (CFR) §1500-1508, and 32 CFR §989, Environmental Impact Analysis Process, the Department of the Air Force (DAF) has prepared an Environmental Assessment (EA) to identify and assess the potential environmental consequences associated with replacing potential lead service lines at Hanscom Air Force Base (AFB), Middlesex County, Massachusetts.

PURPOSE AND NEED FOR ACTION (EA § 1.3, Page 1-2)

The purpose of the Proposed Action is to protect human health by reducing lead exposure in water systems at Hanscom AFB.

Lead services lines have the potential to negatively affect human health and the environment. The Environmental Protection Agency (EPA) provides guidance for developing and maintaining an inventory of water system service lines. The EPA also provides states with needed information for oversight and reporting to EPA. Under the EPA's recent Lead and Copper Rule Revisions (LCRR) and associated guidance, water systems are required to prepare and maintain an inventory of service line materials by October 16, 2024. The guidance also positions water systems to begin replacing lead service lines as soon as possible. Therefore, the need for the Proposed Action is to adhere to EPA regulations, inventorying water service lines at Hanscom AFB and identifying and replacing potential lead service lines.

PROPOSED ACTION (EA § 2.1, Page 2-1)

Hanscom AFB proposes to investigate water service lines at Hanscom AFB, create an inventory of existing service lines, identify potential lead service lines, and remove and remove those that are found to contain lead. The recently completed Lead Service Line Investigation and Report MXRD22EA02 (May 2023), identifies 24 potentially suspect lead-containing water service lines at Hanscom AFB.

Physical inspections of the 24 pipe segments identified as potentially containing lead will be conducted to determine if they do. An expected area of disturbance of approximately four feet to each side of the service line will result from removal of topsoil, sidewalk, or other surfaces. Disturbance resulting from physical inspections and removal actions for each pipe segment totals approximately 130 square feet (sf). A total area of disturbance of up to approximately 2,197 sf is anticipated from physical inspections of all 24 segments.

Pipes identified as lead-containing are proposed to be removed. The disturbance associated with removal actions, which may be up to four feet on each side of the service lines, and results in approximately 7,945 sf of disturbance for all 24 segments.

SELECTION STANDARDS (EA § 2.2, Pages 2-1 to 2-3)

Removal of lead service lines was determined to be the only reasonable alternative(s) that meets the selection standards presented in Table 2-1 on page 2-3 and described in EA § 2.2.

DETAILED DESCRIPTION OF ALTERNATIVE(S) (EA § 2.3, Pages 2-3 to 2-14)

Three alternatives of the Proposed Action were analyzed and the alternative that best meets EPA and state requirements, protects public health and the environment, supports continual mission growth, and provides an efficient approach to remove lead service lines on the base was selected. Based on the selection standards, the EA considers all potential impacts of Alternative 1 (the Preferred Alternative) and the No-Action Alternative. The EA also considers cumulative environmental impacts with other proposed projects in the Region of Influence (ROI).

ALTERNATIVE 1 (PREFERRED ALTERNATIVE) – Investigation and Removal of Lead Service Lines (EA § 2.3.1, Page 2-3)

The Preferred Alternative involves completing an inspection of the material of existing unknown lines and components followed by the removal of all identified lead service lines and components at Hanscom AFB.

NO-ACTION ALTERNATIVE (EA § 2.3.2, Page 2-14)

The CEQ regulation 40 CFR §1502.14(c) requires the inclusion of a No Action Alternative in the NEPA analysis. The No Action Alternative serves as the baseline against which alternatives can be evaluated to identify impacts to the natural and built environments. Under the No Action Alternative, Hanscom AFB would not conduct an inspection of unknown service lines and no lead service lines would be replaced. The No Action Alternative would fail to meet EPA regulations and to protect public health.

ALTERNATIVES ELIMINATED FROM FURTHER CONSIDERATION (EA § 2.4, Pages 2-14 and 2-15)

Two alternatives were initially considered during the environmental impact analysis process and eliminated from further consideration because they did not meet all the criteria for the selection standards presented in Table 2-1 on page 2-3. The alternatives were:

- **Alternative 2** – Removing all unknown service lines and components identified as “potentially suspect lead-containing” service lines and components at Hanscom AFB.
- **Alternative 3** – Completing physical inspections of unknown lines and components and monitoring lead levels. Identified lead service lines and components at Hanscom AFB would not be removed unless action levels are reached under the LCRR.

SCOPE OF ANALYSIS (EA § 3.0, Page 3-1)

Regardless of the alternative selected, the following resources would not be affected by the Proposed Action and are not discussed in detail in the EA: Air installation Compatible Use Zone (AICUZ)

AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES (EA § 3.0, Pages 3-1 to 3-30)

The Environmental Assessment, incorporated by reference into this finding, analyzes the potential environmental consequences of activities associated with implementing the Preferred Alternative (Alternative 1). The EA considers all potential impacts of the Preferred Alternative and the No Action Alternative. The EA also considers cumulative environmental impacts with other projects in the Region of Influence. The analyses of the affected environment and environmental consequences of implementing the Preferred Alternative presented in the EA concluded that by implementing environmental protection measures, the DAF would be in compliance with all terms and conditions and reporting requirements stipulated by the United States Fish and Wildlife Service (USFWS) and the Programmatic Agreement (PA)

between Hanscom AFB and the Massachusetts State Historic Preservation Office (SHPO) regarding the management of historic properties at Hanscom AFB.

The DAF has concluded that implementation of the Preferred Alternative would have no adverse impacts on the following resources:

AIR QUALITY (EA § 3.2.1, Pages 3-1 to 3-7)

The potential impacts to air quality as a result of implementing the Preferred Alternative are associated with emissions related to excavation and paving activities. The Air Force Conformity Applicability Model (ACAM) was performed in accordance with Air Force Manual (AFMAN) 32-7002, *Environmental Compliance and Pollution Prevention*, the Clean Air Act (CAA Section 176(c)), Air Quality Compliance And Resource Management; the Environmental Impact Analysis Process (EIAP, 32 CFR 989); and the General Conformity Rule (GCR, 40 CFR 93 Subpart B) to assess potential air quality impact(s) associated with the Preferred Alternative.

The results of the analysis show that emissions of all potential excavation and paving activities for the Preferred Alternative would be temporary and have *de minimis* impacts on the air quality, with all NAAQS emissions well below threshold limits. Overall, the analysis showed that the air conformity rules were not applicable. Best management practices would be applied to the maximum extent possible. All equipment and vehicles used during excavation and paving would be maintained in good operating condition so that exhaust emissions are minimized. Dust will be controlled on-site using appropriate dust abatement techniques. As a result, no significant short-term or long-term impacts to air quality are anticipated.

LAND USE (EA 3.2.2, Page 3-7)

The Preferred Alternative would be compatible with current land use and future Hanscom AFB land use plans. No significant short-term or long-term land use impacts would be experienced with the implementation of the Preferred Alternative.

WATER RESOURCES (EA § 3.2.3, Pages 3-7 to 3-19)

No groundwater features, surface water features, wetlands, or floodplains are present within the footprints of the Preferred Alternative. Therefore, excavation and paving activities are not anticipated to directly affect these resources. All activities would be conducted in accordance with best management practices such as placement of silt fences and/or hay bales around catch basins to prevent adverse impacts to the stormwater system discharges and inadvertently to the receiving water (Shawsheen River).

SOIL AND GEOLOGICAL RESOURCES (EA § 3.2.4, Pages 3-19 and 3-21)

The Preferred Alternative is not anticipated to result in grading and topography changes. Lead service line replacement sites have previously been disturbed and are mostly flat. Minimal and temporary impacts to soil are anticipated by excavation activities associated with the Proposed Action. Sediment control measures would be adjusted to meet field conditions during all phases of construction. These measures would be constructed prior to and immediately after disturbance of surface material.

All projects are reviewed to see if there is potential to impact or be impacted by active environmental restoration sites, former restoration sites, or potential Perfluoroalkyl and Polyfluoroalkyl substances (PFAS) sites. The lines near the corner of Forbes Street and Barksdale Street are west of the former gasoline service station site, IRP Site # ST022. No impacts are anticipated because the site's distance from Site #ST022. There is a line to west of Hamilton Street that is near or on a former petroleum-impacted site

that has been closed, Site # ST014. The levels of contamination there when it was last sampled were below any risk-based levels, so there are no concerns. The remaining proposed replacement lines are not located near restoration sites or PFAS sites.

The Installation Restoration Program (IRP) has an opportunity to review and provide input on all phases of construction activities at HAFB to ensure that impacts from PFAS and non-PFAS sites are mitigated. That same amount of coordination will continue as the project proceeds. Because the presence and location of non-AFFF PFAS is not yet known, predicting a time frame and sample locations associated with a Site Inspection and Remedial Investigation is difficult at this time. As needed, through coordination with the IRP, PFAS Site Inspection and Remedial Investigation work will be incorporated into the design. The Proposed Action would avoid adverse impacts related to PFAS contamination.

No short-term or long-term adverse impacts on the geology of the areas are anticipated with the implementation of the Preferred Alternative.

CULTURAL RESOURCES (EA § 3.2.5, Pages 3-21 to 3-22)

None of the undertakings pursued under this EA would be located within an archaeologically sensitive area; however, Building 1119 with proposed lead service line removal is within the Air Force Cambridge Research Laboratory (AFCRL) Historic District and located near zones of archaeological potential. On November 30, 2023 the DAF sent a consultation letter to SHPO stating that, in accordance with Section 106 of the NHPA (5 U.S.C. 306018) and its implementing regulation at 36 CFR Part 800, DAF has determined that the Preferred Alternative is proposed within the AFCRL Historic District; however, the implementation of the preferred Alternative is not anticipated to have adverse effects to the historic properties. In sites in the vicinity of sensitive cultural/historical areas, hand digging will be used for excavation of soil from the point of connection to the water main along the entire length of the service line to be removed/replaced.

Federal agencies are required to consult with tribes when an agency action might affect historic properties of religious and cultural significance to the tribes. To fulfill the obligation above, DAF also sent consultation letters to the Wampanoag Tribe of Gay Head (Aquinnah) and the Mashpee Wampanoag Tribe for their assistance in identifying any such properties on Hanscom AFB, particularly within the Preferred Alternative area that may be of significance to the tribes. This includes archaeological sites, burial grounds, sacred landscapes or features, ceremonial areas, traditional cultural properties and landscapes, plant and animal communities, and buildings and structures with significant tribal association. The provisions for inadvertent discovery or archaeological resources would be incorporated into the Proposed Action, consistent with all ground disturbing projects at Hanscom AFB.

NOISE (EA § 3.2.6, Pages 3-23 and 3-23)

No adverse impacts are anticipated from the Proposed Action. The Preferred Alternative is anticipated to have temporary, minor noise impacts associated with excavation and re-paving activities. Appropriate measures will be applied to minimize potential noise impacts. After implementation of the Preferred Alternative, noise levels are expected to be consistent with current background levels at Hanscom AFB.

BIOLOGICAL/NATURAL RESOURCES (EA § 3.2.7, Pages 3-24 and 3-25)

The Preferred Alternative is anticipated to result in temporary, minor impacts on the natural vegetation from excavation activities and on wildlife from noise generated by excavation and re-paving activities. The Preferred Alternative sites are previously disturbed and improved with landscaped areas, parking lots,

and paved sidewalks. Appropriate measures will be taken to limit impact and restore work areas to existing conditions.

Every undertaking is required to undergo a separate consultation with USFWS to ensure that any effects on protected species are considered. In place of these consultations, a “No Effect” determination is in effect for undertakings conducted at Hanscom AFB between October 2, 2018 and October 1, 2023, extended through March 2024, unless subsequently rescinded based on newly acquired science or information.

No priority habitats and rare species are located within the Preferred Alternative sites. Therefore, no short-term or long-term adverse impacts on biological/natural resources are anticipated as a result of the Preferred Alternative.

INFRASTRUCTURE (EA § 3.2.8, Pages 3-26 to 3-31)

The Preferred Alternative would support the goals of the DoD, DAF, and Hanscom AFB by focusing and sustaining quality mission execution, building a sustainable installation, and improving installation facilities and services. The Preferred Alternative would contribute to the improvement of the water system at Hanscom AFB.

No adverse long-term impacts on traffic are anticipated as no additional personnel would result from the Proposed Action; therefore, no traffic would be generated. Temporary impacts on traffic are anticipated to result from excavation and re-paving activities. However, all practicable mitigation practices in accordance with Hanscom AFB regulations would be adopted to minimize and prevent any resulting impacts on traffic, air quality, and noise including limiting work on roadways to off peak hours. Appropriate methodologies that ensure public safety and protect nearby tenants will be employed. Techniques such as barricades, flaggers, and signage will be used as necessary to isolate excavation areas from pedestrian traffic adjacent to the work sites. Sidewalk areas and walkways near excavation activities will be well marked and lit to protect pedestrians and ensure their safety.

In addition, no increase in utility (water, energy, wastewater, stormwater) usage is expected. Therefore, no long-term impacts to infrastructure are anticipated as a result of the Preferred Alternative. Eleven of the 24 segments of water lines with unknown status are currently in service, while the remaining segments are listed as abandoned. However, none of the water mains service residential properties or major industrial properties on the base; therefore, their removal and replacement would not have significant impacts to water distribution or consumption.

Any short-term, construction related impacts would be mitigated by the planning and project approval requirements of Hanscom AFB, which are in place to ensure appropriate levels of base resources. To avoid temporary disturbances, the Proposed Action will be coordinated with surrounding buildings to ensure critical infrastructure remains in service. Therefore, no significant short-term infrastructure impacts would be experienced because of implementing the Preferred Alternative.

Long-term benefits of the Preferred Alternative include aligning with the EPA’s LCRR regulations; thus, improving water quality and promoting public health of those served by the water system on the base.

OCCUPATIONAL SAFETY AND HEALTH (EA § 3.2.9, Pages 3-31 and 3-32)

Occupational safety and health procedures would be implemented as part of the excavation and replacement activities to ensure the safety and health of individuals at the worksite. Implementation of the Preferred Alternative would not result in direct or indirect impact on the safety and health of DAF employees and others at the site. The Preferred Alternative would be completed in accordance with all

applicable federal, state, local, and applicable DAF regulatory safety standards. Excavation and re-paving procedures will be designed to meet all OSHA safety standards for specific site construction activities. Contractors would be trained to identify and avoid safety hazards, such as those common to working around/with heavy equipment and electrically powered hand tools.

SOLID WASTE AND HAZARDOUS WASTES (EA § 3.2.10, Pages 3-33 to 3-34)

The Preferred Alternative is not anticipated to result in adverse impacts on solid waste and hazardous materials. Materials excavated will be restored at their current location after excavation of lead service lines. Therefore, except for lead service lines identified, no solid waste is anticipated to be produced.

Overall, solid waste management would follow Hanscom AFB recycling policies and MassDEP solid waste policies and guidance to minimize the amount of solid waste disposed without beneficial reuse during construction activities. Contractors hired to execute projects would be responsible for solid and hazardous materials management in accordance with Hanscom AFB's HMMP, ISWMP, and Hazardous Materials Operations Plan. Hazardous materials retrieved (lead pipes) during extraction and replacement activities would be stored, transported, and disposed in accordance with base, military, state, and federal regulations.

SOCIOECONOMICS AND ENVIRONMENTAL JUSTICE (EA § 3.2.11, Pages 3-34 and 3-35)

No adverse impacts on socioeconomics and environmental justice are anticipated from the Preferred Alternative. The Proposed Action only proposes infrastructure improvements.

Possible impacts from the excavation and paving activities could include temporary disruption of traffic and increases in noise and fugitive dust. However, these effects would be minor and short-term, mostly affecting Hanscom AFB residents than off-installation residents.

The Preferred Alternative would result in the long-term benefit of improving the water system at Hanscom AFB, thus contributing to the enhancement of public health.

PUBLIC REVIEW / INTERAGENCY COORDINATION (EA § 1.9, Page 1-7)

A notice of availability was published in the Lexington Minuteman and Concord Journal on **DATE**, inviting the public to review the Draft EA and Draft Finding of No Significant Impact (FONSI) for a 30-day comment period. In addition, DAF issued a press release on **DATE** announcing the availability of the Draft EA and FONSI. Copies were posted to the HAFB public facing website (<https://www.hanscom.af.mil/About-Us/Fact-Sheets/Display/Article/379486/civil-engineering>) for download and review. The public comment period closed on **DATE** and **XX** comments were received.

FINDING OF NO SIGNIFICANT IMPACT (FONSI)

Based on my review of the facts and analyses contained in the *Lead Pipe Replacement EA* conducted under the provisions of NEPA, CEQ Regulations, and 32 CFR § 989, I conclude that the Preferred Alternative would not have a significant environmental impact, either by itself or cumulatively with other known projects. Accordingly, an Environmental Impact Statement is not required. The signing of this Finding of No Significant Impact completes the environmental impact analysis process.

THOMAS J. SCHLUCKEBIER, P.E., CFM, LEED AP
Date Base Civil Engineer