

HANSCOM AFB, MA UTILITY SYSTEM DESCRIPTIONS

General: Hanscom AFB is located 20 miles northwest of Boston and is surrounded by the historic towns of Bedford, Lexington, Lincoln, and Concord. The Base occupies approximately 830 acres of land, and has approximately 200 buildings and other facilities.

System Descriptions: The following information is only an estimate and is subject to change. It describes the potable water, wastewater, natural gas, and electrical utility systems at Hanscom Air Force Base and the four off-site locations:

Sagamore Hill Observation Site
Ipswich Antenna Test Facility
Fourth Cliff Family Recreation Area
Sudbury Geophysics Site

Hanscom AFB:

Potable Water: Water service is provided to Hanscom AFB by the Town of Lexington which provides 95 percent of the water supply through two mains. The remaining 5 percent of the water supply is provided by the town of Bedford which feeds a trailer park and family camp area. Both towns obtain water from the Massachusetts Water Resources Authority (MWRA). The base distribution system consists of approximately 20 miles of main piping. That includes PVC, ductile iron, and asbestos cement pipe. One water storage tank provides a capacity of 1,000,000 gallons.

Sanitary Sewer: Sanitary sewage is disposed to the town of Bedford that is served by the MWRA sewage system. The sanitary sewer system consists of approximately 21 miles of collection piping that is mostly vitrified clay pipe. The sewage collection system includes a lift station with a capacity of 1,000 gpm and 1,500 gpm pump station discharging to the town of Bedford sewage collection system.

Natural Gas: The natural gas service is provided by the Boston Gas Company through an 8-inch high pressure main. Natural gas demand is approximately 140 million cubic feet annually. The natural gas distribution system consists of approximately 8 miles of distribution piping. There are approximately 2 miles of steel pipe and 6 miles of PE pipe.

Electrical: Boston Edison provides power through their substation 319. The electrical distribution system includes approximately 5 miles of high-voltage overhead, 17.5 miles of high-voltage underground, 5 miles of low-voltage overhead, 25 miles of low-voltage underground, 4 substation 3.7 MVA transformers, 3 high-voltage switching stations, 90 high-voltage pad mount transformers, 62 high-voltage pole mount transformers, and 725 outdoor lights.

Off-Site Facilities:

Sagamore Hill Observation Site, Hamilton, Massachusetts:

Potable Water Supply: City water is supplied from a city main to a meter located at the main building. The water serves approximately nine persons at the facility.

Sanitary Sewer: Sanitary sewage is disposed in two septic tank/drain field systems, one servicing each building at the facility.

Electrical: Electrical is provided to the site by approximately 0.22 miles of underground 4160 V distribution and a 75 kVA pad mount distribution transformer.

Ipswich Antenna Test Facility, Ipswich, Massachusetts:

Potable Water: Water is supplied from the city main. The onsite water system includes a branch line to a hydrant, a branch line to an interior sprinkler system, and lines to the water meter at the main building.

Sanitary System: Sanitary sewage is disposed in an onsite septic system.

Electrical: Electric power is supplied to the site from a pole just outside the front gate. At this pole there is primary metering for the site and the underground get away for the primary underground feed to the site. On site there is approximately 0.3 miles of underground primary circuits and three pad mounted distribution transformers.

Fourth Cliff Family Recreation Area, Fourth Cliff, Massachusetts:

Potable Water: City water is supplied from a city main through approximately 1,500 feet of distribution piping providing water to approximately 20 recreational houses and facilities.

Sanitary Sewer: Sanitary sewage is disposed onsite in two septic tank and leach field systems.

Electrical: On site there is approximately 0.5 miles of single phase overhead distribution circuit and four 25 kVA single phase pole top transformers. Lighting is provided on site by 15 pole mounted light fixtures.

Sudbury Geophysics Site, Sudbury, Massachusetts:

Potable Water: Nonpotable Water is provided by an onsite well; drinking water is provided by bottled water service.

Sanitary Sewage: Sanitary sewage is disposed in an onsite septic tank/leach field system.

Electrical: At the site there exists approximately 75 yards of single phase overhead primary distribution circuit, one three phase bank of pole mounted transformers and one single phase transformer bank.

The point of contact is Mark Young (mark.young@tyndall.af.mil), FAX 850-283-6336