GE
159 Plastics Avenue
Pittsfield, MA 01201
USA

Transmitted Via Overnight Courier

February 27, 2007

Mr. Richard Fisher
U.S. Environmental Protection Agency
EPA - New England
One Congress Street, Suite 1100
Boston, Massachusetts 02114-2023

Re: **GE-Pittsfield/Housatonic River Site**
Groundwater Management Area 1 (GECD310)
NAPL Monitoring Report for Fall 2006

Dear Mr. Fisher:

In accordance with GE's approved *Baseline Monitoring Program Proposal for Plant Site 1 Groundwater Management Area* (September 2000), enclosed is the *Plant Site 1 Groundwater Management Area NAPL Monitoring Report for Fall 2006.* This report summarizes and presents the results of activities performed from July through December 2006, related to the monitoring and recovery of non-aqueous phase liquid (NAPL) at the Plant Site 1 Groundwater Management Area (GMA 1) and discusses proposed modifications to certain NAPL monitoring activities.

Please call Andrew Silfer or me if you have any questions regarding this report.

Sincerely,

Richard W. Gates /MH for

Richard W. Gates
Remediation Project Manager

Enclosure
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cc:
D. Tagliaferro, EPA
T. Conway, EPA (cover letter only)
H. Inglis, EPA (CD-ROM)
R. Howell, EPA (CD-ROM, cover letter only)
K.C. Mitkevicius, USACE (CD-ROM)
L. Palmieri, Weston (2 hard copies and CD-ROM)
A. Symington, MDEP (cover letter only)
J. Rothchild, MDEP (cover letter only)
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Pittsfield Commissioner of Public Health
T. Hickey, Director, PEDA
J. Bernstein, Bernstein, Cushner & Kimmel
T. Bowers, Gradient
N. E. Harper, MA AG
D. Young, MA EOEA
M. Carroll, GE (cover letter only)
A. Silfer, GE (CD-ROM)
R. McLaren, GE (cover letter only)
J. Nuss, ARCADIS BBL
J. Bieke, Goodwin Procter
J. Ciampa, SPECTRA
J. Porter, Mintz, Levin
R. Nasman, Berkshire Gas
M. Booher, Leboeuf, Lamb, Greene & MacRae, L.L.P.
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Infrastructure, environment, facilities

General Electric Company
Pittsfield, Massachusetts

Groundwater Management Area 1
NAPL Monitoring Report for
Fall 2006

Volume I of II

February 2007

ARCADIS BBL

Groundwater Management Area 1 NAPL Monitoring Report for Fall 2006

(Fall 2006 GMA 1
NAPL Monitoring Report)

Volume I of II

Prepared for:
General Electric Company

Prepared by:
ARCADIS of New York, Inc.
6723 Towpath Road
Syracuse
New York 13214-0066
Tel 315.446.9120
Fax 315.449.0017

Our Ref.:
B0020136

Date:
February 2007

Table of Contents

Tables

Figures

Volume II Appendices

Appendices

1. Introduction

1.1 General

On October 27, 2000, a Consent Decree (CD) executed in 1999 by the General Electric Company (GE), the United States Environmental Protection Agency (EPA), the Massachusetts Department of Environmental Protection (MDEP), and several other government agencies was entered by the United States District Court for the District of Massachusetts. The CD governs (among other things) the performance of response actions to address polychlorinated biphenyls (PCBs) and other hazardous constituents in soils, sediment, and groundwater in several Removal Action Areas (RAAs) located in or near Pittsfield, Massachusetts that are included within the GE-Pittsfield/Housatonic River Site (the Site). For groundwater and non-aqueous-phase liquid (NAPL), the RAAs at and near the GE Pittsfield facility have been divided into five separate Groundwater Management Areas (GMAs). These GMAs are described, together with the Performance Standards established for the response actions at and related to them, in Section 2.7 of the Statement of Work for Removal Actions Outside the River (SOW) (Appendix E to the CD), with further details presented in Attachment H to the SOW (Groundwater/NAPL Monitoring, Assessment, and Response Programs). This report relates to the monitoring and recovery of NAPL at the Plant Site 1 Groundwater Management Area, also known as and referred to herein as GMA 1.

In September 2000, GE submitted a Baseline Monitoring Program Proposal for Plant Site 1 Groundwater Management Area (GMA 1 Baseline Monitoring Proposal). That proposal summarized the hydrogeologic information available at that time for GMA 1 and proposed groundwater and NAPL monitoring activities (incorporating, as appropriate, those activities in place at that time) for the baseline monitoring period at this GMA. EPA conditionally approved the GMA 1 Baseline Monitoring Proposal by letter of March 20, 2001. Since their initiation, the groundwater quality and NAPL monitoring programs have been modified several times (with EPA approval), including modifications based on proposals contained in GE's semi-annual groundwater and NAPL monitoring reports, update letters from GE to EPA, or EPA's letters conditionally approving the semi-annual reports.

As part of its NAPL monitoring program, GE is required to submit semi-annual reports summarizing the NAPL monitoring/ recovery results and related activities and, on an annual basis (in the fall semi-annual reports), to evaluate the NAPL monitoring/recovery program and propose modifications to optimize NAPL recovery operations, as appropriate. This Plant Site 1 Groundwater Management Area NAPL Monitoring Report for Fall 2006 (Fall 2006 NAPL Monitoring Report) summarizes and presents the results of

the NAPL-related activities performed at GMA 1 from July 2006 through December 2006. Based on review of the existing information, this document also provides assessments of the overall effectiveness of NAPL recovery operations at GMA 1 and includes a description of new and previously-submitted proposals to modify certain NAPL recovery activities, based on the results of those assessments. Non-NAPL-related groundwater quality monitoring activities regarding GMA 1 are described in separate reports, the most recent of which was GE's January 2007 Plant Site 1 Groundwater Management Area Supplemental Groundwater Quality Monitoring Report for Fall 2006.

1.2 Program Overview

GE has performed NAPL monitoring and recovery activities for over 40 years at some portions of GMA 1, and the results of those activities have been documented in numerous reports prepared under MCP and the Resource Conservation and Recovery Act (RCRA) Corrective Action Programs prior to fall 2000, and under the CD thereafter. GE's NAPL recovery program at GMA 1 includes the operation of several automated hydraulic control and NAPL recovery systems and routine manual monitoring and recovery operations for light non-aqueous-phase liquid (LNAPL) and dense non-aqueous-phase liquid (DNAPL). The manual monitoring program includes a combination of weekly to semi-annual groundwater and NAPL thickness measurements and manual removal of NAPL if the observed thickness is greater than a location-specific criterion.

Approximately 250 monitoring wells were monitored across GMA 1 between July and December 2006. The specific NAPL monitoring and recovery activities performed at the various RAAs within GMA 1 in fall 2006 are discussed in more detail in Sections 3 and 4. GE, in addition to undertaking routine NAPL monitoring activities, also modified the groundwater elevation and NAPL monitoring/removal program to more efficiently meet the needs of the program. Those modifications were proposed in several documents submitted to EPA in 2006, including:

- The Fall 2005 Groundwater Quality Monitoring Interim Report (conditionally approved by EPA in a May 10, 2006 letter).

- The Spring 2005 and Fall 2005 NAPL Monitoring Reports (conditionally approved by EPA in a July 6, 2006 letter).

- The Spring 2006 NAPL Monitoring Report (conditionally approved by EPA in a November 14, 2006 letter).

- A May 22, 2006 proposal to remove/replace certain wells in the 20s and 30s Complexes (approved by EPA in a June 8, 2006 letter).

- An October 30, 2006 proposal to install an additional recovery well in the former scrapyard area portion of East Street Area 2-South (conditionally approved by EPA in a January 10, 2007 letter).

1.3 Format of Document

The remainder of this report is presented in five sections. Section 2 provides a summary of pertinent background information concerning GMA 1, including descriptions of geologic conditions, the historical extent of NAPL, the active NAPL recovery systems, and the applicable NAPL-related Performance Standards under the CD. Section 3 provides an overview of GE's active groundwater and NAPL recovery systems and summarizes the recovery data from those systems. Section 4 presents the results of the fall 2006 NAPL monitoring/recovery activities at GMA 1. Section 5 contains an evaluation of the effectiveness of the current NAPL monitoring/recovery program at GMA 1. This section also contains a description of previously-approved program modifications that have yet to be implemented. Finally, Section 6 presents the schedule for future field and reporting activities related to NAPL monitoring and recovery in GMA 1.

2. Background Information

2.1 General

As discussed above, the CD and SOW provide for the performance of groundwater-related monitoring and NAPL removal activities at a number of GMAs. Some of these GMAs, including GMA 1, incorporate multiple RAAs to reflect the fact that groundwater may flow between RAAs. GMA 1 encompasses 11 RAAs and occupies an area of approximately 215 acres (Figure 1). Several of these RAAs are known to contain NAPL in the subsurface. The RAAs within GMA 1 include:

- RAA 1 - 40s Complex;
- RAA 2 - 30s Complex;
- RAA 3 - 20s Complex;
- RAA 4 - East Street Area 2-South;
- RAA 5 - East Street Area 2-North;
- RAA 6 - East Street Area 1-North;
- RAA 12 - Lyman Street Area;
- RAA 13 - Newell Street Area II;
- RAA 14 - Newell Street Area I;
- RAA 17 - Silver Lake Area; and
- RAA 18 - East Street Area 1-South

GMA 1 contains a combination of GE-owned and non-GE-owned industrial areas, residential properties, and recreational areas, including land formerly owned by GE that has been, or will be, transferred to the Pittsfield Economic Development Authority (PEDA) pursuant to the Definitive Economic Development Agreement (DEDA). The Housatonic River flows through the southern portion of this GMA, while Silver Lake is located along the western boundary. Certain portions of this GMA originally consisted of land

associated with oxbows or low-lying areas of the Housatonic River. Re-channelization and straightening of the Housatonic River in the early 1940s by the City of Pittsfield and the United States Army Corps of Engineers (USACE) separated several of these oxbows and low-lying areas from the active course of the river. These oxbows and low-lying areas were subsequently filled with various materials from a variety of sources, resulting in the current surface elevations and topography.

The remainder of this section discusses pertinent background information concerning GMA 1, including a general description of the areas where NAPL is present, the types of NAPL found, and the applicable NAPL-related Performance Standards that must ultimately be achieved.

2.2 Hydrogeologic Framework

Over 500 monitoring wells and associated soil borings have been installed across GMA 1. Data collected at the time of soil boring/monitoring well installation (e.g., lithologic descriptions of the subsurface materials) and subsequent groundwater and NAPL monitoring at many of these locations have produced an extensive database of hydrogeologic information. Construction details of the GMA 1 wells monitored during fall 2006 are provided in Table 1. Although variations to the hydrogeologic setting within GMA 1 exist depending on the specific location and RAA, the available data support a general assessment of subsurface stratigraphy within GMA 1 and are sufficient for the purposes of this report. Relative to the presence of NAPL, there are two primary hydrogeologic units present throughout GMA 1 that are important to its extent, as briefly described below.

2.2.1 Geologic Overview

Unconsolidated Granular Deposits

This unit generally consists of heterogeneous fill materials overlying sands and gravels and is the upper unit within GMA 1. The sands sandy gravels are well-sorted and were deposited as glacial outwash and/or in association with recent depositional processes within the Housatonic River. Isolated silty lenses and peat deposits may also be present locally, typically at depths corresponding to the bottom elevations of the river and the former oxbows. At certain locations within GMA 1, non-native fill materials are present above the natural granular deposits. The fill materials, where present, consist of sand, gravel, cinders, brick, glass, and other similar material.

The unconsolidated granular unit extends from ground surface to depths ranging from less than 5 feet (in the northern portion of GMA 1) to over 40 feet (in the southeastern corner of the GMA). The majority of the existing monitoring wells within GMA 1 are screened within this unit, as it is the upper and primary water-bearing unit within the GMA. Groundwater is encountered under unconfined conditions within this unit at depths between less than 3 feet to over 25 feet below ground surface (bgs). Groundwater generally occurs at shallower depths near the Housatonic River and in the East Street Area 1-South RAA.

Glacial Till

The till unit underlies the granular deposits and consists of approximately 20 to at least 40 feet of dense silt containing varying amounts of clay, sand, and gravel. Discontinuous sandy lenses also have been identified in the till at the Lyman Street Area RAA in the southwestern portion of GMA 1. Till is encountered relatively close to the ground surface at the higher elevation areas in the East Street Area 2-North RAA and in parts of the East Street Area 1-South RAA, but is otherwise generally encountered at depths beginning between approximately 20 to 50 feet beneath the remainder of GMA 1. The top of till elevation contours are illustrated on Figure 2. As shown on that figure, the till surface generally descends from north to south, although erosional depressions and ridges are evident across the surface.

The glacial till unit is much less permeable than the overlying granular deposits and serves as a hydraulic barrier to downward groundwater flow and potential constituent migration. Wells installed within the till are generally located in the East Street Area 2-North RAA, where the till serves as the uppermost water-bearing unit. Additionally, numerous soil borings and monitoring wells throughout GMA 1 have also been drilled to intercept the granular deposit/till interface to monitor for the potential presence of DNAPL along this hydrogeologic interface.

Localized Aquitards

In addition to the primary hydrogeologic units discussed above, portions of GMA 1 also contain localized aquitards that appear to be relatively thin and discontinuous. These aquitards occur within the unconsolidated granular unit and are composed of low permeability material such as peat and silt. These units are likely associated with over bank flood events and/or stagnant bog areas located between meanders of the Housatonic River channel that existed prior to straightening of the channel. Since these silt and peat layers have relatively low permeability relative to the surrounding materials,

they may act as localized hydraulic barriers that impede vertical migration of constituents in groundwater. DNAPL has been observed at the top of such layers in several monitoring wells in the Newell Street Area II RAA and in and adjacent to portions of the East Street Area 2-South RAA. The volume of DNAPL associated with these localized aquitards is relatively minor in comparison to DNAPL accumulations that are found within structural depressions in the top of the glacial till surface.

GE has developed representative geologic cross-sections across the primary GMA 1 NAPL areas that also incorporate information concerning the recent extent of NAPL in those areas. These figures are discussed in Section 2.3 below, in conjunction with the descriptions of the associated NAPL areas.

2.2.2 Groundwater Flow

Although variations occur in groundwater elevations at various wells or portions of GMA 1, overall groundwater flow patterns have remained relatively stable for several years. In general, groundwater flow is toward the Housatonic River from both the north and south, roughly mimicking surface topography. Other influences on groundwater flow include: Silver Lake; the recharge pond and slurry wall which are utilized to aid in hydraulic control efforts in East Street Area 2-South; and several groundwater/NAPL recovery systems which are pumped to induce hydraulic depressions in their vicinity. Groundwater flow conditions observed during fall 2006 display the typical patterns observed at GMA 1, and are discussed in more detail in Section 4.

2.3 Identification of Plant Site 1 NAPL Areas

The portions of GMA 1 where NAPL has been observed are discussed below. Figures 3 and 4 illustrate areas within GMA 1 that have been known to contain separate phase LNAPL or DNAPL, based on observations in monitoring wells. These figures represent a compilation of past investigations and show the maximum lateral extent of NAPL that has been observed and documented in prior GE reports, and are not indicative of current conditions. As discussed in Section 3 and 4, the extent of NAPL observed in fall 2006 is greatly reduced from that shown on Figures 3 and 4. Figures 5 through 9 contain cross-sections illustrating the vertical extent of NAPL at the primary NAPL areas within GMA 1 (East Street Area 2-South, Lyman Street Area, and Newell Street Area II). The locations of those cross-sections are shown on Figure 1. Figures 11 and 12 present the lateral extent of LNAPL and DNAPL, respectively, based on fall 2006 monitoring data.

This section also describes the active groundwater and NAPL recovery systems that are located in GMA 1. Each recovery system consists of one or more recovery wells or caissons that serve as a point of recovery of groundwater, LNAPL, and/or DNAPL.

2.3.1 20s, 30s, and 40s Complexes

40s Complex (RAA 1)

NAPL presence within this area is related to hydraulic oils that were present within hydraulic cylinders associated with elevators in former Buildings 42 and 43. In former Building 42, an approximate 220-gallon release of hydraulic oil occurred on March 5, 1997 from a freight elevator hydraulic cylinder. Following reporting of the release in March 1997, GE implemented activities to recover the residual hydraulic oils not collected immediately following the initial release and to assess the potential for further migration of the released oils within the environment. Collectively, these activities included the decommissioning of the freight elevator, conversion of the abandoned hydraulic cylinder into an oil recovery well, initiation and performance of oil recovery operations, and investigations to assess the potential for subsurface migration of oils released from the elevator shaft. Installation of a downgradient monitoring well was also completed. GE operated the automated oil recovery system through December 2003 and collected weekly data concerning the depth to water and thickness of oil (if present). In February 2004, with EPA approval, GE decommissioned the elevator shaft and recovery system (i.e., the removed the recovery system and the sealed the elevator shaft with cement/bentonite grout) in preparation for the demolition of Building 42, at which time the upper vault area and basement were backfilled with clean backfill materials.

In former Building 43, hydraulic fluid was observed on April 7, 2004, during a pre-demolition inspection of an inactive elevator inside the building. Specifically, LNAPL was observed in a cylindrical shaft extending below the basement floor surface. The shaft, which consisted of a 12-inch diameter hydraulic piston, housed within a 23-inch diameter protective casing, extended approximately 62 feet below the basement floor slab. PCBs were detected in LNAPL samples collected from the annular space between the piston and outer casing within the elevator shaft and submitted for laboratory analysis. No volatile organic compounds (VOCs) were detected in a laboratory sample analyzed for these compounds. From April 2004 until April 2005, a weekly monitoring program was implemented to monitor LNAPL thickness. Approximately 175 gallons of LNAPL were recovered from the elevator shaft cylinder shortly after the initial observation, after which no LNAPL other than a thin film was observed at this location. As proposed in GE's November 5, 2004 letter to EPA and MDEP, and approved by EPA, monitoring activities

were discontinued at this location in April 2005 in preparation for the demolition of the portion of former Building 43 above the elevator shaft.

After removal of the demolition debris was completed in April 2006, GE removed, drained and properly disposed of the hydraulic piston. On May 1, 2006, following removal of the hydraulic piston, an LNAPL thickness of approximately 4 feet was measured in the surrounding casing. GE informed EPA of these results and implemented a month-long program to measure and remove, as necessary, the LNAPL. For the first two weeks of this program, GE performed daily LNAPL monitoring and removal activities (if recoverable quantities of LNAPL were present) and on May 17, 2006, GE implemented a weekly program until May 31, 2006. Approximately 100 gallons of LNAPL were recovered form the hydraulic cylinder during the first week of this period monitoring period, after which only a thin LNAPL film was observed. Therefore, it appears that the source of this second occurrence of LNAPL within the hydraulic cylinder was leakage from the hydraulic piston during removal activities and that all recoverable LNAPL was removed shortly after it was discovered. GE discussed the monitoring/LNAPL removal results with EPA and received verbal approval to complete the decommissioning of the elevator shaft on June 5, 2006. Shortly thereafter, GE sealed the elevator shaft with cement/bentonite grout up to the top of the hydraulic cylinder, leaving the upper vault area and basement to be backfilled with clean backfill materials in conjunction with the building demolition project.

30s Complex (RAA 2)

No separate phase NAPL has been detected in any monitoring wells in this RAA. Indications of the potential presence of NAPL were observed in a soil sample collected from a boring installed in December 2000 during the pre-design investigation at this RAA. In response to this observation, GE, with EPA concurrence, installed a monitoring well (GMA1-10) at this location and monitored the well for the presence of NAPL on a weekly basis for four months following its installation in June 2001. The monitoring frequency was reduced to monthly in October 2001, and further scaled back to quarterly in July 2002 (although this well and several others at the 30s Complex have been monitored on a monthly basis since July 2003 in conjunction with RD/RA activities at the Silver Lake area). NAPL was observed in soil samples examined during the installation of replacement well RF-16R in December 2006. However, although a sheen was observed on water removed during development of this recently-installed well, no measurable accumulations of NAPL have been detected in the well. To date, separate phase NAPL has not been observed in any of the wells located within the 30s Complex, including well ES2-19, which was installed to monitor downgradient of the Building 42 elevator shaft hydraulic oil release discussed above.

20s Complex (RAA 3)

In the past, GE operated a tank farm area which was located in the eastern portion of the 20s Complex and utilized the area to the north of the 20s Complex in various manufacturing and storage capacities involving oil. A portion of the 20s Complex was also formerly utilized for coal-gas manufacturing and oil storage by the Berkshire Gas Company. LNAPL extends from East Street Area 2-North to East Street Area 2-South across the central to eastern portion of the 20s Complex. Although the extent of LNAPL in this area extends into the East Street Area 2-North RAA (discussed below), indicating an upgradient source, the former facilities located within the 20s Complex may also have released NAPL to the subsurface in the past.

2.3.2 East Street Area 2-North & South

East Street Area 2-South (RAA 4)

As shown on Figures 3 and 4, multiple areas and types of NAPL have been observed within various portions of this RAA, including an extension of the LNAPL which is present in East Street Area 2-North RAA and the 20s Complex RAA immediately north of East Street Area 2-South. Additional potential sources of LNAPL in the central to eastern portion of this area may include fill materials placed in Former Oxbow H and several facilities associated with the former Berkshire Gas Company coal-gas manufacturing and storage facility. LNAPL which is recovered from the automated recovery systems contains multiple constituents, typically including PCBs (primarily Aroclor 1260), polynuclear aromatic hydrocarbons (PAHs), chlorobenzene, ethylbenzene, toluene, and xylenes, 1,2,4-trichlorobenzene, 1,2-dichlorobenzene, 1,3-dichlorobenzene, and 1,4-dichlorobenzene, among other constituents. Additionally, a small LNAPL pocket containing PAHs, chlorobenzene, and lesser quantities of PCBs (Aroclors 1254 and 1260) has been observed in the former Scrap Yard Area south of Building 64 (also referred to as the Materials Reclamation Area). LNAPL samples from two monitoring wells in this area (wells GMA1-15 and GMA1-16) were collected and analyzed in spring 2005. The results of that sampling were discussed in the Spring 2005 NAPL Monitoring Report.

Two types of DNAPL are present within this area: (1) Coal-tar DNAPL consisting primarily of PAHs (which are constituents associated with wastes from the former Berkshire Gas manufactured gas plant), as well as ethylbenzene, toluene, and xylenes, which have been observed within and along the eastern and western limbs of Former Oxbow H and beneath the Housatonic River; and (2) DNAPL containing PCBs (Aroclor 1260), along with chlorobenzene, 1,2,4-trichlorobenzene, 1,2-dichlorobenzene, 1,3-dichlorobenzene, and

1,4-dichlorobenzene, which have been observed at scattered locations along Former Oxbow H, near Building 68, and other areas along the Housatonic River.

Figures 5 and 6 present hydrogeologic cross-sections prepared along the riverbank portion of East Street Area 2-South, including the results of NAPL observations made during the fall 2006 semi-annual monitoring event. The presence of DNAPL in certain low areas of the glacial till interface is evident on those figures.

East Street Area 2-North (RAA 5)

In the past, GE used portions of this area in various manufacturing operations, primarily the manufacture of electrical transformers and associated components. This area contained GE's primary transformer oil storage and distribution facilities. As a result, various oils (some containing PCBs) and other materials were released to the environment. The northern edge of the LNAPL plume which extends south across the 20s Complex and into East Street Area 2-South is located near the former location of Building 3C, and other isolated LNAPL occurrences have been observed to the east of this area, near Building 12Y, as shown on Figure 3. Prior to 1964, a portion of the GE facility referred to as the Building 12F Tank Farm was used for the storage of mineral oil dielectric fluid. LNAPL that has been observed in East Street Area 1-North (discussed below) may have originated from this former tank farm area. A small pocket of DNAPL, consisting primarily of PCBs (Aroclor 1260) and lesser amounts of 1,2,4-trichlorobenzene 1,2-dichlorobenzene, 1,3-dichlorobenzene, and 1,4-dichlorobenzene, has also been observed near Building 12Y.

2.3.3 East Street Area 1-North & South

East Street Area 1-North (RAA 6)

As discussed above, LNAPL that may have migrated from the former Building 12F Tank Farm is present within the southern to central portion of this area. In addition, several underground storage tanks (USTs) were formerly utilized by prior property owners in the vicinity of Building 69, which is currently owned by GE. These USTs, which were removed prior to GE's purchase of the property in 1984, included a 10,000-gallon fuel tank (removed in 1960), a 5,000-gallon gasoline tank (removed in 1964), a 5,000-gallon diesel fuel tank (also removed in 1964), and a 1,000-gallon gasoline tank (removed in 1978). The removal permits for these non-GE owned USTs are on file with the City of Pittsfield Fire Department.

The LNAPL in this area contains relatively low levels of PCBs and is addressed by the Northside Recovery System. A physically separate LNAPL area has been observed to the east of this recovery system and extends south onto East Street Area 1-South.

East Street Area 1-South (RAA 18)

Two LNAPL areas have been documented in this RAA. The first and larger LNAPL area extends from north of East Street (in East Street Area 1-North) to slightly inside the boundary to East Street Area 1-South. This LNAPL is contained by the Southside Recovery System. The other area where PCB-containing LNAPL has been observed is to the west of the larger LNAPL zone, between the Northside and Southside Recovery Systems. PCB concentrations in this area have ranged from 4 to 122 ppm.

2.3.4 Lyman Street Area (RAA 12)

This area contains three of the 11 former oxbows or low-lying areas (Former Oxbows B, D, and E) of the Housatonic River which were filled in during the late 1930s and early 1940s as part of a joint program between the City of Pittsfield and the USACE to straighten the river channel and reduce flooding potential of the river. These oxbows were filled with materials originating from the GE facility, as well as other sources. LNAPL and DNAPL have been observed within and near Former Oxbow D, primarily beneath the Lyman Street parking lot in the eastern portion of this RAA, as illustrated on Figures 3 and 4. The chemical composition of the two NAPL types is similar, in that both contain varying levels of PCBs (Aroclor 1254), PAHs, chlorobenzene, ethylbenzene, toluene, xylenes, 1,2,4-trichlorobenzene, 1,2-dichlorobenzene, 1,3-dichlorobenzene, and 1,4-dichlorobenzene, among other constituents.

Hydrogeologic cross-sections prepared through NAPL-bearing regions beneath the Lyman Street parking lot area are shown on Figures 7 and 8. As shown on Figure 7, LNAPL and DNAPL occur within close vertical proximity due to the relatively shallow depth of the till confining layer in this area.

2.3.5 Newell Street Area II (RAA 13)

Former Housatonic River Oxbows F and G are located within this RAA. DNAPL is present within Former Oxbow G and beneath the former Newell Street parking lot at the locations shown on Figure 4. This DNAPL consists primarily of PCBs (Aroclor 1254), with lesser amounts of PAHs (mostly naphthalene and 2-methylnaphthalene), 1,2,4-

trichlorobenzene, 1,2-dichlorobenzene, 1,3-dichlorobenzene, 1,4-dichlorobenzene, toluene, tetrachloroethene, trichloroethene, and xylenes.

DNAPL is present within two areas: an upper DNAPL perched on silty sand and peat deposits and a lower DNAPL located above the top of the glacial till present at depths of approximately 30 to 40 feet below grade. The deeper DNAPL represents, by far, the more significant accumulation and is subject to collection by the automated recovery systems. A hydrogeologic cross-section illustrating the vertical distribution of DNAPL beneath Newell Street Area II is presented on Figure 9.

An isolated occurrence of LNAPL containing PCBs (Aroclor 1254), along with minor amounts of naphthalene, 1,3-dichlorobenzene, 1,4-dichlorobenzene, and xylenes, and a measured specific gravity of approximately 0.9 has also been observed beneath the southern corner of the parking lot.

2.4 NAPL-Related Performance Standards

Under the CD and SOW, GE is required to perform monitoring, recovery, assessment, and other response activities related to NAPL until the applicable NAPL-related Performance Standards are ultimately achieved. The NAPL-related Performance Standards are set forth in Section 2.7 and Attachment H (Section 4.0) of the SOW. They consist of the following:

1. Containment, defined as no discharge of NAPL to surface waters and/or sediments, which shall include no sheens on surface water and no bank seeps of NAPL.

2. For areas near surface waters in which there is no physical containment barrier between the wells and surface water, elimination of measurable NAPL (i.e., detectable with an oil/water interface probe) in wells near the surface water bank that could potentially discharge NAPL into the surface water, in order to prevent such discharge and assist in achieving groundwater quality Performance Standards.

3. For areas adjacent to physical containment barriers, prevention of any measurable LNAPL migration around the ends of the physical containment barriers.

4. For NAPL areas not located adjacent to surface waters, reduction in the amount of measurable NAPL to levels which eliminate the potential for NAPL migration toward surface water discharge areas or beyond GMA boundaries, and which assist in achieving groundwater quality Performance Standards.

5. For NAPL detected in wells designed to assess GW-2 groundwater (i.e., located at average depths of 15 feet or less from the ground surface and within a horizontal distance of 30 feet from an existing occupied building), a demonstration that constituents in the NAPL do not pose an unacceptable risk to occupants of such building via volatilization and transport to the indoor air of such building. Such demonstration may include assessment activities such as: NAPL sampling, soil gas sampling, desk-top modeling of potential volatilization of chemicals from the NAPL (or associated groundwater) to the indoor air of the nearby occupied buildings, or sampling of the indoor air of such buildings. If necessary, GE shall propose corrective actions, including, but not limited to, containment, recovery, or treatment of NAPL and impacted groundwater.

In addition to these Performance Standards, GE has developed and implemented site-wide criteria for NAPL monitoring and manual recovery requirements, standard procedures for assessment of new NAPL occurrences, and the feasibility of the installation of new recovery systems. Those guidelines have been incorporated into GE's approved Field Sampling Plan/Quality Assurance Project Plan (FSP/QAPP).

3. Historical NAPL Monitoring and Recovery Activities

3.1 General

This section describes the active groundwater and NAPL recovery systems that are located in GMA 1 at the following RAAs: East Street Area 2-South, East Street Area 1-North, East Street Area 1-South, Lyman Street Area, and Newell Street Area II. Each recovery system consists of one or more recovery wells or caissons that serve as the point of collection for groundwater, LNAPL, and/or DNAPL.

Certain of these recovery systems are equipped with a groundwater extraction pump that is operated to create a cone of depression within the water table. The cone of depression created by the extraction pump results in a groundwater gradient towards the recovery system, drawing water and oil into the perforated collection laterals, wells, or caissons for subsequent removal. In addition to physically removing NAPL, these systems also serve to provide hydraulic control, limiting the migration of NAPL from this area.

Depending on the quantity of NAPL in a certain area, some of the recovery systems are equipped with a groundwater extraction pump as well as an oil recovery pump to facilitate NAPL recovery. The oil recovery pump draws oil from the free surface in a well or caisson. The collected NAPL is then pumped into temporary storage units near the recovery well prior to collection and proper disposal by GE.

The recovery systems are checked on a weekly basis to ensure that all pumps are functioning properly. As part of these routine maintenance activities, measurements of groundwater and NAPL levels are collected and removal volumes are documented. The data obtained are summarized in GE's monthly reports on overall activities at the GE-Pittsfield/Housatonic River Site and serve as the basis for much of the discussion later in this report.

A brief description of each active recovery system within GMA 1 is provided in the following subsections. Boring logs and construction diagrams of the primary recovery systems are provided in Appendix A. Graphs illustrating overall historical NAPL recovery data from the GMA 1 RAAs are included in Appendix B, while groundwater and NAPL recoveries for the individual automated recovery systems are provided graphically in Appendices C and D for LNAPL and DNAPL recovery systems, respectively. Manual NAPL monitoring and recovery data for fall 2006 is tabulated in Appendix E (discussions of these manual NAPL recovery activities are included in Section 4). Appendix F contains

data and graphs illustrating the efficiency of the East Street Area 2-South LNAPL recovery systems since 2000.

Condition No. 4 of EPA's June 20, 2003 conditional approval letter required GE to evaluate the efficiency (i.e., percentage of NAPL removed compared to total quantity of liquid removed) of the automated recovery systems at GMA 1. This evaluation was performed for the primary East Street Area 2-South LNAPL recovery systems and those results are discussed below. NAPL recovery efficiency evaluations were limited to these systems for the following reasons:

1. The automated DNAPL recovery systems at GMA 1 do not remove groundwater, thus the efficiency is either 0% (during periods when no DNAPL is recovered) or 100% (when DNAPL is removed). These systems are best assessed by comparison of DNAPL recovery volumes to prior data.

2. The East Street Area 1-North and South recovery systems remove very little LNAPL in comparison to the amount of groundwater pumped as part of their hydraulic control functions. The "efficiency" of these systems is not properly measured in terms of the percentage of LNAPL recovered per unit of recovered groundwater, but in the degree of containment of LNAPL that the systems provide. Therefore, GE does not believe a detailed evaluation of the calculated efficiencies of these systems is appropriate.

3. Similar to the East Street Area 1-North and South recovery systems, the Lyman Street Area automated recovery systems do not remove significant quantities of LNAPL. In addition, the groundwater removal volumes from the three recovery systems in this area are tracked as a combined total, such that individual recovery well efficiencies cannot be calculated.

4. Finally, LNAPL recovery efficiencies were not assessed for certain recovery systems that are utilized solely as hydraulic control points (i.e., RW-2(X)) without any associated LNAPL recovery, or that employ LNAPL skimmers (i.e., well GMA1-17W) and do not remove groundwater as part of their operation.

The overall efficiency of each primary East Street Area 2-South automated recovery system since 2000 is presented in Section 3.2 below, while variations in efficiency during the current monitoring period are discussed in Section 5.2.1. Data and graphs illustrating the efficiency of the East Street Area 2-South LNAPL recovery systems are provided in Appendix F.

3.2 East Street Area 2-South

Nine active groundwater and NAPL recovery wells or caissons are present within East Street Area 2-South as illustrated on Figure 1. The recovery systems that are most important to LNAPL recovery and control are 64S, RW-1(S), 64V, RW-1(X), and RW-2(X). Two other recovery caissons (64X(W) and 64R) are generally pumped at lower rates to facilitate oil recovery, but are not utilized to provide hydraulic control. Additionally, an automated LNAPL removal skimmer system was recently installed in monitoring well GMA1-17, which is located near Buildings 64G and 64T. This skimmer was installed as a replacement for a similar system in nearby well 40R, which was removed due to lack of recent productivity. A DNAPL recovery system is also present in well RW-3(X). Those recovery systems where active groundwater and NAPL recovery are currently being performed are described below. Construction details of these systems are included in Appendix A and automated recovery data for LNAPL and DNAPL are presented in Appendices C and D, respectively. Data and graphs illustrating the efficiency of the East Street Area 2-South LNAPL recovery systems are provided in Appendix F.

In addition, GE is in the process of designing an additional automated recovery system to be placed in the Former Scrapyard Area, as discussed in GE's October 30, 2006 proposal (conditionally approved by EPA in a letter dated January 10, 2007). The proposed construction of this recovery well (which GE now proposes to be designated as well RW-4, rather than RW-3 as described in GE's initial proposal, to avoid confusion with another well designated RW-3) is also provided in Appendix A.

Caisson 64R

Caisson 64 R is located approximately 350 feet south of East Street and 675 feet west of Newell Street, upgradient of Caisson 64V (discussed below) and the on-site recharge pond, as shown on Figure 1. Caisson 64R was installed in 1974 and consists of an 8-foot diameter caisson extending 24 feet bgs. The caisson is constructed of perforated steel pipe and includes a series of eight 8-inch oil collection laterals. Four of these horizontal laterals extend 150 feet in a southwestern direction and four extend 125 feet to the northeast. The laterals were installed at depths of 15.3 to 21.3 feet below grade.

Between May 1985 and November 1988, Caisson 64R was equipped with water-level and oil-level probes, a groundwater extraction pump, and a floating oil recovery pump for LNAPL removal. Approximately 79,000 gallons of NAPL were collected during this time period. Beginning in 1988, the 64V recovery system became operational and increased groundwater pumping into the nearby recharge pond subsequently took place. As a

result, groundwater levels near the recharge pond (and within Caisson 64) increased above the elevation of the 64R collection laterals. Despite the operation of the groundwater depression pump, water levels in Caisson 64R consistently remained above the uppermost lateral, resulting in a decrease in LNAPL recovery efficiency. As a result, GE removed the groundwater depression pump in January 1989, and installed it in Caisson 64X(S) to improve oil recovery in that area. Periodic groundwater pumping from Caisson 64R resumed in July 1994. Since 1985, and through December 2006, a combined total of approximately 215,725 gallons of LNAPL have been removed from Caisson 64R and well 40R. LNAPL removed from Caisson 64R and well 40R (discussed below) had been tracked as a combined total since the installation of well 40R until November 2002. At that time, GE installed an inline flow meter in the NAPL removal piping of Caisson 64R. Since installation of the flow meter, approximately 17,400 gallons of LNAPL have been removed from Caisson 64R.

Since January 2000, a combined total of approximately 34,700 gallons of LNAPL and 35.9 million gallons of water have been removed from Caisson 64R and well 40R (all groundwater removal was from Caisson 64R), resulting in a combined LNAPL recovery efficiency of 0.097% for this system. Since separate LNAPL recovery tracking was initiated in November 2002, the LNAPL recovery efficiency for Caisson 64R has been 0.063%.

Well 40R

Well 40R is located approximately 350 feet south of East Street and 725 feet west of Newell Street, as shown on Figure 1. LNAPL in this area was previously removed from well 40, which consisted of a 2.5-inch PVC casing with a 2.5-inch PVC screen installed to a depth of 20 feet. An automated LNAPL removal system was installed in well 40 in September 1994 and operated until May 1995. To improve NAPL collection efficiency, well 40R was installed adjacent to well 40 in June 1995, and automated LNAPL recovery operations were relocated to the new well. As stated above, approximately 214,000 gallons of LNAPL have been removed from the 40/40R and 64R recovery systems through December 2005. Of this total, approximately 35,000 gallons can be specifically tracked to wells 40/40R during the period between October 1994 and January 1996. In November 2002, the 40R and 64R recovery systems were modified to record LNAPL collection data separately. As discussed above, GE installed an inline flow meter in the NAPL removal piping of Caisson 64R. The NAPL contribution from well 40R was calculated by subtracting the inline flow data from the total volume recorded in the LNAPL holding tanks. Those data indicate that approximately 217 gallons of LNAPL have been removed from well 40R from November 2002 through December 2002. No LNAPL has

been recovered from this well since January 2003. In the Spring 2005 NAPL Monitoring Report, GE proposed to remove the well 40R skimmer system and transfer it to nearby well GMA1-17W. Following EPA approval of that proposal, automated LNAPL recovery from well 40R was discontinued in October 2006 and a new skimmer system was activated at well GMA1-17W. GE will monitor well 40R on a monthly basis and LNAPL accumulations observed in excess of 0.25 foot will be manually removed.

Well GMA1-17W

Well GMA1-17W is located approximately 300 feet south of East Street and 850 feet west of Newell Street, as shown on Figure 1. An automated LNAPL recovery system consisting of a floating skimmer, pneumatic bladder pump, compressor and tank-full shut off was installed in this well and activated on October 5, 2006. LNAPL is pumped into a 30-gallon steel closed-top DOT-approved container. The complete system is housed in a secure weather proof hazardous materials hut with an approximate 125 gallon capacity sump for spill containment purposes. A liquid level detection shut down mechanism within the sump operates as a back-up to the drum full shut off control. The LNAPL storage container is removed and replaced every thirty days (at a maximum), or when full. Since activation in October 2006 through December 2006, the GMA1-17W skimmer system has removed approximately 58 gallons of LNAPL.

Caisson 64S

Caisson 64S is located approximately 370 feet south of East Street and 1,170 feet west of Newell Street, as shown on Figure 1. Caisson 64S was installed in 1974 and originally consisted of an 8-foot diameter caisson extending to a depth of 15 feet. The shallow depth of Caisson 64S limited the capture zone of the oil recovery system, so the caisson was deepened to 28.5 feet on November 13, 1997 utilizing 2-foot diameter augers. Installed inside the caisson is a 1-foot diameter stainless steel well casing with a 25-foot long, 1-foot diameter stainless steel slotted screen.

The original caisson is constructed of concrete and includes five sets of 8-inch collection laterals. The sets of horizontal laterals extend in the following directions: 125 feet northeast, 80 feet northeast, 100 feet north, 100 feet north, and 100 feet northwest. The laterals were installed at depths between 7.5 and 11 feet. Construction details of Caisson 64S, including the collection system modifications implemented in 1997 and 2002, are included in Appendix A. This recovery well was further modified by GE in September 2002, with the installation of a solid steel sleeve around the inner 1-foot well casing to a depth of approximately 19 feet. The purpose of this sleeve is to reduce turbulence due to

cascading water from the upper collection laterals in this caisson. This will allow a deeper groundwater depression level in the caisson and enhance the cone of depression.

Shortly after installation of the sleeve, the groundwater depression level was successfully lowered from approximately 972 feet to 963 feet. However, this increased drawdown did not result in a corresponding increase in LNAPL recovery. In fact, no LNAPL was recovered during pumping from within the steel sleeve during the first several months following its installation. LNAPL recovery resumed in April 2003 after the pumping system was moved back into the outer caisson, even though the pumping level was raised back up to approximately 974 feet. As directed by EPA, GE purchased a second pump to place within the steel sleeve to allow pumping from both locations within this caisson. That pump was installed and dual pumping was initiated in early August 2003. The presence of LNAPL within the deeper sleeve was also documented at that time and LNAPL recovery volumes have increased since this modification.

Caisson 64S is equipped with dual water-level and oil-level probes (for both the inner and outer caisson sections), groundwater extraction pumps, and a floating oil recovery pump for LNAPL removal. Since 1983, approximately 254,400 gallons of LNAPL have been removed from Caisson 64S in conjunction with well RW-1(S). LNAPL removed from Caisson 64S and well RW-1(S) (discussed below) was tracked as a combined total since the installation of well RW-1(S) in 1998. In December 2002, the 64S and RW-1(S) recovery systems were modified to record LNAPL collection data separately. GE installed an inline flow meter in the NAPL removal piping of well RW-1(S) to identify the quantity of LNAPL being removed from that system. The NAPL contribution from Caisson 64S was calculated by subtracting the inline flow data from the total volume recorded in the LNAPL holding tanks. Utilizing this method, an LNAPL recovery of approximately 20,300 gallons has been tracked to Caisson 64S since the installation of the flow meter in December 2002.

Since January 2000 a combined total of approximately 46,400 gallons of LNAPL and 119 million gallons of water have been removed from Caisson 64S and well RW-1(S), resulting in a combined LNAPL recovery efficiency of 0.039% for this system. Since separate LNAPL recovery tracking was initiated in December 2002, the LNAPL recovery efficiency for Caisson 64S has been 0.059%.

Well RW-1(S)

Well RW-1(S) is located approximately 480 feet south of East Street and 1,400 feet west of Newell Street, as shown on Figure 1. Well RW-1(S) was put into operation in March 1998, and consists of a 1-foot diameter stainless steel well casing with a 1-foot diameter, 20-foot long, stainless steel slotted screen. The well was installed to a depth of 30 feet. Construction details of RW-1(S) are presented in Appendix A. Well RW-1(S) is equipped with a groundwater extraction pump and an oil recovery pump. The cone of depression created by the groundwater extraction pump is approximately 150 feet long and 100 feet wide. As discussed above, LNAPL removed from well RW-1(S) was combined with that from Caisson 64S until December 2002, when GE installed an inline flow meter in the NAPL removal piping of well RW-1(S). Since December 2002, approximately 2,600gallons of LNAPL were removed from well RW-1(S). Small amounts of DNAPL (approximately 20 gallons since spring 1998) have also been periodically removed from this well.

As discussed above, the combined LNAPL recovery efficiency for the Caisson 64S and well RW-1(S) system since January 2000 is 0.039%. Since separate LNAPL recovery tracking was initiated in December 2002, the LNAPL recovery efficiency for well RW-1(S) has been 0.006%.

Caisson 64V

Caisson 64V is located approximately 200 feet north of the Housatonic River and 470 feet west of Newell Street, as shown on Figure 1. Caisson 64V has been in operation since April 1988, and extends to a depth of 30 feet. The caisson contains a 2-foot diameter stainless steel well casing with a 2-foot diameter, 20-foot long, stainless steel slotted screen. The caisson is located immediately upgradient from a subgrade slurry wall (discussed below) that provides additional physical containment and assists in the hydraulic control of LNAPL in the area.

Caisson 64V is equipped with water-level and oil-level probes, a groundwater extraction pump, and an oil recovery pump for LNAPL removal. The cone of depression around the caisson extends approximately 350 feet in an east to west direction and as far north as 200 feet. Since 1988, approximately 342,000 gallons of LNAPL have been removed from Caisson 64V. In addition to the LNAPL removal, DNAPL also periodically accumulates in the base of Caisson 64V and is removed by manual pumping. From 1997 to 1999, approximately 127 gallons of DNAPL were pumped from Caisson 64V. Since that time, approximately 15 gallons of DNAPL have been removed by this system. The LNAPL

recovery efficiency for the Caisson 64V recovery system since January 2000 is 0.066%, based on an approximate LNAPL removal volume of 61,500 gallons and a groundwater removal volume of 92.5 million gallons during this timeframe.

Oil Recovery System 64X

Oil recovery system 64X was installed in 1974 and has been operating since 1985. The system consists of three Caissons: 64X(N), 64X(S), and 64X(W), as shown on Figure 1. Caisson 64X(N) is located approximately 160 feet north of the Housatonic River and 515 feet west of Newell Street. Caisson 64X(N) is approximately 9.5 feet in diameter and is installed to a depth of approximately 15 feet. Caisson 64X(S) is located approximately 60 feet north of the Housatonic River and 430 feet west of Newell Street. Caisson 64X(S) is 7 feet in diameter, extends to a depth of 20 feet, and includes a series of horizontal 8-inch diameter oil collection laterals to facilitate LNAPL removal. Caisson 64X(W) is located approximately 70 feet north of the Housatonic River and 530 feet west of Newell Street. Caisson 64X(W) is approximately 5 feet in diameter and is installed to a depth of approximately 17.5 feet. All three caissons are constructed with perforated steel pipe.

Oil collection laterals, which extend from depths of approximately 10 to 15 feet, are contained in a trench that extends between Caissons 64X(W) and 64X(S). The trench is approximately 3-feet wide and filled with gravel. The south (downgradient) wall of the trench, parallel to the riverbank, is lined with a 1-foot thick layer of clay and a high-density polyethylene liner to impede NAPL from flowing out of the trench.

Originally, the Caisson 64X oil recovery system contained oil recovery pumps and water-level and oil-level probes. The oil recovery pumps were upgraded with automatic timers in May 1988, and a groundwater extraction pump was installed in Caisson 64X(W) in January 1989 to lower the groundwater table. The groundwater extraction pump was removed in October 1993 when well RW-2(X) was installed. Groundwater pumping and automated LNAPL recovery were resumed at this well in August 1994. Although it is not necessary to pump groundwater from the 64X system to provide hydraulic control in this area, groundwater is removed from Caisson 64X(W) to facilitate enhanced LNAPL recovery.

Approximately 44,300 gallons of LNAPL have been removed from system 64X in conjunction with recovery well RW-1(X). The majority of LNAPL was collected between 1985 and 1987, solely from the 64X system. Until October 2002, LNAPL removed from the 64X system and well RW-1(X) (discussed below) was tracked as a combined total. Beginning at that time, GE recorded the NAPL volume in the holding tank before and after

activation of the manually-operated NAPL removal pump at well RW-1(X) to identify the amount of LNAPL removed by that system. Subtraction of the manual removal from the total NAPL present in the holding tank volume yields the quantity of NAPL originating from the 64X system. Since October 2002, approximately 880 gallons of LNAPL have been recovered by recovery system 64X.

Since January 2000 a combined total of approximately 2,300 gallons of LNAPL and 82 million gallons of water have been removed from the 64X/RW-1(X) systems, resulting in a combined LNAPL recovery efficiency of 0.003%. Since separate LNAPL recovery tracking was initiated in October 2002, the LNAPL recovery efficiency for the 64X system has been 0.004%.

Well RW-1(X)

Well RW-1(X) is located approximately 70 feet north of the Housatonic River and 500 feet west of Newell Street, as shown on Figure 1. RW-1(X) was installed on November 25, 1992, and consists of an 8-inch diameter stainless steel well casing with an 8-inch diameter, 15-foot long, slotted stainless steel screen. The well extends to a depth of 24 feet. Pumping of the well was initiated on December 7, 1992.

RW-1(X) is equipped with a groundwater extraction pump and a manually-activated LNAPL recovery pump. The pumping of RW-1(X), coupled with RW-2(X) (discussed below), produces two overlapping cones of depression that provide hydraulic control near the riverbank and locally reverse the natural groundwater gradients so that groundwater flows toward the recovery well instead of the Housatonic River. Until October 2002, LNAPL removed from the 64X system (discussed above) and well RW-1(X) was tracked as a combined total. To determine the LNAPL contribution from well RW-1(X), GE has recorded the NAPL volumes in the common holding tank before and after activation of the NAPL removal pump. Since October 2002, approximately 54 gallons of NAPL were recovered by well RW-1(X).

As discussed above, the combined LNAPL recovery efficiency for the 64X/RW-1(X) systems since January 2000 is 0.003%. Since separate LNAPL recovery tracking was initiated in October 2002, the LNAPL recovery efficiency for well RW-1(X) has been 0.0003%.

Well RW-2(X)

Well RW-2(X) is located approximately 65 feet north of the Housatonic River and approximately 560 feet west of Newell Street, as shown on Figure 1. Well RW-2(X) was installed on October 27, 1993, and is constructed of an 8-inch diameter stainless steel well casing with an 8-inch diameter, 15-foot long, slotted stainless steel screen. The well extends to a depth of 24 feet. Pumping of well RW-2(X) began on November 12, 1993. RW-2(X) is equipped with a groundwater extraction pump that, along with the groundwater depression pump in well RW-1(X), provides hydraulic control near the riverbank and locally reverses the natural groundwater gradients (toward the river). A separate oil recovery pump is not present in RW-2(X) since significant quantities of LNAPL have never accumulated in this well.

Well RW-3(X)

Well RW-3(X) is located approximately 65 feet north of the Housatonic River and 430 feet west of Newell Street, along the riverbank near the 64X recovery system, as shown on Figure 1. Well RW-3(X), installed on September 13, 1999, was constructed of a 6-inch diameter PVC riser and a 10-foot long, slotted PVC and stainless steel wire wrapped screen. The well extends to a depth of 47 feet. Well RW-3(X) was specifically designed to remove the coal-tar DNAPL present in the riverbank area. Initially, DNAPL accumulations were manually pumped from RW-3(X) until the construction of an automated pumping system was completed in June 2000. Approximately 4,500 gallons of DNAPL have been removed from well RW-3(X) since it was installed.

Additional Containment/Hydraulic Control Features

In addition to the active recovery systems at East Street Area 2-South, several physical barriers have been constructed to control groundwater flow and/or restrict NAPL migration. These features include a subgrade slurry wall, a groundwater recharge pond, and a series of sheetpile containment barriers.

The slurry wall is located to the east of the eastern limb of the former river oxbow in the southeastern portion of East Street Area 2-South and was installed in August 1987. This 350-linear foot, V-shaped slurry wall (extending approximately 200 feet to the east and 150 feet to the west of the center point) is completed to an average depth of 28 feet. Caisson 64V is located immediately upgradient of the center of the slurry wall, while the groundwater Recharge Pond is located to the west. In combination, these items provide physical containment of LNAPL and assist in the hydraulic control in the area. The 64X,

RW-1(X), and RW-2(X) recovery systems are located downgradient of the slurry wall to recover LNAPL present between the slurry wall and the river.

Several sheetpile containment barriers are in place along the riverbank portion of East Street Area 2-South. The largest barrier, referred to as the 64X Area Sheetpile, is located along the riverbank near the eastern limb of the former oxbow. This barrier is approximately 400 feet long and extends to a depth of approximately 28 feet. This wall primarily serves to prevent LNAPL and shallow DNAPL migration toward the river, although the western portion of the barrier also impedes deeper DNAPL migration, as it is placed below the glacial till interface. It also provides a partial barrier to groundwater which is impeded by the wall and removed by the RW-1(X), RW-2(X), and 64X(W) pumping wells. Four smaller sheetpile containment barriers (Cell G1, Cell G2, Cell G3, and Cell J1) were constructed along the riverbank portion of East Street Area 2-South during the Upper ½-Mile Reach Removal Action to address observations of NAPL during excavation activities. These barriers range from approximately 90 to 120 feet in length and extend to depths between 21 and 30 feet below grade. The Cell G1 and Cell J1 barriers are keyed into the glacial till, while the Cell G2 and Cell G3 barriers terminate above the till interface. A series of monitoring wells, consisting of a perimeter well at each end of the barrier and a well behind the center of the barrier, were installed to monitor groundwater elevations and potential NAPL presence near each of these barriers. Finally, an approximately 130-foot sheetpile barrier extending into till to a depth of approximately 30 feet is located to the south of the 60s Complex. This barrier was installed in conjunction with remediation activities performed in the Building 68 Area.

Groundwater removed from the GMA 1 recovery systems is pumped to the Building 64G groundwater treatment facility for processing. After treatment, the majority of the water is discharged to the Housatonic River through NPDES-permitted Outfall 005. However, as part of GE's overall efforts to contain NAPL within the Site and to optimize NAPL recovery operations, a portion of the treated water discharged from the 64G facility is routed to GE's on-site recharge pond (located west of recovery well 64V). Discharge to this pond results in a higher groundwater elevation relative to the surrounding area, which serves as a hydraulic barrier to LNAPL migration. Since April 1988, the elevation of the recharge pond has been controlled via an "Electrogauge" level controller. Between April 1988 and October 1990, the elevation of the recharge pond was held at approximately 985 feet above mean sea level (AMSL). In October 1990, the elevation of the recharge pond was reduced to 984 feet AMSL. In September 1994, the elevation of the pond was reduced again to 983 feet AMSL to decrease the size of the groundwater "mound," while still maintaining the necessary hydraulic barrier. Approximately 26.4 million gallons of water were removed by the GMA 1 recovery systems and sent to the Building 64G groundwater

treatment facility for processing in fall 2006. Of this total, approximately 93 percent of the treated groundwater was discharged to the Housatonic River, while the remaining 7 percent was discharged to the recharge pond.

3.3 East Street Area 1-North & South

3.3.1 East Street Area 1-North

The Northside Recovery System is located on the north side of East Street, approximately 200 feet east of the intersection of Newell Street and East Street, as shown on Figure 1. This system was installed in 1979, and consists of a 6.75-foot diameter perforated steel caisson equipped with 22 six-inch diameter, 80-foot long perforated collection laterals (11 on the east side of the caisson and 11 on the west side). The laterals begin at a depth of 7.5 feet bgs and extend to 18.5 feet, and have a vertical collection range sufficient to intercept seasonal variations in the water table. Construction details for the Northside Recovery System are provided in Appendix A.

The Northside Recovery System is equipped with a groundwater extraction pump to create a cone of depression and an oil recovery pump to remove LNAPL from the groundwater surface. The Northside Recovery System discharges the pumped water to GE's Building 64G treatment facility located in East Street Area 2-South. Collected oil is removed from the caisson periodically by GE and properly disposed. Since 1980, the Northside Recovery System has removed approximately 1,210 gallons of LNAPL. LNAPL and groundwater recovery data for this system are included in Appendix C.

3.3.2 East Street Area 1-South

The Southside Recovery System is located on the south side of East Street, approximately 400 feet east of the intersection of Newell Street and East Street. This system was installed in 1986, and consists of a perforated, pre-cast, concrete caisson extending to a depth of 16 feet.

The Southside Recovery System is equipped with a groundwater extraction pump and an oil recovery pump and essentially operates in the same manner as the Northside Recovery System in East Street Area 1-North. The groundwater extraction pump induces a cone of depression in the local water table and the oil recovery device recovers LNAPL floating on top of the groundwater. Since 1986, approximately 550 gallons of LNAPL have been removed via the Southside Recovery System.

3.4 Lyman Street Area

Three active groundwater and NAPL recovery wells (RW-1R, RW-2, and RW-3) and one former recovery well (RW-1) are located within the Lyman Street Area. The combined capture zone of these three wells extends over 350 feet along the edge of the Housatonic River, capturing and reversing groundwater flow in the vicinity. Together, these wells, in conjunction with a sheetpile barrier installed in July 2002, provide control in the prevention and abatement of bank seeps or sheens along the Housatonic River. Each of these recovery systems is described below.

Wells RW-1/RW-1R

Recovery well RW-1 is located approximately 50 feet north of the Housatonic River and 220 feet east of Lyman Street, as shown on Figure 1. RW-1 was installed on April 9, 1991, and was constructed of a 2-foot diameter stainless steel well casing with a 2-foot diameter, 10-foot long, slotted stainless steel screen installed to a depth of 18 feet. Active groundwater extraction was initiated on August 10, 1992.

Because of apparent well screen fouling, RW-1 was replaced by RW-1R for active LNAPL recovery purposes in September 1998. RW-1R, located approximately 25 feet southeast of RW-1, consists of a 1-foot diameter stainless steel well casing with a 1-foot diameter, 10-foot long, slotted stainless steel wire wound screen extending to 20 feet. Construction details for RW-1 and RW-1R are presented in Appendix A.

RW-1R is equipped with automatic level sensors for NAPL and groundwater and a centrifugal pump for groundwater extraction. LNAPL is recovered using a surface-mounted gear pump and adjustable intake hose. LNAPL recovery measures are initiated manually and NAPL is periodically removed by GE for proper disposal. Since September 1995, the extracted groundwater has been pumped directly to GE's Building 64G groundwater treatment plant for processing. Prior to that time, extracted groundwater was treated on site at a portable groundwater treatment facility. Since 1992, approximately 500 gallons of LNAPL have been removed from RW-1 and RW-1R. DNAPL also periodically accumulates at the base of well RW-1 and is manually removed and properly disposed of by GE. Over 565 gallons of DNAPL have been removed from well RW-1. Approximately two-thirds of this total was removed between 1992 and 1994. As approved by EPA in a July 6, 2006 letter, well RW-1 is to be decommissioned in conjunction with soil Removal Actions and placement of an engineered barrier at the Lyman Street RAA.

Well RW-2

Well RW-2 is located approximately 40 feet north of the Housatonic River and 350 feet east of Lyman Street, as shown on Figure 1. This well was installed on November 5, 1992 to a depth of 22 feet, and is constructed of an 8-inch diameter stainless steel well casing with an 8-inch diameter, 10-foot long, slotted stainless steel screen. The well was activated on November 20, 1992. Well RW-2 is operated solely as a groundwater extraction well, as no free product has been observed in this well. It is equipped with an automatic groundwater level sensor and a centrifugal pump for groundwater extraction.

Well RW-3

RW-3 is located approximately 50 feet north of the Housatonic River and 70 feet east of Lyman Street, as shown on Figure 1. RW-3 was installed in July 1996, and is constructed of a 2-foot diameter stainless steel well casing with a 2-foot diameter, 11-foot long, slotted stainless steel screen. The well was activated on August 19, 1996.

RW-3 is equipped with automatic level sensors for NAPL and groundwater and a centrifugal pump for groundwater extraction/hydraulic control. LNAPL is recovered using a surface-mounted gear pump and adjustable intake hose. LNAPL recovery measures are similar to RW-1/RW-1R, in that they are initiated manually for subsequent removal and proper disposal. Extracted groundwater is pumped to the 64G groundwater treatment plant. Since 1996, approximately 2,140 gallons of LNAPL have been removed via well RW-3.

Additional Containment/Hydraulic Control Features

As part of the source control activities and Upper ½-Mile Reach Removal Action, a 400-foot long sheetpile containment barrier was constructed along the northern riverbank to the east of Lyman Street. This sheetpiling serves as a barrier to groundwater, LNAPL, and DNAPL migration, extends to a depth of approximately 23 feet below grade, and is keyed into the glacial till. Although all known occurrences of LNAPL are located to the north (upgradient) of the limits of the sheetpile barrier, DNAPL has also been detected at certain wells located to the west of the sheetpile barrier, including wells LSSC-07, LSSC-08I, and LSSC-16I.

3.5 Newell Street Area II

GE operated two automated DNAPL recovery systems (System 1 and System 2) within Newell Street Area II from 1999 until July 2005, when automated recovery operations were temporarily suspended (with EPA approval) to allow soil Removal Actions and placement of an engineered barrier to be conducted at the Newell Street Area II RAA (after the completion of which, as discussed below, GE resumed automated DNAPL recovery utilizing an upgraded recovery system). Each system was composed of multiple recovery wells installed to the top of the till confining unit and connected via common DNAPL collection systems. System 1 consisted of wells NS-15, NS-30, and NS-32 located near the western corner of the Newell Street parking lot, between 50 and 100 feet south of the Housatonic River. System 1 became operational on March 1, 1999. Approximately 2,280 gallons of DNAPL were removed by System 1 from 1999 until its shutdown in July 2005. System 2 most recently consisted of wells N2SC-01I, N2SC-03I, and N2SC-14 located west of the Newell Street parking lot, between approximately 140 and 200 feet south of the Housatonic River. Originally, System 2 consisted of only well N2SC-01I, which was put into operation on July 15, 1999. Wells N2SC-02 and N2SC-03I were added to the recovery system on June 30, 2000, and well N2SC-14 was added to the system on July 10, 2000. Well N2SC-02 was removed from the recovery system in August 2003, based on the results of DNAPL recovery testing that showed a lack of DNAPL entering the well. From 1999 until its temporary shutdown in 2005, approximately 33,000 gallons of DNAPL were recovered via System 2. DNAPL recovery data are summarized in Appendix D.

In anticipating of the commencement of work on the Removal Action for Newell Street Area II, GE submitted a letter to EPA dated March 16, 2005 (conditionally approved by EPA in a letter dated May 2, 2005). In that letter, GE proposed that DNAPL recovery testing be conducted on each of the Newell Street Area II recovery wells to delineate potential modifications to optimize the recovery systems prior to the performance of Removal Actions and placement of an engineered barrier at the Newell Street Area II RAA. The results of that testing and specific proposals to take System 1 offline and upgrade System 2 were provided in letters to EPA dated June 7, 2005 and June 23, 2005. In particular, in an effort to reduce the number of wells penetrating the engineered barrier, GE proposed the abandonment of certain existing monitoring wells and DNAPL recovery wells, the permanent shutdown of automated DNAPL recovery System 1 (to be accompanied by the initiation of manual DNAPL monitoring on a periodic basis), and the reconfiguration of DNAPL recovery System 2. Specifically, at System 2, GE proposed a temporary shutdown during construction, followed by resumed DNAPL recovery operations at wells N2SC-14 and two new 6-inch diameter recovery wells located

adjacent to, and to replace, wells N2SC-1I and N2SC-3I. GE also proposed to remove the current System 1 DNAPL collection piping and storage shed and consolidation of all future DNAPL collection and storage into the existing System 2 trailer. GE also proposed to continue manual DNAPL removal at well N2SC-08. Those two letters were conditionally approved by EPA in a letter dated July 12, 2005.

The automated DNAPL recovery systems for Newell Street Area II were shut down on July 25, 2005 pursuant to EPA approval of GE's June 7, 2005 and June 23, 2005 proposals. Each system was disconnected from the associated recovery wells, the above-grade recovery system piping networks were drained and dismantled, and the System 1 control shed was removed. Two larger diameter replacement recovery wells (N2SC-1I(R) and N2SC-3I(R)) have been installed adjacent to former recovery wells N2SC-01I and N2SC-03I. Construction details for these wells are included in Appendix A. The new recovery system was completed and activated on August 30, 2006. Approximately 715 gallons of DNAPL were removed by the upgraded System 2 in fall 2006.

4. Fall 2006 NAPL Monitoring and Recovery Activities and Results

4.1 General

This section describes the results of the NAPL/groundwater elevation monitoring and NAPL recovery activities performed by GE within GMA 1 from July through December 2006 (henceforth referred to as fall 2006), including the October 2006 semi-annual monitoring event and other routine monitoring conducted during that period. These activities primarily include the operation of the GMA 1 automated NAPL and groundwater recovery systems, the routine measurement of groundwater elevations and NAPL thickness (if present), and the manual removal of NAPL if sufficient thickness is present. These activities were performed in accordance with GE's approved Field Sampling Plan/Quality Assurance Project Plan (FSP/QAPP).

The results of these activities are summarized below for each RAA within GMA 1. GE has also prepared several tables and figures to assist in the interpretation of the fall 2006 monitoring data. The tables show: the amounts of LNAPL and DNAPL, as well as groundwater, recovered from the automated recovery systems on a month-by-month basis in fall 2006 and for comparison, during the same time period in 2004 (Tables 3 and 4 for LNAPL and DNAPL, respectively); the seasonal groundwater elevation data and the type of monitoring (based on well screen placement) applicable to each well in fall 2006 (Table 5); a summary of the groundwater elevation and LNAPL/DNAPL thickness observations or each well within GMA 1 from which data was obtained during monitoring activities performed in fall 2006 (Table 6); and a summary of groundwater elevation and NAPL observation/recovery data obtained from all monitoring activities performed within GMA 1 in fall 2006 (Table 7). The figures present LNAPL and DNAPL recoveries in graphical form (Appendices B, C, and D); a groundwater elevation contour map based on the water table data collected during the fall 2006 semi-annual monitoring event (Figure 10); and the approximate extent of LNAPL and DNAPL within GMA 1 in fall 2006 (Figures 11 and 12, respectively). In addition, as directed by EPA in its November 14, 2006 conditional approval letter, GE has also included a detailed groundwater elevation contour map for the former scrapyard area near Building 68 (Figure 13). GE has also included a detailed groundwater elevation contour map for Newell Street Area II (Figure 14). The complete fall 2006 manual NAPL monitoring and recovery data set is provided in Appendix E, along with graphs illustrating groundwater elevations and NAPL thicknesses for selected representative GMA 1 wells.

It should be noted that in comparing the fall 2006 data with the fall 2005 data, the comparisons of groundwater elevation data were based on the water table data collected during the fall semi-annual monitoring events, while the NAPL recovery comparisons utilize the volumes recovered over the entire July-December periods of each year. These comparisons are discussed in the following sections.

Approximately one week prior to the semi-annual monitoring event, GE monitored all wells in these areas where the presence of NAPL was noted during the prior year and manually removed any NAPL that was present. During the actual semi-annual monitoring event, if NAPL was found in a well that was not addressed during the bailing round, GE removed the NAPL and returned to monitor the well a week later. The purpose of the bailing round is to ensure that any NAPL present in a well is also present in the surrounding formation and not remnant oil which may have been trapped in the well since the prior semi-annual event. These bailing round activities provide a consistent basis to compare the current presence and thickness of NAPL between wells that may otherwise be subject to varying NAPL removal schedules.

Groundwater elevation contour maps prepared utilizing the fall 2006 semi-annual monitoring data from water table wells are presented on Figures 10, 13, and 14. Typical of results from prior monitoring events, overall groundwater flow patterns converge toward the Housatonic River from both the north and south, except where influenced by features such as Silver Lake, the recharge pond, or by recovery systems which are pumped to induce hydraulic depressions in their vicinity. The detailed groundwater elevation contour maps for the former scrapyard area near Building 68 (Figure 13) and for Newell Street Area II (Figure 14) show a flow pattern consistent with the overall GMA figure. Specifically, groundwater flow at each area is toward the Housatonic River. At the former scrapyard area, the groundwater gradient decreases significantly compared to the area immediately upgradient. Prior measurements in this area have indicated an anomalous hydraulic depression at well HR-G3-MW-1. GE re-surveyed this well in fall 2006 and discovered that the anomaly was due to an incorrect casing elevation. As seen on Figure 13, the groundwater elevation at this well (calculated using the corrected measuring point elevation) is similar to the surrounding monitoring wells.

A similar flattening of groundwater gradients when approaching the river is present at Newell Street Area II, but to a lesser extent than observed at the former scrapyard area. Anomalous results were obtained at two monitoring wells in the center of this area (wells NS-10 and N2SC-09S). These wells are located within the area where GE recently completed soil-related response actions, including soil removal and placement of an engineered barrier, and the surface completions of these wells may have been modified

during performance of those activities. GE will re-survey these wells and will utilize the corrected measuring points in its summary report on Newell Street Area II groundwater elevations to be submitted in June 2007.

On November 30, 2006, a bank inspection along the Housatonic River was conducted to examine the riverbank area adjacent to GMA 1 for the presence of NAPL seeps or sheens. Per Condition 2 of EPA's June 30, 2003 conditional approval letter, riverbank inspections are required to be conducted on a semi-annual basis and after recession of a high flow event (i.e., greater than 1,000 cubic feet per second), as recorded at the Coltsville USGS gauging station. No such high flow events occurred in fall 2006. Therefore, the November 30, 2006 bank inspection was conducted to satisfy the semi-annual inspection requirement. No NAPL or NAPL-related seeps or sheens were observed during this inspection. A few isolated occurrences of iron staining and/or natural organic sheens were observed in organic-rich sediments at scattered locations along the riverbank. The results of these inspections are documented in Appendix G.

4.2 East Street Area 2-North & South, 20s, 30s, and 40s Complexes

4.2.1 40s Complex

Given the relatively small size of the area and prior NAPL investigation results (i.e., NAPL occurrence limited to two former elevator shafts), well RF-4 is the only well within this area that is included in the NAPL monitoring program (subject to semi-annual monitoring). However, in fall 2006, that well could not be located and data obtained from well 95-17, which was monitored to support RD/RA activities at the adjacent Silver Lake Area has been utilized herein. Groundwater elevations were approximately equal to those observed in this area during fall 2005. The fall 2006 monitoring results are summarized in Tables 6 and 7 and the complete data set is included in Appendix E.

4.2.2 30s Complex

GE collected groundwater elevation data from nine monitoring wells in the 30s Complex. Groundwater elevations were slightly lower (approximately 1.12 feet on average) in fall 2006 than were observed in this area during the prior fall. No NAPL was observed at any of the 30s Complex wells, including well ES2-19, which is located downgradient of the former Buildings 42 and 43 elevator shafts, and well GMA1-10, which was installed in response to the observation of NAPL in a soil sample collected during pre-design soil investigations at this location.

In December 2006, wells 95-15, GMA1-2, GMA1-10 and RF-16 were decommissioned pursuant to GE's May 22, 2006 proposal (approved by EPA in a June 8, 2006 letter) to remove/replace certain wells in the 20s and 30s Complexes in support of upcoming redevelopment activities in these areas. A replacement for well RF-16, designated as well RF-16R, was installed at a location approximately 50 feet southwest of the original well location. The boring log and well installation record for the replacement well are included in Appendix A. As noted on the log (and, as discussed above), a small amount of NAPL was observed in a descriptive soil sample collected from near the water table during well installation. A slight sheen was also noted during development of the well, but no accumulations of NAPL have been measured in the well at any time.

4.2.3 20s Complex

GE measured groundwater elevations and assessed the potential presence of LNAPL at 12 monitoring wells located within the 20s Complex during fall 2006. Groundwater elevations were lower (approximately 1.21 feet on average) in fall 2006 than were observed in this area during the prior fall. LNAPL was observed in two monitoring wells (CC and Y) during the fall semi-annual monitoring event and in one additional monitoring well (II) during the bailing round in fall 2006. For comparison, LNAPL was observed at wells CC and II in fall 2005, either during the semi-annual monitoring event, during the bailing round, or on other occasions.

Each of the wells containing LNAPL was bailed prior to the fall semi-annual monitoring event. Approximately 0.01 gallon of LNAPL was removed this fall, compared to 0.005 gallon removed from this area in fall 2005. The fall 2006 monitoring results for the 20s Complex are summarized in Table 7 and a detailed breakdown are provided in Appendix E.

In December 2006, well O-R was decommissioned pursuant to GE's approved proposal to remove/replace certain wells in the 20s and 30s Complexes. A replacement for this well was to be installed at a location approximately 60 feet north of the original well location. However, the approved location was not accessible to the drill rig and a suitable alternate location that would not be impacted during the upcoming redevelopment activities could not be identified in the field. Therefore, it was decided in consultation with EPA field personnel that installation of this well would be deferred until after the completion of grading activities to be performed in this area.

4.2.4 East Street Area 2-South

Groundwater elevations at East Street Area 2-South in fall 2006 were, on average, approximately 1.26 feet lower than the elevations measured during the fall 2005 monitoring event. LNAPL was observed in 30 wells during the fall semi-annual monitoring event as listed in Table 6 and in six additional monitoring wells (during the bailing round or other routine monitoring activities) as summarized in Table 7. The fall 2006 extent of LNAPL is illustrated on Figure 11 and is generally similar to that observed in fall 2005, although a few variations from the prior fall were observed. The primary differences from the previous fall are that, among wells that were monitored both years: LNAPL was observed at four wells (40R, 42, 43, and P3) during the fall 2005 monitoring event but not in the fall 2006 event. LNAPL was not observed at well 26RR or RW-1(X) during the fall 2005 monitoring event but was observed there in the fall 2006 monitoring event. Each of these wells is located in known LNAPL areas. Graphs summarizing groundwater elevation and LNAPL monitoring results for several representative wells in this area are included in Appendix E.

In July 2006, in response to EPA's July 6, 2006 conditional approval letter, GE replaced wells 95-4 and 95-7 with wells 95-04R and 95-07R, respectively. The boring logs and well installation records for these replacement wells are included in Appendix A. Also pursuant to EPA's July 6, 2006 conditional approval letter, for the six months following the installation of those new wells, GE has monitored LNAPL thickness on a monthly basis. EPA's letter stated that if LNAPL thicknesses in those wells were greater than one foot, GE should perform recovery testing at those wells to determine if those wells would be suitable for automated LNAPL recovery systems. However, as shown in Tables 6 and 7, and in Appendix E, LNAPL thicknesses in these 4-inch diameter wells were well below the thicknesses previously measured in the small-diameter wells that they replaced, indicating that the prior data may have been biased high due to surface tension effects in the wells. Specifically, at well 95-4, an LNAPL thickness of slightly above two feet was measured prior to its decommissioning, but three out of five monitoring rounds conducted at replacement well 95-4R showed LNAPL thicknesses of less than one foot (with a maximum thickness of 1.53 feet). The effect is even more pronounced at well 95-7R, where the maximum measured LNAPL thickness since its installation has been 0.02 feet, compared to a thickness of 3.65 feet measured in well 95-7 prior to its removal. Therefore, GE does not believe that bail down testing or the installation of an automated LNAPL recovery system is warranted in either of these wells.

Several active LNAPL recovery systems are present within East Street Area 2-South, as discussed in Section 2.3. Approximately 24.0 million gallons of groundwater and 5,400 gallons of LNAPL were removed by the East Street Area 2-South recovery systems in fall 2006. This volume of recovered LNAPL is slightly less than the amount recovered in fall 2005, when approximately 24.8 million gallons of groundwater and 5,600 gallons of LNAPL were recovered.

GE removed a total of approximately 15.4 gallons of LNAPL from East Street Area 2-South during the course of routine monitoring and manual recovery activities in fall 2006, compared to approximately 13.5 gallons during fall 2005.

As required in EPA's July 6, 2006 conditional approval letter relating to the 2005 NAPL monitoring reports, GE performed LNAPL recovery testing at well 25R over a three-day period in September 2006. The results of that testing are included in Appendix E, and show that once the initial LNAPL accumulations in the well (3.101 liters) was removed, LNAPL recovery to the well was relatively slow. Specifically, the initial LNAPL thickness measured at the well was 5.02 feet. After removal of the stagnant LNAPL from the well, a thickness of 1.28 returned to the well after slightly over one hour of recharge. Over the rest of the testing period, the maximum LNAPL thickness observed in the well was 0.57 feet at the start of the second day of testing, after which the LNAPL thickness was approximately 0.1 feet during the remaining monitoring/removal periods. Excluding the first reading of approximately 0.6 liter per hour, the LNAPL recovery rate ranged from approximately 0.004 to 0.093 liter per hour in this two-inch well. These results indicate that the installation of an automated LNAPL recovery system in this well is not warranted, as the amount of LNAPL returning to the well during testing was considerably less than the guidance values provided in the FSP/QAPP to consider a well as a candidate for installation of an automated recovery system (i.e., 0.5 liter per hour or 6- to 12-inches per hour). In addition, LNAPL in the vicinity of these wells is addressed by the GMA1-17W, 64S and RW-1(S) recovery systems.

The extent of DNAPL observed in the fall 2006 monitoring round was similar to that observed in fall 2005. The presence of DNAPL was recorded in one monitoring well (E2SC-03I), and three recovery wells (64V, RW1-(S), and RW-3(X)) during the fall semi-annual monitoring event, as shown on Figure 12. Each of these wells was known to contain DNAPL based on prior monitoring events. These wells are located along the eastern limb of Former Oxbow H, located north of the Housatonic River.

Approximately 163 gallons of DNAPL were recovered from recovery well RW-3(X) in fall 2006. This volume is less than the volume of DNAPL (236 gallons) removed in fall 2005. No DNAPL was manually recovered from well 64V in fall 2006, although DNAPL accumulations have been periodically removed from this well in the past. GE continued to utilize weighted bailers to remove DNAPL from well E2SC-03I, due to the inability of pumping equipment to remove the viscous coal-tar DNAPL. A total of approximately 3.9 gallons of DNAPL were removed from this well in fall 2006 (compared to approximately 1.9 gallons recovered in fall 2005).

4.2.5 East Street Area 2-North

GE measured groundwater elevations and NAPL thickness (if present) at 11 monitoring wells within East Street Area 2-North in fall 2006. Fall 2006 groundwater elevations averaged approximately 1.99 feet lower than in fall 2005. LNAPL was observed in six monitoring wells (5-N, 14-N, 17-N, 20-N, 23-N, and 24N) during the fall 2006 semi-annual monitoring event or on other occasions in fall 2006. LNAPL was present at four of these wells (5-N, 14-N, 17-N, and 23-N) during fall 2005, with the exception of wells 20-N and 24-N (although LNAPL was observed at these wells in the prior monitoring rounds). Appendix E includes a graph summarizing the groundwater elevation and LNAPL monitoring results for well 14-N, selected as a representative well in this area. DNAPL was not measured or observed during the fall 2006 bailing round and subsequent monitoring events (although DNAPL was observed at well 5-N in prior years).

GE removed a total of approximately 0.0001 gallon of LNAPL from this area during the course of routine monitoring and manual recovery activities in fall 2006, compared to 0.276 gallon over the same time period in 2005. In addition, no DNAPL was recovered from well 5-N in fall 2006, compared to 0.015 gallon in fall 2005.

4.3 East Street Area 1-North & South

4.3.1 East Street Area 1 - North

GE monitored 14 wells within East Street Area 1-North and the Northside Caisson in fall 2006. On average, fall 2006 groundwater elevations were approximately 1.06 feet lower than in fall 2005. LNAPL was observed in six monitoring wells (wells 25, 105, 106, 107, 118, and 140) and the Northside Caisson during the fall 2006 semi-annual monitoring event. In addition, LNAPL was observed in two other wells (49 and 131) during other monitoring rounds. Two of these wells (wells 131 and 140) are monitored and bailed on a quarterly basis. The other wells are monitored on a semi-annual basis, which is preceded

by a bailing round if NAPL is present. A graph summarizing the groundwater elevation and LNAPL monitoring results for well 106, selected as a representative well in this area, is included in Appendix E.

Approximately 1.0 gallon of LNAPL was recovered by the Northside Recovery System and approximately 110,600 gallons of groundwater were removed. During the same time period in 2005, the Northside Recovery System pumped approximately 138,000 gallons of groundwater and recovered approximately 45 gallons of LNAPL.

Each of the wells containing LNAPL was bailed as part of the semi-annual monitoring event and during monthly inspections for the wells that are included in that monitoring and manual removal program. Approximately 1.83 gallons of LNAPL were manually removed in fall 2006, compared to a manual recovery of 0.689 gallon in fall 2005.

4.3.2 East Street Area 1-South

GE monitored 15 wells located within East Street Area 1-South and the Southside Caisson during fall 2006. Groundwater elevations were approximately 0.96 feet lower in this monitoring round, on average, than in fall 2005. LNAPL was observed in five monitoring wells (wells 34, 35, 45, 72, and 76) and the Southside Caisson during the fall 2006 monitoring event. LNAPL was observed in each of these wells, with the exception of well 35, during fall 2005. Graphs summarizing groundwater elevation and LNAPL monitoring results for wells 72 and 76 are included in Appendix E.

Approximately 28 gallons of LNAPL were recovered by the Southside Recovery System and approximately 415,600 gallons of groundwater were removed. During the same time period in 2005, approximately 419,600 gallons of groundwater and 16 gallons of LNAPL were recovered.

Each of the wells containing LNAPL was bailed as part of the semi-annual monitoring event and/or during routine monitoring if LNAPL was observed. Approximately 0.729 gallon of LNAPL was manually removed in fall 2006 compared to a manual recovery total of 0.729 gallon in fall 2005.

4.4 Lyman Street Area

GE monitored 26 Lyman Street Area wells during fall 2006. Groundwater elevations were an average of approximately 1.52 feet lower than measured in fall 2005. LNAPL was observed in three locations (monitoring wells LS-21 and LS-31, and recovery well RW-3)

during the fall 2006 monitoring event. The extent of LNAPL in this area is comparable to that observed during fall 2005 as it roughly mimics the extent of Former Oxbow Area D. LNAPL was observed in wells LS-23 and LS-35 during the fall 2005 monitoring event, but these wells were decommissioned prior to the fall 2006 monitoring event. Graphs summarizing groundwater elevation and LNAPL monitoring results for several representative wells in this area are included in Appendix E.

DNAPL was observed in eight wells (LS-12, LS-30, LS-31, LS-34, LSSC-07, LSSC34I, RW-1, and RW-1(R)) during the fall 2006 semi-annual monitoring event. The extent of DNAPL at this area is also similar to that recorded during fall 2005.

Approximately 1.25 million gallons of groundwater and no LNAPL were removed in fall 2006 from the active recovery systems. For comparison, in fall 2005, 1.9 million gallons of groundwater and 15 gallons of LNAPL were removed from those systems. Most of the LNAPL volume removed during fall 2005 was from recovery well RW-3 (10 gallons). No LNAPL was recovered via well RW-2 during either year, nor has any LNAPL historically been observed at this location.

Approximately 0.065 gallon of LNAPL was manually removed from monitoring wells at the Lyman Street Area during routine monitoring activities in fall 2006, compared to approximately 0.436 gallon during the prior fall. GE also removed approximately 2.16 gallons of DNAPL during routine fall 2006 monitoring events, slightly less than the 3.3 gallons manually removed in fall 2005.

Per Condition No. 1(a) of EPA's June 20, 2003 conditional approval letter, GE monitored well LSSC-08I on a weekly basis in fall 2006 and intended to collect DNAPL samples for analyses of physical and chemical parameters. Although DNAPL was observed on 9 of 22 monitoring rounds at this well, the DNAPL thicknesses ranged from only between 0.01 and 0.04 foot, which will not produce sufficient volumes of DNAPL to conduct any of the required analyses.

4.5 Newell Street Area II

GE monitored 28 wells at this RAA during the fall 2006 semi-annual monitoring event. Groundwater elevations were, on average, approximately 1.09 feet lower compared to fall 2005. LNAPL was observed in one monitoring well (NS-10) and DNAPL was recorded in twelve wells during the fall 2006 monitoring event or other routine monitoring activities, as summarized in Table 7 and Appendix E. The extent of LNAPL is similar to that previously observed in this area. Specifically, an isolated pocket of LNAPL is present near well NS-

10 (see Figure 11). DNAPL was observed at twelve locations (wells MW-1D, MW-1S, N2SC-01I, N2SC-01I(R), N2SC-03I, N2SC-03I(R), N2SC-08, N2SC-09S, N2SC-13I, N2SC-14, NS-30, and NS-32) during the fall 2006 monitoring round. In addition, DNAPL was observed at two other wells (N2SC-02 and N2SC-07) during additional fall 2006 monitoring activities. DNAPL has previously been detected at each of these locations, several of which are (or were formerly) part of the Newell Street Area II DNAPL recovery systems.

Approximately 715 gallons of DNAPL were recovered by System 2 at Newell Street Area II, following completion and reactivation of that system on August 30, 2006. As discussed above, DNAPL recovery System 1 was shut down in July 2005 and subsequently dismantled.

GE also manually removed DNAPL if thicknesses of greater than 0.5 foot were measured during routine monitoring events. In fall 2006, approximately 6.27 gallons of DNAPL were manually recovered, compared to approximately 1.5 gallons in fall 2005. The majority (approximately 2.13 gallons) of the recovered DNAPL was removed from well N2SC-01I(R) prior to its connection to the automated recovery system.

Approximately 0.66 gallon of LNAPL was manually removed from a single Newell Street Area II well during fall 2006, which is approximately the same as the volume removed in fall 2005. All of the LNAPL volume came from well NS-10.

4.6 Newell Street Area I

GE collected groundwater elevation data from three monitoring wells (FW-16, IA-9R, and MM-1) at Newell Street Area I during fall 2006. These monitoring results are summarized in Table 7 and the actual data are provided in Appendix E. The fall 2006 groundwater elevation was approximately 1.00 foot lower than measured in fall 2005. Consistent with prior investigations, no NAPL was observed at Newell Street Area I.

5. Effectiveness Evaluation and Future Program Modifications

5.1 General

This section discusses the effectiveness of the fall 2006 NAPL monitoring activities and upcoming approved modifications to the existing NAPL monitoring and recovery program at GMA 1. Overall, the ongoing NAPL recovery operations at GMA 1 have proven effective in removing LNAPL and DNAPL from the subsurface and preventing NAPL migration. Approximately 1.03 million gallons of NAPL have been removed from this area since 1975, and the lateral extent of NAPL, particularly LNAPL in East Street Area 2-South, has decreased significantly. Of the total amount of NAPL collected since 1975, approximately 94% was LNAPL collected from East Street Area 2-South. Although the existing NAPL recovery efforts have been very effective at removing both LNAPL and DNAPL and controlling its migration, GE continues to evaluate and implement enhancements to its ongoing program.

An overall decrease in groundwater elevations was observed at GMA 1 in fall 2006 as compared to fall 2005, although increases were noted at several individual monitoring wells across this GMA. The amount of groundwater removed by the automated systems during the six-month evaluation period decreased by approximately 860,000 gallons, as compared to a similar time period in 2005 (primarily due to a lower groundwater removal volume in November 2006 compared to November 2005, when an atypically high volume of groundwater was recovered). In general, monthly groundwater removal volumes in early fall 2006 (July through September) were greater than the monthly groundwater removal volumes observed during early fall 2005, while most of the systems recovered less groundwater in late fall 2006 than during the same period in 2005. Most individual systems exhibited similar or slightly increased LNAPL recoveries in fall 2006 as compared to fall 2005, but the LNAPL recovery volumes in some systems, particularly the 64R system at East Street Area 2-South, showed a decrease. During the six-month fall evaluation period in 2006, approximately 5,400 total gallons of NAPL were removed from GMA 1 as compared to 5,600 gallons in 2004. The graphs in Appendix C show historical LNAPL recovery compared to groundwater recovery, while historical DNAPL recovery results are displayed in Appendix D.

Historically, LNAPL collection within East Street Area 2-South has generally been in proportion to the amount of overall groundwater pumping by the recovery systems. In fall 2006, most of the systems that showed increased LNAPL recovery compared to fall 2005 also showed increased groundwater recoveries, while the system with the greatest decrease in LNAPL recovery had the greatest decline in groundwater removal. As in the

past, LNAPL recovery at other areas (e.g., East Street Area 1-North and Lyman Street Area) does not appear to correlate well with either high or low groundwater conditions. LNAPL recovery rates in these areas may be more related to the physical properties of the particular LNAPL and/or localized hydrogeologic characteristics. It is also likely that there are lesser quantities of LNAPL remaining in those portions of GMA 1, so that changes in the water table do not significantly affect the already-low recovery volumes, and LNAPL recovery will continue to diminish, regardless of groundwater pumping rates.

With respect to DNAPL, the observed decrease in overall groundwater elevations would not normally be anticipated to have affected DNAPL recovery at the GMA 1 automated DNAPL recovery systems. Generally, mobile DNAPL does not occur near the top of the water column, so fluctuations in water table elevation would not significantly impact DNAPL mobility or recovery rates. As with LNAPL, it is expected that DNAPL collection volumes will decrease with time as the systems continue to remove recoverable free-phase product from the subsurface. This may be the cause of decreased DNAPL recovery at the RW-3(X) system in fall 2006.

The upgraded DNAPL recovery system was activated at Newell Street Area II in September 2006 and an initial spike in DNAPL recovery was noted through October and into November 2006, before decreasing to levels similar to those recovered before the old system was shut down in 2005.

5.2 Assessment of Automated NAPL Recovery Systems

To evaluate the overall performance of existing NAPL recovery systems within GMA 1, each individual recovery system is discussed below. The need for additional activities to enhance the performance of these systems is also evaluated.

5.2.1 East Street Area 2-South

The volume of LNAPL recovered from the East Street Area 2-South automated recovery systems was approximately equal to the volume removed during fall 2005, which is consistent with the fact that a similar volume of groundwater was removed by these systems during each fall. The 64V system is the highest volume LNAPL-producing system in GMA 1 and, in conjunction with the nearby slurry wall, provides very effective collection and hydraulic control of LNAPL in this area. Although the LNAPL production rate has declined since the peak recoveries achieved in the initial years of operation (i.e., 1988 to 1993), such an overall decline is to be expected and Caisson 64V still removed more LNAPL in 2006 than any other GMA 1 system and showed an increase in LNAPL

recovery compared to fall 2005. As illustrated in the tables and graphs contained in Appendix F, LNAPL recovery efficiency varied during the course of fall 2006, following a similar pattern to that observed in prior years. Therefore, in light of the success of Caisson 64V, no adjustments to this recovery system are proposed at the present time.

Previously, the remaining East Street Area 2-South automated systems utilized common holding tanks, so accurate contributions of individual wells/caissons could not be determined. In fall 2002, GE instituted measures (i.e., installation of NAPL flow meters or additional record keeping) to identify the quantity of LNAPL being removed from several of these systems. Specifically, LNAPL recovery volumes at the paired 64X/RW-1(X), 64R/40R, and 64S/RW-1(S) systems are no longer combined as of October 2002, November 2002, and December 2002, respectively. Since these modifications were made in late fall of 2002, a full historical comparison of the separately-tracked recovery data cannot be made. Therefore, for comparison purposes, GE has calculated LNAPL recovery volumes and efficiency for these systems as they were previously combined. Evaluations of the recovery data since separate tracking began are also presented below.

Approximately 8.19 million gallons of groundwater were removed from the 64S/RW-1(S) recovery systems in fall 2006 as compared to approximately 8.17 million gallons of groundwater removed from this well in fall 2005. NAPL removal from the 64S/RW-1(S) systems was also slightly greater in fall 2006, by approximately 13%. Tracked individually, the LNAPL recovery efficiency for the 64S system has been relatively consistent, with the exception of a spike in efficiency following the re-start of the 64S system after upgrades were made in summer 2003. The LNAPL recovery efficiency of the RW-1(S) system is an order of magnitude lower than the 64S system and has shown a greater degree of variability since tracking began, including a significant increase in summer 2004.

Since December 2002, the first month when separate NAPL recoveries were tracked for wells 64S and RW-1(S), approximately 88% of the LNAPL recovered, but only 44% of groundwater removed from these two systems, was via caisson 64S. The majority of the groundwater is typically removed from well RW-1(S), which serves to provide hydraulic control near the downgradient edge of the LNAPL area.

The volumes of LNAPL and groundwater removed from the 64R/40R recovery systems were approximately 33% and 24% of the respective quantities recovered in fall 2005. The decrease is attributed lower overall groundwater levels in fall 2006, combined with an extended system shut down for maintenance, the disconnection of the 40R skimmer system, and the incorporation of a new oil skimmer at well GMA1-17W. All recovery was

from the 64R caisson, as no LNAPL has been recovered from well 40R since February 2003 and the skimmer system was removed from service in fall 2006. The historical LNAPL recovery efficiency data presented in Appendix F for this combined system is quite variable, presumably due to the fact that no groundwater was removed by the skimmer in well 40R, resulting in large changes in the calculated efficiency based on variations in LNAPL recovery from the well. Since separate tracking was initiated, the LNAPL recovery efficiency of caisson 64R has varied from month to month, and the fall 2006 efficiencies were generally comparable to those observed previously, with a notable exception during September and October 2006, when the system was shut down for an extended period.

The 64X/RW-1(X) systems produced an increase in both LNAPL recovery (increase of 188 gallons) and groundwater removal (increase of 1.3 million gallons) in fall 2006 as compared to fall 2005. As shown in Appendix F, these systems are the least efficient for LNAPL recovery, as they primarily serve a hydraulic control function near the riverbank (particularly RW-1(X)) and only small amounts of LNAPL are present. Since LNAPL only sporadically enters these wells, the historical LNAPL recovery efficiency data does not show a clear trend. The 64X/RW-1(X) recovery systems appear to be functioning as effective hydraulic control points that also intercept LNAPL when available. Therefore, in light of the primary purpose of these wells and the volume of LNAPL recovery in fall 2006, GE does not propose any modifications to these systems.

The volume of DNAPL recovered from recovery well RW-3(X) in fall 2006 (163 gallons) was approximately one-third less than the volume removed by this well in fall 2005. The decreased rate of DNAPL removal in fall 2006 as compared to fall 2005 was consistent from month to month, with the exception of October, which showed a slight increase compared to October 2005 (when the system experienced significant downtime following flooding of the nearby Housatonic River). In general, DNAPL recovery volumes have shown a slight decline consistent with expectations for such a system. Therefore, there is no need to modify this recovery system at this time.

5.2.2 East Street Area 1-North & South

The two East Street Area 1 recovery caissons have effectively maintained hydraulic depressions utilized to contain and capture residual amounts of LNAPL. The amount of water removed by each recovery system in fall 2006 was approximately equal to fall 2005 recoveries, while LNAPL recovery from each recovery system was lower than the prior fall. Since all indications are that the East Street Area 1 recovery systems are containing the LNAPL within their respective areas of influence and remaining amounts of

recoverable LNAPL are small, GE does not propose any modifications to these systems at this time.

5.2.3 Lyman Street Area

As seen on the recovery graphs presented in Appendix C, following the initial surge in NAPL removal at the onset of pumping, LNAPL recovery has remained consistently low at each of the Lyman Street wells where LNAPL is present. No disproportionate changes in groundwater elevations or NAPL distribution have been observed behind the sheetpile containment barrier between the Lyman Street parking lot and the Housatonic River since its installation. The potential for groundwater mounding behind this barrier is limited due to the presence of the three automated recovery wells that are currently in operation in this area.

Less groundwater was removed by the Lyman Street Area recovery systems in fall 2006 as compared to fall 2005, as average groundwater levels were lower than those observed in fall 2005. In addition, no NAPL was recovered by the systems in fall 2006, which may indicate that the majority of recoverable LNAPL in this area has been removed by the Lyman Street systems. Despite the lack of NAPL recovery, the systems effectively provide hydraulic control and prevent LNAPL from moving around the ends of the sheetpile barrier. As such, GE does not propose to make any modifications to the automated recovery systems in this area. However, GE may consider certain modifications to these systems (e.g., replacement of piping) in conjunction with its upcoming design of the new recovery system in the former scrapyard area at East Street Area 2-South, which may tie into the discharge piping utilized by the Lyman Street systems. Additional modifications may also be made in connection with the future capping activities with the Lyman Street parking lot.

Per Condition No. 1(a) of EPA's June 20, 2003 conditional approval letter, GE has attempted to collect DNAPL samples for analyses of physical and chemical parameters from well LSSC-08I during the course of the routine monitoring events at this location. However, sufficient volumes of DNAPL to conduct such analyses have not been observed in this well to date. As shown in Table 7, DNAPL was observed on 9 of 22 monitoring rounds at this well and at thicknesses ranging between less than 0.01 and 0.04 foot. For comparison purposes, an LNAPL thickness of approximately 0.1 foot in a two-inch diameter well would be required to obtain enough sample volume to analyze for either volatile organic compounds or specific gravity. Those two analyses require the least amount of sample volume to conduct; other required analyses require between two and eight times this volume. GE will continue to monitor this well and will collect analytical

samples if possible. Priority will be given to the performance of physical properties analyses if a complete sample set cannot be collected during a single monitoring event. Based on the location of this well, GE does not propose to allow NAPL to accumulate in the well to obtain analytical samples. GE will continue to remove any recoverable accumulations of DNAPL when observed and properly dispose of quantities that are insufficient for laboratory analysis.

5.2.4 Newell Street Area II

Newell Street Area II automated DNAPL recovery Systems 1 and 2 were shut down on July 25, 2005 and the upgraded System 2 was activated on August 30, 2006. Therefore DNAPL recovery data in this area is limited for fall 2006 and cannot be compared to fall 2005. However, following an initial surge in DNAPL recovery after the system was activated, the volume of DNAPL removed during December 2006 was consistent with historical monthly removal volumes of the original System 2.

Overall, the monitoring/removal activities appear to be effective in reducing the volume of subsurface DNAPL and limiting the migration potential of DNAPL at Newell Street Area II. Since the upgraded recovery system was only recently activated, GE proposes no modifications to this system at this time.

A manual monitoring/removal program is addressing the sole pocket of LNAPL in the vicinity of well NS-10. Given the minor amount of LNAPL present in this area, no modifications to the LNAPL monitoring or recovery programs are necessary at this time.

5.3 NAPL Monitoring Program Modifications

GE has implemented most of the approved modifications to the NAPL monitoring program that were proposed in recent NAPL monitoring reports or other correspondence with EPA. This section summarizes the remaining approved program modifications to be implemented at GMA 1.

5.3.1 20s and 30s Complexes

As discussed in GE's May 22, 2006 letter (conditionally approved by EPA in a letter dated June 8, 2006), GE proposed to abandon five monitoring wells identified by the Pittsfield Economic Development Authority (PEDA) that would be impacted by their development plans within the 20s and 30s Complexes. In addition, replacements for two of the wells were proposed to be installed at designated locations that would not interfere with the

development activities, while several other existing wells were proposed to be cut or extended to the level of the proposed post-development grade in the area. As discussed in Section 4.2.2, the well decommissioning activities and installation of one of the replacement wells (well RF-16) was completed in December 2006. However, the second replacement well (well O-RR) could not be installed at that time as the approved location was not accessible to the drill rig and a suitable alternate location could not be identified. Therefore, in consultation with EPA field personnel, the installation of this well was deferred until spring 2007, after the completion of grading activities to be performed in this area, when an acceptable well location can be accessed. The modifications to the casing elevations of existing wells in this area will also be performed at that time.

5.3.2 East Street Area 2-South

As proposed in GE's October 30, 2006 letter and conditionally approved by EPA in a letter dated January 10, 2007, GE plans to install a new LNAPL recovery system in the former scrapyard area. The proposed recovery well (to be designated as well RW-4) will be 12 inches in diameter and constructed with 20 feet of 0.04-inch slotted screen installed to a depth of approximately 30 feet below grade (i.e., extending to just above the static water table, which is at an elevation of approximately 975 feet AMSL or 10 feet below grade in this area). A schematic of the estimated well design is included in Appendix A.

GE will install an automated recovery system in this well that is similar to the one currently utilized in well RS-1(S). Specifically, well RW-4 will be equipped with a groundwater extraction pump and an oil recovery pump. The cone of depression created by the groundwater extraction pump set at a drawdown elevation of approximately 971 – 971.75 feet was estimated to provide sufficient hydraulic control in this area in GE's groundwater flow model. However, as a conservative measure, GE will initially set the groundwater extraction pumps to maintain a drawdown elevation of approximately 967.5 to 969 feet.

GE will prepare detailed plans for the collection system and may install a pilot boring prior to installation of the new recovery well to evaluate subsurface conditions over the entire depth of the recovery well. If the final plans require a significant change in the location or design of the recovery well, GE will inform EPA of its proposed revisions prior to installation. Groundwater removed by the system will be routed to GE's existing treatment facility in Building 64G, utilizing an upgraded piping system, which will be constructed to allow greater capacity than existing piping across this area. A small containment facility will be constructed near the recovery well to house the system controls and to accumulate LNAPL removed from the well until it is properly disposed by GE. As with GE's other automated recovery systems at East Street Area 2-South, GE will check the LNAPL

storage system for leaks or other problems on a daily basis from Monday through Friday and will perform monitoring and preventative maintenance activities on a weekly basis. The system will include tank high level and leak detection alarm system shutdowns. NAPL will be removed at a minimum of once every 30 days.

5.3.3 Lyman Street Area

In Section 4.3 of the Spring 2005 NAPL Report, GE proposed to abandon 31 select wells at the Lyman Street Area prior to the commencement of soil removal activities proposed in a report entitled Conceptual Removal Design/Removal Action Work Plan for the Lyman Street Area. Following EPA's conditional approval of that proposal, which required that GE abandon only 20 of these wells, GE proceeded with the decommissioning each of the monitoring wells in accordance with the general procedures described in Appendix GG of GE's FSP/QAPP for the GE-Pittsfield/Housatonic River Site. Former recovery well RW-1 was not decommissioned during the initial field efforts, as remnant pumping equipment was still present in that well. That equipment was subsequently removed and GE plans to decommission that well in early 2007. Due to the large diameter of the well and its proximity to active recovery well RW-1(R), GE proposes that the well be decommissioned by backfilling in place utilizing sand and gravel fill to a level above the well screen (i.e., approximately 5 feet below grade), followed by a cement/bentonite surface seal. This method is proposed to ensure that adjacent recovery well RW-1(R) is not compromised by the placement of cement/bentonite grout in the formation.

6. Schedule for Future Activities

6.1 General

Schedule requirements related to the baseline monitoring programs were generally identified in Attachment H to the SOW, and further clarified in the GMA 1 Baseline Monitoring Proposal and subsequent NAPL monitoring reports. Since the schedule for most of the routine groundwater and NAPL monitoring activities is unchanged from the previously-approved plan, this section provides a schedule primarily for the implementation of previously-approved changes to the GMA 1 NAPL monitoring program, as well as for certain non-routine activities which will be conducted in the near future.

6.2 Field Activities Schedule

GE will continue to perform its routine NAPL monitoring and recovery activities in accordance with the current monitoring schedule listed in Table 2. The spring 2007 semi-annual bailing round and monitoring event will be conducted in April 2007. Approximately one to two weeks prior to the monitoring event, GE will perform the bailing round, removing any accumulated NAPL in all wells scheduled for semi-annual monitoring that have contained NAPL during the prior 12-month period.

During or after performance of the semi-annual monitoring round, GE will conduct an inspection of the riverbank areas adjacent to GMA 1 for signs of NAPL seeps or sheens. The schedule of this inspection may be modified if a high flow event is recorded at the Coltsville gauging station. Additional riverbank inspections may be performed at East Street Area 2-South, Lyman Street Area, and Newell Street Area II if multiple high flow events are recorded during the spring. Those inspections, if necessary, will be conducted approximately 1-2 weeks after the high flow conditions subside.

GE will also conduct the EPA-approved activities discussed in Section 5.3 in spring 2007, including:

- Install replacement monitoring well O-RR and modify the casing elevations of selected monitoring wells within the 20s and 30s Complexes. These activities will be conducted following completion of PEDA's grading activities in this area. GE will attempt to install well O-RR prior to the spring 2007 semi-annual NAPL monitoring event, if possible.

- Install recovery well RW-4 within the scrapyard portion of East Street Area 2 – South. GE plans to install the well in spring or summer 2007, as plans for the design of the automated recovery system to be placed in this well are developed. Following installation, the well will be monitored on a weekly basis until the automated recovery system is installed in the well. Any recoverable NAPL will be manually removed during those monitoring events.

- Decommission former recovery well RW-1 at the Lyman Street Area in preparation for the upcoming soil removal activities at this RAA.

Prior to performance of these activities, GE will provide EPA with 7 days notice to allow the assignment of field oversight personnel.

6.3 Reporting Schedule

GE will submit a letter report presenting the results of quarterly groundwater elevation monitoring conducted in 2006 and 2007 at Newell Street Area II by June 30, 2007. That letter will also discuss groundwater flow conditions around the perimeter of Newell Street Area II and evaluate the need for additional groundwater monitoring or sampling activities in this area.

GE will submit the Spring 2007 NAPL Monitoring Report for GMA 1 by August 31, 2007, in accordance with the previously approved reporting schedule. That report will present the NAPL monitoring and recovery data for the period of January 2007 through June 2007.

GE will continue to provide the results of ongoing NAPL monitoring and recovery efforts in its monthly reports on overall activities at the GE-Pittsfield/Housatonic River Site.

Tables

Table 1
Monitoring Well Construction Summary

NAPL Monitoring Report For Fall 2006
Plant Site 1 Groundwater Management Area
General Electric Company-Pittsfield, Massachusetts

Well ID	Survey Coordinates		Ground Elevation (Feet AMSL)	Measuring Point Elevation (Feet AMSL)	Depth to Top of Screen (Feet bgs)	Screen Length (Feet)	Top of Screen Elevation (Feet AMSL)	Base of Screen Elevation (Feet AMSL)	Average Depth to Groundwater (Feet bgs)	Average Groundwater Elevation (Feet AMSL)	Till/Silt Elevation (Approximate) (Feet AMSL)
	Northing	Easting									
20s Complex											
CC	534251.19	132927.20	998.8	998.84	16.8	15	982.0	967.0	18.9	979.9	972
EE	534244.32	133101.21	1,004.5	1004.27	20	15	984.5	969.5	24.4	980.1	974
FF	534236.98	133165.10	1,005.7	1005.70	20	15	985.7	970.7	23.8	981.9	969
GG	534237.47	133226.06	1,007.4	1007.40	20	15	987.4	972.4	25.0	982.4	973
II	534294.74	132437.51	1,007.3	1007.26	20	15	987.3	972.3	26.7	980.6	973
JJ	534286.40	132524.77	1,006.4	1006.38	23	15	983.4	968.4	26.2	980.2	968
LL-R	534257.60	133170.00	1,007.7	1010.59	18	15	989.7	974.7	25.9	981.8	977
O-R	534098.79	132518.74	1,000.7	1000.42	N/A	N/A	N/A	N/A	16.0	984.7	965
P-R	534101.50	132615.40	1,003.0	1005.01	16.2	10	986.8	976.8	23.6	979.4	961
QQ-R	534174.50	132893.90	998.6	998.32	13	15	985.6	970.6	19.1	979.5	967
U	534111.32	132740.27	998.9	998.89	4	25	994.9	969.9	19.6	979.3	965
Y	534233.56	132692.64	1,002.9	1002.86	6	30	996.9	966.9	23.3	979.6	966
30s Complex											
95-15	534225.37	131091.35	986.6	986.38	7	10	979.6	969.6	8.3	978.3	966
95-16	534082.14	131773.76	1,007.9	1007.65	14	10	993.9	983.9	15.9	992.0	988
ES2-19	534344.32	131781.79	1,007.6	1,007.22	11.5	8	996.1	988.1	14.0	993.6	1,000
GMA1-10	533752.30	131312.70	985.1	984.86	5.21	15	979.9	964.9	7.7	977.4	965
GMA1-12	534218.00	131263.10	989.3	992.26	9.38	10	979.9	969.9	12.9	976.4	977
RF-02	533507.30	131111.20	983.4	982.43	3	15	980.4	965.4	6.6	976.8	965
RF-03	533872.30	131153.90	985.6	985.40	3	15	982.6	967.6	9.4	976.2	965
RF-03D	533879.30	131154.60	985.5	985.31	30.6	5	954.9	949.9	7.9	977.7	965
RF-16R	534210.60	130924.90	987.1	986.77	7.5	10	979.6	969.6	8.5	978.6	967
40s Complex											
95-17	534481.50	130679.10	1,007.6	1,007.67	20	10	987.6	977.6	22.9	984.7	983
RF-04	534714.97	130997.69	1,012.2	1,011.99	10	15	1,002.2	987.2	16.4	995.5	988
East Street Area 1-North											
25	534255.49	134362.69	1,000.7	1000.70	2	15	998.7	983.7	5.7	995.0	991
49	534248.57	134406.54	999.9	999.90	2	20	997.9	977.9	5.4	994.5	991
ESA1-52	534253.80	134565.90	999.7	999.26	2	20	997.7	977.7	5.6	994.1	990
60R	534263.60	133932.60	1,000.6	1004.03	5.41	10	995.2	985.2	7.5	993.1	985
105	534272.77	134057.88	1,002.9	1002.85	2	15	1,000.9	985.9	7.5	995.4	985
106	534277.70	134109.40	1,003.1	1004.06	3	20	1,000.1	980.1	7.1	996.0	985
107	534282.78	134160.80	1,003.9	1,003.86	2	15	1,001.9	986.9	6.8	997.1	986
108A	534336.66	134174.14	1,007.8	1,007.79	5	15	1,002.8	987.8	10.1	997.7	992
109A	534317.23	134068.87	1,005.5	1,005.43	5	15	1,000.5	985.5	8.2	997.3	988

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	Northing	Easting									
118	534363.96	134345.23	1,001.5	1,001.50	2	8	999.5	991.5	4.3	997.2	993
120	534283.01	134356.93	1,001.3	1,001.30	2	13	999.3	986.3	5.9	995.4	992
128	534262.27	134443.76	1,001.4	1,001.41	1	14	1,000.4	986.4	6.7	994.7	991
131	534334.97	134401.77	1,001.3	1001.18	3	5	998.3	993.3	4.5	996.8	993
140	534238.61	134022.06	1,000.3	1,000.30	2	15	998.3	983.3	7.3	993.0	988
ES1-8	534257.78	134216.20	1,001.2	1,000.85	5	10	996.2	986.2	5.8	995.4	987
North Caisson	534248.54	134125.96	998.0	997.84	7.5	11	990.5	979.5	17.9	980.1	990
East Street Area 1-South											
31R	534143.90	134059.50	1,000.5	1000.23	5.5	10	995.0	985.0	9.2	991.3	991
33	534197.32	134184.99	999.5	999.50	3	20	996.5	976.5	5.6	993.9	982
34	534204.90	134261.79	999.9	999.90	3	20	996.9	976.9	5.8	994.1	983
35	534216.67	134377.60	1,000.2	1000.15	3	20	997.2	977.2	5.7	994.5	990
37R	533949.60	133932.60	989.0	988.79	7.77	10	981.3	971.3	10.2	978.8	966
45	534220.26	134405.22	1,000.1	1000.10	2	20	998.1	978.1	5.7	994.4	990
46	534223.35	134455.17	999.8	999.80	2	20	997.8	977.8	5.9	993.9	990
72	534191.24	134257.11	1,000.6	1000.62	3	20	997.6	977.6	6.6	994.0	983
72R	534196.10	134234.60	1,001.2	1000.92	4	10	997.2	987.2	6.5	994.7	988
75	534188.71	134334.44	1,000.7	1000.65	3	20	997.7	977.7	6.5	994.2	990
76	534194.27	134426.76	1,000.5	1000.45	3	20	997.5	977.5	6.9	993.6	988
78	534076.98	134253.66	997.6	997.61	2	20	995.6	975.6	3.1	994.5	982
80	134085.01	533984.21	990.00	989.98	6.5	25	983.5	958.5	5.0	985.0	N/A
89	534032.28	134341.86	993.9	993.89	1	10	992.9	982.9	2.7	991.2	984
90	134105.31	533864.14	987.70	987.65	2	13	985.7	972.7	5.8	981.9	N/A
139R	533841.60	135011.00	987.39	986.91	6	10	981.4	971.4	10.6	976.8	N/A
ES1-13	534209.68	134576.80	1,000.0	999.93	4	10	996.0	986.0	7.1	992.9	987
ES1-23R	533883.20	134539.90	987.9	989.94	4	10	983.9	973.9	2.4	985.5	<974
ES1-24	533837.41	134748.85	990.41	990.61	4	10	986.4	976.4	8.2	982.2	N/A
GMA1-6	534084.30	134455.50	1,000.7	1,000.44	5	10	995.7	985.7	8.4	992.3	985
GMA1-7	533766.80	134345.00	986.1	985.81	5.4	10	980.7	970.7	12.0	974.1	964
GMA1-18	534221.00	134872.50	998.52	998.29	4	10	994.5	984.5	6.4	991.7	N/A
South Caisson	534173.43	134432.12	1,000.5	1001.11	4	12	996.5	984.5	13.0	987.5	987

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	Northing	Easting									
East Street Area 2-North											
05-N	534367.44	133101.83	1,009.5	1,009.23	18	10	991.5	981.5	24.6	984.9	985
11-N	534386.95	132639.74	1,011.5	1010.85	30	10	981.5	971.5	30.7	980.8	972
14-N	534368.48	133215.75	1,010.7	1010.53	24	10	986.7	976.7	23.6	987.1	988
16-N	534382.34	132782.39	1,011.0	1010.65	30	10	981.0	971.0	30.8	980.3	972
17-N	534404.43	132702.02	1,010.6	1010.49	30	10	980.6	970.6	30.2	980.4	975
17A	535187.45	132107.05	1,024.2	1,023.86	5	15	1,019.2	1,004.2	8.2	1,016.0	1,014
19-N	534406.01	132514.18	1,011.1	1010.68	30	10	981.1	971.1	30.2	980.9	977
20-N	534419.83	132465.12	1,011.2	1010.66	30	10	981.2	971.2	29.4	981.8	977
23-N	534444.85	132701.53	1,011.3	1011.13	30	10	981.3	971.3	30.7	980.6	979
24-N	534465.08	132697.89	1,011.1	1010.50	30	10	981.1	971.1	29.7	981.4	980
27-N	534625.27	132729.89	1,010.9	1010.40	25	10	985.9	975.9	25.8	985.1	987
95-12	534383.12	132689.27	1,010.4	1010.20	30	10.00	980.4	970.4	28.4	981.9	970
ES1-5	534750.38	135063.62	1,023.4	1,023.33	35	10	988.4	978.4	40.0	983.4	982
ES1-18	535027.22	133724.97	1,049.8	1,049.71	4	10	1,045.8	1,035.8	7.0	1,042.8	1,044
ES1-20	535314.82	134924.90	997.8	1,001.56	6	10	991.8	981.8	11.0	986.9	<981
ES1-27R	534603.10	134604.20	1,023.4	1,023.19	9.3	10	1,014.1	1,004.1	8.7	1,014.7	1,007
East Street Area 2-South											
01R	533928.73	133219.80	992.9	992.72	10	15	982.9	967.9	12.5	980.4	963
2	533902.02	133104.87	996.4	995.64	15	10	981.4	971.4	18.4	978.0	967
5	533817.68	132719.06	996.0	996.10	9	15	987.0	972.0	16.5	979.5	949
6	533799.18	132650.34	991.4	991.18	15	10	976.4	966.4	14.5	976.9	947
09R	533568.41	132434.78	987.3	986.88	5	15	982.3	967.3	13.1	974.2	950
10	533530.59	132376.71	988.3	987.95	10	10	978.3	968.3	14.5	973.8	957
13	533453.66	132080.55	991.3	990.88	10	20	981.3	961.3	17.1	974.2	964
14	533441.04	132035.29	992.4	991.61	10	20	982.4	962.4	18.0	974.4	964
15R	533418.19	131897.82	989.7	989.23	8	20	981.7	961.7	15.7	974.0	958
16R	533349.53	131807.57	987.2	987.10	5.9	20	981.3	961.3	11.7	975.5	951
19	532948.30	132198.00	984.1	983.59	10	15	974.1	959.1	10.7	973.4	947
25R	533997.60	133152.50	995.5	998.31	9	20	986.5	966.5	17.4	978.1	963
26RR	534111.70	133258.00	998.4	1,000.58	13	15	985.4	970.4	18.8	979.6	<970.4
28	533843.20	133276.14	991.5	991.86	15	10	976.5	966.5	13.4	978.1	958
29	533775.00	133278.82	992.1	991.59	17	10	975.1	965.1	18.5	973.6	955
30	533681.14	133124.29	990.0	989.34	14	10	976.0	966.0	12.8	977.2	960
31	533655.48	133114.65	991.0	990.60	15	10	976.0	966.0	13.7	977.2	960

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	Northing	Easting									
32	533651.50	133032.33	991.0	990.81	9	10	982.0	972.0	12.8	978.1	965
34	533651.28	132726.36	982.5	982.54	5	10	977.5	967.5	6.5	976.0	950
35	533686.10	132606.52	983.0	982.81	5	10	978.0	968.0	8.0	975.0	943
36	533521.11	132657.53	983.5	983.02	5	10	978.5	968.5	8.8	974.7	950
37	533610.91	132816.39	980.5	980.37	5	10	975.5	965.5	6.0	974.5	960
38	533629.02	132922.84	981.4	980.77	5	10	976.4	966.4	5.7	975.7	967
40R	533758.52	133159.76	991.6	991.60	5	20	986.6	966.6	16.0	975.6	960
42	533615.04	133252.28	988.5	988.33	10	10	978.5	968.5	12.8	975.7	952
43	533534.56	133230.22	985.7	989.67	10	10	975.7	965.7	10.9	974.8	952
44	533554.95	133143.65	988.8	988.33	10	10	978.8	968.8	12.9	975.9	957
47	533769.03	133425.13	991.6	991.09	15	10	976.6	966.6	17.9	973.7	952
48	533661.94	133479.47	989.0	992.39	15	10	974.0	964.0	14.2	974.8	948
49R	533676.54	133574.30	989.1	988.71	5	20	984.1	964.1	15.4	973.7	948
49RR	533698.66	133560.68	990.0	989.80	10	15	980.0	965.0	16.2	973.8	948
50	533353.13	132665.31	986.0	985.79	4.5	20	981.5	961.5	10.2	975.8	953
51	533297.07	132548.81	985.3	985.38	4.5	20	980.8	960.8	11.6	973.7	942
52	533237.36	132442.30	985.5	985.18	4.2	20	981.3	961.3	11.5	974.0	942
53	533585.77	133562.47	987.2	986.90	8	20	979.2	959.2	13.4	973.8	947
54	533545.63	133474.93	986.1	985.78	7	20	979.1	959.1	13.3	972.8	947
55	533634.73	133502.84	987.5	989.45	7	20	980.5	960.5	14.0	973.5	947
57	533638.76	133262.06	990.1	989.80	8	20	982.1	962.1	12.9	977.2	952
58	533568.99	133374.44	986.3	985.79	8	20	978.3	958.3	13.2	973.1	948
59	533600.67	133366.09	986.8	986.32	8	20	978.8	958.8	14.8	972.0	948
ESA2S-64	533152.10	132820.00	985.1	984.98	7	15	978.1	963.1	11.6	973.5	964
64R	533771.64	133196.84	994.0	993.37	15.3	6	978.7	972.7	16.9	977.1	957
64S	533631.91	132677.26	983.5	984.48	3.5	25	980.0	955.0	15.0	968.5	947
64S-Caisson	533631.91	132677.26	983.5	984.40	N/A	N/A	N/A	N/A	N/A	974.5	N/A
64V	533608.93	133375.13	987.0	987.29	10	20	977.0	957.0	21.4	965.6	948
64X(N)	533549.89	133305.85	983.8	984.83	N/A	N/A	N/A	969.0	10.6	973.2	947
64X(S)	533472.53	133365.38	980.5	981.56	10	5	970.5	965.5	10.4	970.1	940
64X(W)	533440.04	133269.78	983.8	984.87	10	7.5	973.8	966.3	13.9	969.9	945
95-1	532972.02	131952.97	983.9	983.77	8	10	975.9	965.9	9.4	974.4	N/A
95-4R	533543.5000	132537.6000	985.80	988.36	10	10	975.8	965.8	11.0	974.8	N/A
95-5	533509.14	132456.06	986.8	989.45	8	10	978.8	968.8	12.1	974.7	947
95-7R	533788.3000	132610.4000	992.10	994.56	16.5	10	975.6	965.6	16.1	976.0	N/A

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	Northing	Easting									
E2SC-03I	533473.03	133392.16	980.4	982.12	34.5	10	945.9	935.9	7.8	972.7	936
E2SC-17	533516.03	133454.75	983.8	985.38	36.7	10	947.1	937.1	10.4	973.3	941
E2SC-21	533227.19	132595.20	982.3	981.70	5	10	977.3	967.3	8.7	973.6	950
E2SC-23	533344.44	133132.75	990.1	992.07	9	10	981.1	971.1	14.7	975.4	955
E2SC-24	533535.46	133544.45	986.0	987.90	9	10	977.0	967.0	12.9	973.1	940
3-6C-EB-14	532899.25	132124.98	984.7	984.20	12	9.5	972.7	963.2	11.2	973.5	950
3-6C-EB-22	532909.20	131931.76	983.3	986.94	6.7	9.8	976.6	966.8	9.1	974.2	958
3-6C-EB-25	532878.30	131758.00	982.6	986.31	11.8	9.5	970.8	961.3	9.5	973.1	958
3-6C-EB-28	532872.86	131728.32	982.8	985.79	6.9	14.5	975.9	961.4	10.0	972.8	958
ES2-01	533454.42	133267.97	985.7	985.36	25	10	960.7	950.7	12.2	973.5	945
ES2-02A	533023.60	132497.90	980.2	979.63	3	15	977.2	962.2	6.6	973.6	940
ES2-05	533324.15	132017.21	990.8	990.65	9	15	981.8	966.8	16.9	973.9	963
ES2-06	533465.77	133277.92	986.3	986.00	37.5	10	948.8	938.8	12.7	973.6	943
ES2-08	533337.75	132969.67	995.3	994.87	10	15	985.3	970.3	21.4	973.9	962
ES2-09	533782.33	132501.21	991.6	991.25	10	10	981.6	971.6	13.9	977.7	955
ES2-11	533441.48	132610.85	985.8	985.05	5	15	980.8	965.8	10.0	975.8	945
ES2-16	533463.77	132335.90	987.1	986.88	10	10	977.1	967.1	10.7	976.4	960
ES2-18	533420.31	132264.62	987.1	986.86	12	22	975.1	953.1	13.1	974.0	962
GMA1-13	533785.70	133705.20	989.5	991.41	15	10	974.5	964.5	15.3	974.2	<964
GMA1-14	534006.20	132995.20	995.3	997.29	12	10	983.3	973.3	16.1	979.2	<973
GMA1-15	533257.00	132155.00	986.6	988.59	6	10	980.6	970.6	12.3	974.3	<970
GMA1-16	533167.90	132359.90	985.1	986.82	8	10	977.1	967.1	10.6	974.5	<967
GMA1-17E	533783.10	132983.90	993.4	993.03	7.5	10	985.9	975.9	15.0	978.3	<975
GMA1-17W	533784.60	134234.60	993.3	992.63	14	10	979.3	969.3	15.0	978.3	<969
GMA1-19	533102.40	132207.90	984.63	984.28	7.59	10	977.0	967.0	10.5	974.2	N/A
GMA1-20	533023.20	132361.60	983.76	983.49	7.78	10	976.0	966.0	9.9	973.8	N/A
GMA1-21	533117.60	132435.20	983.40	985.68	7.37	10	976.0	966.0	9.4	974.0	N/A
GMA1-22	533212.2000	132052.8000	988.74	988.45	10	10	978.7	968.7	15.1	973.6	N/A
GMA1-23	533094.4000	132083.4000	986.44	986.16	7	10	979.4	969.4	12.9	973.6	N/A
GMA1-24	533009.4000	132194.8000	984.19	983.81	6	10	978.2	968.2	11.1	973.1	N/A
HR-C-RW-1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
HR-G1-MW-1	533112.00	132805.24	980.3	982.42	7.4	10	972.9	962.9	7.4	972.9	965
HR-G1-MW-2	533091.85	132769.58	978.0	980.23	15.5	10	962.5	952.5	5.1	972.9	960
HR-G1-MW-3	533046.00	132710.10	978.3	980.21	7	10	971.3	961.3	5.3	973.0	955
HR-G2-MW-1	532985.08	132603.74	979.1	982.60	3.4	10	975.7	965.7	6.2	972.9	953

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	Northing	Easting									
HR-G2-MW-2	532962.82	132558.96	977.9	981.39	3	10	974.9	964.9	4.1	973.7	950
HR-G2-MW-3	532917.49	132477.19	984.1	987.14	8.8	10	975.3	965.3	10.8	973.2	940
HR-G2-RW-1	532955.37	132567.50	975.0	976.88	7.8	5	967.2	962.2	2.2	972.8	950
HR-G3-MW-1	532900.30	132455.10	983.6	987.18	4.1	10	979.5	969.5	14.1	969.5	940
HR-G3-MW-2	532887.95	132335.02	984.3	987.88	4.1	10	980.2	970.2	11.4	972.9	935
HR-G3-RW-1	532872.09	132399.67	976.8	977.78	7.23	2	969.6	967.6	3.6	973.2	937
HR-J1-MW-1	532859.90	131661.60	983.6	985.95	8.22	15	975.4	960.4	10.7	972.9	959
HR-J1-MW-2	532837.20	131571.10	983.7	983.56	7.92	10	975.8	965.8	10.4	973.3	952
HR-J1-MW-3	532823.10	131533.90	984.6	987.68	6.32	15	978.3	963.3	11.8	972.8	951
HR-J1-RW-1	532815.99	131580.58	975.0	975.05	12	2	963.0	961.0	2.3	972.7	952
M-R	533918.80	132612.00	995.8	998.19	15.8	10	980.0	970.0	16.1	979.7	952
P3	533662.24	133183.10	989.3	989.25	4	10	985.3	975.3	5.2	984.1	955
PZ-1S	533390.53	133214.18	990.1	989.93	13.26	5.58	976.8	971.3	17.2	972.9	950
PZ-6S	533452.92	133327.82	984.3	984.13	7.34	5.5	977.0	971.5	11.6	972.7	942
RW-1(S)	533423.56	132379.69	987.0	987.23	10	20	977.0	957.0	17.9	969.1	950
RW-1(X)	533438.75	133301.18	982.7	982.68	9	15	973.7	958.7	14.6	968.1	943
RW-2(X)	533389.37	133238.18	986.2	985.96	9	15	977.2	962.2	15.5	970.6	951
RW-3(X)	533486.57	133387.39	980.9	980.28	36	10	944.9	934.9	8.8	972.2	936
TMP-1	533798.77	133577.02	N/A	992.74	N/A	N/A	N/A	N/A	N/A	973.8	954
Lyman Street Area											
E-4	532781.86	131381.90	986.0	987.98	11.6	10	974.4	964.4	13.8	972.2	953
E-7	533184.18	131010.65	983.3	982.87	4.6	15	978.7	963.7	7.2	976.2	960
EPA-01	532404.00	130818.40	983.3	983.04	18	4	965.3	961.3	10.5	972.9	958
GMA1-5	532063.90	129887.50	979.6	979.50	3.5	10	976.1	966.1	7.4	972.2	N/A
LS-12	532544.49	130773.27	982.6	985.49	7	15	975.6	960.6	9.4	973.2	958
LS-13	532726.19	130912.04	985.1	984.65	10	15	975.1	960.1	11.3	973.8	965
LS-21	532584.70	130988.93	983.9	983.42	8	10	975.9	965.9	11.6	972.4	967
LS-24	532649.95	131080.03	986.6	986.58	10.45	11.45	976.1	964.7	13.7	972.9	961
LS-28	532643.84	130705.47	983.6	986.06	8.6	15	975.0	960.0	9.4	974.2	960
LS-29	532807.58	131047.39	988.3	988.25	24.6	10	963.7	953.7	13.1	975.2	954
LS-30	532620.97	130874.13	984.2	986.44	8.6	10	975.6	965.6	11.3	972.9	966
LS-31	532663.75	130942.01	984.9	987.09	10.6	10	974.3	964.3	11.2	973.7	965
LS-34	532547.16	130747.16	983.0	985.79	16	9.5	967.0	957.5	10.0	973.0	958
LS-38	532454.93	130852.50	984.7	986.95	12.6	10	972.1	962.1	12.3	972.4	962
LS-41	532497.23	130906.32	983.9	986.41	5.2	14.5	978.7	964.2	12.8	971.1	965

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	Northing	Easting									
LS-43	532463.03	130718.21	981.4	981.17	16.7	9.5	964.7	955.2	7.5	973.9	956
LS-44	532395.07	130746.02	981.3	980.78	16.7	9.5	964.6	955.1	8.8	972.5	956
LSSC-06	532545.12	130828.24	983.4	984.91	8	10	975.4	965.4	10.5	972.9	965
LSSC-07	532512.42	130714.50	982.9	982.48	16	10	966.9	956.9	9.9	973.0	954
LSSC-08I	532406.30	130816.34	983.6	983.13	13	10	970.6	960.6	10.7	972.9	958
LSSC-08S	532408.89	130817.23	983.6	983.11	5	10	978.6	968.6	11.4	972.3	958
LSSC-09	532560.23	130968.42	983.4	985.06	6	10	977.4	967.4	11.2	972.1	965
LSSC-16I	532495.89	130691.87	981.6	980.88	18	10	963.6	953.6	9.2	972.4	956
LSSC-16S	532500.50	130690.30	981.5	981.37	5	10	976.5	966.5	8.6	972.9	956
LSSC-18	532664.70	131107.50	987.6	987.32	9	10	978.6	968.6	14.5	973.1	961
LSSC-32	532377.06	130590.77	980.9	980.68	26	10	954.9	944.9	8.2	972.7	949
LSSC-33	532416.27	130678.87	981.0	980.49	20	10	961.0	951.0	8.2	972.7	955
LSSC-34I	532506.10	130803.12	983.0	984.74	15	10	968.0	958.0	10.4	972.6	960
LSSC-34S	532502.63	130807.44	982.9	985.01	5	10	977.9	967.9	10.5	972.4	960
MW-3R	532488.50	130320.80	981.9	981.78	10	5	971.9	966.9	8.5	973.3	<966.9
MW-4R	532351.60	130525.40	981.2	980.82	9	5	972.2	967.2	8.2	973.0	<969.7
MW-6R	532826.50	130329.50	985.5	985.14	4	10	981.5	971.5	10.9	974.6	<971.5
RW-1	532599.66	131008.57	984.3	984.88	8	10	976.3	966.3	11.4	972.9	967
RW-1(R)	532585.81	131015.89	984.8	985.07	9.4	10	975.4	965.4	15.3	969.5	965
RW-2	532617.86	131063.93	986.0	985.92	11	10	975.0	965.0	13.7	972.3	968
RW-3	532506.39	130896.84	984.0	984.08	N/A	11	N/A	N/A	15.8	968.2	965
Newell Street Area I											
FW-16R	532907.36	132756.80	984.1	986.51	8	9.5	976.1	966.6	10.8	973.3	955
IA-9R	532749.28	132436.47	984.7	984.14	7.4	9.5	977.3	967.8	11.1	973.6	958
MM-1	532538.00	132097.40	988.3	988.04	5	10	983.3	973.3	12.2	976.2	957
Newell Street Area II											
GMA1-8	532537.20	131175.60	981.9	981.66	5.7	10	976.2	966.2	9.7	972.3	961
GMA1-9	532597.60	131346.30	979.1	982.36	7.1	10	972.0	962.0	6.3	972.8	957
GMA1-25	532475.2000	131882.3000	987.51	987.19	5	10	982.5	972.5	13.5	974.0	N/A
GMA1-26	532359.4000	131417.3000	983.73	985.53	5	10	978.7	968.7	11.9	971.8	N/A
GMA1-27	532319.7000	131693.2000	981.30	983.29	4	10	977.3	967.3	8.3	973.0	N/A
GMA1-28	532449.0000	131306.0000	981.70	983.49	4	10	977.7	967.7	10.2	971.5	N/A
MW-1D	532513.20	131501.30	984.5	987.20	21.9	14.5	962.6	948.1	11.1	973.4	950
MW-1S	532519.00	131497.20	984.6	986.60	7.9	14.5	976.7	962.2	11.1	973.5	950
N2SC-01I	532583.13	131668.56	983.60	984.99	28	7	955.6	948.6	10.9	972.7	946
N2SC-01I(R)	532577.40	131668.80	983.30	985.98	28	10	955.3	945.3	10.9	972.7	946

Table 1
Monitoring Well Construction Summary

NAPL Monitoring Report For Fall 2006
Plant Site 1 Groundwater Management Area
General Electric Company-Pittsfield, Massachusetts

Well ID	Survey Coordinates		Ground Elevation (Feet AMSL)	Measuring Point Elevation (Feet AMSL)	Depth to Top of Screen (Feet bgs)	Screen Length (Feet)	Top of Screen Elevation (Feet AMSL)	Base of Screen Elevation (Feet AMSL)	Average Depth to Groundwater (Feet bgs)	Average Groundwater Elevation (Feet AMSL)	Till/Silt Elevation (Approximate) (Feet AMSL)
	Northing	Easting									
N2SC-02	532594.30	131592.60	983.3	985.56	26.5	10	956.8	946.8	9.7	973.6	947
N2SC-03I	532536.68	131579.89	983.53	985.33	27	10	956.5	946.5	10.3	973.3	948
N2SC-03I(R)	532538.9	131586.6	983.5	986.08	28	10	955.5	945.5	10.3	973.3	946
N2SC-07	532721.95	131582.50	982.9	984.61	25	10	957.9	947.9	10.1	972.8	948
N2SC-07S	532707.00	131599.50	983.2	982.93	8.9	10	974.3	964.3	10.3	972.9	948
N2SC-08	532481.42	131722.50	983.7	986.07	29	10	954.7	944.7	10.0	973.7	945
N2SC-13I	532549.04	131638.27	983.0	984.75	28.5	10	954.5	944.5	9.5	973.5	945
N2SC-14	532617.20	131618.23	983.40	985.06	26	10	957.4	947.4	12.6	970.8	947
NS-10	532517.43	131813.35	984.9	984.59	5	15	979.9	964.9	10.2	974.7	950
NS-15R	532699.66	131592.66	983.10	982.76	28	10	955.1	945.1	8.6	974.5	
NS-16	532561.33	131790.37	984.7	984.46	10	10	974.7	964.7	10.2	974.5	949
NS-17	532656.18	131503.34	982.0	984.64	6	10	976.0	966.0	9.5	972.5	948
NS-20	532361.30	131815.43	985.6	985.29	6	10	979.6	969.6	6.9	978.7	954
NS-32	532667.98	131618.21	983.60	986.20	28.6	9.5	955.0	945.5	9.9	973.7	946
NS-37	532786.16	132142.18	983.6	986.20	11.05	9.5	972.6	963.1	11.0	972.6	943
SILVER LAKE AREA											
SLGW-1D	534103.00	130536.10	981.2	983.13	30	5	951.2	946.2	2.6	978.6	<945.2
SLGW-1S	534100.50	130531.10	981.2	982.94	4	10	977.2	967.2	4.7	976.5	<945.2
SLGW-2D	533727.50	129779.00	983.6	985.10	30	5	953.6	948.6	5.8	977.8	<947.6
SLGW-2S	533726.00	129785.50	983.5	985.39	4	10	979.5	969.5	5.8	977.7	<947.5
SLGW-3D	533471.80	129332.90	977.2	979.14	26	5	951.2	946.2	-0.8	978.0	<945.2
SLGW-3S	533477.60	129331.10	977.6	981.21	1.5	10	976.1	966.1	1.2	976.4	<945.6
SLGW-4D	533121.90	129350.50	981.8	983.51	30	5	951.8	946.8	4.2	977.6	<945.8
SLGW-4S	533117.20	129348.30	982.0	984.02	4	10	978.0	968.0	5.7	976.3	<946
SLGW-5D	533005.60	130016.30	979.6	979.30	29	5	950.6	945.6	3.5	976.1	<945.64
SLGW-5S	533003.70	130023.50	979.8	979.12	2	10	977.78	967.78	3.7	976.1	<945.78
SLGW-6D	533313.70	131019.30	982.2	981.63	30	5	952.16	947.16	5.7	976.4	<946.16
SLGW-6S	533308.00	131017.30	982.2	981.66	4	10	978.2	968.2	5.8	976.4	<946.2

NOTES:

1. The listed wells were utilized during fall 2006 for groundwater elevation/NAPL monitoring.
2. Feet AMSL: Feet above mean sea level
3. Feet bgs: Feet below ground surface
4. N/A: Information not available.

Table 2
Groundwater/NAPL Monitoring Program and Removal Criteria

NAPL Monitoring Report For Fall 2006
Plant Site 1 Groundwater Management Area
General Electric Company - Pittsfield, Massachusetts

Well ID	Current Monitoring Frequency	NAPL Removal Criteria (If different from Standard Criteria for wells located where NAPL is known to be present)
40s Complex		
RF-04	Semi-Annual	
30s Complex		
95-16	Semi-Annual	
ES2-19	Semi-Annual	
RF-03	Semi-Annual	
RF-16R	Semi-Annual	
20s Complex		
CC	Semi-Annual	
EE	Semi-Annual	
GG	Semi-Annual	
II	Semi-Annual	
JJ	Semi-Annual	
LL-R	Semi-Annual	
O-R	Semi-Annual	
P-R	Semi-Annual	
QQ-R	Semi-Annual	
U	Semi-Annual	
Y	Semi-Annual	
East Street Area 2-South		
01R	Semi-Annual	
2	Semi-Annual	
5	Semi-Annual	
6	Semi-Annual	
09R	Semi-Annual	
10	Semi-Annual	
13	Monthly	Any recoverable quantities of NAPL are removed
14	Monthly	Any recoverable quantities of NAPL are removed
15R	Monthly	Any recoverable quantities of NAPL are removed
16R	Semi-Annual	
19	Weekly	Any recoverable quantities of NAPL are removed
25R	Monthly	Any recoverable quantities of NAPL are removed
26RR	Monthly	
28	Semi-Annual	
29	Semi-Annual	
30	Semi-Annual	
31	Semi-Annual	
32	Semi-Annual	
34	Semi-Annual	
35	Semi-Annual	
36	Semi-Annual	
37	Semi-Annual	
38	Semi-Annual	
40R	Monthly	
42	Semi-Annual	
43	Semi-Annual	
44	Semi-Annual	
47	Semi-Annual	
48	Monthly	Any recoverable quantities of NAPL are removed
49R	Monthly	
49RR	Monthly	

Table 2
Groundwater/NAPL Monitoring Program and Removal Criteria

NAPL Monitoring Report For Fall 2006
Plant Site 1 Groundwater Management Area
General Electric Company - Pittsfield, Massachusetts

Well ID	Current Monitoring Frequency	NAPL Removal Criteria (If different from Standard Criteria for wells located where NAPL is known to be present)
50	Quarterly	
51	Semi-Annual	
52	Semi-Annual	
53	Quarterly	
54	Semi-Annual	
55	Monthly	
57	Semi-Annual	
58	Semi-Annual	
59	Semi-Annual	
64	Semi-Annual	
95-01	Monthly	
95-04R	Monthly	Any recoverable quantities of NAPL are removed
95-05	Semi-Annual	
95-07R	Monthly	Any recoverable quantities of NAPL are removed
E2SC-03I	Semi-Annual	No NAPL is removed during routine monitoring
E2SC-17	Semi-Annual	No NAPL is removed during routine monitoring
E2SC-21	Semi-Annual	
E2SC-23	Monthly	
E2SC-24	Monthly	
3-6C-EB-14	Semi-Annual	
3-6C-EB-22	Monthly	
3-6C-EB-25	Semi-Annual	
3-6C-EB-28	Semi-Annual	
ES2-01	Semi-Annual	
ES2-02A	Semi-Annual	
ES2-05	Semi-Annual	
ES2-06	Semi-Annual	
ES2-08	Semi-Annual	
ES2-09	Semi-Annual	
ES2-11	Semi-Annual	
ES2-14	Semi-Annual	Monitoring to be discontinued during EPA operation of staging area
ES2-15	Semi-Annual	Monitoring to be discontinued during EPA operation of staging area
ES2-16	Semi-Annual	
ES2-17	Semi-Annual	Monitoring to be discontinued during EPA operation of staging area
ES2-18	Semi-Annual	
GMA1-13	Semi-Annual	
GMA1-14	Weekly	Any recoverable quantities of NAPL are removed
GMA1-15	Weekly	Any recoverable quantities of NAPL are removed
GMA1-16	Monthly	
GMA1-17E	Monthly	
GMA1-17W	Monthly	
GMA1-19	Weekly	Any recoverable quantities of NAPL are removed
GMA1-20	Weekly	Any recoverable quantities of NAPL are removed
GMA1-21	Weekly	Any recoverable quantities of NAPL are removed
GMA1-22	Weekly	Any recoverable quantities of NAPL are removed
GMA1-23	Weekly	Any recoverable quantities of NAPL are removed
GMA1-24	Weekly	Any recoverable quantities of NAPL are removed
HR-C-RW-1	Semi-Annual	
HR-G1-MW-1	Quarterly	

Table 2
Groundwater/NAPL Monitoring Program and Removal Criteria

NAPL Monitoring Report For Fall 2006
Plant Site 1 Groundwater Management Area
General Electric Company - Pittsfield, Massachusetts

Well ID	Current Monitoring Frequency	NAPL Removal Criteria (If different from Standard Criteria for wells located where NAPL is known to be present)
HR-G1-MW-2	Quarterly	
HR-G1-MW-3	Quarterly	
HR-G2-MW-1	Monthly	
HR-G2-MW-2	Monthly	
HR-G2-MW-3	Monthly	
HR-G2-RW-1	Monthly	
HR-G3-MW-1	Quarterly	
HR-G3-MW-2	Quarterly	
HR-G3-RW-1	Quarterly	
HR-J1-MW-1	Quarterly	
HR-J1-MW-2	Quarterly	
HR-J1-MW-3	Quarterly	
HR-J1-RW-1	Quarterly	
M-R	Semi-Annual	
P3	Semi-Annual	
PZ-1S	Semi-Annual	
PZ-6S	Semi-Annual	
TMP-1	Quarterly	
East Street Area 2-North		
05-N	Semi-Annual	
11-N	Semi-Annual	
14-N	Semi-Annual	
16-N	Semi-Annual	
17-N	Semi-Annual	
17A	Semi-Annual	
19-N	Semi-Annual	
20-N	Semi-Annual	
23-N	Semi-Annual	
24-N	Semi-Annual	
27-N	Semi-Annual	
ES1-05	Semi-Annual	
ES1-18	Semi-Annual	
ES1-20	Semi-Annual	
ES1-27R	Semi-Annual	
East Street Area 1-North		
25	Semi-Annual	
49	Semi-Annual	
52	Quarterly	Any recoverable quantities of NAPL are removed
60R	Semi-Annual	
105	Semi-Annual	
106	Semi-Annual	
107	Semi-Annual	
108A	Semi-Annual	
109A	Semi-Annual	
118	Semi-Annual	
120	Semi-Annual	
128	Semi-Annual	
131	Quarterly	Any recoverable quantities of NAPL are removed
140	Quarterly	
ES1-08	Quarterly	
ES1-14	Semi-Annual	

Table 2
Groundwater/NAPL Monitoring Program and Removal Criteria

NAPL Monitoring Report For Fall 2006
Plant Site 1 Groundwater Management Area
General Electric Company - Pittsfield, Massachusetts

Well ID	Current Monitoring Frequency	NAPL Removal Criteria (If different from Standard Criteria for wells located where NAPL is known to be present)
East Street Area 1 - South		
31R	Monthly	
33	Monthly	
34	Monthly	Any recoverable quantities of NAPL are removed
35	Semi-Annual	
45	Semi-Annual	
46	Semi-Annual	
72	Monthly	Any recoverable quantities of NAPL are removed
72R	Monthly	Any recoverable quantities of NAPL are removed
75	Semi-Annual	
76	Semi-Annual	
78	Semi-Annual	
139	Semi-Annual	
ES1-13	Semi-Annual	
GMA1-6	Semi-Annual	
GMA1-7	Semi-Annual	
Lyman Street Area		
B-02	Semi-Annual	
E-04	Semi-Annual	
EPA-1	Monthly	
GMA1-5	Semi-Annual	
LS-12	Semi-Annual	
LS-13	Semi-Annual	
LS-21	Semi-Annual	
LS-24	Monthly	
LS-30	Monthly	
LS-31	Monthly	
LS-34	Quarterly	
LS-38	Monthly	Any recoverable quantities of NAPL are removed
LS-41	Semi-Annual	
LS-43	Quarterly	
LS-44	Monthly	
LSSC-06	Semi-Annual	
LSSC-07	Weekly	Any recoverable quantities of NAPL are removed
LSSC-08I	Weekly	Any recoverable quantities of NAPL are removed
LSSC-08S	Monthly	
LSSC-09	Semi-Annual	
LSSC-16I	Monthly	Any NAPL will be removed
LSSC-16S	Semi-Annual	
LSSC-18	Monthly	
LSSC-32	Monthly	
LSSC-33	Monthly	
LSSC-34I	Quarterly	
LSSC-34S	Semi-Annual	
MW-3R	Semi-Annual	
MW-4R	Quarterly	

Table 2
Groundwater/NAPL Monitoring Program and Removal Criteria

NAPL Monitoring Report For Fall 2006
Plant Site 1 Groundwater Management Area
General Electric Company - Pittsfield, Massachusetts

Well ID	Current Monitoring Frequency	NAPL Removal Criteria (If different from Standard Criteria for wells located where NAPL is known to be present)
Newell Street Area I		
FW-16R	Semi-Annual	
IA-9R	Semi-Annual	
MM-1	Semi-Annual	
Newell Street Area II		
GMA1-8	Quarterly	
GMA1-9	Quarterly	
GMA1-25	Quarterly	
GMA1-26	Quarterly	
GMA1-27	Quarterly	
GMA1-28	Quarterly	
MW-1D	Quarterly	
MW-1S	Quarterly	
N2SC-01I	Monthly	No NAPL is removed during routine monitoring
N2SC-03I	Monthly	No NAPL is removed during routine monitoring
N2SC-02	Monthly	Any NAPL will be removed
N2SC-07	Monthly	Any NAPL will be removed
N2SC-07S	Quarterly	
N2SC-08	Monthly	
N2SC-09I	Semi-Annual	
N2SC-09S	Quarterly	
N2SC-13I	Semi-Annual	
N2SC-15	Semi-Annual	
N2SC-16	Semi-Annual	
N2SC-17	Semi-Annual	
NS-9	Quarterly	
NS-10	Quarterly	
NS-15R	Monthly	
NS-16	Quarterly	
NS-17	Quarterly	
NS-20	Quarterly	
NS-30	Quarterly	
NS-32	Quarterly	
NS-36	Semi-Annual	
NS-37	Semi-Annual	
Silver Lake Area		
SLGW-5S	Semi-Annual	
SLGW-6S	Semi-Annual	

NOTES:

1. Unless noted otherwise, the listed wells utilize the proposed Standard Criteria for manual NAPL removal during routine monitoring of 0.25 feet for LNAPL and 0.5 feet for DNAPL.
2. The exceptions listed above only apply for the type of NAPL that the well is designed to monitor.
3. Any NAPL observed during the bailing round conducted prior to the spring and fall semi-annual monitoring events is manually removed.
4. No NAPL is manually removed from any wells during the spring and fall semi-annual monitoring events, provided that NAPL was removed during the bailing round.
5. No NAPL is manually removed from any wells during non-routine data collection activities.

Table 3
Automated LNAPL Recovery System Summary

NAPL Monitoring Report for Fall 2006
Plant Site 1 Groundwater Management Area
General Electric Company-Pittsfield, Massachusetts

Removal Action Area / Recovery System	July 2005 Recovery (Gallons)		August 2005 Recovery (Gallons)		September 2005 Recovery (Gallons)		October 2005 Recovery (Gallons)	
	LNAPL	Groundwater	LNAPL	Groundwater	LNAPL	Groundwater	LNAPL	Groundwater
EAST STREET AREA 1 - NORTH								
NORTHSIDE RECOVERY SYSTEM	0.0	16,600	1.0	16,000	4.0	10,400	24.0	8,900
EAST STREET AREA 1 - SOUTH								
SOUTHSIDE RECOVERY SYSTEM	0.0	45,800	1.0	37,100	9.0	56,300	4.0	71,000
EAST STREET AREA 2 - SOUTH								
64R	225	260,800	250	73,300	50	10,200	75	492,200
40R	0	--	0	--	0	--	0	--
64S	10	330,937	218	271,691	321	172,650	82	541,419
RW-1(S)	17	813,490	32	780,217	4	527,699	43	783,765
64V	465	922,700	581	993,100	349	714,700	564	733,400
64X	15	417,600	20	489,600	25	403,200	25	403,200
RW-1(X)	0	109,800	0	142,000	0	80,000	0	299,300
RW-2(X)	0	747,100	0	982,100	0	721,200	0	529,600
LYMAN STREET AREA								
RW-1R [(1)]	5	310,647	0	310,647	0	198,753	0	314,247
RW-2 [(1)]	0	310,647	0	310,647	0	198,753	0	314,247
RW-3 [(1)]	10	310,647	0	310,647	0	198,753	0	314,247
GMA 1 TOTAL	747	3,975,474	1,103	4,095,755	762	2,895,102	817	4,177,031

NOTES:
1. Groundwater collection is a combined total from the RW-1(R), RW-2, and RW-3 recovery systems.

Table 3
Automated LNAPL Recovery System Summary

NAPL Monitoring Report for Fall 2005
Plant Site 1 Groundwater Management Area
General Electric Company-Pittsfield, Massachusetts

Removal Action Area / Recovery System	November 2005 Recovery (Gallons)		December 2005 Recovery (Gallons)		Fall 2005 Total Recovery (Gallons)	
	LNAPL	Groundwater	LNAPL	Groundwater	LNAPL	Groundwater
EAST STREET AREA 1 - NORTH						
NORTHSIDE RECOVERY SYSTEM	4.0	52,000	12	33,900	45	137,800
EAST STREET AREA 1 - SOUTH						
SOUTHSIDE RECOVERY SYSTEM	2	96,600	0	112,800	16	419,600
EAST STREET AREA 2 - SOUTH						
64R	125	988,100	400	1,062,900	1,125	2,887,500
40R	0	--	0	--	0	0
64S	324	1,014,521	170	927,871	1,125	3,259,089
RW-1(S)	42	1,103,548	40	900,898	178	4,909,617
64V	515	1,304,100	564	1,117,000	3,038	5,785,000
64X	0	489,600	6	417,600	91	2,620,800
RW-1(X)	0	390,700	0	324,500	0	1,346,300
RW-2(X)	0	573,600	0	491,800	0	4,045,400
LYMAN STREET AREA						
RW-1R [(1)]	0	412,936	0	332,721	5	1,879,951
RW-2 [(1)]	0	412,936	0	332,721	0	1,879,951
RW-3 [(1)]	0	412,936	0	332,721	10	1,879,951
GMA 1 TOTAL	1,012	6,425,705	1,192	5,721,990	5,633	27,291,057

NOTES:
1. Groundwater collection is a combined total from the RW-1(R), RW-2, and RW-3 recovery systems.

Table 3
Automated LNAPL Recovery System Summary

NAPL Monitoring Report For Fall 2006
Plant Site 1 Groundwater Management Area
General Electric Company-Pittsfield, Massachusetts

Removal Action Area /	July 2006 Recovery		August 2006 Recovery		September 2006 Recovery		October 2006 Recovery	
	LNAPL	Groundwater	LNAPL	Groundwater	LNAPL	Groundwater	LNAPL	Groundwater
EAST STREET AREA 1 - NORTH								
NORTHSIDE RECOVERY SYSTEM	0.0	51,700	0.0	21,700	0.0	13,000	0.0	17,000
EAST STREET AREA 1 - SOUTH								
SOUTHSIDE RECOVERY SYSTEM	0.0	58,900	0.0	84,900	25.0	59,400	1.0	55,800
40s COMPLEX								
BLDG. 42 ELEVATOR								
EAST STREET AREA 2 - SOUTH								
64R	250	345,697	25	38,948	75	4,627	0	16,844
GMA1-17W	0	--	0	--	0	--	21	--
64S	472	732,853	238	646,128	188	393,032	82	400,898
RW-1(S)	28	722,887	17	741,315	12	554,826	31	900,898
64V	548	885,300	548	1,016,400	332	794,600	432	825,400
64X	28	388,800	127	504,000	24.2	403,200	68.2	403,200
RW-1(X)	0	369,041	0	471,215	1.1	374,761	0	397,949
RW-2(X)	0	1,076,551	0	1,146,830	1	546,233	0	574,780
LYMAN STREET AREA								
RW-1R [(1)]	0	206,016	0	216,359	0	172,604	0	184,541
RW-2 [(1)]	0	206,016	0	216,359	0	172,604	0	184,541
RW-3 [(1)]	0	206,016	0	216,359	0	172,604	0	184,541
GMA 1 TOTAL	1,326	4,837,745	955	4,887,795	658	3,316,283	635	3,777,310

NOTES:
1. Groundwater collection is a combined total from the RW-1(R), RW-2, and RW-3 recovery systems.

Table 3
Automated LNAPL Recovery System Summary

NAPL Monitoring Report For Fall 2006
Plant Site 1 Groundwater Management Area
General Electric Company-Pittsfield, Massachusetts

Removal Action Area /	November 2006 Recovery		December 2006 Recovery		Fall 2006 Total Recovery	
	LNAPL	Groundwater	LNAPL	Groundwater	LNAPL	Groundwater
EAST STREET AREA 1 - NORTH						
NORTHSIDE RECOVERY SYSTEM	1.1	26,700	0.0	13,700	1	143,800
EAST STREET AREA 1 - SOUTH						
SOUTHSIDE RECOVERY SYSTEM	1.1	92,200	0.6	64,400	28	415,600
40s COMPLEX						
BLDG. 42 ELEVATOR					0	0
EAST STREET AREA 2 - SOUTH						
64R	12.5	211,062	18.8	85,911	381	703,089
GMA1-17W	24	--	13	--	58	0
64S	75	682,641	209	638,261	1,264	3,493,813
RW-1(S)	85	877,320	43	900,898	216	4,698,144
64V	855	1,181,500	493	1,017,800	3,207	5,721,000
64X	13.9	489,600	14.9	446,400	276	2,635,200
RW-1(X)	2	545,763	0	435,048	3	2,593,777
RW-2(X)	0	742,383	0	681,784	1	4,768,561
LYMAN STREET AREA						
RW-1R [(1)]	0	270,731	0	205,096	0	1,255,347
RW-2 [(1)]	0	270,731	0	205,096	0	1,255,347
RW-3 [(1)]	0	270,731	0	205,096	0	1,255,347
GMA 1 TOTAL	1,070	5,119,900	792	4,489,298	5,435	26,428,331

NOTES:
1. Groundwater collection is a combined total from the RW-1(R), RW-2, and RW-3 recovery systems.

Table 4
Automated DNAPL Recovery System Summary

NAPL Monitoring Report For Fall 2006
Plant Site 1 Groundwater Management Area
General Electric Company-Pittsfield, Massachusetts

Removal Action Area / Recovery System	July 2005 DNAPL Recovery (Gallons)	August 2005 DNAPL Recovery (Gallons)	September 2005 DNAPL Recovery (Gallons)	October 2005 DNAPL Recovery (Gallons)	November 2005 DNAPL Recovery (Gallons)	December 2005 DNAPL Recovery (Gallons)	Fall 2005 Total DNAPL Recovery (Gallons)
EAST STREET AREA 2-SOUTH							
RW-3(X)	44	51	40	19	51	31	236
NEWELL STREET AREA II							
SYSTEM 1	14.3	-- [1]	-- [1]	-- [1]	-- [1]	-- [1]	14.3
SYSTEM 2	48.6	-- [1]	-- [1]	-- [1]	-- [1]	-- [1]	48.6
GMA 1 TOTAL	106.9	51	40	19	51	31	298.9

Removal Action Area / Recovery System	July 2006 DNAPL Recovery (Gallons)	August 2006 DNAPL Recovery (Gallons)	September 2006 DNAPL Recovery (Gallons)	October 2006 DNAPL Recovery (Gallons)	November 2006 DNAPL Recovery (Gallons)	December 2006 DNAPL Recovery (Gallons)	Fall 2006 Total DNAPL Recovery (Gallons)
EAST STREET AREA 2-SOUTH							
RW-3(X)	28	37	26	22	32	18	163
NEWELL STREET AREA II							
SYSTEM 1	-- [1]	-- [1]	-- [1]	-- [1]	-- [1]	-- [1]	0.0
SYSTEM 2	-- [1]	-- [1]	97.2	340.2	224.1	54	715.5
GMA 1 TOTAL	28	37	123.2	362.2	256.1	72	878.5

Notes:
[1] The DNAPL recovery systems for Newell Street Area II were shut down on July 25, 2005. An upgraded system was be completed and activated on August 30, 2006.

Table 5
Seasonal Groundwater Elevation Data And Monitoring Well Usage Summary

NAPL Monitoring Report For Fall 2006
Plant Site 1 Groundwater Management Area
General Electric Company - Pittsfield, Massachusetts

Well ID	Ground Elevation (Feet AMSL)	Top of Screen Elevation (Feet AMSL)	Base of Screen Elevation (Feet AMSL)	Overall Average Groundwater Elevation (Feet AMSL)	Average Low Groundwater Elevation (Feet AMSL)	Average High Groundwater Elevation (Feet AMSL)	Till/Silt Elevation (Approximate) (Feet AMSL)	Type of Monitoring Applicable to Well in Fall 2006		
								Water Table	LNAPL	DNAPL
20s Complex										
CC	998.8	982.0	967.0	979.9	979.2	980.5	972	X	X	X
EE	1,004.5	984.5	969.5	980.1	979.5	980.7	974	X	X	X
FF	1,005.7	985.7	970.7	981.9	980.7	983.1	969	X	X	---
GG	1,007.4	987.4	972.4	982.4	982.0	982.9	973	X	X	X
II	1,007.3	987.3	972.3	980.6	979.6	981.7	973	X	X	X
JJ	1,006.4	983.4	968.4	980.2	979.2	981.1	968	X	X	X
LL-R	1,007.7	989.7	974.7	981.8	981.4	982.1	977	X	X	X
O-R	1,000.7	N/A	N/A	984.7	984.1	985.3	965	X	---	---
P-R	1,003.0	986.8	976.8	979.4	979.0	979.9	961	X	X	---
QQ-R	998.6	985.6	970.6	979.5	978.8	980.2	967	X	X	---
U	998.9	994.9	969.9	979.3	978.5	980.1	965	X	X	---
Y	1,002.9	996.9	966.9	979.6	978.7	980.4	966	X	X	X
30s Complex										
95-15	986.6	979.6	969.6	978.3	977.8	978.6	966	X	X	---
95-16	1,007.9	993.9	983.9	992.0	991.8	992.3	988	X	X	X
ES2-19	1,007.6	996.1	988.1	993.6	993.3	993.9	1,000	X	X	X
GMA1-10	985.1	979.9	964.9	977.4	977.1	977.9	965	X	X	X
GMA1-12	989.3	979.9	969.9	976.4	976.1	976.7	977	X	X	X
RF-02	983.4	980.4	965.4	976.8	976.4	977.3	965	X	X	X
RF-03	985.6	982.6	967.6	976.2	975.8	976.1	N/A	X	X	---
RF-03D	985.5	954.9	949.9	977.7	977.6	977.7	N/A	---	---	---
RF-16R	987.1	979.6	969.6	978.6	978.5	979.0	967	X	X	---
40s Complex										
RF-04	1,012.2	1,002.2	987.2	995.5	994.1	997.4	988	X	X	X
95-17	1,007.6	987.6	977.6	984.7	983.5	983.7	983	X	X	X
East Street Area 1-North										
25	1,000.7	998.7	983.7	995.0	994.7	995.1	991	X	X	X
49	999.9	997.9	977.9	994.5	994.2	994.8	991	X	X	X
ESA1N-52	999.7	997.7	977.7	994.1	994.1	994.4	990	X	X	X
60R	1,000.6	995.2	985.2	993.1	992.7	993.3	985	X	X	X
105	1,002.9	1,000.9	985.9	995.4	995.0	996.1	985	X	X	X
106	1,003.1	1,000.1	980.1	996.0	996.0	997.0	985	X	X	X
107	1,003.9	1,001.9	986.9	997.1	996.8	997.3	986	X	X	X
108A	1,007.8	1,002.8	987.8	997.7	997.7	997.8	992	X	X	X
109A	1,005.5	1,000.5	985.5	997.3	997.2	997.5	988	X	X	X
118	1,001.5	999.5	991.5	997.2	997.0	997.5	993	X	X	X

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NAPL Monitoring Report For Fall 2006
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General Electric Company - Pittsfield, Massachusetts

Well ID	Ground Elevation (Feet AMSL)	Top of Screen Elevation (Feet AMSL)	Base of Screen Elevation (Feet AMSL)	Overall Average Groundwater Elevation (Feet AMSL)	Average Low Groundwater Elevation (Feet AMSL)	Average High Groundwater Elevation (Feet AMSL)	Till/Silt Elevation (Approximate) (Feet AMSL)	Type of Monitoring Applicable to Well in Fall 2006		
								Water Table	LNAPL	DNAPL
120	1,001.3	999.3	986.3	995.4	995.0	995.7	992	X	X	X
128	1,001.4	1,000.4	986.4	994.7	994.5	994.9	991	X	X	X
131	1,001.3	998.3	993.3	996.8	996.5	997.2	993	X	X	X
140	1,000.3	998.3	983.3	993.0	992.5	993.5	988	X	X	X
ES1-8	1,001.2	996.2	986.2	995.4	995.2	996.3	987	X	X	X
North Caisson	998.0	990.5	979.5	980.1	980.0	980.1	990	X	X	X
East Street Area 1-South										
31R	1,000.5	995.0	985.0	991.3	990.9	991.6	991	X	X	X
33	999.5	996.5	976.5	993.9	993.2	994.0	982	X	X	X
34	999.9	996.9	976.9	994.1	993.9	994.5	983	X	X	X
35	1,000.2	997.2	977.2	994.5	994.3	994.7	990	X	X	X
37R	989.0	981.3	971.3	978.8	978.5	979.3	966	X	X	---
45	1,000.1	998.1	978.1	994.4	994.2	994.6	990	X	X	X
46	999.8	997.8	977.8	993.9	993.7	994.0	990	X	X	X
72	1,000.6	997.6	977.6	994.0	993.8	994.3	983	X	X	X
72R	1,001.2	997.2	987.2	994.7	994.3	994.8	988	X	X	X
75	1,000.7	997.7	977.7	994.2	993.9	994.5	990	X	X	X
76	1,000.5	997.5	977.5	993.6	993.4	993.7	988	X	X	X
78	997.6	995.6	975.6	994.5	994.4	994.5	982	X	X	X
80	990.00	983.5	958.5	985.0	984.1	985.0	N/A	X	---	---
89	993.9	992.9	982.9	985.0	989.9	985.0	984	X	X	X
90	987.70	985.7	972.7	981.9	981.7	982.0	N/A	X	X	---
139R	987.39	981.4	971.4	976.8	975.3	976.7	N/A	X	X	---
ES1-13	1,000.0	996.0	986.0	992.9	989.9	994.0	987	X	X	X
ES1-23R	987.9	983.9	973.9	985.5	983.4	986.8	<974	X	X	X
ES1-24	990.41	986.4	976.4	982.2	978.2	986.3	N/A	X	---	---
GMA1-6	1,000.7	995.7	985.7	992.3	992.0	992.7	985	X	X	X
GMA1-7	986.1	980.7	970.7	974.1	973.6	974.8	964	X	X	---
GMA1-18	998.52	994.5	984.5	991.7	989.8	992.1	N/A	X	X	---
South Caisson	1,000.5	996.5	984.5	987.5	987.7	987.7	987	X	X	X
East Street Area 2-North										
05-N	1,009.5	991.5	981.5	984.9	984.9	985.1	985	X	X	X
11-N	1,011.5	981.5	971.5	980.8	980.0	981.6	972	X	X	X
14-N	1,010.7	986.7	976.7	987.1	986.9	987.2	988	X	X	X
16-N	1,011.0	981.0	971.0	980.3	979.6	980.9	972	X	X	X
17-N	1,010.6	980.6	970.6	980.4	979.8	981.0	975	X	X	X
17A	1,024.2	1,019.2	1,004.2	1,016.0	1,015.7	1,015.3	1,014	X	X	X

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NAPL Monitoring Report For Fall 2006
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								Water Table	LNAPL	DNAPL
19-N	1,011.1	981.1	971.1	980.9	980.5	981.2	977	X	X	X
20-N	1,011.2	981.2	971.2	981.8	981.4	982.3	977	X	---	X
23-N	1,011.3	981.3	971.3	980.6	980.0	981.2	979	X	X	X
24-N	1,011.1	981.1	971.1	981.4	980.3	982.5	980	X	X	X
95-12	1,010.4	980.4	970.4	981.9	980.6	982.7	970	X	---	X
ES1-5	1,023.4	988.4	978.4	983.4	983.1	984.0	982	X	X	X
ES1-18	1,049.8	1,045.8	1,035.8	1,042.8	1,041.2	1,042.7	1,044	X	X	X
ES1-27R	1,023.4	1,014.1	1,004.1	1,014.7	1,013.9	1,015.7	1,007	X	X	X
East Street Area 2-South										
01R	992.9	982.9	967.9	980.4	980.1	980.9	963	X	X	---
2	996.4	981.4	971.4	978.0	977.7	978.9	967	X	X	---
5	996.0	987.0	972.0	979.5	979.5	981.8	949	X	X	---
6	991.4	976.4	966.4	976.9	976.8	978.3	947	X	---	---
09R	987.3	982.3	967.3	974.2	973.8	974.6	950	X	X	---
10	988.3	978.3	968.3	973.8	973.7	973.9	957	X	X	---
13	991.3	981.3	961.3	974.2	974.0	974.7	964	X	X	X
14	992.4	982.4	962.4	974.4	973.8	975.2	964	X	X	X
16R	987.2	981.3	961.3	975.5	975.0	976.0	951	X	X	---
19	984.1	974.1	959.1	973.4	972.8	973.4	947	X	X	---
25R	995.5	986.5	966.5	978.1	977.2	978.0	963	X	X	---
26RR	998.4	985.4	970.4	979.6	979.0	979.9	<970.4	X	X	---
28	991.5	976.5	966.5	978.1	977.6	978.9	958	X	---	---
29	992.1	975.1	965.1	973.6	973.4	974.4	955	X	X	---
30	990.0	976.0	966.0	977.2	977.0	977.6	960	X	---	---
31	991.0	976.0	966.0	977.2	977.0	977.6	960	X	---	---
32	991.0	982.0	972.0	978.1	977.9	978.5	965	X	X	---
34	982.5	977.5	967.5	976.0	974.6	976.1	950	X	X	---
35	983.0	978.0	968.0	975.0	974.4	975.7	943	X	X	---
36	983.5	978.5	968.5	974.7	974.2	975.6	950	X	X	---
37	980.5	975.5	965.5	974.5	974.2	975.4	960	X	X	---
38	981.4	976.4	966.4	975.7	975.6	976.8	967	X	X	X
40R	991.6	986.6	966.6	975.6	974.7	976.4	960	X	X	---
42	988.5	978.5	968.5	975.7	975.9	976.8	952	X	X	---
43	985.7	975.7	965.7	974.8	975.4	975.1	952	X	X	---
44	988.8	978.8	968.8	975.9	975.8	976.8	957	X	X	---
47	991.6	976.6	966.6	973.7	973.7	974.7	952	X	X	---

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								Water Table	LNAPL	DNAPL
48	989.0	974.0	964.0	974.8	974.6	975.2	948	X	---	---
49R	989.1	984.1	964.1	973.7	973.2	974.5	948	X	X	---
49RR	990.0	980.0	965.0	973.8	973.2	974.4	948	X	X	---
50	986.0	981.5	961.5	975.8	975.4	976.5	953	X	X	---
51	985.3	980.8	960.8	973.7	973.4	974.8	942	X	X	---
52	985.5	981.3	961.3	974.0	972.9	974.5	942	X	X	---
53	987.2	979.2	959.2	973.8	972.5	975.1	947	X	X	---
54	986.1	979.1	959.1	972.8	972.0	973.8	947	X	X	---
55	987.5	980.5	960.5	973.5	973.0	974.1	947	X	X	---
57	990.1	982.1	962.1	977.2	977.2	978.3	952	X	X	---
58	986.3	978.3	958.3	973.1	972.7	973.7	948	X	X	---
59	986.8	978.8	958.8	972.0	971.4	972.6	948	X	X	---
ESA2S-64	985.1	978.1	963.1	973.5	972.7	973.7	964	X	X	X
64R	994.0	978.7	972.7	977.1	976.8	976.8	957	X	X	---
64S	983.5	980.0	955.0	968.5	966.7	969.0	947	X	X	---
64S-Caisson	983.5	--	--	974.5	974.5	N/A	N/A	X	X	---
64V	987.0	977.0	957.0	965.6	965.4	965.3	948	X	X	X
64X(N)	983.8	N/A	969.0	973.2	972.5	973.6	947	X	X	---
64X(S)	980.5	970.5	965.5	970.1	969.8	970.8	940	X	X	---
64X(W)	983.8	973.8	966.3	969.9	968.9	970.7	945	X	X	---
95-1	983.9	975.9	965.9	974.4	973.5	974.5	N/A	X	X	---
95-4R	985.8	975.8	965.8	974.8	974.2	975.0	943	X	X	---
95-5	986.8	978.8	968.8	974.7	974.6	974.8	947	X	X	---
95-7R	992.1	975.6	965.6	976.0	975.4	976.0	946	X	X	---
E2SC-03I	980.4	945.9	935.9	972.7	972.0	974.0	936	---	---	X
E2SC-17	983.8	947.1	937.1	973.3	972.7	974.0	941	---	---	X
E2SC-21	982.3	977.3	967.3	973.6	973.3	974.0	950	X	X	---
E2SC-23	990.1	981.1	971.1	975.4	974.6	976.2	955	X	X	---
E2SC-24	986.0	977.0	967.0	973.1	972.1	974.2	940	X	X	---
3-6C-EB-14	984.7	972.7	963.2	973.5	972.6	974.6	950	X	X	---
3-6C-EB-22	983.3	976.6	966.8	974.2	973.1	973.9	958	X	X	---
3-6C-EB-25	982.6	970.8	961.3	973.1	972.8	974.5	958	X	---	---
3-6C-EB-28	982.8	975.9	961.4	972.8	972.5	973.9	958	X	X	---
ES2-01	985.7	960.7	950.7	973.5	972.9	974.5	945	---	---	---
ES2-02A	980.2	977.2	962.2	973.6	973.6	974.0	940	X	X	---
ES2-05	990.8	981.8	966.8	973.9	973.5	974.9	963	X	X	---

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NAPL Monitoring Report For Fall 2006
Plant Site 1 Groundwater Management Area
General Electric Company - Pittsfield, Massachusetts

Well ID	Ground Elevation (Feet AMSL)	Top of Screen Elevation (Feet AMSL)	Base of Screen Elevation (Feet AMSL)	Overall Average Groundwater Elevation (Feet AMSL)	Average Low Groundwater Elevation (Feet AMSL)	Average High Groundwater Elevation (Feet AMSL)	Till/Silt Elevation (Approximate) (Feet AMSL)	Type of Monitoring Applicable to Well in Fall 2006		
								Water Table	LNAPL	DNAPL
ES2-06	986.3	948.8	938.8	973.6	973.0	974.6	943	---	---	X
ES2-08	995.3	985.3	970.3	973.9	973.6	975.2	962	X	X	---
ES2-09	991.6	981.6	971.6	977.7	977.5	977.9	955	X	X	---
ES2-11	985.8	980.8	965.8	975.8	974.3	975.0	945	X	X	---
ES2-16	987.1	977.1	967.1	976.4	976.4	976.3	960	X	X	---
ES2-18	987.1	975.1	953.1	974.0	973.6	974.4	962	X	X	X
GMA1-13	989.5	974.5	964.5	974.2	973.2	974.1	<964	X	X	---
GMA1-14	995.3	983.3	973.3	979.2	978.0	979.6	<973	X	X	---
GMA1-15	986.6	980.6	970.6	974.3	973.3	974.2	<970	X	X	---
GMA1-16	985.1	977.1	967.1	974.5	973.5	974.5	<967	X	X	---
GMA1-17E	993.4	985.9	975.9	978.3	977.7	978.5	N/A	X	X	---
GMA1-17W	993.3	979.3	969.3	978.3	977.4	978.3	N/A	X	X	---
GMA1-19	984.63	977.0	967.0	974.2	974.4	974.0	N/A	X	X	---
GMA1-20	983.76	976.0	966.0	973.8	973.9	973.8	N/A	X	X	---
GMA1-21	983.40	976.0	966.0	974.0	974.3	973.5	N/A	X	X	---
GMA1-22	988.74	978.7	968.7	973.6	973.6	973.6	N/A	X	X	---
GMA1-23	986.44	979.4	969.4	973.6	973.6	973.6	N/A	X	X	---
GMA1-24	984.19	978.2	968.2	973.1	973.1	973.1	N/A	X	X	---
HR-C-RW-1	N/A	N/A	N/A	NO DATA	NO DATA	NO DATA	N/A	---	---	X
HR-G1-MW-1	980.3	972.9	962.9	972.9	972.0	973.5	965	X	X	X
HR-G1-MW-2	978.0	962.5	952.5	972.9	972.2	973.6	960	---	---	X
HR-G1-MW-3	978.3	971.3	961.3	973.0	971.9	973.7	955	X	---	---
HR-G2-MW-1	979.1	975.7	965.7	972.9	971.9	973.3	953	X	X	---
HR-G2-MW-2	977.9	974.9	964.9	973.7	972.6	974.3	950	X	X	---
HR-G2-MW-3	984.1	975.3	965.3	973.2	972.4	973.2	940	X	X	---
HR-G2-RW-1	975.0	967.2	962.2	972.8	972.1	973.5	950	X	X	---
HR-G3-MW-1	983.6	979.5	969.5	969.5	968.3	969.9	940	---	---	---
HR-G3-MW-2	984.3	980.2	970.2	972.9	972.4	972.2	935	X	X	---
HR-G3-RW-1	976.8	969.6	967.6	973.2	972.5	973.9	937	X	---	---
HR-J1-MW-1	983.6	975.4	960.4	972.9	972.0	972.9	959	X	X	---
HR-J1-MW-2	983.7	975.8	965.8	973.3	972.7	973.3	952	X	X	---
HR-J1-MW-3	984.6	978.3	963.3	972.8	972.4	973.5	951	X	X	---
HR-J1-RW-1	975.0	963.0	961.0	972.7	971.9	972.9	952	---	---	---
M-R	995.8	980.0	970.0	979.7	978.2	981.1	952	X	X	---
P3	989.3	985.3	975.3	984.1	984.0	984.2	955	X	X	---
PZ-1S	990.1	976.8	971.3	972.9	972.2	974.1	950	X	X	---

Table 5
Seasonal Groundwater Elevation Data And Monitoring Well Usage Summary

NAPL Monitoring Report For Fall 2006
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General Electric Company - Pittsfield, Massachusetts

Well ID	Ground Elevation (Feet AMSL)	Top of Screen Elevation (Feet AMSL)	Base of Screen Elevation (Feet AMSL)	Overall Average Groundwater Elevation (Feet AMSL)	Average Low Groundwater Elevation (Feet AMSL)	Average High Groundwater Elevation (Feet AMSL)	Till/Silt Elevation (Approximate) (Feet AMSL)	Type of Monitoring Applicable to Well in Fall 2006		
								Water Table	LNAPL	DNAPL
PZ-6S	984.3	977.0	971.5	972.7	972.1	973.5	942	X	X	---
RW-1(S)	987.0	977.0	957.0	969.1	968.9	969.2	950	X	X	X
RW-1(X)	982.7	973.7	958.7	968.1	967.5	968.7	943	X	X	---
RW-2(X)	986.2	977.2	962.2	970.6	969.2	971.5	951	X	X	---
RW-3(X)	980.9	944.9	934.9	972.2	971.3	972.7	936	---	---	X
TMP-1	N/A	N/A	N/A	973.8	973.1	974.5	954	X	---	---
Lyman Street Area										
B-2	978.5	975.5	960.5	971.6	971.7	973.0	N/A	X	X	---
E-4	986.0	974.4	964.4	972.2	971.9	972.6	953	X	X	---
E-7	983.3	978.7	963.7	976.2	975.7	976.7	960	X	X	---
EPA-01	983.3	965.3	961.3	972.9	971.4	973.1	958	---	---	X
GMA1-5	979.6	976.1	966.1	972.2	971.1	972.9	N/A	X	X	---
LS-12	982.6	975.6	960.6	973.2	972.7	974.2	958	X	X	X
LS-13	985.1	975.1	960.1	973.8	973.9	974.6	965	X	X	X
LS-21	983.9	975.9	965.9	972.4	971.7	973.5	967	X	X	X
LS-24	986.6	976.1	964.7	972.9	972.1	973.3	961	X	X	---
LS-29	988.3	963.7	953.7	975.2	974.2	975.1	954	---	---	X
LS-30	984.2	975.6	965.6	972.9	972.5	973.3	966	X	X	X
LS-31	984.9	974.3	964.3	973.7	973.3	974.0	965	X	X	X
LS-34	983.0	967.0	957.5	973.0	972.4	973.7	958	---	---	X
LS-38	984.7	972.1	962.1	972.4	971.7	973.0	962	X	X	X
LS-41	983.9	978.7	964.2	971.1	970.7	971.8	965	X	X	X
LS-43	981.4	964.7	955.2	973.9	972.3	975.0	956	---	---	X
LS-44	981.3	964.6	955.1	972.5	971.8	973.1	956	---	---	X
LSSC-06	983.4	975.4	965.4	972.9	971.8	974.0	965	X	X	X
LSSC-07	982.9	966.9	956.9	973.0	972.4	973.4	954	---	---	X
LSSC-08I	983.6	970.6	960.6	972.9	971.4	973.5	958	X	---	X
LSSC-08S	983.6	978.6	968.6	972.3	971.2	972.8	958	X	X	---
LSSC-09	983.4	977.4	967.4	972.1	971.4	973.1	965	X	X	---
LSSC-16I	981.6	963.6	953.6	972.4	972.2	971.9	956	---	---	X
LSSC-16S	981.5	976.5	966.5	972.9	971.9	973.8	956	X	X	---
LSSC-18	987.6	978.6	968.6	973.1	972.1	973.5	961	X	X	---
LSSC-32	980.9	954.9	944.9	972.7	971.9	973.5	949	---	---	X
LSSC-33	981.0	961.0	951.0	972.7	971.9	973.4	955	---	---	X
LSSC-34I	983.0	968.0	958.0	972.6	971.9	973.2	960	X	---	X
LSSC-34S	982.9	977.9	967.9	972.4	971.6	973.4	960	X	X	---
MW-3R	981.9	971.9	966.9	973.3	973.0	974.6	<966.9	X	---	---

Table 5
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NAPL Monitoring Report For Fall 2006
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General Electric Company - Pittsfield, Massachusetts

Well ID	Ground Elevation (Feet AMSL)	Top of Screen Elevation (Feet AMSL)	Base of Screen Elevation (Feet AMSL)	Overall Average Groundwater Elevation (Feet AMSL)	Average Low Groundwater Elevation (Feet AMSL)	Average High Groundwater Elevation (Feet AMSL)	Till/Silt Elevation (Approximate) (Feet AMSL)	Type of Monitoring Applicable to Well in Fall 2006		
								Water Table	LNAPL	DNAPL
MW-4R	981.2	975.7	965.7	973.0	971.6	973.3	<969.7	X	X	--
MW-6R	985.5	981.5	971.5	974.6	974.0	975.0	<971.5	X	X	--
RW-1	984.3	976.3	966.3	972.9	972.0	973.2	967	X	X	X
RW-1(R)	984.8	975.4	965.4	969.5	969.3	969.1	965	X	X	X
RW-2	986.0	975.0	965.0	972.3	971.6	973.4	968	X	X	X
RW-3	984.0	N/A	N/A	968.2	967.9	968.7	965	X	X	---
Newell Street Area I										
FW-16R	984.1	976.1	966.6	973.3	972.4	974.4	955	X	X	---
IA-9R	984.7	977.3	967.8	973.6	972.5	974.3	958	X	X	---
MM-1	988.3	983.3	973.3	976.2	975.6	977.0	957	X	X	---
Newell Street Area II										
GMA1-8	981.9	976.2	966.2	972.3	971.5	973.2	961	X	X	---
GMA1-9	979.1	972.0	962.0	972.8	972.1	973.2	957	X	---	---
GMA1-25	987.51	987.5	987.5	974.0	973.3	974.4	N/A	X	---	X
GMA1-26	983.73	983.7	983.7	971.8	971.7	971.8	N/A	X	---	X
GMA1-27	981.30	981.3	981.3	973.0	973.0	973.0	N/A	X	---	X
GMA1-28	981.70	981.7	981.7	971.5	971.3	971.6	N/A	X	---	X
MW-1D	984.5	962.6	948.1	973.4	972.7	974.1	950	---	---	X
MW-1S	984.6	976.7	962.2	973.5	972.9	974.3	950	X	X	X
N2SC-01I	983.60	955.6	948.6	972.7	971.9	973.8	946	---	---	X
N2SC-01I(R)	983.30	955.3	945.3	972.7	971.9	973.8	946	---	---	X
N2SC-2	983.3	956.8	946.8	973.6	972.7	973.7	947	---	---	X
N2SC-03I	983.53	956.5	946.5	973.3	972.5	973.9	948	---	---	X
N2SC-03I(R)	983.5	955.5	945.5	973.3	972.5	973.9	946	---	---	X
N2SC-07	982.9	957.9	947.9	972.8	972.0	973.0	948	---	---	X
N2SC-07S	983.2	974.3	964.3	972.9	971.6	973.4	948	X	X	---
N2SC-08	983.7	954.7	944.7	973.7	973.4	974.0	945	---	---	X
N2SC-13I	983.0	954.5	944.5	973.5	973.1	974.4	945	---	---	X
N2SC-14	983.40	957.4	947.4	970.8	970.7	971.3	947	---	---	X
NS-10	984.9	979.9	964.9	974.7	973.7	975.6	950	X	X	---
NS-15 R	983.10	983.1	983.1	982.0	971.34	982.0	NA	X	X	---
NS-16	984.7	974.7	964.7	974.5	973.9	975.3	949	X	X	---
NS-17	982.0	976.0	966.0	972.5	971.8	973.1	948	X	X	---
NS-20	985.6	979.6	969.6	978.7	978.8	979.4	954	X	X	---
NS-32	983.60	955.0	945.5	973.7	974.1	973.3	946	---	---	X
NS-37	983.6	972.6	963.1	972.6	971.3	973.6	943	X	X	---

Table 5
Seasonal Groundwater Elevation Data And Monitoring Well Usage Summary

NAPL Monitoring Report For Fall 2006
Plant Site 1 Groundwater Management Area
General Electric Company - Pittsfield, Massachusetts

Well ID	Ground Elevation (Feet AMSL)	Top of Screen Elevation (Feet AMSL)	Base of Screen Elevation (Feet AMSL)	Overall Average Groundwater Elevation (Feet AMSL)	Average Low Groundwater Elevation (Feet AMSL)	Average High Groundwater Elevation (Feet AMSL)	Till/Silt Elevation (Approximate) (Feet AMSL)	Type of Monitoring Applicable to Well in Fall 2006		
								Water Table	LNAPL	DNAPL
SILVER LAKE AREA										
SLGW-1D	981.2	951.2	946.2	978.6	977.7	979.0	<945.2	---	---	X
SLGW-1S	981.2	977.2	967.2	976.5	975.9	976.3	<945.2	X	X	---
SLGW-2D	983.6	953.6	948.6	977.8	976.8	978.0	<947.6	---	---	X
SLGW-2S	983.5	979.5	969.5	977.7	977.2	977.8	<947.5	X	X	---
SLGW-3D	977.2	951.2	946.2	978.0	977.5	978.3	<945.2	---	---	X
SLGW-3S	977.6	976.1	966.1	976.4	976.0	976.4	<945.6	X	X	---
SLGW-4D	981.8	951.8	946.8	977.6	977.1	977.8	<945.8	---	---	X
SLGW-4S	982.0	978.0	968.0	976.3	976.0	976.3	<946	X	X	---
SLGW-5D	979.6	950.6	945.6	976.1	975.9	976.3	<945.64	---	---	X
SLGW-5S	979.8	977.78	967.78	976.1	975.8	976.3	<945.78	X	X	---
SLGW-6D	982.2	952.16	947.16	976.4	975.7	976.5	<946.16	---	---	X
SLGW-6S	982.2	978.2	968.2	976.4	975.6	976.6	<946.2	X	X	---

NOTES:

1. Feet AMSL: Feet above mean sea level
2. Feet BGS: Feet below ground surface
3. N/A: Information not available.
4. Wells are considered to be applicable for DNAPL monitoring if the base of the well screen is less than 1 foot above the till/silt elevation, or if DNAPL has been observed in the well at other depths.

Table 6
Groundwater Elevation and NAPL Thickness - Fall 2006 Monitoring Round

NAPL Monitoring Report For Fall 2006
Plant Site 1 Groundwater Management Area
General Electric Company - Pittsfield, Massachusetts

Well ID	Groundwater Elevation (Feet AMSL)	LNAPL Thickness (Feet)	DNAPL Thickness (Feet)
20s Complex			
CC	978.76	0.03	ND
EE	978.98	ND	ND
FF	979.96	ND	ND
GG	981.80	ND	ND
II	979.44	ND	ND
JJ	979.07	ND	ND
LL-R	981.03	ND	ND
O-R	984.49	ND	ND
P-R	978.40	ND	ND
QQ-R	978.75	ND	ND
U	978.36	ND	ND
Y	978.57	0.01	ND
30s Complex			
95-15	978.08	ND	---
95-16	992.12	ND	ND
ES2-19	993.99	ND	ND
GMA1-10	977.17	ND	ND
GMA1-12	976.24	ND	ND
RF-02	976.75	ND	ND
RF-03	976.01	ND	NA
RF-03D	977.56	NA	NA
RF-16R	978.27	ND	ND
40s Complex			
95-17	997.14	ND	ND
East Street Area 1-North			
25	994.88	0.01	ND
49	994.60	ND	ND
ESA1N-52	994.39	ND	ND
60R	993.57	ND	ND
105	991.42	0.38	ND
106	996.49	0.33	ND
107	996.46	0.01	ND
108A	997.74	ND	ND
109A	997.06	ND	ND
118	997.40	0.01	ND
128	994.70	ND	ND
131	996.85	ND	ND
140	992.71	0.01	ND
ES1-8	995.60	ND	ND
North Caisson	980.84	0.01	ND
East Street Area 1-South			
31R	991.30	ND	ND
ESA1S-33	993.66	ND	ND
34	994.24	0.02	ND
35	994.55	0.01	ND
45	994.45	0.01	ND
46	993.94	ND	ND
72	994.25	0.01	ND

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NAPL Monitoring Report For Fall 2006
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Well ID	Groundwater Elevation (Feet AMSL)	LNAPL Thickness (Feet)	DNAPL Thickness (Feet)
72R	994.81	ND	ND
75	994.41	ND	ND
76	993.64	0.20	ND
78	994.31	ND	ND
80	985.28	ND	ND
90	982.00	ND	ND
139R	977.19	ND	ND
ES1-13	993.69	ND	ND
ES1-23R	986.84	ND	ND
GMA1-6	992.65	ND	ND
GMA1-7	974.21	ND	ND
GMA1-18	992.50	ND	ND
South Caisson	987.63	0.01	ND
East Street Area 2-North			
05-N	984.76	0.01	ND
11-N	980.43	ND	ND
14-N	987.12	0.19	ND
16-N	979.67	ND	ND
17A	1,016.80	ND	ND
17-N	979.92	0.02	ND
19-N	983.57	ND	ND
20-N	981.66	0.01	ND
23-N	980.42	0.17	ND
24-N	980.70	0.01	ND
ES1-5	983.75	NA	NA
ES1-18	1,044.27	ND	ND
ES1-20	987.50	ND	ND
ES1-27R	1,002.85	ND	ND
East Street Area 2-South			
01R	980.58	ND	ND
2	977.71	ND	ND
5	981.20	ND	ND
6	975.68	ND	ND
09R	973.68	ND	ND
10	973.5	ND	ND
13	973.53	0.06	ND
14	974.15	0.08	ND
16R	974.05	ND	ND
19	973.08	ND	ND
25R	976.98	0.38	ND
26RR	977.57	0.10	ND
28	974.28	ND	ND
29	973.57	0.35	ND
30	977.37	1.70	ND
31	977.25	ND	ND
32	978.43	ND	ND
34	974.68	ND	ND
35	976.81	ND	ND

Table 6
Groundwater Elevation and NAPL Thickness - Fall 2006 Monitoring Round

NAPL Monitoring Report For Fall 2006
Plant Site 1 Groundwater Management Area
General Electric Company - Pittsfield, Massachusetts

Well ID	Groundwater Elevation (Feet AMSL)	LNAPL Thickness (Feet)	DNAPL Thickness (Feet)
36	974.82	ND	ND
37	974.55	ND	ND
38	975.97	ND	ND
40R	972.80	ND	ND
42	976.33	ND	ND
43	975.27	ND	ND
44	975.73	ND	ND
47	973.55	0.99	ND
48	976.93	1.82	ND
49R	973.66	ND	ND
49RR	973.50	ND	ND
50	974.94	0.03	ND
51	973.73	ND	ND
ESA2S-52	973.48	ND	ND
53	973.47	ND	ND
54	972.98	ND	ND
55	973.22	0.50	ND
57	977.20	ND	ND
58	973.11	0.02	ND
59	971.92	ND	ND
ESA2S-64	972.98	ND	ND
64R	977.82	0.01	ND
64S	965.28	<0.01	ND
64S-Caisson	974.59	0.02	ND
64V	965.56	0.50	<0.01
64X(N)	973.09	0.01	ND
64X(S)	966.93	0.08	ND
64X(W)	967.10	0.01	ND
95-1	973.66	ND	ND
95-04R	974.85	0.07	ND
95-5	973.88	0.33	ND
95-07R	975.87	0.01	ND
E2SC-03I	973.22	NA	3.75
E2SC-17	974.08	NA	ND
E2SC-23	974.21	ND	ND
E2SC-24	973.10	ND	ND
3-6C-EB-22	973.44	ND	ND
3-6C-EB-25	973.10	ND	ND
3-6C-EB-28	973.29	ND	ND
ES2-01	973.61	ND	ND
ES2-02A	974.33	ND	ND
ES2-05	974.15	ND	ND
ES2-06	973.44	NA	ND
ES2-08	973.47	ND	ND
ES2-09	977.80	NA	NA
ES2-11	974.13	ND	ND
ES2-16	975.23	NA	NA
ES2-18	973.83	0.00	ND

Table 6
Groundwater Elevation and NAPL Thickness - Fall 2006 Monitoring Round

NAPL Monitoring Report For Fall 2006
Plant Site 1 Groundwater Management Area
General Electric Company - Pittsfield, Massachusetts

Well ID	Groundwater Elevation (Feet AMSL)	LNAPL Thickness (Feet)	DNAPL Thickness (Feet)
GMA1-13	973.81	0.00	ND
GMA1-14	977.88	0.00	ND
GMA1-15	973.70	0.39	ND
GMA1-16	973.72	0.03	ND
GMA1-17E	977.28	0.02	ND
GMA1-17W	979.24	ND	ND
GMA1-19	974.14	0.63	ND
GMA1-20	973.38	ND	ND
GMA1-21	973.44	ND	ND
GMA1-22	973.80	ND	ND
GMA1-23	973.70	ND	ND
GMA1-24	973.36	ND	ND
HR-C-RW-1	NS	ND	ND
HR-G1-MW-1	972.67	ND	ND
HR-G1-MW-2	972.88	ND	ND
HR-G1-MW-3	972.51	ND	ND
HR-G2-MW-1	972.55	ND	ND
HR-G2-MW-2	973.59	ND	ND
HR-G2-MW-3	973.09	ND	ND
HR-G2-RW-1	972.88	ND	ND
HR-G3-MW-1	968.25	ND	ND
HR-G3-MW-2	973.03	ND	ND
HR-G3-RW-1	972.33	ND	ND
HR-J1-MW-3	973.18	ND	ND
HR-J1-MW-2	973.33	ND	ND
HR-J1-MW-1	972.98	ND	ND
HR-J1-RW-1	972.71	ND	ND
M-R	977.79	0.01	ND
P3	984.20	ND	ND
PZ-1S	973.18	ND	ND
PZ-6S	972.88	ND	ND
RW-1(S)	968.02	0.10	<0.01
RW-1(X)	969.08	<0.01	ND
RW-2(X)	972.68	ND	ND
RW-3(X)	971.78	ND	3.80
TMP-1	973.34	ND	ND
SG-HR-1	971.63	NA	NA
Lyman Street Area			
E-4	973.08	ND	ND
E-7	975.77	ND	ND
EPA-1	971.63	ND	ND
LS-12	972.79	ND	0.02
LS-13	974.35	ND	ND
LS-21	972.94	0.07	ND
LS-24	973.13	ND	ND
LS-29	974.23	ND	ND
LS-30	972.62	ND	0.86
LS-31	973.39	0.05	0.61
LS-34	972.46	ND	0.16

Table 6
Groundwater Elevation and NAPL Thickness - Fall 2006 Monitoring Round

NAPL Monitoring Report For Fall 2006
Plant Site 1 Groundwater Management Area
General Electric Company - Pittsfield, Massachusetts

Well ID	Groundwater Elevation (Feet AMSL)	LNAPL Thickness (Feet)	DNAPL Thickness (Feet)
LS-38	971.95	ND	ND
LS-44	971.83	ND	ND
LSSC-06	973.81	ND	ND
LSSC-07	972.23	ND	0.28
LSSC-08S	971.57	ND	ND
LSSC-08I	974.40	ND	ND
LSSC-09	972.61	ND	ND
LSSC-16I	972.28	ND	ND
LSSC-16S	972.34	ND	ND
LSSC-18	973.22	ND	ND
LSSC-32	972.05	ND	ND
LSSC-33	972.05	ND	ND
LSSC-34I	972.06	ND	0.02
LSSC-34S	972.01	ND	ND
MW-3R	973.19	ND	ND
MW-4R	972.02	ND	ND
MW-6R	973.89	ND	ND
RW-1	972.88	ND	<0.01
RW-1(R)	969.06	ND	<0.01
RW-2	973.57	ND	ND
RW-3	967.57	0.13	ND
Newell Street Area I			
FW-16R	973.01	ND	NA
IA-9R	974.98	ND	NA
MM-1	976.19	ND	NA
Newell Street Area II			
GMA1-8	972.51	ND	ND
GMA1-9	973.10	ND	ND
GMA1-25	974.04	ND	ND
GMA1-26	973.63	ND	ND
GMA1-27	974.97	ND	ND
GMA1-28	973.36	ND	ND
MW-1D	973.98	ND	0.01
MW-1S	973.35	ND	0.08
N2SC-01I	973.47	ND	4.19
N2SC-01I(R)	974.99	ND	1.39
N2SC-02	974.99	ND	ND
N2SC-03I	976.20	ND	2.05
N2SC-03I(R)	972.58	ND	2.60
N2SC-04	969.51	NA	NA
N2SC-05	970.63	NA	NA
N2SC-07	975.26	ND	ND
N2SC-07S	972.84	ND	ND
N2SC-08	974.87	ND	2.05
N2SC-09I	978.27	ND	ND
N2SC-09S	978.59	ND	0.18
N2SC-13I	974.90	ND	0.66
N2SC-14	971.12	ND	1.40
N2SC-16	975.79	ND	ND

Table 6
Groundwater Elevation and NAPL Thickness - Fall 2006 Monitoring Round

NAPL Monitoring Report For Fall 2006
Plant Site 1 Groundwater Management Area
General Electric Company - Pittsfield, Massachusetts

Well ID	Groundwater Elevation (Feet AMSL)	LNAPL Thickness (Feet)	DNAPL Thickness (Feet)
NS-10	971.70	0.17	ND
NS-15R	NS	ND	ND
NS-17	972.86	ND	ND
NS-20	979.15	ND	ND
NS-30	976.30	ND	0.19
NS-32	975.42	ND	0.10
NS-37	972.58	ND	ND
Silver Lake Area			
SLGW-1S	978.22	ND	NA
SLGW-1D	976.02	NA	ND
SLGW-3S	977.37	ND	NA
SLGW-3D	976.13	NA	ND
SLGW-4S	976.88	ND	NA
SLGW-4D	976.17	NA	ND
SLGW-5S	975.97	ND	NA
SLGW-5D	975.98	NA	ND
SLGW-6S	975.56	ND	NA
SLGW-6D	976.27	NA	ND

Notes:
1. The listed wells were monitored during the fall 2006 groundwater elevation monitoring event.
2. Feet AMSL: Feet above mean sea level.
3. NS: Measuring point elevation not surveyed.
4. NA: Not applicable - Well not screened to monitor for either LNAPL (i.e., water level above top of well screen) or DNAPL (i.e., well screen does not intersect till or other confining unit).
5. ND: Not detected.
6. Wells RF-4 (40s Complex), 15R, E2SC-21, 3-6C-EB-14, ES2-14, ES2-15, ES2-17 (East Street Area 2-South), 27-N (East Street Area 2-North), 120, ES1-14 (East Street Area 1-North), B-2, GMA1-5, LS-43 (Lyman Street Area), NS-9, and NS-16 (Newell Street Area II) were unable to be measured during the fall 2006 monitoring event. These wells were either not located, inaccessible, or destroyed.

Table 7
Groundwater Elevation and NAPL Monitoring/Recovery
Data Summary: Fall 2006

NAPL Monitoring Report for Fall 2006
Plant Site 1 Groundwater Management Area
General Electric Company - Pittsfield, Massachusetts

Well Name	Number of Measurements	Measuring Point Elevation (Feet AMSL)	Depth to Water		LNAPL Observations			DNAPL Observations			Manual NAPL Recovery	
			Minimum (Feet AMP)	Maximum (Feet AMP)	Times Observed	Minimum Thickness (Feet)	Maximum Thickness (Feet)	Times Observed	Minimum Thickness (Feet)	Maximum Thickness (Feet)	LNAPL Recovery (Gallons)	DNAPL Recovery (Gallons)
40s Complex												
95-17	1	1,007.67	23.94	23.94	0	---	---	0	---	---	0.000	0.000
RF-04	1	1,011.99	Buried									
30s Complex												
95-15	1	986.38	8.30	8.30	0	---	---	0	---	---	0.000	0.000
95-16	1	1,007.65	15.53	15.53	0	---	---	0	---	---	0.000	0.000
ES2-19	1	1,007.22	13.23	13.23	0	---	---	0	---	---	0.000	0.000
GMA1-10	1	984.86	7.69	7.69	0	---	---	0	---	---	0.000	0.000
GMA1-12	1	992.26	16.02	16.02	0	---	---	0	---	---	0.000	0.000
RF-02	1	982.43	5.68	5.68	0	---	---	0	---	---	0.000	0.000
RF-03	1	985.40	9.39	9.39	0	---	---	0	---	---	0.000	0.000
RF-03D	1	985.31	7.75	7.75	0	---	---	0	---	---	0.000	0.000
RF-16	1	987.91	9.64	9.64	0	---	---	0	---	---	0.000	0.000
20s Complex												
CC	2	998.84	20.11	20.25	2	0.03	0.03	0	---	---	0.005	0.000
EE	2	1,004.27	25.29	25.42	0	---	---	0	---	---	0.000	0.000
FF	1	1,005.70	25.74	25.74	0	---	---	0	---	---	0.000	0.000
GG	1	1,007.40	25.60	25.60	0	---	---	0	---	---	0.000	0.000
II	2	1,007.26	27.82	28.49	1	0.03	0.03	0	---	---	0.005	0.000
JJ	1	1,006.38	27.31	27.31	0	---	---	0	---	---	0.000	0.000
LL-R	1	1,010.39	29.36	29.36	0	---	---	0	---	---	0.000	0.000
O-R	1	1,000.42	15.93	15.93	0	---	---	0	---	---	0.000	0.000
P-R	1	1,005.01	26.61	26.61	0	---	---	0	---	---	0.000	0.000
QQ-R	1	998.32	19.57	19.57	0	---	---	0	---	---	0.000	0.000
U	1	998.89	20.53	20.53	0	---	---	0	---	---	0.000	0.000
Y	1	1,002.86	24.30	24.30	1	0.01	0.01	0	---	---	0.000	0.000
East Street Area 2 - South												
01R	1	992.72	12.14	12.14	0	---	---	0	---	---	0.000	0.000
2	2	995.64	17.93	18.60	1	0.01	0.01	0	---	---	0.002	0.000
5	2	996.10	14.90	15.58	0	---	---	0	---	---	0.000	0.000

Table 7
Groundwater Elevation and NAPL Monitoring/Recovery
Data Summary: Fall 2006

NAPL Monitoring Report for Fall 2006
Plant Site 1 Groundwater Management Area
General Electric Company - Pittsfield, Massachusetts

Well Name	Number of Measurements	Measuring Point Elevation (Feet AMSL)	Depth to Water		LNAPL Observations			DNAPL Observations			Manual NAPL Recovery	
			Minimum (Feet AMP)	Maximum (Feet AMP)	Times Observed	Minimum Thickness (Feet)	Maximum Thickness (Feet)	Times Observed	Minimum Thickness (Feet)	Maximum Thickness (Feet)	LNAPL Recovery (Gallons)	DNAPL Recovery (Gallons)
6	1	991.18	15.50	15.50	0	---	---	0	---	---	0.000	0.000
09R	1	986.88	13.20	13.20	0	---	---	0	---	---	0.000	0.000
10	1	987.95	14.45	14.45	0	---	---	0	---	---	0.000	0.000
13	6	990.88	16.90	18.24	5	0.06	0.22	0	---	---	0.082	0.000
14	6	991.61	17.05	18.38	6	0.02	0.23	0	---	---	0.090	0.000
16R	1	987.10	13.05	13.05	0	---	---	0	---	---	0.000	0.000
19	26	983.59	9.95	11.74	0	---	---	0	---	---	0.000	0.000
25R	9	998.31	21.68	26.22	9	0.11	5.19	0	---	---	3.653	0.000
26RR	5	1,000.58	21.00	23.54	5	0.09	0.44	0	---	---	0.124	0.000
28	1	991.86	17.58	17.58	0	---	---	0	---	---	0.000	0.000
29	2	991.59	18.35	19.70	1	0.35	0.98	0	---	---	0.160	0.000
30	2	989.34	13.55	17.10	2	1.70	4.30	0	---	---	0.701	0.000
31	1	990.60	13.35	13.35	0	---	---	0	---	---	0.000	0.000
32	1	990.81	12.38	12.38	0	---	---	0	---	---	0.000	0.000
34	1	982.54	7.86	7.86	0	---	---	0	---	---	0.000	0.000
35	1	982.81	6.00	6.00	0	---	---	0	---	---	0.000	0.000
36	1	983.02	8.20	8.20	0	---	---	0	---	---	0.000	0.000
37	1	980.37	5.82	5.82	0	---	---	0	---	---	0.000	0.000
38	1	980.77	4.80	4.80	0	---	---	0	---	---	0.000	0.000
40R	16	991.60	13.92	18.80	0	---	---	0	---	---	0.000	0.000
42	2	988.33	12.00	13.89	0	---	---	0	---	---	0.000	0.000
43	2	989.67	14.40	14.69	0	---	---	0	---	---	0.000	0.000
44	1	988.33	12.60	12.60	0	---	---	0	---	---	0.000	0.000
47	2	991.09	18.46	19.58	2	0.99	1.38	0	---	---	0.225	0.000
48	6	992.39	16.20	18.40	6	1.18	2.30	0	---	---	1.507	0.000
49R	7	988.71	14.50	15.98	0	---	---	0	---	---	0.000	0.000
49RR	6	989.80	15.68	17.06	0	---	---	0	---	---	0.000	0.000
50	3	985.79	10.70	11.52	3	0.03	0.57	0	---	---	0.144	0.000
51	1	985.38	11.65	11.65	0	---	---	0	---	---	0.000	0.000
ESA2S-52	1	985.18	11.70	11.70	0	---	---	0	---	---	0.000	0.000

Table 7
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Plant Site 1 Groundwater Management Area
General Electric Company - Pittsfield, Massachusetts

Well Name	Number of Measurements	Measuring Point Elevation (Feet AMSL)	Depth to Water		LNAPL Observations			DNAPL Observations			Manual NAPL Recovery	
			Minimum (Feet AMP)	Maximum (Feet AMP)	Times Observed	Minimum Thickness (Feet)	Maximum Thickness (Feet)	Times Observed	Minimum Thickness (Feet)	Maximum Thickness (Feet)	LNAPL Recovery (Gallons)	DNAPL Recovery (Gallons)
53	2	986.90	13.43	14.11	0	---	---	0	---	---	0.000	0.000
54	1	985.78	12.80	12.80	0	---	---	0	---	---	0.000	0.000
55	6	989.45	16.20	18.20	5	0.30	1.30	0	---	---	0.633	0.000
57	2	989.80	12.60	13.28	0	---	---	0	---	---	0.000	0.000
58	2	985.79	12.70	13.51	2	0.02	0.02	0	---	---	0.000	0.000
59	1	986.32	14.40	14.40	0	---	---	0	---	---	0.000	0.000
64	1	984.98	12.00	12.00	0	---	---	0	---	---	0.000	0.000
64R	26	993.37	15.54	16.75	16	0.01	0.04	0	---	---	0.000	0.000
64S	26	984.48	14.46	19.30	6	0.00	0.02	0	---	---	0.000	0.000
64S - Caisson	25	984.40	9.50	11.42	19	0.01	0.15	0	---	---	0.000	0.000
64V	25	987.29	21.60	22.30	25	0.10	0.50	0	---	---	0.000	0.000
64X(N)	25	984.83	10.97	13.85	20	0.01	0.03	0	---	---	0.000	0.000
64X(S)	25	981.56	13.20	16.40	25	0.02	0.20	0	---	---	0.000	0.000
64X(W)	25	984.87	16.98	19.95	22	0.01	0.05	0	---	---	0.000	0.000
95-01	6	983.77	9.52	11.03	0	---	---	0	---	---	0.000	0.000
95-04	2	988.70	16.29	16.42	2	2.00	2.13	0	---	---	0.328	0.000
95-04R	5	988.70	14.18	16.05	5	0.70	1.53	0	---	---	2.489	0.000
95-05	2	989.45	15.88	17.03	2	0.33	0.67	0	---	---	0.109	0.000
95-07	1	994.91	22.60	22.60	1	3.65	3.65	0	---	---	0.597	0.000
95-07R	5	994.91	18.30	19.72	5	0.01	0.02	0	---	---	0.031	0.000
E2SC-03I	5	982.12	8.40	10.45	0	---	---	5	3.75	8.30	0.000	3.900
E2SC-17	5	985.38	10.75	12.25	0	---	---	0	---	---	0.000	0.000
E2SC-21	1	981.70	0.00	0.00	0	---	---	0	---	---	0.000	0.000
E2SC-23	6	992.07	15.25	18.10	0	---	---	0	---	---	0.000	0.000
E2SC-24	6	987.90	14.20	15.90	0	---	---	0	---	---	0.000	0.000
3-6C-EB-22	6	986.94	12.87	14.41	0	---	---	0	---	---	0.000	0.000
3-6C-EB-25	1	986.31	12.70	12.70	0	---	---	0	---	---	0.000	0.000
3-6C-EB-28	1	985.79	12.50	12.50	0	---	---	0	---	---	0.000	0.000
ES2-01	1	985.36	11.75	11.75	0	---	---	0	---	---	0.000	0.000
ES2-02A	2	979.63	5.30	7.06	0	---	---	0	---	---	0.000	0.000

Table 7
Groundwater Elevation and NAPL Monitoring/Recovery
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General Electric Company - Pittsfield, Massachusetts

Well Name	Number of Measurements	Measuring Point Elevation (Feet AMSL)	Depth to Water		LNAPL Observations			DNAPL Observations			Manual NAPL Recovery	
			Minimum (Feet AMP)	Maximum (Feet AMP)	Times Observed	Minimum Thickness (Feet)	Maximum Thickness (Feet)	Times Observed	Minimum Thickness (Feet)	Maximum Thickness (Feet)	LNAPL Recovery (Gallons)	DNAPL Recovery (Gallons)
ES2-05	1	990.65	16.50	16.50	0	---	---	0	---	---	0.000	0.000
ES2-06	6	986.00	11.94	13.64	0	---	---	0	---	---	0.000	0.000
ES2-08	1	994.87	21.40	21.40	0	---	---	0	---	---	0.000	0.000
ES2-09	1	991.25	0.00	0.00	0	---	---	0	---	---	0.000	0.000
ES2-11	1	985.05	10.92	10.92	0	---	---	0	---	---	0.000	0.000
ES2-16	1	986.88	0.00	0.00	0	---	---	0	---	---	0.000	0.000
ES2-18	1	986.86	13.03	13.03	0	---	---	0	---	---	0.000	0.000
HR-C-RW-1	1	N/A	7.70	7.70	0	---	---	0	---	---	0.000	0.000
HR-G1-MW-1	2	982.42	9.75	10.50	0	---	---	0	---	---	0.000	0.000
HR-G1-MW-2	2	980.23	7.35	8.05	0	---	---	0	---	---	0.000	0.000
HR-G1-MW-3	2	980.21	7.70	8.48	0	---	---	0	---	---	0.000	0.000
HR-G2-MW-1	6	982.60	8.50	11.15	0	---	---	0	---	---	0.000	0.000
HR-G2-MW-2	6	981.39	7.20	9.05	0	---	---	0	---	---	0.000	0.000
HR-G2-MW-3	6	987.14	13.40	15.15	0	---	---	0	---	---	0.000	0.000
HR-G2-RW-1	7	976.88	4.50	6.71	0	---	---	0	---	---	0.000	0.000
HR-G3-MW-1	2	987.18	14.20	14.92	0	---	---	0	---	---	0.000	0.000
HR-G3-MW-2	2	987.88	14.85	15.50	0	---	---	0	---	---	0.000	0.000
HR-G3-RW-1	2	977.78	5.45	5.56	0	---	---	0	---	---	0.000	0.000
HR-J1-MW-1	2	985.95	12.97	13.31	0	---	---	0	---	---	0.000	0.000
HR-J1-MW-2	2	983.56	10.23	10.58	0	---	---	0	---	---	0.000	0.000
HR-J1-MW-3	2	987.68	14.50	14.86	0	---	---	0	---	---	0.000	0.000
HR-J1-RW-1	2	975.05	2.34	2.78	0	---	---	0	---	---	0.000	0.000
GMA1-13	1	991.41	17.60	17.60	0	---	---	0	---	---	0.000	0.000
GMA1-14	6	997.29	9.42	20.19	3	0.01	0.03	0	---	---	0.005	0.000
GMA1-15	18	988.59	15.00	16.60	18	0.26	0.84	0	---	---	1.671	0.000
GMA1-16	18	986.82	10.60	14.30	18	0.03	0.65	0	---	---	0.564	0.000
GMA1-17E	6	993.03	14.83	16.07	6	0.01	0.02	0	---	---	0.003	0.000
GMA1-17W	9	992.63	16.54	23.20	3	<0.01	4.20	0	---	---	0.414	0.000
GMA1-19	26	984.28	10.22	12.20	26	0.02	1.22	0	---	---	1.858	0.000
GMA1-20	25	983.49	9.70	11.30	0	---	---	0	---	---	0.000	0.000

Table 7
Groundwater Elevation and NAPL Monitoring/Recovery
Data Summary: Fall 2006

NAPL Monitoring Report for Fall 2006
Plant Site 1 Groundwater Management Area
General Electric Company - Pittsfield, Massachusetts

Well Name	Number of Measurements	Measuring Point Elevation (Feet AMSL)	Depth to Water		LNAPL Observations			DNAPL Observations			Manual NAPL Recovery	
			Minimum (Feet AMP)	Maximum (Feet AMP)	Times Observed	Minimum Thickness (Feet)	Maximum Thickness (Feet)	Times Observed	Minimum Thickness (Feet)	Maximum Thickness (Feet)	LNAPL Recovery (Gallons)	DNAPL Recovery (Gallons)
GMA1-21	26	985.68	11.72	13.45	0	---	---	0	---	---	0.000	0.000
GMA1-22	18	988.45	13.15	15.80	0	---	---	0	---	---	0.000	0.000
GMA1-23	18	986.16	11.85	13.55	0	---	---	0	---	---	0.000	0.000
GMA1-24	20	983.81	9.90	11.64	1	0.01	0.01	0	---	---	0.002	0.000
M-R	2	998.19	20.41	20.61	2	0.01	0.01	0	---	---	0.002	0.000
P3	2	989.25	5.05	5.23	0	---	---	0	---	---	0.000	0.000
PZ-1S	2	989.93	16.75	17.80	0	---	---	0	---	---	0.000	0.000
PZ-6S	1	984.13	11.25	11.25	0	---	---	0	---	---	0.000	0.000
RW-1(S)	25	987.23	18.90	19.95	25	0.01	0.34	2	<0.01	<0.01	0.000	0.000
RW-1(X)	25	982.68	13.20	14.90	10	<0.01	0.30	0	---	---	0.000	0.000
RW-2(X)	25	985.96	12.20	15.50	1	---	---	0	---	---	0.000	0.000
RW-3(X)	25	980.28	8.10	10.80	0	---	---	25	1.40	3.80	0.000	0.000
SG-HR-1	26	990.73	16.73	19.89	0	---	---	0	---	---	0.000	0.000
TMP-1	2	992.74	19.32	19.40	0	---	---	0	---	---	0.000	0.000
East Street Area 2 - North												
05-N	2	1,009.23	24.48	24.61	1	0.01	0.01	0	---	---	0.000	0.000
11-N	1	1,010.85	30.42	30.42	0	---	---	0	---	---	0.000	0.000
14-N	2	1,010.53	23.59	23.63	2	0.13	0.19	0	---	---	0.021	0.000
16-N	2	1,010.65	30.98	31.50	0	---	---	0	---	---	0.000	0.000
17-N	2	1,010.49	30.59	31.10	2	0.02	0.05	0	---	---	0.008	0.000
17A	1	1,023.86	7.06	7.06	0	---	---	0	---	---	0.000	0.000
19-N	1	1,010.68	0.00	0.00	0	---	---	0	---	---	0.000	0.000
20-N	1	1,010.66	29.01	29.01	1	0.01	0.01	0	---	---	0.000	0.000
23-N	2	1,011.13	30.87	31.26	2	0.06	0.17	0	---	---	0.010	0.000
24-N	1	1,010.50	29.81	29.81	1	0.01	0.01	0	---	---	0.000	0.000
95-12	1	1,010.20	0.00	0.00	0	---	---	0	---	---	0.000	0.000
ES1-05	3	1,023.33	36.91	39.58	0	---	---	0	---	---	0.000	0.000
ES1-18	1	1,049.71	5.44	5.44	0	---	---	0	---	---	0.000	0.000
ES1-20	3	1,001.56	14.01	14.11	0	---	---	0	---	---	0.000	0.000
ES1-27R	1	1,023.19	20.34	20.34	0	---	---	0	---	---	0.000	0.000

Table 7
Groundwater Elevation and NAPL Monitoring/Recovery
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Plant Site 1 Groundwater Management Area
General Electric Company - Pittsfield, Massachusetts

Well Name	Number of Measurements	Measuring Point Elevation (Feet AMSL)	Depth to Water		LNAPL Observations			DNAPL Observations			Manual NAPL Recovery	
			Minimum (Feet AMP)	Maximum (Feet AMP)	Times Observed	Minimum Thickness (Feet)	Maximum Thickness (Feet)	Times Observed	Minimum Thickness (Feet)	Maximum Thickness (Feet)	LNAPL Recovery (Gallons)	DNAPL Recovery (Gallons)
East Street Area 1 - North												
25	1	1,000.70	5.83	5.83	1	0.01	0.01	0	---	---	0.000	0.000
49	2	999.90	5.30	5.72	1	0.01	0.01	0	---	---	0.002	0.000
ESA1N-52	2	999.26	4.87	4.91	0	---	---	0	---	---	0.000	0.000
60R	1	1,004.03	10.46	10.46	0	---	---	0	---	---	0.000	0.000
105	2	1,002.85	8.39	11.78	2	0.38	0.80	0	---	---	0.163	0.000
106	2	1,004.06	7.88	9.59	2	0.33	0.49	0	---	---	0.080	0.000
107	2	1,003.86	7.41	7.73	1	0.01	0.01	0	---	---	0.000	0.000
108A	1	1,007.79	10.05	10.05	0	---	---	0	---	---	0.000	0.000
109A	1	1,005.43	8.37	8.37	0	---	---	0	---	---	0.000	0.000
118	1	1,001.50	4.11	4.11	1	0.01	0.01	0	---	---	0.000	0.000
128	1	1,001.41	6.71	6.71	0	---	---	0	---	---	0.000	0.000
131	3	1,001.18	4.33	4.97	1	0.05	0.05	0	---	---	0.002	0.000
140	2	1,000.30	7.53	7.60	1	0.01	0.01	0	---	---	0.000	0.000
ES1-08	2	1,000.85	5.25	5.40	0	---	---	0	---	---	0.000	0.000
North Caisson	26	997.84	16.63	19.90	23	0.01	1.98	0	---	---	1.585	0.000
East Street Area 1 - South												
31R	6	1,000.23	8.93	8.98	0	---	---	0	---	---	0.000	0.000
33	5	999.50	5.84	6.90	0	---	---	0	---	---	0.000	0.000
34	6	999.90	5.68	6.22	6	0.01	0.03	0	---	---	0.015	0.000
35	2	1,000.15	5.61	6.00	2	0.01	0.04	0	---	---	0.007	0.000
45	2	1,000.10	5.66	6.03	2	0.01	0.09	0	---	---	0.015	0.000
46	1	999.80	5.86	5.86	0	---	---	0	---	---	0.000	0.000
72	6	1,000.62	6.38	7.03	5	0.01	0.16	0	---	---	0.034	0.000
72R	6	1,000.92	6.11	7.00	0	---	---	0	---	---	0.000	0.000
75	1	1,000.65	6.24	6.24	0	---	---	0	---	---	0.000	0.000
76	2	1,000.45	7.00	7.44	2	0.20	0.68	0	---	---	0.111	0.000
78	1	997.61	3.30	3.30	0	---	---	0	---	---	0.000	0.000
80	1	989.98	4.70	4.70	0	---	---	0	---	---	0.000	0.000
90	1	987.65	5.65	5.65	0	---	---	0	---	---	0.000	0.000
139R	1	986.91	9.72	9.72	0	---	---	0	---	---	0.000	0.000

Table 7
Groundwater Elevation and NAPL Monitoring/Recovery
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General Electric Company - Pittsfield, Massachusetts

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			Minimum (Feet AMP)	Maximum (Feet AMP)	Times Observed	Minimum Thickness (Feet)	Maximum Thickness (Feet)	Times Observed	Minimum Thickness (Feet)	Maximum Thickness (Feet)	LNAPL Recovery (Gallons)	DNAPL Recovery (Gallons)
ES1-13	1	999.93	6.24	6.24	0	---	---	0	---	---	0.000	0.000
ES1-23R	1	989.94	3.10	3.10	0	---	---	0	---	---	0.000	0.000
GMA1-6	1	1,000.44	7.79	7.79	0	---	---	0	---	---	0.000	0.000
GMA1-7	1	985.81	11.60	11.60	0	---	---	0	---	---	0.000	0.000
GMA1-18	1	998.29	5.79	5.79	0	---	---	0	---	---	0.000	0.000
South Caisson	26	1,001.11	7.60	14.63	20	0.01	0.07	0	---	---	0.000	0.000
Lyman Street Area												
E-04	1	987.98	14.90	14.90	0	---	---	0	---	---	0.000	0.000
E-07	1	982.87	7.10	7.10	0	---	---	0	---	---	0.000	0.000
EPA-01	5	983.04	11.34	12.60	0	---	---	0	---	---	0.000	0.000
LS-12	1	985.49	12.70	12.70	0	---	---	1	0.02	0.02	0.000	0.000
LS-21	1	983.42	10.55	10.55	1	0.07	0.07	0	---	---	0.000	0.000
LS-29	1	988.25	14.02	14.02	0	---	---	0	---	---	0.000	0.000
LS-30	5	986.44	13.40	14.40	0	---	---	3	0.80	2.70	0.000	0.730
LS-31	5	987.09	13.05	14.50	3	0.03	0.40	4	0.22	1.02	0.065	0.080
LS-34	2	985.79	13.33	13.94	0	---	---	2	0.16	0.98	0.000	0.160
LS-38	5	986.95	14.78	16.06	0	---	---	0	---	---	0.000	0.000
LS-44	5	980.78	8.90	10.20	0	---	---	0	---	---	0.000	0.000
LSSC-06	1	984.91	11.10	11.10	0	---	---	0	---	---	0.000	0.000
LSSC-07	23	982.48	9.90	11.60	0	---	---	17	0.23	0.43	0.000	1.172
LSSC-08I	22	983.13	11.24	13.10	0	---	---	9	<0.01	0.04	0.000	0.023
LSSC-08S	5	983.11	11.50	12.82	0	---	---	0	---	---	0.000	0.000
LSSC-09	1	985.06	12.45	12.45	0	---	---	0	---	---	0.000	0.000
LSSC-16I	5	980.88	8.32	9.65	0	---	---	1	0.02	0.02	0.000	0.003
LSSC-16S	1	981.37	9.03	9.03	0	---	---	0	---	---	0.000	0.000
LSSC-18	5	987.32	13.68	14.97	0	---	---	0	---	---	0.000	0.000
LSSC-32	5	980.68	8.28	9.77	0	---	---	0	---	---	0.000	0.000
LSSC-33	5	980.49	8.35	9.60	0	---	---	0	---	---	0.000	0.000
LSSC-34I	2	984.74	12.68	13.08	0	---	---	2	0.02	0.23	0.000	0.000
LSSC-34S	1	985.01	13.00	13.00	0	---	---	0	---	---	0.000	0.000

Table 7
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Well Name	Number of Measurements	Measuring Point Elevation (Feet AMSL)	Depth to Water		LNAPL Observations			DNAPL Observations			Manual NAPL Recovery	
			Minimum (Feet AMP)	Maximum (Feet AMP)	Times Observed	Minimum Thickness (Feet)	Maximum Thickness (Feet)	Times Observed	Minimum Thickness (Feet)	Maximum Thickness (Feet)	LNAPL Recovery (Gallons)	DNAPL Recovery (Gallons)
MW-3R	1	983.54	10.35	10.35	0	---	---	0	---	---	0.000	0.000
MW-4R	2	980.82	8.80	9.78	0	---	---	0	---	---	0.000	0.000
MW-6R	1	985.14	11.25	11.25	0	---	---	0	---	---	0.000	0.000
RW-1	22	984.88	11.47	13.50	0	---	---	19	<0.01	0.29	0.000	0.000
RW-1(R)	22	985.07	14.69	16.80	1	0.01	0.01	1	1.07	1.07	0.000	0.000
RW-2	22	987.82	13.20	15.30	0	---	---	0	---	---	0.000	0.000
RW-3	23	984.08	16.23	17.04	22	0.01	0.20	0	---	---	0.000	0.000
BM-2A	26	986.32	15.20	16.58	0	---	---	0	---	---	0.000	0.000
Newell Street Area I												
FW-16R	1	986.51	13.70	13.70	0	---	---	0	---	---	0.000	0.000
IA-9R	1	984.14	10.96	10.96	0	---	---	0	---	---	0.000	0.000
MM-1	1	988.04	11.85	11.85	0	---	---	0	---	---	0.000	0.000
Newell Street Area II												
GMA1-8	3	981.66	9.15	10.11	0	---	---	0	---	---	0.000	0.000
GMA1-9	3	982.36	9.26	10.16	0	---	---	0	---	---	0.000	0.000
GMA1-25	3	987.19	13.15	14.20	0	---	---	0	---	---	0.000	0.000
GMA1-26	3	985.53	11.90	12.72	0	---	---	0	---	---	0.000	0.000
GMA1-27	3	983.29	8.32	8.94	0	---	---	0	---	---	0.000	0.000
GMA1-28	3	983.49	10.13	11.10	0	---	---	0	---	---	0.000	0.000
MW-1D	3	987.20	13.22	14.35	0	---	---	1	0.01	0.15	0.000	0.021
MW-1S	3	986.60	11.75	14.20	0	---	---	1	0.06	0.44	0.000	0.072
N2SC-01I	24	984.99	10.60	13.55	0	---	---	11	2.60	4.19	0.000	1.336
N2SC-01I(R)	22	985.98	13.26	16.21	0	---	---	18	0.16	2.54	0.000	2.130
N2SC-02	7	985.56	10.10	12.25	0	---	---	1	0.04	0.04	0.000	0.006
N2SC-03I	24	985.33	9.50	12.92	0	---	---	8	1.35	2.68	0.000	0.676
N2SC-03I(R)	24	986.08	12.56	14.40	0	---	---	18	0.25	2.75	0.000	0.000
N2SC-04	2	981.56	10.36	11.29	0	---	---	0	---	---	0.000	0.000
N2SC-07	7	984.61	9.25	11.40	0	---	---	3	0.10	0.51	0.000	0.116
N2SC-07S	3	982.93	10.09	11.15	0	---	---	0	---	---	0.000	0.000
N2SC-08	7	986.07	10.64	12.70	0	---	---	5	2.05	2.60	0.000	1.524

Table 7
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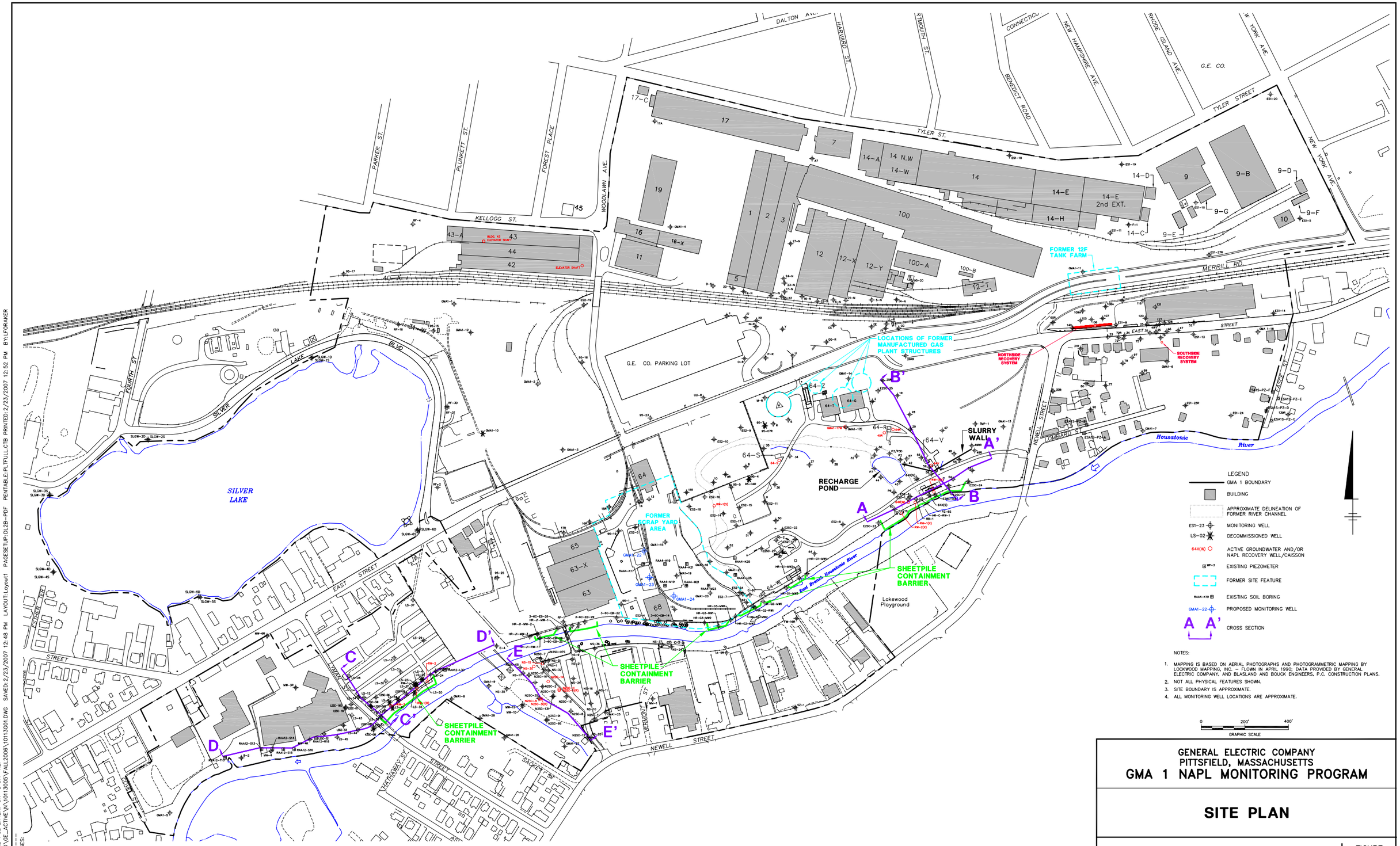
			Minimum (Feet AMP)	Maximum (Feet AMP)	Times Observed	Minimum Thickness (Feet)	Maximum Thickness (Feet)	Times Observed	Minimum Thickness (Feet)	Maximum Thickness (Feet)	LNAPL Recovery (Gallons)	DNAPL Recovery (Gallons)
N2SC-09I	3	987.77	9.50	13.30	0	---	---	2	0.06	0.09	0.000	0.000
N2SC-13I	3	984.75	9.85	10.70	0	---	---	2	0.66	0.82	0.000	0.010
N2SC-14	22	985.06	13.18	15.15	0	---	---	19	0.50	2.05	0.000	0.000
N2SC-16	2	985.62	9.83	10.77	0	---	---	0	---	---	0.000	0.000
NS-10	4	984.59	13.05	16.20	4	0.17	0.61	0	---	---	0.659	0.000
NS-15R	24	N/A	9.70	12.24	0	---	---	0	---	---	0.000	0.000
NS-17	3	984.64	11.78	12.78	0	---	---	0	---	---	0.000	0.000
NS-20	3	985.29	5.95	6.50	0	---	---	0	---	---	0.000	0.000
NS-30	24	985.99	9.18	11.60	0	---	---	13	0.05	1.00	0.000	0.261
NS-32	23	986.20	10.20	12.45	0	---	---	11	0.03	0.45	0.000	0.119
NS-37	1	986.20	13.62	13.62	0	---	---	0	---	---	0.000	0.000
Silver Lake Area												
SLGW-1S	1	982.94	6.92	6.92	0	---	---	0	---	---	0.000	0.000
SLGW-1D	1	983.13	4.91	4.91	0	---	---	0	---	---	0.000	0.000
SLGW-2S	1	985.39	0.00	0.00	0	---	---	0	---	---	0.000	0.000
SLGW-2D	1	985.10	0.00	0.00	0	---	---	0	---	---	0.000	0.000
SLGW-3S	1	980.21	4.08	4.08	0	---	---	0	---	---	0.000	0.000
SLGW-3D	1	979.14	1.77	1.77	0	---	---	0	---	---	0.000	0.000
SLGW-4S	1	984.02	7.85	7.85	0	---	---	0	---	---	0.000	0.000
SLGW-4D	1	983.51	6.63	6.63	0	---	---	0	---	---	0.000	0.000
SLGW-5S	1	979.12	3.14	3.14	0	---	---	0	---	---	0.000	0.000
SLGW-5D	1	979.30	3.33	3.33	0	---	---	0	---	---	0.000	0.000
SLGW-6S	1	981.66	5.39	5.39	0	---	---	0	---	---	0.000	0.000
SLGW-6D	1	981.63	6.07	6.07	0	---	---	0	---	---	0.000	0.000
Silver Lake Gauge	26	980.30	3.68	4.98	0	---	---	0	---	---	0.000	0.000

NOTES:

1. Measurements collected between July 1, 2006 and December 31, 2006.
2. Feet AMSL = Feet above mean sea level.
3. Feet BMP = Feet below measuring point.
4. N/A - Not Applicable

Figures



LEGEND

- GMA 1 BOUNDARY
- BUILDING
- APPROXIMATE DELINEATION OF FORMER RIVER CHANNEL
- ES1-23 MONITORING WELL
- LS-02 DECOMMISSIONED WELL
- 64X(W) ACTIVE GROUNDWATER AND/OR NAPL RECOVERY WELL/CAISSON
- MW-3 EXISTING PIEZOMETER
- FORMER SITE FEATURE
- RAA4-K19 EXISTING SOIL BORING
- GMA1-22 PROPOSED MONITORING WELL
- A A' CROSS SECTION

NOTES:

1. MAPPING IS BASED ON AERIAL PHOTOGRAPHS AND PHOTOGRAMMETRIC MAPPING BY LOCKWOOD MAPPING, INC. – FLOWN IN APRIL 1990; DATA PROVIDED BY GENERAL ELECTRIC COMPANY, AND BLASLAND AND BOUCK ENGINEERS, P.C. CONSTRUCTION PLANS.
2. NOT ALL PHYSICAL FEATURES SHOWN.
3. SITE BOUNDARY IS APPROXIMATE.
4. ALL MONITORING WELL LOCATIONS ARE APPROXIMATE.

0 200' 400'
GRAPHIC SCALE

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

GMA 1 NAPL MONITORING PROGRAM

SITE PLAN

ARCADIS BBL
Infrastructure, environment, facilities

FIGURE
1

SYR-85-NJR RCB PGL LAYER: ON=*, OFF=REF
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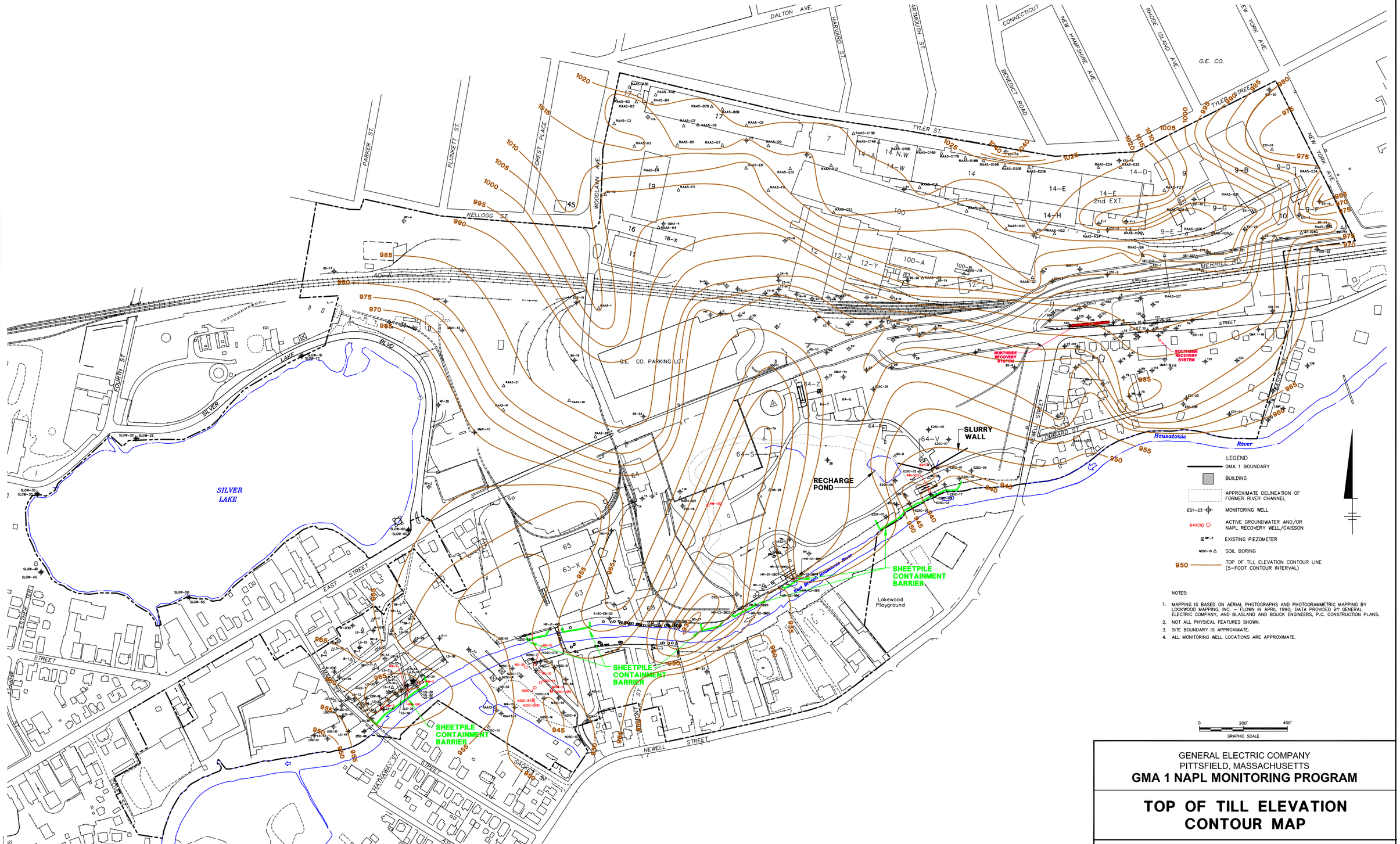
10113X01



NOTES:

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2. NOT ALL PHYSICAL FEATURES SHOWN.
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4. ALL MONITORING WELL LOCATIONS ARE APPROXIMATE.

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

GMA 1 NAPL MONITORING PROGRAM

TOP OF TILL ELEVATION CONTOUR MAP

ARCADIS BBL
Infrastructure, environment, facilities

FIGURE
2

SYR=RLP NES PGL LAYER: ON=*; OFF=REF; (FRZ)
G:\CAD\GE-CAD\GE_ACTIVE\VN_10113005\FALL2006\10113B06.DWG SAVED: 2/23/2007 12:53 PM LAYOUT: 2 PAGESETUP: DLZB-PDF PENTABLE: PLTFULL.CTB PRINTED: 2/23/2007 12:53 PM BY: LFORAKER
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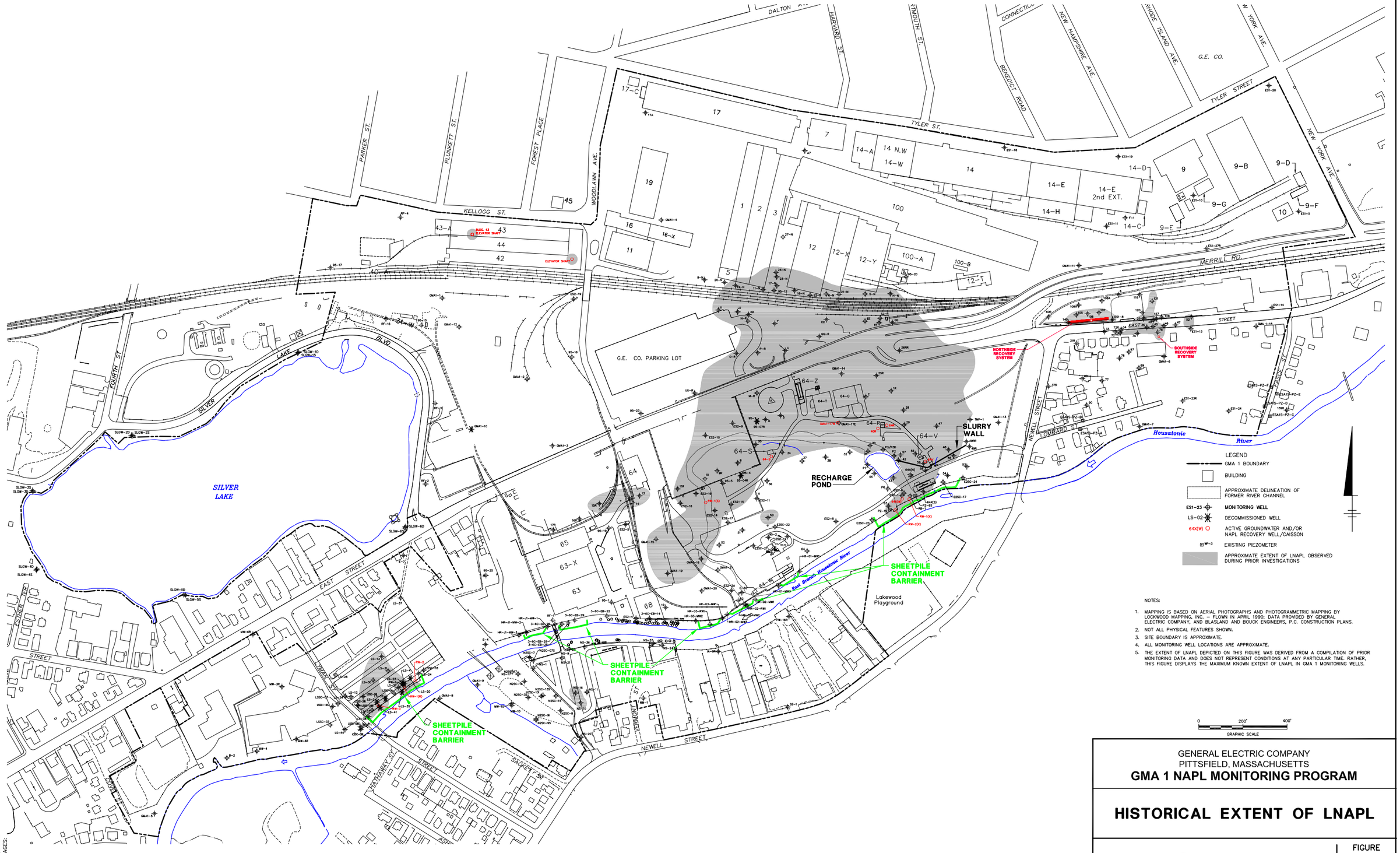

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

GMA 1 NAPL MONITORING PROGRAM

HISTORICAL EXTENT OF LNAPL

ARCADIS BBL
Infrastructure, environment, facilities

FIGURE
3

SYR-RLP RCB PGL LAYER: ON=*, OFF=REF, |BLOG-SHD
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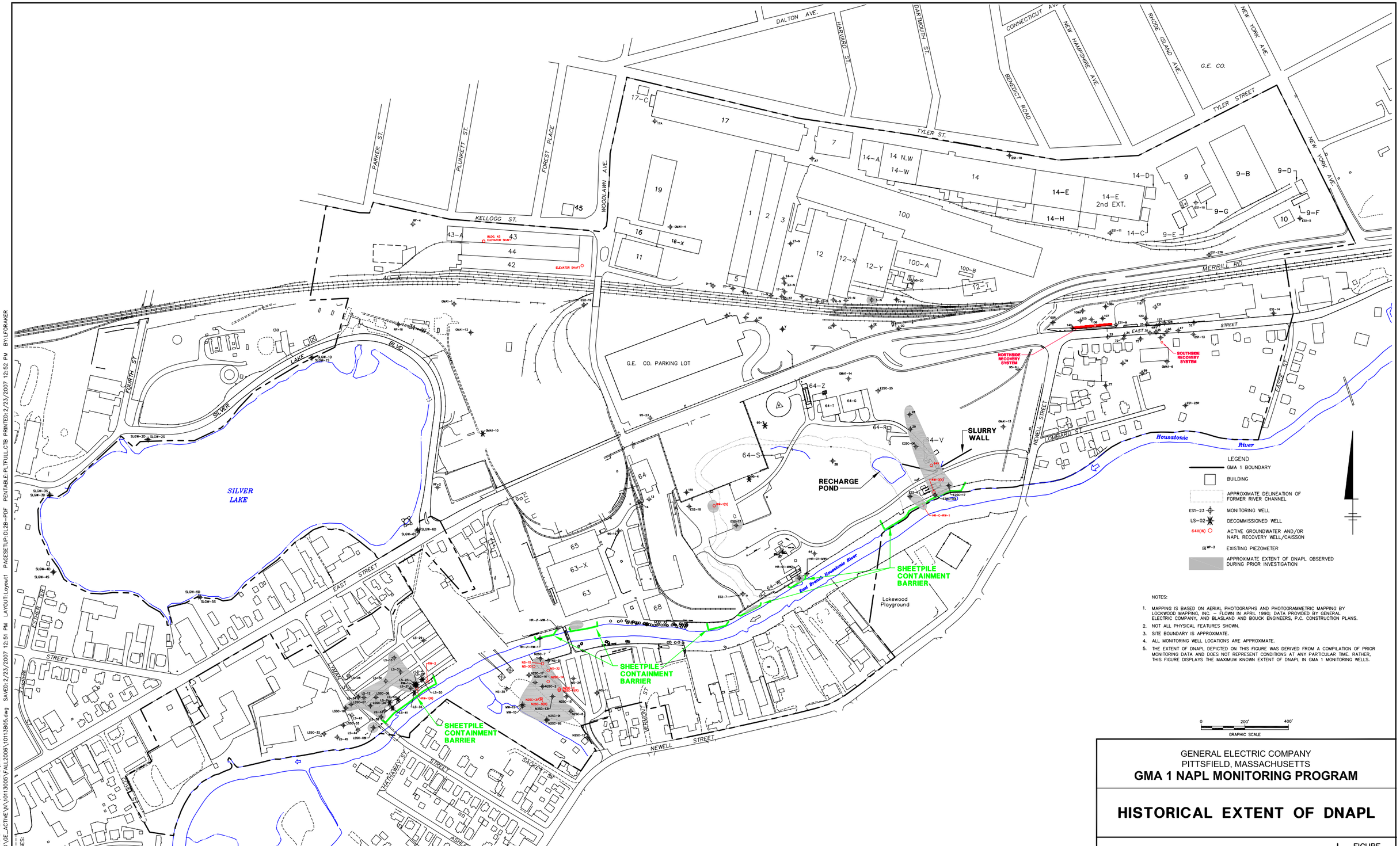


NOTES:

1. MAPPING IS BASED ON AERIAL PHOTOGRAPHS AND PHOTOGRAMMETRIC MAPPING BY LOCKWOOD MAPPING, INC. – FLOWN IN APRIL 1990; DATA PROVIDED BY GENERAL ELECTRIC COMPANY, AND BLASLAND AND BOUCK ENGINEERS, P.C. CONSTRUCTION PLANS.
2. NOT ALL PHYSICAL FEATURES SHOWN.
3. SITE BOUNDARY IS APPROXIMATE.
4. ALL MONITORING WELL LOCATIONS ARE APPROXIMATE.
5. THE EXTENT OF DNAPL DEPICTED ON THIS FIGURE WAS DERIVED FROM A COMPILATION OF PRIOR MONITORING DATA AND DOES NOT REPRESENT CONDITIONS AT ANY PARTICULAR TIME. RATHER, THIS FIGURE DISPLAYS THE MAXIMUM KNOWN EXTENT OF DNAPL IN GMA 1 MONITORING WELLS.

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

GMA 1 NAPL MONITORING PROGRAM

HISTORICAL EXTENT OF DNAPL

ARCADIS BBL
Infrastructure, environment, facilities

FIGURE
4

WEST
A

EAST
A'

ELEVATION IN FEET

1000
990
980
970
960
950
940
930

APPROXIMATE LATERAL EXTENT OF LNAPL
BASED ON OBSERVATIONS AT NEARBY WELLS

E2SC-11
SB-1
E2SC-10
PZ-1S
63
RW-2(X)
SB6
95-6
E2SC-09
RW-1(X)
PZ-3S
PZ-3D
PZ-4S
E2SC-03S,I
SB-17
SB-18
E2SC-17
54
E2SC-16S,I
SB-20
SB-21
53
E2SC-04
RAA4-E41

THINLY BEDDED LOOSE FINE TO MEDIUM SAND

MEDIUM DENSE TO DENSE; MEDIUM TO COARSE SAND & GRAVEL

DENSE TO VERY DENSE SILTY SAND & GRAVEL (TILL)

FILL

SILT AND SILTY SAND

THINLY BEDDED LOOSE FINE TO MEDIUM SAND

FILL

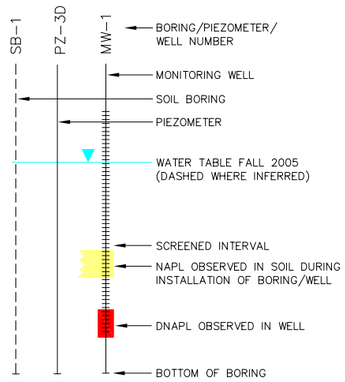
THINLY BEDDED LOOSE FINE TO MEDIUM GRAVEL

MEDIUM DENSE TO DENSE; MEDIUM TO COARSE SAND & GRAVEL

SILT AND SILTY SAND

DENSE TO VERY DENSE SILTY SAND & GRAVEL (TILL)

LEGEND:



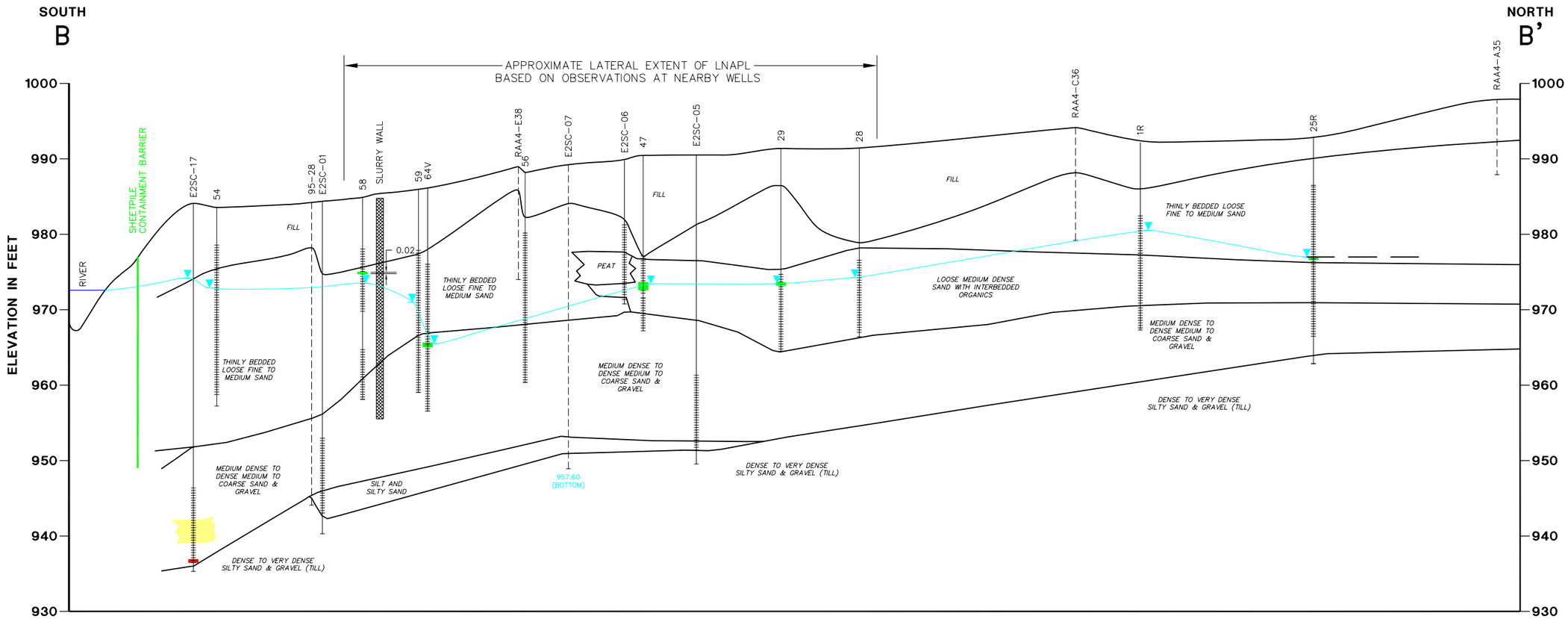
0 50' 100'
HORIZONTAL SCALE

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS
GMA 1 NAPL MONITORING PROGRAM

GEOLOGIC CROSS SECTION A-A'

ARCADIS BBL
Infrastructure, environment, facilities

FIGURE
5



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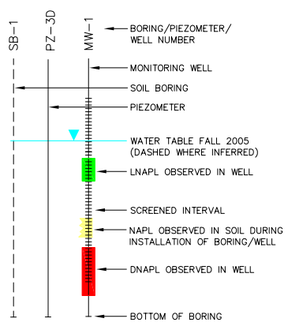

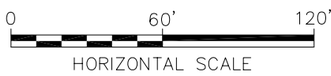

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

GMA 1 NAPL MONITORING PROGRAM

GEOLOGIC CROSS SECTION B-B'

ARCADIS BBL
Infrastructure, environment, facilities

FIGURE
6

NORTH
C

SOUTH
C'

RAA12-J18
RAA12-L20
LS-28
LS-34
LS-12
LSSC-34I/S
LS-1
LSSC-11
LS-33
LS-38
SHEETPILE CONTAINMENT BARRIER
P-6
HOUSATONIC RIVER

990
980
970
960
950
940
930
920

ELEVATION IN FEET

FILL
FINE TO MEDIUM SAND
MEDIUM TO COARSE SAND & GRAVEL
DENSE TO VERY DENSE SILTY SAND & GRAVEL (TILL)

LEGEND:

SB-1 PZ-3D LS-38

- BORING/PIEZOMETER/ WELL NUMBER
- MONITORING WELL
- SOIL BORING
- PIEZOMETER
- WATER TABLE FALL 2005 (DASHED WHERE INFERRED)
- SCREENED INTERVAL
- DNAPL OBSERVED IN WELL
- BOTTOM OF BORING

0 40' 80'
HORIZONTAL SCALE

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS
GMA 1 NAPL MONITORING PROGRAM

GEOLOGIC CROSS SECTION C-C'

ARCADIS BBL
Infrastructure, environment, facilities

FIGURE
7

SYR-85-DMW LJP PGL LAYER: ON=*, OFF=*REF*
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XREFS: IMAGES:
10113X00

WEST
D

EAST
D'

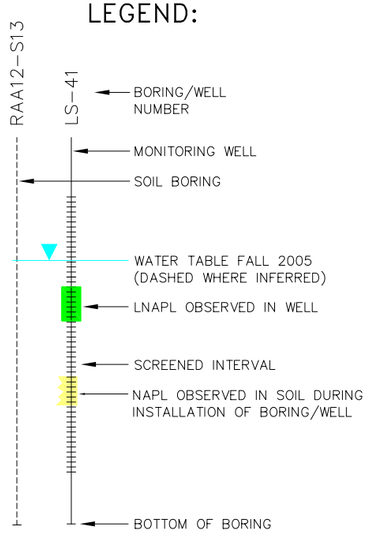
ELEVATION IN FEET

990
980
970
960
950
940

RAA12-T10
RAA12-S13
RAA12-S14
RAA12-S15
RAA12-S16
RAA12-R18
LS-45
LS-44
LSSC-08I
LYMAN STREET
LS-38
LS-41
LS-35
LSSC-18
RAA12-L30
E-3
E-4

FILL
SAND & SILT
SILT & ORGANICS
FINE TO MEDIUM SAND
SAND & SILT
SILT & ORGANICS
SAND & SILT
FINE TO MEDIUM SAND
FILL
SAND & SILT
SAND & SILT
GRAVEL
SILT
FILL
FINE TO MEDIUM SAND
SILT
SAND & SILT
FINE TO MEDIUM SAND
FINE TO COARSE SAND & GRAVEL

LEGEND:



0 100' 200'
HORIZONTAL SCALE

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS
GMA 1 NAPL MONITORING PROGRAM

GEOLOGIC CROSS SECTION D-D'

ARCADIS BBL
Infrastructure, environment, facilities

FIGURE
8

NORTH

E

SOUTH

E'

ELEVATION IN FEET

1000
990
980
970
960
950
940
930

HOUSATONIC RIVER

N2SC-05 NS-17 N2SC-17 N2SC-16 N2SC-02 N2SC-3I/S RAA13-D91 N2SC-08 RAA13-F93 N2SC-12 NS-20

FILL

INTERBEDDED FINE TO MEDIUM SAND, SILT, & ORGANICS

FINE TO COARSE SAND & GRAVEL

DENSE TO VERY DENSE SILTY SAND & GRAVEL (TILL)

LEGEND

SB-1 PZ-3D LS-38

- BORING/PIEZOMETER/ WELL NUMBER
- MONITORING WELL
- SOIL BORING
- PIEZOMETER
- WATER TABLE FALL 2005 (DASHED WHERE INFERRED)
- SCREENED INTERVAL
- DNAPL OBSERVED IN WELL
- BOTTOM OF BORING

0 50' 100'

HORIZONTAL SCALE

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS
GMA 1 NAPL MONITORING PROGRAM

GEOLOGIC CROSS SECTION E-E'

ARCADIS BBL
Infrastructure, environment, facilities

FIGURE
9

SYR-85-DWW LJP PGL LAYER: ON=*; OFF=*REF*
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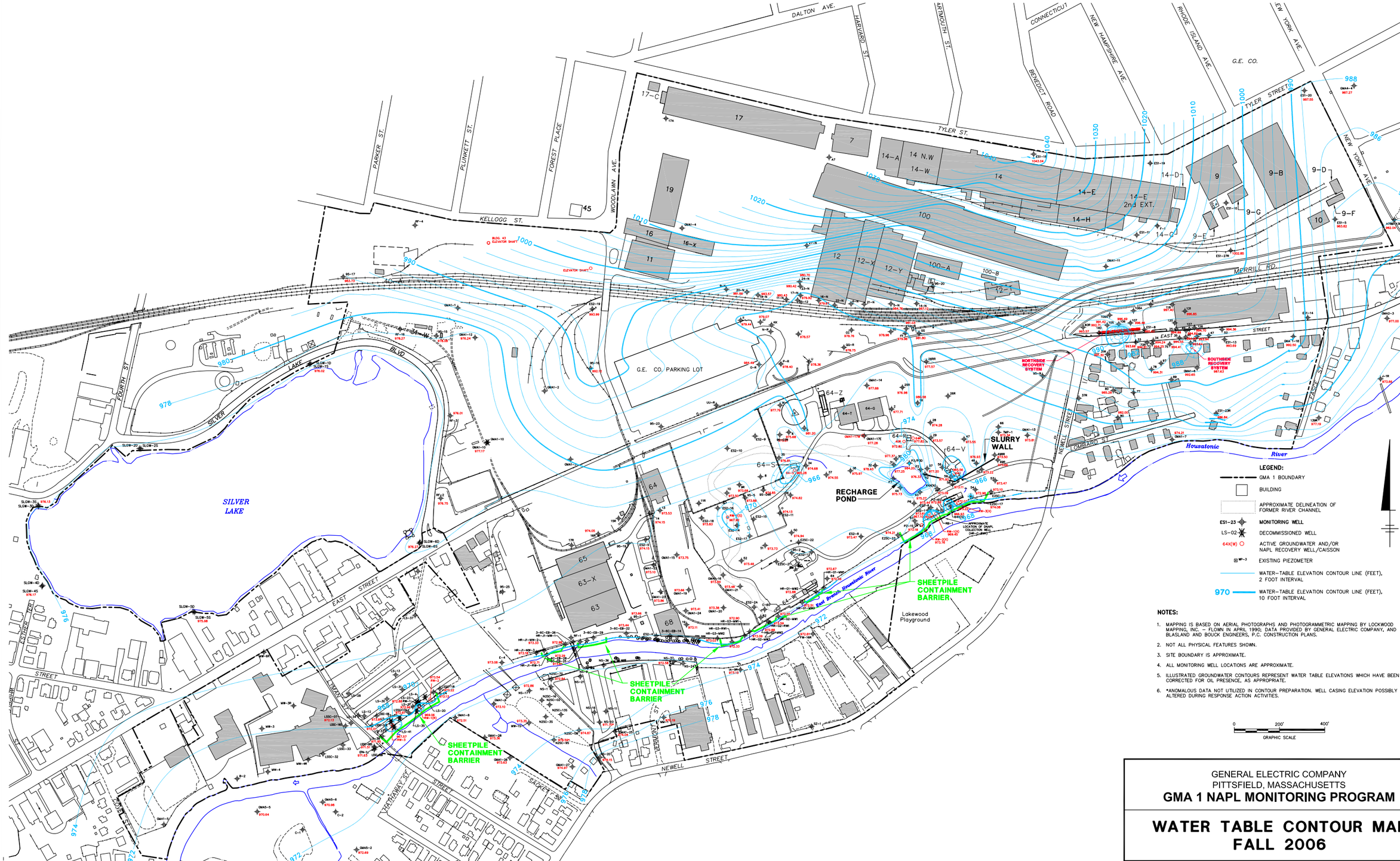


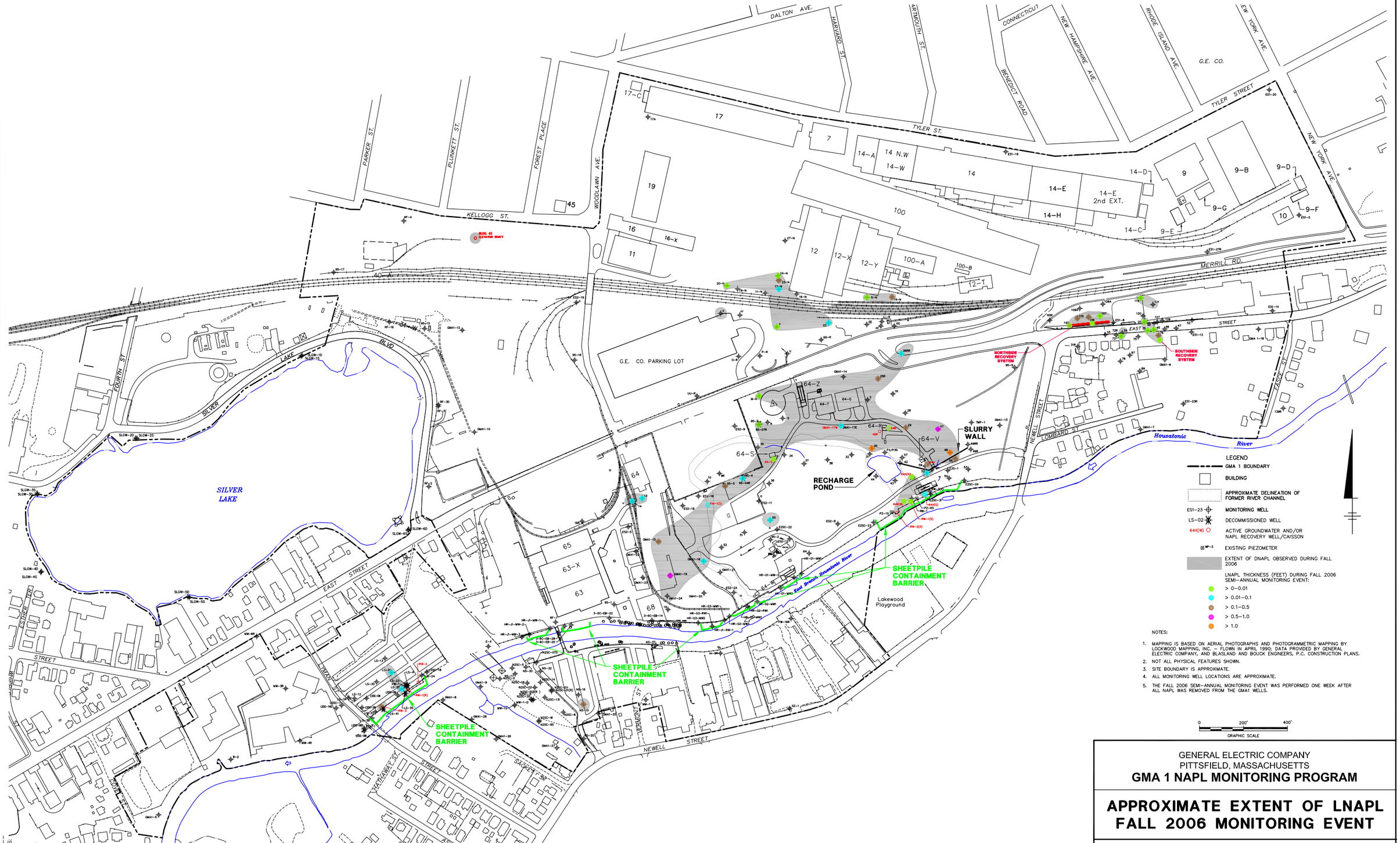
GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

GMA 1 NAPL MONITORING PROGRAM

WATER TABLE CONTOUR MAP FALL 2006

ARCADIS BBL
Infrastructure, environment, facilities

FIGURE 10



LEGEND

- GMA 1 BOUNDARY
- BUILDING
- APPROXIMATE DELINEATION OF FORMER RIVER CHANNEL
- ES1-23 MONITORING WELL
- LS-02 DECOMMISSIONED WELL
- 64X(W) ACTIVE GROUNDWATER AND/OR NAPL RECOVERY WELL/CAISSON
- MP-3 EXISTING PIEZOMETER
- EXTENT OF DNAPL OBSERVED DURING FALL 2006

LNAPL THICKNESS (FEET) DURING FALL 2006 SEMI-ANNUAL MONITORING EVENT:

- > 0-0.01
- > 0.01-0.1
- > 0.1-0.5
- > 0.5-1.0
- > 1.0

NOTES:

1. MAPPING IS BASED ON AERIAL PHOTOGRAPHS AND PHOTOGRAMMETRIC MAPPING BY LOCKWOOD MAPPING, INC. – FLOWN IN APRIL 1990; DATA PROVIDED BY GENERAL ELECTRIC COMPANY, AND BLASLAND AND BOUCK ENGINEERS, P.C. CONSTRUCTION PLANS.
2. NOT ALL PHYSICAL FEATURES SHOWN.
3. SITE BOUNDARY IS APPROXIMATE.
4. ALL MONITORING WELL LOCATIONS ARE APPROXIMATE.
5. THE FALL 2006 SEMI-ANNUAL MONITORING EVENT WAS PERFORMED ONE WEEK AFTER ALL NAPL WAS REMOVED FROM THE GMA1 WELLS.

0 200' 400'
GRAPHIC SCALE

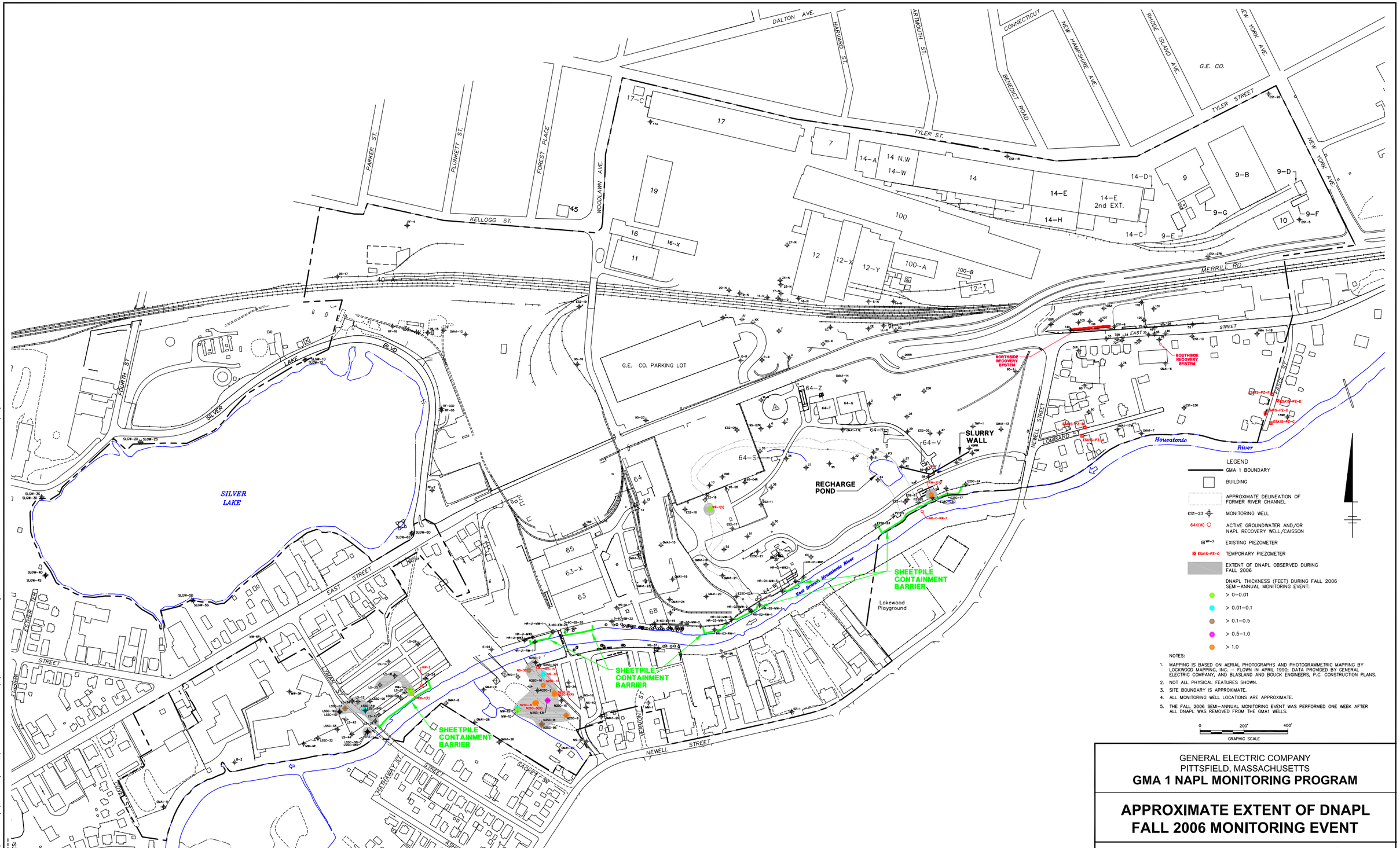
GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

GMA 1 NAPL MONITORING PROGRAM

APPROXIMATE EXTENT OF LNAPL FALL 2006 MONITORING EVENT

ARCADIS BBL
Infrastructure, environment, facilities

FIGURE
11



GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS
GMA 1 NAPL MONITORING PROGRAM

APPROXIMATE EXTENT OF DNAPL FALL 2006 MONITORING EVENT

ARCADIS BBL
Infrastructure, environment, facilities

FIGURE
12

SYR-85-NJR LAF PGL RCB LAYER: ON=*; OFF=*REF*
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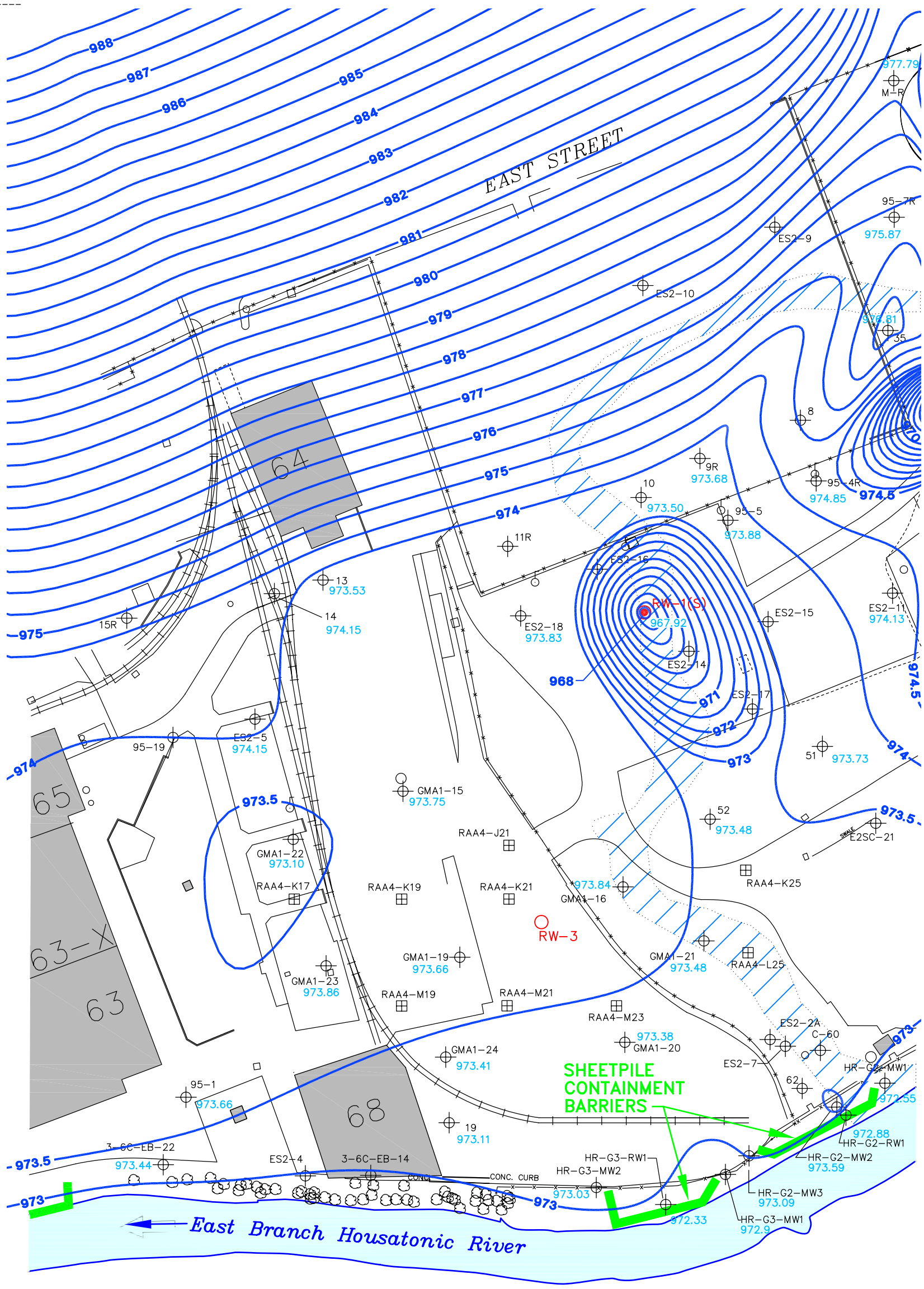


LEGEND:

- BUILDING
- APPROXIMATE DELINEATION OF FORMER RIVER CHANNEL
- ES1-23 MONITORING WELL
- RW-1(S) ACTIVE GROUNDWATER AND NAPL RECOVERY WELL
- FORMER SCRAPYARD AREA
- RAA4-K19 EXISTING SOIL BORING
- RW-3 PROPOSED LNAPL RECOVERY WELL
- 970 WATER-TABLE ELEVATION CONTOUR LINE (FEET), 0.5-FOOT INTERVAL

NOTES:

1. MAPPING IS BASED ON AERIAL PHOTOGRAPHS AND PHOTOGRAMMETRIC MAPPING BY LOCKWOOD MAPPING, INC. – FLOWN IN APRIL 1990; DATA PROVIDED BY GENERAL ELECTRIC COMPANY, AND BLASLAND AND BOUCK ENGINEERS, P.C. CONSTRUCTION PLANS.
2. NOT ALL PHYSICAL FEATURES SHOWN.
3. SITE BOUNDARY IS APPROXIMATE.
4. ALL MONITORING WELL LOCATIONS ARE APPROXIMATE.

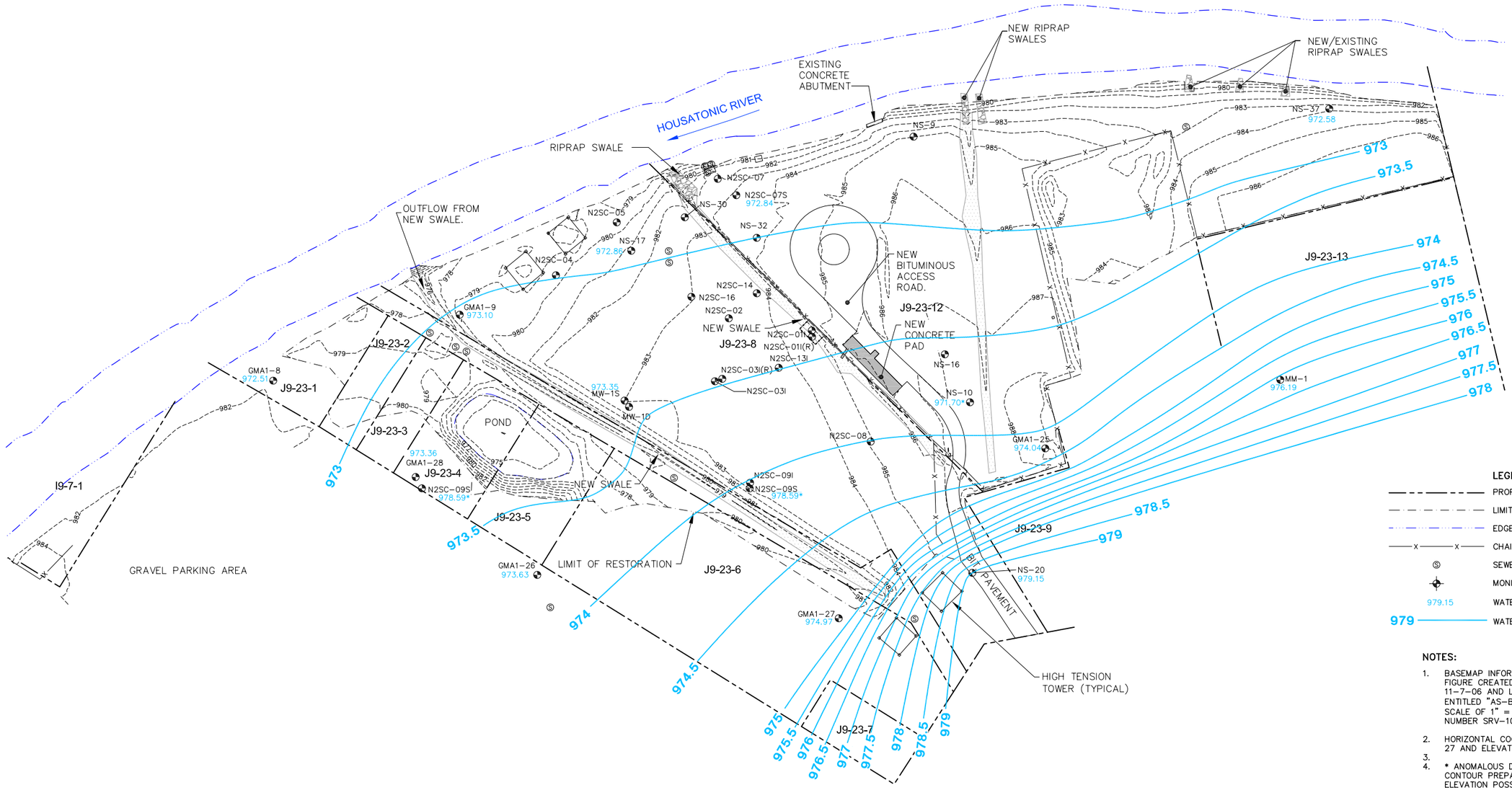
0 100' 200'
GRAPHIC SCALE

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS
GMA 1 NAPL MONITORING PROGRAM

DETAILED FORMER SCRAPYARD AREA WATER TABLE CONTOUR MAP FALL 2006

ARCADIS BBL
Infrastructure, environment, facilities

FIGURE
13



LEGEND:

- PROPERTY LINE
- LIMIT OF AS-BUILT TOPOGRAPHIC SURVEY
- EDGE OF WATER
- CHAINLINK FENCE
- SEWER MANHOLE
- MONITORING WELL
- 979.15 WATER TABLE ELEVATION (FT.)
- 979 WATER TABLE ELEVATION CONTOUR LINE (FT.)

NOTES:

1. BASEMAP INFORMATION OBTAINED FROM A FIGURE CREATED BY HILL ENGINEERS ON 11-7-06 AND LAST REVISED ON 1-2-07 ENTITLED "AS-BUILT SITE PLAN" AT A SCALE OF 1" = 50'. DRAWING FILE NUMBER SRV-1060-001.
2. HORIZONTAL COORDINATE SYSTEM IS NAD 27 AND ELEVATIONS ARE NGVD29.
3.
4. * ANOMALOUS DATA NOT UTILIZED IN CONTOUR PREPARATION. WELL CASING ELEVATION POSSIBLY ALTERED DURING RESPONSE ACTION ACTIVITIES.

0 50' 100'
GRAPHIC SCALE

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

GMA 1 NAPL MONITORING PROGRAM

DETAILED NEWELL STREET AREA II WATER TABLE CONTOUR MAP FALL 2006

ARCADIS BBL
Infrastructure, environment, facilities

FIGURE 14

SYR-85-LAF DWG RCB LAYER: ON=*; OFF=*REF*
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