



GE
159 Plastics Avenue
Pittsfield, MA 01201
USA

Transmitted Via Overnight Delivery

April 5, 2006

Ms. Sharon Hayes
U.S. Environmental Protection Agency
EPA New England
One Congress Street, Suite 1100
Boston, Massachusetts 02114-2023

**Re: GE-Pittsfield/Housatonic River Site
Silver Lake Area (GECD600)
Addendum to Third Interim Pre-Design Investigation Report
for Soils Adjacent to Silver Lake**

Dear Ms. Hayes:

On December 20, 2005, the General Electric Company (GE) submitted to the U.S. Environmental Protection Agency (EPA) a document titled *Third Interim Pre-Design Investigation Report for Soils Adjacent to Silver Lake* (Third Interim PDI Report). That document included: (a) a description of pre-design soil investigations performed by GE in October 2005; (b) an overall summary of the available soil data set; (c) GE's proposal for additional soil sampling for polychlorinated biphenyls (PCBs) and certain other constituents listed in Appendix IX of 40 CFR Part 264, plus three additional constituents (benzidine, 2-chloroethyl vinyl ether, and 1,2-diphenylhydrazine) (Appendix IX+3); (d) an update on the status of survey and mapping activities in support of future Removal Design/Removal Action (RD/RA) activities; and (e) a proposed schedule for the performance and reporting of the activities proposed therein.

As noted in the Third Interim PDI Report, the October 2005 soil investigations were conducted by GE in accordance with GE's May 2005 Second Interim PDI Report, as conditionally approved by EPA, except at one property (Parcel I9-9-19; see Figure 1). At that property, the property owner denied GE access to conduct the required sampling. However, EPA was given access to this property on December 15, 2005, to collect six samples from the three locations proposed in the Second Interim PDI Report, which are located on the bank portion of the property. EPA collected those samples on the next day, and provided them to GE for analysis of lead. At the time of submission of the Third Interim PDI Report, analytical results had not yet been received by GE. Therefore, the Third Interim PDI Report indicated that following receipt of these data and performance of a data quality assessment, the results would be provided to EPA, along with an evaluation of the need for additional data to characterize lead in bank soils at Parcel I9-9-19.

In addition to the evaluation of the need for additional data to characterize lead in bank soils at Parcel I9-9-19, GE has continued the process of conducting detailed RD/RA evaluations of the non-PCB constituents for each property within the Silver Lake Area Removal Action Area (RAA) (see Figure 1). As a result of these efforts, in addition to the data needs previously identified in the Third Interim PDI Report, GE has identified a number of additional data needs related to non-PCB constituents.

Therefore, this letter provides the following:

- The results of recent pre-design bank soil sampling at Parcel I9-9-19, including a data quality review and validation of the resulting lead data, and an assessment regarding the need for additional lead soil sampling at that property;
- An assessment of the need for additional non-PCB soil data (beyond the data needs identified in the Third Interim PDI Report) to support future RD/RA activities, and a revised proposal for additional non-PCB soil investigations; and
- A proposed schedule for the additional data collection activities.

1. Summary of Recent Sampling Results from Parcel I9-9-19

As noted above, the owner of Parcel I9-9-19 denied GE permission to access the property to conduct the proposed sampling, which involved the collection of six samples from three locations on the bank portion of the property for analysis of lead. However, on December 15, 2005, EPA was granted access permission for the collection of those samples; and on December 16, EPA collected the six samples (at the locations shown on Figure 9) and provided them to GE for lead analysis. Soil boring logs associated with the December 2005 sampling activities at Parcel I9-9-19 are presented in Appendix A.

The laboratory analytical results from the December 2005 sampling activities at Parcel I9-9-19 have undergone data validation in accordance with Section 7.5 of GE's approved *Field Sampling Plan/Quality Assurance Project Plan* (FSP/QAPP). The results of this data validation are presented in Appendix B; as discussed therein, 100% of the December 2005 pre-design data are considered usable.

The validated analytical results for the lead samples collected during the December 2005 sampling at Parcel I9-9-19 are summarized in Table 1. The locations of those soil samples, as well as prior non-PCB soil sample locations at that property, are shown on Figure 9. The results of GE's assessment of the need for additional soil sampling for lead at Parcel I9-9-19 are provided in Section 2 (below).

2. Identification of Additional Non-PCB Data Needs

In performing data evaluations in advance of the formal RD/RA process, GE has attempted to identify areas where remediation is likely to be needed in order to achieve the applicable Performance Standards for properties within the Silver Lake Area. Where such areas are identified, GE has evaluated the need for and scope of additional soils data to support the development of remediation plans (e.g., the limits of soil removal). At the time of the Third Interim PDI Report, GE had conducted preliminary evaluations of the non-PCB constituents for this purpose. Since that time, GE has conducted more in-depth evaluations of the available data on non-PCB constituents and, based thereon, has identified a number of additional data needs. In performing these evaluations, GE has followed the procedures outlined in the CD and SOW. Specifically, GE has performed the following steps for each evaluation area (i.e., the bank portion of the property or, where included in this RAA, the non-bank portion of the property):

- For constituents other than PCBs and polychlorinated dibenzo-p-dioxins and polychlorinated dibenzofurans (PCDDs/PCDFs), an initial screening step was conducted involving comparison of the maximum concentration of each detected constituent to the applicable (i.e., residential or industrial) EPA Region 9 Preliminary Remediation Goal (PRG), including the use of PRGs for "surrogate" constituents for those constituents without listed PRGs.

- For PCDDs/PCDFs, total toxicity equivalency quotient (TEQ) concentrations were calculated, using the Toxicity Equivalency Factors published by the World Health Organization, and the maximum TEQ concentration in each relevant depth increment was compared to the applicable RBC for TEQs set forth in the SOW.
- For those constituents (other than PCDDs/PCDFs) that were not screened out in the first step, the existing arithmetic average concentration of each such constituent was calculated for each evaluation area and depth. These average concentrations were then compared to the applicable “Wave 2” Method 1 soil standards under the Massachusetts Contingency Plan (MCP), which were issued by the Massachusetts Department of Environmental Protection (MDEP) in January 2006 and became effective on April 3, 2006. For those evaluation areas where the arithmetic average of one or more of the retained constituents (other than sulfide, discussed below) exceeded its corresponding Method 1 Wave 2 standard, GE either:
 - (a) identified the sample result(s) that cause the exceedance, and then selected additional soil delineation samples; or
 - (b) conducted an area-specific risk assessment to determine if current conditions achieve the applicable risk-based Performance Standards established in the SOW. In that case, if those standards would not be achieved, then the sample result(s) causing the unacceptable condition were identified and corresponding soil delineation samples were selected.

With respect to sulfide, GE, EPA, and MDEP have agreed (since submittal of the Third Interim PDI Report) on a modified evaluation procedure for those instances where sulfide is retained following the PRG screening step (using carbon disulfide as a surrogate constituent in the absence of a PRG for sulfide). Under this procedure (documented in a memorandum from GE to EPA and MDEP dated April 4, 2006), given the absence of a Method 1 soil standard for sulfide, the average concentrations of sulfide will be compared to a derived Method 2 soil standard (specified in an attachment to that memorandum); however, if sulfide is the only constituent with a concentration in excess of the applicable standard (either under existing conditions or after remediation to address certain constituents), no further evaluations related solely to sulfide or soil remediation solely to address sulfide are necessary, and GE will present the rationale supporting that exclusion. Therefore, in performing the RD/RA evaluations described above, no additional delineation sampling specifically related to sulfide has been identified.

Based on review of the available data (including the most recent results from Parcel I9-9-19) and application of the above process, GE has identified a number of additional data needs, beyond those previously identified in the Third Interim PDI Report, where additional soil data are necessary to delineate elevated levels of certain non-PCB constituents that will need to be remediated, and thus to define the soil removal limits. Proposals to satisfy these additional data needs are described below. Further, in an attempt to minimize the ongoing sampling event iterations, some samples are proposed to be collected and held, with analysis to be contingent upon the analytical results of certain samples proposed for initial analysis.

To facilitate review, the currently proposed sampling and analysis activities for non-PCB constituents, including the sampling proposed in the Third Interim PDI Report and the additional sampling identified since that time, are described below. Further, for completeness, the overall proposed sampling and analysis effort for both PCBs and non-PCB constituents is summarized in Table 2, and the proposed sample locations are shown on Figures 2 through 11, as appropriate.

- Parcel I9-9-1 (bank portion) – In the Third Interim PDI Report, GE proposed to collect additional samples to further delineate the elevated concentration of lead detected in the 3- to 5-foot sample at location I9-9-1-SB-5. Based on further review of the data, GE proposes a more comprehensive additional sampling effort on the bank portion of this property. Review of the data indicates that soil removal will be necessary to a depth of at least 5 feet below ground surface (bgs) at and near location I9-9-1-SB-5 to address elevated lead concentrations in the 1- to 3-foot and 3- to 5-foot samples from that location, and to a depth of at least 9 feet bgs at and near location I9-9-1-SB-6 to address elevated concentrations of lead and arsenic in the 7- to 9-foot sample from that location. To delineate the extent of such removal, GE proposes to collect and analyze the following additional samples at the locations shown on Figure 10:
 - Sample from 5- to 7-foot depth at location I9-9-1-SB-5 for lead analysis (vertical delineation);
 - Sample from 3- to 5-foot depth at location I9-9-1-SB-5-N for lead analysis (horizontal delineation to northwest of above location);
 - Sample from 9- to 11-foot depth at location I9-9-1-SB-6 for analysis of lead and arsenic (vertical delineation);
 - Samples from the 5- to 7-foot and 7- to 9-foot depths at location I9-9-1-SB-5-S for analysis of lead (5-7' sample) or lead and arsenic (7-9' sample) (horizontal delineation northwest of I9-9-1-SB-6); and
 - Samples from the 1- to 3-foot, 3- to 5-foot, 5- to 7-foot, and 7- to 9-foot depths at a new location to the south of I9-9-1-SB-6 (I9-9-1-SB-6-S) for analysis of lead (or lead and arsenic in the 7-9' sample) (horizontal delineation southeast of locations I9-9-1-SB-5 and -SB-6).

In addition, GE proposes to collect and hold a number of additional samples from various depths and locations at and around the above samples for potential analysis of lead and/or arsenic depending on the results from the initial samples analyzed. These include samples from certain additional depth increments at the above locations, plus samples from locations further north and south – namely, existing location SLB-1BB (which is located on the bank portion of adjacent Parcel I9-10-8) and new location I9-9-1-SB-6-SS, as shown on Figure 10. The specific samples proposed for collection and analysis or holding for potential analysis are listed in Table 2.

- Parcel I9-10-8 (bank portion) – Review of data from the bank portion of this property indicates that a sample collected in 1995 from the 0- to 0.5-foot depth increment at sample location SLB-1BB showed no detected concentrations of polycyclic aromatic hydrocarbons (PAHs), but that the detection limits were elevated, such that the use of half the detection limit in the averaging skews the depth-specific average for those constituents. Accordingly, GE proposes to collect a new soil sample from the 0- to 1-foot depth increment at sample location SLB-1BB (shown on Figure 10) for analysis of semi-volatile organic compounds (SVOCs), which include PAHs.
- Parcel I9-10-8 (non-bank portion) – As specified in the Third Interim PDI Report, GE proposes to collect a sample from the 0- to 1-foot depth increment at a location on the non-bank portion of this parcel (I9-10-8-SB-16-SS) for lead analysis to delineate to the south the elevated lead concentration found in the top foot at location I9-10-8-SB-16-S. In addition, as a conservative measure, GE proposes to collect and hold a sample from the 0- to 1-foot depth increment at a location further south of proposed delineation sample location I9-10-8-SB-16-SS (i.e., new location I9-10-8-SB-16-SSS) for possible future lead analysis depending on the lead result from I9-10-8-SB-16-SS. These proposed sample locations are shown on Figure 10.

- Parcel I9-9-18 (bank portion) – Due to an elevated concentration of antimony in the 0- to 1-foot depth increment at sample location I9-9-18-SB-1, GE proposes to collect a sample from the 0- to 1-foot depth increment at a location to the south of that sample location (i.e., at existing location I9-9-18-SB-1-S) for analysis of antimony. In addition, as a conservative measure, GE proposes to collect and hold an additional sample from the 0- to 1-foot depth increment from a location further south (new location I9-9-18-SB-1-SS) for possible future analysis of antimony depending on the result from the surface soil sample at I9-9-18-SB-1-S. These proposed locations are depicted on Figure 9.
- Parcel I9-9-19 (bank portion) – The non-PCB data from the bank portion of this property, including the lead data from the December 2005 samples, have been reviewed to assess the need for additional soil data for lead. This review indicates that, due to a relatively elevated concentration of lead in the 0- to 1-foot sample from location I9-9-19-SB-2-S, additional sampling for lead is needed to the south of that location. Accordingly, an additional sample will be collected from the 0- to 1-foot depth increment at a location to the south of that sample location (new location I9-9-19-SB-2-SS), as shown on Figure 9. In addition, GE proposes to collect and hold an additional sample from the 0- to 1-foot depth increment from a location further south (new location I9-9-19-SB-2-SSS, also shown on Figure 9) for possible future analysis of lead depending on the result from location I9-9-19-SB-2-SS.
- Parcel I9-9-24 (bank portion) – Review of the non-PCB data from the bank portion of this property shows elevated concentrations of several metals in the 13- to 15-foot sample from location I9-9-24-SB-2. The elevated concentration of lead in this sample has already been delineated through the collection and lead analysis of delineation samples from the 13- to 15-foot depth increment at locations I9-9-24-SB-2-SE and -SB-2-W. However, the elevated concentrations of other metals in the 13- to 15-foot sample from location I9-9-24-SB-2 – coupled with the lower but still somewhat elevated concentrations of cadmium and chromium in the 9- to 11-foot sample from location I9-9-24-SB-1 – cause the average concentrations of cadmium, chromium, and copper in the 1- to 15-foot depth increment at this area to exceed the MCP Method 1 soil standards (or, for copper, the applicable Method 2 soil standard used at the GE-Pittsfield/Housatonic River Site). Accordingly, GE proposes to collect additional samples from the 9- to 11-foot and 13- to 15-foot depths at locations I9-9-24-SB-2-SE and -SB-2-W for analysis of cadmium, chromium, and, for the 13- to 15-foot samples, copper. In addition, GE proposes to collect and hold samples from the 9- to 11-foot and 13- to 15-foot depth increment at locations further east and west of the above proposed delineation sample locations (new locations I9-9-24-SB-2-SES and I9-9-24-SB-2-WW) for possible future analysis of cadmium, chromium, and/or copper depending on the results from the initially analyzed samples. These proposed locations are depicted on Figure 8.
- Recreational Area 3 – As described in the Third Interim PDI Report, due to elevated concentrations of PAHs in the 0- to 1-foot and 1- to 3-foot samples from location RA-3-SB-15-E, GE proposes to collect additional samples from the 0- to 1-foot and 1- to 3-foot depth increments at a location to the east (RA-3-SB-15-EE, which is actually located in Recreational Area 4) for analysis of SVOCs. In addition, based on its more recent review, due to an elevated concentration of PAHs in the 1- to 3-foot depth increment from location RA-3-SB-15-W, GE proposes to collect an additional sample for analysis of SVOCs from the 1- to 3-foot depth increment at a location to the west of that sample location (new location RA-3-SB-15-WW). Further, GE proposes to collect and hold an additional sample from the 1- to 3-foot depth increment from a location further west (new location RA-3-SB-15-WWW) for possible future analysis of SVOCs depending on the results from the 1- to 3-foot sample from RA-3-SB-15-WW. These proposed locations are depicted on Figure 11.

As noted above, a summary of the overall scope of proposed non-PCB sampling (including the previously proposed sampling and the further sampling proposed herein), as well as the additional PCB sampling proposed in the Third Interim PDI Report, is provided in Table 2, with appropriate references to the attached figures to show the sampling locations.

3. Proposed Schedule

Following EPA's approval of the Third Interim PDI Report and this Addendum, GE will perform the additional soil investigations and will submit a report on a schedule consistent with that proposed in the Third Interim PDI Report – i.e., within four months from EPA's approval – subject to obtaining access in a timely manner and to potential seasonal constraints on performing the sampling. If GE concludes that no additional soil sampling is needed, that report will constitute the Final Pre-Design Investigation Report, will summarize all available soils data, and will propose a schedule for submitting the Conceptual RD/RA Work Plan for soils at the Silver Lake Area. If GE concludes that additional soil sampling is needed, the report will constitute another Interim PDI Report and will include a proposal for such additional sampling and a proposed schedule for completing that sampling and submitting a Final Pre-Design Investigation Report.

Please contact me if you have any questions or comments regarding this letter.

Sincerely,



Richard W. Gates
Remediation Project Manager

JJL/csc

Attachments

V:\GE_Silver_Lake\Reports and Presentations\Addendum to 3rd Int PDI\18662196LtrRpt.doc

cc: Dean Tagliaferro, EPA
Tim Conway, EPA
Rose Howell, EPA*
Holly Inglis, EPA
K.C. Mitkevicius, USACE (CD-ROM)
Linda Palmieri, Weston (CD-ROM)
Susan Steenstrup, MDEP (2 copies)
Anna Symington, MDEP*
Robert Bell, MDEP*
Jane Rothchild, MDEP*
Thomas Angus, MDEP*

Nancy E. Harper, MA AG*
Dale Young, MA EOE*
Mayor James Ruberto, City of Pittsfield
Michael Carroll, GE*
Andrew Silfer, GE
Rod McLaren, GE*
James Nuss, BBL
James Bieke, Goodwin Procter
Public Information Repositories
GE Internal Repository
Affected Property Owners

**cover letter only*

Tables

**TABLE 1
SUMMARY OF DECEMBER 2005 SOIL SAMPLING DATA FOR LEAD**

**ADDENDUM TO THIRD INTERIM PRE-DESIGN INVESTIGATION REPORT FOR SOILS ADJACENT TO SILVER LAKE
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in dry weight parts per million, ppm)**

Parameter	Sample ID: Sample Depth(Feet): Date Collected:	I9-9-19-SB-2E 0-1 12/16/05	I9-9-19-SB-2E 1-3 12/16/05	I9-9-19-SB-2S 0-1 12/16/05	I9-9-19-SB-2S 1-3 12/16/05	I9-9-19-SB-2W 0-1 12/16/05	I9-9-19-SB-2W 1-3 12/16/05
Inorganics							
Lead		350	530	900	120	820	180

Notes:

1. Due to the property owner's refusal to grant access to GE, samples from Parcel I9-9-19 were collected by EPA representatives and provided to Blasland, Bouck & Lee, Inc., for analysis of lead by SGS Environmental Services, Inc.
2. Samples have been validated as per Field Sampling Plan/Quality Assurance Project Plan (FSP/QAPP), General Electric Company, Pittsfield, Massachusetts, Blasland Bouck & Lee, Inc. (approved May 29, 2004 and resubmitted June 19, 2004).

**TABLE 2
SUMMARY OF PROPOSED ADDITIONAL SOIL SAMPLING LOCATIONS AND ANALYSES**

**ADDENDUM TO THIRD INTERIM PRE-DESIGN INVESTIGATION REPORT FOR SOILS ADJACENT TO SILVER LAKE
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**

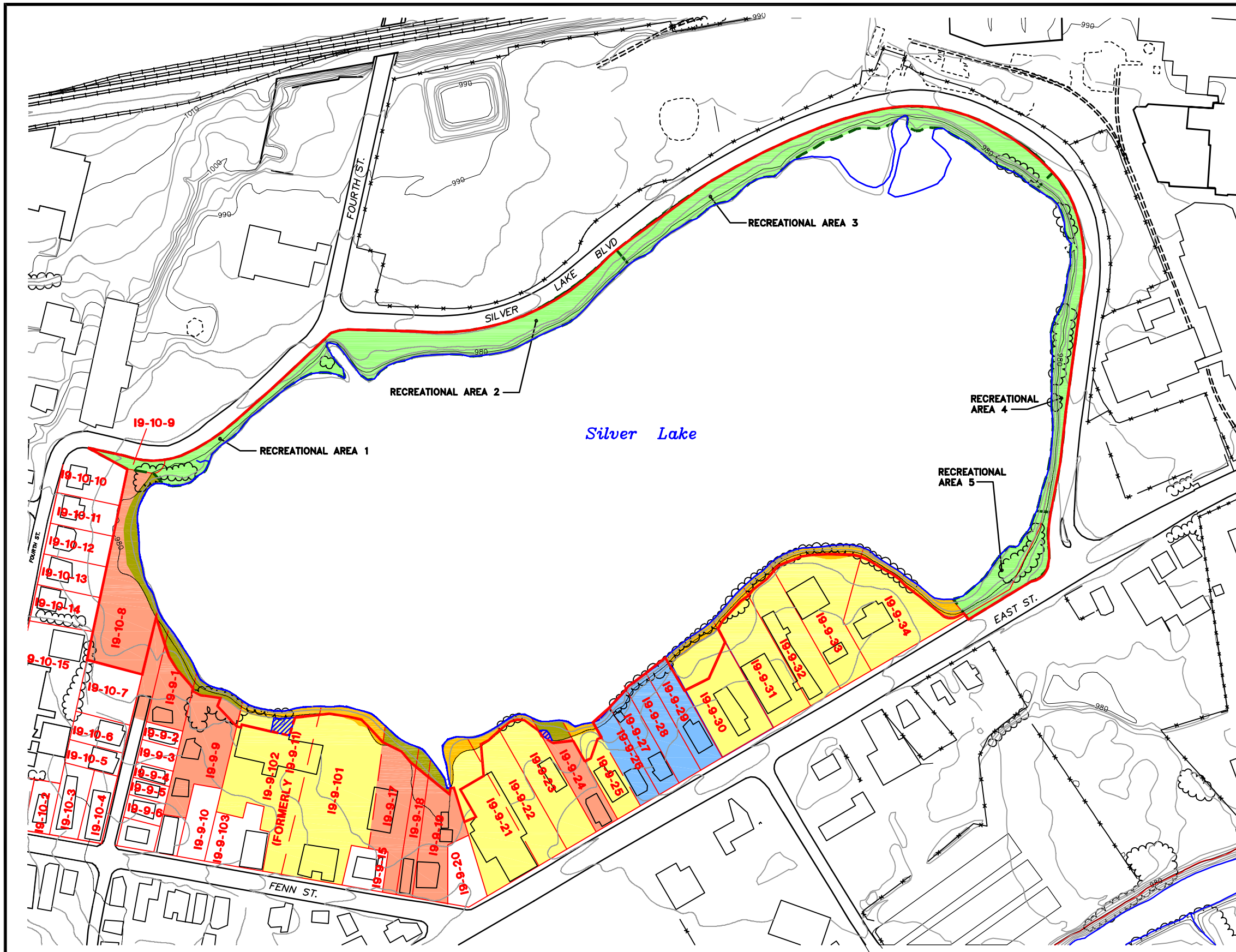
Sample ID	Proposed Sample Depth	Analyses
Parcel I9-9-1 (BANK) (See Figure 10)		
I9-9-1-SB-5	5-7'	Lead – vertical delineation
	7-9'	Hold for potential analysis of lead and/or arsenic depending on results from 7-9' sample at I9-9-1-SB-5-S
I9-9-1-SB-5-N	3-5'	Lead – horizontal delineation northwest of I9-9-1-SB-5
	5-7'	Hold for potential analysis of lead depending on result from 5-7' sample at I9-9-1-SB-5
I9-9-1-SB-5-S	5-7'	Lead – horizontal delineation northwest of I9-9-1-SB-6
	7-9'	Lead and arsenic – horizontal delineation northwest of I9-9-1-SB-6
	9-11'	Hold for potential analysis of lead and/or arsenic depending on results from 9-11' sample at I9-9-1-SB-6
I9-9-1-SB-6	9-11'	Lead and arsenic – vertical delineation
I9-9-1-SB-6-S	1-3'	Lead – horizontal delineation southeast of I9-9-1-SB-5 and -SB-6
	3-5'	Lead – horizontal delineation southeast of I9-9-1-SB-5 and -SB-6
	5-7'	Lead – horizontal delineation southeast of I9-9-1-SB-5 and -SB-6
	7-9'	Lead and arsenic – horizontal delineation southeast of I9-9-1-SB-6
	9-11'	Hold for potential analysis of lead and/or arsenic depending on results from 9-11' sample at I9-9-1-SB-6
I9-9-1-SB-6-SS	1-3'	Hold for potential analysis of lead depending on results from 1-3' sample at I9-9-1-SB-6-S
	3-5'	Hold for potential analysis of lead depending on results from 3-5' sample at I9-9-1-SB-6-S
	5-7'	Hold for potential analysis of lead depending on results from 5-7' sample at I9-9-1-SB-6-S
	7-9'	Hold for potential analysis of lead and/or arsenic depending on results from 7-9' sample at I9-9-1-SB-6-S
	9-11'	Hold for potential analysis of lead and/or arsenic depending on results from 9-11' sample at I9-9-1-SB-6-S (if analyzed)
Parcel I9-10-8 (BANK) (See Figure 10)		
SLB-1BB	0-1'	Semi-volatile organic compounds (SVOCs) – re-collection and analysis since historical sample from this location (at 0-0.5') had elevated detection limits for non-detect results
	1-3'	Hold for potential analysis of lead for horizontal delineation northwest of I9-9-1-SB-5-N depending on results from first round of samples
	3-5'	Hold for potential analysis of lead depending on result from 3-5' sample at I9-9-1-SB-5-N
Parcel I9-10-8 (NON-BANK) (See Figure 10)		
I9-10-8-SB-16-SS	0-1'	Lead – horizontal delineation south of I9-10-8-SB-16-S
I9-10-8-SB-16-SSS	0-1'	Hold for potential analysis of lead depending on result from above sample at I9-10-8-SB-16-SS
Parcel I9-9-18 (BANK) (See Figure 9)		
I9-9-18-SB-1-S	0-1'	Antimony – horizontal delineation south of I9-9-18-SB-1
I9-9-18-SB-1-SS	0-1'	Hold for potential analysis of antimony depending on result from above sample at I9-9-18-SB-1-S

**TABLE 2
SUMMARY OF PROPOSED ADDITIONAL SOIL SAMPLING LOCATIONS AND ANALYSES**

**ADDENDUM TO THIRD INTERIM PRE-DESIGN INVESTIGATION REPORT FOR SOILS ADJACENT TO SILVER LAKE
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**

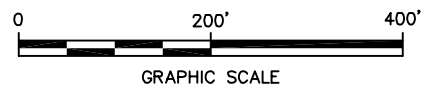
Sample ID	Proposed Sample Depth	Analyses
Parcel I9-9-19 (BANK) (See Figure 9)		
I9-9-19-SB-2-SS	0-1'	Lead – horizontal delineation south of I9-9-19-SB-2-S
I9-9-19-SB-2-SSS	0-1'	Hold for potential analysis of lead depending on result from above sample at I9-9-19-SB-2-SS
Parcel I9-9-24 (BANK) (See Figure 8)		
I9-9-24-SB-2-SE	9-11'	Cadmium and chromium – horizontal delineation south of I9-9-24-SB-1
	13-15'	Cadmium, chromium, copper – horizontal delineation southeast of I9-9-24-SB-2
I9-9-24-SB-2-W	9-11'	Cadmium and chromium – horizontal delineation west of I9-9-24-SB-1
	13-15'	Cadmium, chromium, copper – horizontal delineation west of I9-9-24-SB-2
I9-9-24-SB-2-SES	9-11'	Hold for potential analysis of cadmium and/or chromium depending on results from 9-11' sample at I9-9-24-SB-2-SE
	13-15'	Hold for potential analysis of cadmium, chromium, and/or copper depending on results from 13-15' sample at I9-9-24-SB-2-SE
I9-9-24-SB-WW	9-11'	Hold for potential analysis of cadmium and/or chromium depending on results from 9-11' sample at I9-9-24-SB-2-W
	13-15'	Hold for potential analysis of cadmium, chromium, and/or copper depending on results from 13-15' sample at I9-9-24-SB-2-W
Parcel I9-9-24 (NON-BANK) (See Figure 3)		
I9-9-24-SB-10	0-1'	Polychlorinated biphenyls (PCBs) – delineation of PCBs > 2 ppm in 0-1' depth west of I9-9-24-SB-9
Parcel I9-9-23 (NON-BANK) (See Figure 3)		
I9-9-23-SB-4	0-1'	Hold for potential PCB analysis depending on result from 0-1' sample from I9-9-24-SB-10
Parcel I9-9-102 (NON-BANK) (See Figure 4)		
I9-9-11-SB-9	10-15'	PCBs – delineation of PCBs > 2 ppm in 10-15' depth east of I9-9-11-SB-8
Recreational Areas 3 and 4 (See Figure 11)		
RA-3-SB-15-EE	0-1'	SVOCs – horizontal delineation east of RA-3-SB-15
	1-3'	SVOCs – horizontal delineation east of RA-3-SB-15
RA-3-SB-15-WW	1-3'	SVOCs – horizontal delineation west of RA-3-SB-15
RA-3-SB-15-WWW	1-3'	Hold for potential analysis of SVOCs depending on results from 1-3' sample at RA-3-SB-15-WW

Figures



- LEGEND:**
- EDGE OF WATER
 - RAILROAD
 - VEGETATION
 - PROPERTY BOUNDARY
 - BOUNDARY BETWEEN COMMONLY OWNED PROPERTIES
 - 19-9-102** PROPERTY ID
 - APPROXIMATE LIMIT OF SILVER LAKE SOILS RAA BOUNDARY (DASHED WHERE INFERRED)
 - AREA OF PARCEL PROPOSED FOR INCLUSION IN SILVER LAKE AREA RAA (SUBJECT TO REVISION BASED ON ADDITIONAL SAMPLING) AT THESE PARCELS WHERE SUCH AREA WILL EXTEND BEYOND BANK
 - COMMERCIAL/INDUSTRIAL PROPERTY
 - BANK PORTIONS OF COMMERCIAL/INDUSTRIAL PROPERTIES
 - RESIDENTIAL PROPERTY
 - BANK PORTIONS OF RESIDENTIAL PROPERTIES
 - PROPERTY ADDRESSED AS PART OF ADMINISTRATIVE CONSENT ORDER WITH MDEP
 - RECREATIONAL AVERAGING AREAS

- NOTES:**
1. THE BASE MAP FEATURES PRESENTED ON THIS FIGURE WERE PHOTOGRAMMETRICALLY MAPPED FROM APRIL 1990 AERIAL PHOTOGRAPHS.
 2. TAX ASSESSORS' PARCEL IDENTIFICATION NUMBERS AND BOUNDARY INFORMATION OBTAINED FROM CITY OF PITTSFIELD'S TAX ASSESSOR'S OFFICE AND IS CURRENT THROUGH SEPTEMBER 5, 1997.

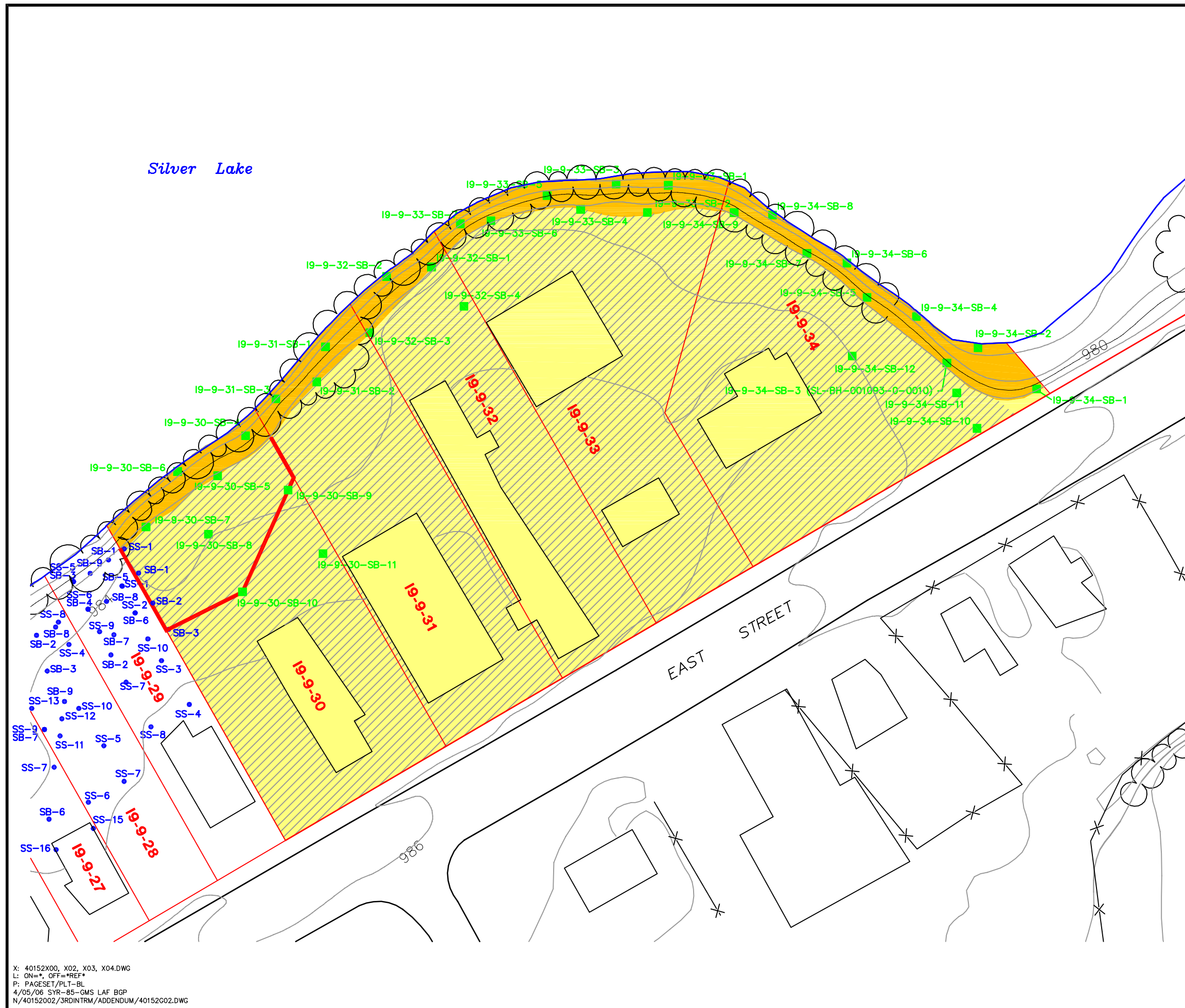


GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS
ADDENDUM TO THIRD INTERIM PRE-DESIGN INVESTIGATION
REPORT FOR SOILS ADJACENT TO SILVER LAKE












**SILVER LAKE
AREA SITE MAP**



X: 40152X00, X02, X03, X04.DWG
L: ON=*, OFF=*REF*
P: PAGESET/PLT-BL
4/05/06 SYR-85-LJP LAF BGP
N/40152002/3RDINTRM/ADDENDUM/40152G01.DWG

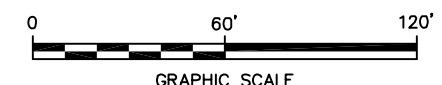


LEGEND:

-  EDGE OF WATER
-  VEGETATION
-  APPROXIMATE SURFACE ELEVATION (1-FOOT CONTOUR)
-  PROPERTY BOUNDARY
-  PROPERTY ID
-  APPROXIMATE LIMIT OF NON-BANK PORTION TO BE INCLUDED WITHIN THE SILVER LAKE AREA RAA
-  COMMERCIAL/INDUSTRIAL PROPERTY
-  BANK PORTIONS OF COMMERCIAL/INDUSTRIAL PROPERTIES
-  PAVED AREAS
-  PRIOR (HISTORICAL) PCB SOIL SAMPLE LOCATION
-  PRE-DESIGN PCB SOIL SAMPLE LOCATION

NOTES:

1. THE BASE MAP FEATURES PRESENTED ON THIS FIGURE WERE PHOTOGRAMMETRICALLY MAPPED FROM APRIL 1990 AERIAL PHOTOGRAPHS.
2. TAX ASSESSORS' PARCEL IDENTIFICATION NUMBERS AND BOUNDARY INFORMATION OBTAINED FROM CITY OF PITTSFIELD'S TAX ASSESSOR'S OFFICE AND IS CURRENT THROUGH SEPTEMBER 5, 1997.
3. EPA PRE-DESIGN SPLIT SOIL SAMPLE IDENTIFIED IN PARENTHESES.
4. LOCATIONS OF PAVED AREAS ARE APPROXIMATE.

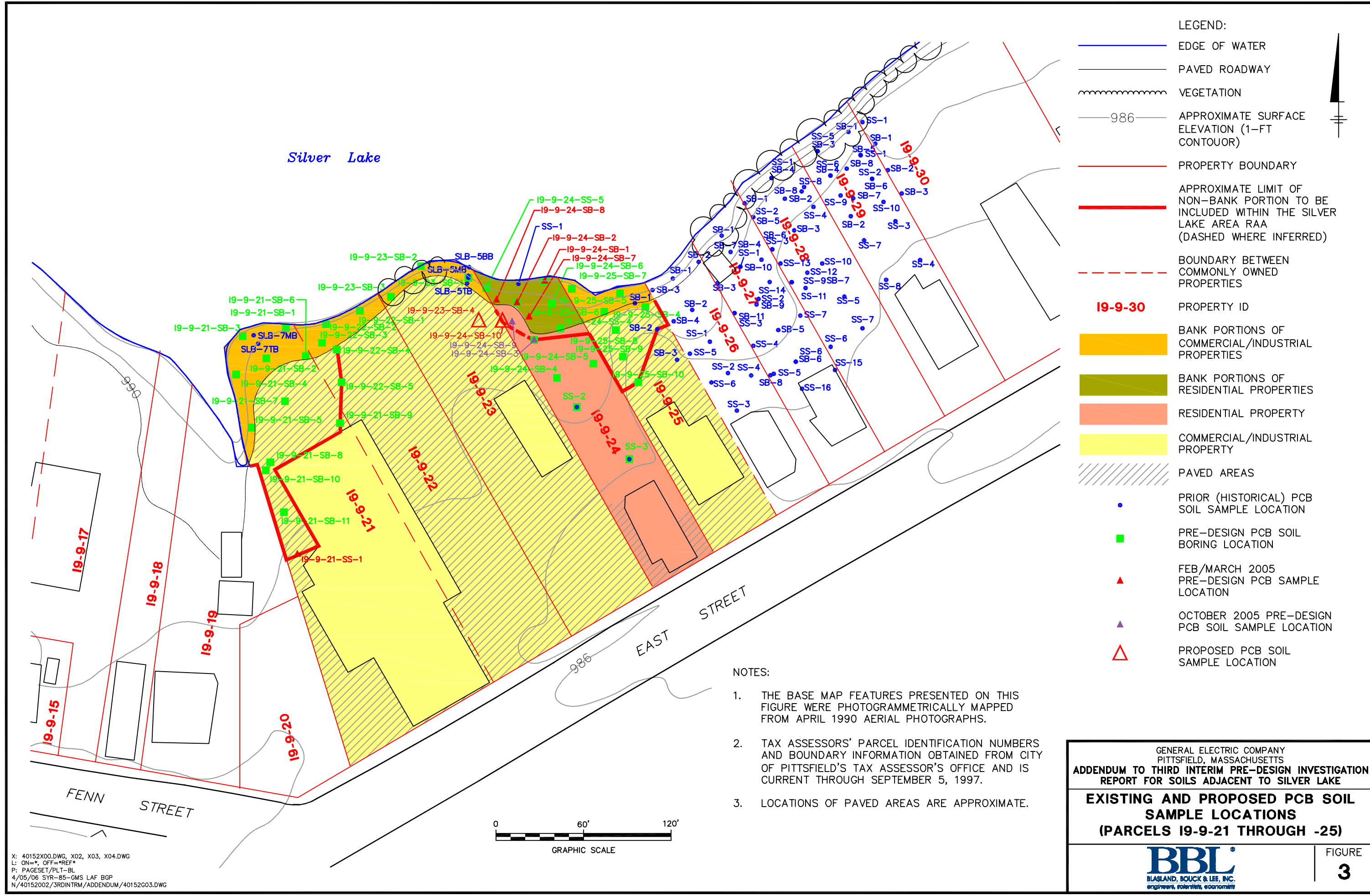


GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS
**ADDENDUM TO THIRD INTERIM PRE-DESIGN INVESTIGATION
REPORT FOR SOILS ADJACENT TO SILVER LAKE**

**PCB SOIL SAMPLE LOCATIONS
(PARCELS 19-9-30 THROUGH -34)**



X: 40152X00, X02, X03, X04.DWG
L: ON=*, OFF=*REF*
P: PAGESET/PLT-BL
4/05/06 SYR-85-GMS LAF BGP
N/40152002/3RDINTRM/ADDENDUM/40152G02.DWG



- LEGEND:
- EDGE OF WATER
 - PAVED ROADWAY
 - VEGETATION
 - 986 APPROXIMATE SURFACE ELEVATION (1-FT CONTOUR)
 - PROPERTY BOUNDARY
 - APPROXIMATE LIMIT OF NON-BANK PORTION TO BE INCLUDED WITHIN THE SILVER LAKE AREA RAA (DASHED WHERE INFERRED)
 - BOUNDARY BETWEEN COMMONLY OWNED PROPERTIES
 - 19-9-30** PROPERTY ID
 - BANK PORTIONS OF COMMERCIAL/INDUSTRIAL PROPERTIES
 - BANK PORTIONS OF RESIDENTIAL PROPERTIES
 - RESIDENTIAL PROPERTY
 - COMMERCIAL/INDUSTRIAL PROPERTY
 - PAVED AREAS
 - PRIOR (HISTORICAL) PCB SOIL SAMPLE LOCATION
 - PRE-DESIGN PCB SOIL BORING LOCATION
 - FEB/MARCH 2005 PRE-DESIGN PCB SAMPLE LOCATION
 - OCTOBER 2005 PRE-DESIGN PCB SOIL SAMPLE LOCATION
 - PROPOSED PCB SOIL SAMPLE LOCATION

- NOTES:
1. THE BASE MAP FEATURES PRESENTED ON THIS FIGURE WERE PHOTOGRAMMETRICALLY MAPPED FROM APRIL 1990 AERIAL PHOTOGRAPHS.
 2. TAX ASSESSORS' PARCEL IDENTIFICATION NUMBERS AND BOUNDARY INFORMATION OBTAINED FROM CITY OF PITTSFIELD'S TAX ASSESSOR'S OFFICE AND IS CURRENT THROUGH SEPTEMBER 5, 1997.
 3. LOCATIONS OF PAVED AREAS ARE APPROXIMATE.

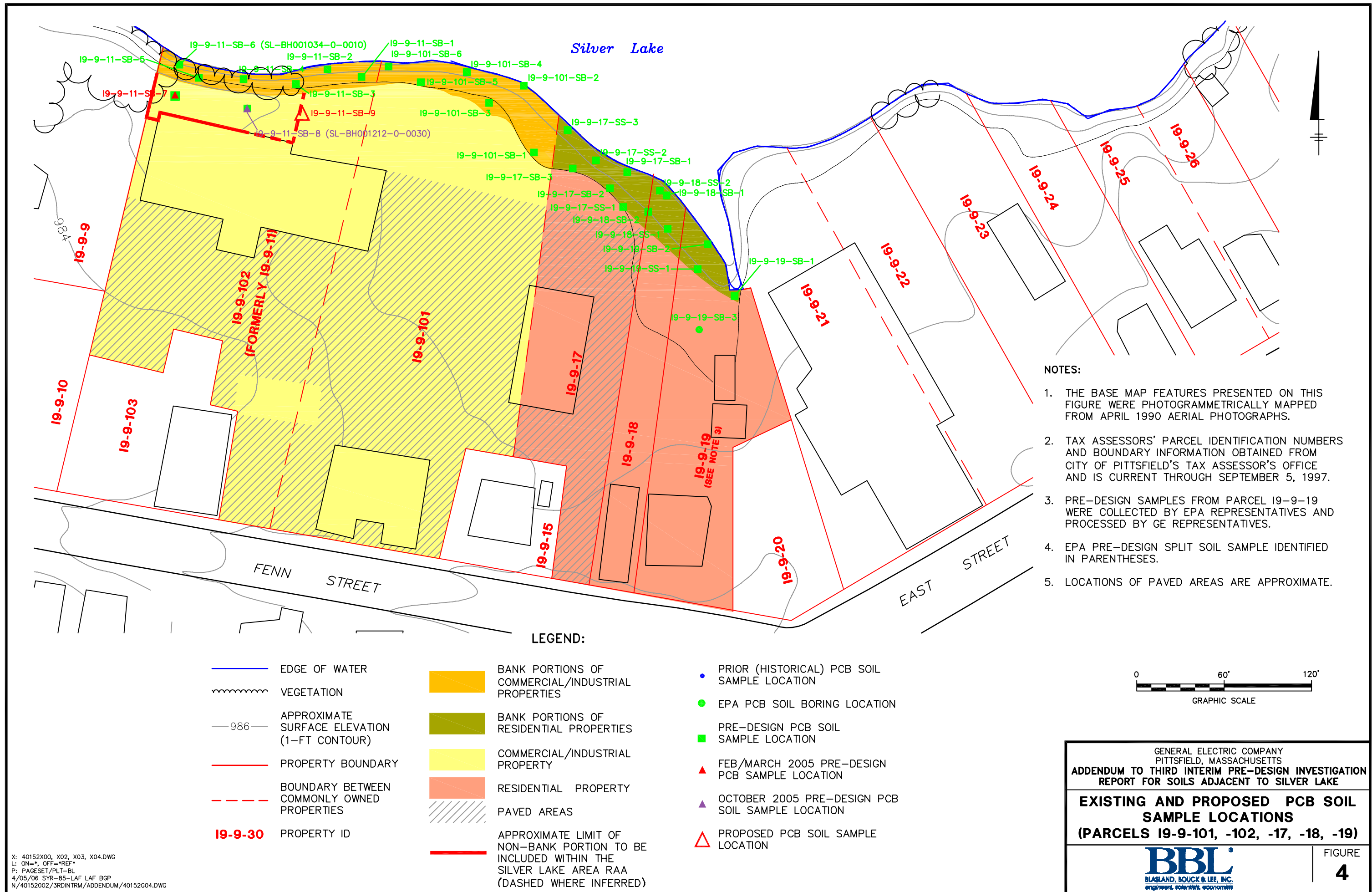
GENERAL ELECTRIC COMPANY
 PITTSFIELD, MASSACHUSETTS
**ADDENDUM TO THIRD INTERIM PRE-DESIGN INVESTIGATION
 REPORT FOR SOILS ADJACENT TO SILVER LAKE**

**EXISTING AND PROPOSED PCB SOIL
 SAMPLE LOCATIONS
 (PARCELS 19-9-21 THROUGH -25)**



X: 40152X00.DWG, X02, X03, X04.DWG
 L: ON=*, OFF=*REF*
 P: PAGESET/PLT-BL
 4/05/06 SYR-85-GMS LAF BGP
 N/40152002/3RDINTRM/ADDENDUM/40152G03.DWG

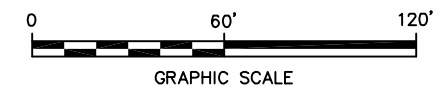




- NOTES:**
1. THE BASE MAP FEATURES PRESENTED ON THIS FIGURE WERE PHOTOGRAMMETRICALLY MAPPED FROM APRIL 1990 AERIAL PHOTOGRAPHS.
 2. TAX ASSESSORS' PARCEL IDENTIFICATION NUMBERS AND BOUNDARY INFORMATION OBTAINED FROM CITY OF PITTSFIELD'S TAX ASSESSOR'S OFFICE AND IS CURRENT THROUGH SEPTEMBER 5, 1997.
 3. PRE-DESIGN SAMPLES FROM PARCEL 19-9-19 WERE COLLECTED BY EPA REPRESENTATIVES AND PROCESSED BY GE REPRESENTATIVES.
 4. EPA PRE-DESIGN SPLIT SOIL SAMPLE IDENTIFIED IN PARENTHESES.
 5. LOCATIONS OF PAVED AREAS ARE APPROXIMATE.

LEGEND:

- | | | | | | |
|--|--|--|--|--|--|
| | EDGE OF WATER | | BANK PORTIONS OF COMMERCIAL/INDUSTRIAL PROPERTIES | | PRIOR (HISTORICAL) PCB SOIL SAMPLE LOCATION |
| | VEGETATION | | BANK PORTIONS OF RESIDENTIAL PROPERTIES | | EPA PCB SOIL BORING LOCATION |
| | APPROXIMATE SURFACE ELEVATION (1-FT CONTOUR) | | COMMERCIAL/INDUSTRIAL PROPERTY | | PRE-DESIGN PCB SOIL SAMPLE LOCATION |
| | PROPERTY BOUNDARY | | RESIDENTIAL PROPERTY | | FEB/MARCH 2005 PRE-DESIGN PCB SAMPLE LOCATION |
| | BOUNDARY BETWEEN COMMONLY OWNED PROPERTIES | | PAVED AREAS | | OCTOBER 2005 PRE-DESIGN PCB SOIL SAMPLE LOCATION |
| | 19-9-30 PROPERTY ID | | APPROXIMATE LIMIT OF NON-BANK PORTION TO BE INCLUDED WITHIN THE SILVER LAKE AREA RAA (DASHED WHERE INFERRED) | | PROPOSED PCB SOIL SAMPLE LOCATION |



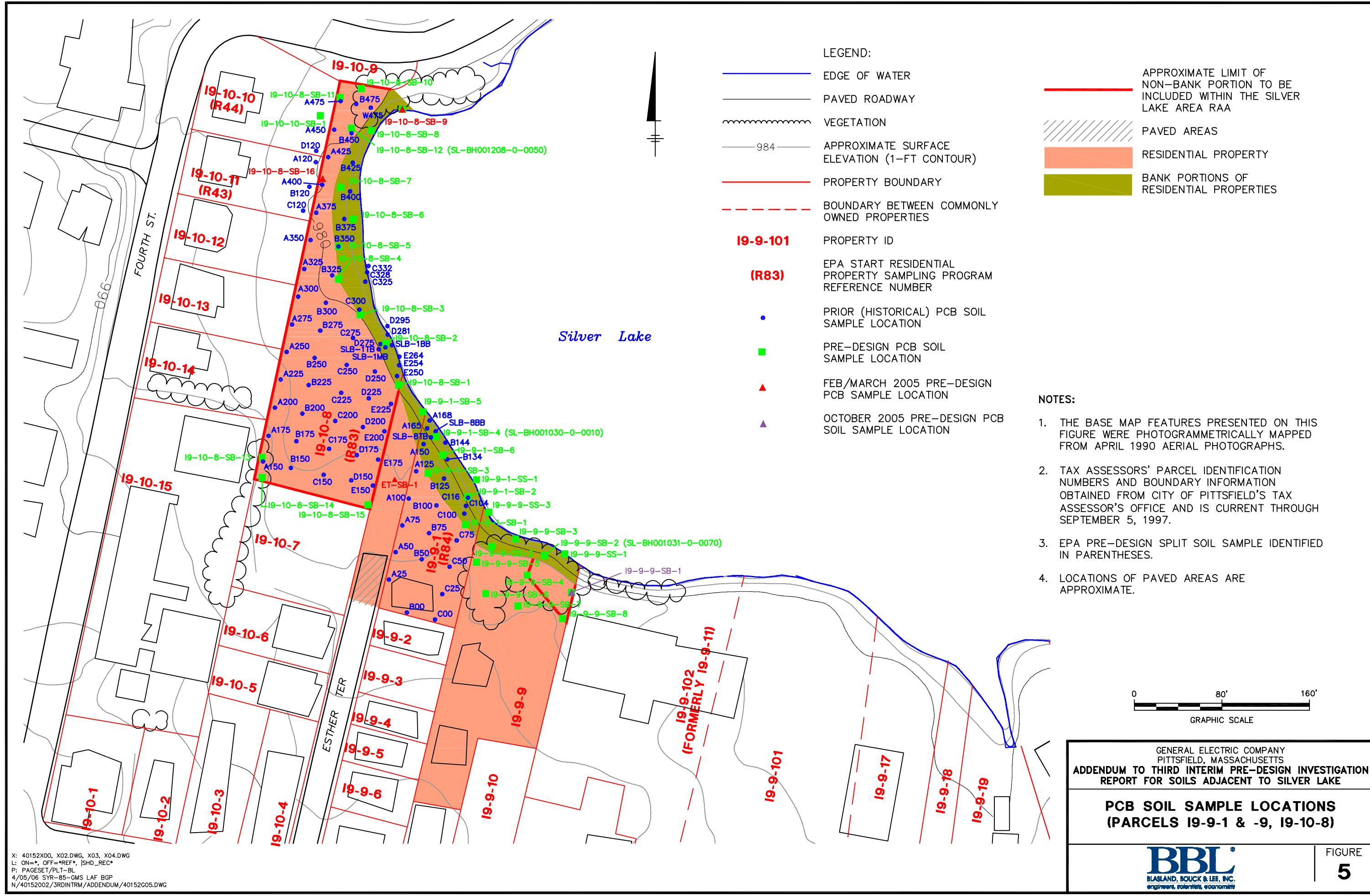
GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS
ADDENDUM TO THIRD INTERIM PRE-DESIGN INVESTIGATION REPORT FOR SOILS ADJACENT TO SILVER LAKE

EXISTING AND PROPOSED PCB SOIL SAMPLE LOCATIONS (PARCELS 19-9-101, -102, -17, -18, -19)

BBL
BLASLAND, BOUCK & LEE, INC.
engineers, scientists, economists

FIGURE **4**

X: 40152X00, X02, X03, X04.DWG
L: ON=*, OFF=*REF*
P: PAGESET/PLT-BL
4/05/06 SYR-85-LAF LAF BGP
N/40152002/3RDINTRM/ADDENDUM/40152G04.DWG

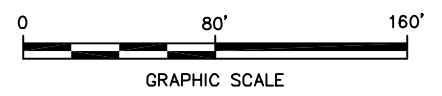


- LEGEND:
- EDGE OF WATER
 - PAVED ROADWAY
 - VEGETATION
 - 984 APPROXIMATE SURFACE ELEVATION (1-FT CONTOUR)
 - PROPERTY BOUNDARY
 - BOUNDARY BETWEEN COMMONLY OWNED PROPERTIES
 - 19-9-101 PROPERTY ID
 - (R83) EPA START RESIDENTIAL PROPERTY SAMPLING PROGRAM REFERENCE NUMBER
 - PRIOR (HISTORICAL) PCB SOIL SAMPLE LOCATION
 - PRE-DESIGN PCB SOIL SAMPLE LOCATION
 - ▲ FEB/MARCH 2005 PRE-DESIGN PCB SAMPLE LOCATION
 - ▲ OCTOBER 2005 PRE-DESIGN PCB SOIL SAMPLE LOCATION

- APPROXIMATE LIMIT OF NON-BANK PORTION TO BE INCLUDED WITHIN THE SILVER LAKE AREA RAA
- PAVED AREAS
- RESIDENTIAL PROPERTY
- BANK PORTIONS OF RESIDENTIAL PROPERTIES

NOTES:

1. THE BASE MAP FEATURES PRESENTED ON THIS FIGURE WERE PHOTOGRAMMETRICALLY MAPPED FROM APRIL 1990 AERIAL PHOTOGRAPHS.
2. TAX ASSESSORS' PARCEL IDENTIFICATION NUMBERS AND BOUNDARY INFORMATION OBTAINED FROM CITY OF PITTSFIELD'S TAX ASSESSOR'S OFFICE AND IS CURRENT THROUGH SEPTEMBER 5, 1997.
3. EPA PRE-DESIGN SPLIT SOIL SAMPLE IDENTIFIED IN PARENTHESES.
4. LOCATIONS OF PAVED AREAS ARE APPROXIMATE.

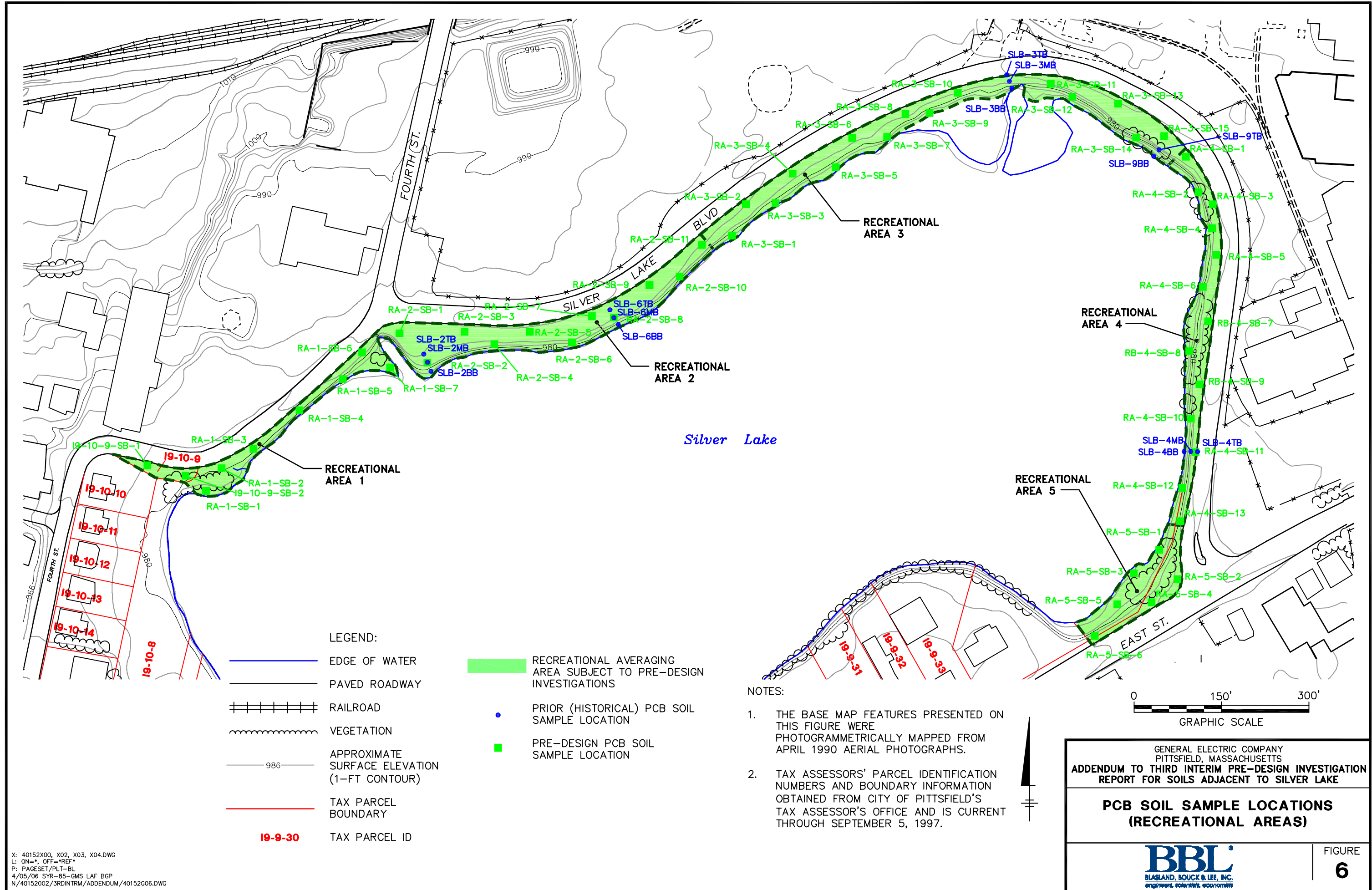


GENERAL ELECTRIC COMPANY
 PITTSFIELD, MASSACHUSETTS
 ADDENDUM TO THIRD INTERIM PRE-DESIGN INVESTIGATION
 REPORT FOR SOILS ADJACENT TO SILVER LAKE

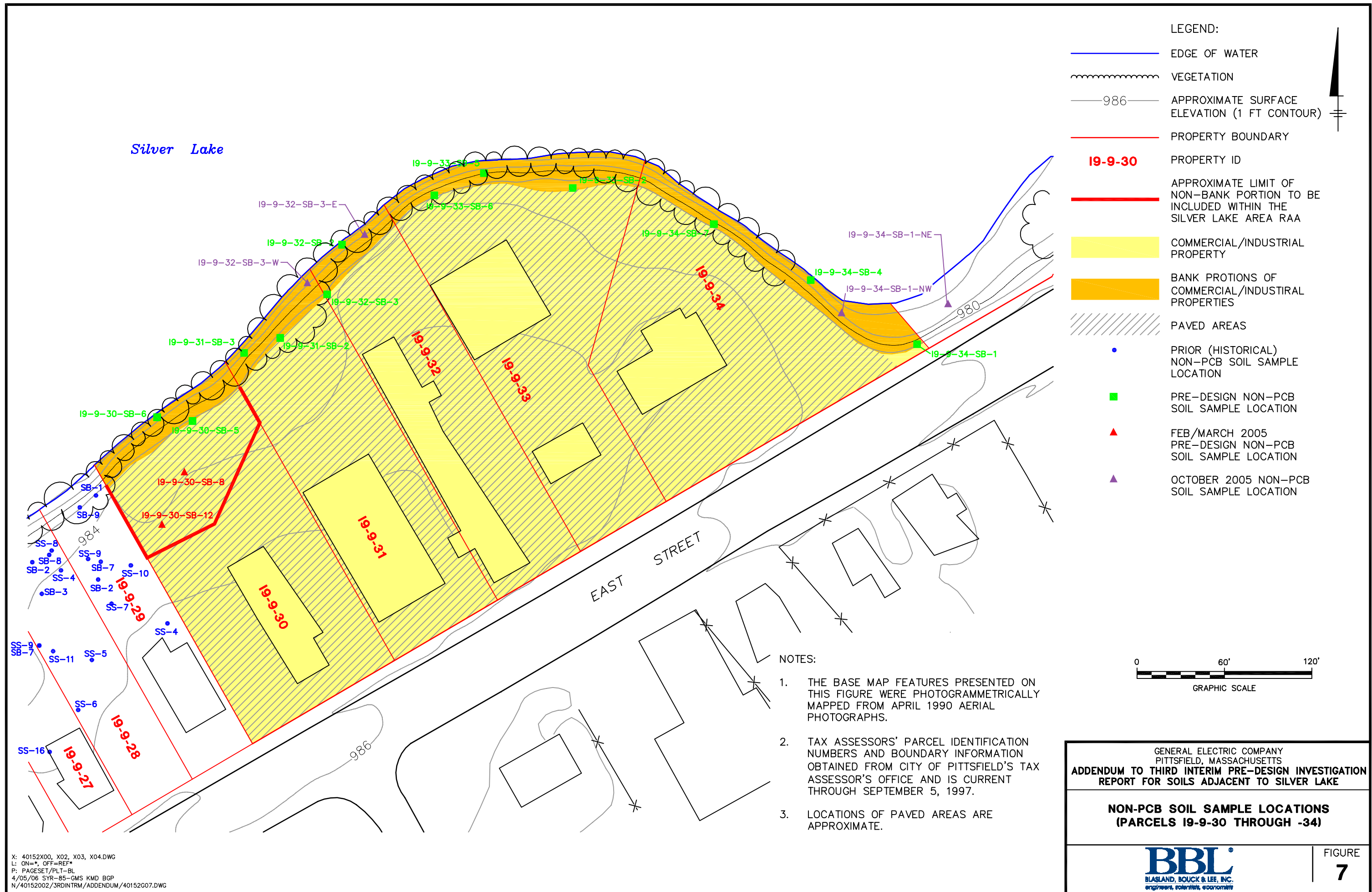
**PCB SOIL SAMPLE LOCATIONS
 (PARCELS 19-9-1 & -9, 19-10-8)**



X: 40152X00, X02.DWG, X03, X04.DWG
 L: ON=*, OFF=*REF*, [SHD_REC*
 P: PAGESET/PLT-BL
 4/05/06 SYR-85-GMS LAF BGP
 N/40152002/3RDINTRM/ADDENDUM/40152G05.DWG

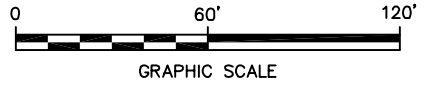


X: 40152X00, X02, X03, X04.DWG
 L: ON=*, OFF=*REF*
 P: PAGESET/PLT-BL
 4/05/06 SYR-85-GMS LAF BGP
 N/40152002/3RDINTRM/ADDENDUM/40152G06.DWG



- LEGEND:
- EDGE OF WATER
 - VEGETATION
 - APPROXIMATE SURFACE ELEVATION (1 FT CONTOUR)
 - PROPERTY BOUNDARY
 - 19-9-30** PROPERTY ID
 - APPROXIMATE LIMIT OF NON-BANK PORTION TO BE INCLUDED WITHIN THE SILVER LAKE AREA RAA
 - COMMERCIAL/INDUSTRIAL PROPERTY
 - BANK PORTIONS OF COMMERCIAL/INDUSTRIAL PROPERTIES
 - PAVED AREAS
 - PRIOR (HISTORICAL) NON-PCB SOIL SAMPLE LOCATION
 - PRE-DESIGN NON-PCB SOIL SAMPLE LOCATION
 - FEB/MARCH 2005 PRE-DESIGN NON-PCB SOIL SAMPLE LOCATION
 - OCTOBER 2005 NON-PCB SOIL SAMPLE LOCATION

- NOTES:
1. THE BASE MAP FEATURES PRESENTED ON THIS FIGURE WERE PHOTOGRAMMETRICALLY MAPPED FROM APRIL 1990 AERIAL PHOTOGRAPHS.
 2. TAX ASSESSORS' PARCEL IDENTIFICATION NUMBERS AND BOUNDARY INFORMATION OBTAINED FROM CITY OF PITTSFIELD'S TAX ASSESSOR'S OFFICE AND IS CURRENT THROUGH SEPTEMBER 5, 1997.
 3. LOCATIONS OF PAVED AREAS ARE APPROXIMATE.



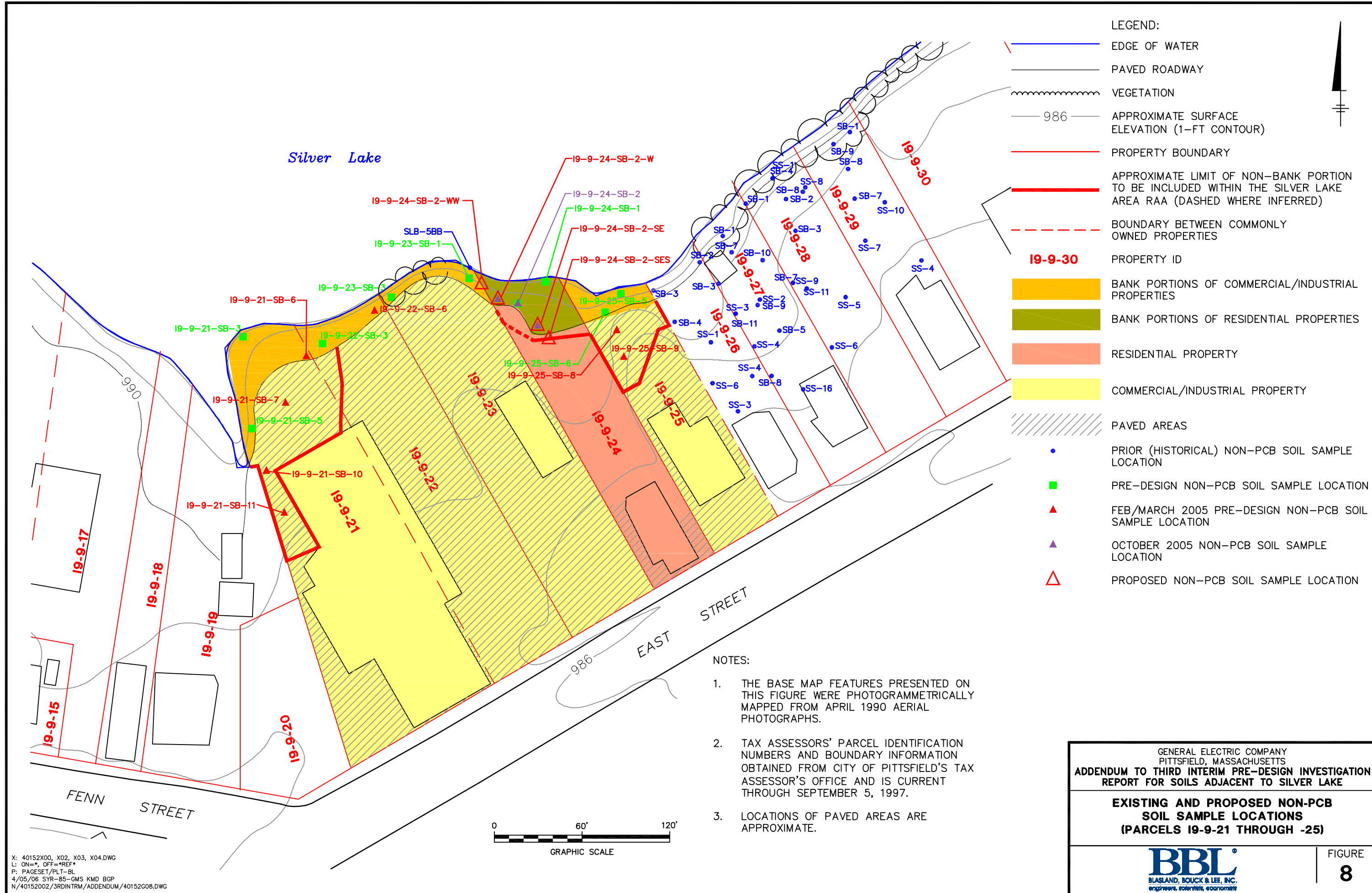
GENERAL ELECTRIC COMPANY
 PITTSFIELD, MASSACHUSETTS
**ADDENDUM TO THIRD INTERIM PRE-DESIGN INVESTIGATION
 REPORT FOR SOILS ADJACENT TO SILVER LAKE**

**NON-PCB SOIL SAMPLE LOCATIONS
 (PARCELS 19-9-30 THROUGH -34)**



FIGURE
7

X: 40152X00, X02, X03, X04.DWG
 L: ON=*, OFF=REF*
 P: PAGESET/PLT-BL
 4/05/06 SYR-85-GMS KMD BGP
 N/40152002/3RDINTRM/ADDENDUM/40152G07.DWG



LEGEND:

- EDGE OF WATER
- PAVED ROADWAY
- VEGETATION
- 986 APPROXIMATE SURFACE ELEVATION (1-FT CONTOUR)
- PROPERTY BOUNDARY
- APPROXIMATE LIMIT OF NON-BANK PORTION TO BE INCLUDED WITHIN THE SILVER LAKE AREA RAA (DASHED WHERE INFERRED)
- BOUNDARY BETWEEN COMMONLY OWNED PROPERTIES
- 19-9-30** PROPERTY ID
- BANK PORTIONS OF COMMERCIAL/INDUSTRIAL PROPERTIES
- BANK PORTIONS OF RESIDENTIAL PROPERTIES
- RESIDENTIAL PROPERTY
- COMMERCIAL/INDUSTRIAL PROPERTY
- PAVED AREAS
- PRIOR (HISTORICAL) NON-PCB SOIL SAMPLE LOCATION
- PRE-DESIGN NON-PCB SOIL SAMPLE LOCATION
- FEB/MARCH 2005 PRE-DESIGN NON-PCB SOIL SAMPLE LOCATION
- OCTOBER 2005 NON-PCB SOIL SAMPLE LOCATION
- PROPOSED NON-PCB SOIL SAMPLE LOCATION

NOTES:

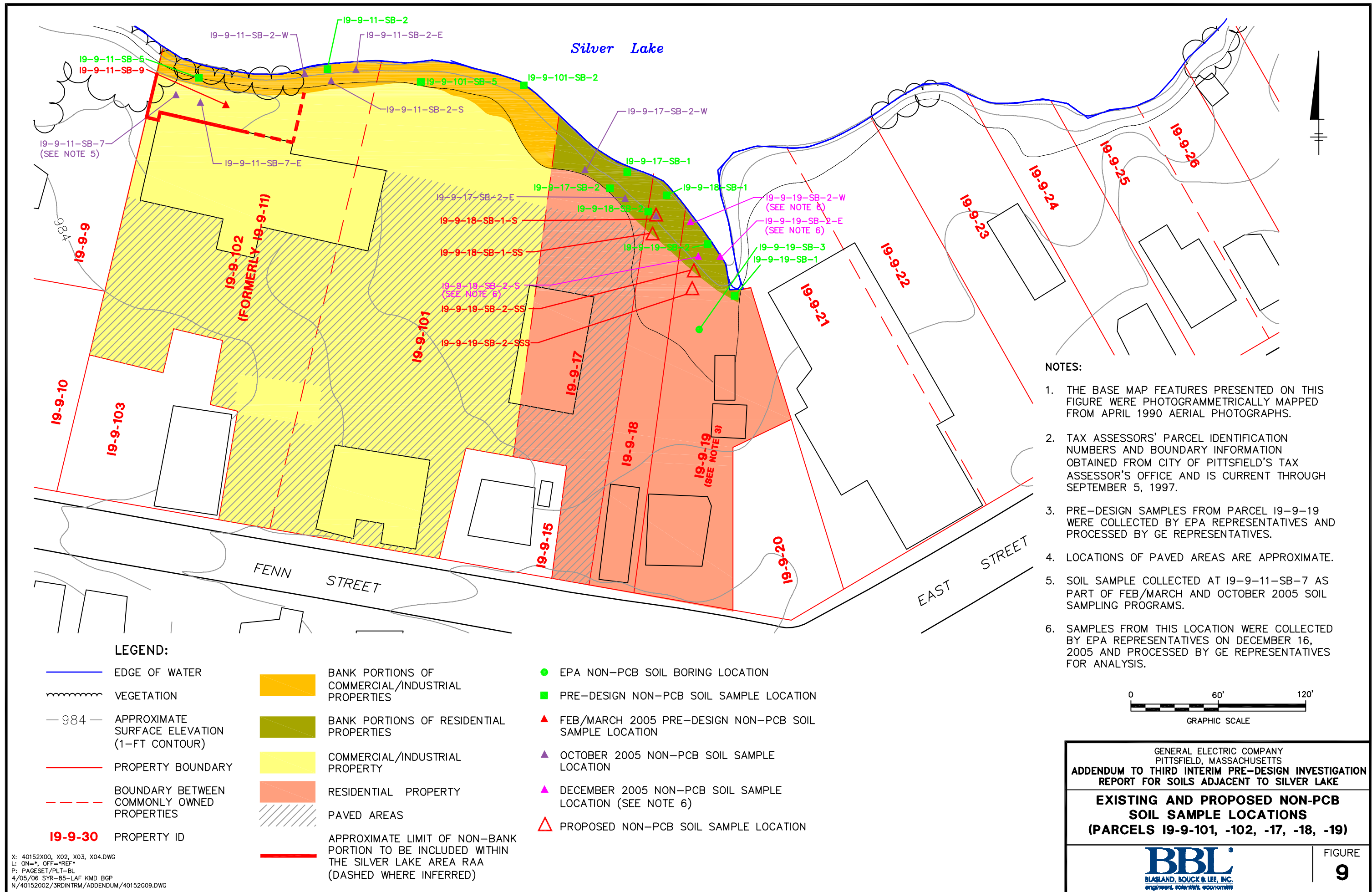
1. THE BASE MAP FEATURES PRESENTED ON THIS FIGURE WERE PHOTOGRAMMETRICALLY MAPPED FROM APRIL 1990 AERIAL PHOTOGRAPHS.
2. TAX ASSESSORS' PARCEL IDENTIFICATION NUMBERS AND BOUNDARY INFORMATION OBTAINED FROM CITY OF PITTSFIELD'S TAX ASSESSOR'S OFFICE AND IS CURRENT THROUGH SEPTEMBER 5, 1997.
3. LOCATIONS OF PAVED AREAS ARE APPROXIMATE.

GENERAL ELECTRIC COMPANY
 PITTSFIELD, MASSACHUSETTS
**ADDENDUM TO THIRD INTERIM PRE-DESIGN INVESTIGATION
 REPORT FOR SOILS ADJACENT TO SILVER LAKE**

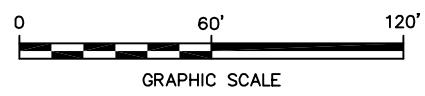
**EXISTING AND PROPOSED NON-PCB
 SOIL SAMPLE LOCATIONS
 (PARCELS 19-9-21 THROUGH -25)**



X: 40152X00, X02, X03, X04.DWG
 L: ON=*, OFF=*REF*
 P: PAGESET/PLT-BL
 4/05/06 SYR-85-GMS KMD BGP
 N/40152002/3RDINTRM/ADDENDUM/40152G08.DWG



- NOTES:**
1. THE BASE MAP FEATURES PRESENTED ON THIS FIGURE WERE PHOTOGRAMMETRICALLY MAPPED FROM APRIL 1990 AERIAL PHOTOGRAPHS.
 2. TAX ASSESSORS' PARCEL IDENTIFICATION NUMBERS AND BOUNDARY INFORMATION OBTAINED FROM CITY OF PITTSFIELD'S TAX ASSESSOR'S OFFICE AND IS CURRENT THROUGH SEPTEMBER 5, 1997.
 3. PRE-DESIGN SAMPLES FROM PARCEL 19-9-19 WERE COLLECTED BY EPA REPRESENTATIVES AND PROCESSED BY GE REPRESENTATIVES.
 4. LOCATIONS OF PAVED AREAS ARE APPROXIMATE.
 5. SOIL SAMPLE COLLECTED AT 19-9-11-SB-7 AS PART OF FEB/MARCH AND OCTOBER 2005 SOIL SAMPLING PROGRAMS.
 6. SAMPLES FROM THIS LOCATION WERE COLLECTED BY EPA REPRESENTATIVES ON DECEMBER 16, 2005 AND PROCESSED BY GE REPRESENTATIVES FOR ANALYSIS.



LEGEND:

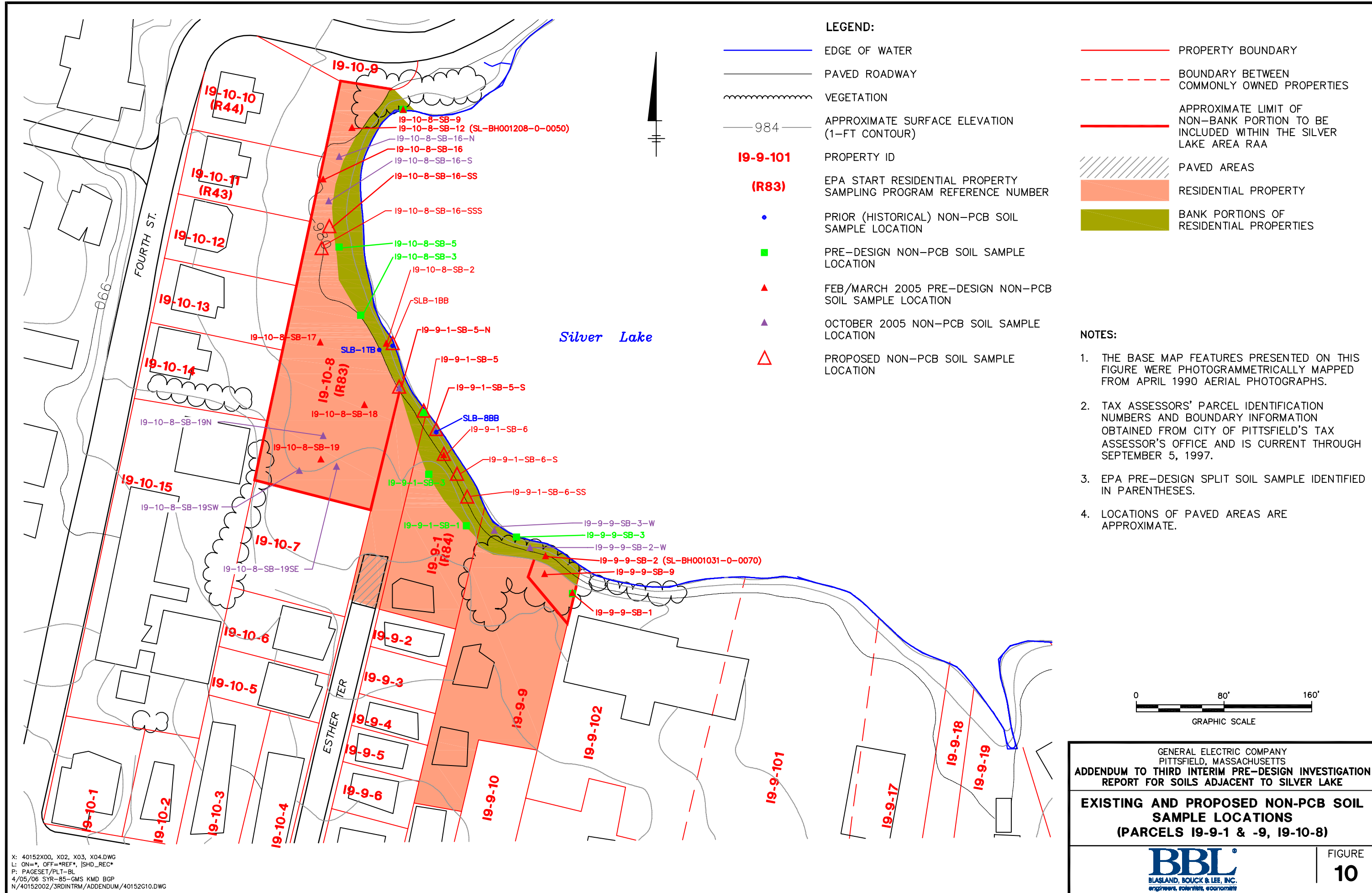
- | | | | |
|--|--|--|---|
| | EDGE OF WATER | | EPA NON-PCB SOIL BORING LOCATION |
| | VEGETATION | | PRE-DESIGN NON-PCB SOIL SAMPLE LOCATION |
| | APPROXIMATE SURFACE ELEVATION (1-FT CONTOUR) | | FEB/MARCH 2005 PRE-DESIGN NON-PCB SOIL SAMPLE LOCATION |
| | PROPERTY BOUNDARY | | OCTOBER 2005 NON-PCB SOIL SAMPLE LOCATION |
| | BOUNDARY BETWEEN COMMONLY OWNED PROPERTIES | | DECEMBER 2005 NON-PCB SOIL SAMPLE LOCATION (SEE NOTE 6) |
| | PROPERTY ID | | PROPOSED NON-PCB SOIL SAMPLE LOCATION |
| | BANK PORTIONS OF COMMERCIAL/INDUSTRIAL PROPERTIES | | |
| | BANK PORTIONS OF RESIDENTIAL PROPERTIES | | |
| | COMMERCIAL/INDUSTRIAL PROPERTY | | |
| | RESIDENTIAL PROPERTY | | |
| | PAVED AREAS | | |
| | APPROXIMATE LIMIT OF NON-BANK PORTION TO BE INCLUDED WITHIN THE SILVER LAKE AREA RAA (DASHED WHERE INFERRED) | | |

GENERAL ELECTRIC COMPANY
 PITTSFIELD, MASSACHUSETTS
**ADDENDUM TO THIRD INTERIM PRE-DESIGN INVESTIGATION
 REPORT FOR SOILS ADJACENT TO SILVER LAKE**

**EXISTING AND PROPOSED NON-PCB
 SOIL SAMPLE LOCATIONS
 (PARCELS 19-9-101, -102, -17, -18, -19)**



X: 40152X00, X02, X03, X04.DWG
 L: ON=*, OFF=*REF*
 P: PAGESET/PLT-BL
 4/05/06 SYR-85-LAF KMD BGP
 N/40152002/3RDINTRM/ADDENDUM/40152G09.DWG

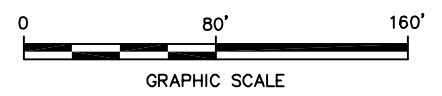


LEGEND:

- EDGE OF WATER
- PAVED ROADWAY
- VEGETATION
- APPROXIMATE SURFACE ELEVATION (1-FT CONTOUR)
- PROPERTY BOUNDARY
- BOUNDARY BETWEEN COMMONLY OWNED PROPERTIES
- APPROXIMATE LIMIT OF NON-BANK PORTION TO BE INCLUDED WITHIN THE SILVER LAKE AREA RAA
- PROPERTY ID
- EPA START RESIDENTIAL PROPERTY SAMPLING PROGRAM REFERENCE NUMBER
- PRIOR (HISTORICAL) NON-PCB SOIL SAMPLE LOCATION
- PRE-DESIGN NON-PCB SOIL SAMPLE LOCATION
- FEB/MARCH 2005 PRE-DESIGN NON-PCB SOIL SAMPLE LOCATION
- OCTOBER 2005 NON-PCB SOIL SAMPLE LOCATION
- PROPOSED NON-PCB SOIL SAMPLE LOCATION
- PAVED AREAS
- RESIDENTIAL PROPERTY
- BANK PORTIONS OF RESIDENTIAL PROPERTIES

NOTES:

1. THE BASE MAP FEATURES PRESENTED ON THIS FIGURE WERE PHOTOGRAMMETRICALLY MAPPED FROM APRIL 1990 AERIAL PHOTOGRAPHS.
2. TAX ASSESSORS' PARCEL IDENTIFICATION NUMBERS AND BOUNDARY INFORMATION OBTAINED FROM CITY OF PITTSFIELD'S TAX ASSESSOR'S OFFICE AND IS CURRENT THROUGH SEPTEMBER 5, 1997.
3. EPA PRE-DESIGN SPLIT SOIL SAMPLE IDENTIFIED IN PARENTHESES.
4. LOCATIONS OF PAVED AREAS ARE APPROXIMATE.

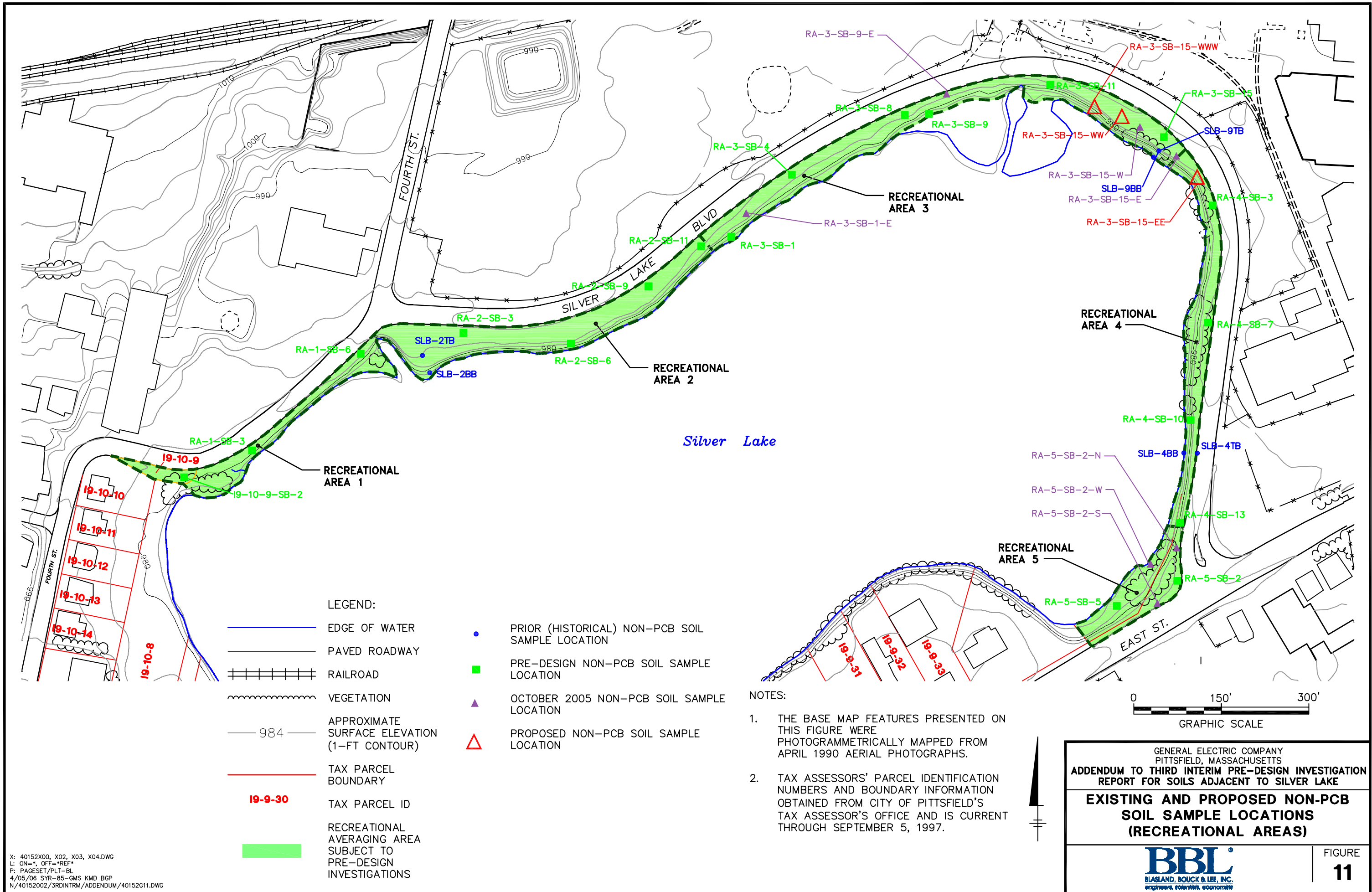


GENERAL ELECTRIC COMPANY
 PITTSFIELD, MASSACHUSETTS
 ADDENDUM TO THIRD INTERIM PRE-DESIGN INVESTIGATION
 REPORT FOR SOILS ADJACENT TO SILVER LAKE

**EXISTING AND PROPOSED NON-PCB SOIL
 SAMPLE LOCATIONS
 (PARCELS 19-9-1 & -9, 19-10-8)**



X: 40152X00, X02, X03, X04.DWG
 L: ON=*, OFF=*REF*, [SHD_REC*
 P: PAGESET/PLT-BL
 4/05/06 SYR-85-GMS KMD BGP
 N/40152002/3RDINTRM/ADDENDUM/40152G10.DWG



LEGEND:

- EDGE OF WATER
- PAVED ROADWAY
- RAILROAD
- VEGETATION
- APPROXIMATE SURFACE ELEVATION (1-FT CONTOUR)
- TAX PARCEL BOUNDARY
- TAX PARCEL ID
- RECREATIONAL AVERAGING AREA SUBJECT TO PRE-DESIGN INVESTIGATIONS
- PRIOR (HISTORICAL) NON-PCB SOIL SAMPLE LOCATION
- PRE-DESIGN NON-PCB SOIL SAMPLE LOCATION
- OCTOBER 2005 NON-PCB SOIL SAMPLE LOCATION
- PROPOSED NON-PCB SOIL SAMPLE LOCATION

NOTES:

1. THE BASE MAP FEATURES PRESENTED ON THIS FIGURE WERE PHOTOGRAMMETRICALLY MAPPED FROM APRIL 1990 AERIAL PHOTOGRAPHS.
2. TAX ASSESSORS' PARCEL IDENTIFICATION NUMBERS AND BOUNDARY INFORMATION OBTAINED FROM CITY OF PITTSFIELD'S TAX ASSESSOR'S OFFICE AND IS CURRENT THROUGH SEPTEMBER 5, 1997.

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS
**ADDENDUM TO THIRD INTERIM PRE-DESIGN INVESTIGATION
REPORT FOR SOILS ADJACENT TO SILVER LAKE**

**EXISTING AND PROPOSED NON-PCB
SOIL SAMPLE LOCATIONS
(RECREATIONAL AREAS)**




FIGURE
11

X: 40152X00, X02, X03, X04.DWG
L: ON=*, OFF=*REF*
P: PAGESET/PLT-BL
4/05/06 SYR-85-GMS KMD BGP
N/40152002/3RDINTRM/ADDENDUM/40152G11.DWG

Appendices

Appendix A

Soil Boring Logs

Date Start/Finish: 12/16/05
Drilling Company: BBL
Driller's Name: JJB
Drilling Method: Direct Push
Auger Size: NA
Rig Type: Slide Hammer
Sample Method: 2' Macrocore

Northing: 532900.3
Easting: 129872.5
Casing Elevation: NA
Borehole Depth: 4' below grade
Surface Elevation: 978.4
Descriptions By: EMF

Boring ID: I9-9-19-SB-2E
Client: General Electric Company
Location: Silver Lake Parcel I9-9-19

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Boring Construction
0	985							
		1	0-2	1.0	0.0		Light brown fine SAND and SILT, trace Organic Material. Light brown fine SAND and SILT with Coal, Ash, and Cinders.	Borehole backfilled with Bentonite.
		2	2-4	1.0	0.0			
5	980							
10	975							
15	970							



Remarks: bgs = below ground surface; NA = Not Applicable/Available.
 Analyses: 0-1': Lead; 1-3': Lead.

Date Start/Finish: 12/16/05
Drilling Company: BBL
Driller's Name: JJB
Drilling Method: Direct Push
Auger Size: NA
Rig Type: Slide Hammer
Sample Method: 2' Macrocore

Northing: 532900.9
Easting: 129858.0
Casing Elevation: NA
Borehole Depth: 4' below grade
Surface Elevation: 977.8
Descriptions By: EMF

Boring ID: I9-9-19-SB-2S
Client: General Electric Company
Location: Silver Lake Parcel I9-9-19

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Boring Construction
0	985							
		1	0-2	1.0	0.0		Light brown fine SAND and SILT, trace Organic Material. Light brown fine SAND and SILT with Coal, Ash, and Cinders.	
		2	2-4	1.0	0.0			
5	980							
10	975							
15	970							



Remarks: bgs = below ground surface; NA = Not Applicable/Available.
 Analyses: 0-1': Lead; 1-3': Lead.

Date Start/Finish: 12/16/05
Drilling Company: BBL
Driller's Name: JJB
Drilling Method: Direct Push
Auger Size: NA
Rig Type: Slide Hammer
Sample Method: 2' Macrocore

Northing: 532924.1
Easting: 129852.4
Casing Elevation: NA

Borehole Depth: 4' below grade
Surface Elevation: 978.2

Descriptions By: EMF

Boring ID: I9-9-19-SB-2W
Client: General Electric Company

Location: Silver Lake Parcel I9-9-19

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Boring Construction
0	985							
		1	0-2	1.0	0.0		Light brown fine SAND and SILT, trace Organic Material. Light brown fine SAND and SILT with Coal, Ash, and Cinders.	
		2	2-4	1.0	0.0			
5	980							
10	975							
15	970							



Remarks: bgs = below ground surface; NA = Not Applicable/Available.
 Analyses: 0-1': Lead; 1-3': Lead.

Appendix B

Data Validation Report (December 2005)

APPENDIX B
SOIL SAMPLING DATA VALIDATION REPORT

ADDENDUM TO THE THIRD INTERIM PRE-DESIGN INVESTIGATION REPORT
FOR SOILS ADJACENT TO SILVER LAKE

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

1.0 General

This attachment summarizes the Tier I and Tier II data reviews performed for soil samples collected during Supplemental Pre-Design Investigation activities conducted in support of the Removal Design/Removal Action (RD/RA) at the Silver Lake site located in Pittsfield, Massachusetts. The samples were analyzed for metals by SGS Environmental Services, Inc. of Charleston, West Virginia. Data validation was performed for six metals samples.

2.0 Data Evaluation Procedures

This attachment outlines the applicable quality control criteria utilized during the data review process and any deviations from those criteria. The data review was conducted in accordance with the following documents:

- *Field Sampling Plan/Quality Assurance Project Plan, General Electric Company, Pittsfield, Massachusetts*, Blasland, Bouck & Lee, Inc. (BBL; FSP/QAPP, approved May 25, 2004 and resubmitted June 15, 2004);
- *Region I Tiered Organic and Inorganic Data Validation Guidelines*, USEPA Region I (July 1, 1993); and
- *Region I Laboratory Data Validation Functional Guidelines for Evaluating Inorganics Analyses*, USEPA Region I (June 13, 1988) (Modified February 1989).

A tabulated summary of the Tier I and Tier II data evaluations is presented in Table B-1. Each sample subjected to evaluation is listed in Table B-1 to document that data review was performed, as well as present the highest level of data validation (Tier I or Tier II) that was applied. Samples that required data qualification are listed separately for each parameter (compound or analyte) that required qualification.

The following data qualifiers were used in this data evaluation:

- J The compound was positively identified, but the associated numerical value is an estimated concentration. This qualifier is used when the data evaluation procedure identifies a deficiency in the data generation process. This qualifier is also used when a compound is detected at an estimated concentration less than the corresponding practical quantitation limit (PQL).
- U The compound was analyzed for, but was not detected. The sample quantitation limit is presented and adjusted for dilution and (for solid samples only) percent moisture. Non-detect sample results are presented as ND(PQL) within this report and in Table B-1 for consistency with documents previously prepared for investigations conducted at this site.

UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is estimated and may or may not represent the actual level of quantitation. Non-detect sample results that required qualification are presented as ND(PQL) J within this report and in Table B-1 for consistency with documents previously prepared for this investigation.

3.0 Data Validation Procedures

The FSP/QAPP provides (in Section 7.5) that all analytical data will be validated to a Tier I level following the procedures presented in the *Region I Tiered Organic and Inorganic Data Validation Guidelines* (USEPA guidelines). Accordingly, 100% of the analytical data for these investigations were subjected to Tier I review. The Tier I review consisted of a completeness evidence audit, as outlined in the *USEPA Region I CSF Completeness Evidence Audit Program* (USEPA Region I, July 31, 1991), to verify that all laboratory data and documentation were present. In the event data packages were determined to be incomplete, the missing information was requested from the laboratory. Upon completion of the Tier I review, the data packages were in compliance with the USEPA Region I Tier I data completeness requirements. A tabulated summary of the samples subjected to Tier I and Tier II data evaluation is presented in the following table.

Summary of Samples Subjected to Tier I and Tier II Data Validation

Parameter	Tier I Only			Tier I & Tier II			Total
	Samples	Duplicates	Blanks	Samples	Duplicates	Blanks	
Metals	0	0	0	6	0	0	6
Total	0	0	0	6	0	0	6

As specified in the FSP/QAPP, Tier II data review consisted of a review of all data package summary forms for identification of quality assurance/quality control (QA/QC) deviations and qualification of the data according to the Region I Data Validation Functional Guidelines.

4.0 Data Review

Based on USEPA Region I Tier II data validation procedures, QA/QC parameter deviations that required sample result qualification were not observed for these data.

5.0 Overall Data Usability

This section summarizes the analytical data in terms of its completeness and usability for site characterization purposes. Data completeness is defined as the percentage of analytical results that have been determined to be usable during the data validation process. The percent usability calculation included analyses evaluated under both the Tier I and Tier II data validation reviews. Data completeness with respect to usability was calculated separately for analytical results for inorganic, and each of the organic, constituents. The percent usability calculation also includes quality control samples collected to aid in the evaluation of data usability. Therefore, field/equipment blank, trip blank, and field duplicate data determined to be unusable as a result of the validation process are represented in the percent usability calculation; the results of which are tabulated in the following table.

Data Usability

Parameter	Percent Usability	Rejected Data
Metals	100	None

The data package completeness, as determined from the Tier I data review, was used in combination with the data quality deviations identified during the Tier II data review to determine overall data quality. As specified in the FSP/QAPP, the overall precision, accuracy, representativeness, comparability, and completeness (PARCC) parameters determined from the Tier I and Tier II data reviews were used as indicators of overall data quality. These parameters were assessed through an evaluation of the results of the field and laboratory QA/QC sample analyses to provide a measure of compliance of the analytical data with the Data Quality Objectives (DQOs) specified in the FSP/QAPP. Therefore, the following sections present summaries of the PARCC parameters assessment with regard to the DQOs specified in the FSP/QAPP.

5.1 Precision

Precision measures the reproducibility of measurements under a given set of conditions. Specifically, it is a quantitative measure of the variability of a group of measurements compared to their average value. For this investigation, precision was defined as the RPD between duplicate sample results. The duplicate samples used to evaluate precision included laboratory duplicates and MS/MSD samples. For this analytical program, none of the data required qualification due to laboratory duplicate RPD deviations, or MS/MSD RPD deviations.

5.2 Accuracy

Accuracy measures the bias in an analytical system or the degree of agreement of a measurement with a known reference value. For this investigation, accuracy was defined as the percent recovery of QA/QC samples that were spiked with a known concentration of an analyte or compound of interest. The QA/QC samples used to evaluate analytical accuracy included instrument calibration, internal standards, laboratory control standards (LCSs), MS/MSD samples, contract required detection limit (CRDL) samples, and surrogate compound recoveries. For this analytical program, none of the data required qualification due to calibration deviations, MS/MSD recovery deviations, CRDL standard recovery deviations, internal standards recovery deviations, or LCS recovery deviations.

5.3 Representativeness

Representativeness expresses the degree to which sample data accurately and precisely represents a specific population characteristic, parameter variations at a sampling point, or an environmental condition. Representativeness is a qualitative parameter that is most concerned with the proper design of the sampling program. The representativeness criterion is best satisfied by making certain that sampling locations are selected properly and a sufficient number of samples are collected. This parameter has been addressed by collecting samples at locations specified in MDEP-approved work plans, and by following the procedures for sample collection/analyses that were described in the FSP/QAPP. Additionally, the analytical program used procedures consistent with USEPA-approved analytical methodology. A QA/QC parameter that is an indicator of the representativeness of a sample is holding time. Holding time criteria are established to maintain the samples in a state that is representative of the in-situ field conditions before analysis. For this analytical program, none of the data required qualification for exceeding holding time requirements.

5.4 Comparability

Comparability is a qualitative parameter expressing the confidence with which one data set can be compared with another. This goal was achieved through the use of the standardized techniques for sample collection and analysis presented in the FSP/QAPP. The USEPA SW-846¹ analytical methods presented in the FSP/QAPP are updated on occasion by the USEPA to benefit from recent technological

¹ Test Methods for evaluating Solid Waste, SW-846, USEPA, Final Update III, December 1996.

advancements in analytical chemistry and instrumentation. In most cases, method upgrades include the incorporation of new technology that improves the sensitivity and stability of the instrumentation or allows the laboratory to increase throughput without hindering accuracy and precision. Overall, the analytical methods for this investigation have remained consistent in their general approach through continued use of the basic analytical techniques (e.g., sample extraction/preparation, instrument calibration, QA/QC procedures). Through the use of consistent base analytical procedures, and by requiring that updated procedures meet the QA/QC criteria specified in the FSP/QAPP, the analytical data from past, present, and future sampling events will be comparable to allow for qualitative and quantitative assessment of site conditions.

5.5 Completeness

Completeness is defined as the percentage of measurements that are judged to be valid or usable to meet the prescribed DQOs. The completeness criterion is essentially the same for all data uses -- the generation of a sufficient amount of valid data. This analytical data set had an overall usability of 100%.

**TABLE B - 1
ANALYTICAL DATA VALIDATION SUMMARY**

**ADDENDUM TO THE THIRD PRE-DESIGN INVESTIGATION REPORT
FOR SOILS ADJACENT TO SILVER LAKE**

**GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in parts per million, ppm)**

Sample Delivery Group No.	Sample ID	Date Collected	Matrix	Validation Level	Qualification	Compound	QA/QC Parameter	Value	Control Limits	Qualified Result	Notes
Metals											
5L0P418	I9-9-19-SB-2E (0 - 1)	12/16/2005	Soil	Tier II	No						
5L0P418	I9-9-19-SB-2E (1 - 3)	12/16/2005	Soil	Tier II	No						
5L0P418	I9-9-19-SB-2S (0 - 1)	12/16/2005	Soil	Tier II	No						
5L0P418	I9-9-19-SB-2S (1 - 3)	12/16/2005	Soil	Tier II	No						
5L0P418	I9-9-19-SB-2W (0 - 1)	12/16/2005	Soil	Tier II	No						
5L0P418	I9-9-19-SB-2W (1 - 3)	12/16/2005	Soil	Tier II	No						