

GE 159 Plastics Avenue Pittsfield, MA 01201

Transmitted via Overnight Delivery

September 27, 2005

Mr. Dean Tagliaferro
Project Coordinator
U.S. Environmental Protection Agency, Region 1
c/o Weston Solutions, Inc.
10 Lyman Street
Pittsfield, MA 01201

Re: GE-Pittsfield/Housatonic River Site

East Street Area 1-North (GECD130)

Final Completion Report

Dear Mr. Tagliaferro:

Pursuant to Paragraph 88.a of the Consent Decree for the GE-Pittsfield/Housatonic River Site, enclosed is General Electric Company's (GE's) Final Completion Report for East Street Area 1-North. This report demonstrates that the East Street Area 1-North Removal Action has been completed in full satisfaction of the requirements of the Consent Decree. Accordingly, GE requests that EPA issue a Certification of Completion for this Removal Action.

Sincerely,

Andrew T. Silfer, P.E.

GE Project Coordinator

Enclosure

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Property Owner, Parcel K10-14-1

Public Information Repositories

GE Internal Repository

(* without enclosure)

Final Completion Report for the East Street Area 1-North Removal Action

General Electric Company Pittsfield, Massachusetts

September 2005



Statement and Certification by GE's Project Coordinator

I am the General Electric Company's (GE's) Project Coordinator for activities conducted by GE pursuant

to the Consent Decree for the GE-Pittsfield/Housatonic River Site, which was entered by the United

States District Court for the District of Massachusetts on October 27, 2000.

As described in this Final Completion Report for the East Street Area 1-North Removal Action, the East

Street Area 1-North Removal Action required by the Consent Decree has been completed in full

satisfaction of the requirements of the Consent Decree relating to that Removal Action.

I certify under penalty of law that this document and all attachments were prepared under my direction or

supervision in accordance with a system designed to assure that qualified personnel properly gather and

evaluate the information submitted. Based on my inquiry of the person or persons who manage the

system, or those persons directly responsible for gathering the information, the information submitted is,

to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant

penalties for submitting false information, including the possibility of fine and imprisonment for knowing

violations.

Andrew T. Silfer, P.E.

GE Project Coordinator

Data

9/27 2005

Statement by Supervising Contractor

I am a registered Professional Engineer and represent Blasland, Bouck, and Lee, Inc. as the Supervising Contractor for work conducted by the General Electric Company pursuant to the Consent Decree for the GE-Pittsfield/Housatonic River Site, which was entered by the United States District Court for the District of Massachusetts on October 27, 2000.

Based on my inquiry of those individuals responsible for preparing this *Final Completion Report for the East Street Area 1-North Removal Action*, the information contained in this report is, to the best of my knowledge and belief, true, accurate, and complete. As summarized in this report, the East Street Area 1-North Removal Action required by the Consent Decree has been completed in full satisfaction of the requirements of the Consent Decree relating to that Removal Action, and the Performance Standards set forth in the Consent Decree for that Removal Action have been attained.

James M. Nuss, P.E.

Supervising Contractor Blasland, Bouck & Lee, Inc.

Date: SEPT. 27, 2005

Professional Engineer Seal Massachusetts No. 38000

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1. Introduction

This Final Completion Report for the East Street Area 1-North Removal Action (Final Completion Report) is submitted by the General Electric Company (GE), pursuant to Paragraph 88.a of the October 2000 Consent Decree (CD) for the GE-Pittsfield/Housatonic River Site (the Site), to request that the U.S. Environmental Protection Agency (EPA) issue a Certification of Completion for the East Street Area 1-North Removal Action at the Site. The submittal of this Final Completion Report represents the culmination of efforts conducted by GE to investigate and evaluate soils present within the East Street Area 1-North Removal Action Area (RAA). Figure 1 identifies the East Street Area 1-North RAA. As discussed in this report, no soil-related remediation actions were necessary to achieve the applicable Performance Standards established in the CD for this RAA. GE is submitting this report for EPA approval and to request a Certification of Completion confirming that GE has satisfactorily completed the East Street Area 1-North Removal Action and that the applicable Performance Standards established in the CD for this Removal Action have been attained.

The East Street Area 1-North RAA occupies an area of approximately 5 acres and is generally bounded by railway property and the associated right-of-way to the north, Merrill Road to the west, East Street to the south, and a non-GE-owned commercial area to the east. East Street Area 1-North is located outside of the 100-year floodplain of the Housatonic River.

As shown on Figure 2, eight parcels (based on City of Pittsfield tax maps), as well as certain adjacent City-owned road easements and/or rights-of-way, are located within East Street Area 1-North. Included are the following parcels:

- Parcel J10-8-1:
- Parcel J10-8-2;
- Parcel J10-8-3;
- Parcel J10-8-4;
- Parcel J10-8-5;
- Parcel J10-8-6:
- Parcel K10-14-1; and
- Parcel K11-1-15 (portion).

Pursuant to the CD and the accompanying *Statement of Work for Removal Actions Outside the River* (SOW) (Appendix E of the CD), all of East Street Area 1-North is considered a "commercial/industrial" area. Of the parcels identified above, the first six are owned by GE. The remaining two parcels consist of: (a) a property owned by a non-GE entity (Parcel K10-14-1); and (b) a narrow strip of land extending across the northern portion of this RAA, which comprises part of Parcel K11-1-15, owned by a railroad company (referred to herein as the "Parcel K11-1-15 Strip").

The activities completed by GE relating to East Street Area 1-North over the last few years have been consistent with the requirements of the CD and SOW. These activities, each of which has been documented in various reports and other submittals to the EPA, have included the following:

- Sampling and analysis of soils throughout East Street Area 1-North have been conducted to supplement usable historical soil data and to further assess the presence of polychlorinated biphenyls (PCBs) and other hazardous constituents listed in Appendix IX of 40 CFR Part 264 (excluding pesticides and herbicides), plus three additional constituents benzidine, 2-chloroethyl vinyl ether, and 1,2-diphenylhydrazine (Appendix IX+3) in soil.
- GE has performed Removal Design/Removal Action (RD/RA) evaluations to determine the need for remediation to achieve the soil-related Performance Standards established in the CD and SOW for East Street Area 1-North. GE has provided those evaluations to EPA in the January 2004 Revised Conceptual Removal Design/Removal Action Work Plan for East Street Area 1-North (Revised Conceptual RD/RA Work Plan), prepared by Blasland, Bouck & Lee, Inc. (BBL) and conditionally approved by EPA in a letter dated March 18, 2004.
- A Grant of Environmental Restriction and Easement (ERE) has been executed and recorded for the GEowned parcels within East Street Area 1-North (Parcels J10-8-1 through J10-8-6). The ERE establishes
 allowable and prohibited future uses of and activities on these parcels, as well as related reporting,
 protocols, and documentation associated with future site activities. This ERE, which covers the six GEowned parcels, has been approved by EPA, accepted by MDEP as the Grantee, and recorded in the
 Berkshire Middle District Registry of Deeds on September 27, 2005 in Book 3340, Page 133,
 accompanied by a Plan of Land and a Plan of Restricted Area, which were recorded in the Berkshire
 Middle District Registry of Deeds on the same date in Plat H, No. 34, and Plat H, No. 35, respectively.

- GE provided notices to the owners of Parcel K10-14-1 (April 2, 2004) and the Parcel K11-1-15 Strip (April 30, 2004) that a Conditional Solution was implemented at their properties. GE has also provided notices of this Conditional Solution to the holders of encumbrances on Parcel K10-14-1 (April 16, 2004) and the Parcel K11-1-15 Strip (April 28, 2005).
- A Pre-Certification Inspection of East Street Area 1-North was conducted on September 7, 2005, in accordance with Paragraph 88.a of the CD, and was attended by representatives of EPA, the Massachusetts Department of Environmental Protection (MDEP), and GE.

As described in Section 3.6 of the SOW, a Final Completion Report is intended to provide a detailed summary of the soil-related response actions that have been performed within the RAA (e.g., soil removal, engineered barrier installation, etc.) to achieve the applicable Performance Standards established in the CD and SOW. Such a document would then serve as the basis for GE's determination that the response actions have been completed in accordance with the applicable requirements of the CD. However, for East Street Area 1-North, the soil investigations and technical RD/RA evaluations resulted in the determination that current conditions already achieve the applicable Performance Standards, such that no soil remediation actions were necessary. As a result, this Final Completion Report does not provide details concerning completed soil remediation actions, but rather summarizes the investigations and evaluations that have been performed for this RAA.

Based on activities completed to date, including the execution and recording of an ERE for the GE-owned parcels and the sending of notices of Conditional Solutions for the non-GE-owned parcels, GE has satisfied all applicable soil-related Performance Standards established in the CD and SOW for the East Street Area 1-North Removal Action. As a result, consistent with the requirements of Paragraph 88.a of the CD, GE and its Supervising Contractor, BBL, have prepared statements indicating that the East Street Area 1-North Removal Action has been completed in full satisfaction of the applicable requirements of the CD. These statements are included with this Final Completion Report.

The soil investigations and RD/RA evaluations performed for East Street Area 1-North have generated a large amount of information, summarized in various documents related to the proposed and completed soil investigations and the results of technical RD/RA evaluations. In addition, EPA has provided approval or conditional approval of each such GE submittal. Collectively, this information serves as the basis for GE's conclusion that the applicable soil-related Performance Standards for the East Street Area 1-North Removal Action have been achieved. Including all of the available information within this Final Completion Report is

not warranted, nor is that the objective of this report, as discussed above. Instead, this Final Completion Report provides a general overview of the investigations and evaluations that GE has performed for this RAA, with references to more detailed reports and other correspondence.

Included in this report are summaries of pre-design and other soil investigations (Section 2), RD/RA evaluations for PCBs and other Appendix IX+3 constituents in soil (Section 3), and activities performed since completion of the RD/RA evaluations (Section 4). In addition, this Final Completion Report includes comparison of current site conditions to the applicable soil-related Performance Standards for East Street Area 1-North (Section 5) and a discussion of anticipated future inspection activities for the non-GE-owned portions of East Street Area 1-North (Section 6). Attachment A contains representative photographs of the RAA that depict site conditions after the CD was entered and the condition of this RAA at around the time of the Pre-Certification Inspection that was conducted on September 7, 2005. Attachment B contains the Conditional Solution Annual Inspection Checklist form to be used by GE to report on its annual inspections of the non-GE-owned parcels that are subject to Conditional Solutions.

2. Summary of Completed Soil Investigations

Over the last few years, GE has performed a number of sampling and analysis activities within East Street Area 1-North as part of pre-design soil investigations required pursuant to the CD and Attachment D of the SOW. The data generated by these activities (as well as certain sampling data obtained from investigations conducted by GE dating back to 1980) have been used to characterize existing conditions with respect to PCBs and other Appendix IX+3 constituents and to support the performance of technical RD/RA evaluations to assess the need for soil-related response actions to achieve the applicable Performance Standards.

As part of the pre-design activities under the CD, the following documents were prepared between May 2002 and January 2004 to identify the proposed scope of pre-design investigations for East Street Area 1-North, and then to report on the results of those investigations. As noted, each of these documents was approved by EPA.:

- Pre-Design Investigation Work Plan for the East Street Area 1-North Removal Action (Pre-Design Work Plan) (BBL, May 2002). (EPA conditional approval of this work plan was provided in a letter to GE dated August 29, 2002.)
- Addendum to Pre-Design Investigation Work Plan for the East Street Area 1-North Removal Action (Addendum to Pre-Design Work Plan) (letter from GE dated September 18, 2002). (EPA conditional approval of this addendum was provided in a letter to GE dated October 2, 2002.)
- Pre-Design Investigation Report for East Street Area 1-North Removal Action (Pre-Design Report) (BBL, April 2003). (EPA conditional approval of this report was provided in a letter to GE dated June 20, 2003.)
- Proposal for Supplemental VOC Sampling at East Street Area 1-North (letter from GE dated July 7, 2003). (EPA conditional approval of this proposal was provided in a letter to GE dated July 16, 2003.)
- Conceptual RD/RA Work Plan for East Street Area 1-North (Conceptual RD/RA Work Plan) (BBL,
 October 2003). (EPA conditional approval of this report was provided in a letter to GE dated November
 26, 2003.)
- Revised Conceptual RD/RA Work Plan (cited above). (EPA conditional approval of this report was provided in a letter to GE dated March 18, 2004.)

All of the sampling data have been subject to a data quality review and assessment pursuant to the EPA-approved *Field Sampling Plan/Quality Assurance Project Plan* (FSP/QAPP) in effect at the time of the review (BBL, December 2002, reflecting EPA approval by letter of November 4, 2002). Only data of acceptable quality were included in subsequent RD/RA evaluations. The soil sampling locations related to the pre-design investigations and the locations related to investigations conducted prior to the pre-design investigations mentioned above are shown on Figure 2.

3. Summary of RD/RA Soil Evaluations

Following completion of the pre-design soil investigations, GE performed technical RD/RA evaluations to assess the need for soil remediation to achieve the applicable Performance Standards established in the CD and SOW. The RD/RA evaluations were performed in accordance with the procedures established in Technical Attachments E and F of the SOW for PCBs and other Appendix IX+3 constituents in soil, respectively. These evaluations resulted in the determination that current conditions at East Street Area 1-North already achieve the applicable soil-related Performance Standards, such that no remediation actions for soils were necessary. However, since these Performance Standards were established for commercial/industrial properties, and since existing soil conditions did not meet the Performance Standards that would apply to residential properties, it was necessary to establish an ERE for the GE-owned portion of the RAA and Conditional Solutions for the non-GE-owned portion of the RAA. The results of these RD/RA evaluations were initially presented in the Conceptual RD/RA Work Plan, prepared by BBL and submitted to EPA in October 2003.

In a letter dated November 16, 2003, EPA provided conditional approval of the Conceptual RD/RA Work Plan and required that GE prepare a revised work plan to address and incorporate the EPA comments regarding certain Appendix IX+3 evaluations presented in the Conceptual RD/RA Work Plan. In response GE prepared and submitted the Revised Conceptual RD/RA Work Plan, which was conditionally approved by EPA in a letter dated March 18, 2004. In that letter, EPA indicated its concurrence with GE's conclusion that no soil-related remediation was necessary at East Street Area 1-North to achieve the applicable Performance Standards established in the CD and SOW. Figure 3 illustrates the current site features and topography, and Attachment A includes representative photographs of East Street Area 1-North.

4. Post-RD/RA Activities

Following the completion of the technical RD/RA evaluations, and the determination that current soil conditions with respect to PCBs and other Appendix IX+3 constituents achieve the applicable Performance Standards, GE performed other activities necessary to achieve the remaining Performance Standards and complete the activities necessary to request from EPA a Certification of Completion. This section describes these activities.

4.1 Grant of Environmental Restriction and Easement for GE-Owned Parcels

The CD (Paragraphs 24.a and 54) requires that GE execute and record an ERE for the GE-owned parcels within East Street Area 1-North in order to satisfy one of the applicable Performance Standards. A fully executed ERE for these GE-owned parcels (collectively), together with associated documentation (including the plans referenced in the ERE, a title insurance commitment, and copies of releases and terminations of easements held by other parties on these parcels), were submitted to EPA and MDEP on August 24, 2005. That ERE includes two current types of restricted areas, referred to as the "Open Soil/Vegetated Area" and the "Other Ground Covering Feature Area," which are depicted on a Plan of Restricted Area referenced in the ERE. The Other Ground Covering Feature Area consists of the area covered by an existing building, and the Open/Soil/Vegetated Area consists of the remainder of the GE-owned parcels that are subject to the ERE. Any future excavation activities in these areas are subject to certain restrictions and requirements set forth in the ERE.

The ERE was subsequently approved by EPA and accepted by MDEP as the Grantee, and it was recorded in the Berkshire Middle District Registry of Deeds on September 27, 2005, in Book 3340, Page 133. The Plan of Land and Plan of Restricted Area, which are referenced in the ERE, were separately recorded on the same date in the Berkshire Middle District Registry of Deeds in Plat H, No. 34, and Plat H, No. 35, respectively. In accordance with Paragraphs 54.g and 54.h of the CD, GE will provide to EPA and MDEP with an updated title insurance policy and a copy of the recorded ERE within 30 days of the recording date.

4.2 Implementation of Conditional Solutions at Non-GE Properties

For the non-GE-owned properties, the CD requires that, unless the Performance Standards for residential use are met (which they are not here), GE must make "best efforts" (as defined in the CD) to obtain an ERE from the

property owners (CD Paragraphs 24.b, 56, and 60.a), and that where an ERE cannot be obtained from the property owners, GE must implement a Conditional Solution in accordance with the CD (CD Paragraphs 24.b, 34-38). As documented in a letter from GE to EPA and MDEP dated August 15, 2003, GE requested an ERE from the owner of Parcel K10-14-1 in December 2002, but the owner subsequently advised GE that he did not want any restrictions on his property. As a result, GE advised EPA and MDEP that a Conditional Solution would be implemented at that property. Additionally, as also documented in that August 15, 2003 letter, for the narrow portion of Parcel K11-1-15 that lies within East Street Area 1-North, EPA and GE agreed that an ERE would not be pursued and that, if that portion does not meet residential standards, GE would implement a Conditional Solution there.

A Conditional Solution has been implemented at these non-GE-owned parcels. GE provided notices to the owners of Parcel K10-14-1 and the Parcel K11-1-15 Strip on April 2, 2004 and April 30, 2004, respectively, that a Conditional Solution had been implemented at their properties. In addition, GE provided notices of this Conditional Solution to the holders of encumbrances on Parcel K10-14-1 and the Parcel K11-1-15 Strip on April 16, 2004 and April 28, 2005, respectively.

4.3 Pre-Certification Inspection

A Pre-Certification Inspection of East Street Area 1-North was conducted in accordance with Paragraph 88.a of the CD on September 7, 2005. That inspection was attended by representatives of EPA, MDEP, and GE. No issues were identified during that inspection regarding the completed response actions. Based on the outcome of that inspection, the recording of the ERE, and the transmittal of the notices of Conditional Solutions, GE has concluded that the East Street Area 1-North Removal Action is complete and that the applicable Performance Standards for that Removal Action have been achieved. Therefore, in accordance with Paragraph 88.a of the CD, GE has prepared this report requesting EPA to provide a Certification of Completion for the East Street Area 1-North Removal Action. This report includes the required statements prepared by GE's Project Coordinator and its Supervising Contractor.

4.4 Future Demolition Activities

Occupying portions of Parcel K10-14-1 and Parcel J10-8-6 is an existing structure; the portion of the structure located on GE-owned Parcel J10-8-6 is referred to as Building 69. Under an agreement known as the Definitive Economic Development Agreement (DEDA) executed by GE, the City of Pittsfield, and the Pittsfield Economic

Development Authority (PEDA), GE will demolish the above-grade portions of Building 69. Following these demolition activities, the existing floor slab and subsurface building foundation will remain, and will continue to constitute the Other Ground-Covering Feature Area under the ERE. The actual demolition activities are not subject to the CD and SOW. However, since certain disposition activities will occur at locations within the GE facility (i.e., the On-Plant Consolidation Areas [OPCAs]), the disposition of demolition debris associated with those activities will be subject to the CD and SOW, but is not part of the East Street Area 1-North Removal Action.

The schedule for the demolishing of Building 69 located on the GE-owned portion of East Street Area 1-North has not yet been established. Once a schedule has been established and prior to performing the demolition activities, GE will submit to the EPA a work plan identifying the procedures and protocols for the characterization of the demolition debris from Building 69 and the placement of such debris in the OPCAs.

5. Comparison to CD Performance Standards

As noted above, GE's execution and recording of an ERE for the GE-owned parcels at East Street Area 1-North and the submission of notices of Conditional Solutions for the non-GE-owned parcels at this RAA have satisfied the Performance Standards requiring such actions. This section summarizes the basis for GE's conclusion that existing soil conditions at East Street Area 1-North satisfy the applicable Performance Standards for PCBs and other Appendix IX+3 constituents.

5.1 Evaluations for PCBs in Soil

The soils within East Street Area 1-North were evaluated in three separate averaging/evaluation areas – one consisting of the GE-owned portion of the RAA and the other two consisting of the two non-GE-owned properties. (For purposes of the RD/RA evaluations, each of these averaging/evaluation areas includes the adjacent City-owned road easements/rights-of-way.) The PCB-related Performance Standards for these areas apply to specific soil depth increments; and for each such depth increment, the need for remediation is based on comparison of a spatial average PCB concentration (calculated in accordance with Attachment E of the SOW) to numerical, risk-based concentrations established in the CD and SOW. The PCB-related Performance Standards for the various pertinent depth increments at East Street Area 1-North are generally summarized in the following chart:

	PCB Performance Standard (ppm)			
Parcel Type	0 to 1 foot	0 to 3 feet	1 to 6 feet	0 to 15 feet
GE-Owned Parcels	25	NA	200	100
Non-GE-Owned Parcels	25	25	200	100

Note: Performance Standards are based on spatial average PCB concentrations, calculated in accordance with the CD and SOW. In addition, there is a 125 ppm not-to-exceed Performance Standard for PCBs in the top foot of unpaved soils

A further description of these Performance Standards, along with an evaluation of existing soil PCB concentrations in relation to those standards, are provided below for the GE-owned and non-GE-owned properties at this RAA. The PCB soil data used to support these evaluations are included in the Pre-Design Investigation Report. In accordance with the SOW, the pre-design soil samples at GE-owned parcels were

generally collected on an approximate 100-foot grid in the areas outside the existing building (considered unpaved areas for sampling and evaluation purposes) and at a frequency of approximately two samples per acre within the Building 69 footprint (considered a paved area for sampling and evaluation purposes). At the non-GE-owned parcels, samples were generally collected on an approximate 50-foot grid for surface (top foot) samples and on an approximate 100-foot grid for deeper soil samples (to a depth of 15 feet) in both paved and unpaved areas.

For the <u>GE-owned</u> parcels (evaluated jointly as a single averaging area), the applicable PCB Performance Standards and the evaluation results showing that they were achieved are as follows:

Performance Standard – For the 0- to 1-foot depth increment, remediation is required if the spatial average PCB concentration in the top foot of the unpaved portion of the area or of the overall area (paved and unpaved combined) exceeds 25 ppm. In addition, there must be no soils containing PCB concentrations greater than 125 ppm in the top foot of the unpaved areas.

• Achieved. As documented in the Revised Conceptual RD/RA Work Plan, the spatial average PCB concentrations for the top one foot of soil in unpaved areas (0.98 ppm) and in the overall area (0.86 ppm) are well below 25 ppm. (As noted above, for purposes of RD/RA evaluations, the grade-level slab that will remain following GE's future demolition of Building 69 was considered a paved area.) The data used to develop these spatial averages included results from 16 soil samples (including historical and EPA-analyzed split samples) from 13 locations within the GE-owned parcels. Additionally, the maximum PCB concentration in the top foot of unpaved soils in East Street Area 1-North is 2.2 ppm, which is well below the not-to-exceed level of 125 ppm for such soils.

Performance Standard – For the 1- to 6-foot depth increment, remediation is required if the spatial average PCB concentration in that depth increment exceeds 200 ppm.

• Achieved. As documented in the Revised Conceptual RD/RA Work Plan, the spatial average PCB concentration for the 1- to 6-foot depth increment (1.54 ppm) is far below 200 ppm. The data used to develop this spatial average included results from 19 soil samples (including historical and EPA split samples) from 14 locations within the GE-owned parcels and one additional soil sample collected from one location within the Parcel K11-1-15 Strip.

Performance Standard – Where utilities potentially subject to emergency repair (e.g., water, gas, sewer, electricity, communication, and stormwater) are present and the spatial average PCB concentration in the corresponding utility corridor exceeds 200 ppm in the 1- to 6-foot depth increment, GE must evaluate whether any additional response actions are necessary. In addition, in the event that a new subgrade utility is installed or an existing subgrade utility is repaired or replaced in the future, the spatial average PCB concentration of the backfill materials must be at or below 25 ppm.

• Achieved. As discussed in the Revised Conceptual RD/RA Work Plan, the maximum PCB concentration detected in soils within the utility corridors at this RAA (1.62 ppm) is much less than 200 ppm. As a result, any spatial average calculation for soils in close proximity to a subsurface utility would necessarily be below 200 ppm. Additionally, the ERE includes provisions related to future repair of subgrade utilities.

Performance Standard – If the spatial average PCB concentration for the 0- to 15-foot depth increment exceeds 100 ppm (after incorporating the performance of any other required remediation), GE is required to install an engineered barrier.

• Achieved. As documented in the Revised Conceptual RD/RA Work Plan, the spatial average PCB concentration for the 0- to 15-foot depth increment (0.95 ppm) is far below 100 ppm. This spatial average concentration was calculated based on the results from the soil samples collected to evaluate the 0- to 1-foot and 1- to 6-foot depth increments (as described above), plus the results from 22 additional (deeper) soil samples (including historical and EPA split samples) collected from 17 locations within the GE-owned parcels.

For the <u>non-GE-owned</u> properties within East Street Area 1-North (Parcel K10-14-1 and the Parcel K11-1-15 Strip), where a Conditional Solution was implemented, the applicable PCB Performance Standards and the evaluation results showing that they were achieved are as follows:

Performance Standard – For the 0- to 1-foot depth increment (considering the paved and unpaved portions together), remediation is required if the spatial average PCB concentration exceeds 25 ppm. In addition, there must be no soils containing PCB concentrations greater than 125 ppm in the top foot of the unpaved areas.

• Achieved. As documented in the Revised Conceptual RD/RA Work Plan, the spatial average PCB concentrations for the top one foot of soil at Parcel K10-14-1 (0.35 ppm) and the Parcel K11-1-15 Strip (0.67 ppm) are well below 25 ppm. In addition, the maximum PCB concentrations in the top foot of unpaved soil at Parcel K10-14-1 (1.8 ppm) and the Parcel K11-1-15 Strip (2.2 ppm) are below the not-to-exceed level of 125 ppm for such soils. The data used to develop the spatial average at Parcel K10-14-1 included results from 26 soil samples (including historical samples) from 26 locations within Parcel K10-14-1, as well as one soil sample from one nearby location within the Parcel K11-1-15 Strip and two soil samples from two nearby locations within the GE-owned parcels. The data used to develop the spatial average at the Parcel K11-1-15 Strip included results from one soil sample from one location within the Parcel K11-1-15 Strip, as well as five soil samples from five nearby locations within Parcel K10-14-1 and nine soil samples (including historical and EPA split samples) from seven nearby locations within the GE-owned parcels.

Performance Standard – For the 0- to 3-foot depth increment, remediation is required if the spatial average PCB concentration in that depth increment exceeds 25 ppm.

• **Achieved**. As documented in the Revised Conceptual RD/RA Work Plan, the spatial average PCB concentrations for the 0- to 3-foot depth increment at Parcel K10-14-1 (0.30 ppm) and the Parcel K11-1-15 Strip (0.95 ppm) are well below 25 ppm.

The spatial average concentration for Parcel K10-14-1 was calculated based on the results from the soil samples collected to evaluate the 0- to 1-foot depth increment (as described above), plus the results from: (a) seven additional soil samples (including historical samples) collected from the 1- to 3-foot depth increment from seven locations within Parcel K10-14-1; (b) one additional soil sample collected from the 1- to 3-foot depth increment from one location within the Parcel K11-1-15 Strip; and (c) two additional soil samples (including historical samples) collected from the 1- to 3-foot depth increment from two locations within the GE-owned parcels.

The spatial average concentration for the Parcel K11-1-15 Strip was calculated based on the results from the soil samples collected to evaluate the 0- to 1-foot depth increment (as described above), plus the results from: (a) one additional soil sample collected from the 1- to 3-foot depth increment from one location within the Parcel K11-1-15 Strip; (b) three additional soil samples collected from the 1- to 3-foot depth increment from three locations within Parcel K10-14-1; and (c) seven additional soil samples

(including historical and EPA split samples) collected from the 1- to 3-foot depth increment from seven locations within the GE-owned parcels.

Performance Standard – For the 1- to 6-foot depth increment, remediation is required if the spatial average PCB concentration in that depth increment exceeds 200 ppm.

• **Achieved**. As documented in the Revised Conceptual RD/RA Work Plan, the spatial average PCB concentrations for the 1- to 6-foot depth increment at Parcel K10-14-1 (0.22 ppm) and the Parcel K11-1-15 Strip (1.16 ppm) are far below 200 ppm.

The spatial average concentration for Parcel K10-14-1 was calculated based on the results from the soil samples collected to evaluate the 0- to 1-foot and 0- to 3-foot depth increments (as described above), plus the results from: (a) seven additional soil samples (including historical samples) collected from the 3- to 6-foot depth increment from seven locations within Parcel K10-14-1; (b) one additional soil sample collected from the 3- to 6-foot depth increment from one location within the Parcel K11-1-15 Strip; and (c) one additional soil sample collected from the 3- to 6-foot depth increment from one location within the GE-owned parcels.

The spatial average concentration for the Parcel K11-1-15 Strip was calculated based on the results from the soil samples collected to evaluate the 0- to 1-foot and 0- to 3-foot depth increments (as described above), plus the results from: (a) two additional soil samples collected from the 3- to 6-foot depth increment from two locations within the Parcel K11-1-15 Strip; (b) three additional soil samples collected from the 3- to 6-foot depth increment from three locations within Parcel K10-14-1; and (c) two additional soil samples (including historical and EPA split samples) collected from the 3- to 6-foot depth increment from two locations within the GE-owned parcels.

Performance Standard – Where utilities potentially subject to emergency repair (e.g., water, gas, sewer, electricity, communication, and stormwater lines) are present and the spatial average PCB concentration in the corresponding utility corridor exceeds 200 ppm, GE must evaluate whether any additional response actions are necessary for that corridor. In addition, in the event that a new subgrade utility is installed or an existing subgrade utility is repaired or replaced in the future, the spatial average PCB concentration of the backfill materials must be at or below 25 ppm.

• Achieved. As discussed in the Revised Conceptual RD/RA Work Plan and noted above, the maximum PCB concentration detected in soils within the utility corridors at this RAA (1.62 ppm) is much less than 200 ppm. As a result, any spatial average calculation for soils in close proximity to a subsurface utility would necessarily be below 200 ppm.

Performance Standard – If the spatial average PCB concentration for the 0- to 15-foot depth increment exceeds 100 ppm (after incorporating the performance of any other required remediation), GE is required to install an engineered barrier in those areas determined to cause the exceedance of the 100 ppm spatial average concentration.

• **Achieved**. As documented in the Revised Conceptual RD/RA Work Plan, the spatial average PCB concentrations for the 0- to 15-foot depth increment at Parcel K10-14-1 (0.28 ppm) and the Parcel K11-1-15 Strip (0.61 ppm) are far below 100 ppm.

The spatial average concentration for Parcel K10-14-1 was calculated based on the results from the soil samples collected to evaluate the 0- to 1-foot, 0- to 3-foot, and the 1- to 6-foot depth increments (as described above), plus the results from: (a) 11 additional soil samples (including historical samples) collected from the 6- to 15-foot depth increment from seven locations within Parcel K10-14-1; (b) one additional soil sample collected from the 6- to 15-foot depth increment from one location within Parcel K11-1-15 Strip; and (c) two additional soil samples collected from the 6- to 15-foot depth increment from two locations within the GE-owned parcels.

The spatial average concentration for Parcel K11-1-15 Strip was calculated based on the results from the soil samples collected to evaluate the 0- to 1-foot, 0- to 3-foot, and 1- to 6-foot depth increments (as described above), plus the results from: (a) one additional soil sample collected from the 6- to 15-foot depth increment from two locations within the Parcel K11-1-15 Strip; (b) three additional soil samples collected from the 6- to 15-foot depth increment from three locations within Parcel K10-14-1; and (c) nine additional soil samples (including historical and EPA split samples) collected from the 6- to 15-foot depth increment from eight locations within the GE-owned parcels.

Summarized below are the existing spatial average PCB concentrations calculated for each averaging/evaluation areas within the East Street Area 1-North RAA and the applicable PCB-related Performance Standards.

	Spatial Average PCB Concentration (ppm)			
Depth Increment	Performance Standard	GE-Owned Parcels ¹	Parcel K10-14-1	Parcel K11-1-15
0 to 1 foot - Unpaved Areas	25	0.98	NA ²	NA ²
0 to 1 foot - Overall Area	25	0.86	0.35	0.67
0 to 3 feet	25	NA ²	0.30	0.95
1 to 6 feet	200	1.54	0.22	1.16
0 to 15 feet	100	0.95	0.28	0.61

Notes:

Based on the above comparisons, the applicable Performance Standards for PCBs in soil at East Street Area 1-North have been achieved.

5.2 Evaluations for Non-PCB Appendix IX+3 Constituents in Soil

The Performance Standards established in the CD and SOW for non-PCB Appendix IX+3 constituents in soil set forth a prescribed process that includes and considers (as needed) several evaluation components. This process includes: (1) comparison to specific EPA-established Preliminary Remediation Goals (PRGs) for dioxin/furan Toxicity Equivalency Quotients (TEQs); and (2) several steps for other non-PCB constituents, including (a) a screening step based on comparison of maximum detected concentrations to EPA Region IX PRGs (or surrogate PRGs), (b) comparison of average concentrations of the remaining constituents to the Method 1 soil standards set forth in the Massachusetts Contingency Plan (MCP), and (c) if any of those Method 1 standards is exceeded, the performance of an area-specific risk assessment for all constituents that were retained following the screening step, using the same exposure scenarios and assumptions used by EPA in developing the PCB Performance Standards. For East Street Area 1-North, the Appendix IX+3 evaluations for constituents other than PCBs and dioxin/furans were conducted using the area-specific risk assessment method.

These Performance Standards apply to the same averaging/evaluation areas as the PCB Performance Standards, which, in this case, means that the GE-owned parcels (collectively), non-GE-owned Parcel K10-14-1, and the non-GE-owned Parcel K11-1-15 Strip are considered separate areas subject to evaluation. For the GE-owned parcels, a total of 21 soil samples (including historical and EPA samples) were analyzed for one or more of the non-PCB Appendix IX+3 constituent groups; and for Parcel K10-14-1, a total of 15 soil samples were analyzed

^{1.} The GE-owned parcels at East Street Area 1-North include Parcels J10-8-1, J10-8-2, J10-8-3, J10-8-4, J10-8-5, and J10-8-6.

^{2.} NA = not applicable. In accordance with Paragraph 25 of the CD and Section 2.2.2 of the SOW, there are no Performance Standards for the 0- to 3-foot depth increment at GE-owned properties, and there are no separate spatial average Performance Standards for the unpaved portion of the 0- to 1-foot depth increment at non-GE-owned properties.

for one or more of those constituent groups. In the case of the Parcel K11-1-15 Strip, only a limited amount of Appendix IX+3 data (two samples from one location) existed. For the purpose of evaluating this area, those data were combined with the Appendix IX+3 data collected from sample locations on the adjacent parcels but near the Parcel K11-1-15 Strip, which were considered to be representative of soils within the Parcel K11-1-15 Strip. The data used in the non-PCB Appendix IX+3 evaluations are included in the Pre-Design Investigation Report and/or the Revised Conceptual RD/RA Work Plan.

A summary of the evaluation of non-PCB data is presented below.

Performance Standards – For dioxins/furans, a total TEQ concentration must be calculated for each sample, using the Toxicity Equivalency Factors (TEFs) published by the World Health Organization. For each evaluation area and depth increment, the maximum TEQ concentration or the 95% Upper Confidence Limit (95% UCL) on the mean of TEQ concentrations, whichever is lower, must be compared to the applicable PRG established by EPA for such TEQs in commercial/industrial areas – 5 parts per billion (ppb) in the top foot and 20 ppb in subsurface soil. If the maximum or 95% UCL TEQ concentration is less than the applicable PRG, no further response actions are necessary.

• Achieved. As presented in the Revised Conceptual RD/RA Work Plan, the maximum TEQ concentrations for soils in East Street Area 1-North for each averaging/evaluation area and depth increment were below the applicable PRGs for commercial/industrial areas. As a result, there was no need to calculate the 95% UCLs for the TEQ concentrations. Based on these analyses, no response actions to address dioxins/furans are necessary.

Performance Standards – As a screening step, the maximum concentrations of all detected constituents must be compared to the EPA Region IX PRGs (or surrogate PRGs approved by EPA) for industrial areas. For all constituents that are retained after this screening, if an area-specific risk assessment is performed, the average concentrations of those constituents (excluding PCBs and dioxins/furans) must be evaluated using the same exposure scenarios and assumptions used by EPA in developing the applicable PCB Performance Standards (as set forth in Appendix D to the CD), together with standard EPA toxicity values. If the results of that area-specific risk evaluation result in cumulative excess lifetime cancer risks (ELCRs) less than 1×10^{-5} (after rounding) and non-cancer Hazard Indices (HIs) less than 1.0 (after rounding), no further response actions are necessary. In addition, EPA has agreed to the following for an area-specific risk assessment: (1) for the 0- to 15-foot depth increment, since the CD does not contain any specific exposure

scenario, the average concentrations are to be compared to the Upper Concentration Limits (UCLs) set forth in the MCP; and (2) since EPA has not established any toxicity values for lead, the concentrations of lead are to be evaluated through comparison to certain criteria approved by EPA – namely, a risk-based concentration (RBC) of 2,008 ppm (based on application of EPA's Adult Lead Methodology [ALM] model) for the 0- to 1-foot and (where applicable) 0- to 3-foot depth increments, and a default concentration of 6,000 ppm (based on the MCP UCL for lead) for the 1- to 6-foot depth increment.

• Achieved. The East Street Area 1-North risk assessment presented in Appendix C to the Revised Conceptual RD/RA Work Plan followed the above procedures. It demonstrated the following for both GE-owned and non-GE-owned parcels: (1) For the 0- to 1-foot, 0- to 3-foot (for non-GE-owned parcels only), and 1- to 6-foot depth increments, the cumulative ELCRs are well below the 1x10⁻⁵ benchmark; (2) for the same depth increments, the cumulative HIs are well below 1.0; (3) the average lead concentrations in the areas where lead was retained after screening (which consisted of the two non-GE-owned parcels) are well below the applicable comparison criteria for all depth increments; and (4) the average concentrations of all retained constituents in the 0- to 15-foot depth increment are below the applicable MCP UCLs.

Based on the above comparisons, the applicable Performance Standards for non-PCB Appendix IX+3 constituents in soil at East Street Area 1-North have been achieved.

6. Future Inspection Activities

Since the existing soil conditions at the East Street Area 1-North RAA satisfy the applicable Performance Standards for PCBs and Appendix IX+3 constituents, no physical remediation has been implemented. Therefore, there is no need to develop a Post-Removal Site Control Plan for East Street Area 1-North or to conduct any related inspection/maintenance activities. In addition, under the Consent Decree, post-remediation inspections of GE-owned properties at which an ERE has been recorded are not required. However, for non-GE-owned properties at which a Conditional Solution has been implemented, the CD (Paragraphs 36 and 38 and Appendix Q) requires certain annual post-remediation review and inspection activities.

GE will conduct annual inspections of Parcel K10-14-1 and the Parcel K11-1-15 Strip, consisting of the activities specified in Paragraphs 36 and 38 of the CD and Section III of Appendix Q to the CD. Specifically, the activities that will be performed include a document review and a visual site inspection as described below:

Prior to conducting the visual site inspection, GE will review the most recent property records at the Pittsfield Tax Assessor's Office to determine whether there has been a change in ownership of either parcel; and if there has been a change in ownership, GE will provide notice to the new owner of the Conditional Solution implemented at the property. In addition, prior to the visual inspection, GE will review the Revised Conceptual RD/RA Work Plan, which describes the Conditional Solution, as well as Figure 3 of this Final Completion Report, which depicts current site feature and topography (or any more recent map available to GE showing more up-to-date site features and topography at these parcels), and any subsequent work plan(s) approved and implemented pursuant to Paragraph 35 of the Consent Decree.

After reviewing these documents, GE will conduct a visual site inspection of each property (to the extent possible given any access limitations) to evaluate whether there is evidence, based on visual observation, that any of the following have occurred since the last inspection:

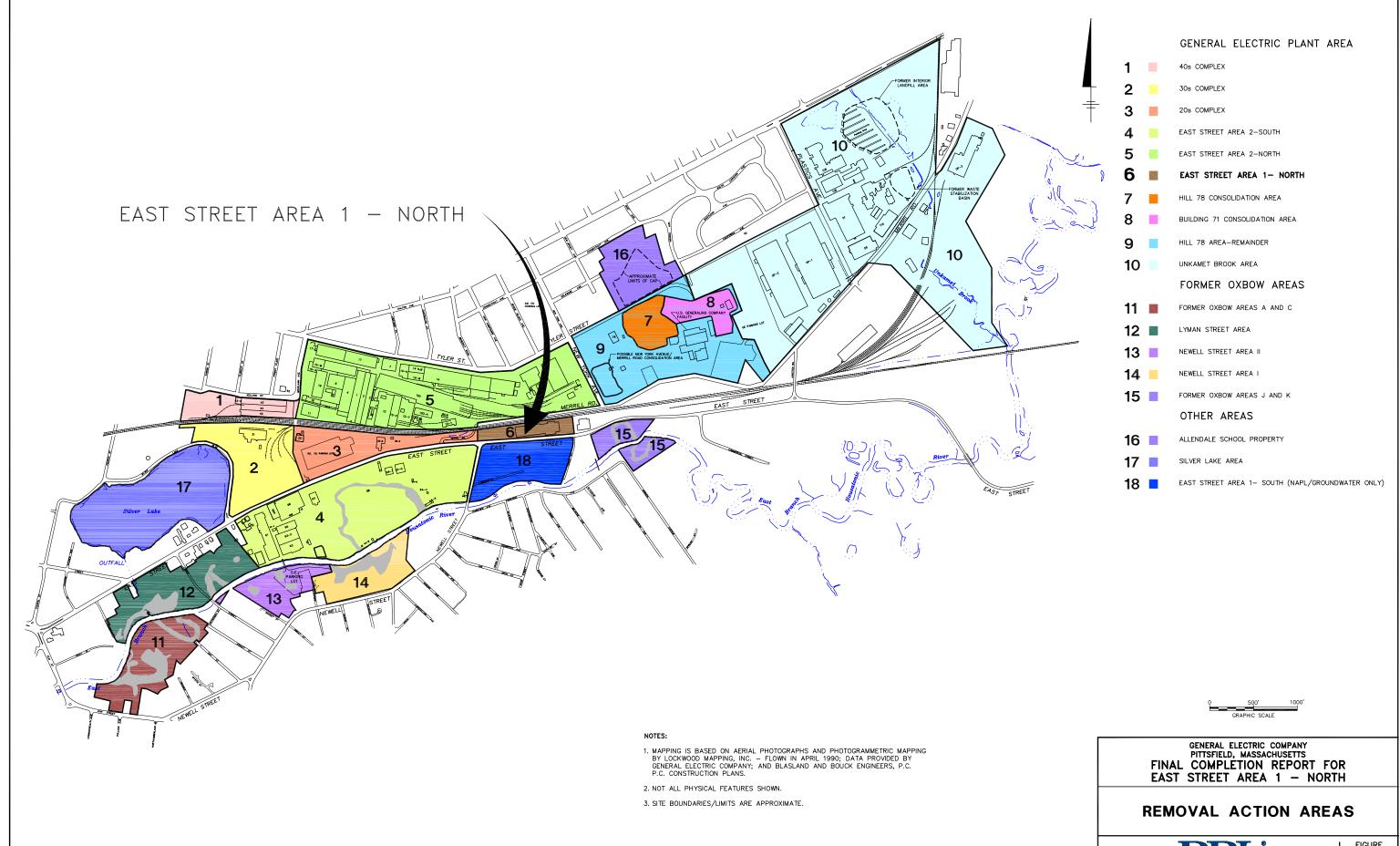
- 1) Any change in activities or uses of the property that would be potentially inconsistent with the commercial/industrial land use, which is the land use for which the Conditional Solution was implemented at both properties;
- 2) Installation of a new utility or repair or replacement of an existing utility that involved disturbance of soil;

- 3) Any excavations, construction, or other activities or conditions that resulted in the disturbance of ten (10) cubic yards of soil or greater, regardless of depth; and
- 4) If any of the activities described in # 2 or # 3 are noted, any reduction of the surface grade, compared to that shown in Figure 3 of this Final Completion Report (or any more up-to-date map, if available).

After all observations have been made, GE will complete, for each parcel, the Annual Inspection Checklist provided in Attachment B to this Final Completion Report. GE will prepare a written inspection report within 30 days of the completion of the inspections and submit the report to EPA and MDEP. That report will include a description of the current ownership of each parcel, a summary of the findings for each property (including an identification, based on visual inspection, of any known or suspected changes in the activities or uses at either property that would involve any of the activities or uses listed above), and a copy of the completed Annual Inspection Checklists indicating that the inspections included all required criteria. Any determination of whether changes in activities and uses that have occurred would in fact be inconsistent with the land uses for which the Conditional Solution was implemented or would involve unacceptable exposure conditions will be made by EPA and/or MDEP.

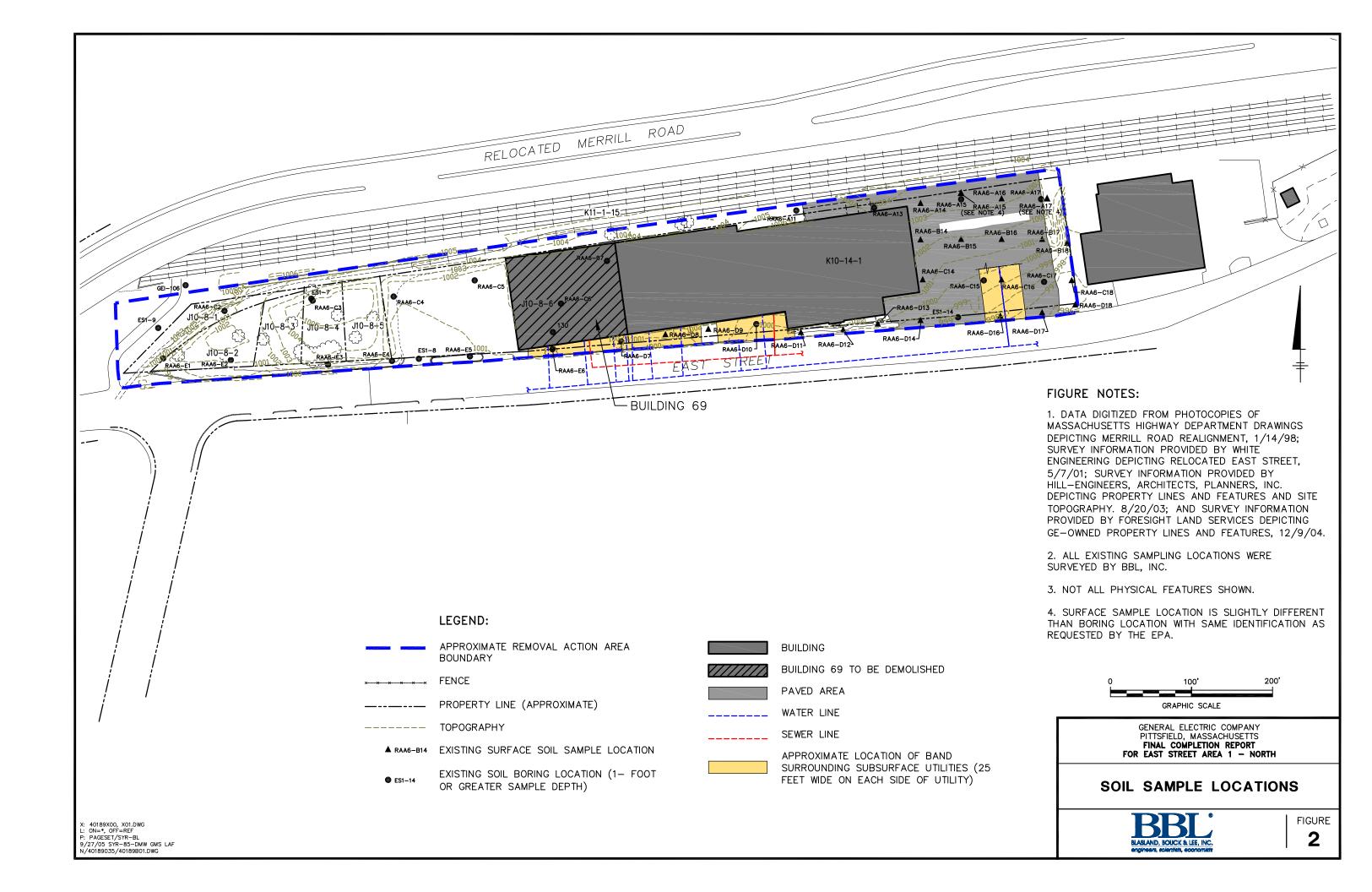
Figures

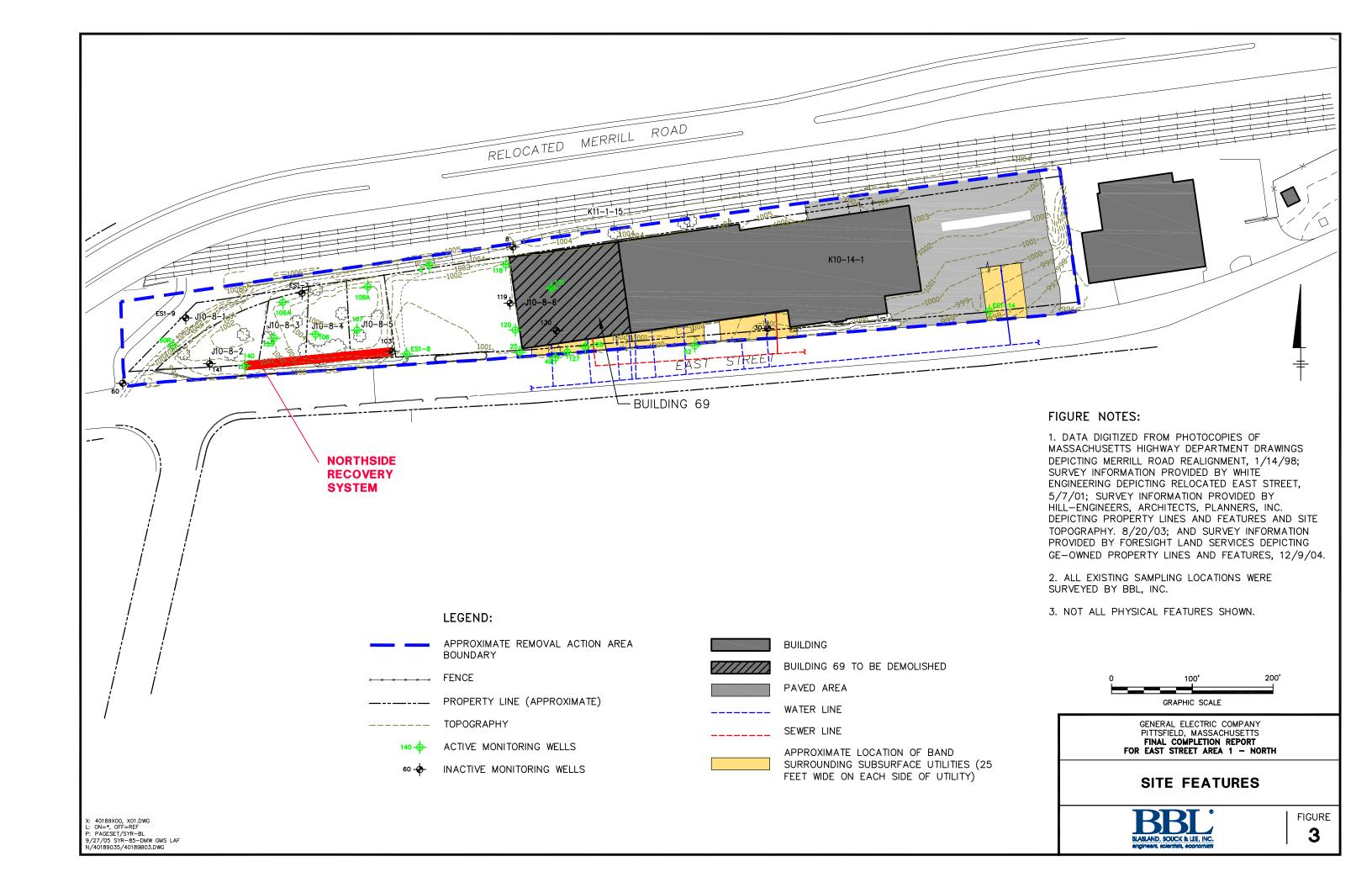




X: 40189X01.DWG, 40189X02.DWG L: ON=*, OFF=*REF* P: PAGESET/SYR-DL 9/27/05 SYR-85-NES GMS LAF N/40189035/COMPLETE/40189G01.DWG

FIGURE





Attachments



Attachment A

Site Photographs





LEGEND:

APPROXIMATE REMOVAL ACTION AREA BOUNDARY

NOT TO SCALE

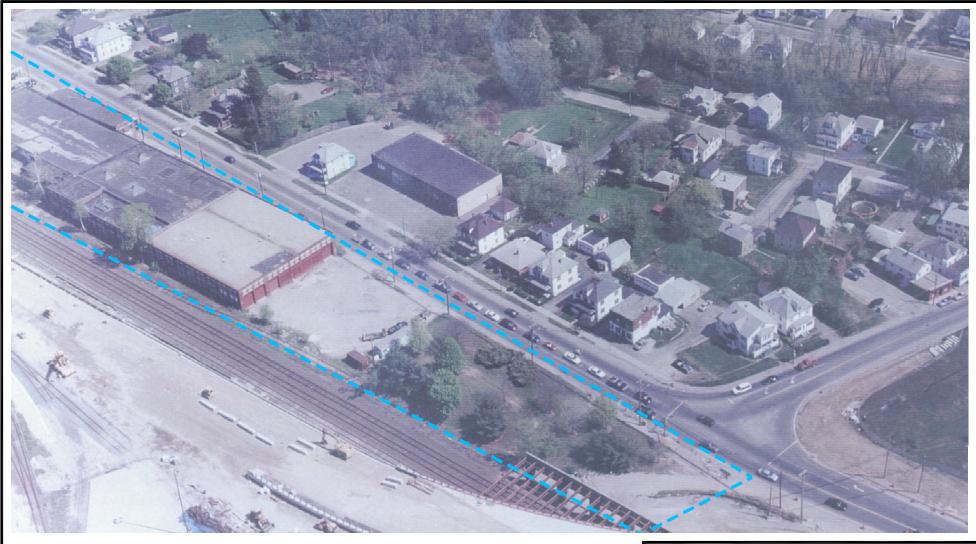
X: 40189X02.TIF L: ON=*, OFF=REF P: PAGESET/SYR-AP1 9/27/05 SYR-85-LJP GMS LAF N/40189035/40189G03.DWG GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS
FINAL COMPLETION REPORT
FOR EAST STREET AREA 1— NORTH

MAY 2001 AERIAL PHOTOGRAPH (LOOKING EAST)



FIGURE

A-1



LEGEND:

APPROXIMATE REMOVAL ACTION AREA BOUNDARY

NOT TO SCALE

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MAY 2001 AERIAL PHOTOGRAPH (LOOKING SOUTHEAST)



FIGURE

A-2

X: 40189X03.TIF L: ON=*, OFF=REF P: PAGESET/SYR-AL1 9/27/O5 SYR-85-LJP GMS LAF N/40189035/40189G04.DWG



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GENERAL SITE CONDITIONS GE-OWNED PROPERTY - SEPTEMBER 7, 2005
(LOOKING NORTHWEST)



FIGURE

A-3

X: 40189X02.JPG L: ON=*, OFF=*REF P: PAGESET/SYR-AL1 9/27/O5 SYR-85-LJP GMS LAF N/40189035/PHOTO/40189G02.DWG



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GENERAL SITE CONDITIONS GE-OWNED PROPERTY - SEPTEMBER 7, 2005
(LOOKING EAST)



FIGURE

A-4

X: 40189X03.JPG L: ON=*, OFF=*REF P: PAGESET/SYR-AL1 9/27/05 SYR-85-LJP GMS LAF N/40189035/PH0T0/40189G03.DWG



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PITTSFIELD, MASSACHUSETTS
FINAL COMPLETION REPORT
FOR EAST STREET AREA 1— NORTH

GENERAL SITE CONDITIONS PARCEL K10-14-1 - SEPTEMBER 13, 2005
(LOOKING NORTHWEST)



FIGURE

A-5

X: 40189X04.JPG L: ON=*, OFF=*REF P: PAGESET/SYR-AL1 9/27/05 SYR-85-LJP GMS LAF N/40189035/PH0T0/40189G04.DWG



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FINAL COMPLETION REPORT
FOR EAST STREET AREA 1— NORTH

GENERAL SITE CONDITIONS PARCEL K10-14-1 - SEPTEMBER 13, 2005
(LOOKING NORTHWEST)



FIGURE

A-6

X: 40189X05.JPG L: ON=*, OFF==*REF P: PAGESET/SYR-AL1 9/27/05 SYR-85-LJP GMS LAF N/40189035/PHOTO/40189G05.DWG

Attachment B

Conditional Solution Annual Inspection Checklist



CONDITIONAL SOLUTION AND	NUAL INSPECTION CHECK LIST
PARCEL NUMBER	_
DOCUMENT REVIEW	
Conducted By:	Representing:
Review Start Date:	_
1. Check here to confirm that the description of the Conditional Action Work Plan, Figure 3 of the Final Completion Report (of the property), and any subsequent work plan(s) approved Decree, have been reviewed.	
 Check here to confirm that the most recent property records have been reviewed. 	from the Pittsfield Tax Assessor's Office for this property
B. Has there been a change in ownership of this property? No	
Yes - If yes, list the new owner's name and mailing address	below and indicate whether a notice of the Conditional
Solution has been or will be sent to the new owner.	
Review Completed Date:	
SUAL SITE INSPECTION	
Conducted By:Inspection Start Date:	Representing:
inoposion start bate.	_
. List other individuals and their company/agency that were prese	ent during the visual site inspection.
2. Is there any visual evidence of changes in activities and uses of inconsistent with the land use for which the Conditional Solution No Yes - If yes, describe below.	
3. Is there any visual evidence of installation of a new utility or rep disturbance of soil within the property since the last inspection?	
Yes - If yes, describe below and show the location(s) of such	n activity on a plan.
-	

	CONDITIONAL SOLUTION ANNUAL INSPECTION CHECK LIST			
4	Is there any visual evidence of excavations, construction, or other activities or conditions that resulted in the disturbance of 10 cubic yards of soil or greater, regardless of depth, within the property?			
	Yes - If yes, describe below and show the location(s) of such activity on a plan.			
5	If any of the conditions listed in the responses to Questions 3 and 4 appears to have altered the surface grade of either property compared to the surface grade shown on Figure 3 included in the Final Completion Report or the most current drawing of such grade (if available), identify the approximate area/location of such grade change on a plan.			
6	Inspection Completed Date:			