

61-0578

SDMS 43581

***Removal Design/Removal Action
Work Plan Addendum for the
Future City Recreational Area***

**General Electric Company
Pittsfield, Massachusetts**

April 2003

BBL[®]
BLASLAND, BOUCK & LEE, INC.
engineers & scientists



01-0578

Corporate Environmental Programs
General Electric Company
100 Woodlawn Avenue, Pittsfield, MA 01201

SDMS 43581

Transmitted Via Overnight Courier

April 29, 2003

Mr. Bryan Olson
EPA Project Coordinator
U.S. Environmental Protection Agency
EPA New England
One Congress Street, Suite 1100
Boston, Massachusetts 02114-2023

**Re: GE-Pittsfield/Housatonic River Site
East Street Area 2-South (GEC150)
Removal Design/Removal Action Work Plan Addendum
for the Future City Recreational Area**

Dear Mr. Olson:

In December 2001, the General Electric Company (GE) submitted a document to the United States Environmental Protection Agency entitled *Removal Design/Removal Action Work Plan for the Future City Recreational Area* (RD/RA Work Plan). Since submittal of the RD/RA Work Plan, GE has completed the majority of the activities necessary to finalize the design and proceed with construction of the Future City Recreational Area. Based on these activities, we are submitting herewith a *Removal Design/Removal Action Work Plan Addendum for the Future City Recreational Area*.

Please call John Novotny or me if you have any questions about this work plan addendum.

Very truly yours,

Andrew T. Silfer, P.E.
GE Project Coordinator

V:\GE_Pittsfield_CD_ESA_2_South\Reports and Presentations\CITY REC\3612_itr.doc

Enclosure

cc: Tim Conway, EPA
Holly Inglis, EPA
Michael Nalipinski, EPA
Rose Howell, EPA
K.C. Mitkevicius, USACE
Dawn Jamros, Weston
Susan Steenstrup, MDEP
Alan Weinberg, MDEP (cover letter only)
Robert Bell, MDEP (cover letter only)
Susan Keydel, MDEP
Thomas Angus, MDEP (cover letter only)
Nancy E. Harper, MA AG (cover letter only)
Dale Young, MA EOEAA (cover letter only)
Mayor Sara Hathaway, City of Pittsfield
Thomas Hickey, Director, PEDAA
Richard Scapin, Chair, Pittsfield City Council
Pittsfield Department of Health
Jeffrey Bernstein, Bernstein, Cushner & Kimmel
Teresa Bowers, Gradient
Michael Carroll, GE (cover letter only)
John Novotny, GE
Rod McLaren, GE (cover letter only)
Andrew Silber, GE (cover letter only)
James Nuss, BBL
James Bieke, Shea & Gardner
Public Information Repositories
GE Internal Repository

*Removal Design/Removal Action
Work Plan Addendum for the
Future City Recreational Area*

**General Electric Company
Pittsfield, Massachusetts**

April 2003

BBL[®]
BLASLAND, BOUCK & LEE, INC.
engineers & scientists

Table of Contents

Section 1. Introduction.....	1-1
1.1 General	1-1
1.2 Background Information.....	1-2
1.3 Contents of Work Plan Addendum	1-4
1.4 Format of Document	1-5
Section 2. Summary of Supplemental Soil Investigations.....	2-1
2.1 General	2-1
2.2 Supplemental FCRA Investigations	2-1
2.3 Access Road Investigations.....	2-2
Section 3. Summary of PCB Soil Evaluations	3-1
3.1 General	3-1
3.2 Revised PCB Evaluation for the FCRA.....	3-1
3.3 PCB Evaluation for the Access Road Area.....	3-3
Section 4. Summary of Non-PCB Soil Evaluations	4-1
4.1 General	4-1
4.2 Revised Appendix IX+3 Evaluation for the FCRA	4-2
4.2.1 Review of Data Qualifiers	4-2
4.2.2 Comparison to Screening PRGs.....	4-2
4.2.3 Dioxin/Furan Data Assessment	4-3
4.2.4 Comparison to MCP Method 1 Soil Standards	4-3
4.2.5 Preliminary Review of Deeper Data.....	4-4
4.3 Appendix IX+3 Evaluation for Access Road Area	4-4
4.3.1 Review of Data Qualifiers	4-4
4.3.2 Comparison to Screening PRGs.....	4-4
4.3.3 Dioxin/Furan Data Assessment	4-5
4.3.4 Comparison to MCP Method 1 Soil Standards	4-5
Section 5. Supplemental Design Information	5-1
5.1 General	5-1
5.2 Technical Plans and Specifications	5-2
5.3 Soil Removal Activities.....	5-3
5.4 Configuration of the FCRA Soil Cover	5-3
5.5 Configuration of the Access Road	5-4
5.6 Perimeter Fencing.....	5-5
5.7 Flood Storage Capacity	5-6
5.8 Soil Fill and Topsoil Materials	5-6
5.9 Applicable or Relevant and Appropriate Requirements.....	5-7

Section 6. Implementation Plan.....	6-1
6.1 General	6-1
6.2 Project Participants	6-1
6.3 Contractor Submittals	6-2
6.4 Site Preparation	6-3
6.4.1 Utility Clearances	6-4
6.4.2 Site Controls and Access.....	6-4
6.4.3 Survey Control	6-5
6.4.4 Erosion and Sedimentation Control Measures	6-5
6.4.5 Surface Preparation	6-6
6.5 Construction Activities.....	6-7
6.5.1 Soil Removal, Handling, and Transport.....	6-7
6.5.2 Disposition of Excavated Materials and Remediation-Derived Waste	6-9
6.5.3 Equipment Cleaning.....	6-10
6.6 Perimeter Air Monitoring	6-10

Section 7. Post-Construction Activities.....	7-1
7.1 General	7-1
7.2 Pre-Certification Inspection and Completion Report	7-1
7.3 Post-Removal Site Control Plan and Other Post-Construction Inspection and Maintenance Activities.....	7-2
7.3.1 Periodic Inspections.....	7-2
7.3.2 Maintenance/Repair.....	7-3
7.3.3 Inspection Schedule and Reporting.....	7-4

Section 8. Schedule.....	8-1
---------------------------------	------------

Tables

2-1 Pre-Design Investigation Soil Sampling Results for PCBs
2-2 Pre-Design Investigation Soil Sampling Results for Non-PCB Appendix IX+3 Constituents
2-3 Historical Soil Sampling Results for PCBs
2-4 Historical Soil Sampling Results for Non-PCB Appendix IX+3 Constituents
2-5 FCRA: Supplemental Soil Sampling Results for Non-PCB Appendix IX+3 Constituents
2-6 Access Road Area: Pre-Design and Supplemental Soil Sampling Results for PCBs
2-7 Access Road Area: Soil Sampling Results for Non-PCB Appendix IX+3 Constituents
4-1 FCRA: Comparison of Detected Non-PCB Appendix IX+3 Constituents to Residential Screening PRGs
4-2 FCRA: Comparison of Select Non-PCB Appendix IX+3 Constituent Average Concentrations to MCP Method 1 Standards
4-3 Access Road Area: Comparison of Detected Non-PCB Appendix IX+3 Constituents to Residential Screening PRGs
4-4 Access Road Area: Comparison of Select Non-PCB Appendix IX+3 Constituent Average Concentrations to MCP Method 1 Standards
5-1 PCB Data Summary (All Samples <10 Feet Deep)
5-2 RCRA Waste Characterization Analytical Results
5-3 Comparison of Applicable Data to RCRA Standards

Figures

- 1-1 Site Location
- 1-2 Limits of the Future City Recreational Area and Access Road Area
- 2-1 Soil Sample Locations
- 3-1 Non-Construction –Related Soil Removals

Attachments

- A Supplemental Soil Sampling Validation Report
- B Future City Recreational Area – PCB Evaluations (Existing Conditions)
- C Future City Recreational Area – PCB Evaluations (Post-Removal Conditions)
- D Access Road Area – PCB Evaluations (Existing Conditions)
- E Access Road Area – PCB Evaluations (Post-Removal Conditions)
- F Technical Drawings
- G Technical Specifications
- H Submittal Tracking Form
- I Ambient Air PCB & Particulate Monitoring

1. Introduction

1.1 General

In December 2001, the General Electric Company (GE) submitted a document to the United States Environmental Protection Agency (EPA) entitled *Removal Design/Removal Action Work Plan for the Future City Recreational Area* (RD/RA Work Plan). The RD/RA Work Plan summarized the soil investigations and evaluations conducted by GE related to the construction of a youth athletic field (referred to as the Future City Recreational Area, or FCRA) within a portion of GE's Pittsfield, Massachusetts facility known as East Street Area 2-South (Figure 1-1).

The RD/RA Work Plan was prepared by GE in accordance with the requirements of the October 27, 2000 Consent Decree (CD) executed between EPA, the Massachusetts Department of Environmental Protection (MDEP), GE, and several other governmental agencies. The CD requires (among other things) the performance of Removal Actions to address polychlorinated biphenyls (PCBs) and other hazardous constituents present in soils, sediment, and groundwater in several Removal Action Areas (RAAs) located in or near Pittsfield. These RAAs are part of the GE-Pittsfield/Housatonic River Site (the Site). For each Removal Action, the CD and accompanying *Statement of Work for Removal Actions Outside the River* (SOW) (Appendix E to the CD) establish Performance Standards that must be achieved, as well as specific work plans and other documents that must be prepared to support the response actions for each RAA. The December 2001 RD/RA Work Plan is one of the submittals required by the CD and SOW.

The RD/RA Work Plan identified the need for an addendum to address several remaining activities, including additional soil characterization, selection of the final ballfield configuration (including an access road area), updates to the remedial evaluations (as needed), and specific construction implementation details. Since submittal of the RD/RA Work Plan, GE has completed the majority of the activities necessary to finalize the design and proceed with construction of the FCRA and has prepared this *Removal Design/Removal Action Work Plan Addendum for the Future City Recreational Area* (Work Plan Addendum) to summarize these activities. As further discussed in the following sections, GE currently in the process of selecting a Remediation Contractor to perform the work discussed herein; therefore, certain implementation-related information cannot be provided at this time (i.e., contractor submittals, proposed backfill sources, etc). Following the selection of the remediation contractor, GE will provide EPA with this information in a supplemental information package.

GE anticipates that, following EPA review and approval of this Work Plan Addendum and subsequent supplemental information package, construction activities for the FCRA will be performed in 2003.

1.2 Background Information

At the time that the CD for the Site was entered in October 2000, a separate agreement, known as the Definitive Economic Development Agreement (DEDA), executed by GE, the City of Pittsfield (the City), and the Pittsfield Economic Development Authority (PEDA), also became effective. As part of the DEDA, GE agreed to construct a youth athletic field, for lease to the City, within an area of the GE facility designated in the CD and SOW as the East Street Area 2-South RAA. The specific portion of East Street Area 2-South where the FCRA will be constructed is shown in Figure 1-1. This approximately 3.4-acre area is generally bounded by East Street to the north, Newell Street to the east, and other parts of East Street Area 2-South to the west and south. This area is currently grass-covered, with no buildings or pavement present (Figure 1-2). The Housatonic River is located approximately 400 feet south of the FCRA and the 100-year floodplain of the river is present along the southern boundary of this area.

The CD and SOW establish several specific Performance Standards related to the FCRA. In general, the Performance Standards require the installation of a one-foot thick (minimum) soil cover across the surface of the FCRA. In addition, for the uppermost two feet of existing soil within the area (which will become the 1- to 3-foot depth increment after installation of the soil cover), the CD and SOW establish certain other Performance Standards for PCBs and the non-PCB constituents listed in Appendix IX of 40 CFR Part 264 plus three additional constituents (benzidine, 2-chloroethylvinyl ether, and 1,2-diphenylhydrazine) (Appendix IX+3).

To accommodate the DEDA requirements, the construction of the FCRA will occur prior to the performance of soil-related response actions associated with the remainder of East Street Area 2-South. As a result, GE expedited its performance of several activities within and adjacent to the FCRA. A summary of pre-design and design-related activities leading up to the submittal of the RD/RA Work Plan is presented below:

- In November 2001, GE submitted a document entitled *Pre-Design Investigation Work Plan for Portion of East Street Area 2-South Removal Action – Future City Recreational Area (PDIWP)* to EPA. EPA approved the PDIWP in a letter dated January 16, 2001.

-
- Between January 17 and February 1, 2001, GE conducted pre-design soil investigations for areas within and adjacent to the FCRA.
 - In April 2001, GE submitted a document entitled *Pre-Design Investigation Report for Portion of East Street Area 2-South: Future City Recreational Area* (Pre-Design Report) to EPA. EPA approved that document in a letter dated July 16, 2001.
 - In December 2001, GE submitted the RD/RA Work Plan.

As described in the RD/RA Work Plan, it was determined (on a preliminary basis) that no response actions other than the installation of the soil cover were necessary to meet the soil-related Performance Standards established in the CD and SOW. However, in the RD/RA Work Plan, several items were identified that required resolution and/or the performance of additional activities before the findings of the initial RD/RA evaluations could be finalized. These generally included the following:

- At the time that the RD/RA Work Plan was submitted, GE and the City were discussing possible changes to the area occupied by the FCRA, as well as the ancillary components to the actual ballfield area.
- Based on discussions concerning the configuration of the FCRA, a gravel access road was identified in the RD/RA Work Plan to provide vehicular access between the parking lot (located within the FCRA) and the point of access along Newell Street near the Newell Street bridge. A portion of this access road is located outside of the limits of the FCRA and within the East Street Area 2-South RAA. While GE and EPA agreed to Performance Standards for that portion of the access road located outside of the FCRA, the available soil investigation data did not satisfy the corresponding pre-design investigation requirements. As such, additional soil investigations were necessary to support RD/RA evaluations for this area.
- The RD/RA Work Plan identified the need for additional soil sampling within the FCRA to further assess several volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs) that were not detected in the pre-design investigations but had elevated analytical detection limits relative to the initial screening concentrations used in the non-PCB soil evaluations. To determine whether and to

what extent lower analytical reporting limits could be achieved, and to support subsequent evaluations regarding these constituents, additional pre-design investigations were identified.

Given the need for supplemental soil sampling, as well as the status of discussions with the City regarding the final planning and design of the FCRA and its ancillary components, the RD/RA Work Plan indicated that an addendum would be prepared once the remaining activities were completed and other outstanding items were resolved.

Following submittal of the RD/RA Work Plan, GE conducted the supplemental soil sampling identified therein, and submitted the results and associated evaluation to EPA in a letter report dated February 15, 2002, titled Supplemental Soil Sampling Report. Thereafter, by letter dated April 18, 2002, EPA provided conditional approval of the RD/RA Work Plan and the Supplemental Soil Sampling Report.

Since that time, the final configuration of the FCRA and its ancillary components has been determined through discussions among GE, the City, and PEDA. Based on those discussions, the limits of the FCRA have been slightly modified relative to the configuration shown in the RD/RA Work Plan; the southern boundary of the FCRA has been moved slightly north and the western boundary has been moved slightly east. The initial and revised limits are indicated on Figure 1-2. That final configuration is reflected in the figures, evaluations, and discussions presented in this Work Plan Addendum. In addition, although not required to achieve the applicable Performance Standards for the FCRA, GE has elected to remove and replace certain PCB-containing soil from portions of the FCRA and access road area, as discussed further below. Due to these changes, revised evaluations have been conducted for both PCBs and other Appendix IX+3 constituents in soil at the FCRA, and evaluations of these constituents have also been performed for the access road area, both before and after consideration of the proposed voluntary soil removal in that area. These evaluations confirm that no additional response actions are necessary to achieve the applicable Performance Standards.

1.3 Contents of Work Plan Addendum

This Work Plan Addendum has been prepared to address, among other items, the following topics:

- Modifications to the limits and configuration of the FCRA based on discussions with the City and PEDA;

-
- Results of the additional soil sampling proposed in the RD/RA Work Plan for the FCRA and the access road area;
 - The removal of select soils within the FCRA and access road area, despite satisfying the applicable Performance Standards;
 - In light of the above, revised evaluations of PCBs and other Appendix IX+3 constituents in soil at the FCRA, as well as evaluations of PCBs and other Appendix IX+3 constituents in soil in the access road area;
 - Details regarding the volume of flood storage capacity that will be lost by the installation of the soil cover in the portions of the FCRA within the 100-year floodplain and a description of how compensatory storage will be provided to offset this loss of capacity;
 - Final details concerning ancillary facilities, such as the parking area and access road;
 - Final technical specifications and drawings (e.g., selection of materials for the construction of the FCRA);
 - Description of implementation details, including a discussion of methods to ensure achievement of the pertinent Applicable or Relevant and Appropriate Requirements (ARARs);
 - Identification of the Removal Action team, including key personnel and roles and responsibilities;
 - A summary of post-construction activities, including Post-Removal Site Control activities, following the completion of construction; and
 - Proposed implementation schedule.

1.4 Format of Document

The remainder of this Work Plan Addendum is presented in seven sections, summarized as follows:

-
- **Section 2 – Summary of Supplemental Soil Investigations:** Summarizes the scope and findings of the supplemental soil investigations performed since submittal of the RD/RA Work Plan, including the results of the validation activities performed for the supplemental sampling data.
 - **Section 3 – Summary of PCB Soil Evaluations:** Summarizes the revised PCB soil evaluations conducted for the FCRA and the PCB evaluations conducted for the access road area.
 - **Section 4 – Summary of Non-PCB Soil Evaluations:** Summarizes the revised non-PCB Appendix IX+3 soil evaluations conducted for the FCRA and the non-PCB evaluations conducted for the access road area.
 - **Section 5 – Supplemental Design Information:** Describes additional design-related information associated with the FCRA construction activities, and supplements and expands on the preliminary information presented in the RD/RA Work Plan. Information presented in this section is based on the detailed design activities performed since the submittal of the RD/RA Work Plan.
 - **Section 6 – Implementation Plan:** Discusses certain site-specific implementation components, including contractor submittal requirements, project-specific site preparation and construction-related components, and the perimeter air monitoring approach. As also discussed in this section, there remains certain implementation-related logistics that are currently unknown and will be provided to EPA once a Remediation Contractor has been selected.
 - **Section 7 – Post-Construction Activities:** Identifies the various activities to be performed following construction of the FCRA, including reporting and Post-Removal Site Control activities.
 - **Section 8 – Schedule:** Identifies the need for, and anticipated contents of, a supplemental information package to support this Work Plan Addendum, as well as the anticipated schedule for construction and reporting activities.

In addition to the sections identified above, several tables, figures, and attachments have been prepared and are included with this document. These items support and supplement the report narrative and are referenced throughout the text as appropriate.

2. Summary of Supplemental Soil Investigations

2.1 General

The RD/RA Work Plan presented tables showing the then-available pre-design and historical PCB data from within and near the FCRA, as well as the pre-design and historical non-PCB Appendix IX+3 data from within the FCRA. Those tables have been updated to reflect the changes in the limits of the FCRA described above, as well as EPA's comments in its April 18, 2002 conditional approval letter. The updated tables are included herein as Tables 2-1 through 2-4 and the sample locations are shown on Figure 2-1. (Note that in the RD/RA Work Plan, the location ID for sample 95-210-6 was misidentified as 210S in the original version of Table 2-3. The location ID was subsequently determined to be 95-21, which is located approximately 400 feet west of the FCRA. In light of this, sample 95-210-6 has been removed from the revised version of Table 2-3 provided in this Work Plan Addendum.)

As discussed above, the RD/RA Work Plan proposed additional investigations within the FCRA and within the access road area located between the FCRA and the vehicle access point along Newell Street (Figure 1-2). The sampling at the FCRA was aimed at attempting to achieve lower analytical detection limits for certain VOCs and SVOCs, while the sampling at the access road area was designed to complete the pre-design soil sampling for both PCBs and other Appendix IX+3 constituents in that area. These investigations were performed in January 2002 (following submittal of the RD/RA Work Plan) and the results were presented to EPA in a Supplemental Soil Sampling Report dated February 15, 2002, which was approved by EPA on April 18, 2002. For both the FCRA and the access road area, the scope and findings of these supplemental investigations are summarized in this section. A summary of the data validation, which has been completed since the Supplemental Soil Sampling Report, is also presented.

2.2 Supplemental FCRA Investigations

On January 3, 2002, GE collected soil samples from the upper 2 feet of existing soil at four locations within the FCRA. The objective of this sampling was to assess whether and to what extent lower analytical detection/reporting limits could be achieved for several VOC and SVOC constituents that were not detected during the pre-design soil investigations but exhibited elevated analytical detection limits, thus complicating the evaluation process. The specific sample locations – 210S, CRA-7, CRA-14, and CRA-18, as shown on Figure

2-1 – were previously subject to pre-design sampling and were selected in consideration of their location within the FCRA as well as the VOC/SVOC analytical results (i.e., elevated VOC/SVOC reporting limits associated with non-detect results).

The preliminary analytical results and evaluation of the supplemental VOC and SVOC data were provided in the Supplemental Soil Sampling Report. As discussed in that report, laboratory analyses of the supplemental soil samples demonstrated again that the target VOCs and SVOCs were not detected (with one exception, a detection of acetophenone at very low concentrations), and also showed that the laboratory was generally able to achieve lower detection limits (in some cases significantly lower) than the prior analyses, approaching the Practical Quantitation Limits (PQLs) specified in GE's FSP/QAPP. As a result, the Supplemental Soil Sampling Report concluded that no further sampling or evaluations for the targeted VOCs/SVOCs were necessary, and that the targeted VOCs and SVOCs could be eliminated from future RD/RA evaluations at the FCRA. As noted above, this report was approved by EPA in its letter of April 18, 2002.

Since that time, the supplemental VOC and SVOC data have been subject to validation in accordance with the *Field Sampling Plan/Quality Assurance Project Plan* (FSP/QAPP). The results of this data quality review are summarized in Attachment A, and the validated results are provided in Table 2-5. No significant data quality issues were observed and only minor qualifications to the results presented in the Supplemental Soil Sampling Report were necessary. As a result, the conclusion in the Supplemental Soil Sampling Report regarding the elimination of these constituents from further RD/RA evaluations in this area remains valid.

2.3 Access Road Investigations

The current design of the FCRA calls for the installation of a gravel access road between the parking lot within the recreational area itself and the point of vehicle access along Newell Street, near the Newell Street bridge (Figure 1-2). As agreed between GE and EPA, the upper 3 feet of soil in the access road area is considered a separate averaging area from both the FCRA and remaining portions of East Street Area 2-South and is subject to the Performance Standards for GE-owned recreational areas, as specified in CD Paragraphs 25.d(iv) and 26.b(i). In addition, as stated in EPA's conditional approval letter of April 18, 2002, this area must meet the Performance Standards set forth in CD Paragraphs 29.a and 24.a, 24.e, and 24.f, particularly the not-to-exceed PCB concentration of 50 parts per million (ppm) in the top foot of unpaved soil.

To support RD/RA evaluations for the access road area, the RD/RA Work Plan identified the existing PCB and non-PCB data that could be used in those evaluations and proposed additional investigations to supplement the available data set. The supplemental investigations (performed between January 2, 2002 and January 3, 2002) included the collection of 18 soil samples from nine locations; all 18 samples were subject to PCB analysis and four were subject to analysis for other Appendix IX+3 constituents (excluding pesticides and herbicides). The approximate sample locations are shown on Figure 2-1. The resulting number and distribution of PCB and Appendix IX+3 samples were consistent with the pre-design soil investigation requirements established in the CD and SOW for GE-owned recreational areas.

Preliminary results for the access road samples were provided in the Supplemental Soil Sampling Report. Since the submittal of the Supplemental Soil Sampling Report, these data have been subject to validation procedures. The results of this data quality review are included in Attachment A. During the validation process, no significant data quality issues were observed in the summary reports prepared by the analytical laboratory and only minor qualifications to the data presented in the Supplemental Soil Sampling Report were necessary. The validated results from these samples, together with the prior data from the access road area, are presented in Tables 2-6 and 2-7 for PCBs and other Appendix IX+3 constituents, respectively.

3. Summary of PCB Soil Evaluations

3.1 General

As noted above, since submittal of the RD/RA Work Plan in December 2001, the limits of the FCRA have been modified, based on discussions among GE, the City, and PEDDA, to move the southern boundary of the FCRA slightly north and the western boundary slightly east. The initial and revised limits are indicated on Figures 1-2 and 2-1. In consideration of the revised FCRA boundaries and additional PCB data for the access road area soils, this section evaluates the PCB soils data for both the FCRA and access road area. For the FCRA, this evaluation is a revision to (and supersedes) the evaluation presented in the RD/RA Work Plan. For the access road area, this evaluation considers previously existing data, as well as the results of the supplemental soil investigations summarized in Section 2. The procedures used to calculate PCB spatial average concentrations for both the FCRA and the access road area followed those established in Attachment E to the SOW (Protocols for PCB Spatial Averaging) and described in detail in Section 3.3 of the RD/RA Work Plan.

3.2 Revised PCB Evaluation for the FCRA

The soil-related Performance Standards for the GE Plant Area, including the FCRA, are set forth in Paragraph 25 of the CD and Section 2.2.2 of the SOW. Those relevant to PCBs in soil at the FCRA were described in Section 3.2 of the RD/RA Work Plan. They require that GE install a 1-foot-thick (minimum) soil cover in this area in accordance with the general requirements for such covers set forth in the SOW, and that GE remove and replace soils in the next 2 feet below that 1-foot-thick cover as necessary to achieve a spatial average PCB concentration at or below 15 parts per million (ppm) in that 2-foot depth. The Performance Standards further provide that response actions for depths greater than 3 feet within the FCRA are to be determined as part of the response actions for the overall averaging area within East Street Area-2 South where the FCRA is located (i.e., the Former Gas Plant/Scrap Yard Area), taking into account the anticipated performance of the above-described response actions for the top 3 feet.

Although the modifications to the FCRA noted above and shown on Figure 1-2 are relatively minor, certain of the spatial average polygons are affected, so that the spatial average calculations are also affected. Therefore, the PCB soil evaluations have been revised. The results of the PCB spatial average calculations and a comparison to the applicable Performance Standards are summarized below.

Following the placement of a 1-foot-thick (minimum) soil cover over the existing soils, the existing 0- to 2-foot depth increment will represent the 1- to 3-foot depth increment under post-construction conditions. Therefore, the initial step in this evaluation was to calculate the spatial average PCB concentration for the uppermost 2 feet of existing soil in the FCRA. To account for the various depth increments associated with the existing PCB soil data set, the evaluation process for the 0- to 2-foot depth increment first involved the calculation of existing PCB spatial average concentrations for three intermediate depth increments within the existing 0- to 2-foot depth increment for which analytical data are available (i.e., the 0- to 0.5-foot, 0.5- to 1-foot, and 1- to 2-foot depth increments). These individual PCB spatial average concentrations were then combined to derive the PCB spatial average concentration for the existing 0- to 2-foot depth increment.

To support this calculation, the following materials have been prepared and are included in Attachment B:

- Site mapping identifying specific Thiessen polygons for the existing 0- to 0.5-foot, 0.5- to 1-foot, and 1- to 2-foot depth increments;
- Computer spreadsheets to incorporate the results of the Thiessen polygon mapping (i.e., Thiessen polygon size) and the corresponding PCB analytical data; and
- Calculations of the spatial average PCB concentration for the existing 0- to 2-foot depth increment.

As shown in Attachment B, the spatial average PCB concentration for the existing 0- to 2-foot depth increment at the FCRA is approximately 3 ppm. This is the same PCB concentration reported in the RD/RA Work Plan, indicating that the modification of the FCRA boundaries had little effect on the overall PCB average. Since this existing PCB spatial average concentration is well below the corresponding Performance Standard of 15 ppm for this depth increment, no response actions are necessary to address PCBs in the existing 0- to 2-foot depth increment (i.e. future 1- to 3-foot depth increment) at the FCRA.

Nevertheless, GE has elected to voluntarily remove the top 2 feet of existing soil within the polygon associated with sample location CRA-17, where PCBs were detected at a concentration of 42 ppm in the 0- to 2-foot depth increment. Figure 3-1 depicts the soils subject to this 2-foot removal. Following completion of this 2-foot excavation (involving approximately 430 cubic yards) and replacement of that soil with clean backfill, the spatial average PCB concentration for the 0- to 2-foot depth increment at the FCRA will be reduced from approximately 3 ppm to approximately 1.2 ppm. The revised PCB evaluations which account for this removal

are provided in Attachment C. Additional information regarding the soil removal is provided in Section 5.3 of this Work Plan Addendum.

As stated in the RD/RA Work Plan, GE also considered certain other PCB Performance Standards related to East Street Area 2-South, to determine whether such standards may result in the need for additional response actions within the FCRA. As previously indicated, the need for response actions for depths greater than 3 feet within the FCRA will be considered as part of RD/RA evaluations for East Street Area 2-South, and specifically the Former Gas Plant/Scrap Yard Averaging Area. To assess the possibility that soils beneath the FCRA may require future response actions at such depths under evaluations of that larger averaging area, GE has made a preliminary review of the available pre-design PCB data from within and near the FCRA that could affect the relevant depth increments that extend deeper than 3 feet – i.e., the 1- to 6-foot and 0- to 15-foot depth increments. Of the 75 available PCB samples, the maximum discrete PCB concentrations – apart from the 42 ppm result from the 0- to- 2-foot sample at location CRA-17, where the soils will be removed – are 9.2 ppm in surface soils and 5.6 ppm in subsurface soils. Since these maximum concentrations are far below the applicable Performance Standards for the relevant depth increments, it is clear that any future PCB-related response actions for the Former Gas Plan/Scrap Yard Area would not involve soils beneath the FCRA.

In addition, the CD and SOW require that, if the spatial average PCB concentration in an existing subsurface utility corridor exceeds 200 ppm in the 1- to 6-foot depth increment, GE is required to evaluate whether additional response actions are necessary. Given the available PCB soil data described above, it is likewise clear that no further evaluations concerning subsurface utilities within or related to the FCRA portion of East Street Area 2-South are necessary.

3.3 PCB Evaluation for the Access Road Area

Based on discussions with EPA, it was agreed that since the access road area is not be part of the ballfield area, installation of a 1-foot-thick soil cover is not required. At the same time, based on the potential recreational-type use of the access road (relative to the remaining portions of East Street Area 2-South), the commercial/industrial Performance Standards for East Street Area 2-South would not apply to the top 3 feet of soil in the access road area. In these circumstances, GE and the EPA agreed that the uppermost 3 feet of soil within the access road area will be subject to the same Performance Standards applicable at other GE-owned recreational areas within the CD Site (as identified in Section 2.3 above). For PCBs, these Performance

Standards require soil removal and replacement as necessary to achieve spatial average PCB concentrations of 10 ppm in the 0- to 1-foot depth increment and 15 ppm in the 1- to 3-foot depth increment. In addition, for unpaved areas, any soil containing PCBs at or above the not-to-exceed concentration of 50 ppm in the uppermost foot of soil is subject to removal. For purposes of these evaluations, the uppermost 3 feet of soil in the access road area is considered a separate averaging area, and response actions for depths greater than 3 feet in this area will be determined as part of the response actions for the overall averaging area within East Street Area 2-South.

To assess achievement of these Performance Standards, spatial average PCB concentrations have been calculated for the existing 0- to 1-foot and 1- to 3-foot depth increments in the access road area. The evaluation process for the 0- to 1-foot depth increment utilized the data from the 0- to 1-foot samples in this area, plus the data from the 0- to 2-foot sample from location CRA-19. For the 1- to 3-foot depth increment, the evaluation process utilized the data from the 1- to 3-foot samples in this area and also incorporated the 0- to 2-foot sample result from CRA-19. For the latter evaluation, due to the different depth increment of the CRA-19 sample from the other samples, it was necessary first to calculate PCB spatial average concentrations for two intermediate depth increments within 1- to 3-foot depth (i.e., the 1- to 2-foot and 2- to 3-foot depth increments). These individual PCB spatial average concentrations were then combined to derive the overall PCB spatial average concentration for the existing 1- to 3-foot depth increment.

To support the spatial average PCB calculations for the access road area, the following materials have been prepared and are included in Attachment D:

- Site mapping identifying specific Thiessen polygons for the existing 0- to 1-foot, 1- to 2-foot, and 2- to 3-foot depth increments;
- Computer spreadsheets to incorporate the results of the Thiessen polygon mapping (i.e., Thiessen polygon size) and the corresponding PCB analytical data; and
- Calculations of the spatial average PCB concentration for the existing 0- to 1-foot and 1- to 3-foot depth increments.

As shown in Attachment D, the spatial average PCB concentration for the existing 0- to 1-foot depth increment for the access road area is approximately 6.2 ppm. In addition, the maximum PCB sample result for this depth

increment (38 ppm) is below the applicable not-to-exceed concentration (50 ppm). Since the existing PCB spatial average concentration and maximum discrete concentration are below the corresponding Performance Standards, no response actions are necessary to address PCBs in the existing 0- to 1-foot depth increment.

For the existing 1- to 3-foot depth increment, the spatial average PCB concentration for the access road area is 0.06 ppm. This existing PCB spatial average concentration is well below the corresponding Performance Standard of 15 ppm for this depth increment. Accordingly, no response actions are necessary to address PCBs in the existing 1- to 3-foot depth increment. In addition, no subsurface utilities are currently present within the access road area.

Because a portion of the access road is located within the 100-year floodplain of the Housatonic River (Figure 1-2), the uppermost one foot of soil within the limits of the access road will be removed prior to placing one foot of compacted gravel to create the driving surface. This approach will avoid the loss of flood storage capacity within the floodplain that would otherwise occur by installing the access road on top of existing grade. As shown on Figure 3-1, the access road occupies a portion of the polygon associated with sample location RAA4-23, where a PCB concentration of 38 ppm was detected in the sample collected from the 0- to 1-foot depth increment. However, GE has elected to voluntarily remove soils from the 0- to 1-foot depth increment within this entire polygon. This represents an additional volume of approximately 25 in-situ cubic yards beyond what would be removed from this polygon for access road construction purposes. In total, the 1-foot removal within the polygon associated with sample location RAA4-23 will include the removal of approximately 60 cubic yards. Figure 3-1 depicts the soils subject to this additional 1-foot removal.

In consideration of this removal of the entire 0- to 1-foot polygon associated with sample location RAA4-23, calculations were performed to assess the post-removal spatial average PCB concentrations within the access road area. Following completion of the 1-foot removal within the polygon associated with sample location RAA4-23, and replacement of that soil with clean backfill material, the PCB concentration for the 0- to 1-foot depth increment at the access road will be reduced from approximately 6.2 ppm to approximately 0.55 ppm. The revised PCB evaluations, which account for this removal, are provided in Attachment E. (This removal does not affect the calculated average PCB concentration for the existing 1- to 3-foot depth interval (0.06 ppm) indicated above.) Additional information regarding the soil removal is provided in Section 5.3 of this Work Plan Addendum.

It should be noted that the post-removal average PCB calculations presented in Attachment E only include the removal of the polygon associated with the 0- to 1-foot depth interval at sample point RAA4-23. In actuality, the construction-related removal of soils related to the access road construction will also involve soil removal from other polygons within the access road area. Such removal would further reduce the post-removal average PCB concentrations for the 0- to 1-foot depth interval in the access road area.

4. Summary of Non-PCB Soil Evaluations

4.1 General

The Performance Standards established in the CD and SOW for Appendix IX+3 constituents in soil set forth a prescribed process that includes (as needed) several evaluation components. The assessment of Appendix IX+3 constituents is based on the available data from soil samples collected within the area subject to evaluation. It also incorporates the anticipated performance of response actions (if any) that have been identified for PCBs. Beyond these initial evaluation components, the activities involved in the assessment vary depending on the specific constituents under consideration, the possible elimination of certain constituents from further evaluation based on a screening step, and the specific risk-based evaluation method.

The preliminary evaluations presented in the RD/RA Work Plan determined that response actions were not necessary for Appendix IX+3 constituents. Moreover, as discussed in Section 2.2, the supplemental soil investigations performed since that time to further evaluate elevated detection limits associated with certain non-detect VOCs/SVOCs confirmed that no further investigations or evaluations were necessary to address those specific non-detect VOCs/SVOCs and that those constituents need not be considered further in the evaluations of this area.

Nevertheless, due to the revisions in the configuration and limits of the FCRA, a re-evaluation has been performed for the Appendix IX+3 constituents in soils at the FCRA. As shown on Figure 2-1, the revised FCRA limits now exclude two Appendix IX+3 samples that were included in the previous evaluation (i.e., RAA4-1 and RAA4-8). In addition, an Appendix IX+3 evaluation has been performed for the access road area.

The applicable Performance Standards for Appendix IX+3 constituents in soil at the GE Plant Area are set forth in Section 2.2.2 and Attachment F of the SOW. These Performance Standards apply to the same averaging areas and depths as the PCB Performance Standards – in this case, the uppermost 2 feet of existing soil in the FCRA and the uppermost 3 feet of existing soil in the access road area. The relevant Performance Standards were described in Section 4.2 of the RD/RA Work Plan. The remainder of this section summarizes the revised/supplemental Appendix IX+3 evaluations for the FCRA and the access road area.

4.2 Revised Appendix IX+3 Evaluation for the FCRA

The preliminary Appendix IX+3 soil evaluation for the FCRA previously presented in the RD/RA Work Plan has been updated to reflect the changes in the final configuration of the FCRA, which results in the exclusion of two samples previously incorporated in the evaluation (i.e., RAA 4-1 and RAA 4-8). A summary of the revised evaluation is presented below.

4.2.1 Review of Data Qualifiers

The first step in the evaluation of non-PCB Appendix IX+3 constituents at the FCRA was to review any data qualifiers to determine whether any sample results should be eliminated due to laboratory interference or laboratory contamination. All of the soil data used in this evaluation were previously subject to a data quality assessment. No sample results were rejected due to laboratory interference or laboratory contamination.

4.2.2 Comparison to Screening PRGs

The next step in the evaluation process was to compare the maximum concentrations of all detected constituents, except for dioxins/furans, to the EPA Region 9 Preliminary Remediation Goals (PRGs) (set forth in Exhibit F-1 to Attachment F of the SOW), using the residential PRGs for the FCRA. For constituents for which EPA Region 9 PRGs do not exist, surrogate PRGs were used, in accordance with the SOW and EPA's April 18, 2002 conditional approval letter. For example, the EPA Region 9 residential PRG for naphthalene was used for other non-carcinogenic polycyclic aromatic hydrocarbons (PAHs) and the EPA Region 9 residential PRG for carbon disulfide was used for sulfide. (These PRGs and surrogate PRGs are hereinafter referred to jointly as "Screening PRGs.") With EPA approval, these comparisons did not include pesticides and herbicides. Further, only detected constituents were included (thus excluding the select non-detect VOCs and SVOCs that were subject to the supplemental soil sampling). Any constituent whose maximum concentration is at or below its Screening PRGs was eliminated from further consideration.

The comparisons of the maximum concentrations of detected constituents at the FCRA to the Screening PRGs are shown in Table 4-1. Based on these comparisons, six constituents had maximum concentrations exceeding their corresponding Screening PRGs for residential soil:

-
- benzo(a)anthracene;
 - benzo(a)pyrene;
 - benzo(b)fluoranthene;
 - dibenzo(a,h)anthracene;
 - indeno(1,2,3-cd)pyrene; and
 - arsenic.

These constituents were subject to further evaluation as discussed in Section 4.2.4.

4.2.3 Dioxin/Furan Data Assessment

For each dioxin/furan sample, a total Toxicity Equivalency Quotient (TEQ) concentration was calculated using the Toxicity Equivalency Factors (TEFs) published by the World Health Organization (WHO) and representing any non-detected compound as one-half the detection limit. The maximum total TEQ concentration for the existing 0- to 2-foot depth increment at the FCRA was then compared to the applicable PRG established by EPA for dioxin/furan TEQs in the 1- to 3-foot depth increment at recreational properties, which is 1.5 ppb. The maximum TEQ concentration at the FCRA is 0.04 ppb, which is below the applicable dioxin/furan TEQ PRG of 1.5 ppb for this depth increment. As a result, no further response actions are necessary to address dioxins/furans at the FCRA.

4.2.4 Comparison to MCP Method 1 Soil Standards

For those constituents retained for further evaluation, the next component of the evaluation process involved a comparison of the average concentrations of those constituents to the applicable Method 1 soil standards set out in the Massachusetts Contingency Plan (MCP). As stated in the RD/RA Work Plan, GE has conservatively selected the MCP Method 1 S-1 soil standards for application to the FCRA.

For the six constituents retained for evaluation – benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenzo(a,h)anthracene, indeno(1,2,3-cd)pyrene, and arsenic – arithmetic average concentrations were calculated, using the available data from samples located within the existing 0- to 2-foot depth increment, and are presented in Table 4-2. The table also provides a comparison of the calculated arithmetic average concentrations to their corresponding Method 1 S-1 soil standards. As shown in Table 4-2, none of the six retained constituents has an average concentration that exceeds its corresponding Method 1 S-1 soil standard.

Accordingly, no further response actions are necessary to address non-PCB constituents in the existing 0- to 2-foot depth increment (future 1- to 3-foot depth increment) at the FCRA.

4.2.5 Preliminary Review of Deeper Data

As with PCBs, GE has made a preliminary review of the Appendix IX+3 data for depths greater than 3 feet within the FCRA area to determine whether response actions may be necessary for such depths under evaluations of the Former Gas Plant/Scrap Yard Area at East Street Area 2-South. While one sample from the existing 5- to 14-foot (future 6- to 15-foot) depth interval showed elevated levels of polycyclic aromatic hydrocarbons (PAHs) (in the range of 30-50 ppm), the other PAH sample results are low, and hence the average concentrations of these constituents at depth in this area will be well below the MCP Upper Concentration Limits (UCLs) for these PAHs, which would apply to the 0- to 15-foot depth interval under an area-specific risk evaluation of this area. As a result, it is not expected that future response actions, if any, to address non-PCB Appendix IX+3 constituents at depth in the Former Gas Plant/Scrap Yard Area would affect the FCRA.

4.3 Appendix IX+3 Evaluation for Access Road Area

This section evaluates the existing Appendix IX+3 soils data for the access road area based on the Performance Standards and evaluation process established in the SOW.

4.3.1 Review of Data Qualifiers

All of the available soil data for the access road area have been subject to a data quality assessment. In certain cases, the sampling results have been qualified as indicated in the Appendix IX+3 data table (Table 2-7). However, no sample results were rejected due to laboratory interference or laboratory contamination.

4.3.2 Comparison to Screening PRGs

Consistent with the protocols established in the SOW and followed for the FCRA, the maximum concentrations of non-PCB Appendix IX+3 constituents detected in the access road area, other than dioxins and furans, were compared to the Screening PRGs, using the PRGs for soils in residential areas. Similar to the evaluations

performed for the FCRA, pesticides and herbicides were not included. These comparisons are shown in Table 4-3. Based on these comparisons, only arsenic and benzo(a)pyrene had maximum concentrations exceeding their corresponding Screening PRGs. Therefore, these constituents were retained for further evaluation.

It should be noted, however, that several non-detect VOC and SVOC results had elevated detection limits, as indicated in Table 2-7, such that one-half the maximum detection limit exceeded the Screening PRGs. Most of these constituents were the same as the targeted VOCs/SVOCs which were subject to the supplemental soil sampling at the FCRA and presented in the February 2002 Supplemental Soil Sampling Report. For the same reasons identified in that report with respect to such constituents at the FCRA, GE does not believe that additional investigations or evaluations of these constituents at the access road area are warranted, and hence these constituents were not included in the Appendix IX+3 evaluations for this area. However, there were two other constituents that were not detected and for which one-half the maximum detection limit exceeds their Screening PRGs – dibenzo(a,h)anthracene and indeno(1,2,3-cd)pyrene. The detection limits for these samples were similar to (or in some cases lower than) the detection limits for these constituents in the FCRA samples. Nonetheless, as a conservative measure, these constituents were retained for further evaluation.

4.3.3 Dioxin/Furan Data Assessment

For dioxins/furans, total TEQ concentrations were calculated for each dioxin/furan sample using the TEFs published by the WHO. The total TEQ concentrations for the soil samples associated with the access road area are presented in Table 2-7. Based on this available data set, the maximum TEQ concentrations were determined for the existing 0- to 1-foot and 1- to 3-foot depth increments within the access road area. These maximum concentrations are 0.05 and 0.15 ppb, respectively. These results are below the dioxin/furan TEQ PRGs for the 0- to 1-foot and 1- to 3-foot depth increments at recreational areas, which are 1.0 ppb and 1.5 ppb, respectively. Thus, no further response actions to address dioxins/furans are necessary within the access road area.

4.3.4 Comparison to MCP Method 1 Soil Standards

For the four constituents retained for further evaluation – benzo(a)pyrene, dibenzo(a,h)anthracene, indeno(1,2,3-cd)pyrene, and arsenic – the next component of the evaluation process involved the comparison of the average concentrations of these constituents to their MCP Method 1 soil standards. Similar to the evaluations performed

in the FCRA, GE has conservatively selected the MCP Method 1 S-1 soil standards for the access road area soils.

Table 4-4 presents the depth-specific arithmetic average concentrations for benzo(a)pyrene, dibenzo(a,h)anthracene, indeno(1,2,3-cd)pyrene, and arsenic. This table also provides a comparison of these average concentrations to their corresponding Method 1 S-1 soil standards. As shown in Table 4-4, none of these constituents has an average concentration exceeding its corresponding Method 1 S-1 soil standard for either the 0- to 1-foot or the 1- to 3-foot depth increment. Based on this analysis, no further response actions to address non-PCB Appendix IX+3 constituents are necessary within the access road area.

5. Supplemental Design Information

5.1 General

The primary response actions for the FCRA will involve the placement of a 1-foot-thick (minimum) soil cover over the surface of the approximately 3.4-acre area, the voluntary removal of certain soil within the FCRA and access road area (although not necessary to achieve the Performance Standards), and the installation of fencing around the perimeter of the FCRA and access road area. Other components of the overall construction activities associated with the recreational area include:

- irrigation system to facilitate watering of the athletic field;
- lighting system;
- perimeter walking path;
- sod/seeding in vegetated portions of the FCRA;
- gravel access road and parking area;
- a restroom/storage building; and
- athletic field appurtenances (e.g., scorer's booth, players' benches, baseball backstop, scoreboard, etc.).

Certain of the above components will require handling of existing soils, including the construction of the access road, light pole bases, building footers, and other support structures. The procedures described in this Work Plan Addendum (Sections 5 and 6) are applicable to those activities. By comparison, other components are not pertinent to the response actions, and the associated design and implementation procedures are not specifically addressed in this plan. Such components include the architectural plans, lighting design, irrigation system, utilities, and other athletic field appurtenances.

This remainder of this section provides additional information related to the design of the soil cover, the soil removal that GE has elected to perform within the FCRA and access road area, perimeter fencing, and other pertinent components of the construction activities. Section 6 provides additional site-specific implementation details associated with construction of the various design components.

5.2 Technical Plans and Specifications

Preliminary technical design information regarding the installation of the soil cover within the FCRA was provided in the RD/RA Work Plan. In addition, certain of the documents comprising GE's Project Operations Plan (POP) provide additional design-, construction-, and implementation-related information relevant to the construction activities. With the exception of the FSP/QAPP and the Health and Safety Plan (HASP) (which was provided to EPA for informational purposes only), the latest revisions to the POP plans were submitted to EPA on February 5, 2003, and conditionally approved by EPA by letter dated April 24, 2003.

The POP contains a series of plans that address several common aspects of the Removal Actions Outside the River and apply to various activities to be conducted as part of those Removal Actions, ranging from initial pre-design activities to the performance and completion of remediation activities. Collectively, these plans describe the minimum requirements, general activities, protocols, and methodologies that are applicable to these Removal Actions. These plans include a Waste Characterization Plan, a Soil Cover/Backfill Characterization Plan, a Site Management Plan, an Ambient Air Monitoring Plan, and a Contingency and Emergency Procedures Plan. The POP also includes a Construction Quality Assurance Plan (CQAP), which provides technical requirements related to items such as backfill, topsoil, seeding, mulch, etc. In addition, the CQAP specifies activities that are relevant to certain of the construction activities, such as soil placement and grading/compaction, survey control, etc. The general provisions of the POP are applicable to the FCRA and access road construction activities and are incorporated herein by reference.

Since the time the RD/RA Work Plan was submitted to the EPA in December 2001, GE has further developed the technical design of the FCRA and associated access road area. The specific design details have been advanced in consideration of the requirements of the CD, as well as coordination with the City regarding the layout and features of the FCRA. The various design details are summarized in this Work Plan Addendum, but are more specifically described in the Technical Drawings and Specifications that will be used by GE to procure a Remediation Contractor. Copies of select technical drawings and specifications are provided in Attachments E and F, respectively, and include those related to the construction of the soil cover, vegetative surface, perimeter fencing, and other construction elements. Details specific to the FCRA facilities and appurtenances (e.g., scorer's booth architecture, irrigation system, etc.) are not included.

5.3 Soil Removal Activities

In addition to the removal of certain soils to facilitate construction activities (further discussed in Section 6.5.1), GE has elected to remove additional soils within the FCRA and access road area as a component of the Removal Action. As described in Section 3.2, GE will remove 2 feet of soil from the FCRA within the area associated with sample location CRA-17 (Figure 3-1), where a PCB concentration of 42 ppm was detected in the 0- to 2-foot depth increment. The soil volume associated with this removal is approximately 430 cubic yards. In addition, GE will remove 1 foot of soil within the access road area associated with sample location RAA4-23 (Figure 3-1), where a PCB concentration of 38 ppm was detected in the 0- to 1-foot depth increment. As described in Section 3.3, the soil volume associated with this removal is approximately 60 cubic yards. The soils subject to removal will be transported and properly disposed of at the Hill 78 On-Plant Consolidation Area (OPCA), as described in Section 6.5.2.

Prior to initiating removal activities for these areas, the horizontal limits of removal will be surveyed and staked in the field. During removal activities, field measurements will be made to verify that the target removal depths have been met for each area. Following removal, common fill will be obtained from an off-site source (Section 5.8) and will be placed and compacted to re-establish the original grade around sample point CRA-17 prior to the placement of the 1-foot-thick (minimum) soil cover in this area. For the access road area, the portion of the excavation that extends beyond the gravel access road will be backfilled with eight inches of common fill and 4 inches of topsoil, and restored with a vegetated cover. The provisions specified in the POP, including the Soil Cover/Backfill Characterization Plan and the CQAP, will be utilized during the removal and backfill activities.

5.4 Configuration of the FCRA Soil Cover

As established in the CD and SOW, the minimum thickness of the soil cover to be placed across the FCRA is 1 foot. Except as indicated below, this thickness will be provided within the entirety of the 3.4-acre FCRA. In several areas, the thickness of the soil cover will be greater than 1 foot in order to accommodate variability in the current topography of the area and to provide a final surface that is relatively level, but promotes drainage of rainfall runoff (i.e., a downward slope of approximately 1.5% to 2%).

The targeted final grade contours are shown on the technical drawing entitled "Grading and Utility Plan" (Attachment F). These contours will result in a minimum soil thickness of 1 foot throughout the FCRA, except along a portion of the slope at the northern limit of the FCRA where the grade transitions to East Street. The

1-foot-thick soil cover was not extended up the entirety of this sloped area based on constructability and grading considerations; specifically, the slope provides an appropriate location for tapering of the soil cover without increasing the road shoulder elevation along East Street. In addition, the soils currently comprising the slope along East Street are clean soils placed by Mass Highway during the East Street renovation and widening project performed by Mass Highway in 2001. These soils essentially serve as a clean cover over the pre-existing FCRA soils in this area.

The 1-foot-thick soil cover to be placed within the FCRA encompasses the athletic fields, perimeter walking path, parking lot, and a portion of the access road. Cross-sections depicting the various cover configurations are provided on the technical drawing entitled "Details Sheet" (Attachment F). As indicated, the cover configuration within the athletic field area typically includes a minimum of 4 inches of topsoil underlain by a thickness of soil fill material as needed to achieve the specified final surface elevations (typically 8 inches or more). In these areas, the sod will be placed on top of the minimum 1-foot-thick soil cover, thus providing an additional cover thickness in areas where sod is placed. In areas corresponding to the baseball infield, the topsoil will be replaced by a minimum of 3 inches of infield clay and the underlying soil fill thickness will be increased as necessary.

In the parking lot area and access road portions of the FCRA, the cover configuration includes (from bottom to top) a layer of geotextile stabilization fabric, bank run gravel, and a minimum of 4 inches of dense graded base course gravel. The thickness of the bank run gravel layer will vary as needed to achieve the specified final grade (typically 8 inches or more).

Except as noted above, the 1-foot-thick soil cover will be placed within the entirety of the FCRA perimeter fence. Extending outward from the fence, the soil cover will be tapered to surrounding grade at a slope no steeper than 2H:1V. These tapers will also be subject to sod placement or seeding and mulch to establish vegetative growth.

5.5 Configuration of the Access Road

The installation of a gravel access road between the parking area within the recreational area and the point of vehicle access along Newell Street was identified by the City based on considerations related to traffic flow at the Newell Street/East Street intersection, as well as off-street parking. As shown on Figure 1-2, a portion of the

anticipated access road is located outside of the FCRA and within the remainder of East Street Area 2-South. The parcel of land within which the access road will be constructed includes an area of approximately 0.3 acres and will be demarcated through the installation of fencing to separate it from the remainder of East Street Area 2-South.

Outside the limits of the FCRA, the access road area is not subject to a minimum 1-foot-thick soil cover. However, as indicated on Figure 1-2, the entirety of the access road area is located within the 100-year floodplain of the Housatonic River. Therefore, to avoid a net fill placement within the access road area, the access road will be constructed to match the surrounding grade. This will be achieved by first excavating approximately 1 foot of soil from within the limits of the gravel access drive, and then constructing the gravel drive within the excavated soil area, as indicated on the technical drawing entitled "Details Sheet" (Attachment F). Within this area, the configuration of the access road will be consistent with the configuration of the access road and parking lot to be constructed in the FCRA. This includes (from bottom to top) a layer of geotextile stabilization fabric, 8 inches of bank run gravel, and 4 inches of dense graded base course gravel. Soils removed from the access road area will be disposed of in the Hill 78 OPCA (Section 6.5.2).

5.6 Perimeter Fencing

Perimeter chainlink fencing is currently present around the perimeter of the East Street Area 2-South RAA. A portion of this fencing will also serve to demarcate the northern and eastern boundaries of the FCRA and access road area. To supplement the existing fencing, chainlink fencing will also be installed to delineate the remainder of the FCRA and access road area. Fencing will be installed along the designated boundaries of the FCRA and access road area, as shown on the technical drawing entitled "Grading and Utility Plan" (Attachment F). This fencing will serve to restrict access from the FCRA or access road area to the remainder of East Street Area 2-South.

In addition to this perimeter fencing, chainlink fencing will be installed at the interior portion of the FCRA, as shown on the "Grading and Utility Plan" (Attachment F). This interior fencing will be installed to prevent vehicular access from the access road and parking area into the athletic field area.

Several access gates will be installed in the new fencing and retrofitted into the existing fencing. The locations of these gates, which include pedestrian and vehicular access gates, are indicated on the technical drawing entitled "Grading and Utility Plan" (Attachment F). In particular, an access gate will be constructed at the point

where vehicles enter the access road area from Newell Street, and an emergency access gate will be installed in the existing chainlink fencing along East Street. Also, a gate will be installed in the fencing separating the access road from the vegetated portion of the FCRA. This gate will allow access by emergency and maintenance vehicles into the athletic field area. All of these gates will remain locked when the recreational area is not in use or being serviced, and gate keys will be provided to appropriate personnel (e.g., GE representatives, the City, and emergency response officials). No gates will be installed that would allow for vehicular or pedestrian access from the FCRA or access road area into the remainder of the East Street Area 2-South RAA.

5.7 Flood Storage Capacity

As shown on Figure 1-2, placement of a 1-foot-thick (minimum) soil cover over the FCRA will include the placement of some cover materials within portions of the 100-year floodplain of the Housatonic River. Based on the final grade configuration illustrated in the "Grading and Utility Plan" (Attachment F), the volume of fill placement within the 100-year floodplain is approximately 245 cubic yards.

As specified in the CD and SOW, GE is required to provide flood storage compensation for the loss of flood storage capacity. To partially offset the estimated 245 cubic yards of fill to be placed in the floodplain, GE anticipates that approximately 220 cubic yards of flood storage capacity will be gained by the demolition of Building 64Y, which is located in East Street Area 2-South to the south of the FCRA. The planned demolition of this building was described in a letter to EPA dated April 17, 2003. This demolition is anticipated to occur during the 2003 construction season.

GE will offset the remaining volume (approximately 25 cubic yards) in conjunction with future demolition activities within East Street Area 2-South.

5.8 Soil Fill and Topsoil Materials

Approximately 450 cubic yards of soil fill material will be needed to backfill the soil removals in the vicinity of sample locations CRA-17 and RAA4-23 (Sections 3.2 and 3.3). Soil fill and topsoil will also be used during the construction of the soil cover within the FCRA. Soil fill will consist of common fill and bank run gravel. The access road will consist of bank run gravel and dense-graded base gravel.

The specific fill sources to be used for this project will be identified by the Remediation Contractor selected by GE to perform the work. As noted above, a Remediation Contractor has not yet been selected. Once a Remediation Contractor is selected and the associated fill sources are identified, representative samples of proposed fill materials will be collected and analyzed for PCBs and the Appendix IX+3 volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), and metals, as required by GE's approved Soil Cover/Backfill Characterization Plan (Attachment C to the POP). Identification of the approved fill sources and associated analytical data will be separately submitted to EPA in a supplement to this Work Plan Addendum.

5.9 Applicable or Relevant and Appropriate Requirements

Attachment B to the SOW identifies several chemical-, action-, and location-specific Applicable or Relevant and Appropriate Requirements (ARARs) for the Removal Actions Outside the River. Based on the scope of the response action for the FCRA, several of the identified ARARs were considered in the development of the design and implementation procedures associated with the FCRA response action. The primary ARARs that pertain to this response action are those listed in Section C of Table 2 of Attachment B to the SOW (relating to "Surface Cover Activities"). Because soil removal will be performed in conjunction with this work, the action-specific ARARs identified in Section B of Table 2 of Attachment B to the SOW (relating to "Soil Removal") were also considered. In addition, because a portion of the FCRA falls within the 100-year floodplain of the Housatonic River, the location-specific ARAR associated with the Massachusetts Wetlands Protection Act are applicable to this work. A summary of the key ARARs that were considered with respect to this work, along with the associated project component(s) and means by which the ARAR is addressed by the design and implementation activities, is as follows:

ARAR	Associated Project Components	Means by Which ARAR Will Be Addressed
TSCA Regulations (40 CFR 761.61 and 761.79)	<ul style="list-style-type: none"> • Soil Removal • Surface Cover Activities 	<ul style="list-style-type: none"> • EPA has determined that Removal Actions conducted in accordance with the CD and SOW will not pose an unreasonable risk of injury to health or the environment.
RCRA Hazardous Waste Regulations (40 CFR 261.24)	<ul style="list-style-type: none"> • Soil Removal 	<ul style="list-style-type: none"> • Appendix IX+3 evaluations (Section 4). • Waste profile evaluation (Section 6.5.2), showing that soil to be excavated is not a RCRA characteristic hazardous waste.

ARAR	Associated Project Components	Means by Which ARAR Will Be Addressed
Clean Water Act NPDES Regulations [40 CFR 122.44(k); 40 CFR 122.26(c)(ii)(C); 40 CFR 125.100-.104]	<ul style="list-style-type: none"> • Soil Removal • Surface Cover Activities 	<ul style="list-style-type: none"> • Implementation of erosion and sedimentation controls.
Massachusetts Air Pollution Control Requirements (310 CMR 7.09)	<ul style="list-style-type: none"> • Soil Removal • Surface Cover Activities 	<ul style="list-style-type: none"> • Implementation of dust control measures and air monitoring to meet those requirements.
Massachusetts Wetlands Protection Act and Regulations [MGL c. 131 §40; 310 CMR 10.53(3)(q); 310 CMR 10.54-.58]	<ul style="list-style-type: none"> • Soil Removal • Placement of fill materials within 100-year floodplain 	<ul style="list-style-type: none"> • Implementation of erosion and sedimentation controls. • Provision of compensatory flood storage capacity to offset fill volume.

6. Implementation Plan

6.1 General

As indicated in Section 5.2, the POP contains a series of plans that address several common aspects for Removal Actions Outside the River. As relevant, those plans will be followed in the implementation of the response actions for the FCRA and the access road area.

As a supplement to the implementation-related procedures specified in the POP plans, this section provides additional details (to the extent possible at this time) regarding certain construction activities. Specifically, this section identifies the requirements for project-specific plans to be submitted by the selected Remediation Contractor, describes site-specific elements of the site preparation and construction activities, and summarizes the project-specific perimeter air monitoring approach.

6.2 Project Participants

To the extent possible, the following table identifies the key project participants involved with the design and implementation of the FCRA construction activities, along with their project roles and contact information:

Organization/Contact	Role	Address and Phone Number
United States Environmental Protection Agency Michael Nalipinski	<ul style="list-style-type: none">- Lead regulatory agency.- Review and approval of RD/RA Work Plan and Work Plan Addendum.- Oversight of response actions.- Coordination of other regulatory agencies.	United States Environmental Protection Agency, Region 1 1 Congress St., Suite 1100 Boston, MA 02114 (888) 372-7341
General Electric Company John F. Novotny, P.E.	<ul style="list-style-type: none">- Pre-design, construction, and documentation activities related to construction of the FCRA.- Supervise implementation of the Removal Action and related activities to ensure that they are conducted in accordance with the CD and DEDA.- Direct/coordinate activities of the Remediation Contractor and other GE-contracted organizations.- Responsible for preparation of a Final Completion Report.	General Electric Company 100 Woodlawn Avenue Building 11-250 Pittsfield, MA 01201 (413) 494-3177

Organization/Contact	Role	Address and Phone Number
Blasland, Bouck & Lee, Inc. James M. Nuss, P.E., LSP	<ul style="list-style-type: none"> - Supervising Contractor for GE. - Review Contractor submittals. - Project coordination and documentation. - Provide technical assistance related to the implementation of the Removal Action. - Assist in verifying that the Removal Action is complete and performed in accordance with the Work Plan. - Prepare Final Completion Report. 	Blasland, Bouck & Lee, Inc. 6723 Towpath Road Syracuse, NY 13214 (315) 446-9120
White Engineering, Inc. Michael Kulig, P.E.	<ul style="list-style-type: none"> - Design consultant to GE. - Review Remediation Contractor submittals. 	White Engineering, Inc. 55 South Merriam Street Pittsfield, MA 01201 (413) 443-8011
Berkshire Environmental Consultants Maura Hawkins	<ul style="list-style-type: none"> - Design and implement perimeter air monitoring in conjunction with construction activities. 	Berkshire Environmental Consultants 152 North Street, Suite 250 Pittsfield, MA 01201 (413) 443-0130
Remediation Contractor (To be determined)	<ul style="list-style-type: none"> - Implement all construction-related activities 	(To be determined)

As further discussed in Section 8, a Remediation Contractor has not yet been selected by GE. The name and contact information for the selected Contractor will be provided to the EPA in a supplement to this Work Plan Addendum.

6.3 Contractor Submittals

Once selected, the Remediation Contractor will be required to provide certain pre-mobilization submittals to demonstrate that the Contractor (a) has an adequate understanding of the scope of the Removal Action; (b) has developed a project-specific sequence that can efficiently perform all on-site activities within the allowable schedule; (c) will utilize acceptable materials, products, and procedures; and (d) will perform all activities in a manner that is protective of on-site workers and the surrounding community. Certain of those submittals relate to the manner in which the work activities will be implemented and, as such, will supplement the information and procedures presented in this plan. Those submittals include:

- Operations Plan;
- Contractor Health and Safety Plan (HASP); and
- Contingency Plan.

The purpose of the Operations Plan is to summarize the materials, procedures, timelines, and controls that the Contractor intends to utilize during project activities. This plan will be prepared in consultation with GE and include a list of equipment, work schedule, traffic control, excavation approach, materials handling, equipment cleaning, and other aspects of the work activities. The HASP will identify the Remediation Contractor's project-specific health and safety procedures, and will be developed to address the minimum requirements established in the POP and 29 CFR 1910 and 1926. The plan will address those activities to be undertaken by the Contractor and present required information including, but not limited to, training, identification of key personnel (including the Contractor's Health and Safety Officer), medical surveillance, site hazards, work zones, personal safety equipment and protective clothing, personal air monitoring, equipment cleaning, and material safety data sheets. The Contingency Plan will set forth procedures for responding to emergency conditions or events that may occur during the performance of the Removal Action, and includes information such as emergency access/egress routes, spill control and countermeasures, and emergency contact information.

Once developed by the selected Remediation Contractor and approved by GE, the above-listed Contractor submittals will be submitted to EPA as a supplement to this Work Plan Addendum (Section 8).

In addition to the required pre-mobilization submittals, the Remediation Contractor will be required to prepare various other submittals over the course of this project. The overall purpose of the submittals is to verify that the materials and procedures used in the construction activities are consistent with the design of the Removal Action. In accordance with the POP, the various submittals will be tracked to confirm their receipt and approval. An example of the Preliminary Submittal Tracking Form is provided in Attachment H. For the purposes of this plan, the tracking form includes only those submittal items related to the CD/SOW-required work components; it does not include submittal requirements associated with ancillary items (e.g., architectural items).

6.4 Site Preparation

Immediately prior to or following mobilization to the work area, the selected Remediation Contractor will perform several site preparation activities to establish the necessary site controls, features, and procedures for subsequent implementation of the removal action activities. These activities include obtaining utility clearances, establishing site controls and access, site survey and layout, installing erosion and sedimentation control measures, and surface preparation. General information regarding various site preparation activities (e.g., coordinating with local utilities, permitting, verifying existing conditions, establishing work areas) is provided in

the CQAP; the information provided below supplements the CQAP by providing additional site-specific details associated with certain of these activities.

6.4.1 Utility Clearances

Underground utilities that could potentially be affected by the construction activities will be identified prior to initiating any intrusive subsurface activities (e.g., soil excavation, fence post installation, etc.). As indicated on the technical drawing entitled "Grading and Utility Plan" (Attachment F), certain subsurface utilities are known to be present within and adjacent to the FCRA and access road area, including a sewer line immediately west of the FCRA, a sewer line along East Street in the northern portion of the FCRA, and a water service line extending from Newell Street into the access road area. The selected Contractor will be responsible for marking out the locations of these utilities at the start of the work. Any additional commercially owned utilities will be demarcated by an independent company (DIGSAFE).

6.4.2 Site Controls and Access

Currently, entry to the FCRA is via an access-controlled GE entry/exit gate located off East Street. Also, existing perimeter fencing around the East Street Area 2-South RAA prevents public or pedestrian access to the FCRA and access road area. Until such time that a new access gate is installed along Newell Street, and the remainder of perimeter fence is installed to preclude access from the FCRA to the remainder of the East Street Area 2-South RAA, equipment and personnel associated with the FCRA construction activities will access via the gate along East Street. Once the perimeter fencing has been installed, access to the work area will be provided by the new access gate along Newell Street. This gate will be locked at all times while personnel are not present at the FCRA in conjunction with construction activities (e.g., nights and weekends).

To the extent possible, proposed gates to be installed in the existing perimeter fence will be installed in a single day so that the perimeter fence is intact throughout the construction activities. In the event that a given gate cannot be completed in a single work day, temporary barriers will be installed to minimize the potential for inadvertent or unauthorized access to the work area during non-work periods.

6.4.3 Survey Control

In accordance with the CQAP, survey controls will be established at the start of the work and maintained throughout the construction activities. GE will provide survey benchmarks so that the Contractor can establish appropriate horizontal and vertical control consistent with the existing survey data.

As stated in Section 4.3 of the CQAP, the Contractor will establish a 50-foot control grid within the FCRA. Prior to placing any soil cover materials, the Contractor will be required to survey the current elevation at each grid point, plus up to 10 additional locations to be identified at the discretion of GE. The 10 additional locations to be identified by GE will be for the purposes of verifying breaks in topography or other features that might not otherwise be adequately documented via the 50-foot grid. Once the soil cover materials are placed, the Contractor will be required to survey final elevations at the 50-foot grid points, plus the same additional locations identified by GE. This survey will be performed to verify that a minimum of 1-foot-thick soil cover has been placed in all areas within the FCRA (relative to the initial survey), and to verify that suitable final surface grade has been achieved. Placement of vegetative cover and other surface features (e.g., players' benches, scorer's box, etc.) will not be permitted until GE has reviewed the Contractor's survey documentation to verify that a suitable surface cover thickness has been provided.

6.4.4 Erosion and Sedimentation Control Measures

Erosion and sedimentation control measures will be implemented to minimize the potential for erosion of exposed soils and subsequent accumulation of materials in site drainage pathways. In addition, these measures will be used to divert rainfall runoff from contacting any soil stockpile areas and/or entering work areas and open excavations.

Specific to this work area, erosion control measures to be implemented will include the placement of staked silt fencing around the perimeter of the downhill side of the work area, plus additional area-specific measures as required. The approximate location and layout of the perimeter siltation fencing is indicated on the technical drawing entitled "Grading and Utility Plan" (Attachment F). This fencing will be placed at the start of the site work activities, and will be maintained until a good stand of vegetation is established.

In addition to the perimeter silt fence, other erosion and sedimentation control measures will be implemented as needed. At a minimum, this will include placement of erosion control measures around any temporary soil stockpiles, and the placement of erosion control measures within and/or around the section of abandoned railroad tracks to be removed from outside the FCRA limits (Section 6.4.5 and the technical drawing entitled "Grading and Utility Plan").

6.4.5 Surface Preparation

Various surface preparation activities will be performed prior to or in conjunction with the initial site preparation activities. The key surface preparation activities are as follows:

- Two existing monitoring wells are currently present within the limits of the FCRA (26R and 95-9). These monitoring wells will be decommissioned by GE prior to Contractor mobilization. The scope of the well decommissioning activities was separately addressed in a letter from GE to the EPA dated July 16, 2002.
- As indicated on the "Grading and Utility Plan" (Attachment F), an existing vertical 36-inch diameter corrugated metal caisson is present in the southern portion of the FCRA. The caisson is approximately 36 inches in diameter and 23 feet deep. As part of the surface preparation activities, the Contractor will cut the caisson at existing ground level and fill the subgrade portion with concrete, grout or other suitable, inert material.
- As indicated on the "Grading and Utility Plan," certain sections of abandoned railroad track will be removed from inside the FCRA prior to soil cover placement. This section of railroad track will be removed because it is currently present above the surrounding grade. Other sections of abandoned railroad track are present at or below the surrounding grade, and will not affect the ability to provide a 1-foot-thick (minimum) soil cover.
- Approximately 170 linear feet of abandoned railroad track and ties will be removed from an area outside the limits of the FCRA. As indicated on the "Grading and Utility Plan," this area is located south of the FCRA and west of the access road area. This section of abandoned track will be removed for aesthetic purposes and will be restored by replacing it with an equivalent amount of topsoil so that this activity does not affect the flood storage capacity within the 100-year floodplain of the Housatonic River. The restored topsoil area will also be seeded with grass to establish a vegetative cover.

Caisson materials, railroad tracks, railroad ties, and any other existing materials removed as part of the surface preparation activities will be disposed along with other materials to be removed from the FCRA, as discussed in Section 6.4.2.

6.5 Construction Activities

6.5.1 Soil Removal, Handling, and Transport

Construction activities will require removal and handling of certain existing soils within the FCRA and access road area. Specifically, existing materials will be removed and handled in conjunction with the following activities:

- Soil removal around samples CRA-17 (FCRA) and RAA4-23 (access road area) (Section 5.3);
- Construction of light pole bases for the outdoor lighting system;
- Construction of foundation supports for the scorer's booth, scoreboard, restroom/storage building, and other structural items;
- Installation of perimeter fence post anchors;
- Installation of underground utilities (e.g., sewer and water connection);
- Construction of the access road to match surrounding grade with a cut/fill balance within the 100-year floodplain area;
- Removal of debris to construct an asphalt entrance from Newell Street to the access road area; and
- Removal of limited portions of existing railroad tracks and/or ties.

The maximum depth of excavation is anticipated to be up to 10 feet based on the depth required to facilitate construction of the base supports for the outdoor lighting system. Based on data from the ongoing groundwater

monitoring program, the depth to groundwater in the FCRA is typically in the range of 17 to 22 feet below ground surface. Accordingly, excavation of saturated materials is not anticipated.

Certain excavated soils may be subject to re-placement within the FCRA while others will be subject to disposal at one of GE's OPCAs (Section 6.4.2). For example, soils excavated for installation of utilities will be replaced into the trench after the utility piping is placed, provided that the existing material is suitable for such purposes (i.e., does not contain non-native materials, large boulders, etc.) and that it is not used within the uppermost foot of the excavation (clean off-site soil will be used for the top one foot of the excavation backfill). Following the removal of soils from the area of sample CRA-17, none of the existing soils less than 10 feet deep within the FCRA (i.e., potentially subject to removal as part of construction-related excavation activities) contain PCBs above 25 ppm; indeed, apart from the CRA-17 sample, the maximum PCB concentration in these soils is 9.2 ppm. Therefore, pursuant to the CD and SOW, those existing materials are available for use as backfill.

Excavation performed for construction of structural supports (e.g., building footers and slabs, light pole bases, etc.), will extend beyond the limits of the support in order to allow for construction of forms. Once the concrete is cured, the forms will be removed and a portion of the excavated soils will be backfilled and compacted around the structures. The remaining excess soils (i.e., the volume displaced by the concrete forms) will be transported to the OPCAs for disposal, as discussed below. Similarly, soils excavated for other purposes (e.g., removal in the vicinity of sample points CRA-17 and RAA4-23, fence post anchors, the portion of the access road located within the 100-year floodplain, portions of railroad tracks, debris from the Newell Street access area, etc.) will be transported to the OPCAs for disposal.

Soils excavated for construction of structural supports and that will be re-placed as fill around the structures will be temporarily staged adjacent to the areas from which they were removed to allow their re-use as backfill materials in the same approximate location. Soils excavated for installation of utilities will also be temporarily staged adjacent to the trench. These soils will be covered while materials are not actively being placed or removed. These temporarily staged soils will be placed in locations that will not interfere with normal operations (to the extent possible), with response actions, or with normal traffic flow.

To the extent possible, excavated soils that will not be used as backfill, along with materials associated with the removed portions of railroad tracks (Section 6.4.5), will be loaded directly into appropriate vehicles (i.e., dump trucks) that will be used for transport to the OPCA (Section 6.5.2). In that case, the same mechanical equipment that is used for excavation will be used to load these materials into the vehicles. As necessary, temporary

stockpiles may be established to facilitate handling and loading of materials into the transport vehicles. These stockpiles will be covered while materials are not actively being placed or removed. Similar to the stockpiles discussed above, these temporarily staged materials will be placed in locations that will not interfere with normal operations (to the extent possible), with response actions, or with normal traffic flow.

Based on the specified soil removal limits and soil volume to be displaced by structural supports, the total volume of existing FCRA and access road materials to be removed from the work area is approximately 760 in-situ cubic yards. Of this volume, approximately 430 in-situ cubic yards will be generated during implementation of the soil removal in the vicinity of sample location CRA-17 (Section 5.3) and approximately 60 in-situ cubic yards will be generated by the removal of soils around sample point RAA4-23. The remainder (approximately 270 in-situ cubic yards) will be generated from excavation of fence post anchors, to achieve a cut/fill balance in the floodplain portion of the access road, and from the other sources indicated above. These materials will be subject to disposal in the Hill 78 OPCA at the GE facility, as discussed below.

6.5.2 Disposition of Excavated Materials and Remediation-Derived Waste

Disposition of excavated materials in GE's OPCAs is based on the concentrations of PCBs (which determine whether the materials are regulated for disposal under TSCA) and Toxicity Characteristic Leaching Procedure (TCLP) constituents (which determine whether the materials constitute characteristic hazardous waste under RCRA). Excavated materials that contain greater than or equal to 50 ppm PCBs (as determined by an appropriate composite sampling technique or other techniques approved by the EPA) or that exceed the RCRA hazardous waste characteristic levels (based on TCLP sample evaluation) may be disposed of in the Building 71 OPCA, but not the Hill 78 OPCA. Materials containing less than 50 ppm PCBs and TCLP constituent concentrations below RCRA hazardous waste characteristic levels may be disposed of in the Hill 78 OPCA.

To identify the appropriate disposition option for the excavated materials, analytical data for all samples located within the FCRA or access road area and less than 10 feet in depth were evaluated. For these samples, Table 5-1 summarizes analytical data for PCBs and Table 5-2 summarizes the data for those constituents for which TCLP-based standards are provided in 40 CFR 261.24, as only these constituents are relevant for assessing disposition requirements. Table 5-3 summarizes the maximum and average concentrations for TCLP constituents in soils potentially subject to excavation and disposition in the OPCAs, and compares those results to a screening value that represents 20 times the corresponding RCRA hazardous waste characteristic level (expressed in ppm, or mg/L). Based on the nature of the TCLP test procedure, if the concentration of a given

constituent in the soil exceeds this indicator threshold, there is a general possibility of exceeding the TCLP RCRA hazardous waste characteristic levels.

As shown in Table 5-1, the maximum PCB concentration detected in these samples was 42 ppm (detected at location CRA-17 and subject to removal). In addition, as indicated in Table 5-3, none of the maximum detected concentrations of TCLP constituents (when detected) exceeds 20 times the corresponding TCLP criterion. Similarly, none of the average concentrations of TCLP constituents (using one-half the detection limit for non-detect results) exceeds 20 times the corresponding TCLP criterion. Therefore, it can be concluded that none of the materials exceed the TCLP criteria. Based on this conservative assessment, all of the material to be excavated from the FCRA and access road area will be eligible for disposition in the Hill 78 OPCA, and will be consolidated at that OPCA.

The Remediation Contractor will transport excavated materials from the work area to the Hill 78 OPCA using lined and tarped transport vehicles. Also, while saturated soil excavation is not anticipated, the EPA Paint Filter Test (EPA 9096-SW846) will be used, as necessary, to confirm that the materials are suitable for vehicular transport (i.e., no free liquids) prior to leaving the work area. The transportation route from the FCRA to the OPCA will be entirely within the GE facility. GE will maintain project-specific information to document the transport of each load from the FCRA to the Hill 78 OPCA.

6.5.3 Equipment Cleaning

Equipment and materials that have come into contact with FCRA soils during the construction activities will be cleaned prior to re-location to an area outside the work zone (i.e., the excavation and loading areas), prior to handling backfill materials, and prior to its departure from the FCRA. Equipment cleaning will be conducted as specified in Section 3.5 of Attachment D (Site Management Plan) to the POP.

6.6 Perimeter Air Monitoring

Ambient air monitoring for PCBs and particulates will be performed in conjunction with the FCRA construction activities. The scope of the ambient air monitoring program is presented in Attachment I to this Work Plan Addendum. In overview, ambient air monitoring for PCBs will include collection of ambient air samples using "high volume" samplers equipped with glass fiber filters and polyurethane foam (PUF) cartridges. The samples will be collected, analyzed, and evaluated using the procedures specified in EPA Compendium Method TO-4A.

To obtain representative data on ambient levels of PCBs around the construction site before and during construction activities, two PCB air sampling events will be performed prior to the start of construction activities and additional such events will be performed at least once every 4 weeks during the course of the construction. Ambient air monitoring for particulates will be performed on a continuous basis during all active construction activities using real-time particulate air monitors. For both the PCB and particulate monitoring, monitor locations will be established at four locations surrounding the FCRA and at one background location. Although subject to change based on field and work conditions, the Ambient Air PCB and Particulate Air Monitoring Plan (Attachment I) identifies four preliminary locations for perimeter air monitoring. The background monitoring location will be established near Gate 31 on Woodlawn Avenue.

7. Post-Construction Activities

7.1 General

This section addresses the activities to be performed by GE following the completion of construction activities in the FCRA and access road area. These activities include the preparation and submittal of a Completion Report, project closeout activities, and post-removal site control activities. Each of these topics is further discussed below.

7.2 Pre-Certification Inspection and Completion Report

Once GE has determined that the response actions for the FCRA and access road area are complete and that the applicable Performance Standards have been attained, GE will schedule and conduct a pre-certification inspection with EPA, MDEP, and the City of Pittsfield.

After the pre-certification inspection, GE will proceed with remaining closeout activities, which will consist of development and submission of a Completion Report to summarize and document the scope of the completed Removal Action activities. At a minimum, the Completion Report will include the following:

- A summary of the various project components;
- Identification of any modifications to the response actions relative to the design identified herein;
- Survey data to document the current grade and final surface contours;
- Copies of Record Drawings to document the as-built conditions;
- Documentation regarding the volume and disposition of materials excavated in conjunction with the construction activities; and
- A schedule of post-construction inspection and maintenance activities.

As indicated in Section 8, GE proposes that this report will be provided to the EPA within approximately 90 days of completing the construction activities.

7.3 Post-Removal Site Control Plan and Other Post-Construction Inspection and Maintenance Activities

Post-construction inspection, maintenance, and repair activities (I/M activities) will be performed in the FCRA as required by Technical Attachment J to the SOW. Such activities will be performed to ensure that the completed response action is performing as designed. The scope of the I/M activities described below was derived from various sources, including the following:

- Minimum I/M requirements established by Attachment J to the SOW;
- Section 5.7 of the RD/RA Work Plan (Anticipated Post-Removal Site Control Activities); and
- Anticipated I/M requirements specific to the final design of the FCRA and access road.

In addition to GE's I/M activities, there are certain other general maintenance activities, outside the scope of the CD and SOW, that will be undertaken by the City pursuant to a Lease Agreement between GE and the City (Attachment F to the DEDA). Those additional general maintenance activities are described, for informational purposes, in Section 7.3.2.

7.3.1 Periodic Inspections

GE will initiate post-construction inspections of the FCRA and access road area following the completion of the construction activities in those areas. The first inspection will be performed approximately one month after completion of the construction activities to visually identify potential problems associated with the cover, such as settlement or the presence of stressed vegetation. Thereafter, the soil cover will be inspected at least every 6 months for the first year after implementation and annually thereafter. These inspections will be performed by GE (or a designated GE representative) to assess the integrity of the surface cover and ancillary components of the removal action (e.g., perimeter fencing), and to verify that the response action is performing as designed. At a minimum, these inspections will include visual observation of the following:

-
- Erosion controls to verify their continued effectiveness, until such time vegetation is sufficiently established;
 - Surface cover area to identify any areas where excessive settlement has occurred relative to the surrounding areas;
 - Perimeter fence to identify potential evidence of unauthorized entry or use of the FCRA;
 - Access road/parking area to ensure that nothing (e.g., erosion, unauthorized excavation, etc.) has occurred that would significantly reduce post-remediation elevations in these areas; and
 - Surface cover for evidence of animal burrows, unauthorized excavation, or other conditions that could jeopardize the integrity of the response action.

GE will also inspect the vegetated areas of the FCRA semi-annually during the 2-year period following the planting and installation of vegetative material. These inspections are anticipated to occur in April and October of each year to ensure that the vegetation is growing as anticipated and is providing the desired degree of erosion control. If needed, additional planting, seeding, or sod placement will be performed to replace dead or dying vegetation (discussed below).

In addition to these scheduled inspections and in accordance with Section 2.2 of Technical Attachment J to the SOW, the FCRA will also be subject to inspection following severe storms (those with 10- to 20-year return periods) to verify that the cover system has not sustained significant damage. Following these inspections, the cover materials will be repaired or replaced as necessary at areas exhibiting deficiencies or potential problems.

7.3.2 Maintenance/Repair

GE will be responsible for maintenance and repair of site conditions and features as necessary to meet the requirements of the CD and SOW. Such activities will typically include addressing any conditions noted during the periodic inspections. Examples of conditions that may be identified and addressed as a result of the periodic inspections include, but are not limited to:

-
- Repair of damaged portions of the perimeter fence separating the FCRA from the remainder of the East Street Area 2-South RAA;
 - Placement of additional topsoil in areas of erosion or settlement;
 - Re-sod/seed areas where the initial vegetative cover does not become sufficiently established, as well as any areas where additional topsoil is placed by GE for surface cover maintenance purposes;
 - Placement of additional gravel along the access road and/or parking lot areas; and
 - Removal of animal burrows within or immediately adjacent to the FCRA.

Any such conditions noted as a result of periodic inspections (or as otherwise observed by GE) will be addressed as soon as practicable. The nature of the associated maintenance/repair will be documented in the subsequent inspection report.

In addition, in accordance with the July 7, 1999 Lease Agreement between GE and the City (including the December 2001 Amendment to the Lease Agreement), the City will perform the general maintenance and/or repair activities as needed to maintain the functionality of the FCRA and associated facilities. Specifically, the Lease Agreement provides that the City will maintain the FCRA structures and facilities, will mow and appropriately mark the playing fields, and will maintain the landscaping at the FCRA. The Lease Agreement provides further that the City will "maintain any protective cap, soil cover or other protection put in place by [GE] on the Leased Property; provided, however, that [GE] shall be responsible for repairs to any protective cap, soil cover or other protection required under the Consent Decree and SOW which are not related to maintenance."

7.3.3 Inspection Schedule and Reporting

The soil cover at the FCRA will be inspected approximately 1 month after completion of the final restoration activities. Thereafter, the soil cover will be inspected approximately every 6 months for the first year after implementation and annually thereafter. Additionally, during the 2-year period following the planting and

installation of vegetative material, the vegetated areas will be inspected in April and October for each year to ensure that the vegetation is growing as anticipated and is providing the necessary erosion control.

Inspection reports will be prepared annually, subject to EPA approval of an alternate frequency. These reports will be submitted to the EPA and will document the inspection and maintenance activities performed since the submittal of the previous inspection report. As required by Attachment J to the SOW, these reports will include the following information (as relevant):

- Description of the type and frequency of inspection and /or monitoring activities conducted;
- Description of any significant modifications to the inspection and/or monitoring program made since the submittal of the preceding monitoring report;
- Description of any conditions or problems noted during the inspection and/or monitoring period which are or may be affecting the performance of the response action;
- Description of any measures taken to correct conditions which are affecting the performance of the response action;
- Results of sampling analyses and screening conducted as part of the monitoring and/or inspection program (if any); and
- Description of any measures that may need to be performed to correct any conditions affecting the performance of the response action.

8. Schedule

GE has secured proposals from several Remediation Contractors but has not yet finalized its selection. Following selection of a Remediation Contractor (anticipated to occur within the next few weeks), GE will submit a supplemental information package to the EPA as a follow-up to this Work Plan Addendum. The supplemental information package is anticipated to include the following:

- Identification of and contact information for the selected Remediation Contractor;
- Copies of the Remediation Contractor's pre-mobilization submittals (i.e., Operations Plan, HASP, and Contingency Plan);
- Identification of backfill sources and locations; and
- Analytical data for samples collected from the backfill sources.

GE anticipates that this supplemental information will be submitted to the EPA within 30 days of selecting the Remediation Contractor.

GE has estimated that it will take approximately 120 calendar days from the date of mobilization to complete the FCRA and access road construction activities, including construction of the ancillary items associated with the athletic fields (e.g., scorer's booth, restroom/storage building, lights, etc.). GE will initiate those activities upon EPA approval of this Work Plan Addendum and the supplemental information package described above, as well as final approval by the City to proceed with construction.

Within approximately 90 days of completing the field construction activities, GE will prepare and submit a Completion Report to document the work activities, as described in Section 7.2. That report will represent the completion of CD-required construction activities. Periodic inspection reports will then be provided to the EPA in accordance with the schedule outlined in Section 7.3.3.

Tables

TABLE 2-1
PRE-DESIGN INVESTIGATION SOIL SAMPLING RESULTS FOR PCBs

RD/RA WORK PLAN ADDENDUM FOR THE FUTURE CITY RECREATIONAL AREA
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in dry weight parts per million, ppm)

Sample ID	Depth (Feet)	Date Collected	Aroclor-1016, -1221, -1232, -1248	Aroclor-1242	Aroclor-1254	Aroclor-1260	Total PCBs
CRA-1	0-2	01/17/01	ND(0.044)	ND(0.044)	0.54	0.74	1.28
CRA-2	0-2	01/17/01	ND(0.047)	ND(0.047)	0.49	0.70	1.19
CRA-3	0-2	01/17/01	ND(0.46)	ND(0.46)	ND(0.46)	ND(0.46)	ND(0.46)
CRA-4	0-2	01/18/01	ND(0.051)	ND(0.051)	0.10	0.10	0.20
CRA-5	0-2	01/18/01	ND(0.049)	ND(0.049)	0.35	0.49	0.84
CRA-6	0-2	01/18/01	ND(0.047)	ND(0.047)	0.064	0.22	0.284
CRA-7	0-2	01/18/01	ND(0.048)	ND(0.048)	0.048	0.063	0.111
CRA-8	0-2	01/22/01	ND(2.2)	ND(2.2)	ND(2.2)	ND(2.2)	ND(2.2)
CRA-9	0-2	01/22/01	ND(0.24)	ND(0.24)	ND(0.24)	5.6	5.6
CRA-10	0-2	01/22/01	ND(0.049)	ND(0.049)	0.28	0.45	0.73
CRA-11	0-2	01/23/01	ND(0.047)	ND(0.047)	0.28	0.78	1.06
CRA-12	0-2	01/23/01	ND(0.46)	ND(0.46)	ND(0.46)	3.4	3.4
CRA-13	0-2	01/23/01	ND(0.046)	ND(0.046)	ND(0.046)	ND(0.046)	ND(0.046)
CRA-14	0-2	01/19/01	ND(0.21)	ND(0.21)	0.61	1.2	1.81
CRA-15	0-2	01/19/01	ND(0.23)	ND(0.23)	0.80	1.5	2.3
CRA-16	0-2	01/19/01	ND(0.044)	ND(0.044)	0.32	0.57	0.89
CRA-17	0-2	01/19/01	ND(4.2)	ND(4.2)	ND(4.2)	42	42
CRA-18	0-2	01/23/01	ND(0.044)	ND(0.044)	ND(0.044)	0.32	0.32
CRA-19	0-2	01/23/01	ND(0.044)	ND(0.044)	0.14	0.24	0.38
CRA-20	0-2	01/31/01	ND(0.048)	ND(0.048)	0.026 J	0.032 J	0.058 J
CRA-21	0-2	01/31/01	ND(0.047)	ND(0.047)	ND(0.047)	ND(0.047)	ND(0.047)
CRA-22	0-2	01/31/01	ND(0.058)	ND(0.058)	0.43	0.52	0.95
RAA4-3	0-1	01/30/01	ND(0.051)	ND(0.051)	0.68	ND(0.051)	0.68
RAA4-5	0-1	01/30/01	ND(0.45)	ND(0.45)	2.8	6.6	9.4
RAA4-6	0-1	01/30/01	ND(2.5)	ND(2.5)	ND(2.5)	14	14
RAA4-7	0-1	01/30/01	ND(0.22)	ND(0.22)	0.55	0.73	1.28
RAA4-8	0-1	01/30/01	ND(0.22) [ND(0.26)]	ND(0.22) [ND(0.26)]	ND(0.22) [ND(0.26)]	3.5 [5.4]	3.5 [5.4]
RAA4-9	0-1	01/30/01	ND(0.044)	ND(0.044)	0.44	1.2	1.64
RAA4-10	0-1	01/30/01	ND(0.24)	ND(0.24)	ND(0.24)	3.9	3.9
RAA4-12	0-1	01/30/01	ND(0.22)	ND(0.22)	ND(0.22)	7.9	7.9
RAA4-14	0-1	01/30/01	ND(0.044)	0.14	0.66	0.90	1.7
RAA4-17	0-1	01/29/01	ND(0.53)	ND(0.53)	3.3	6.8	10.1

- Notes:
1. Samples were collected by Blasland, Bouck & Lee, Inc., and were submitted to CT&E Environmental Services, Inc. for analysis of PCBs.
 2. Only data used in RD/RA evaluations related to the Future City Recreational Area are provided in this table.
 3. Samples have been validated as per Field Sampling Plan/Quality Assurance Project Plan, General Electric Company, Pittsfield, Massachusetts, Blasland Bouck & Lee, Inc. (approved November 4, 2002 and resubmitted December 10, 2002).
 4. ND - Analyte was not detected. The number in parentheses is the associated detection limit.
 5. Field duplicate sample results are presented in brackets.

Data Qualifiers:

J - Indicates that the associated numerical value is an estimated concentration.

TABLE 2-2
PRE-DESIGN INVESTIGATION SOIL SAMPLING RESULTS FOR NON-PCB APPENDIX IX+3 CONSTITUENTS

RD/RA WORK PLAN ADDENDUM FOR FUTURE CITY RECREATIONAL AREA
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in dry weight parts per million, ppm)

Sample ID: Sample Depth (Feet): Parameter Date Collected:	CRA-3 0-2 04/27/01	CRA-5 0-2 01/18/01	CRA-7 0-2 01/18/01	CRA-11 0-2 01/23/01	CRA-12 0-2 01/23/01	CRA-14 0-2 01/19/01
Volatile Organics						
1,1,1,2-Tetrachloroethane	NA	ND(0.0074)	ND(0.0072)	ND(0.0070)	ND(0.0069)	ND(0.0064)
1,1,1-Trichloroethane	NA	ND(0.0074)	ND(0.0072)	ND(0.0070)	ND(0.0069)	ND(0.0064)
1,1,2,2-Tetrachloroethane	NA	ND(0.0074)	ND(0.0072)	ND(0.0070)	ND(0.0069)	ND(0.0064)
1,1,2-Trichloroethane	NA	ND(0.0074)	ND(0.0072)	ND(0.0070)	ND(0.0069)	ND(0.0064)
1,1-Dichloroethane	NA	ND(0.0074)	ND(0.0072)	ND(0.0070)	ND(0.0069)	ND(0.0064)
1,1-Dichloroethene	NA	ND(0.0074)	ND(0.0072)	ND(0.0070)	ND(0.0069)	ND(0.0064)
1,2,3-Trichloropropane	NA	ND(0.0074)	ND(0.0072)	ND(0.0070)	ND(0.0069)	ND(0.0064)
1,2-Dibromo-3-chloropropane	NA	ND(0.0074)	ND(0.0072)	ND(0.0070)	ND(0.0069)	ND(0.0064)
1,2-Dibromoethane	NA	ND(0.0074)	ND(0.0072)	ND(0.0070)	ND(0.0069)	ND(0.0064)
1,2-Dichloroethane	NA	ND(0.0074)	ND(0.0072)	ND(0.0070)	ND(0.0069)	ND(0.0064)
1,2-Dichloropropane	NA	ND(0.0074)	ND(0.0072)	ND(0.0070)	ND(0.0069)	ND(0.0064)
1,4-Dioxane	NA	ND(0.20) J	ND(0.20) J	ND(0.20) J	ND(0.20) J	ND(0.20) J
2-Butanone	NA	ND(0.10)	ND(0.10)	ND(0.10)	ND(0.10)	ND(0.10)
2-Chloro-1,3-butadiene	NA	ND(0.0074)	ND(0.0072)	ND(0.0070)	ND(0.0069)	ND(0.0064)
2-Chloroethylvinylether	NA	ND(0.0074)	ND(0.0072)	ND(0.0070)	ND(0.0069)	ND(0.0064)
2-Hexanone	NA	ND(0.015)	ND(0.014)	ND(0.014)	ND(0.014)	ND(0.013)
3-Chloropropene	NA	ND(0.015)	ND(0.014)	ND(0.014)	ND(0.014)	ND(0.013)
4-Methyl-2-pentanone	NA	ND(0.015)	ND(0.014)	ND(0.014)	ND(0.014)	ND(0.013)
Acetone	NA	ND(0.10)	ND(0.10)	ND(0.10)	ND(0.10)	ND(0.10)
Acetonitrile	NA	ND(0.15)	ND(0.14)	ND(0.14)	ND(0.14)	ND(0.13)
Acrolein	NA	ND(0.15) J	ND(0.14) J	ND(0.14) J	ND(0.14) J	ND(0.13) J
Acrylonitrile	NA	ND(0.015)	ND(0.014)	ND(0.014)	ND(0.014)	ND(0.013)
Benzene	NA	ND(0.0074)	ND(0.0072)	ND(0.0070)	ND(0.0069)	ND(0.0064)
Bromodichloromethane	NA	ND(0.0074)	ND(0.0072)	ND(0.0070)	ND(0.0069)	ND(0.0064)
Bromoform	NA	ND(0.0074)	ND(0.0072)	ND(0.0070)	ND(0.0069)	ND(0.0064)
Bromomethane	NA	ND(0.015)	ND(0.014)	ND(0.014)	ND(0.014)	ND(0.013)
Carbon Disulfide	NA	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)
Carbon Tetrachloride	NA	ND(0.0074)	ND(0.0072)	ND(0.0070)	ND(0.0069)	ND(0.0064)
Chlorobenzene	NA	ND(0.0074)	ND(0.0072)	ND(0.0070)	ND(0.0069)	ND(0.0064)
Chloroethane	NA	ND(0.015)	ND(0.014)	ND(0.014)	ND(0.014)	ND(0.013)
Chloroform	NA	ND(0.0074)	ND(0.0072)	ND(0.0070)	ND(0.0069)	ND(0.0064)
Chloromethane	NA	ND(0.015)	ND(0.014)	ND(0.014)	ND(0.014)	ND(0.013)
cis-1,3-Dichloropropene	NA	ND(0.0074)	ND(0.0072)	ND(0.0070)	ND(0.0069)	ND(0.0064)
Dibromochloromethane	NA	ND(0.0074)	ND(0.0072)	ND(0.0070)	ND(0.0069)	ND(0.0064)
Dibromomethane	NA	ND(0.0074)	ND(0.0072)	ND(0.0070)	ND(0.0069)	ND(0.0064)
Dichlorodifluoromethane	NA	ND(0.015)	ND(0.014)	ND(0.014)	ND(0.014)	ND(0.013)
Ethyl Methacrylate	NA	ND(0.015)	ND(0.014)	ND(0.014)	ND(0.014)	ND(0.013)
Ethylbenzene	NA	ND(0.0074)	ND(0.0072)	ND(0.0070)	ND(0.0069)	ND(0.0064)
Iodomethane	NA	ND(0.0074)	ND(0.0072)	ND(0.0070)	ND(0.0069)	ND(0.0064)
Isobutanol	NA	ND(0.30) J	ND(0.29) J	ND(0.28) J	ND(0.28) J	ND(0.26) J
Methacrylonitrile	NA	ND(0.015)	ND(0.014)	ND(0.014)	ND(0.014)	ND(0.013)
Methyl Methacrylate	NA	ND(0.015)	ND(0.014)	ND(0.014)	ND(0.014)	ND(0.013)
Methylene Chloride	NA	ND(0.0074)	ND(0.0072)	ND(0.0070)	ND(0.0069)	ND(0.0064)
Propionitrile	NA	ND(0.074) J	ND(0.072) J	ND(0.070) J	ND(0.069) J	ND(0.064) J
Styrene	NA	ND(0.0074)	ND(0.0072)	ND(0.0070)	ND(0.0069)	ND(0.0064)
Tetrachloroethene	NA	ND(0.0074)	ND(0.0072)	ND(0.0070)	ND(0.0069)	ND(0.0064)
Toluene	NA	ND(0.0074)	ND(0.0072)	ND(0.0070)	ND(0.0069)	ND(0.0064)
trans-1,2-Dichloroethene	NA	ND(0.0074)	ND(0.0072)	ND(0.0070)	ND(0.0069)	ND(0.0064)
trans-1,3-Dichloropropene	NA	ND(0.0074)	ND(0.0072)	ND(0.0070)	ND(0.0069)	ND(0.0064)
trans-1,4-Dichloro-2-butene	NA	ND(0.015)	ND(0.014)	ND(0.014)	ND(0.014)	ND(0.013)
Trichloroethene	NA	ND(0.0074)	ND(0.0072)	ND(0.0070)	ND(0.0069)	ND(0.0064)
Trichlorofluoromethane	NA	ND(0.0074)	ND(0.0072)	ND(0.0070)	ND(0.0069)	ND(0.0064)
Vinyl Acetate	NA	ND(0.015)	ND(0.014)	ND(0.014)	ND(0.014)	ND(0.013)
Vinyl Chloride	NA	ND(0.015)	ND(0.014)	ND(0.014)	ND(0.014)	ND(0.013)
Xylenes (total)	NA	ND(0.0074)	ND(0.014)	ND(0.0070)	ND(0.014)	ND(0.013)

TABLE 2-2
PRE-DESIGN INVESTIGATION SOIL SAMPLING RESULTS FOR NON-PCB APPENDIX IX+3 CONSTITUENTS

RD/RA WORK PLAN ADDENDUM FOR FUTURE CITY RECREATIONAL AREA
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in dry weight parts per million, ppm)

Sample ID: Sample Depth (Feet): Parameter Date Collected:	CRA-3 0-2 04/27/01	CRA-5 0-2 01/18/01	CRA-7 0-2 01/18/01	CRA-11 0-2 01/23/01	CRA-12 0-2 01/23/01	CRA-14 0-2 01/19/01
Semivolatle Organics						
1,2,4,5-Tetrachlorobenzene	ND(0.44) [ND(0.42)]	ND(0.54)	ND(0.48)	ND(0.47)	ND(0.46)	ND(2.1)
1,2,4-Trichlorobenzene	ND(0.44) [ND(0.42)]	ND(0.54)	ND(0.48)	ND(0.47)	ND(0.46)	ND(2.1)
1,2-Dichlorobenzene	ND(0.44) [ND(0.42)]	ND(0.54)	ND(0.48)	ND(0.47)	ND(0.46)	ND(2.1)
1,2-Diphenylhydrazine	ND(0.44) [ND(0.42)]	ND(0.54)	ND(0.48)	ND(0.47)	ND(0.46)	ND(2.1)
1,3,5-Trinitrobenzene	ND(0.87) [ND(0.84)]	ND(1.1)	ND(0.97)	ND(0.94)	ND(0.92)	ND(4.1)
1,3-Dichlorobenzene	ND(0.44) [ND(0.42)]	ND(0.54)	ND(0.48)	ND(0.47)	ND(0.46)	ND(2.1)
1,3-Dinitrobenzene	ND(2.2) [ND(2.1)]	ND(2.7)	ND(2.4)	ND(2.4) J	ND(2.3) J	ND(10)
1,4-Dichlorobenzene	ND(0.44) [ND(0.42)]	ND(0.54)	ND(0.48)	ND(0.47)	ND(0.46)	ND(2.1)
1,4-Naphthoquinone	ND(2.2) [ND(2.1)]	ND(2.7)	ND(2.4)	ND(2.4)	ND(2.3)	ND(10)
1-Naphthylamine	ND(2.2) [ND(2.1)]	ND(2.7)	ND(2.4)	ND(2.4)	ND(2.3)	ND(10)
2,3,4,6-Tetrachlorophenol	ND(0.44) [ND(0.42)]	ND(0.54)	ND(0.48)	ND(0.47)	ND(0.46)	ND(2.1)
2,4,5-Trichlorophenol	ND(0.44) [ND(0.42)]	ND(0.54)	ND(0.48)	ND(0.47)	ND(0.46)	ND(2.1)
2,4,6-Trichlorophenol	ND(0.44) [ND(0.42)]	ND(0.54)	ND(0.48)	ND(0.47)	ND(0.46)	ND(2.1)
2,4-Dichlorophenol	ND(0.44) [ND(0.42)]	ND(0.54)	ND(0.48)	ND(0.47)	ND(0.46)	ND(2.1)
2,4-Dimethylphenol	ND(0.44) [ND(0.42)]	ND(0.54)	ND(0.48)	ND(0.47)	ND(0.46)	ND(2.1)
2,4-Dinitrophenol	ND(2.2) [ND(2.1)]	ND(2.7)	ND(2.4)	ND(2.4)	ND(2.3)	ND(10)
2,4-Dinitrotoluene	ND(2.2) [ND(2.1)]	ND(2.7)	ND(2.4)	ND(2.4)	ND(2.3)	ND(10)
2,6-Dichlorophenol	ND(0.44) [ND(0.42)]	ND(0.54)	ND(0.48)	ND(0.47)	ND(0.46)	ND(2.1)
2,6-Dinitrotoluene	ND(0.44) [ND(0.42)]	ND(0.54)	ND(0.48)	ND(0.47)	ND(0.46)	ND(2.1)
2-Acetylaminofluorene	ND(0.87) [ND(0.84)]	ND(1.1)	ND(0.97)	ND(0.94)	ND(0.92)	ND(4.1)
2-Chloronaphthalene	ND(0.44) [ND(0.42)]	ND(0.54)	ND(0.48)	ND(0.47)	ND(0.46)	ND(2.1)
2-Chlorophenol	ND(0.44) [ND(0.42)]	ND(0.54)	ND(0.48)	ND(0.47)	ND(0.46)	ND(2.1)
2-Methylnaphthalene	ND(0.44) [ND(0.42)]	ND(0.54)	ND(0.48)	ND(0.47)	ND(0.46)	ND(2.1)
2-Methylphenol	ND(0.44) [ND(0.42)]	ND(0.54)	ND(0.48)	ND(0.47)	ND(0.46)	ND(2.1)
2-Naphthylamine	ND(2.2) [ND(2.1)]	ND(2.7)	ND(2.4)	ND(2.4)	ND(2.3)	ND(10)
2-Nitroaniline	ND(2.2) [ND(2.1)]	ND(2.7)	ND(2.4)	ND(2.4)	ND(2.3)	ND(10)
2-Nitrophenol	ND(0.87) [ND(0.84)]	ND(1.1)	ND(0.97)	ND(0.94)	ND(0.92)	ND(4.1)
2-Picoline	ND(0.44) [ND(0.42)]	ND(0.54)	ND(0.48)	ND(0.47)	ND(0.46)	ND(2.1)
3&4-Methylphenol	ND(0.87) [ND(0.84)]	ND(1.1)	ND(0.97)	ND(0.94)	ND(0.92)	ND(4.1)
3,3'-Dichlorobenzidine	ND(2.2) [ND(2.1)]	ND(2.7)	ND(2.4)	ND(2.4)	ND(2.3)	ND(10)
3,3'-Dimethylbenzidine	ND(2.2) [ND(2.1)]	ND(2.7)	ND(2.4)	ND(2.4) J	ND(2.3) J	ND(10) J
3-Methylcholanthrene	ND(0.87) [ND(0.84)]	ND(1.1)	ND(0.97)	ND(0.94) J	ND(0.92) J	ND(4.1) J
3-Nitroaniline	ND(2.2) [ND(2.1)]	ND(2.7)	ND(2.4)	ND(2.4)	ND(2.3)	ND(10)
4,6-Dinitro-2-methylphenol	ND(0.44) [ND(0.42)]	ND(0.54)	ND(0.48)	ND(0.47)	ND(0.46)	ND(2.1)
4-Aminobiphenyl	ND(0.87) [ND(0.84)]	ND(1.1)	ND(0.97)	ND(0.94) J	ND(0.92) J	ND(4.1)
4-Bromophenyl-phenylether	ND(0.44) [ND(0.42)]	ND(0.54)	ND(0.48)	ND(0.47)	ND(0.46)	ND(2.1)
4-Chloro-3-Methylphenol	ND(0.44) [ND(0.42)]	ND(0.54)	ND(0.48)	ND(0.47)	ND(0.46)	ND(2.1)
4-Chloroaniline	ND(0.87) [ND(0.84)]	ND(1.1) J	ND(0.97) J	ND(0.94)	ND(0.92)	ND(4.1)
4-Chlorobenzilate	ND(2.2) [ND(2.1)]	ND(2.7)	ND(2.4)	ND(2.4)	ND(2.3)	ND(10)
4-Chlorophenyl-phenylether	ND(0.44) [ND(0.42)]	ND(0.54)	ND(0.48)	ND(0.47)	ND(0.46)	ND(2.1)
4-Nitroaniline	ND(2.2) [ND(2.1)]	ND(2.7)	ND(2.4)	ND(2.4)	ND(2.3)	ND(10)
4-Nitrophenol	ND(2.2) [ND(2.1)]	ND(2.7)	ND(2.4)	ND(2.4)	ND(2.3)	ND(10) J
4-Nitroquinoline-1-oxide	ND(2.2) [ND(2.1)]	ND(2.7) J	ND(2.4) J	ND(2.4) J	ND(2.3) J	ND(10) J
4-Phenylenediamine	ND(2.2) [ND(2.1)]	ND(2.7)	ND(2.4)	ND(2.4)	ND(2.3)	ND(10)
5-Nitro-o-toluidine	ND(2.2) [ND(2.1)]	ND(2.7)	ND(2.4)	ND(2.4)	ND(2.3)	ND(10)
7,12-Dimethylbenz(a)anthracene	ND(0.87) [ND(0.84)]	ND(1.1)	ND(0.97)	ND(0.94)	ND(0.92)	ND(4.1)
a,a'-Dimethylphenethylamine	ND(2.2) [ND(2.1)]	ND(2.7)	ND(2.4)	ND(2.4)	ND(2.3)	ND(10)
Acenaphthene	ND(0.44) [0.63]	ND(0.54)	ND(0.48)	ND(0.47)	ND(0.46)	ND(2.1)
Acenaphthylene	ND(0.44) [0.44]	ND(0.54)	ND(0.48)	ND(0.47)	ND(0.46)	ND(2.1)
Acetophenone	ND(0.44) [ND(0.42)]	ND(0.54) J	ND(0.48) J	ND(0.47)	ND(0.46)	ND(2.1)
Aniline	ND(0.44) [ND(0.42)]	ND(0.54)	ND(0.48)	ND(0.47)	ND(0.46)	ND(2.1)
Anthracene	ND(0.44) [1.7]	ND(0.54)	ND(0.48)	0.10 J	ND(0.46)	ND(2.1)
Aramite	ND(0.87) [ND(0.84)]	ND(1.1) J	ND(0.97) J	ND(0.94) J	ND(0.92) J	ND(4.1) J
Benzidine	ND(0.87) [ND(0.84)]	ND(1.1)	ND(0.97)	ND(0.94) J	ND(0.92) J	ND(4.1) J
Benzo(a)anthracene	0.60 [3.0]	ND(0.54)	ND(0.48)	0.56	ND(0.46)	ND(2.1)
Benzo(a)pyrene	0.60 [2.8]	ND(0.54)	ND(0.48)	0.49	ND(0.46)	ND(2.1)
Benzo(b)fluoranthene	0.54 [2.1]	ND(0.54)	ND(0.48)	0.60	ND(0.46)	ND(2.1)
Benzo(g,h,i)perylene	ND(0.44) [1.9]	ND(0.54)	ND(0.48)	0.18 J	ND(0.46)	ND(2.1)
Benzo(k)fluoranthene	0.51 [1.9]	ND(0.54)	ND(0.48)	0.89	ND(0.46)	ND(2.1)
Benzyl Alcohol	ND(0.87) [ND(0.84)]	ND(1.1)	ND(0.97)	ND(0.94)	ND(0.92)	ND(4.1)

TABLE 2-2
PRE-DESIGN INVESTIGATION SOIL SAMPLING RESULTS FOR NON-PCB APPENDIX IX+3 CONSTITUENTS

RD/RA WORK PLAN ADDENDUM FOR FUTURE CITY RECREATIONAL AREA
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in dry weight parts per million, ppm)

Sample ID: Sample Depth (Feet): Parameter Date Collected:	CRA-3 0-2 04/27/01	CRA-5 0-2 01/18/01	CRA-7 0-2 01/18/01	CRA-11 0-2 01/23/01	CRA-12 0-2 01/23/01	CRA-14 0-2 01/19/01
Semivolatile Organics (continued)						
bis(2-Chloroethoxy)methane	ND(0.44) [ND(0.42)]	ND(0.54)	ND(0.48)	ND(0.47)	ND(0.46)	ND(2.1)
bis(2-Chloroethyl)ether	ND(0.44) [ND(0.42)]	ND(0.54)	ND(0.48)	ND(0.47)	ND(0.46)	ND(2.1)
bis(2-Chloroisopropyl)ether	ND(0.44) [ND(0.42)]	ND(0.54) J	ND(0.48) J	ND(0.47)	ND(0.46)	ND(2.1) J
bis(2-Ethylhexyl)phthalate	ND(0.44) [ND(0.42)]	ND(0.54)	ND(0.48)	ND(0.47)	ND(0.46)	ND(2.1)
Butylbenzylphthalate	ND(0.87) [ND(0.84)]	ND(1.1)	ND(0.97)	ND(0.94) J	ND(0.92) J	ND(4.1)
Chrysene	0.54 [2.7]	ND(0.54)	ND(0.48)	1.1	ND(0.46)	ND(2.1)
Diallate	ND(0.87) [ND(0.84)]	ND(1.1)	ND(0.97)	ND(0.94)	ND(0.92)	ND(4.1)
Dibenzo(a,h)anthracene	ND(0.87) [ND(0.84)]	ND(1.1)	ND(0.97)	ND(0.94)	ND(0.92)	ND(4.1)
Dibenzofuran	ND(0.44) [ND(0.42)]	ND(0.54)	ND(0.48)	ND(0.47)	ND(0.46)	ND(2.1)
Diethylphthalate	ND(0.44) [ND(0.42)]	ND(0.54)	ND(0.48)	ND(0.47)	ND(0.46)	ND(2.1)
Dimethylphthalate	ND(0.44) [ND(0.42)]	ND(0.54)	ND(0.48)	ND(0.47)	ND(0.46)	ND(2.1)
Di-n-Butylphthalate	ND(0.44) [ND(0.42)]	ND(0.54)	ND(0.48)	ND(0.47)	ND(0.46)	ND(2.1)
Di-n-Octylphthalate	ND(0.44) [ND(0.42)]	ND(0.54)	ND(0.48)	ND(0.47)	ND(0.46)	ND(2.1)
Diphenylamine	ND(0.44) [ND(0.42)]	ND(0.54)	ND(0.48)	ND(0.47)	ND(0.46)	ND(2.1)
Ethyl Methanesulfonate	ND(0.44) [ND(0.42)]	ND(0.54) J	ND(0.48) J	ND(0.47)	ND(0.46)	ND(2.1)
Fluoranthene	1.2 [7.0]	ND(0.54)	ND(0.48)	2.3	ND(0.46)	ND(2.1)
Fluorene	ND(0.44) [0.84]	ND(0.54)	ND(0.48)	ND(0.47)	ND(0.46)	ND(2.1)
Hexachlorobenzene	ND(0.44) [ND(0.42)]	ND(0.54)	ND(0.48)	ND(0.47)	ND(0.46)	ND(2.1)
Hexachlorobutadiene	ND(0.87) [ND(0.84)]	ND(1.1)	ND(0.97)	ND(0.94)	ND(0.92)	ND(4.1)
Hexachlorocyclopentadiene	ND(0.44) [ND(0.42)]	ND(0.54)	ND(0.48)	ND(0.47)	ND(0.46)	ND(2.1)
Hexachloroethane	ND(0.44) [ND(0.42)]	ND(0.54)	ND(0.48)	ND(0.47)	ND(0.46)	ND(2.1)
Hexachlorophene	ND(0.87) [ND(0.84)]	ND(1.1) J	ND(0.97) J	ND(0.94) J	ND(0.92) J	ND(4.1) J
Hexachloropropene	ND(0.44) [ND(0.42)]	ND(0.54) J	ND(0.48) J	ND(0.47)	ND(0.46)	ND(2.1) J
Indeno(1,2,3-cd)pyrene	ND(0.87) [2.1]	ND(1.1)	ND(0.97)	0.20 J	ND(0.92)	ND(4.1)
Isodrin	ND(0.44) [ND(0.42)]	ND(0.54)	ND(0.48)	ND(0.47)	ND(0.46)	ND(2.1)
Isophorone	ND(0.44) [ND(0.42)]	ND(0.54)	ND(0.48)	ND(0.47)	ND(0.46)	ND(2.1)
Isosafrole	ND(0.87) [ND(0.84)]	ND(1.1)	ND(0.97)	ND(0.94)	ND(0.92)	ND(4.1)
Methapyrene	ND(2.2) [ND(2.1)]	ND(2.7) J	ND(2.4) J	ND(2.4) J	ND(2.3) J	ND(10) J
Methyl Methanesulfonate	ND(0.44) [ND(0.42)]	ND(0.54)	ND(0.48)	ND(0.47)	ND(0.46)	ND(2.1)
Naphthalene	ND(0.44) [0.83]	ND(0.54)	ND(0.48)	ND(0.47)	ND(0.46)	ND(2.1)
Nitrobenzene	ND(0.44) [ND(0.42)]	ND(0.54)	ND(0.48)	ND(0.47)	ND(0.46)	ND(2.1)
N-Nitrosodiethylamine	ND(0.44) [ND(0.42)]	ND(0.54)	ND(0.48)	ND(0.47)	ND(0.46)	ND(2.1)
N-Nitrosodimethylamine	ND(2.2) [ND(2.1)]	ND(2.7)	ND(2.4)	ND(2.3)	ND(2.2)	ND(10)
N-Nitroso-di-n-butylamine	ND(0.87) [ND(0.84)]	ND(1.1) J	ND(0.97) J	ND(0.94)	ND(0.92)	ND(4.1)
N-Nitroso-di-n-propylamine	ND(0.87) [ND(0.84)]	ND(1.1)	ND(0.97)	ND(0.94)	ND(0.92)	ND(4.1)
N-Nitrosodiphenylamine	ND(0.44) [ND(0.42)]	ND(0.54)	ND(0.48)	ND(0.47)	ND(0.46)	ND(2.1)
N-Nitrosomethylethylamine	ND(0.84) [ND(0.84)]	ND(0.99)	ND(0.97)	ND(0.94)	ND(0.92)	ND(2.1)
N-Nitrosomorpholine	ND(0.44) [ND(0.42)]	ND(0.54)	ND(0.48)	ND(0.47)	ND(0.46)	ND(2.1) J
N-Nitrosopiperidine	ND(0.44) [ND(0.42)]	ND(0.54)	ND(0.48)	ND(0.47)	ND(0.46)	ND(2.1)
N-Nitrosopyrrolidine	ND(0.87) [ND(0.84)]	ND(1.1) J	ND(0.97) J	ND(0.94)	ND(0.92)	ND(4.1)
o,o,o-Triethylphosphorothioate	ND(0.44) [ND(0.42)]	ND(0.54)	ND(0.48)	ND(0.47)	ND(0.46)	ND(2.1)
o-Toluidine	ND(0.44) [ND(0.42)]	ND(0.54)	ND(0.48)	ND(0.47)	ND(0.46)	ND(2.1)
p-Dimethylaminoazobenzene	ND(2.2) [ND(2.1)]	ND(2.7)	ND(2.4)	ND(2.4)	ND(2.3)	ND(10) J
Pentachlorobenzene	ND(0.44) [ND(0.42)]	ND(0.54)	ND(0.48)	ND(0.47)	ND(0.46)	ND(2.1)
Pentachloroethane	ND(0.44) [ND(0.42)]	ND(0.54)	ND(0.48)	ND(0.47) J	ND(0.46) J	ND(2.1)
Pentachloronitrobenzene	ND(2.2) [ND(2.1)]	ND(2.7) J	ND(2.4) J	ND(2.4)	ND(2.3)	ND(10)
Pentachlorophenol	ND(2.2) [ND(2.1)]	ND(2.7)	ND(2.4)	ND(2.4)	ND(2.3)	ND(10)
Phenacetin	ND(2.2) [ND(2.1)]	ND(2.7)	ND(2.4)	ND(2.4)	ND(2.3)	ND(10) J
Phenanthrene	0.64 [7.5]	ND(0.54)	ND(0.48)	0.67	ND(0.46)	ND(2.1)
Phenol	ND(0.44) [ND(0.42)]	ND(0.54)	ND(0.48)	ND(0.47)	ND(0.46)	ND(2.1)
Pronamide	ND(0.44) [ND(0.42)]	ND(0.54)	ND(0.48)	ND(0.47)	ND(0.46)	ND(2.1)
Pyrene	0.88 [6.2]	0.32 J	ND(0.48)	1.9	ND(0.46)	ND(2.1)
Pyridine	ND(0.44) [ND(0.42)]	ND(0.54) J	ND(0.48) J	ND(0.47) J	ND(0.46) J	ND(2.1)
Safrole	ND(0.44) [ND(0.42)]	ND(0.54)	ND(0.48)	ND(0.47)	ND(0.46)	ND(2.1)
Thionazin	ND(0.44) [ND(0.42)]	ND(0.54)	ND(0.48)	ND(0.47)	ND(0.46)	ND(2.1)

TABLE 2-2
PRE-DESIGN INVESTIGATION SOIL SAMPLING RESULTS FOR NON-PCB APPENDIX IX+3 CONSTITUENTS

RD/RA WORK PLAN ADDENDUM FOR FUTURE CITY RECREATIONAL AREA
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in dry weight parts per million, ppm)

Sample ID: Sample Depth (Feet): Parameter Date Collected:	CRA-3 0-2 04/27/01	CRA-5 0-2 01/18/01	CRA-7 0-2 01/18/01	CRA-11 0-2 01/23/01	CRA-12 0-2 01/23/01	CRA-14 0-2 01/19/01
Furans						
2,3,7,8-TCDF	NS	0.000011	ND(0.00000068)	0.000012	0.0000020	0.0000055
TCDFs (total)	NS	0.000099	0.0000056	0.000099 I	0.000014	0.000046
1,2,3,7,8-PeCDF	NS	0.0000026	ND(0.00000023)	0.0000033	0.00000064 J	0.0000017 J
2,3,4,7,8-PeCDF	NS	0.0000035	0.00000052 J	0.000010	0.0000022 J	0.0000028
PeCDFs (total)	NS	0.000048	0.0000050	0.00012 I	0.000028	0.000032
1,2,3,4,7,8-HxCDF	NS	0.0000025	0.00000025 J	0.0000042	0.0000011 J	0.0000019 J
1,2,3,6,7,8-HxCDF	NS	0.0000018 J	0.00000024 J	0.0000037	0.0000098 J	0.0000013 J
1,2,3,7,8,9-HxCDF	NS	ND(0.00000031)	ND(0.00000070)	ND(0.0000018)	ND(0.00000027)	0.00000036 J
2,3,4,6,7,8-HxCDF	NS	0.0000028	0.00000042 J	0.000010	0.0000023	0.0000022 J
HxCDFs (total)	NS	0.000038	0.0000048	0.00013	0.000031	0.000029
1,2,3,4,6,7,8-HpCDF	NS	0.0000079	0.00000095 J	0.000015	0.0000038	0.0000041
1,2,3,4,7,8,9-HpCDF	NS	0.0000089 J	0.00000014 J	0.0000015 J	0.00000039 J	0.00000061 J
HpCDFs (total)	NS	0.000022	0.0000026	0.000037	0.0000081	0.0000092
OCDF	NS	0.000018	ND(0.00000022)	0.000013	0.0000037 J	0.0000036 J
Dioxins						
2,3,7,8-TCDD	NS	ND(0.00000023) X	ND(0.00000065)	ND(0.00000021) X	ND(0.00000013) X	ND(0.00000016) X
TCDDs (total)	NS	0.0000011	0.00000018	0.0000012 I	ND(0.00000029)	0.00000042
1,2,3,7,8-PeCDD	NS	ND(0.00000027) X	ND(0.00000098) X	ND(0.00000020) X	ND(0.00000036) X	ND(0.00000011) X
PeCDDs (total)	NS	0.0000020	0.00000015	0.0000026	ND(0.00000054)	0.00000047 I
1,2,3,4,7,8-HxCDD	NS	0.00000023 J	ND(0.00000061)	0.00000036 J	ND(0.00000087)	ND(0.00000017)
1,2,3,6,7,8-HxCDD	NS	0.00000068 J	ND(0.00000015) X	0.00000077 J	0.00000034 J	ND(0.00000026) X
1,2,3,7,8,9-HxCDD	NS	0.00000039 J	ND(0.00000012) X	0.00000053 J	0.00000016 J	ND(0.00000016)
HxCDDs (total)	NS	0.0000053	0.00000026	0.0000078	0.00000051	0.0000011
1,2,3,4,6,7,8-HpCDD	NS	0.000012	0.0000022 J	0.000011	0.0000021 J	0.0000023
HpCDDs (total)	NS	0.000023	0.0000044	0.000023	0.0000042	0.0000023
OCDD	NS	0.000082	0.000016	0.000069	ND(0.000016)	0.000013
Total TEQs (WHO TEFs)	NS	0.0000043	0.00000053	0.0000098	0.0000038	0.0000033
Inorganics						
Antimony	NA	ND(15.0)	ND(14.0)	ND(13.0) J	ND(12.0) J	ND(11.0)
Arsenic	NA	ND(22.0)	16.0	ND(21.0)	ND(15.0)	ND(15.0)
Barium	NA	47.0	39.0	ND(42.0)	31.0	46.0
Beryllium	NA	ND(1.50)	ND(1.40)	0.340	0.350	0.230
Cadmium	NA	ND(2.20)	ND(2.20)	ND(2.10)	ND(2.10)	ND(1.90)
Chromium	NA	12.0	15.0	10.0	12.0	29.0
Cobalt	NA	ND(15.0)	26.0	14.0	14.0	11.0
Copper	NA	41.0	110	47.0	58.0	46.0
Cyanide	NA	ND(1.00)	ND(1.00)	ND(1.00)	ND(1.00)	4.80
Lead	NA	ND(30.0)	36.0	64.0	21.0	26.0
Mercury	NA	ND(0.300)	ND(0.290)	ND(0.280)	ND(0.280)	ND(0.260)
Nickel	NA	25.0	35.0	25.0	25.0	25.0
Selenium	NA	ND(1.50)	ND(1.40)	ND(1.00)	ND(1.00)	ND(0.960)
Silver	NA	ND(3.00)	ND(2.90)	ND(1.00)	ND(1.00)	ND(0.960)
Sulfide	NA	12.0	ND(7.20)	9.00	13.0	16.0
Thallium	NA	ND(3.00)	ND(2.90)	ND(2.10) J	ND(2.10) J	ND(1.90)
Tin	NA	ND(11.0)	ND(11.0)	ND(64.0)	ND(62.0)	ND(57.0)
Vanadium	NA	ND(15.0)	ND(14.0)	ND(10.0)	11.0	23.0
Zinc	NA	99.0	170	52.0	57.0	67.0

TABLE 2-2
PRE-DESIGN INVESTIGATION SOIL SAMPLING RESULTS FOR NON-PCB APPENDIX IX+3 CONSTITUENTS

RD/RA WORK PLAN ADDENDUM FOR FUTURE CITY RECREATIONAL AREA
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in dry weight parts per million, ppm)

Sample ID: Sample Depth (Feet): Parameter Date Collected:	CRA-16 0-2 01/19/01	CRA-18 0-2 01/23/01	CRA-21 0-2 01/31/01	X-17 0-2 01/31/01
Volatile Organics				
1,1,1,2-Tetrachloroethane	ND(0.0067)	ND(0.0067) [ND(0.0076)]	ND(0.0071)	NA
1,1,1-Trichloroethane	ND(0.0067)	ND(0.0067) [ND(0.0076)]	ND(0.0071)	NA
1,1,2,2-Tetrachloroethane	ND(0.0067)	ND(0.0067) [ND(0.0076)]	ND(0.0071)	NA
1,1,2-Trichloroethane	ND(0.0067)	ND(0.0067) [ND(0.0076)]	ND(0.0071)	NA
1,1-Dichloroethane	ND(0.0067)	ND(0.0067) [ND(0.0076)]	ND(0.0071)	NA
1,1-Dichloroethene	ND(0.0067)	ND(0.0067) [ND(0.0076)]	ND(0.0071)	NA
1,2,3-Trichloropropane	ND(0.0067)	ND(0.0067) [ND(0.0076)]	ND(0.0071)	NA
1,2-Dibromo-3-chloropropane	ND(0.0067)	ND(0.0067) [ND(0.0076)]	ND(0.0071)	NA
1,2-Dibromoethane	ND(0.0067)	ND(0.0067) [ND(0.0076)]	ND(0.0071)	NA
1,2-Dichloroethane	ND(0.0067)	ND(0.0067) [ND(0.0076)]	ND(0.0071)	NA
1,2-Dichloropropane	ND(0.0067)	ND(0.0067) [ND(0.0076)]	ND(0.0071)	NA
1,4-Dioxane	ND(0.20) J	ND(0.20) J [ND(0.20)]	ND(0.20) J	NA
2-Butanone	ND(0.10)	ND(0.10) [ND(0.10)]	ND(0.10)	NA
2-Chloro-1,3-butadiene	ND(0.0067)	ND(0.0067) [ND(0.0076)]	ND(0.0071)	NA
2-Chloroethylvinylether	ND(0.0067)	ND(0.0067) [ND(0.0076)]	ND(0.0071)	NA
2-Hexanone	ND(0.013)	ND(0.013) [ND(0.015)]	ND(0.014)	NA
3-Chloropropene	ND(0.013)	ND(0.013) [ND(0.015)]	ND(0.014)	NA
4-Methyl-2-pentanone	ND(0.013)	ND(0.013) [ND(0.015)]	ND(0.014)	NA
Acetone	ND(0.10)	ND(0.10) [ND(0.10)]	ND(0.10)	NA
Acetonitrile	ND(0.13)	ND(0.13) [ND(0.15)]	ND(0.14) J	NA
Acrolein	ND(0.13) J	ND(0.13) J [ND(0.15)]	ND(0.14) J	NA
Acrylonitrile	ND(0.013)	ND(0.013) [ND(0.015)]	ND(0.014)	NA
Benzene	ND(0.0067)	ND(0.0067) [ND(0.0076)]	ND(0.0071)	NA
Bromodichloromethane	ND(0.0067)	ND(0.0067) [ND(0.0076)]	ND(0.0071)	NA
Bromoform	ND(0.0067)	ND(0.0067) [ND(0.0076)]	ND(0.0071)	NA
Bromomethane	ND(0.013)	ND(0.013) [ND(0.015)]	ND(0.014)	NA
Carbon Disulfide	ND(0.010)	ND(0.010) [ND(0.010)]	ND(0.010)	NA
Carbon Tetrachloride	ND(0.0067)	ND(0.0067) [ND(0.0076)]	ND(0.0071)	NA
Chlorobenzene	ND(0.0067)	ND(0.0067) [ND(0.0076)]	ND(0.0071)	NA
Chloroethane	ND(0.013)	ND(0.013) [ND(0.015)]	ND(0.014)	NA
Chloroform	ND(0.0067)	ND(0.0067) [ND(0.0076)]	ND(0.0071)	NA
Chloromethane	ND(0.013)	ND(0.013) [ND(0.015)]	ND(0.014)	NA
cis-1,3-Dichloropropene	ND(0.0067)	ND(0.0067) [ND(0.0076)]	ND(0.0071)	NA
Dibromochloromethane	ND(0.0067)	ND(0.0067) [ND(0.0076)]	ND(0.0071)	NA
Dibromomethane	ND(0.0067)	ND(0.0067) [ND(0.0076)]	ND(0.0071)	NA
Dichlorodifluoromethane	ND(0.013)	ND(0.013) [ND(0.015)]	ND(0.014)	NA
Ethyl Methacrylate	ND(0.013)	ND(0.013) [ND(0.015)]	ND(0.014)	NA
Ethylbenzene	ND(0.0067)	ND(0.0067) [ND(0.0076)]	ND(0.0071)	NA
Iodomethane	ND(0.0067)	ND(0.0067) [ND(0.0076)]	ND(0.0071)	NA
Isobutanol	ND(0.27) J	ND(0.27) J [ND(0.30)]	ND(0.28) J	NA
Methacrylonitrile	ND(0.013)	ND(0.013) [ND(0.015)]	ND(0.014)	NA
Methyl Methacrylate	ND(0.013)	ND(0.013) [ND(0.015)]	ND(0.014)	NA
Methylene Chloride	ND(0.0067)	ND(0.0067) [ND(0.0076)]	ND(0.0071)	NA
Propionitrile	ND(0.067) J	ND(0.067) J [ND(0.076)]	ND(0.071) J	NA
Styrene	ND(0.0067)	ND(0.0067) [ND(0.0076)]	ND(0.0071)	NA
Tetrachloroethene	ND(0.0067)	ND(0.0067) [ND(0.0076)]	ND(0.0071)	NA
Toluene	ND(0.0067)	ND(0.0067) [ND(0.0076)]	ND(0.0071)	NA
trans-1,2-Dichloroethene	ND(0.0067)	ND(0.0067) [ND(0.0076)]	ND(0.0071)	NA
trans-1,3-Dichloropropene	ND(0.0067)	ND(0.0067) [ND(0.0076)]	ND(0.0071)	NA
trans-1,4-Dichloro-2-butene	ND(0.013)	ND(0.013) [ND(0.015)]	ND(0.014)	NA
Trichloroethene	ND(0.0067)	ND(0.0067) [ND(0.0076)]	ND(0.0071)	NA
Trichlorofluoromethane	ND(0.0067)	ND(0.0067) [ND(0.0076)]	ND(0.0071) J	NA
Vinyl Acetate	ND(0.013)	ND(0.013) [ND(0.015)]	ND(0.014)	NA
Vinyl Chloride	ND(0.013)	ND(0.013) [ND(0.015)]	ND(0.014)	NA
Xylenes (total)	ND(0.013)	ND(0.013) [ND(0.0076)]	ND(0.0071)	NA

TABLE 2-2
PRE-DESIGN INVESTIGATION SOIL SAMPLING RESULTS FOR NON-PCB APPENDIX IX+3 CONSTITUENTS

RD/RA WORK PLAN ADDENDUM FOR FUTURE CITY RECREATIONAL AREA
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in dry weight parts per million, ppm)

Parameter	Sample ID: Sample Depth (Feet): Date Collected:	CRA-16 0-2 01/19/01	CRA-18 0-2 01/23/01	CRA-21 0-2 01/31/01	X-17 0-2 01/31/01
Semivolatile Organics					
1,2,4,5-Tetrachlorobenzene		ND(0.44)	ND(0.44) [ND(0.50)]	ND(0.47)	NA
1,2,4-Trichlorobenzene		ND(0.44)	ND(0.44) [ND(0.50)]	ND(0.47)	NA
1,2-Dichlorobenzene		ND(0.44)	ND(0.44) [ND(0.50)]	ND(0.47)	NA
1,2-Diphenylhydrazine		ND(0.44)	ND(0.44) [ND(0.50)]	ND(0.47)	NA
1,3,5-Trinitrobenzene		ND(0.90)	ND(0.89) [ND(1.0)]	ND(0.96)	NA
1,3-Dichlorobenzene		ND(0.44)	ND(0.44) [ND(0.50)]	ND(0.47)	NA
1,3-Dinitrobenzene		ND(2.3)	ND(2.3) J [ND(2.6)]	ND(2.4)	NA
1,4-Dichlorobenzene		ND(0.44)	ND(0.44) [ND(0.50)]	ND(0.47)	NA
1,4-Naphthoquinone		ND(2.3)	ND(2.3) [ND(2.6)]	ND(2.4)	NA
1-Naphthylamine		ND(2.3)	ND(2.3) [ND(2.6) J]	ND(2.4) J	NA
2,3,4,6-Tetrachlorophenol		ND(0.44)	ND(0.44) [ND(0.50)]	ND(0.47)	NA
2,4,5-Trichlorophenol		ND(0.44)	ND(0.44) [ND(0.50)]	ND(0.47)	NA
2,4,6-Trichlorophenol		ND(0.44)	ND(0.44) [ND(0.50)]	ND(0.47)	NA
2,4-Dichlorophenol		ND(0.44)	ND(0.44) [ND(0.50)]	ND(0.47)	NA
2,4-Dimethylphenol		ND(0.44)	ND(0.44) [ND(0.50)]	ND(0.47)	NA
2,4-Dinitrophenol		ND(2.3)	ND(2.3) [ND(2.6)]	ND(2.4)	NA
2,4-Dinitrotoluene		ND(2.3)	ND(2.3) [ND(2.6)]	ND(2.4)	NA
2,6-Dichlorophenol		ND(0.44)	ND(0.44) [ND(0.50)]	ND(0.47)	NA
2,6-Dinitrotoluene		ND(0.44)	ND(0.44) [ND(0.50) J]	ND(0.47)	NA
2-Acetylaminofluorene		ND(0.90)	ND(0.89) [ND(1.0) J]	ND(0.96)	NA
2-Chloronaphthalene		ND(0.44)	ND(0.44) [ND(0.50)]	ND(0.47)	NA
2-Chlorophenol		ND(0.44)	ND(0.44) [ND(0.50)]	ND(0.47)	NA
2-Methylnaphthalene		ND(0.44)	ND(0.44) [ND(0.50)]	ND(0.47)	NA
2-Methylphenol		ND(0.44)	ND(0.44) [ND(0.50)]	ND(0.47)	NA
2-Naphthylamine		ND(2.3)	ND(2.3) [ND(2.6)]	ND(2.4) J	NA
2-Nitroaniline		ND(2.3)	ND(2.3) [ND(2.6) J]	ND(2.4)	NA
2-Nitrophenol		ND(0.90)	ND(0.89) [ND(1.0)]	ND(0.96)	NA
2-Picoline		ND(0.44)	ND(0.44) [ND(0.50)]	ND(0.47)	NA
3&4-Methylphenol		ND(0.90)	ND(0.89) [ND(1.0)]	ND(0.96)	NA
3,3'-Dichlorobenzidine		ND(2.3)	ND(2.3) [ND(2.6) J]	ND(2.4) J	NA
3,3'-Dimethylbenzidine		ND(2.3)	ND(2.3) J [ND(2.6) J]	ND(2.4)	NA
3-Methylcholanthrene		ND(0.90)	ND(0.89) J [ND(1.0)]	ND(0.96) J	NA
3-Nitroaniline		ND(2.3)	ND(2.3) [ND(2.6)]	ND(2.4)	NA
4,6-Dinitro-2-methylphenol		ND(0.44)	ND(0.44) [ND(0.50)]	ND(0.47)	NA
4-Aminobiphenyl		ND(0.90)	ND(0.89) J [ND(1.0)]	ND(0.96) J	NA
4-Bromophenyl-phenylether		ND(0.44)	ND(0.44) [ND(0.50)]	ND(0.47)	NA
4-Chloro-3-Methylphenol		ND(0.44)	ND(0.44) [ND(0.50)]	ND(0.47)	NA
4-Chloroaniline		ND(0.90) J	ND(0.89) [ND(1.0)]	ND(0.96)	NA
4-Chlorobenzilate		ND(2.3)	ND(2.3) [ND(2.6)]	ND(2.4)	NA
4-Chlorophenyl-phenylether		ND(0.44)	ND(0.44) [ND(0.50)]	ND(0.47)	NA
4-Nitroaniline		ND(2.3)	ND(2.3) [ND(2.6)]	ND(2.4)	NA
4-Nitrophenol		ND(2.3)	ND(2.3) [ND(2.6)]	ND(2.4)	NA
4-Nitroquinoline-1-oxide		ND(2.3) J	ND(2.3) J [ND(2.6) J]	ND(2.4) J	NA
4-Phenylenediamine		ND(2.3)	ND(2.3) [ND(2.6)]	ND(2.4)	NA
5-Nitro-o-toluidine		ND(2.3)	ND(2.3) [ND(2.6)]	ND(2.4)	NA
7,12-Dimethylbenz(a)anthracene		ND(0.90)	ND(0.89) [ND(1.0)]	ND(0.96) J	NA
a,a'-Dimethylphenethylamine		ND(2.3)	ND(2.3) [ND(2.6) J]	ND(2.4)	NA
Acenaphthene		ND(0.44)	0.13 J [ND(0.50)]	ND(0.47)	NA
Acenaphthylene		ND(0.44)	ND(0.44) [ND(0.50)]	ND(0.47)	NA
Acetophenone		ND(0.44) J	ND(0.44) [ND(0.50)]	ND(0.47)	NA
Aniline		ND(0.44)	ND(0.44) [ND(0.50)]	ND(0.47)	NA
Anthracene		ND(0.44)	0.34 J [ND(0.50)]	ND(0.47)	NA
Aramite		ND(0.90) J	ND(0.89) J [ND(1.0) J]	ND(0.96) J	NA
Benzidine		ND(0.90)	ND(0.89) J [ND(1.0)]	ND(0.96)	NA
Benzo(a)anthracene		0.33 J	1.0 [ND(0.50)]	ND(0.47)	NA
Benzo(a)pyrene		0.35 J	1.0 [ND(0.50)]	ND(0.47)	NA
Benzo(b)fluoranthene		0.23 J	0.84 [ND(0.50)]	ND(0.47)	NA
Benzo(g,h,i)perylene		ND(0.44)	0.56 [ND(0.50)]	ND(0.47)	NA
Benzo(k)fluoranthene		0.45	1.1 [ND(0.50)]	ND(0.47)	NA
Benzyl Alcohol		ND(0.90)	ND(0.89) [ND(1.0)]	ND(0.96)	NA

TABLE 2-2
PRE-DESIGN INVESTIGATION SOIL SAMPLING RESULTS FOR NON-PCB APPENDIX IX+3 CONSTITUENTS

RD/RA WORK PLAN ADDENDUM FOR FUTURE CITY RECREATIONAL AREA
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in dry weight parts per million, ppm)

Parameter	Sample ID: Sample Depth (Feet): Date Collected:	CRA-16 0-2 01/19/01	CRA-18 0-2 01/23/01	CRA-21 0-2 01/31/01	X-17 0-2 01/31/01
Semivolatile Organics (continued)					
bis(2-Chloroethoxy)methane		ND(0.44)	ND(0.44) [ND(0.50)]	ND(0.47)	NA
bis(2-Chloroethyl)ether		ND(0.44)	ND(0.44) [ND(0.50)]	ND(0.47)	NA
bis(2-Chloroisopropyl)ether		ND(0.44) J	ND(0.44) [ND(0.50)]	ND(0.47) J	NA
bis(2-Ethylhexyl)phthalate		ND(0.44)	ND(0.44) [ND(0.50)]	ND(0.47)	NA
Butylbenzylphthalate		ND(0.90)	ND(0.89) J [ND(1.0) J]	ND(0.96)	NA
Chrysene		0.43 J	1.1 [ND(0.50)]	ND(0.47)	NA
Diallate		ND(0.90)	ND(0.89) [ND(1.0)]	ND(0.96)	NA
Dibenzo(a,h)anthracene		ND(0.90)	ND(0.89) [ND(1.0)]	ND(0.96)	NA
Dibenzofuran		ND(0.44)	0.14 J [ND(0.50)]	ND(0.47)	NA
Diethylphthalate		ND(0.44)	ND(0.44) [ND(0.50)]	ND(0.47)	NA
Dimethylphthalate		ND(0.44)	ND(0.44) [ND(0.50)]	ND(0.47)	NA
Di-n-Butylphthalate		ND(0.44)	ND(0.44) [ND(0.50)]	ND(0.47)	NA
Di-n-Octylphthalate		ND(0.44)	ND(0.44) [ND(0.50)]	ND(0.47)	NA
Diphenylamine		ND(0.44)	ND(0.44) [ND(0.50)]	ND(0.47)	NA
Ethyl Methanesulfonate		ND(0.44) J	ND(0.44) [ND(0.50)]	ND(0.47) J	NA
Fluoranthene		0.66	2.1 [ND(0.50)]	ND(0.47)	NA
Fluorene		ND(0.44)	0.16 J [ND(0.50)]	ND(0.47)	NA
Hexachlorobenzene		ND(0.44)	ND(0.44) [ND(0.50)]	ND(0.47)	NA
Hexachlorobutadiene		ND(0.90)	ND(0.89) [ND(1.0)]	ND(0.96)	NA
Hexachlorocyclopentadiene		ND(0.44)	ND(0.44) [ND(0.50)]	ND(0.47) J	NA
Hexachloroethane		ND(0.44)	ND(0.44) [ND(0.50)]	ND(0.47)	NA
Hexachlorophene		ND(0.90) J	ND(0.89) J [ND(1.0) J]	ND(0.96) J	NA
Hexachloropropene		ND(0.44) J	ND(0.44) [ND(0.50) J]	ND(0.47)	NA
Indeno(1,2,3-cd)pyrene		ND(0.90)	0.56 J [ND(1.0)]	ND(0.96)	NA
Isodrin		ND(0.44) J	ND(0.44) [ND(0.50)]	ND(0.47)	NA
Isophorone		ND(0.44)	ND(0.44) [ND(0.50)]	ND(0.47)	NA
Isosafrole		ND(0.90)	ND(0.89) [ND(1.0)]	ND(0.96)	NA
Methapyrilene		ND(2.3) J	ND(2.3) J [ND(2.6)]	ND(2.4) J	NA
Methyl Methanesulfonate		ND(0.44)	ND(0.44) [ND(0.50)]	ND(0.47)	NA
Naphthalene		ND(0.44)	0.17 J [ND(0.50)]	ND(0.47)	NA
Nitrobenzene		ND(0.44)	ND(0.44) [ND(0.50)]	ND(0.47)	NA
N-Nitrosodiethylamine		ND(0.44)	ND(0.44) [ND(0.50)]	ND(0.47)	NA
N-Nitrosodimethylamine		ND(2.2)	ND(2.2) [ND(2.5)]	ND(2.3)	NA
N-Nitroso-di-n-butylamine		ND(0.90) J	ND(0.89) [ND(1.0)]	ND(0.96)	NA
N-Nitroso-di-n-propylamine		ND(0.90)	ND(0.89) [ND(1.0)]	ND(0.96)	NA
N-Nitrosodiphenylamine		ND(0.44)	ND(0.44) [ND(0.50)]	ND(0.47)	NA
N-Nitrosomethylethylamine		ND(0.90)	ND(0.89) [ND(1.0)]	ND(0.96)	NA
N-Nitrosomorpholine		ND(0.44)	ND(0.44) [ND(0.50) J]	ND(0.47)	NA
N-Nitrosopiperidine		ND(0.44)	ND(0.44) [ND(0.50)]	ND(0.47)	NA
N-Nitrosopyrrolidine		ND(0.90) J	ND(0.89) [ND(1.0)]	ND(0.96)	NA
o,o,o-Triethylphosphorothioate		ND(0.44)	ND(0.44) [ND(0.50)]	ND(0.47) J	NA
o-Toluidine		ND(0.44)	ND(0.44) [ND(0.50)]	ND(0.47)	NA
p-Dimethylaminoazobenzene		ND(2.3)	ND(2.3) [ND(2.6)]	ND(2.4)	NA
Pentachlorobenzene		ND(0.44)	ND(0.44) [ND(0.50)]	ND(0.47)	NA
Pentachloroethane		ND(0.44)	ND(0.44) J [ND(0.50)]	ND(0.47)	NA
Pentachloronitrobenzene		ND(2.3) J	ND(2.3) [ND(2.6) J]	ND(2.4)	NA
Pentachlorophenol		ND(2.3)	ND(2.3) [ND(2.6)]	ND(2.4)	NA
Phenacetin		ND(2.3)	ND(2.3) [ND(2.6)]	ND(2.4)	NA
Phenanthrene		0.49	1.6 [ND(0.50)]	ND(0.47)	NA
Phenol		ND(0.44)	ND(0.44) [ND(0.50)]	ND(0.47)	NA
Pronamide		ND(0.44)	ND(0.44) [ND(0.50)]	ND(0.47)	NA
Pyrene		1.1	2.2 [ND(0.50)]	ND(0.47)	NA
Pyridine		ND(0.44) J	ND(0.44) J [ND(0.50)]	ND(0.47)	NA
Safrole		ND(0.44)	ND(0.44) [ND(0.50)]	ND(0.47)	NA
Thionazin		ND(0.44)	ND(0.44) [ND(0.50)]	ND(0.47)	NA

TABLE 2-2
PRE-DESIGN INVESTIGATION SOIL SAMPLING RESULTS FOR NON-PCB APPENDIX IX+3 CONSTITUENTS

RD/RA WORK PLAN ADDENDUM FOR FUTURE CITY RECREATIONAL AREA
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in dry weight parts per million, ppm)

Sample ID: Sample Depth (Feet): Date Collected:	CRA-16 0-2 01/19/01	CRA-18 0-2 01/23/01	CRA-21 0-2 01/31/01	X-17 0-2 01/31/01
Furans				
2,3,7,8-TCDF	0.000014	0.0000098 [0.0000098]	0.00000051 J	0.000053
TCDFs (total)	0.00013 I	0.000080 I [0.000091]	0.0000036	0.00045 QI
1,2,3,7,8-PeCDF	0.0000041	0.0000039 [0.0000034]	ND(0.0000023) X	0.000014
2,3,4,7,8-PeCDF	0.0000054	0.000012 [0.000012]	0.00000053 J	0.000021
PeCDFs (total)	0.000068 I	0.000011 I [0.000011]	0.0000052	0.00025 Q
1,2,3,4,7,8-HxCDF	0.0000038	0.0000048 [0.0000038]	0.00000043 J	0.000011
1,2,3,6,7,8-HxCDF	0.0000027	0.0000038 [0.0000034]	0.00000038 J	0.0000072
1,2,3,7,8,9-HxCDF	0.0000061 J	0.0000011 J [0.0000010 J]	ND(0.0000010)	0.0000018 J
2,3,4,6,7,8-HxCDF	0.0000042	0.0000068 [0.0000070]	0.00000060 J	0.000012
HxCDFs (total)	0.000053	0.000084 [0.000091]	0.0000079	0.00020
1,2,3,4,6,7,8-HpCDF	0.0000077	0.0000094 [0.0000082]	0.0000057	0.000011
1,2,3,4,7,8,9-HpCDF	0.0000087 J	0.0000013 J [0.0000011 J]	0.00000044 J	0.0000028
HpCDFs (total)	0.000015 I	0.000021 [0.000020]	0.000015	0.00020
OCDF	0.0000053	0.0000085 [0.0000066]	0.000018	0.000059
Dioxins				
2,3,7,8-TCDD	ND(0.0000025) X	ND(0.0000021) X [ND(0.0000018) X]	ND(0.00000095)	ND(0.0000061) X
TCDDs (total)	0.0000024 I	0.0000014 [0.0000016]	ND(0.00000042)	0.0000093
1,2,3,7,8-PeCDD	ND(0.0000014) X	ND(0.0000024) X [ND(0.0000013) X]	ND(0.00000019) X	ND(0.0000013) X
PeCDDs (total)	0.0000027 I	0.0000022 [0.0000027]	ND(0.00000062)	0.0000088 Q
1,2,3,4,7,8-HxCDD	0.0000025 J	0.0000022 J [0.0000021 J]	0.00000026 J	0.0000062 J
1,2,3,6,7,8-HxCDD	0.0000054 J	0.0000065 J [0.0000055 J]	0.00000077 J	0.0000026
1,2,3,7,8,9-HxCDD	0.0000035 J	0.0000040 J [0.0000033 J]	0.00000053 J	0.0000014 J
HxCDDs (total)	0.000024	0.0000063 [0.0000060]	0.0000048	0.000022
1,2,3,4,6,7,8-HpCDD	0.0000051	0.0000079 [0.0000057]	0.000018	0.000038
HpCDDs (total)	0.000011	0.000017 [0.000012]	0.000034	0.000070
OCDD	0.000029	0.000057 [0.000039]	0.00013	0.00025
Total TEQs (WHO TEFs)	0.0000065	0.000010 [0.0000097]	0.0000010	0.000023
Inorganics				
Antimony	ND(12.0)	ND(12.0) J [ND(14.0) J]	ND(13.0)	NA
Arsenic	ND(15.0)	ND(15.0) [ND(23.0)]	ND(21.0)	NA
Barium	36.0	39.0 [ND(46.0)]	ND(43.0)	NA
Beryllium	0.270	0.300 [0.330]	0.310	NA
Cadmium	ND(2.00)	ND(2.00) [ND(2.30)]	ND(2.10)	NA
Chromium	9.40	12.0 [14.0]	11.0	NA
Cobalt	11.0	14.0 [17.0]	ND(11.0)	NA
Copper	31.0	56.0 [50.0]	ND(21.0)	NA
Cyanide	ND(1.00)	ND(1.00) [ND(1.00)]	ND(1.00)	NA
Lead	42.0	38.0 [34.0]	18.0	NA
Mercury	ND(0.270)	ND(0.270) [ND(0.300)]	ND(0.280)	NA
Nickel	19.0	26.0 [30.0]	16.0	NA
Selenium	ND(1.00)	ND(1.00) [ND(1.10)]	ND(1.10) J	NA
Silver	ND(1.00)	ND(1.00) [ND(1.10)]	ND(1.10)	NA
Sulfide	ND(6.70)	21.0 [29.0]	ND(7.10)	NA
Thallium	ND(2.00)	ND(2.00) J [ND(2.30) J]	ND(2.10)	NA
Tin	ND(60.0)	ND(60.0) [ND(68.0)]	ND(64.0)	NA
Vanadium	11.0	12.0 [14.0]	11.0	NA
Zinc	70.0	69.0 [84.0]	58.0	NA

TABLE 2-2
PRE-DESIGN INVESTIGATION SOIL SAMPLING RESULTS FOR NON-PCB APPENDIX IX+3 CONSTITUENTS

RD/RA WORK PLAN ADDENDUM FOR FUTURE CITY RECREATIONAL AREA
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in dry weight parts per million, ppm)

Notes:

1. Samples were collected by Biasland, Bouck & Lee, Inc., and were submitted to CT&E Environmental Services, Inc. for analysis of Appendix IX+3 constituents (excluding herbicides and pesticides).
2. Samples have been validated as per Field Sampling Plan/Quality Assurance Project Plan, General Electric Company, Pittsfield, Massachusetts, Biasland Bouck & Lee, Inc. (approved November 4, 2002 and resubmitted December 10, 2002).
3. ND - Analyte was not detected. The number in parentheses is the associated detection limit.
4. NA - Not Analyzed - Laboratory did not report results for this analyte.
5. Total 2,3,7,8-TCDD toxicity equivalents (TEQs) were calculated using Toxicity Equivalency Factors (TEFs) derived by the World Health Organization (WHO) and published by Van den Berg et al. In Environmental Health Perspectives 8.106(2), December 1998.
6. Field duplicate sample results are presented in brackets.

Data Qualifiers:

Organics

- J - Indicates that the associated numerical value is an estimated concentration.
- X - Estimated Maximum Possible Concentration.
- I - Polychlorinated Diphenyl Ether (PCDPE) Interference.
- Q - Indicates the presence of quantitative interferences.

Inorganics

- J - Indicates that the associated numerical value is an estimated concentration.

TABLE 2-3
HISTORICAL SOIL SAMPLING RESULTS FOR PCBs

RD/RA WORK PLAN ADDENDUM FOR THE FUTURE CITY RECREATIONAL AREA
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in dry weight parts per million, ppm)

Sample ID	Location ID	Depth (Feet)	Date Collected	Aroclor-1016, -1232, -1242, -1248	Aroclor-1221	Aroclor-1254	Aroclor-1260	Total PCBs
209B0002	95-9	0-2	02/29/96	ND(0.036)	ND(0.073)	ND(0.036)	0.31	0.31
210S0-6	210S	0-0.5	09/17/97	ND(0.35)	ND(0.70)	ND(0.35)	9.2 B	9.2
E2SC-05-CS01	E2SC-5	0-1	10/08/98	ND(0.18)	ND(0.18)	ND(0.18)	1.6	1.6
E2SC-05-CS0106	E2SC-5	1-6	10/08/98	ND(0.037)	ND(0.037)	ND(0.037)	0.29	0.29
E2SC-14-CS01	E2SC-14	0-1	10/08/98	ND(0.077)	ND(0.077)	ND(0.077)	0.60	0.60
E2SC-14-CS0106	E2SC-14	1-6	10/08/98	ND(0.037)	ND(0.037)	ND(0.037)	ND(0.037)	ND(0.037)
P2X160002	X-16	0-2	07/08/91	ND(0.050)	NA	ND(0.050)	0.070	0.070
P2X170002	X-17	0-2	07/08/91	ND(0.024)	ND(0.024)	ND(0.024)	ND(0.024)	ND(0.024)
P2X170002(IT)	X-17	0-2	07/08/91	ND(0.050)	NA	ND(0.050)	ND(0.050)	ND(0.050)
P202S	202S	0-0.5	05/17/91	ND(0.028) [ND(0.026)]	ND(0.028) [ND(0.026)]	ND(0.028) [ND(0.026)]	0.87 [1.0]	0.87 [1.0]

- Notes:
1. Samples were collected by General Electric Company subcontractors and submitted to CompuChem Environmental Corporation and IT Analytical Services for analysis of PCBs.
 2. The previous version of this table provided in a document entitled *Removal Design/Removal Action Work Plan for the Future City Recreational Area* (BBL, December 2001) included data for sample 95-210-6. This data has since been removed from this table after discovering that the sample was not collected in the vicinity of the Future City Recreational Area.
 3. ND - Analyte was not detected. The number in parentheses is the associated detection limit.
 4. NA - Not Analyzed - Laboratory did not report results for this analyte.
 5. Field duplicate sample results are presented in brackets.
 6. Sample ID's with (IT) suffix distinguish samples analyzed by IT Analytical Services vs. CompuChem Environmental Corporation.

Data Qualifiers:

B - Analyte was also detected in the associated method blank.

TABLE 2-4
HISTORICAL SOIL SAMPLING RESULTS FOR NON-PCB APPENDIX IX+3 CONSTITUENTS

RD/RA WORK PLAN ADDENDUM FOR THE FUTURE CITY RECREATIONAL AREA
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results in ppm dry weight)

Parameter	Sample ID: Location ID: Sample Depth (Feet): Date Collected:	210S0-6 210S 0-0.5 09/17/97	P2X170002 X-17 0-2 07/08/91	P202S 202S 0-0.5 05/17/91
Volatile Organics				
1,1,1,2-Tetrachloroethane		ND(0.021)	ND(0.0060)	ND(0.0070) [ND(0.0060)]
1,1,1-trichloro-2,2,2-trifluoroethane		NA	ND(0.012)	ND(0.014) [ND(0.013)]
1,1,1-Trichloroethane		ND(0.021)	ND(0.0060)	ND(0.0070) [ND(0.0060)]
1,1,2,2-Tetrachloroethane		ND(0.011)	ND(0.012)	ND(0.014) [ND(0.013)]
1,1,2-trichloro-1,2,2-trifluoroethane		NA	ND(0.012)	ND(0.014) [ND(0.013)]
1,1,2-Trichloroethane		ND(0.015)	ND(0.0060)	ND(0.0070) [ND(0.0060)]
1,1-Dichloroethane		ND(0.016)	ND(0.0060)	ND(0.0070) [ND(0.0060)]
1,1-Dichloroethene		ND(0.021)	ND(0.0060)	ND(0.0070) [ND(0.0060)]
1,2,3-Trichloropropane		ND(0.021)	ND(0.018)	ND(0.021) [ND(0.019)]
1,2-Dibromo-3-chloropropane		ND(0.053)	ND(0.012)	ND(0.014) [ND(0.013)]
1,2-Dibromoethane		ND(0.021)	ND(0.0060)	ND(0.0070) [ND(0.0060)]
1,2-Dichloroethane		ND(0.011)	ND(0.0060)	ND(0.0070) [ND(0.0060)]
1,2-Dichloroethene (total)		NA	ND(0.0060)	ND(0.0070) [ND(0.0060)]
1,2-Dichloropropane		ND(0.021)	ND(0.0060)	ND(0.0070) [ND(0.0060)]
1,4-Dioxane		ND(54)	NA	NA
2-Butanone		0.0030 JB	ND(0.012)	ND(0.014) [ND(0.013)]
2-Chloroethylvinylether		ND(0.016)	ND(0.012)	ND(0.014) [ND(0.013)]
2-Hexanone		ND(0.037)	ND(0.018)	ND(0.021) [ND(0.019)]
3-Chloropropene		ND(0.016)	ND(0.018)	ND(0.021) [ND(0.019)]
4-Methyl-2-pentanone		ND(0.026)	ND(0.018)	ND(0.021) [ND(0.019)]
Acetone		0.024 JB	ND(0.012)	0.016 B [0.021 B]
Acetonitrile		ND(0.21)	NA	NA
Acrolein		ND(0.24)	ND(0.11)	ND(0.13) [ND(0.12)]
Acrylonitrile		ND(0.22)	ND(0.14)	ND(0.17) [ND(0.15)]
Benzene		ND(0.016)	ND(0.0060)	ND(0.0070) [ND(0.0060)]
Bromodichloromethane		ND(0.021)	ND(0.0060)	ND(0.0070) [ND(0.0060)]
Bromoform		ND(0.016)	ND(0.012)	ND(0.014) [ND(0.013)]
Bromomethane		ND(0.021)	ND(0.0060)	ND(0.0070) [ND(0.0060)]
Carbon Disulfide		ND(0.011)	ND(0.0060)	ND(0.0070) [ND(0.0060)]
Carbon Tetrachloride		ND(0.016)	ND(0.0060)	ND(0.0070) [ND(0.0060)]
Chlorobenzene		ND(0.016)	ND(0.0060)	ND(0.0070) [ND(0.0060)]
Chloroethane		ND(0.021)	ND(0.012)	ND(0.014) [ND(0.013)]
Chloroform		ND(0.016)	ND(0.0060)	ND(0.0070) [ND(0.0060)]
Chloromethane		ND(0.037)	ND(0.012)	ND(0.014) [ND(0.013)]
cis-1,3-Dichloropropene		ND(0.011)	ND(0.0060)	ND(0.0070) [ND(0.0060)]
Dibromochloromethane		ND(0.016)	ND(0.0060)	ND(0.0070) [ND(0.0060)]
Dibromomethane		ND(0.021)	ND(0.012)	ND(0.014) [ND(0.013)]
Dichlorodifluoromethane		ND(0.011)	NA	NA
Ethyl Methacrylate		ND(0.026)	ND(0.012)	ND(0.014) [ND(0.013)]
Ethylbenzene		ND(0.016)	ND(0.0060)	ND(0.0070) [ND(0.0060)]
Iodomethane		ND(0.011)	ND(0.012)	ND(0.014) [ND(0.013)]
Isobutanol		ND(14)	NA	NA
Methacrylonitrile		ND(0.021)	NA	NA
Methyl Methacrylate		ND(0.053)	NA	NA
Methylene Chloride		0.022 B	0.010 BJ	0.072 B [0.030 B]
Propionitrile		ND(0.62)	NA	NA
Styrene		ND(0.011)	ND(0.0060)	ND(0.0070) [ND(0.0060)]
Tetrachloroethene		ND(0.016)	ND(0.0060)	ND(0.0070) [ND(0.0060)]
Toluene		ND(0.016)	ND(0.0060)	ND(0.0070) [ND(0.0060)]
trans-1,2-Dichloroethene		ND(0.016)	NA	NA
trans-1,3-Dichloropropene		ND(0.016)	ND(0.0060)	ND(0.0070) [ND(0.0060)]
trans-1,4-Dichloro-2-butene		ND(0.021)	ND(0.018)	ND(0.021) [ND(0.019)]
Trichloroethene		ND(0.021)	ND(0.0060)	ND(0.0070) [ND(0.0060)]
Trichlorofluoromethane		ND(0.021)	ND(0.0060)	ND(0.0070) [ND(0.0060)]
Vinyl Acetate		ND(0.021)	ND(0.012)	ND(0.014) [ND(0.013)]
Vinyl Chloride		ND(0.021)	ND(0.012)	ND(0.014) [ND(0.013)]
Xylenes (total)		0.0010 JB	ND(0.0060)	ND(0.0070) [ND(0.0060)]

TABLE 2-4
HISTORICAL SOIL SAMPLING RESULTS FOR NON-PCB APPENDIX IX+3 CONSTITUENTS

RD/RA WORK PLAN ADDENDUM FOR THE FUTURE CITY RECREATIONAL AREA
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results in ppm dry weight)

Parameter	Sample ID: Location ID: Sample Depth (Feet): Date Collected:	210S0-6 210S 0-0.5 09/17/97	P2X170002 X-17 0-2 07/08/91	P202S 202S 0-0.5 05/17/91
Semivolatile Organics				
1,2,3,4-Tetrachlorobenzene		NA	ND(0.38)	ND(0.46) [ND(0.42)]
1,2,3,5-Tetrachlorobenzene		NA	ND(0.38)	ND(0.46) [ND(0.42)]
1,2,3-Trichlorobenzene		NA	ND(0.38)	ND(0.46) [ND(0.42)]
1,2,4,5-Tetrachlorobenzene		ND(1.4)	ND(0.38)	ND(0.46) [ND(0.42)]
1,2,4-Trichlorobenzene		ND(0.58)	ND(0.38)	ND(0.46) [ND(0.42)]
1,2-Dichlorobenzene		ND(0.62)	ND(0.38)	ND(0.46) [ND(0.42)]
1,2-Diphenylhydrazine		ND(0.73)	ND(0.38)	ND(0.46) [ND(0.42)]
1,3,5-Trichlorobenzene		NA	ND(0.38)	ND(0.46) [ND(0.42)]
1,3,5-Trinitrobenzene		ND(0.96)	ND(0.76)	ND(0.93) [ND(0.85)]
1,3-Dichlorobenzene		ND(0.54)	ND(0.38)	ND(0.46) [ND(0.42)]
1,3-Dinitrobenzene		ND(0.59)	NA	NA
1,4-Dichlorobenzene		ND(0.55)	ND(0.38)	ND(0.46) [ND(0.42)]
1,4-Dinitrobenzene		NA	ND(0.76)	ND(0.93) [ND(0.85)]
1,4-Naphthoquinone		ND(1.7)	ND(0.76)	ND(0.93) [ND(0.85)]
1-Chloronaphthalene		NA	ND(0.38)	ND(0.46) [ND(0.42)]
1-Methylnaphthalene		NA	ND(0.38)	0.16 J [0.15 J]
1-Naphthylamine		ND(1.5)	ND(0.76)	ND(0.93) [ND(0.85)]
2,3,4,6-Tetrachlorophenol		ND(1.5)	ND(0.76)	ND(0.93) [ND(0.85)]
2,4,5-Trichlorophenol		ND(1.4)	ND(0.76)	ND(0.93) [ND(0.85)]
2,4,6-Trichlorophenol		ND(1.4)	ND(0.76)	ND(0.93) [ND(0.85)]
2,4-Dichlorophenol		ND(0.58)	ND(0.38)	ND(0.46) [ND(0.42)]
2,4-Dimethylphenol		ND(0.64)	ND(0.38)	ND(0.46) [ND(0.42)]
2,4-Dinitrophenol		ND(1.8)	ND(1.5)	ND(1.8) [ND(1.7)]
2,4-Dinitrotoluene		ND(0.70)	ND(0.38)	ND(0.46) [ND(0.42)]
2,6-Dichlorophenol		ND(1.3)	ND(0.76)	ND(0.93) [ND(0.85)]
2,6-Dinitrotoluene		ND(0.79)	ND(0.38)	ND(0.46) [ND(0.42)]
2-Acetylaminofluorene		ND(0.75)	ND(0.38)	ND(0.46) [ND(0.42)]
2-Chloronaphthalene		ND(1.0)	ND(0.38)	ND(0.46) [ND(0.42)]
2-Chlorophenol		ND(0.66)	ND(0.38)	ND(0.46) [ND(0.42)]
2-Methylnaphthalene		ND(0.89)	ND(0.38)	0.077 J [0.076 J]
2-Methylphenol		ND(0.69)	ND(0.38)	ND(0.46) [ND(0.42)]
2-Naphthylamine		ND(0.91)	ND(0.76)	ND(0.93) [ND(0.85)]
2-Nitroaniline		ND(1.2)	ND(0.38)	ND(0.46) [ND(0.42)]
2-Nitrophenol		ND(0.65)	ND(0.38)	ND(0.46) [ND(0.42)]
2-Phenylenediamine		NA	ND(0.38)	ND(0.46) [ND(0.42)]
2-Picoline		ND(1.3)	ND(0.76)	ND(0.93) [ND(0.85)]
3,3'-Dichlorobenzidine		ND(0.53)	ND(0.38)	ND(0.46) [ND(0.42)]
3,3'-Dimethoxybenzidine		NA	ND(0.38)	ND(0.46) [ND(0.42)]
3,3'-Dimethylbenzidine		ND(1.0)	ND(0.76)	ND(0.93) [ND(0.85)]
3-Methylcholanthrene		0.64 JB	ND(0.38)	ND(0.46) [ND(0.42)]
3-Methylphenol		ND(1.4)	ND(0.38)	ND(0.46) [ND(0.42)]
3-Nitroaniline		ND(0.73)	ND(0.76)	ND(0.93) [ND(0.85)]
3-Phenylenediamine		NA	ND(0.38)	ND(0.46) [ND(0.42)]
4,4'-Methylene-bis(2-chloroaniline)		NA	ND(0.38)	ND(0.46) [ND(0.42)]
4,6-Dinitro-2-methylphenol		ND(1.9)	ND(1.1)	ND(1.4) [ND(1.3)]
4-Aminobiphenyl		ND(0.43)	ND(0.38)	ND(0.46) [ND(0.42)]
4-Bromophenyl-phenylether		ND(0.79)	ND(0.38)	ND(0.46) [ND(0.42)]
4-Chloro-3-Methylphenol		ND(0.79)	ND(0.38)	ND(0.46) [ND(0.42)]
4-Chloroaniline		ND(0.73)	ND(0.38)	ND(0.46) [ND(0.42)]
4-Chlorobenzilate		ND(0.75)	ND(0.38)	ND(0.46) [ND(0.42)]
4-Chlorophenyl-phenylether		ND(0.63)	ND(0.38)	ND(0.46) [ND(0.42)]
4-Methylphenol		ND(1.4)	ND(0.38)	ND(0.46) [ND(0.42)]
4-Nitroaniline		ND(1.2)	ND(0.76)	ND(0.93) [ND(0.85)]
4-Nitrophenol		ND(4.8)	ND(0.38)	ND(0.46) [ND(0.42)]
4-Nitroquinoline-1-oxide		ND(5.1)	NA	NA
4-Phenylenediamine		ND(0.70)	ND(0.38)	ND(0.46) [ND(0.42)]
5-Nitro-o-toluidine		ND(1.1)	ND(0.76)	ND(0.93) [ND(0.85)]
7,12-Dimethylbenz(a)anthracene		ND(0.43)	ND(0.38)	ND(0.46) [ND(0.42)]
a,a'-Dimethylphenethylamine		ND(0.70)	ND(0.38)	ND(0.46) [ND(0.42)]

TABLE 2-4
HISTORICAL SOIL SAMPLING RESULTS FOR NON-PCB APPENDIX IX+3 CONSTITUENTS

RD/RA WORK PLAN ADDENDUM FOR THE FUTURE CITY RECREATIONAL AREA
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results in ppm dry weight)

Sample ID:	210S0-6	P2X170002	P202S
Location ID:	210S	X-17	202S
Sample Depth (Feet):	0-0.5	0-2	0-0.5
Date Collected:	09/17/97	07/08/91	05/17/91
Semi-Volatile Organics (continued)			
Acenaphthene	ND(0.70)	ND(0.38)	ND(0.46) [ND(0.42)]
Acenaphthylene	ND(0.71)	ND(0.38)	0.31 J [0.54]
Acetophenone	ND(0.70)	ND(0.38)	ND(0.46) [0.074 J]
Aniline	ND(0.59)	ND(0.38)	ND(0.46) [0.048 J]
Anthracene	ND(0.78)	ND(0.38)	0.22 J [0.27 J]
Aramite	ND(0.70) B	NA	NA
Benzal chloride	NA	ND(0.38)	ND(0.46) [ND(0.42)]
Benzidine	ND(1.7) B	ND(0.38)	ND(0.46) [ND(0.42)]
Benzo(a)anthracene	0.090 J	ND(0.38)	0.63 [0.96]
Benzo(a)pyrene	0.097 JB	ND(0.38)	ND(0.46) [ND(0.42)]
Benzo(b)fluoranthene	0.12 J	ND(0.38)	0.52 [0.81]
Benzo(g,h,i)perylene	0.057 J	ND(0.38)	0.44 J [0.61]
Benzo(k)fluoranthene	0.062 JB	ND(0.38)	0.72 [1.2]
Benzoic Acid	NA	ND(3.8)	0.51 J [0.18 J]
Benzyl Alcohol	ND(0.58)	ND(0.38)	ND(0.46) [ND(0.42)]
Benzyl Chloride	NA	ND(0.38)	ND(0.46) [ND(0.42)]
bis(2-Chloroethoxy)methane	ND(0.71)	ND(0.38)	ND(0.46) [ND(0.42)]
bis(2-Chloroethyl)ether	ND(0.62)	ND(0.76)	ND(0.93) [ND(0.85)]
bis(2-Chloroisopropyl)ether	ND(0.69)	ND(0.38)	ND(0.46) [ND(0.42)]
bis(2-Ethylhexyl)phthalate	0.18 J	0.088 BJ	0.17 J [2.2]
Butylbenzylphthalate	ND(0.72)	ND(0.38)	ND(0.46) [ND(0.42)]
Chrysene	0.10 JB	ND(0.38)	0.77 [0.96]
Cyclophosphamide	NA	ND(1.8)	ND(2.2) [ND(2.1)]
Diallate	NA	ND(0.38)	ND(0.46) [ND(0.42)]
Diallate (cis isomer)	ND(0.70)	NA	NA
Diallate (trans isomer)	ND(0.70)	NA	NA
Dibenz(a,j)acridine	NA	ND(0.38)	ND(0.46) [ND(0.42)]
Dibenzo(a,h)anthracene	ND(0.45)	ND(0.38)	0.14 J [0.25 J]
Dibenzofuran	ND(0.73)	ND(0.38)	ND(0.46) [ND(0.42)]
Diethylphthalate	ND(0.76)	ND(0.38)	ND(0.46) [ND(0.42)]
Dimethoate	NA	ND(0.38)	ND(0.46) [ND(0.42)]
Dimethylphthalate	ND(1.0)	ND(0.38)	ND(0.46) [ND(0.42)]
Di-n-Butylphthalate	ND(0.81)	ND(0.38)	0.079 J [0.077 J]
Di-n-Octylphthalate	ND(0.51) B	ND(0.38)	ND(0.46) [ND(0.42)]
Diphenylamine	ND(1.5)	ND(0.38)	ND(0.46) [ND(0.42)]
Ethyl Methacrylate	NA	ND(0.38)	ND(0.46) [ND(0.42)]
Ethyl Methanesulfonate	ND(0.63)	ND(0.38)	ND(0.46) [ND(0.42)]
Fluoranthene	0.15 J	ND(0.38)	0.85 [1.0]
Fluorene	ND(0.73)	ND(0.38)	0.13 J [0.16 J]
Hexachlorobenzene	ND(0.81)	ND(0.38)	ND(0.46) [ND(0.42)]
Hexachlorobutadiene	ND(0.59)	ND(0.38)	ND(0.46) [ND(0.42)]
Hexachlorocyclopentadiene	ND(0.70)	ND(0.38)	ND(0.46) [ND(0.42)]
Hexachloroethane	ND(0.63)	ND(0.38)	ND(0.46) [ND(0.42)]
Hexachloropropene	ND(0.60)	ND(0.38)	ND(0.46) [ND(0.42)]
Indeno(1,2,3-cd)pyrene	0.056 J	ND(0.38)	0.35 J [0.48]
Isodrin	ND(0.97)	NA	NA
Isophorone	ND(0.72)	ND(0.38)	ND(0.46) [ND(0.42)]
Isosafrole	ND(1.4)	ND(0.76)	ND(0.93) [ND(0.85)]
Methapyriene	ND(1.4)	ND(0.76)	ND(0.93) [ND(0.85)]
Methyl Methanesulfonate	ND(0.74)	ND(0.38)	ND(0.46) [ND(0.42)]
Naphthalene	ND(0.70)	ND(0.38)	0.17 J [0.18 J]
Nitrobenzene	ND(0.72)	ND(0.38)	ND(0.46) [ND(0.42)]
N-Nitrosodiethylamine	ND(0.63)	ND(0.38)	ND(0.46) [ND(0.42)]
N-Nitrosodimethylamine	ND(0.70)	ND(0.38)	ND(0.46) [ND(0.42)]
N-Nitroso-di-n-butylamine	ND(1.5)	ND(0.38)	ND(0.46) [ND(0.42)]
N-Nitroso-di-n-propylamine	ND(0.64)	ND(0.38)	ND(0.46) [ND(0.42)]
N-Nitrosodiphenylamine	ND(1.5)	ND(0.38)	ND(0.46) [ND(0.42)]
N-Nitrosomethylethylamine	ND(0.57)	ND(0.38)	ND(0.46) [ND(0.42)]

TABLE 2-4
HISTORICAL SOIL SAMPLING RESULTS FOR NON-PCB APPENDIX IX+3 CONSTITUENTS

RD/RA WORK PLAN ADDENDUM FOR THE FUTURE CITY RECREATIONAL AREA
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results in ppm dry weight)

Sample ID:	21050-6	P2X170002	P202S
Location ID:	210S	X-17	202S
Sample Depth (Feet):	0-0.5	0-2	0-0.5
Date Collected:	09/17/97	07/08/91	05/17/91
Semivolatile Organics (continued)			
N-Nitrosomorpholine	ND(0.79)	ND(0.38)	ND(0.46) [ND(0.42)]
N-Nitrosopiperidine	ND(0.78)	ND(0.38)	ND(0.46) [ND(0.42)]
N-Nitrosopyrrolidine	ND(0.56)	ND(0.38)	ND(0.46) [ND(0.42)]
o,o,o-Triethylphosphorothioate	ND(5.6)	NA	NA
o-Toluidine	ND(2.1)	ND(0.38)	ND(0.46) [ND(0.42)]
Paraldehyde	NA	ND(0.38)	ND(0.46) [ND(0.42)]
p-Dimethylaminoazobenzene	ND(0.71)	ND(0.38)	ND(0.46) [ND(0.42)]
Pentachlorobenzene	ND(0.70)	ND(0.38)	ND(0.46) [ND(0.42)]
Pentachloroethane	ND(0.88)	ND(0.38)	ND(0.46) [ND(0.42)]
Pentachloronitrobenzene	ND(0.68)	ND(0.38)	ND(0.46) [ND(0.42)]
Pentachlorophenol	ND(1.5)	ND(0.76)	ND(0.93) [ND(0.85)]
Phenacetin	ND(0.64)	ND(0.38)	ND(0.46) [ND(0.42)]
Phenanthrene	0.068 J	ND(0.38)	0.89 [0.92]
Phenol	ND(0.60)	ND(0.38)	0.069 J [0.066 J]
Pronamide	ND(0.69)	ND(0.38)	ND(0.46) [ND(0.42)]
Pyrene	0.15 J	ND(0.38)	1.1 [1.3]
Pyridine	ND(0.58)	ND(0.38)	ND(0.46) [ND(0.42)]
Safrole	ND(0.61)	ND(0.38)	ND(0.46) [ND(0.42)]
Thionazin	ND(0.71)	ND(0.38)	ND(0.46) [ND(0.42)]
Organochlorine Pesticides			
4,4'-DDD	NA	ND(0.0042)	ND(0.0049) [ND(0.0045)]
4,4'-DDE	NA	ND(0.0042)	ND(0.0049) [ND(0.0045)]
4,4'-DDT	NA	ND(0.0042)	ND(0.0049) [ND(0.0045)]
Aldrin	NA	ND(0.0012)	ND(0.0014) [ND(0.0013)]
Alpha-BHC	NA	ND(0.0012)	ND(0.0014) [ND(0.0013)]
Beta-BHC	NA	ND(0.0012)	ND(0.0014) [ND(0.0013)]
Delta-BHC	NA	ND(0.0012)	ND(0.0014) [ND(0.0013)]
Dieldrin	NA	ND(0.0018)	ND(0.0021) [ND(0.0019)]
Endosulfan I	NA	ND(0.0018)	ND(0.0021) [ND(0.0019)]
Endosulfan II	NA	ND(0.0042)	ND(0.0049) [ND(0.0045)]
Endosulfan Sulfate	NA	ND(0.0024)	ND(0.0028) [ND(0.0026)]
Endrin	NA	ND(0.0030)	ND(0.0035) [ND(0.0032)]
Endrin Aldehyde	NA	ND(0.0012)	ND(0.0014) [ND(0.0013)]
Gamma-BHC (Lindane)	NA	ND(0.0012)	ND(0.0014) [ND(0.0013)]
Heptachlor	NA	ND(0.0012)	ND(0.0014) [ND(0.0013)]
Heptachlor Epoxide	NA	ND(0.0012)	ND(0.0014) [ND(0.0013)]
Kepone	NA	ND(0.0012)	ND(0.0014) [ND(0.0013)]
Methoxychlor	NA	ND(0.0042)	ND(0.0049) [ND(0.0045)]
Technical Chlordane	NA	ND(0.0048)	ND(0.0056) [ND(0.0051)]
Toxaphene	NA	ND(0.024)	ND(0.028) [ND(0.026)]
Organophosphate Pesticides			
Dimethoate	NA	ND(0.012)	ND(0.014) [ND(0.013)]
Disulfoton	NA	ND(0.012)	ND(0.014) [ND(0.013)]
Ethyl Parathion	NA	ND(0.012)	ND(0.014) [ND(0.013)]
Methyl Parathion	NA	ND(0.012)	ND(0.014) [ND(0.013)]
Phorate	NA	ND(0.012)	ND(0.014) [ND(0.013)]
Sulfotep	NA	ND(0.012)	ND(0.014) [ND(0.013)]
Herbicides			
2,4,5-T	NA	ND(0.030)	ND(0.035) [ND(0.032)]
2,4,5-TP	NA	ND(0.030)	ND(0.035) [ND(0.032)]
2,4-D	NA	ND(0.12)	ND(0.14) [ND(0.13)]

TABLE 2-4
HISTORICAL SOIL SAMPLING RESULTS FOR NON-PCB APPENDIX IX+3 CONSTITUENTS

RD/RA WORK PLAN ADDENDUM FOR THE FUTURE CITY RECREATIONAL AREA
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results in ppm dry weight)

Parameter	Sample ID: Location ID: Sample Depth (Feet): Date Collected:	210S0-6 210S 0-0.5 09/17/97	P2X170002 X-17 0-2 07/08/91	P202S 202S 0-0.5 05/17/91
Furans				
2,3,7,8-TCDF		0.000015 Y	ND(0.000019)	0.00042 [ND(0.00010)]
TCDFs (total)		0.00015	ND(0.000047)	0.00098 [ND(0.00010)]
1,2,3,7,8-PeCDF		0.0000070	NA	NA
2,3,4,7,8-PeCDF		0.000018	NA	NA
PeCDFs (total)		0.00089	ND(0.000047)	0.00088 [ND(0.00019)]
1,2,3,4,7,8-HxCDF		0.000049	NA	NA
1,2,3,6,7,8-HxCDF		ND(0.000042) v	NA	NA
1,2,3,7,8,9-HxCDF		ND(0.00000033)	NA	NA
2,3,4,6,7,8-HxCDF		0.000056	NA	NA
HxCDFs (total)		0.0015	ND(0.000069)	0.00097 [0.00040]
1,2,3,4,6,7,8-HpCDF		0.00020	NA	NA
1,2,3,4,7,8,9-HpCDF		0.000032	NA	NA
HpCDFs (total)		0.00052	ND(0.000071)	0.00096 [0.00052]
OCDF		0.000084	ND(0.00015)	0.00032 [ND(0.00028)]
Dioxins				
2,3,7,8-TCDD		0.0000090 J	ND(0.000041)	ND(0.000053) [ND(0.000098)]
TCDDs (total)		0.000012	ND(0.000057)	ND(0.000053) [ND(0.000098)]
1,2,3,7,8-PeCDD		0.0000087	NA	NA
PeCDDs (total)		0.000029	ND(0.000060)	ND(0.00014) [ND(0.00029)]
1,2,3,4,7,8-HxCDD		0.000012	NA	NA
1,2,3,6,7,8-HxCDD		0.000014	NA	NA
1,2,3,7,8,9-HxCDD		0.000014	NA	NA
HxCDDs (total)		0.00018	ND(0.000089)	ND(0.00016) [ND(0.00028)]
1,2,3,4,6,7,8-HpCDD		0.000081	NA	NA
HpCDDs (total)		0.00017	ND(0.00012)	0.00011 [ND(0.00038)]
OCDD		0.00033	ND(0.00016)	0.00098 [0.00066]
Total TEQs (WHO TEFs)		0.000040	NC	NC
Inorganics				
Aluminum		NA	13400	9210 [ND(6220)]
Antimony		ND(0.600) N	ND(3.90) N	ND(3.00) N [ND(2.70) N]
Arsenic		7.30	11.9 N	ND(0.840) WN [4.60 N]
Barium		134	26.4	48.6 [51.1]
Beryllium		0.260 BN	0.220 BN	0.320 BN [0.210 BN]
Cadmium		0.780 BN	ND(0.480)	ND(0.550) [ND(0.500)]
Calcium		NA	1400 EN	10500 [7310]
Chromium		17.9	13.0	22.2 [13.7]
Cobalt		NA	13.7	10.2 [6.50]
Copper		38.2 E	35.0 N	30.4 [22.7]
Cyanide		ND(0.520)	ND(0.600)	1.10 [1.10]
Iron		NA	28200 E	19700 [15700]
Lead		33.8 N	38.9 A	65.2 [45.0]
Magnesium		NA	4950 N	9050 [5710]
Manganese		NA	915	445 [925]
Mercury		ND(0.0500)	ND(0.120) N	0.200 [0.220]
Nickel		26.9	23.1	18.1 [11.8]
Potassium		NA	335 BN	800 [547 BN]
Selenium		1.30	ND(2.40) WN	ND(0.420) WN [ND(0.380) WN]
Silver		ND(0.160)	ND(0.600) N	ND(0.690) N [ND(0.620) N]
Sodium		NA	96.1 B	145 B [152 B]
Sulfide		NA	96.1 BN	145 BN [152 BN]
Thallium		17.0	ND(12.0)	NA
Tin		ND(1.00)	ND(0.240) N	ND(0.420) W [ND(0.380)]
Vanadium		15.9	12.4	18.2 [13.2]
Zinc		97.2	74.3 E	88.6 E [62.6 E]

TABLE 2-4
HISTORICAL SOIL SAMPLING RESULTS FOR NON-PCB APPENDIX IX+3 CONSTITUENTS

RD/RA WORK PLAN ADDENDUM FOR THE FUTURE CITY RECREATIONAL AREA
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in dry weight parts per million, ppm)

Notes:

1. Samples were collected and analyzed by General Electric Company subcontractors for Appendix IX + 3 constituents.
2. ND - Analyte was not detected. The number in parentheses is the associated detection limit.
3. NA - Not Analyzed - Laboratory did not report results for this analyte.
4. NC - Not Calculated. Insufficient data to calculate TEQs.
5. Total 2,3,7,8-TCDD toxicity equivalents (TEQs) were calculated using Toxicity Equivalency Factors (TEFs) derived by the World Health Organization (WHO) and published by Van den Berg et al. In Environmental Health Perspectives 8.106(2), December 1998.
6. Field duplicate sample results are presented in brackets.

Data Qualifiers:

Organics

- B - Analyte was also detected in the associated method blank.
- D - Compound quantitated using a secondary dilution.
- J - Indicates an estimated value less than the practical quantitation limit (PQL).
- v - Indicates an elevated detection limit due to chemical interference.
- Y - 2,3,7,8-TCDF results have been confirmed on a DB-225 column.

Inorganics

- A - Results produced from single point method of standard addition calculation employing the analytical responses of both spiked and unspiked samples.
- B - Indicates an estimated value between the instrument detection limit (IDL) and practical quantitation limit (PQL).
- E - Serial dilution results not within 10%. Applicable only if analyte concentration is at least 50X the IDL in original sample.
- N - Indicates sample matrix spike analysis was outside control limits.
- W - GFAA Analytical spike recovery outside of range of 85% to 115% in a sample which exhibits a low concentration of analyte. Unspiked response must be < 50% of spiked sample response.

TABLE 2-5
 FCRA: SUPPLEMENTAL SOIL SAMPLING RESULTS FOR NON-PCB APPENDIX IX+3 CONSTITUENTS

RD/RA WORK PLAN ADDENDUM FOR THE FUTURE CITY RECREATIONAL AREA
 GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
 (Results in ppm dry weight)

Sample ID: Sample Depth (Feet): Parameter Date Collected:	CRA-7 0-2 01/03/02	CRA-14 0-2 01/03/02	CRA-18 0-2 01/03/02	210S 0-0.5 01/03/02
Volatile Organics				
1,2,3-Trichloropropane	ND(0.0063)	ND(0.0056)	ND(0.0054)	ND(0.0060)
1,2-Dibromoethane	ND(0.0063)	NA	NA	ND(0.0060)
Acrolein	ND(0.13) J	NA	NA	ND(0.12) J
trans-1,4-Dichloro-2-butene	ND(0.0063)	NA	NA	ND(0.0060)
Semivolatile Organics				
1,2-Diphenylhydrazine	ND(0.42)	ND(0.37)	NA	NA
1,3-Dinitrobenzene	ND(0.85)	ND(0.75)	NA	NA
2-Nitroaniline	ND(2.2)	ND(1.9)	NA	NA
3,3'-Dichlorobenzidine	ND(0.85)	ND(0.75)	ND(0.72)	ND(0.80)
3,3'-Dimethylbenzidine	ND(0.42)	ND(0.37)	ND(0.36)	ND(0.40)
3-Nitroaniline	ND(2.2)	ND(1.9)	NA	NA
4-Chlorobenzilate	ND(0.85)	ND(0.75)	NA	NA
4-Nitroaniline	ND(0.85)	ND(0.75)	NA	NA
7,12-Dimethylbenz(a)anthracene	ND(0.85)	ND(0.75)	ND(0.72)	ND(0.80)
Acetophenone	ND(0.42)	0.16 J	NA	NA
Benzidine	ND(0.85) J	ND(0.75) J	ND(0.72) J	ND(0.80) J
bis(2-Chloroethyl)ether	ND(0.42)	ND(0.37)	ND(0.36)	ND(0.40)
Hexachlorobenzene	ND(0.42)	ND(0.37)	NA	ND(0.40)
N-Nitrosodiethylamine	ND(0.42)	ND(0.37)	ND(0.36)	ND(0.40)
N-Nitrosodimethylamine	ND(0.42)	ND(0.37)	ND(0.36)	ND(0.40)
N-Nitroso-di-n-butylamine	ND(0.85)	ND(0.75)	ND(0.72)	ND(0.80)
N-Nitroso-di-n-propylamine	ND(0.42)	ND(0.37)	ND(0.36)	ND(0.40)
N-Nitrosomethylethylamine	ND(0.85)	ND(0.75)	ND(0.72)	ND(0.80)
N-Nitrosopyrrolidine	ND(0.85)	ND(0.75)	ND(0.72)	ND(0.80)
o-Toluidine	ND(0.42)	ND(0.37)	NA	NA
Pentachloronitrobenzene	ND(0.85)	ND(0.75)	NA	NA
Pentachlorophenol	ND(2.2)	ND(1.9)	NA	NA

Notes:

1. Samples were collected by Blasland, Bouck & Lee, Inc., and were submitted to CT&E Environmental Services, Inc. for analysis of select volatile and semivolatile constituents.
2. Samples have been validated as per Field Sampling Plan/Quality Assurance Project Plan, General Electric Company, Pittsfield, Massachusetts, Blasland Bouck & Lee, Inc. (approved November 4, 2002 and resubmitted December 10, 2002).
3. ND - Analyte was not detected. The number in parentheses is the associated detection limit.
4. NA - Not Analyzed - Laboratory did not report results for this analyte.

Data Qualifiers:

Organics

J - Indicates that the associated numerical value is an estimated concentration.

**TABLE 2-6
ACCESS ROAD AREA: PRE-DESIGN AND SUPPLEMENTAL SOIL SAMPLING RESULTS FOR PCBS**

**RD/RA WORK PLAN ADDENDUM FOR THE FUTURE CITY RECREATIONAL AREA
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in dry weight parts per million, ppm)**

Sample ID	Depth (Feet)	Date Collected	Aroclor-1016, -1221, -1232, -1242	Aroclor-1242	Aroclor-1248	Aroclor-1254	Aroclor-1260	Total PCBs
RAA4-14	0-1	01/30/01	ND(0.044)	0.14	ND(0.044)	0.66	0.90	1.7
	1-3	01/03/02	ND(0.041) [ND(0.041)]	ND(0.041) [ND(0.041)]	ND(0.041) [ND(0.041)]	ND(0.041) [ND(0.041)]	ND(0.041) [0.022 J]	ND(0.041) [0.022 J]
RAA4-15	0-1	01/30/01	ND(0.046)	ND(0.046)	ND(0.046)	0.34	0.50	0.84
	1-3	01/02/02	ND(0.036)	ND(0.036)	ND(0.036)	0.035 J	0.041	0.076
RAA4-21	0-1	01/29/01	ND(0.039)	ND(0.039)	ND(0.039)	ND(0.039)	ND(0.039)	ND(0.039)
	1-3	01/03/02	ND(0.036)	ND(0.036)	ND(0.036)	ND(0.036)	ND(0.036)	ND(0.036)
RAA4-22	0-1	01/31/01	ND(0.056)	ND(0.056)	ND(0.056)	0.24	0.46	0.70
	1-3	01/03/02	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)
RAA4-23	0-1	01/02/02	ND(0.79)	ND(0.79)	ND(0.79)	18	20	38
	1-3	01/02/02	ND(0.034)	ND(0.034)	ND(0.034)	0.028 J	0.030 J	0.058 J
RAA4-24	0-1	01/02/02	ND(0.041)	ND(0.041)	0.080	0.22	0.15	0.45
	1-3	01/02/02	ND(0.035)	ND(0.035)	ND(0.035)	ND(0.035)	ND(0.035)	ND(0.035)
RAA4-25	0-1	01/02/02	ND(0.036)	ND(0.036)	ND(0.036)	ND(0.036)	0.97	0.97
	1-3	01/02/02	ND(0.035) [ND(0.035)]	ND(0.035) [ND(0.035)]	ND(0.035) [ND(0.035)]	ND(0.035) [0.022 J]	0.026 J [0.023 J]	0.026 J [0.045 J]
RAA4-26	0-1	01/02/02	ND(0.037)	ND(0.037)	ND(0.037)	ND(0.037)	0.38	0.38
	1-3	01/02/02	ND(0.035)	ND(0.035)	ND(0.035)	ND(0.035)	0.074	0.074
RAA4-E42	0-1	01/03/02	ND(0.036)	ND(0.036)	ND(0.036)	0.22	ND(0.40)	0.22
	1-3	01/03/02	ND(0.035)	ND(0.035)	ND(0.035)	ND(0.035)	ND(0.035)	ND(0.035)

Notes:

1. Samples were collected by Blasland, Bouck & Lee, Inc., and were submitted to CT&E Environmental Services, Inc. for analysis of PCBs.
2. Only data used in RD/RA evaluations related to the access road area are provided in this table.
3. Samples have been validated as per Field Sampling Plan/Quality Assurance Project Plan, General Electric Company, Pittsfield, Massachusetts, Blasland Bouck & Lee, Inc. (approved November 4, 2002 and resubmitted December 10, 2002).
4. ND - Analyte was not detected. The number in parentheses is the associated detection limit.
5. Field duplicate sample results are presented in brackets.

Data Qualifiers:

J - Indicates that the associated numerical value is an estimated concentration.

TABLE 2-7
ACCESS ROAD AREA: SOIL SAMPLING RESULTS FOR NON-PCB APPENDIX IX+3 CONSTITUENTS

RD/RA WORK PLAN ADDENDUM FOR THE FUTURE CITY RECREATIONAL AREA
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in dry weight parts per million, ppm)

Sample ID: Sample Depth (Feet): Parameter Date Collected:	RAA4-15 0-1 01/30/01	RAA4-22 1-6 01/31/01	RAA4-25 0-1 01/02/02	RAA4-25 1-3 01/02/02	RAA4-26 1-3 01/02/02	RAA4-E42 0-1 01/03/02
Volatile Organics						
1,1,1,2-Tetrachloroethane	ND(0.0069)	NA	ND(0.0054)	ND(0.0053) [ND(0.0053)]	ND(0.0053)	ND(0.0054)
1,1,1-Trichloroethane	ND(0.0069)	NA	ND(0.0054)	ND(0.0053) [ND(0.0053)]	ND(0.0053)	ND(0.0054)
1,1,2,2-Tetrachloroethane	ND(0.0069)	NA	ND(0.0054)	ND(0.0053) [ND(0.0053)]	ND(0.0053)	ND(0.0054)
1,1,2-Trichloroethane	ND(0.0069)	NA	ND(0.0054)	ND(0.0053) [ND(0.0053)]	ND(0.0053)	ND(0.0054)
1,1-Dichloroethane	ND(0.0069)	NA	ND(0.0054)	ND(0.0053) [ND(0.0053)]	ND(0.0053)	ND(0.0054)
1,1-Dichloroethane	ND(0.0069)	NA	ND(0.0054)	ND(0.0053) [ND(0.0053)]	ND(0.0053)	ND(0.0054)
1,2,3-Trichloropropane	ND(0.0069)	NA	ND(0.0054)	ND(0.0053) [ND(0.0053)]	ND(0.0053)	ND(0.0054)
1,2-Dibromo-3-chloropropane	ND(0.0069)	NA	ND(0.0054)	ND(0.0053) [ND(0.0053)]	ND(0.0053)	ND(0.0054)
1,2-Dibromoethane	ND(0.0069)	NA	ND(0.0054)	ND(0.0053) [ND(0.0053)]	ND(0.0053)	ND(0.0054)
1,2-Dichloroethane	ND(0.0069)	NA	ND(0.0054)	ND(0.0053) [ND(0.0053)]	ND(0.0053)	ND(0.0054)
1,2-Dichloropropane	ND(0.0069)	NA	ND(0.0054)	ND(0.0053) [ND(0.0053)]	ND(0.0053)	ND(0.0054)
1,4-Dioxane	ND(0.20) J	NA	ND(0.11) J	ND(0.10) J [ND(0.11) J]	ND(0.11) J	ND(0.11) J
2-Butanone	ND(0.10)	NA	ND(0.011)	ND(0.010) [ND(0.011)]	ND(0.011)	ND(0.011)
2-Chloro-1,3-butadiene	ND(0.0069)	NA	ND(0.0054)	ND(0.0053) [ND(0.0053)]	ND(0.0053)	ND(0.0054)
2-Chloroethylvinylether	ND(0.0069)	NA	ND(0.0054)	ND(0.0053) [ND(0.0053)]	ND(0.0053)	ND(0.0054)
2-Hexanone	ND(0.014)	NA	ND(0.011)	ND(0.010) [ND(0.011)]	ND(0.011)	ND(0.011)
3-Chloropropene	ND(0.014)	NA	ND(0.0054)	ND(0.0053) [ND(0.0053)]	ND(0.0053)	ND(0.0054)
4-Methyl-2-pentanone	ND(0.014)	NA	ND(0.011)	ND(0.010) [ND(0.011)]	ND(0.011)	ND(0.011)
Acetone	ND(0.10)	NA	ND(0.022)	ND(0.021) [ND(0.021)]	ND(0.021)	ND(0.022)
Acetonitrile	ND(0.14) J	NA	ND(0.11) J	ND(0.10) J [ND(0.11) J]	ND(0.11) J	ND(0.11) J
Acrolein	ND(0.14) J	NA	ND(0.11) J	ND(0.10) J [ND(0.11) J]	ND(0.11) J	ND(0.11) J
Acrylonitrile	ND(0.014)	NA	ND(0.0054)	ND(0.0053) [ND(0.0053)]	ND(0.0053)	ND(0.0054)
Benzene	ND(0.0069)	NA	ND(0.0054)	ND(0.0053) [ND(0.0053)]	ND(0.0053)	ND(0.0054)
Bromodichloromethane	ND(0.0069)	NA	ND(0.0054)	ND(0.0053) [ND(0.0053)]	ND(0.0053)	ND(0.0054)
Bromoform	ND(0.0069)	NA	ND(0.0054)	ND(0.0053) [ND(0.0053)]	ND(0.0053)	ND(0.0054)
Bromomethane	ND(0.014)	NA	ND(0.0054)	ND(0.0053) [ND(0.0053)]	ND(0.0053)	ND(0.0054)
Carbon Disulfide	ND(0.010)	NA	ND(0.0054)	ND(0.0053) [ND(0.0053)]	ND(0.0053)	ND(0.0054)
Carbon Tetrachloride	ND(0.0069)	NA	ND(0.0054)	ND(0.0053) [ND(0.0053)]	ND(0.0053)	ND(0.0054)
Chlorobenzene	ND(0.0069)	NA	ND(0.0054)	ND(0.0053) [ND(0.0053)]	ND(0.0053)	ND(0.0054)
Chloroethane	ND(0.014)	NA	ND(0.0054)	ND(0.0053) [ND(0.0053)]	ND(0.0053)	ND(0.0054) J
Chloroform	ND(0.0069)	NA	ND(0.0054)	ND(0.0053) [ND(0.0053)]	ND(0.0053)	ND(0.0054)
Chloromethane	ND(0.014)	NA	ND(0.0054)	ND(0.0053) [ND(0.0053)]	ND(0.0053)	ND(0.0054)
cis-1,3-Dichloropropene	ND(0.0069)	NA	ND(0.0054)	ND(0.0053) [ND(0.0053)]	ND(0.0053)	ND(0.0054)
Dibromochloromethane	ND(0.0069)	NA	ND(0.0054)	ND(0.0053) [ND(0.0053)]	ND(0.0053)	ND(0.0054)
Dibromomethane	ND(0.0069)	NA	ND(0.0054)	ND(0.0053) [ND(0.0053)]	ND(0.0053)	ND(0.0054)
Dichlorodifluoromethane	ND(0.014)	NA	ND(0.0054)	ND(0.0053) [ND(0.0053)]	ND(0.0053)	ND(0.0054)
Ethyl Methacrylate	ND(0.014)	NA	ND(0.0054)	ND(0.0053) [ND(0.0053)]	ND(0.0053)	ND(0.0054)
Ethylbenzene	ND(0.0069)	NA	ND(0.0054)	ND(0.0053) [ND(0.0053)]	ND(0.0053)	ND(0.0054)
Iodomethane	ND(0.0069)	NA	ND(0.0054)	ND(0.0053) [ND(0.0053)]	ND(0.0053)	ND(0.0054)
Isobutanol	ND(0.28) J	NA	ND(0.11) J	ND(0.10) J [ND(0.11) J]	ND(0.11) J	ND(0.11) J
Methacrylonitrile	ND(0.014)	NA	ND(0.0054)	ND(0.0053) [ND(0.0053)]	ND(0.0053)	ND(0.0054)
Methyl Methacrylate	ND(0.014)	NA	ND(0.0054)	ND(0.0053) [ND(0.0053)]	ND(0.0053)	ND(0.0054)
Methylene Chloride	ND(0.0069)	NA	ND(0.0054)	ND(0.0053) [ND(0.0053)]	ND(0.0053)	ND(0.0054)
Propionitrile	ND(0.069) J	NA	ND(0.011) J	ND(0.010) J [ND(0.011) J]	ND(0.011) J	ND(0.011) J
Styrene	ND(0.0069)	NA	ND(0.0054)	ND(0.0053) [ND(0.0053)]	ND(0.0053)	ND(0.0054)
Tetrachloroethene	ND(0.0069)	NA	ND(0.0054)	ND(0.0053) [ND(0.0053)]	ND(0.0053)	ND(0.0054)
Toluene	ND(0.0069)	NA	ND(0.0054)	ND(0.0053) [ND(0.0053)]	ND(0.0053)	ND(0.0054)
trans-1,2-Dichloroethene	ND(0.0069)	NA	ND(0.0054)	ND(0.0053) [ND(0.0053)]	ND(0.0053)	ND(0.0054)
trans-1,3-Dichloropropene	ND(0.0069)	NA	ND(0.0054)	ND(0.0053) [ND(0.0053)]	ND(0.0053)	ND(0.0054)
trans-1,4-Dichloro-2-butene	ND(0.014)	NA	ND(0.0054)	ND(0.0053) [ND(0.0053)]	ND(0.0053)	ND(0.0054)
Trichloroethene	ND(0.0069)	NA	ND(0.0054)	ND(0.0053) [ND(0.0053)]	ND(0.0053)	ND(0.0054)
Trichlorofluoromethane	ND(0.0069) J	NA	ND(0.0054) J	ND(0.0053) J [ND(0.0053) J]	ND(0.0053) J	ND(0.0054)
Vinyl Acetate	ND(0.014)	NA	ND(0.0054)	ND(0.0053) [ND(0.0053)]	ND(0.0053)	ND(0.0054) J
Vinyl Chloride	ND(0.014)	NA	ND(0.0054)	ND(0.0053) [ND(0.0053)]	ND(0.0053)	ND(0.0054)
Xylenes (total)	ND(0.014)	NA	ND(0.0054)	ND(0.0053) [ND(0.0053)]	ND(0.0053)	ND(0.0054)

TABLE 2-7
ACCESS ROAD AREA: SOIL SAMPLING RESULTS FOR NON-PCB APPENDIX IX+3 CONSTITUENTS

RD/RA WORK PLAN ADDENDUM FOR THE FUTURE CITY RECREATIONAL AREA
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in dry weight parts per million, ppm)

Sample ID: Sample Depth (Feet): Parameter Date Collected:	RAA4-15 0-1 01/30/01	RAA4-22 1-6 01/31/01	RAA4-25 0-1 01/02/02	RAA4-25 1-3 01/02/02	RAA4-26 1-3 01/02/02	RAA4-E42 0-1 01/03/02
Furans						
2,3,7,8-TCDF	0.00013	ND(0.000014)	0.000013	0.0000014 [0.0000022]	0.0000026	0.000017
TCDFs (total)	0.0010	ND(0.000014)	0.000089	0.000011 [0.000018]	0.000015	0.00014
1,2,3,7,8-PeCDF	0.000031	ND(0.000020)	0.0000067	0.0000052 J [0.0000080 J]	0.000014 J	0.000083
2,3,4,7,8-PeCDF	0.000049	ND(0.000020)	0.000019	0.0000019 J [0.0000028]	0.0000028	0.000029
PeCDFs (total)	0.00055 Q	ND(0.000020)	0.000020	0.000016 [0.000024]	0.000028	0.00030
1,2,3,4,7,8-HxCDF	0.000022	ND(0.000062)	0.0000071	0.0000095 J [0.000011 J]	0.000015 J	0.000089
1,2,3,6,7,8-HxCDF	0.000016	ND(0.000058)	0.0000060	0.0000074 J [0.0000080 J]	0.000012 J	0.000082
1,2,3,7,8,9-HxCDF	0.000038	ND(0.000068)	0.0000020 J	ND(0.0000038) [0.0000039 J]	ND(0.0000022) Q	ND(0.0000024)
2,3,4,6,7,8-HxCDF	0.000026	ND(0.000063)	0.000012	0.0000014 J [0.0000017 J]	0.0000021 J	0.000016
HxCDFs (total)	0.00035	ND(0.00052)	0.000014	0.000015 [0.000021]	0.000024 Q	0.00022
1,2,3,4,6,7,8-HpCDF	0.000042	ND(0.000040)	0.000014	0.0000017 J [0.0000022]	0.0000039	0.000025
1,2,3,4,7,8,9-HpCDF	0.000050	ND(0.000048)	0.0000017 J	0.0000022 J [0.0000032 J]	0.0000045 J	0.000019 J
HpCDFs (total)	0.000091	ND(0.000044)	0.000033	0.0000019 [0.0000050]	0.0000043	0.000058
OCDF	0.000032	ND(0.000038)	0.0000066	0.0000012 J [0.0000013 J]	0.0000017 J	0.000022
Dioxins						
2,3,7,8-TCDD	0.000011	ND(0.000020)	ND(0.00000010) X	ND(0.00000046) X [ND(0.00000044) X]	ND(0.00000044) X	ND(0.00000045) X
TCDDs (total)	0.000023	ND(0.000020)	0.0000015	0.0000017 [0.0000062]	0.0000011	0.0000032
1,2,3,7,8-PeCDD	0.0000018 J	ND(0.000021)	ND(0.00000024) X	ND(0.00000022) X [ND(0.00000022) X]	ND(0.00000022) X	ND(0.00000023) X
PeCDDs (total)	0.000026 Q	ND(0.000021)	0.0000016	0.0000018 [0.0000063]	0.0000012	0.0000048
1,2,3,4,7,8-HxCDD	0.0000086 J	ND(0.000084)	ND(0.00000026) X	ND(0.00000022) [ND(0.00000030)]	ND(0.00000022)	0.0000054 J
1,2,3,6,7,8-HxCDD	0.0000018 J	ND(0.000083)	0.00000086 J	ND(0.00000022) [0.00000050 J]	0.00000034 J	0.0000016 J
1,2,3,7,8,9-HxCDD	0.0000011 J	ND(0.000076)	ND(0.00000024) X	ND(0.00000022) X [0.00000032 J]	ND(0.00000022) Q	0.0000011 J
HxCDDs (total)	0.000020	ND(0.000081)	0.0000069	0.0000033 [0.0000062]	0.0000028 Q	0.000016
1,2,3,4,6,7,8-HpCDD	0.000017	ND(0.000080)	0.000011	0.0000024 [0.0000016 J]	0.0000022 J	0.000022
HpCDDs (total)	0.000036	ND(0.000080)	0.000024	0.0000051 [0.0000030]	0.0000047	0.000043
OCDD	0.000094	ND(0.000040)	0.000072	ND(0.000014) [ND(0.0000081)]	ND(0.000016)	0.00017
Total TEQs (WHO TEFs)	0.000050	0.00015	0.000014	0.0000017 [0.0000023]	0.0000025	0.000021
Inorganics						
Antimony	ND(12.0)	ND(12.0)	ND(6.00)	ND(6.00) [ND(6.00)]	ND(6.00)	ND(6.00)
Arsenic	ND(15.0)	ND(20.0)	4.20	5.20 [4.10]	4.00	2.90
Barium	38.0	ND(40.0)	23.0	21.0 [ND(20.0)]	22.0	ND(20.0)
Beryllium	0.340	0.310	0.130 B	0.150 B [0.150 B]	ND(0.500)	0.0980 B
Cadmium	ND(2.10)	ND(2.00)	0.130 B	ND(0.500) [ND(0.500)]	ND(0.500)	ND(0.500)
Chromium	16.0	13.0	6.80	5.60 [4.70]	5.20	6.20
Cobalt	14.0	16.0	7.10	8.60 [6.20]	5.50	ND(5.00)
Copper	41.0	32.0	22.0	19.0 [18.0]	12.0	58.0
Cyanide	ND(1.00)	ND(1.00)	0.130	ND(0.210) [ND(0.110)]	ND(0.210)	ND(0.220)
Lead	46.0	21.0	21.0	25.0 [22.0]	6.80	22.0
Mercury	ND(0.280)	ND(0.270)	0.0120 B	0.0220 B [0.0320 B]	0.00530 B	0.0580 B
Nickel	25.0	27.0	13.0	14.0 [10.0]	9.40	9.50
Selenium	ND(1.00) J	ND(1.00) J	ND(1.00)	ND(1.00) [ND(1.00)]	ND(1.00)	ND(1.00)
Silver	ND(1.00)	ND(1.00)	ND(1.00)	ND(1.00) [ND(1.00)]	ND(1.00)	ND(1.00)
Sulfide	ND(6.90)	ND(6.80)	ND(8.70)	ND(5.30) [ND(25.0)]	ND(14.0)	8.60
Thallium	ND(2.10)	ND(2.00)	ND(1.60)	ND(1.60) [ND(1.60)]	ND(1.60)	ND(1.60)
Tin	ND(62.0)	ND(61.0)	ND(10.0)	4.50 B [ND(10.0)]	3.50 B	ND(10.0)
Vanadium	14.0	11.0	8.00	ND(5.00) [ND(5.00)]	ND(5.00)	6.10
Zinc	95.0	75.0	38.0	32.0 [26.0]	27.0	35.0

TABLE 2-7
ACCESS ROAD AREA: SOIL SAMPLING RESULTS FOR NON-PCB APPENDIX IX+3 CONSTITUENTS

RD/RA WORK PLAN ADDENDUM FOR THE FUTURE CITY RECREATIONAL AREA
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in dry weight parts per million, ppm)

Notes:

1. Samples were collected by Biasland, Bouck & Lee, Inc., and were submitted to CT&E Environmental Services, Inc. for analysis of non-PCB Appendix IX+3 constituents (excluding herbicides and pesticides).
2. Samples have been validated as per Field Sampling Plan/Quality Assurance Project Plan, General Electric Company, Pittsfield, Massachusetts, Biasland Bouck & Lee, Inc. (approved November 4, 2002 and resubmitted December 10, 2002).
3. ND - Analyte was not detected. The value in parentheses is the associated detection limit.
4. NA - Not Analyzed - Laboratory did not report results for this analyte.
5. Total 2,3,7,8-TCDD toxicity equivalents (TEQs) were calculated using Toxicity Equivalency Factors (TEFs) derived by the World Health Organization (WHO) and published by Van den Berg et al. in Environmental Health Perspectives 8.106(2), December 1998.
6. Field duplicate sample results are presented in brackets.

Data Qualifiers:

Organics

- J - Indicates that the associated numerical value is an estimated concentration.
- X - Estimated Maximum Possible Concentration.
- Q - Indicates the presence of quantitative interferences.

Inorganics

- J - Indicates that the associated numerical value is an estimated concentration.
- B - Indicates an estimated value between the instrument detection limit (IDL) and practical quantitation limit (PQL).

TABLE 4-1
FCRA: COMPARISON OF DETECTED NON-PCB
APPENDIX IX+3 CONSTITUENTS TO RESIDENTIAL SCREENING PRGs

RD/RA WORK PLAN ADDENDUM FOR THE FUTURE CITY RECREATIONAL AREA
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results in ppm, dry-weight)

Non-PCB Appendix IX+3 Constituent (See Note 2)	Maximum Detect	USEPA Region 9 Residential PRGs (See Note 3)	Constituent Retained for Further Evaluation? (See Note 4)
Volatile Organics			
2-Butanone	0.003	6,900	No
Acetone	0.024	1,400	No
Methylene Chloride	0.072	8.5	No
Xylenes (total)	0.001	210	No
Semi-Volatile Organics			
1-Methylnaphthalene	0.16	55	No
2-Methylnaphthalene	0.077	55	No
3-Methylcholanthrene	0.64	55	No
Acenaphthene	0.63	2,600	No
Acenaphthylene	0.54	55	No
Acetophenone	0.16	0.49	No
Aniline	0.048	78	No
Anthracene	1.7	14,000	No
Benzo(a)anthracene	3.0	0.56	Yes
Benzo(a)pyrene	2.8	0.056	Yes
Benzo(b)fluoranthene	2.1	0.56	Yes
Benzo(g,h,i)perylene	1.9	55	No
Benzo(k)fluoranthene	1.9	5.6	No
Benzoic Acid	0.51	100000	No
bis(2-Ethylhexyl)phthalate	2.2	32	No
Chrysene	2.7	56	No
Dibenzo(a,h)anthracene	0.25	0.056	Yes
Dibenzofuran	0.14	210	No
Di-n-Butylphthalate	0.079	5,500	No
Fluoranthene	7.0	2,000	No
Fluorene	0.84	1,800	No
Indeno(1,2,3-cd)pyrene	2.1	0.56	Yes
Naphthalene	0.83	55	No
Phenanthrene	7.5	55	No
Phenol	0.069	33000	No
Pyrene	6.2	1,500	No
Inorganics			
Arsenic	16	0.38	Yes
Barium	134	5,200	No
Beryllium	0.35	150	No
Cadmium	0.78	37	No
Chromium	29	210	No
Cobalt	26	3,300	No
Copper	110	2,800	No
Cyanide	4.8	11,000	No
Lead	65.2	400	No
Mercury	0.22	22	No
Nickel	35	1,500	No
Selenium	1.3	370	No
Sulfide	152	350 (5)	No
Vanadium	23	520	No
Zinc	170	22,000	No

Notes:

1. PRG = Preliminary Remediation Goal.
2. Per Attachment F to *Statement of Work for Removal Actions Outside the River (SOW)*, comparison to PRGs is required for all detected Appendix IX+3 constituents except PCBs.
3. Screening PRGs include EPA Region 9 Residential PRGs or, for certain constituents, surrogate PRGs based on the following: Attachment F, #3b of the SOW (certain PAHs); or Condition 6 of EPA's April 18, 2002 comment letter (sulfide).
4. Constituent is retained for further evaluation if its maximum detected concentration exceeds its corresponding PRG.

TABLE 4-2
 FCRA: COMPARISON OF SELECT NON-PCB APPENDIX IX+3
 CONSTITUENT AVERAGE CONCENTRATIONS TO MCP METHOD 1 STANDARDS

RD/RA WORK PLAN ADDENDUM FOR THE FUTURE CITY RECREATIONAL AREA
 GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
 (Results in ppm, dry-weight)

Non-PCB Appendix IX+3 Constituent	Sample Detection Frequency	Arithmetic Average Concentration (see Note 2)	MCP Method 1 S-1 Soil Standard (see Note 3)	Average Exceeds Method 1 Standard? (see Note 4)
Semi-Volatile Organics				
Benzo(a)anthracene	6/12	0.53	0.7	No
Benzo(a)pyrene	5/12	0.47	0.7	No
Benzo(b)fluoranthene	6/12	0.47	0.7	No
Dibenzo(a,h)anthracene	1/12	0.54	0.7	No
Indeno(1,2,3-cd)pyrene	5/12	0.59	0.7	No
Inorganics				
Arsenic	4/11	9.25	30	No

Notes:

1. Constituents retained for evaluation have a maximum sample result that exceeds their respective EPA Region 9 Residential PRGs or surrogate PRGs.
2. Non-detect sample results included as one-half the detection limit in the calculation of arithmetic average concentrations.
3. The Method 1 soil standards listed are those associated with GW-2 or GW-3 groundwater (whichever is more stringent).
4. Arithmetic average concentrations of all constituents identified above are compared to Method 1 Soil Standards.

TABLE 4-3
ACCESS ROAD AREA: COMPARISON OF DETECTED NON-PCB APPENDIX IX+3
CONSTITUENTS TO RESIDENTIAL SCREENING PRGs

RD/RA WORK PLAN ADDENDUM FOR THE FUTURE CITY RECREATIONAL AREA
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results in ppm, dry-weight)

Non-PCB Appendix IX+3 Constituent (See Note 2)	Maximum Detect	USEPA Region 9 Residential PRGs (See Note 3)	Constituent Retained for Further Evaluation? (See Note 4)
Semi-Volatile Organics			
Anthracene	0.14	14,000	No
Benzo(a)anthracene	0.21	0.56	No
Benzo(a)pyrene	0.11	0.056	Yes
Benzo(b)fluoranthene	0.082	0.56	No
Benzo(k)fluoranthene	0.16	0.56	No
bis(2-Ethylhexyl)phthalate	0.11	32	No
Chrysene	0.34	56	No
Fluoranthene	0.59	2,000	No
Naphthalene	0.52	55	No
Phenanthrene	0.54	55	No
Pyrene	0.53	1,500	No
Inorganics			
Arsenic	5.2	0.38	Yes
Barium	38	5,200	No
Beryllium	0.34	150	No
Cadmium	0.13	37	No
Chromium	16	210	No
Cobalt	16	3,300	No
Copper	58	2,800	No
Cyanide	0.13	11	No
Lead	46	400	No
Mercury	0.058	22	No
Nickel	27	1,500	No
Sulfide	8.6	350 (5)	No
Tin	4.5	45,000	No
Vanadium	14	520	No
Zinc	95	22,000	No

Notes:

1. PRG = Preliminary Remediation Goal.
2. Per Attachment F to *Statement of Work for Removal Actions Outside the River (SOW)*, comparison to PRGs is required for all detected Appendix IX+3 constituents except PCBs.
3. Screening PRGs include EPA Region 9 Residential PRGs or, for certain constituents, surrogate PRGs based on the following: Attachment F, #3b of the SOW (certain PAHs); or Condition 6 of EPA's April 18, 2002 comment letter (sulfide).
4. Constituent is retained for further evaluation if its maximum detected concentration exceeds its corresponding PRG.

TABLE 4-4
ACCESS ROAD AREA: COMPARISON OF SELECT NON-PCB APPENDIX IX+3 CONSTITUENT
AVERAGE CONCENTRATIONS TO MCP METHOD 1 SOIL STANDARDS

RD/RA WORK PLAN ADDENDUM FOR THE FUTURE CITY RECREATIONAL AREA
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results in ppm, dry-weight)

Non-PCB Appendix IX+3 Constituent	Sample Detection Frequency	Arithmetic Average Concentration (see Note 2)	MCP Method 1 S-1 Soil Standard (see Note 3)	Average Exceeds Method 1 Standard? (see Note 4)
0- to 1-Foot Depth Interval				
Benzo(a)pyrene	0/3	0.27	0.7	No
Dibenzo(a,h)anthracene	0/3	0.42	0.7	No
Indeno(1,2,3-cd)pyrene	0/3	0.42	0.7	No
Arsenic	2/3	4.87	30	No
1- to 3-Foot Depth Interval				
Benzo(a)pyrene	1/3	0.15	0.7	No
Dibenzo(a,h)anthracene	0/3	0.30	0.7	No
Indeno(1,2,3-cd)pyrene	0/3	0.30	0.7	No
Arsenic	2/3	6.22	30	No

Notes:

1. Constituents retained for evaluation have a maximum sample result that exceeds their respective EPA Region 9 Residential PRGs or surrogate PRGs.
2. Non-detect sample results included as one-half the detection limit in the calculation of arithmetic average concentrations.
3. The Method 1 soil standards listed are those associated with GW-2 or GW-3 groundwater (whichever is more stringent).
4. Arithmetic average concentrations of all constituents identified above are compared to Method 1 Soil Standards.

TABLE 5-1
PCB DATA SUMMARY (ALL SAMPLES <10 FEET DEEP)

RD/RA WORK PLAN ADDENDUM FOR THE FUTURE CITY RECREATIONAL AREA
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in dry weight parts per million, ppm)

Sample ID	Depth (Feet)	Date Collected	Aroclor-1221	Aroclor-1016, -1232, -1242, -1248	Aroclor-1254	Aroclor-1260	Total PCBs
Within Limits of Future City Recreational Area							
202S	0-0.5	05/17/91	ND(0.028) [ND(0.026)]	ND(0.028) [ND(0.026)]	ND(0.028) [ND(0.026)]	0.87 [1.0]	0.87 [1.0]
210S	0-0.5	09/17/97	ND(0.35)	ND(0.70)	ND(0.35)	9.2 B	9.2
	0-0.5	09/18/97	ND(0.034)	ND(0.068)	ND(0.034)	0.35	0.35
95-9	0-2	02/29/96	ND(0.036)	ND(0.073)	ND(0.036)	0.31	0.31
	2-4	02/29/96	NR	NR	NR	NR	ND(0.042)
	4-6	02/29/96	NR	NR	NR	NR	0.030 J
	6-8	02/29/96	NR	NR	NR	NR	0.013 JP
	8-10	02/29/96	NR	NR	NR	NR	0.018 J
CRA-1	0-2	01/17/01	ND(0.044)	ND(0.044)	0.54	0.74	1.28
	2-5	01/17/01	ND(0.042)	ND(0.042)	ND(0.042)	ND(0.042)	ND(0.042)
	5-14	01/17/01	ND(0.043)	ND(0.043)	ND(0.043)	ND(0.043)	ND(0.043)
CRA-2	0-2	01/17/01	ND(0.047)	ND(0.047)	0.49	0.70	1.19
	2-5	01/17/01	ND(0.047)	ND(0.047)	ND(0.047)	ND(0.047)	ND(0.047)
	5-14	01/17/01	ND(0.044)	ND(0.044)	ND(0.044)	ND(0.044)	ND(0.044)
CRA-3	0-2	01/17/01	ND(0.46)	ND(0.46)	ND(0.46)	ND(0.46)	ND(0.46)
	2-5	01/17/01	ND(0.27)	ND(0.27)	ND(0.27)	ND(0.27)	ND(0.27)
	5-14	01/17/01	ND(0.047) [ND(0.044)]	ND(0.047) [ND(0.044)]	ND(0.047) [ND(0.044)]	ND(0.047) [ND(0.044)]	ND(0.047) [ND(0.044)]
CRA-4	0-2	01/18/01	ND(0.051)	ND(0.051)	0.10	0.10	0.20
	2-5	01/18/01	ND(0.047)	ND(0.047)	0.18	0.26	0.44
	5-14	01/18/01	ND(0.043)	ND(0.043)	ND(0.043)	ND(0.043)	ND(0.043)
CRA-5	0-2	01/18/01	ND(0.049)	ND(0.049)	0.35	0.49	0.84
	2-5	01/18/01	ND(0.044)	ND(0.044)	ND(0.044)	ND(0.044)	ND(0.044)
	5-14	01/18/01	ND(0.044)	ND(0.044)	ND(0.044)	ND(0.044)	ND(0.044)
CRA-6	0-2	01/18/01	ND(0.047)	ND(0.047)	0.064	0.22	0.284
	2-5	01/18/01	ND(0.049)	ND(0.049)	ND(0.049)	ND(0.049)	ND(0.049)
	5-14	01/18/01	ND(0.044)	ND(0.044)	ND(0.044)	ND(0.044)	ND(0.044)
CRA-7	0-2	01/18/01	ND(0.048)	ND(0.048)	0.048	0.063	0.111
	2-5	01/18/01	ND(0.052)	ND(0.052)	ND(0.052)	ND(0.052)	ND(0.052)
	5-14	01/18/01	ND(0.044) [ND(0.044)]	ND(0.044) [ND(0.044)]	ND(0.044) [ND(0.044)]	ND(0.044) [ND(0.044)]	ND(0.044) [ND(0.044)]
CRA-8	0-2	01/22/01	ND(2.2)	ND(2.2)	ND(2.2)	ND(2.2)	ND(2.2)
	2-5	01/22/01	ND(0.040)	ND(0.040)	ND(0.040)	ND(0.040)	ND(0.040)
	5-14	01/22/01	ND(0.045)	ND(0.045)	ND(0.045)	0.094	0.094
CRA-9	0-2	01/22/01	ND(0.24)	ND(0.24)	ND(0.24)	5.6	5.6
	2-5	01/22/01	ND(0.048)	ND(0.048)	ND(0.048)	0.029 J	0.029 J
	5-14	01/22/01	ND(0.042)	ND(0.042)	ND(0.042)	ND(0.042)	ND(0.042)
CRA-10	0-2	01/22/01	ND(0.049)	ND(0.049)	0.28	0.45	0.73
	2-5	01/22/01	ND(0.044)	ND(0.044)	ND(0.044)	ND(0.044)	ND(0.044)
	5-14	01/22/01	ND(0.044)	ND(0.044)	ND(0.044)	ND(0.044)	ND(0.044)
CRA-11	0-2	01/23/01	ND(0.047)	ND(0.047)	0.28	0.78	1.06
	2-5	01/23/01	ND(0.041) [ND(0.041)]	ND(0.041) [ND(0.041)]	ND(0.041) [ND(0.041)]	ND(0.041) [ND(0.041)]	ND(0.041) [ND(0.041)]
	5-14	01/23/01	ND(0.043)	ND(0.043)	ND(0.043)	ND(0.043)	ND(0.043)
CRA-12	0-2	01/23/01	ND(0.46)	ND(0.46)	ND(0.46)	3.4	3.4
	2-5	01/23/01	ND(0.22)	ND(0.22)	1.8	0.92	2.72
	5-14	01/23/01	ND(0.045)	ND(0.045)	ND(0.045)	ND(0.045)	ND(0.045)
CRA-13	0-2	01/23/01	ND(0.046)	ND(0.046)	ND(0.046)	ND(0.046)	ND(0.046)
	2-5	01/23/01	ND(0.046)	ND(0.046)	ND(0.046)	ND(0.046)	ND(0.046)
	5-14	01/23/01	ND(0.054)	ND(0.054)	ND(0.054)	ND(0.054)	ND(0.054)
CRA-14	0-2	01/19/01	ND(0.21)	ND(0.21)	0.61	1.2	1.81
	2-5	01/19/01	ND(0.042)	ND(0.042)	ND(0.042)	ND(0.042)	ND(0.042)
	5-14	01/19/01	ND(0.041)	ND(0.041)	ND(0.041)	ND(0.041)	ND(0.041)
CRA-15	0-2	01/19/01	ND(0.23)	ND(0.23)	0.80	1.5	2.3
	2-5	01/19/01	ND(0.047)	ND(0.047)	ND(0.047)	ND(0.047)	ND(0.047)
	5-14	01/19/01	ND(0.050)	ND(0.050)	ND(0.050)	0.13	0.13
CRA-16	0-2	01/19/01	ND(0.044)	ND(0.044)	0.32	0.57	0.89
	2-5	01/19/01	ND(0.044)	ND(0.044)	0.35	0.79	1.14
	5-14	01/19/01	ND(0.043)	ND(0.043)	0.063	0.082	0.145
CRA-17	0-2	01/19/01	ND(4.2)	ND(4.2)	ND(4.2)	42	42
	2-5	01/19/01	ND(0.042)	ND(0.042)	ND(0.042)	ND(0.042)	ND(0.042)
	5-14	01/19/01	ND(0.042)	ND(0.042)	ND(0.042)	ND(0.042)	ND(0.042)
CRA-18	0-2	01/23/01	ND(0.044)	ND(0.044)	ND(0.044)	0.32	0.32
	2-5	01/23/01	ND(0.043)	ND(0.043)	ND(0.043)	ND(0.043)	ND(0.043)
	5-14	01/23/01	ND(0.045)	ND(0.045)	ND(0.045)	ND(0.045)	ND(0.045)

TABLE 5-1
PCB DATA SUMMARY (ALL SAMPLES <10 FEET DEEP)

RD/RA WORK PLAN ADDENDUM FOR THE FUTURE CITY RECREATIONAL AREA
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in dry weight parts per million, ppm)

Sample ID	Depth (Feet)	Date Collected	Aroclor-1221	Aroclor-1016, -1232, -1242, -1248	Aroclor-1254	Aroclor-1260	Total PCBs
Within Limits of Future City Recreational Area (continued)							
CRA-19	0-2	01/23/01	ND(0.044)	ND(0.044)	0.14	0.24	0.38
	2-5	01/23/01	ND(0.042)	ND(0.042)	ND(0.042)	ND(0.042)	ND(0.042)
	5-14	01/23/01	ND(0.048)	ND(0.048)	ND(0.048)	ND(0.048)	ND(0.048)
CRA-20	0-2	01/31/01	ND(0.048)	ND(0.048)	0.026 J	0.032 J	0.058 J
	2-5	01/31/01	ND(0.042)	ND(0.042)	0.13	0.22	0.35
	5-14	01/31/01	ND(0.042)	ND(0.042)	ND(0.042)	ND(0.042)	ND(0.042)
CRA-21	0-2	01/31/01	ND(0.047)	ND(0.047)	ND(0.047)	ND(0.047)	ND(0.047)
	2-5	01/31/01	ND(0.044)	ND(0.044)	0.085	0.12	0.205
	5-14	01/31/01	ND(0.040) [ND(0.041)]	ND(0.040) [ND(0.041)]	ND(0.040) [ND(0.041)]	ND(0.040) [ND(0.041)]	ND(0.040) [ND(0.041)]
CRA-22	0-2	01/31/01	ND(0.058)	ND(0.058)	0.43	0.52	0.95
	2-5	01/31/01	ND(0.048)	ND(0.048)	ND(0.048)	ND(0.048)	ND(0.048)
	5-14	01/31/01	ND(0.044)	ND(0.044)	ND(0.044)	ND(0.044)	ND(0.044)
P2X170002	0-2	07/08/91	ND(0.024)	ND(0.024)	ND(0.024)	ND(0.024)	ND(0.024)
P2X170002(IT)	0-2	07/08/91	ND(0.050)	NA	ND(0.050)	ND(0.050)	ND(0.050)
	2-4	07/08/91	NR	NR	NR	NR	0.16
	4-6	07/08/91	NR	NR	NR	NR	ND(0.050)
	6-8	07/08/91	NR	NR	NR	NR	ND(0.050)
	8-10	07/08/91	NR	NR	NR	NR	ND(0.050)
Within Limits of Access Road							
RAA4-15	0-1	01/30/01	ND(0.046)	ND(0.046)	0.34	0.50	0.84
	1-3	01/02/02	ND(0.036)	ND(0.036)	0.035 J	0.041	0.076
RAA4-22	0-1	01/31/01	ND(0.056)	ND(0.056)	0.24	0.46	0.70
	1-3	01/03/02	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)
	3-6	01/03/02	ND(0.037)	ND(0.037)	ND(0.037)	ND(0.037)	ND(0.037)
	1-6	01/31/01	ND(0.045)	ND(0.045)	ND(0.045)	ND(0.045)	ND(0.045)
	6-15	01/31/01	ND(0.048)	ND(0.048)	ND(0.048)	ND(0.048)	ND(0.048)
RAA4-23	0-1	01/02/02	ND(0.79)	ND(0.79)	18	20	38
	1-3	01/02/02	ND(0.034)	ND(0.034)	0.028 J	0.030 J	0.058 J
RAA4-25	0-1	01/02/02	ND(0.036)	ND(0.036)	ND(0.036)	0.97	0.97
	1-3	01/02/02	ND(0.035) [ND(0.035)]	ND(0.035) [ND(0.035)]	ND(0.035) [0.022 J]	0.026 J [0.023 J]	0.026 J [0.045 J]
RAA4-26	0-1	01/02/02	ND(0.037)	ND(0.037)	ND(0.037)	0.38	0.38
	1-3	01/02/02	ND(0.035)	ND(0.035)	ND(0.035)	0.074	0.074
RAA4-E42	0-1	01/03/02	ND(0.036)	ND(0.036)	0.22	ND(0.40)	0.22
	1-3	01/03/02	ND(0.035)	ND(0.035)	ND(0.035)	ND(0.035)	ND(0.035)
	3-6	01/03/02	ND(0.040)	ND(0.040)	ND(0.040)	ND(0.040)	ND(0.040)
	6-15	01/03/02	ND(0.037)	ND(0.037)	ND(0.037)	ND(0.037)	ND(0.037)
Maximum PCB Concentration:							42
Average PCB Concentration:							1.27

Notes:

- This table summarizes all FCRA and access road area PCB data for samples less than 10 feet deep. This is based on a conservative assessment that such soils could be removed during construction activities and subject to disposal in an On-Plant Consolidation Area at the GE facility.
- Samples were collected by Blasland, Bouck & Lee, Inc., and were submitted to CT&E Environmental Services, Inc., CompuChem Environmental Corporation and IT Analytical Services for analysis of PCBs.
- ND - Analyte was not detected. The number in parentheses is the associated detection limit.
- NA - Not Analyzed - Laboratory did not report results for this analyte.
- NR - Not Reported.
- Field duplicate sample results are presented in brackets.
- Sample ID's with (IT) suffix distinguish samples analyzed by IT Analytical Services vs. CompuChem Environmental Corporation.
- Samples collected on or after 01/17/01 have been validated as per Field Sampling Plan/Quality Assurance Project Plan, General Electric Company, Pittsfield, Massachusetts, Blasland Bouck & Lee, Inc. (approved November 4, 2002 and resubmitted December 10, 2002).

Data Qualifiers:

- J - Indicates an estimated value less than the practical quantitation limit (PQL).
- P - The analyte is detected in the sample. The percent difference in the concentrations calculated from two dissimilar GC columns is greater than 25%. The value should be considered as estimated.

TABLE 5-2
RCRA WASTE CHARACTERIZATION ANALYTICAL RESULTS

RD/RA WORK PLAN ADDENDUM FOR THE FUTURE CITY RECREATIONAL AREA
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in dry weight parts per million, ppm)

Sample ID: Sample Depth (Feet): Date Collected:	210S 0-0.5 01/03/02	210S0-6 0-0.5 09/17/97	CRA-1 5-14 01/17/01	CRA-1 6-8 01/17/01	CRA-2 2-4 01/17/01	CRA-2 2-5 01/17/01	CRA-3 0-2 04/27/01	CRA-3 5-14 01/17/01	CRA-5 0-2 01/18/01	CRA-6 2-5 01/18/01
Volatile Organics										
1,1-Dichloroethene	NA	ND(0.021)	NA	ND(0.0064)	ND(0.0071)	NA	NA	NA	ND(0.0074)	NA
1,2-Dichloroethane	NA	ND(0.011)	NA	ND(0.0064)	ND(0.0071)	NA	NA	NA	ND(0.0074)	NA
2-Butanone	NA	0.0030 JB	NA	ND(0.10)	ND(0.10)	NA	NA	NA	ND(0.10)	NA
Benzene	NA	ND(0.016)	NA	ND(0.0064)	ND(0.0071)	NA	NA	NA	ND(0.0074)	NA
Carbon Tetrachloride	NA	ND(0.016)	NA	ND(0.0064)	ND(0.0071)	NA	NA	NA	ND(0.0074)	NA
Chlorobenzene	NA	ND(0.016)	NA	ND(0.0064)	ND(0.0071)	NA	NA	NA	ND(0.0074)	NA
Chloroform	NA	ND(0.016)	NA	ND(0.0064)	ND(0.0071)	NA	NA	NA	ND(0.0074)	NA
Tetrachloroethene	NA	ND(0.016)	NA	ND(0.0064)	ND(0.0071)	NA	NA	NA	ND(0.0074)	NA
Trichloroethene	NA	ND(0.021)	NA	ND(0.0064)	ND(0.0071)	NA	NA	NA	ND(0.0074)	NA
Vinyl Chloride	NA	ND(0.021)	NA	ND(0.013)	ND(0.014)	NA	NA	NA	ND(0.015)	NA
Semivolatile Organics										
1,4-Dichlorobenzene	NA	ND(0.55)	ND(0.43)	NA	NA	ND(0.47)	ND(0.44) [ND(0.42)]	ND(2.3)	ND(0.54)	ND(0.51)
2,4,5-Trichlorophenol	NA	ND(1.4)	ND(0.43)	NA	NA	ND(0.47)	ND(0.44) [ND(0.42)]	ND(2.3)	ND(0.54)	ND(0.51)
2,4,6-Trichlorophenol	NA	ND(1.4)	ND(0.43)	NA	NA	ND(0.47)	ND(0.44) [ND(0.42)]	ND(2.3)	ND(0.54)	ND(0.51)
2,4-Dinitrotoluene	NA	ND(0.70)	ND(2.2)	NA	NA	ND(2.4)	ND(2.2) [ND(2.1)]	ND(12)	ND(2.7)	ND(2.6)
2-Methylphenol	NA	ND(0.69)	ND(0.43)	NA	NA	ND(0.47)	ND(0.44) [ND(0.42)]	ND(2.3)	ND(0.54)	ND(0.51)
3&4-Methylphenol	NA	ND(1.4)	ND(0.86)	NA	NA	ND(0.95)	ND(0.87) [ND(0.84)]	ND(4.7)	ND(1.1)	ND(1.0)
Hexachlorobenzene	ND(0.40)	ND(0.81)	ND(0.43)	NA	NA	ND(0.47)	ND(0.44) [ND(0.42)]	ND(2.3)	ND(0.54)	ND(0.51)
Hexachlorobutadiene	NA	ND(0.59)	ND(0.86)	NA	NA	ND(0.95)	ND(0.87) [ND(0.84)]	ND(4.7)	ND(1.1)	ND(1.0)
Hexachloroethane	NA	ND(0.63)	ND(0.43)	NA	NA	ND(0.47)	ND(0.44) [ND(0.42)]	ND(2.3)	ND(0.54)	ND(0.51)
Nitrobenzene	NA	ND(0.72)	ND(0.43)	NA	NA	ND(0.47)	ND(0.44) [ND(0.42)]	ND(2.3)	ND(0.54)	ND(0.51)
Pentachlorophenol	NA	ND(1.5)	ND(2.2)	NA	NA	ND(2.4)	ND(2.2) [ND(2.1)]	ND(12)	ND(2.7)	ND(2.6)
Pyridine	NA	ND(0.58)	ND(0.43)	NA	NA	ND(0.47)	ND(0.44) [ND(0.42)]	ND(2.3)	ND(0.54) J	ND(0.51) J
Organochlorine Pesticides										
Endrin	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Gamma-BHC (Lindane)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Heptachlor Epoxide	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methoxychlor	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Technical Chlordane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Toxaphene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Herbicides										
2,4,5-TP	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Inorganics										
Arsenic	NA	7.30	ND(19.0)	NA	NA	ND(21.0)	NA	ND(21.0)	ND(22.0)	ND(22.0)
Barium	NA	134	ND(38.0)	NA	NA	ND(43.0)	NA	49.0	47.0	ND(44.0)
Cadmium	NA	0.780 B	ND(1.90) J	NA	NA	ND(2.10) J	NA	ND(2.10) J	ND(2.20)	ND(2.20)
Chromium	NA	17.9	9.20	NA	NA	12.0	NA	13.0	12.0	9.60
Lead	NA	33.8 L	14.0 J	NA	NA	12.0 J	NA	24.0 J	ND(30.0)	ND(29.0)
Mercury	NA	ND(0.0500)	ND(0.260)	NA	NA	ND(0.280)	NA	ND(0.280)	ND(0.300)	ND(0.290)
Selenium	NA	1.30	ND(0.960) J	NA	NA	ND(1.10) J	NA	ND(1.10) J	ND(1.50)	ND(1.50)
Silver	NA	ND(0.160)	ND(0.960)	NA	NA	ND(1.10)	NA	ND(1.10)	ND(3.00)	ND(2.90)

TABLE 5-2
RCRA WASTE CHARACTERIZATION ANALYTICAL RESULTS

RD/RA WORK PLAN ADDENDUM FOR THE FUTURE CITY RECREATIONAL AREA
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in dry weight parts per million, ppm)

Sample ID: Sample Depth (Feet): Date Collected:	CRA-6 4-5 01/18/01	CRA-7 0-2 01/18/01	CRA-7 0-2 01/03/02	CRA-8 2-4 01/22/01	CRA-8 2-5 01/22/01	CRA-9 5-14 01/22/01	CRA-10 2-5 01/22/01	CRA-10 4-5 01/22/01	CRA-11 0-2 01/23/01	CRA-12 0-2 01/23/01	CRA-13 5-14 01/23/01
Volatile Organics											
1,1-Dichloroethene	ND(0.0073)	ND(0.0072)	NA	ND(0.0061)	NA	NA	NA	ND(0.0067)	ND(0.0070)	ND(0.0069)	NA
1,2-Dichloroethane	ND(0.0073)	ND(0.0072)	NA	ND(0.0061)	NA	NA	NA	ND(0.0067)	ND(0.0070)	ND(0.0069)	NA
2-Butanone	ND(0.10)	ND(0.10)	NA	ND(0.10)	NA	NA	NA	ND(0.10)	ND(0.10)	ND(0.10)	NA
Benzene	ND(0.0073)	ND(0.0072)	NA	ND(0.0061)	NA	NA	NA	ND(0.0067)	ND(0.0070)	ND(0.0069)	NA
Carbon Tetrachloride	ND(0.0073)	ND(0.0072)	NA	ND(0.0061)	NA	NA	NA	ND(0.0067)	ND(0.0070)	ND(0.0069)	NA
Chlorobenzene	ND(0.0073)	ND(0.0072)	NA	ND(0.0061)	NA	NA	NA	ND(0.0067)	ND(0.0070)	ND(0.0069)	NA
Chloroform	ND(0.0073)	ND(0.0072)	NA	ND(0.0061)	NA	NA	NA	ND(0.0067)	ND(0.0070)	ND(0.0069)	NA
Tetrachloroethene	ND(0.0073)	ND(0.0072)	NA	ND(0.0061)	NA	NA	NA	ND(0.0067)	ND(0.0070)	ND(0.0069)	NA
Trichloroethene	ND(0.0073)	ND(0.0072)	NA	ND(0.0061)	NA	NA	NA	ND(0.0067)	ND(0.0070)	ND(0.0069)	NA
Vinyl Chloride	ND(0.015)	ND(0.014)	NA	ND(0.012)	NA	NA	NA	ND(0.013)	ND(0.014)	ND(0.014)	NA
Semivolatile Organics											
1,4-Dichlorobenzene	NA	ND(0.48)	NA	NA	ND(0.40)	ND(0.42)	ND(0.44)	NA	ND(0.47)	ND(0.46)	ND(0.54)
2,4,5-Trichlorophenol	NA	ND(0.48)	NA	NA	ND(0.40)	ND(0.42)	ND(0.44)	NA	ND(0.47)	ND(0.46)	ND(0.54)
2,4,6-Trichlorophenol	NA	ND(0.48)	NA	NA	ND(0.40)	ND(0.42)	ND(0.44)	NA	ND(0.47)	ND(0.46)	ND(0.54)
2,4-Dinitrotoluene	NA	ND(2.4)	NA	NA	ND(2.1)	ND(2.2)	ND(2.3)	NA	ND(2.4)	ND(2.3)	ND(2.8)
2-Methylphenol	NA	ND(0.48)	NA	NA	ND(0.40)	ND(0.42)	ND(0.44)	NA	ND(0.47)	ND(0.46)	ND(0.54)
3&4-Methylphenol	NA	ND(0.97)	NA	NA	ND(0.81)	ND(0.85)	ND(0.90)	NA	ND(0.94)	ND(0.92)	ND(1.1)
Hexachlorobenzene	NA	ND(0.48)	ND(0.42)	NA	ND(0.40)	ND(0.42)	ND(0.44)	NA	ND(0.47)	ND(0.46)	ND(0.54)
Hexachlorobutadiene	NA	ND(0.97)	NA	NA	ND(0.81)	ND(0.85)	ND(0.90)	NA	ND(0.94)	ND(0.92)	ND(1.1)
Hexachloroethane	NA	ND(0.48)	NA	NA	ND(0.40)	ND(0.42)	ND(0.44)	NA	ND(0.47)	ND(0.46)	ND(0.54)
Nitrobenzene	NA	ND(0.48)	NA	NA	ND(0.40)	ND(0.42)	ND(0.44)	NA	ND(0.47)	ND(0.46)	ND(0.54)
Pentachlorophenol	NA	ND(2.4)	ND(2.2)	NA	ND(2.1)	ND(2.2)	ND(2.3)	NA	ND(2.4)	ND(2.3)	ND(2.8)
Pyridine	NA	ND(0.48) J	NA	NA	ND(0.40)	ND(0.42)	ND(0.44)	NA	ND(0.47) J	ND(0.46) J	ND(0.54)
Organochlorine Pesticides											
Endrin	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Gamma-BHC (Lindane)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Heptachlor Epoxide	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methoxychlor	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Technical Chlordane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Toxaphene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Herbicides											
2,4,5-TP	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Inorganics											
Arsenic	NA	16.0	NA	NA	ND(18.0)	ND(19.0)	ND(20.0)	NA	ND(21.0)	ND(15.0)	ND(24.0)
Barium	NA	39.0	NA	NA	ND(36.0)	ND(38.0)	ND(40.0)	NA	ND(42.0)	31.0	ND(49.0)
Cadmium	NA	ND(2.20)	NA	NA	ND(1.80)	ND(1.90)	ND(2.00)	NA	ND(2.10)	ND(2.10)	ND(2.40)
Chromium	NA	15.0	NA	NA	9.60	10.0	7.80	NA	10.0	12.0	11.0
Lead	NA	36.0	NA	NA	15.0	10.0	18.0 J	NA	64.0	21.0	16.0
Mercury	NA	ND(0.290)	NA	NA	ND(0.240)	ND(0.250)	ND(0.270)	NA	ND(0.280)	ND(0.280)	ND(0.330)
Selenium	NA	ND(1.40)	NA	NA	ND(0.910)	ND(0.950)	ND(1.00) J	NA	ND(1.00)	ND(1.00)	ND(1.20)
Silver	NA	ND(2.90)	NA	NA	ND(0.910)	ND(0.950)	ND(1.00)	NA	ND(1.00)	ND(1.00)	ND(1.20)

TABLE 5-2
RCRA WASTE CHARACTERIZATION ANALYTICAL RESULTS

RD/RA WORK PLAN ADDENDUM FOR THE FUTURE CITY RECREATIONAL AREA
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in dry weight parts per million, ppm)

Sample ID: Sample Depth (Feet): Date Collected:	CRA-14 0-2 01/19/01	CRA-14 0-2 01/03/02	CRA-15 5-14 01/19/01	CRA-15 6-8 01/19/01	CRA-16 0-2 01/19/01	CRA-17 5-14 01/19/01	CRA-18 0-2 01/23/01	CRA-19 2-4 01/23/01	CRA-19 2-5 01/23/01	CRA-20 2-4 01/31/01	CRA-20 2-5 01/31/01
Volatile Organics											
1,1-Dichloroethene	ND(0.0064)	NA	NA	ND(0.0074)	ND(0.0067)	NA	ND(0.0067) [ND(0.0076)]	ND(0.0064)	NA	ND(0.0063)	NA
1,2-Dichloroethane	ND(0.0064)	NA	NA	ND(0.0074)	ND(0.0067)	NA	ND(0.0067) [ND(0.0076)]	ND(0.0064)	NA	ND(0.0063)	NA
2-Butanone	ND(0.10)	NA	NA	ND(0.10)	ND(0.10)	NA	ND(0.10) [ND(0.10)]	ND(0.10)	NA	ND(0.10)	NA
Benzene	ND(0.0064)	NA	NA	ND(0.0074)	ND(0.0067)	NA	ND(0.0067) [ND(0.0076)]	ND(0.0064)	NA	ND(0.0063)	NA
Carbon Tetrachloride	ND(0.0064)	NA	NA	ND(0.0074)	ND(0.0067)	NA	ND(0.0067) [ND(0.0076)]	ND(0.0064)	NA	ND(0.0063)	NA
Chlorobenzene	ND(0.0064)	NA	NA	ND(0.0074)	ND(0.0067)	NA	ND(0.0067) [ND(0.0076)]	ND(0.0064)	NA	ND(0.0063)	NA
Chloroform	ND(0.0064)	NA	NA	ND(0.0074)	ND(0.0067)	NA	ND(0.0067) [ND(0.0076)]	ND(0.0064)	NA	ND(0.0063)	NA
Tetrachloroethene	ND(0.0064)	NA	NA	ND(0.0074)	ND(0.0067)	NA	ND(0.0067) [ND(0.0076)]	ND(0.0064)	NA	ND(0.0063)	NA
Trichloroethene	ND(0.0064)	NA	NA	ND(0.0074)	ND(0.0067)	NA	ND(0.0067) [ND(0.0076)]	ND(0.0064)	NA	ND(0.0063)	NA
Vinyl Chloride	ND(0.013)	NA	NA	ND(0.015)	ND(0.013)	NA	ND(0.013) [ND(0.015)]	ND(0.013)	NA	ND(0.013)	NA
Semivolatile Organics											
1,4-Dichlorobenzene	ND(2.1)	NA	ND(0.50)	NA	ND(0.44)	ND(0.50)	ND(0.44) [ND(0.50)]	NA	ND(0.43)	NA	ND(0.42)
2,4,5-Trichlorophenol	ND(2.1)	NA	ND(0.50)	NA	ND(0.44)	ND(0.50)	ND(0.44) [ND(0.50)]	NA	ND(0.43)	NA	ND(0.42)
2,4,6-Trichlorophenol	ND(2.1)	NA	ND(0.50)	NA	ND(0.44)	ND(0.50)	ND(0.44) [ND(0.50)]	NA	ND(0.43)	NA	ND(0.42)
2,4-Dinitrotoluene	ND(10)	NA	ND(2.5)	NA	ND(2.3)	ND(2.5)	ND(2.3) [ND(2.6)]	NA	ND(2.2)	NA	ND(2.2)
2-Methylphenol	ND(2.1)	NA	ND(0.50)	NA	ND(0.44)	ND(0.50)	ND(0.44) [ND(0.50)]	NA	ND(0.43)	NA	ND(0.42)
3&4-Methylphenol	ND(4.1)	NA	ND(1.0)	NA	ND(0.90)	ND(1.0)	ND(0.89) [ND(1.0)]	NA	ND(0.86)	NA	ND(0.85)
Hexachlorobenzene	ND(2.1)	ND(0.37)	ND(0.50)	NA	ND(0.44)	ND(0.50)	ND(0.44) [ND(0.50)]	NA	ND(0.43)	NA	ND(0.42)
Hexachlorobutadiene	ND(4.1)	NA	ND(1.0)	NA	ND(0.90)	ND(1.0)	ND(0.89) [ND(1.0)]	NA	ND(0.86)	NA	ND(0.85)
Hexachloroethane	ND(2.1)	NA	ND(0.50)	NA	ND(0.44)	ND(0.50)	ND(0.44) [ND(0.50)]	NA	ND(0.43)	NA	ND(0.42)
Nitrobenzene	ND(2.1)	NA	ND(0.50)	NA	ND(0.44)	ND(0.50)	ND(0.44) [ND(0.50)]	NA	ND(0.43)	NA	ND(0.42)
Pentachlorophenol	ND(10)	ND(1.9)	ND(2.5)	NA	ND(2.3)	ND(2.5)	ND(2.3) [ND(2.6)]	NA	ND(2.2)	NA	ND(2.2)
Pyridine	ND(2.1)	NA	ND(0.50)	NA	ND(0.44) J	ND(0.50) J	ND(0.44) J [ND(0.50)]	NA	ND(0.43) J	NA	ND(0.42)
Organochlorine Pesticides											
Endrin	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Gamma-BHC (Lindane)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Heptachlor Epoxide	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methoxychlor	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Technical Chlordane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Toxaphene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Herbicides											
2,4,5-TP	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Inorganics											
Arsenic	ND(15.0)	NA	ND(22.0)	NA	ND(15.0)	ND(19.0)	ND(15.0) [ND(23.0)]	NA	ND(15.0)	NA	ND(19.0)
Barium	46.0	NA	ND(45.0)	NA	36.0	ND(39.0)	39.0 [ND(46.0)]	NA	ND(30.0)	NA	ND(38.0)
Cadmium	ND(1.90)	NA	ND(2.20)	NA	ND(2.00)	ND(1.90)	ND(2.00) [ND(2.30)]	NA	ND(1.90)	NA	ND(1.90)
Chromium	29.0	NA	8.40	NA	9.40	8.20	12.0 [14.0]	NA	8.90	NA	12.0
Lead	26.0	NA	5.00	NA	42.0	12.0	38.0 [34.0]	NA	14.0	NA	65.0
Mercury	ND(0.260)	NA	ND(0.300)	NA	ND(0.270)	ND(0.260)	ND(0.270) [ND(0.300)]	NA	ND(0.260)	NA	0.340
Selenium	ND(0.960)	NA	ND(1.10)	NA	ND(1.00)	ND(0.970)	ND(1.00) [ND(1.10)]	NA	ND(0.960)	NA	ND(0.950) J
Silver	ND(0.960)	NA	ND(1.10)	NA	ND(1.00)	ND(0.970)	ND(1.00) [ND(1.10)]	NA	ND(0.960)	NA	ND(0.950)

TABLE 5-2
RCRA WASTE CHARACTERIZATION ANALYTICAL RESULTS

RD/RA WORK PLAN ADDENDUM FOR THE FUTURE CITY RECREATIONAL AREA
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in dry weight parts per million, ppm)

Sample ID: Sample Depth (Feet): Date Collected:	CRA-21 0-2 01/31/01	CRA-22 5-14 01/31/01	P202S 0-0.5 05/17/91	RAA4-15 0-1 01/30/01	RAA4-22 1-6 01/31/01	RAA4-22 4-6 01/31/01	RAA4-25 0-1 01/02/02	RAA4-25 1-3 01/02/02	RAA4-26 1-3 01/02/02	RAA4-E42 0-1 01/03/02
Volatile Organics										
1,1-Dichloroethene	ND(0.0071)	NA	ND(0.0070) [ND(0.0060)]	ND(0.0069)	NA	ND(0.0068)	ND(0.0054)	ND(0.0053) [ND(0.0053)]	ND(0.0053)	ND(0.0054)
1,2-Dichloroethane	ND(0.0071)	NA	ND(0.0070) [ND(0.0060)]	ND(0.0069)	NA	ND(0.0068)	ND(0.0054)	ND(0.0053) [ND(0.0053)]	ND(0.0053)	ND(0.0054)
2-Butanone	ND(0.10)	NA	ND(0.014) [ND(0.013)]	ND(0.10)	NA	ND(0.10)	ND(0.011)	ND(0.010) [ND(0.011)]	ND(0.011)	ND(0.011)
Benzene	ND(0.0071)	NA	ND(0.0070) [ND(0.0060)]	ND(0.0069)	NA	ND(0.0068)	ND(0.0054)	ND(0.0053) [ND(0.0053)]	ND(0.0053)	ND(0.0054)
Carbon Tetrachloride	ND(0.0071)	NA	ND(0.0070) [ND(0.0060)]	ND(0.0069)	NA	ND(0.0068)	ND(0.0054)	ND(0.0053) [ND(0.0053)]	ND(0.0053)	ND(0.0054)
Chlorobenzene	ND(0.0071)	NA	ND(0.0070) [ND(0.0060)]	ND(0.0069)	NA	ND(0.0068)	ND(0.0054)	ND(0.0053) [ND(0.0053)]	ND(0.0053)	ND(0.0054)
Chloroform	ND(0.0071)	NA	ND(0.0070) [ND(0.0060)]	ND(0.0069)	NA	ND(0.0068)	ND(0.0054)	ND(0.0053) [ND(0.0053)]	ND(0.0053)	ND(0.0054)
Tetrachloroethene	ND(0.0071)	NA	ND(0.0070) [ND(0.0060)]	ND(0.0069)	NA	ND(0.0068)	ND(0.0054)	ND(0.0053) [ND(0.0053)]	ND(0.0053)	ND(0.0054)
Trichloroethene	ND(0.0071)	NA	ND(0.0070) [ND(0.0060)]	ND(0.0069)	NA	ND(0.0068)	ND(0.0054)	ND(0.0053) [ND(0.0053)]	ND(0.0053)	ND(0.0054)
Vinyl Chloride	ND(0.014)	NA	ND(0.014) [ND(0.013)]	ND(0.014)	NA	ND(0.014)	ND(0.0054)	ND(0.0053) [ND(0.0053)]	ND(0.0053)	ND(0.0054)
Semivolatile Organics										
1,4-Dichlorobenzene	ND(0.47)	ND(0.44)	ND(0.46) [ND(0.42)]	ND(0.88)	ND(0.54)	NA	ND(0.36)	ND(0.35) [ND(0.35)]	ND(0.35)	ND(0.36)
2,4,5-Trichlorophenol	ND(0.47)	ND(0.44)	ND(0.93) [ND(0.85)]	ND(0.88)	ND(0.54)	NA	ND(0.36)	ND(0.35) [ND(0.35)]	ND(0.35)	ND(0.36)
2,4,6-Trichlorophenol	ND(0.47)	ND(0.44)	ND(0.93) [ND(0.85)]	ND(0.88)	ND(0.54)	NA	ND(0.36)	ND(0.35) [ND(0.35)]	ND(0.35)	ND(0.36)
2,4-Dinitrotoluene	ND(2.4)	ND(2.3)	ND(0.46) [ND(0.42)]	ND(4.4)	ND(2.7)	NA	ND(0.36)	ND(0.35) [ND(0.35)]	ND(0.35)	ND(0.36)
2-Methylphenol	ND(0.47)	ND(0.44)	ND(0.46) [ND(0.42)]	ND(0.88)	ND(0.54)	NA	ND(0.36)	ND(0.35) [ND(0.35)]	ND(0.35)	ND(0.36)
3&4-Methylphenol	ND(0.96)	ND(0.90)	ND(0.46) [ND(0.42)]	ND(1.8)	ND(1.1)	NA	ND(0.73)	ND(0.70) [ND(0.71)]	ND(0.71)	ND(0.72)
Hexachlorobenzene	ND(0.47)	ND(0.44)	ND(0.46) [ND(0.42)]	ND(0.88)	ND(0.54)	NA	ND(0.36)	ND(0.35) [ND(0.35)]	ND(0.35)	ND(0.36)
Hexachlorobutadiene	ND(0.96)	ND(0.90)	ND(0.46) [ND(0.42)]	ND(1.8)	ND(1.1)	NA	ND(0.36)	ND(0.35) [ND(0.35)]	ND(0.35)	ND(0.36)
Hexachloroethane	ND(0.47)	ND(0.44)	ND(0.46) [ND(0.42)]	ND(0.88)	ND(0.54)	NA	ND(0.36)	ND(0.35) [ND(0.35)]	ND(0.35)	ND(0.36)
Nitrobenzene	ND(0.47)	ND(0.44)	ND(0.46) [ND(0.42)]	ND(0.88)	ND(0.54)	NA	ND(0.36)	ND(0.35) [ND(0.35)]	ND(0.35)	ND(0.36)
Pentachlorophenol	ND(2.4)	ND(2.3)	ND(0.93) [ND(0.85)]	ND(4.4)	ND(2.7)	NA	ND(1.8)	ND(1.8) [ND(1.8)]	ND(1.8)	ND(1.8)
Pyridine	ND(0.47)	ND(0.44)	ND(0.46) [ND(0.42)]	ND(0.88) J	ND(0.54)	NA	ND(0.36)	ND(0.35) [ND(0.35)]	ND(0.35)	ND(0.36)
Organochlorine Pesticides										
Endrin	NA	NA	ND(0.0035) [ND(0.0032)]	NA	NA	NA	NA	NA	NA	NA
Gamma-BHC (Lindane)	NA	NA	ND(0.0014) [ND(0.0013)]	NA	NA	NA	NA	NA	NA	NA
Heptachlor Epoxide	NA	NA	ND(0.0014) [ND(0.0013)]	NA	NA	NA	NA	NA	NA	NA
Methoxychlor	NA	NA	ND(0.0049) [ND(0.0045)]	NA	NA	NA	NA	NA	NA	NA
Technical Chlordane	NA	NA	ND(0.0056) [ND(0.0051)]	NA	NA	NA	NA	NA	NA	NA
Toxaphene	NA	NA	ND(0.028) [ND(0.026)]	NA	NA	NA	NA	NA	NA	NA
Herbicides										
2,4,5-TP	NA	NA	ND(0.035) [ND(0.032)]	NA	NA	NA	NA	NA	NA	NA
2,4 D	NA	NA	ND(0.14) [ND(0.13)]	NA	NA	NA	NA	NA	NA	NA
Inorganics										
Arsenic	ND(21.0)	ND(20.0)	ND(0.840) WNL [4.60 NL]	ND(15.0)	ND(20.0)	NA	4.20	5.20 [4.10]	4.00	2.90
Barium	ND(43.0)	ND(40.0)	48.6 [51.1]	38.0	ND(40.0)	NA	23.0	21.0 [ND(20.0)]	22.0	ND(20.0)
Cadmium	ND(2.10)	ND(2.00)	ND(0.550) [ND(0.500)]	ND(2.10)	ND(2.00)	NA	0.130 B	ND(0.500) [ND(0.500)]	ND(0.500)	ND(0.500)
Chromium	11.0	9.80	22.2 [13.7]	16.0	13.0	NA	6.80	5.60 [4.70]	5.20	6.20
Lead	18.0	8.90	65.2 [45.0]	46.0	21.0	NA	21.0	25.0 [22.0]	6.80	22.0
Mercury	ND(0.280)	ND(0.270)	0.200 [0.220]	ND(0.280)	ND(0.270)	NA	0.0120 B	0.0220 B [0.0320 B]	0.00530 B	0.0580 B
Selenium	ND(1.10) J	ND(1.00) J	ND(0.420) WNL [ND(0.380) WNL]	ND(1.00) J	ND(1.00) J	NA	ND(1.00)	ND(1.00) [ND(1.00)]	ND(1.00)	ND(1.00)
Silver	ND(1.10)	ND(1.00)	ND(0.690) N [ND(0.620) N]	ND(1.00)	ND(1.00)	NA	ND(1.00)	ND(1.00) [ND(1.00)]	ND(1.00)	ND(1.00)

TABLE 5-2
RCRA WASTE CHARACTERIZATION ANALYTICAL RESULTS

RD/RA WORK PLAN ADDENDUM FOR THE FUTURE CITY RECREATIONAL AREA
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in dry weight parts per million, ppm)

Notes:

1. This table summarizes all FCRA and access road area PCB data for samples less than 10 feet deep. This is based on a conservative assessment that such soils could be removed during construction activities and subject to disposal in an On-Plant Consolidation Area at the GE facility.
2. Samples were collected by Blasland, Bouck & Lee, Inc., and were submitted to CT&E Environmental Services, Inc., CompuChem Environmental Corporation and IT Analytical Services for analysis of Appendix IX+3 constituents.
3. Samples have been validated as per Field Sampling Plan/Quality Assurance Project Plan, General Electric Company, Pittsfield, Massachusetts, Blasland Bouck & Lee, Inc. (approved November 4, 2002 and resubmitted December 10, 2002).
4. 2002 and resubmitted December 10, 2002).
5. ND - Analyte was not detected. The number in parentheses is the associated detection limit.
6. NA - Not Analyzed - Laboratory did not report results for this analyte.
7. Field duplicate sample results are presented in brackets.
8. Samples collected on or after 01/17/01 have been validated as per Field Sampling Plan/Quality Assurance Project Plan, General Electric Company, Pittsfield, Massachusetts, Blasland Bouck & Lee, Inc. (approved November 4, 2002 and resubmitted December 10, 2002).

Data Qualifiers:

Organics

- B - Analyte was also detected in the associated method blank.
- J - Indicates that the associated numerical value is an estimated concentration.

Inorganics

- J - Indicates that the associated numerical value is an estimated concentration.
- B - Indicates an estimated value between the instrument detection limit (IDL) and practical quantitation limit (PQL).
- L - Indicates sample matrix spike duplicate analysis was outside control limits.
- N - Indicates sample matrix spike analysis was outside control limits.
- W - GFAA Analytical spike recovery outside of range of 85% to 115% in a sample which exhibits a low concentration of analyte. Unspiked response must be < 50% of spiked sample response.

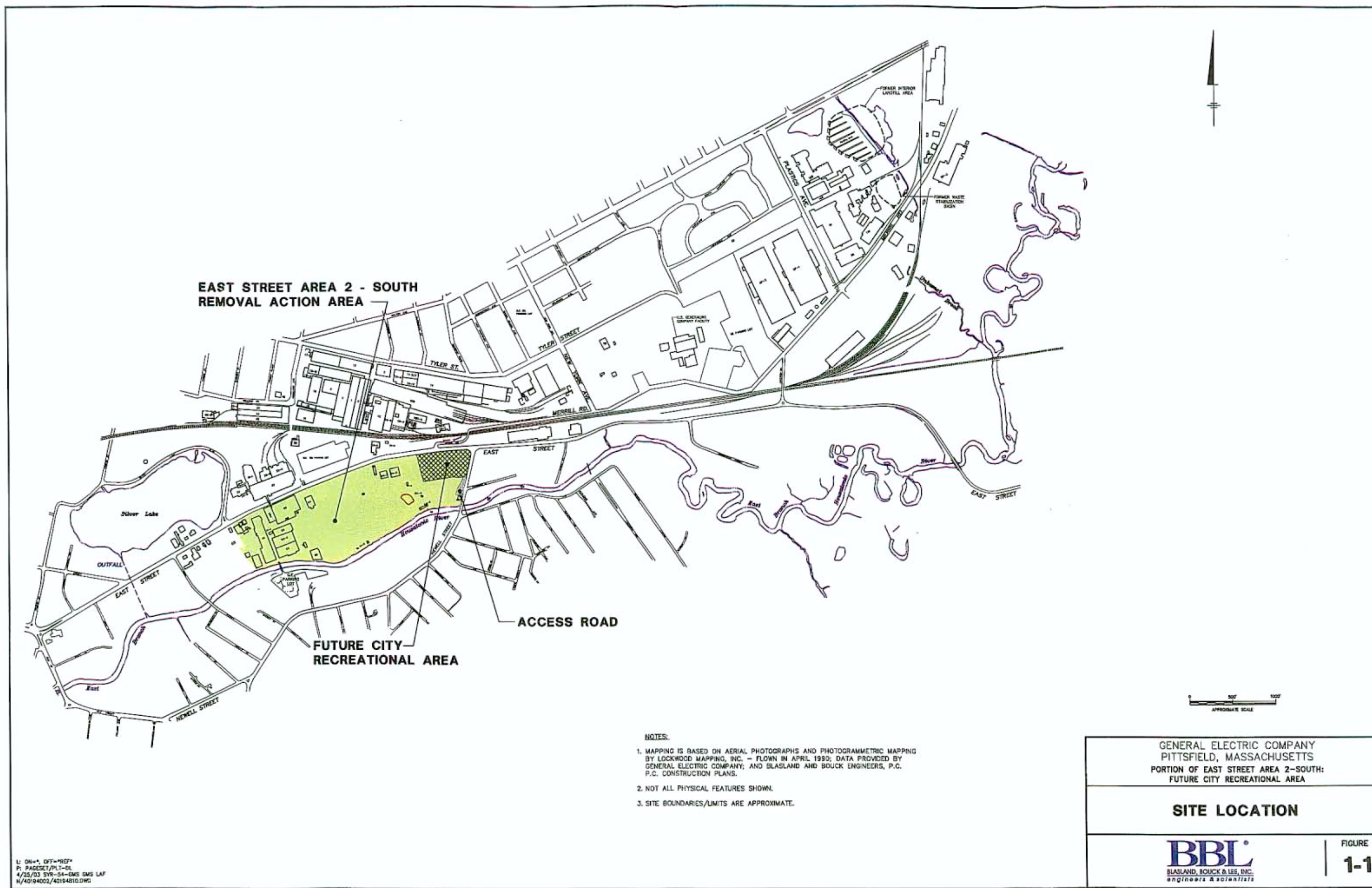
TABLE 5-3
COMPARISON OF APPLICABLE DATA TO RCRA STANDARDS

RD/RA WORK PLAN ADDENDUM FOR THE FUTURE CITY RECREATIONAL AREA
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in dry weight parts per million, ppm)

Constituent	Detection Frequency	Maximum Detect	Arithmetic Average	20X RCRA Standard (3)	Potential RCRA Exceedence?
Volatile Organics					
1,1-Dichloroethene	0/24	ND	0.00359	14	No
1,2-Dichloroethane	0/24	ND	0.00338	10	No
2-Butanone	1/24	0.003	0.00388	4,000	No
Benzene	0/24	ND	0.00348	10	No
Carbon Tetrachloride	0/24	ND	0.00348	10	No
Chlorobenzene	0/24	ND	0.00348	2,000	No
Chloroform	0/24	ND	0.00348	120	No
Tetrachloroethene	0/24	ND	0.00348	14	No
Trichloroethene	0/24	ND	0.00359	10	No
Vinyl Chloride	0/24	ND	0.00631	4	No
Semivolatile Organics					
1,4-Dichlorobenzene	0/30	ND	0.292	150	No
2,4,5-Trichlorophenol	0/30	ND	0.313	8,000	No
2,4,6-Trichlorophenol	0/30	ND	0.313	40	No
2,4-Dinitrotoluene	0/30	ND	1.32	2.6	No
2-Methylphenol	0/30	ND	0.294	4,000	No
3&4-Methylphenol	0/30	ND	0.585	4,000	No
Hexachlorobenzene	0/33	ND	0.287	2.6	No
Hexachlorobutadiene	0/30	ND	0.547	10	No
Hexachloroethane	0/30	ND	0.293	60	No
Nitrobenzene	0/30	ND	0.294	40	No
Pentachlorophenol	0/32	ND	1.41	2,000	No
Pyridine	0/30	ND	0.292	100	No
Organochlorine Pesticides					
Endrin	0/1	ND	0.00168	0.4	No
Gamma-BHC (Lindane)	0/1	ND	0.000675	8	No
Heptachlor Epoxide	0/1	ND	0.000675	0.16	No
Methoxychlor	0/1	ND	0.00235	200	No
Technical Chlordane	0/1	ND	0.00268	0.6	No
Toxaphene	0/1	ND	0.0135	10	No
Herbicides					
2,4,5-TP	0/1	ND	0.0168	20	No
2,4-D	0/1	ND	0.0675	200	No
Inorganics					
Arsenic	7/29	16	8.71	100	No
Barium	13/29	134	30.1	2,000	No
Cadmium	2/29	0.78	0.879	20	No
Chromium	29/29	29	11.3	100	No
Lead	27/29	65.2	24.7	100	No
Mercury	6/29	0.34	0.128	4	No
Selenium	1/29	1.3	0.547	20	No
Silver	0/29	ND	0.585	100	No

Notes:

1. Summary table created using information provided in Table 5-2. Table 5-2 contains analytical results for samples collected from within the Future City Recreational Area and the access road.
2. One-half the detection limit used during calculation of arithmetic mean for non-detect laboratory results.
3. Criteria equals 20 times the RCRA "Maximum Concentration of Contaminants for the Toxicity Characteristic."



**EAST STREET AREA 2 - SOUTH
REMOVAL ACTION AREA**

**FUTURE CITY
RECREATIONAL AREA**

ACCESS ROAD

NOTES:

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

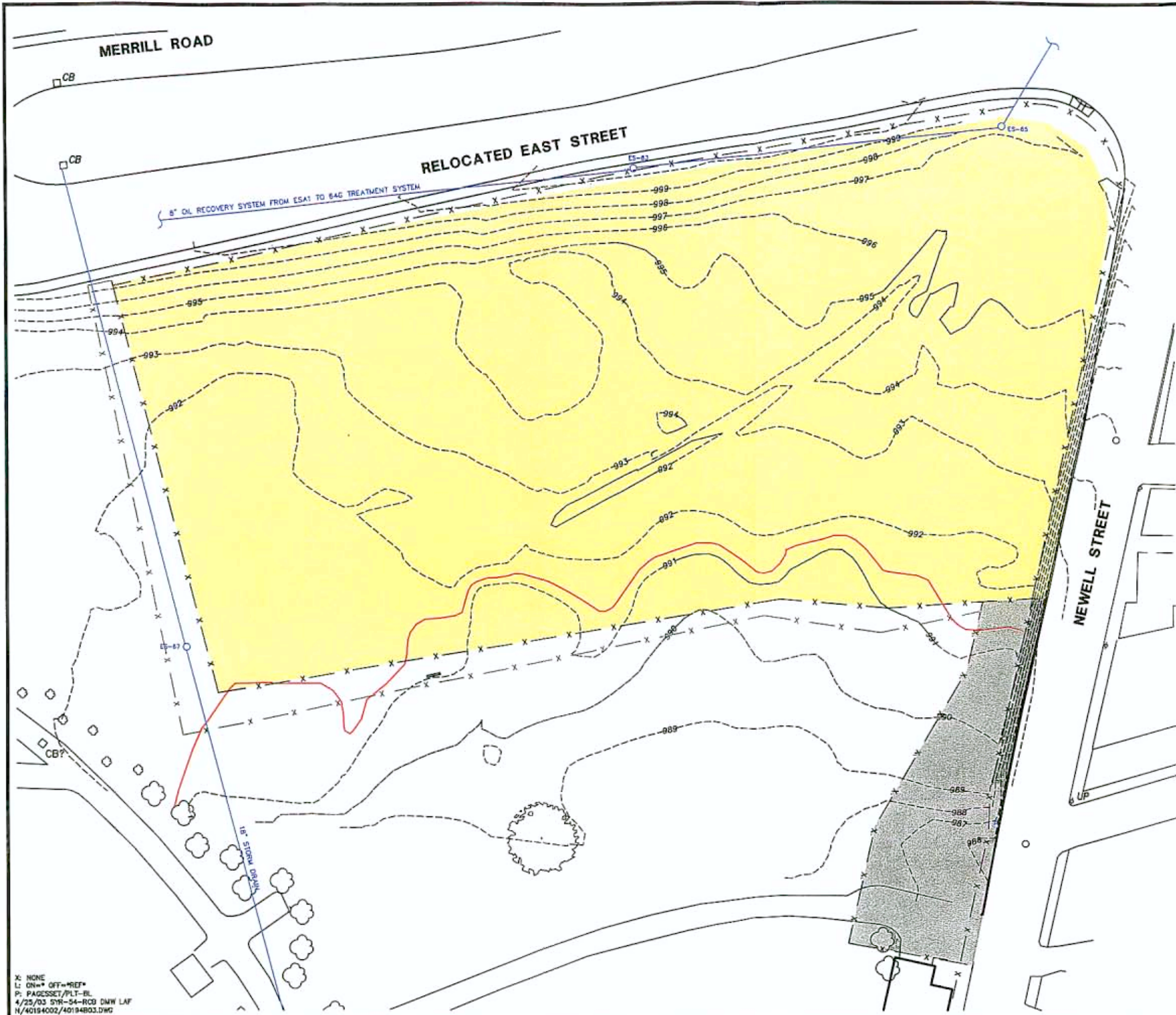


GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS
PORTION OF EAST STREET AREA 2-SOUTH:
FUTURE CITY RECREATIONAL AREA

SITE LOCATION

BBL
BLASLAND, BOUCK & LES, INC.
engineers & scientists

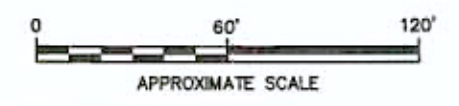
FIGURE
1-1



LEGEND:

- CURRENT (REVISED) LIMITS OF FUTURE CITY RECREATIONAL AREA
- APPROXIMATE 100-YEAR FLOODPLAIN
- EXISTING TOPOGRAPHIC CONTOUR
- X X EXISTING/PROPOSED PERIMETER FENCE
- LIMITS OF ACCESS ROAD AREA

NOTE:
 1. MAPPING IS BASED ON SURVEY PROVIDED BY WHITE ENGINEERING, INC. DATED 12/4/01.



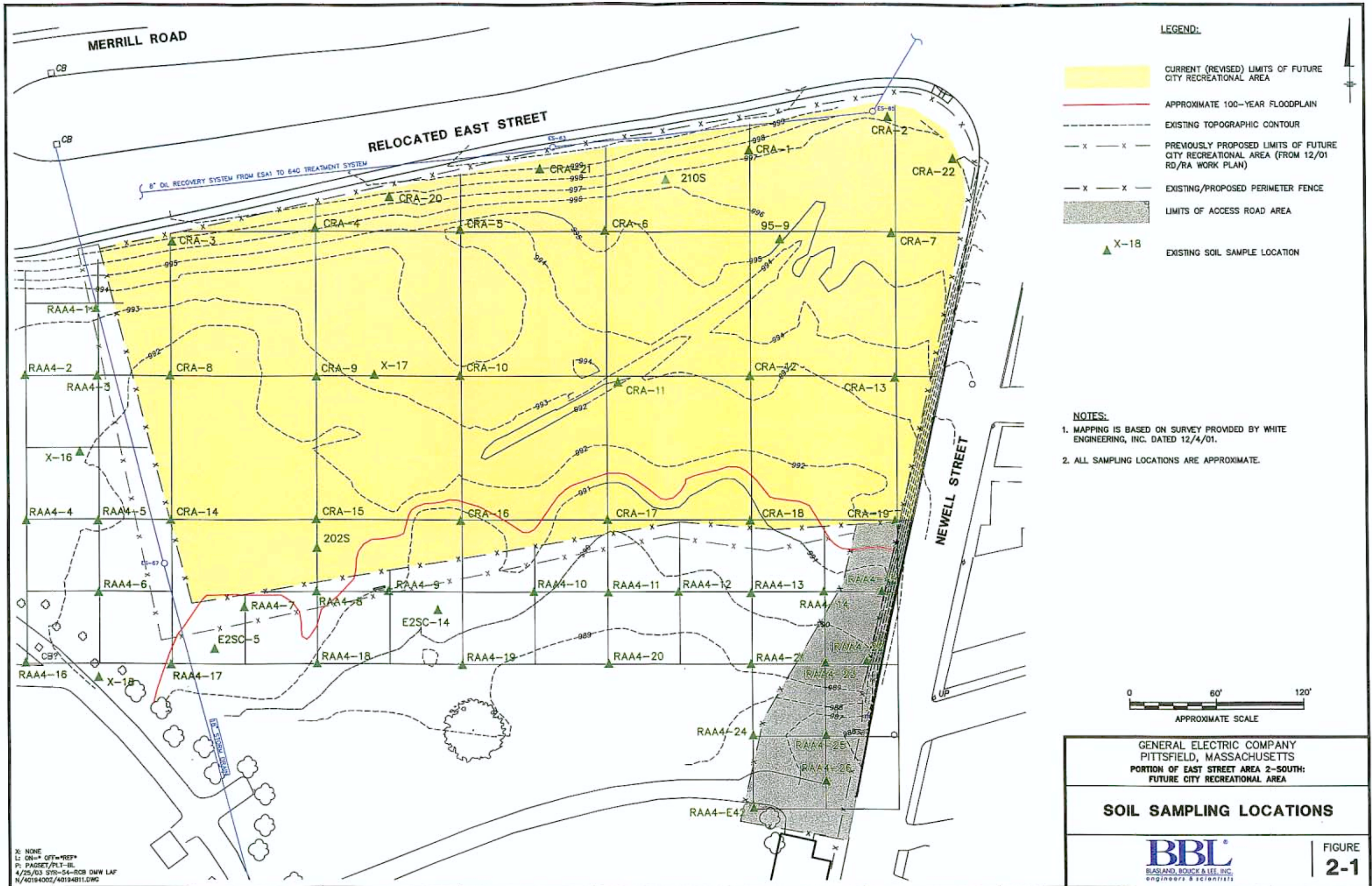
GENERAL ELECTRIC COMPANY
 PITTSFIELD, MASSACHUSETTS
 PORTION OF EAST STREET AREA 2-SOUTH:
 FUTURE CITY RECREATIONAL AREA

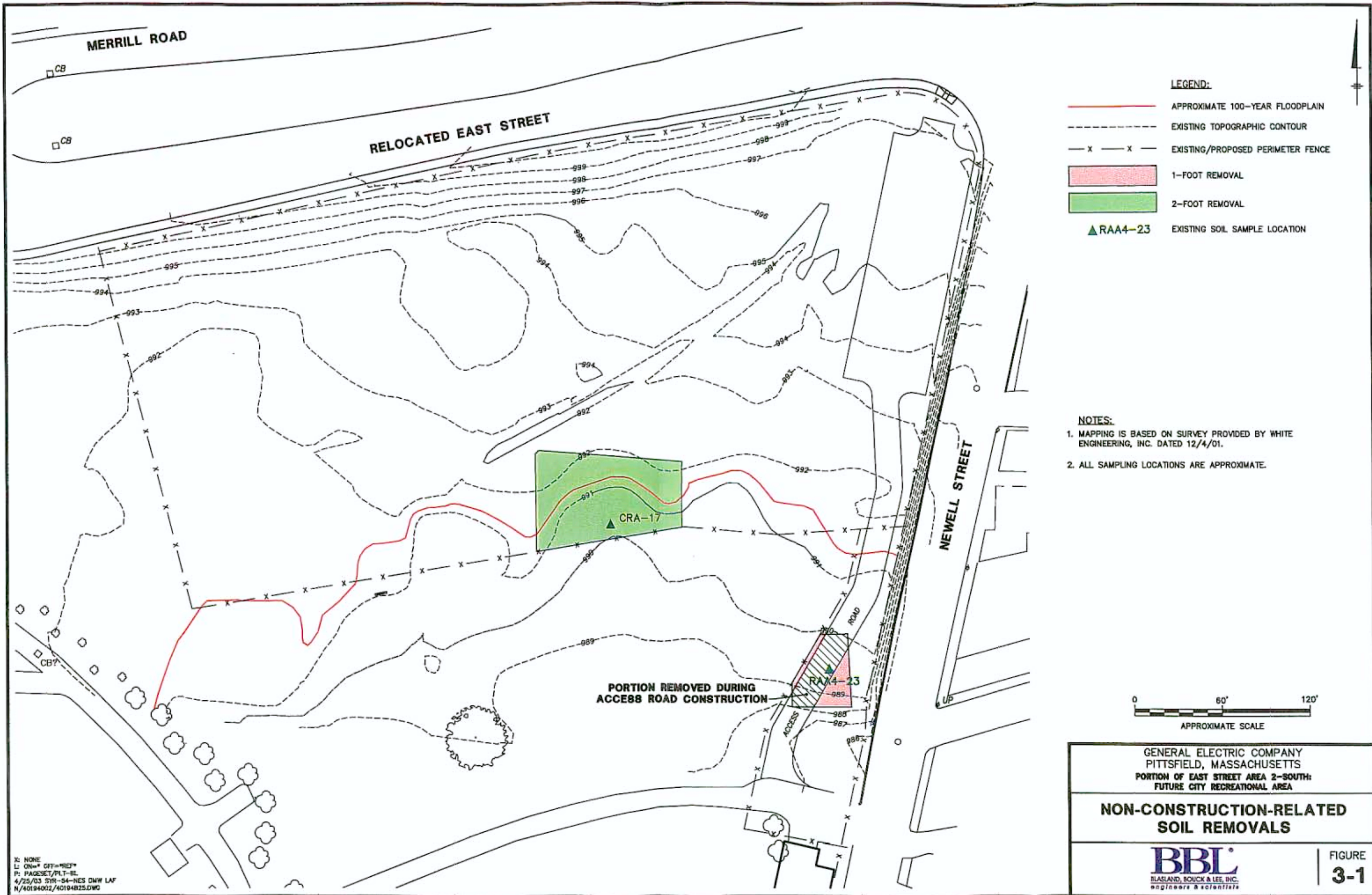
**LIMITS OF FUTURE CITY
 RECREATIONAL AREA AND
 ACCESS ROAD AREA**

FIGURE
1-2

BBL
BLASLAND, BOYCK & LEE, INC.
engineers & scientists

X: NONE
 L: ON= OFF=REF
 P: PAGESSET/PLT-BL
 4/25/03 516-54-RCB DMW LAF
 N/40194002/40194803.DWG





Attachments

Attachment A

**Supplemental Soil Sampling
Validation Report**

**ATTACHMENT A
SUPPLEMENTAL SOIL SAMPLING VALIDATION REPORT**

**RD/RA WORK PLAN ADDENDUM FOR THE FUTURE CITY RECREATIONAL AREA
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 sampling activities at the Future City Recreational Area, located in Pittsfield, Massachusetts. The samples were analyzed for various constituents listed in Appendix IX of 40 CFR Part 264, plus three additional constituents -- benzidine, 2-chloroethyl vinyl ether, and 1,2-diphenylhydrazine (hereafter referred to as Appendix IX+3), excluding pesticides and herbicides, by CT&E Environmental Services, Inc. of Charleston, West Virginia. Data validation was performed for the following number of samples for each specified analyte group:

Analyte Group	No. of Samples
Polychlorinated Biphenyls (PCBs)	21
Volatile Organic Compounds (VOCs)	12
Semi-Volatile Organic Compounds (SVOCs)	10
Polychlorinated Dibenzo-p-dioxins (PCDDs)/ Polychlorinated Dibenzofurans (PCDFs)	6
Metals	6
Cyanide/Sulfide	6

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 October 17, 2000);
- *Region I Tiered Organic and Inorganic Data Validation Guidelines*, USEPA Region I (July 1, 1993);
- *Region I Laboratory Data Validation Functional Guidelines for Evaluating Inorganics Analyses*, USEPA Region I (June 13, 1988) (Modified February 1989);
- *Region I Laboratory Data Validation Functional Guidelines for Evaluating Organics Analyses*, USEPA Region I (February 1, 1988) (Modified November 1, 1988);
- *Region I Laboratory Data Validation Functional Guidelines for Evaluating Organics Analyses*, USEPA Region I (Draft, December 1996); and,
- *National Functional Guidelines for Dioxin/Furan Data Validation*, USEPA (Draft, January 1996).

A summary of the Tier I and Tier II data evaluation is presented in Table 1. Each sample subject to evaluation is listed in Table 1 to document that data review was performed and to indicate the highest level of data validation (Tier I or Tier II) that was applied. Samples requiring data qualification are listed separately for each parameter (compound or analyte) that required qualification.

The following data qualifiers have been used in this data evaluation.

- J The compound or analyte 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, and also when a compound or analyte is detected at estimated concentrations less than the practical quantitation limit (PQL).
- U The compound or analyte 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-detected sample results are presented as ND(PQL) within this report and in Table 1 for consistency with previous documents prepared for this investigation.
- UJ The compound or analyte was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual level of quantitation. Non-detected sample results requiring qualification are presented as ND(PQL) J within this report and in Table 1 for consistency with previous documents prepared for this investigation.
- R Indicates that the previously reported detection limit or sample result has been rejected due to a major deficiency in the data generation procedure. The data should not be used for any qualitative or quantitative purposes.

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, 7/31/91), to ensure that all laboratory data and documentation were present. A summary of the samples subjected to Tier I and Tier II data evaluation is presented below.

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	
PCBs	9	1	0	9	1	1	21
VOCs	0	0	0	8	1	3	12
SVOCs	0	0	0	8	1	1	10
PCDDs/PCDFs	0	0	0	4	1	1	6
Metals	0	0	0	4	1	1	6
Cyanide/Sulfide	0	0	0	4	1	1	6
Total	9	1	0	37	6	8	61

In the event that 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 complied with the USEPA Region I Tier I data completeness requirements.

As specified in the FSP/QAPP, approximately 25% of the laboratory sample delivery group packages were randomly chosen to be subjected to a Tier II review. A Tier II review was also performed to resolve data usability limitations that were identified from laboratory qualification of the data during the Tier I data review. The 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. Due to the variable sizes of the data packages and the number of data qualification issues identified during the Tier I review, approximately 93% of the data were subjected to a Tier II review. The Tier II review resulted in the qualification of data for several samples due to minor QA/QC deficiencies. Additionally, all field duplicates were examined for relative percent difference (RPD) compliance with the criteria specified in the FSP/QAPP.

When qualification of the sample data was required, the sample results associated with a QA/QC parameter deviation were qualified in accordance with the procedures outlined in the USEPA Region I data validation guidance documents. When the data validation process identified several quality control deficiencies, the cumulative effect of the various deficiencies was employed in assigning the final data qualifier. A summary of the QA/QC parameter deviations that resulted in data qualification is presented below for each analytical method.

4.0 Data Review

Initial calibration criterion for organic analyses requires that the average relative response factor (RRF) have a value greater than 0.05. Sample results were qualified as an estimate (J) when this criterion was exceeded. The compounds that exceeded initial calibration criterion and the number of samples qualified are presented below.

Analysis Qualified Due to Initial Calibration Deviations

Analysis	Compound	Number of Affected Samples	Qualification
VOCs	1,4-Dioxane	8	J
	Acetone	1	J
	Acetonitrile	8	J
	Acrolein	10	J
	Acrylonitrile	3	J
	Isobutanol	8	J
	Propionitrile	8	J
SVOCs	4-Nitroquinoline-1-oxide	1	J
	Hexachlorophene	5	J

Several of the organic compounds (including the compounds presented in the table above detailing RRF deviations) exhibit instrument response factors (RFs) that are below the USEPA Region I minimum value of 0.05, but meet the analytical method criterion, which does not specify minimum RFs for these compounds. These compounds were analyzed by the laboratory at a higher concentration than the compounds that normally exhibit RFs greater than the USEPA Region I minimum value of 0.05 in an effort demonstrate acceptable response. USEPA Region I guidelines state that non-detected compound results associated with a RF less than the minimum value of 0.05 are to be rejected (R). However, the case of these select organic compounds, the

RF is an inherent problem with the current analytical methodology; therefore, the non-detected sample results were qualified as estimated (J).

The continuing calibration criterion requires that the percent difference (%D) between the initial calibration RRF and the continuing calibration RRF for VOCs and SVOCs be less than 25%. Sample data for detected and non-detected compounds with %D values that exceeded the continuing calibration criterion were qualified as estimated (J). A summary of the compounds that exceeded continuing calibration criterion and the number of samples qualified due to those deviations are identified below.

Compounds Qualified Due to Continuing Calibration of %D Values

Analysis	Compound	Number of Affected Samples	Qualification
VOCs	Chloroethane	1	J
	Trichlorofluoromethane	6	J
	Vinyl Acetate	1	J
SVOCs	1,3,5-Trinitrobenzene	4	J
	1,3-Dinitrobenzene	1	J
	1,4-Naphthoquinone	1	J
	2-Acetylaminofluorene	4	J
	2-Nitroaniline	4	J
	3-Methylcholanthrene	4	J
	4-Aminobiphenyl	4	J
	4-Phenylenediamine	1	J
	5-Nitro-o-toluidine	1	J
	7,12-Dimethylbenz(a)anthracene	1	J
	a,a'-Dimethylphenethylamine	1	J
	Aramite	5	J
	Benzidine	5	J
	Hexachlorocyclopentadiene	1	J
	Hexachlorophene	1	J
N-Nitrosodiethylamine	5	J	

Field, laboratory, and method blanks were analyzed to evaluate whether field sampling equipment or laboratory background contamination may have contributed to the reported sample results. When detected analytes were identified in a blank sample, blank action levels were calculated at ten times the blank concentrations for the common laboratory contaminant compounds (OCDD and OCDF) and five times the blank concentration for all other detected analytes. Detected sample results that were below the blank action level were qualified with a "U." The analytes detected in the method blanks and which resulted in qualification of sample data are presented below.

Compounds Qualified Due to Blank Deviations

Analysis	Compound	Number of Affected Samples	Qualification
PCDDs/PCDFs	OCDD	3	U
Inorganics	Sulfide	3	U
	Tin	1	U
PCBs	Aroclor-1260	3	U
	Total PCBs	3	U

Matrix spike (MS) sample analysis recovery criteria for organics require that the MS recoveries be within the laboratory-generated quality control acceptance limits specified on the MS reporting form. Organic sample results that exceeded laboratory-generated quality control acceptance limits and have MS recoveries greater than 10% were qualified as estimated (J). Compounds that did not meet MS recovery criteria and the samples qualified due to those deviations are presented below.

Analytes/Compounds Qualified Due to Matrix Spike Recovery Deviations

Analysis	Analyte/Compounds	Number of Affected Samples	Qualification
SVOCs	N-Nitroso-di-n-propylamine	1	J

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 sample results that have been determined to be usable during the data validation process. Data completeness with respect to usability was calculated separately for inorganic and each of the organic analyses. The percent usability calculation included analyses evaluated under both the Tier I and Tier II data validation reviews. 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 value tabulated below.

Parameter	Data Usability	
	Percent Usability	Rejected Data
Inorganics	100	None
Cyanide/Sulfide	100	None
VOCs	100	None
SVOCs	100	None
PCBs	100	None
PCDDs/PCDFs	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, field duplicates, MS/MSD samples, and ICP serial dilution samples. For this analytical program, none of the data required qualification for laboratory duplicate RPD deviations, MS/MSD RPD deviations, ICP serial dilution deviations, or field duplicate 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, CRDL samples, and surrogate compound recoveries. For this analytical program, 6.5% of the data required qualification for calibration deviations and 0.13% of the data required qualification for MS/MSD recoveries. None of the data required qualification for surrogate compound recovery deviations, internal standard recovery deviations, CRDL standard recoveries, or LCS recovery deviations.

5.3 Representativeness

Representativeness expresses the degree to which sample data accurately and precisely represents a characteristic of a population, 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 Agency 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 that were 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 advancements in analytical chemistry and instrumentation. In most cases, the 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 (i.e., sample extraction/preparation, instrument calibration, QA/QC procedures, etc.). Through this 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.

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

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. The actual completeness of this analytical data for individual analytical parameters and overall usability of this data set is 100%.

ATTACHMENT A
ANALYTICAL DATA VALIDATION SUMMARY

RD/RA WORK PLAN ADDENDUM FOR THE FUTURE CITY RECREATIONAL AREA
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
PCBs											
2A0P037	RAA4-15 (1 - 3)	1/2/2002	Soil	Tier I	No						
2A0P037	RAA4-23 (0 - 1)	1/2/2002	Soil	Tier I	No						
2A0P037	RAA4-23 (1 - 3)	1/2/2002	Soil	Tier I	No						
2A0P037	RAA4-24 (0 - 1)	1/2/2002	Soil	Tier I	No						
2A0P037	RAA4-24 (1 - 3)	1/2/2002	Soil	Tier I	No						
2A0P037	RAA4-25 (0 - 1)	1/2/2002	Soil	Tier I	No						
2A0P037	RAA4-25 (1 - 3)	1/2/2002	Soil	Tier I	No						
2A0P037	RAA4-26 (0 - 1)	1/2/2002	Soil	Tier I	No						
2A0P037	RAA4-26 (1 - 3)	1/2/2002	Soil	Tier I	No						
2A0P037	RAA4-DUP-1 (1 - 3)	1/2/2002	Soil	Tier I	No						
2A0P060	RAA4-14 (1 - 3)	1/3/2002	Soil	Tier II	No						
2A0P060	RAA4-21 (1 - 3)	1/3/2002	Soil	Tier II	No						
2A0P060	RAA4-21 (3 - 6)	1/3/2002	Soil	Tier II	No						
2A0P060	RAA4-22 (1 - 3)	1/3/2002	Soil	Tier II	Yes	Aroclor-1260	Rinse Blank	-	-	ND(0.038)	
						Total PCBs	Rinse Blank	-	-	ND(0.038)	
2A0P060	RAA4-22 (3 - 6)	1/3/2002	Soil	Tier II	No						
2A0P060	RAA4-DUP-2 (1 - 3)	1/3/2002	Soil	Tier II	No						
2A0P060	RAA4-E42 (0 - 1)	1/3/2002	Soil	Tier II	Yes	Aroclor-1260	Rinse Blank	-	-	ND(0.40)	
						Total PCBs	Rinse Blank	-	-	0.22	
2A0P060	RAA4-E42 (1 - 3)	1/3/2002	Soil	Tier II	No						
2A0P060	RAA4-E42 (3 - 6)	1/3/2002	Soil	Tier II	No						
2A0P060	RAA4-E42 (6 - 15)	1/3/2002	Soil	Tier II	No						
2A0P060	RB-010302-1	1/3/2002	Soil	Tier II	No						
Metals											
2A0P037	RAA4-25 (0 - 1)	1/2/2002	Soil	Tier II	No						
2A0P037	RAA4-25 (1 - 3)	1/2/2002	Soil	Tier II	No						
2A0P037	RAA4-26 (1 - 3)	1/2/2002	Soil	Tier II	No						
2A0P037	RAA4-DUP-1 (1 - 3)	1/2/2002	Soil	Tier II	No						
2A0P037	Rinse Blank	1/2/2002	Water	Tier II	No						
2A0P060	RAA4-E42 (0 - 1)	1/3/2002	Soil	Tier II	Yes	Tin	Method Blank	-	-	ND(10.0)	
VOCs											
2A0P037	RAA4-25 (0 - 1)	1/2/2002	Soil	Tier II	Yes	1,4-Dioxane	ICAL RRF	0.009	>0.05	ND(0.11) J	
						Acetonitrile	ICAL RRF	0.033	>0.05	ND(0.11) J	
						Acrolein	ICAL RRF	0.003	>0.05	ND(0.11) J	
						Isobutanol	ICAL RRF	0.004	>0.05	ND(0.11) J	
						Propionitrile	ICAL RRF	0.027	>0.05	ND(0.011) J	
						Trichlorofluoromethane	CCAL %D	33.2%	<25%	ND(0.0054) J	
2A0P037	RAA4-25 (1 - 3)	1/2/2002	Soil	Tier II	Yes	1,4-Dioxane	ICAL RRF	0.009	>0.05	ND(0.10) J	
						Acetonitrile	ICAL RRF	0.033	>0.05	ND(0.10) J	
						Acrolein	ICAL RRF	0.003	>0.05	ND(0.10) J	
						Isobutanol	ICAL RRF	0.004	>0.05	ND(0.10) J	
						Propionitrile	ICAL RRF	0.027	>0.05	ND(0.010) J	
						Trichlorofluoromethane	CCAL %D	33.2%	<25%	ND(0.0053) J	
2A0P037	RAA4-26 (1 - 3)	1/2/2002	Soil	Tier II	Yes	1,4-Dioxane	ICAL RRF	0.009	>0.05	ND(0.11) J	
						Acetonitrile	ICAL RRF	0.033	>0.05	ND(0.11) J	
						Acrolein	ICAL RRF	0.003	>0.05	ND(0.11) J	
						Isobutanol	ICAL RRF	0.004	>0.05	ND(0.11) J	
						Propionitrile	ICAL RRF	0.027	>0.05	ND(0.011) J	
						Trichlorofluoromethane	CCAL %D	33.2%	<25%	ND(0.0053) J	
2A0P037	RAA4-DUP-1 (1 - 3)	1/2/2002	Soil	Tier II	Yes	1,4-Dioxane	ICAL RRF	0.009	>0.05	ND(0.11) J	
						Acetonitrile	ICAL RRF	0.033	>0.05	ND(0.11) J	
						Acrolein	ICAL RRF	0.003	>0.05	ND(0.11) J	
						Isobutanol	ICAL RRF	0.004	>0.05	ND(0.11) J	
						Propionitrile	ICAL RRF	0.027	>0.05	ND(0.011) J	
						Trichlorofluoromethane	CCAL %D	33.2%	<25%	ND(0.0053) J	

ATTACHMENT A
ANALYTICAL DATA VALIDATION SUMMARY

RD/RA WORK PLAN ADDENDUM FOR THE FUTURE CITY RECREATIONAL AREA
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
VOCs (continued)											
2A0P037	Rinse Blank	1/2/2002	Soil	Tier II	Yes	1,4-Dioxane	ICAL RRF	0.001	>0.05	ND(0.20) J	
						Acrylonitrile	ICAL RRF	0.021	>0.05	ND(0.0050) J	
						Acetonitrile	ICAL RRF	0.035	>0.05	ND(0.10) J	
						Acrolein	ICAL RRF	0.030	>0.05	ND(0.10) J	
						Isobutanol	ICAL RRF	0.023	>0.05	ND(0.10) J	
						Propionitrile	ICAL RRF	0.011	>0.05	ND(0.10) J	
						Trichlorofluoromethane	CCAL %D	33.2%	<25%	ND(0.0050) J	
2A0P037	TRIP BLANK	1/2/2002	Soil	Tier II	Yes	1,4-Dioxane	ICAL RRF	0.001	>0.05	ND(0.20) J	
						Acrylonitrile	ICAL RRF	0.021	>0.05	ND(0.0050) J	
						Acetonitrile	ICAL RRF	0.035	>0.05	ND(0.10) J	
						Acrolein	ICAL RRF	0.030	>0.05	ND(0.10) J	
						Isobutanol	ICAL RRF	0.023	>0.05	ND(0.10) J	
						Propionitrile	ICAL RRF	0.011	>0.05	ND(0.10) J	
						Trichlorofluoromethane	CCAL %D	33.2%	<25%	ND(0.0050) J	
2A0P060	210S (0 - 0.5)	1/3/2002	Soil	Tier II	Yes	Acrolein	ICAL RRF	0.003	>0.05	ND(0.12) J	
2A0P060	CRA-14 (0 - 2)	1/3/2002	Soil	Tier II	No						
2A0P060	CRA-18 (0 - 2)	1/3/2002	Soil	Tier II	No						
2A0P060	CRA-7 (0 - 2)	1/3/2002	Soil	Tier II	Yes	Acrolein	ICAL RRF	0.003	>0.05	ND(0.13) J	
2A0P060	RAA4-E42 (0 - 1)	1/3/2002	Soil	Tier II	Yes	1,4-Dioxane	ICAL RRF	0.009	>0.05	ND(0.11) J	
						Acetonitrile	ICAL RRF	0.033	>0.05	ND(0.11) J	
						Acrolein	ICAL RRF	0.003	>0.05	ND(0.11) J	
						Chloroethane	CCAL %D	33.2%	<25%	ND(0.0054) J	
						Isobutanol	ICAL RRF	0.004	>0.05	ND(0.11) J	
						Propionitrile	ICAL RRF	0.027	>0.05	ND(0.011) J	
						Vinyl Acetate	CCAL %D	27.2%	<25%	ND(0.0054) J	
						1,4-Dioxane	ICAL RRF	0.001	>0.05	ND(0.20) J	
						Acrylonitrile	ICAL RRF	0.021	>0.05	ND(0.0050) J	
						Acetonitrile	ICAL RRF	0.050	>0.05	ND(0.10) J	
Acrolein	ICAL RRF	0.030	>0.05	ND(0.10) J							
Isobutanol	ICAL RRF	0.023	>0.05	ND(0.10) J							
Propionitrile	ICAL RRF	0.011	>0.05	ND(0.10) J							
Acetone	ICAL RRF	0.048	>0.05	ND(0.020) J							
SVOCs											
2A0P037	RAA4-25 (0 - 1)	1/2/2002	Soil	Tier II	Yes	1,3,5-Trinitrobenzene	CCAL %D	0.266	<25%	ND(0.36) J	
						2-Acetylaminofluorene	CCAL %D	35.1%	<25%	ND(0.73) J	
						2-Nitroaniline	CCAL %D	30.8%	<25%	ND(1.8) J	
						3-Methylcholanthrene	CCAL %D	25.6%	<25%	ND(0.73) J	
						4-Aminobiphenyl	CCAL %D	28.3%	<25%	ND(0.73) J	
						Aramite	CCAL %D	27.5%	<25%	ND(0.73) J	
						Hexachlorophene	ICAL RRF	1.9%	>0.05	ND(0.73) J	
						N-Nitrosodiethylamine	CCAL %D	26.3%	<25%	ND(0.36) J	
						1,3,5-Trinitrobenzene	CCAL %D	26.6%	<25%	ND(0.36) J	
						2-Acetylaminofluorene	CCAL %D	35.1%	<25%	ND(0.70) J	
						2-Nitroaniline	CCAL %D	30.8%	<25%	ND(1.8) J	
3-Methylcholanthrene	CCAL %D	25.6%	<25%	ND(0.70) J							
4-Aminobiphenyl	CCAL %D	28.3%	<25%	ND(0.70) J							
Aramite	CCAL %D	27.5%	<25%	ND(0.70) J							
Hexachlorophene	ICAL RRF	0.019	>0.05	ND(0.70) J							
N-Nitrosodiethylamine	CCAL %D	26.3%	<25%	ND(0.35) J							
2A0P037	RAA4-26 (1 - 3)	1/2/2002	Soil	Tier II	Yes	1,3,5-Trinitrobenzene	CCAL %D	26.6%	<25%	ND(0.35) J	
						2-Acetylaminofluorene	CCAL %D	35.1%	<25%	ND(0.71) J	
						2-Nitroaniline	CCAL %D	30.8%	<25%	ND(1.8) J	
						3-Methylcholanthrene	CCAL %D	25.6%	<25%	ND(0.71) J	
						4-Aminobiphenyl	CCAL %D	28.3%	<25%	ND(0.71) J	
						Aramite	CCAL %D	27.5%	<25%	ND(0.71) J	
						Hexachlorophene	ICAL RRF	0.019	>0.05	ND(0.71) J	
						N-Nitrosodiethylamine	CCAL %D	26.3%	<25%	ND(0.35) J	
						N-Nitroso-di-n-propylamine	MS %R	34.0%	41% to 126%	ND(0.35) J	
						N-Nitroso-di-n-propylamine	MSD %R	36.0%	41% to 126%	ND(0.35) J	

ATTACHMENT A
ANALYTICAL DATA VALIDATION SUMMARY

RD/RA WORK PLAN ADDENDUM FOR THE FUTURE CITY RECREATIONAL AREA
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
SVOCs (continued)											
2A0P037	RAA4-DUP-1 (1 - 3)	1/2/2002	Soil	Tier II	Yes	1,3,5-Trinitrobenzene	CCAL %D	26.6%	<25%	ND(0.35) J	
						2-Acetylaminofluorene	CCAL %D	35.1%	<25%	ND(0.71) J	
						2-Nitroaniline	CCAL %D	30.8%	<25%	ND(1.8) J	
						3-Methylcholanthrene	CCAL %D	25.6%	<25%	ND(0.71) J	
						4-Aminobiphenyl	CCAL %D	28.3%	<25%	ND(0.71) J	
						Aramite	CCAL %D	27.5%	<25%	ND(0.71) J	
						Hexachlorophene	ICAL RRF	0.019	>0.05	ND(0.71) J	
						N-Nitrosodiethylamine	CCAL %D	26.3%	<25%	ND(0.35) J	
2A0P037	Rinse Blank	1/2/2002	Soil	Tier II	Yes	1,3-Dinitrobenzene	CCAL %D	32.1%	<25%	ND(0.020) J	
						5-Nitro-o-toluidine	CCAL %D	29.4%	<25%	ND(0.010) J	
						7,12-Dimethylbenz(a)anthracene	CCAL %D	37.1%	<25%	ND(0.010) J	
						Aramite	CCAL %D	34.8%	<25%	ND(0.010) J	
						Hexachlorophene	ICAL RRF	0.019	>0.05	ND(0.020) J	
						Hexachlorophene	CCAL %D	37.2%	<25%	ND(0.020) J	
						N-Nitrosodiethylamine	CCAL %D	32.8%	<25%	ND(0.010) J	
						Benzidine	CCAL %D	27.5%	<25%	ND(0.80) J	
2A0P060	210S (0 - 0.5)	1/3/2002	Soil	Tier II	Yes	Benzidine	CCAL %D	27.5%	<25%	ND(0.75) J	
2A0P060	CRA-14 (0 - 2)	1/3/2002	Soil	Tier II	Yes	Benzidine	CCAL %D	27.5%	<25%	ND(0.72) J	
2A0P060	CRA-18 (0 - 2)	1/3/2002	Soil	Tier II	Yes	Benzidine	CCAL %D	27.5%	<25%	ND(0.85) J	
2A0P060	CRA-7 (0 - 2)	1/3/2002	Soil	Tier II	Yes	Benzidine	CCAL %D	27.5%	<25%	ND(0.85) J	
2A0P060	RAA4-E42 (0 - 1)	1/3/2002	Soil	Tier II	Yes	1,4-Naphthoquinone	CCAL %D	28.5%	<25%	ND(0.72) J	
						4-Nitroquinoline-1-oxide	ICAL RRF	0.045	>0.05	ND(0.72) J	
						4-Phenylenediamine	CCAL %D	31.1%	<25%	ND(0.72) J	
						a,a'-Dimethylphenethylamine	CCAL %D	30.3%	<25%	ND(0.72) J	
						Benzidine	CCAL %D	27.5%	<25%	ND(0.72) J	
						Hexachlorocyclopentadiene	CCAL %D	30.9%	<25%	ND(0.36) J	
PCDDs/PCDFs											
2A0P037	RAA4-25 (0 - 1)	1/2/2002	Soil	Tier II	No						
2A0P037	RAA4-25 (1 - 3)	1/2/2002	Soil	Tier II	Yes	OCDD	Method Blank	-	-	ND(0.000014)	
2A0P037	RAA4-26 (1 - 3)	1/2/2002	Soil	Tier II	Yes	OCDD	Method Blank	-	-	ND(0.000016)	
2A0P037	RAA4-DUP-1 (1 - 3)	1/2/2002	Soil	Tier II	Yes	OCDD	Method Blank	-	-	ND(0.000081)	
2A0P037	Rinse Blank	1/2/2002	Water	Tier II	No						
2A0P060	RAA4-E42 (0 - 1)	1/3/2002	Soil	Tier II	No						
Sulfide and Cyanide											
2A0P037	RAA4-25 (0 - 1)	1/2/2002	Soil	Tier II	Yes	Sulfide	Rinse Blank	-	-	ND(8.70)	
2A0P037	RAA4-25 (1 - 3)	1/2/2002	Soil	Tier II	No						
2A0P037	RAA4-26 (1 - 3)	1/2/2002	Soil	Tier II	Yes	Sulfide	Rinse Blank	-	-	ND(14.0)	
2A0P037	RAA4-DUP-1 (1 - 3)	1/2/2002	Soil	Tier II	Yes	Sulfide	Rinse Blank	-	-	ND(25.0)	
2A0P037	Rinse Blank	1/2/2002	Water	Tier II	No						
2A0P060	RAA4-E42 (0 - 1)	1/3/2002	Soil	Tier II	No						

Attachment B

**Future City Recreational Area –
PCB Evaluations
(Existing Conditions)**

ATTACHMENT B
 EXISTING CONDITIONS - 0- TO 2-FOOT DEPTH INCREMENT
 FUTURE CITY RECREATIONAL AREA - PCB EVALUATIONS
 GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
 EXISTING CONDITIONS - 0- TO 0.5-FOOT DEPTH INCREMENT

Sample ID(s)	Polygon ID	Polygon Area (sq. ft.)	Sample Depth (ft.)	PCB Conc. (ppm)	Volume (cumulative) (cy)	Average PCB Concentration Per Foot (ppm)	Average PCB Conc. TIMES Total Volume
CRA-1	87	3,867	0 - 0.5	1.28	71.61	1.28	91.66
CRA-2	88	3,119	0 - 0.5	1.19	57.77	1.19	68.74
CRA-3	93	5,082	0 - 0.5	0.23	94.11	0.23	21.65
CRA-4	92	5,466	0 - 0.5	0.2	101.22	0.20	20.24
CRA-5	91	6,337	0 - 0.5	0.84	117.36	0.84	98.58
CRA-6	90	7,028	0 - 0.5	0.284	130.15	0.28	36.96
CRA-7	89	6,666	0 - 0.5	0.111	123.45	0.11	13.70
CRA-8	94	6,985	0 - 0.5	1.1	129.36	1.10	142.29
CRA-9	95	7,091	0 - 0.5	5.6	131.32	5.60	735.41
CRA-10	96	8,438	0 - 0.5	0.73	156.26	0.73	114.07
CRA-11	97	10,013	0 - 0.5	1.06	185.42	1.06	196.55
CRA-12	98	9,517	0 - 0.5	3.4	176.24	3.40	599.21
CRA-13	99	7,773	0 - 0.5	0.023	143.95	0.02	3.31
CRA-14	105	4,076	0 - 0.5	1.81	75.49	1.81	136.63
CRA-15	104	5,780	0 - 0.5	2.3	107.04	2.30	246.19
CRA-16	122, 103	6,775	0 - 0.5	0.89	125.47	0.89	111.67
CRA-17	102, 125	5,631	0 - 0.5	42	104.27	42.00	4,379.43
CRA-18	101, 123	5,296	0 - 0.5	0.32	98.07	0.32	31.38
CRA-19	100	3,386	0 - 0.5	0.38	62.70	0.38	23.83
CRA-20	106	2,434	0 - 0.5	0.058	45.07	0.06	2.61
CRA-21	107	2,798	0 - 0.5	0.0235	51.81	0.02	1.22
CRA-22	108	1,928	0 - 0.5	0.95	35.70	0.95	33.92
95-9	86	7,291	0 - 0.5	0.31	135.02	0.31	41.86
210S	85	4,417	0 - 0.5	9.2	81.79	9.20	752.45
202S	84, 127	1,790	0 - 0.5	0.935	33.14	0.94	30.99
E2SC-14	117	5	0 - 0.5	0.6	0.10	0.60	0.06
RAA4-3	111	326	0 - 0.5	0.68	6.04	0.68	4.11
RAA4-7	109, 110	1,698	0 - 0.5	1.28	31.45	1.28	40.26
RAA4-8	114	443	0 - 0.5	4.45	8.21	4.45	36.55
RAA4-9	115, 116, 124	1,034	0 - 0.5	1.64	19.15	1.64	21.40
RAA4-10	118, 126	338	0 - 0.5	3.9	6.26	3.90	34.42
RAA4-14	120, 121	14	0 - 0.5	1.7	0.27	1.70	0.45
X-16	112	4	0 - 0.5	0.07	0.07	0.07	0.01
X-17	83	5,586	0 - 0.5	0.0185	103.45	0.02	1.91
Totals:	--	148,434	--	--	2,748.78	--	8,073.70
Volume-Weighted Average:							2.94

EXISTING CONDITIONS - 0.5- TO 1-FOOT DEPTH INCREMENT

Sample ID(s)	Polygon ID	Polygon Area (sq. ft.)	Sample Depth (ft.)	PCB Conc. (ppm)	Volume (cumulative) (cy)	Average PCB Concentration Per Foot (ppm)	Average PCB Conc. TIMES Total Volume
CRA-1	77	5,449	0.5 - 1	1.28	100.91	1.28	129.16
CRA-2	78	3,119	0.5 - 1	1.19	57.77	1.19	68.74
CRA-3	83	5,082	0.5 - 1	0.23	94.11	0.23	21.65
CRA-4	82	5,466	0.5 - 1	0.2	101.22	0.20	20.24
CRA-5	81	6,337	0.5 - 1	0.84	117.36	0.84	98.58
CRA-6	80	9,412	0.5 - 1	0.284	174.30	0.28	49.50
CRA-7	79	6,666	0.5 - 1	0.111	123.45	0.11	13.70
CRA-8	84	6,985	0.5 - 1	1.1	129.36	1.10	142.29
CRA-9	85	7,091	0.5 - 1	5.6	131.32	5.60	735.41
CRA-10	86	8,438	0.5 - 1	0.73	156.26	0.73	114.07
CRA-11	87	10,013	0.5 - 1	1.06	185.42	1.06	196.55
CRA-12	88	9,517	0.5 - 1	3.4	176.24	3.40	599.21
CRA-13	89	7,773	0.5 - 1	0.023	143.95	0.02	3.31
CRA-14	95	4,076	0.5 - 1	1.81	75.49	1.81	136.63
CRA-15	94	6,870	0.5 - 1	2.3	127.22	2.30	292.62
CRA-16	114, 93	6,775	0.5 - 1	0.89	125.47	0.89	111.67
CRA-17	92, 115	5,631	0.5 - 1	42	104.27	42.00	4,379.43
CRA-18	91, 116	5,296	0.5 - 1	0.32	98.07	0.32	31.38
CRA-19	90	3,386	0.5 - 1	0.38	62.70	0.38	23.83
CRA-20	96	2,434	0.5 - 1	0.058	45.07	0.06	2.61
CRA-21	97	2,886	0.5 - 1	0.0235	53.44	0.02	1.26
CRA-22	98	1,928	0.5 - 1	0.95	35.70	0.95	33.92

ATTACHMENT B
EXISTING CONDITIONS - 0- TO 2-FOOT DEPTH INCREMENT
FUTURE CITY RECREATIONAL AREA - PCB EVALUATIONS
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS

EXISTING CONDITIONS - 0.5- TO 1-FOOT DEPTH INCREMENT (continued)

Sample ID(s)	Polygon ID	Polygon Area (sq. ft.)	Sample Depth (ft.)	PCB Conc. (ppm)	Volume (cumulative) (cy)	Average PCB Concentration Per Foot (ppm)	Average PCB Conc. TIMES Total Volume
95-9	100	7,654	0.5 - 1	0.31	141.73	0.31	43.94
E2SC-14	109	5	0.5 - 1	0.6	0.10	0.60	0.06
RAA4-3	103	326	0.5 - 1	0.68	6.04	0.68	4.11
RAA4-7	101, 102	1,765	0.5 - 1	1.28	32.69	1.28	41.84
RAA4-8	106	993	0.5 - 1	4.45	18.38	4.45	81.81
RAA4-9	107, 108	1,118	0.5 - 1	1.64	20.69	1.64	33.94
RAA4-10	117, 110	338	0.5 - 1	3.9	6.26	3.90	24.42
RAA4-14	112, 113	14	0.5 - 1	1.7	0.27	1.70	0.45
X-16	104	4	0.5 - 1	0.07	0.07	0.07	0.01
X-17	99	5,586	1 - 3.0	0.0185	103.45	0.02	1.91
Totals:	--	148,434	--	--	2,748.78	--	7,438.24
Volume-Weighted Average:							2.71

EXISTING CONDITIONS - 1- TO 2-FOOT DEPTH INCREMENT

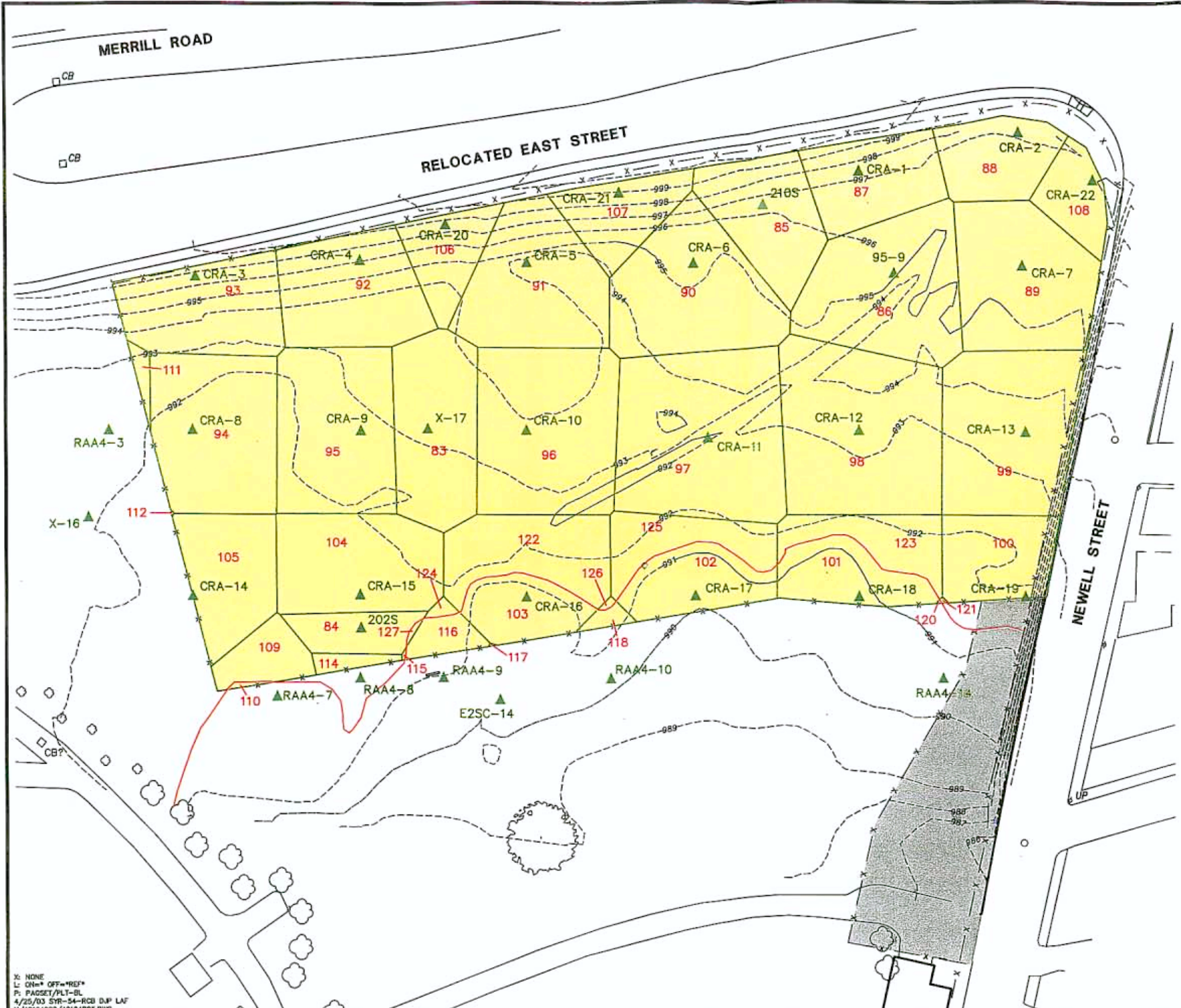
Sample ID(s)	Polygon ID	Polygon Area (sq. ft.)	Sample Depth (ft.)	PCB Conc. (ppm)	Volume (cumulative) (cy)	Average PCB Concentration Per Foot (ppm)	Average PCB Conc. TIMES Total Volume
CRA-1	63	5,449	1 - 2	1.28	201.82	1.28	258.33
CRA-2	64	3,119	1 - 2	1.19	115.53	1.19	137.48
CRA-3	69	5,125	1 - 2	0.23	189.82	0.23	43.66
CRA-4	68	5,466	1 - 2	0.2	202.45	0.20	40.49
CRA-5	67	6,337	1 - 2	0.84	234.72	0.84	197.16
CRA-6	66	9,412	1 - 2	0.284	348.59	0.28	99.00
CRA-7	65	6,666	1 - 2	0.111	246.90	0.11	27.41
CRA-8	70	7,268	1 - 2	1.1	269.20	1.10	296.12
CRA-9	71	7,091	1 - 2	5.6	262.65	5.60	1,470.82
CRA-10	72	8,438	1 - 2	0.73	312.52	0.73	228.14
CRA-11	73	10,013	1 - 2	1.06	370.84	1.06	393.09
CRA-12	74	9,517	1 - 2	3.4	352.48	3.40	1,198.43
CRA-13	75	7,773	1 - 2	0.023	287.89	0.02	6.62
CRA-14	81	4,618	1 - 2	1.81	171.04	1.81	309.57
CRA-15	80, 88	8,870	1 - 2	2.3	328.53	2.30	755.63
CRA-16	79, 91	7,266	1 - 2	0.89	269.11	0.89	239.51
CRA-17	78, 92	5,772	1 - 2	42	213.76	42.00	8,977.94
CRA-18	77, 90	5,304	1 - 2	0.32	196.43	0.32	62.86
CRA-19	76	3,393	1 - 2	0.38	125.66	0.38	47.75
CRA-20	82	2,434	1 - 2	0.058	90.14	0.06	5.23
CRA-21	83	2,886	1 - 2	0.0235	106.88	0.02	2.51
CRA-22	84	1,928	1 - 2	0.95	71.40	0.95	67.83
95-9	62	7,654	1 - 2	0.31	283.46	0.31	87.87
E2SC-5	85, 86	740	1 - 2	0.29	27.39	0.29	7.94
PR	89	306	1 - 2	0.0185	11.34	0.02	0.21
X-16	87	4	1 - 2	0.07	0.14	0.07	0.01
X-17	61	5,586	1 - 2	0.0185	206.90	0.02	3.83
Totals:	--	148,435	--	--	5,497.58	--	14,965.43
Volume-Weighted Average:							2.72

EXISTING CONDITIONS - 0- TO 2-FOOT DEPTH INCREMENT

Sample ID(s)	Polygon ID	Polygon Area (sq. ft.)	Sample Depth (ft.)	PCB Conc. (ppm)	Volume (cumulative) (cy)	Average PCB Concentration Per Foot (ppm)	Average PCB Conc. TIMES Total Volume
Totals:	--	148,434	--	--	10,995	--	30,477.37
Volume-Weighted Average:							2.77

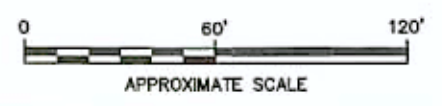
Notes:

1. Polygon ID and area based on information shown on Figures B-1, B-2, and B-3.
2. Non-detectable PCBs included as one-half the detection limit in calculations and shown in bold.
3. For instances where a duplicate sample was available, the average of the samples was included in table.
4. All calculations and rounding are performed by the computer software. Therefore, certain quantities in above table are displayed as rounded numbers for table clarity.



- LEGEND:**
- CURRENT (REVISED) LIMITS OF FUTURE CITY RECREATIONAL AREA
 - APPROXIMATE 100-YEAR FLOODPLAIN
 - EXISTING TOPOGRAPHIC CONTOUR
 - EXISTING/PROPOSED PERIMETER FENCE
 - X-18 EXISTING SOIL SAMPLE LOCATION AND ID
 - LIMITS OF ACCESS ROAD AREA
 - HORIZONTAL LIMITS OF AREA ASSOCIATED WITH GIVEN SAMPLE, DEVELOPED USING THE THEISSEN POLYGON APPROACH.
 - 100 POLYGON ID

- NOTES:**
1. MAPPING IS BASED ON SURVEY PROVIDED BY WHITE ENGINEERING, INC. DATED 12/4/01.
 2. ALL SAMPLING LOCATIONS ARE APPROXIMATE.



GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS
PORTION OF EAST STREET AREA 2-SOUTH:
FUTURE CITY RECREATIONAL AREA

**FCRA-THEISSEN POLYGON MAP
0- TO 0.5-FOOT DEPTH INCREMENT**


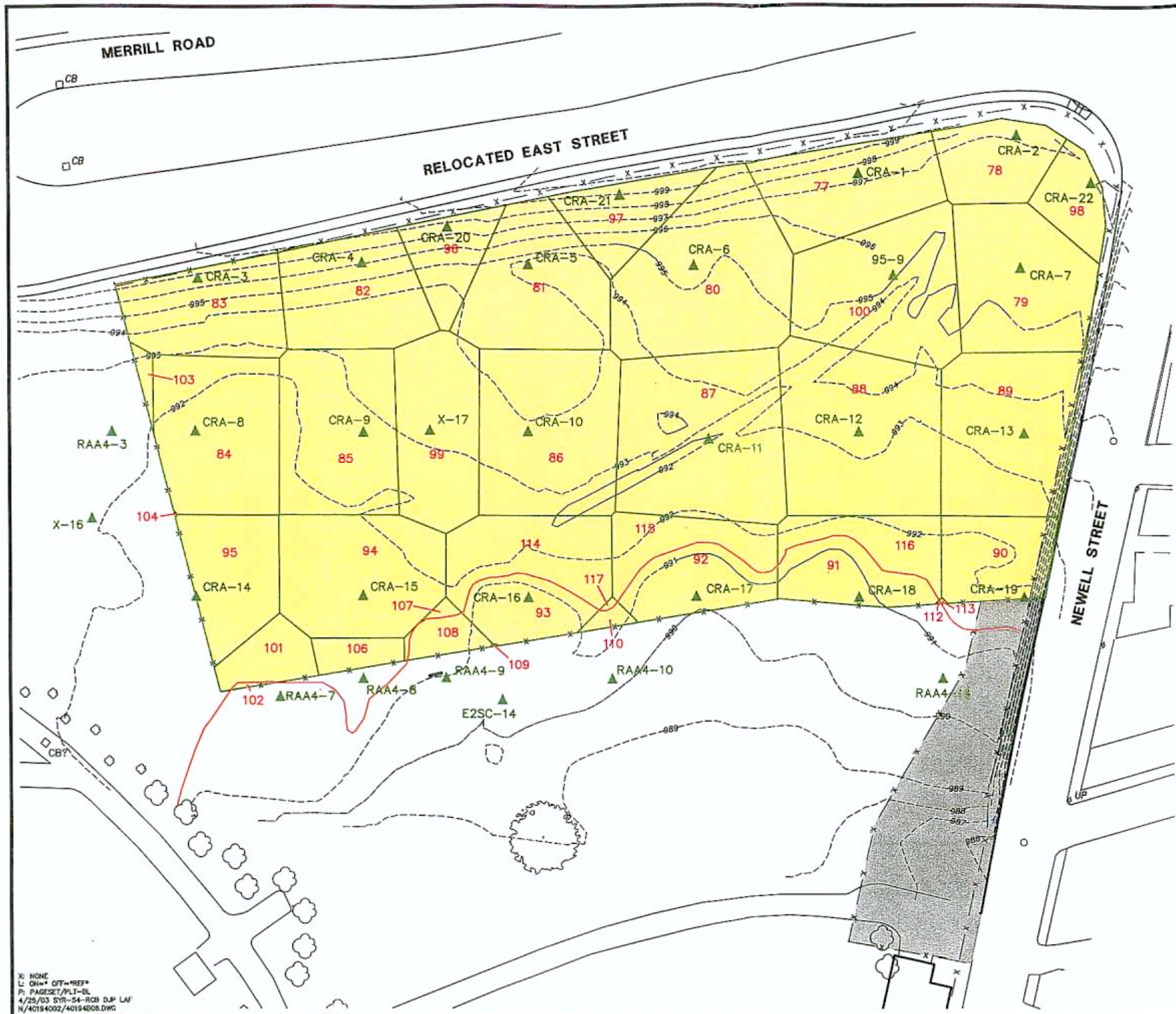


FIGURE
B-1

X: NONE
L: ON* OFF**REF*
P: PADSET/PLT-BL
4/25/03 SYR-54-RCB DJP LAF
N/40194002/40194803.DWG

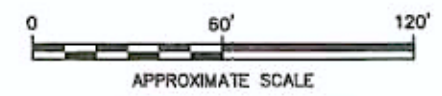


LEGEND:

- CURRENT (REVISED) LIMITS OF FUTURE CITY RECREATIONAL AREA
- APPROXIMATE 100-YEAR FLOODPLAIN
- EXISTING TOPOGRAPHIC CONTOUR
- EXISTING/PROPOSED PERIMETER FENCE
- X-18
EXISTING SOIL SAMPLE LOCATION AND ID
- LIMITS OF ACCESS ROAD AREA
- HORIZONTAL LIMITS OF AREA ASSOCIATED WITH GIVEN SAMPLE, DEVELOPED USING THE THEISSEN POLYGON APPROACH.
- 100
POLYGON ID

NOTES:

1. MAPPING IS BASED ON SURVEY PROVIDED BY WHITE ENGINEERING, INC. DATED 12/4/01.
2. ALL SAMPLING LOCATIONS ARE APPROXIMATE.



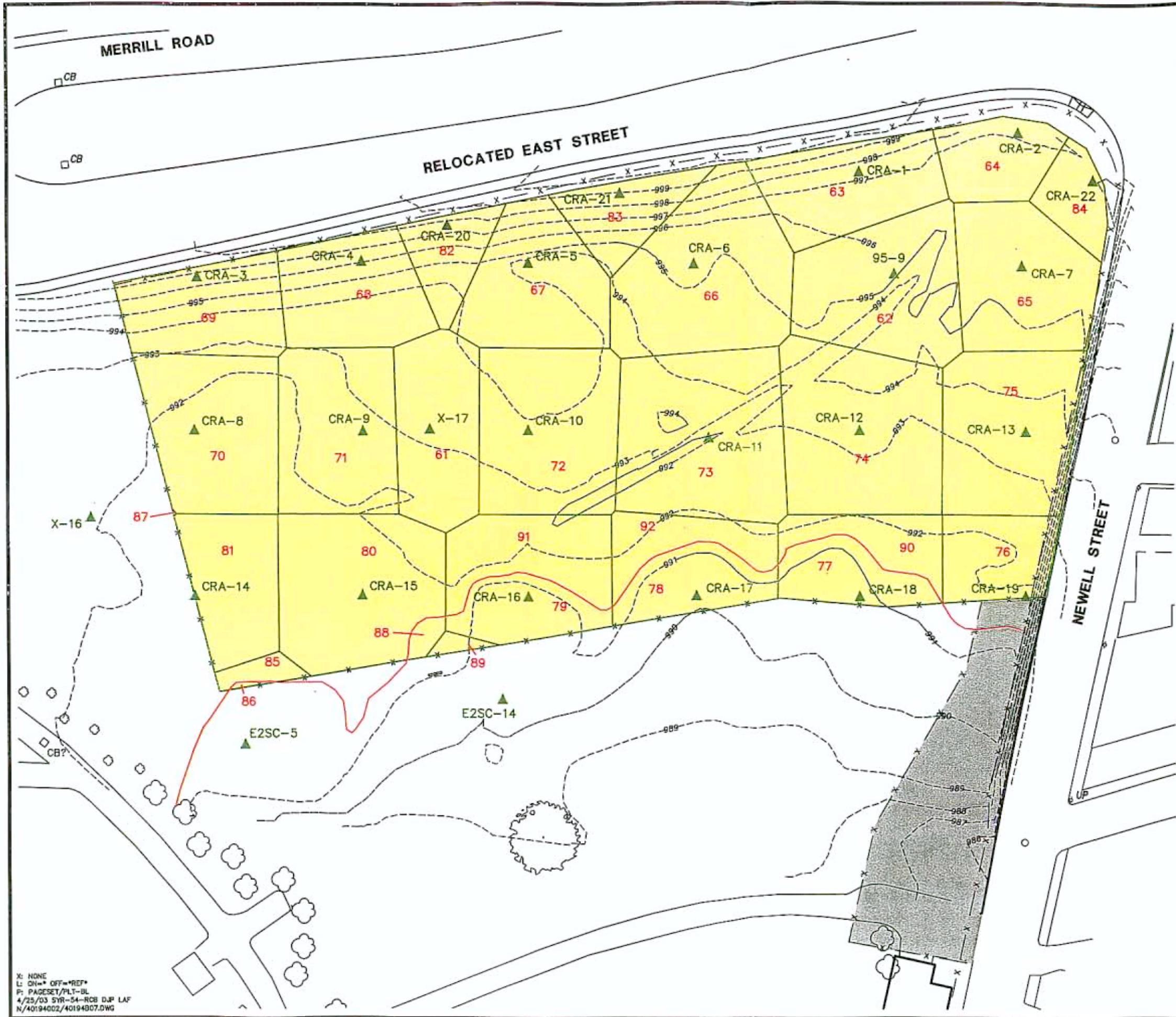
GENERAL ELECTRIC COMPANY
 PITTSFIELD, MASSACHUSETTS
 PORTION OF EAST STREET AREA 2-SOUTH:
 FUTURE CITY RECREATIONAL AREA

**FCRA-THEISSEN POLYGON MAP
 0.5- TO 1-FOOT DEPTH INCREMENT**



FIGURE
B-2

X: NONE
 L: ON* QTY=REF*
 P: PAGESET/PLT-BL
 4/25/03 571-54-RC9 DJP LAF
 N/40194002/40194005.DWG

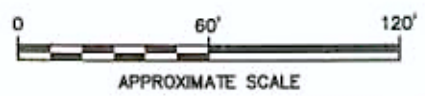


LEGEND:

- CURRENT (REVISED) LIMITS OF FUTURE CITY RECREATIONAL AREA
- APPROXIMATE 100-YEAR FLOODPLAIN
- EXISTING TOPOGRAPHIC CONTOUR
- EXISTING/PROPOSED PERIMETER FENCE
- X-18 EXISTING SOIL SAMPLE LOCATION AND ID
- LIMITS OF ACCESS ROAD AREA
- HORIZONTAL LIMITS OF AREA ASSOCIATED WITH GIVEN SAMPLE, DEVELOPED USING THE THEISSEN POLYGON APPROACH.
- 100 POLYGON ID

NOTES:

1. MAPPING IS BASED ON SURVEY PROVIDED BY WHITE ENGINEERING, INC. DATED 12/4/01.
2. ALL SAMPLING LOCATIONS ARE APPROXIMATE.



GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS
PORTION OF EAST STREET AREA 2-SOUTH:
FUTURE CITY RECREATIONAL AREA

**FCRA-THEISSEN POLYGON MAP
1- TO 2-FOOT DEPTH INCREMENT**




FIGURE
B-3

X: NONE
L: DN= OFF=REF*
P: PAGESET/PLT-DL
4/25/03 SVR-54-RCB DJP LAF
N/40194002/40194007.DWG

Attachment C

**Future City Recreational Area –
PCB Evaluations
(Post-Removal Conditions)**

ATTACHMENT C
POST-REMOVAL CONDITIONS - 0- TO 2-FOOT DEPTH INCREMENT

FUTURE CITY RECREATIONAL AREA - PCB EVALUATIONS
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS

POST-REMOVAL CONDITIONS - 0- TO 0.5-FOOT DEPTH INCREMENT

Sample ID(s)	Polygon ID	Polygon Area (sq. ft.)	Sample Depth (ft.)	PCB Conc. (ppm)	Volume (cumulative) (cy)	Average PCB Concentration Per Foot (ppm)	Average PCB Conc. TIMES Total Volume
CRA-1	87	3,667	0 - 0.5	1.28	71.61	1.28	91.66
CRA-2	88	3,119	0 - 0.5	1.19	57.77	1.19	68.74
CRA-3	93	5,082	0 - 0.5	0.23	94.11	0.23	21.65
CRA-4	92	5,466	0 - 0.5	0.2	101.22	0.20	20.24
CRA-5	91	6,337	0 - 0.5	0.84	117.36	0.84	98.58
CRA-6	90	7,028	0 - 0.5	0.284	130.15	0.28	36.96
CRA-7	89	6,666	0 - 0.5	0.111	123.45	0.11	13.70
CRA-8	94	6,985	0 - 0.5	1.1	129.36	1.10	142.29
CRA-9	95	7,091	0 - 0.5	5.6	131.32	5.60	735.41
CRA-10	96	8,438	0 - 0.5	0.73	156.26	0.73	114.07
CRA-11	97	10,013	0 - 0.5	1.06	185.42	1.06	196.55
CRA-12	98	9,517	0 - 0.5	3.4	176.24	3.40	599.21
CRA-13	99	7,773	0 - 0.5	0.023	143.95	0.02	3.31
CRA-14	105	4,076	0 - 0.5	1.81	75.49	1.81	136.63
CRA-15	104	5,780	0 - 0.5	2.3	107.04	2.30	246.19
CRA-16	122, 103	6,775	0 - 0.5	0.89	125.47	0.89	111.67
CRA-17	102, 125	5,631	0 - 0.5	0.021	104.27	0.02	2.19
CRA-18	101, 123	5,296	0 - 0.5	0.32	98.07	0.32	31.38
CRA-19	100	3,386	0 - 0.5	0.38	62.70	0.38	23.83
CRA-20	106	2,434	0 - 0.5	0.058	45.07	0.06	2.61
CRA-21	107	2,798	0 - 0.5	0.0235	51.81	0.02	1.22
CRA-22	108	1,928	0 - 0.5	0.95	35.70	0.95	33.92
86	86	7,291	0 - 0.5	0.31	135.02	0.31	41.86
210S	85	4,417	0 - 0.5	9.2	81.79	9.20	752.45
202S	84, 127	1,790	0 - 0.5	0.935	33.14	0.94	30.99
E2SC-14	117	5	0 - 0.5	0.6	0.10	0.60	0.06
RAA4-3	111	326	0 - 0.5	0.68	6.04	0.68	4.11
RAA4-7	109, 110	1,698	0 - 0.5	1.28	31.45	1.28	40.26
RAA4-8	114	443	0 - 0.5	4.45	8.21	4.45	36.55
RAA4-9	115, 116, 124	1,034	0 - 0.5	1.64	19.15	1.64	31.40
RAA4-10	118, 126	338	0 - 0.5	3.9	6.26	3.90	24.42
RAA4-14	120, 121	14	0 - 0.5	1.7	0.27	1.70	0.45
X-16	112	4	0 - 0.5	0.07	0.07	0.07	0.01
X-17	83	5,586	0 - 0.5	0.0185	103.45	0.02	1.91
Totals:	-	148,434	--	--	2,749	--	3,696.47
Volume-Weighted Average:							1.34

POST-REMOVAL CONDITIONS - 0.5- TO 1-FOOT DEPTH INCREMENT

Sample ID(s)	Polygon ID	Polygon Area (sq. ft.)	Sample Depth (ft.)	PCB Conc. (ppm)	Volume (cumulative) (cy)	Average PCB Concentration Per Foot (ppm)	Average PCB Conc. TIMES Total Volume
CRA-1	77	5,449	0.5 - 1	1.28	100.91	1.28	129.16
CRA-2	78	3,119	0.5 - 1	1.19	57.77	1.19	68.74
CRA-3	83	5,082	0.5 - 1	0.23	94.11	0.23	21.65
CRA-4	82	5,466	0.5 - 1	0.2	101.22	0.20	20.24
CRA-5	81	6,337	0.5 - 1	0.84	117.36	0.84	98.58
CRA-6	80	9,412	0.5 - 1	0.284	174.30	0.28	49.50
CRA-7	79	6,666	0.5 - 1	0.111	123.45	0.11	13.70
CRA-8	84	6,985	0.5 - 1	1.1	129.36	1.10	142.29
CRA-9	85	7,091	0.5 - 1	5.6	131.32	5.60	735.41
CRA-10	86	8,438	0.5 - 1	0.73	156.26	0.73	114.07
CRA-11	87	10,013	0.5 - 1	1.06	185.42	1.06	196.55
CRA-12	88	9,517	0.5 - 1	3.4	176.24	3.40	599.21
CRA-13	89	7,773	0.5 - 1	0.023	143.95	0.02	3.31
CRA-14	95	4,076	0.5 - 1	1.81	75.49	1.81	136.63
CRA-15	94	6,870	0.5 - 1	2.3	127.22	2.30	292.62

ATTACHMENT C
POST-REMOVAL CONDITIONS - 0- TO 2-FOOT DEPTH INCREMENT

FUTURE CITY RECREATIONAL AREA - PCB EVALUATIONS
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS

POST-REMOVAL CONDITIONS - 0.5- TO 1-FOOT DEPTH INCREMENT (continued)

Sample ID(s)	Polygon ID	Polygon Area (sq. ft.)	Sample Depth (ft.)	PCB Conc. (ppm)	Volume (cumulative) (cy)	Average PCB Concentration Per Foot (ppm)	Average PCB Conc. TIMES Total Volume
CRA-16	114, 93	6,775	0.5 - 1	0.89	125.47	0.89	111.67
CRA-17	92, 115	5,631	0.5 - 1	0.021	104.27	0.02	2.19
CRA-18	91, 116	5,296	0.5 - 1	0.32	98.07	0.32	31.38
CRA-19	90	3,386	0.5 - 1	0.38	62.70	0.38	23.83
CRA-20	96	2,434	0.5 - 1	0.058	45.07	0.06	2.61
CRA-21	97	2,886	0.5 - 1	0.0235	53.44	0.02	1.26
CRA-22	98	1,928	0.5 - 1	0.95	35.70	0.95	33.92
95-9	100	7,654	0.5 - 1	0.31	141.73	0.31	43.94
E2SC-14	109	5	0.5 - 1	0.6	0.10	0.60	0.06
RAA4-3	103	326	0.5 - 1	0.68	6.04	0.68	4.11
RAA4-7	101, 102	1,765	0.5 - 1	1.28	32.69	1.28	41.84
RAA4-8	106	993	0.5 - 1	4.45	18.38	4.45	81.81
RAA4-9	107, 108	1,118	0.5 - 1	1.64	20.69	1.64	33.94
RAA4-10	117, 110	338	0.5 - 1	3.9	6.26	3.90	24.42
RAA4-14	112, 113	14	0.5 - 1	1.7	0.27	1.70	0.45
X-16	104	4	0.5 - 1	0.07	0.07	0.07	0.01
X-17	99	5,586	0.5 - 1	0.0185	103.45	0.02	1.91
Totals:	--	148,434	--	--	2,749	--	3,061.00
Volume-Weighted Average:							1.11

POST-REMOVAL CONDITIONS - 1- TO 2-FOOT DEPTH INCREMENT

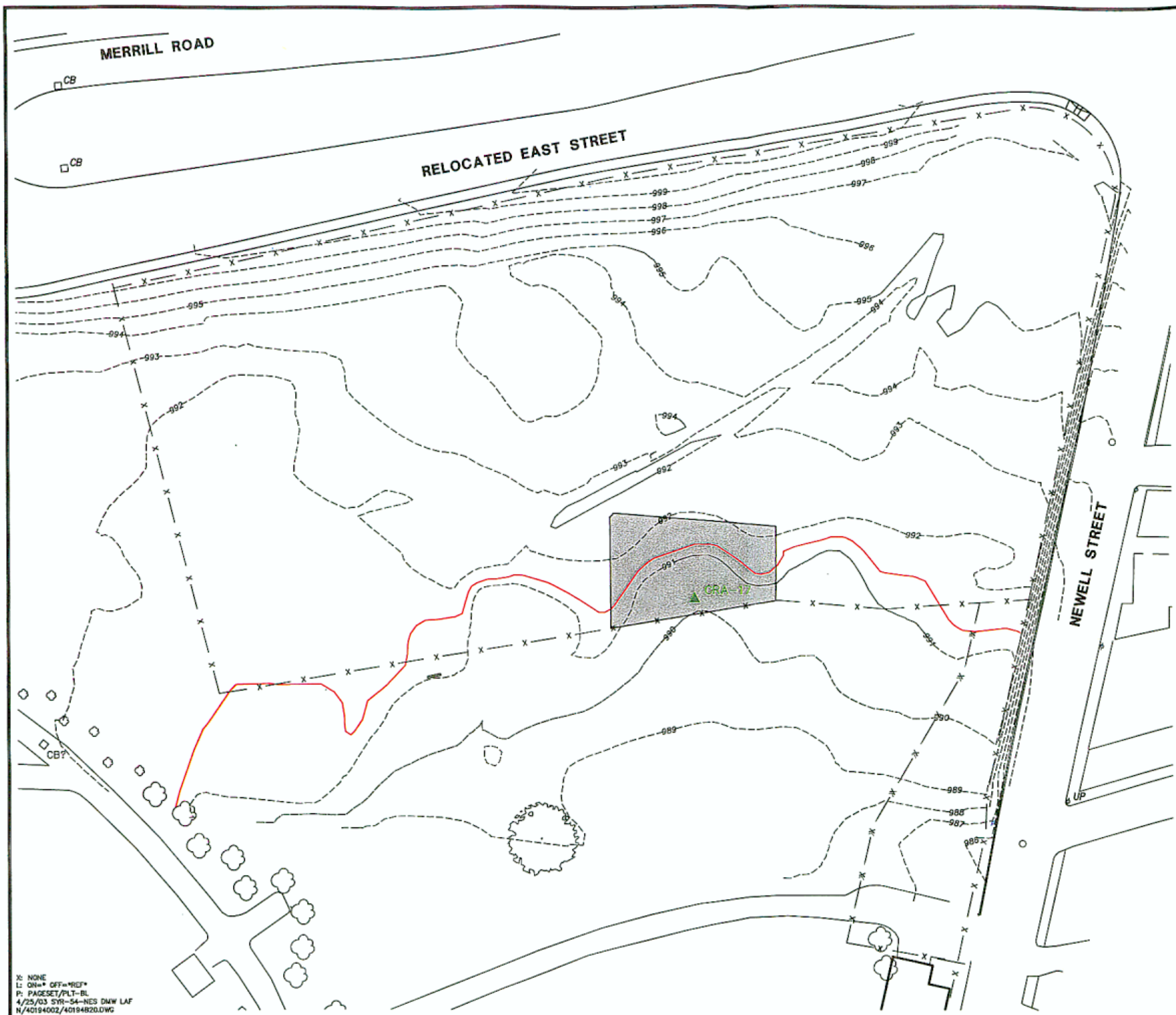
Sample ID(s)	Polygon ID	Polygon Area (sq. ft.)	Sample Depth (ft.)	PCB Conc. (ppm)	Volume (cumulative) (cy)	Average PCB Concentration Per Foot (ppm)	Average PCB Conc. TIMES Total Volume
CRA-1	63	5,449	1 - 2	1.28	201.82	1.28	258.33
CRA-2	64	3,119	1 - 2	1.19	115.53	1.19	137.48
CRA-3	69	5,125	1 - 2	0.23	189.82	0.23	43.66
CRA-4	68	5,466	1 - 2	0.2	202.45	0.20	40.49
CRA-5	67	6,337	1 - 2	0.84	234.72	0.84	197.16
CRA-6	66	9,412	1 - 2	0.284	348.59	0.28	99.00
CRA-7	65	6,666	1 - 2	0.111	246.90	0.11	27.41
CRA-8	70	7,268	1 - 2	1.1	269.20	1.10	296.12
CRA-9	71	7,091	1 - 2	5.6	262.65	5.60	1,470.82
CRA-10	72	8,438	1 - 2	0.73	312.52	0.73	228.14
CRA-11	73	10,013	1 - 2	1.06	370.84	1.06	393.09
CRA-12	74	9,517	1 - 2	3.4	352.48	3.40	1,198.43
CRA-13	75	7,773	1 - 2	0.023	287.89	0.02	6.62
CRA-14	81	4,618	1 - 2	1.81	171.04	1.81	309.57
CRA-15	80, 88	8,870	1 - 2	2.3	328.53	2.30	755.63
CRA-16	79, 91	7,266	1 - 2	0.89	269.11	0.89	239.51
CRA-17	78, 92	5,772	1 - 2	0.021	213.76	0.02	4.49
CRA-18	77, 90	5,304	1 - 2	0.32	196.43	0.32	62.86
CRA-19	76	3,393	1 - 2	0.38	125.66	0.38	47.75
CRA-20	82	2,434	1 - 2	0.058	90.14	0.06	5.23
CRA-21	83	2,886	1 - 2	0.0235	106.88	0.02	2.51
CRA-22	84	1,928	1 - 2	0.95	71.40	0.95	67.83
95-9	62	7,654	1 - 2	0.31	283.46	0.31	87.87
E2SC-5	85, 86	740	1 - 2	0.29	27.39	0.29	7.94
E2SC-14	89	306	1 - 2	0.0185	11.34	0.02	0.21
X-16	87	4	1 - 2	0.07	0.14	0.07	0.01
X-17	61	5,586	1 - 2	0.0185	206.90	0.02	3.83
Totals:	--	148,435	--	--	5,496	--	5,991.98
Volume-Weighted Average:							1.09

POST-REMOVAL CONDITIONS - 0- TO 2-FOOT DEPTH INCREMENT

Sample ID(s)	Polygon ID	Area (sq. ft.)	Depth (ft.)	Conc. (ppm)	(cumulative) (cy)	Concentration Per Foot (ppm)	Conc. TIMES Total Volume
Totals:	--	148,434	--	--	10,955	--	12,749.45
Volume-Weighted Average:							1.16

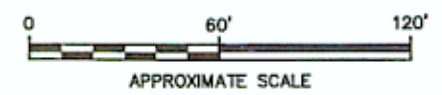
Notes:

- Polygon ID and area based on information shown on Figures B-1, B-2, and B-3.
- Non-detectable PCBs included as one-half the detection limit in calculations and shown in bold.
- For instances where a duplicate sample was available, the average of the samples was included in table.
- All calculations and rounding are performed by the computer software. Therefore, certain quantities in above table are displayed as rounded numbers for table clarity.
- Shaded numbers in bold and italics represent the placement of clean backfill following the performance of the proposed removal. The backfill concentration corresponds to the average PCB concentration as presented in GE's *Proposed CD Backfill Data Set* (March 11, 2003).
- Approximate limits of removal are shown on Figure C-1.



- LEGEND:**
- APPROXIMATE 100-YEAR FLOODPLAIN
 - - - - - EXISTING TOPOGRAPHIC CONTOUR
 - X - X - EXISTING/PROPOSED PERIMETER FENCE
 - ▨ APPROXIMATE HORIZONTAL LIMITS OF 2 FOOT EXCAVATION
 - ▲ CRA-17 EXISTING SOIL SAMPLE LOCATION

- NOTES:**
1. MAPPING IS BASED ON SURVEY PROVIDED BY WHITE ENGINEERING, INC. DATED 12/4/01.
 2. ALL SAMPLING LOCATIONS ARE APPROXIMATE.



GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS
PORTION OF EAST STREET AREA 2-SOUTH:
FUTURE CITY RECREATIONAL AREA

**APPROXIMATE HORIZONTAL LIMITS
OF VOLUNTARY SOIL REMOVAL IN
THE VICINITY OF CRA-17**

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

FIGURE
C-1

X: NONE
L: ON* OFF* REF*
P: PAGESET/PLT-BL
4/25/03 SYR-54-NES DMW LAF
N/40194002/40194820.DWG

Attachment D

**Access Road Area – PCB Evaluations
(Existing Conditions)**

ATTACHMENT D
EXISTING CONDITIONS - 0- TO 1- FOOT DEPTH INCREMENT

ACCESS ROAD AREA - PCB EVALUATIONS
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS

Sample ID (s)	Polygon ID	Polygon Area (sq. ft.)	Sample Depth (ft.)	PCB Conc. (ppm)	Volume (cumulative) (cy)	Average PCB Concentration Per Foot (ppm)	Average PCB Conc. TIMES Total Volume
CRA-19	26	662	0 - 1	0.38	24.51	0.38	9.31
RAA4-14	29	557	0 - 1	1.7	20.62	1.70	35.06
RAA4-15	20	1,153	0 - 1	0.84	42.69	0.84	35.86
RAA4-21	28	78	0 - 1	0.02	2.91	0.02	0.06
RRA4-22	21	867	0 - 1	0.7	32.13	0.70	22.49
RAA4-23	22	1,638	0 - 1	38	60.68	38.00	2305.74
RAA4-24	27	966	0 - 1	0.45	35.76	0.45	16.09
RAA4-25	23	1,875	0 - 1	0.97	69.44	0.97	67.36
RAA4-26	24	1,977	0 - 1	0.38	73.22	0.38	27.82
RAA4-E-42	25	1,178	0 - 1	0.22	43.63	0.22	9.60
Totals:	--	10,951	--	--	405.59	--	2,529.39
Volume Weighted Average:							6.24

Notes:

1. Polygon ID and area based on information shown on Figure D-1.
2. Non-detectable PCBs included as one-half the detection limit in calculations and shown in bold.
3. For instances where a duplicate sample was available, the average of the samples was included in the table.
4. All calculations and rounding are performed by the computer software. Therefore, certain quantities in the above table are displayed as rounded numbers for table clarity.

ATTACHMENT D
EXISTING CONDITIONS - 1- TO 3- FOOT DEPTH INCREMENT

ACCESS ROAD AREA - PCB EVALUATIONS
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS

EXISTING CONDITIONS - 1- TO 2- FOOT DEPTH INCREMENT

Sample ID (s)	Polygon ID	Polygon Area (sq. ft.)	Sample Depth (ft.)	PCB Conc. (ppm)	Volume (cumulative) (cy)	Average PCB Concentration Per Foot (ppm)	Average PCB Conc. TIMES Total Volume
CRA-19	26	662	1 - 2	0.38	24.51	0.38	9.31
RAA4-14	29	557	1 - 2	0.021	20.62	0.02	0.43
RAA4-15	20	1,153	1 - 2	0.076	42.69	0.08	3.24
RAA4-21	28	78	1 - 2	0.018	2.91	0.02	0.05
RRA4-22	21	867	1 - 2	0.019	32.13	0.02	0.61
RAA4-23	22	1,638	1 - 2	0.058	60.68	0.06	3.52
RAA4-24	27	966	1 - 2	0.018	35.76	0.02	0.64
RAA4-25	23	1,875	1 - 2	0.036	69.44	0.04	2.50
RAA4-26	24	1,977	1 - 2	0.074	73.22	0.07	5.42
RAA4-E-42	25	1,178	1 - 2	0.018	43.63	0.02	0.79
Totals:	--	10,951	--	--	405.59	--	26.52
Volume Weighted Average:							0.07

EXISTING CONDITIONS - 2- TO 3- FOOT DEPTH INCREMENT

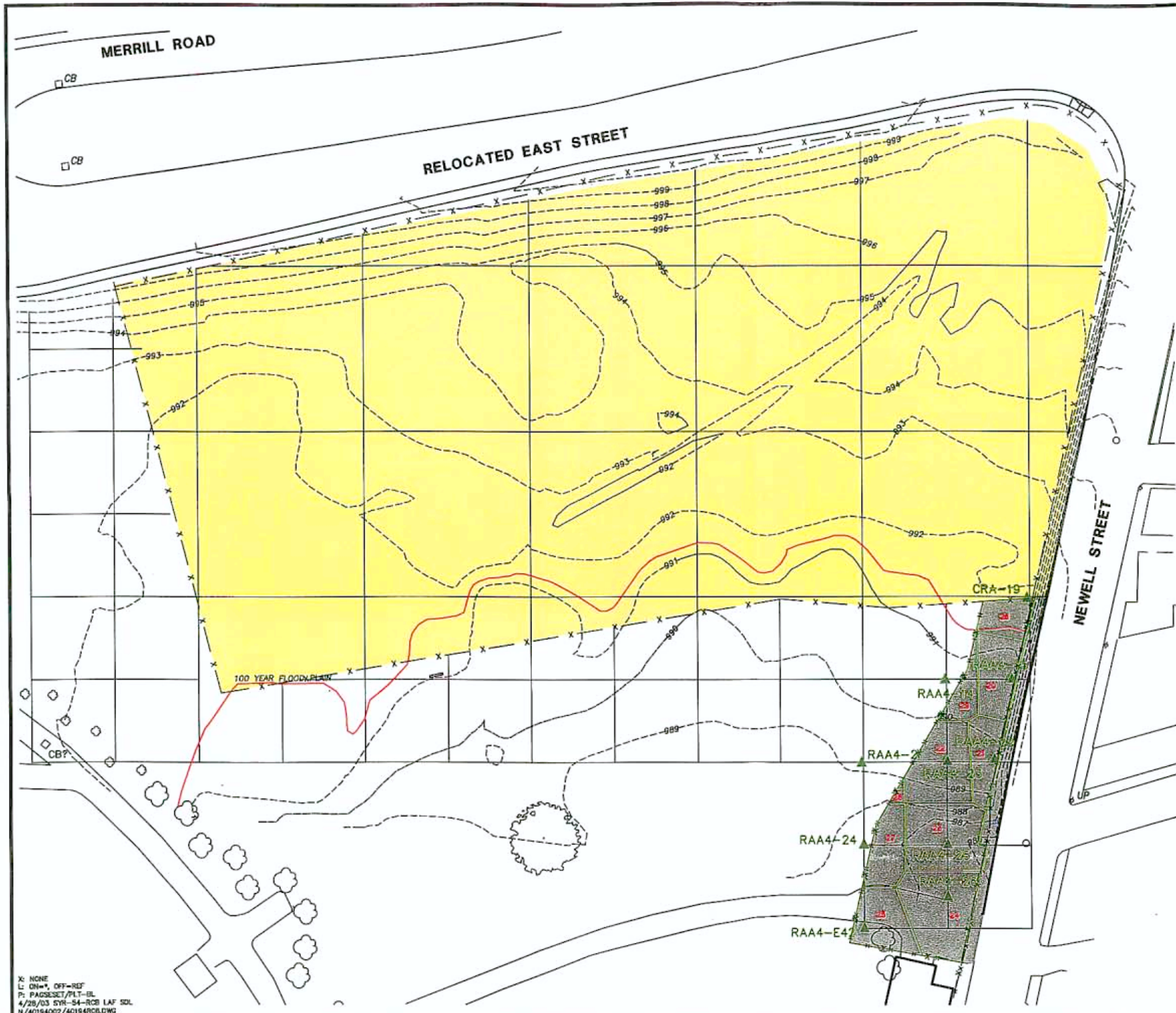
Sample ID (s)	Polygon ID	Polygon Area (sq. ft.)	Sample Depth (ft.)	PCB Conc. (ppm)	Volume (cumulative) (cy)	Average PCB Concentration Per Foot (ppm)	Average PCB Conc. TIMES Total Volume
RAA4-14	26	558	2 - 3	0.021	20.65	0.02	0.43
RAA4-15	18	1,814	2 - 3	0.076	67.18	0.08	5.11
RAA4-21	25	78	2 - 3	0.018	2.91	0.02	0.05
RRA4-22	19	867	2 - 3	0.019	32.13	0.02	0.61
RAA4-23	20	1,638	2 - 3	0.058	60.68	0.06	3.52
RAA4-24	24	966	2 - 3	0.018	35.76	0.02	0.64
RAA4-25	21	1,875	2 - 3	0.036	69.44	0.04	2.50
RAA4-26	22	1,977	2 - 3	0.074	73.22	0.07	5.42
RAA4-E-42	23	1,178	2 - 3	0.018	43.63	0.02	0.79
Totals:	--	10,951	--	--	405.59	--	19.07
Volume Weighted Average:							0.05

EXISTING CONDITIONS - 1- TO 3- FOOT DEPTH INCREMENT

Sample ID (s)	Polygon ID	Polygon Area (sq. ft.)	Sample Depth (ft.)	PCB Conc. (ppm)	Volume (cumulative) (cy)	Average PCB Concentration Per Foot (ppm)	Average PCB Conc. TIMES Total Volume
Totals:	--	10,951	--	--	811.19	--	45.59
Volume Weighted Average:							0.06

Notes:

1. Polygon ID and area based on information shown on Figures D-2 and D-3.
2. Non-detectable PCBs included as one-half the detection limit in calculations and shown in bold.
3. For instances where a duplicate sample was available, the average of the samples was included in the table.
4. All calculations and rounding are performed by the computer software. Therefore, certain quantities in the above table are displayed as rounded numbers for table clarity.

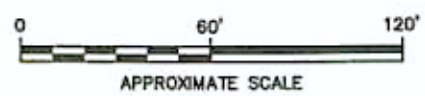


LEGEND:

- CURRENT (REVISED) LIMITS OF FUTURE CITY RECREATIONAL AREA
- APPROXIMATE 100-YEAR FLOODPLAIN
- EXISTING TOPOGRAPHIC CONTOUR
- EXISTING/PROPOSED PERIMETER FENCE
- X-18 EXISTING SOIL SAMPLE LOCATION
- LIMITS OF ACCESS ROAD AREA
- HORIZONTAL LIMITS OF AREA ASSOCIATED WITH GIVEN SAMPLE, DEVELOPED USING THE THEISSEN POLYGON APPROACH.
- 20 POLYGON ID

NOTES:

1. MAPPING IS BASED ON SURVEY PROVIDED BY WHITE ENGINEERING, INC. DATED 12/4/01.
2. ALL SAMPLING LOCATIONS ARE APPROXIMATE.

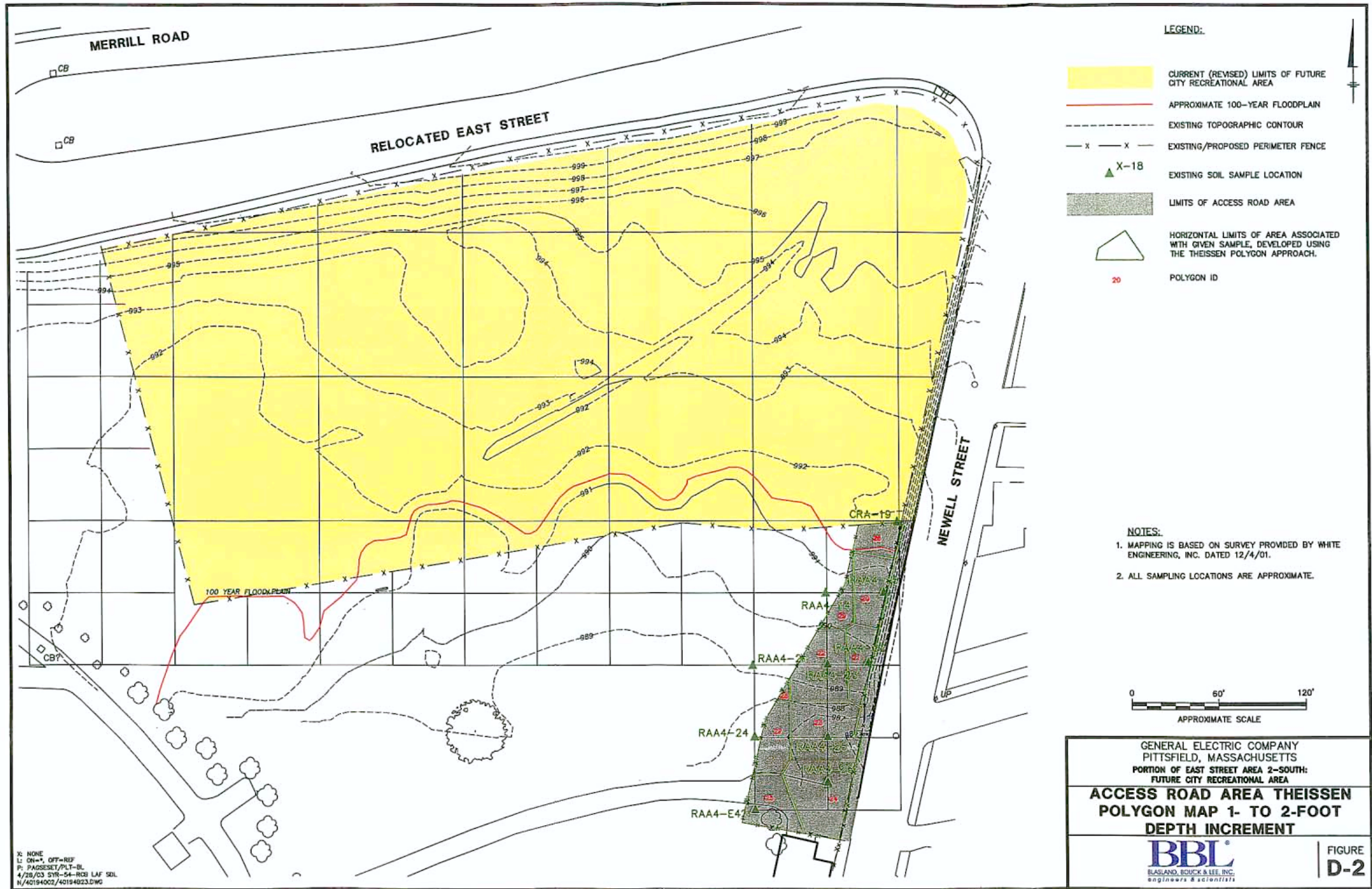


GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS
PORTION OF EAST STREET AREA 2-SOUTH:
FUTURE CITY RECREATIONAL AREA

**ACCESS ROAD AREA THEISSEN
POLYGON MAP 0- TO 1-FOOT
DEPTH INCREMENT**



X: NONE
L: ON=*, OFF=REF
P: PAGESET/PLT-BL
4/28/03 SYR-54-RCB LAF SDL
N/40194002/40194006.DWG

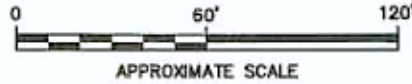


LEGEND:

- CURRENT (REVISED) LIMITS OF FUTURE CITY RECREATIONAL AREA
- APPROXIMATE 100-YEAR FLOODPLAIN
- EXISTING TOPOGRAPHIC CONTOUR
- x x EXISTING/PROPOSED PERIMETER FENCE
- ▲ X-18 EXISTING SOIL SAMPLE LOCATION
- LIMITS OF ACCESS ROAD AREA
- ▲ HORIZONTAL LIMITS OF AREA ASSOCIATED WITH GIVEN SAMPLE, DEVELOPED USING THE THEISSEN POLYGON APPROACH.
- 20 POLYGON ID

NOTES:

1. MAPPING IS BASED ON SURVEY PROVIDED BY WHITE ENGINEERING, INC. DATED 12/4/01.
2. ALL SAMPLING LOCATIONS ARE APPROXIMATE.



GENERAL ELECTRIC COMPANY
 PITTSFIELD, MASSACHUSETTS
 PORTION OF EAST STREET AREA 2-SOUTH:
 FUTURE CITY RECREATIONAL AREA
**ACCESS ROAD AREA THEISSEN
 POLYGON MAP 1- TO 2-FOOT
 DEPTH INCREMENT**


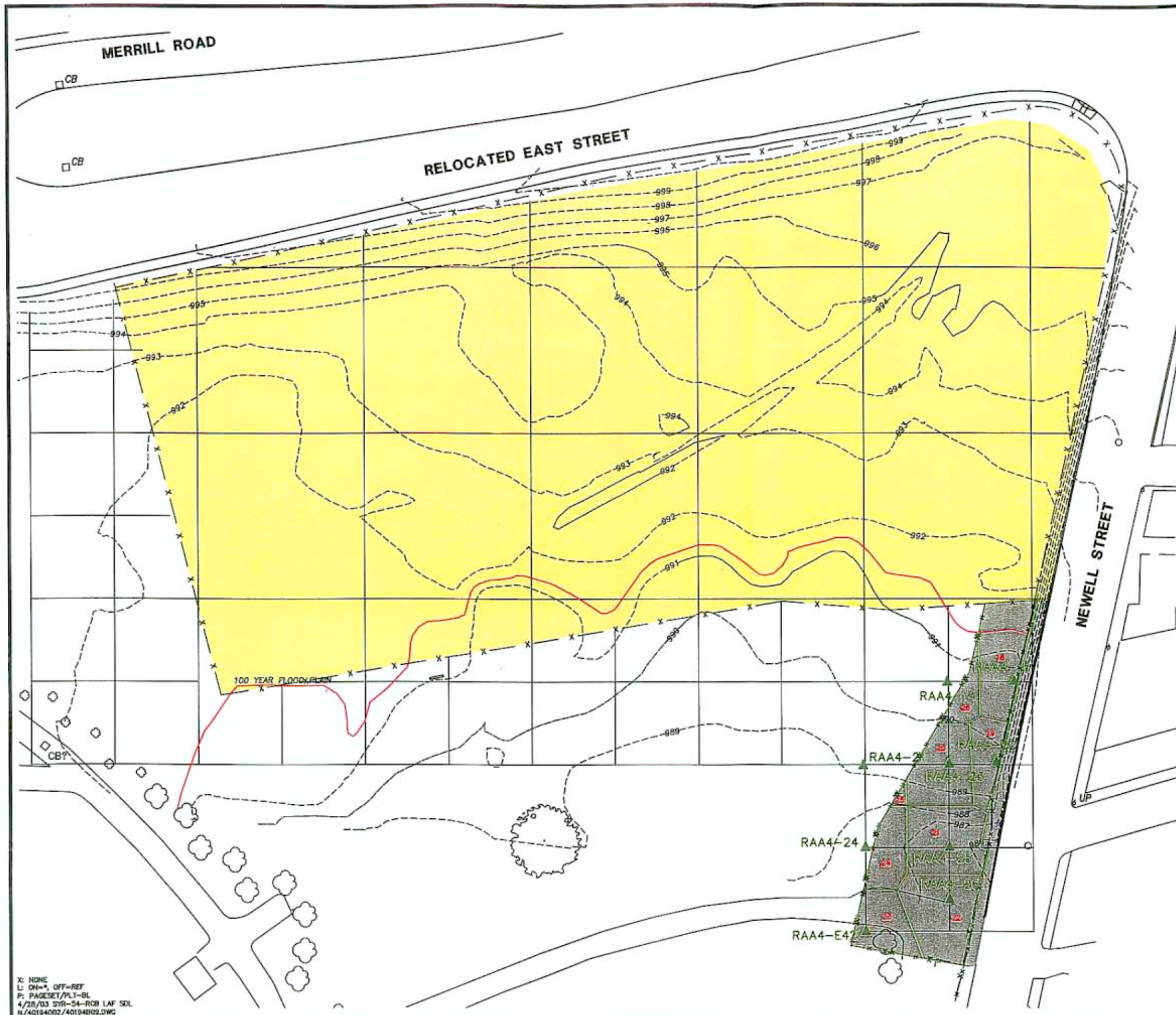

BBL
 BLAISLAND, BOUCK & LEE, INC.
 engineers & scientists

FIGURE
D-2

X: NONE
 L: ON=*, OFF=REF
 P: PAGESET,PLT=BL
 4/28/03 519-54-ROB LAF SDL
 N/40194002/40194023.DWG

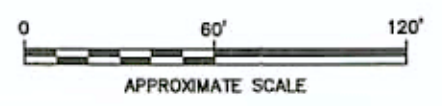


LEGEND:

- CURRENT (REVISED) LIMITS OF FUTURE CITY RECREATIONAL AREA
- APPROXIMATE 100-YEAR FLOODPLAIN
- EXISTING TOPOGRAPHIC CONTOUR
- x EXISTING/PROPOSED PERIMETER FENCE
- x-18 EXISTING SOIL SAMPLE LOCATION
- LIMITS OF ACCESS ROAD AREA
- 20 HORIZONTAL LIMITS OF AREA ASSOCIATED WITH GIVEN SAMPLE, DEVELOPED USING THE THEISSEN POLYGON APPROACH.
- 20 POLYGON ID


NOTES:

1. MAPPING IS BASED ON SURVEY PROVIDED BY WHITE ENGINEERING, INC. DATED 12/4/01.
2. ALL SAMPLING LOCATIONS ARE APPROXIMATE.



GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS
PORTION OF EAST STREET AREA 2-SOUTH:
FUTURE CITY RECREATIONAL AREA

**ACCESS ROAD AREA THEISSEN
POLYGON MAP 2- TO 3-FOOT
DEPTH INCREMENT**



**FIGURE
D-3**

X: NONE
L: ON=*, OFF=REF
P: PAGESET/PLT-BL
4/28/03 SYR-54-R028 LAF SXL
N/40194002/40194B09.DWG

Attachment E

Access Road Area – PCB Evaluations (Post-Removal Conditions)

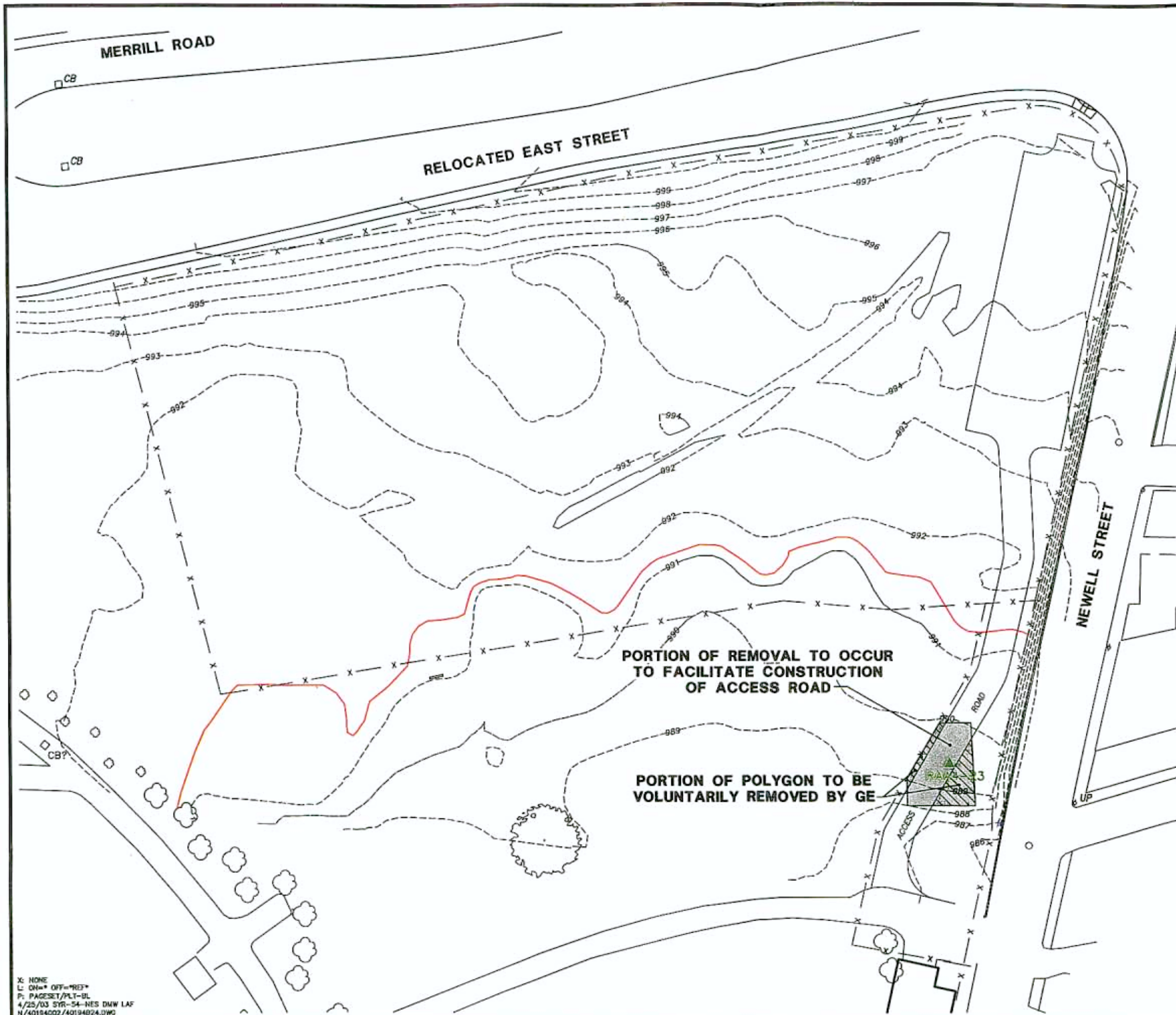
ATTACHMENT E
POST-REMOVAL CONDITIONS - 0- TO 1- FOOT DEPTH INCREMENT

ACCESS ROAD AREA - PCB EVALUATIONS
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS

Sample ID (s)	Polygon ID	Polygon Area (sq. ft.)	Sample Depth (ft.)	PCB Conc. (ppm)	Volume (cumulative) (cy)	Average PCB Concentration Per Foot (ppm)	Average PCB Conc. TIMES Total Volume
CRA-19	26	662	0 - 1	0.38	24.51	0.38	9.31
RAA4-14	29	557	0 - 1	1.7	20.62	1.70	35.06
RAA4-15	20	1,153	0 - 1	0.84	42.69	0.84	35.86
RAA4-21	28	78	0 - 1	0.02	2.91	0.02	0.06
RRA4-22	21	867	0 - 1	0.7	32.13	0.70	22.49
RAA4-23	22	1,638	0 - 1	0.021	60.68	0.02	1.27
RAA4-24	27	966	0 - 1	0.45	35.76	0.45	16.09
RAA4-25	23	1,875	0 - 1	0.97	69.44	0.97	67.36
RAA4-26	24	1,977	0 - 1	0.38	73.22	0.38	27.82
RAA4-E-42	25	1,178	0 - 1	0.22	43.63	0.22	9.60
Totals:	--	10,951	--	--	405.59	--	224.93
Volume Weighted Average:							0.55

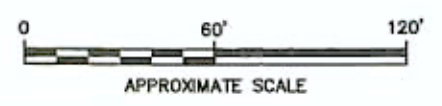
Notes:

1. Polygon ID and area based on information shown on Figure D-1.
2. Non-detectable PCBs included as one-half the detection limit in calculations and shown in bold.
3. For instances where a duplicate sample was available, the average of the samples was included in the table.
4. All calculations and rounding are performed by the computer software. Therefore, certain quantities in the above table are displayed as rounded numbers for table clarity.
5. Shaded numbers in bold and italics represent the placement of clean backfill material following the performance of the proposed removal. The backfill concentration corresponds to the average PCB concentration as presented in GE's *Proposed CD Backfill Data Set* (March 11, 2003).
6. Approximate removal limits are shown on Figure E-1.



- LEGEND:**
- APPROXIMATE 100-YEAR FLOODPLAIN
 - - - - - EXISTING TOPOGRAPHIC CONTOUR
 - x - x - EXISTING/PROPOSED PERIMETER FENCE
 - APPROXIMATE HORIZONTAL LIMITS OF 1 FOOT EXCAVATION
 - ▲ RAA4-23 EXISTING SOIL SAMPLE LOCATION

- NOTES:**
1. MAPPING IS BASED ON SURVEY PROVIDED BY WHITE ENGINEERING, INC. DATED 12/4/01.
 2. ALL SAMPLING LOCATIONS ARE APPROXIMATE.



GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS
PORTION OF EAST STREET AREA 2-SOUTH:
FUTURE CITY RECREATIONAL AREA

**APPROXIMATE HORIZONTAL LIMITS
OF VOLUNTARY SOIL REMOVAL IN
THE VICINITY OF RAA4-23**

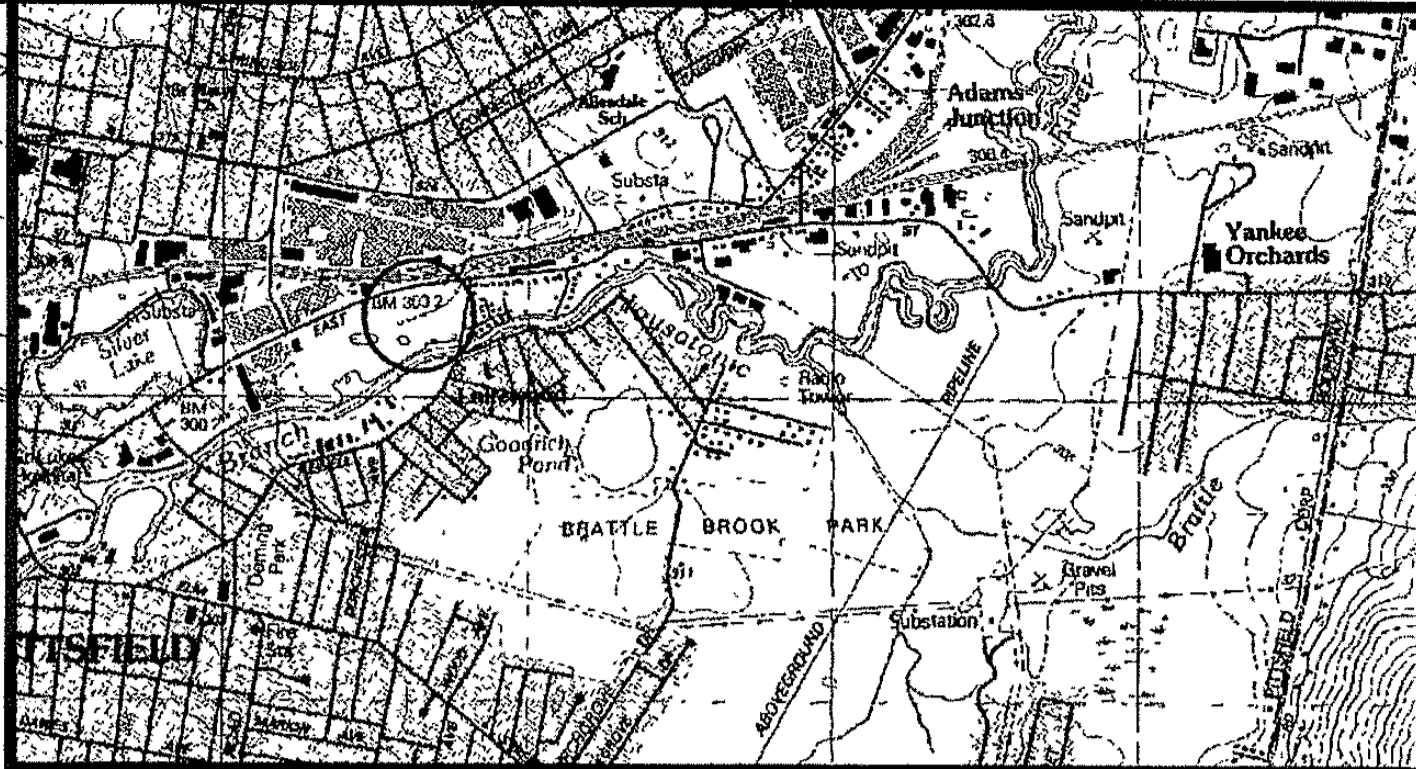
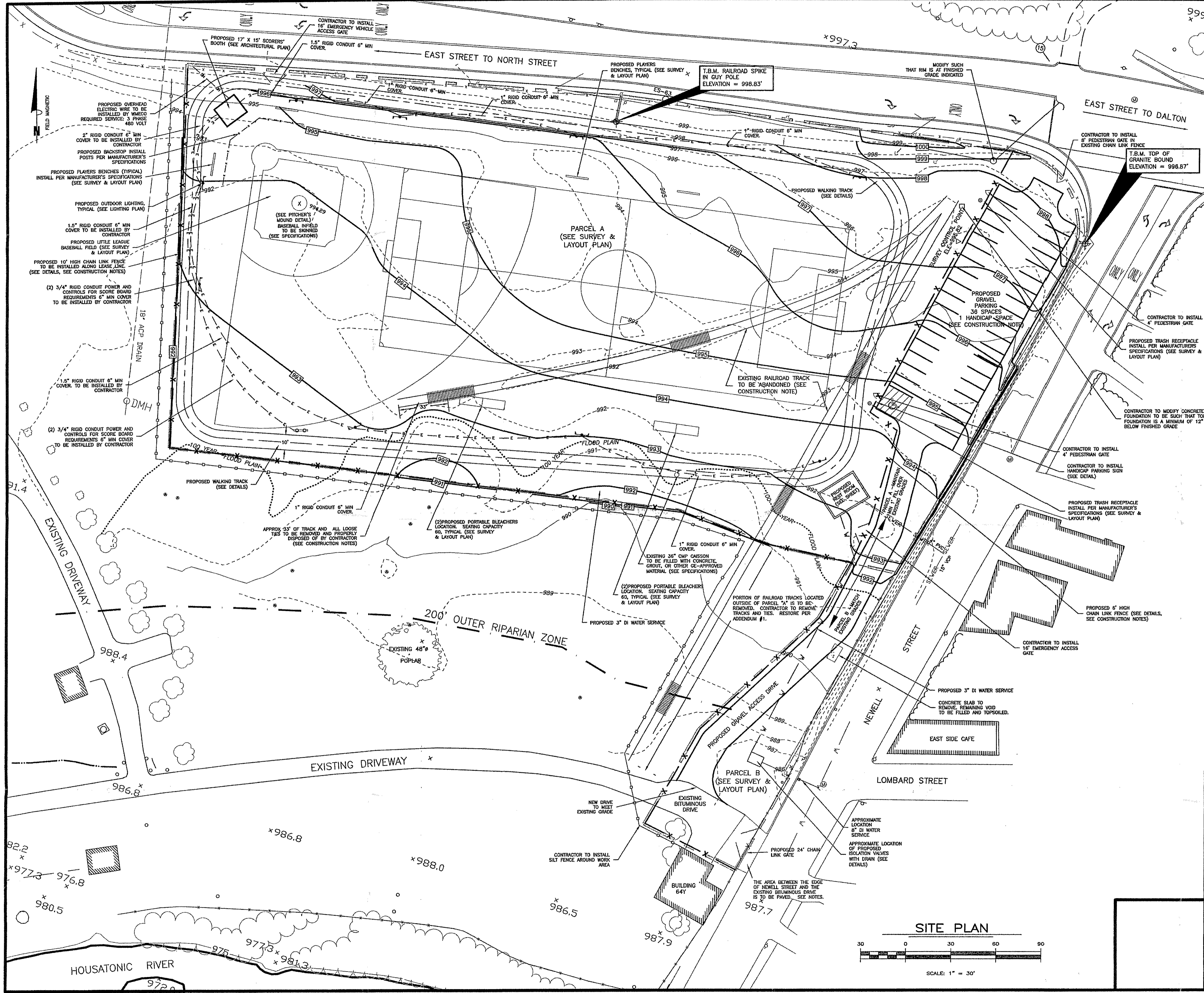
BBL
BLASLAND, BOUCK & LEE, INC.
engineers & scientists

FIGURE
E-1

X: NONE
L: ON= OFF=REF*
P: PAGESET/PLT-BL
4/25/03 SYR-54-NES DMW LAF
N/40194002/40194024.DWG

Attachment F

Technical Drawings



LOCUS MAP

LEGEND

- | | | | |
|-----------|--|---|--|
| - - - - - | EXISTING CONTOURS | ○ | UTILITY POLE |
| - - - - - | PROPOSED CONTOURS (PRIOR TO INSTALLATION OF SOD) | ⊕ | OBSERVATION WELL |
| - - - - - | FLOOD PLAN ELEVATION | ⊗ | EXISTING MANHOLE |
| - - - - - | EXISTING RIPARIAN ZONE | ○ | EXISTING SIGN |
| - - - - - | EXISTING FENCELINE | ○ | EXISTING POST |
| - - - - - | PROPOSED FENCELINE | ○ | GUY WIRE |
| — x — x — | PROPOSED OVERHEAD ELECTRIC | ○ | SURVEY CONTROL POINT |
| — E — E — | PROPOSED UNDERGROUND ELECTRIC | ○ | EXISTING DRAINAGE STRUCTURE |
| — | LEASE LINE | ○ | PROPOSED OUTDOOR LIGHTING (SEE LIGHTING PLAN FOR LAYOUT) |
| - - - - - | EDGE OF TREELINE | X | SPOT GRADE ELEVATION |
| - - - - - | PROPOSED SILTFENCE | | |
| - - - - - | PROPOSED WATER LINE | | |
| - - - - - | EXISTING WATER LINE | | |
| - - - - - | EXISTING SEWER LINE | | |
| - - - - - | PROPOSED SEWER LINE | | |

GENERAL NOTES:

CONTOUR INTERVAL IS 1' REFERENCED TO THE N. G. V. D. OF 1929. DRAWING REFLECTS CONDITIONS AS FOUND IN THE FIELD WITHIN THE LIMITS OF PARCEL A ON MARCH 2, 2000. PORTIONS OF THIS PLAN ARE TAKEN FROM MASSHIGHWAY PLAN ENTITLED "PITTSFIELD-MERRILL ROAD".

THE 100 YEAR FLOOD PLAN ELEVATION IN THIS AREA IS AT ELEVATION 991.6± ACCORDING TO F. E. M. A. FLOOD MAP #250037 PANEL #020C.

THIS PLAN WAS COMPILED USING AUTOCAD R14 AND EAGLE POINT 99 SOFTWARE. CONTOURS ARE COMPUTER GENERATED INTERPOLATIONS EDITED TO GENERALLY CONFORM TO FIELD OBSERVATIONS.

CONTRACTOR IS TO NOTIFY ENGINEER BEFORE PROCEEDING IF SUBSURFACE CONDITIONS DIFFER FROM THOSE INDICATED ON THIS PLAN.

ALL UNDERGROUND UTILITIES SHOWN ARE APPROXIMATE. CONTRACTOR IS RESPONSIBLE TO NOTIFY DIG SAFE PRIOR TO COMMENCEMENT OF WORK.

CONSTRUCTION NOTES:

CONTRACTOR TO INSURE 1 FT MINIMUM COVER IN AREA DESCRIBED AS PARCEL A. GRADES SHOWN HEREON ARE APPROXIMATE ONLY; ALL EXISTING AND FINISHED GRADES SHALL BE VERIFIED AND DOCUMENTED BY A LICENSED ENGINEER OR LAND SURVEYOR AT THE TIME OF CONSTRUCTION.

MONITORING WELL, HOLES, AND ANY OTHER SUBSURFACE STRUCTURE LOCATIONS ARE APPROXIMATE AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR. INSPECTION BY A GENERAL ELECTRIC REPRESENTATIVE SHALL THEN DETERMINE FILL/DECOMMISSIONING PROCEDURES.

SOD SHALL BE PLACED ON ALL PLAYING FIELDS AND FOUL TERRITORY AREA AND OTHER AREAS LOCATED WITHIN PARCEL "A". TOTAL AREA OF SOD SHALL BE APPROXIMATELY 134,000 SF. ALL OTHER DISTURBED AREAS ARE TO BE SEEDED AND MULCHED.

SEE ATTACHMENT ONE-WORK TASK DESCRIPTIONS FOR FILL, PARKING LOT, ELECTRIC, ABANDONMENT AND REMOVAL OF RAILROAD TRACKS AND FENCE SPECIFICATIONS.

CONTRACTOR SHALL BE RESPONSIBLE FOR SETTING ELECTRIC LIGHT POLES & BASES, GENERAL ELECTRIC TO SUPPLY ALL ELECTRICAL FIXTURES, AND POLES FOR OUTDOOR ATHLETIC FIELD LIGHTING.

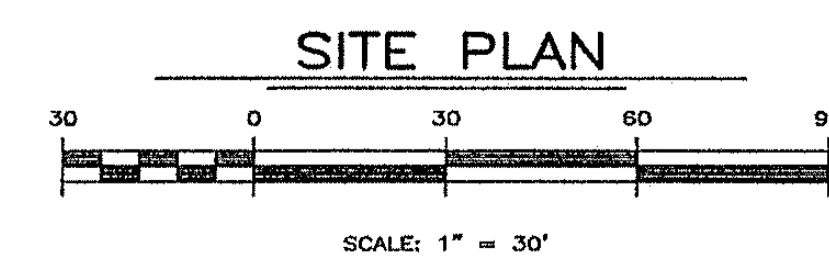
ALL SOILS, RAILROAD TIES, AND SIMILAR MATERIALS REMOVED OR EXCAVATED FOR ANY PURPOSE SHALL BE TRANSPORTED BY THE CONTRACTOR AND DISPOSED IN A DESIGNATED AREA OF THE FACILITY. SECTIONS OF REMOVED RAILROAD TRACKS SHALL BE DISPOSED OF BY THE CONTRACTOR AS SCRAP METAL.

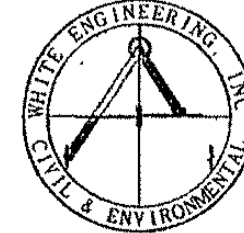
THE AREA BETWEEN THE EXISTING BITUMINOUS DRIVE IN THE VICINITY OF BUILDING 64Y AND THE EXISTING WESTERLY EDGE OF NEWELL STREET IS TO BE REPAVED AS SHOWN ON THIS PLAN. THE CONTRACTOR IS TO INSTALL A MINIMUM OF 2" OF BINDER AND A MINIMUM OF 1-3/4" OF TOP COURSE (MASSHIGHWAY CLASS I, TYPE A BITUMINOUS CONCRETE). EXISTING PAVEMENT EDGES ARE TO BE SAWCUT AND NEW PAVEMENT IS TO BE KEPT TO MATCH EXISTING PAVEMENT GRADES. ALL PAVING IS TO BE PERFORMED IN ACCORDANCE WITH MASSHIGHWAY STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES - 1995 EDITION.

FINAL LOCATION OF ELECTRICAL SERVICE TO PROPOSED RESTROOM FACILITY IS TO BE DETERMINED BY WESTERN MASSACHUSETTS ELECTRIC COMPANY.

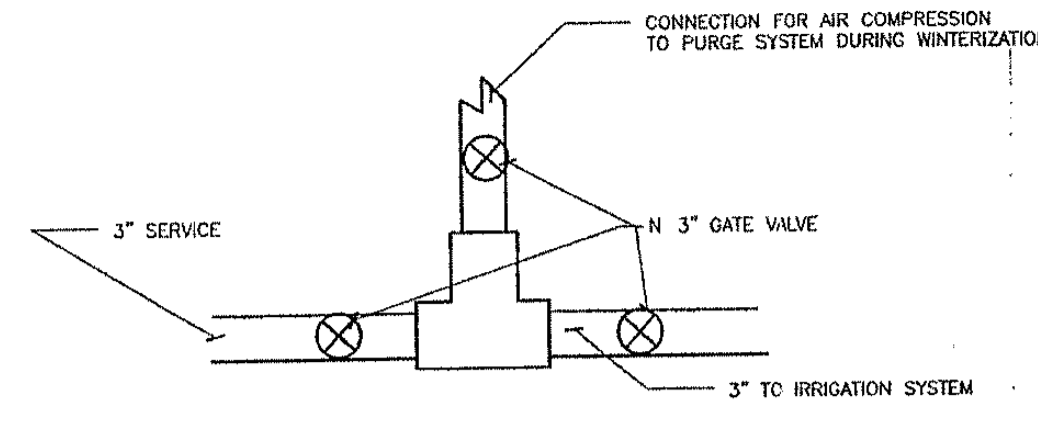
PROPOSED ATHLETIC FIELDS GRADING AND UTILITY PLAN for GENERAL ELECTRIC COMPANY

EAST STREET AND NEWELL STREET		PITTSFIELD, MA
3	ADDENDUM #2-ADD WALKING PATH/BATHROOM	AMB 02/03/03
2	ADDENDUM #1	MSK 05/31/02
1	BID SET	AMB 05/16/02

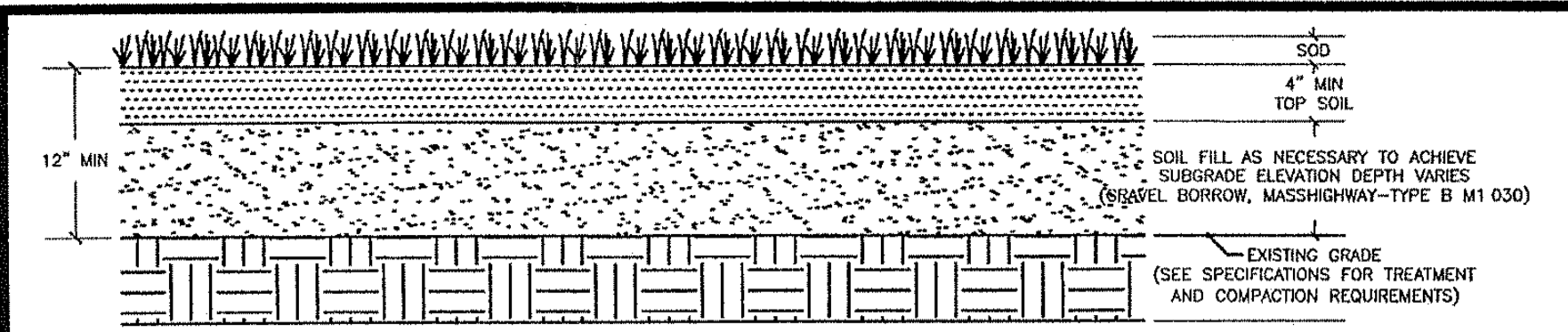




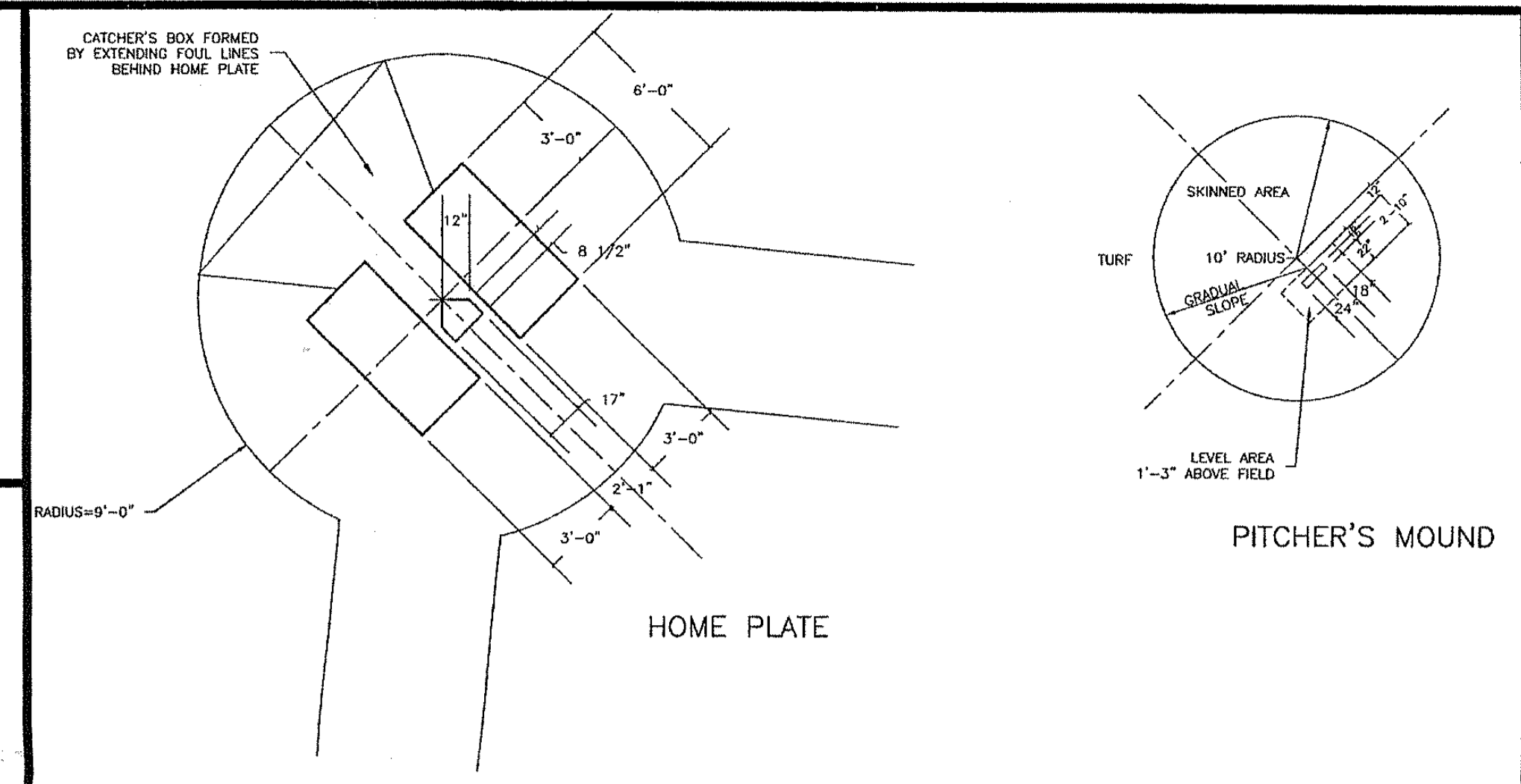
WHITE ENGINEERING INC.
 CIVIL & ENVIRONMENTAL
 55 SOUTH MERRIAM STREET, PITTSFIELD, MA 01201
 PHONE (413) 443-8011 E-MAIL WHITEENG@AOL.COM FAX (413) 443-8012
 DATE MAY 16, 2002 DWN AMB APRVD MSK DWN HD 00-02-03
 DSGN AMB CKD MSK SCALE NOTED SHEET 2 OF 3



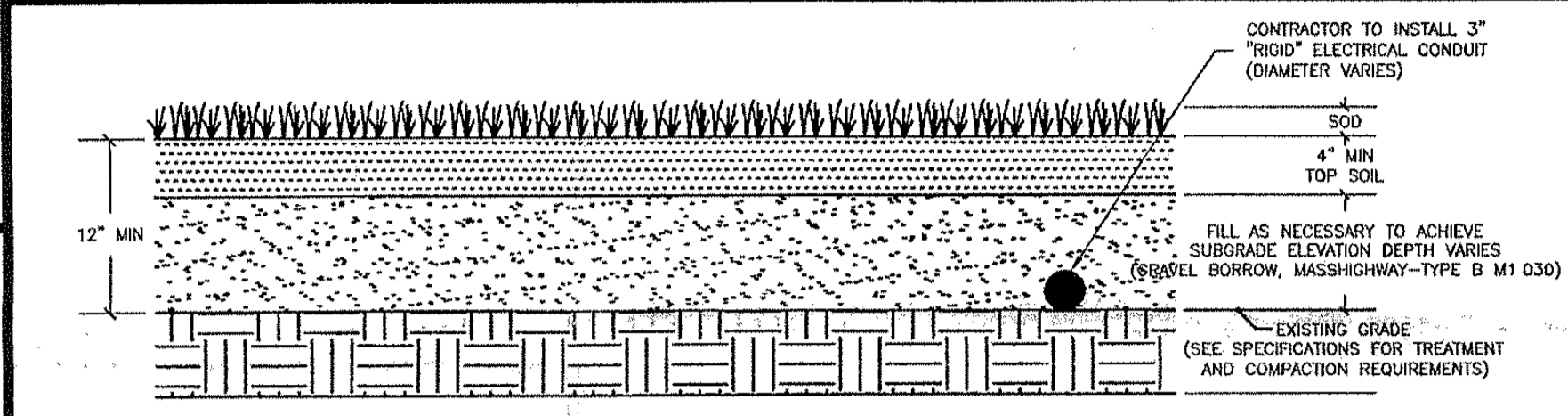
WATER SERVICE
NTS AIR CONNECTION IN RESTROOM/STORAGE FACILITY



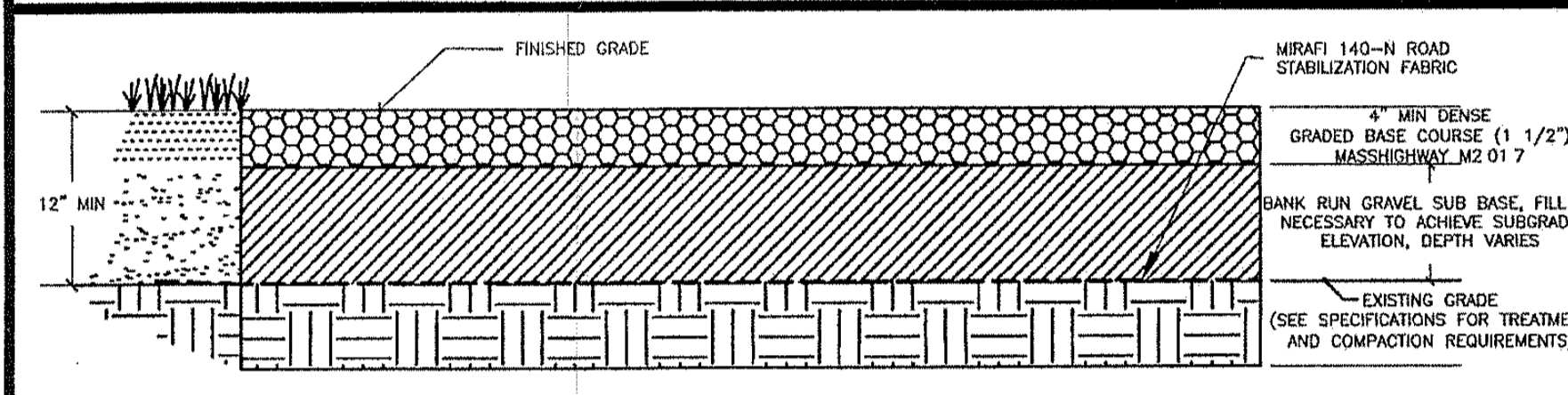
NOTE: MINIMUM 12" SOIL FILL TO BE INSTALLED. 12" DOES NOT INCLUDE SOD.
SECTION AT PARCEL B (FILL AREA)
NTS



LITTLE LEAGUE FIELD DETAIL
NTS

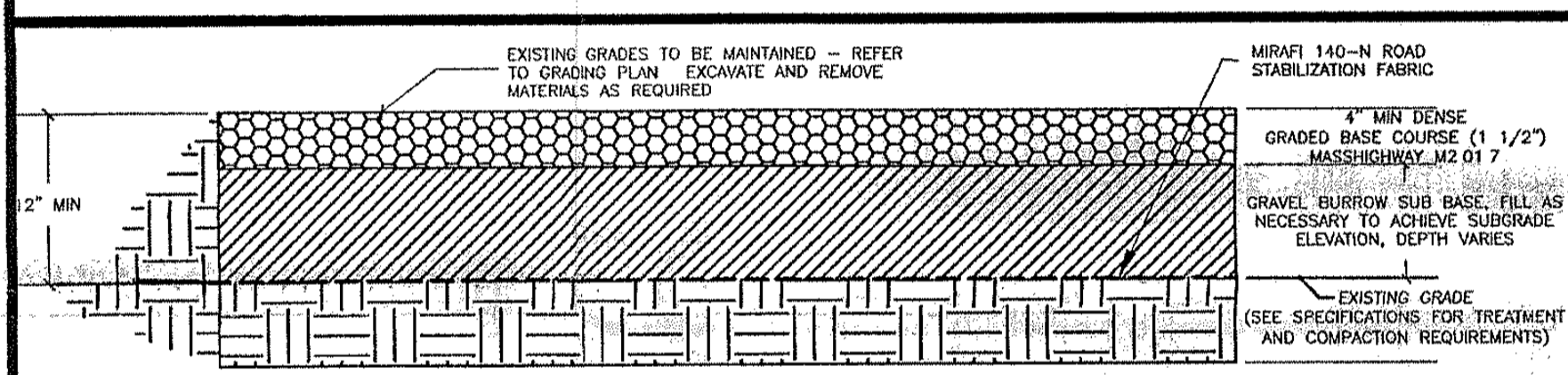


SECTION AT ELECTRICAL CONDUIT
NTS

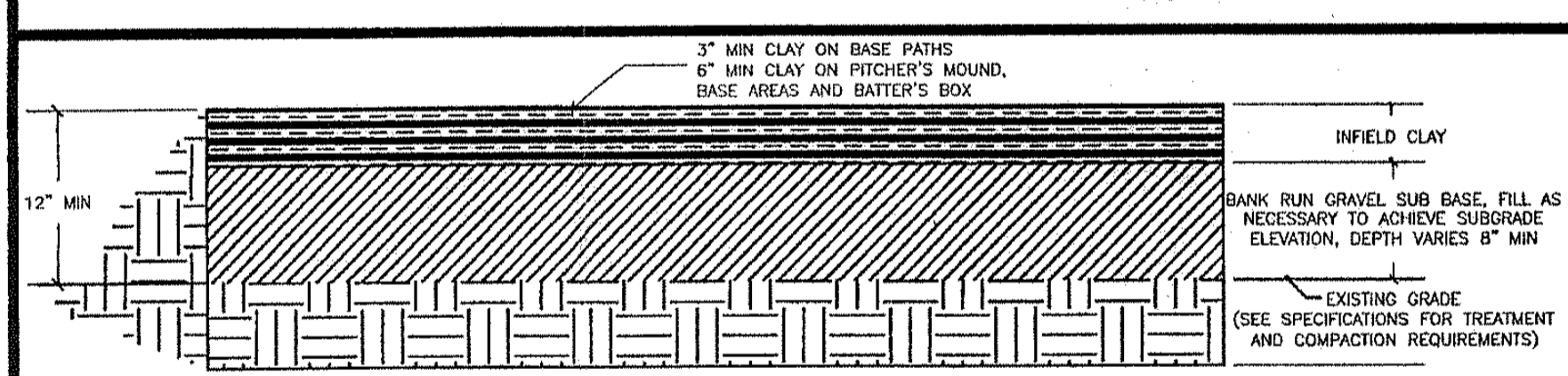


SECTION AT PARKING AREA & ACCESS ROAD (PARCEL A)
NTS

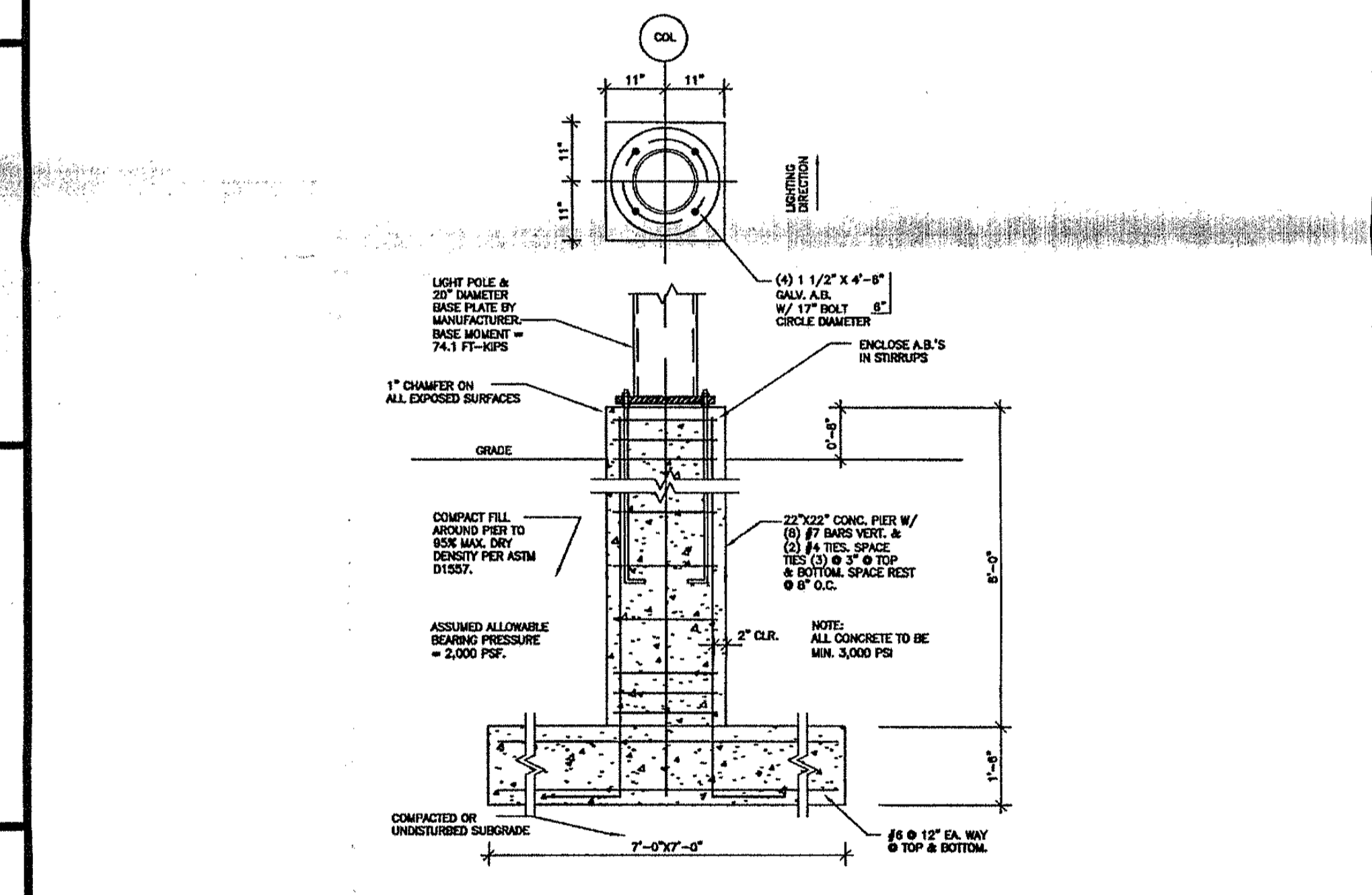
NOTE: CONTRACTOR TO OBTAIN DETAILS FOR SEWER CONNECTION FROM CITY OF PITTSFIELD DEPARTMENT OF PUBLIC WORKS. INSTALL PER CITY REQUIREMENTS.
SEWER CONNECTION DETAIL
NTS



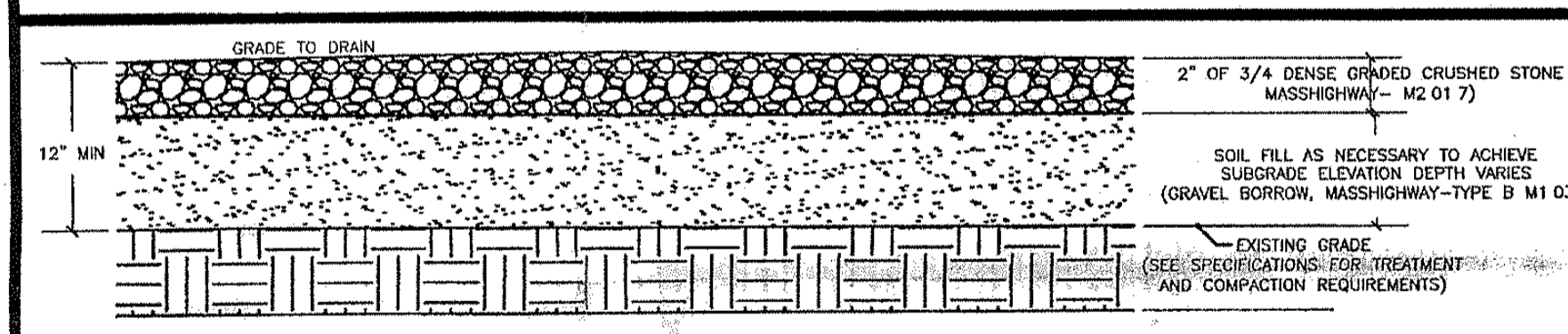
SECTION AT ACCESS ROAD (PARCEL B)
NTS



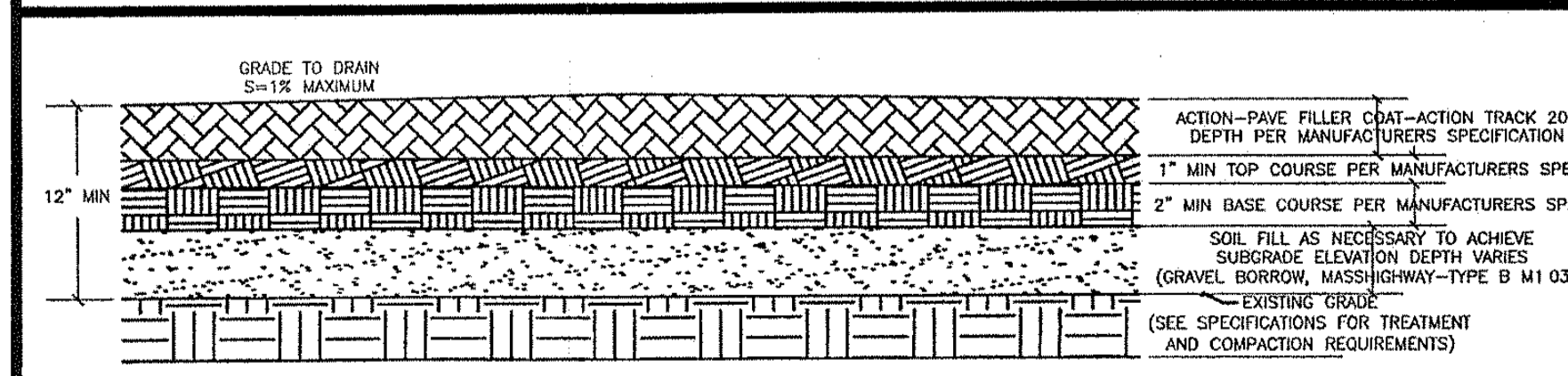
SECTION AT BASEBALL FIELD - SKINNED AREA
NTS



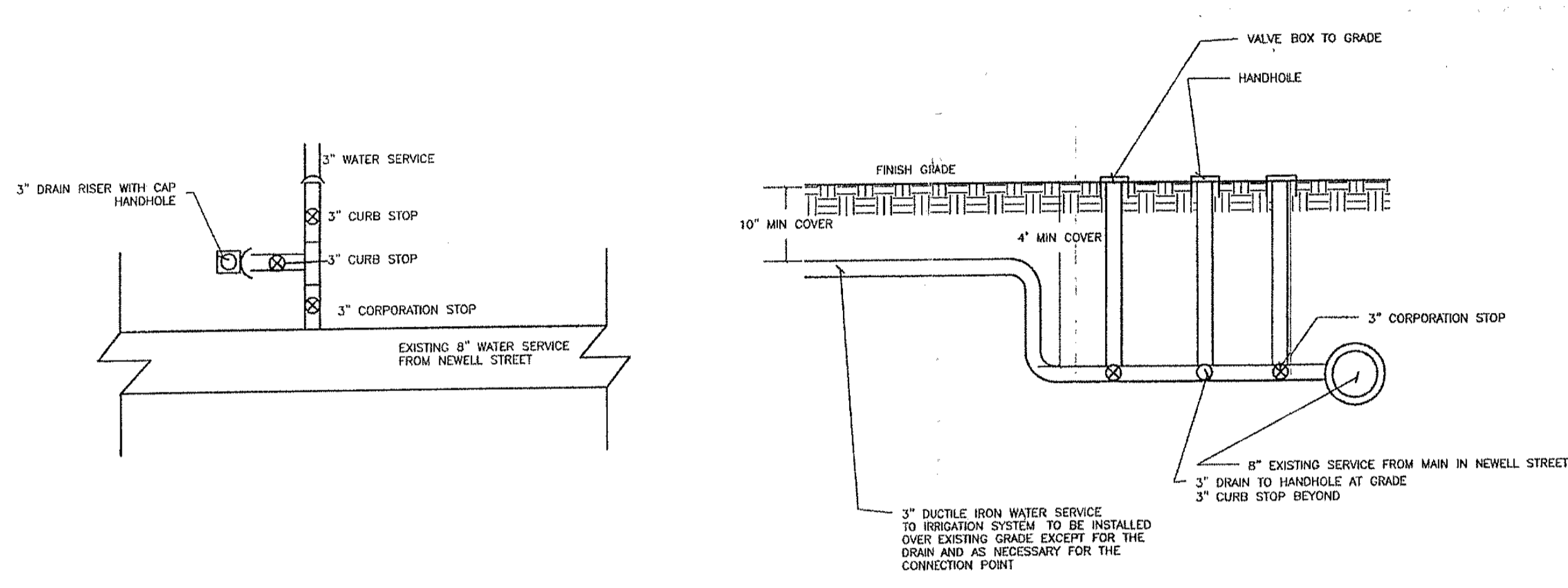
LIGHT POLE PIER AND FOOTING DETAIL
NTS



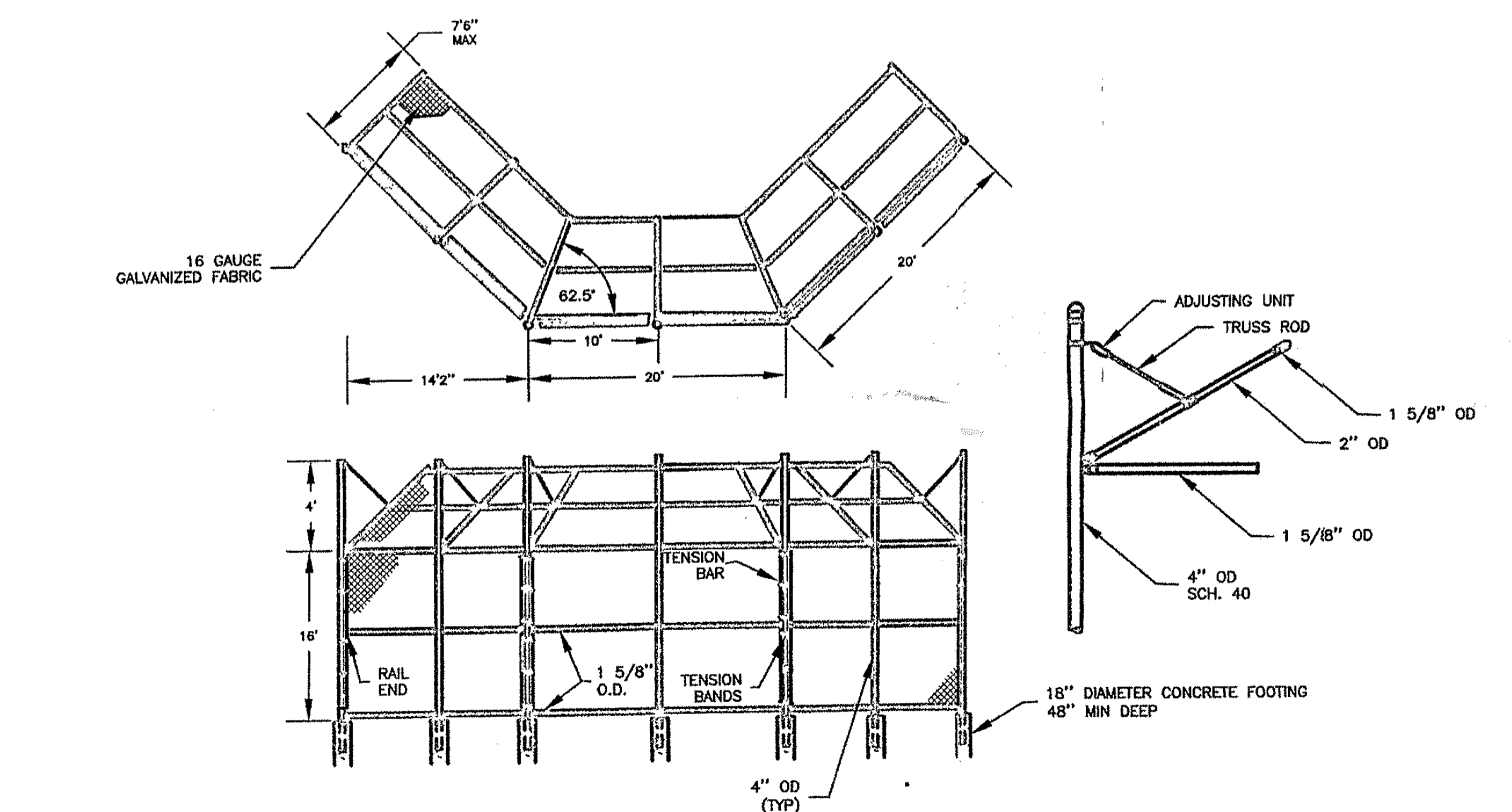
WALKING TRACK DETAIL-ALTERNATIVE #1
NTS



WALKING TRACK DETAIL-ALTERNATIVE #2
NTS



WATER MAIN SERVICE CONNECTION DETAIL
NTS



BACK STOP DETAIL
NTS

PROPOSED ATHLETIC FIELDS DETAILS SHEET
for
GENERAL ELECTRIC COMPANY

EAST STREET AND NEWELL STREET PITTSFIELD, MA

3	ADDENDUM #2 - WALKING PATH/BATHROOM	AMB	02/03/03
2	ADDENDUM #1	MSK	05/31/02
1	BID SET	AMB	05/16/02

WHITE ENGINEERING INC.
CIVIL & ENVIRONMENTAL
55 SOUTH MERRIAM STREET, PITTSFIELD, MA 01201

PHONE (413) 443-9011 E-MAIL WHITEENG@AOL.COM FAX (413) 443-8012
DATE MAY 16, 2002 DWN AMB APD MSK DWG NO. 00-02-03
BY AMB CVD MSK SCALE NOTED SHEET 3 OF 3

Attachment G

Technical Specifications

MATERIALS AND PERFORMANCE SECTION – 02200

EARTHWORK

PART 1 - GENERAL

1.01 DESCRIPTION

- A. All labor, materials, services, and equipment necessary to complete the earthwork activities as depicted on the Technical Drawings and/or as directed by GE or GE's Representative.

1.02 RELATED WORK SPECIFIED ELSEWHERE

- A. Section MP-02207 - Restoration of Surfaces
- B. Section MP-02222 - Soil Fill Material
- C. Section 3.22 – Air Monitoring
- D. Section 3.23 – Dust Suppression
- E. Section 3.24 – Soil Removal and Disposition
- F. Section 3.25 – Material Handling and Staging

1.03 SUBMITTALS

- A. Contractor's proposed equipment and compaction method(s).

1.04 APPLICABLE CODES, STANDARDS AND SPECIFICATIONS

- A. American Society for Testing and Materials (ASTM).

1.05 DEFINITION

- A. Earthwork is defined to include, but is not limited to, clearing, pavement removal, rough grading, excavation for subgrades, trenching, handling and disposal of surplus materials, maintenance of excavations, removal of water, backfilling operations, embankments and fills, and compaction.

PART 2 - PRODUCTS

Specified elsewhere.

PART 3 - EXECUTION

3.01 UNAUTHORIZED EXCAVATION

- A. The Contractor shall not be entitled to any compensation for excavations carried beyond or below the lines and subgrades prescribed on the Technical Drawings. The Contractor shall refill such unauthorized excavations at its own expense and in conformance with the provisions of this section.
- B. Should the Contractor, through negligence or for reasons of its own, carry its excavation below the designated subgrade, appropriate materials specified in Section MP-02222 - Soil Fill Material shall be furnished and placed as backfill in sufficient quantities to reestablish the required subgrade surface. Soil

fill material used for backfilling shall be spread and compacted in conformance with the requirements of later subsections of this section and to the percentage compaction outlined therein. The cost of any tests required as a result of this refilling operation shall be borne by the Contractor.

- C. All material that slides, falls, or caves into the established limits of excavations due to any cause whatsoever, shall be removed and disposed of at the Contractor's expense and no extra compensation will be paid to the Contractor for any materials ordered for refilling the void areas left by the slide, fall, or cave-in.

3.02 BACKFILL MATERIALS

- A. Soil fill material shall be used as specified for backfill. Requirements for off-site soil fill material are specified in Section MP-02222 - Soil Fill Material.
- B. On-site material is designated as "native fill" or "existing soil" material.

3.03 GENERAL BACKFILLING REQUIREMENTS

- A. Backfill shall be started at the lowest section of the area to be backfilled.
- B. Drainage of the areas being backfilled shall be maintained at all times.
- C. Areas to be backfilled shall be inspected prior to backfilling operations. All unsuitable materials and debris shall be removed.
- D. Backfill material shall be inspected prior to placement and all roots, vegetation, organic matter, or other foreign debris shall be removed.
- E. Stones larger than 6 inches in any dimension shall be removed or broken.
- F. Stones shall not be allowed to form clusters with voids.
- G. Backfill material shall not be placed when moisture content is too high to allow proper compaction.
- H. When material is too dry for adequate compaction, water shall be added to the extent necessary.
- I. Backfill material shall not be placed on frozen ground nor shall the material itself be frozen or contain frozen soil fragments when placed.
- J. No calcium chloride or other chemicals shall be added to prevent freezing.
- K. Material incorporated in the backfilling operation that is not in satisfactory condition shall be subject to rejection and removal at the Contractor's expense.
- L. With the exception of any backfill placed directly over geosynthetics (as directed by the Technical Drawings), the maximum lift thickness is 12 inches (measured prior to compaction).

3.04 METHOD OF COMPACTION

A. General

1. The Contractor shall adopt compaction methods that shall produce the degree of compaction specified herein, prevent subsequent settlement, and provide adequate support.
2. Methods used shall avoid disturbance to underlying fine-grained soils and to subsurface utilities.
3. Before filling or backfilling is begun, the Contractor shall submit in its Operations Plan the equipment and method for compaction which it proposes to use.
4. Hydraulic compaction by ponding or jetting shall not be permitted.
5. Backfill material shall not be left in an uncompacted state at the close of a day's construction.
6. Prior to terminating work, the final layer of compacted fill, after compaction, shall be rolled with a smooth-drum roller if necessary to eliminate ridges of soil left by tractors, trucks or other equipment used for compaction.
7. As backfill progresses, the surface shall be graded such that no ponding of water shall occur on the surface of the fill.
8. Fill shall not be placed on snow, ice or soil that was permitted to freeze prior to compaction.
9. Unsatisfactory materials shall be removed prior to fill placement.

B. Equipment

Unless otherwise specified on the Technical Drawings or in this RFP, equipment for compaction shall be the largest equipment consistent with space limitations of the work areas and the need to protect adjacent facilities.

1. Compaction of fill material in critical areas shall be accomplished by means of a drum-type, power driven, hand-guided vibratory compactor, or by hand-guided vibratory plate tampers.
2. If the proposed method does not produce the degree of compaction required, an alternate method shall be adopted until the required compaction is achieved.
3. The moisture content of backfill or fill material shall be adjusted, if necessary, to achieve the required degree of compaction.

C. Minimum Compaction Requirements

1. Unless otherwise specified on the Technical Drawings or in this RFP, the degree of compaction specified for the various items listed in Table 1 shall be the minimum allowable.
2. Unless the Contractor can successfully demonstrate that its methods shall produce the required degree of compaction, materials to be compacted shall be placed in layers not exceeding the uncompacted thicknesses listed in Table 1.

3. In-place density tests shall be required at a minimum of one test per each lift of backfill placed or at a frequency of 1 passing test per 2,500 square feet of subgrade, 100 cubic yards of soil fill, or 100 linear feet of trench.
4. GE or GE's Representative may order additional in-place density tests to ascertain conformance with the compaction requirements shown in Table 1.
5. The Contractor shall dig test holes at no additional cost to GE when requested for the purpose of taking an in-place density test below the current fill level.
6. The Contractor shall provide free access to trenches and fill areas for the purpose of making such tests. Payment for these tests shall be made by the Contractor.
7. The Contractor shall anticipate time needed due to testing procedures and shall not have claims for extra compensation occasioned by such time.
8. Minimum field compaction requirements in Table 1 are expressed as a percentage of the maximum dry unit weight of the material compacted using the Modified Proctor Compaction Test (ASTM D1557).

TABLE 1		
Type of Backfill	Maximum Uncompacted Fill Layer Thickness (inches)	Minimum Compaction (percent)
1. Subgrade -Native Soil	Not applicable	Proof-rolling
2. Embankments and Fills	12	90
3. Pipe Trenches	8	92
4. Pipe and Manhole Bedding	8	92
5. Access Road and Parking Lot Gravel	8	95
6. Topsoil	8	Compact by placing/grading only

9. Compaction curves for the full range of soil materials shall be developed by the Contractor.
10. When proof-rolling existing (or native) soils, the layer shall be acceptable when deformations caused by site equipment (e.g., roller, dump truck) are no deeper than 1 inch. All soft or wet materials that continue to deform more than 1 inch shall be removed and replaced with suitable material.

3.05 GRADING

- A. After the completion of all fill and backfill operations, the Contractor shall grade the site to the lines, grades and elevations shown on the Technical Drawings, taking into account any subsequent site restoration requirements.

3.06 EXISTING FACILITIES

A. General

1. Existing subsurface facilities may be encountered during construction of the work, or located in close proximity to the work.

2. These facilities may include, but are not necessarily limited to, sewers, drains, water mains, conduits and their appurtenances. These facilities may not be shown on the Technical Drawings. However, the sizes, locations, and heights or depths, if indicated, are only approximate and the Contractor shall conduct its operations with caution and satisfy itself as to the accuracy of the information given. The Contractor shall not claim nor shall it be entitled to receive compensation for damages sustained by reason of the inaccuracy of the information given or by reason of its failure to properly maintain and support such structures.
3. There may be other subsurface facilities, the existence and/or location of which are not known, such as individual water and gas services, electrical conduits, storm drains, etc. The Contractor shall consult with GE or GE's Representatives of such facilities and, if possible, shall determine, prior to construction, the location and depth of any such facilities that may exist in the area to be excavated.
4. If underground facilities are known to exist in an area but their location is uncertain, the Contractor shall exercise reasonable care in its excavation technique to avoid damage to them.
5. The Contractor shall notify Massachusetts DIGSAFE at least 72 hours prior to any site work.

B. Notification and Protection Procedures

1. Except where superseded by state or local regulations, or in the absence of any applicable regulations, the Contractor shall, at a minimum, include the following procedures in its operations:
 - a) Prior to Excavating:
 - 1) Determine correct field location of all nearby underground facilities or arrange for Representatives of the utilities to locate them.
 - 2) Notify owners of nearby underground facilities when excavation is to take place, allowing them reasonable time to institute precautionary procedures or preventive measures which they deem necessary for protection of their facilities.
 - 3) In cooperation with owners of nearby facilities, provide temporary support and protection of those underground facilities that may be especially vulnerable to damage by virtue of their physical condition or location, or those that could create hazardous conditions if damaged.
 - b) Immediately notify any utility owner of any damage to its underground facilities resulting from the Contractor's operations, and arrange for repairs to be made as soon as possible.
 - c) In case of an electrical short, or escape of gas or hazardous fluids (resulting from damage to an underground facility), immediately notify the local Fire Department and all persons who might be endangered and assist in evacuation of people from the area.

3.07 OTHER REQUIREMENTS

A. Unfinished work

1. When, for any reason, the work is to be left unfinished, all trenches and excavations shall be filled and all roadways and watercourses left unobstructed with their surfaces in a safe and satisfactory condition. The surface of all roadways shall have temporary pavement.

B. Hauling Material on Street

1. When hauling material over the streets or pavement, the Contractor shall provide suitably tight-sealing vehicles so as to prevent deposits on the streets or pavements. In all cases where any materials are dropped from the vehicles, the Contractor shall clean up the same as often as required to keep the crosswalks, streets, and pavements clean and free from dirt, mud, stone, and other hauled material.
2. When hauling materials that contain PCBs or other hazardous constituents, the Contractor shall abide by all applicable federal, state, and local codes, including, but not limited to, manifesting and placarding (if necessary).

C. Dust Control

1. It shall be the sole responsibility of the Contractor to control the dust created by any and all of its operations to such a degree that it will not endanger the safety and welfare of the general public.

- END OF SECTION -

MATERIALS AND PERFORMANCE SECTION – 02207

RESTORATION OF SURFACES

PART 1 - GENERAL

1.01 DESCRIPTION

- A. All types of surfaces, structures and appurtenances disturbed, damaged, or destroyed during the performance of the work under or as a result of the operations of the Contract, shall be restored and maintained, as specified herein or as directed by GE or GE's Representative. Work includes but is not limited to: finish grading, access drive, parking area, fencing installation, filling of CMP riser.
- B. The quality of materials and the performance of work used in the restoration shall produce a surface or feature equal to or better than the condition of each before the work began, as approved by GE or GE's Representative.

1.02 RELATED WORK SPECIFIED ELSEWHERE

- A. Section MP-02200 - Earthwork
- B. Section MP-02212 - Topsoil, Seeding, and Mulch
- C. Section MP-02222 - Soil Fill Materials
- D. Section MP-02209 - Sod

1.03 SUBMITTALS

- A. A schedule of restoration operations shall be submitted by the Contractor for review.
- B. Materials cut sheets for chain link fencing.
- C. Name of proposed fencing installer shall be submitted by the Contractor for review.
- D. Contractor shall submit his methodology for the filling of the CMP riser located within the field area.

1.04 SCHEDULE OF RESTORATION

- A. After an accepted schedule has been agreed upon, it shall be adhered to unless otherwise revised with the approval of GE or GE's Representative.
- B. The replacement of surfaces at any time, as scheduled or as directed, shall not relieve the Contractor of responsibility to repair damages by settlement or other failures.

PART 2 - PRODUCTS

2.01 CHAIN LINK FENCING

A. Chain Link Fencing shall comply with the following specifications:

10' Fence:

Fabric :	2" Aluminized Mesh, 9 gauge, selvage to be knuckle/knuckle	
Framework :	Top and bottom rails:	1-5/8" schedule 40
	Line posts	2-1/2" schedule 40
	Brace Rail	1-5/8" schedule 40
	Corner Posts	3" schedule 40
	End Posts	3" schedule 40
	Gate Posts	4" schedule 40
	Gate Frame	2" schedule 40

6' or 8' Fence:

Fabric :	2" Aluminized Mesh, 6 gauge, selvage to be knuckle/knuckle	
Framework :	Top and bottom rails:	1-5/8" schedule 40
	Line posts	2-1/2" schedule 40
	Brace Rail	1-5/8" schedule 40
	Corner Posts	2-1/2" schedule 40
	End Posts	3" schedule 40
	Gate Posts	3" schedule 40
	Gate Frame	2" schedule 40

Post Attachment: install fencing using bolted flanges to concrete slabs or install concrete footings where posts will be located in grass area.

10' Fence: in lawn or earth areas install 48" deep x 12" diameter concrete footings at posts. Install 48" deep x 14" diameter concrete footings at corners.

8' Fence: in lawn or earth areas install 48" deep x 12" diameter concrete footings at posts.

6' Fence: in lawn or earth areas, drive fence posts to depth of 4' minimum.

PART 3 - EXECUTION

3.01 STONE OR GRAVEL PAVEMENT

A. All pavement and other areas surfaced with stone or gravel shall be replaced with material to match the existing surface unless otherwise specified.

1. The depth of the asphalt or gravel shall be at least equal to the existing.
2. After compaction, the surface shall conform to the slope and grade of the area being replaced.

3.02 CURBS AND GUTTER REPLACEMENT

- A. Curbs and gutters removed or damaged in connection with or as a result of the construction operations shall be replaced with new construction.
- B. The minimum length of curb or gutter to be left in place or replaced shall be 5 feet. Where a full section is not being replaced, the existing curb or gutter shall be saw cut to provide a true edge.
 - 1. The restored curb or gutter shall be the same shape, thickness and finish as being replaced and shall be constructed of concrete, stone, asphalt, or any other material so as to match the material of the curb or gutter being replaced.

3.03 GRASSED AREAS

- A. The furnishing and placing of topsoil, seed and mulch shall be as directed by GE or GE's Representative.
- B. When required to obtain germination, the seeded areas shall be watered in such a manner as to prevent washing out of the seed.
- C. Any washout or damage that occurs shall be regraded and reseeded until a good sod is established.
- D. The Contractor shall maintain the newly seeded areas in good condition, including regrading, reseeding, remulching, and watering.

3.04 OTHER TYPES OF RESTORATION

- A. Drainage structures, including culverts, manholes, catch basins, sidewalks, pavements and piping, that are destroyed or removed as a result of the construction operations shall be replaced in like size and material and shall be replaced at the original location and grade unless otherwise shown on the Technical Drawings. When there is minor damage to a drainage structure and with the consent of GE or GE's Representative, a repair may be undertaken, if satisfactory results can be obtained.

Fences and gates destroyed, damaged, removed or otherwise altered as a result of the construction operations shall be replaced in like size and material and shall be replaced at the original location unless otherwise noted.

Chain link fencing shall be installed by a properly licensed, qualified fencing installer.

3.05 MAINTENANCE

- A. The finished products of restoration shall be maintained in an acceptable condition for and during a period of one year following the date of Substantial Completion or other such date as set forth elsewhere in the Contract Documents.

- END OF SECTION -

MATERIALS AND PERFORMANCE SECTION – 02209

SOD

PART 1 – GENERAL

1.01 DESCRIPTION

- A. This work shall consist of the construction of lawn on the areas indicated on the plans in accordance with these specifications.

1.02 RELATED WORK SPECIFIED ELSEWHERE

- A. Section MP-02200 – Earthwork
- B. Section MP-02207 – Restoration of Surfaces
- C. Section MP-02212 – Topsoil, Seeding, and Mulch
- D. Section MP-02222 – Soil Fill Material

1.03 SUBMITTALS

- A. The Contractor shall submit the location of the source for sod.

PART 2 – PRODUCTS

2.01 MATERIALS

- A. Sod shall be composed of the grass mixture as recommended by the New England Sod Producer's Association and shall be specified as:

Tall Fescue	80 – 100%
Kentucky Bluegrass	0 – 20%
Perennial Ryegrass	0 – 20%

Sods shall have been nursery grown on cultivated agricultural land specifically for sod purposes. The sod shall be free of objectionable grassy and broad leaf weeds. Sods shall be considered free of such weeds if less than 5 such plants are found per 100 square feet of area.

The sod shall be machine cut at a uniform minimum thickness of 1 inch at the time of cutting. Measurement for thickness shall exclude top growth and thatch.

Individual pieces of sod shall be cut to the supplier's standard width and length. Maximum allowable deviation from standard widths and lengths shall be 5%. Broken pads and torn or uneven ends will not be acceptable.

PART 3 – EXECUTION

3.01 INSTALLATION

- A. A foundation for the sod shall consist of loam borrow, plantable soil borrow or topsoil rehandled and spread in quantities sufficient to produce a depth of at least 4 inches after tamping and natural settlement has taken place for 1 month. Soil surface shall have a continuous surface free of stones, sticks or roots greater than 1 inch in any dimension, without voids or irregularities. Prior to placement of sod, loam shall be lightly scarified with a rake and watered lightly.

Fresh sod shall then be placed in final position on the designated areas. All sods shall be harvested, delivered and installed within 48 hours. When air temperature exceeds 90°F the period of time from harvest to installation shall be less than 24 hours.

Planting season for sod shall be from April 15 to June 1 and from August 15 to November 1. Any requests to deviate from this schedule must be submitted by the Contractor to GE in writing. Sod shall not be planted in soil with a temperature greater than 90°F.

Work shall progress in such a manner that workers are not walking on installed sod. Sod shall be placed parallel with the contour. Vertical joints between sods shall be staggered. Ends and sides of sod shall be butted closely together so that sod is not stretched and ends do not dry out. Contractor shall use full pieces throughout, and trim excess with clean straight cuts. Waste sod and scraps shall not be assembled to create a new piece. All sods shall be very carefully handled, to prevent loosening and separation of the loam from the roots. The sod shall be settled by watering it and by tamping on a board laid over it.

If sod cannot be installed immediately upon arrival to the site, the sod shall be stored in a shaded location, sprinkled with water, and covered with burlap, straw or other acceptable material which shall be kept moist when required and as directed. The sod shall be placed in layers so that the grassy side of the first or bottom layer shall be uppermost, whereas in the next succeeding layer in immediate contact with the corresponding surface of the preceding layer. The sod shall not be stored in such a manner to compress the thickness of sod below 2 inches.

- B. On slopes steeper than 3:1, sod shall be held securely in place with wooden pegs. The pegs shall be placed at intervals not greater than 3 feet. Pegs shall be at least 1 foot in length, driven flush with the surface of the sod. Other approved methods of fastening sod to slopes may be used where pegging is not practicable.
- C. When the sod has been set in final position, loam shall be used to fill the joint and as a surface dressing to cover the sodded areas to a depth of about 0.25 inch. A grass seed mixture conforming to the specification stated in MP-02212 shall be mixed with clean, dry sand or dry sandy loam and sown upon the loam surface dressing at the rate of 0.45 pounds per 100 square yards. The sodded areas shall then be compacted, and the compaction shall be equivalent to that provided by hand roller with a mass of between 75 and 100 pounds per foot of width and to produce a smooth, uniform surface.

3.02 MAINTENANCE

- A. The Contractor shall maintain all of the sodded areas for a minimum of 30 days following installation, or until the work has been officially accepted by GE, whichever is longer, without additional compensation. Before acceptance of the work, a satisfactory uniform stand of grass will be required. Partial acceptances will not be granted.

If necessary, suitable signs and barricades shall be placed to protect the sodded areas. Barriers shall be removed prior to final inspection.

Maintenance shall include watering, mowing, and any reseeding or resodding determined necessary by GE.

Sod shall be watered in sufficient quantities to maintain adequate soil moisture to a depth of 4 inches. Watering shall be done in a manner that will provide uniform coverage, prevent erosion due to application of excessive quantities over small areas, and prevent damage of the turf by the watering equipment.

Mowing shall occur before turf exceeds 5 inches, and shall be cut to a height of 3 inches.

3.03 WARRANTY

- A. The Contractor shall provide a full warranty on the sod for a period extending no less than one year from the date of acceptance by GE. The warranty shall include materials and costs associated with replacement of sod that does not survive the warranty period.

- END OF SECTION -

MATERIALS AND PERFORMANCE SECTION – 02212

TOPSOIL, SEEDING, AND MULCH

PART 1 - GENERAL

1.01 DESCRIPTION

- A. Work under this section consists of furnishing and placing of topsoil, fertilizer, seed, mulch, erosion control matting, and maintenance of seeded areas until final acceptance.

1.02 RELATED WORK SPECIFIED ELSEWHERE

- A. Section MP-02200 – Earthwork
- B. Section MP-02207 - Restoration of Surfaces
- C. Section 3.31 - Soil Fill Sources
- D. Section 3.33 - Site Restoration and Warranty

1.03 SUBMITTALS

- A. Analysis of the seed (to demonstrate compliance with the seed mix identified in Section 2.01 of this specification) and fertilizer (to identify chemical composition), and proposed application rates (to demonstrate compliance with the fertilizer application rate identified in Section 3.01B of this specification).
- B. Should hydroseed be used, the Contractor shall submit all data including material and application rates.
- C. Sample of topsoil to be tested by GE for chemical contaminants as discussed in Section 3.31 - Soil Fill Sources.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Any off-site topsoil shall be unfrozen, friable, natural loam and shall be free of clay lumps, brush needs, litter, stumps, stones, and other extraneous matter. The topsoil shall have an organic content between 5% and 20%, and a pH between 5.5 and 7.5.
- B. Fertilizer shall be a standard quality commercial carrier of available plant food elements. A complete prepared and packaged material containing a minimum of 5% nitrogen, 10% phosphoric acid, and 10% potash.
 - 1. Each bag of fertilizer shall bear the manufacturer's guaranteed statement of analysis.
- C. Seed mixtures shall be of commercial stock of the current season's crop and shall be delivered in unopened containers bearing the guaranteed analysis of the mix. All seed shall meet the State standards of germination and purity.

D. Seed mix:

65%	Kentucky Blue Grass
20%	Perennial Rye Grass
15%	Fescue

- E. Mulch shall be stalks of oats, wheat, rye, or other approved crops free from noxious weeds and coarse materials.
- F. Temporary erosion control matting shall be S75 as manufactured by North American Green, or equivalent.
- G. Permanent erosion control matting shall be P300P as manufactured by North American Green, or equivalent.

PART 3 - EXECUTION

3.01 INSTALLATION

- A. The topsoil shall be applied in a single loose lift of not less than 6 inches. No compaction is required or allowed. Following placement of topsoil and prior to fertilizer application, all stones greater than 1-inch in diameter, sticks, and other deleterious material shall be removed.
- B. The fertilizer shall be applied to the surface uniformly at the rate of 20 pounds per 1,000 square feet.
- Following the application of the fertilizer and prior to application of the seed, the topsoil shall be scarified to a depth of at least 2 inches with a disk or other suitable method traveling across the slope if possible.
 - After the soil surface has been fine-graded, the seed mixture shall be uniformly applied upon the prepared surface with a mechanical spreader at a rate specified by the seed manufacturer.
 - The seed shall be raked lightly into the surface.
 - Seeding and mulching shall not be done during windy weather.
 - Mulch (where used) shall be hand or machine spread to form a continuous blanket over the seed bed, approximately 2 inches in uniform thickness at loose measurement with a minimum of 90% surface coverage. Excessive amounts or bunching of mulch shall not be permitted.
 - Unless otherwise specified, mulch shall be left in place and allowed to decompose.
 - Any mulch that has not disintegrated at time of first mowing shall be removed.
 - Seeded areas shall be watered as often as required to obtain germination and to obtain and maintain a satisfactory sod growth. Watering shall be performed in such a manner as to prevent washing out of seed and mulch.

- Hydroseeding may be accepted as an alternative method of applying fertilizer, seed, and mulch. The Contractor must submit all data regarding materials and application rates to GE or GE's Representative for review.
- Temporary and permanent erosion control matting shall be installed in accordance with manufacturer's specifications.

3.02 MAINTENANCE

- A. All erosion rills or gullies within the topsoil layer shall be filled with additional approved topsoil, graded smooth, and re-seeded and mulched.
- B. The Contractor shall also be responsible for repairs to all erosion of the seeded areas until all new grass is firmly established and reaches a height of not less than 4 inches. All bare or poorly vegetated areas must be re-seeded and mulched.

- END OF SECTION -

MATERIALS AND PERFORMANCE SECTION – 02222

SOIL FILL MATERIAL

PART 1 - GENERAL

1.01 DESCRIPTION

A. Work Specified

1. Work under this section shall include, but not necessarily be limited to, supplying all labor and materials, excavating, transporting, dumping, spreading, and compacting soil fill material in the locations and to the depth shown on the Technical Drawings and/or as directed by GE or GE's Representative.

B. Applicable Standards and Specifications

1. American Society for Testing Materials (ASTM).
2. American Association of State Highway and Transportation Officials (AASHTO).

1.02 RELATED WORK SPECIFIED ELSEWHERE

A. Section MP-02200 - Earthwork

1.03 SUBMITTALS

A. Refer to Sections 3.2 and 3.31 of the Conditions of Work.

PART 2 - PRODUCTS

2.01 MATERIALS

A. Select fill shall be the type listed below:

1. Soil Fill: Soil Fill material shall be free from excessive moisture, frost, stumps, trees, roots, sod, muck, marl, vegetable matter, or other unsuitable materials, and demonstrated to be clean based on chemical analysis. Soil Fill shall consist of clean common earth fill free from organic material, coatings, sharp angular stones, and other deleterious materials, and shall have a maximum particle size of 3 inches. Soil Fill shall have the following gradation by weight:

<u>Percent Passing</u>	<u>Sieve</u>
100	3-inch
10-30	No. 200

2. Infield Soil (Beam Clay): Infield soil shall be "Beam Clay" as supplied by Partak Peat Corporation of Great Meadows, NJ.

“Beam Clay” shall have the following traits:

1. Provides firm traction
2. Provides good drainage with minimal accumulation of surface water.
3. Provides adequate moisture retention for insurance of pliable surface texture
4. Provides adequate compaction while retaining ability to be worked up easily during maintenance procedures.
5. Free of stone.
6. Reddish orange color for aesthetic quality.
7. All natural ingredients.

Mechanical Analysis:

Sand: 75-85%
Silt: 4-8% (.002mm - .05mm)
Clay: 12-16% (smaller than .002mm)

Sand Sieve Analysis:

<u>Screen Size</u>	<u>Percent Passing</u>
1/4" (6.3mm)	100%
#4 (4.76mm)	98-100%
#10 (2.00mm)	85-98%
#18 (1.00mm)	70-95%
#35 (0.50mm)	45-65%
#60 (0.25mm)	20-40%
#140 (0.105mm)	0-10%
#270 (0.053mm)	0-2%

Maximum of 50% between 0.25mm and 1.0mm

Density: 80-90 lbs per cubic foot or 2,160 – 2,430 per cubic yard, plus add 40% for compaction.

3. Gravel Borrow:

Gravel Borrow shall consist of inert material that is hard, durable stone and coarse sand, free from loam and clay, surface coatings, and deleterious material.

Gradation requirements for gravel borrow shall be determined by AASHTO T11 and T27 and shall conform to the following:

<u>Sieve Designation</u>	<u>Percent Passing</u>
1/2-inch	100
No. 4	90 - 100
No. 50	20 - 65
No. 200	0 - 12

Maximum size of stone in gravel shall be 3 inches largest dimension.

1. Dense Graded Crushed Stone:

Coarse aggregate shall have a percentage of wear, by the Los Angeles test, of not more than 45. Fine aggregate shall consist of natural or crushed sand. The composite material shall be free from clay, loam or other plastic material, and shall conform to the following grading requirements:

<u>Sieve Designation</u>	<u>Percent Passing</u>
2-inch	100
1.5-inch	70 - 100
3/4-inch	50 - 85
No. 4	30 - 55
No. 50	8 - 24
No. 200	3 - 10

Sampling and testing shall be in accordance with the following standard AASHTO methods:

Sieve Analysis – T27
Passing No. 200 (75µm) – T11

PART 3 - EXECUTION

3.01 INFIELD SOIL PLACEMENT

Apply 3" of "Beam Clay" on base paths and 6" within 6 feet of base areas and 6" within pitchers mound and batters box. If "Beam Clay" is dry after installation, moisten evenly and drag infield area with drag mat until smooth.

3.02 SOIL FILL PLACEMENT

- A. In general, soil fill material shall be placed and compacted in horizontal layers not exceeding those thicknesses indicated in Section MP-02200 - Earthwork. Subgrade for placement of soil fill material shall be approved by GE or GE's Representative. Soil fill material shall not be placed on ground that will not support the weight of construction equipment.
- B. Each layer of soil fill material shall be thoroughly tamped or rolled to the required degree of compaction by mechanical tampers, or vibrators. Successive layers shall not be placed until the layer under construction has been thoroughly compacted.
- C. Where required, the Contractor shall, at its own expense, moisture-condition the fill to meet the compaction requirements. If the material is too wet for satisfactory compaction due to rain or other causes, it shall be allowed to dry or be removed as required before compaction.

3.03 FIELD TESTING AND QUALITY CONTROL

- A. In-place nuclear density testing (ASTM D2922 and D3017) shall be performed by an independent testing laboratory, at the Contractor's expense, at the frequency specified in Section MP-02200 - Earthwork.

3.04 CRITERIA AND TOLERANCES

- A. Soil fill material shall be constructed to such heights as to make allowance for post-construction settlement. Any settlement that occurs before final acceptance of the Contract shall be corrected to make the backfill conform to the established lines and grades.

- END OF SECTION -

Attachment H

Submittal Tracking Form

ATTACHMENT H
SUBMITTAL TRACKING FORM

FUTURE CITY RECREATIONAL AREA
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS

Item No.	Submittal Description	Specification Reference (see Note 2)	Date Received	Review Conducted by:		Interim Status/Date (see Note 1)	Final Status/Date (see Note 1)	Notes
				GE Project Manager	Design Engineer			
1	Operations Plan	Section 3.5						
2	Health and Safety Plan	Section 3.6						
3	Contingency Plan	Section 3.7						
4	Name and location of each source and type of fill material proposed by the Contractor, including provision of a sample from each source and soil fill type.	Section 3.30 and Materials and Performance Section 02212 (1.03)						
	- Topsoil							
	- Run of Bank Gravel							
	- Dense Grade Gravel							
	- Soil Fill Material							
	- Infield Clay							
	- Material Used for Walking Path Surface	To Be Determined						
5	Record Drawings	Section 3.33						
6	Manufacturer's Warranties (refer to Section 3.35 of the RFP).	Section 3.35						
7	Earthwork - Contractor's proposed equipment and compaction methods.	Materials and Performance Section 02200 (1.03)(A)						
8	Restoration of Surfaces - Schedule for restoration operations.	Materials and Performance Section 02207 (1.03)(A)						
9	Restoration of Surfaces - Materials cut sheet for chain-link fencing.	Materials and Performance Section 02207 (1.03)(B)						
10	Restoration of Surfaces - Name of proposed fencing installer.	Materials and Performance Section 02207 (1.03)(C)						
11	Restoration of Surfaces - Methodology for filling the CMP riser.	Materials and Performance Section 02207 (1.03)(D)						
12	Sod - Proposed location of sod source.	Materials and Performance Section 02209 (1.04)(A)						
13	Topsoil, Seeding, and Mulch - Analysis of the seed (to demonstrate compliance with the seed mix identified in the RFP) and fertilizer (to identify chemical composition), and proposed application rates (to demonstrate compliance with fertilizer application rates identified in the RFP).	Materials and Performance Section 02212 (1.03)(A)						
14	Topsoil, Seeding, and Mulch - Should hydroseed be used, the Contractor shall submit all data including material and application rates.	Materials and Performance Section 02212 (1.03)(B)						
15	Topsoil, Seeding, and Mulch - Should hydroseed be used, the Contractor shall submit all data including material and application rates.	Materials and Performance Section 02212 (1.03)(B)						

ATTACHMENT H
SUBMITTAL TRACKING FORM

FUTURE CITY RECREATIONAL AREA
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS

Item No.	Submittal Description	Specification Reference (see Note 2)	Date Received	Review Conducted by:		Interim Status/Date (see Note 1)	Final Status/Date (see Note 1)	Notes
				GE Project Manager	Design Engineer			
16	Soil Fill Material - Sieve analyses results	Materials and Performance Section 02222 (2.01)(A1)						
17	Geotextile Fabric - Manufacturer's data for geotextile including, at a minimum, physical properties, packaging, and installation techniques.	Materials and Performance Section 02232 (1.03)(A)						
18	Geotextile Fabric - Manufacturer's quality assurance/quality control program.	Materials and Performance Section 02232 (1.03)(B)						
19	Geotextile Fabric - Certified results of all quality control testing. The results shall identify the sections/panels of field-delivered fabric they represent. The Contractor shall submit written certification that the field delivered material meets the manufacturer's specifications. The Contractor shall also provide the lot and roll number for the fabric delivered to the site.	Materials and Performance Section 02232 (1.03)(C)/ (2.04)(A)						
20	Geotextile Fabric - Contractor's proposed transportation, handling, storage, and installation techniques.	Materials and Performance Section 02232 (1.03)(D)						
21	Geotextile Fabric - Shop drawings, including panel layouts and installation sequence.	Materials and Performance Section 02232 (1.03)(E)						
22	Geotextile Fabric - Manufacturer's standard warranty provided for geotextiles.	Materials and Performance Section 02232 (1.03)(F)						
23	Geotextile Fabric - Upon completion, the Contractor shall submit all quality control documentation and as-built drawings.	Materials and Performance Section 02232 (3.03)(A1)						
24	Geotextile Fabric - Upon completion, the Contractor shall submit the warranty obtained from the Manufacturer/ Fabricator.	Materials and Performance Section 02232 (3.03)(A2)						

Notes:

1. Submittal status nomenclature is as follows:

- R - Reviewed
- N - Reviewed and Noted
- S - Resubmit
- J - Rejected

2. With the exception of the material used to construct the surface of the walking pathway, all specifications are referenced to the *Request for Proposal - Future City Recreational Area* (RFP; BBL, May 2002).

3. The Health and Safety Plan is required for GE record-keeping purposes only and, therefore, GE and BBL will conduct a review of the plan for completeness only. Determination of the appropriate level of worker safety, equipment, and procedures must be made by the Contractor based on site visits, review of available information, and anticipated site activities.

Attachment I

**Ambient Air PCB &
Particulate Monitoring**

ATTACHMENT I

**SCOPE OF WORK
For
Ambient Air PCB & Particulate Monitoring
Future Pittsfield City Recreational Area**

**General Electric Company
Pittsfield, Massachusetts**

Prepared by

Berkshire Environmental Consultants, Inc.
152 North Street, Suite 250
Pittsfield, MA 01201

July 2002

TABLE OF CONTENTS

- 1.0 Introduction
- 2.0 Sampling Objective
- 3.0 PCB Monitoring Program
 - 3.1 High Volume PCB Sampling
 - 3.2 Analytical Procedures
- 4.0 Particulate Monitoring
- 5.0 Quality Assurance and Quality Control Procedures
- 6.0 PCB Sample Documentation, Handling and Shipment
- 7.0 Meteorological Monitoring
- 8.0 Documentation and Reporting
- 9.0 Action Levels
 - 9.1 PCB's
 - 9.2 Particulate Matter

1.0 INTRODUCTION

General Electric Company (GE) has retained Berkshire Environmental Consultants, Inc. (BEC) to conduct ambient air monitoring for polychlorinated biphenyls (PCBs) and particulate matter during the construction of a future Recreational Area and Athletic Fields. The future recreational area will be constructed on a several acre lot on the corner of East and Newell Streets in Pittsfield which was formerly open space in the GE complex.

2.0 SAMPLING OBJECTIVE

The objectives of this sampling program are two-fold:

1. To obtain valid and representative data on ambient levels of PCBs around the construction site before and during construction activities to insure that the activities are not causing an unacceptable increase in ambient air concentrations of PCB.
2. To obtain valid and representative data on ambient levels of particulate around the construction site before and during construction activities to insure that the activities are not causing an unacceptable increase in ambient air concentrations of particulate.

3.0 PCB MONITORING PROGRAM

3.1 *High Volume PCB Sampling*

The high volume PCB sampling program will include the following elements:

High-Volume Monitoring Locations	4
Background Sites	1
Co-Located Sites (Field Duplicates)	1
Sampling Time	24 hours per sampling event
Sampling Period	Duration of construction activity
Frequency of Sampling	Twice prior to the onset of construction activity and once every four weeks during construction activity*
No. of Blanks Per Sampling Event	1
Sampling Method	EPA Compendium Method TO-4A
Analytical Method	GC/ECD or GC/MS as described in EPA Method TO-4A

- * Sampling frequency may be increased if either PCB or particulate monitoring levels exceed threshold values.

Ambient air monitoring for PCBs will be conducted during construction activity. Sampling will be conducted for two 24 hour periods prior to the initiation of activities and will proceed once every 4 weeks during construction. The ambient air monitoring frequency for PCB may be increased to bi-weekly in the event that ambient particulate concentrations at any one location consistently exceed the proposed particulate notification level (i.e. $120 \mu\text{g}/\text{m}^3$). Consistently exceeding will be defined as greater than $120 \mu\text{g}/\text{m}^3$ on three consecutive 10 hour days or 5 days in any two week period. Once PCB concentrations are below PCB action levels (see Section 9 of this Scope of Work) for two consecutive bi-weekly events, then PCB sampling frequency will revert to once every 4 weeks.

PCB monitoring will be conducted at four locations surrounding the proposed Recreational Area. A background monitor will be operated inside GE Gate 31 on the corner of Woodlawn Avenue and Tyler Street. Preliminary monitoring sites have been identified on the NW, NE, and SW corners and on the SE side of the proposed Recreational Area. The specific sampling locations for monitors will be selected based on the location and nature of the construction activity, predominant wind direction, the location of potential receptors, physical obstructions (i.e. trees, buildings), etc., the availability of power, site security, and site accessibility.

The detection limit (DL) for PCB analysis of the high volume samples will be $0.0003 \mu\text{g}/\text{m}^3$, in consideration of the following:

Avg. Sampling Rate	0.225 m^3/min .
Avg. Sample Volume	324 m^3/PUF
Analytical DL	0.1 $\mu\text{g}/\text{PUF}$
Project DL	0.0003 $\mu\text{g}/\text{m}^3$

The sampling method for PCBs in the high volume samples is USEPA Compendium Method TO-4A, Determination of Pesticides and Polychlorinated Biphenyls in Ambient Air Using High Volume Polyurethane Foam (PUF) Sampling Followed by Gas Chromatographic/Multi-Detector Detection (GC/MD). This method employs a modified high volume sampler consisting of a glass fiber filter with a polyurethane foam (PUF) backup absorbent cartridge to sample ambient air at a rate of $0.225 \text{m}^3/\text{min}$. A General Metal Works Model GPS-1 Sampler or equivalent will be used. The filter and cartridge will be placed in clean, sealed containers and returned to the laboratory for analysis.

Procedures for sample media preparation and calibration of the sampling system are specified in Method TO-4A. TO-4A further specifies procedures for calculation and data reporting, and the assessment of data for accuracy and precision.

The samplers will be monitored at six hour intervals over the 24 hour sampling period. During these six-hour checks, instrument magnehelic pressure readings (an indicator of air flow) will be taken. As necessary, the air flow may be adjusted to meet the target flow rate. At the end of the sampling period, the PUF cartridges will be removed from the sampling train. Each PUF cartridge (inside a glass holder) will be wrapped in hexane rinsed aluminum foil. The PUF samples will be labeled, wrapped, packaged in blue ice and sent under chain-of-custody to the contract laboratory for analysis.

The PCB sampling probe height for all high volume monitors will be approximately 2.0 meters above the ground. This height is adequate to represent the breathing zone and be above the

influence of ground activity around the monitor. The location of the samplers will be in conformance, to the extent practical, with the siting requirements for ambient monitors in Ambient Monitoring Guidelines for Prevention of Significant Deterioration (PSD), U.S. EPA. May, 1987.

3.2 Analytical Procedures

In the high volume samples, the PCBs will be recovered by Soxhlet extraction with 10% diethyl ether in hexane. The extracts will be reduced in volume using Kuderna-Danish (K-D) concentration techniques and subjected to column chromatographic cleanup. The extracts will be analyzed for PCBs using gas chromatography with either electron capture detection (GC/ECD) or mass spectrometry detection (GC/MS) as described TO-4A.

The samples will be analyzed for the following PCB Aroclors:

PCB-1016	PCB-1221
PCB-1232	PCB-1242
PCB-1248	PCB-1254
PCB-1260	

4.0 PARTICULATE MONITORING

Ambient air monitoring for particulate will be conducted during construction activities. Real-time ambient particulate monitoring will be performed during all active on-site activities. Such monitoring will be conducted at four locations (which may vary as site activities progress) and at one appropriate background location inside GE Gate 31 on the corner of Woodlawn Avenue and Tyler Street. Preliminary monitoring sites have been identified on the NW, NE, and SW corners and on the SE side of the proposed Recreational Area. The specific locations for stations will be selected based on the location and nature of the construction activities, predominant wind direction, location of potential receptors, availability of power, site accessibility, and site security.

At the background and one on-site location, real-time particulate monitoring will be performed using a MIE dataRAM Model DR-2000 real time particulate monitor. Each monitor Model DR-2000 is equipped with a temperature conditioning heater and in-line impactor head to monitor and record particulate concentrations with a mean diameter less than 10 micrometers (PM_{10}). At the remaining three on-site locations, real-time particulate monitoring will be performed using a MIE dataRAM Model pDR-1000. Particulate monitoring will typically be conducted at all sites for approximately 10 hours daily, from 7 a.m. to 5 p.m., during construction activities. Additional site activities may warrant a longer monitoring period. Particulate data will be recorded and averaged by the instruments' dataloggers every 15 minutes.

Calibrations and maintenance will be conducted at the frequency and in accordance with the procedures recommended by the manufacturer. All calibrations will be recorded.

5.0 QUALITY ASSURANCE AND QUALITY CONTROL PROCEDURES

Quality assurance and quality control (QA/QC) procedures for the PCB air sampling program follow those described in GE's *Field Sampling Plan/Quality Assurance Project Plan (FSP/QAPP)* and Method TO-

4A. Quality assurance and quality control for the particulate sampling will be based on manufacturer's recommendations.

6.0 PCB SAMPLE DOCUMENTATION, HANDLING AND SHIPMENT

Each filter holder and PUF cartridge holder will be pre-marked with a permanent identification number. As each sample is collected, it will be recorded on a field data form along with the date, time and location of collection.

All samples will be securely wrapped for shipment. PCB samples will be preserved at 4°C and shipped on blue ice. Samples will be shipped under chain-of-custody by commercial overnight carrier or courier to the analytical laboratory. Complete details on the PCB sample shipment procedures are contained in the FSP/QAPP.

7.0 METEOROLOGICAL MONITORING

Meteorological data from the Climatronics Electronic Weather Station (EWS) operated at the GE facility in Pittsfield, Massachusetts will be included with the sampling results. This EWS has been operating continuously since 1991 at the GE facility in East Street Area 2 providing data to support other GE activities under the MCP. The EWS measures and records wind speed, wind direction, precipitation, temperature, relative humidity and integrated solar radiation. The siting of the meteorological station was established with the approval of DEP. The station was installed and continues to operate in accordance with EPA On-site Meteorological Program Guidance for Regulatory Modeling Applications and a Site Specific Meteorological Monitoring Quality Assurance Project Plan. The operation of the EWS has been successfully audited by Massachusetts Department of Environmental Protection (DEP).

Barometric pressure will be measured and recorded on each sampling day. In addition, a portable relativity humidity indicator will be used for field verification of humidity conditions.

8.0 DOCUMENTATION AND REPORTING

Particulate data will be summarized and reported to the GE Project Coordinator and the Blasland, Bouck & Lee (BBL) Project Manager. If there is an exceedance of a reporting threshold, GE will be notified as soon as possible. All field and laboratory data recorded during ambient monitoring will be documented according to the procedures in the FSP/QAPP. A written report summarizing the results will be provided to GE and BBL within one month after the conclusion of sampling and will include the following:

- Date and Time of Sampling
- Sampling Locations
- Calibration and Maintenance Activities
- Pollutants Monitored
- Number of Samples Collected
- Analytical Results
- Quality Assurance Assessment
- Meteorological Data Summary
- Discussion of Problems or Disruptions
- Signature of Individual Responsible For Monitoring Program

9.0 ACTION LEVELS

9.1 *PCB's*

The notification and action levels for PCB concentrations in ambient air are $0.05 \mu\text{g}/\text{m}^3$ (24-hour average) and $0.1 \mu\text{g}/\text{m}^3$ (24-hour average), respectively. These are the same levels established by EPA for the GE Building 68 Removal Action and for off-site remediation activities in Pittsfield. Any exceedance of the notification level will be immediately reported to GE.

9.2 *Particulate Matter*

For each day of monitoring, the particulate data from the on-site monitors will initially be compared with the data from the background monitor. If the average 10-hour PM_{10} concentration at any on-site monitor exceeds the average concentration at the background monitor, the on-site concentrations will then be compared with the notification level of $120 \mu\text{g}/\text{m}^3$ (micrograms per cubic meter) -- which represents 80 percent of the current 24-hour National Ambient Air Quality Standard (NAAQS) for PM_{10} ($150 \mu\text{g}/\text{m}^3$). This level has been selected to allow notice to GE before concentrations reach the level of the 24-hour NAAQS. Any exceedances of the notification level or the NAAQS will be immediately reported to the GE Project Coordinator.

