01-0716

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

Transmitted Via Overnight Delivery

March 3, 2004

Mr. Michael Nalipinski
U.S. Environmental Protection Agency, Region I
One Congress Street, Mail Code HBT
Boston, MA 02203-2201

Re: **GE-Pittsfield/Housatonic River Site**
30s Complex (GECD120)
Proposal for Additional Soil Investigations – 30s Complex

Dear Mr. Nalipinski:

This letter describes the investigations proposed by the General Electric Company (GE) to further characterize certain soils within the 30s Complex Removal Action Area (RAA) located at GE's Pittsfield, Massachusetts facility (Figure 1). The investigations described herein have been identified based on recent discussions among GE, the U.S. Environmental Protection Agency (EPA), the Massachusetts Department of Environmental Protection (MDEP), and the Pittsfield Economic Development Authority (PEDA) related to the future transfer of this area to PEDA and PEDA's subsequent development of the area.

To facilitate PEDA's future planning and re-development of the 30s Complex, GE has agreed to perform – on behalf of PEDA – additional soil characterization activities in this area. The primary objective of these investigations is to supplement the existing data set as required to further characterize the uppermost 6 feet of soil for polychlorinated biphenyls (PCBs) and other constituents listed in Appendix IX of 40 CFR Part 264, plus three constituents -- benzidine, 2-chloroethyl vinyl ether, and 1,2-diphenylhydrazine (Appendix IX+3). The additional soil investigations proposed herein have been identified assuming a potential future scenario whereby all surfaces within the 30s Complex (with one exception discussed below) would be unpaved. Under this scenario, additional investigations have been identified based on the pre-design investigation requirements for unpaved areas at the GE Plant Area, as established in the *Statement of Work for Removal Areas Outside the River (SOW)*, which is Appendix E to the October 2000 Consent Decree (CD) for the GE Pittsfield/Housatonic River Site. Additional information concerning the scope and anticipated schedule for the additional soil investigations is presented below.

A. Additional Soil Characterization Activities

To determine the scope of the additional investigation activities for the 30s Complex, it has been assumed, based on input from PEDA, that the entire 30s Complex will be unpaved, with the exception of the former Building 31 Powerhouse foundation, which contains various building demolition debris and is covered by an engineered barrier. Currently, the ground cover for the 30s Complex includes a variety of paved and unpaved areas, and formerly included several buildings which were recently demolished by

GE. As such, PEDA has requested that GE identify and coordinate performance of the additional investigation activities required for the top 6 feet of soils assuming that the entire 30s Complex will be an unpaved area (with the exception of the area above the former Building 31 Powerhouse foundation). To assist in the identification of the required additional investigation activities, GE compared the grid-based pre-design investigation sampling requirements specified in the SOW for unpaved areas within the GE Plant Area against the existing soil data from pre-design investigations previously performed by GE at the 30s Complex. Additional details regarding the scope of the proposed investigations are provided below.

The pre-design soil investigation activities specified in the SOW for unpaved areas within the GE Plant Area generally involve the collection of soil samples on an approximate 100-foot sampling grid. Samples are collected at each grid node from the 0- to 1-foot, 1- to 6-foot, and 6- to 15-foot depth increments for analysis of PCBs. The SOW also requires the collection of additional samples for analysis of non-PCB Appendix IX+3 constituents. The number of required Appendix IX+3 samples is approximately equal to one-third the total number of samples collected for analysis of PCBs. Further, these samples are required to be approximately evenly distributed between surface (0- to 1-foot depth) and subsurface depth increments. However, as previously mentioned, the additional investigations described herein are for only the uppermost 6 feet of soil, so that some adjustments to the sampling scope (relative to the requirements of the SOW) have been implemented.

To determine the scope of additional PCB soil investigations for the 30s Complex, the 100-foot sampling grid previously used for the pre-design investigations within the 30s Complex was expanded to include the entire RAA, as shown on Figure 2. Table 1 identifies the grid nodes that fall within the 30s Complex. Without consideration of the available investigation data, the SOW criteria for pre-design soil investigations in unpaved areas (excluding quality assurance/quality control samples) would require the following activities for the uppermost 6 feet of soils at the 30s Complex:

- PCB soil sampling at 74 grid node locations (0- to 1-foot and 1- to 6-foot depth increments);
- Analysis of 148 soil samples for PCBs; and
- Analysis of 50 soil samples for other non-PCB Appendix IX+3 constituents (excluding pesticides and herbicides).

As previously indicated, GE has already conducted certain pre-design soil investigations at the 30s Complex at the locations indicated on Figure 2. The locations and depth increments of existing sampling data that are available to satisfy the 100-foot grid are also presented in Table 1. When considering the pre-design investigation data previously collected at the 30s Complex, a number of additional samples are required to characterize the soils in the uppermost 6 feet at the 30s Complex in accordance with the requirements of the SOW. The number of samples required by the SOW for unpaved areas, the number of existing samples that satisfy those requirements, and the number of proposed additional samples are as follows:

Depth Increment	SOW Requirements [1]		Existing Pre-Design Investigation Data		Proposed Additional Samples	
	PCBs	Appendix IX+3	PCBs	Appendix IX+3	PCBs	Appendix IX+3
0-1 ft	74	25	56	26	18	0
1-6 ft	74	25	52	15	23 [2]	10
Total	148	50	108	38	41	10

Notes:
1. Based on the SOW requirements for unpaved areas within the GE Plant Site.
2. Existing sample location RAA2-B8 was terminated at approximately 3 feet below the bottom of the building slab due to an obstruction. GE will attempt to collect a soil sample from the entire 1- to 6-foot interval during the additional soil investigation.

To address the data needs identified above, 51 additional soil samples are proposed for collection from 25 locations for analysis of PCBs and/or Appendix IX+3 constituents (excluding herbicides and pesticides). The existing and proposed PCB and Appendix IX+3 sample locations and depths are summarized in Table 1 and presented on Figures 2 through 4. As with all soil investigations at this Site, the proposed sample locations shown on Figures 2 through 4 are approximate and subject to change based on field considerations (e.g., accessibility considerations, difficult drilling conditions). Finally, the collection and analysis of the proposed soil samples will be conducted in accordance with the procedures set forth in GE's approved *Field Sampling Plan/Quality Assurance Project Plan* (FSP/QAPP) and will be consistent with the procedures that were used during the previous investigations conducted at this RAA.

B. Evaluation of Investigation Results

Following completion of the investigation activities proposed herein, the results of the additional soil sample data will be evaluated. This evaluation will include a screening-level review of the sample results considering only the data from the soil samples collected during this investigation, since the evaluations presented in the Conceptual RD/RA Work Plan for the 20s, 30s, and 40s Complexes demonstrated that the soils within the overall 30s Complex were below the applicable Performance Standards established in the CD and SOW. In these circumstances, if the new data are generally comparable to the prior data and/or if the new data are below the specified Performance Standards, more detailed evaluations will not be required. However, if the new data, when combined with the prior data from the 30s Complex, indicate that the concentrations of PCBs or other Appendix IX+3 constituents in soils may approach or exceed the applicable Performance Standards, then GE will develop revised RD/RA evaluations for the entire 30s Complex for both PCBs and other Appendix IX+3 constituents using both new and existing data.

C. Schedule

GE proposes to conduct the additional investigations described above, validate the data, perform the required evaluations, and submit a summary report to EPA within 90 days of EPA's approval of this proposal. In the interim, GE will provide to EPA the results of the additional investigation activities described herein as part of the monthly status reports for CD-related activities.

Please call me if you have any questions regarding this proposal.

Sincerely,

John F. Novotny /GH

John F. Novotny, P.E.
Manager-Facilities & Brownfields Programs

V:\GE_Pittsfield_CD_20s30s40s\Correspondence\234199.doc
Attachments

cc: Tim Conway, EPA
Rose Howell, EPA
Holly Inglis, EPA
Dean Tagliaferro, EPA
Carol Tucker, EPA
K.C. Mitkevicius, USACE
Dawn Jamros, Weston
Susan Steenstrup, MDEP
Anna Symington, MDEP
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Mayor James Ruberto, City of Pittsfield
Thomas Hickey, Director, PEDA
Gerald Lee, President, Pittsfield City Council
Pittsfield Department of Health
Jeffrey Bernstein, Bernstein, Cushner & Kimmel
Theresa Bowers, Gradient
Michael Carroll, GE
Rod McLaren, GE
Andrew Silfer, GE
James Bieke, Shea & Gardner
Samuel Gutter, Sidley Austin Brown & Wood
James Nuss, BBL
Corey Averill, BBL
Public Information Repositories
GE Internal Repository

TABLE 1
EXISTING AND PROPOSED ADDITIONAL SAMPLING
30s COMPLEX REMOVAL ACTION AREA

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

Grid Node	0- to 1-foot Depth Interval		1- to 6-foot Depth Interval	
	PCBs	Appendix IX+3	PCBs	Appendix IX+3
A1	**P**	--	**P**	--
A2	PEDA-33-A-SB-1	PEDA-33-A-SB-1	PEDA-33-A-SB-1	--
A3	RAA2-A3	--	RAA2-A3	RAA2-A3
A4	RAA2-21	RAA2-21	RAA2-21	--
A5	RAA2-A5	RAA2-A5	RAA2-22	--
A6	PEDA-33-X-SB-1	PEDA-33-X-SB-1	PEDA-33-X-SB-1	--
A7	RAA2-23	--	RAA2-23/RAA2-26	RAA2-23
B1	RAA2-43	--	**P**	**P**
B2	**P**	--	**P**	--
B3	RAA2-B3	RAA2-B3	RAA2-B3	--
B4	RAA2-41	--	RAA2-41	RAA2-41
B5	PEDA-33-SB-2	--	PEDA-33-SB-2	--
B6	RAA2-B6	--	RAA2-B6	--
B7	PEDA-33-SB-1	PEDA-33-SB-1	PEDA-33-SB-1	--
B8 [3]	RAA2-B8	--	RAA2-B8 (R @ 3.0 bgs) / **P**	--
C1	RAA2-24	RAA2-24	RAA2-24	--
C2	PEDA-34-SB-1	PEDA-34-SB-1	RAA2-C2	--
C3	RAA2-20/RAA2-25	RAA2-20	RAA2-20/RAA2-25	--
C4	RAA2-C4	--	RAA2-C4	--
C5	RAA2-C5	RAA2-C5	RAA2-C5	--
C6	RAA2-C6	--	RAA2-C6	--
C7	RAA2-C7	--	RAA2-C7	RAA2-C7
C8	RAA2-29	RAA2-29	RAA2-29	--
D1	RAA2-D1	RAA2-D1	RAA2-42	RAA2-42
D2	RAA2-D2	--	RAA2-D2	--
D3	RAA2-D3	--	RAA2-D3	--
D4	RAA2-27	RAA2-27	RAA2-27	PEDA-33-SB-3
D5	RAA2-D5	--	RAA2-28	RAA2-28
D6	RAA2-40	--	RAA2-40	--
E1	**P**	--	**P**	**P**
E2	RAA2-30	RAA2-30	RAA2-30	--
E3	**P**	--	**P**	--
E4	RAA2-31	--	RAA2-31	--
F1	RF-2	RF-2	212S	--
F2	RAA2-32	--	RAA2-32	RAA2-32
G1	RAA2-5	RAA2-5	RAA2-5	--
G2	RAA2-6	--	RAA2-6	RAA2-6
G3	RAA2-7	RAA2-7	RAA2-7	--
G4	RAA2-8	--	RAA2-8	**P**
G5	RAA2-SB1,-SB2,-SB3	RAA2-SB1,-SB2,-SB3	**P**	--
G6	RAA2-38	--	RAA2-38	RAA2-38
G7	RAA2-10	RAA2-10	RAA2-10	--
G9	RAA2-1	--	RAA2-1	**P**
G10	RAA2-2	--	RAA2-2	RAA2-2
G11	RAA2-3	--	RAA2-3	--
G12	RAA2-4	RAA2-4	RAA2-4	--
H1	**P**	--	**P**	**P**
H2 [4]	**P**	--	**P**	--
H3 [4]	**P**	--	**P**	**P**
H4 [4]	**P**	--	**P**	--
H5	RAA2-12	--	RAA2-12	RAA2-12
H6	RAA2-9	--	RAA2-9	--

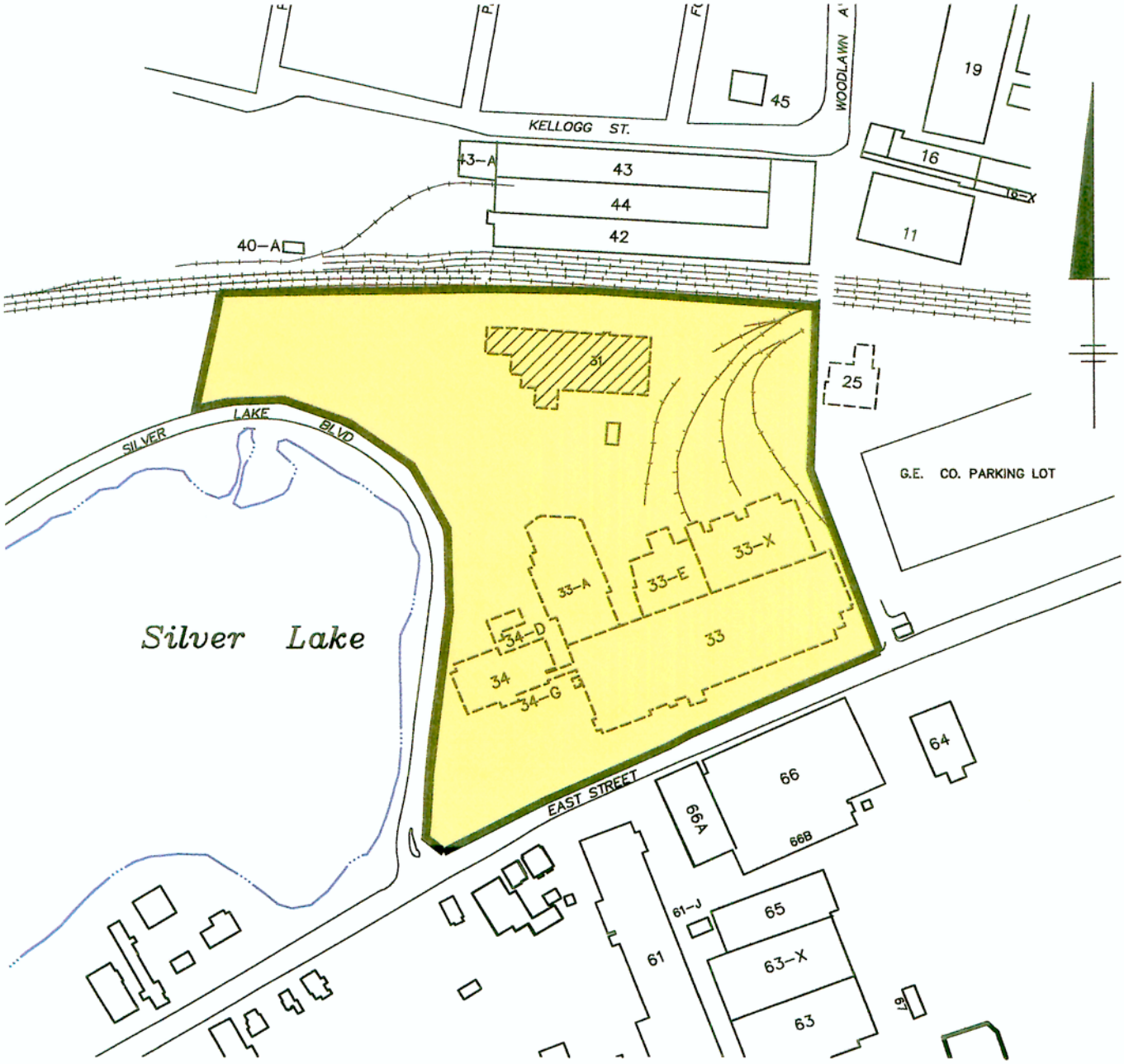
TABLE 1
EXISTING AND PROPOSED ADDITIONAL SAMPLING
30s COMPLEX REMOVAL ACTION AREA

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

Grid Node	0- to 1-foot Depth Interval		1- to 6-foot Depth Interval	
	PCBs	Appendix IX+3	PCBs	Appendix IX+3
H7	RAA2-13	--	RAA2-13	RAA2-13
H9	RAA2-11	RAA2-11	RAA2-11	--
H10	**P**	--	**P**	--
H11	RF-16	--	RF-16	RF-16
H12	95-15	--	**P**	--
I1	**P**	--	**P**	--
I2	RAA2-15	--	RAA2-15	--
I3	**P**	--	**P**	--
I4	RAA2-16	RAA2-16	RAA2-16	--
I5	**P**	--	**P**	--
I6	RAA2-19	RAA2-19	RAA2-19	--
I7	RAA2-39	--	RAA2-39	--
I11	RAA2-14	RAA2-14	RAA2-14	--
I12	**P**	--	**P**	**P**
J1	**P**	--	**P**	**P**
J2	**P**	--	**P**	--
J3	RAA2-18	--	RAA2-18	RAA2-18
J4	**P**	--	**P**	--
J5	**P**	--	**P**	**P**
J6	**P**	--	**P**	--
J7	95-16	95-16	**P**	**P**
J12	RAA2-17	RAA2-17	RAA2-17	--

Notes

1. The corresponding grid node locations are shown on Figure 2 for soil sampling associated with investigations for PCBs.
2. P - Indicates proposed sample location and depth interval.
3. At grid node B8, an additional attempt will be made to obtain a soil sample from the 1- to 6-foot depth interval. This boring may be relocated in the field to a location outside the limits of the former building foot-print in the event that refusal is encountered at a depth on 3 feet below the bottom of the former building slab.
4. At grid nodes H2, H3, and H4 each sampling location has been relocated approximately 20 feet south since these grid nodes are located within the footprint of the existing Building 31 vault.
5. The number of required PCB samples for each depth increment (74) is based on the requirements of the SOW. The number of required Appendix IX+3 soil samples (50) is equal to one-third the total number of PCB soil samples required to characterize the 30s Complex RAA in accordance with the SOW. These samples were evenly distributed between the 0- to 1-foot and 1- to 6-foot depth increments.



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. P.C. CONSTRUCTION PLANS.
2. DEMOLISHED BUILDINGS SHOWN AS DASHED.
3. NOT ALL PHYSICAL FEATURES SHOWN.
4. SITE BOUNDARIES/LIMITS ARE APPROXIMATE.

30s COMPLEX REMOVAL ACTION AREA (APPROXIMATE)

APPROXIMATE LIMITS OF BUILDING 31 VAULT AND ENGINERRED BARRIER

0 300' 600'

GRAPHIC SCALE

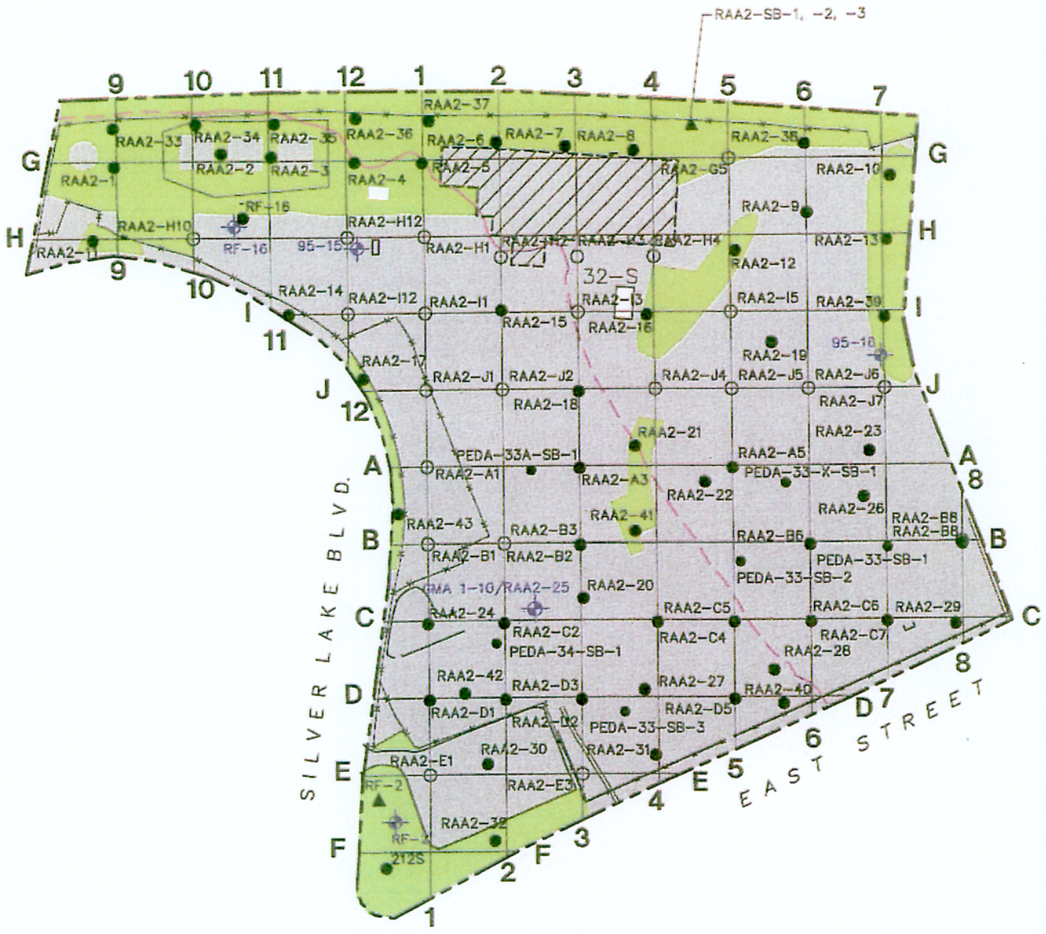
GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS
ADDITIONAL SOIL INVESTIGATIONS
30s COMPLEX

LOCATION MAP

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

FIGURE 1

L: ON=*, OFF=*REF*
P: PAGESET/SYR-AP
3/3/04 SYR-85-RCB LJP GMS
N/20423020/ADDITION/20423G04.DWG



LEGEND:

- APPROXIMATE LIMITS OF 30'S COMPLEX
- FENCE
- APPROXIMATE 100-YEAR FLOODPLAIN BOUNDARY (DASHED WHERE INFERRED)
- UNPAVED (GRASS/DIRT/GRAVEL)
- PAVED (ASPHALT/CONCRETE)
- 100 FOOT GRID
- EXISTING MONITORING WELL AND CORRESPONDING SOIL SAMPLING LOCATION
- EXISTING SURFACE SOIL SAMPLING LOCATION
- EXISTING SOIL BORING LOCATION
- PROPOSED SOIL BORING LOCATION
- APPROXIMATE LIMITS OF BUILDING 31 VAULT AND ENGINEERED BARRIER

NOTES:

1. MAPPING IS BASED ON AERIAL PHOTOGRAPHS AND PHOTOGRAMMETRIC MAPPING BY LOCKWOOD MAPPING, INC. – FLOWN IN APRIL 1990; DATA PROVIDED BY GENERAL ELECTRIC COMPANY, AND BLASLAND AND BOUCK ENGINEERS, P.C. CONSTRUCTION PLANS.
2. NOT ALL PHYSICAL FEATURES SHOWN.
3. SITE BOUNDARY IS APPROXIMATE.
4. ALL SAMPLING LOCATIONS ARE APPROXIMATE.
5. EXTENT OF VARIOUS SURFACE COVERS IS APPROXIMATE.
6. 100-YEAR FLOODPLAIN BOUNDARY IS BASED ON ELEVATIONS PUBLISHED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY: "FLOOD INSURANCE STUDY" – CITY OF PITTSFIELD, MASSACHUSETTS" JANUARY 16, 1987; AND "FLOOD INSURANCE RATE MAP – CITY OF PITTSFIELD, MASSACHUSETTS" (PANELS 250037 0010C AND 25037 0020C), FEBRUARY 19, 1982, AND TWO-FOOT CONTOUR TOPOGRAPHIC MAPPING GENERATED PHOTOGRAMETRICALLY IN 1990 AT A BASE SCALE OF 1:2,400.

0 200' 400'

APPROXIMATE SCALE

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS
ADDITIONAL SOIL INVESTIGATIONS
30s COMPLEX

EXISTING AND PROPOSED PCB SOIL SAMPLE LOCATIONS

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

FIGURE 2

L: ON=*, OFF=REF*
P: PAGESET/SYR-BL
3/3/04 SYR-65-RCA LJP GMS
N/20423020/ADDITION/20423G02.DWG

LEGEND:

- APPROXIMATE LIMITS OF 30'S COMPLEX
- FENCE
- APPROXIMATE 100-YEAR FLOODPLAIN BOUNDARY (DASHED WHERE INFERRED)
- UNPAVED (GRASS/DIRT/GRAVEL)
- PAVED (ASPHALT/CONCRETE)
- EXISTING MONITORING WELL AND CORRESPONDING SOIL SAMPLING LOCATION
- EXISTING SURFACE SOIL SAMPLING LOCATION
- EXISTING SOIL BORING LOCATION
- APPROXIMATE LIMITS OF BUILDING 31 VAULT AND ENGINEERED BARRIER

NOTES:

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2. NOT ALL PHYSICAL FEATURES SHOWN.
3. SITE BOUNDARY IS APPROXIMATE.
4. ALL SAMPLING LOCATIONS ARE APPROXIMATE.
5. EXTENT OF VARIOUS SURFACE COVERS IS APPROXIMATE.
6. 100-YEAR FLOODPLAIN BOUNDARY IS BASED ON ELEVATIONS PUBLISHED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY: "FLOOD INSURANCE STUDY" – CITY OF PITTSFIELD, MASSACHUSETTS" JANUARY 16, 1987; AND "FLOOD INSURANCE RATE MAP – CITY OF PITTSFIELD, MASSACHUSETTS" (PANELS 250037 0010C AND 25037 0020C), FEBRUARY 19, 1982, AND TWO-FOOT CONTOUR TOPOGRAPHIC MAPPING GENERATED PHOTOGRAMETRICALLY IN 1990 AT A BASE SCALE OF 1:2,400.

0 200' 400'

APPROXIMATE SCALE

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS
ADDITIONAL SOIL INVESTIGATIONS
30s COMPLEX

EXISTING APPENDIX IX+3 SOIL SAMPLE LOCATIONS 0- TO 1-FOOT INTERVAL

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

FIGURE 3

L: ON=*, OFF=REF*
P: PAGESET/SYR-BL
3/3/04 SYR-65-RCA LAF GMS
N/20423020/ADDITION/20423G03.DWG

LEGEND:

- APPROXIMATE LIMITS OF 30'S COMPLEX
- FENCE
- APPROXIMATE 100-YEAR FLOODPLAIN BOUNDARY (DASHED WHERE INFERRED)
- UNPAVED (GRASS/DIRT/GRAVEL)
- PAVED (ASPHALT/CONCRETE)
- EXISTING SOIL BORING LOCATION
- PROPOSED SOIL BORING LOCATION
- APPROXIMATE LIMITS OF BUILDING 31 VAULT AND ENGINEERED BARRIER

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.
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0 200' 400'

APPROXIMATE SCALE

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS
ADDITIONAL SOIL INVESTIGATIONS
30s COMPLEX

EXISTING AND PROPOSED APPENDIX IX+3 SOIL SAMPLE LOCATIONS 1- TO 6-FOOT INTERVAL

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

FIGURE 4

L: ON=*, OFF=REF*
P: PAGESET/SYR-BL
3/3/04 SYR-85-RCA LAF GMS
N:\20423020\ADDITION\20423G01.DWG