



01-0785

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

*Transmitted via Overnight Delivery*

August 19, 2004

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

**Re: GE-Pittsfield/Housatonic River Site  
Hill 78 Area-Remainder (GEC160)  
Addendum to Pre-Design Investigation Work Plan**

Dear Mr. DiLorenzo:

In February 2004, in accordance with the Consent Decree (CD) for the GE-Pittsfield/Housatonic River Site and the accompanying *Statement of Work for Removal Actions Outside the River* (SOW), the General Electric Company (GE) submitted to the U.S. Environmental Protection Agency (EPA) the *Pre-Design Investigation Work Plan for Hill 78 Area-Remainder* (PDI Work Plan). Subsequently, on July 22, 2004, GE received EPA's conditional approval letter for the PDI Work Plan. In response to the conditions set forth in that EPA letter, GE has made several modifications to the PDI Work Plan, which are presented below. This *Pre-Design Investigation Work Plan Addendum* (PDIWP Addendum) addresses each of the EPA conditions and modifies the scope of the proposed pre-design investigations based on those conditions. Note that the pre-design investigations will be conducted in accordance with the original PDI Work Plan, except as modified by this PDIWP Addendum.

### **General Modifications**

Relative to the information presented in the PDI Work Plan and discussed with EPA during a technical meeting held in Pittsfield on July 21, 2004, the boundary of the Hill 78 Area-Remainder Removal Action Area (RAA) has been modified in the vicinity of the On-Plant Consolidation Areas (OPCAs) to reflect that fact that two existing storm water retention basins are considered part of the OPCAs and therefore are not part of the Hill 78 Area-Remainder RAA. In addition, the classification of the parking lot in the southeast corner of the RAA has been modified to more accurately reflect the current condition of the pavement (discussed below). These revisions are incorporated on the attached figures.

### **Modifications to Previously-Proposed Sampling Locations**

In the July 22, 2004 conditional approval letter, EPA identified additional data needs relating to subsurface utilities which are potentially subject to emergency repair, drainage swales located in the southern portion of the RAA, and the non-GE Parcel located along Merrill Road. In addition, EPA required GE to modify certain sampling locations to obtain usable data in areas where prior analytical data were rejected during the data usability assessment conducted during the preparation of the PDI Work Plan. The modifications made to the pre-design sampling plan as a result of these requirements are summarized below.

- In Condition 5, EPA states that additional characterization is required within certain utility corridors within the RAA. To address utility characterization within the utility corridors to the west and north of the Steam Turbine Generator Building, GE will shift proposed sample location RAA9-K12 approximately 25 ft to the east of the grid node, within the utility corridor and will add a boring at location RAA9-H17. Also, GE will move boring RAA9-G7 approximately 25 ft to the west of the grid node into the utility corridor to the east of Building 78.
- In Condition 7, EPA indicates that the three drainage swales within the Hill 78 Area-Remainder (Drainage Swales A, B, and C) require additional investigation. To address this data need, GE will add surface soil sampling locations to be analyzed for PCBs and Appendix IX+3 constituents (excluding pesticides and herbicides) at the following locations: RAA9-K12E -- near former boring location SE-1 in Drainage Swale A; RAA9-L15 in Drainage Swale B; and RAA9-J18 in Drainage Swale C.
- In Condition 3, EPA agrees with GE's proposed sampling approach to evaluate the non-GE-owned Parcel K11-7-1 as a separate averaging area, utilizing the Performance Standards applicable to the non-GE-owned commercial/industrial parcels at Unkamet Brook and East Street Area 1-North with EREs (including performance of PCB soil characterization on an approximate 50-foot grid for the 0- to 1-foot depth interval and on an approximate 100-foot grid for the subsurface depth intervals), subject to certain modifications. Specifically, proposed boring RAA9-K9 will be moved approximately 15 feet southeast to the corner of the parcel boundary. Proposed boring RAA9-L11 shall be moved approximately 10 feet to the west to the parcel boundary. These relocations are intended to allow PCB data from these borings to be utilized for both averaging areas. In addition, previously-proposed surface soil sample location RAA9-LM10.5 at the southern boundary of the parcel will instead be installed as a soil boring.
- In Subsection 4.3.1 of the PDI Work Plan, GE's evaluation of existing historical soil data has led to the rejection of several soil samples where elevated levels of PCBs, PAHs, and/or VOCs were previously reported. In Conditions 4 and 8, EPA agrees that these samples should be rejected, but requires GE to shift the locations of certain proposed boring locations to re-sample at some of the rejected data locations. To satisfy this requirement, GE will:
  - Shift proposed boring RAA9-J9 south to prior boring location 2N;
  - Shift proposed boring RAA9-L17 northeast near prior boring location L-7 and collect the Appendix IX+3 sample from the 1- to 6-foot depth increment instead of from 0- to 1-foot depth increment as previously proposed;
  - Collect an Appendix IX+3 sample from 1- to 6-feet at boring RAA9-F18, instead of from boring RAA9-F20; and
  - Collect an Appendix IX+3 sample from 0- to 1-foot at boring RAA9-G18, instead of from boring RAA9-G20.

Based on the foregoing considerations, GE proposes to collect and submit soil samples for analysis of PCBs and/or one or more groups of Appendix IX+3 constituents at the locations and depths shown on attached Figure 1 (for PCBs) and Figures 2 through 4 (for non-PCB Appendix IX+3 constituents) and listed in Table 1. A summary of the numbers of existing, proposed, and total PCB and non-PCB Appendix IX+3 characterization samples is as follows:

ANALYTE GROUP	SURFACE SAMPLES	SUBSURFACE SAMPLES		TOTAL SAMPLES
	0-1 ft.	1-6 ft.	6-15 ft.	
<b>EXISTING SAMPLES</b>				
PCBs	19	14	5	38
VOCs	0	5	6	11
SVOCs	0	5	6	11
PCDDs/PCDFs	0	1	6	7
Inorganics	0	5	6	11
<b>PROPOSED SAMPLES</b>				
PCBs	104	98	105	307
VOCs	59	24	24	107
SVOCs	59	24	24	107
PCDDs/PCDFs	59	28	30	117
Inorganics	59	24	24	107
<b>TOTAL SAMPLES</b>				
PCBs	123	112	110	345
VOCs	59	29	30	118
SVOCs	59	29	30	118
PCDDs/PCDFs	59	29	36	124
Inorganics	59	29	30	118

Note: In the above table, existing data are counted as one sample for each characterization depth interval although multiple samples may have been collected across the specified depth interval in some cases.

Under the protocols set forth in Attachment D of the SOW, the total number of non-PCB Appendix IX+3 analyses must be approximately one-third the number of PCB samples required to characterize this area and must be approximately evenly distributed between surface soil samples (from the top foot of soil) and subsurface soils (from the various deeper intervals). As can be seen from the above table, the total number of analyses that will be available for each group of Appendix IX+3 constituents will exceed the required number of 115, due to the need to obtain an appropriate spatial distribution of Appendix IX+3 samples at this RAA and sufficient Appendix IX+3 data from each relevant depth increment at the GE-owned and non-GE-owned properties, which will be treated as separate averaging areas.

Table 1 lists, on a sample-by-sample basis, the proposed pre-design sampling locations, depths, and analytical parameters. However, the specific locations/depths of some of the non-PCB Appendix IX+3 samples may be modified in the field considering PID readings or other observations (e.g., odors or evidence of staining) or if site conditions (e.g., standing/flowing water, large trees, subsurface utilities, other obstructions) prevent sampling at any of the designated locations. If such field modifications are made, GE will endeavor to maintain the proper ratio of the number of non-PCB Appendix IX+3 analyses at the various depth intervals (e.g., roughly half from the top foot and the rest from deeper increments), to the extent practical.

### **Approach to Parking Lot Investigation**

Condition 6 of EPA's July 22, 2004 conditional approval letter discusses the required characterization of a parking lot located in the southeast corner of the RAA. Since the pavement has deteriorated and contains several unpaved berms, EPA does not consider this area to be paved for the purposes of pre-design sampling requirements. EPA proposed three options to address this area:

1. GE shall sample this parking lot by applying a grid at the frequency required for "unpaved industrial GE-owned areas";
2. GE shall pave all of the non-bermed areas and add the following soil boring locations within the unpaved berms for PCB analysis from the appropriate intervals: RAA9-I22, RAA9-J20, RAA9-J22, and RAA9-K19; or
3. GE shall pave the entire parking lot area, including the unpaved berms, so that the sampling strategy as proposed in the PDI Work Plan is sufficient to address this paved area.

The EPA conditional approval letter also allows GE, in lieu of implementing one of the above options at this time, to investigate this area utilizing a phased approach, and this is the option that GE will pursue. Specifically, pursuant to the conditional approval letter, GE will initially sample this area as proposed in the PDI Work Plan. The results of that sampling will be evaluated to determine whether remediation of this area and/or additional characterization activities are necessary and to select one of the three options described above. Alternatively, if the preliminary sampling data suggest that an alternate approach may be warranted, GE will propose any such strategy to EPA for review and approval.

### **Response to Other EPA Approval Conditions**

Two conditions contained in EPA's July 22, 2004 conditional approval letter specifically allow GE to respond to those conditions in either the Hill 78 OPCA program and/or the Groundwater Management Area 4 (GMA 4) groundwater monitoring program, as an alternative to this addendum.

- Condition 1 of EPA's July 22, 2004 letter states that GE shall evaluate the integrity of the City of Pittsfield storm water drainage and sewer lines that extend from Tyler Street beneath the Hill 78 OPCA and the Hill 78 Area-Remainder RAA. The majority of these lines are located beneath the Hill 78 OPCA, therefore, GE will perform the required evaluation under its OPCA program and any significant findings will be incorporated into future activities related to the Hill 78 Area-Remainder RAA and/or the GMA 4 groundwater monitoring program, as appropriate.
- Condition 2 of EPA's July 22, 2004 letter states that GE shall discuss the detection of certain volatile organic compounds (i.e., chlorobenzene and other chlorinated solvents) in groundwater in the vicinity of the Hill 78 OPCA and buildings associated with National Energy & Gas Transmission, Inc. Since this condition concerns constituents detected in groundwater, GE will address this topic in its reports prepared under the GMA 4 groundwater monitoring program.

## Schedule

GE proposes to complete the investigations described in this PDIWP Addendum and to submit a Pre-Design Investigation Report for the Hill 78 Area-Remainder RAA within 12 months after EPA's approval of this PDIWP Addendum, subject to possible changes due to weather-related delays, etc. In the event that delays to this proposed schedule are identified, GE will notify EPA and propose a revised schedule for completing the investigations and submitting a Pre-Design Investigation Report.

Please call John Novotny or me if you have any questions about this PDIWP Addendum.

Sincerely,



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

## Enclosure

V:\GE\_Pittsfield\_CD\_Hill\_78\_Remainder\Reports and Presentations\PDIWP\_Addendum\52742196tr.doc

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Public Information Repositories  
GE Internal Repositories  
*\*(Copy of letter only)*

# *Attachments*

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**TABLE 1**  
**PROPOSED SOIL SAMPLING LOCATIONS, DEPTHS, AND PARAMETERS**  
**ADDENDUM TO PRE-DESIGN INVESTIGATION WORK PLAN FOR FOR HILL 78 AREA-REMAINDER**  
**GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**

Sample ID	Sample Depth (ft.)	Analyses To Be Performed				
		PCBs	VOCs	SVOCs	Inorganics	PCDDs/PCDFs
<b>PAVED AREAS ON GE PROPERTIES</b>						
RAA9-G7	0-1	X	--	--	--	--
	1-6	X	--	--	--	--
	6-15	X	--	--	--	--
RAA9-H7	0-1	X	X	X	X	X
	1-6	X	--	--	--	--
	6-15	X	X	X	X	X
RAA9-H16	0-1	X	X	X	X	X
	1-6	X	--	--	--	--
	6-15	X	X	X	X	X
RAA9-H18	0-1	X	--	--	--	--
	1-6	X	X	X	X	X
	6-15	X	--	--	--	--
RAA9-I14	0-1	X	--	--	--	--
	1-6	X	X	X	X	X
	6-15	X	--	--	--	--
RAA9-I20	0-1	X	X	X	X	X
	1-6	X	--	--	--	--
	6-15	X	--	--	--	--
RAA9-I21	0-1	X	--	--	--	--
	1-6	X	--	--	--	--
	6-15	X	--	--	--	--
RAA9-J5	0-1	X	X	X	X	X
	1-6	X	--	--	--	--
	6-15	X	--	--	--	--
RAA9-J19	0-1	X	--	--	--	--
	1-6	X	--	--	--	--
	6-15	X	X	X	X	X
RAA9-K21	0-1	X	X	X	X	X
	1-6	X	--	--	--	--
	6-15	X	--	--	--	--
<b>UNPAVED AREAS ON GE PROPERTIES</b>						
RAA9-B18	0-1	X	X	X	X	X
	1-6	X	X	X	X	X
	6-15	X	X	X	X	X
RAA9-C15	0-1	X	--	--	--	--
	1-6	X	--	--	--	X
	6-15	X	--	--	--	--
RAA9-C16	1-6	--	--	--	--	X
	6-15	X	--	--	--	--
RAA9-E7	0-1	X	X	X	X	X
	1-6	X	--	--	--	--
	6-15	X	--	--	--	--
RAA9-F5	0-1	X	X	X	X	X
	1-6	X	--	--	--	--
	6-15	X	--	--	--	--

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Sample ID	Sample Depth (ft.)	Analyses To Be Performed				
		PCBs	VOCs	SVOCs	Inorganics	PCDDs/PCDFs
RAA9-F6	0-1	X	X	X	X	X
	1-6	X	--	--	--	--
	6-15	X	--	--	--	--
RAA9-F7	0-1	X	--	--	--	--
	1-6	X	--	--	--	X
	6-15	X	--	--	--	--
RAA9-F15	0-1	X	--	--	--	--
	1-6	X	--	--	--	--
	6-15	X	--	--	--	--
RAA9-F16	0-1	X	X	X	X	X
	1-6	X	--	--	--	--
	6-15	X	--	--	--	--
RAA9-F18	0-1	X	--	--	--	--
	1-6	X	X	X	X	X
	6-15	X	--	--	--	--
RAA9-F20	0-1	X	X	X	X	X
	1-6	X	--	--	--	--
	6-15	X	--	--	--	--
RAA9-G3	0-1	X	X	X	X	X
	1-6	X	X	X	X	X
	6-15	X	--	--	--	--
RAA9-G4	0-1	X	X	X	X	X
	1-6	X	--	--	--	--
	6-15	X	X	X	X	X
RAA9-G5	0-1	X	X	X	X	X
	1-6	X	X	X	X	X
	6-15	X	--	--	--	--
RAA9-G14	0-1	X	X	X	X	X
	1-6	X	--	--	--	--
	6-15	X	X	X	X	X
RAA9-G17	0-1	X	X	X	X	X
	1-6	X	--	--	--	--
	6-15	X	--	--	--	--
RAA9-G18	0-1	--	X	X	X	X
	6-15	X	--	--	--	--
RAA9-G20	0-1	X	--	--	--	--
	1-6	X	--	--	--	--
	6-15	X	X	X	X	X
RAA9-H2	0-1	X	X	X	X	X
	1-6	X	--	--	--	--
	6-15	X	X	X	X	X
RAA9-H3	0-1	X	--	--	--	--
	1-6	X	--	--	--	--
	6-15	X	--	--	--	--
RAA9-H4	0-1	X	X	X	X	X
	1-6	X	--	--	--	--
	6-15	X	--	--	--	--



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Sample ID	Sample Depth (ft.)	Analyses To Be Performed				
		PCBs	VOCs	SVOCs	Inorganics	PCDDs/PCDFs
RAA9-H5	0-1	X	X	X	X	X
	1-6	X	--	--	--	--
	6-15	X	X	X	X	X
RAA9-H6	0-1	X	--	--	--	--
	1-6	X	X	X	X	X
	6-15	X	--	--	--	--
RAA9-H15	0-1	X	X	X	X	X
	1-6	X	--	--	--	--
	6-15	X	X	X	X	X
RAA9-H17	0-1	X	X	X	X	X
	1-6	X	X	X	X	X
	6-15	X	--	--	--	--
RAA9-H19	0-1	X	--	--	--	--
	1-6	X	--	--	--	--
	6-15	X	--	--	--	X
RAA9-H20	0-1	X	X	X	X	X
	1-6	X	X	X	X	X
	6-15	X	--	--	--	--
RAA9-H22	0-1	X	X	X	X	X
	1-6	X	X	X	X	X
	6-15	X	X	X	X	X
RAA9-I2	0-1	X	--	--	--	--
	1-6	X	--	--	--	--
	6-15	X	--	--	--	--
RAA9-I3	0-1	X	X	X	X	X
	1-6	X	--	--	--	--
	6-15	X	--	--	--	--
RAA9-I4	0-1	X	--	--	--	--
	1-6	X	X	X	X	X
	6-15	X	--	--	--	--
RAA9-I5	0-1	X	X	X	X	X
	1-6	X	--	--	--	--
	6-15	X	--	--	--	--
RAA9-I7	6-15	X	--	--	--	--
RAA9-I9	0-1	--	X	X	X	X
	6-15	X	--	--	--	--
RAA9-I11	6-15	X	--	--	--	--
RAA9-I12	6-15	X	X	X	X	X
RAA9-I15	0-1	X	--	--	--	--
	1-6	X	--	--	--	--
	6-15	X	--	--	--	--
RAA9-I17	0-1	X	X	X	X	X
	1-6	X	--	--	--	--
	6-15	X	--	--	--	--
RAA9-I18	0-1	X	--	--	--	--
	1-6	X	--	--	--	--

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Sample ID	Sample Depth (ft.)	Analyses To Be Performed				
		PCBs	VOCs	SVOCs	Inorganics	PCDDs/PCDFs
RAA9-I23	0-1	X	--	--	--	--
	1-6	X	--	--	--	--
	6-15	X	X	X	X	X
RAA9-J3	0-1	X	X	X	X	X
	1-6	X	X	X	X	X
	6-15	X	--	--	--	--
RAA9-J4	0-1	X	X	X	X	X
	1-6	X	--	--	--	--
	6-15	X	--	--	--	--
RAA9-J6	6-15	X	--	--	--	--
RAA9-J7	0-1	--	X	X	X	X
	6-15	X	--	--	--	X
RAA9-J8	0-1	X	--	--	--	--
	1-6	X	--	--	--	--
	6-15	X	X	X	X	X
RAA9-J9	0-1	X	X	X	X	X
	1-6	X	--	--	--	--
	6-15	X	--	--	--	--
RAA9-J10	0-1	X	--	--	--	--
	1-6	X	--	--	--	--
	6-15	X	X	X	X	X
RAA9-J11	0-1	X	X	X	X	X
	1-6	X	--	--	--	X
	6-15	X	--	--	--	--
RAA9-J12	0-1	X	--	--	--	--
	1-6	X	--	--	--	--
	6-15	X	--	--	--	--
RAA9-J13	0-1	X	X	X	X	X
	1-6	X	--	--	--	--
	6-15	X	--	--	--	--
RAA9-J14	0-1	X	--	--	--	--
	1-6	X	--	--	--	--
	6-15	X	X	X	X	X
RAA9-J15	0-1	X	--	--	--	--
	1-6	X	--	--	--	--
	6-15	X	--	--	--	--
RAA9-J16	0-1	X	X	X	X	X
	1-6	X	--	--	--	--
	6-15	X	--	--	--	--
RAA9-J17	0-1	X	X	X	X	X
	1-6	X	X	X	X	X
	6-15	X	--	--	--	--
RAA9-J18	0-1	X	X	X	X	X
RAA9-K3	0-1	X	--	--	--	--
	1-6	X	--	--	--	--

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Sample ID	Sample Depth (ft.)	Analyses To Be Performed				
		PCBs	VOCs	SVOCs	Inorganics	PCDDs/PCDFs
RAA9-K4	6-15	X	--	--	--	--
RAA9-K5	0-1	X	--	--	--	--
	1-6	X	X	X	X	X
	6-15	X	--	--	--	--
RAA9-K6	0-1	X	X	X	X	X
	1-6	X	--	--	--	--
	6-15	X	X	X	X	X
RAA9-K7	0-1	X	--	--	--	--
	1-6	X	--	--	--	--
	6-15	X	--	--	--	--
RAA9-K8	0-1	X	X	X	X	X
	1-6	X	X	X	X	X
	6-15	X	--	--	--	--
RAA9-K9	0-1	X	--	--	--	--
	1-6	X	--	--	--	--
	6-15	X	--	--	--	--
RAA9-K11	0-1	X	--	--	--	--
	1-6	X	--	--	--	--
	6-15	X	--	--	--	--
RAA9-K12	0-1	X	X	X	X	X
	1-6	X	X	X	X	X
	6-15	X	--	--	--	--
RAA9-K12E	0-1	X	X	X	X	X
RAA9-K13	1-6	X	--	--	--	--
	6-15	X	--	--	--	--
RAA9-K14	0-1	X	X	X	X	X
	1-6	X	X	X	X	X
	6-15	X	--	--	--	--
RAA9-K15	0-1	X	X	X	X	X
	1-6	X	--	--	--	--
	6-15	X	--	--	--	X
RAA9-K16	0-1	X	--	--	--	--
	1-6	X	--	--	--	--
	6-15	X	--	--	--	--
RAA9-K17	0-1	X	--	--	--	--
	1-6	X	--	--	--	--
	6-15	X	--	--	--	--
RAA9-K18	0-1	X	X	X	X	X
	1-6	X	--	--	--	--
	6-15	X	X	X	X	X
RAA9-K24	0-1	X	X	X	X	X
	1-6	X	X	X	X	X
	6-15	X	--	--	--	--
RAA9-L4	0-1	X	X	X	X	X
	1-6	X	--	--	--	--
	6-15	X	--	--	--	--

**TABLE 1**  
**PROPOSED SOIL SAMPLING LOCATIONS, DEPTHS, AND PARAMETERS**  
**ADDENDUM TO PRE-DESIGN INVESTIGATION WORK PLAN FOR FOR HILL 78 AREA-REMAINDER**  
**GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**

Sample ID	Sample Depth (ft.)	Analyses To Be Performed				
		PCBs	VOCs	SVOCs	Inorganics	PCDDs/PCDFs
RAA9-L5	0-1	X	X	X	X	X
	1-6	X	--	--	--	--
	6-15	X	--	--	--	--
RAA9-L6	0-1	X	--	--	--	--
	1-6	X	--	--	--	--
	6-15	X	--	--	--	--
RAA9-L7	0-1	X	X	X	X	X
	1-6	X	--	--	--	--
	6-15	X	--	--	--	--
RAA9-L8	0-1	X	--	--	--	--
	1-6	X	--	--	--	--
	6-15	X	X	X	X	X
RAA9-L9	0-1	X	--	--	--	--
	1-6	X	--	--	--	--
	6-15	X	--	--	--	--
RAA9-L11	0-1	X	--	--	--	--
	1-6	X	--	--	--	--
	6-15	X	--	--	--	--
RAA9-L12	0-1	X	X	X	X	X
	1-6	X	--	--	--	--
	6-15	X	X	X	X	X
RAA9-L13	0-1	X	--	--	--	--
	1-6	X	--	--	--	--
	6-15	X	--	--	--	--
RAA9-L14	0-1	X	--	--	--	--
	1-6	X	--	--	--	--
	6-15	X	--	--	--	--
RAA9-L15	0-1	X	X	X	X	X
RAA9-L17	0-1	X	--	--	--	--
	1-6	X	X	X	X	X
	6-15	X	--	--	--	X
RAA9-L18	0-1	X	X	X	X	X
	1-6	X	--	--	--	--
	6-15	X	--	--	--	--
RAA9-L19	0-1	X	--	--	--	--
	1-6	X	--	--	--	--
	6-15	X	--	--	--	X
RAA9-L20	0-1	X	X	X	X	X
	1-6	X	X	X	X	X
	6-15	X	--	--	--	--
RAA9-L21	0-1	X	--	--	--	--
	1-6	X	--	--	--	--
	6-15	X	--	--	--	--
RAA9-M4	0-1	X	--	--	--	--
	1-6	X	--	--	--	--
	6-15	X	--	--	--	--

**TABLE 1**  
**PROPOSED SOIL SAMPLING LOCATIONS, DEPTHS, AND PARAMETERS**  
**ADDENDUM TO PRE-DESIGN INVESTIGATION WORK PLAN FOR FOR HILL 78 AREA-REMAINDER**  
**GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS**

Sample ID	Sample Depth (ft.)	Analyses To Be Performed				
		PCBs	VOCs	SVOCs	Inorganics	PCDDs/PCDFs
RAA9-M5	0-1	X	X	X	X	X
	1-6	X	--	--	--	--
	6-15	X	X	X	X	X
RAA9-M6	0-1	X	--	--	--	--
	1-6	X	--	--	--	--
	6-15	X	--	--	--	--
RAA9-M7	0-1	X	--	--	--	--
	1-6	X	--	--	--	--
	6-15	X	--	--	--	--
RAA9-M8	0-1	X	X	X	X	X
	1-6	X	--	--	--	--
	6-15	X	--	--	--	--
RAA9-M9	0-1	X	X	X	X	X
	1-6	X	X	X	X	X
	6-15	X	--	--	--	--
RAA9-N5	0-1	X	X	X	X	X
	1-6	X	X	X	X	X
	6-15	X	--	--	--	--
RAA9-N6	0-1	X	--	--	--	--
	1-6	X	--	--	--	--
	6-15	X	--	--	--	--
RAA9-N7	0-1	X	--	--	--	--
	1-6	X	--	--	--	--
	6-15	X	--	--	--	X
<b>NON-GE PROPERTY</b>						
RAA9-K9.5	0-1	X	X	X	X	X
RAA9-K10	1-6	X	X	X	X	X
	6-15	X	X	X	X	X
RAA9-KL10.5	0-1	X	X	X	X	X
RAA9-L9.5	0-1	X	--	--	--	--
RAA9-L10	0-1	X	--	--	--	--
	1-6	X	X	X	X	X
	6-15	X	X	X	X	X
RAA9-L10.5	0-1	X	--	--	--	--
RAA9-LM10	0-1	X	X	X	X	X
RAA9-LM10.5	0-1	X	--	--	--	--
	1-6	X	--	--	--	--
	6-15	X	X	X	X	X

**Notes:**

1. This table identifies soil samples to be collected and the analyses to be performed as part of the pre-design investigation at the Hill 78 Area-Remainder Removal Action Area.
2. The Appendix IX+3 sample intervals shown above may be modified in the field based on the results of photoionization detector (PID) readings and visual observations at the time of sample collection.

Location ID	0-2	2-4	4-6	6-8	8-10	10-12	12-14	14-16	16-18	18-20	20-22	22-24	24-26	26-28
H78B-13	0.6	1.3	0.63 P	1.7	0.38	ND (0.042)	ND (0.042)	ND (0.042)	ND (0.042)	ND (0.042)	ND (0.042)	ND (0.042)	ND (0.042)	ND (0.042)
H78B-14	1.8 P	1.7 P	0.91 P	2.9	0.14 P	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
H78B-15	0.3	0.21 P	0.21 P	0.21 P	0.21 P	0.21 P	0.21 P	0.21 P	0.21 P	0.21 P	0.21 P	0.21 P	0.21 P	0.21 P

Location ID	0-2	2-4	4-6	6-8	8-10	10-12	12-14	14-16	16-18	18-20	20-22	22-24	24-26	26-28
NY-5	0.1	ND (0.05)	0.06	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)
NY-6	2.30	0.52	0.86 (0.25)	1.86	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)

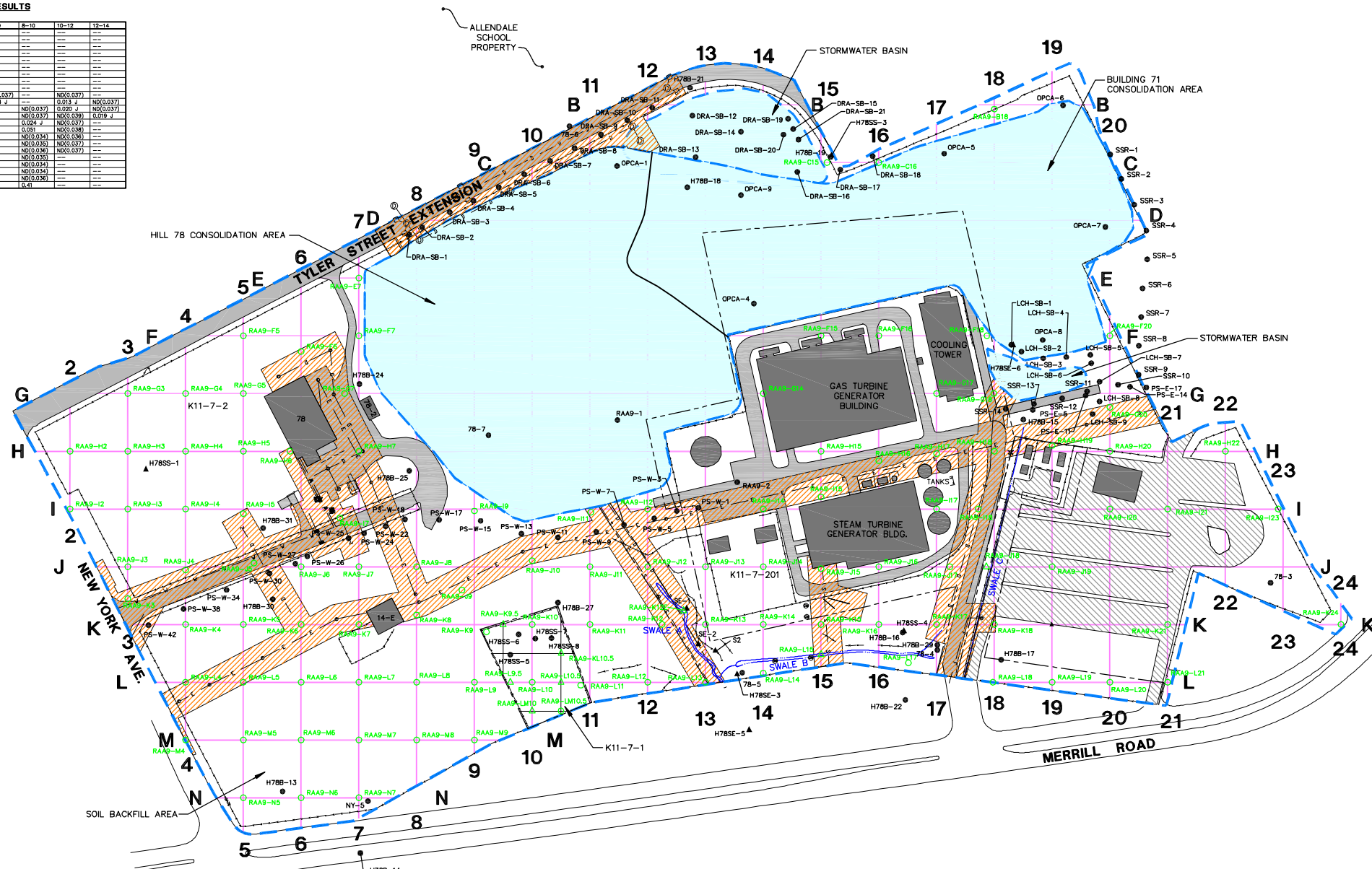
Location ID	0-2	2-4	4-6	6-8	8-10	10-12	12-14
LCH-SB-1	1.9	0.081	---	---	---	---	---
LCH-SB-2	0.300	---	---	---	---	---	---
LCH-SB-3	0.189	---	---	---	---	---	---

Location ID	0-2	2-4	4-6	6-8	8-10	10-11
PS-E-5	0.07	ND	ND	ND	ND	ND
PS-E-11	0.15	ND	ND	ND	ND	ND
PS-E-14	0.18	ND	ND	ND	ND	ND

Location ID	0-1	1-2	2-3	3-4	4-5	5-7	7-8
DRA-SB-1	0.069	0.024	ND	ND	0.85	---	---
DRA-SB-2	0.13	0.06	0.06	---	---	---	---
DRA-SB-3	0.13	0.06	0.06	---	---	---	---

Location ID	0-55	0-1	1-6	6-15
OPCA-1	---	ND (0.043)	0.93	0.16
OPCA-4	---	0.073	0.93	0.16
OPCA-5	---	2.2	0.24	0.02

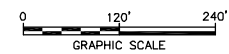
Location ID	0-2	0-35	0-1	1-15
H78SS-1	1.8 P	---	---	---
H78SS-3	0.18	---	---	---
H78SS-4	6.0	---	---	---



**LEGEND:**

- K11-7-201 PROPERTY ID
- APPROXIMATE SITE BOUNDARY
- HILL 78 AND BUILDING 71 CONSOLIDATION AREAS (NOT PART OF HILL 78 AREA-REMAINDER RAA)
- PROPERTY LINE
- EASEMENT LINE
- FENCE LINE
- GAS MARKER
- SANITARY MANHOLE
- CATCH BASIN
- DRAIN MANHOLE
- WATER METER PIT
- ELECTRIC MANHOLE
- WATER VALVE
- FIRE HYDRANT
- STORM SEWER (DRAINAGE) LINE
- UNDERGROUND ELECTRIC LINE
- SANITARY LINE
- WATER LINE
- PAVED AREA
- BUILDING/STRUCTURE
- APPROXIMATE LOCATION OF BAND SURROUNDING SUBSURFACE UTILITIES (25 FEET WIDE ON EACH SIDE OF UTILITY)
- PAVED LOT SUBJECT TO FURTHER ASSESSMENT (SEE NOTE 3)
- 78-7 • EXISTING BORING LOCATION
- H78SS-1 ▲ EXISTING SURFACE SAMPLE LOCATION
- RAA9-K9.5 ▲ PROPOSED SURFACE SOIL SAMPLE LOCATION
- RAA9-K12 ○ PROPOSED SOIL BORING SAMPLE LOCATION

- NOTES:**
- MAPPING BASED ON AUTOCAD DRAWING FILE(PLANT3.CAD) AS PROVIDED BY GE AND ADDITIONAL INFORMATION FROM THE MCP PHASE II SCOPE OF WORK AND PROPOSAL FOR RORA FACILITY INVESTIGATION (O'BRIEN & GERE ENGINEERS, INC., FEBRUARY 1996) AS WELL AS SUPPLEMENTAL SITE SURVEY INFORMATION OBTAINED BY HILL ENGINEERS, PLANNERS & ARCHITECTS (WEEK OF MAY 29,1997). LOCATIONS EAST OF THE PARKING LOT DIGITIZED FROM MARCH 2000 AIR PHOTO AND ARE APPROXIMATE.
  - ALL LOCATIONS ARE APPROXIMATE.
  - THIS LOT WILL EITHER BE RE-PAVED OR RECLASSIFIED AS AN UNPAVED AREA SUBJECT TO ADDITIONAL SAMPLING FOLLOWING AN ASSESSMENT OF THE INITIAL PRE-DESIGN DATA.



- TABLE NOTES:**
- = NO SAMPLE COLLECTED.
  - ND (0.05) = NOT DETECTED, DETECTION LIMIT IN PARENTHESIS, (IF AVAILABLE).
  - [0.19] = DUPLICATE ANALYSIS RESULT SHOWN IN BRACKETS.
  - P = INDICATES DUAL COLUMN PERCENT DIFFERENCES VALUE EXCEEDED 25 PERCENT.
  - J = INDICATES AN ESTIMATED VALUE LESS THAN THE CLP-REQUIRED QUANTITATION LIMIT.

X: 20464X01, 20464X02, 20464X03.DWG  
 L: ON=\*, OFF=\*REF\*  
 P: PAGESET/SYR-DL  
 8/16/04 SYR-85-DJP LAF NJR  
 C/20464010/ADDENDUM/20464G01.DWG

GENERAL ELECTRIC COMPANY  
 PITTSFIELD, MASSACHUSETTS  
 ADDENDUM TO PRE-DESIGN INVESTIGATION  
 WORK PLAN FOR HILL 78 AREA-REMAINDER

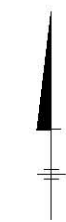
**PROPOSED PCB  
 CHARACTERIZATION LOCATIONS**

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

FIGURE  
**1**

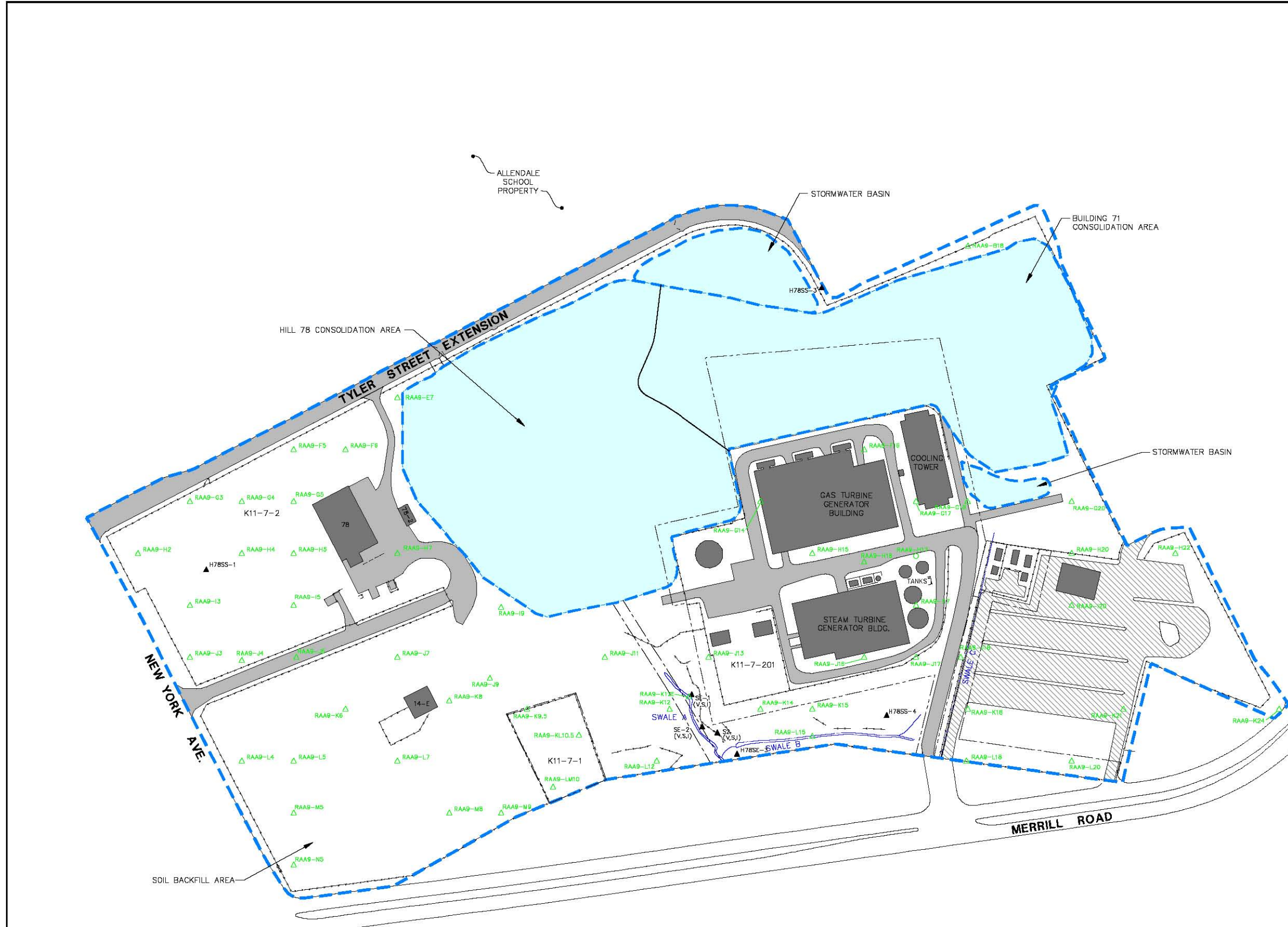
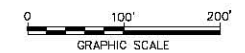
LEGEND:

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- APPROXIMATE SITE BOUNDARY
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- EASEMENT LINE
- FENCE LINE
- PAVED AREA
- BUILDING/STRUCTURE
- PAVED LOT SUBJECT TO FURTHER ASSESSMENT (SEE NOTE 4)
- S2 EXISTING BORING LOCATION
- ▲ RAA9-G20 PROPOSED BORING LOCATION



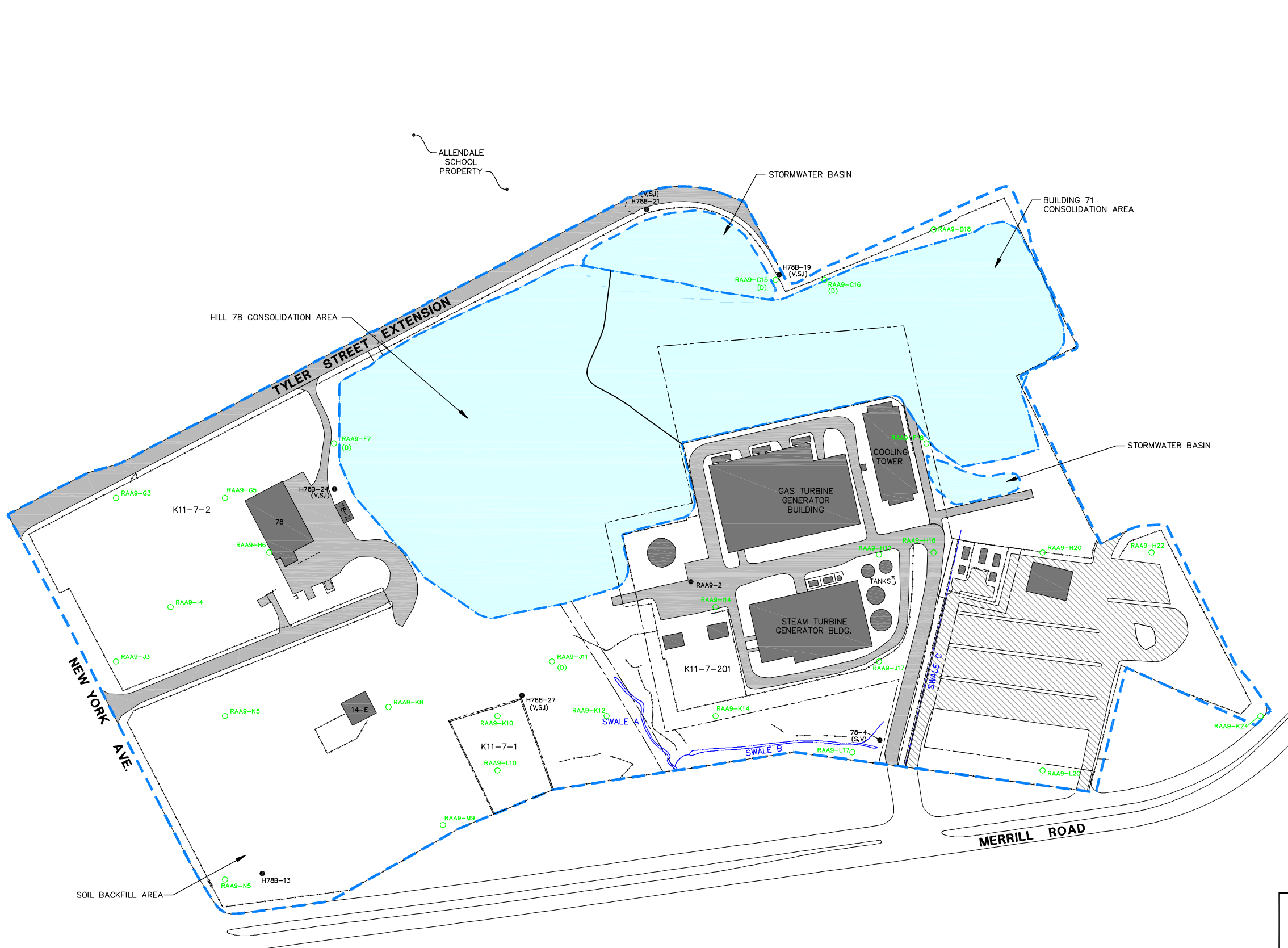
NOTES:

1. MAPPING BASED ON AUTOCAD DRAWING FILE (PLANT3.CAD) AS PROVIDED BY GE AND ADDITIONAL INFORMATION FROM THE MCP PHASE II SCOPE OF WORK AND PROPOSAL FOR RCRA FACILITY INVESTIGATION (O'BRIEN & GERE ENGINEERS, INC., FEBRUARY 1996) AS WELL AS SUPPLEMENTAL SITE SURVEY INFORMATION OBTAINED BY HILL ENGINEERS, PLANNERS & ARCHITECTS (WEEK OF MAY 29, 1997). LOCATIONS EAST OF THE PARKING LOT DIGITIZED FROM MARCH 2000 AIR PHOTO AND ARE APPROXIMATE.
2. ALL LOCATIONS ARE APPROXIMATE.
3. SAMPLES FROM EXISTING AND PROPOSED SOIL SAMPLE LOCATIONS HAVE BEEN OR WILL BE ANALYZED FOR ALL APPENDIX IX+3 CONSTITUENT GROUPS (EXCLUDING PESTICIDES AND HERBICIDES).
4. THIS LOT WILL EITHER BE RE-PAVED OR RECLASSIFIED AS AN UNPAVED AREA SUBJECT TO ADDITIONAL SAMPLING FOLLOWING AN ASSESSMENT OF THE INITIAL PRE-DESIGN DATA.



**GENERAL ELECTRIC COMPANY  
PITTSFIELD, MASSACHUSETTS  
ADDENDUM TO PRE-DESIGN INVESTIGATION  
WORK PLAN FOR HILL 78 AREA-REMAINDER  
EXISTING AND PROPOSED APPENDIX  
IX+3 SOIL SAMPLE LOCATIONS  
(0- TO 1-FOOT DEPTH INTERVAL)**

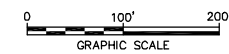




**LEGEND:**

- K11-7-201 PROPERTY ID
- APPROXIMATE SITE BOUNDARY
- HILL 78 AND BUILDING 71 CONSOLIDATION AREAS (NOT PART OF HILL 78 AREA-REMAINDER RAA)
- PROPERTY LINE
- EASEMENT LINE
- x-x-x- FENCE LINE
- PAVED AREA
- BUILDING/STRUCTURE
- PAVED LOT SUBJECT TO FURTHER ASSESSMENT (SEE NOTE 4)
- S2 ● EXISTING BORING LOCATION
- RAA9-G20A ○ PROPOSED BORING LOCATION

- NOTES:**
- MAPPING BASED ON AUTOCAD DRAWING FILE (PLANT3.CAD) AS PROVIDED BY GE AND ADDITIONAL INFORMATION FROM THE MCP PHASE II SCOPE OF WORK AND PROPOSAL FOR RCRA FACILITY INVESTIGATION (O'BRIEN & GERE ENGINEERS, INC., FEBRUARY 1996) AS WELL AS SUPPLEMENTAL SITE SURVEY INFORMATION OBTAINED BY HILL ENGINEERS, PLANNERS & ARCHITECTS (WEEK OF MAY 29, 1997). LOCATIONS EAST OF THE PARKING LOT DIGITIZED FROM MARCH 2000 AIR PHOTO AND ARE APPROXIMATE.
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  - SAMPLES FROM EXISTING AND PROPOSED SOIL SAMPLE LOCATIONS HAVE BEEN OR WILL BE ANALYZED FOR ALL APPENDIX IX+3 CONSTITUENT GROUPS (EXCLUDING PESTICIDES AND HERBICIDES) UNLESS OTHERWISE INDICATED IN PARENTHESES USING THE FOLLOWING DESIGNATION:  
 D = POLYCHLORINATED DIBENZO -P-DIOXINS (PCDDs) AND POLYCHLORINATED DIBENZOFURANS (PCDFs)
  - THIS LOT WILL EITHER BE RE-PAVED OR RECLASSIFIED AS AN UNPAVED AREA SUBJECT TO ADDITIONAL SAMPLING FOLLOWING AN ASSESSMENT OF THE INITIAL PRE-DESIGN DATA.

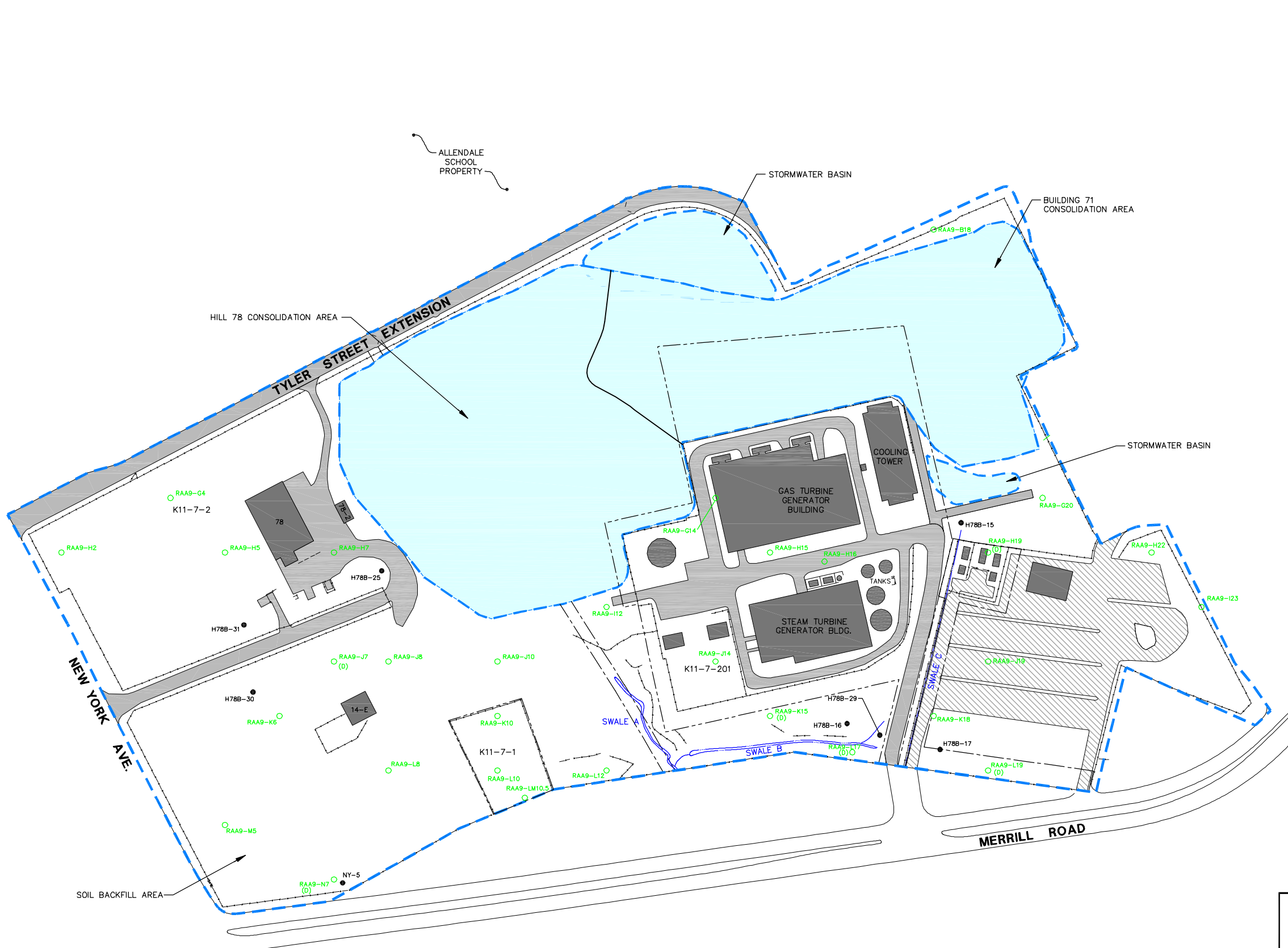


**GENERAL ELECTRIC COMPANY**  
 PITTSFIELD, MASSACHUSETTS  
**ADDENDUM TO PRE-DESIGN INVESTIGATION**  
**WORK PLAN FOR HILL 78 AREA-REMAINDER**  
**EXISTING AND PROPOSED APPENDIX**  
**IX+3 SOIL SAMPLE LOCATIONS**  
**(1- TO 6-FOOT DEPTH INTERVAL)**

FIGURE  
**3**

X: 20464X03, 20464X04.DWG  
 L: ON=\*, OFF=\*REF\*  
 P: PAGESET/SYR-DL  
 8/16/04 SYR-85-GMS LAF NJR  
 C:/20464010/ADDENDUM/20464G03.DWG

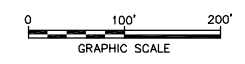




**LEGEND:**

- K11-7-201 PROPERTY ID
- APPROXIMATE SITE BOUNDARY
- HILL 78 AND BUILDING 71 CONSOLIDATION AREAS (NOT PART OF HILL 78 AREA-REMAINDER RAA)
- PROPERTY LINE
- EASEMENT LINE
- FENCE LINE
- PAVED AREA
- BUILDING/STRUCTURE
- ▨ PAVED LOT SUBJECT TO FURTHER ASSESSMENT (SEE NOTE 4)
- S2 EXISTING BORING LOCATION
- RAA9-G20A PROPOSED BORING LOCATION

- NOTES:**
- MAPPING BASED ON AUTOCAD DRAWING FILE (PLANT3.CAD) AS PROVIDED BY GE AND ADDITIONAL INFORMATION FROM THE MCP PHASE II SCOPE OF WORK AND PROPOSAL FOR RCRA FACILITY INVESTIGATION (O'BRIEN & GERE ENGINEERS, INC., FEBRUARY 1996) AS WELL AS SUPPLEMENTAL SITE SURVEY INFORMATION OBTAINED BY HILL ENGINEERS, PLANNERS & ARCHITECTS (WEEK OF MAY 29, 1997). LOCATIONS EAST OF THE PARKING LOT DIGITIZED FROM MARCH 2000 AIR PHOTO AND ARE APPROXIMATE.
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 D = POLYCHLORINATED DIBENZO -P-DIOXINS (PCDDs) AND POLYCHLORINATED DIBENZOFURANS (PCDFs)
  - THIS LOT WILL EITHER BE RE-PAVED OR RECLASSIFIED AS AN UNPAVED AREA SUBJECT TO ADDITIONAL SAMPLING FOLLOWING AN ASSESSMENT OF THE INITIAL PRE-DESIGN DATA.



**GENERAL ELECTRIC COMPANY**  
 PITTSFIELD, MASSACHUSETTS  
**ADDENDUM TO PRE-DESIGN INVESTIGATION**  
**WORK PLAN FOR HILL 78 AREA-REMAINDER**  
**EXISTING AND PROPOSED APPENDIX**  
**IX+3 SOIL SAMPLE LOCATIONS**  
**(6- TO 15-FOOT DEPTH INTERVAL)**




FIGURE  
**4**

X: 20464X03, 20464X04.DWG  
 L: ON=\*, OFF=\*REF\*  
 P: PAGESET/SYR-DL  
 8/16/04 SYR-85-GMS LAF NJR  
 C:/20464010/ADDENDUM/20464G04.DWG