

**United States Environmental Protection Agency
EPA New England
One Congress Street, Suite 1100
Boston, MA 02114-2023**

February 17, 2005

To: J. Kilborn, EPA
H. Inglis, EPA
R. Howell, EPA (w/o attachments)
D. Moore, USACE
K.C. Mitkevicius, USACE
S. Steenstrup, MA DEP (2 copies)
R. Bell, Esquire, MA DEP
S. Peterson, CT DEP
A. Silber, GE
J. Novotny, GE
J.R. Bieke, Esquire, Shea & Gardner
S. Messur, BBL
D. Young, MA EOE
K. Munney, US Fish and Wildlife
D. Mauro, META Environmental, Inc.
R. Nasman, The Berkshire Gas Company
Mayor Ruberto, City of Pittsfield
Commissioner of Public Works and Utilities, City of Pittsfield
Public Information Repositories

RE: January 2005 Monthly Report
1.5 Mile Reach Removal Action
GE-Pittsfield/Housatonic River Site

Enclosed please find the January 2005 Monthly Report for the 1.5 Mile Reach Removal Action. In accordance with the Consent Decree for the GE-Pittsfield/Housatonic River Site, the United States Environmental Protection Agency (EPA) is performing the 1.5 Mile Reach Removal Action, with General Electric funding a portion of the project through a cost sharing formula.

The EPA has entered into an agreement with the United States Army Corps of Engineers (USACE) to assist in the design and construction of the Removal Action. The USACE subsequently awarded a design-construct contract to Weston Solutions, Inc. (Weston). Weston, with several subcontractors, will be performing the design and construction activities for the 1.5 Mile Reach Removal Action.

If you have any questions, please contact me at (413) 236-0969.

Sincerely,

Dean Tagliaferro
1.5 Mile Reach Removal Action Project Manager

1. Overview

During January 2005, the Environmental Protection Agency (EPA), the United States Army Corps of Engineers (USACE), the USACE's contractor, Weston Solutions, Inc., and Weston's subcontractors continued remediation activities on the 1.5 Mile Reach Removal Action. The primary work included the removal of the 54-inch HDPE pipe from the riverbed and the placement of aquatic enhancements in the Phase 2 and Phase 3A. Also, the removal of the water treatment system (WTS) modutank sediment was completed and the decontamination and dismantling of the WTS was initiated. In addition, the repair of the energy dissipater from the City outfall downstream of the Elm Street Bridge was initiated.

2. Chronological description of tasks performed

Refer to Figure 1 for an orientation of the excavation cells and their respective locations.

On December 17, 2004 all major construction activities were suspended due to the Holiday shutdown, the construction activities resumed on January 3, 2005.

During the first week of January, activities associated with the removal of the 54-inch HDPE river diversion pipes were initiated. Stop logs were added to the temporary diversion dam in order to stop the flow in the river so the 54-inch pipe could be accessed. The pipe was then cut into 125-foot or 300-foot sections by using a hydraulic cut-off saw. The pipe restraint system collars were removed from the pipe and the pipe sections were dragged upstream to the staging area on Parcel I8-24-1. The pipe was then cut into 50-foot sections, loaded onto a flat bed truck and transported to GE staging area. Stop logs were removed from the temporary dam at the end of each working day to allow flow through the river channel. In addition one 50-foot section of the pipe was sent offsite to Cook Land Clearing for a chipping test for disposal or recycling purposes.

Activities associated with demobilization of the water treatment system were initiated. The removal of the modutank sediment material was initiated, approximately 40cy of material was removed from the modutank and transported to Building 68 stockpile management area. The sediment material was thickened with portland cement for transportation purposes prior to the transfer to Building 68. Also, all the pumps, hoses and roll off boxes were decontaminated, removed from the water treatment area and transported to the Lyman Street parking lot staging area.

Also, during the first week of January, decontamination of large boulders, which were removed from the riverbed during the remediation efforts, was completed. The boulders were consolidated into one location and will be used as river enhancement structures during the river restoration efforts. The lay out of the locations of the river enhancement structures in the Transition Reach, Phase 2 and Phase 3A was completed.

Decontamination and demobilization of the heavy construction equipment for the winter months was completed.

The Survey contractor initiated the topographical survey of Fred Garner Park, the future location of the water treatment system.

During the second week of January, activities associated with the removal of the 54-inch HDPE river diversion pipes continued in the same manner as described above. The pipe was removed up to the downstream end of Articulated Concrete Blocks (ACB) area in Phase 2.

Activities associated with demobilization of the water treatment system also continued. Approximately 180cy of material was removed from the modutank and transported to Building 68 stockpile management area. The sediment material was thickened with portland cement for transportation purposes prior to the transfer to Building 68. In addition the demobilization of the Frac tanks was initiated.

Activities associated with the placement of the river enhancement structures in the Phase 2 and Phase 3A were initiated. All debris material was removed from the riverbed prior to the installation of the river enhancement structures.

Also, during the second week of January, the repair activities of the energy dissipater from the City outfall downstream of the Elm Street Bridge were initiated. The existing outfall energy dissipater concrete slab was removed. In addition, some ACB adjacent to the energy dissipater and riverbank soil material from underneath the energy dissipater was removed to allow for the construction of a new energy dissipater. (See Table 1 for quantities of material generated in the month of January 2005 and Table 2 for quantities of material generated to date.) The dissipater concrete material (approximately 30cy) was transported to the Lyman Street parking lot staging area and the riverbank material (approximately 10cy) was transported to Building 65 stockpile management area. To protect the riverbed adjacent to the energy dissipater location from erosion from the outfall discharge, the riverbed was covered with fabric and bin blocks were installed. Also, with heavy rain forecasted for the weekend steel plates and gryfflon liner were installed at the outfall location to provide additional erosion control.

Topographical survey activities at Fred Garner Park, the future location of the water treatment system were completed.

During the third week of January, activities associated with demobilization of the water treatment system continued. The removal of all the sediment material and the liner from the modutanks was completed. Approximately 120cy of material and tank liner was removed from the modutank and transported to Building 68 stockpile management area. The sediment material was thickened with portland cement for transportation purposes prior to the transfer to Building 68. The framing, panels and backwash piping from the modutank structures were dismantled and transported to Building 63 stockpile management area for decontamination.

The repair activities of the energy dissipater from the City outfall downstream of the Elm Street Bridge continued. The erosion control steel plates and gryfflon liner were removed from the outfall area and additional material was excavated from the riverbank and riverbed to either till or bedrock to develop a more stable base for the concrete pour of the new energy dissipater. The

excavated riverbank and riverbed material (approximately 20cy) was transported to Building 65 stockpile management area. A six-inch layer of filter stone was placed over the excavated areas. The construction of the concrete forms, installation of the re-bar and reinforced wire mesh for the concrete pour for the new energy dissipater base slab was completed. Two-inch stone was placed inside the forms and a warming tent was built over the area of the outfall for the preparation of the concrete pour.

Activities associated with the placement of the river enhancement structures in the Phase 3A and Phase 2 up to the ACB area were completed.

During the fourth week of January, activities associated with demobilization of the water treatment system continued. The removal of the sand material from the sand filter vessels was completed and the removal of the spent carbon from the carbon filter vessels was initiated. The sand filter material (approximately 50cy) and the spent carbon material (approximately 30cy) were transported to Building 65 stockpile management area. The material was stockpiled into two separate piles.

The repair activities of the energy dissipater from the City outfall downstream of the Elm Street Bridge continued. Approximately 16cy of concrete was poured for the base slab and the required concrete testing was completed. Next, the forms for the 12 rough element chute blocks were constructed.

During the last week of January, activities associated with demobilization of the water treatment system continued. The removal of the spent carbon from the carbon filter vessels continued. Approximately 30cy the spent carbon material was removed and transported to Building 65 stockpile management area.

Since there were no sediment excavation activities during the month of January (except for the material removed during the repair of the energy dissipater), the water treatment system did not treat any water. Therefore the monthly sampling of the water treatment system for the month of January was not necessary.

Also, due to the minimal remediation activities scheduled for the upcoming winter months, all air and water monitoring and sampling activities were suspended on December 08, 2004 until excavation activities resume in the spring. During the month of January, PCB wipe samples were collected on decontaminated equipment. On January 05, 2005, one off-site disposal characterization sample was collected from the water treatment system spent carbon. Also, one eight-point composite off-site disposal characterization sample was collected on January 28, 2005 from the water treatment system sand filter material (stockpiled in Building 65).

Conditions and settlement monitoring activities on selected structures and properties in Phase 3B were initiated during the month of January.

Stockpile management area activities continued throughout the month of January. Daily inspections, operation, and maintenance activities were performed within Buildings 63, 65, Area 64 (the outside stockpile area) and Building 68.

Traffic control was conducted on Lyman Street, Elm Street and Deming Street during the month of January.

3. Sampling/test results received

Table 4 contains data associated with PCB wipe samples collected on decontaminated equipment. Sample results associated with January 28, 2005 sampling of the water treatment system sand filter material (stockpiled in Building 65) are presented in Table 5.

4. Diagrams associated with the tasks performed

Figure 1 is a map of Phase 1, the Transition Phase, Phase 2 and Phase 3A and includes the layout of all excavation cells, the temporary dam, water monitoring locations, air sampling locations, access road locations, excavation load-out locations, staging area locations, fence line location, the water treatment system pad location, and the utility trench location.

5. Reports received and prepared

Not Available.

6. Photo documentation of activities performed

See attached photos.

7. Brief description of work to be performed in February 2005

- Complete the removal of the 54-inch HDPE pipe.
- Complete the placement of aquatic enhancements in the Transition Reach & Phase 2.
- Complete the decontamination and dismantling of the WTS.

- Complete the repair of the energy dissipater from the City outfall downstream of the Elm Street Bridge.
- Initiate the relocation of the water treatment system and support area to Fred Garner Park.

8. ATTACHMENTS TO THIS REPORT

Table 1. Quantity of Bank and Sediment Material Excavated during the Month of January

Table 2. Quantity of Bank and Sediment Material Excavated to Date

Table 3. Quantity of Material Transferred to OPCAs to Date

Table 4. Equipment Confirmatory Wipe Sample Results

Table 5. Water Treatment System Sand Filter Material Characterization Analytical Results

Figure 1- 1.5 Mile Removal Action Site Map

Photo documentation

**Table 1 - Quantity of Bank and Sediment Material Generated During the Month of January
January 2005 Monthly Report**

**GE-Pittsfield/Housatonic River Project 1.5 Mile Removal Action
Pittsfield, MA**

(Results are reported in cubic yards)

Date	Location	Approximate Quantity of Excavated Bank and Sediment Material		
		non-TSCA	TSCA	NAPL impacted
Bank Soil and Sediment				
1/12/2005	Energy Dissipater	10	0	0
1/18/2005	Energy Dissipater	20	0	0
	Monthly total from bank soil and sediment	30	0	0

Note:

All quantities are in compacted or "in-place" cubic yards. All loads are estimated at 10cy per truck.

**Table 2 - Quantity of Bank and Sediment Material Excavated to Date
January 2005 Monthly Report**

**GE-Pittsfield/Housatonic River Project 1.5 Mile Removal Action
Pittsfield, MA**

(Results are reported in cubic yards)

		Approximate Quantity of Bank and Sediment Material Excavated to Date			
Date	Location	non-TSCA	TSCA	NAPL impacted	Total
09/26/02 to 10/02/02	Cell 1A	101	0	53	154
10/02/02 to 10/04/02	Cell 1B	60	0	110	170
10/18/02 to 10/29/02	Cell 2	874	175	0	1,049
11/11/02 to 11/15/02	Cell 3	183	0	200	383
11/18/02 to 11/25/02	Cell 4	2,283	198	0	2,481
12/03/02 to 12/10/02	Cell 5	1,629	369	0	1,998
01/07/03 to 01/15/03	Cell 6	832	658	0	1,490
01/10/03 to 01/29/03	Cell 6A	2,611	68	0	2,679
02/03/03 to 02/10/03	Cell 7&7A	1,114	636	0	1,750
02/20/03 to 02/24/03	Cell 5A	899	0	0	899
02/25/03 to 03/07/03	Cell 8&8A	1,245	90	0	1,335
03/14/03 to 03/18/03	Cell 9	603	307	0	910
03/27/03 to 04/07/03	Cell 10&10A	1,730	133	0	1,863
04/14/03 to 04/16/03	Cell 12	668	1,354	0	2,022
04/30/03 to 05/09/03	Cell 11	1,713	341	10	2,064
05/27/03 to 06/12/03	Cell 11A	957	166	462	1,585
06/25/03 to 07/29/03	Cell 12A	1,656	805	656	3,117
09/04/03 to 10/22/03	Cell 13	3,580	298	1,129	5,007
01/08/04 to 03/24/04	Cell 14&15	4,462	288	257	5,007
05/25/04 to 07/28/04	Cell 16&17	4,409	822	3,191	8,422
07/30/04 to 09/17/04	Cell 18&19	3,741	65	685	4,491
09/28/04 to 10/25/04	Cell 20	948	591	196	1,735
09/28/04 to 10/25/04	Cell 21	525	569	0	1,094
09/28/04 to 10/25/04	Cell 22	1,170	686	0	1,856
11/04/04 to 12/01/04	Cell 23	1,725	189	0	1,914
11/04/04 to 12/02/05	Cell 24	1,610	247	0	1,857
	Total	41,328	9,055	6,949	57,332

Note:

All quantities determined by pre- and post- excavation surveying.

**Table 3 - Quantity of Material Transferred to OPCAs to Date
January 2005 Monthly Report**

**GE-Pittsfield/Housatonic River Project 1.5 Mile Removal Action
Pittsfield, MA**

(Results are reported in cubic yards)

Date	Location	Approximate Quantity Transported to OPCAs	
		Hill 78 (non-TSCA)	Bldg. 71 (TSCA)
Site Preparation Activities			
09/11/02	Building 65 Stockpile Management Area	225	
Bank Soil and Sediment			
12/05/02 to 12/19/02	Stockpile Management Area/Excavation Cells	4,718 (1)	910 (1)
02/11/03 to 02/28/03	Stockpile Management Area/Excavation Cells	5,137 (2)	539 (2)
03/03/03 to 03/14/03	Stockpile Management Area/Excavation Cells	1,749 (2)	1,353 (2)
04/07/03 to 04/18/03	Stockpile Management Area/Excavation Cells	2,710 (3)	1,698 (3)
04/07/03 to 04/18/03	Stockpile Management Area/Cleanup Material	370 (3)	40 (3)
05/12/03 to 05/14/03	Stockpile Management Area/Excavation Cells	1,826 (3)	0
05/12/03 to 05/14/03	Stockpile Management Area/Cleanup Material	220 (3)	0
06/11/03 to 06/12/03	Stockpile Management Area/Excavation Cells	0	704 (3)
06/16/03 to 06/17/03	Stockpile Management Area/Excavation Cells	712 (3)	0
06/16/03 to 06/17/03	Stockpile Management Area/Cleanup Material	146 (3)	0
07/07/03 to 07/11/03	Stockpile Management Area/Excavation Cells	1,188 (3)	748 (3)
09/15/03 to 09/30/03	Stockpile Management Area/Excavation Cells	2,090 (3)	308 (3)
10/28/03 to 10/30/03	Stockpile Management Area/Excavation Cells	1,623 (3)	33 (3)
10/28/03 to 10/30/03	Stockpile Management Area/Cleanup Material	181 (3)	0
11/18/03	Demolition Debris from Parcels I8-10-2 and I8-10-3	200 (4)	0
1/12/04	Stockpile Management Area/Excavation Cells	77 (3)	0
04/28/04 to 4/30/04	Stockpile Management Area	0	825 (3)
05/12/04 to 05/27/04	Stockpile Management Area/Excavation Cells/Outfall Repair on Parcel I8-23-6	1,518 (3)	484 (3)
06/03/04 to 06/22/04	Stockpile Management Area	0	528 (3)
07/06/04 to 07/16/05	Stockpile Management Area	396 (3)	836 (3)
08/11/04 to 08/31/04	Stockpile Management Area	1,045 (3)	0
09/28/04 to 09/30/04	Stockpile Management Area	1,375 (3)	0
10/01/04 to 10/14/04	Stockpile Management Area	352 (3)	1,958 (3)
11/01/04 to 11/15/04	Stockpile Management Area	363 (3)	1,342 (3)
12/02/04 to 12/14/04	Stockpile Management Area	176 (3)	847 (3)
Project Totals		28,238	13,153

Pursuant to the Consent Decree, EPA is allowed to dispose of up to 50,000cy of material into GE OPCAs. Pursuant to August 2004 agreement between EPA and GE, EPA is allowed to dispose an additional 750cy of material into the GE OPCAs to account for a portion of the volume of material generated as part of the removal of the gabion baskets and reno mattresses along Deming Street.

Notes:

All quantities are in compacted or "in-place" cubic yards.

- (1) Estimated at 14cy per truck, loaded with excavator.
- (2) Estimated at 11cy per truck due to loading out frozen material.
- (3) Estimated at 11cy per truck, loaded with front end loader.
- (4) Estimated at 8cy per truck

**Table 4 - Equipment Confirmatory Wipe Samples
January 2005 Monthly Report**

**GE-Pittsfield/Housatonic River Project 1.5 Mile Removal Action
Pittsfield, MA**

(Results are presented in $\mu\text{g}/100 \text{ cm}^2$)

Sample ID	Date Collected	Aroclor 1016, 1221, 1232, 1242, & 1248	Aroclor 1254	Aroclor 1260	Total PCBs
H2-XI000182-0-5J03	03-Jan-05	ND(0.25)	ND(0.25)	ND(0.25)	ND(0.25)
H2-XI000183-0-5J03	03-Jan-05	ND(0.25)	ND(0.25)	ND(0.25)	ND(0.25)
H2-XI000184-0-5J04	04-Jan-05	ND(0.25)	ND(0.25)	0.49	0.49
H2-XI000185-0-5J04	04-Jan-05	ND(0.25)	ND(0.25)	0.30	0.30
H2-XI000186-0-5J04	04-Jan-05	ND(0.25)	ND(0.25)	ND(0.25)	ND(0.25)
H2-XI000187-0-5J04	04-Jan-05	ND(0.25)	ND(0.25)	ND(0.25)	ND(0.25)
H2-XI000188-0-5J06	06-Jan-05	ND(0.25)	ND(0.25)	0.46	0.46
H2-XI000189-0-5J06	06-Jan-05	ND(0.25)	ND(0.25)	ND(0.25)	ND(0.25)
H2-XI000190-0-5J07	07-Jan-05	ND(0.25)	ND(0.25)	ND(0.25)	ND(0.25)
H2-XI000191-0-5J07	07-Jan-05	ND(0.25)	ND(0.25)	1.6	1.6
H2-XI000192-0-5J12	12-Jan-05	ND(0.25)	ND(0.25)	ND(0.25)	ND(0.25)

Notes:

PCB Action Level - 10.0 $\mu\text{g}/100 \text{ cm}^2$

ND(0.25) - Analyte was not detected. The value in parentheses is the associated detection limit.

**Table 5 - Water Treatment System Sand Filter Material Characterization
Testing Results
January 2005 Monthly Report
GE-Pittsfield/Housatonic River Project 1.5 Mile Removal Action
Pittsfield, MA**

(Results are presented in part per million, ppm)

Sample ID	H2-OT000225-0-5J28
Sample type	material characterization
Date Collected	1/28/2005
Stockpile Location	Building 65 Sand Filter
Analyte	
PCBS	
AROCLOR-1254	0.36
AROCLOR-1260	0.49
PCB, TOTAL	0.85
APP IX SEMIVOLATILES	
2-METHYLNAPHTHALENE	0.023 J
ACENAPHTHENE	0.029 J
ACENAPHTHYLENE	0.052 J
ANTHRACENE	0.022 J
BENZO(A)ANTHRACENE	0.092 J
BENZO(A)PYRENE	0.20 J
BENZO(B)FLUORANTHENE	0.093 J
BENZO(GH)PERYLENE	0.16 J
BENZO(K)FLUORANTHENE	0.15 J
BIS(2-ETHYLHEXYL) PHTHALATE	0.092 J
CHRYSENE	0.11 J
DIBENZO(A,H)ANTHRACENE	0.032 J
DI-N-OCTYL PHTHALATE	0.024 J
FLUORANTHENE	0.21 J
INDENO(1,2,3-C,D)PYRENE	0.11 J
NAPHTHALENE	0.017 J
PHENANTHRENE	0.046 J
PHENOL	0.027 J
PYRENE	0.21 J
TCLP HERBICIDES	
	all Non-Detects
TCLP METALS	
BARIUM, TCLP LEACHATE (mg/l)	0.229
LEAD, TCLP (mg/l)	0.0114
SELENIUM, TCLP LEACHATE (mg/l)	0.0056
TCLP PESTICIDES	
	all Non-Detects
TCLP SEMIVOLATILES	
	all Non-Detects
TCLP VOLATILES	
	all Non-Detects
INORGANICS	
CORROSIVITY BY PH	8.3
IGNITABILITY (deg f)	>150
PAINT FILTER LIQUIDS (ml)	ABSENT
PERCENT SOLIDS (%)	89.8
SULFIDE	ND
CYANIDE	ND

Notes:
Only detected constituents are summarized
ND - not detected
J - Indicates an estimated value



Photograph 1 – 54-inch HDPE Pipe Removal Cut



Photograph 2 – Moving the Cut 54-inch Pipe Upstream to the Staging Area



Photograph 3 – 54-inch HDPE Pipe Cut into 50-foot Sections



Photograph 4– Removal of Materials from the WTS Modutank



Photograph 5– Aquatic Enhancement Structures Upstream of Dawes Ave Bridge



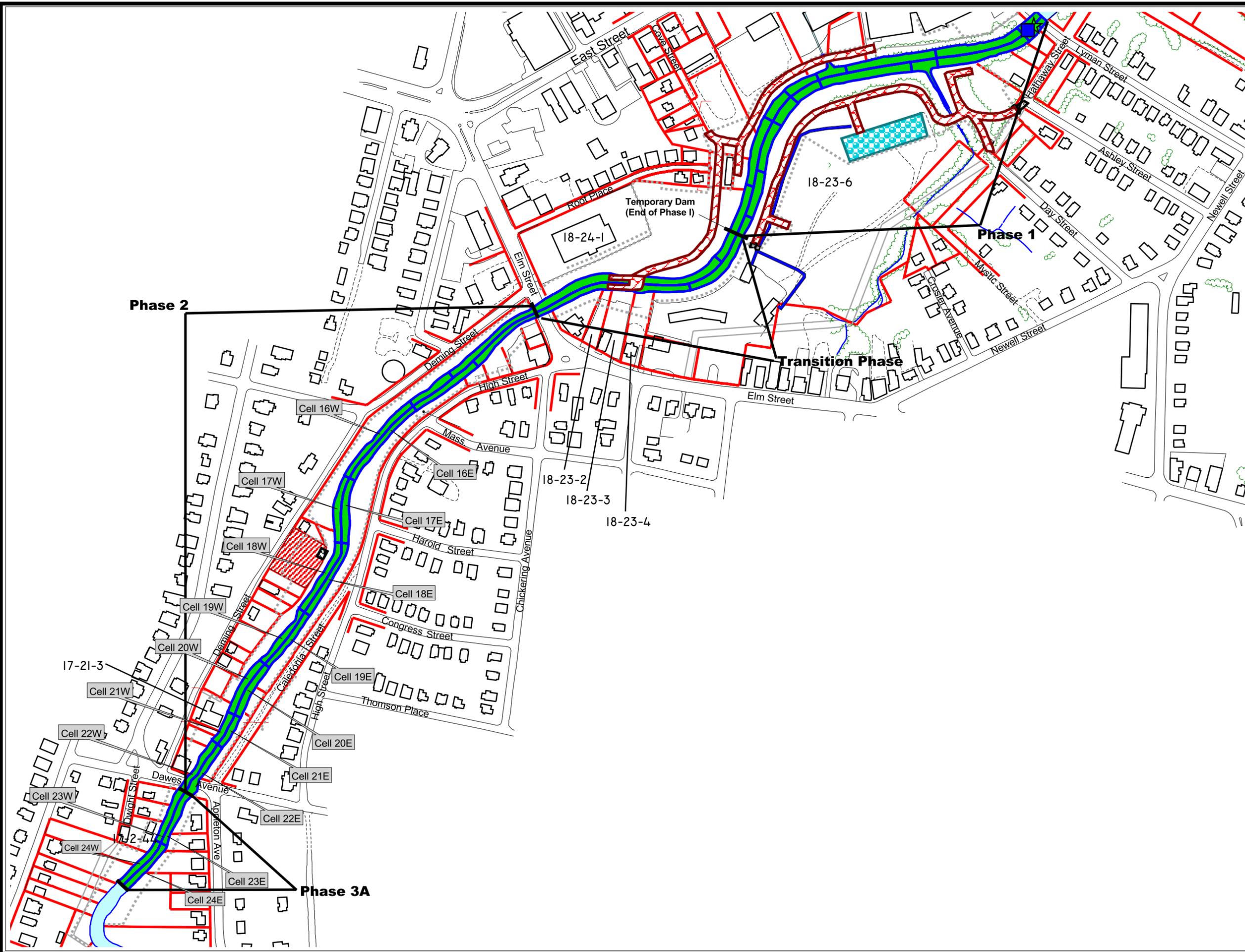
Photograph 6 – Forms and Re-bar for the Energy Dissipater Base Slab



Photograph 7 – Placing Concrete for the Energy Dissipater Base Slab



Photograph 8 – Forms for the Energy Dissipater Chute Blocks



LEGEND

- Roads
- Surface Water
- Water Treatment Plant*
- Access Roads
- Asphalt Access Road
- Property Lines
- Loadout Area
- Deming Street Staging/Loadout Area
- Fence line*
- Work Completed
- Work In Progress
- Work Pending
- Turbidity Monitoring Locations
- Water Monitoring Locations
- Buried Electric/Telephone Line*

*Note: As-built features were located using a real time GPS unit



Scale in Feet



Figure 1
1.5 Mile Removal Action
Site Map
January 2005 Monthly Report