



G E O C O N S U L T A N T S , I N C .

# RELEASE ABATEMENT MEASURE (RAM) COMPLETION REPORT

FORMER CRANE COMPANY  
PINEVALE, MOXON & GOODWIN STREETS  
SPRINGFIELD, MASSACHUSETTS 01151  
MADEP RTN 1-00170  
WjF PROJECT No. 1675

FEBRUARY 20, 2009

PREPARED FOR:

GOODWIN REALTY, LLC  
10 BEECHWOOD AVENUE  
WILBRAHAM, MASSACHUSETTS 01095



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## **1.0 INTRODUCTION**

On behalf of Mrs. Judy Bergdoll of Goodwin Realty, LLC, WjF GeoConsultants, Inc. (WjF) is providing this Release Abatement Measure (RAM) Completion Report for the above-referenced Springfield location. Environmental activities conducted at the former Chapman Valve / Crane Company by O'Reilly, Talbot & Okun (OTO) in 2006, on behalf of Westmass Area Development Corporation, have resulted in the discovery of several contaminants in areas not previously addressed by the Crane Company. Goodwin Realty, LLC currently owns the entire 15.95-acre parcel. The location of the Site is depicted on a portion of the Springfield North and a portion of the Ludlow USGS quadrangles (Figure 1). A Site Plan is also included as Figure 2, and former building locations along with test pit and boring locations from the current investigation, are indicated on the Site Plan. Mrs. Bergdoll retained WjF in October 2006 to continue response actions at this location.



## **2.0 BACKGROUND INFORMATION**

### *2.1 General*

According to information provided in the Preliminary Findings Report (OTO, 2006) and in additional reports dated May 1998 and October 2003 by ATC (consultant for the Crane Company), the former Chapman Valve / Crane Company factory Site consists of approximately 16 acres of land bounded by Pinevale Street on the west, Goodwin Street to the south, Moxon Street to the east, and OK Pet Supply and land owned by the City of Springfield to the north. The Site was an active manufacturing facility in the 1800s until the mid 1980s, and included 12 factory buildings. All 12 factory buildings have been demolished and only the concrete floor slabs remain.

The Massachusetts Department of Environmental Protection (MassDEP) assigned Release Tracking Number (RTN) 1-00170 in April 1987, and the property has had a long history of environmental issues. A Post Audit Completion Statement and Addendum Risk Characterization Report, dated October 17, 2003, prepared by ATC Associates, demonstrated that a level of No Significant Risk had been achieved, and a Class A-2 Response Action Outcome (RAO) Statement was appropriate. Goodwin Realty has since purchased the property and unofficially subdivided the property into three parcels.

Site observations made and laboratory data generated by OTO revealed the following:

- Lead and arsenic were detected above Reportable Concentrations (RCs) in the shallow soil sample from test pit TP-16, collected from beneath the concrete slab. TP-16 is located in the northern portion of the former iron foundry, Building 16;
- Several extractable petroleum hydrocarbon (EPH) fractions and target analytes and polychlorinated biphenyls (PCBs) were detected above RCs in a shallow soil sample from test pit TP-3, which is located in the south central portion of former machine shop, Building 10. In addition, a layer of black sand and gravel between 6 and 12 inches thick that exhibited a petroleum odor was found just below the concrete floor slab in test pits TP-3, TP-12 and TP-13, which are also located in the south central portion of Building 10; and



- Volatile petroleum hydrocarbons (VPH) and EPH fractions were detected above RCs in the 10-12 foot sample from test pit TP-18. This sample was reported to have exhibited a petroleum odor and elevated PID reading. TP-18 is located in the former brass foundry, Building 5.

The following compounds were detected above RCs in one or more soil samples collected at the Site:

**Soil Concentrations >RCS-1**

EPH C <sub>9</sub> -C <sub>18</sub> aliphatics	EPH C <sub>19</sub> -C <sub>36</sub> aliphatics	Lead
VPH C <sub>9</sub> -C <sub>10</sub> aromatics	EPH C <sub>11</sub> -C <sub>22</sub> aromatics	Arsenic
Phenanthrene	Benzo(a)anthracene	Chrysene
Benzo(b)fluoranthene	Benzo(k)fluoranthene	Benzo(a)pyrene
Indeno(1,2,3-cd)pyrene	Dibenzo(a,h)anthracene	PCBs (arochlor 1254)

*2.2 Release Notification Form / Notice of Responsibility*

The above-referenced laboratory data indicated that the former manufacturing facility was subject to a release of petroleum in soil at concentrations that exceeded the applicable RCs. WjF provided written notification to the MassDEP on November 29, 2006 on behalf of Goodwin Realty. The MassDEP previously assigned Release Tracking Number 1-00170 the property, and, as discussed, based on the history of the Site, future remedial response actions at the Site were to be conducted as a RAM under the previously assigned RTN.

*2.3 Previously Conducted Assessment Activities*

On December 12, 2006, WjF initiated a soil-boring program at the Site. Soil borings were installed in an attempt to delineate contamination in the three (3) Areas of Concern (AOCs) identified in the subsurface explorations conducted by OTO. Soil borings, designated TPB-1 through TPB-16, were completed using a Mobil B-53 hollow stem



auger drill rig and a GeoProbe™ sampling rig operated by Martin GeoEnvironmental of Belchertown, Massachusetts under the supervision of WjF personnel.

Soil samples from borings TPB-1 through TPB-5 were collected from the area of TP-16, located in the northern portion of the former iron foundry, Building 16. Soil samples for borings TPB-6 through TPB-10 were collected from the area of TP-18, located in the former brass foundry, Building 5. Soil samples for borings TPB-11 through TPB-16 were collected from the area of TP-3, TP-12 and TP-13, located in the south central portion of former machine shop identified as Building 10. The EPH laboratory data for the former machine shop are summarized in Table 1.

#### *2.4 RAM Plan / Status of Previous RAM Activities*

WjF submitted a RAM Plan dated January 5, 2007 to MassDEP on behalf of Goodwin Realty to address the Areas of Concern associated with TP-3, TP-12 and TP-13. The RAM Plan objective was to reduce, to below risk-based standards, the concentrations of EPH fractions and target analytes and PCBs which were detected above RCs in a shallow sample from test pit TP-3.

The soil-boring program conducted in December 2006 was successful in delineating the extent of PCB impacted soil associated with test pit TP-3. The laboratory analysis results for test pit borings TPB-11 through TPB-15 indicated that no detectable concentrations PCBs were present in the soil samples above the laboratory method detection limit. The laboratory analysis results for TPB-16 indicated that PCB-1254 and PCB-1260 were present; however, at concentrations well below the applicable Method 1 S1 GW2/GW3 standards. Therefore, the laboratory analysis results for TPB-11 through TPB-16 delineated the extent of the PCB impacted soil associated with TP-3. The laboratory data are summarized in Table 2.



Soil samples collected from TPB-11 through TPB-16 during the December 2006 boring program were also analyzed for coal ash determination. The laboratory results indicated that the appearance and chemical composition of particles within three of the six soil samples are consistent with the standards for coal and/or coal ash. The coal ash data are summarized in Table 3.

The soil-boring program conducted in December 2006 was only partially successful in delineating the extent of EPH impacted soil associated with test pits TP-3, TP-12 and TP-13. The impacted soil was delineated to the south by the foundation of the former machine shop building and by TPB-11 located south of the foundation outside of the footprint of the building. The impacted soil was delineated to the east by the concrete walled utility tunnel and by TPB-13A and TPB-15A located east of the utility tunnel. Soil data north and west of the area of TP-3, TP-12 and TP-13 indicated that petroleum-impacted soil, above the Method 1 S1 GW2/GW3 standards, exists in the area of TPB-12B, TPB-14 and TPB16.

WjF submitted a RAM Status Report to MADEP in May 2007 on behalf of Goodwin Realty indicating that subsequent to the submittal of the RAM Plan in January 2007, no additional RAM activities were conducted at the Site during the reporting period.

During the June 2007 soil excavation program, Bergdoll Construction of Springfield, Massachusetts excavated the soil within the foundation walled footprint of the former machine shop building, west of the utility tunnel, to a depth of approximately two feet below floor grade. Surficial soils were also excavated from the area of TPB-16 outside of the footprint of the building adjacent to the utility tunnel. The excavated area included former test pits TP-3, TP-12 and TP-13 and former borings TPB-12, TPB-12A, TPB-12B, TPB-13, TPB-14, TPB-15 and TPB-16. The soil was stockpiled on-site pending sampling and disposal.



The results of post-excavation soil samples collected subsequent to the completion of the June 2007 soil excavation program indicated that the vertical extent and the northern extent of the release had been delineated. Post-excavation soil samples collected from the western extent of the excavated area within the buildings' footprint (PE-1 and PE-2) indicated EPH contaminated soil above the Method 1 S1 GW2/GW3 standards remained at the western extent of the excavated area.

On October 3, 2007, WjF conducted a soil-boring program at the Site to delineate the western extent of the EPH soil contamination associated with PE-1 and PE-2. The laboratory results of the soil samples collected from soil borings PE-1A and PE-2A, installed west of PE-1 and PE-2 delineated the western extent of the impacted soil detected in PE-1 and PE-2. Soil samples were also collected from each of the borings for coal ash determination, and an additional soil sample was collected for coal ash determination from the open excavation in the location of PE-4 (designated as PE-4A 1'). The laboratory results indicated that the appearance and chemical composition of particles within the soil samples is consistent with the standards for coal or coal ash.

During the week of March 24, 2008, Bergdoll Construction removed the concrete floor slab of the former machine shop building in the area between PE-1 and PE-2, and PE-1A and PE-2A. The concrete floor was removed from the interior footprint of the former building, extending from the area of PE-1 and PE-2, approximately 15 feet west to the location of PE-1A and PE-2A. The removed concrete was stockpiled on-Site with other brick and concrete waste.

The impacted soil in the area of PE-1 and PE-2 was excavated to a depth of 2 feet below floor grade, and the excavation was extended west to the location of soil borings PE-1A and PE-2A, which delineated the western extent of the EPH soil contamination. The impacted soil was placed on and covered with polyethylene sheeting and stockpiled on Site pending laboratory analyses for waste disposal parameters.





### **3.0 RAM STATUS OF CURRENT ACTIVITIES**

In accordance with 310 CMR 40.0445, the following is a description of the completed RAM activities conducted during this RAM Status reporting period, addressing the petroleum hydrocarbon release beneath the former machine shop concrete floor slab.

#### *3.1 Transportation and Disposal of Impacted Soil – June 2008*

On April 11, 2008, WjF personnel collected one (1) composite soil sample (identified as SS-Comp-1) from the stockpiled soil for analysis for the Ondrick Waste Profile parameters. The sample was submitted to Spectrum Analytical, Inc. (Spectrum) of Agawam, Massachusetts for volatile organic compounds (VOCs) in accordance with EPA Methodology SW846 5030, PCBs in accordance with EPA Methodology SW846 3545A, total petroleum hydrocarbons (TPH) 8100 in accordance with EPA Methodology SW846 3550B, reactivity, flashpoint, pH and total metals by EPA 6000/7000. The laboratory results indicated the following: total VOCs – 0.917 milligrams per kilogram (mg/Kg); PCBs – not detected; total TPH – 439 mg/Kg; reactivity – non reactive; flashpoint – >200°F; pH – 7.34; arsenic – 2.50 mg/Kg; barium – 39.8 mg/Kg; chromium – 12.8 mg/Kg; mercury – 0.221 mg/Kg; and lead – 56.4 mg/Kg. The laboratory results indicate that the compounds present were below the Ondrick acceptance criteria. WjF personnel prepared and submitted a soil prequalification package, including a Bill of Lading, to transport the contaminated soil. WjF submitted a copy of the soil prequalification package in the previously submitted RAM Status Report submitted in May 2008.

On June 18, 2008, Bergdoll Construction, under the supervision of WjF field personnel, transported the stockpiled material to the Ondrick Construction Company, located in Chicopee, Massachusetts. A total of 160.86 tons (approximately 100 cubic yards) of impacted soil / concrete rubble were disposed of at Ondrick Construction Company. A copy of the completed Bill of Lading is included as Attachment 1. Mrs. Judy Bergdoll,

RAM Completion Report  
Former Chapman Valve / Crane Company  
Indian Orchard, Massachusetts  
RTN 1-00170



President of Goodwin Realty, LLC, has authorized William J. Fabbri to sign electronically MassDEP Bureau of Waste Site Cleanup Transmittal Forms on her behalf. Mrs. Bergdoll's authorization is presented as Attachment 2.



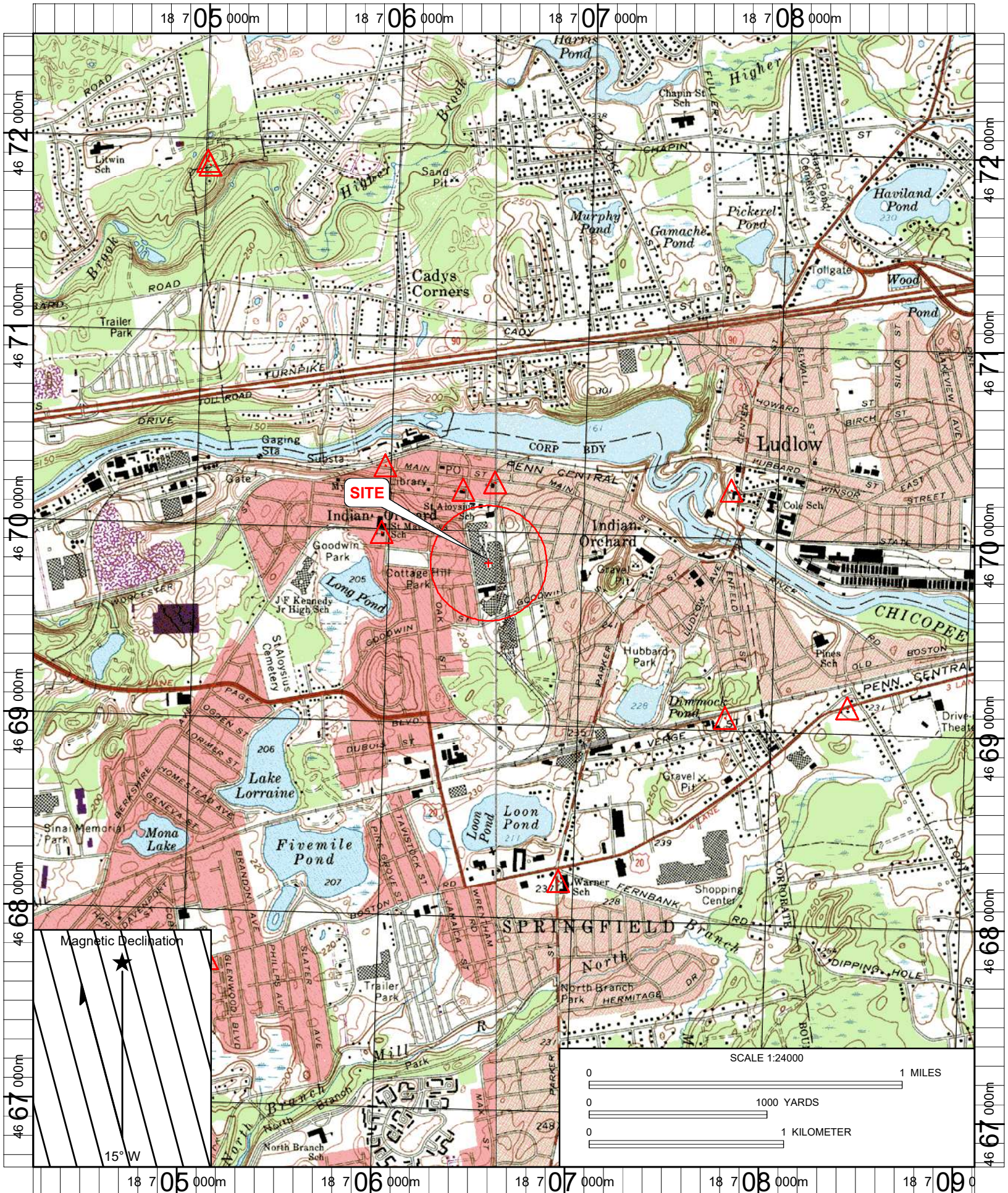
#### **4.0 SUMMARY AND CONCLUSIONS**

The objective of the RAM is to reduce, to below risk-based standards, the concentrations of EPH fractions / target analytes and PCBs which were detected above RCs in a shallow sample from test pit TP-3, and a layer of black sand and gravel between 6 and 12 inches thick that exhibited a petroleum odor found just below the concrete floor slab in the adjacent test pits, TP-12 and TP-13.

Bergdoll excavated impacted soil in the area of tests pits TP-12 and TP-13 in June 2007 and residual impacted soil associated with PE-1 and PE-2 during the March 2008 soil excavation program, under the direction of WjF. Subsequent to the completion of soil excavation activities, WjF collected a composite soil sample from the stockpiled soil for laboratory analyses for waste disposal parameters. WjF prepared and submitted a soil prequalification package including a Bill of Lading to transport the contaminated soil to the Ondrick's Construction soil disposal facility. In June 2008, Bergdoll Construction, under the supervision of WjF personnel transported a total of 160.86 tons (approximately 100 cubic yards) of impacted soil / concrete rubble to the Ondrick soil disposal facility.

The RAM was successful and met its intended objective. WjF is currently reviewing the Site data as part of the Risk Characterization and will determine the future response actions necessary at the Site. Attached please find transmittal form BWSC-106 for this Release Abatement Measure completion Report.

## FIGURES



Name: LUDLOW  
 Date: 8/14/2008  
 Scale: 1 inch equals 2000 feet

Location: 18 0706601 E 4669646 N NAD 27  
 Caption: FIGURE 1 - LOCUS PLAN  
 Former Chapman Valve / Crane Company  
 Springfield, Massachusetts

**NOTES:**

ALL LOCATIONS AND DIMENSIONS OF SITE FEATURES ARE APPROXIMATE ONLY. NO PROPERTY LINE SURVEY WAS CONDUCTED BY WJF AND THIS PLAN SHOULD NOT BE USED FOR CONSTRUCTION.

THIS PLAN WAS PREPARED FROM RESOURCES MADE AVAILABLE TO WJF BY ATC ASSOCIATES INC. AND O'REILLY, TALBOT & OKUN ASSOCIATES, INC. THE DETAILS OF THE PLAN ARE LIMITED ACCORDINGLY.

THIS PLAN IS INTENDED TO PRESENT MONITORING WELLS, SOIL BORINGS AND TEST PIT LOCATIONS. IT SHOULD BE USED FOR NO OTHER PURPOSE. GROUNDWATER ELEVATIONS ARE BASED ON MEASUREMENTS COLLECTED ON NOVEMBER 14, 2007.

**LEGEND:**

- MW-201 (92.8) MONITORING WELL LOCATION WITH GROUNDWATER ELEVATION INSTALLED BY WJF
- MW-18 MONITORING WELL LOCATION INSTALLED BY CEA
- OTO-20 MONITORING WELL LOCATION INSTALLED BY OTO
- TPB-1 SOIL BORINGS BY CONDUCTED WJF
- TP-1 TEST PIT LOCATION BY OTO
- AREA OF CONTAMINATED SOIL REMOVAL BY OTHERS
- LOCATION OF LEAKING USTs
- AREA OF CONTAMINATED SOIL REMOVAL BY WJF JUNE-07
- AREA OF CONTAMINATED SOIL REMOVAL BY WJF MARCH-08
- GROUNDWATER CONTOUR AND ELEVATION
- GROUNDWATER FLOW DIRECTION

**TITLE:**

**SITE PLAN**  
For RAM Completion Report

**LOCATION:**

PINEVALE, GOODWIN & MOXON  
SPRINGFIELD, MA

**CLIENT:**

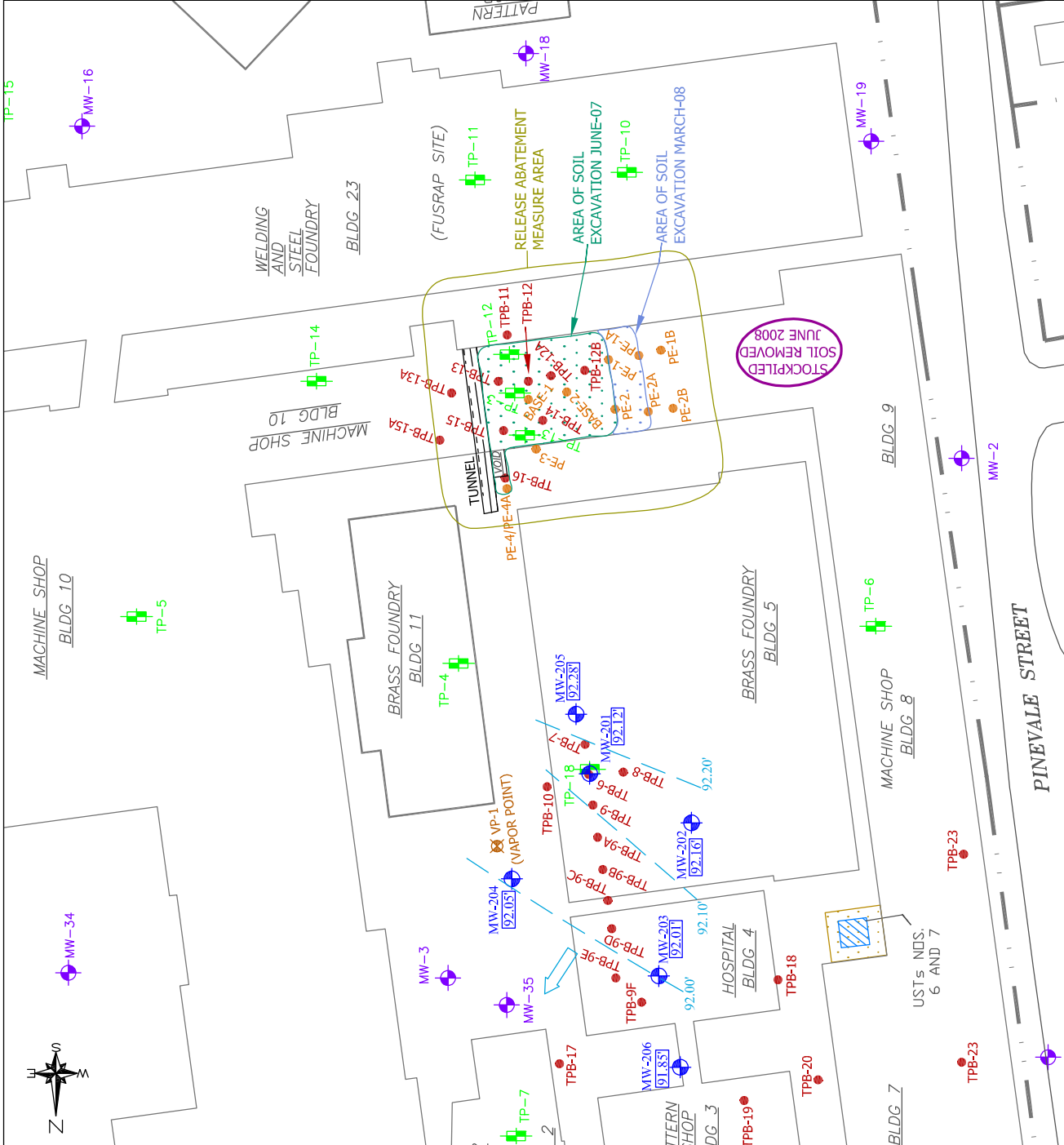
GOODWIN REALTY, LLC



2789 Boston Road  
Wilbraham, MA 01095  
Tel. 413.233.4220

SCALE: 0 25 50 100  
DATE: 2/20/09  
APPROVED BY: [Signature]  
FIGURE: 2

DRAWING #: 1  
JOB #: 1675





## **TABLES**



**TABLE 1**  
**Summary of Extractable Petroleum Hydrocarbon (EPH) Soil Laboratory Data**  
 Former Machine Shop - Building 10  
 Former Chapman Valve / Crane Company  
 Pinevale, Goodwin and Mosxon Streets  
 Springfield, Massachusetts 01115

All results reported in mg/kg

Sample ID	Date	Depth (ft)	PID/PetroFlag Screening (ppm)	EPH Fractions			EPH Target Analytes															
				C <sub>7</sub> -C <sub>8</sub> Aliphatics	C <sub>9</sub> -C <sub>10</sub> Aliphatics	C <sub>11</sub> -C <sub>12</sub> Aromatics	Acenaphthylene	Acenaphthene	Fluorene	Phenanthrene	Anthracene	Fluoranthene	Pyrene	Benzo (a) anthracene	Chrysene	Benzo (b) fluoranthene	Benzo (k) fluoranthene	Benzo (a) pyrene	Indeno (1,2,3-cd) pyrene	Dibenzo (a,h) anthracene	Benzo (g,h,i) perylene	
TPB-11 0-2'	12/12/06	0-2'	NA	<31.3	63.6	<31.3	<0.156	<0.156	<0.156	<0.156	0.364	0.364	0.834	0.789	0.356	0.452	0.436	0.464	0.311	<0.156	0.342	
TPB-13A 0-2'	12/12/06	0-2'	NA	<31.6	<31.6	<31.6	<0.157	<0.157	<0.157	1.53	1.53	1.53	1.550	0.864	0.847	0.845	0.78	1.060	0.673	<0.157	0.848	
TPB-14 0-2'	12/12/06	0-2'	NA	<35.2	22.1	<70.3	0.797	<0.350	0.797	27.300	27.300	27.300	27.500	23.700	7.660	7.440	5.990	6.970	4.280	0.502	4.890	
TPB-12B 0-2'	12/12/06	0-2'	NA	<41.5	<41.5	<83.0	0.53	<0.413	0.737	12.500	12.500	12.500	22.500	20.100	7.110	6.630	3.89	7.060	4.25	0.584	4.83	
TPB-15A 0-2'	12/12/06	0-2'	NA	<41.1	12.1	72.6	<0.205	<0.205	<0.205	0.508	0.508	0.508	1.040	1.010	0.303	0.539	0.494	0.467	0.267	<0.205	0.328	
TPB-16 0-2'	12/12/06	0-2'	NA	<40.3	25.3	<202	<1.0	<1.0	<1.0	2.050	24.800	24.800	41.200	35.300	16.500	17.300	13.80	16.50	10.10	1.57	10.80	
PE-1 1**	6/25/07	1'	175	<29.6	<29.6	86.0	0.685	0.282	0.691	10.200	10.200	10.200	14.500	12.500	6.520	6.200	5.46	6.210	3.680	0.529	4.100	
PE-2 1**	6/25/07	1'	over range	<29.5	789	445	1.710	<1.470	<1.470	32.000	32.000	32.000	62.300	56.700	24.60	24.30	22.60	26.70	16.50	2.020	20.20	
PE-3 1'	6/25/07	1'	7	<28.2	<28.2	60.4	<0.141	<0.141	<0.141	0.221	0.221	0.221	0.821	0.787	0.402	0.381	0.516	0.427	0.269	<0.141	0.312	
PE-4 1'	6/27/07	1'	1199	<27.8	<27.8	89.6	0.141	<0.138	0.141	4.200	4.200	4.200	9.510	8.730	5.36	4.700	4.970	5.06	2.99	0.531	3.260	
Base-1 2'	6/25/07	2'	304	<27.4	138	30.8	<0.137	<0.137	<0.137	1.280	1.280	1.280	2.070	1.930	0.877	0.925	0.87	0.933	0.723	<0.137	0.873	
Base-2 2'	6/25/07	2'	0	<26.9	<26.9	<36.0	<0.134	<0.134	<0.134	<0.134	<0.134	<0.134	0.311	0.289	0.145	<0.134	0.140	0.160	<0.134	<0.134	<0.134	
PE-2A 1-2'	10/3/07	1-2'	NA	<36.0	<36.0	<36.0	<0.179	<0.179	0.250	2.330	2.330	2.330	12.200	11.500	4.090	3.620	2.450	1.520	3.150	0.499	3.830	
PE-1A 1-2'	10/3/07	1-2'	NA	<26.9	81.9	<26.9	0.293	<0.134	0.292	0.711	0.711	0.711	2.040	1.850	0.834	1.110	1.050	0.779	1.930	<0.137	2.760	
<b>Method 1 SI/GW2 Standard</b>				1,000	3,000	1,000	1,000	40	600	1,000	500	1,000	1,000	1,000	7	70	70	2	7	7	1,000	
<b>Method 1 SI/GW3 Standard</b>				1,000	3,000	1,000	1,000	300	10	1,000	500	1,000	1,000	1,000	1,000	7	70	70	2	7	7	1,000

**Notes:**

Method 1 Soil Standard S-1 is the applicable standard to avoid implementation of an Activity and Use Limitation.

*Italic* value indicates exceedance of SI/GW2 standard.

Shaded value indicates exceedance of SI/GW3 standard.

\* = Soil was excavated in June 2007.

\*\* = Soil was excavated in March 2008.

EPH = Extractable Petroleum Hydrocarbons.

MCP = Massachusetts Contingency Plan 310 CMR 40.0000.

PID = photoionization detector.

"<" = less than the laboratory reporting limit.

ppm = parts per million.

mg/kg = milligram per kilogram (equivalent to parts per million).

NA = Not analyzed.

N/A = Not available.





**TABLE 2**  
**Summary of Polychlorinated Biphenyls (PCBs) Soil Laboratory Data**  
**Former Machine Shop - Building 10**  
**Former Chapman Valve / Crane Company**  
**Pinevale, Goodwin and Moxon Streets**  
**Springfield, Massachusetts 01115**

All results reported in mg/kg

Sample ID	Date	Depth (ft)	PCB - 1016	PCB - 1221	PCB - 1232	PCB - 1242	PCB - 1248	PCB - 1254	PCB - 1260	PCB - 1262	PCB - 1268
TPB-11 0-2'	12/12/06	0-2'	<0.0271	<0.0271	<0.0271	<0.0271	<0.0271	<0.0271	<0.0271	<0.0271	<0.0271
TPB-13A 0-2'	12/12/06	0-2'	<0.0276	<0.0276	<0.0276	<0.0276	<0.0276	<0.0276	<0.0276	<0.0276	<0.0276
TPB-14 0-2' *	12/12/06	0-2'	<0.0280	<0.0280	<0.0280	<0.0280	<0.0280	<0.0280	<0.0280	<0.0280	<0.0280
TPB-12B 0-2' *	12/12/06	0-2'	<0.0322	<0.0322	<0.0322	<0.0322	<0.0322	<0.0322	<0.0322	<0.0322	<0.0322
TPB-15A 0-2'	12/12/06	0-2'	<0.0285	<0.0285	<0.0285	<0.0285	<0.0285	<0.0285	<0.0285	<0.0285	<0.0285
TPB-16 0-2' *	12/12/06	0-2'	<0.0303	<0.0303	<0.0303	<0.0303	<0.0303	0.29	0.159	<0.0303	<0.0303
<b>Method 1 S1/GW2 Standard</b>			2	2	2	2	2	2	2	2	2
<b>Method 1 S1/GW3 Standard</b>			2	2	2	2	2	2	2	2	2

**Notes:**

Method 1 Soil Standard S-1 is the applicable standard to avoid implementation of an Activity and Use Limitation.

*Italic* value indicates exceedance of S1/GW2 standard.

Shaded value indicates exceedance of S1/GW3 standard.

\* = Soil was excavated in June 2007.

MCP = Massachusetts Contingency Plan 310 CMR 40.0000.

"<" = less than the laboratory reporting limit.

NA = Not applicable.

mg/kg = milligrams per kilogram (equivalent to parts per million).



**TABLE 3**  
**Summary of Coal Ash Soil Laboratory Data**  
**Former Machine Shop - Building 10**  
**Former Chapman Valve / Crane Company**  
**Pinevale, Goodwin and Moxon Streets**  
**Springfield, Massachusetts 01115**

Sample ID	Date	Depth (ft)	Exempt				Non-Exempt			Miscellaneous	
			Coal	Coal Ash	Coal Flyash	Wood Ash	Tar	Oil Soot	Asphalt	Mineral	
TPB-11 0-2'	12/12/06	0-2'					X				
TPB-12B 0-2' *	12/12/06	0-2'							X		
TPB-13A 0-2'	12/12/06	0-2'									X
TPB-14 0-2' *	12/12/06	0-2'	X							X	
TPB-15A 0-2'	12/12/06	0-2'	X	X							
TPB-16 0-2' *	12/12/06	0-2'		X			X			X	
PE-2 1' *	6/25/07	1'	X	X			X		X		
PE-4 1' *	6/27/07	1'	X				X		X		
PE-1A 1-2'	10/3/07	1-2'	X								
PE-1B 1-2'	10/3/07	1-2'		X				X			
PE-2A 1-2'	10/3/07	1-2'	X					X			
PE-2B 1-2'	10/3/07	1-2'	X					X-Lead			
PE-4A 1'	10/3/07	1'	X					X			

**Notes:**

\* = Soil was excavated in June 2007.

X = Detected.



## **APPENDIX A**

**BILL OF LADING FOR STOCKPILED SOIL**

8900  
8-05-11899MA



**Massachusetts Department of Environmental Protection**  
**Bureau of Waste Site Cleanup**

**BWSC-012A**

**BILL OF LADING** (pursuant to 310 CMR 40.0030)

Release Tracking Number  
**1 - 170**

**A. LOCATION OF SITE OR DISPOSAL SITE WHERE REMEDIATION WASTE WAS GENERATED:**

Release Name (optional): Former Chapman Valve / Crane Company  
Street: Pinevale St. Location Aid: \_\_\_\_\_  
City/Town: Springfield, MA ZIP Code: 01151  
Date/Period of Generation: June 2007 to: June 2008  
Additional Release Tracking Numbers Associated with this Bill of Lading: \_\_\_\_\_  
*\* Note: If this Bill of Lading is the result of a Limited Removal Action (LRA) taken prior to Notification, a Release Tracking Number is not needed.*

**B. PERSON CONDUCTING RESPONSE ACTION ASSOCIATED WITH BILL OF LADING:**

Name of Organization: Goodwin Realty Trust  
Name of Contact: Mrs. Judy Bergdoll Title: Owner  
Street: 10 Beechwood Dr.  
City/Town: Wilbraham State: MA ZIP Code: 01095  
Telephone: (413) 596-9950 Ext.: \_\_\_\_\_

**C. RELATIONSHIP TO RELEASE OF PERSON CONDUCTING RESPONSE ACTION ASSOCIATED WITH BILL OF LADING:**

RP or PRP Specify:  Owner  Operator  Generator  Transporter Other RP or PRP: \_\_\_\_\_  
 Fiduciary, Secured Lender or Municipality with Exempt Status (as defined by M.G.L. c. 21E, s. 2)  
 Agency or Public Utility on a Right of Way (as defined by M.G.L. c. 21E, s. 5D)  
 Other Person: \_\_\_\_\_

If an owner and/or operator is not conducting the response action associated with the Bill of Lading, provide on an attachment the name, contact person, address and telephone number, including any area code and extension, for each, if known.

**D. TRANSPORTER OR COMMON CARRIER INFORMATION:**

Transporter/Common Carrier Name: Bergdoll Construction  
Contact Person: Judy Bergdoll Title: Owner  
Street: 10 Beechwood Dr.  
City/Town: Wilbraham State: MA ZIP Code: 01095  
Telephone: (413) 596-9950 Ext.: \_\_\_\_\_

**E. RECEIVING FACILITY/TEMPORARY STORAGE LOCATION:**

Operator/Facility Name: Ted Ondrick Company, LLC  
Contact Person: Alan Desrosiers Title: Manager  
Street: 58 Industry Road  
City/Town: Chicopee State: MA ZIP Code: 01020  
Telephone: 413.592.2566 Ext.: \_\_\_\_\_  
Type of Facility: (check one)  Asphalt Batch/Cold Mix  Landfill/Disposal  Incinerator  Temporary Storage  
 Asphalt Batch/Hot Mix  Landfill/Daily Cover  Other: \_\_\_\_\_  
 Thermal Processing  Landfill/Structural Fill  
EPA Identification #: MAP000015280

Division of Hazardous Waste/Class A Permit #: WR-25-90 Division of Solid Waste Management Permit #: \_\_\_\_\_

Actual/Anticipated Period of Temporary Storage (specify dates if applicable): \_\_\_\_\_ to: \_\_\_\_\_

Reason for Temporary Storage: \_\_\_\_\_

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E. RECEIVING FACILITY/TEMPORARY STORAGE LOCATION (continued):

Temporary Storage Address:

Street: \_\_\_\_\_

City/Town: \_\_\_\_\_ State: \_\_\_\_\_ ZIP Code: \_\_\_\_\_

F. DESCRIPTION OF REMEDIATION WASTE:

(check all that apply)

- Contaminated Media (check all that apply):  Soil  Groundwater  Surface Water  Other: \_\_\_\_\_
- Contaminated Debris (check all that apply):  Vegetation or Organic Debris  Demolition/Construction Waste  
 Inorganic Absorbant Materials  Other: \_\_\_\_\_
- Non-hazardous Uncontainerized Waste (check all that apply):  Non-aqueous Phase Liquid  Other: \_\_\_\_\_
- Non-hazardous Containerized Waste (check all that apply):  Tank Bottoms/Sludges  Containers  Drums  
 Engineered Impoundments  Other: \_\_\_\_\_

Type of Contamination (check all that apply):  Gasoline  Diesel Fuel  #2 Oil  #4 Oil  #6 Oil  Waste Oil  
 Kerosene  Jet Fuel  Other: \_\_\_\_\_

Estimated Volume of Materials: Cubic Yards: 100 Tons: 150 Other: \_\_\_\_\_

Contaminant Source (check one/specify):  Transportation Accident  Underground Storage Tank  Other: \_\_\_\_\_

Response Action Associated with Bill of Lading (check one):  Immediate Response Action  Release Abatement Measure

Utility-Related Abatement Measure  Limited Removal Action  Comprehensive Response Action  Other: \_\_\_\_\_

Remediation Waste Characterization Support Documentation attached:

- Site History Information  Sampling and Analytical Methods and Procedures  Laboratory Data  Field Screening Data

If supporting documentation is not appended, provide an attachment stating the date and in connection with what document such information was previously submitted to DEP.

G. LICENSED SITE PROFESSIONAL (LSP) OPINION:

Name of Organization: WJF GeoConsultants, Inc.

LSP Name: William J. Fabbri Title: Principal

Telephone: (413) 233-4220 Ext.: \_\_\_\_\_

I attest under the pains and penalties of perjury that I have personally examined and am familiar with this submittal, including any and all documents accompanying this submittal. In my professional opinion and judgment based upon application of

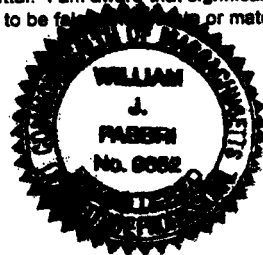
- (i) the standard of care in 309 CMR 4.02(1),
- (ii) the applicable provisions of 309 CMR 4.02(2) and (3), and
- (iii) the provisions of 309 CMR 4.03(5).

to the best of my knowledge, information and belief, the assessment actions undertaken to characterize the Remediation Waste which is (are) the subject of this submittal for acceptance at the facility identified in this submittal comply with the applicable provisions of 310 CMR 40.0000, and such facility is permitted to accept Remediation Waste having the characteristics described in this submittal. I am aware that significant penalties may result, including, but not limited to, possible fines and imprisonment, if I submit information which I know to be false, misleading or materially incomplete.

LSP Signature: [Handwritten Signature] Seal:

Date: May 13, 2008

License Number: 9652



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**H. CERTIFICATION OF PERSON CONDUCTING RESPONSE ACTION ASSOCIATED WITH THIS BILL OF LADING:**

I certify under penalties of law that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this certification, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, the material information contained herein is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for willfully submitting false, inaccurate, or incomplete information.

Signature: *J. Bergdoll*

Date: 5-5-08

Name of Person (print): \_\_\_\_\_



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BWSC-012B

BILL OF LADING (pursuant to 310 CMR 40.0030)  
LOG SHEET

Release Tracking Number:

1 - 170

I. LOAD INFORMATION:

LOAD 1: Signature of Transporter Representative:

Date of Shipment: 06/18/08 Time of Shipment: 8:25 (circle one) am/pm  
Truck/Tractor Registration: L80740 Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative: JM

Date of Receipt: 06/18/08 Time of Receipt: 8:34  
(circle one) am/pm

Load Size (cu. yds./tons): 20.22 ton

LOAD 2: Signature of Transporter Representative:

Date of Shipment: 06/18/08 Time of Shipment: 0825 (circle one) am/pm  
Truck/Tractor Registration: YH 1453217 Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative: JM

Date of Receipt: 06/18/08 Time of Receipt: 8:37  
(circle one) am/pm

Load Size (cu. yds./tons): 20.13 ton

LOAD 3: Signature of Transporter Representative:

Date of Shipment: 06/18/08 Time of Shipment: 9:15 (circle one) am/pm  
Truck/Tractor Registration: L80740 Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative: JM

Date of Receipt: 06/18/08 Time of Receipt: 9:27  
(circle one) am/pm

Load Size (cu. yds./tons): 19.74 ton

LOAD 4: Signature of Transporter Representative:

Date of Shipment: 06/18/08 Time of Shipment: 0925 (circle one) am/pm  
Truck/Tractor Registration: 1453217 Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative: JM

Date of Receipt: 06/18/08 Time of Receipt: 9:39  
(circle one) am/pm

Load Size (cu. yds./tons): 21.88 ton

LOAD 5: Signature of Transporter Representative:

Date of Shipment: 06/18/08 Time of Shipment: 9:55 (circle one) am/pm  
Truck/Tractor Registration: L80740 Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative: JM

Date of Receipt: 06/18/08 Time of Receipt: 10:07  
(circle one) am/pm

Load Size (cu. yds./tons): 18.73 ton

LOAD 6: Signature of Transporter Representative:

Date of Shipment: 06/18/08 Time of Shipment: 9:15 (circle one) am/pm  
Truck/Tractor Registration: 1453217 Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative: JM

Date of Receipt: 06/18/08 Time of Receipt: 10:26  
(circle one) am/pm

Load Size (cu. yds./tons): 21.19 ton

LOAD 7: Signature of Transporter Representative:

Date of Shipment: 06/18/08 Time of Shipment: 10:45 (circle one) am/pm  
Truck/Tractor Registration: L80740 Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative: JM

Date of Receipt: 06/18/08 Time of Receipt: 10:51  
(circle one) am/pm

Load Size (cu. yds./tons): 19.52 ton

J. LOG SHEET VOLUME INFORMATION:

Total Volume This Page (cu. yds./tons): 141.41 ton

Total Carried Forward (cu. yds./tons): 0 ton

Total Carried Forward and This Page (cu. yds./tons): 141.41 ton

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Massachusetts Department of Environmental Protection  
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BWSC-012B

BILL OF LADING (pursuant to 310 CMR 40.0030)

Release Tracking Number

SUMMARY SHEET 2 OF 2

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**I. LOAD INFORMATION:** Signature of Transporter Representative: \_\_\_\_\_

**Load 1:** *[Signature]* Receiving Facility/Temporary Storage Representative: \_\_\_\_\_

Date of Shipment: 06-18-08 Time of Shipment: 10:50  AM  PM Date of Receipt: \_\_\_\_\_ Time of Receipt: \_\_\_\_\_

Truck/Tractor Registration: H53217 Trailer Registration (if any): \_\_\_\_\_ Date of Receipt: 06-18-08 Time of Receipt: 11:09  AM  PM

Load Size (cu. yds./tons): \_\_\_\_\_

**Load 2:** Signature of Transporter Representative: \_\_\_\_\_

Receiving Facility/Temporary Storage Representative: \_\_\_\_\_

Date of Shipment: \_\_\_\_\_ Time of Shipment: \_\_\_\_\_  AM  PM Date of Receipt: \_\_\_\_\_ Time of Receipt: \_\_\_\_\_  AM  PM

Truck/Tractor Registration: \_\_\_\_\_ Trailer Registration (if any): \_\_\_\_\_ Load Size (cu. yds./tons): \_\_\_\_\_

**Load 3:** Signature of Transporter Representative: \_\_\_\_\_

Receiving Facility/Temporary Storage Representative: \_\_\_\_\_

Date of Shipment: \_\_\_\_\_ Time of Shipment: \_\_\_\_\_  AM  PM Date of Receipt: \_\_\_\_\_ Time of Receipt: \_\_\_\_\_  AM  PM

Truck/Tractor Registration: \_\_\_\_\_ Trailer Registration (if any): \_\_\_\_\_ Load Size (cu. yds./tons): \_\_\_\_\_

**Load 4:** Signature of Transporter Representative: \_\_\_\_\_

Receiving Facility/Temporary Storage Representative: \_\_\_\_\_

Date of Shipment: \_\_\_\_\_ Time of Shipment: \_\_\_\_\_  AM  PM Date of Receipt: \_\_\_\_\_ Time of Receipt: \_\_\_\_\_  AM  PM

Truck/Tractor Registration: \_\_\_\_\_ Trailer Registration (if any): \_\_\_\_\_ Load Size (cu. yds./tons): \_\_\_\_\_

**Load 5:** Signature of Transporter Representative: \_\_\_\_\_

Receiving Facility/Temporary Storage Representative: \_\_\_\_\_

Date of Shipment: \_\_\_\_\_ Time of Shipment: \_\_\_\_\_  AM  PM Date of Receipt: \_\_\_\_\_ Time of Receipt: \_\_\_\_\_  AM  PM

Truck/Tractor Registration: \_\_\_\_\_ Trailer Registration (if any): \_\_\_\_\_ Load Size (cu. yds./tons): \_\_\_\_\_

**Load 6:** Signature of Transporter Representative: \_\_\_\_\_

Receiving Facility/Temporary Storage Representative: \_\_\_\_\_

Date of Shipment: \_\_\_\_\_ Time of Shipment: \_\_\_\_\_  AM  PM Date of Receipt: \_\_\_\_\_ Time of Receipt: \_\_\_\_\_  AM  PM

Truck/Tractor Registration: \_\_\_\_\_ Trailer Registration (if any): \_\_\_\_\_ Load Size (cu. yds./tons): \_\_\_\_\_

**J. LOG SHEET VOLUME INFORMATION:**

Total Volume Recorded This Page (cu. yds./tons): 19.45

Total Carried Forward (cu. yds./tons): 141.41

Total Carried Forward and This Page (cu. yds./tons): 160.86





Massachusetts Department of Environmental Protection  
Bureau of Waste Site Cleanup

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BILL OF LADING (pursuant to 310 CMR 40.0030)

Release Tracking Number

SUMMARY SHEET 1 OF 1

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K. SUMMARY OF SHIPMENTS:

Date of Shipment:	Date of Receipt:	Number of Loads Shipped:	Daily Volume Shipped (cu. yds./tons)
6-18-2008	6-18-2008	8	160.86
Summary Sheet Total Shipped:		8	160.86
Bill of Lading Total Shipped (only if different):			



Massachusetts Department of Environmental Protection  
Bureau of Waste Site Cleanup

BWSC-012C

BILL OF LADING (pursuant to 310 CMR 40.0030)  
SUMMARY SHEET

Release Tracking Number  
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ONLY COMPLETE ONE COPY OF THIS PAGE AND ATTACH TO THE FINAL COPY OF THE SUMMARY SHEET.

L. ACKNOWLEDGMENT OF RECEIPT OF REMEDIATION WASTE AT RECEIVING FACILITY OR TEMPORARY STORAGE:

Receiving Facility/Temporary Storage Representative (print):

Alan Dosroiers

Title: Manager

Signature: *Alan Dosroiers*

Date: 4/27/08

M. ACKNOWLEDGMENT OF SHIPMENT AND RECEIPT OF REMEDIATION WASTE BY PERSON  
CONDUCTING RESPONSE ACTION ASSOCIATED WITH THIS BILL OF LADING:

I certify under penalties of law that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this certification, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, the material information contained in herein is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for willfully submitting false, inaccurate, or incomplete information.

Signature:

*William J. Fabbrì*

Agent for

Date: 2/18/09

Name of Person (print):

William J. Fabbrì

Goodwin Restly, LLC



## **APPENDIX B**

### SIGNATORY AUTHORIZATION


February 13, 2009

Mr. William J. Fabbri  
WjF GeoConsultants, Inc.  
2789 Boston Road  
Wilbraham, Massachusetts 01095

RE: Signatory Authority

Dear Mr. Fabbri:

I, Judy Bergdoll, of Goodwin Realty, LLC, hereby authorize WjF GeoConsultants, Inc. (WjF) to sign my name electronically for any required Massachusetts Department of Environmental Protection (MassDEP) Bureau of Waste Site Cleanup (BWSC) transmittal forms regarding the release (MassDEP RTN 1-00170) at Pinevale, Goodwin and Moxon Streets in Springfield, Massachusetts. As the responsible party, I understand that I remain fully liable for the requirements of the Massachusetts Contingency Plan 310 CMR 40.0000 and Massachusetts General Law c.21E, and that WjF is signing solely for my convenience.

  
Judy Bergdoll, Goodwin Realty, LLC

Date

2-13-09