



GE  
159 Plastics Avenue  
Pittsfield, MA 01201  
USA

*Transmitted via Overnight Courier*

August 27, 2008

Ms. Dale C. Young  
Lead Administrative Trustee  
Massachusetts Executive Office of Energy and Environmental Affairs  
100 Cambridge Street, Suite 900  
Boston, Massachusetts 02114-2119

**Re: GE-Pittsfield/Housatonic River Site  
Newell Street Area II (GEC450)  
Summary of July 2008 Inspection of Natural Resource Restoration/Enhancement Measures**

Dear Ms. Young:

On July 28, 2008, the General Electric Company (GE) performed the third inspection of the natural resource restoration/enhancement (NRRE) measures at Newell Street Area II. As shown on Figure 1, the areas subject to NRRE measures consist of the majority of the GE-owned Newell Street parking lot area, which has been covered with a vegetative engineered barrier, and a portion of the "wooded area" at Parcel J9-23-12. The NRRE measures installed in these areas consist of the planting of an herbaceous native grassland community, as well as the placement of a bluebird box on the edge of the parking lot area adjacent to the Housatonic River. This letter provides some background information on these measures and presents the results of the July 28, 2008 inspection.

### **Background**

The NRRE measures to be installed in these areas in accordance with the Consent Decree (CD) for the GE-Pittsfield/Housatonic River Site and associated *Statement of Work for Removal Actions Outside the River* (SOW) were specified in GE's *Final Removal Design/Removal Action Work Plan for Newell Street Area II* (Final Work Plan; March 2005) and the *Final RD/RA Work Plan Addendum for Newell Street Area II* (Final Work Plan Addendum; May 2005), as approved by EPA. These measures consisted of the following:

- The planting of an herbaceous native grassland community on the surface of the vegetative engineered barrier at the Newell Street parking lot area (excluding the paved access road), as well as in a portion of the wooded area on Parcel J9-23-12 shown on Figure 1, using a mixture of native grass and wildflower species proposed in the Final Work Plan Addendum and approved by EPA; and
- The installation of a bluebird box along the edge of the former parking lot area adjacent to the Housatonic River.

In accordance with a request from the Natural Resource Trustees (Trustees) in a letter dated June 10, 2005, GE did not place stumps and rock piles within the NRRE area. The requirements for monitoring and maintenance of the NRRE measures in accordance with Technical Attachment I to the SOW were set

out in the *Restoration Project Monitoring and Maintenance Plan* (Restoration M&M Plan) provided as Attachment A to the Final Work Plan Addendum. On June 5, 2007, GE submitted a *Completion of Installation of Restoration Work Report* describing the installation of these NRRE measures and reiterating the required monitoring and maintenance activities in accordance with the Restoration M&M Plan.

GE conducted the first and second inspections of these NRRE measures at Newell Street Area II on June 20, 2007 and September 5, 2007, respectively. Summaries of the June and September 2007 inspections were submitted to the Trustees, with copies to EPA and the Massachusetts Department of Environmental Protection (MDEP), in letters dated August 3, 2007 and October 2, 2007, respectively.

Based on observations made during these inspections, herbaceous planting areas within the NRRE area were determined to be exhibiting less than the required 100% cover. In response to these observations, GE proposed, in separate communications with the Trustees and EPA, a plan to conduct sampling of the upper three inches of topsoil within the NRRE area for pH and nutrient level analyses. The purpose of these analyses was to aid GE in determining the factors potentially restricting the growth and promulgation of the desired herbaceous species. On September 17, 2007, the Trustees approved this proposal. On October 3, 2007, GE conducted topsoil sampling activities in these areas and submitted that sample for analysis at the University of Massachusetts Soil and Plant Tissue Testing Lab. Review of the results of that analysis indicated that topsoil within the NRRE area contained relatively low levels of nitrogen, potassium, and phosphorus, and had a pH of 8. Based on that review, GE proposed to institute a soil enhancement program, involving application of fertilizer, to augment nutrient levels (i.e., nitrogen, potassium, and phosphorus) and provide a more favorable environment for the establishment of herbaceous cover. The first application of fertilizer was performed on October 19, 2007.

On May 5, 2008, GE met with the Trustees and EPA to view the Newell Street Area II NRRE area. Following that meeting, GE proposed supplemental follow-up activities involving reinstallation of topsoil and reseeded in the NRRE area. The Trustees approved that proposal on June 2, 2008. On June 4 and 5 2008, GE carried out the approved supplemental activities. These activities included the following:

- The erosion control mat was removed from the swale and areas surrounding the access road, followed by installation of topsoil and the Trustee-proposed native grassland seed mix (seed mix) within these areas. Straw mulch with a thickness of no more than 2 inches was then applied and anchored.
- At certain areas where topsoil was minimal and at areas exhibiting only 70% to 75% groundcover, topsoil and the Trustee-proposed seed mix were applied at an application rate of 30 pounds per acre, with an additional 10 pounds per acre of annual rye (*Lolium temulentum*). Straw mulch with a thickness of no more than 2 inches was then applied and anchored.
- In the remainder of the NRRE area, the Trustee-proposed seed mix was applied at an application rate of 15 pounds per acre, with an additional 5 pounds per acre of annual rye, using an "over-seeder" at a seed depth of no more than ¼ inch.

### **Summary of Inspection Activities**

Consistent with prior inspections, the July 2008 inspection was conducted in accordance with the requirements for such inspections set out in the Restoration M&M Plan provided in the Final Work Plan Addendum. Inspection activities consisted of a field inspection and survey of the NRRE area to: (a) verify areal coverage by herbaceous species; (b) determine any evidence of trespassing or herbivory; (c)

assess the apparent vigor of the vegetation; (d) inspect for the presence of invasive species (as listed in the Restoration M&M Plan); and (e) assess the condition of the bluebird box. In addition, the July 2008 inspection verified the completion of the above-described activities conducted in the fall of 2007 and the spring of 2008. Representatives of EPA and the Trustees were present at this inspection.

To document the results of the July 2008 inspection, GE completed an NRRE Inspection Checklist and collected photographic documentation of the conditions of the NRRE area. Copies of the completed checklist and the photographs are provided in Attachments A and B, respectively.

The July 2008 inspection also served as the restoration work installation inspection and meeting among GE, EPA, and the Trustees required by Paragraph 120 of the CD. The Trustees determined in that meeting that the installation of the NRRE measures at Newell Street Area II had been completed in accordance with the applicable requirements and Performance Standards in the CD. GE anticipates receiving a Certification of Completion of Installation Work from the Trustees under Paragraph 120 of the CD in the near future.

### **Summary of Observations During Inspection/Site Meeting**

Under Attachment I to the SOW, the percent coverage Performance Standard for the NRRE area is 100%. The Restoration M&M Plan provides that any herbaceous planting area within the NRRE area with less than 100% cover will be supplemented with additional planting and seeding. As indicated in the Inspection Checklist in Attachment A, the July 2008 inspection showed that the majority of the NRRE area contains between 95% and 100% herbaceous ground cover, with approximately 80% of the species observed from the seed mix. In addition, the inspection identified six specific areas in the western portion of the Newell Street parking lot area that exhibited approximately 70% to 75% groundcover, with approximately 75% of the species observed from the seed mix.

In response to these observations, GE and the Trustees agreed that areas with 95% to 100% cover are anticipated to achieve the 100% coverage Performance Standard without the performance of additional planting or seeding activities. Additionally, GE proposed, and the Trustees approved, a plan to install topsoil, the Trustee-proposed seed mix, and no more than 2 inches of straw mulch over the six areas described above with approximately 70% to 75% groundcover. These planting activities were completed in August 2008. The Trustees indicated that, following completion of these planting activities, they anticipate that the six areas with 70% to 75% groundcover will achieve the required 100% groundcover during the 2008 growing season.

As also indicated in the NRRE Inspection Checklist, the inspection identified an area of minimal erosion within the northern-most portion of the swale (adjacent to the Housatonic River) located in the western portion of the Newell Street parking lot area. In response, GE installed topsoil, the Trustee-proposed seed mix, and no more than 2 inches of straw mulch to the eroded area.

No significant signs of herbivory or stress were observed in the developing plant communities. Several Autumn olive and/or Russian olive saplings were observed and removed within the NRRE area. The total percentage of area occupied by these species was observed to be less than 1%, which is well below the 5% Performance Standard for invasive species cover set forth in Attachment I to the SOW and the Restoration M&M Plan. These were the only invasive species listed in the Restoration M&M Plan that were observed within the NRRE area. In addition, the NRRE area is surrounded by a locked chain-link fence (except along the river) restricting trespasser access, and no signs of damage from trespassers were observed. Finally, the bluebird box was found to be present, intact, and functional.

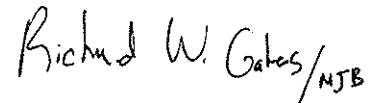
**Schedule of Future Activities and Inspections**

GE has already performed the corrective measures noted above (i.e., the installation of topsoil, the Trustee-proposed seed mix, and up to 2 inches of straw mulch in the areas identified above).

With respect to future inspections, the Restoration M&M Plan provides that monitoring activities are to consist of two site visits during each of the first three years after planting, one visit during the fifth year after planting, and one visit during the seventh year after planting. In each of the first three years after planting, visits are to be conducted in the late spring after the first leaf flush (May/June) and in the summer (July/August) to assess plant survival. The single visit in the fifth and seventh year after planting is to be conducted in the summer (July/August). Given that the reseeded occurred in 2008, GE will commence this monitoring schedule in 2009, conducting two monitoring visits in 2009, 2010, and 2011, one in 2013, and one in 2015. These inspections and any necessary maintenance will be performed in accordance with the NRRE inspection/maintenance requirements set out in the forthcoming Final Completion Report for the Newell Street Area II Removal Action and will utilize the NRRE Inspection Checklist included in that document. Following each inspection, an inspection report will be prepared and submitted to the Trustees (through the Lead Administrative Trustee), with copies to EPA and the MDEP. In addition, GE will prevent shrub and tree growth within the NRRE area through mowing of the grass in that area no earlier than late October each year (beginning in fall 2008) for the duration of the monitoring period and through removal of any shrub/tree growth in the area during that period.

Please call me if you have any comments or questions.

Sincerely,



Richard W. Gates  
Remediation Project Manager

Attachments

cc: Dean Tagliaferro, EPA  
Richard Fisher, EPA  
Tim Conway, EPA  
Holly Inglis, EPA  
Rose Howell, EPA\*  
Linda Palmieri, Weston (2 copies)  
Michael Gorski, MDEP (2 copies)  
Anna Symington, MDEP\*  
Jane Rothchild, MDEP\*  
Susan Steenstrup, MDEP  
Todd Chadwell, Stantec

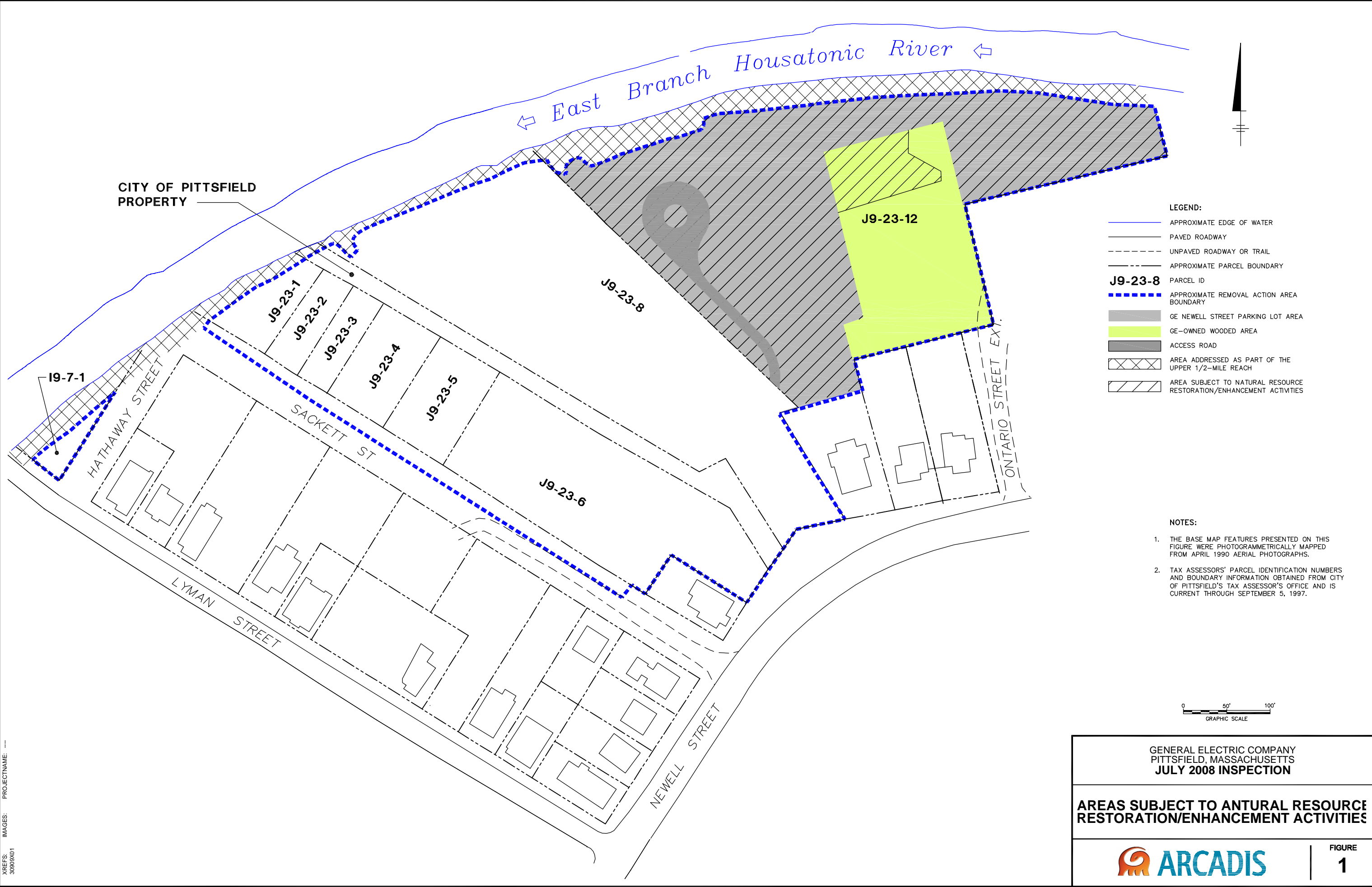
Mayor James Ruberto, City of Pittsfield  
Nancy E. Harper, MA AG\*  
Michael Carroll, GE\*  
Rod McLaren, GE  
James Nuss, ARCADIS  
James Bieke, Goodwin Procter  
Public Information Repositories  
GE Internal Repositories

\* *without attachments*

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**Figure**

CITY: SYRACUSE DIV/GROUP: 141 DB: DWI LAF GMS LD: DWM PM: (Rend) LYN: ON: OFF=REF  
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 XREFS: IMAGES: PROJECTNAME: 30909X01



CITY OF PITTSFIELD PROPERTY

East Branch Housatonic River

J9-23-12

J9-23-8

J9-23-1

J9-23-2

J9-23-3

J9-23-4

J9-23-5

J9-23-6

I9-7-1

HATHAWAY STREET

SACKETT ST

LYMAN STREET

NEWELL STREET

ONTARIO STREET EXT.

LEGEND:

- APPROXIMATE EDGE OF WATER
- PAVED ROADWAY
- UNPAVED ROADWAY OR TRAIL
- APPROXIMATE PARCEL BOUNDARY
- J9-23-8** PARCEL ID
- APPROXIMATE REMOVAL ACTION AREA BOUNDARY
- GE NEWELL STREET PARKING LOT AREA
- GE-OWNED WOODED AREA
- ACCESS ROAD
- AREA ADDRESSED AS PART OF THE UPPER 1/2-MILE REACH
- AREA SUBJECT TO NATURAL RESOURCE RESTORATION/ENHANCEMENT ACTIVITIES

NOTES:

1. THE BASE MAP FEATURES PRESENTED ON THIS FIGURE WERE PHOTOGRAMMETRICALLY MAPPED FROM APRIL 1990 AERIAL PHOTOGRAPHS.
2. TAX ASSESSORS' PARCEL IDENTIFICATION NUMBERS AND BOUNDARY INFORMATION OBTAINED FROM CITY OF PITTSFIELD'S TAX ASSESSOR'S OFFICE AND IS CURRENT THROUGH SEPTEMBER 5, 1997.



GENERAL ELECTRIC COMPANY  
 PITTSFIELD, MASSACHUSETTS  
 JULY 2008 INSPECTION

**AREAS SUBJECT TO ANTURAL RESOURCE RESTORATION/ENHANCEMENT ACTIVITIES**



FIGURE  
**1**

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**Attachment A**

Completed Inspection Form

**NATURAL RESOURCE RESTORATION / ENHANCEMENT  
INSPECTION CHECKLIST**

**NEWELL STREET AREA II REMOVAL ACTION**

**PARCEL J9-23-12 (PARKING LOT AREA AND PORTION OF WOODED AREA)**

**I. GENERAL INFORMATION**

Inspection Date: 7/28/08  
Conducted By: Paolo Filippetti - (585) 385-0090 ext. 35  
Weather Conditions: Sunny, 80°F  
Date of Last Inspection: 9/5/07

**II. INSPECTION SUMMARY**

**1. Groundcover**

**A. Estimated Groundcover** (Note a percentage of groundcover by herbaceous species; note evidence of areas of bare/sparse vegetation; note any damage from trespassing or herbivory; note any physical changes since last inspection, etc.)

- Eastern portion of Newell Street parking lot area and portion of the "wooded area" - 95% to 100% total groundcover; 80% of the species observed from seed mix.
- Western portion of Newell Street parking lot area (area west of wooded area) - 95% to 100% total groundcover; 80% of the species observed from seed mix. Six areas within the western portion of the Newell Street parking lot area were identified as having 70% to 75% total groundcover; 75% of the species observed from seed mix.

**B. Presence of Invasive Species** (Note a percentage of area occupied by invasive species; note the species present including but not limited to the following: Amur honeysuckle, Autumn olive, Black locust, Black swallow-wort, Common barberry, Common buckthorn, Garlic mustard, Glossy buckthorn, Goutweed or Bishop's weed, Japanese barberry, Japanese honeysuckle, Japanese knotweed, Morrow's honeysuckle, Morrow's X Tartarian honeysuckle [hybrid], Multiflora rose, Norway maple, Oriental bittersweet, Phragmites - Reed grass, Porcelain berry, Purple loosestrife, Russian olive, Tartarian honeysuckle, or Yellow iris, etc.)

- Several Autumn olive and/or Russian olive saplings were observed and removed. Total percentage of area occupied by these species was observed to be less than 1%.

**2. Bluebird box to be inspected on a yearly basis for 3 years.** (Note any evidence of damage and the extent of damage such as the need to be replaced.)

- Bluebird box observed to be in good condition.

**3. Other Observations** (Confirm that repair/maintenance measures identified during prior inspection have been performed; note any other general observations, including parcel-specific restoration activities.)

- Temporary access road previously installed from the north end of the asphalt access road to just south of the riverbank was observed to have adequate groundcover.
- Upper three inches of topsoil within the NRRE areas was sampled for pH and pK analyses in fall 2007.
- One fertilizer application was installed during fall 2007.
- Erosion control mat was removed from swale and access road areas. Topsoil and Trustee-proposed seed mix was installed spring 2008.
- Topsoil, Trustee-proposed seed mix, and annual rye was installed spring 2008 at certain areas where topsoil was minimal and at areas exhibiting only 70% to 75% groundcover.
- All other NRRE areas not addressed with topsoil, were over-seeded with Trustee-proposed seed mix in spring 2008.
- Minimal erosion observed in northern-most portion of the swale (adjacent to Housatonic River) located in the western portion of the Newell Street parking lot area.

**III. FOLLOW-UP MAINTENANCE AND REPAIR ACTIVITIES**

- Install additional topsoil and Trustee-proposed seed mix in the six areas identified above as having 70% to 75% groundcover.
- Install additional topsoil and Trustee-proposed seed mix in eroded swale area noted above.
- Install no more than 2 inches of straw mulch cover over areas addressed with topsoil and Trustee-proposed seed mix.

**ATTACH ADDITIONAL INFORMATION AS APPROPRIATE**



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**Attachment B**

Photo Log



Photo #1: Herbaceous Cover on Western Portion of NRRE Areas on Parcel J9-23-12  
Photo taken from "former wooded area" in a western direction.



Photo #2: Herbaceous Cover within Swale on Parcel J9-23-12  
Photo taken from riverbank in a southern direction.

Client: General Electric Company
Project Name: Newell Street Area II
Project Location: Pittsfield, Massachusetts



Photo #3: Herbaceous Cover on Western Portion of NRRE Areas on Parcel J9-23-12  
Photo taken from riverbank in a southwestern direction.



Photo #4: Portion of Herbaceous Cover Requiring Follow-up Maintenance Activities  
Photo taken from riverbank in a southeastern direction.

Client: General Electric Company

Project Name: Newell Street Area II

Project Location: Pittsfield, Massachusetts

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Photo #5: Portion of Herbaceous Cover Requiring Follow-up Maintenance Activities  
Photo taken from riverbank in a southeastern direction.



Photo #6: Portion of Herbaceous Cover Requiring Follow-up Maintenance Activities  
Photo taken from access road in an eastern direction.

Client: General Electric Company

Project Name: Newell Street Area II

Project Location: Pittsfield, Massachusetts

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Photo #7: Portion of Herbaceous Cover Requiring Follow-up Maintenance Activities  
Photo taken from southern portion of site in a northern direction.



Photo #8: Portion of Herbaceous Cover Requiring Follow-up Maintenance Activities  
Photo taken from southern portion of site in a northern direction.

Client: General Electric Company

Project Name: Newell Street Area II

Project Location: Pittsfield, Massachusetts

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Photo #9: Portion of Herbaceous Cover Requiring Follow-up Maintenance Activities  
Photo taken from southern portion of Parcel J9-23-12 in a northern direction.



Photo #10: Newly Established Herbaceous Cover Along Access Road  
Photo taken from southern portion of Parcel J9-23-12 in a northern direction.

Client: General Electric Company

Project Name: Newell Street Area II

Project Location: Pittsfield, Massachusetts

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Photo #11: Newly Established Herbaceous Cover Along Access Road  
Photo taken from southern portion of Parcel J9-23-12 in a northern direction.



Photo #12: Newly Established Herbaceous Cover Along Access Road  
Photo taken from southern portion of Parcel J9-23-12 in a northern direction.

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Client: General Electric Company  
Project Name: Newell Street Area II  
Project Location: Pittsfield, Massachusetts

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