

**MONITORING AND  
MAINTENANCE PLAN  
FOR  
ENVIRONMENTAL COVENANT**

**MARY-LEILA LOFTS  
316 NORTH WEST STREET  
GREENSBORO, GREEN COUNTY, GEORGIA  
GEC PROJECT NO.: 130254.242**

**PREPARED BY  
GEOTECHNICAL & ENVIRONMENTAL CONSULTANTS, INC.  
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MACON, GEORGIA 31204**

**March 9, 2018**

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## **1.0     INTRODUCTION**

The Mary-Leila Lofts project involves the redevelopment of a former mill into a residential apartment complex. The site has been evaluated for environmental concerns and has entered into the Brownfield Program of the Department of Natural Resources Environmental Protection Division (EPD). The property has concentrations of metals and semi-volatile organic compounds (SVOCs) in soil above Types 1, 2, 3, or 4 Risk Reduction Standards (RRSs). The property has been brought into compliance with soil RRSs using soil excavation and removal procedures, and a Type 5 RRS remedy for areas where Types 1 thru 4 could not be achieved. The Type 5 remedy was implemented using engineering and institutional controls to restrict access and exposure to the subsurface contaminants that were left in place. The area in compliance with the Type 5 RRS is referred to as the Area of Concern (see Figure 2 of Appendix I). The engineering controls include the installation of a nearly impervious cap of 3" thick asphalt or concrete over the entire Area of Concern where soils exceed Types 1 thru 4 RRS. The institutional controls are in the form of an Environmental Covenant with use restrictions on the Area of Concern. This Monitoring and Maintenance Plan is required by the Environmental Covenant. The Monitoring and Maintenance Plan describes the requirements for inspecting, repairing and reporting the conditions of the capped Area of Concern of the Mary-Leila Lofts property.

## **2.0     ENGINEERING CONTROLS**

The purpose of the Engineering Controls is to prevent human contact or exposure with those soils impacted with metals or SVOCs above Types 1 thru 4 RRS and to minimize infiltration of rain into these soils. **ALL** concrete and asphalt covered areas including parking lots, sidewalks, driveways and the Pavilion have been included as the part of the Type 5 RRS Area of Concern. The parking lot pavement system has been constructed with three (3) inch thick layer of asphalt. Concrete thickness for sidewalks and the pavilion pad ranges from three (3) to six (6) inches. Prior to the installation of the asphalt in some areas, a 24 inch thick layer of "clean" fill material was brought from off site to cover the impacted soil and/or the soil was stabilized with soil-cement.

As shown on Figure 2 of Appendix I, this Area of Concern includes **ALL** concrete and asphalt covered areas including parking lots, sidewalks, driveways and the Pavilion, with the exception of two small utility islands located in the northern and southern parking lots. The impacted soil in the utility island areas is below a 24 inch thick layer of "clean" fill material that was stabilized with soil-cement and landscaped with grass and shrubbery. The impervious cap has been constructed with positive drainage towards storm inlets and/or towards landscaped areas.

Should the Property Owner wish to change, alter the design, or reduce the extent of the cap in the Area of Concern, an amendment to the Brownfield Corrective Action Plan shall be developed and submitted to the EPD Brownfield Program for approval of such activities.

The Owner of the Property must also give thirty (30) days advance written notice to EPD of the Owner's intent to change the use of the Area of Concern, apply for building permit(s), or perform any site work if such actions would negatively affect or modify the effectiveness of the engineered controls described in the Environmental Covenant. In case of an emergency

situation requiring immediate action, the Property Owner shall provide notice to EPD as soon as possible.

### **3.0 MAINTENANCE AND INSPECTIONS**

#### **3.1 Uses Damaging the Integrity of the Cap**

Activities and uses of the property must not damage the integrity of the asphalt and concrete cap in the Area of Concern. When intrusive activities are necessary, the extracted soil will be disposed of offsite in accordance with applicable local, state, and federal rules and regulations governing the disposal of such material.

#### **3.2 Cap Penetrations and Repairs**

The asphalt and concrete cap may be penetrated in order to perform work necessary to install, maintain, or repair utilities, structures, and engineering controls. All such activities must be performed in a manner to minimize the release of, or exposure to, the contaminants in the subsurface soil beneath the Area of Concern cap in accordance with this Monitoring and Maintenance Plan.

Placement of contaminated soils back into the excavation is not acceptable, and any excavated soil from the capped Area of Concern shall be properly characterized for disposal and transported and disposed of at an appropriate disposal facility. Recapping of the site is necessary unless all the impacted soil in the excavated area is removed and replaced with “clean” fill meeting Types 1 thru 4 RRS. Intrusive activities must be performed by personnel with proper environmental safety training and in accordance with a Health and Safety Plan.

#### **3.3 Site Inspections**

Annual maintenance and inspections of the cap in the Area of Concern must be performed by persons with knowledge of the requirements of this Maintenance and Monitoring Plan. The annual inspection should be performed during the 2nd quarter of each year. An Inspection Log to be completed for each inspection is provided in Appendix II. Completed forms will be kept in a 3-ring binder with the Mary-Leila Lofts Monitoring and Maintenance Plan. The binder will be kept onsite in the main office.

Should any damages or other changes be observed during the inspection, these will be recorded in the Inspection Log and brought to the attention of the Property Manager. The Property Manager will confirm what actions must be taken to return the cap in the Area of Concern to its original condition. Once complete, the actions taken will be described on the Inspection Log and the completed form will be returned to the 3-ring binder.

Maintenance personnel walk the grounds on a routine basis during performance of their regular duties. If during these routine activities maintenance personnel observe damage to the cap in the Area of Concern, or conditions that warrant correction as described herein, they shall note the condition and date on the inspection log and advise the Property Manager, as if it was part of the routine annual inspection, so appropriate action may be taken.

The capped Area of Concern includes *ALL* concrete and asphalt covered areas including parking lots, sidewalks, driveways and the Pavilion pad, as well as a 24” thick layer of fill material in each of the two landscaped islands in the northern and southern parking lots, as shown on Figure 2 in Appendix I. In the Area of Concern, asphalt and concrete pavement (including curbing, and sidewalks) must be inspected along the entire surface. The Area of Concern must be inspected for:

- Potholes;
- Washout/ erosion at the ground surface;
- Damage to pavement or concrete that expose underlying soil; and
- Large cracks (at least one half inch wide or wide enough for a writing pen to fit inside the crack) or holes that expose underlying soil; and
- Property markers (6) for the Area of Concern are readable and unobstructed.

Inspections of the landscaped islands must also be performed. These islands must be inspected for:

- Washout/ erosion at the ground surface; and
- Damage to pavement or concrete that expose underlying soil; and

The northern most grassed area must be inspected to confirm the area is not being used for Residential purposes.

If any of these deficiencies are observed, they should be noted in the Inspection Log and reported to the Property Manager immediately. The deficiency must be corrected as soon as practicable but within 60 days and the type of corrective action noted on the Inspection Log, and when it was completed.

#### **4.0 UTILITY WORK**

Before any subsurface utility (electric, gas, cable, sewer, sprinklers, etc.) work is performed in the Area of Concern, the Property Manager shall ensure the utility workers are given a copy of this Monitoring and Maintenance Plan and ensure they follow the procedures therein, as well as according to their Health and Safety Plan.

#### **5.0 AREA OF CONCERN MARKERS**

The Environmental Covenant stipulates that the Property have markers that identify the Type 5 Area of Concern as a restricted area of the Property (language as shown in Appendix II). Six (6) markers consisting of 18 inch by 18 inch granite slabs or similar material are placed around the Area of Concern as shown on Figure 2. The visibility, legibility and structural integrity of the markers must be maintained. The markers must be inspected during the Annual inspection and as noted during routine landscaping maintenance. The results of the Annual Inspection must be documented on the Inspection Log. All maintenance of the markers must be documented on the Inspection Log. If major damage is noted, the affected marker must be repaired or replaced within sixty (60) days of discovery.

## 6.0 ANNUAL REPORT AND CERTIFICATION

The information in the Inspection Log is to be summarized by the Property Manager or the Owner for inclusion in the Annual Report and Certification that must be submitted annually to the Georgia EPD, Brownfield Program for the Mary-Leila Lofts Redevelopment. The Annual Certification must confirm that the use of the Type 5 Area of Concern has not changed and that the capping systems remain intact. If no significant maintenance activities have been required, the Annual Report and Certification shall state:

- All hard surface capping materials in the Area of Concern of the Property remained secure and intact during the past twelve months.
- The northern grassy area of the Property (shown in Figure 2) continues to only be used for non-residential purposes.

If during the annual period, activities cause penetration or breaching of the cap in the Area of Concern, or if significant maintenance or repair activities have been performed, the Annual Report and Certification shall also include a brief summary of such activities.

The report, to be submitted to EPD, Brownfield Program annually by July 1, shall consist of a letter with the below certification statement, a copy of the completed Inspection Log (example in Appendix II), and, if necessary, the brief summary mentioned above. The letter must contain the name of the person EPD should contact regarding the Property Inspection, as well as the mailing address, telephone number, and email of that person. The letter must also include a Property Use Statement regarding compliance with the CSR and RRS for the site and the following certification:

*I certify that this document and all attachments were prepared under my direction and supervision to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who are responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information to a State agency.*

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Signature

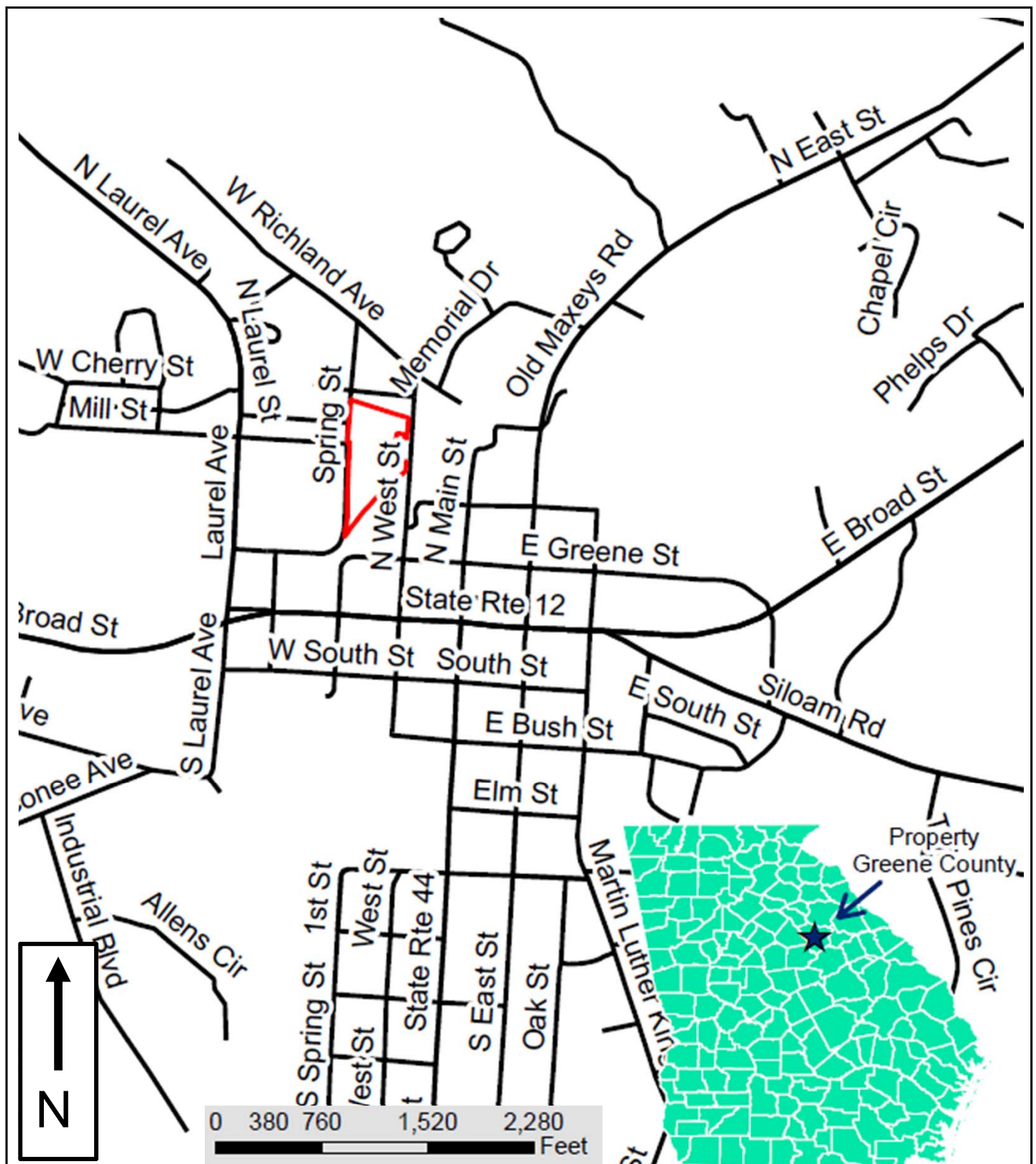
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Date

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Printed Name and official title

## **APPENDIX I**



**Figure 1**  
**Site Location Map**  
**Mary-Leila Lofts**  
**316 North West Street**  
**Greensboro, Greene County, Georgia**  
**GEC Project No. 130254.242**  
**Approximate Scale: As Shown**

**GEC**  
**GEOTECHNICAL**  
**&**  
**ENVIRONMENTAL**  
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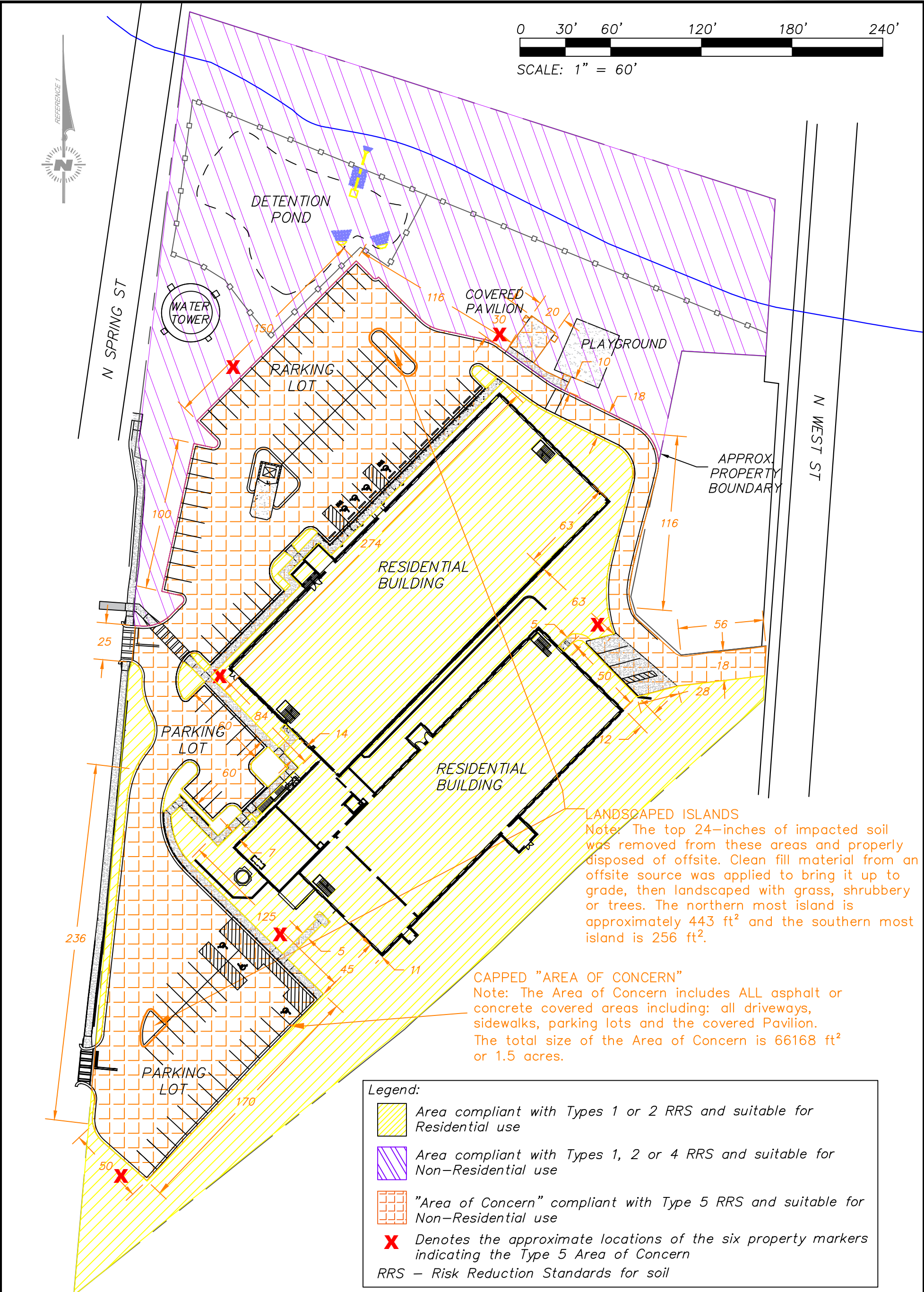


Figure 2  
Property and Area of Concern  
Mary-Leila Lofts  
316 North West Street  
Greensboro, Greene County, Georgia  
GEC Project No. 130254.242

## **APPENDIX II**

**MARY-LEILA LOFTS  
INSPECTION LOG**

Inspected Areas	Mark Yes (Y) or No (N)	Does the item require repair or attention? (Include note if needed)	Location of item requiring repair	Date of correction & Action Taken
<b>Southern Parking Lot (Including Driveways)</b>				
Pot holes?				
Washout/erosion at the ground surface?				
Damage to structures that expose underlying soil?				
Large cracks or holes that expose underlying soil?				
Landscaped island undisturbed?				
Area of Concern markers in good condition and in-tact?				
<b>Northern Parking Lot (Including Driveways)</b>				
Pot holes?				
Washout/erosion at the ground surface?				
Damage to structures that expose underlying soil?				
Large cracks or holes that expose underlying soil?				
Landscaped island undisturbed?				
Area of Concern markers in good condition and in-tact?				

<b>Concrete Pavement (Sidewalks and Pavilion Pad)</b>				
Covered Pavilion Pad intact?				
Pot holes?				
Washout/erosion at the ground surface?				
Damage to structures that expose underlying soil?				
Large cracks or holes that expose underlying soil?				
Area of Concern markers in good condition and in-tact?				
<b>Entire Property</b>				
Residential use limited to main buildings				

Additional notes:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Inspected by (Signature):** \_\_\_\_\_

**Inspected by (Name):** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Phone #:** \_\_\_\_\_

AREA OF CONCERN MARKER STATEMENT

## **RESTRICTED AREA**

**ASPHALT, CONCRETE, AND  
SUBSURFACE  
SUBJECT TO  
ENVIRONMENTAL COVENANT**

**CONTACT THE ONSITE  
PROPERTY MANAGER  
PRIOR TO DIGGING OR  
COMMENCING ANY LAND  
DISTURBING ACTIVITY**

*ADDITIONAL INFORMATION MAY BE OBTAINED  
BY CONTACTING THE GEORGIA  
ENVIRONMENTAL PROTECTION DIVISION –  
BROWNFIELD PROGRAM*

## EXAMPLE OF ANNUAL LETTER

[Date]

Brownfield Program  
Georgia Environmental Protection Division  
2 Martin Luther King, Jr. Drive S.E., Suite 1054 East  
Atlanta, GA 30334

**Re: Annual Inspection Report  
Mary-Leila Lofts Redevelopment  
316 North West Street  
Greensboro, Georgia**

This document serves as the Annual Inspection Report for Mary-Leila Lofts Redevelopment, Greensboro, Georgia referred to herein as the "Property".

### **Property Use Statement**

The Property is in compliance with the following statements:

- All hard surface capping materials in the Area of Concern at the Property remained secure and intact during the past twelve months.
- The northern grassy area of the Property continues to only be used for non-residential purposes (as identified in Figure 2 of the Monitoring and Maintenance Plan).

### **Attachments**

Attachments to this report are as follows:

- Annual Inspection Log(s)
- Summary report of penetrations, breaches, repairs, or significant maintenance to the cap system in the Area of Concern *(if any performed)*

### **Certifications**

*I certify that this document and all attachments were prepared under my direction and supervision to assure that qualified personnel properly gather and evaluate that information submitted. Based on my inquiry of the person or persons who are responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information to a State agency.*

---

Authorized Signature

If you have any questions, please call.

Sincerely,  
[Printed Name and Title]  
[Address]  
[Phone]  
[Email Address]