SPECTRA
ENVIRONMENTAL GROUP, INC.
ENGINEERING, ARCHITECTURE & SURVEYING, PC

September 30, 2015

Bureau Chief or Regional Hazardous Waste
Remediation Engineer
Supervising Project Manager
Environmental Remediation
NYS Department of Environmental Conservation
625 Broadway
Albany, New York 12233

Mr. Mark Sergott, Public Health Specialist
New York State Department of Health
Bureau of Environmental Exposure Investigation
Empire State Plaza – Corning Tower Room 1787
Albany, New York 12237

Ms. Karen Cahill
Division of Environmental Remediation
NYS Department of Environmental Conservation
615 Erie Boulevard West
Syracuse, New York 13204-2400

Division of Environmental Enforcement
Department of Environmental Conservation
625 Broadway, 14th Floor
Albany, New York 12233-5500

Re: Destiny – Brownfield Site Cleanup - Phase I Site
Periodic Review Report and Annual Certification – September 2014 - August 2015
Site Name: Oil City/Carousel Center – Phase I
Site No.: C734104

Dear Sir or Madame:

Enclosed please find the Periodic Review Report (PRR) and Annual Certification for the above captioned site. This report is submitted in compliance with the Brownfield Cleanup Agreement for the Site (execution date June 28, 2005) under the New York State Brownfield Cleanup Program. New York State Department of Environmental Conservation issued a certification of completion for the Phase I Site remedial program on December 2, 2011.

Additional engineering and institutional controls are in place at the site pursuant to prior cleanup agreements. This includes the foundation wells that maintain the water table below the elevation of the Carousel Mall underground parking area, the Hess collection trench and the Clark cell control system. Based on observation (absence of flooding in the garage and discharge monitoring results under the New York SPDES program), these controls are functioning adequately and are not addressed in the PRR.

Sincerely,

SPECTRA ENVIRONMENTAL GROUP, INC.

Paul M. Adel

Paul M. Adel, P.E.
Project Manager

Attachment

cc w/att: David Aitken, Destiny

PMA/FRP/m²
G:\2015\15188\Reports\PRR 2015\Cover Letter for Periodic Review Report Sept. 2015.doc

ENVIRONMENTAL GROUP, INC.
ENGINEERING, ARCHITECTURE & SURVEYING, PC

PERIODIC REVIEW REPORT
AND
ANNUAL CERTIFICATION
FOR SEPTEMBER 2014-AUGUST 2015

OIL CITY/CAROUSEL CENTER - PHASE I SITE (#C734104)
DESTINY USA, SYRACUSE, NEW YORK

Prepared for:

New York State Department of Environmental Conservation Region 7

March 2009 Aerial Photograph

Prepared by:

Spectra Engineering, Architecture and Surveying, P.C.
19 British American Boulevard
Latham, New York 12110

SEPTEMBER 2015

PERIODIC REVIEW REPORT AND ANNUAL CERTIFICATION
FOR REPORTING PERIOD SEPTEMBER 2014-AUGUST 2015
OIL CITY/CAROUSEL CENTER – PHASE I (#C734104)
DESTINY USA, SYRACUSE, NEW YORK

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1.0 INTRODUCTION AND DESCRIPTION OF REMEDIAL PROGRAM

1.1 INTRODUCTION

This is the third Periodic Review Report (PRR) and Annual Certification which is required as an element of the remedial program for the Oil City/Carousel Center - Phase I Site (#C734104), (hereinafter referred to as the "Phase I Site", or "the Expansion") pursuant to the Brownfield Cleanup Agreement (execution date June 28, 2005) under the New York State (NYS) Brownfield Cleanup Program (BCP) administered by New York State Department of Environmental Conservation (NYSDEC). A Certificate of Completion (COC) was signed on December 2, 2011.

1.1.1 General

Destiny USA Holdings, LLC and or its affiliates (Destiny) has remediated a 10.3 acre property located in Onondaga County, Syracuse, New York (the "Phase I Site") to address subsurface soil, groundwater and vapor contamination present within the Phase I Site boundaries. The Remedial Party, Destiny, was required to investigate and remediate contaminated media at the Phase I Site. The site location of the 10.3 acre area subject to this report is provided in Figure 1.

After completion of the remedial work, which included source removal of approximately 80,000 cubic yards of contaminated soil (see Phase I RWP), some residual contamination remained at depths well below finished grade. A Phase I Site Management Plan (Phase I SMP) was prepared to manage the residual material at the Phase I Site. All BCP reports associated with the Phase I Site can be viewed by contacting the NYSDEC or its successor agency managing environmental issues in New York State.

1.1.2 Purpose

This report represents the third Periodic Review and Annual Certification Report for the Destiny USA Phase I Site. The Phase I Periodic Review and Annual Certification Report have been prepared by Spectra Engineering, Architecture and Surveying, P.C. ("Spectra"), on behalf of Destiny, in accordance with the requirements set forth in the Phase I SMP. The report was prepared pursuant to Section 6.0 "Inspections, Reporting and Certifications" presented in the Phase I "Site Management Plan and Operations and Maintenance Plan" dated August 2009 and addresses the operation and maintenance of the Institutional Controls (ICs) and Engineering Controls (ECs) that are in place on the Phase I Site. A detailed description of all ECs and ICs was provided in the initial PRR report.

Per the SMP; the site owner or remedial party must submit to NYSDEC a written statement that certifies, under penalty of perjury, that: (1) controls employed at the Controlled Property are unchanged from the previous certification or that any changes to the controls were approved by

the NYSDEC; and, (2) nothing has occurred that impairs the ability of the controls to protect public health and environment or that constitute a violation or failure to comply with the SMP.

A Periodic Review Report is also required to be submitted to the Department annually in accordance with BCA regulatory reporting requirements.

This certification and periodic review shall be submitted annually, or at an alternate period of time as approved by the NYSDEC and will be made by an expert that the NYSDEC finds acceptable.

This report and supporting data covers the monitoring period of September 2014 to August 2015. This is the third annual report and annual certification completed for Phase I Site since remedy implementation.

Information contained in this report was provided by the site monitor and includes the following:

- Identification, assessment and certification of all ECs/ICs required by the remedy for the site; and
- A summary of monitoring data and/or information generated during the reporting period with comments and conclusions.

This periodic site evaluation also assesses the following:

- The compliance of the remedy with the requirements of the site-specific RAWP, ROD or Decision Document;
- The operation and the effectiveness of all treatment units, etc., including identification of any needed repairs or modifications;
- Any new conclusions or observations regarding site contamination based on inspections or data generated by the Monitoring Plan for the media being monitored;
- Recommendations regarding any necessary changes to the remedy and/or Monitoring Plan;
- The overall performance and effectiveness of the remedy; and
- Any observations, conclusions, or recommendations.

2.0 GENERAL SITE DESCRIPTION

The overall Destiny Site consists of approximately 152 acres at the southeast end of Onondaga Lake (a Class C water body). It is generally bounded by: Onondaga Lake and Conrail tracks, to the northwest; Interstate 81 (I-81) to the north and northeast; Bear Street on the south and southeast; and the New York State Barge Canal to the south and southwest. See Figures 1 and 2.

The Phase I Site is located in the southeast portion of the lands generally referred to as the Carousel Center site, between the existing Carousel Center building and West Hiawatha Boulevard. The Phase I Site consists of the area under the expansion area footprint as shown on Figure 2 "Site Plan". The remedy described in the Phase I RWP has been completed and is subject to the ongoing operation and maintenance requirements set forth in the Phase I Site Management/Operations and Maintenance Plan ("Phase I SMP"). Prior to the work described in the Final Engineering Report, the Phase I Site consisted of surface parking lots and associated driveway areas. Prior to 1990, a portion of each of the following uses was located in the area of the Phase I Site: Marley Scrap Yard, Buckeye Petroleum Tank Farm, and the Amerada Hess Petroleum Tank Farm.

Land uses surrounding the Destiny Site consists generally of business districts and mixed residential property to the north and east. Vacant land abuts the property to the south-southeast. The Onondaga County Metropolitan Sewage Treatment Plant is located across the Barge Canal to the south-southwest.

3.0 DESCRIPTION OF SELECTED REMEDY

The remedy selected for the Phase I Site was – Excavation, Vapor Barrier with Vapor Control and Capping. See Phase I RWP, §2.0, Alternative 4.

The selected remedy was chosen because it met the criteria established in the BCP program, including the protection of public health and the environment (including groundwater, drinking water, surface water, air, indoor air and sensitive populations) and was consistent with remedies approved and implemented at other NYSDEC-approved BCP sites with similar contamination and proposing a similar use. The selected remedy included both institutional and engineering controls, which are described below. The remedy is appropriately protective to allow the Phase I Site to be used for restricted-residential (other than single family houses), commercial, or industrial purposes.

3.1 ENGINEERING CONTROLS

Soil Cover

Exposure to residual soil contamination at the Phase I Site is prevented by a four inch layer of clean sand, a vapor barrier, and a 15-inch thick concrete slab on grade.

Procedures for the inspection and maintenance of this cover are provided in the Monitoring Plan included in Section 4 of the Phase I SMP.

Vapor Control and Vapor Barrier System

The vapor control pipe network uses 2-inch diameter slotted schedule 40 PVC pipe, which has been installed under the floor slab. Parallel laterals are laid no more than 40 feet apart on center. Perforations for the piping are 0.020 inch wide circumferential slots. The slotted pipe is wrapped with filter fabric. All ends are capped with piping connections and end caps glued with PVC cement to prevent separation. The piping network is divided into six sections (galleries) with each gallery covering approximately 75,000 sq. ft. of floor area.

Two inch diameter Schedule 40 PVC solid pipe was installed to connect each gallery to an in-line axial fan. The fans extract air from the subslab environment and exhaust on the roof of the expansion. Each independent gallery of the sub-slab pipe network was originally de-pressurized by an in-line axial fan in the solid gallery riser pipe, located on the second level. In April and May, 2012 the six fans were replaced by three regenerative blowers located in three separate weather enclosures on the roof. The vapor control system exhaust is vented above the building roofline. This system is similar to the sub-slab depressurizing systems employed in radon-affected areas.

The riser location for each gallery is shown on the vapor control system construction drawings provided in the Final Engineering Report and in the 2012 Periodic Review Report.

The pressure in the vapor control galleries is maintained lower than the ambient pressure in the occupied spaces of the expansion. This ensures that vapors emanating from soil beneath the building move towards the pipe gallery, to be captured and vented safely outside of occupied space. The system produces a vacuum on the collection gallery risers in the range of 2 to 3 inches of water ("IWG").

Vapor Barrier

A vapor barrier was installed that extends from the façade of the existing building to the perimeter of the Phase I Expansion area to establish a continuous sealed vapor barrier beneath the concrete slab floor.

During piping installation, the vapor barrier material was used to create an apron (min 24 inch wide) around each riser stub. Each riser stub was sealed to the apron and to the ground sheet with butyl mastic tape in concentric rings around the riser pipe. A minimum 4 inch wide air tight seal was created.

Adjacent sheets of vapor barrier material were overlapped by a minimum of 18 inches and sealed with a continuous strip of butyl mastic double sided tape, with a minimum 4 inch wide seal to create an air tight joint.

The vapor barrier extends at least 12 inches onto the top of each concrete pile cap or grade beam. The vapor barrier is adhered to concrete with butyl mastic double sided tape with a minimum 4 inch wide air tight seal.

Conduit bundles extending through the concrete slab are wrapped together with the vapor barrier extending a minimum of 4 inches above top of concrete slab. The open portion of the vapor barrier has been sealed with foam or silicon joint compound to create an air tight plug.

The vapor barrier was loosely laid between pile caps to prevent membrane tension. The vapor barrier contains a minimum 18-inch wide tension relief fold between the pile caps. The longitudinal lap seal between side-by-side sheets may not fall within the Tension relief fold. The tension relief fold may cross lap seal at ends of sheets.

Prior to pouring the floor slab, the vapor barrier was inspected for the integrity of joints and membrane material, and for proper tension relief construction. Membrane tension was relieved by splicing additional sheet material, using the lap seal requirements above (See Figure 4).

Procedures for operating and maintaining the vapor control system are documented in the Operation and Maintenance Plan (Section 4 of the Phase I SMP). Procedures for monitoring the system are included in the Monitoring Plan (Section 3 of the Phase I SMP). The Monitoring Plan also addresses severe condition inspections in the event that a severe condition, which may affect controls at the site, occurs.

Groundwater Controls

The selected remedy does not include engineering controls for groundwater contamination at the Phase I Site. Removal of contaminated soil has a beneficial effect on groundwater conditions by eliminating sources. The concrete slab covering the Phase I Site functions as a cap that prevents infiltration of precipitation that might otherwise come in contact with residual contaminated soil. These controls will restrict dermal contact, inhalation and ingestion of water. In addition, the institutional controls discussed below, restrict the use of groundwater on the Phase I Site for any purpose unless it is first treated in a manner deemed acceptable to the NYSDEC to render such groundwater safe for the purpose for which it will be used. These measures preclude the need for any groundwater treatment on the Phase I Site.

Notwithstanding these protections, in the event contaminated groundwater leaves the Phase I Site it is captured and appropriately treated by an existing groundwater control and treatment facility located downgradient of the Phase I Site (See Figure 3). These controls include:

a. A groundwater collection trench located down gradient of the Phase I Site collects and treats potentially migrating contaminants before they could migrate to locations off of the Carousel Center;

b. A slurry wall around Carousel Center which is designed to limit groundwater flow across the Phase I Site; and

c. The existing Carousel Center foundation wells which continuously pump and treat the Phase I Site groundwater through an on-site wastewater collection and treatment system prior to discharge through a NYSDEC SPDES permitted outfall. The foundation pumping system is designed to create a hydraulic gradient towards the foundation well intake which further limits any threat of offsite migration of contaminants through groundwater.

Each of these facilities are operated pursuant to requirements established by and under the supervision of NYSDEC.

In addition, because of capping and lining of features at and adjacent to the Phase I Site, the community is not exposed to groundwater. Water for the Phase I Site is supplied by an existing municipal water supply system.

3.2 INSTITUTIONAL CONTROLS

The selected remedy also includes institutional controls for the Phase I Site. The institutional controls provide the necessary non-physical protections and provide notice to properly limit potential human or environmental exposure to contaminants.

The institutional controls for the Phase I Site include establishment of an environmental easement that requires:

a. Compliance by the Grantor and the Grantor's successors and assigns with all elements of the NYSDEC-approved Site Management Plan/Operation, Maintenance and Monitoring Plan (which outlines the required activities, such as, inspection, monitoring, certification, operation, maintenance and repair);

b. Prohibition of groundwater use for potable or non-potable uses is prohibited on the Phase I Site without first undergoing a NYSDEC and/or NYSDOH approved treatment;

c. That all proposed ground-intrusive activities on the Phase I Site be conducted in accordance with the NYSDEC-approved Site Management Plan; and

d. A prohibition on any vegetable gardens on the surface of Phase I Site as per NYCRR Part 375-1.8(g)(2)(ii).

Institutional Controls identified in the Environmental Easement may not be discontinued without an amendment to or extinguishment of the Environmental Easement.

Site restrictions that apply to the Phase I Site are:

- The property may not be used for a higher level of use, such as unrestricted residential (i.e. single family houses), without additional remediation and amendment of the Environmental Easement, as approved by the NYSDEC;
- Ensure appropriate future use and that future property owners are aware of the existing conditions on the Phase I Site;
- All future activities on the property that will disturb remaining contaminated material must be conducted in accordance with the Phase I SMP;

- Include the required notifications prior to commencement of any ground-intrusive activities that may encounter contaminated materials. Notification of NYSDEC and any on-site workers will be required prior to excavating soil;
- The use of the groundwater underlying the property is prohibited without treatment rendering it safe for intended use; and
- Include notice of and information relating to a soil management plan, identifying requirements in the event of excavation, which will be included as part of the operations and maintenance monitoring plan (OM&M).

4.0 SUMMARY OF COMPLETED 2014-2015 SITE ACTIVITIES AND MONITORING

4.1 SYSTEM MAINTENANCE

During the current reporting period the following system maintenance activities were performed:

1. On January 8, 2015 the meter in Pump Room 318 was replaced.
2. On January 30, 2015 the meter in Pump Room 303 was replaced.

4.2 SYSTEM MONITORING

Consistent with the Site Management Plan, the pressure monitoring system is to be monitored on a monthly basis. Effective June, 2014 the responsibility to monitor the subslab vapor system was transferred from Spectra to Destiny USA. All monitoring, maintenance, and system reports will be maintained by Destiny USA and submitted to the certifying engineer for inclusion in the Periodic Review Report. Appendix A contains the annual system monitoring reports and documentation of maintenance events during the review period.

5.0 IDENTIFICATION, ASSESSMENT, AND CERTIFICATION OF ALL ECS/ICS

5.1 REMEDY COMPLIANCE

Compliance is established by application of the engineering and institutional controls described in the Site Management Plan. The engineering controls must be inspected, monitored, certified, operated and maintained. Institutional controls put restrictions on certain current site activities and future site use and management.

5.1.1 Engineering Controls

Engineering controls to prevent exposure to residual soil contamination consist of a four inch layer of clean sand, vapor collection galleries, a vapor barrier, and a 15-inch thick concrete slab on grade, and vapor control system. Observations during construction verified that the sand layer was in place, the vapor collection pipe network was constructed according to engineering specifications, the vapor barrier extended from the façade of the existing building to the perimeter of the Phase I Expansion area providing a continuous sealed vapor barrier, the concrete floor of the building was built to engineering specifications, the specified vent fans were installed on each vapor collection gallery, and the risers are vented above the building roofline.

There are no operational or maintenance activities associated with the impermeable membrane. Maintenance of the three regenerative blowers will continue at manufacturer recommended intervals, in accordance with the SMP.

The SMP specifies the schedule for monitoring the pressure in the system. The pressure in the vapor control galleries is maintained below the ambient pressure in the occupied spaces of the expansion, ensuring that vapors emanating from soil beneath the building move towards the pipe gallery, are captured, and vented safely outside of the occupied space. The system produces a vacuum in the collection galleries in the range of 2 to 3 inches of water ("IWG"). The monitoring records indicate that the proper pressure range was maintained during this reporting period.

5.1.2 Institutional Controls

The institutional controls consist of the implementation of provisions incorporated in an approved environmental easement, which includes restrictions on certain site activities that present and future site owners must observe. The environmental easement provisions have been implemented as follows:

- The current owner is implementing all elements of the Site Management Plan/Operation, Maintenance and Monitoring Plan;
- The impervious cap has been implemented with construction of the vapor barrier (sand layer, membrane and concrete floor) in accordance with engineering specifications;
- The soil vapor mitigation system has been constructed in accordance with engineering specifications, and is being operated, monitored, maintained, in accordance with the Site Management Plan;
- Groundwater is not being used for potable or non-potable uses on the Phase I Site;
- Ground-intrusive activities on the Phase I Site have been conducted in accordance with the Site Management Plan. Notifications are made to NYSDEC and on-site workers prior to commencement of these activities;
- There are no vegetable gardens on the surface of Phase I Site;
- The use of the property has not changed; and
- The property remains under the control as the owner of record during the remediation, therefore, the restrictions on future use that must be observed by future owners are not applicable for this reporting period.

5.2 SYSTEM EFFECTIVENESS

The riser fans maintain a vacuum on each collection gallery to ensure that vapors originating below the expansion area floor will not enter the occupied spaces in the expansion.

Vacuum pressure and vapor contaminant data were collected to assess the vapor control system's effectiveness and document trends in sub-slab vapor contaminant concentrations.

5.3 OBSERVATIONS AND CONCLUSION

The vapor control system has operated reliably over the course of this reporting period. The continuous vacuum applied by the vacuum systems provide assurance that the collection galleries are operating effectively and vapors originating below the expansion floor are not entering the occupied space.

As of this report date, the vapor control system is fully operational. Future reports will be prepared as required by regulation and/or agreement.

5.4 RECOMMENDATIONS

At the time of this reporting, there are no modifications needed to the vapor control system. The operation and monitoring routine should be continued unchanged. Any future interior

renovations or improvements that compromise the integrity of the vapor barrier will be conducted in accordance with the SMP.

5.5 REMEDY EFFECTIVENESS

The performance and effectiveness of the remedy is consistent with the objectives of the remedial work plans, the record of decision, and the provisions of the Site Management Plan. The engineering and institutional controls have provided adequate protection of public health during this reporting period. No additional modification of the controls, including the operation, maintenance, inspection and monitoring procedures currently in place, are needed at this time to provide continued future protection of public health.

6.0 ANNUAL CERTIFICATION

Certification Condition	Vapor Control System	Groundwater & Soil Restrictions
The inspection of the site to confirm the effectiveness of the institutional and engineering controls required by the remedial program was performed under my direction;	True	True
The institutional control and/or engineering control employed at this site is unchanged from the date the control was put in place, or last approved by the Department;	True (Note 1)	True
Nothing has occurred that would impair the ability of the control to protect the public health and environment;	True	True
Nothing has occurred that would constitute a violation or failure to comply with any site management plan for this control;	True	True
Access to the site will continue to be provided to the Department to evaluate the remedy, including access to evaluate the continued maintenance of this control;	True	True
If a financial assurance mechanism is required under the oversight document for the site, the mechanism remains valid and sufficient for the intended purpose under the document;	NA (Note 2)	NA (Note 2)
Use of the site is compliant with the environmental easement;	True	True
The engineering control systems are performing as designed and are effective;	True	NA (Note 3)
To the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program and generally accepted engineering practices; and	True	True
The information presented in this report is accurate and complete.	True	True

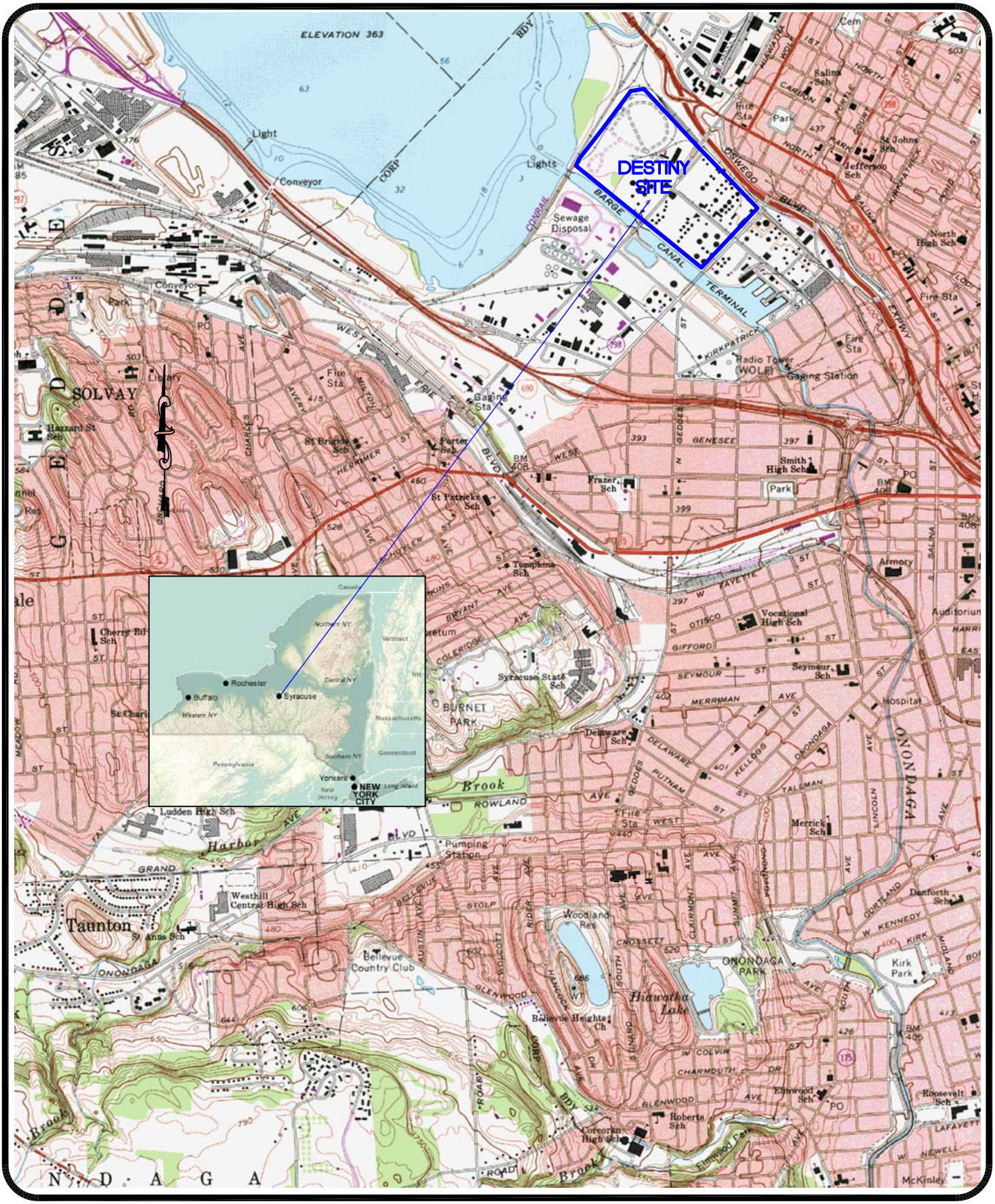
Note 1. Original six in-line axial fans replaced with regenerative blowers in May 2012.
Note 2. Circumstances have not required establishing a financial assurance mechanism.
Note 3. Groundwater and Soil Restrictions are institutional controls.

No new information has come to my attention, including groundwater monitoring data from wells located at the site boundary, if any, to indicate that the assumptions made in the qualitative exposure assessment of off-site contamination are no longer valid.

I certify that all information and statements in this certification form are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law. I, Paul M. Adel, P.E., of Spectra Engineering, Architecture and Surveying PC, 19 British American Boulevard, Latham, NY 12110, am certifying as Owner's Designated Site Representative for remediation engineering for the site.

075084-1	September 25, 2015	
NYS Professional Engineer #	Date	Signature

FIGURES

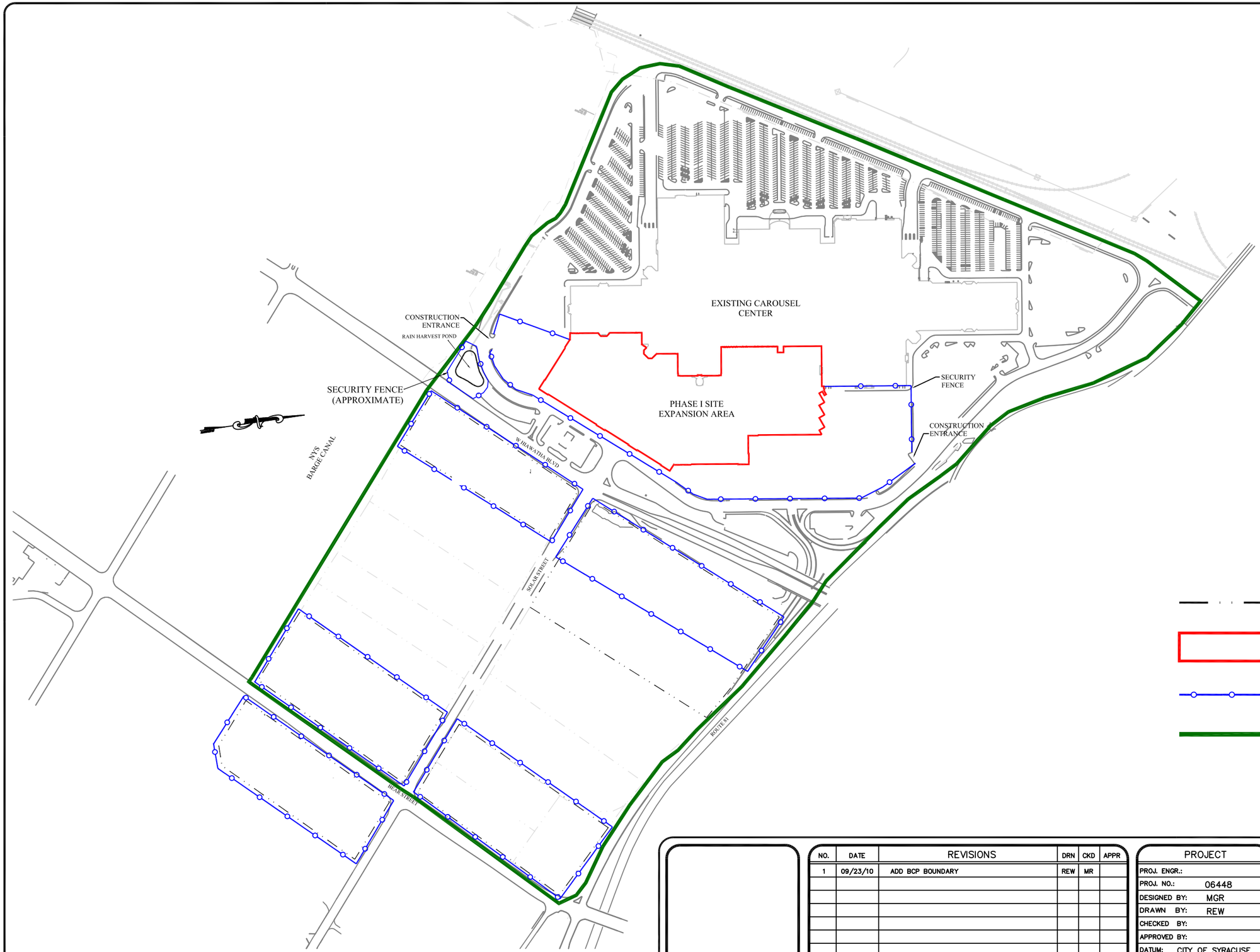


SPECTRA ENVIRONMENTAL GROUP, INC.
19 British American Blvd
Latham, NEW YORK 13202

DESTINY SITE
LOCATION MAP

ONONDAGA COUNTY — NEW YORK

PROJ. No.: 06448	DATE: 08/24/2010	SCALE: NOT TO SCALE	DWG. NO.06448SLMAP.DWG	FIGURE 1



LEGEND

- PARCEL BOUNDARIES
- PHASE I SITE BOUNDARY
- SECURITY FENCE
- APPROXIMATE BCP BOUNDARY (152 ACRES)

NOTE: MAP BASED ON DRAWINGS FROM O'BRIEN AND GERE ENGINEERS, INC. ISSUED FOR CONSTRUCTION 06/06/2007

NO.	DATE	REVISIONS	DRN	CKD	APPR
1	09/23/10	ADD BCP BOUNDARY	REW	MR	

PROJECT	
PROJ. ENGR.:	
PROJ. NO.:	06448
DESIGNED BY:	MGR
DRAWN BY:	REW
CHECKED BY:	
APPROVED BY:	
DATUM:	CITY OF SYRACUSE
CONTOUR INTERVAL =	NA

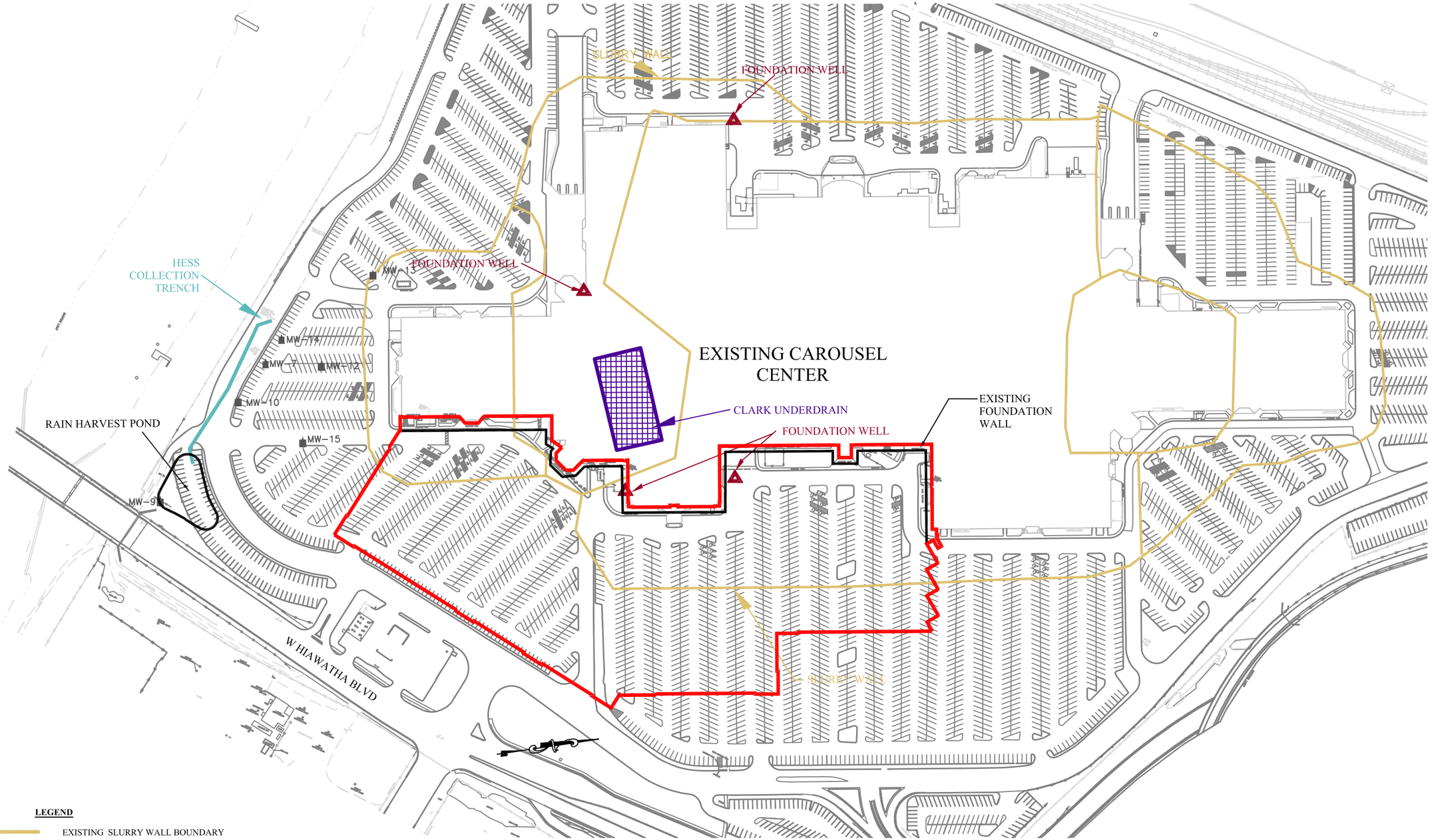
0 100' 200' 400'
1" = 400'

SITE PLAN
PHASE I SITE

CITY OF SYRACUSE, NEW YORK — ONONDAGA COUNTY

SPECTRA ENVIRONMENTAL GROUP, INC.
19 British American Boulevard
Latham, New York 12110
TEL (518) 782 0882 FAX (518) 782 0973

DATE: 08/24/10	SCALE: 1" = 400'	DWG. NO. 06448	FIGURE 2



LEGEND

- EXISTING SLURRY WALL BOUNDARY
- EXISTING FOUNDATION WELLS
- EXISTING CLARK UNDERDRAIN
- EXISTING HESS TRENCH
- MW-7 EXISTING MONITORING WELLS
- EXISTING TUNNEL WALL
- PHASE I SITE BOUNDARY

NOTE: MAP BASED ON DRAWINGS FROM O'BRIEN AND GERE ENGINEERS, INC. ISSUED FOR CONSTRUCTION 06/06/2007

NO.	DATE	REVISIONS	DRN	CKD	APPR

PROJECT	
PROJ. ENGR.:	
PROJ. NO.:	06448
DESIGNED BY:	MGR
DRAWN BY:	REW
CHECKED BY:	
APPROVED BY:	
DATUM:	CITY OF SYRACUSE
CONTOUR INTERVAL =	NA

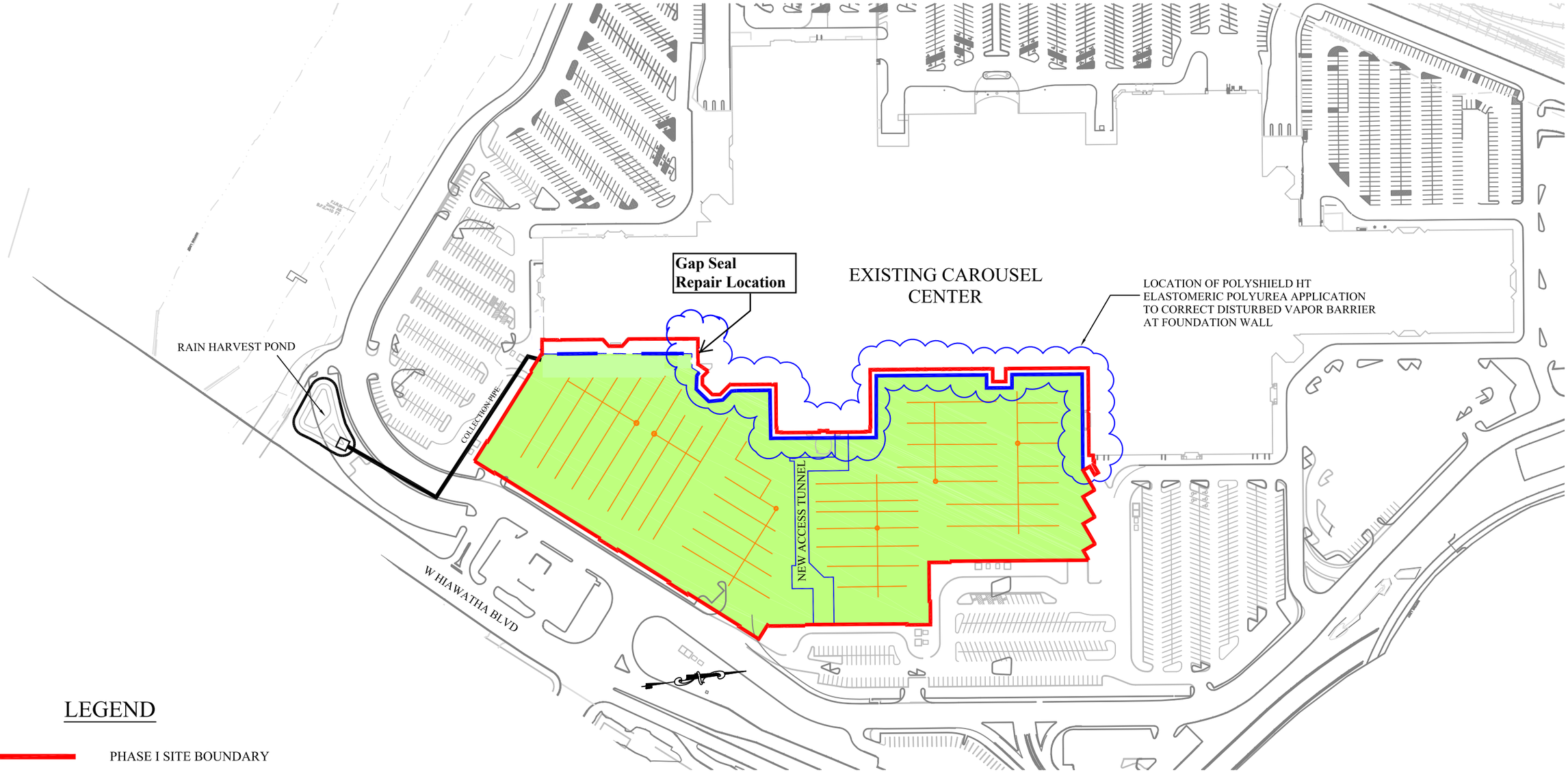
0 50' 100' 200'
1" = 200'

EXISTING HYDRAULIC CONTOLS PLAN PHASE I SITE

CITY OF SYRACUSE, NEW YORK — ONONDAGA COUNTY

SPECTRA ENVIRONMENTAL GROUP, INC.
19 British American Boulevard
Latham, New York 12110
TEL (518) 782 0882 FAX (518) 782 0973

DATE: 08/24/10	SCALE: 1" = 200'	DWG. NO. 06448	FIGURE 3



LEGEND

- PHASE I SITE BOUNDARY
- LIMITS OF VAPOR BARRIER
- VAPOR CONTROL PIPE LATERAL
- VAPOR CONTROL SYSTEM RISER AND BLOWER LOCATION (EXTENDS FROM 1ST FLOOR TO ROOF) SEE DETAILS SHEETS APPENDIX K

NOTE: MAP BASED ON DRAWINGS FROM O'BRIEN AND GERE ENGINEERS, INC. ISSUED FOR CONSTRUCTION 06/06/2007

NO.	DATE	REVISIONS	DRN	CKD	APPR

PROJECT	
PROJ. ENGR.:	
PROJ. NO.:	06448
DESIGNED BY:	MGR
DRAWN BY:	REW
CHECKED BY:	
APPROVED BY:	
DATUM:	CITY OF SYRACUSE
CONTOUR INTERVAL =	NA

0 50' 100' 200'
1" = 200'

ENGINEERING CONTROLS PLAN
PHASE I SITE

CITY OF SYRACUSE, NEW YORK — ONONDAGA COUNTY

SPECTRA ENVIRONMENTAL GROUP, INC.
19 British American Boulevard
Latham, New York 12110
TEL (518) 782 0882 FAX (518) 782 0973

DATE: 08/24/10 | SCALE: 1" = 200' | DWG. NO. 06448 | FIGURE 4

APPENDIX A

SYSTEM MAINTENANCE AND MONITORING RECORDS

DECEMBER 2014

2014 **Month:** DECEMBER

Control Panel Zone: 1 (Heat Pump Room 303)

Date	Initials	Initial Reading (Before Pump Shutdown) Gallery A	Gallery B	Manifold	Manifold Water Y/N	Final Reading (After Pump Restart) Gallery A	Gallery B	Manifold	Dust Drum Water Y/N
12/16/14	MT	3.8	3.8	—	2½ gal	3.8	3.8	—	N
12/23/14	MT	3.4	3.4	—	2½ gal	3.4	3.4	—	N
12/30/14	MT	3.4	3.4	—	2½ gal	3.4	3.4	—	N

In the event of Gage reading zero, or other indication of blower malfunction, notify Rob Schoeneck immediately. Document reason for zero reading/blower malfunction.

2014 **Month:** DECEMBER

Control Panel Zone: 2 (Heat Pump Room 310)

		Initial Reading (Before Pump Shutdown)				Final Reading (After Pump Restart)			
Date	Initials	Gallery A	Gallery B	Manifold	Manifold Water Y/N	Gallery A	Gallery B	Manifold	Dust Drum Water Y/N
12/16/14	MJ	3.2	3.2	—	N	3.2	3.2	—	N
12/23/14	MJ	3.2	3.2	—	N	3.2	3.2	—	N
12/30/14	MJ	3.2	3.2	—	N	3.2	3.2	—	N

In the event of Gage reading zero, or other indication of blower malfunction, notify Rob Schoeneck immediately. Document reason for zero reading/blower malfunction.

2014 **Month:** DECEMBER

Control Panel Zone: 3 (Heat Pump Room 318)

		Initial Reading (Before Pump Shutdown)				Final Reading (After Pump Restart)			
Date	**Initials**	**Gallery A**	**Gallery B**	**Manifold**	**Manifold Water Y/N**	**Gallery A**	**Gallery B**	**Manifold**	Dust Drum Water Y/N
12/16/14	mf	3.4	3.4	—	5½ gal	3.4	3.4	—	~~—~~ N
12/23/14	mf	3.4	3.4	—	5½ gal	3.4	3.4	—	~~—~~ N
12/30/14	mf	3.4	3.4	—	5½ gal	3.4	3.4	—	~~—~~ N

In the event of Gage reading zero, or other indication of blower malfunction, notify Rob Schoeneck immediately. Document reason for zero reading/blower malfunction.

JANUARY 2015

2015 **Month:** January 2015

Control Panel Zone: 2 (Heat Pump Room 310)

		Initial Reading (Before Pump Shutdown)				Final Reading (After Pump Restart)			
Date	**Initials**	**Gallery A**	**Gallery B**	**Manifold**	**Manifold Water Y/N**	**Gallery A**	**Gallery B**	**Manifold**	Dust Drum Water Y/N
1/13/15	MT	3.2	3.0	—	—	3.2	3.0	—	N
1/20/15	MT	3.4	3.4	—	—	3.4	3.4	—	N
1/26/15	MT	3.2	3.2	—	—	3.2	3.2	—	N

In the event of Gage reading zero, or other indication of blower malfunction, notify Rob Schoeneck immediately. Document reason for zero reading/blower malfunction.

201 **Month:** January 2015

Control Panel Zone: 3 (Heat Pump Room 318)

Date	Initials	Initial Reading (Before Pump Shutdown) Gallery A	Gallery B	Manifold	Manifold Water Y/N	Final Reading (After Pump Restart) Gallery A	Gallery B	Manifold	Dust Drum Water Y/N
1/13/15	MT	3.0	3.0	—	9.13	3.0	3.0	—	N
1/20/15	MT	2.8	2.8	—	9.96	2.8	2.8	—	N
1/27/15	MT	2.8	2.8	—	19.16	2.8	2.8	—	N

In the event of Gage reading zero, or other indication of blower malfunction, notify Rob Schoeneck immediately. Document reason for zero reading/blower malfunction.

2015 **Month:** _____

Control Panel Zone: 1 (Heat Pump Room 303)

Date	Initials	Initial Reading (Before Pump Shutdown) Gallery A	Gallery B	Manifold	Manifold Water Y/N	Final Reading (After Pump Restart) Gallery A	Gallery B	Manifold	Dust Drum Water Y/N
1/13/15	MT	5.0	5.0	—	2½ gal	5.0	5.0	—	N
1/20/15	MT	5.0	5.0	—	2½ gal	5.0	5.0	—	N
1/27/15	MT	4.0	4.0	—	2½ gal	4.0	4.0	—	N

In the event of Gage reading zero, or other indication of blower malfunction, notify Rob Schoeneck immediately. Document reason for zero reading/blower malfunction.

APRIL 2015

201 **Month:** March 2015

Control Panel Zone: 3 (Heat Pump Room 318)

Date	Initials	Initial Reading (Before Pump Shutdown) Gallery A	Gallery B	Manifold	Manifold Water Y/N	Final Reading (After Pump Restart) Gallery A	Gallery B	Manifold	Dust Drum Water Y/N
3/17/15	MF	3.4	3.4	—	2951	3.4	3.4	—	5 gal
3/24/15	MF	3.5	3.5	—	3113	3.5	3.5	—	5 gal
3/31/15	MF	3.2	3.2	—	3138	3.2	3.2	—	2 gal

In the event of Gage reading zero, or other indication of blower malfunction, notify Rob Schoeneck immediately. Document reason for zero reading/blower malfunction.

2015 **Month:** March 2015

Control Panel Zone: 1 (Heat Pump Room 303)

		Initial Reading (Before Pump Shutdown)				Final Reading (After Pump Restart)			
Date	Initials	Gallery A	Gallery B	Manifold	Manifold Water Y/N	Gallery A	Gallery B	Manifold	Dust Drum Water Y/N
3-17-15	MM	5.0	5.0	—	1870	5.0	5.0	—	5 gal
3-24-15	MM	3.8	4.2	—	1940	3.8	4.2	—	2 gal
3-31-15	MM	4.4	4.4	—	1946	4.4	4.4	—	2 gal

In the event of Gage reading zero, or other indication of blower malfunction, notify Rob Schoeneck immediately. Document reason for zero reading/blower malfunction.

2015 **Month:** March 2015

Control Panel Zone: 2 (Heat Pump Room 310)

		Initial Reading (Before Pump Shutdown)				Final Reading (After Pump Restart)			
Date	**Initials**	**Gallery A**	**Gallery B**	**Manifold**	**Manifold Water Y/N**	**Gallery A**	**Gallery B**	**Manifold**	Dust Drum Water Y/N
3-17-15	mf	2.6	2.6	—	0	2.6	2.6	—	5 gal
3-24-15	mf	2.4	2.6	—	0	2.4	2.6	—	5 gal
3-31-15	mf	2.4	2.6	—	0	2.4	2.6	—	2 gal

In the event of Gage reading zero, or other indication of blower malfunction, notify Rob Schoeneck immediately. Document reason for zero reading/blower malfunction.

AUGUST 2015

CONTROL PANEL ZONE : 1 (Heat Pump Room 303)

MINIMUM FREQUENCY: ONCE PER MONTH

OTHERWISE: AS OFTEN AS NECESSARY TO AVOID CONDENSATE ACCUMULATION

DATE	INITIALS	Initial Reading (Before Pump Shutdown)			Manifold Water (Y/N)	Final Reading (After Pump Restart)			Dust Drum Water (Y/N)
		Gallery A	Gallery B	Manifold		Gallery A	Gallery B	Manifold	
9/22/14	MT	3.6	3.8	—	3 gal	3.5	3.8	—	N
9/30/14	MT	3.6	3.8	—	2½ gal	3.6	3.8	—	N
10/7/14	MT	3.6	3.8	—	2 gal	3.5	3.6	—	N
10/15/14	MT	3.6	3.8	—	5 gal	3.6	3.6	—	N
10/21/14	MT	3.4	3.6	—	2½ gal	3.4	3.6	—	N
10/28/14	MT	3.4	3.6	—	5 gal	3.4	3.6	—	N
11/4/14	MT	3.6	3.6	—	5 gal	3.6	3.6	—	N
11/11/14	MT	3.2	3.6	—	5 gal	3.2	3.6	—	N
11/18/14	MT	3.2	3.4	—	4 gal	3.2	3.4	—	N
11/25/14	MT	4.0	3.8	—	5 gal	4.0	3.8	—	N
12/2/14	MT	3.4	3.4	—	5 gal	3.4	3.4	—	N
12/9/14	MT	4.0	4.0	—	5 gal	4.0	4.0	—	N
12/16/14	MT	3.8	3.8	—	2½ gal	3.8	3.8	—	N
12/23/14	MT	3.4	3.4	—	2½ gal	3.4	3.4	—	N
12/30/14	MT	3.4	3.4	—	2½ gal	3.4	3.4	—	N
1/6/15	MT	4.0	4.0	—	2½ gal	4.0	4.0	—	N
1/13/15	MT	5.0	5.0	—	2½ gal	5.0	5.0	—	N
1/20/15	MT	5.0	5.0	—	1.38	5.0	5.0	—	N
1/27/15	MT	4.0	4.0	—	4.00	4.0	4.0	—	N
2/3/15	MT	5.8	5.8	—	10.37	5.8	5.8	—	5 gal
2/10/15	MT	6.0	6.0	—	17.01	6.0	6.0	—	5 gal
2/17/15	MT	6.0	6.0	—	17.21	6.0	6.0	—	5 gal
2/24/15	KS	5.2	5.4	—	1725	5.2	5.4	—	5 gal
3/3/15	MT	5.0	5.0	—	1707	5.0	5.0	—	5 gal
3/10/15	MT	6.0	6.0	—	1584	6.0	6.0	—	5 gal
3/17/15	MT	5.0	5.0	—	1870	5.0	5.0	—	5 gal
3/24/15	KS	3.8	4.2	—	1940	3.8	4.2	—	2 gal
3/31/15	MT	4.4	4.4	—	1946	4.4	4.4	—	2 gal
4/7/15	MT	4.4	4.4	—	1957	4.4	4.4	—	2 gal
4/14/15	MT	3.4	3.4	—	1958	3.4	3.4	—	—
4/21/15	KS	2.5	2.6	—	1900	3.1	3.1	—	—
4/28/15	MT	3.0	3.0	—	1884	3.0	3.0	—	—
5/5/15	MT	3.0	3.0	—	1846	3.0	3.0	—	—
5/12/15	MT	2.8	2.8	—	1722	2.8	2.8	—	—
5/19/15	MT	2.6	2.6	—	2094	2.6	2.6	—	—
5/26/15	MT	2.4	2.4	—	2306	2.8	2.4	—	—
6/3/15	MT	2.8	2.8	—	2580	2.8	2.8	—	—
6/9/15	MT	2.6	2.8	—	2654	2.6	2.8	—	—
6/16/15	MT	2.2	2.6	—	2858	2.2	2.6	—	—
6/23/15	MT	2.6	2.8	—	3032	2.6	2.8	—	—
6/30/15	MT	2.6	2.8	—	3203	2.6	2.8	—	—
7/7/15	KS	2.6	2.8	—	3485	2.6	2.8	—	—
7/14/15	MT	2.2	2.2	—	3425	2.2	2.2	—	—
7/21/15	MT	2.2	2.2	—	3484	2.2	2.2	—	—
7/28/15	MT	2.2	2.2	—	3494	2.2	2.2	—	—
8/4/15	MT	2.8	2.8	—	3506	2.8	2.8	—	—
8/11/15	MT	2.8	2.6	—	3580	2.8	2.6	—	—

IN THE EVENT OF GAGE READING ZERO, OR OTHER INDICATION OF BLOWER MALFUNCTION, NOTIFY R. SCHOENECK IMMEDIATELY, DOCUMENT REASON FOR ZERO READING / BLOWER MALFUNCTION, DOCUMENT CORRECTIVE ACTION

Starting Meter Read 948 1/15/15 2/2/15 – 3008.72

Changed Meter – 1/30/15 – Reading 3033

CONTROL PANEL ZONE : 3 (Heat Pump Room 318)

MINIMUM FREQUENCY: ONCE PER MONTH

OTHERWISE: AS OFTEN AS NECESSARY TO AVOID CONDENSATE ACCUMULATION Meter

DATE	INITIALS	Initial Reading (Before Pump Shutdown)			Manifold Water (Y/N)	Final Reading (After Pump Restart)			Dust Drum Water (Y/N)
		Gallery A	Gallery B	Manifold		Gallery A	Gallery B	Manifold	
9/22/14	mf	4.5	4.4	—	2 gal	4.3	4.3	—	—
9/30/14	mf	4.6	4.5	—	2 gal	4.4	4.4	—	N
10/7/14	mf	4.5	4.4	—	1 gal	4.3	4.4	—	N
10/15/14	mf	4.6	4.6	—	4 gal	4.5	4.6	—	N
10/22/14	mf	4.2	4.0	—	2 gal	4.0	3.8	—	N
10/28/14	mf	4.2	4.2	—	5 gal	4.2	4.2	—	N
11/4/14	mf	4.0	3.8	—	5½ gal	4.0	3.8	—	N
11/11/14	mf	4.0	4.0	—	5½ gal	4.0	4.0	—	N
11/18/14	mf	3.6	3.5	—	5½ gal	3.5	3.5	—	N
12/2/14	mf	3.5	3.5	—	5½ gal	3.5	3.5	—	N
12/9/14	mf	3.4	3.4	—	5½ gal	3.4	3.4	—	N
12/16/14	mf	3.4	3.4	—	5½ gal	3.4	3.4	—	N
12/23/14	mf	3.4	3.4	—	5½ gal	3.4	3.4	—	N
12/30/14	mf	3.4	3.4	—	5½ gal	3.4	3.4	—	N
1/6/15	mf	3.4	3.5	—	5½ gal	3.4	3.4	—	N
1-6-15	S.O.	3.0	3.0	—	7.47	3.6	3.6	—	N
1/13/15	mf	3.0	3.0	—	9.13	3.0	3.0	—	N
1/20/15	mf	2.8	2.8	—	9.96	2.8	2.8	—	N
1/27/15	mf	2.8	2.8	—	19.16	2.8	2.8	—	N
2/3/15	mf	3.0	3.0	—	23.67	3.0	3.0	—	5 gal
2/10/15	mf	3.4	3.4	—	23.67	3.4	3.4	—	5 gal
2/17/15	mf	3.2	3.2	—	23.67	3.2	3.2	—	5 gal
2/24/15	KS	3.0	3.0	—	23.67	3.0	3.0	—	5 gal
3/3/15	mf	3.0	3.0	—	23.67	3.0	3.0	—	5 gal
3/10/15	mf	2.4	2.4	—	24.15	2.4	2.4	—	5 gal
3/17/15	mf	3.4	3.4	—	24.51	3.4	3.4	—	5 gal
3/24/15	mf	3.5	3.6	—	31.13	3.5	3.5	—	5 gal
3/31/15	mf	3.2	3.2	—	31.38	3.2	3.2	—	2 gal
4/7/15	mf	3.2	3.2	—	36.50	3.2	3.2	—	2 gal
4/14/15	mf	3.0	3.0	—	36.98	3.0	3.0	—	—
4/21/15	mf	3.8	3.8	—	39.60	3.8	3.8	—	—
4/28/15	mf	5.0	5.0	—	41.34	5.0	5.0	—	—
5/5/15	mf	4.5	4.5	—	41.57	4.5	4.5	—	—
5/12/15	mf	3.5	3.5	—	41.58	3.5	3.5	—	—
5/19/15	mf	2.8	2.8	—	42.47	2.8	2.8	—	—
5/26/15	mf	3.6	3.6	—	42.38	3.6	3.6	—	—
6/3/15	mf	3.2	3.2	—	42.38	3.2	3.2	—	—
6/9/15	mf	3.0	3.0	—	43.16	3.0	3.0	—	—
6/16/15	mf	3.0	3.0	—	43.27	3.0	3.0	—	—
6/23/15	mf	3.0	3.0	—	43.37	3.0	3.0	—	—
6/30/15	mf	3.4	3.2	—	43.48	3.4	3.2	—	—
7/7/15	mf	3.6	3.6	—	43.95	3.6	3.6	—	—
7/14/15	mf	3.7	3.7	—	43.95	3.7	3.7	—	—
7/21/15	mf	3.8	3.8	—	43.95	3.8	3.8	—	—
7/28/15	mf	3.8	3.8	—	43.95	3.8	3.8	—	—
8/4/15	mf	3.8	3.8	—	43.95	3.8	3.8	—	—
8/11/15	mf	3.6	3.6	—	43.95	3.6	3.6	—	—

IN THE EVENT OF GAGE READING ZERO, OR OTHER INDICATION OF BLOWER MALFUNCTION, NOTIFY R. SCHOENEK IMMEDIATELY, DOCUMENT REASON FOR ZERO READING / BLOWER MALFUNCTION, DOCUMENT CORRECTIVE ACTION

- Meter installed 1-8-15 reading 7.47 gallons - Shane O'Connor 378-7712

7/2/15 - 23.33

CONTROL PANEL ZONE : 2 (Heat Pump Room 310)

MINIMUM FREQUENCY: ONCE PER MONTH

OTHERWISE: AS OFTEN AS NECESSARY TO AVOID CONDENSATE ACCUMULATION

DATE	INITIALS	Initial Reading (Before Pump Shutdown)			Manifold Water (Y/N)	Final Reading (After Pump Restart)			Dust Drum Water (Y/N)
		Gallery A	Gallery B	Manifold		Gallery A	Gallery B	Manifold	
9/22/14	MT	5.0	5.2	—	N	4.9	5.0	—	N
9/30/14	MT	4.4	4.5	—	N	4.4	4.4	—	N
10/7/14	MT	4.8	5.0	—	N	4.6	4.8	—	N
10/15/14	MT	5.0	5.0	—	N	4.8	4.8	—	N
10/21/14	MT	5.2	5.2	—	N	5.0	5.0	—	N
10/28/14	MT	4.7	5.0	—	N	4.5	4.8	—	N
11/4/14	MT	5.0	5.0	—	N	4.8	5.0	—	N
11/11/14	MT	4.4	4.6	—	N	4.4	4.6	—	N
11/18/14	MT	3.8	3.8	—	N	3.8	3.8	—	N
11/25/14	MT	3.8	4.0	—	N	3.8	3.8	—	N
12/2/14	MT	3.6	3.6	—	N	3.6	3.6	—	N
12/9/14	MT	3.4	3.4	—	N	3.4	3.4	—	N
12/16/14	MT	3.2	3.2	—	N	3.2	3.2	—	N
12/23/14	MT	3.2	3.2	—	N	3.2	3.2	—	N
12/30/14	MT	3.2	3.2	—	N	3.2	3.2	—	N
1/6/15	MT	3.2	3.2	—	N	3.2	3.2	—	N
1/13/15	MT	3.0	3.0	—	N	3.2	3.0	—	N
1/20/15	MT	3.4	3.4	—	N	3.4	3.4	—	N
1/27/15	MT	3.2	3.2	—	N	3.2	3.2	—	N
2/3/15	MT	3.0	3.0	—	N	3.0	3.0	—	N
2/10/15	MT	2.4	2.6	—	2.5	2.4	2.6	—	5gal
2/17/15	MT	2.4	2.6	—	2.5	2.4	2.6	—	5gal
2/24/15	KS	2.4	2.6	—	2.5	2.4	2.6	—	5gal
3/3/15	MT	2.2	2.6	—	0	2.2	2.6	—	5gal
3/10/15	MT	2.4	2.4	—	0	2.4	2.4	—	5gal
3/17/15	MT	2.6	2.6	—	0	2.6	2.6	—	5gal
3/24/15	MT	2.4	2.6	—	0	2.4	2.6	—	5gal
3/31/15	MT	2.4	2.6	—	0	2.4	2.6	—	5gal
4/7/15	MT	2.4	2.6	—	0	2.4	2.6	—	2gal
4/14/15	MT	2.2	2.2	—	0	2.2	2.2	—	2gal
4/21/15	MT	2.0	2.0	—	0	2.0	2.0	—	—
4/28/15	MT	1.6	1.8	—	0	1.6	1.8	—	—
5/5/15	MT	1.6	1.8	—	0	1.8	1.8	—	—
5/12/15	MT	1.8	1.8	—	0	1.8	1.8	—	—
5/19/15	MT	1.6	1.6	—	0	1.6	1.6	—	—
5/26/15	MT	1.6	1.6	—	0	1.6	1.6	—	—
6/3/15	MT	1.6	1.6	—	0	1.6	1.6	—	—
6/9/15	KS	1.6	1.8	—	0	1.6	1.6	—	—
6/16/15	MT	1.6	1.8	—	0	1.6	1.8	—	—
6/23/15	MT	1.6	1.7	—	0	1.6	1.7	—	—
6/30/15	MT	1.6	1.7	—	0	1.6	1.7	—	—
7/7/15	KS	1.6	1.8	—	0	1.6	1.5	—	—
7/14/15	MT	1.8	1.8	—	0	1.8	1.8	—	—
7/21/15	MT	1.8	1.8	—	0	1.8	1.8	—	—
7/28/15	MT	1.8	1.8	—	0	1.8	1.8	—	—
8/4/15	MT	1.6	1.8	—	0	1.6	1.8	—	—
8/11/15	MT	1.8	1.8	—	0	1.8	1.8	—	—

IN THE EVENT OF GAGE READING ZERO, OR OTHER INDICATION OF BLOWER MALFUNCTION, NOTIFY R. SCHOENEK IMMEDIATELY, DOCUMENT REASON FOR ZERO READING / BLOWER MALFUNCTION, DOCUMENT CORRECTIVE ACTION