

**BUILDING 730 (FORMERLY 338)  
POWERHOUSE GYM SPACE VAPOR MITIGATION  
SYSTEM START-UP SUMMARY REPORT**

**AT**

**IPARK 84  
FORMER IBM EAST FISHKILL FACILITY**

**AUGUST 2020**

**PREPARED FOR:**

**JESSICA LACLAIR  
NEW YORK STATE DEPT. OF ENVIRONMENTAL CONSERVATION  
DEPT. OF ENVIRONMENTAL REMEDIATION  
625 BROADWAY  
ALBANY, NEW YORK 12233-7013**

**WALDEN ENVIRONMENTAL ENGINEERING, PLLC**  
**Industry Leader in Environmental Engineering Consulting**

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Sent via email to [jess.laclair@dec.ny.gov](mailto:jess.laclair@dec.ny.gov) and [julia.kenney@health.ny.gov](mailto:julia.kenney@health.ny.gov)

August 27, 2020  
iPark0118.47

Ms. Jessica LaClair  
Environmental Engineer  
Division of Environmental Remediation  
New York State Department of Environmental Conservation  
625 Broadway  
Albany, NY 12233-7013

Re: iPark 84  
Former IBM East Fishkill Facility  
Building 730 (338) Powerhouse Gym Space  
Vapor Mitigation System Start-Up Summary

Dear Ms. LaClair:

This submittal has been prepared by Walden Environmental Engineering, PLLC (“Walden”) on behalf of iPark East Fishkill LLC (iPark) to present the start-up report for the vapor mitigation system installed in the Powerhouse Gym space of Building 730 (formerly Building 338), located at 2070 State Route 52 in Hopewell Junction, New York, herein after referred to as the “Site”. The mitigation system was installed as a preventive measure to ensure protection against soil vapor intrusion at Building 730 (338) within the tenant occupied space.

iPark has completed construction in the Powerhouse Gym space in Building 730 (338), and fit up is moving forward for the bakery manufacturing operation and other tenant uses planned in this building, as described in the 60-day notification submitted to the State on July 17, 2020 (included in **Attachment A**). Each tenant space will be modified to suit the individual tenant needs.

**Well Point Construction**

A mitigation system pilot confirmation test was conducted on July 21, 2020 after the floors in the gym were sealed. The test was performed on one of the pilot test well points to confirm the area of influence produced by the extraction wells that had been installed in Building 730 (338). Vacuum pressure monitoring points installed at distances of 30 feet, 40 feet and 50 feet from the



pilot test well point were used to perform the confirmation pilot test. This testing confirmed that the system could achieve the 40-foot radius of influence proposed in the July 8, 2020 Vapor Mitigation System Basis of Design report approved by the State (refer to **Appendix A** for the approved design submittal).

Installation of the remaining mitigation system well points and monitoring points for the gym space was completed based on the 40-foot minimum radius of influence observed during the July 21<sup>st</sup> pilot testing in accordance with the approved Basis of Design. The construction details are provided in the approved Basis of Design report.

### **Gym Space Mitigation System**

**Figure 1** depicts the final configuration of the full-scale mitigation system installed to prevent soil vapor intrusion in the Powerhouse Gym space. Photographs of the system are presented in **Attachment B**. The system consists of three (3) vacuum well points (WP-4, WP-5 and WP-6). Each well point was constructed of 2-inch slotted PVC pipe connected to a solid PVC riser extending approximately one (1) foot below the bottom of the existing slab at each location. The bottom of the screened interval is capped with solid PVC.

Each well point is equipped with a RadonAway HS-5000 fan. A gate valve and a Magnehelic gauge were installed prior to the fan in order to control the vacuum and flow at each point. Each of these points is each equipped with a RadonAway Checkpoint IIAR Mitigation System Monitor with Remote Alarm.

Three (3) permanent monitoring points (MP-4, MP-5 and MP-6) were installed at the locations indicated on **Figure 1**. These points were installed using Stainless Steel Vapor Pins and flush mounted with secure stainless-steel covers.

Detailed as-built drawings for the full-scale Building 730 (338) vapor mitigation system and an Operation and Maintenance (O&M) plan will be submitted to the State as part of the Construction Completion Report after system installation is completed in the remaining tenant spaces in the building.

### **Gym Space Mitigation System Start-Up and Testing**

On August 24, 2020 the mitigation system well points (WP-4, WP-5 and WP-6) within the Powerhouse Gym space were started up. Measurements at each well point and monitoring point were recorded during system start-up and are provided on **Figure 1** and in the O&M checklist presented as **Attachment C**. Based on available industry guidance, achieving a pressure differential of -0.004 inches of water column (WC) across a slab is generally considered sufficient to prevent soil vapor intrusion. The start-up results confirm that the mitigation system

Ms. Jessica LaClair  
Building 730 (338) Gym Space Mitigation System Start Up  
August 27, 2020

- 3 -



maintains a minimum differential pressure of -0.004 inches of WC across the slab of Building 730 (338), effectively depressurizing the slab beneath the gym space in accordance with the approved Basis of Design. In addition, all alarms, fans, gauges, and valves were tested and functioned properly as designed.

On August 11, 2020, pre-occupancy indoor air sampling was conducted in the Powerhouse Gym space after construction work was completed, and before the mitigation system was started up. The IAQ sampling results confirmed that indoor air quality is acceptable in the space, as summarized in the *Building 730 (Formerly Building 338) Powerhouse Gym Pre-Occupancy Indoor Air Quality Testing Summary Report* submitted to NYSDEC and NYSDOH on August 19<sup>th</sup>; a copy of this report is presented in **Appendix B**.

Based on the start-up results for the gym mitigation system and the pre-occupancy IAQ results, iPark respectfully requests that NYSDEC and NYSDOH issue authorization for occupancy of the Powerhouse Gym space, as the tenant's opening is scheduled for August 29<sup>th</sup>.

Please call me at (516) 624-7200 if you have any questions or need any additional information.

Very truly yours,  
Walden Environmental Engineering, PLLC

A handwritten signature in black ink that reads "Nora M. Brew". The signature is fluid and cursive, with a long horizontal stroke at the end.

Nora M. Brew, P.E.  
VP/Senior Project Manager

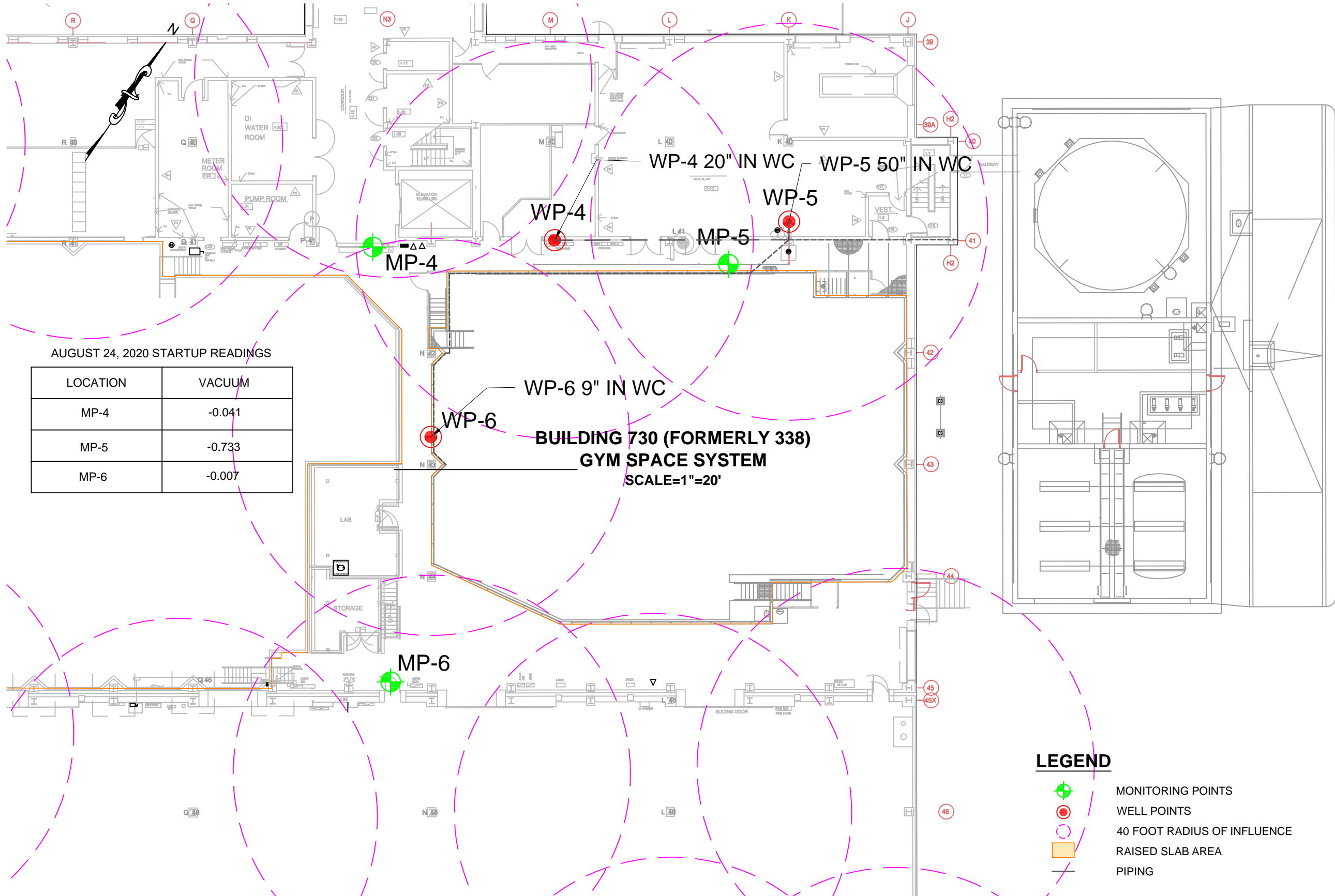
cc: J. Kenney, NYSDOH  
M. Buckley, iPark  
C. Monheit, iPark  
D. Chartrand, IBM

#### Attachments

- Figure 1 – SSDS System Startup – Powerhouse Gym
- Attachment A – 60-day Notification Submitted on July 17, 2020
- Attachment B – System Startup Photo Log (August 24, 2020)
- Attachment C – O&M Checklist August 24, 2020
- Appendix A – State-Approved Vapor Mitigation System Basis of Design Report
- Appendix B – Building 730 (Formerly Building 338) Powerhouse Gym Pre-Occupancy Indoor Air Quality Testing Summary Report

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AUGUST 24, 2020 STARTUP READINGS

LOCATION	VACUUM
MP-4	-0.041
MP-5	-0.733
MP-6	-0.007

**BUILDING 730 (FORMERLY 338)**  
**GYM SPACE SYSTEM**  
 SCALE=1"=20'

**LEGEND**

- MONITORING POINTS
- WELL POINTS
- 40 FOOT RADIUS OF INFLUENCE
- RAISED SLAB AREA
- PIPING

TP3


**WALDEN ENVIRONMENTAL ENGINEERING, PLLC**  
 16 SPRING STREET  
 OYSTER BAY, NEW YORK 11771  
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REVISION	
No.	DATE

FOR: **BUILDING 730 (FORMER 338)**  
 iPark 84 Campus  
 2070 State Route 52  
 Hopewell Junction, NY 12533

DRAWING TITLE:  
**SSDS SYSTEM START-UP**  
**POWERHOUSE GYM SPACE**

FIGURE NO:	ISSUED
1	
REVISION NO:	
0	

DESIGNED BY: NMB    DRAWN BY: JMS    JOB NO: IPARK118.47    DATE: 8/27/2020    11x17 SHEET NO: 1 OF 1  
 APPROVED BY: JMH    SCALE: AS NOTED    CAD FILE NAME: 2:\IPark0118\Park0118.47 - 8338 SSDS Testing and Design\O&M Startup Documents\Park Building Building 730-338\_SSDS\_IB\_082720.dwg

ATTACHMENT A

60-DAY NOTIFICATION SUBMITTED ON JULY 17, 2020



**60-Day Advance Notification of Site Change of Use, Transfer of Certificate of Completion, and/or Ownership**

Required by 6NYCRR Part 375-1.11(d) and 375-1.9(f)

To be submitted at least 60 days prior to change of use to:

Chief, Site Control Section  
 New York State Department of Environmental Conservation  
 Division of Environmental Remediation, 625 Broadway  
 Albany NY 12233-7020

**I. Site Name:** Former IBM East Fishkill Facility **DEC Site ID No.** 314054

**II. Contact Information of Person Submitting Notification:**

Name: Mike Buckley, Director of Construction iPark 84  
 Address1: iPark East Fishkill LLC  
 Address2: 2070 Route 52, Building 200, Hopewell Junction, NY 12533  
 Phone: 845-765-2110 E-mail: mbuckley@nationalresources.com

**III. Type of Change and Date:** Indicate the Type of Change(s) (check all that apply):

- Change in Ownership or Change in Remedial Party(ies)
- Transfer of Certificate of Completion (CoC)
- Other (e.g., any physical alteration or other change of use)

Proposed Date of Change (mm/dd/yyyy):

**IV. Description:** Describe proposed change(s) indicated above and attach maps, drawings, and/or parcel information.

See attached description of proposed change of use regarding the planned bakery, brewery, food court, ~~visitor's center, and gym to occupy Building 730 (formerly Building 338).~~ The plans include construction of a mezzanine area for the gym area. A change of use allowing for commercial occupancy was approved through a Consent Order executed on May 1, 2020.

If "Other," the description must explain and advise the Department how such change may or may not affect the site's proposed, ongoing, or completed remedial program (attach additional sheets if needed).

See attached discussion of how the proposed change of use for the various tenants in Building 730 (formerly Building 338) will not affect the remedial program at the Former IBM East Fishkill Facility.



**VII. Agreement to Notify DEC after Transfer:** If Section VI applies, and all or part of the site will be sold, a letter to notify the DEC of the completion of the transfer must be provided. If the current owner is also the holder of the CoC for the site, the CoC should be transferred to the new owner using DEC's form found at <http://www.dec.ny.gov/chemical/54736.html>. This form has its own filing requirements (see 6NYCRR Part 375-1.9(f)).

Signing below indicates that these notices will be provided to the DEC within the specified time frames. If the sale of the site also includes the transfer of a CoC, the DEC agrees to accept the notice given in VII.3 below in satisfaction of the notice required by VII.1 below (which normally must be submitted within 15 days of the sale of the site).

Within 30 days of the sale of the site, I agree to submit to the DEC:

1. the name and contact information for the new owner(s) (see §375-1.11(d)(3)(ii));
2. the name and contact information for any owner representative; and
3. a notice of transfer using the DEC's form found at <http://www.dec.ny.gov/chemical/54736.html> (see §375-1.9(f)).

Name: \_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Date)

\_\_\_\_\_  
(Print Name)

Address1: \_\_\_\_\_

Address2: \_\_\_\_\_

Phone: \_\_\_\_\_ E-mail: \_\_\_\_\_

**Continuation Sheet**

Prospective Owner/Holder  Prospective Remedial Party  Prospective Owner Representative  
Name: \_\_\_\_\_  
Address1: \_\_\_\_\_  
Address2: \_\_\_\_\_  
Phone: \_\_\_\_\_ E-mail: \_\_\_\_\_

Prospective Owner/Holder  Prospective Remedial Party  Prospective Owner Representative  
Name: \_\_\_\_\_  
Address1: \_\_\_\_\_  
Address2: \_\_\_\_\_  
Phone: \_\_\_\_\_ E-mail: \_\_\_\_\_

Prospective Owner/Holder  Prospective Remedial Party  Prospective Owner Representative  
Name: \_\_\_\_\_  
Address1: \_\_\_\_\_  
Address2: \_\_\_\_\_  
Phone: \_\_\_\_\_ E-mail: \_\_\_\_\_

Prospective Owner/Holder  Prospective Remedial Party  Prospective Owner Representative  
Name: \_\_\_\_\_  
Address1: \_\_\_\_\_  
Address2: \_\_\_\_\_  
Phone: \_\_\_\_\_ E-mail: \_\_\_\_\_

Prospective Owner/Holder  Prospective Remedial Party  Prospective Owner Representative  
Name: \_\_\_\_\_  
Address1: \_\_\_\_\_  
Address2: \_\_\_\_\_  
Phone: \_\_\_\_\_ E-mail: \_\_\_\_\_

Prospective Owner/Holder  Prospective Remedial Party  Prospective Owner Representative  
Name: \_\_\_\_\_  
Address1: \_\_\_\_\_  
Address2: \_\_\_\_\_  
Phone: \_\_\_\_\_ E-mail: \_\_\_\_\_



## Instructions for Completing the 60-Day Advance Notification of Site Change of Use, Transfer of Certificate of Completion (CoC), and/or Ownership Form

Submit to: Chief, Site Control Section, New York State Department of Environmental Conservation, Division of Environmental Remediation, 625 Broadway, Albany NY 12233-7020

### Section I

#### Description

Site Name

Official DEC site name.

(see <http://www.dec.ny.gov/cfmx/extapps/derexternal/index.cfm?pageid=3>)

DEC Site ID No.

DEC site identification number.

### Section II

#### Contact Information of Person Submitting Notification

Name

Name of person submitting notification of site change of use, transfer of certificate of completion and/or ownership form.

Address1

Street address or P.O. box number of the person submitting notification.

Address2

City, state and zip code of the person submitting notification.

Phone

Phone number of the person submitting notification.

E-mail

E-mail address of the person submitting notification.

### Section III

#### Type of Change and Date

Check Boxes

Check the appropriate box(s) for the type(s) of change about which you are notifying the Department. Check all that apply.

Proposed Date of Change

Date on which the change in ownership or remedial party, transfer of CoC, or other change is expected to occur.

### Section IV

#### Description

Description

For each change checked in Section III, describe the proposed change.

Provide all applicable maps, drawings, and/or parcel information.

If "Other" is checked in Section III, explain how the change may affect the site's proposed, ongoing, or completed remedial program at the site.

Please attach additional sheets, if needed.

## Section V Certification Statement

*This section must be filled out if the change of use results in a change of ownership or responsibility for the proposed, ongoing, or completed remedial program for the site. When completed, it provides DEC with a certification that the prospective purchaser has been provided a copy of any order, agreement, or State assistance contract as well as a copy of all approved remedial work plans and reports.*

Name The owner of the site property or their designated representative must sign and date the certification statement. Print owner or designated representative's name on the line provided below the signature.

Address1 Owner or designated representative's street address or P.O. Box number.

Address2 Owner or designated representative's city, state and zip code.

Phone Owner or designated representative's phone number.

E-Mail Owner or designated representative's E-mail.

## Section VI Contact Information for New Owner, Remedial Party, and CoC Holder (if a CoC was issued)

*Fill out this section only if the site is to be sold or there will be a new remedial party. Check the appropriate box to indicate whether the information being provided is for a Prospective Owner, CoC Holder (if site was ever issued a COC), Prospective Remedial Party, or Prospective Owner Representative. Identify the prospective owner or party and include contact information. A Continuation Sheet is provided at the end of this form for additional owner/party information.*

Name Name of Prospective Owner, Prospective Remedial Party or Prospective Owner Representative.

Address1 Street address or P.O. Box number for the Prospective Owner, Prospective Remedial Party, or Prospective Owner Representative.

Address2 City, state and zip code for the Prospective Owner, Prospective Remedial Party, or Prospective Owner Representative.

Phone Phone number for the Prospective Owner, Prospective Remedial Party or Prospective Owner Representative.

E-Mail E-mail address of the Prospective Owner, Prospective Remedial Party or Prospective Owner Representative.



***If the site is subject to an Environmental Easement, Deed Restriction, or Site Management Plan requiring periodic certification of institutional controls/engineering controls (IC/EC), indicate who will be the certifying party(ies). Attach additional sheets, if needed.***

Certifying Party Name	Name of Certifying Party.
Address1	Certifying Party's street address or P.O. Box number.
Address2	Certifying Party's city, state and zip code.
Phone	Certifying Party's Phone number.
E-Mail	Certifying Party's E-mail address.

## **Section VII Agreement to Notify DEC After Property Transfer/Sale**

***This section must be filled out for all property transfers of all or part of the site. If the site also has a CoC, then the CoC shall be transferred using DEC's form found at <http://www.dec.ny.gov/chemical/54736.html>***

***Filling out and signing this section of the form indicates you will comply with the post transfer notifications within the required timeframes specified on the form. If a CoC has been issued for the site, the DEC will allow 30 days for the post transfer notification so that the "Notice of CoC Transfer Form" and proof of it's filing can be included. Normally the required post transfer notification must be submitted within 15 day (per 375-1.11(d)(3)(ii)) when no CoC is involved.***

Name	Current property owner must sign and date the form on the designated lines. Print owner's name on the line provided.
Address1	Current owner's street address.
Address2	Current owner's city, state and zip code.

**Attachment to 60-Day Notification for Building 730 (Formerly 338) – Various Tenants**

**Proposed Change of Use**

**Former IBM East Fishkill Facility – DEC Site ID No. 314054**

**Proposed Date for Change of Use Date**

The proposed change of use date indicated on the form is iPark East Fishkill LLC’s (iPark) tentative target date, recognizing that State approval is required before the work activities can begin. The Building 730 (Formerly Building 338) plans include commercial use tenants including a gym, a bakery, a brewery, a food truck area, and a welcome center. Upon approval from the State, iPark plans to proceed with the modifications to Building 730 (338) while satisfying all NYSDEC requirements that must be fulfilled prior to tenant occupancy for the planned operations.

Please note that this 60-day notification expands upon the notification submitted on February 5, 2020 for the Powerhouse Gym space in Building 730 (338). The previous plans for Foreign Objects Brewery to lease space in Building 730 (338) have fallen through; therefore, the 60-day notification submitted on August 26, 2019 for this occupancy is void.

**Description of Proposed Change of Use**

iPark proposes to lease various sized spaces to several commercial tenants, as indicated in the table below. The locations of Building 730 (338) and the planned tenant occupancies are called out on the attached site figures.

Tenant Name	Square Footage	Location in Building 730
Brewery (anticipated)	21,378	Western
Sprout Creek Bakery	15,861	Southern
Food Hub	61,914	Eastern
iPark Visitor Center	3,526	Southeastern
Powerhouse Gym	16,405	Northern

Building 730 (338) was formerly used by IBM for sintering manufacturing, laboratory operations and wastewater treatment. Equipment within Building 730 (338) has been decommissioned and the building is vacant [*Report of HVAC Adjustment and Indoor Air Quality Testing Buildings 330C and 338* (Sanborn Head, February 2016)]. The majority of the solid waste management units (SWMUs) in Building 730 (338) were decommissioned, decontaminated, and removed on behalf of Global Foundries in 2015 as documented in the *Certification of SWMU Closure Report* (Arcadis, dated April 6, 2016). iPark will remove SWMU components remaining in certain locations within Building 730 (338) based on tenant needs in accordance with the *Work Plan for Decontamination, Demolition and Removal of Solid Waste Management Unit (SWMU) Components in Building 730 (Formerly Building 338)* (Walden, February 2020) which was approved by DEC and DOH in a letter dated February 13, 2020.

It is anticipated that the Sprout Creek Bakery fit-up will involve disturbance to the existing floor slab in that tenant space during the performance of trenching activities. As of the date of this submission, the final dimensions and locations of the required trenching have not been finalized. A work plan detailing the trenching work and pre-construction sampling to be performed prior to sub slab disturbance will be submitted to the State before any intrusive activities begin. The floors will be sealed throughout the building and the HVAC systems serving Building 730 will be modified. Additional details on any other proposed modifications will be provided as the plans are developed.

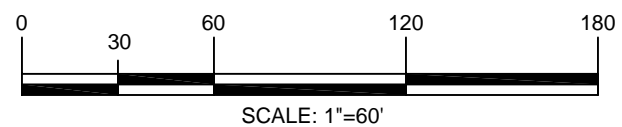
#### Discussion of How the Proposed Change of Use Will Not Affect the Remedial Program at the Former IBM East Fishkill Facility

IBM performed indoor air quality testing in Building 730 (338) as summarized in historical site reports. In addition, iPark conducted investigations in early 2019 to characterize soils in the parking area outside Building 730 (338) as part of the deed restriction modification process. The results of an investigation conducted at Building 730 (338) in March 2019 indicated the presence of volatile organic compound (VOC) vapors below the slab and the potential for soil vapor intrusion (SVI). The results of this SVI investigation are summarized *Building 338 Sub-Slab Vapor Investigation* (GZA, September 16, 2019). Therefore, a mitigation system will be installed as a preventive measure to ensure protection against soil vapor intrusion at Building 730 (338).


In February 2020, Walden performed a pilot mitigation test in the Powerhouse Gym tenant space in accordance with the *Building 730 (338) Vapor Mitigation System Pilot Testing Plan* (Walden, February 11, 2020) which was approved by NYSDEC. Based upon the results of the pilot test, a Sub Slab Depressurization System (SSDS) for the Powerhouse Gym space was designed by Walden, as summarized in the *Building 730 (338) Vapor Mitigation System Basis of Design* report (Walden, April 15, 2020); the final layout of this SSDS is currently being established based on comments from the State.

Please note that the SSDS mitigation systems for the other tenant spaces in Building 730 (338) will be designed based on the February 2020 pilot test results. Installation of the SSDS mitigation systems will be coordinated with the buildout of each tenant space. The final configuration of the SSDS systems will be determined as the plans for each tenant space are developed. It is possible that multiple tenant spaces could be served by a single system, if building conditions are suited to such installations.

For each tenant space in Building 730 (338), once the SSDS is installed, interior modifications are completed, and the HVAC system is operating under normal conditions, indoor air testing will be performed in that space. The testing results will be evaluated and submitted to NYSDEC and NYSDOH to verify that indoor air quality is acceptable before the tenant takes occupancy.



**SITE PLAN**  
SCALE: 1" = 60'-0"


 WALDEN ENVIRONMENTAL ENGINEERING, PLLC  
 iPARK 84 CAMPUS, 200 NORTH DRIVE, SUITE #108  
 HOPEWELL JUNCTION, NEW YORK 12533  
 P: (845) 253-8025; (516) 624-7200  
 F: (516) 624-3219  
[WWW.WALDENENVIRONMENTALENGINEERING.COM](http://WWW.WALDENENVIRONMENTALENGINEERING.COM)

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REVISION	
No.	DATE

FOR: **BUILDING 730 (FORMER 338)**  
 iPark 84 Campus  
 2070 State Route 52  
 Hopewell Junction, NY 12533  
 DESIGNED BY: NMB  
 APPROVED BY: JMH

DRAWING TITLE: **SITE PLAN**  
**BUILDING 730 (338)**  
**60 - DAY NOTIFICATION**  
 DRAWN BY: EJK  
 SCALE: AS NOTED

FIGURE NO: **1**  
 SHEET NO: 1 OF 1  
 REVISION NO: **0**  
 ISSUED  
JOB NO: IPARK118.44 DATE: 2/6/20 11x17 CAD FILE NAME: 2:\iPark\118\iPark\0118-44 - 8338 Sprout Creek Bakery\iPark Building Building 730 338 Gym 00 Day.dwg







ATTACHMENT B

SYSTEM STARTUP PHOTO LOG (AUGUST 24, 2020)

**Building 338 – Gym Space Mitigation System Startup  
August 24, 2020**

Photograph #1



WP-4 System Configuration

Photograph #2



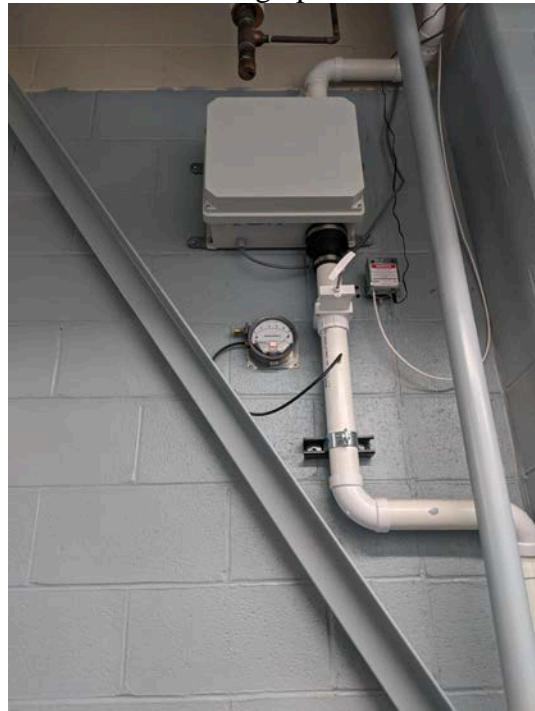
WP-4 Magnehelic Gauge (reading 20 in WC)

Photograph #3



WP-4 Piping from floor to unit

Photograph #4



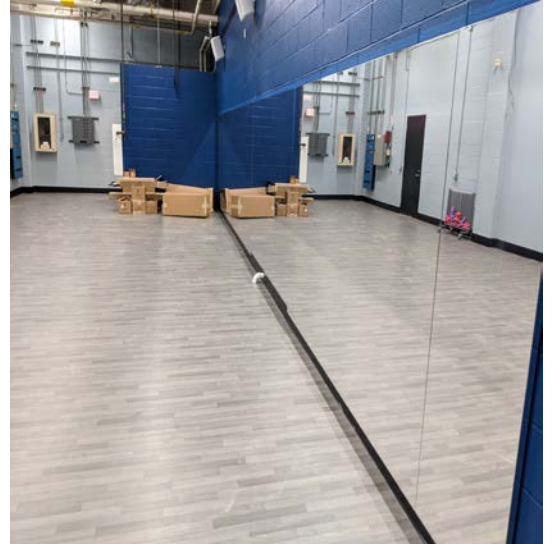
WP-5 System Configuration

Photograph #5



WP-5 Magnehelic Gauge (reading 50 in WC)

Photograph #6



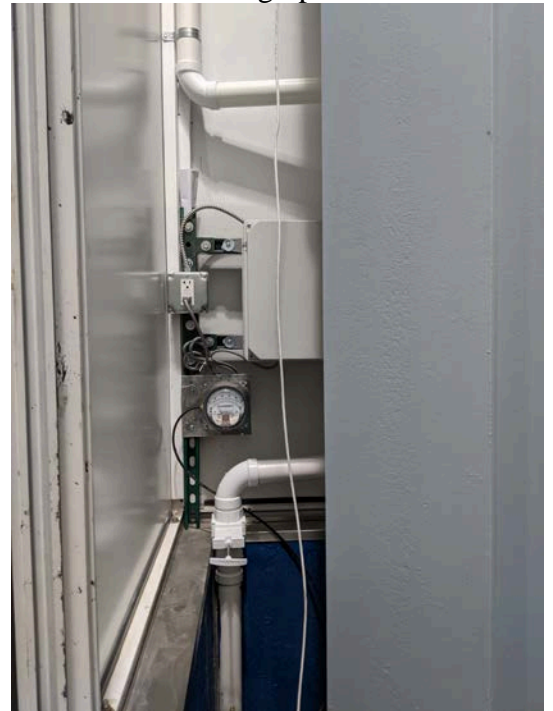
WP-5 Piping from floor and through wall

Photograph #7



WP-5 Piping from wall to unit

Photograph #8



WP-6 System Configuration

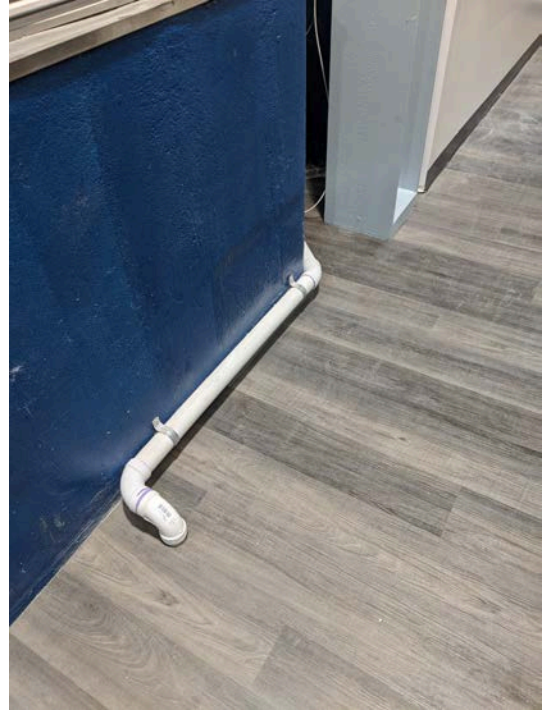


Photograph #9



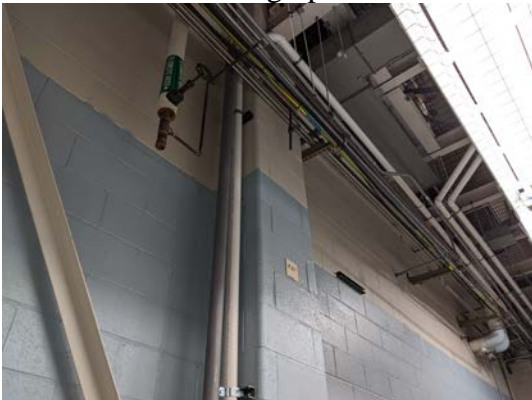
WP-6 Magnehelic Gauge (reading 9 in WC)

Photograph #10



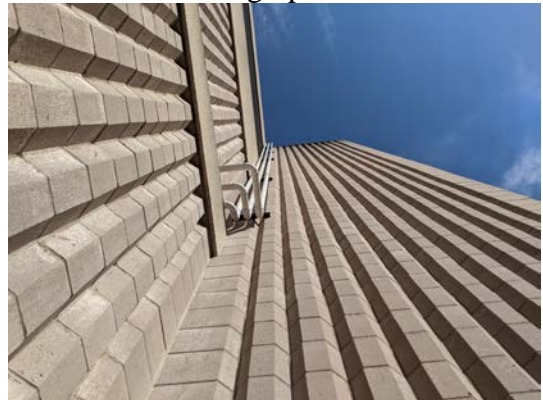
WP-6 Piping from floor to unit

Photograph #10



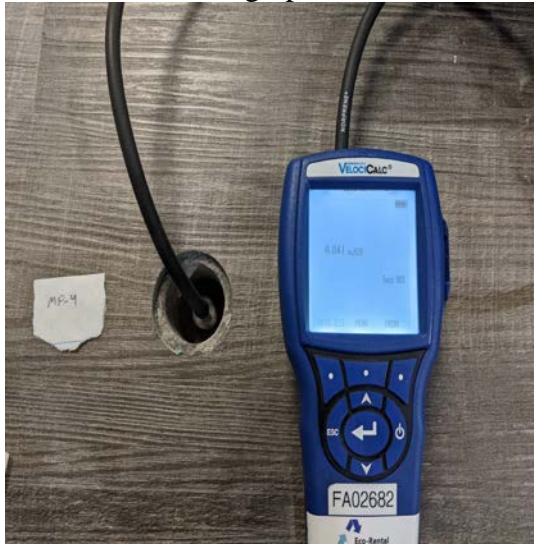
System piping indoor wall penetration

Photograph #11



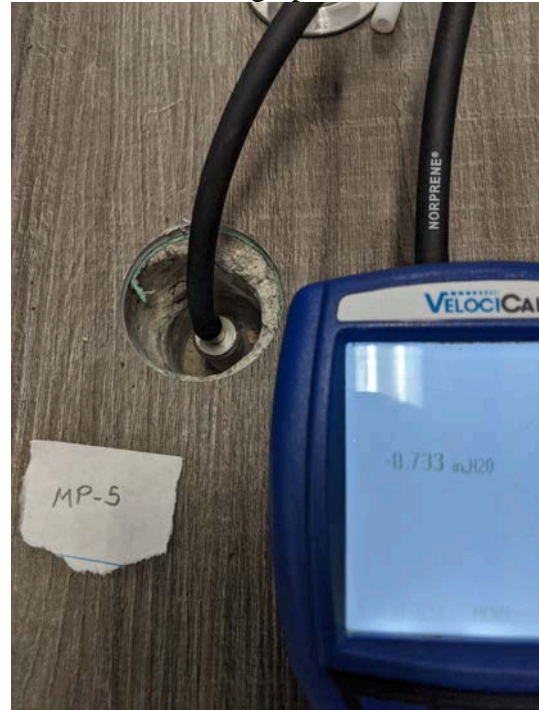
System piping outdoor to exhaust

Photograph #12



MP-4 Vacuum reading (-0.041 in WC)

Photograph #13



MP-5 Vacuum reading (-0.733 in WC)

Photograph #14



MP-6 Vacuum reading (-0.007 in WC)

ATTACHMENT C

O&M CHECKLIST AUGUST 24, 2020



# WALDEN ENVIRONMENTAL ENGINEERING PLLC

## O&M CHECKLIST

Project #:                   iPARK0118.47 - Bldg 338 SVI Sampling & SSDS Design                   Date:                   8/24/2020                  

Inspector(s):                   JMS                   Time:                   1500                  

### WELL POINTS

	GAUGE READING (in H2O)	GAUGE FUNCTIONING?	PIPING DAMAGED?	FAN ON?	ALARM FUNCTIONING?
WP-1	*	N/A	N/A	N/A	N/A
WP-2	*	N/A	N/A	N/A	N/A
WP-3	*	N/A	N/A	N/A	N/A
WP-4	20	Y	N	Y	Y
WP-5	50	Y	N	Y	Y
WP-6	9	Y	N	Y	Y
WP-7	*	N/A	N/A	N/A	N/A
WP-8	*	N/A	N/A	N/A	N/A
WP-9	*	N/A	N/A	N/A	N/A
WP-10	*	N/A	N/A	N/A	N/A
WP-11	*	N/A	N/A	N/A	N/A
WP-12	*	N/A	N/A	N/A	N/A
WP-13	*	N/A	N/A	N/A	N/A
WP-14	*	N/A	N/A	N/A	N/A
WP-15	*	N/A	N/A	N/A	N/A
WP-16	*	N/A	N/A	N/A	N/A
WP-17	*	N/A	N/A	N/A	N/A

Notes:                   \*: Well points to be installed beginning 08/27/20.                    
                  WP-6 was sealed around the floor penetration.                    
                  Alarms are functioning and to be wired to electrical room.                  

### MONITORING POINTS

	PRESSURE READING (in H2O)	POINT DAMAGED?
MP-1	*	N/A
MP-2	*	N/A
MP-3	*	N/A
MP-4	-0.041	N
MP-5	-0.733	N
MP-6	-0.007	N
MP-7	*	N/A
MP-8	*	N/A
MP-9	*	N/A
MP-10	*	N/A
MP-11	*	N/A
MP-12	*	N/A

Notes:                   \*: Monitoring points to be installed beginning 08/27/20.

APPENDIX A

STATE-APPROVED VAPOR MITIGATION SYSTEM BASIS OF DESIGN REPORT

# NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Remedial Bureau D

625 Broadway, 12th Floor, Albany, NY 12233-7013

P: (518) 402-9676 | F: (518) 402-9773

www.dec.ny.gov

July 17, 2020

Joseph Cotter  
iPark 84  
200 North Drive  
Hopewell Junction, NY 12533

Re: Building 338  
Vapor Mitigation System Basis of Design  
iPark 84, Former IBM East Fishkill Facility  
NYSDEC Site No. 314054, EPA ID NYD000707901

Dear Mr. Cotter:

The New York State Department of Environmental Conservation and Department of Health (Departments) have reviewed the Response to Comments and the revised basis of design for the vapor mitigation system to be installed in Building 338. These documents were submitted by Walden Environmental Engineering on behalf of National Resources on July 8, 2020. The Departments understand that the system will be construction in phases as tenant spaces are constructed. Start-up testing and indoor air quality sampling must be conducted and acceptable to the Departments before any space can be occupied.

The Departments have no additional comments and approve the design for Building 338. Please notify the Departments when work is scheduled. If you have any questions, please call me at (518) 402-9821.

Sincerely,



Jessica LaClair  
Project Manager  
Remedial Section A, Remedial Bureau D  
Division of Environmental Remediation

ec: M. Buckley, iPark  
C. Monheit, National Resources  
N. Brew, Walden  
D. Chartrand, IBM



Department of  
Environmental  
Conservation



E. Lutz, GF  
G. Marone, GF  
J. Armitage, NYSDEC  
D. Bendell, NYSDEC, Region 3  
B. Conlon, NYSDEC  
S. Edwards, NYSDEC  
J. Kenney, NYSDOH  
M. Schuck, NYSDOH

**BUILDING 730 (338) VAPOR MITIGATION  
SYSTEM BASIS OF DESIGN (REVISED)**

**AT**

**IPARK 84  
FORMER IBM EAST FISHKILL FACILITY**

**JULY 2020**

**PREPARED FOR:**

**JESSICA LACLAIR  
NEW YORK STATE DEPT. OF ENVIRONMENTAL CONSERVATION  
DEPT. OF ENVIRONMENTAL REMEDIATION  
625 BROADWAY  
ALBANY, NEW YORK 12233-7013**

**WALDEN ENVIRONMENTAL ENGINEERING, PLLC**  
**Industry Leader in Environmental Engineering Consulting**

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Sent via email to [jess.laclair@dec.ny.gov](mailto:jess.laclair@dec.ny.gov) and [julia.kenney@health.ny.gov](mailto:julia.kenney@health.ny.gov)

July 8, 2020  
iPark0118.47

Ms. Jessica LaClair  
Environmental Engineer  
Division of Environmental Remediation  
New York State Department of Environmental Conservation  
625 Broadway  
Albany, NY 12233-7013

Re: iPark 84  
Former IBM East Fishkill Facility  
Building 730 (338) Vapor Mitigation  
System Basis of Design

Dear Ms. LaClair:

This submittal has been prepared by Walden Environmental Engineering, PLLC (“Walden”) on behalf of iPark East Fishkill LLC (iPark) to present the basis of design for the vapor mitigation system to be installed at Building 730 (formerly Building 338), located at 2070 State Route 52 in Hopewell Junction, New York, herein after referred to as the “Site”. The Site location map is presented as Figure 1. The results of an investigation conducted at Building 730 (338) in March 2019 indicated the presence of volatile organic compound (VOC) vapors below the slab and the potential for soil vapor intrusion (SVI). The results of this SVI investigation are presented in *Building 338 Sub-Slab Vapor Investigation* (GZA, September 16, 2019), which is included as an attachment in Appendix A. Therefore, a mitigation system will be installed as a preventive measure to ensure protection against soil vapor intrusion at Building 730 (338).

*Site Description and Well Point Construction*

iPark plans to fit-up Building 730 (338) for future occupancy by a gym, a bakery manufacturing operation, and other tenant uses to be determined. Each tenant space will be modified to suit the individual tenant needs.

A pilot mitigation test was conducted in accordance with the *Building 730 (338) Vapor Mitigation System Pilot Testing Plan* (Walden, February 11, 2020) which was verbally approved



by NYSDEC on February 12<sup>th</sup>. A copy of the Work Plan is included in Appendix A. The pilot test results establish the basis of the proposed full-scale mitigation system design.

Four (4) vacuum extraction well points were installed for the pilot test at the approximate locations shown on Figure 2 of this design plan. Twenty-four (24) vacuum pressure monitoring points were also installed, at distances of 5 ft, 10 ft, 20 ft, 30 ft, 40 ft and 50 ft from each well point. A utility mark-out was performed to clear these locations before drilling through the slab.

- The pilot test well points (PTP-1, PTP-2, PTP-3 and PTP-4) were constructed of 2-inch slotted PVC pipe connected to a solid PVC riser extending approximately one (1) foot below the bottom of the existing slab at each location. The bottom of the screened interval was capped with solid PVC. The pilot test well points were set in coarse sand and sealed with bentonite and cement.
- The pilot test microwell monitoring points consist of six-inch long stainless-steel mesh screens set in coarse sand and connected to ¼-inch inert polyethylene tubing.

The construction details for the pilot test well points and monitoring points are provided on Figure 3 of the Work Plan. When drilling to install the pilot test points, the concrete floor slab in certain areas of Building 730 (338) (refer to the areas noted on Figure 2) were determined to be more than 30 inches thick. Therefore, no extraction points or monitoring points were installed in these areas. The floor slab thickness in the other parts of the building ranged from approximately 6 to 12 inches.

#### Pilot Test

Once the test well points and monitoring points were installed, a pilot test was performed on February 19, 2020 to determine the area of influence each well is capable of producing. The pilot test results help to establish the basis for the full-scale mitigation system design to ensure that the installed system will depressurize the building slab. The pilot testing was performed in accordance with the New York State Department of Health *Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York* (October 2006), and the United States Environmental Protection Agency Office of Solid Waste and Emergency Response *Technical Guide for Assessing and Mitigating the Vapor Intrusion Pathway from Subsurface Vapor Sources to Indoor Air* (June 2015). These documents do not contain a specific value to define effective sub-slab depressurization. However, based on available industry guidance, achieving a pressure differential of -0.004 inches of water column (WC) across a slab is generally considered sufficient to prevent soil vapor intrusion. Therefore, the objective of the mitigation system design is to achieve and maintain a minimum differential pressure of -0.004 inches of WC across the



slab of Building 730 (338), regardless of weather conditions, barometric pressure, or HVAC operations.

Photographs taken during the pilot test are presented in Appendix B. Background pressure readings of the subsurface were taken prior to testing and are included in the pilot test data tables presented in Appendix C. During the course of the test, a regenerative blower (1 horsepower capable of delivering 40" of WC vacuum) was connected to the four pilot test points. The blower was set to varying vacuum settings and flow rates. Maximum vacuum and flow at each point depended on the integrity/seal of the floor slab in the vicinity of the point. All vacuum measurements were recorded using an Infiltec DM1 Micro-Manometer.

The raised slab area (as noted on Figure 2) was too thick to drill through even using an extension bit, therefore PTP-1 and PTP-2 were relocated outside the limits of the raised area. The floor near PTP-2 had many cracks and an open drain that limited how much vacuum and flow could be applied to the point. **No water was present in the drain; all floor drains in building 730 (338) go to the industrial waste pump room.** Based on the condition of the floor slab, mitigation efforts will include sealing cracks and penetrations in the floor to eliminate vapor intrusion pathways and provide a good seal to promote the propagation of the vacuum beneath the slab.

The vacuum readings collected during the pilot test are included in the tables in Appendix C. The data from each pilot test point was plotted under an applied vacuum ranging from 5 to 40 inches of WC with accompanying trendlines; these plots are also included in Appendix C. Based upon the results, each pilot test point produced an approximate radius of influence of 30 feet at an applied vacuum of only 15 inches of WC.

#### Soil Vapor Mitigation System Design

Based on the pilot test results, Walden will perform a phased installation that will follow these steps:

- Sealing cracks, seams and penetrations in the floor slab to eliminate vapor intrusion pathways, increase propagation of the sub-slab vacuum and maximize the area of influence produced by each leg of the mitigation system. A floor sealer or polyurethane caulk may be used to seal visible cracks. iPark will consult with the Building 730 (338) tenants to determine other floor sealing methods.
- **Building (730) 338 shall be divided into quadrants (approximate based on tenant spaces and buildout schedules). One test point will be installed and tested after floor sealing efforts have been completed within each quadrant in step with interior modifications within individual tenant spaces. The communication test results will be**



**used to determine the radius of influence for the remainder of the extraction points in the entire quadrant.**

- **Three (3) field determined temporary points will be located and used to collect communication data for the points. These points will range distances from 30 feet to 50 feet away from the test point. Results and figures documenting the field installation performance will be included in the as-builts.**
- **Points within each quadrant will be installed according to the results of the on-site communication testing.**
- At least 10 monitoring points from currently installed locations to remain.
- Each well point will be equipped with a RadonAway HS5000 fan capable of producing approximately 40” of WC and a RadonAway Checkpoint IIAR Mitigation System Monitor Remote Alarm P#28001-4 (refer to the cut sheets provided in Appendix D).
- Pressure gauges and system controls to manage each well point.

The radon fans, alarms and system gauges/controls will be mounted on the existing building columns and enclosures will be installed to protect and restrict access to the system components. All of the vacuum extraction points and monitoring points will be located outside the raised floor slab area, as it is not feasible to install these points through the 30+-inch thick slab in this area. Given the extent of the raised floor area, the vacuum extraction wells may not create a continuous vacuum beneath the entire raised area. However, considering the thickness of the raised slab and the elimination of all cracks, seams and penetrations in the slab, there will be no pathway for soil vapor intrusion through the slab.

Based on the 30-foot radius of influence observed during the pilot testing, approximately 25 vacuum extraction well points would be needed to depressurize the slab. However, once the floor is sealed and the full-scale system is in operation, the radius of influence at each point is expected to be at least 40 feet; the proposed design layout shown on Drawing 2 is based on a 40-foot radius of influence. **As described above**, Walden proposes to test the radius of influence after the floor is sealed **as individual tenant spaces are constructed** to determine the actual radius **per quadrant**. The number of vacuum extraction points and locations will be adjusted accordingly based on actual field conditions and the tenant space layouts. **This approach will be followed as each section of the mitigation system is installed and brought online as construction is completed and new tenants occupy the building.** As-built drawings for the full-scale system installation will be submitted to NYSDEC/NYSDOH after construction is completed **for each section**. In addition, start-up testing results documenting the system effectiveness will be submitted to NYSDEC/NYSDOH.

Ms. Jessica LaClair  
Building 730 (338) Basis of Design  
July 8, 2020

- 5 -



Operation and Maintenance

All mechanical aspects of the mitigation system will be visually inspected on a routine basis, and repaired as needed, to ensure proper function. Following the initial startup of the system and stabilization of vacuum readings, routine inspections, monitoring, and maintenance will be conducted on a periodic basis.

The vacuum at the monitoring points will be measured at the time of startup to confirm that the mitigation system effectively depressurizes the slab beneath Building 730 (338). All system PID screening and gauge readings will be collected for subsequent reporting. The frequency of the monitoring shall be evaluated at start-up and/or as directed by NYSDEC/NYSDOH.

Given the tenants' desire to take occupancy as soon as possible, iPark is ready to move forward with the installation of the system described herein upon authorization from the State. Therefore, we respectfully request that NYSDEC and NYSDOH prioritize issuing its authorization to proceed with the finalization of the system described within this report.

Please call me at (516) 624-7200 if you have any questions or need any additional information.

Very truly yours,  
Walden Environmental Engineering, PLLC

A handwritten signature in black ink that reads "Nora M. Brew".

Nora M. Brew, P.E.  
Senior Project Manager

cc: J. Kenney, NYSDOH  
M. Buckley, iPark  
C. Monheit, iPark  
D. Chartrand, IBM

Enclosures

- Figure 1 – Site Location Map
- Figure 2 – Pilot Test Well Point and Monitoring Point Locations
- Figure 3 – Well Point and Monitoring Point Details
- Appendix A – *Building 730 (338) Vapor Mitigation System Pilot Testing Plan* (Walden, February 11, 2020)
- Appendix B – Building 338 Pilot Test Photo Log (February 19, 2020)
- Appendix C – Pilot Test Results Table and Plots (February 19, 2020)
- Appendix D – RadonAway HS5000 Cut Sheet and Alarm

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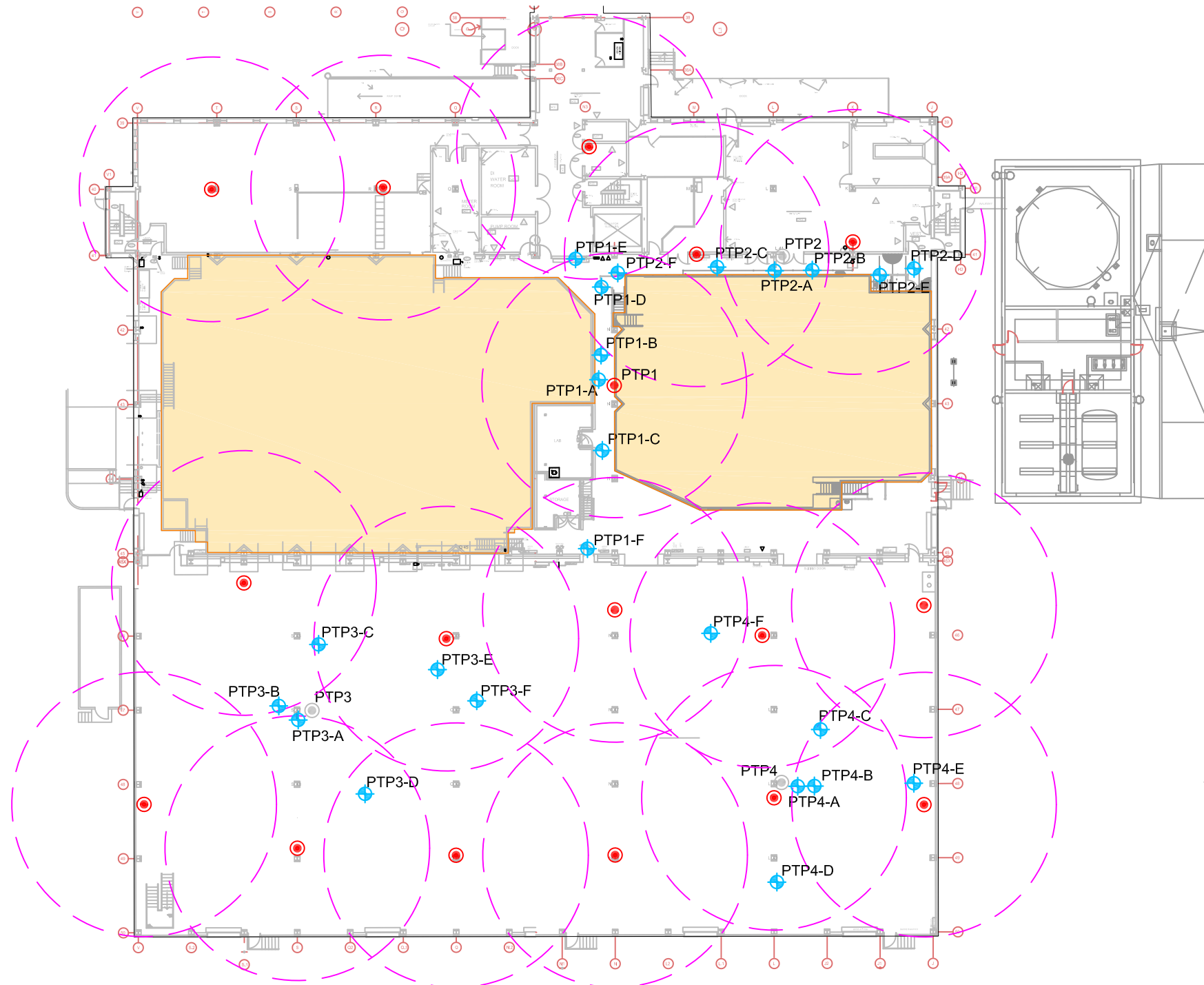
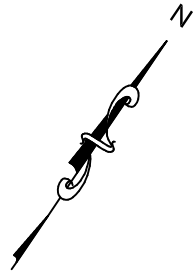
REVISION	
No.	DATE

FOR: BUILDING 730 (FORMER 338)  
 iPark 84 Campus  
 2070 State Route 52  
 Hopewell Junction, NY 12533  
 DESIGNED BY: NMB  
 APPROVED BY: JMH






DRAWING TITLE:  
**SITE PLAN**  
 BUILDING 338-VAPOR MITIGATION  
 SYSTEM  
 DRAWN BY: EJK  
 SCALE: AS NOTED

FIGURE NO:  
**1**  
 SHEET NO: 1 OF 2  
 ISSUED  
 REVISION NO:  
**0**

JOB NO: IPARK118.47 DATE: 4/13/20 11x17  
 CAD FILE NAME: Z:\IPARK118\Part0118.47 - 6338 SDDS Testing and Design\CAD\IPark Building Building 730 338\_SDDS\_JMS.dwg



**LEGEND**

-  CURRENTLY INSTALLED MONITORING POINTS
-  PROPOSED EXTRACTION WELL POINTS
-  40 FOOT RADIUS OF INFLUENCE
-  PILOT TEST WELL POINTS
-  RAISED SLAB AREA

**BLDG 730 (FORMERLY 338)  
PROPOSED WELL POINT LOCATIONS  
SCALE=1"=40'**

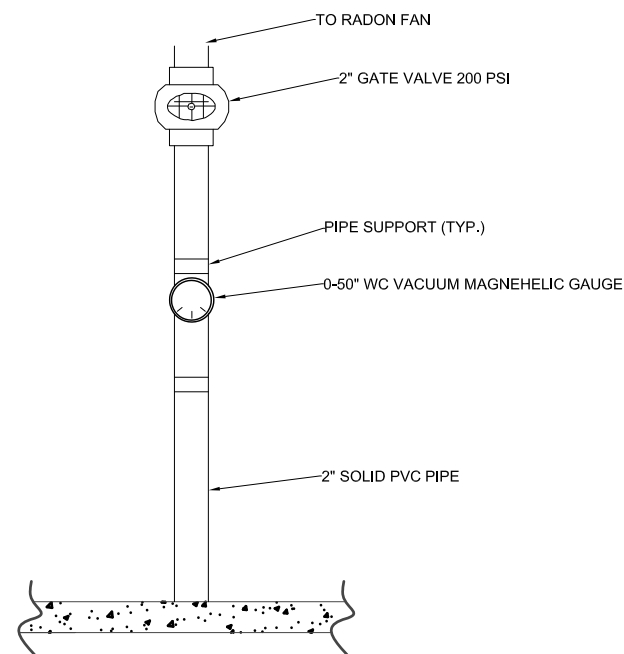
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REVISION	
No.	DATE

FOR: **BUILDING 730 (FORMER 338)**  
 iPark 84 Campus  
 2070 State Route 52  
 Hopewell Junction, NY 12533  
 DESIGNED BY: NMB    DRAWN BY: JMS  
 APPROVED BY: JMH    SCALE: AS NOTED

DRAWING TITLE:  
**PROPOSED WELL POINT  
LOCATIONS  
BUILDING 338-**  
 JOB NO: IPARK118.47    DATE: 4/16/2020    11x17 SHEET NO: 2 OF 2  
 CAD FILE NAME: Z:\IPARK118\Parad118.47 - 6338 SDDS Testing and Design\CAD\IPark Building Building 730 338\_SDDS\_JMS\_0620.dwg

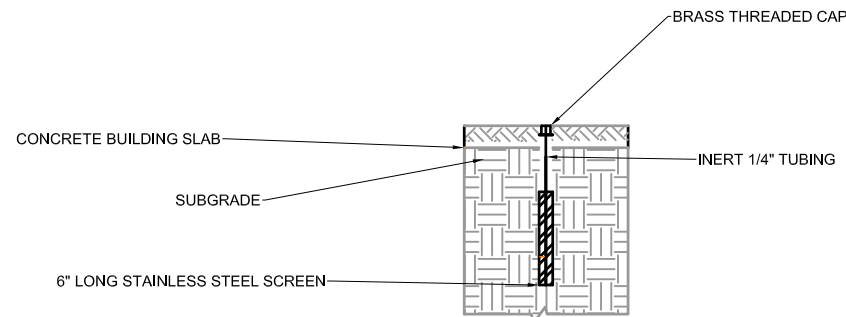
FIGURE NO: **2**  
 ISSUED  
 REVISION NO: **0**



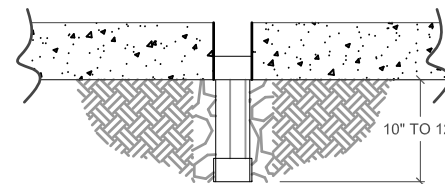
**PIPING CONFIGURATION DETAIL**  
NOT TO SCALE

**TYPICAL EXTRACTION POINT DETAIL NOTES:**

1. MAGNEHELIC GAUGE SHALL BE DWYER INSTRUMENTS MODEL #2050 OR APPROVED EQUAL, AND SHALL INCLUDE A-610 PIPE MOUNT KIT OR APPROVED EQUAL.
2. THREADED JOINTS SHALL BE MADE WITH TEFLON THREAD SEALANT TAPE TO BE VACUUM AND/OR PRESSURE TIGHT. THREAD SEALANT LIQUIDS OR PASTES SHALL NOT BE USED.
3. INSTALL SUITABLE HANGERS/SUPPORTS WITHIN 2 FEET OF EACH SIDE OF A PIPE JOINT. HANGERS AND/OR SUPPORTS SHOULD BE INSTALLED EVERY 10 FEET OF STRAIGHT PIPE.

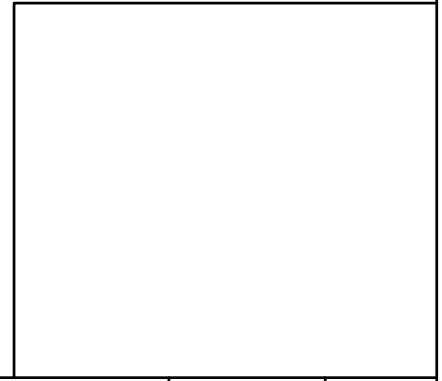


**TYPICAL MONITORING POINT DETAIL**  
NOT TO SCALE



**TYPICAL EXTRACTION POINT DETAIL**  
NOT TO SCALE

1. ACTUAL PIPE RUNS TO BE DETERMINED IN FIELD



REVISION	
No.	DATE

FOR: BUILDING 730 (FORMER 338) iPark 84 Campus 2070 State Route 52 Hopewell Junction, NY 12533
DESIGNED BY: NMB
APPROVED BY: JMH

DRAWING TITLE: <b>VAPOR EXTRACTION WELL AND MONITORING WELL DETAILS</b>
DESIGNED BY: NMB
APPROVED BY: JMH

FIGURE NO: <b>3</b>	ISSUED <b>0</b>
REVISION NO: <b>0</b>	



APPENDIX A

BUILDING 730 (338) VAPOR MITIGATION SYSTEM PILOT TESTING PLAN  
(Walden, February 11, 2020)

**BUILDING 730 (FORMERLY BUILDING 338)  
VAPOR MITIGATION SYSTEM TESTING PLAN**

**AT**

**IPARK 84  
FORMER IBM EAST FISHKILL FACILITY**

**FEBRUARY 2020**

**PREPARED FOR:**

**JESSICA LACLAIR  
NEW YORK STATE DEPT. OF ENVIRONMENTAL CONSERVATION  
DEPT. OF ENVIRONMENTAL REMEDIATION  
625 BROADWAY  
ALBANY, NEW YORK 12233-7013**

**WALDEN ENVIRONMENTAL ENGINEERING, PLLC**  
**Industry Leader in Environmental Engineering Consulting**

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February 11, 2020

iPark0118.47

Ms. Jessica LaClair  
Environmental Engineer  
Division of Environmental Remediation  
New York State Department of Environmental Conservation  
625 Broadway  
Albany, NY 12233-7013

Re: iPark 84  
Former IBM East Fishkill Facility  
Building 730 (338) Vapor Mitigation  
System Pilot Testing Plan

Dear Ms. LaClair:

This submittal has been prepared by Walden Environmental Engineering, PLLC (“Walden”) on behalf of iPark East Fishkill LLC (iPark) to present the pilot testing plan as part of the mitigation system design for Building 730 (formerly Building 338), located at 2070 State Route 52 in Hopewell Junction, New York, herein after referred to as the “Site”. The Site location map is presented as Figure 1. The results of an investigation conducted at Building 730 (338) in March 2019 indicated the presence of volatile organic compound (VOC) vapors below the slab and the potential for soil vapor intrusion (SVI). The results of this SVI investigation are presented in Attachment A: *Building 338 Sub-Slab Vapor Investigation* (GZA, September 16, 2019). Therefore, a mitigation system will be installed as a preventive measure to ensure protection against soil vapor intrusion at Building 730 (338).

iPark plans to fit-up Building 730 (338) for future occupancy by a gym, a bakery manufacturing operation, and other tenant uses to be determined. Each tenant space will be modified to suit the individual tenant needs. A pilot mitigation test will be conducted as described below to establish the basis of the full-scale mitigation system design.

Four (4) vacuum extraction well points will be installed for the pilot test at the approximate locations shown on Figure 2. Approximately 24 vacuum pressure monitoring points (installed at



distances of 5 ft, 10 ft, 20 ft, 30 ft, 40 ft and 50 ft from each well point). A utility mark-out will be performed to clear these locations before drilling through the slab.

- The pilot test well points will be constructed of 2-inch slotted PVC pipe connected to a solid PVC riser extending approximately one (1) foot below the bottom of the existing slab at each location. The bottom of the screened interval will be capped with solid PVC. The Building 730 (338) slab is expected to range from 6 to 12 inches thick based on the site conditions encountered during the March 2019 SVI investigation. The pilot test well points will be set in coarse sand and sealed with bentonite and cement.
- The pilot test microwell monitoring points will consist of six-inch long stainless-steel mesh screens set in coarse sand and connected to ¼-inch inert polyethylene tubing.

The construction details for the pilot test well points and monitoring points are provided on Figure 3. The locations of the well points and monitoring points will be adjusted as needed based on field conditions.

Once the test well points and monitoring points are installed, a pilot test will be performed to determine the area of influence each well is capable of producing. The pilot test results will establish the basis for the full-scale mitigation system design to ensure that the installed system will depressurize the entire building slab. The pilot testing will be performed in accordance with the New York State Department of Health *Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York* (October 2006), and the United States Environmental Protection Agency Office of Solid Waste and Emergency Response *Technical Guide for Assessing and Mitigating the Vapor Intrusion Pathway from Subsurface Vapor Sources to Indoor Air* (June 2015). These documents do not contain a specific value to define effective sub-slab depressurization. However, based on available industry guidance, achieving a pressure differential of -0.004 inches of water column (WC) across a slab is generally considered sufficient to prevent soil vapor intrusion. Therefore, the objective of the mitigation system design will be to achieve and maintain a minimum differential pressure of -0.004 inches of WC across the slab of Building 730 (338), regardless of weather conditions, barometric pressure, or HVAC operations.

Atmospheric conditions during the pilot test will be recorded along with any observations that may impact interpretation of the pilot test results. Background pressure readings will be collected prior to the testing. A vacuum blower (1.5 horsepower capable of delivering 59" inches of WC vacuum and a maximum flow rate of 120 SCFM) will be connected to the vacuum extraction well points during the test. The blower will be set to varying pressures and flow rates. Pressure readings will be recorded from each monitoring point utilizing a micromanometer.

Ms. Jessica LaClair  
Building 730 (338) Pilot Test Plan  
February 11, 2020

- 3 -



Based on the radius of influence observed during the pilot testing, the full-scale mitigation system will be designed to depressurize the entire slab. The pilot test results and full-scale system design will be submitted to NYSDEC/NYSDOH for review and approval.

iPark and its subcontractors shall adhere to the HASP that is provided in Attachment B for all activities that will be conducted under this pilot testing plan. Health and Safety air monitoring will take place during work to monitor workers' exposure. Only on-Site personnel who have received 40-hour OSHA Hazardous Waste Operations and Emergency Response (HAZWOPER) training and annual 8-hour refresher training (and have proof of certified HAZWOPER training) will be allowed in the exclusion zone and contaminant reduction zone per the HASP. Because Building 730 (338) is vacant and the proposed pilot test work will be conducted indoors, CAMP air monitoring is not required.

Given the tenant's desire to take occupancy as soon as possible, iPark is ready to move forward with the pilot testing upon authorization from the State. Therefore, we respectfully request that NYSDEC and NYSDOH prioritize issuing its authorization to proceed with the pilot test.

Please call me at (516) 624-7200 if you have any questions or need any additional information.

Very truly yours,  
Walden Environmental Engineering, PLLC

A handwritten signature in cursive script that reads "Nora M. Brew".

Nora M. Brew, P.E.  
Senior Project Manager

cc: J. Kenney, NYSDOH  
M. Buckley, iPark  
C. Monheit, iPark  
D. Chartrand, IBM

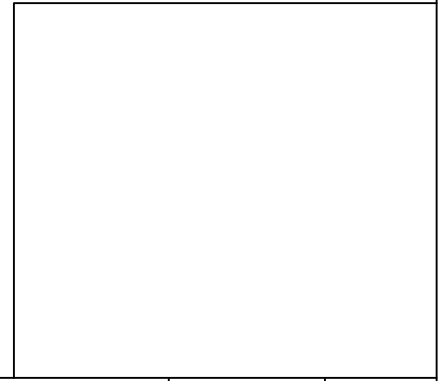
#### Enclosures

- Figure 1 – Site Location Map
- Figure 2 – Proposed Well Point and Monitoring Point Locations
- Figure 3 – Well Point and Monitoring Point Details

Attachment A - Building 338 Sub-Slab Vapor Investigation (GZA, September 16, 2019)  
Attachment B – Health and Safety Plan



**SITE PLAN**  
**NOT TO SCALE**



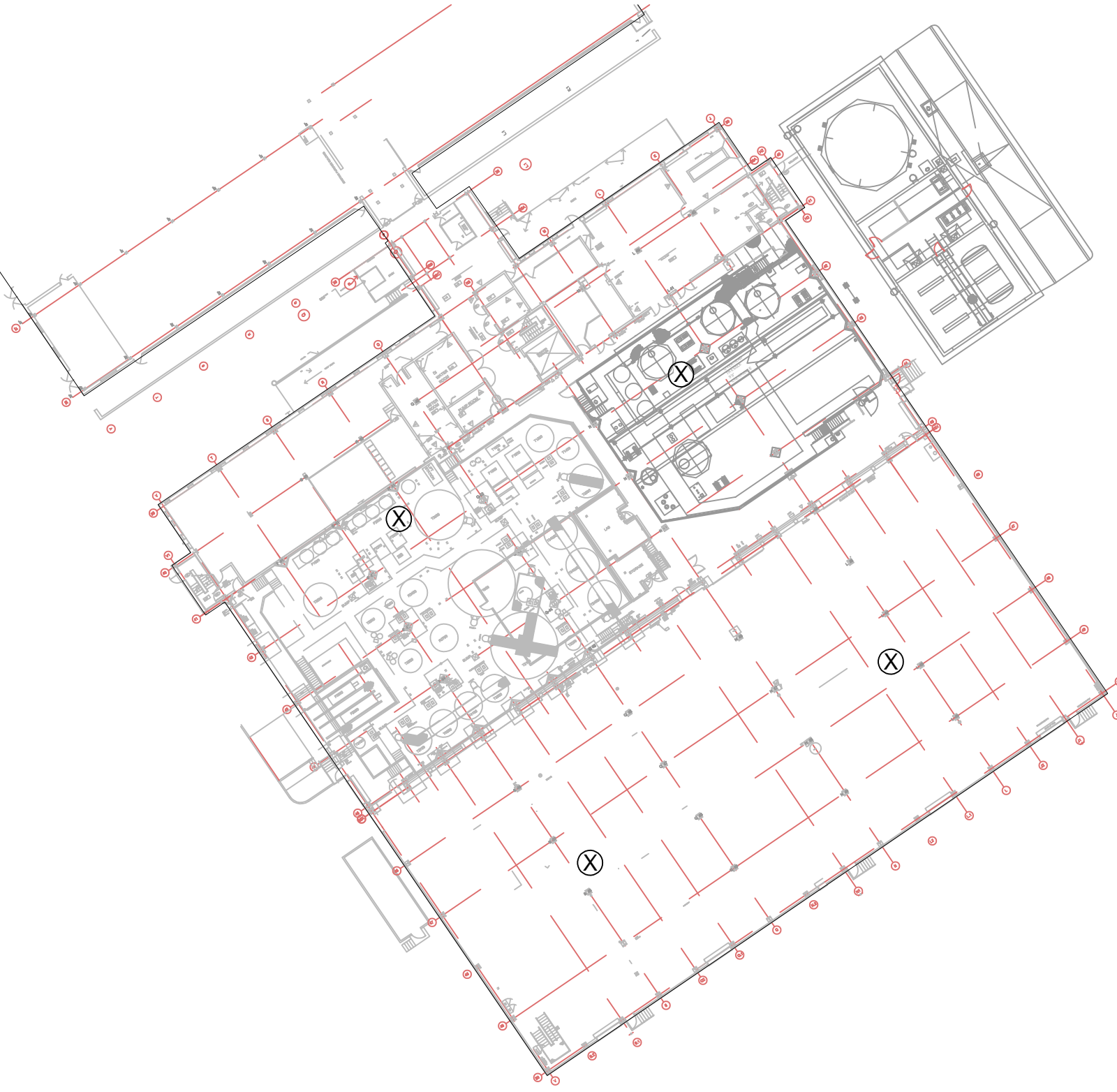
REVISION	
No.	DATE

FOR: <b>BUILDING 730 (FORMER 338)</b> iPark 84 Campus 2070 State Route 52 Hopewell Junction, NY 12533
DESIGNED BY: NMB
APPROVED BY: JMH

DRAWING TITLE: <b>SITE PLAN</b> <b>BUILDING 338-PILOT TEST</b>
DESIGNED BY: NMB
APPROVED BY: JMH

FIGURE NO: <b>1</b>	ISSUED
REVISION NO: <b>0</b>	
SHEET NO: 1 OF 2	

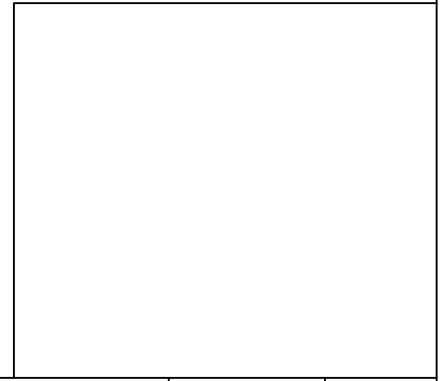




**LEGEND**

⊗ PROPOSED TEST WELL POINTS

**BLDG 730 (FORMERLY 338)  
PILOT TEST WELL POINT LOCATIONS  
NOT TO SCALE**




**WALDEN ENVIRONMENTAL ENGINEERING, PLLC**  
 16 SPRING STREET  
 OYSTER BAY, NEW YORK 11771  
 P: (516) 624-7200 F: (516) 624-3219  
 WWW.WALDENENVIRONMENTALENGINEERING.COM

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REVISION	
No.	DATE

FOR: **BUILDING 730 (FORMER 338)**  
 iPark 84 Campus  
 2070 State Route 52  
 Hopewell Junction, NY 12533

DRAWING TITLE:  
**WELL POINT LOCATIONS  
 BUILDING 338- PILOT TEST**

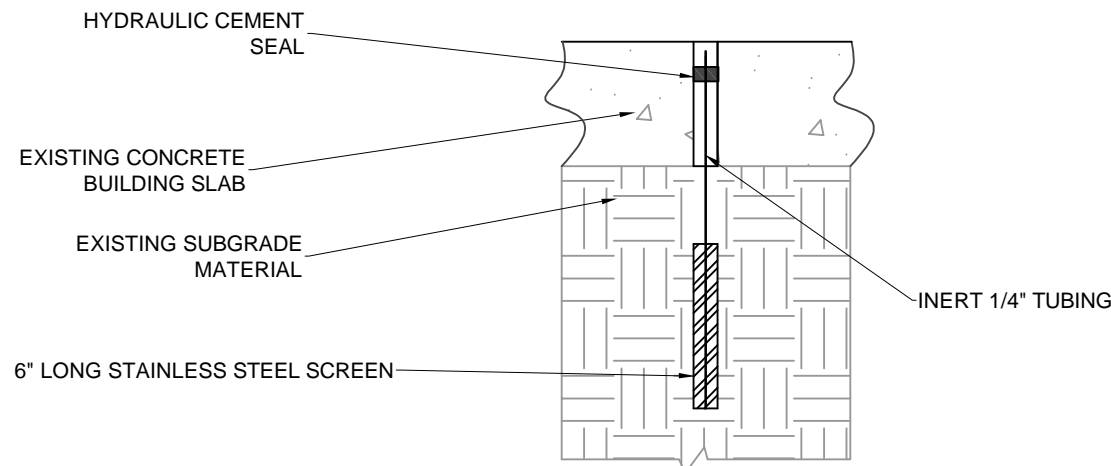
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**2**

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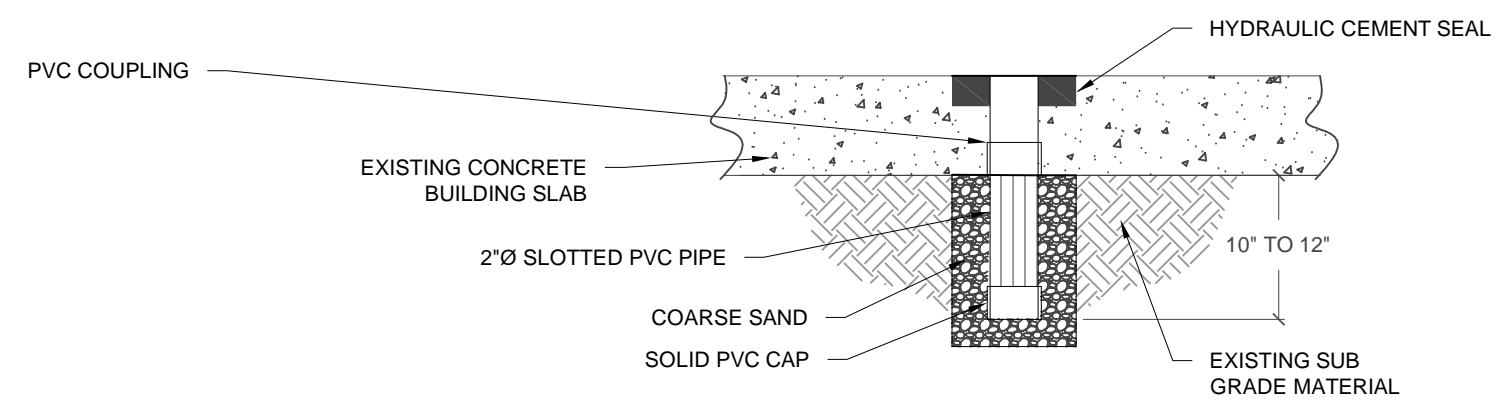
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SHEET NO: 2 OF 2

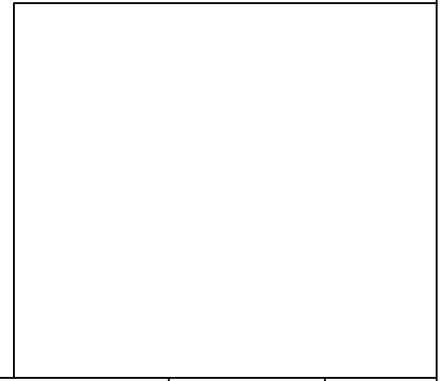
DESIGNED BY: NMB    DRAWN BY: EJK    JOB NO: IPARK118.47    DATE: 2/11/20    11x17    SHEET NO: 2 OF 2  
 APPROVED BY: JMH    SCALE: AS NOTED    CAD FILE NAME: 2:\IPark\118\Par\0118.47 - 8338 SDC\IPark Building Building 730-338 Pilot test.dwg



**TYPICAL MONITORING POINT DETAIL**  
SCALE: N.T.S.



**TYPICAL TEST WELL POINT DETAIL**  
SCALE: N.T.S.



REVISION	
No.	DATE

FOR: **BUILDING 730 (FORMER 338)**  
 iPark 84 Campus  
 2070 State Route 52  
 Hopewell Junction, NY 12533  
 DESIGNED BY: NMB    DRAWN BY: EJK  
 APPROVED BY: JMH    SCALE: AS NOTED

DRAWING TITLE:  
**FIGURE 3 - DETAILS**  
**BUILDING 338- PILOT TEST**  
 JOB NO: IPARK118.47    DATE: 2/11/20    11x17  
 CAD FILE NAME: 21IPark0118/Park0118.47 - 8338 SDD/Figure 3.dwg

DRAWING NO: **3**  
 SHEET NO: 3 OF 3  
 ISSUED  
 REVISION NO: **0**



ATTACHMENT A

BUILDING 338 SUB-SLAB VAPOR INVESTIGATION (GZA, SEPTEMBER 16, 2019)



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GZA GeoEnvironmental of  
New York  
104 West 29th Street  
10th Floor  
New York, NY 10001  
T: 212.594.8140  
F: 212.279.8180  
www.gza.com

September 16, 2019  
File No. 12.0076252.10

Jessica LaClair  
Environmental Engineer  
Division of Environmental Remediation  
New York State Department of Environmental Conservation  
625 Broadway  
Albany, NY 12233-7013

Re: Building 338 Sub-Slab Vapor Investigation  
Former IBM East Fishkill Facility, Hopewell Junction, NY  
NYSDEC Site No. 314054, EPA ID NYD000707901

Dear Ms. LaClair

GZA GeoEnvironmental of New York (GZA) has prepared this letter on behalf of i.park84, LLC to detail the collection of sub-slab soil gas and indoor air samples within Building 338 at the Former IBM East Fishkill Facility located at 2070 Route 52, Hopewell Junction, NY (Site). The objective of the sampling was to evaluate the sub-slab soil vapor and indoor air within Building 338 in order to assess the potential for soil vapor intrusion. Future sampling will be conducted to evaluate the potential exposures to Site-related contaminants via the soil vapor intrusion pathway for future occupants once the building remodeled and the heating ventilation and air conditioning (HVAC) is operational. Investigation activities were conducted in accordance GZA's March 6, 2019 Sub-Slab Vapor Investigation Work Plan – Building 338 (Work Plan) approved by the New York State Department of Environmental Conservation (NYSDEC) on March 15, 2019, except where otherwise noted.

#### **FIELD INVESTIGATION ACTIVITIES**

The field investigation activities included a pre-sampling building inspection, installation of permanent sub-slab vapor monitoring points, and the collection and analysis of sub-slab soil vapor, indoor air and ambient air samples.

#### **BUILDING INSPECTION**

GZA conducted a pre-sampling inspection of Building 338 on June 16, 2019 to evaluate the condition of the slab as well as to identify materials currently or historically stored or used within the building that have a potential to be a source of volatile chemicals.



The interior building slab was observed to be in good condition with minimal cracking. GZA observed raised areas constructed of concrete within the first floor of the building (**Figure 1**). It is unknown if these raised areas are filled with concrete or other fill material (e.g., soil). These areas were elevated approximately 24 inches above the slab.

During the inspection, GZA observed metal working operations in the eastern portion of the building. GZA did not observe other operations involving materials/chemicals that could interfere with the proposed sampling. GZA did observe a supply of cleaning materials in the southern portion of the Building in the vicinity of SS-01. These materials were moved to the western portion of the Building to be kept at a distance from the proposed indoor air sampling locations during sampling. A copy of the completed New York State Department of Health (NYSDOH) Indoor Air Quality Questionnaire and Building Inventory can be found in **Attachment A**.

#### SUB-SLAB VAPOR MONITORING POINT INSTALLATION

On June 16, 2019, permanent sub-slab vapor monitoring points (SS-01 through SS-04) were installed within Building 338. The locations of SS-02 and SS-03 were relocated from the locations identified in the Work Plan due to the presence of the elevated concrete surfaces.

The sub-slab vapor monitoring points were constructed by coring an approximate 3-inch diameter hole through the concrete floor slab and installing a 2-inch-diameter by approximately 1.5-ft-long 20-slot schedule 40 PVC screen equipped with a capped port flush with the existing slab. Sub-slab vapor monitoring points were installed approximately 12-inches below the slab. The sub-slab vapor monitoring points were sealed with a mixture of bentonite and cement and installed flush with the existing slab. **Figure 1** depicts the location of the sub-slab vapor monitoring points.

#### SAMPLING AND ANALYSIS

On June 17, 2019, GZA mobilized to the Site to perform leak testing and to collect air samples. Helium integrity testing was performed on each sub-slab vapor monitoring points in accordance with the Work Plan.

Following completion of leak testing, the following samples were collected:

- One sub-slab soil vapor sample from each sub-slab vapor monitoring point (SS-01 through SS-04);
- One co-located indoor air sample in the vicinity of each sub-slab vapor monitoring point (IA-01 through IA-04);
- Two ambient air samples on the exterior of Building 338 (AA-01 and AA-02); and
- One duplicate ambient air sample (DUP-06181) at sample location AA-01.

Sampling was conducted in accordance with the NYSDEC-approved Work Plan. Collection of sub-slab vapor samples and indoor air samples was conducted over 30 minutes. During sampling, GZA noted that multiple loading dock doors on the east, west and south walls of Building 338 were periodically opened/closed. GZA



requested that this activity be kept to a minimum and continued with the indoor air sampling. Ambient air samples were collected from an upwind (AA-01) and downwind (AA-02) location over 30 minutes. A duplicate sample was collected at location AA-01. Samples were analyzed by Alpha Analytical by U.S. Environmental Protection Agency (EPA) method TO-15. **Figure 1** depicts the sample locations.

## RESULTS

The analytical results of the sub-slab soil vapor and indoor air samples were compared to the Soil Vapor/Indoor Air Matrices provided in NYSDOH's Guidance for Evaluating Soil Vapor Intrusion in the State of New York. Based on the concentrations detected in sub-slab soil vapor and indoor air, the Soil Vapor/Indoor Air Matrix indicates no further action for constituents other than PCE.

Tetrachloroethene (PCE) exceeded the sub-slab vapor matrix value of 100  $\mu\text{g}/\text{m}^3$  at all samples (SS-01 through SS-04) with detected concentrations of 104, 204, 213 and 1010  $\mu\text{g}/\text{m}^3$ , respectively. However, PCE was below the indoor air matrix value of 3  $\mu\text{g}/\text{m}^3$  in all samples (IA-01 through IA-04) with concentrations of 0.305, 0.278, 0.332 and 0.305  $\mu\text{g}/\text{m}^3$  respectively. Based on the PCE concentrations detected at SS-04 (1010  $\mu\text{g}/\text{m}^3$ ) and IA-04 (0.305  $\mu\text{g}/\text{m}^3$ ), the recommended action indicated on the Soil Vapor/Indoor Air Matrix is mitigation. Based on the PCE concentrations detected at SS-01 through SS-03 and IA-01 through IA-03, no further action is indicated on the Soil Vapor/Indoor Air Matrix. However, as noted earlier, possible interference (increased ventilation from the opening of the loading dock doors) occurred during the indoor air sampling.

The results of the indoor air samples (IA-01 through IA-04) were compared to Table C-1 2003 Upper Fence Study of Volatile Organic Chemicals in air of Fuel Oil Heated Homes for Indoor Air, Table C-2 2001 USEPA BASE 90<sup>th</sup> Percentile for Indoor Air, Table C-5 Health Effects Institute 95<sup>th</sup> Percentile for Indoor Air (Indoor Air Background Values), and the NYSDOH Air Guidance Values (AGV). Concentrations of tetrahydrofuran, trichlorofluoromethane and n-hexane exceeded one or more of the Indoor Air Background Values at one or more of the indoor air sampling locations. The results indicated no exceedances of the NYSDOH AGVs for any indoor air sample. The results are presented in **Table 1**.

## DISCUSSION

The results of this investigation indicate there is the potential for vapor intrusion within Building 338 based on the elevated concentrations of PCE identified in the sub-slab soil vapors, most notably in the northern portion of the building. However, the indoor air concentrations of PCE do not indicate current exposure. As noted above, the indoor air concentrations could have been affected by the opening/closing of loading dock doors during sampling. Although tetrahydrofuran, trichlorofluoromethane and n-hexane were detected above Indoor Air Background Values concentrations in indoor air were generally higher than the sub-slab soil vapor concentrations indicating that there are other potential sources of these compounds contributing to the detected concentrations rather than sub-slab soil vapor.



GZA recommends further evaluation once the final proposed layout of Building 338 is complete. Based on the proposed use of the building and areas to be occupied following redevelopment, an evaluation should be conducted to determine whether mitigation is needed in portions of the building and the most appropriate mitigation methods.

If you have any questions regarding the above, please contact Meredith Hayes at 973.774.3332 or [meredith.hayes@gza.com](mailto:meredith.hayes@gza.com).

Very truly yours,  
GZA GEOENVIRONMENTAL OF NEW YORK, INC.

A handwritten signature in blue ink that reads "M. Hayes".

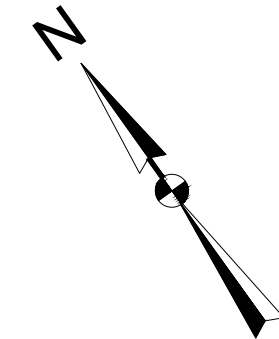
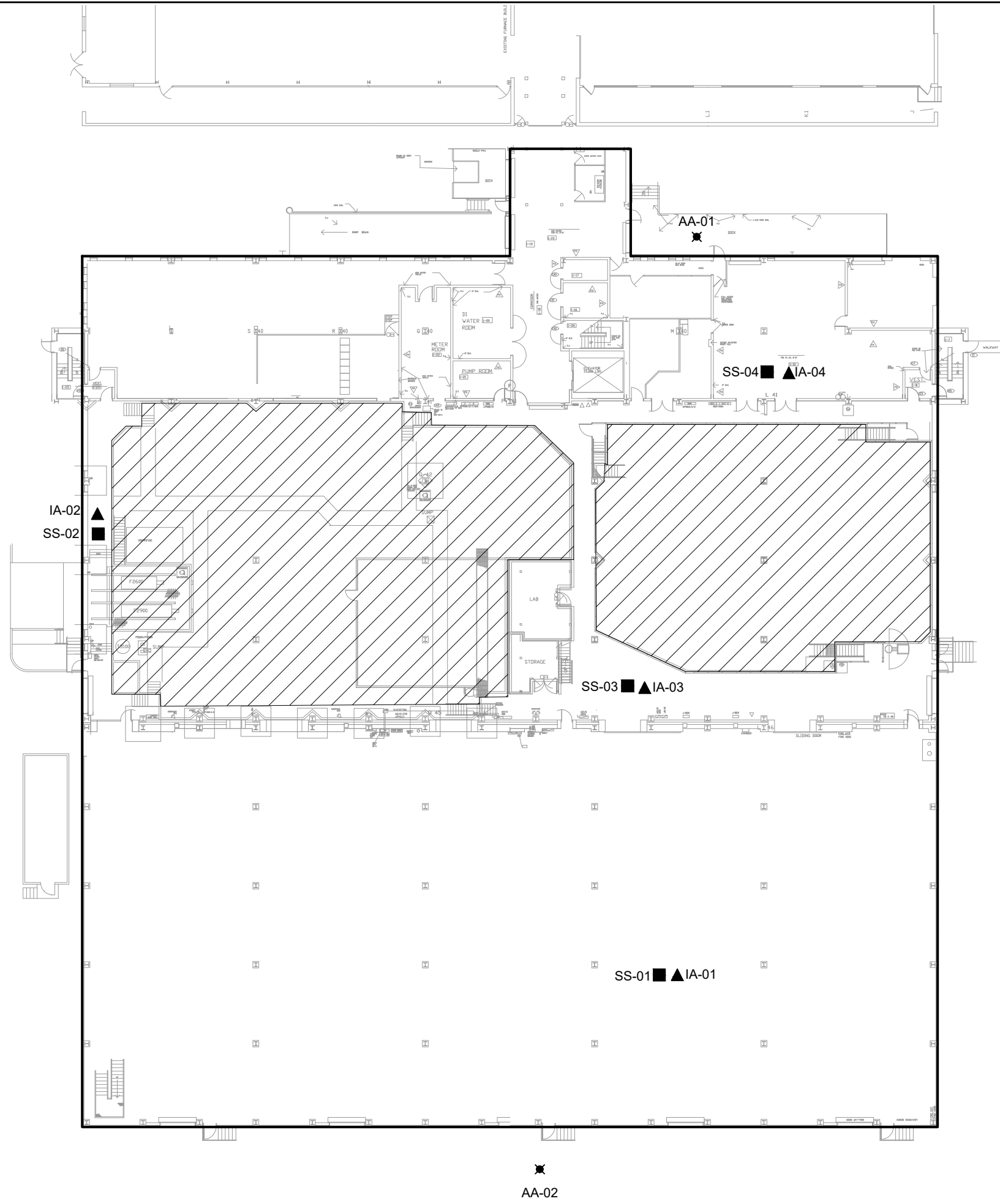
Meredith Hayes  
Senior Project Manager

A handwritten signature in blue ink that reads "Ernest Hanna".

Ernest Hanna, P.E.  
Consultant/Reviewer

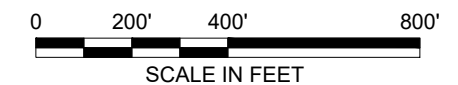
A handwritten signature in blue ink that reads "David Winslow".

David Winslow, P.G., Ph.D.  
Senior Vice President



**LEGEND:**

- BUILDING 338 FOOTPRINT
- ▨ APPROXIMATE AREA OF RAISED SLAB
- SUB-SLAB SAMPLE LOCATION
- ▲ INDOOR AIR SAMPLE LOCATION
- ✱ AMBIENT AIR SAMPLE LOCATION



NO.	ISSUE/DESCRIPTION	BY	DATE

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**SOIL VAPOR INTRUSION ASSESSMENT REPORT - BUILDING 338**

**SAMPLE LOCATION MAP**

PREPARED BY: <b>GZA</b> GeoEnvironmental, Inc. Engineers and Scientists www.gza.com		PREPARED FOR: I.PARK84, LLC. GREENWICH, CT	
PROJ MGR: BP	REVIEWED BY: BR	CHECKED BY: BP	<b>FIGURE 1</b> SHEET NO.
DESIGNED BY: BR	DRAWN BY: MT	SCALE: 1" = 400'	
DATE: JULY, 2019	PROJECT NO. 12.0076252.10	REVISION NO.	

✱ AA-02

**TABLE 1**  
ANALYTICAL RESULTS  
Building 338 Sub-slab Vapor Investigation  
2070 Route 52  
Hopewell Junction, New York 12533

SAMPLE ID:	NYSDOH AGV <sup>1</sup>	Fuel Oil 2003 Upper Indoor <sup>2</sup>	BASE Data 90th <sup>3</sup>	2005 95th Percentile Indoor <sup>4</sup>	SS-04			IA-04			SS-03			IA-03			SS-02			IA-02			
LAB ID:					L1926771-01			L1926771-08			L1926771-03			L1926771-07			L1926771-02			L1926771-06			
COLLECTION DATE:					6/18/2019			6/18/2019			6/18/2019			6/18/2019			6/18/2019			6/18/2019			
SAMPLE MATRIX:					SOIL_VAPOR			AIR			SOIL_VAPOR			AIR			SOIL_VAPOR			AIR			
					Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc
<b>VOLATILE ORGANICS IN AIR</b>																							
Dichlorodifluoromethane		10	16.5				9.25	1.98		5.04	0.989		6.13	0.989		4.92	0.989		4190	0.989		5.09	0.989
Chloromethane		4.2	3.7				1.66	0.826		1.51	0.413		2.46	0.413		1.42	0.413		ND	0.413		1.48	0.413
Freon-114		0.4					ND	2.8		ND	1.4		ND	1.4		ND	1.4		ND	1.4		ND	1.4
Vinyl chloride		0.4	1.9				ND	1.02		-	-		ND	0.511		-	-		ND	0.511		-	-
1,3-Butadiene			3				51.3	0.885		ND	0.442		ND	0.442		ND	0.442		ND	0.442		ND	0.442
Bromomethane		0.5	1.7				ND	1.55		ND	0.777		ND	0.777		ND	0.777		ND	0.777		ND	0.777
Chloroethane		0.4	1.1				ND	1.06		ND	0.528		ND	0.528		ND	0.528		ND	0.528		ND	0.528
Ethanol		1300	210				31.1	18.8		ND	9.42		38.3	9.42		ND	9.42		23.9	9.42		12	9.42
Vinyl bromide							ND	1.75		ND	0.874		ND	0.874		ND	0.874		ND	0.874		ND	0.874
Acetone		115	98.9	45.8			71.5	4.75		9.38	2.38		116	2.38		11.6	2.38		30.6	2.38		15.5	2.38
Trichlorofluoromethane		12	18.1				10.2	2.25		11.7	1.12		10.5	1.12		10.5	1.12		9.44	1.12		12	1.12
Isopropanol			250				ND	2.46		1.57	1.23		2.75	1.23		1.42	1.23		2.17	1.23		2.15	1.23
1,1-Dichloroethene		0.4	1.4				ND	1.59		-	-		ND	0.793		-	-		ND	0.793		-	-
Tertiary butyl Alcohol							5.18	3.03		ND	1.52		6.03	1.52		ND	1.52		2.6	1.52		ND	1.52
Methylene chloride	60	16	10	7.5			ND	3.47		ND	1.74		ND	1.74		ND	1.74		ND	1.74		ND	1.74
3-Chloropropene							ND	1.25		ND	0.626		ND	0.626		ND	0.626		ND	0.626		ND	0.626
Carbon disulfide			4.2				8.19	1.25		ND	0.623		9.93	0.623		ND	0.623		4.11	0.623		ND	0.623
Freon-113			3.5				ND	3.07		ND	1.53		ND	1.53		ND	1.53		ND	1.53		ND	1.53
trans-1,2-Dichloroethene							ND	1.59		2.85	0.793		1.53	0.793		2.7	0.793		1.97	0.793		2.67	0.793
1,1-Dichloroethane		0.4	0.7				ND	1.62		ND	0.809		ND	0.809		ND	0.809		ND	0.809		ND	0.809
Methyl tert butyl ether		14	11.5	36			ND	1.44		ND	0.721		ND	0.721		ND	0.721		ND	0.721		ND	0.721
2-Butanone			12				14.4	2.95		ND	1.47		21.6	1.47		ND	1.47		6.08	1.47		1.72	1.47
cis-1,2-Dichloroethene		0.4	1.9				ND	1.59		-	-		ND	0.793		-	-		ND	0.793		-	-
Ethyl Acetate			5.4				ND	3.6		ND	1.8		ND	1.8		ND	1.8		ND	1.8		ND	1.8
Chloroform		1.2	1.1	6.34			6.06	1.95		ND	0.977		36.9	0.977		ND	0.977		17.9	0.977		ND	0.977
Tetrahydrofuran		0.8					19.5	2.95		1.7	1.47		19.1	1.47		ND	1.47		7.37	1.47		ND	1.47
1,2-Dichloroethane		0.4	0.9				ND	1.62		ND	0.809		ND	0.809		ND	0.809		ND	0.809		ND	0.809
n-Hexane		14	10.2				ND	1.41		ND	0.705		2.21	0.705		ND	0.705		1.07	0.705		ND	0.705
1,1,1-Trichloroethane		2.5	20.6				ND	2.18		-	-		ND	1.09		-	-		ND	1.09		-	-
Benzene		13	9.4	10			1.66	1.28		ND	0.639		1.5	0.639		ND	0.639		0.834	0.639		ND	0.639
Carbon tetrachloride		1.3	1.3	1.1			ND	2.52		-	-		ND	1.26		-	-		ND	1.26		-	-
Cyclohexane		6.3					ND	1.38		ND	0.688		1.03	0.688		ND	0.688		ND	0.688		ND	0.688
1,2-Dichloropropane		0.4	1.6				ND	1.85		ND	0.924		ND	0.924		ND	0.924		ND	0.924		ND	0.924
Bromodichloromethane							ND	2.68		ND	1.34		1.63	1.34		ND	1.34		2.72	1.34		ND	1.34
1,4-Dioxane							ND	1.44		ND	0.721		ND	0.721		ND	0.721		ND	0.721		ND	0.721
Trichloroethene	2	0.5	4.2	1.36			2.26	2.15		-	-		ND	1.07		-	-		ND	1.07		-	-
2,2,4-Trimethylpentane		5					ND	1.87		ND	0.934		ND	0.934		ND	0.934		ND	0.934		ND	0.934
Heptane							ND	1.64		ND	0.82		2.16	0.82		ND	0.82		ND	0.82		ND	0.82
cis-1,3-Dichloropropene		0.4	2.3				ND	1.82		ND	0.908		ND	0.908		ND	0.908		ND	0.908		ND	0.908
4-Methyl-2-pentanone		1.9	6				ND	4.1		ND	2.05		ND	2.05		ND	2.05		2.72	2.05		ND	2.05
trans-1,3-Dichloropropene			1.3				ND	1.82		ND	0.908		ND	0.908		ND	0.908		ND	0.908		ND	0.908
1,1,2-Trichloroethane		0.4	1.5				ND	2.18		ND	1.09		ND	1.09		ND	1.09		ND	1.09		ND	1.09
Toluene		57	43	39.8			5.09	1.51		1.77	0.754		5.13	0.754		1.04	0.754		4.33	0.754		1.39	0.754
2-Hexanone							ND	1.64		ND	0.82		ND	0.82		ND	0.82		1.27	0.82		ND	0.82
Dibromochloromethane							ND	3.41		ND	1.7		ND	1.7		ND	1.7		ND	1.7		ND	1.7
1,2-Dibromoethane		0.4	1.5				ND	3.07		ND	1.54		ND	1.54		ND	1.54		ND	1.54		ND	1.54
Tetrachloroethene	30	2.5	15.9	6.01			1010	2.71		-	-		213	1.36		-	-		204	1.36		-	-

**TABLE 1**  
**ANALYTICAL RESULTS**  
 Building 338 Sub-slab Vapor Investigation  
 2070 Route 52  
 Hopewell Junction, New York 12533

SAMPLE ID:	NYSDOH AGV <sup>1</sup>	Fuel Oil 2003 Upper Indoor <sup>2</sup>	BASE Data 90th <sup>3</sup>	2005 95th Percentile Indoor <sup>4</sup>	SS-04			IA-04			SS-03			IA-03			SS-02			IA-02		
LAB ID:					L1926771-01			L1926771-08			L1926771-03			L1926771-07			L1926771-02			L1926771-06		
COLLECTION DATE:					6/18/2019			6/18/2019			6/18/2019			6/18/2019			6/18/2019			6/18/2019		
SAMPLE MATRIX:					SOIL_VAPOR			AIR			SOIL_VAPOR			AIR			SOIL_VAPOR			AIR		
					Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL
Chlorobenzene		0.4	0.9		ND		1.84	ND		0.921	ND		0.921	ND		0.921	ND		0.921	ND		0.921
Ethylbenzene		6.4	5.7	7.62	10.9		1.74	ND		0.869	2.68		0.869	ND		0.869	2.32		0.869	ND		0.869
p/m-Xylene		11	22.2	22.2	8.34		3.47	ND		1.74	5.47		1.74	ND		1.74	6.91		1.74	ND		1.74
Bromoform					ND		4.14	ND		2.07	ND		2.07	ND		2.07	ND		2.07	ND		2.07
Styrene		1.4	1.9	5.13	ND		1.7	ND		0.852	ND		0.852	ND		0.852	ND		0.852	ND		0.852
1,1,2,2-Tetrachloroethane		0.4			ND		2.75	ND		1.37	ND		1.37	ND		1.37	ND		1.37	ND		1.37
o-Xylene		7.1	7.9	7.24	3.9		1.74	ND		0.869	2.51		0.869	ND		0.869	2.69		0.869	ND		0.869
4-Ethyltoluene			3.6		2.6		1.97	ND		0.983	2		0.983	ND		0.983	2.38		0.983	ND		0.983
1,3,5-Trimethylbenzene		3.9	3.7		3.17		1.97	ND		0.983	2.69		0.983	ND		0.983	2.76		0.983	ND		0.983
1,2,4-Trimethylbenzene		9.8	9.5		17		1.97	ND		0.983	13.4		0.983	ND		0.983	16.5		0.983	ND		0.983
Benzyl chloride			6.8		ND		2.07	ND		1.04	ND		1.04	ND		1.04	ND		1.04	ND		1.04
1,3-Dichlorobenzene		0.5	2.4		ND		2.4	ND		1.2	ND		1.2	ND		1.2	ND		1.2	ND		1.2
1,4-Dichlorobenzene		1.2	5.5	344	ND		2.4	ND		1.2	ND		1.2	ND		1.2	ND		1.2	ND		1.2
1,2-Dichlorobenzene		0.5	1.2		ND		2.4	ND		1.2	ND		1.2	ND		1.2	ND		1.2	ND		1.2
1,2,4-Trichlorobenzene		0.5	6.8		ND		2.97	ND		1.48	ND		1.48	ND		1.48	ND		1.48	ND		1.48
Hexachlorobutadiene		0.5	6.8		ND		4.27	ND		2.13	ND		2.13	ND		2.13	ND		2.13	ND		2.13
<b>VOLATILE ORGANICS IN AIR BY SIM</b>																						
Vinyl chloride		0.4	1.9		*		*	ND		0.051	*		*	ND		0.051	*		*	ND		0.051
1,1-Dichloroethene		0.4	1.4		*		*	ND		0.079	*		*	ND		0.079	*		*	ND		0.079
cis-1,2-Dichloroethene		0.4	1.9		*		*	ND		0.079	*		*	ND		0.079	*		*	ND		0.079
1,1,1-Trichloroethane		2.5	20.6		*		*	ND		0.109	*		*	ND		0.109	*		*	ND		0.109
Carbon tetrachloride		1.3	1.3	1.1	*		*	0.503		0.126	*		*	0.604		0.126	*		*	0.503		0.126
Trichloroethene	2	0.5	4.2	1.36	*		*	ND		0.107	*		*	ND		0.107	*		*	ND		0.107
Tetrachloroethene	30	2.5	15.9	6.01	*		*	0.305		0.136	*		*	0.332		0.136	*		*	0.278		0.136

Notes:

- 1 - NYSDOH Air Guidance Value (indoor air samples only)
- 2 - Table C-1 2003 Upper Fence Study of Volatile Organic Chemicals in air of Fuel Oil Heated Homes for Indoor Air (indoor air samples only)
- 3 - Table C-2 2001 USEPA BASE 90th Percentile for Indoor Air (indoor air sample only)
- 4 - Table C-5 2005 Health Effects Institute 95th Percentile for Indoor Air (indoor air samples only)

4	This value exceeds NYSDOH AGV
6	This value exceeds one or more of the Indoor Air Background Values
2	This detection limit exceeds the applicable criteria
-	Compound analyzed by SIM, See "Volatile Organics in Air by SIM" Compound List
*	Compound not analyzed by SIM, See "Volatile Organics in Air" Compound List
Q	Laboratory data qualifier
ND	The compound was not detected above the method detection limit
J	Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than MDL. The concentration given is an approximate value.
RL	Reporting limit



**TABLE 1**  
**ANALYTICAL RESULTS**  
 Building 338 Sub-slab Vapor Investigation  
 2070 Route 52  
 Hopewell Junction, New York 12533

SAMPLE ID:	NYSDOH AGV <sup>1</sup>	Fuel Oil 2003 Upper Indoor <sup>2</sup>	BASE Data 90th <sup>3</sup>	2005 95th Percentile Indoor <sup>4</sup>	SS-01			IA-01			AA-01			AA-02			DUP-061819		
LAB ID:					L1926771-04			L1926771-05			L1926771-09			L1926771-10			L1926771-11		
COLLECTION DATE:					6/18/2019			6/18/2019			6/18/2019			6/18/2019			6/18/2019		
SAMPLE MATRIX:					SOIL_VAPOR			AIR			AIR			AIR			AIR		
					Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL
<b>VOLATILE ORGANICS IN AIR</b>																			
Dichlorodifluoromethane		10	16.5		72.7	0.989		3.79	0.989		2.76	0.989		2.71	0.989		3	0.989	
Chloromethane		4.2	3.7		6.03	0.413		2.13	0.413		1.54	0.413		1.85	0.413		1.5	0.413	
Freon-114		0.4			ND	1.4		ND	1.4		ND	1.4		ND	1.4		ND	1.4	
Vinyl chloride		0.4	1.9		ND	0.511		-	-		-	-		-	-		-	-	
1,3-Butadiene			3		4.76	0.442		ND	0.442		ND	0.442		ND	0.442		ND	0.442	
Bromomethane		0.5	1.7		ND	0.777		ND	0.777		ND	0.777		ND	0.777		ND	0.777	
Chloroethane		0.4	1.1		0.752	0.528		ND	0.528		ND	0.528		ND	0.528		ND	0.528	
Ethanol		1300	210		11.1	9.42		86.9	9.42		ND	9.42		ND	9.42		ND	9.42	
Vinyl bromide					ND	0.874		ND	0.874		ND	0.874		ND	0.874		ND	0.874	
Acetone		115	98.9	45.8	43.2	2.38		36.8	2.38		8.22	2.38		25.7	2.38		10	2.38	
Trichlorofluoromethane		12	18.1		10.5	1.12		16.8	1.12		1.43	1.12		1.45	1.12		1.54	1.12	
Isopropanol			250		1.99	1.23		6.71	1.23		ND	1.23		3.07	1.23		ND	1.23	
1,1-Dichloroethene		0.4	1.4		ND	0.793		-	-		-	-		-	-		-	-	
Tertiary butyl Alcohol					5.12	1.52		ND	1.52		ND	1.52		ND	1.52		ND	1.52	
Methylene chloride	60	16	10	7.5	ND	1.74		8.62	1.74		ND	1.74		ND	1.74		ND	1.74	
3-Chloropropene					ND	0.626		ND	0.626		ND	0.626		ND	0.626		ND	0.626	
Carbon disulfide			4.2		22.8	0.623		0.878	0.623		ND	0.623		ND	0.623		ND	0.623	
Freon-113			3.5		3.34	1.53		ND	1.53		ND	1.53		ND	1.53		ND	1.53	
trans-1,2-Dichloroethene					1.09	0.793		1.15	0.793		ND	0.793		ND	0.793		ND	0.793	
1,1-Dichloroethane		0.4	0.7		ND	0.809		ND	0.809		ND	0.809		ND	0.809		ND	0.809	
Methyl tert butyl ether		14	11.5	36	ND	0.721		ND	0.721		ND	0.721		ND	0.721		ND	0.721	
2-Butanone			12		96.1	1.47		6.58	1.47		ND	1.47		2.42	1.47		ND	1.47	
cis-1,2-Dichloroethene		0.4	1.9		ND	0.793		-	-		-	-		-	-		-	-	
Ethyl Acetate			5.4		ND	1.8		ND	1.8		ND	1.8		ND	1.8		ND	1.8	
Chloroform		1.2	1.1	6.34	130	0.977		ND	0.977		ND	0.977		ND	0.977		ND	0.977	
Tetrahydrofuran		0.8			128	1.47		79	1.47		2.72	1.47		ND	1.47		ND	1.47	
1,2-Dichloroethane		0.4	0.9		ND	0.809		ND	0.809		ND	0.809		ND	0.809		ND	0.809	
n-Hexane		14	10.2		4.86	0.705		20.4	0.705		ND	0.705		ND	0.705		ND	0.705	
1,1,1-Trichloroethane		2.5	20.6		ND	1.09		-	-		-	-		-	-		-	-	
Benzene		13	9.4	10	2.39	0.639		2.26	0.639		ND	0.639		ND	0.639		ND	0.639	
Carbon tetrachloride		1.3	1.3	1.1	ND	1.26		-	-		-	-		-	-		-	-	
Cyclohexane		6.3			1.42	0.688		1.45	0.688		ND	0.688		ND	0.688		ND	0.688	
1,2-Dichloropropane		0.4	1.6		ND	0.924		ND	0.924		ND	0.924		ND	0.924		ND	0.924	
Bromodichloromethane					6.24	1.34		ND	1.34		ND	1.34		ND	1.34		ND	1.34	
1,4-Dioxane					ND	0.721		ND	0.721		ND	0.721		ND	0.721		ND	0.721	
Trichloroethene	2	0.5	4.2	1.36	ND	1.07		-	-		-	-		-	-		-	-	
2,2,4-Trimethylpentane		5			2.96	0.934		2.06	0.934		ND	0.934		ND	0.934		ND	0.934	
Heptane					4.34	0.82		2.66	0.82		ND	0.82		ND	0.82		ND	0.82	
cis-1,3-Dichloropropene		0.4	2.3		ND	0.908		ND	0.908		ND	0.908		ND	0.908		ND	0.908	
4-Methyl-2-pentanone		1.9	6		3.28	2.05		ND	2.05		ND	2.05		ND	2.05		ND	2.05	
trans-1,3-Dichloropropene			1.3		ND	0.908		ND	0.908		ND	0.908		ND	0.908		ND	0.908	
1,1,2-Trichloroethane		0.4	1.5		ND	1.09		ND	1.09		ND	1.09		ND	1.09		ND	1.09	
Toluene		57	43	39.8	6.1	0.754		11	0.754		1.54	0.754		1.22	0.754		1.32	0.754	
2-Hexanone					ND	0.82		ND	0.82		ND	0.82		ND	0.82		ND	0.82	
Dibromochloromethane					1.94	1.7		ND	1.7		ND	1.7		ND	1.7		ND	1.7	
1,2-Dibromoethane		0.4	1.5		ND	1.54		ND	1.54		ND	1.54		ND	1.54		ND	1.54	
Tetrachloroethene	30	2.5	15.9	6.01	104	1.36		-	-		-	-		-	-		-	-	

**TABLE 1**  
**ANALYTICAL RESULTS**  
 Building 338 Sub-slab Vapor Investigation  
 2070 Route 52  
 Hopewell Junction, New York 12533

SAMPLE ID:	NYSDOH AGV <sup>1</sup>	Fuel Oil 2003 Upper Indoor <sup>2</sup>	BASE Data 90th <sup>3</sup>	2005 95th Percentile Indoor <sup>4</sup>	SS-01			IA-01			AA-01			AA-02			DUP-061819		
LAB ID:					L1926771-04			L1926771-05			L1926771-09			L1926771-10			L1926771-11		
COLLECTION DATE:					6/18/2019			6/18/2019			6/18/2019			6/18/2019			6/18/2019		
SAMPLE MATRIX:					SOIL_VAPOR			AIR			AIR			AIR			AIR		
					Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL
Chlorobenzene		0.4	0.9		ND		0.921	ND		0.921	ND		0.921	ND		0.921	ND		0.921
Ethylbenzene		6.4	5.7	7.62	6.12		0.869	1.08		0.869	ND		0.869	ND		0.869	ND		0.869
p/m-Xylene		11	22.2	22.2	9.21		1.74	3.58		1.74	ND		1.74	ND		1.74	ND		1.74
Bromoform					ND		2.07	ND		2.07	ND		2.07	ND		2.07	ND		2.07
Styrene		1.4	1.9	5.13	ND		0.852	ND		0.852	ND		0.852	ND		0.852	ND		0.852
1,1,2,2-Tetrachloroethane		0.4			ND		1.37	ND		1.37	ND		1.37	ND		1.37	ND		1.37
o-Xylene		7.1	7.9	7.24	3.55		0.869	1.39		0.869	ND		0.869	ND		0.869	ND		0.869
4-Ethyltoluene			3.6		2.2		0.983	ND		0.983	ND		0.983	ND		0.983	ND		0.983
1,3,5-Trimethylbenzene		3.9	3.7		2.66		0.983	ND		0.983	ND		0.983	ND		0.983	ND		0.983
1,2,4-Trimethylbenzene		9.8	9.5		13.9		0.983	1.82		0.983	ND		0.983	ND		0.983	ND		0.983
Benzyl chloride			6.8		ND		1.04	ND		1.04	ND		1.04	ND		1.04	ND		1.04
1,3-Dichlorobenzene		0.5	2.4		ND		1.2	ND		1.2	ND		1.2	ND		1.2	ND		1.2
1,4-Dichlorobenzene		1.2	5.5	344	ND		1.2	ND		1.2	ND		1.2	ND		1.2	ND		1.2
1,2-Dichlorobenzene		0.5	1.2		ND		1.2	ND		1.2	ND		1.2	ND		1.2	ND		1.2
1,2,4-Trichlorobenzene		0.5	6.8		ND		1.48	ND		1.48	ND		1.48	ND		1.48	ND		1.48
Hexachlorobutadiene		0.5	6.8		ND		2.13	ND		2.13	ND		2.13	ND		2.13	ND		2.13
<b>VOLATILE ORGANICS IN AIR BY SIM</b>																			
Vinyl chloride		0.4	1.9		*		*	ND		0.051	ND		0.051	ND		0.051	ND		0.051
1,1-Dichloroethene		0.4	1.4		*		*	ND		0.079	ND		0.079	ND		0.079	ND		0.079
cis-1,2-Dichloroethene		0.4	1.9		*		*	0.19		0.079	ND		0.079	ND		0.079	ND		0.079
1,1,1-Trichloroethane		2.5	20.6		*		*	ND		0.109	ND		0.109	ND		0.109	ND		0.109
Carbon tetrachloride		1.3	1.3	1.1	*		*	0.503		0.126	0.484		0.126	0.491		0.126	0.51		0.126
Trichloroethene	2	0.5	4.2	1.36	*		*	0.279		0.107	ND		0.107	ND		0.107	ND		0.107
Tetrachloroethene	30	2.5	15.9	6.01	*		*	0.305		0.136	0.278		0.136	0.298		0.136	0.305		0.136

Notes:

- 1 - NYSDOH Air Guidance Value (indoor air samples only)
- 2 - Table C-1 2003 Upper Fence Study of Volatile Organic Chemicals in air of Fuel Oil Heated Homes for Indoor Air (indoor air samples only)
- 3 - Table C-2 2001 USEPA BASE 90th Percentile for Indoor Air (indoor air sample only)
- 4 - Table C-5 2005 Health Effects Institute 95th Percentile for Indoor Air (indoor air samples only)

4	This value exceeds NYSDOH AGV
6	This value exceeds one or more of the Indoor Air Background Values
2	This detection limit exceeds the applicable criteria
-	Compound analyzed by SIM, See "Volatile Organics in Air by SIM" Compound List
*	Compound not analyzed by SIM, See "Volatile Organics in Air" Compound List
Q	Laboratory data qualifier
ND	The compound was not detected above the method detection limit
J	Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than MDL. The concentration given is an approximate value.
RL	Reporting limit

## **Appendix B**

### **Indoor air quality questionnaire and building inventory**

---

As discussed in Section 2.11, products in buildings should be inventoried every time indoor air is sampled to provide an accurate assessment of the potential contribution of volatile chemicals. In addition, the type of structure, floor layout and physical conditions of the building being studied should be noted to identify (and minimize) conditions that may interfere with the proposed testing.

Toward this end, a blank copy of the NYSDOH Center for Environmental Health's Indoor Air Quality Questionnaire and Building Inventory is provided in this appendix. Also provided is an example that demonstrates how the form should be completed properly.

**NEW YORK STATE DEPARTMENT OF HEALTH  
INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY  
CENTER FOR ENVIRONMENTAL HEALTH**

This form must be completed for each residence involved in indoor air testing.

Preparer's Name Ben Romagnolo Date/Time Prepared 6/17/19  
Preparer's Affiliation GZA GeoEnvironmental Phone No. 973-774-3300  
Purpose of Investigation SUI Assessment

**1. OCCUPANT:**

Interviewed: Y /  N

Last Name: \_\_\_\_\_ First Name: \_\_\_\_\_

Address: \_\_\_\_\_

County: \_\_\_\_\_

Home Phone: \_\_\_\_\_ Office Phone: \_\_\_\_\_

Number of Occupants/persons at this location \_\_\_\_\_ Age of Occupants \_\_\_\_\_

**2. OWNER OR LANDLORD:** (Check if same as occupant \_\_\_)

Interviewed: Y /  N

Last Name: \_\_\_\_\_ First Name: \_\_\_\_\_

Address: \_\_\_\_\_

County: \_\_\_\_\_

Home Phone: \_\_\_\_\_ Office Phone: \_\_\_\_\_

**3. BUILDING CHARACTERISTICS**

Type of Building: (Circle appropriate response)

- |  |                              |  |
|--|------------------------------|--|
| <input checked="" type="radio"/> Residential | <input type="radio"/> School | <input type="radio"/> Commercial/Multi-use |
| <input type="radio"/> Industrial             | <input type="radio"/> Church | Other: _____                               |

5. BASEMENT AND CONSTRUCTION CHARACTERISTICS (Circle all that apply)

- a. Above grade construction: wood frame  concrete  stone  brick
- b. Basement type: full  crawlspace  slab  other N/A
- c. Basement floor: concrete  dirt  stone  other N/A
- d. Basement floor: uncovered  covered  covered with N/A
- e. Concrete floor:  unsealed  sealed  sealed with \_\_\_\_\_
- f. Foundation walls:  poured  block  stone  other \_\_\_\_\_
- g. Foundation walls: unsealed  sealed  sealed with N/A Unknown
- h. The basement is:  wet  damp  dry  moldy N/A
- i. The basement is: finished  unfinished  partially finished N/A
- j. Sump present?  Y /  N → in 1st floor
- k. Water in sump? Y /  N not applicable

Basement/Lowest level depth below grade: N/A (feet)

Identify potential soil vapor entry points and approximate size (e.g., cracks, utility ports, drains)

Multiple cracks observed throughout Building,  
Trench drains, grates

6. HEATING, VENTING and AIR CONDITIONING (Circle all that apply)

Type of heating system(s) used in this building: (circle all that apply – note primary)

- Hot air circulation  Heat pump  Hot water baseboard
- Space Heaters  Stream radiation  Radiant floor
- Electric baseboard  Wood stove  Outdoor wood boiler  Other High temp air circulation.

The primary type of fuel used is:

- Natural Gas  Fuel Oil  Kerosene
- Electric  Propane  Solar
- Wood  Coal

Domestic hot water tank fueled by: \_\_\_\_\_

Boiler/furnace located in: Basement  Outdoors  Main Floor  Other \_\_\_\_\_

Air conditioning: Central Air  Window units  Open Windows  None

j. Has painting/staining been done in the last 6 months? Y /  N Where & When? \_\_\_\_\_

k. Is there new carpet, drapes or other textiles? Y /  N Where & When? \_\_\_\_\_

l. Have air fresheners been used recently? Y /  N When & Type? \_\_\_\_\_

m. Is there a kitchen exhaust fan? Y /  N If yes, where vented? \_\_\_\_\_

n. Is there a bathroom exhaust fan? Y /  N If yes, where vented? \_\_\_\_\_

o. Is there a clothes dryer? Y /  N If yes, is it vented outside? Y / N

p. Has there been a pesticide application? Y /  N When & Type? \_\_\_\_\_

Are there odors in the building? Y /  N  
If yes, please describe: \_\_\_\_\_

Do any of the building occupants use solvents at work? Y /  N  
(e.g., chemical manufacturing or laboratory, auto mechanic or auto body shop, painting, fuel oil delivery, boiler mechanic, pesticide application, cosmetologist)

If yes, what types of solvents are used? \_\_\_\_\_

If yes, are their clothes washed at work? Y /  N

Do any of the building occupants regularly use or work at a dry-cleaning service? (Circle appropriate response)

Yes, use dry-cleaning regularly (weekly) No  
Yes, use dry-cleaning infrequently (monthly or less)  Unknown  
Yes, work at a dry-cleaning service

Is there a radon mitigation system for the building/structure? Y /  N Date of Installation: \_\_\_\_\_  
Is the system active or passive? Active/Passive

9. WATER AND SEWAGE

Water Supply: Public Water Drilled Well Driven Well Dug Well Other: \_\_\_\_\_

Sewage Disposal: Public Sewer Septic Tank Leach Field Dry Well Other: \_\_\_\_\_

10. RELOCATION INFORMATION (for oil spill residential emergency) N/A

a. Provide reasons why relocation is recommended: \_\_\_\_\_

b. Residents choose to: remain in home relocate to friends/family relocate to hotel/motel

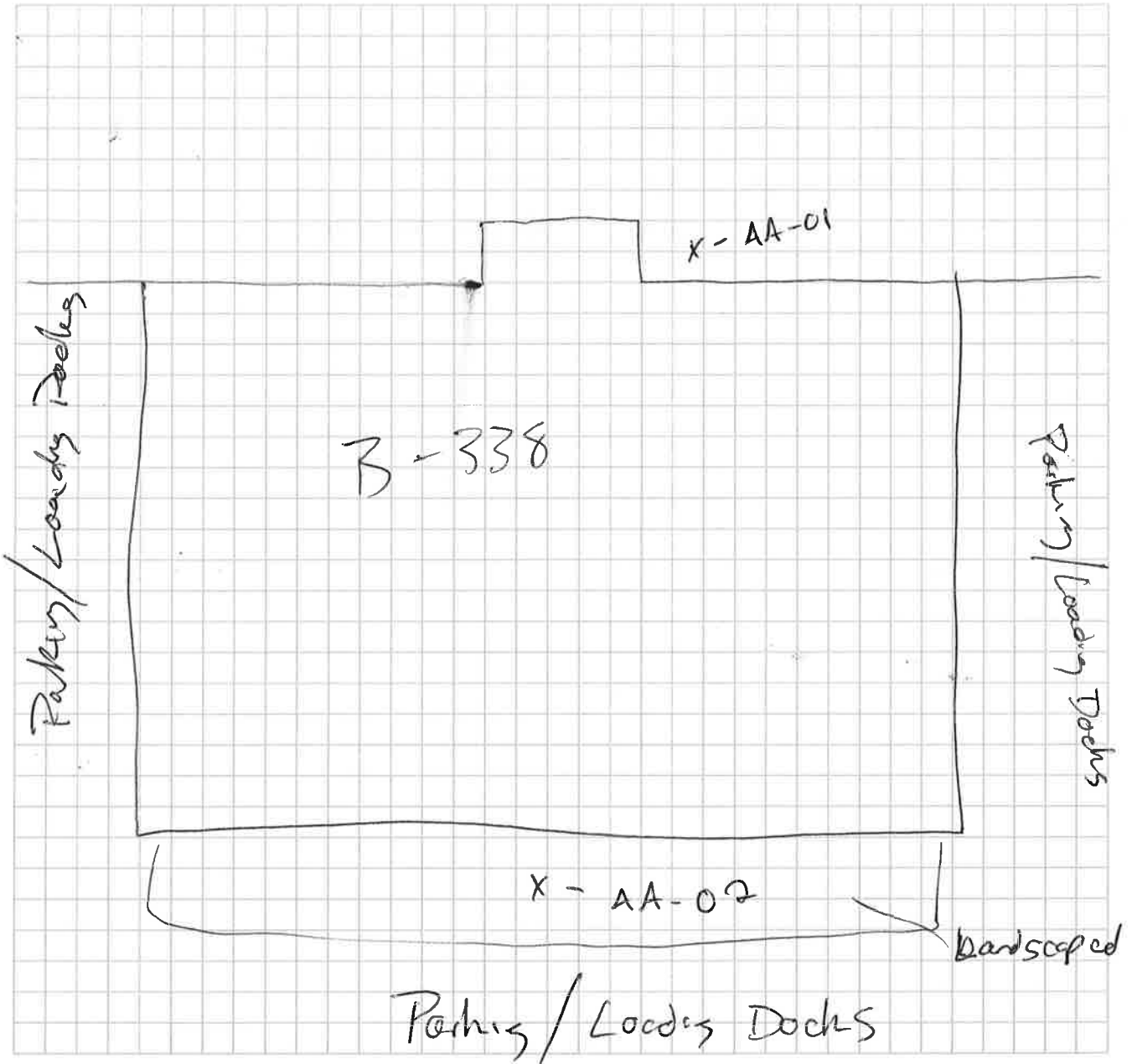
c. Responsibility for costs associated with reimbursement explained? Y / N

d. Relocation package provided and explained to residents? Y / N

### 12. OUTDOOR PLOT

Draw a sketch of the area surrounding the building being sampled. If applicable, provide information on spill locations, potential air contamination sources (industries, gas stations, repair shops, landfills, etc.), outdoor air sampling location(s) and PID meter readings.

Also indicate compass direction, wind direction and speed during sampling, the locations of the well and septic system, if applicable, and a qualifying statement to help locate the site on a topographic map.



Example

1

Correct

**NEW YORK STATE DEPARTMENT OF HEALTH  
INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY  
CENTER FOR ENVIRONMENTAL HEALTH**

This form must be completed for each residence involved in indoor air testing.

Preparer's Name Mary Jones Date/Time Prepared 10/22/04 10:00 am

Preparer's Affiliation XYZ Consulting Phone No. 518-555-1212

Purpose of Investigation Thomasville Soil Vapor Intrusion Investigation (Site #32141)

**1. OCCUPANT:**

Interviewed:  Y  N

Last Name: Smith First Name: Carol

Address: 25 Main Street Thomasville, New York 25230

County: Albany

Home Phone: 518-556-2222 Office Phone: 518-556-2400

Number of Occupants/persons at this location 2 Age of Occupants 36, 10

**2. OWNER OR LANDLORD:** (Check if same as occupant )

Interviewed: Y  N

Last Name: White First Name: Frank

Address: 64 Mountain Road Bainbridge, New York 26390

County: Dutchess

Home Phone: 845-876-1301 Office Phone: 845-227-2430

**3. BUILDING CHARACTERISTICS**

**Type of Building:** (Circle appropriate response)

Residential  
 Industrial

School  
 Church

Commercial/Multi-Use  
Other: \_\_\_\_\_



Example Correct 3

5. BASEMENT AND CONSTRUCTION CHARACTERISTICS (Circle all that apply)

- a. Above grade construction:  wood frame    concrete    stone    brick
- b. Basement type:  full    crawlspace    slab    other \_\_\_\_\_
- c. Basement floor:  concrete    dirt    stone    other \_\_\_\_\_
- d. Basement floor:  uncovered    covered    covered with \_\_\_\_\_
- e. Concrete floor:  unsealed    sealed    sealed with \_\_\_\_\_
- f. Foundation walls:  poured    block    stone    other \_\_\_\_\_
- g. Foundation walls:  unsealed    sealed    sealed with \_\_\_\_\_
- h. The basement is:    wet    damp     dry    moldy
- i. The basement is:    finished     unfinished    partially finished
- j. Sump present?    Y  N
- k. Water in sump?    Y / N /  not applicable

Basement/Lowest level depth below grade: 6 (feet)

Identify potential soil vapor entry points and approximate size (e.g., cracks, utility ports, drains)

Floor drain in laundry area

6. HEATING, VENTING and AIR CONDITIONING (Circle all that apply)

Type of heating system(s) used in this building: (circle all that apply – note primary)

- Hot air circulation    Heat pump    Hot water baseboard
- Space Heaters    Stream radiation    Radiant floor
- Electric baseboard    Wood stove    Outdoor wood boiler    Other \_\_\_\_\_

The primary type of fuel used is:

- Natural Gas     Fuel Oil    Kerosene
- Electric    Propane    Solar
- Wood    Coal

Domestic hot water tank fueled by: gas

Boiler/furnace located in:  Basement    Outdoors    Main Floor    Other \_\_\_\_\_

Air Conditioning:    Central Air     Window units    Open Windows    None

# Example Correct

j. Has painting/staining been done in the last 6 months? Y /  N Where & When? \_\_\_\_\_

k. Is there new carpet, drapes or other textiles?  Y /  N Where & When? carpet in dining room

l. Have air fresheners been used recently? Y /  N When & Type? \_\_\_\_\_

m. Is there a kitchen exhaust fan?  Y /  N If yes, where vented? outside

n. Is there a bathroom exhaust fan? Y /  N If yes, where vented? \_\_\_\_\_

o. Is there a clothes dryer?  Y /  N If yes, is it vented outside?  Y /  N

p. Has there been a pesticide application? Y /  N When & Type? \_\_\_\_\_

Are there odors in the building? Y /  N

If yes, please describe: \_\_\_\_\_

Do any of the building occupants use solvents at work?  Y /  N

(e.g., chemical manufacturing or laboratory, automechanic or autobody shop, painting, fuel oil delivery, boiler mechanic, pesticide application, cosmetologist etc.)

If yes, what types of solvents are used? hair salon dyes, alcohols, peroxides, acetone

If yes, are their clothes washed at work? Y /  N

Do any of the building occupants regularly use or work at a dry-cleaning service? (Circle appropriate response)

- Yes, use dry-cleaning regularly (weekly)
- Yes, use dry-cleaning infrequently (monthly or less)
- Yes, work at a dry-cleaning service
- No
- Unknown

Is there a radon mitigation system for the building/structure?  Y /  N Date of Installation: June 2000

Is the system active or passive?  Active /  Passive

## 9. WATER AND SEWAGE

Water Supply: Public Water  Drilled Well  Driven Well  Dug Well Other: \_\_\_\_\_

Sewage Disposal: Public Sewer  Septic Tank  Leach Field  Dry Well Other: \_\_\_\_\_

## 10. RELOCATION INFORMATION (for oil spill residential emergency)

a. Provide reasons why relocation is recommended: not applicable

b. Residents choose to: remain in home  relocate to friends/family  relocate to hotel/motel

c. Responsibility for costs associated with reimbursement explained? Y / N

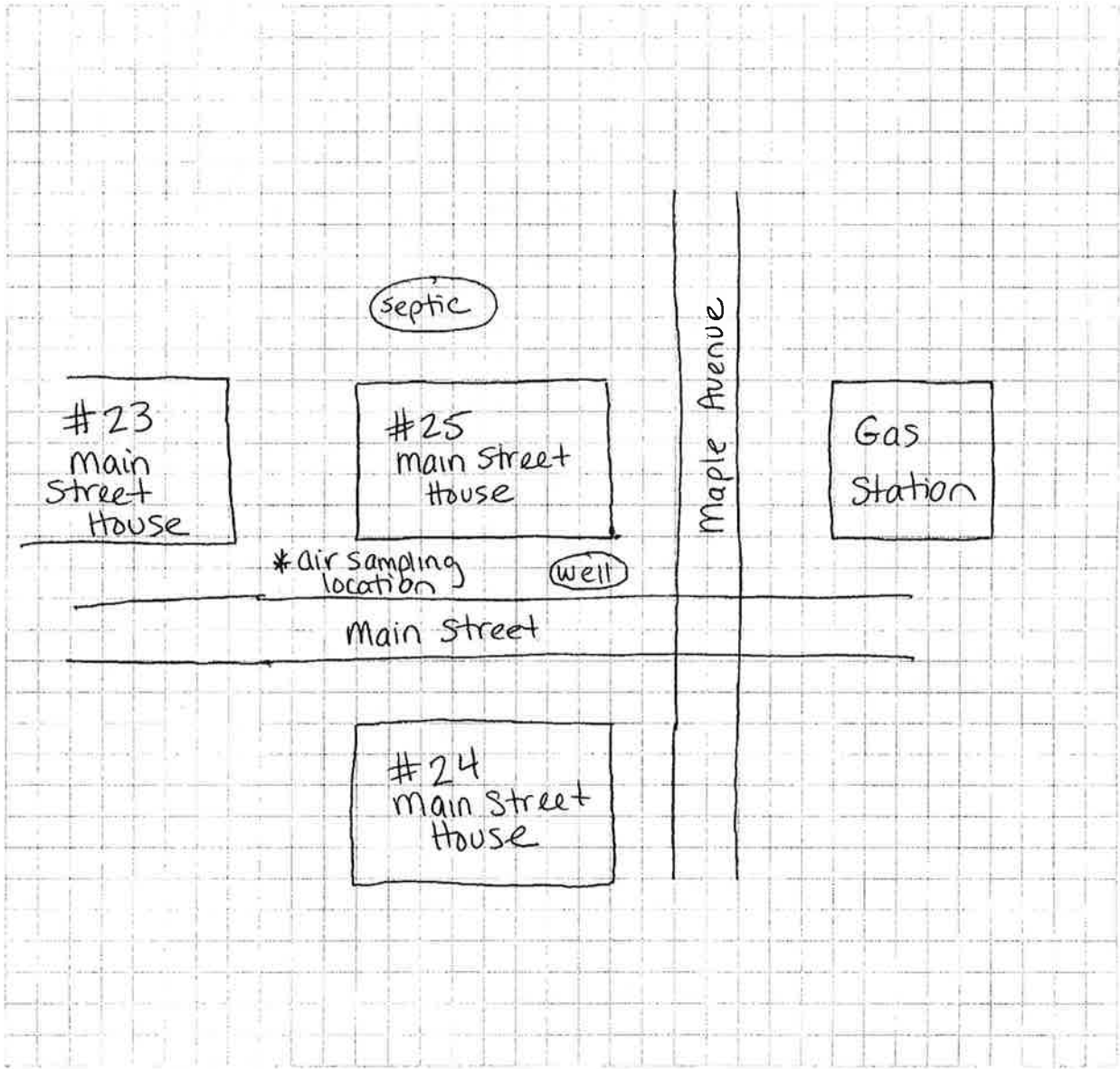
d. Relocation package provided and explained to residents? Y / N

# Example Correct 7

## 12. OUTDOOR PLOT

Draw a sketch of the area surrounding the building being sampled. If applicable, provide information on spill locations, potential air contamination sources (industries, gas stations, repair shops, landfills, etc.), outdoor air sampling location(s) and PID meter readings.

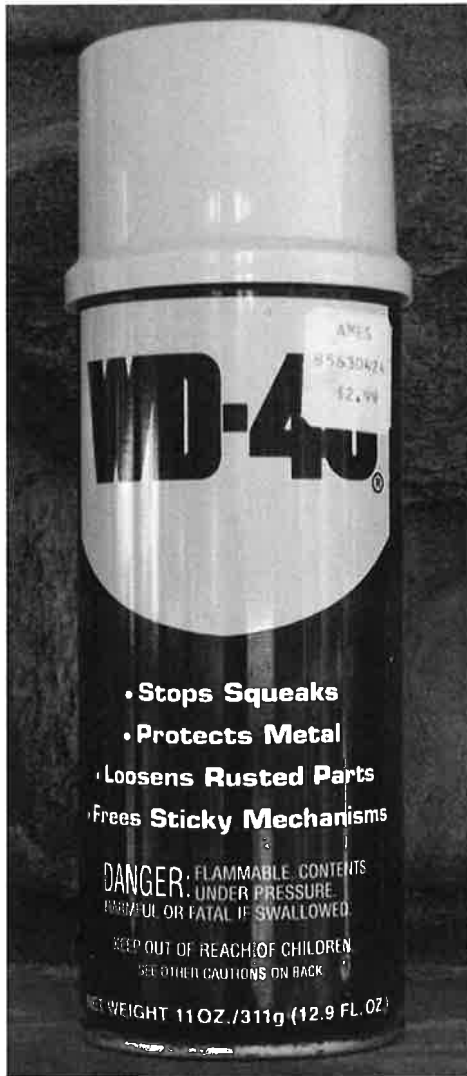
Also indicate compass direction, wind direction and speed during sampling, the locations of the well and septic system, if applicable, and a qualifying statement to help locate the site on a topographic map.



↑ N  
Wind direction = NE

**Product Inventory Attachment — 25 Main Street, City**

**WD-40 FRONT**



**WD-40 INGREDIENTS**

**HARMFUL OR FATAL IF SWALLOWED:**  
Contains petroleum distillates. If  
swallowed, **DO NOT** induce vomit-  
ing. Call physician immediately.  
Use in a well-ventilated area.  
**DELIBERATE OR DIRECT INHALATION  
OF VAPOR OR SPRAY MIST MAY BE  
HARMFUL OR FATAL.**

ATTACHMENT B

HEALTH AND SAFETY PLAN

**COPY AVAILABLE ON REQUEST**

APPENDIX B

BUILDING 338 PILOT TEST PHOTO LOG (February 19, 2020)



**Building 338 Vapor Mitigation Pilot Test Photographs  
February 2020**

Photograph #1



Drilling for monitoring microwell installation.

Photograph #2



Microwell screen and tubing for monitoring point.

Photograph #3



Monitoring point brass fitting assembly.

Photograph #4



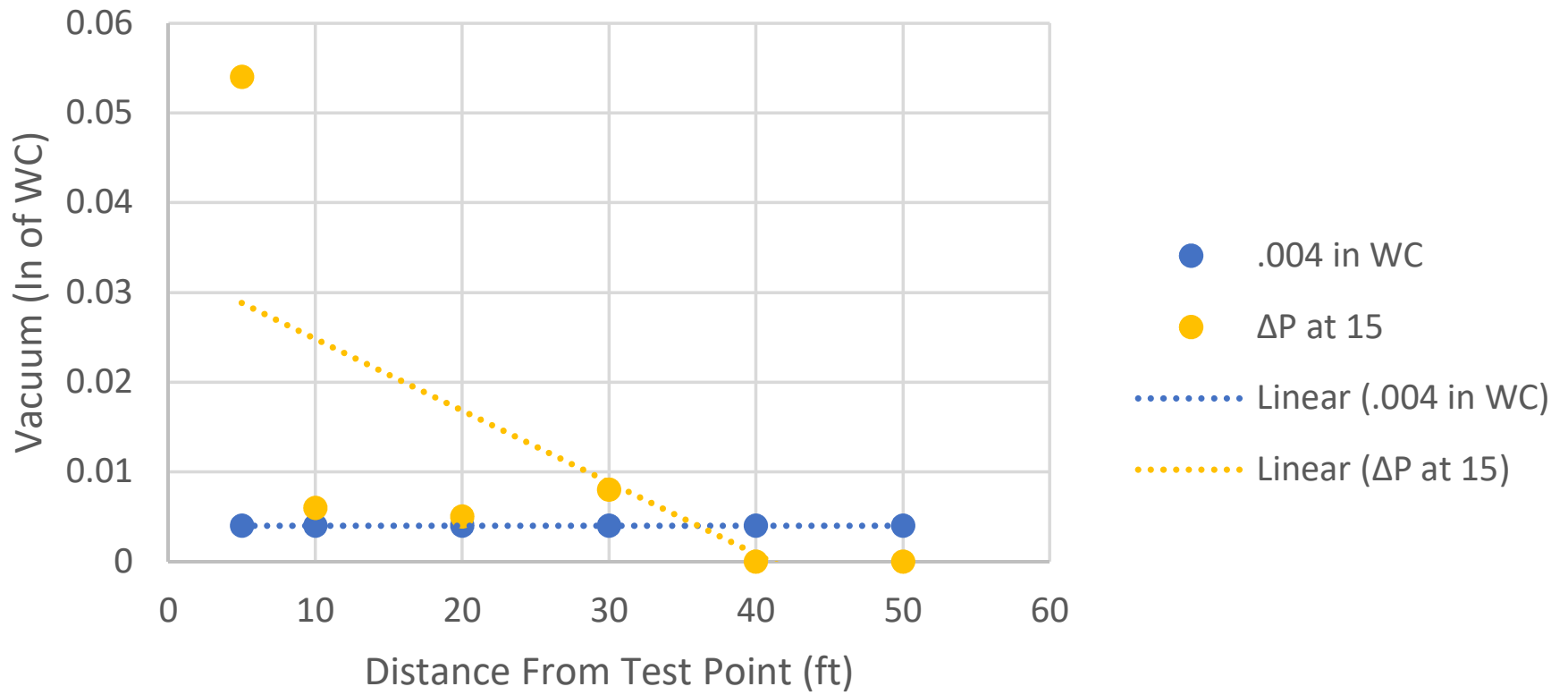
Thickness of cored slab in southern end of building.

APPENDIX C

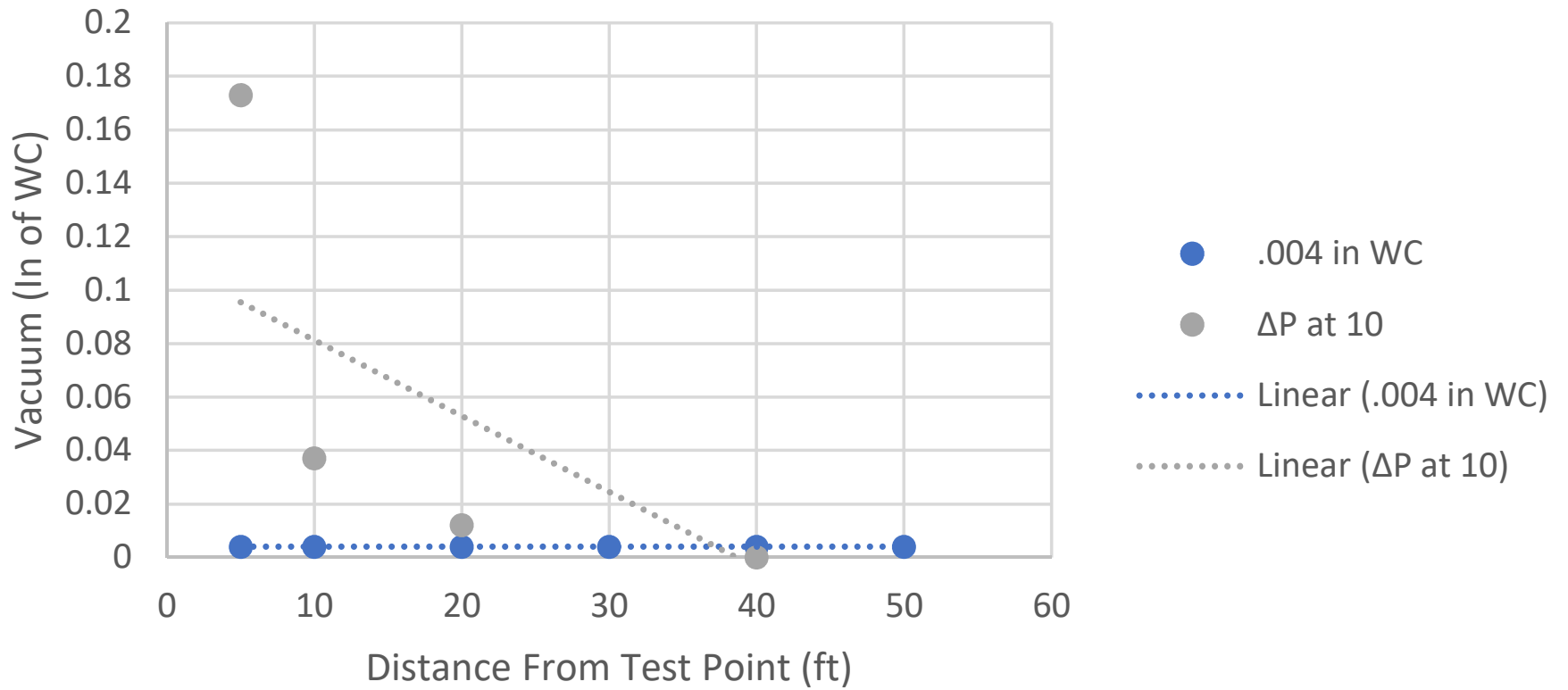
PILOT TEST RESULTS TABLE AND PLOTS (February 19, 2020)



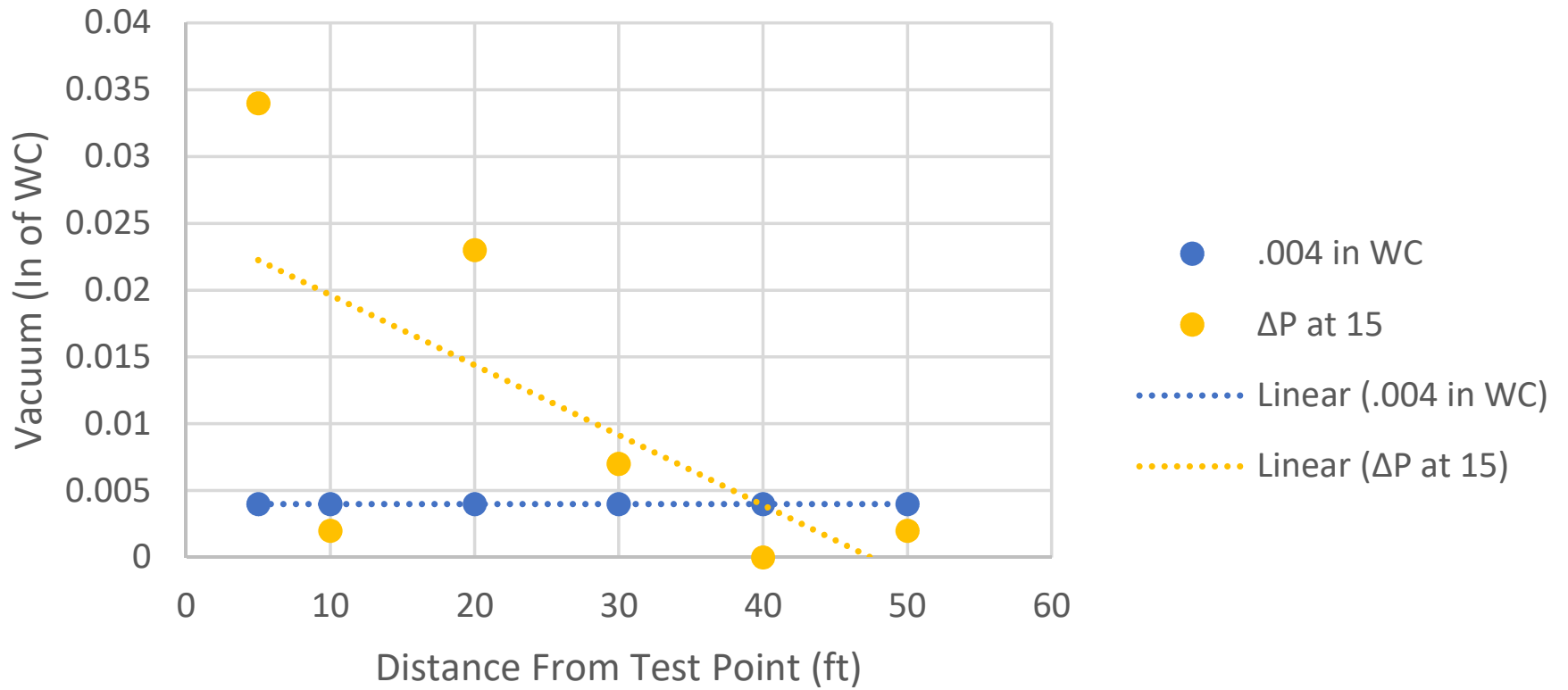
# PTP 1 @ 15 in WC



# PTP 2 @ 10 in WC

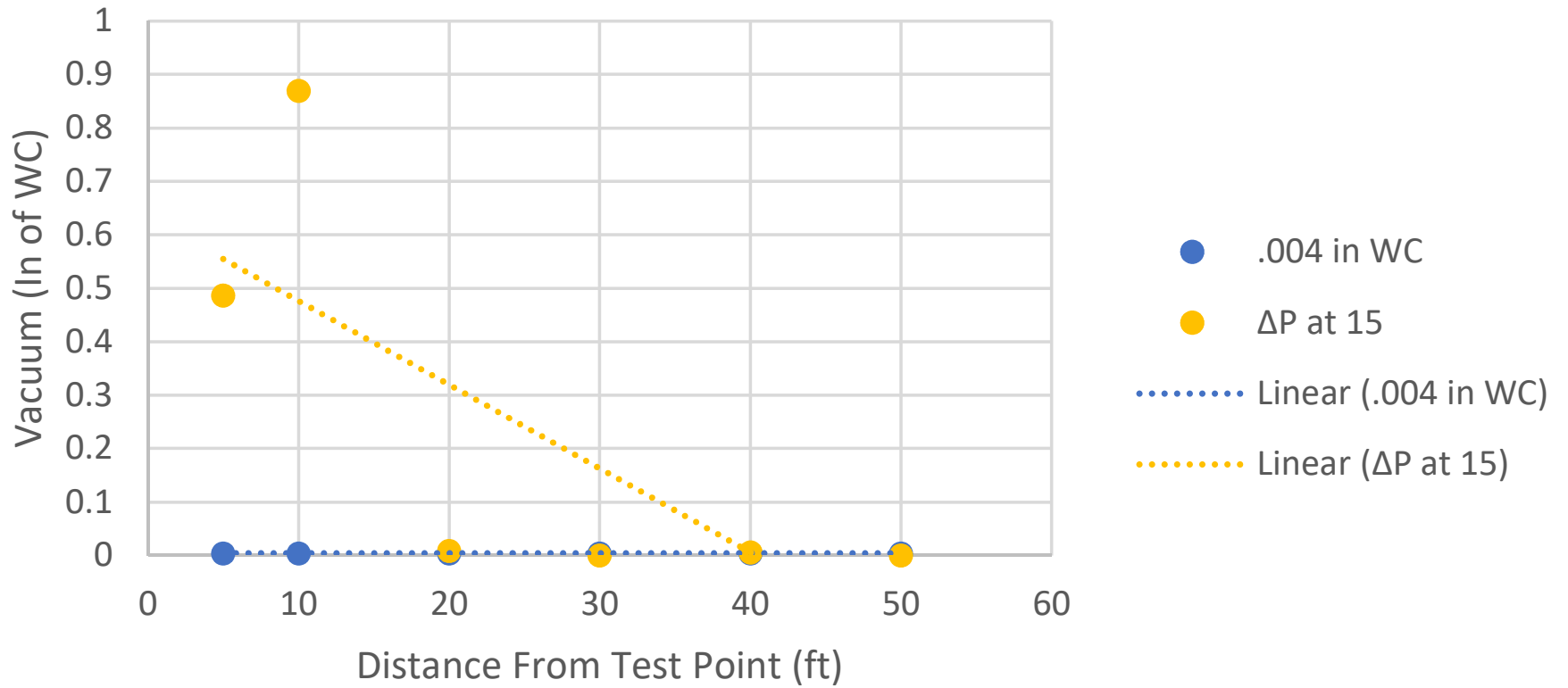


# PTP 3 @ 15 in WC





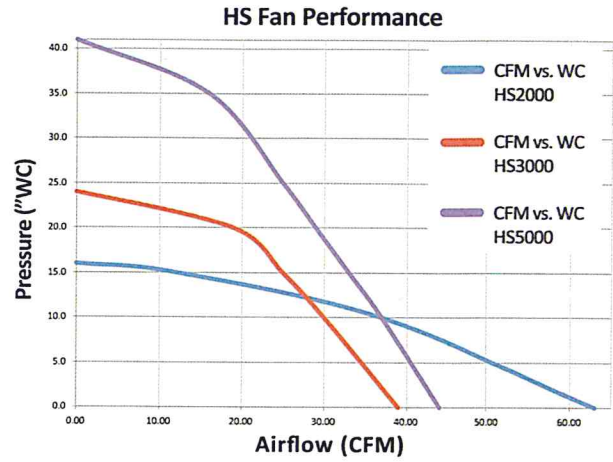
# PTP 4 @ 15 in WC



APPENDIX D

RADONAWAY HS5000 CUT SHEET AND ALARM

# HS FANS



## SPECIFICATIONS

MODEL	WATTS	SOUND RATING MID (dBA)	RECOM. MAX. OP. PRESSURE \"WC	TYPICAL CFM vs. STATIC PRESSURE WC					
				0"	10"	15"	20"	25"	35"
HS2000 w/ Cord	153-314	56.2	14	62	40	23	-	-	-
HS3000 w/ Cord	120-250	48.0	21	39	30	25	19	-	-
HS5000 w/ Cord	349-381	55.3	35	43	35	32	28	24	18
HS2000E w/ Switch Box	153-314	56.2	14	62	40	23	-	-	-
HS3000E w/ Switch Box	120-250	48.0	21	39	30	25	19	-	-
HS5000E w/ Switch Box	349-381	55.3	35	43	35	32	28	24	18

**MADE IN USA** Made in the USA with U.S. and imported parts.



RadonAway® inline radon fans are covered by our 1-year, hassle-free warranty.

See p. 22 for fan dimensions.

## PRICING

ITEM	P/N	UNIT PRICE	
		1-4	5+
HS2000 w/ Cord	23004-1		
HS3000 w/ Cord	23004-2		
HS5000 w/ Cord	23004-3		
HS2000E w/ Switch Box	23004-4		
HS3000E w/ Switch Box	23004-5		
HS5000E w/ Switch Box	23004-6		
3-YR Warranty	HS3YR		

## FEATURES

- Internal condensate bypass
- Brackets for vertical mounting indoors and outdoors
- Inlet: 3.0" PVC / Outlet: 2.0" PVC
- Weight: 18 lbs.

ITEM	P/N	UNIT PRICE
2" Schedule 40 Vent Muffler	24002	
Magnehelic Manometer 0-50" WC	50001-2	
Minihelic Manometer 0-40" WC	50027	
2 x 2 Flex Coupling (black) <sup>1</sup>	79020	
2 x 3 Flex Coupling (black) <sup>1</sup>	79027	
3 x 3 Flex Coupling (black) <sup>1</sup>	79010	

<sup>1</sup>Coupling sizes are for selection only, actual sizes may vary fractionally. See Flexible Coupling Sizing Chart on p. 24. Also available in white.

Quantity discounts determined by number of RadonAway® fans (any model) per order.



Flex Coupling 79010



Magnehelic Gauge 50001-2



Muffler 24002



Minihelic Gauge 50027

## SYSTEM ALARMS



Checkpoint IIA  
28001-2



Checkpoint IIAR (remote)  
28001-4



Pressure Switch  
73023

## PRICING & DESCRIPTIONS

ITEM	P/N	DESCRIPTION	PRICE
Checkpoint IIA Mitigation System Monitor/Alarm	28001-2	Audible alarm; green and red LED lights; factory preset to activate at .25"WC vacuum pressure; low voltage.	
Checkpoint IIAR Mitigation System Monitor with Remote Alarm	28001-4	Provides all the features of the Checkpoint II plus can be wired to a remote location where the homeowner is more likely to hear an alarm (50' of wire included).	
Pressure Switch	73023	Suitable to activate light or alarm for monitoring fan operation; activates at .25"WC; UL/CSA recognized (wire and probe not included).	

Need a more sensitive alarm? 0.10 alarm available. Call for details.

## RADONAWAY® RSA-1 ALARM



RadonAway's new vacuum monitoring alarm utilizes piezoresistive pressure sensor (PPS) technology and provides audible and visual indications when the radon system is not moving sufficient air to be effective. It is designed for use on 2", 3", 4" or 6" pipe, or flat surfaces. Some of the RSA-1's additional features are:

- Easy installation
- Battery operated
- Alarm and Service Delay functions
- Hush & Test buttons

## RADON GAS DETECTOR



## PRICING & DESCRIPTION

ITEM*	P/N	DESCRIPTION	PRICE
Pro Series 3 Radon Gas Detector	28221	Numeric LED indicator, .1-999.9 pCi/L; displays updates hourly; daily self-test of electronics and sensor.	

\*Not approved for radon testing.





**INSTALLATION & OPERATING INSTRUCTIONS**  
**Instruction P/N IN015 Rev E**  
**FOR CHECKPOINT IIa™ P/N 28001-2 & 28001-3**  
**RADON SYSTEM ALARM**

**INSTALLATION INSTRUCTIONS**  
(WALL MOUNTING)

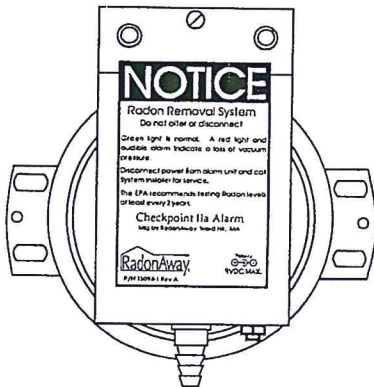
Select a suitable wall location near a vertical section of the suction pipe. The unit should be mounted about four or five feet above the floor and as close to the suction pipe as possible. Keep in mind that with the plug-in transformer provided, the unit must also be within six feet of a 120V receptacle. **NOTE: The Checkpoint IIa is calibrated for vertical mounting, horizontal mounting will affect switchpoint calibration.**

Drill two ¼” holes 4” apart horizontally where the unit is to be mounted.

Install the two ¼” wall anchors provided.

Hang the CHECKPOINT IIa from the two mounting holes located on the mounting bracket. Tighten the mounting screws so the unit fits snugly and securely against the wall.

Drill a 5/16” hole into the side of the vent pipe about 6” higher than the top of the unit.



Insert the vinyl tubing provided about 1” inside the suction pipe.

Cut a suitable length of vinyl tubing and attach it to the pressure switch connector on the CHECKPOINT IIa.

**CALIBRATION AND OPERATION.**

The CHECKPOINT IIa units are calibrated and sealed at the factory to alarm when the vacuum pressure falls below the factory setting and should not normally require field calibration. Factory Settings are:

**28001-2 -.25” WC Vacuum**

**28001-3 -.10” WC Vacuum**

**To Verify Operation:**

With the exhaust fan off or the pressure tubing disconnected and the CHECKPOINT IIa plugged in, both the red indicator light and the audible alarm should be on.

Turn the fan system on or connect the pressure tubing to the fan piping. The red light and the audible alarm should go off. The green light should come on.

Now turn the fan off. The red light and audible alarm should come on in about two or three seconds and the green light should go out.

**WARRANTY INFORMATION**

Subject to applicable consumer protection legislation, RadonAway warrants that the CHECKPOINT IIa will be free from defective material and workmanship for a period of (1) year from the date of purchase. Warranty is contingent on installation in accordance with the instructions provided. This warranty does not apply where repairs or alterations have been made or attempted by others; or the unit has been abused or misused. Warranty does not include damage in shipment unless the damage is due to the negligence of RadonAway. All other warranties, expressed or written, are not valid. To make a claim under these limited warranties, you must return the defective item to RadonAway with a copy of the purchase receipt. RadonAway is not responsible for installation or removal cost associated with this warranty. In no case is RadonAway liable beyond the repair or replacement of the defective product FOB RadonAway.

**THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF. THERE IS NO WARRANTY OF MERCHANTABILITY. ALL OTHER WARRANTIES, EXPRESSED OR WRITTEN, ARE NOT VALID.**

For service under these warranties, contact RadonAway for a Return Material Authorization (RMA) number and shipping information. **No returns can be accepted without an RMA.** If factory return is required, the customer assumes all shipping costs to and from factory.

Manufactured by:  
RadonAway  
Ward Hill, MA  
(978)-521-3703




## Radon Mitigation Fan

HS fans offer a proven solution for tough radon mitigation jobs, providing up to 25 times the suction of inline tube fans to deal with sand, tight soil or clay sub-slab material.

## Features

- Internal condensate bypass
- Brackets for vertical mounting indoors and outdoors
- Inlet: 3.0" PVC / Outlet: 2.0" PVC
- Weight: 18 lbs.
- Size: 15.5"W x 13.3"H x 8.2"D
- Warranty: 1 year (3-year option available)

MODEL	WATTS	SOUND RATING (dBA)			RECOM. MAX. OP. PRESSURE "WC	TYPICAL CFM* vs. STATIC PRESSURE WC					
		OPEN	1/2	CLOSED		0"	10"	15"	20"	25"	35"
HS2000 with cord	174-307	56.5	56.2	51.9	14	63	37	12	-	-	-
HS3000 with cord	120-250	47.9	48.0	46.2	21	39	30	25	19	-	-
HS5000 with cord	223-385	56.0	55.3	53.1	35	44	37	33	29	25	16
HS2000E with switch box	174-307	56.5	56.2	51.9	14	63	37	12	-	-	-
HS3000E with switch box	120-250	47.9	48.0	46.2	21	39	30	25	19	-	-
HS5000E with switch box	223-385	56.0	55.3	53.1	35	44	37	33	29	25	16

 Made in the USA with U.S. and imported parts.

\* CFM measured through suction.

For Further Information, Contact Your Radon Professional:

APPENDIX B

BUILDING 730 (FORMERLY BUILDING 338) POWERHOUSE GYM PRE-OCCUPANCY  
INDOOR AIR QUALITY TESTING SUMMARY REPORT



**BUILDING 730 (FORMERLY 338)  
POWERHOUSE GYM SPACE PRE-OCCUPANCY  
INDOOR AIR QUALITY TESTING SUMMARY  
REPORT**

**AT**

**PARK 84  
FORMER IBM EAST FISHKILL FACILITY**

**AUGUST 2020**

**PREPARED FOR:**

**JESSICA LACLAIR  
NEW YORK STATE DEPT. OF ENVIRONMENTAL CONSERVATION  
DEPT. OF ENVIRONMENTAL REMEDIATION  
625 BROADWAY  
ALBANY, NEW YORK 12233-7013**

**WALDEN ENVIRONMENTAL ENGINEERING, PLLC**  
**Industry Leader in Environmental Engineering Consulting**

———— PROACTIVE SOLUTIONS SINCE 1995 ————



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Sent via email to [jess.laclair@dec.ny.gov](mailto:jess.laclair@dec.ny.gov)

August 19, 2020  
iPARK0118.44

Ms. Jessica LaClair  
Environmental Engineer  
Division of Environmental Remediation  
New York State Department of Environmental Conservation  
625 Broadway  
Albany, NY 12233-7013

Re: iPark 84, Former IBM East Fishkill Facility  
Building 730 (Formerly Building 338) Powerhouse Gym  
Pre-Occupancy Indoor Air Quality Testing  
Summary Report

Dear Ms. LaClair:

Walden Environmental Engineering, PLLC (Walden) has prepared this letter to summarize the results of the indoor air quality (IAQ) testing conducted on August 11, 2020 within the Powerhouse Gym space in Building 730 (formerly Building 338). Building 730 is owned by iPark East Fishkill (iPark). Powerhouse Gym is leasing space in Building 730 on the first floor and second floor/mezzanine level. Refer to Figure 1 for the site location map. Following completion of interior construction in the gym space, IAQ testing was conducted prior to tenant occupancy as required by NYSDEC and NYSDOH. The purpose of the testing was to verify that IAQ is acceptable before the gym takes occupancy and begins operating in the space.

Walden, at the request of iPark, performed the IAQ testing in accordance with the *RCRA Facility Investigation (RFI) VOC Source Assessment Work Plan (RFI Work Plan)* dated June 15, 2009, prepared by Sanborn, Head Engineering, PC and Walden's IAQ Testing Plan letter (Testing Plan, dated July 13, 2020), which was approved by NYSDEC on July 17, 2020. A copy of the approved Testing Plan is included in Appendix A.

Installation of a Sub Slab Depressurization System (SSDS) to prevent potential soil vapor intrusion into the Powerhouse Gym space has been completed in accordance with the July 8, 2020 Basis of Design report approved by NYSDEC. A copy of the approved Basis of Design is included in Appendix B. The SSDS was not operating during the August 11<sup>th</sup> IAQ sampling in



the gym space. SSDS start-up and testing is expected to be completed in August 2020 to confirm that the mitigation system effectively depressurizes the slab beneath Building 730 (338). The start-up testing results documenting the system effectiveness will be submitted to NYSDEC/NYSDOH under separate cover.

### **Summary of HVAC Conditions and Building Inventory**

The gym space in Building 730 is served by two HVAC units (#3A and #3B) which were operating during the August 11<sup>th</sup>, 2020 IAQ sampling under the same conditions anticipated during normal operations once the tenant takes occupancy.

With the exception of incidental cleaning and sanitizing agents, chemicals are not stored within this tenant space. During the sampling, floor adhesives and materials associated with final interior renovations were observed at the periphery of the gym space. A copy of the Indoor Air Quality Questionnaire and Building Inventory completed during the IAQ sampling event is presented in Appendix C.

### **Summary of IAQ Testing**

IAQ testing was conducted in accordance with the procedures outlined in the NYSDEC-approved RFI Work Plan and Testing Plan. Samples were collected using 6-liter, individually certified clean, stainless-steel Summa<sup>®</sup> canisters. The Summa<sup>®</sup> canisters were calibrated by the laboratory with flow controllers to obtain 8-hour time-averaged samples. Indoor air samples were collected from a height of approximately three (3) feet above the floor at the following nine (9) locations throughout the gym space, which are depicted on Figures 2 and 3:

Sample ID	Representative Square Footage, approximate (ft <sup>2</sup> )	Area Use
IA-1	500	First Floor - Entrance hallway
IA-2	480	First Floor - Reception area
IA-3	1,750	First Floor - Trainers Turf area
IA-4	5,000	First Floor - Main Equipment area
IA-5	1,200	First Floor - Cardio studio
IA-6	1,400	First Floor - Leg studio
IA-7	2,700	Second Floor - Mezzanine Fitness Area
IA-8	1,600	Second Floor – Locker Room Area
IA-9	1,200	Second Floor – Yoga Studio Area



A duplicate sample (DUPLICATE) was collected at location IA-4: First Floor- Main Equipment Area. One (1) outdoor ambient air sample (AA-01) was collected adjacent to one of the rooftop air intakes for the HVAC system to assess background conditions and any potential impacts on the IAQ results. A field blank was also collected by transferring lab-grade nitrogen directly from a compressed gas canister into a Summa<sup>®</sup> Canister.

PID readings were collected at each sample location immediately before sample collection began to evaluate whether VOCs were present in the gym space and had the potential to impact the IAQ results. The following PID readings were collected:

Sample ID	PID Reading (ppm)
IA-1	0.0
IA-2	0.0
IA-3	0.0
IA-4	0.0
IA-5	0.0
IA-6	0.0
IA-7	0.0
IA-8	0.0
IA-9	0.0
AA-01	0.4

The only PID reading above zero calibration gas equivalents was recorded at AA-01. The PID screening measurements indicated no apparent air quality impacts. The presence of cleaning products and sealants were recorded in the tenant space (refer to Appendix C).

All samples were transferred to Phoenix Labs of Manchester, CT, a NYSDOH ELAP certified laboratory (NYSDOH ELAP #11301) under chain of custody for analysis of volatile organic compound (VOC) analytes via modified Method TO-15 (full list) to achieve lower reporting limits via selective ion monitoring for TCE, vinyl chloride and carbon tetrachloride. A summary of field sampling information is provided in Table 1. The IAQ laboratory analytical data are provided in Table 2. Photos taken during the sampling are provided in Appendix D. The full laboratory analytical report is provided in Appendix E. A Data Usability Summary Report (DUSR) is being prepared and will be submitted under separate cover.

Ms. Jessica LaClair  
Building 730 (338) Powerhouse Gym IAQ Testing  
August 19, 2020

- 4 -



### **Results and Discussion**

The gym IAQ analytical data were compared to the typical indoor air background concentrations published in USEPA's 2001 Building Assessment and Survey Evaluation (BASE) database. When developing BASE, USEPA collected indoor air samples at randomly selected office and commercial buildings using Summa<sup>®</sup> canisters. Table 2 presents the gym IAQ data compared to the 75th, 90th, 95th and 99th percentile indoor air BASE concentrations for reference in comparing the VOC data to typical indoor background concentrations.

All of the VOC concentrations detected in the gym IAQ samples were within or below the range of background concentrations listed in the USEPA BASE database as noted in Table 2, indicating that indoor air quality is acceptable. Based on the results from the pre-occupancy IAQ testing presented herein, please confirm that the Powerhouse Gym space within Building 730 (338) is suitable for tenant occupancy.

Please call me at (516) 624-7200 if you have any questions or need any additional information.

Very truly yours,  
Walden Environmental Engineering, PLLC

A handwritten signature in black ink that reads "Nora M. Brew". The signature is written in a cursive, flowing style.

Nora M. Brew, P.E.  
Senior Project Manager

#### Attachments:

- Figure 1 – Site Location Map
- Figure 2 – Sampling Locations on the 1<sup>st</sup> Floor
- Figure 3 – Sampling Locations on the 2<sup>nd</sup> Floor

- Table 1 – Summary of Field Information
- Table 2 – Summary of IAQ Analysis

- Appendix A - IAQ Testing Plan (Walden, July 13, 2020)
- Appendix B – Vapor Mitigation System Basis of Design (Walden, July 8, 2020)
- Appendix C – Indoor Air Quality Questionnaire and Building Inventory
- Appendix D – Photographic Log of Sampling Locations
- Appendix E – Laboratory Analytical Report

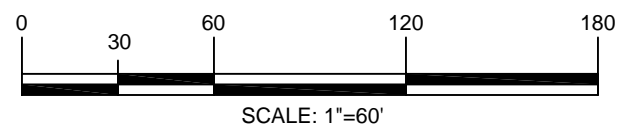
Ms. Jessica LaClair  
Building 730 (338) Powerhouse Gym IAQ Testing  
August 19, 2020

- 5 -

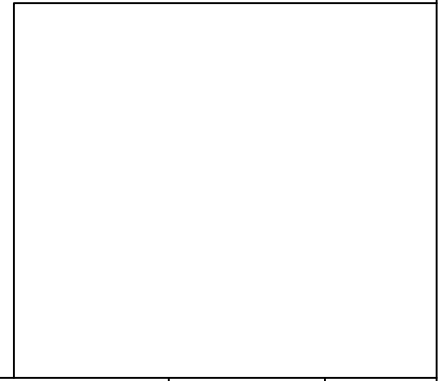



cc: J. Kenney, NYSDOH  
C. Monheit, iPark  
M. Buckley, iPark  
D. Chartrand, IBM

Z:\iPark0118\iPark0118.44 - B338 - 60 day and SWMU Work Plan\Preoccupancy IAQ Work Plan\IAQ Sampling Report\ipark118.44\_Powerhouse Gym Pre-Occupancy IAQ Testing Report 8.19.2020.docx



**SITE PLAN**  
SCALE: 1" = 60'-0"




 WALDEN ENVIRONMENTAL ENGINEERING, PLLC  
 iPARK 84 CAMPUS, 200 NORTH DRIVE, SUITE #108  
 HOPEWELL JUNCTION, NEW YORK 12533  
 P: (845) 253-8025; (516) 624-7200  
 F: (516) 624-3219  
[WWW.WALDENENVIRONMENTALENGINEERING.COM](http://WWW.WALDENENVIRONMENTALENGINEERING.COM)

• UNAUTHORIZED ALTERATION OR ADDITION TO THIS PLAN IS A VIOLATION OF SECTION 7209 OF NEW YORK STATE EDUCATION LAW.  
 • COPIES OF THIS PLAN NOT BEARING THE PROFESSIONAL ENGINEER'S INKED SEAL OR EMBOSSED SEAL SHALL NOT BE CONSIDERED TO BE A VALID TRUE COPY.

REVISION	
No.	DATE

FOR: **BUILDING 730 (FORMER 338)**  
 iPark 84 Campus  
 2070 State Route 52  
 Hopewell Junction, NY 12533  
 DESIGNED BY: NMB  
 APPROVED BY: JMH

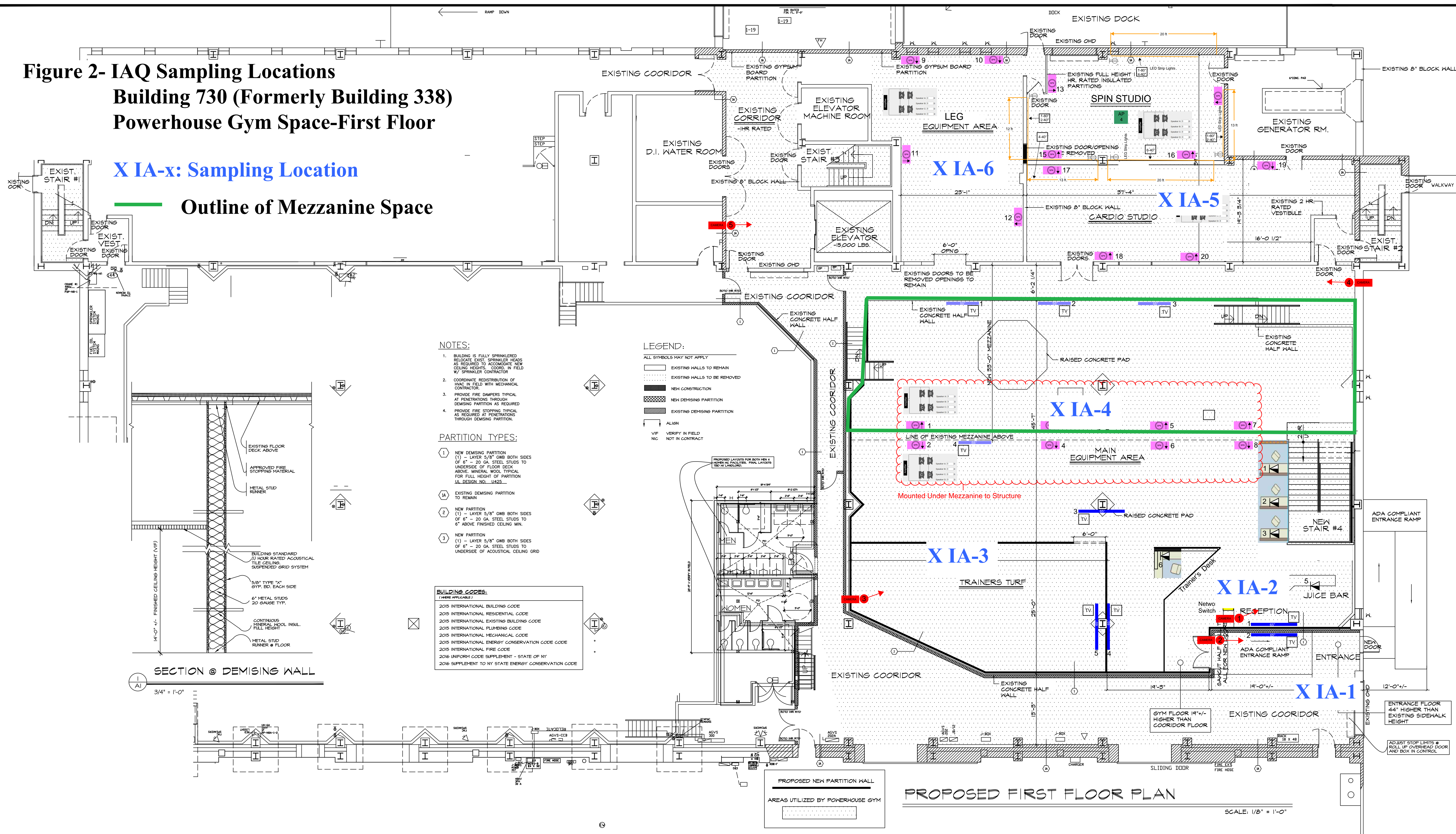
DRAWING TITLE: **SITE PLAN**  
**BUILDING 730 (338)**  
 DRAWN BY: EJK  
 SCALE: AS NOTED

FIGURE NO: **1**  
 SHEET NO: 1 OF 1  
 REVISION NO: **0**  
 ISSUED  
JOB NO: IPARK118.44 DATE: 2/6/20 11x17 CAD FILE NAME: 2:\iPark\118\iPark\0118-44 - 8338 Sprout Creek Bakery\iPark Building Building 730 338 Gym 03 Day.dwg



**Figure 2- IAQ Sampling Locations**  
**Building 730 (Formerly Building 338)**  
**Powerhouse Gym Space-First Floor**

**X IA-x: Sampling Location**  
**Outline of Mezzanine Space**



**NOTES:**

- BUILDING IS FULLY SPRINKLERED. RELOCATE EXIST. SPRINKLER HEADS AS REQUIRED TO ACCOMMODATE NEW CEILING HEIGHTS. COORD. IN FIELD W/ SPRINKLER CONTRACTOR.
- COORDINATE REDISTRIBUTION OF HVAC IN FIELD WITH MECHANICAL CONTRACTOR.
- PROVIDE FIRE DAMPERS TYPICAL AT PENETRATIONS THROUGH DEMISING PARTITION AS REQUIRED.
- PROVIDE FIRE STOPPING TYPICAL AS REQUIRED AT PENETRATIONS THROUGH DEMISING PARTITION.

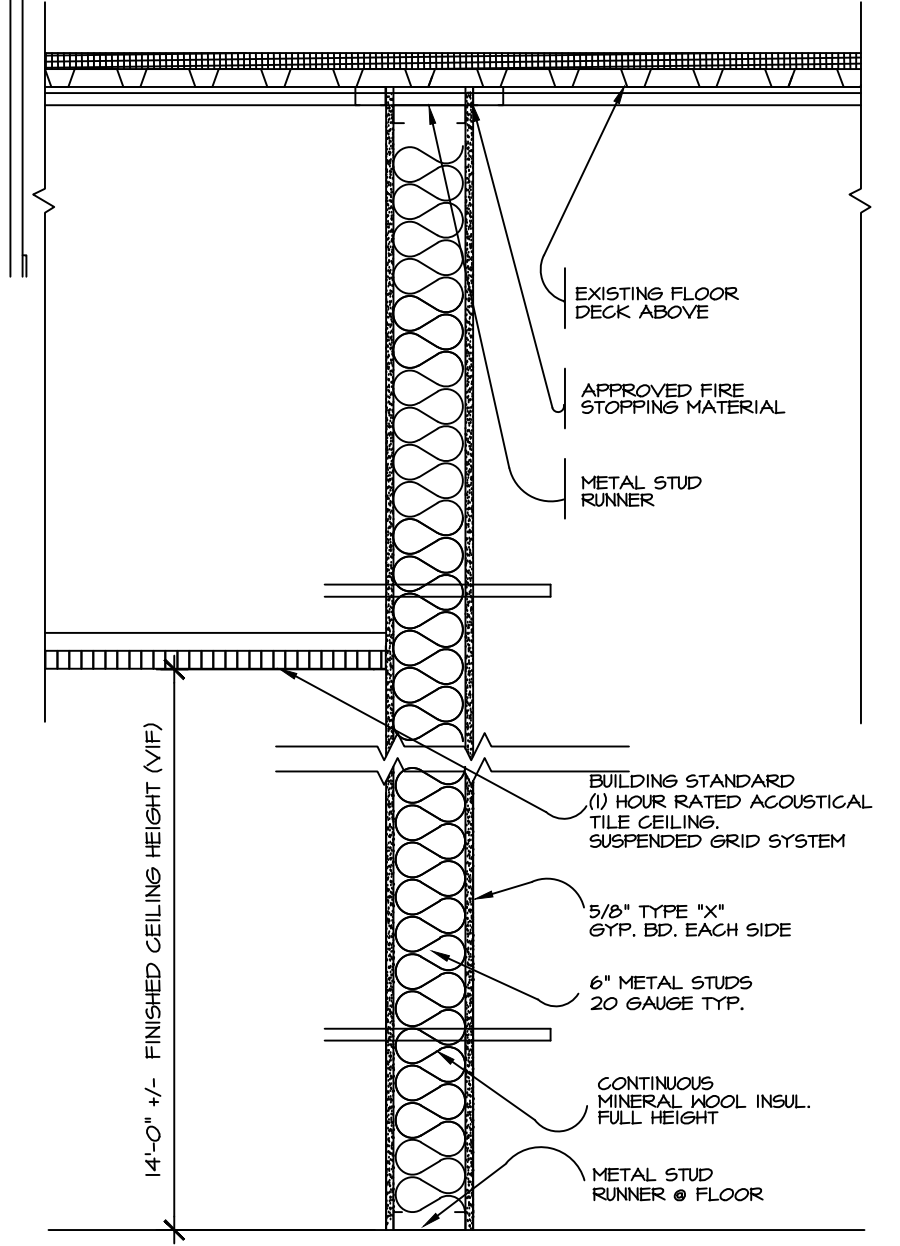
**PARTITION TYPES:**

- NEW DEMISING PARTITION (1) - LAYER 5/8" GWB BOTH SIDES OF 6" - 20 GA. STEEL STUDS TO UNDERSIDE OF FLOOR DECK ABOVE. MINERAL WOOL TYPICAL FOR FULL HEIGHT OF PARTITION. UL DESIGN NO. U425.
- EXISTING DEMISING PARTITION TO REMAIN.
- NEW PARTITION (1) - LAYER 5/8" GWB BOTH SIDES OF 6" - 20 GA. STEEL STUDS TO 6" ABOVE FINISHED CEILING MIN.
- NEW PARTITION (1) - LAYER 5/8" GWB BOTH SIDES OF 6" - 20 GA. STEEL STUDS TO UNDERSIDE OF ACOUSTICAL CEILING GRID.

**BUILDING CODES:**  
 (WHERE APPLICABLE)  
 2015 INTERNATIONAL BUILDING CODE  
 2015 INTERNATIONAL RESIDENTIAL CODE  
 2015 INTERNATIONAL EXISTING BUILDING CODE  
 2015 INTERNATIONAL PLUMBING CODE  
 2015 INTERNATIONAL MECHANICAL CODE  
 2015 INTERNATIONAL ENERGY CONSERVATION CODE  
 2015 INTERNATIONAL FIRE CODE  
 2016 UNIFORM CODE SUPPLEMENT - STATE OF NY  
 2016 SUPPLEMENT TO NY STATE ENERGY CONSERVATION CODE

**LEGEND:**  
 ALL SYMBOLS MAY NOT APPLY

- EXISTING WALLS TO REMAIN
- EXISTING WALLS TO BE REMOVED
- NEW CONSTRUCTION
- NEW DEMISING PARTITION
- EXISTING DEMISING PARTITION
- ALIGN
- VF VERIFY IN FIELD
- NC NOT IN CONTRACT



**SECTION @ DEMISING WALL**  
 3/4" = 1'-0"

**PROPOSED NEW PARTITION WALL**  
**AREAS UTILIZED BY POWERHOUSE GYM**  
**PROPOSED FIRST FLOOR PLAN**  
 SCALE: 1/8" = 1'-0"

A1.dwg ISSUED FOR BUILDING PERMIT

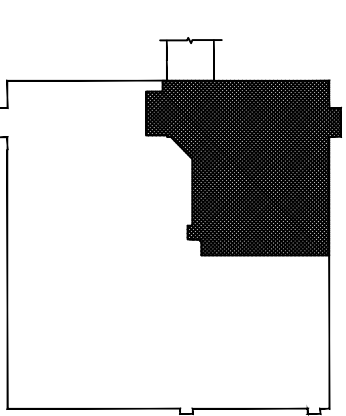
**POWERHOUSE GYM**

730 South Drive  
 Suite 101  
 Hopewell Junction, NY

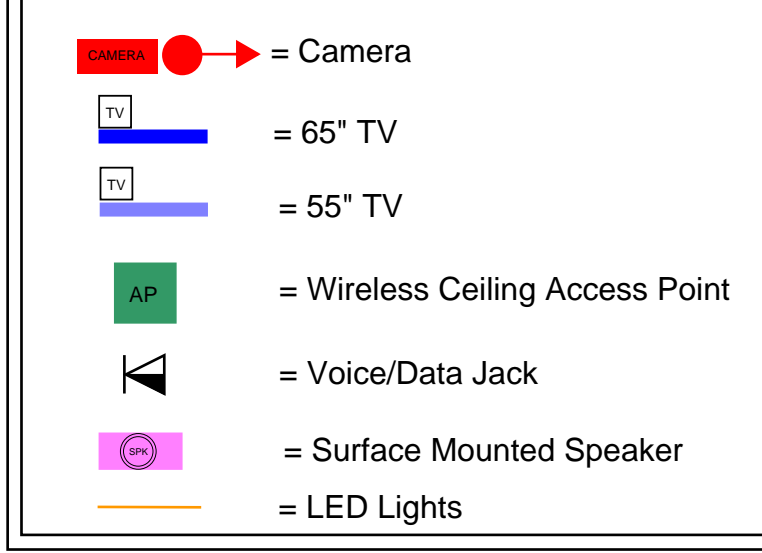
**ANTHONY TOTILO ARCHITECTS AND ASSOCIATES**  
 Anthony Totilo, A.I.A.  
 114 Old North Stamford Road  
 Stamford, Connecticut 06905  
 (203) 517-6586

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**LOCATION PLAN**



**NOTES:**



**SHEET TITLE:**

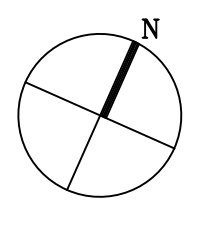
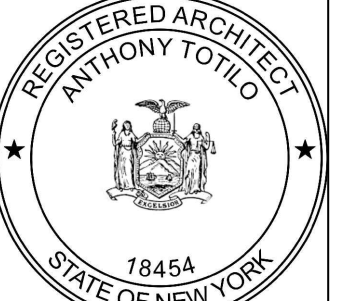
**1ST FLOOR PLAN**

1	03.19.20	ISSUED FOR BLDG PERMIT
NO	DATE	REVISIONS

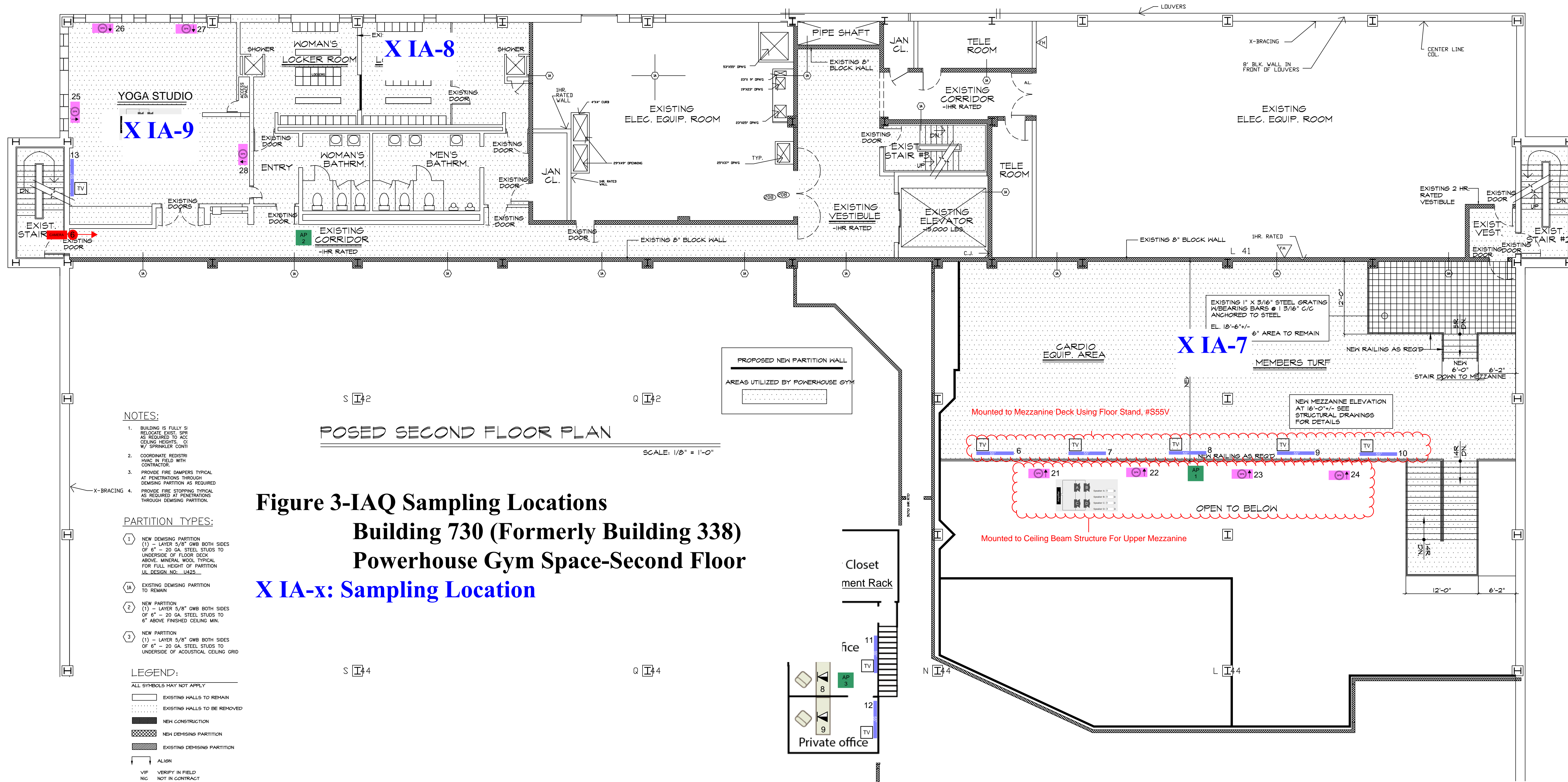
**SHEET TITLE:**

**1ST FLOOR PLAN**

DRAWN BY:	AT	PROJECT NO:
CHECKED BY:	TOT	SHEET NO:
DATE:	02.22.19	A1
SCALE:	AS NOTED	







**NOTES:**

- BUILDING IS FULLY SI  
RELOCATE EXIST. SPS  
AS REQUIRED TO ACC  
CEILING HEIGHTS. C  
W/ SPRINKLER CONTI
- COORDINATE REDISTRI  
BASIC IN FIELD WITH  
CONTRACTOR.
- PROVIDE FIRE DAMPERS TYPICAL  
AT PENETRATIONS THROUGH  
DEMISING PARTITION AS REQUIRED
- PROVIDE FIRE STOPPING TYPICAL  
AS REQUIRED AT PENETRATIONS  
THROUGH DEMISING PARTITION.

**PARTITION TYPES:**

- NEW DEMISING PARTITION  
(1) - LAYER 5/8" GWB BOTH SIDES  
OF 6" - 20 GA. STEEL STUDS TO  
UNDERSIDE OF FLOOR DECK  
ABOVE: MINERAL WOOL TYPICAL  
FOR FULL HEIGHT OF PARTITION  
UL DESIGN NO. L9422
- EXISTING DEMISING PARTITION  
TO REMAIN
- NEW PARTITION  
(1) - LAYER 5/8" GWB BOTH SIDES  
OF 6" - 20 GA. STEEL STUDS TO  
6" ABOVE FINISHED CEILING MIN.
- NEW PARTITION  
(1) - LAYER 5/8" GWB BOTH SIDES  
OF 6" - 20 GA. STEEL STUDS TO  
UNDERSIDE OF ACoustICAL CEILING GRID

**LEGEND:**

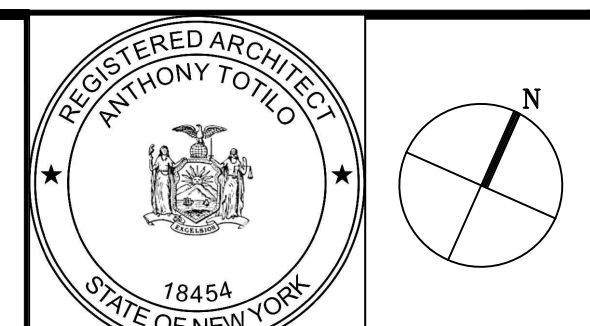
- ALL SYMBOLS MAY NOT APPLY
- EXISTING HALLS TO REMAIN
  - EXISTING HALLS TO BE REMOVED
  - NEW CONSTRUCTION
  - NEW DEMISING PARTITION
  - EXISTING DEMISING PARTITION
  - ALIGN
  - VIF VERIFY IN FIELD
  - NIC NOT IN CONTRACT

POSED SECOND FLOOR PLAN  
SCALE: 1/8" = 1'-0"

**Figure 3-IAQ Sampling Locations**  
**Building 730 (Formerly Building 338)**  
**Powerhouse Gym Space-Second Floor**  
**X IA-x: Sampling Location**

A2.dwg Issued for permit

<p><b>POWERHOUSE GYM</b></p> <p>730 South Drive Suite 101 Hopewell Junction, NY</p>	<p><b>ANTHONY TOTILO ARCHITECTS AND ASSOCIATES</b></p> <p>Anthony Totilo, A.I.A.</p> <p>114 Old North Stamford Road Stamford, Connecticut 06905 (203) 517-6586</p> <p><small>OWNER USE AND ALTERATION OF DOCUMENTS: The client acknowledges that the documents, drawings, specifications including electronic media files are the property of Anthony Totilo Architects and Associates and shall remain the property of Anthony Totilo Architects and Associates. The client or any person or entity that acquires or obtains the drawings and specifications from or through the client shall not use them on any other project, shall not modify them or change the drawings and specifications without written authorization from Anthony Totilo Architects and Associates. Furthermore, the client agrees to the fullest extent permitted by law to indemnify and hold harmless Anthony Totilo Architects and Associates, its officers, directors and employees from any and all claims, suits, liability, demands or costs, including attorney fees arising out of or resulting from the use of the drawings and specifications.</small></p>	<p>LOCATION PLAN</p>	<p>NOTES:</p> <ul style="list-style-type: none"> <li><span style="color: red;">●</span> → = Camera</li> <li><span style="color: blue;">TV</span> = 65" TV</li> <li><span style="color: blue;">TV</span> = 55" TV</li> <li><span style="color: green;">AP</span> = Wireless Ceiling Access Point</li> <li><span style="color: black;">▲</span> = Voice/Data Jack</li> <li><span style="color: magenta;">⊙</span> = Surface Mounted Speaker</li> <li><span style="color: orange;">—</span> = LED Lights</li> </ul>	<p>SHEET TITLE:</p> <p><b>2ND FLOOR PLAN</b></p>	<p>SHEET TITLE:</p>	
				<p>1 03.19.20 ISSUED FOR BLDG PERMIT</p> <p>NO DATE REVISIONS</p>	<p>DRAWN BY: AT</p> <p>CHECKED BY: TOT</p> <p>DATE: 02.22.19</p> <p>SCALE: AS NOTED</p>	<p>PROJECT NO:</p> <p>SHEET NO:</p> <p><b>A2</b></p>



**iPARK 84 Campus  
2070 NY-Route 52  
Hopewell Junction, New York**

**TABLE 1  
SUMMARY OF INDOOR AIR SAMPLE INFORMATION  
BUILDING 730 (FORMER 338) - POWERHOUSE GYM**

Sample Location	Building Floor	Sample Matrix	Canister Number	Regulator Number	Sample Height (feet above floor)	Start Time (24-hour format)	Start Pressure (mmHg)	PID Reading (ppm)	Stop Time (24-hour format)	Stop Pressure (mmHg)	Temperature (°F)	Location Description	Chemicals Observed Near Sample Location
IA-1	Ground	Indoor Air	28566	7036	2.5	9:07	-30	0.0	15:45	-9	72	Entrance hallway	None observed
IA-2	Ground	Indoor Air	19628	5352	2.5	8:36	-30	0.0	15:30	-9	72	Juice bar area	None observed
IA-3	Ground	Indoor Air	28608	5390	2.5	8:38	-26	0.0	15:30	-9	72	Trainer's turf	Hand sanitizer and disinfectant
IA-4	Ground	Indoor Air	23329	5593	2.5	8:41	-30	0.0	15:04	-9	72	Main equipment area	Hand sanitizer and disinfectant
IA-5	Ground	Indoor Air	490	5506	2.5	8:42	-30	0.0	15:40	-9	72	Leg studio	Hand sanitizer and disinfectant
IA-6	Ground	Indoor Air	28556	4966	2.5	8:44	-30	0.0	15:07	-9	72	Cardio studio	Floor adhesives
IA-7	Mezzanine	Indoor Air	18258	5552	2.5	8:45	-30	0.0	15:37	-8	72	Mezzanine equipment area	Hand sanitizer and disinfectant
IA-8	Second Floor	Indoor Air	13638	5597	2.5	9:04	-29	0.0	15:25	-8	72	Locker room	None observed
IA-9	Second Floor	Indoor Air	28551	5395	2.5	9:00	-30	0.0	15:25	-9	72	Yoga studio	Floor adhesives
Duplicate	Ground	Indoor Air	28565	5385	2.5	8:49	-30	0.0	15:03	-8	72	Main equipment area	Hand sanitizer and disinfectant
Ambient Air	Roof	Ambient Air	23336	4490	1	8:58	-20	0.4	15:39	-9.5	80 (AM), 95 (PM)	NW Front of Building	None observed

**iPARK 84 Campus  
2070 NY-Route 52  
Hopewell Junction, New York**

**TABLE 2  
SUMMARY OF IAQ ANALYSIS  
BUILDING 730 (FORMER 338) - POWERHOUSE GYM**

CAS Registry Number	USEPA BASE Database Tables - Typical Background Concentrations for Indoor Air				Collection Date Sample ID Matrix  Location  Units	8/11/2020 IA-1 Air  Entrance hallway (1st floor)  Result    RL		8/11/2020 IA-2 Air  Reception area (1st floor)  Result    RL		8/11/2020 IA-3 Air  Trainers Turf Area (1st floor)  RL		8/11/2020 IA-4 Air  Main equipment area (1st floor)  Result    RL		8/11/2020 DUPLICATE Air  Main equipment area (1st floor)  Result    RL		8/11/2020 IA-5 Air  Cardio studio (1st floor)  Result    RL		8/11/2020 IA-6 Air  Leg studio (1st floor)  Result    RL		
	75th Percentile	90th Percentile	95th Percentile	99th Percentile																
<b>Volatiles (TO15) By TO15</b>																				
1,1,1-Trichloroethane	71-55-6	10.8	20.6	33.0	737.9	ug/m3	< 1.09	1.09	< 1.09	1.09	< 1.09	1.09	< 1.09	1.09	< 1.09	1.09	< 1.09	1.09	< 1.09	1.09
1,1-Dichloroethene	75-35-4	<1.2	<1.4	<1.6	<1.7	ug/m3	< 0.40	0.40	< 0.40	0.40	< 0.40	0.40	< 0.40	0.40	< 0.40	0.40	< 0.40	0.40	< 0.40	0.40
1,2,4-Trichlorobenzene	120-82-1	<1.2	<6.8	<7.2	<8.1	ug/m3	< 1.85	1.85	< 1.85	1.85	< 1.85	1.85	< 1.85	1.85	< 1.85	1.85	< 1.85	1.85	< 1.85	1.85
1,2-Dichlorobenzene	95-50-1	<1.0	<1.2	<1.3	10.5	ug/m3	< 0.90	0.90	< 0.90	0.90	< 0.90	0.90	< 0.90	0.90	< 0.90	0.90	< 0.90	0.90	< 0.90	0.90
1,3-Dichlorobenzene	541-73-1	<1.1	<2.4	<2.5	<2.8	ug/m3	< 0.90	0.90	< 0.90	0.90	< 0.90	0.90	< 0.90	0.90	< 0.90	0.90	< 0.90	0.90	< 0.90	0.90
1,4-Dichlorobenzene	106-46-7	1.4	5.5	12.5	80.5	ug/m3	< 0.90	0.90	< 0.90	0.90	< 0.90	0.90	< 0.90	0.90	< 0.90	0.90	< 0.90	0.90	< 0.90	0.90
Acetone	67-64-1	59.8	98.9	120.2	226.6	ug/m3	13.0	2.37	15.7	2.37	11.9	2.37	11.5	2.37	11.6	2.37	12.8	2.37	12.7	2.37
Benzene	71-43-2	5.1	9.4	12.5	25.0	ug/m3	< 0.16	0.16	< 0.16	0.16	< 0.16	0.16	< 0.16	0.16	< 0.16	0.16	< 0.16	0.16	< 0.16	0.16
Carbon Tetrachloride	56-23-5	<1.1	<1.3	0.7	0.9	ug/m3	0.4	0.13	0.41	0.13	0.45	0.13	0.41	0.13	0.38	0.13	0.43	0.13	0.4	0.13
Chlorobenzene	108-90-7	<0.8	<0.9	<1.0	1.0	ug/m3	< 0.92	0.92	< 0.92	0.92	< 0.92	0.92	< 0.92	0.92	< 0.92	0.92	< 0.92	0.92	< 0.92	0.92
Cis-1,2-Dichloroethene	156-59-2	<1.2	<1.9	<2.0	<2.2	ug/m3	< 0.79	0.79	< 0.79	0.79	< 0.79	0.79	< 0.79	0.79	< 0.79	0.79	< 0.79	0.79	< 0.79	0.79
Dichlorodifluoromethane	75-71-8	10.5	16.5	32.9	81.3	ug/m3	2.67	0.99	2.12	0.99	2.21	0.99	2.04	0.99	2.04	0.99	2.11	0.99	2.13	0.99
Ethylbenzene	100-41-4	3.4	5.7	7.6	18.5	ug/m3	< 0.65	0.65	< 0.65	0.65	< 0.65	0.65	< 0.65	0.65	< 0.65	0.65	< 0.65	0.65	< 0.65	0.65
m,p-Xylene	179601-23-1	12.2	22.2	28.5	67.6	ug/m3	< 0.65	0.65	< 0.65	0.65	< 0.65	0.65	< 0.65	0.65	< 0.65	0.65	< 0.65	0.65	< 0.65	0.65
Methylene Chloride	75-09-2	5.0	10.0	16.0	1155.6	ug/m3	< 1.39	1.39	< 1.39	1.39	< 1.39	1.39	< 1.39	1.39	< 1.39	1.39	< 1.39	1.39	< 1.39	1.39
o-Xylene	95-47-6	4.4	7.9	11.2	20.1	ug/m3	< 0.65	0.65	< 0.65	0.65	< 0.65	0.65	< 0.65	0.65	< 0.65	0.65	< 0.65	0.65	< 0.65	0.65
Tetrachloroethene	127-18-4	5.9	15.9	25.4	55.6	ug/m3	< 0.68	0.68	< 0.68	0.68	< 0.68	0.68	< 0.68	0.68	< 0.68	0.68	< 0.68	0.68	< 0.68	0.68
Toluene	108-88-3	25.9	43.0	70.8	348.9	ug/m3	< 0.75	0.75	6.93	0.75	< 0.75	0.75	1.02	0.75	1.03	0.75	0.89	0.75	0.89	0.75
Trichloroethene	79-01-6	1.2	4.2	6.5	57.0	ug/m3	< 0.20	0.20	< 0.20	0.20	< 0.20	0.20	< 0.20	0.20	< 0.20	0.20	< 0.20	0.20	< 0.20	0.20
Trichlorofluoromethane	75-69-4	6.7	18.1	54.0	860.6	ug/m3	8.31	0.84	7.52	0.84	6.63	0.84	6.79	0.84	7.02	0.84	6.96	0.84	6.85	0.84
Trichlorotrifluoroethane	76-13-1	<3.0	3.5	9.4	19.7	ug/m3	< 1.15	1.15	< 1.15	1.15	< 1.15	1.15	< 1.15	1.15	< 1.15	1.15	< 1.15	1.15	< 1.15	1.15
Vinyl Chloride	75-01-4	<1.0	<1.9	<2.2	<2.6	ug/m3	< 0.05	.05	< 0.05	0.05	< 0.05	0.05	< 0.05	0.05	< 0.05	0.05	< 0.05	0.05	< 0.05	0.05

**iPARK 84 Campus  
2070 NY-Route 52  
Hopewell Junction, New York**

**TABLE 2  
SUMMARY OF IAQ ANALYSIS  
BUILDING 730 (FORMER 338) - POWERHOUSE GYM**

CAS Registry Number	USEPA BASE Database Tables - Typical Background Concentrations for Indoor Air				Collection Date Sample ID Matrix  Location  Units	8/11/2020 IA-7 Air  Mezzanine Fitness Area		8/11/2020 IA-8 Air  Locker Room Area (2nd floor)		8/11/2020 IA-9 Air  Yoga Studio Area (2nd floor)		8/11/2020 AA-01 Air  Rooftop HVAC Intake		8/11/2020 FB-01 Air  Nitrogen Field Blank		
	75th Percentile	90th Percentile	95th Percentile	99th Percentile		Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	
<b>Volatiles (TO15) By TO15</b>																
1,1,1-Trichloroethane	71-55-6	10.8	20.6	33.0	737.9	ug/m3	< 1.09	1.09	< 1.09	1.09	< 1.09	1.09	< 1.09	1.09	< 1.09	1.09
1,1-Dichloroethene	75-35-4	<1.2	<1.4	<1.6	<1.7	ug/m3	< 0.40	0.40	< 0.40	0.40	< 0.40	0.40	< 0.40	0.40	< 0.40	0.40
1,2,4-Trichlorobenzene	120-82-1	<1.2	<6.8	<7.2	<8.1	ug/m3	< 1.85	1.85	< 1.85	1.85	< 1.85	1.85	< 1.85	1.85	< 1.85	1.85
1,2-Dichlorobenzene	95-50-1	<1.0	<1.2	<1.3	10.5	ug/m3	< 0.90	0.90	< 0.90	0.90	< 0.90	0.90	< 0.90	0.90	< 0.90	0.90
1,3-Dichlorobenzene	541-73-1	<1.1	<2.4	<2.5	<2.8	ug/m3	< 0.90	0.90	< 0.90	0.90	< 0.90	0.90	< 0.90	0.90	< 0.90	0.90
1,4-Dichlorobenzene	106-46-7	1.4	5.5	12.5	80.5	ug/m3	< 0.90	0.90	< 0.90	0.90	< 0.90	0.90	< 0.90	0.90	< 0.90	0.90
Acetone	67-64-1	59.8	98.9	120.2	226.6	ug/m3	12.7	2.37	17.7	2.37	11.6	2.37	10.3	2.37	< 2.37	2.37
Benzene	71-43-2	5.1	9.4	12.5	25.0	ug/m3	< 0.16	0.16	< 0.16	0.16	< 0.16	0.16	< 0.16	0.16	1.04	0.16
Carbon Tetrachloride	56-23-5	<1.1	<1.3	0.7	0.9	ug/m3	0.4	0.13	0.36	0.13	0.43	0.13	0.41	0.13	< 0.13	0.13
Chlorobenzene	108-90-7	<0.8	<0.9	<1.0	1.0	ug/m3	< 0.92	0.92	< 0.92	0.92	< 0.92	0.92	< 0.92	0.92	< 0.92	0.92
Cis-1,2-Dichloroethene	156-59-2	<1.2	<1.9	<2.0	<2.2	ug/m3	< 0.79	0.79	< 0.79	0.79	< 0.79	0.79	< 0.79	0.79	< 0.79	0.79
Dichlorodifluoromethane	75-71-8	10.5	16.5	32.9	81.3	ug/m3	2.01	0.99	2.19	0.99	2.29	0.99	1.89	0.99	< 0.99	0.99
Ethylbenzene	100-41-4	3.4	5.7	7.6	18.5	ug/m3	< 0.65	0.65	< 0.65	0.65	< 0.65	0.65	< 0.65	0.65	< 0.65	0.65
m,p-Xylene	179601-23-1	12.2	22.2	28.5	67.6	ug/m3	< 0.65	0.65	< 0.65	0.65	< 0.65	0.65	< 0.65	0.65	1.32	0.65
Methylene Chloride	75-09-2	5.0	10.0	16.0	1155.6	ug/m3	< 1.39	1.39	2.98	1.39	< 1.39	1.39	< 1.39	1.39	< 1.39	1.39
o-Xylene	95-47-6	4.4	7.9	11.2	20.1	ug/m3	< 0.65	0.65	< 0.65	0.65	< 0.65	0.65	< 0.65	0.65	0.85	0.65
Tetrachloroethene	127-18-4	5.9	15.9	25.4	55.6	ug/m3	< 0.68	0.68	< 0.68	0.68	1.03	0.68	< 0.68	0.68	0.72	0.68
Toluene	108-88-3	25.9	43.0	70.8	348.9	ug/m3	0.87	0.75	< 0.75	0.75	< 0.75	0.75	< 0.75	0.75	1.55	0.75
Trichloroethene	79-01-6	1.2	4.2	6.5	57.0	ug/m3	< 0.20	0.20	< 0.20	0.20	< 0.20	0.20	< 0.20	0.20	< 0.20	0.20
Trichlorofluoromethane	75-69-4	6.7	18.1	54.0	860.6	ug/m3	6.91	0.84	5.6	0.84	7.41	0.84	1.79	0.84	< 0.84	0.84
Trichlorotrifluoroethane	76-13-1	<3.0	3.5	9.4	19.7	ug/m3	< 1.15	1.15	< 1.15	1.15	< 1.15	1.15	< 1.15	1.15	< 1.15	1.15
Vinyl Chloride	75-01-4	<1.0	<1.9	<2.2	<2.6	ug/m3	< 0.05	0.05	< 0.05	0.05	< 0.05	0.05	< 0.05	0.05	< 0.05	0.05

APPENDIX A  
IAQ TESTING PLAN (WALDEN, JULY 13, 2020)

# NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Remedial Bureau D

625 Broadway, 12th Floor, Albany, NY 12233-7013

P: (518) 402-9676 | F: (518) 402-9773

www.dec.ny.gov

July 17, 2020

Joseph Cotter  
iPark 84  
200 North Drive  
Hopewell Junction, NY 12533

Re: Building 338 – Powerhouse Gym Space  
Indoor Air Quality Testing Plan  
iPark 84, Former IBM East Fishkill Facility  
NYSDEC Site No. 314054, EPA ID NYD000707901

Dear Mr. Cotter:

The New York State Department of Environmental Conservation and Department of Health (Departments) have reviewed the Indoor Air Quality (IAQ) Testing Plan for the Powerhouse Gym space located in Building 338. This sampling plan was submitted by Walden Environmental Engineering on behalf of National Resources on July 13, 2020. This sampling is required to be completed and acceptable to the Departments before the Powerhouse Gym tenant can take occupancy and begin operating.

The Departments have no comments and approve the IAQ Testing Plan. Please notify the Departments when work is scheduled. If you have any questions, please call me at (518) 402-9821.

Sincerely,



Jessica LaClair  
Project Manager  
Remedial Section A, Remedial Bureau D  
Division of Environmental Remediation

ec: M. Buckley, iPark  
C. Monheit, National Resources  
N. Brew, Walden  
D. Chartrand, IBM  
E. Lutz, GF  
G. Marone, GF



Department of  
Environmental  
Conservation





J. Armitage, NYSDEC  
D. Bendell, NYSDEC, Region 3  
B. Conlon, NYSDEC  
S. Edwards, NYSDEC  
J. Kenney, NYSDOH  
M. Schuck, NYSDOH



---

Sent via email to jess.laclair@dec.ny.gov

July 13, 2020  
iPARK0118.44

Jessica LaClair  
Environmental Engineer  
Division of Environmental Remediation  
New York State Department of Environmental Conservation  
625 Broadway  
Albany, NY 12233-7013

Re: iPark 84, Former IBM East Fishkill Facility  
Building 730 (Formerly Building 338) – Powerhouse Gym  
Indoor Air Quality Testing Plan

Dear Ms. LaClair:

Walden Environmental Engineering, PLLC (Walden) has prepared this letter to summarize the Indoor Air Quality (IAQ) testing proposed to evaluate indoor air quality within Building 730 (Formerly Building 338) at the Former IBM East Fishkill facility (Facility). A fitness center (Powerhouse Gym) with a maximum occupancy of one hundred and seventy-six (176) people plans to lease approximately 16,405 ft<sup>2</sup> of space in Building 730. It is understood that NYSDEC and NYSDOH require this sampling to be completed and the results reported to the State to verify that IAQ is acceptable in this space before Powerhouse Gym can take occupancy and begin operating in the space.

The results of an investigation conducted at Building 730 in March 2019 indicated the presence of volatile organic compound (VOC) vapors below the slab and the potential for soil vapor intrusion (SVI). The results of this SVI investigation are summarized in the *Building 338 Sub-Slab Vapor Investigation* report (GZA, September 16, 2019). Subsequently, Walden performed a pilot mitigation test in Building 730 in accordance with the *Building 730 (338) Vapor Mitigation System Pilot Testing Plan* (Walden, February 11, 2020) which was approved by NYSDEC. Based upon the results of the pilot test, a Sub Slab Depressurization System (SSDS) for Building 730 was designed by Walden, as summarized in the *Building 730 (338) Vapor Mitigation System Basis of Design* report (Walden, April 15, 2020). NYSDEC provided comments on this report and the revised design report was submitted to the State for approval on July 9, 2020.



iPark is in the process of completing the interior modifications as needed to ready the Powerhouse Gym space for occupancy. These modifications include SWMU removal, relocation of interior walls and construction of a mezzanine area. The space has an open plenum ceiling. Once the interior modifications are completed, Walden, at the request of iPark, shall perform the IAQ testing in accordance with the procedures detailed in the June 15, 2009 *RCRA Facility Investigation (RFI) VOC Source Assessment Work Plan (RFI Work Plan)*, prepared on behalf of IBM) which was previously approved by NYSDEC. Walden will notify NYSDEC and NYSDOH when the IAQ sampling has been scheduled.

The proposed IAQ sampling locations are shown on Figures 1 and 2 (corresponding to the sampling locations on the first and second floors of the gym space) and listed below. The actual sampling locations will be determined in the field. Any significant changes from the locations shown on Figure 1 will be discussed with NYSDEC and NYSDOH to gain the State’s concurrence before sample collection begins. The Powerhouse Gym space in Building 730 is served by the existing HVAC system which will be re-energized. Two units (#3A and #3B) serve the space. Additionally, there are recirculation units within the manufacturing space to achieve desired air quality. The HVAC system will be operating during the IAQ sampling.

Sample ID	Representative Square Footage, approximate (ft <sup>2</sup> )	Area Use
IA-1	500	First Floor - Entrance hallway
IA-2	480	First Floor - Reception area
IA-3	1,750	First Floor - Trainers turf area
IA-4	5,000	First Floor - Main equipment area
IA-5	1,200	First Floor - Cardio studio
IA-6	1,400	First Floor - Leg studio
IA-7	2,700	Second Floor - Mezzanine Fitness Area
IA-8	1,600	Second Floor – Locker Room Area
IA-9	1,200	Second Floor – Yoga Studio Area

In addition to the samples referenced above, one duplicate sample (IA-Duplicate) will be collected at one of the sample locations which will be determined in the field. One outdoor ambient air sample (AA-01) will be collected at the HVAC unit intake to assess background conditions and identify any background impacts to IAQ. Any chemicals observed as being stored or used within the space will be inventoried during the sampling.

Ms. Jessica LaClair  
B730 Powerhouse Gym IAQ Testing Plan  
July 13, 2020

- 3 -



All samples will be submitted to Phoenix Labs of Manchester, CT, a NYSDOH ELAP certified laboratory (NYSDOH ELAP #11301) for analysis of VOC analytes via Method TO-15 (full list). A modified Method TO-15 as specified in the June 2009 *RFI Work Plan* will be used to achieve lower reporting limits via selective ion monitoring for TCE, vinyl chloride and carbon tetrachloride. The IAQ data will be evaluated, validated and presented in a summary report that will be submitted to NYSDEC and NYSDOH for review. Upon reviewing the IAQ sampling summary report for the Powerhouse Gym space, NYSDEC and NYSDOH will determine whether the tenant can take occupancy and begin operating.

Data generated during these Building 730 IAQ sampling activities will be shared with IBM. Note that iPark will provide the results of the IAQ sampling to the tenant within 45 days of receiving the validated data.

Given the tenant's desire to take occupancy as soon as possible, we are ready to move forward with the IAQ sampling in the gym space upon authorization from the State. Therefore, we request that NYSDEC and NYSDOH prioritize issuing its authorization to proceed with the IAQ testing. Upon submittal of the IAQ testing summary report, the State's assistance in making its review of the results a priority will be greatly appreciated.

Please call me at (516) 624-7200 if you have any questions or need any additional information.

Very truly yours,  
Walden Environmental Engineering, PLLC

A handwritten signature in cursive script that reads "Nora M. Brew".

Nora M. Brew, P.E.  
Senior Project Manager

cc: J. Kenney, NYSDOH  
C. Monheit, iPark East Fishkill  
M. Buckley, iPark East Fishkill  
D. Chartrand, IBM

Z:\ipark0118\ipark0118.44 - B338 - 60 Day And SWMU Work Plan\Preoccupancy IAQ Work Plan\B338 Powerhouse Gym IAQ Testing Plan Letter 7.13.2020.Docx

FIGURE 1

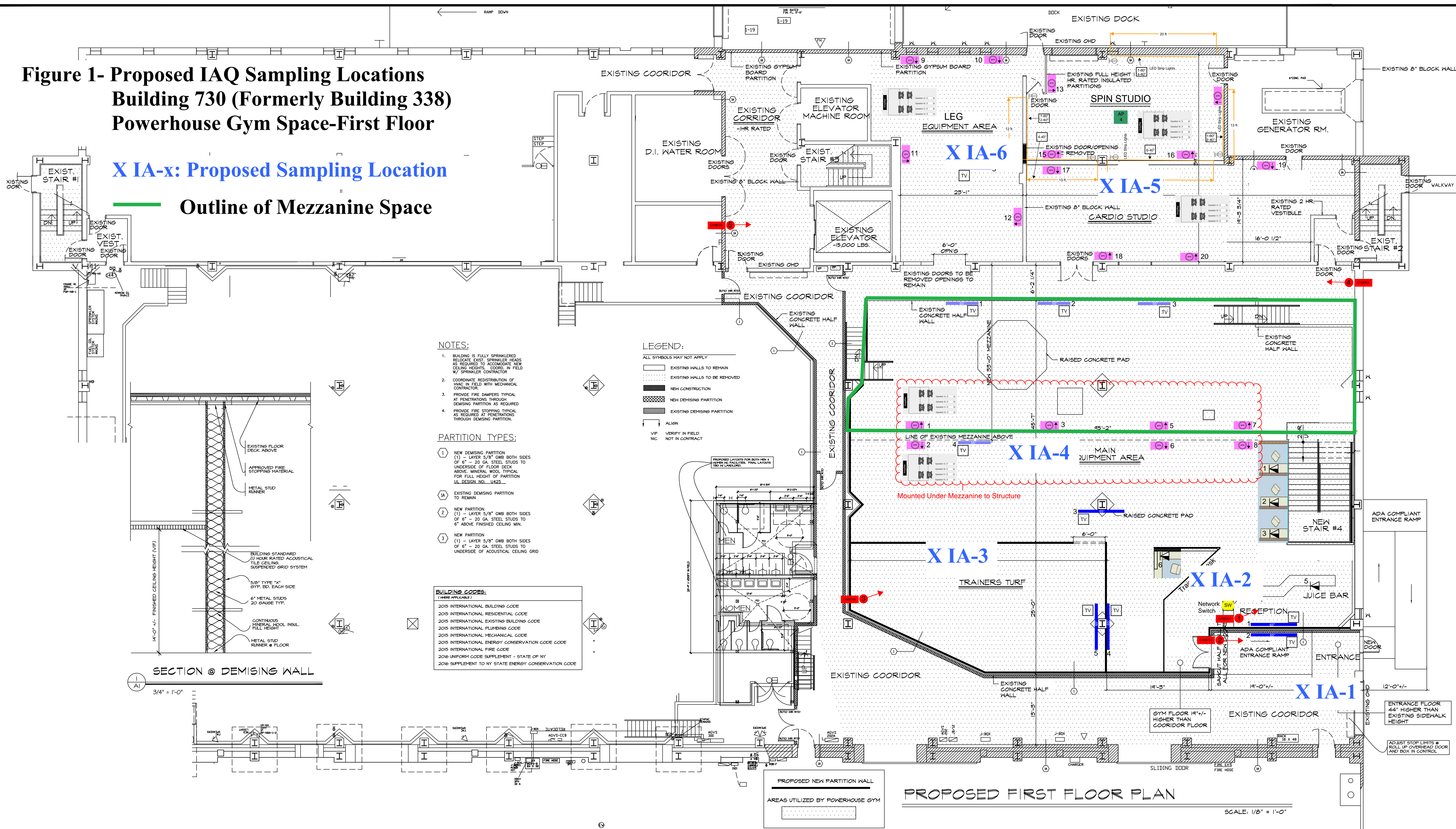
PROPOSED IAQ SAMPLING LOCATIONS – FIRST FLOOR



# Figure 1- Proposed IAQ Sampling Locations Building 730 (Formerly Building 338) Powerhouse Gym Space-First Floor

X IA-x: Proposed Sampling Location

Outline of Mezzanine Space



**NOTES:**

- BUILDING IS FULLY SPRINKLERED. RELOCATE EXIST. SPRINKLER HEADS AS REQUIRED TO ACCOMMODATE NEW CEILING HEIGHTS. COORD. IN FIELD W/ SPRINKLER CONTRACTOR.
- COORDINATE REDISTRIBUTION OF HVAC IN FIELD WITH MECHANICAL CONTRACTOR.
- PROVIDE FIRE DAMPERS TYPICAL AT PENETRATIONS THROUGH DEMISING PARTITION AS REQUIRED.
- PROVIDE FIRE STOPPING TYPICAL AS REQUIRED AT PENETRATIONS THROUGH DEMISING PARTITION.

**PARTITION TYPES:**

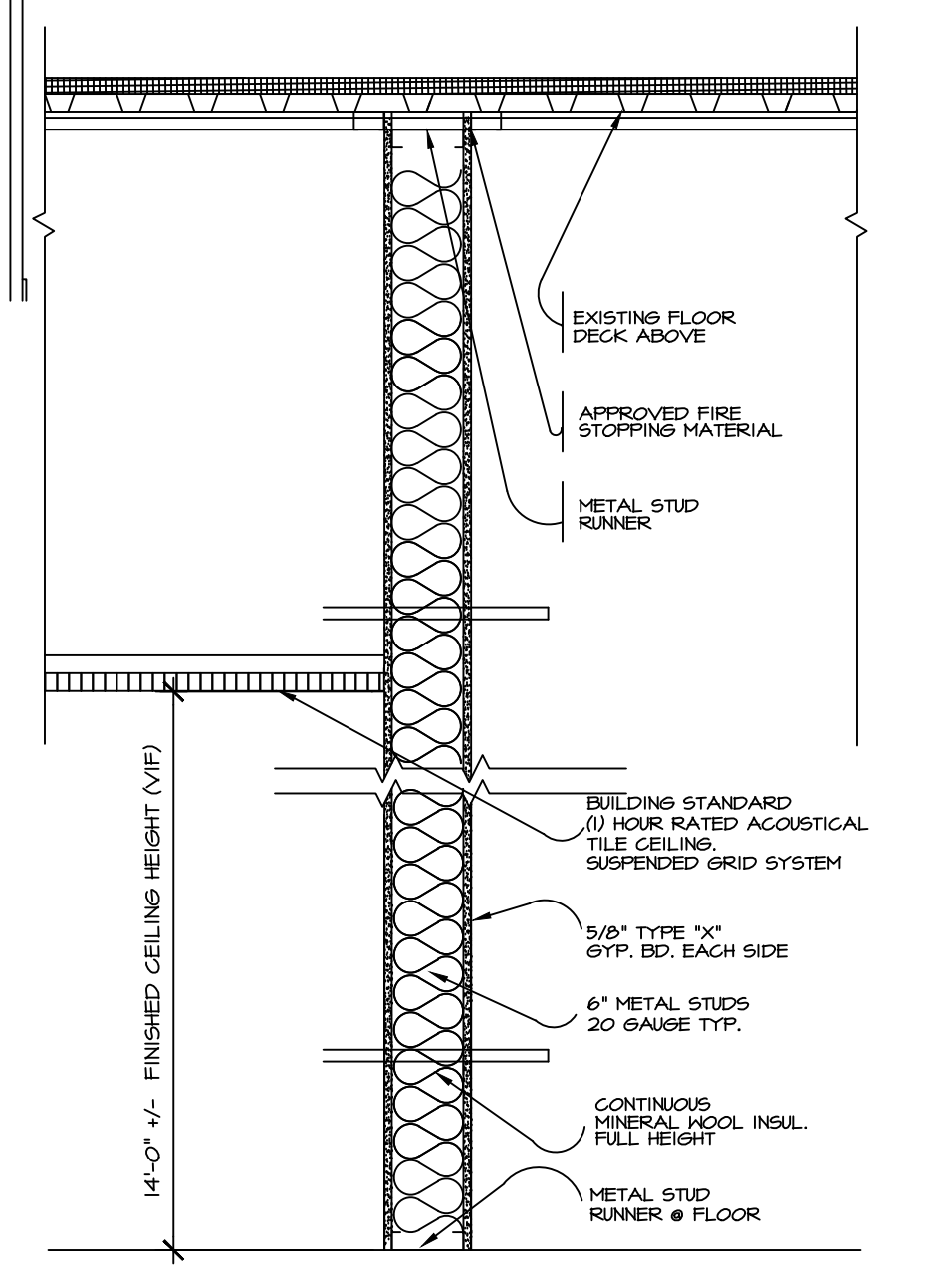
- NEW DEMISING PARTITION (1) - LAYER 5/8" GWB BOTH SIDES OF 6" - 20 GA. STEEL STUDS TO UNDERSIDE OF FLOOR DECK ABOVE. MINERAL WOOL TYPICAL FOR FULL HEIGHT OF PARTITION. UL DESIGN NO. U425.
- EXISTING DEMISING PARTITION TO REMAIN.
- NEW PARTITION (1) - LAYER 5/8" GWB BOTH SIDES OF 6" - 20 GA. STEEL STUDS TO 6" ABOVE FINISHED CEILING MIN.
- NEW PARTITION (1) - LAYER 5/8" GWB BOTH SIDES OF 6" - 20 GA. STEEL STUDS TO UNDERSIDE OF ACOUSTICAL CEILING GRID.

**BUILDING CODES:**  
(WHERE APPLICABLE)

- 2015 INTERNATIONAL BUILDING CODE
- 2015 INTERNATIONAL RESIDENTIAL CODE
- 2015 INTERNATIONAL EXISTING BUILDING CODE
- 2015 INTERNATIONAL PLUMBING CODE
- 2015 INTERNATIONAL MECHANICAL CODE
- 2015 INTERNATIONAL ENERGY CONSERVATION CODE
- 2015 INTERNATIONAL FIRE CODE
- 2016 UNIFORM CODE SUPPLEMENT - STATE OF NY
- 2016 SUPPLEMENT TO NY STATE ENERGY CONSERVATION CODE

**LEGEND:**  
ALL SYMBOLS MAY NOT APPLY

- EXISTING HALLS TO BE REMOVED
- EXISTING HALLS TO REMAIN
- NEW CONSTRUCTION
- NEW DEMISING PARTITION
- EXISTING DEMISING PARTITION
- ALIGN
- VF VERIFY IN FIELD
- NC NOT IN CONTRACT



SECTION @ DEMISING WALL  
3/4" = 1'-0"

PROPOSED NEW PARTITION WALL  
AREAS UTILIZED BY POWERHOUSE GYM  
PROPOSED FIRST FLOOR PLAN  
SCALE: 1/8" = 1'-0"

A1.dwg ISSUED FOR BUILDING PERMIT

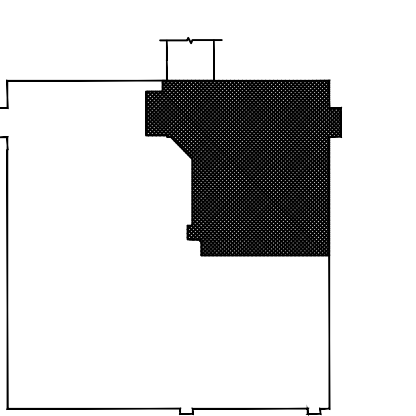
**POWERHOUSE GYM**

730 South Drive  
Suite 101  
Hopewell Junction, NY

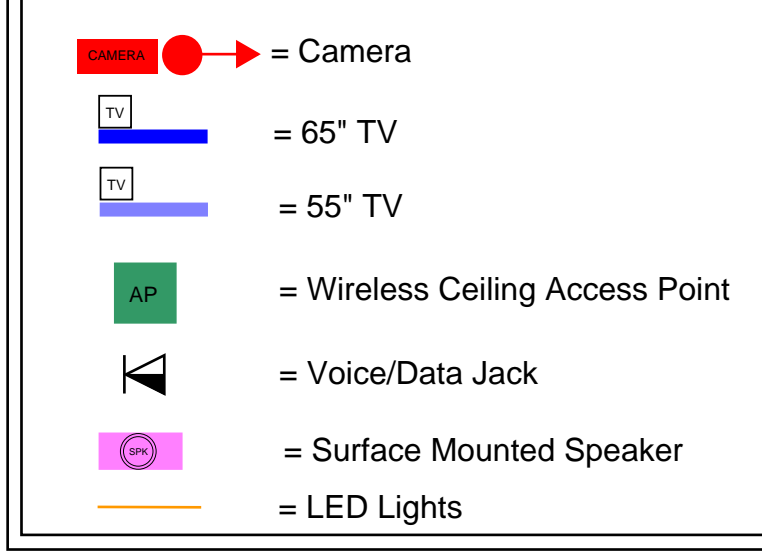
**ANTHONY TOTILO ARCHITECTS AND ASSOCIATES**  
Anthony Totilo, A.I.A.  
114 Old North Stamford Road  
Stamford, Connecticut 06905  
(203) 517-6586

**OWNER USE AND ALTERATION OF DOCUMENTS:**  
The client acknowledges that the documents, drawings, specifications including electronic media files are the property of Anthony Totilo Architects and Associates and shall remain the property of Anthony Totilo Architects and Associates. The client or any person or entity that acquires or obtains the drawings and specifications from or through the client shall not use them on any other project, shall not modify, alter or change the drawings and specifications without written authorization from Anthony Totilo Architects and Associates. Furthermore, the client agrees to the fullest extent permitted by law to indemnify and hold harmless Anthony Totilo Architects and Associates, its officers, directors and employees from any and all claims, suits, liability, demands or costs, including attorney fees arising out of or resulting from the use of the drawings and specifications on any other project.

LOCATION PLAN



NOTES:



SHEET TITLE:

1ST FLOOR PLAN

SHEET TITLE:

1	03.19.20	ISSUED FOR BLDG PERMIT
NO	DATE	REVISIONS



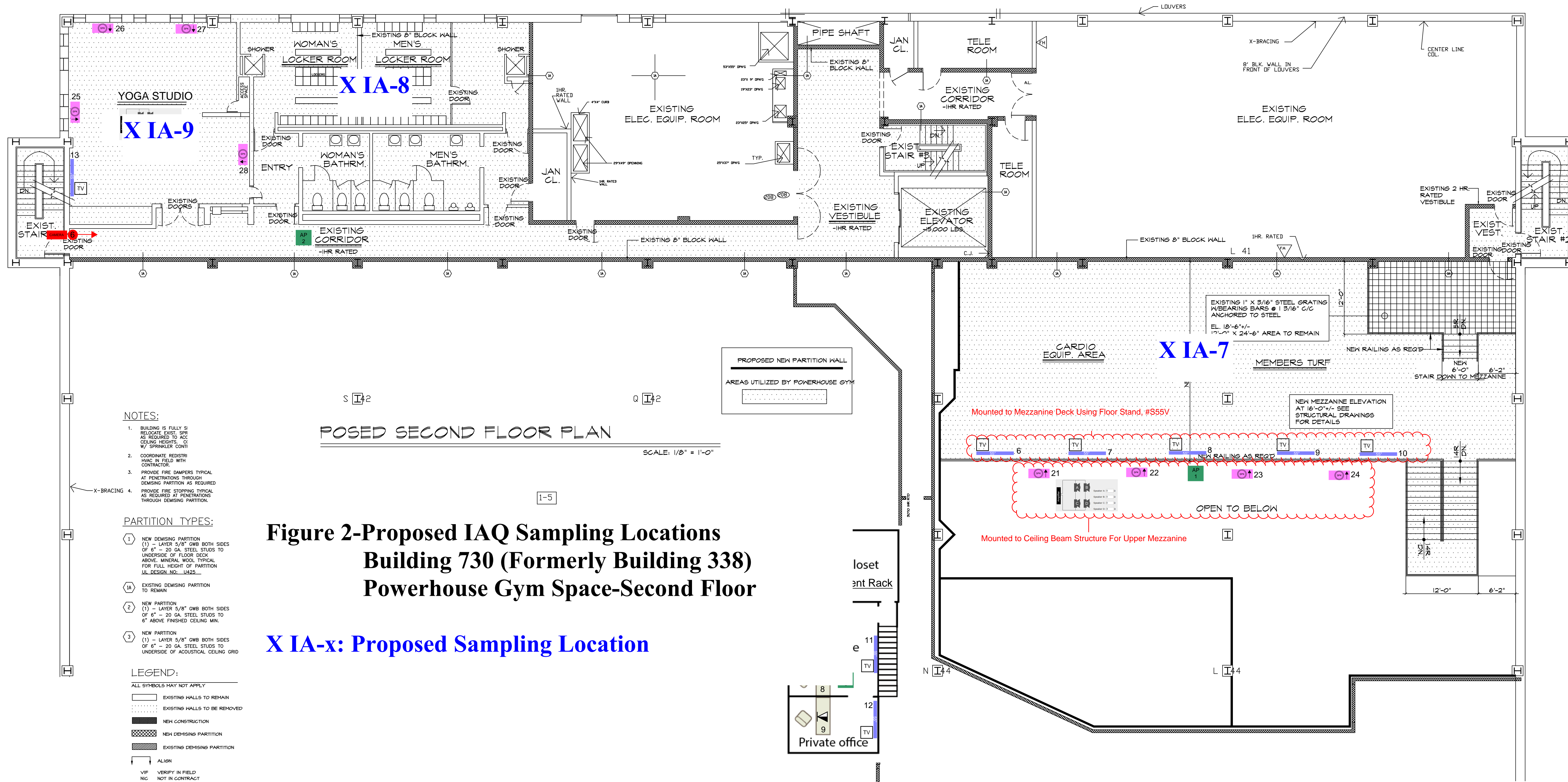
DRAWN BY: AT  
CHECKED BY: TOT  
DATE: 02.22.19  
SCALE: AS NOTED

PROJECT NO:  
SHEET NO:  
**A1**

FIGURE 2

PROPOSED IAQ SAMPLING LOCATIONS – SECOND FLOOR





**NOTES:**

- BUILDING IS FULLY SI  
RELOCATE EXIST. SPS  
AS REQUIRED TO ACC  
CEILING HEIGHTS. C  
W/ SPRINKLER CONTI
- COORDINATE REDISTRI  
MATIC IN FIELD WITH  
CONTRACTOR.
- PROVIDE FIRE DAMPERS TYPICAL  
AT PENETRATIONS THROUGH  
DEMISING PARTITION AS REQUIRED
- PROVIDE FIRE STOPPING TYPICAL  
AS REQUIRED AT PENETRATIONS  
THROUGH DEMISING PARTITION.

**PARTITION TYPES:**

- NEW DEMISING PARTITION  
(1) - LAYER 5/8" GWB BOTH SIDES  
OF 6" - 20 GA. STEEL STUDS TO  
UNDERSIDE OF FLOOR DECK  
ABOVE: MINERAL WOOL TYPICAL  
FOR FULL HEIGHT OF PARTITION  
UL DESIGN NO. L9422
- EXISTING DEMISING PARTITION  
TO REMAIN
- NEW PARTITION  
(1) - LAYER 5/8" GWB BOTH SIDES  
OF 6" - 20 GA. STEEL STUDS TO  
6" ABOVE FINISHED CEILING MIN.
- NEW PARTITION  
(1) - LAYER 5/8" GWB BOTH SIDES  
OF 6" - 20 GA. STEEL STUDS TO  
UNDERSIDE OF ACoustICAL CEILING GRID

**LEGEND:**

- ALL SYMBOLS MAY NOT APPLY
- EXISTING WALLS TO REMAIN
  - EXISTING WALLS TO BE REMOVED
  - NEW CONSTRUCTION
  - NEW DEMISING PARTITION
  - EXISTING DEMISING PARTITION
  - ALIGN
  - VIF VERIFY IN FIELD
  - NIC NOT IN CONTRACT

POSED SECOND FLOOR PLAN  
SCALE: 1/8" = 1'-0"

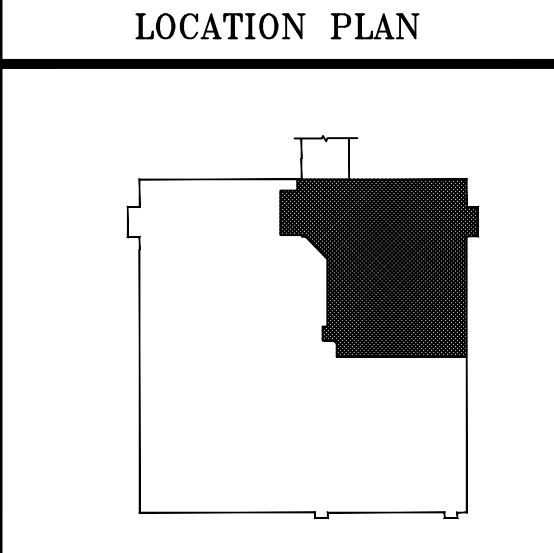
**Figure 2-Proposed IAQ Sampling Locations  
Building 730 (Formerly Building 338)  
Powerhouse Gym Space-Second Floor**

**X IA-x: Proposed Sampling Location**

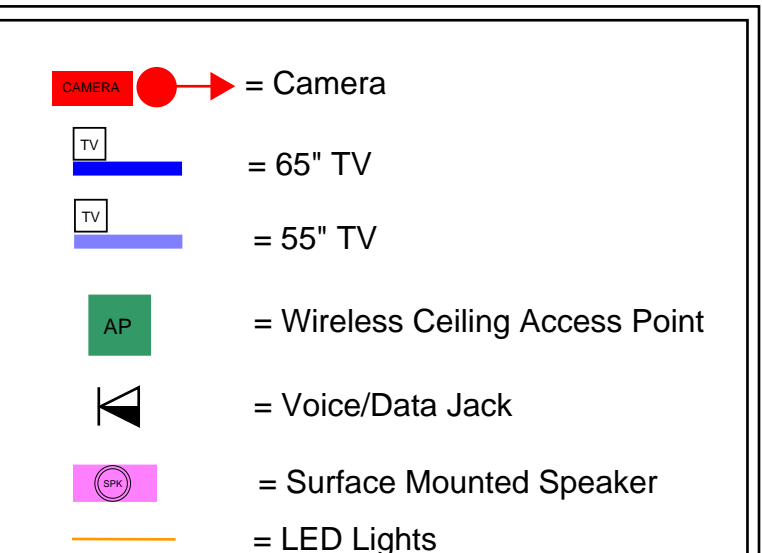
A2.dwg issued for permit

**POWERHOUSE GYM**  
730 South Drive  
Suite 101  
Hopewell Junction, NY

**ANTHONY TOTILO ARCHITECTS AND ASSOCIATES**  
Anthony Totilo, A.I.A.  
114 Old North Stamford Road  
Stamford, Connecticut 06905  
(203) 517-6586



**NOTES:**



**SHEET TITLE:**  
2ND FLOOR PLAN

NO	DATE	REVISIONS
1	03.19.20	ISSUED FOR BLDG PERMIT

**SHEET TITLE:**

DRAWN BY:	AT	PROJECT NO:
CHECKED BY:	TOT	SHEET NO:
DATE:	02.22.19	<b>A2</b>
SCALE:	AS NOTED	

REGISTERED ARCHITECT  
**ANTHONY TOTILO**  
18454  
STATE OF NEW YORK

APPENDIX B

VAPOR MITIGATION SYSTEM BASIS OF DESIGN (WALDEN, JULY 8, 2020)

**PRESENTED AS APPENDIX A OF SYSTEM START UP REPORT FOR  
MITIGATION SYSTEM IN GYM SPACE**

APPENDIX C  
INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY

NEW YORK STATE DEPARTMENT OF HEALTH  
INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY  
CENTER FOR ENVIRONMENTAL HEALTH

This form must be completed for each residence involved in indoor air testing.

Preparer's Name Herri Ann Wright Date/Time Prepared 8/11/20 10:45

Preparer's Affiliation Environmental Consultant Phone No. 510 624 7200

Purpose of Investigation Indoor air quality survey

1. OCCUPANT:

Interviewed:  Y /  N

Last Name: Mignone First Name: John

Address: 200 North Drive Hopewell Junction, NY 12533

County: Dutchess

Home Phone: 914 447 2438 Office Phone: \_\_\_\_\_

Number of Occupants/persons at this location \_\_\_\_\_ Age of Occupants \_\_\_\_\_

2. OWNER OR LANDLORD: (Check if same as occupant \_\_\_)

Interviewed:  Y /  N

Last Name: \_\_\_\_\_ First Name: \_\_\_\_\_

Address: \_\_\_\_\_

County: \_\_\_\_\_

Home Phone: \_\_\_\_\_ Office Phone: \_\_\_\_\_

3. BUILDING CHARACTERISTICS

Type of Building: (Circle appropriate response)

- Residential
- School
- Commercial/Multi-use
- Industrial
- Church
- Other: \_\_\_\_\_

If the property is residential, type? (Circle appropriate response)

- |              |                 |                   |
|--------------|-----------------|-------------------|
| Ranch        | 2-Family        | 3-Family          |
| Raised Ranch | Split Level     | Colonial          |
| Cape Cod     | Contemporary    | Mobile Home       |
| Duplex       | Apartment House | Townhouses/Condos |
| Modular      | Log Home        | Other: <u>NO</u>  |

If multiple units, how many? N/A

If the property is commercial, type?

Business Type(s) GYM

Does it include residences (i.e., multi-use)? Y  N  If yes, how many? N/A

Other characteristics:

Number of floors 2 with mezzanine Building age approx. 1980s

Is the building insulated? Y  N  How air tight? Tight /  Average  / Not Tight

4. AIRFLOW

Use air current tubes or tracer smoke to evaluate airflow patterns and qualitatively describe:

Airflow between floors

N/A

Airflow near source

N/A

Outdoor air infiltration

Open doors, moderate

Infiltration into air ducts

moderate

5. BASEMENT AND CONSTRUCTION CHARACTERISTICS (Circle all that apply)

- a. Above grade construction: wood frame concrete stone brick
- b. Basement type: N/A full crawlspace slab other \_\_\_\_\_
- c. Basement floor: N/A concrete dirt stone other \_\_\_\_\_
- d. Basement floor: N/A uncovered covered covered with \_\_\_\_\_
- e. Concrete floor: unsealed sealed sealed with \_\_\_\_\_
- f. Foundation walls: N/A poured block stone other \_\_\_\_\_
- g. Foundation walls: N/A unsealed sealed sealed with \_\_\_\_\_
- h. The basement is: N/A wet damp dry moldy
- i. The basement is: N/A finished unfinished partially finished
- j. Sump present? Y (N)
- k. Water in sump? Y (N) not applicable

Basement/Lowest level depth below grade: N/A (feet) lowest level is on grade

Identify potential soil vapor entry points and approximate size (e.g., cracks, utility ports, drains)

floor drains

6. HEATING, VENTING and AIR CONDITIONING (Circle all that apply)

Type of heating system(s) used in this building: (circle all that apply – note primary)

- Hot air circulation Heat pump Hot water baseboard
- Space Heaters Stream radiation Radiant floor
- Electric baseboard Wood stove Outdoor wood boiler Other \_\_\_\_\_

The primary type of fuel used is:

- Natural Gas Fuel Oil Kerosene
- Electric Propane Solar
- Wood Coal

Domestic hot water tank fueled by: natural gas

Boiler/furnace located in: Basement Outdoors Main Floor Other top floor

Air conditioning: Central Air Window units Open Windows None

Are there air distribution ducts present?  Y /  N

Describe the supply and cold air return ductwork, and its condition where visible, including whether there is a cold air return and the tightness of duct joints. Indicate the locations on the floor plan diagram.

Recently updated HVAC

7. OCCUPANCY

Is basement/lowest level occupied?  Full-time  Occasionally  Seldom  Almost Never

Level General Use of Each Floor (e.g., familyroom, bedroom, laundry, workshop, storage)

Basement N/A

1<sup>st</sup> Floor Reception area, weight room, cardio

2<sup>nd</sup> Floor Locker rooms, fitness rooms, cardio

3<sup>rd</sup> Floor N/A

4<sup>th</sup> Floor N/A

8. FACTORS THAT MAY INFLUENCE INDOOR AIR QUALITY

a. Is there an attached garage? Y  N

b. Does the garage have a separate heating unit? Y / N /  NA

c. Are petroleum-powered machines or vehicles stored in the garage (e.g., lawnmower, atv, car) Y / N /  NA  
Please specify \_\_\_\_\_

d. Has the building ever had a fire? Y /  N When? \_\_\_\_\_

e. Is a kerosene or unvented gas space heater present? Y  N Where? \_\_\_\_\_

f. Is there a workshop or hobby/craft area? Y /  N Where & Type? \_\_\_\_\_

g. Is there smoking in the building? Y  N How frequently? \_\_\_\_\_

h. Have cleaning products been used recently?  Y /  N When & Type? disinfectants

i. Have cosmetic products been used recently? Y  N When & Type? \_\_\_\_\_



- j. Has painting/staining been done in the last 6 months?  Y /  N Where & When? all walls
- k. Is there new carpet, drapes or other textiles?  Y /  N Where & When? turf area
- l. Have air fresheners been used recently? Y /  N When & Type? \_\_\_\_\_
- m. Is there a kitchen exhaust fan? Y /  N If yes, where vented? \_\_\_\_\_
- n. Is there a bathroom exhaust fan? Y /  N If yes, where vented? \_\_\_\_\_
- o. Is there a clothes dryer? Y /  N If yes, is it vented outside? Y / N
- p. Has there been a pesticide application? Y /  N When & Type? \_\_\_\_\_

Are there odors in the building? Y /  N  
 If yes, please describe: \_\_\_\_\_

Do any of the building occupants use solvents at work? Y /  N  
 (e.g., chemical manufacturing or laboratory, auto mechanic or auto body shop, painting, fuel oil delivery, boiler mechanic, pesticide application, cosmetologist)

If yes, what types of solvents are used? N/A

If yes, are their clothes washed at work? Y /  N

Do any of the building occupants regularly use or work at a dry-cleaning service? (Circle appropriate response)

- Yes, use dry-cleaning regularly (weekly)  No
- Yes, use dry-cleaning infrequently (monthly or less)  Unknown
- Yes, work at a dry-cleaning service

Is there a radon mitigation system for the building/structure? Y /  N Date of Installation: \_\_\_\_\_  
 Is the system active or passive? Active/Passive

**9. WATER AND SEWAGE**

Water Supply:  Public Water    Drilled Well    Driven Well    Dug Well    Other: \_\_\_\_\_  
 Sewage Disposal:    Public Sewer    Septic Tank    Leach Field    Dry Well     Other: GE WWTP

**10. RELOCATION INFORMATION (for oil spill residential emergency)**

- a. Provide reasons why relocation is recommended: N/A
- b. Residents choose to: remain in home    relocate to friends/family    relocate to hotel/motel
- c. Responsibility for costs associated with reimbursement explained? Y / N
- d. Relocation package provided and explained to residents? Y / N

**11. FLOOR PLANS**

**Draw a plan view sketch of the basement and first floor of the building. Indicate air sampling locations, possible indoor air pollution sources and PID meter readings. If the building does not have a basement, please note.**

**Basement:**

See attached

**First Floor:**

See attached

**12. OUTDOOR PLOT**

**Draw a sketch of the area surrounding the building being sampled. If applicable, provide information on spill locations, potential air contamination sources (industries, gas stations, repair shops, landfills, etc.), outdoor air sampling location(s) and PID meter readings.**

**Also indicate compass direction, wind direction and speed during sampling, the locations of the well and septic system, if applicable, and a qualifying statement to help locate the site on a topographic map.**

See attached

## 13. PRODUCT INVENTORY FORM

Make & Model of field instrument used: MiniRae 3000

List specific products found in the residence that have the potential to affect indoor air quality.

Location	Product Description	Size (units)	Condition*	Chemical Ingredients	Field Instrument Reading (units)	Photo** Y/N
1 <sup>st</sup> floor	unspecified sanitizer <sup>x9</sup>	32 fl oz	U	unknown	0.0	✓
↓	Germ X hand sanitizer <sup>x9</sup>	8 fl oz	U		0.0	✓
mezz.	unspecified sanitizer <sup>x2</sup>	32 fl oz	U		0.0	✓
↓	Germ X hand sanitizer	8 fl oz	U		0.0	✓
1 <sup>st</sup> floor	Phillips grip stick adhesive <sup>17oz</sup>		U		0.0	✓
↓	Easy sand joint compound	18 lb	U		0.0	✓
↓	USG all purpose sheetrock <sup>x2</sup>	5 gal	U		0.0	✓
↓	Proform mid weight joint compound <sup>x2</sup>	5 gal	U		0.0	✓
↓	Skimcrete XL cement <sup>x4</sup>	25 lb	U		0.0	✓
↓	Eco 811 carpet tile adhesive <sup>x3</sup>	4 gal	U		0.0	✓
↓	solvent free base adhesive chapco	4 gal	U		0.0	✓
↓	Flawtread adhesive <sup>Tarkett</sup>	4 gal	U		0.0	✓
↓	low foam floor cleaner - Ecoler <sup>x3</sup>	1 gal	U		0.0	✓
2 <sup>nd</sup> floor	Grip 3 solvent free floor adhesive	4 gal	U		0.0	✓

\* Describe the condition of the product containers as **Unopened (UO)**, **Used (U)**, or **Deteriorated (D)**

\*\* Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

**Indoor Air Quality Questionnaire and Building Inventory**  
**Product Inventory Photographs-August 2020**  
**Former IBM East Fishkill Facility – Building 730 (338)- Powerhouse Gym**



Photo #1: 1<sup>st</sup> Floor Main Equipment Area/Leg Studio/Mezzanine

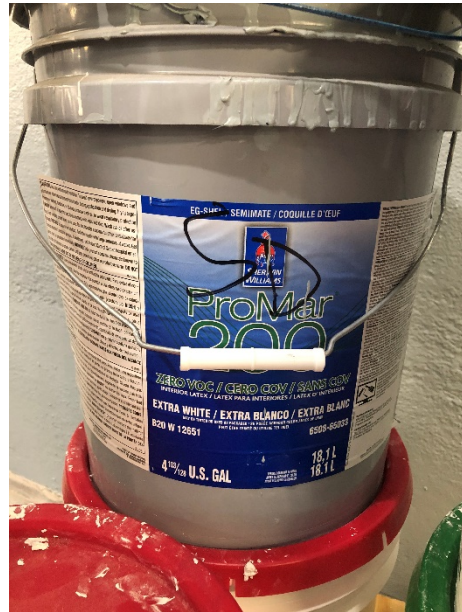


Photo #2: 1<sup>st</sup> Floor



Photo #3: 1st Floor

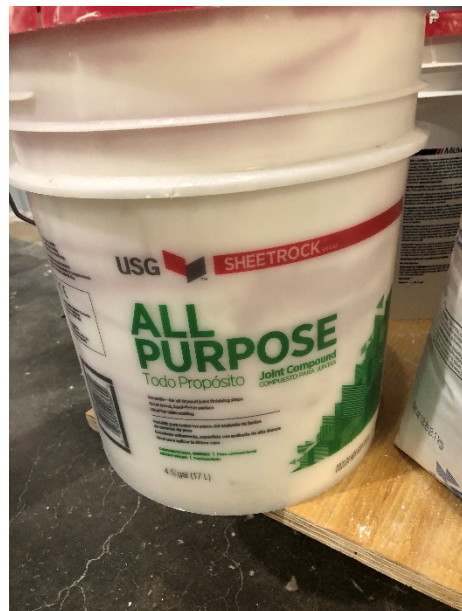


Photo #4: 1<sup>st</sup> Floor





Photo #5: 1<sup>st</sup> Floor



Photo #6: 1<sup>st</sup> Floor



Photo #7: 1<sup>st</sup> Floor



Photo #8: 1<sup>st</sup> Floor



Photo #9: 1<sup>st</sup> Floor



Photo #10: 2<sup>nd</sup> Floor



APPENDIX D  
PHOTOGRAPHIC LOG OF SAMPLING LOCATIONS

**Site Photographs**  
**Building 338, Power House Gym**

**Photograph #1**



Sample Location IA-1,  
First Floor- Entrance Hallway

**Photograph #2**



Sample Location IA-2,  
First Floor - Reception area

**Photograph #3**



Sample Location IA-3,  
First Floor - Trainers turf area

**Photograph #4**



Sample Location IA-4,  
First Floor - Main equipment area

**Photograph #5**



Sample Location IA-5,  
First Floor - Cardio studio

**Photograph #6**



Sample Location IA-6,  
First Floor - Leg studio

**Photograph #7**



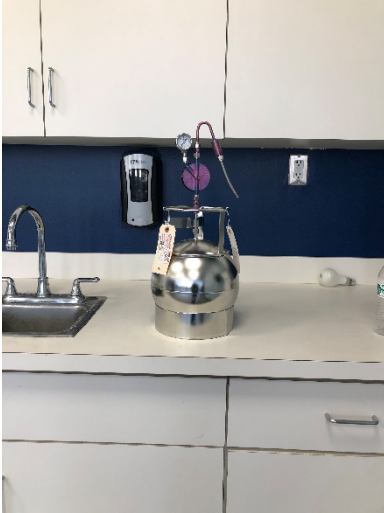
Sample Location IA-7,  
Second Floor - Mezzanine Fitness Area

**Photograph #8**



Sample Location IA-8,  
Second Floor – Locker Room Area

**Photograph #9**



Sample Location IA-9,  
Second Floor – Yoga Studio Area

**Photograph #10**



Sample Location AA-01,  
Rooftop HVAC Unit

APPENDIX E  
LABORATORY ANALYTICAL REPORT



Environmental Laboratories, Inc.  
 587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
 Tel. (860) 645-1102 Fax (860) 645-0823



# Analysis Report

August 13, 2020

FOR: Attn: Nora Brew  
 Walden Environmental Engineering PLLC  
 16 Spring Street  
 Oyster Bay, NY 11771

Sample Information

Matrix: AIR  
 Location Code: WALDENE-IPARK  
 Rush Request: 72 Hour  
 P.O.#: IPARK 0118.44  
 Canister Id: 18258

Custody Information

Collected by: EJ  
 Received by: CP  
 Analyzed by: see "By" below

Date

08/11/20 15:37  
 08/12/20 17:16

Time

## Laboratory Data

SDG ID: GCG52615  
 Phoenix ID: CG52615

Project ID: IPARK 0018.44 POWERHOUSE GYM  
 Client ID: IA-7 (MEZZANINE)

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	Dilution
<b><u>Volatiles (TO15)</u></b>							
1,1,1-Trichloroethane	ND	0.200	ND	1.09	08/12/20	KCA	1
1,1-Dichloroethene	ND	0.100	ND	0.40	08/12/20	KCA	1
1,2,4-Trichlorobenzene	ND	0.250	ND	1.85	08/12/20	KCA	1
1,2-Dichlorobenzene	ND	0.150	ND	0.90	08/12/20	KCA	1
1,3-Dichlorobenzene	ND	0.150	ND	0.90	08/12/20	KCA	1
1,4-Dichlorobenzene	ND	0.150	ND	0.90	08/12/20	KCA	1
Acetone	5.33	1.00	12.7	2.37	08/12/20	KCA	1
Benzene	ND	0.050	ND	0.16	08/12/20	KCA	1
Carbon Tetrachloride	0.064	0.020	0.40	0.13	08/12/20	KCA	1
Chlorobenzene	ND	0.200	ND	0.92	08/12/20	KCA	1
Cis-1,2-Dichloroethene	ND	0.200	ND	0.79	08/12/20	KCA	1
Dichlorodifluoromethane	0.407	0.200	2.01	0.99	08/12/20	KCA	1
Ethylbenzene	ND	0.150	ND	0.65	08/12/20	KCA	1
m,p-Xylene	ND	0.150	ND	0.65	08/12/20	KCA	1
Methylene Chloride	ND	0.400	ND	1.39	08/12/20	KCA	1
o-Xylene	ND	0.150	ND	0.65	08/12/20	KCA	1
Tetrachloroethene	ND	0.100	ND	0.68	08/12/20	KCA	1
Toluene	0.232	0.200	0.87	0.75	08/12/20	KCA	1
Trichloroethene	ND	0.037	ND	0.20	08/12/20	KCA	1
Trichlorofluoromethane	1.23	0.150	6.91	0.84	08/12/20	KCA	1
Trichlorotrifluoroethane	ND	0.150	ND	1.15	08/12/20	KCA	1
Vinyl Chloride	ND	0.020	ND	0.05	08/12/20	KCA	1
<b><u>QA/QC Surrogates/Internals</u></b>							
% Bromofluorobenzene	99	%	99	%	08/12/20	KCA	1
% IS-1,4-Difluorobenzene	99	%	99	%	08/12/20	KCA	1
% IS-Bromochloromethane	100	%	100	%	08/12/20	KCA	1

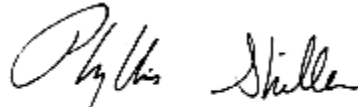


Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	
% IS-Chlorobenzene-d5	99	%	99	%	08/12/20	KCA	1

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL  
BRL=Below Reporting Level L=Biased Low  
QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

**Comments:**

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**Phyllis Shiller, Laboratory Director**

**August 13, 2020**

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# Analysis Report

August 13, 2020

FOR: Attn: Nora Brew  
 Walden Environmental Engineering PLLC  
 16 Spring Street  
 Oyster Bay, NY 11771

## Sample Information

Matrix: AIR  
 Location Code: WALDENE-IPARK  
 Rush Request: 72 Hour  
 P.O.#: IPARK 0118.44  
 Canister Id: 23336

## Custody Information

Collected by: EJ  
 Received by: CP  
 Analyzed by: see "By" below

Date            Time  
 08/11/20        15:39  
 08/12/20        17:16

## Laboratory Data

SDG ID: GCG52615  
 Phoenix ID: CG52616

Project ID: IPARK 0018.44 POWERHOUSE GYM  
 Client ID: AA-1 (AMBIENT AIR)

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	Dilution
<b><u>Volatiles (TO15)</u></b>							
1,1,1-Trichloroethane	ND	0.200	ND	1.09	08/12/20	KCA	1
1,1-Dichloroethene	ND	0.100	ND	0.40	08/12/20	KCA	1
1,2,4-Trichlorobenzene	ND	0.250	ND	1.85	08/12/20	KCA	1
1,2-Dichlorobenzene	ND	0.150	ND	0.90	08/12/20	KCA	1
1,3-Dichlorobenzene	ND	0.150	ND	0.90	08/12/20	KCA	1
1,4-Dichlorobenzene	ND	0.150	ND	0.90	08/12/20	KCA	1
Acetone	4.34	1.00	10.3	2.37	08/12/20	KCA	1
Benzene	ND	0.050	ND	0.16	08/12/20	KCA	1
Carbon Tetrachloride	0.065	0.020	0.41	0.13	08/12/20	KCA	1
Chlorobenzene	ND	0.200	ND	0.92	08/12/20	KCA	1
Cis-1,2-Dichloroethene	ND	0.200	ND	0.79	08/12/20	KCA	1
Dichlorodifluoromethane	0.382	0.200	1.89	0.99	08/12/20	KCA	1
Ethylbenzene	ND	0.150	ND	0.65	08/12/20	KCA	1
m,p-Xylene	ND	0.150	ND	0.65	08/12/20	KCA	1
Methylene Chloride	ND	0.400	ND	1.39	08/12/20	KCA	1
o-Xylene	ND	0.150	ND	0.65	08/12/20	KCA	1
Tetrachloroethene	ND	0.100	ND	0.68	08/12/20	KCA	1
Toluene	ND	0.200	ND	0.75	08/12/20	KCA	1
Trichloroethene	ND	0.037	ND	0.20	08/12/20	KCA	1
Trichlorofluoromethane	0.319	0.150	1.79	0.84	08/12/20	KCA	1
Trichlorotrifluoroethane	ND	0.150	ND	1.15	08/12/20	KCA	1
Vinyl Chloride	ND	0.020	ND	0.05	08/12/20	KCA	1
<b><u>QA/QC Surrogates/Internals</u></b>							
% Bromofluorobenzene	99	%	99	%	08/12/20	KCA	1
% IS-1,4-Difluorobenzene	98	%	98	%	08/12/20	KCA	1
% IS-Bromochloromethane	100	%	100	%	08/12/20	KCA	1

Client ID: AA-1 (AMBIENT AIR)

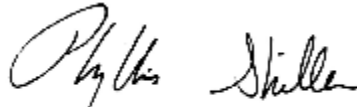
Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	
% IS-Chlorobenzene-d5	98	%	98	%	08/12/20	KCA	1

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL  
BRL=Below Reporting Level L=Biased Low

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

**Comments:**

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**Phyllis Shiller, Laboratory Director**

**August 13, 2020**

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# Analysis Report

August 13, 2020

FOR: Attn: Nora Brew  
 Walden Environmental Engineering PLLC  
 16 Spring Street  
 Oyster Bay, NY 11771

## Sample Information

Matrix: AIR  
 Location Code: WALDENE-IPARK  
 Rush Request: 72 Hour  
 P.O.#: IPARK 0118.44  
 Canister Id: 13638

## Custody Information

Collected by: EJ  
 Received by: CP  
 Analyzed by: see "By" below

## Date

08/11/20  
 08/12/20

## Time

15:35  
 17:16

## Laboratory Data

SDG ID: GCG52615  
 Phoenix ID: CG52617

Project ID: IPARK 0018.44 POWERHOUSE GYM  
 Client ID: IA-8 (MEN'S LOCKER ROOM)

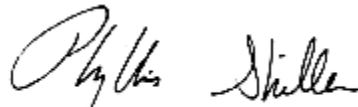
Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	Dilution
<b><u>Volatiles (TO15)</u></b>							
1,1,1-Trichloroethane	ND	0.200	ND	1.09	08/12/20	KCA	1
1,1-Dichloroethene	ND	0.100	ND	0.40	08/12/20	KCA	1
1,2,4-Trichlorobenzene	ND	0.250	ND	1.85	08/12/20	KCA	1
1,2-Dichlorobenzene	ND	0.150	ND	0.90	08/12/20	KCA	1
1,3-Dichlorobenzene	ND	0.150	ND	0.90	08/12/20	KCA	1
1,4-Dichlorobenzene	ND	0.150	ND	0.90	08/12/20	KCA	1
Acetone	7.46	1.00	17.7	2.37	08/12/20	KCA	1
Benzene	ND	0.050	ND	0.16	08/12/20	KCA	1
Carbon Tetrachloride	0.058	0.020	0.36	0.13	08/12/20	KCA	1
Chlorobenzene	ND	0.200	ND	0.92	08/12/20	KCA	1
Cis-1,2-Dichloroethene	ND	0.200	ND	0.79	08/12/20	KCA	1
Dichlorodifluoromethane	0.443	0.200	2.19	0.99	08/12/20	KCA	1
Ethylbenzene	ND	0.150	ND	0.65	08/12/20	KCA	1
m,p-Xylene	ND	0.150	ND	0.65	08/12/20	KCA	1
Methylene Chloride	0.859	0.400	2.98	1.39	08/12/20	KCA	1
o-Xylene	ND	0.150	ND	0.65	08/12/20	KCA	1
Tetrachloroethene	ND	0.100	ND	0.68	08/12/20	KCA	1
Toluene	ND	0.200	ND	0.75	08/12/20	KCA	1
Trichloroethene	ND	0.037	ND	0.20	08/12/20	KCA	1
Trichlorofluoromethane	0.997	0.150	5.60	0.84	08/12/20	KCA	1
Trichlorotrifluoroethane	ND	0.150	ND	1.15	08/12/20	KCA	1
Vinyl Chloride	ND	0.020	ND	0.05	08/12/20	KCA	1
<b><u>QA/QC Surrogates/Internals</u></b>							
% Bromofluorobenzene	99	%	99	%	08/12/20	KCA	1
% IS-1,4-Difluorobenzene	98	%	98	%	08/12/20	KCA	1
% IS-Bromochloromethane	99	%	99	%	08/12/20	KCA	1

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	
% IS-Chlorobenzene-d5	98	%	98	%	08/12/20	KCA	1

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL  
BRL=Below Reporting Level L=Biased Low  
QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

**Comments:**

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**Phyllis Shiller, Laboratory Director**

**August 13, 2020**

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# Analysis Report

August 13, 2020

FOR: Attn: Nora Brew  
 Walden Environmental Engineering PLLC  
 16 Spring Street  
 Oyster Bay, NY 11771

## Sample Information

Matrix: AIR  
 Location Code: WALDENE-IPARK  
 Rush Request: 72 Hour  
 P.O.#: IPARK 0118.44  
 Canister Id: 28556

## Custody Information

Collected by: EJ  
 Received by: CP  
 Analyzed by: see "By" below

Date            Time  
 08/11/20        15:07  
 08/12/20        17:16

## Laboratory Data

SDG ID: GCG52615  
 Phoenix ID: CG52618

Project ID: IPARK 0018.44 POWERHOUSE GYM  
 Client ID: IA-6 (CARDIO)

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	Dilution
<b><u>Volatiles (TO15)</u></b>							
1,1,1-Trichloroethane	ND	0.200	ND	1.09	08/12/20	KCA	1
1,1-Dichloroethene	ND	0.100	ND	0.40	08/12/20	KCA	1
1,2,4-Trichlorobenzene	ND	0.250	ND	1.85	08/12/20	KCA	1
1,2-Dichlorobenzene	ND	0.150	ND	0.90	08/12/20	KCA	1
1,3-Dichlorobenzene	ND	0.150	ND	0.90	08/12/20	KCA	1
1,4-Dichlorobenzene	ND	0.150	ND	0.90	08/12/20	KCA	1
Acetone	5.33	1.00	12.7	2.37	08/12/20	KCA	1
Benzene	ND	0.050	ND	0.16	08/12/20	KCA	1
Carbon Tetrachloride	0.063	0.020	0.40	0.13	08/12/20	KCA	1
Chlorobenzene	ND	0.200	ND	0.92	08/12/20	KCA	1
Cis-1,2-Dichloroethene	ND	0.200	ND	0.79	08/12/20	KCA	1
Dichlorodifluoromethane	0.430	0.200	2.13	0.99	08/12/20	KCA	1
Ethylbenzene	ND	0.150	ND	0.65	08/12/20	KCA	1
m,p-Xylene	ND	0.150	ND	0.65	08/12/20	KCA	1
Methylene Chloride	ND	0.400	ND	1.39	08/12/20	KCA	1
o-Xylene	ND	0.150	ND	0.65	08/12/20	KCA	1
Tetrachloroethene	ND	0.100	ND	0.68	08/12/20	KCA	1
Toluene	0.236	0.200	0.89	0.75	08/12/20	KCA	1
Trichloroethene	ND	0.037	ND	0.20	08/12/20	KCA	1
Trichlorofluoromethane	1.22	0.150	6.85	0.84	08/12/20	KCA	1
Trichlorotrifluoroethane	ND	0.150	ND	1.15	08/12/20	KCA	1
Vinyl Chloride	ND	0.020	ND	0.05	08/12/20	KCA	1
<b><u>QA/QC Surrogates/Internals</u></b>							
% Bromofluorobenzene	98	%	98	%	08/12/20	KCA	1
% IS-1,4-Difluorobenzene	99	%	99	%	08/12/20	KCA	1
% IS-Bromochloromethane	100	%	100	%	08/12/20	KCA	1

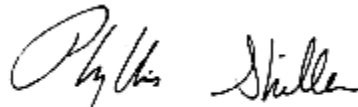


Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	
% IS-Chlorobenzene-d5	99	%	99	%	08/12/20	KCA	1

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL  
BRL=Below Reporting Level L=Biased Low  
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

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**Phyllis Shiller, Laboratory Director**

**August 13, 2020**

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# Analysis Report

August 13, 2020

FOR: Attn: Nora Brew  
 Walden Environmental Engineering PLLC  
 16 Spring Street  
 Oyster Bay, NY 11771

## Sample Information

Matrix: AIR  
 Location Code: WALDENE-IPARK  
 Rush Request: 72 Hour  
 P.O.#: IPARK 0118.44  
 Canister Id: 28565

## Custody Information

Collected by: EJ  
 Received by: CP  
 Analyzed by: see "By" below

Date            Time  
 08/11/20        15:03  
 08/12/20        17:16

## Laboratory Data

SDG ID: GCG52615  
 Phoenix ID: CG52619

Project ID: IPARK 0018.44 POWERHOUSE GYM  
 Client ID: IA-DUP

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	Dilution
<b><u>Volatiles (TO15)</u></b>							
1,1,1-Trichloroethane	ND	0.200	ND	1.09	08/12/20	KCA	1
1,1-Dichloroethene	ND	0.100	ND	0.40	08/12/20	KCA	1
1,2,4-Trichlorobenzene	ND	0.250	ND	1.85	08/12/20	KCA	1
1,2-Dichlorobenzene	ND	0.150	ND	0.90	08/12/20	KCA	1
1,3-Dichlorobenzene	ND	0.150	ND	0.90	08/12/20	KCA	1
1,4-Dichlorobenzene	ND	0.150	ND	0.90	08/12/20	KCA	1
Acetone	4.88	1.00	11.6	2.37	08/12/20	KCA	1
Benzene	ND	0.050	ND	0.16	08/12/20	KCA	1
Carbon Tetrachloride	0.061	0.020	0.38	0.13	08/12/20	KCA	1
Chlorobenzene	ND	0.200	ND	0.92	08/12/20	KCA	1
Cis-1,2-Dichloroethene	ND	0.200	ND	0.79	08/12/20	KCA	1
Dichlorodifluoromethane	0.412	0.200	2.04	0.99	08/12/20	KCA	1
Ethylbenzene	ND	0.150	ND	0.65	08/12/20	KCA	1
m,p-Xylene	ND	0.150	ND	0.65	08/12/20	KCA	1
Methylene Chloride	ND	0.400	ND	1.39	08/12/20	KCA	1
o-Xylene	ND	0.150	ND	0.65	08/12/20	KCA	1
Tetrachloroethene	ND	0.100	ND	0.68	08/12/20	KCA	1
Toluene	0.273	0.200	1.03	0.75	08/12/20	KCA	1
Trichloroethene	ND	0.037	ND	0.20	08/12/20	KCA	1
Trichlorofluoromethane	1.25	0.150	7.02	0.84	08/12/20	KCA	1
Trichlorotrifluoroethane	ND	0.150	ND	1.15	08/12/20	KCA	1
Vinyl Chloride	ND	0.020	ND	0.05	08/12/20	KCA	1
<b><u>QA/QC Surrogates/Internals</u></b>							
% Bromofluorobenzene	98	%	98	%	08/12/20	KCA	1
% IS-1,4-Difluorobenzene	97	%	97	%	08/12/20	KCA	1
% IS-Bromochloromethane	100	%	100	%	08/12/20	KCA	1

Client ID: IA-DUP

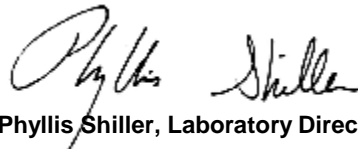
Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	
% IS-Chlorobenzene-d5	97	%	97	%	08/12/20	KCA	1

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL  
BRL=Below Reporting Level L=Biased Low

QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

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**Phyllis Shiller, Laboratory Director**

**August 13, 2020**

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# Analysis Report

August 13, 2020

FOR: Attn: Nora Brew  
 Walden Environmental Engineering PLLC  
 16 Spring Street  
 Oyster Bay, NY 11771

## Sample Information

Matrix: AIR  
 Location Code: WALDENE-IPARK  
 Rush Request: 72 Hour  
 P.O.#: IPARK 0118.44  
 Canister Id: 28566

## Custody Information

Collected by: EJ  
 Received by: CP  
 Analyzed by: see "By" below

## Date

08/11/20  
 08/12/20

## Time

15:45  
 17:16

## Laboratory Data

SDG ID: GCG52615  
 Phoenix ID: CG52620

Project ID: IPARK 0018.44 POWERHOUSE GYM  
 Client ID: IA-1 (ENTRY HALLWAY)

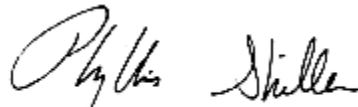
Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	Dilution
<b><u>Volatiles (TO15)</u></b>							
1,1,1-Trichloroethane	ND	0.200	ND	1.09	08/12/20	KCA	1
1,1-Dichloroethene	ND	0.100	ND	0.40	08/12/20	KCA	1
1,2,4-Trichlorobenzene	ND	0.250	ND	1.85	08/12/20	KCA	1
1,2-Dichlorobenzene	ND	0.150	ND	0.90	08/12/20	KCA	1
1,3-Dichlorobenzene	ND	0.150	ND	0.90	08/12/20	KCA	1
1,4-Dichlorobenzene	ND	0.150	ND	0.90	08/12/20	KCA	1
Acetone	5.46	1.00	13.0	2.37	08/12/20	KCA	1
Benzene	ND	0.050	ND	0.16	08/12/20	KCA	1
Carbon Tetrachloride	0.063	0.020	0.40	0.13	08/12/20	KCA	1
Chlorobenzene	ND	0.200	ND	0.92	08/12/20	KCA	1
Cis-1,2-Dichloroethene	ND	0.200	ND	0.79	08/12/20	KCA	1
Dichlorodifluoromethane	0.540	0.200	2.67	0.99	08/12/20	KCA	1
Ethylbenzene	ND	0.150	ND	0.65	08/12/20	KCA	1
m,p-Xylene	ND	0.150	ND	0.65	08/12/20	KCA	1
Methylene Chloride	ND	0.400	ND	1.39	08/12/20	KCA	1
o-Xylene	ND	0.150	ND	0.65	08/12/20	KCA	1
Tetrachloroethene	ND	0.100	ND	0.68	08/12/20	KCA	1
Toluene	ND	0.200	ND	0.75	08/12/20	KCA	1
Trichloroethene	ND	0.037	ND	0.20	08/12/20	KCA	1
Trichlorofluoromethane	1.48	0.150	8.31	0.84	08/12/20	KCA	1
Trichlorotrifluoroethane	ND	0.150	ND	1.15	08/12/20	KCA	1
Vinyl Chloride	ND	0.020	ND	0.05	08/12/20	KCA	1
<b><u>QA/QC Surrogates/Internals</u></b>							
% Bromofluorobenzene	100	%	100	%	08/12/20	KCA	1
% IS-1,4-Difluorobenzene	97	%	97	%	08/12/20	KCA	1
% IS-Bromochloromethane	99	%	99	%	08/12/20	KCA	1

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	
% IS-Chlorobenzene-d5	95	%	95	%	08/12/20	KCA	1

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL  
BRL=Below Reporting Level L=Biased Low  
QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

**Comments:**

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**Phyllis Shiller, Laboratory Director**

**August 13, 2020**

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# Analysis Report

August 13, 2020

FOR: Attn: Nora Brew  
 Walden Environmental Engineering PLLC  
 16 Spring Street  
 Oyster Bay, NY 11771

Sample Information

Matrix: AIR  
 Location Code: WALDENE-IPARK  
 Rush Request: 72 Hour  
 P.O.#: IPARK 0118.44  
 Canister Id: 19628

Custody Information

Collected by: EJ  
 Received by: CP  
 Analyzed by: see "By" below

Date

08/11/20 15:30  
 08/12/20 17:16

Time

## Laboratory Data

SDG ID: GCG52615  
 Phoenix ID: CG52621

Project ID: IPARK 0018.44 POWERHOUSE GYM  
 Client ID: IA-2 (RECEPTION AREA)

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	Dilution
<b><u>Volatiles (TO15)</u></b>							
1,1,1-Trichloroethane	ND	0.200	ND	1.09	08/13/20	KCA	1
1,1-Dichloroethene	ND	0.100	ND	0.40	08/13/20	KCA	1
1,2,4-Trichlorobenzene	ND	0.250	ND	1.85	08/13/20	KCA	1
1,2-Dichlorobenzene	ND	0.150	ND	0.90	08/13/20	KCA	1
1,3-Dichlorobenzene	ND	0.150	ND	0.90	08/13/20	KCA	1
1,4-Dichlorobenzene	ND	0.150	ND	0.90	08/13/20	KCA	1
Acetone	6.63	1.00	15.7	2.37	08/13/20	KCA	1
Benzene	ND	0.050	ND	0.16	08/13/20	KCA	1
Carbon Tetrachloride	0.065	0.020	0.41	0.13	08/13/20	KCA	1
Chlorobenzene	ND	0.200	ND	0.92	08/13/20	KCA	1
Cis-1,2-Dichloroethene	ND	0.200	ND	0.79	08/13/20	KCA	1
Dichlorodifluoromethane	0.429	0.200	2.12	0.99	08/13/20	KCA	1
Ethylbenzene	ND	0.150	ND	0.65	08/13/20	KCA	1
m,p-Xylene	ND	0.150	ND	0.65	08/13/20	KCA	1
Methylene Chloride	ND	0.400	ND	1.39	08/13/20	KCA	1
o-Xylene	ND	0.150	ND	0.65	08/13/20	KCA	1
Tetrachloroethene	ND	0.100	ND	0.68	08/13/20	KCA	1
Toluene	1.84	0.200	6.93	0.75	08/13/20	KCA	1
Trichloroethene	ND	0.037	ND	0.20	08/13/20	KCA	1
Trichlorofluoromethane	1.34	0.150	7.52	0.84	08/13/20	KCA	1
Trichlorotrifluoroethane	ND	0.150	ND	1.15	08/13/20	KCA	1
Vinyl Chloride	ND	0.020	ND	0.05	08/13/20	KCA	1
<b><u>QA/QC Surrogates/Internals</u></b>							
% Bromofluorobenzene	99	%	99	%	08/13/20	KCA	1
% IS-1,4-Difluorobenzene	97	%	97	%	08/13/20	KCA	1
% IS-Bromochloromethane	98	%	98	%	08/13/20	KCA	1

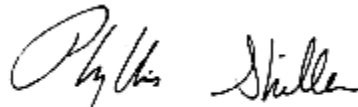


Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	
% IS-Chlorobenzene-d5	97	%	97	%	08/13/20	KCA	1

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL  
BRL=Below Reporting Level L=Biased Low  
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

**Comments:**

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**Phyllis Shiller, Laboratory Director**

**August 13, 2020**

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# Analysis Report

August 13, 2020

FOR: Attn: Nora Brew  
 Walden Environmental Engineering PLLC  
 16 Spring Street  
 Oyster Bay, NY 11771

## Sample Information

Matrix: AIR  
 Location Code: WALDENE-IPARK  
 Rush Request: 72 Hour  
 P.O.#: IPARK 0118.44  
 Canister Id: 23329

## Custody Information

Collected by: EJ  
 Received by: CP  
 Analyzed by: see "By" below

## Date

08/11/20  
 08/12/20

## Time

15:04  
 17:16

## Laboratory Data

SDG ID: GCG52615  
 Phoenix ID: CG52622

Project ID: IPARK 0018.44 POWERHOUSE GYM  
 Client ID: IA-4 (MAIN EQUIPMENT AREA)

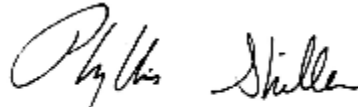
Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	Dilution
<b><u>Volatiles (TO15)</u></b>							
1,1,1-Trichloroethane	ND	0.200	ND	1.09	08/13/20	KCA	1
1,1-Dichloroethene	ND	0.100	ND	0.40	08/13/20	KCA	1
1,2,4-Trichlorobenzene	ND	0.250	ND	1.85	08/13/20	KCA	1
1,2-Dichlorobenzene	ND	0.150	ND	0.90	08/13/20	KCA	1
1,3-Dichlorobenzene	ND	0.150	ND	0.90	08/13/20	KCA	1
1,4-Dichlorobenzene	ND	0.150	ND	0.90	08/13/20	KCA	1
Acetone	4.84	1.00	11.5	2.37	08/13/20	KCA	1
Benzene	ND	0.050	ND	0.16	08/13/20	KCA	1
Carbon Tetrachloride	0.066	0.020	0.41	0.13	08/13/20	KCA	1
Chlorobenzene	ND	0.200	ND	0.92	08/13/20	KCA	1
Cis-1,2-Dichloroethene	ND	0.200	ND	0.79	08/13/20	KCA	1
Dichlorodifluoromethane	0.413	0.200	2.04	0.99	08/13/20	KCA	1
Ethylbenzene	ND	0.150	ND	0.65	08/13/20	KCA	1
m,p-Xylene	ND	0.150	ND	0.65	08/13/20	KCA	1
Methylene Chloride	ND	0.400	ND	1.39	08/13/20	KCA	1
o-Xylene	ND	0.150	ND	0.65	08/13/20	KCA	1
Tetrachloroethene	ND	0.100	ND	0.68	08/13/20	KCA	1
Toluene	0.272	0.200	1.02	0.75	08/13/20	KCA	1
Trichloroethene	ND	0.037	ND	0.20	08/13/20	KCA	1
Trichlorofluoromethane	1.21	0.150	6.79	0.84	08/13/20	KCA	1
Trichlorotrifluoroethane	ND	0.150	ND	1.15	08/13/20	KCA	1
Vinyl Chloride	ND	0.020	ND	0.05	08/13/20	KCA	1
<b><u>QA/QC Surrogates/Internals</u></b>							
% Bromofluorobenzene	100	%	100	%	08/13/20	KCA	1
% IS-1,4-Difluorobenzene	96	%	96	%	08/13/20	KCA	1
% IS-Bromochloromethane	99	%	99	%	08/13/20	KCA	1

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	
% IS-Chlorobenzene-d5	96	%	96	%	08/13/20	KCA	1

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL  
BRL=Below Reporting Level L=Biased Low  
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

**Comments:**

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**Phyllis Shiller, Laboratory Director**

**August 13, 2020**

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# Analysis Report

August 13, 2020

FOR: Attn: Nora Brew  
 Walden Environmental Engineering PLLC  
 16 Spring Street  
 Oyster Bay, NY 11771

## Sample Information

Matrix: AIR  
 Location Code: WALDENE-IPARK  
 Rush Request: 72 Hour  
 P.O.#: IPARK 0118.44  
 Canister Id: 28551

## Custody Information

Collected by: EJ  
 Received by: CP  
 Analyzed by: see "By" below

Date            Time  
 08/11/20        15:25  
 08/12/20        17:16

## Laboratory Data

SDG ID: GCG52615  
 Phoenix ID: CG52623

Project ID: IPARK 0018.44 POWERHOUSE GYM  
 Client ID: IA-9 (MIXED USE STUDIO)

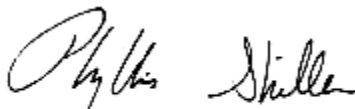
Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	Dilution
<b><u>Volatiles (TO15)</u></b>							
1,1,1-Trichloroethane	ND	0.200	ND	1.09	08/13/20	KCA	1
1,1-Dichloroethene	ND	0.100	ND	0.40	08/13/20	KCA	1
1,2,4-Trichlorobenzene	ND	0.250	ND	1.85	08/13/20	KCA	1
1,2-Dichlorobenzene	ND	0.150	ND	0.90	08/13/20	KCA	1
1,3-Dichlorobenzene	ND	0.150	ND	0.90	08/13/20	KCA	1
1,4-Dichlorobenzene	ND	0.150	ND	0.90	08/13/20	KCA	1
Acetone	4.87	1.00	11.6	2.37	08/13/20	KCA	1
Benzene	ND	0.050	ND	0.16	08/13/20	KCA	1
Carbon Tetrachloride	0.069	0.020	0.43	0.13	08/13/20	KCA	1
Chlorobenzene	ND	0.200	ND	0.92	08/13/20	KCA	1
Cis-1,2-Dichloroethene	ND	0.200	ND	0.79	08/13/20	KCA	1
Dichlorodifluoromethane	0.464	0.200	2.29	0.99	08/13/20	KCA	1
Ethylbenzene	ND	0.150	ND	0.65	08/13/20	KCA	1
m,p-Xylene	ND	0.150	ND	0.65	08/13/20	KCA	1
Methylene Chloride	ND	0.400	ND	1.39	08/13/20	KCA	1
o-Xylene	ND	0.150	ND	0.65	08/13/20	KCA	1
Tetrachloroethene	0.152	0.100	1.03	0.68	08/13/20	KCA	1
Toluene	ND	0.200	ND	0.75	08/13/20	KCA	1
Trichloroethene	ND	0.037	ND	0.20	08/13/20	KCA	1
Trichlorofluoromethane	1.32	0.150	7.41	0.84	08/13/20	KCA	1
Trichlorotrifluoroethane	ND	0.150	ND	1.15	08/13/20	KCA	1
Vinyl Chloride	ND	0.020	ND	0.05	08/13/20	KCA	1
<b><u>QA/QC Surrogates/Internals</u></b>							
% Bromofluorobenzene	100	%	100	%	08/13/20	KCA	1
% IS-1,4-Difluorobenzene	98	%	98	%	08/13/20	KCA	1
% IS-Bromochloromethane	98	%	98	%	08/13/20	KCA	1

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	
% IS-Chlorobenzene-d5	96	%	96	%	08/13/20	KCA	1

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL  
BRL=Below Reporting Level L=Biased Low  
QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

**Comments:**

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**Phyllis Shiller, Laboratory Director**  
**August 13, 2020**  
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# Analysis Report

August 13, 2020

FOR: Attn: Nora Brew  
 Walden Environmental Engineering PLLC  
 16 Spring Street  
 Oyster Bay, NY 11771

## Sample Information

Matrix: AIR  
 Location Code: WALDENE-IPARK  
 Rush Request: 72 Hour  
 P.O.#: IPARK 0118.44  
 Canister Id: 28608

## Custody Information

Collected by: EJ  
 Received by: CP  
 Analyzed by: see "By" below

Date                      Time  
 08/11/20                      15:30  
 08/12/20                      17:16

## Laboratory Data

SDG ID: GCG52615  
 Phoenix ID: CG52624

Project ID: IPARK 0018.44 POWERHOUSE GYM  
 Client ID: IA-3 (TRAINERS TURF)

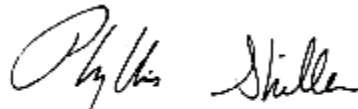
Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	Dilution
<b><u>Volatiles (TO15)</u></b>							
1,1,1-Trichloroethane	ND	0.200	ND	1.09	08/13/20	KCA	1
1,1-Dichloroethene	ND	0.100	ND	0.40	08/13/20	KCA	1
1,2,4-Trichlorobenzene	ND	0.250	ND	1.85	08/13/20	KCA	1
1,2-Dichlorobenzene	ND	0.150	ND	0.90	08/13/20	KCA	1
1,3-Dichlorobenzene	ND	0.150	ND	0.90	08/13/20	KCA	1
1,4-Dichlorobenzene	ND	0.150	ND	0.90	08/13/20	KCA	1
Acetone	5.01	1.00	11.9	2.37	08/13/20	KCA	1
Benzene	ND	0.050	ND	0.16	08/13/20	KCA	1
Carbon Tetrachloride	0.071	0.020	0.45	0.13	08/13/20	KCA	1
Chlorobenzene	ND	0.200	ND	0.92	08/13/20	KCA	1
Cis-1,2-Dichloroethene	ND	0.200	ND	0.79	08/13/20	KCA	1
Dichlorodifluoromethane	0.448	0.200	2.21	0.99	08/13/20	KCA	1
Ethylbenzene	ND	0.150	ND	0.65	08/13/20	KCA	1
m,p-Xylene	ND	0.150	ND	0.65	08/13/20	KCA	1
Methylene Chloride	ND	0.400	ND	1.39	08/13/20	KCA	1
o-Xylene	ND	0.150	ND	0.65	08/13/20	KCA	1
Tetrachloroethene	ND	0.100	ND	0.68	08/13/20	KCA	1
Toluene	ND	0.200	ND	0.75	08/13/20	KCA	1
Trichloroethene	ND	0.037	ND	0.20	08/13/20	KCA	1
Trichlorofluoromethane	1.18	0.150	6.63	0.84	08/13/20	KCA	1
Trichlorotrifluoroethane	ND	0.150	ND	1.15	08/13/20	KCA	1
Vinyl Chloride	ND	0.020	ND	0.05	08/13/20	KCA	1
<b><u>QA/QC Surrogates/Internals</u></b>							
% Bromofluorobenzene	100	%	100	%	08/13/20	KCA	1
% IS-1,4-Difluorobenzene	96	%	96	%	08/13/20	KCA	1
% IS-Bromochloromethane	99	%	99	%	08/13/20	KCA	1

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	
% IS-Chlorobenzene-d5	96	%	96	%	08/13/20	KCA	1

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL  
BRL=Below Reporting Level L=Biased Low  
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

**Comments:**

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**Phyllis Shiller, Laboratory Director**

**August 13, 2020**

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# Analysis Report

August 13, 2020

FOR: Attn: Nora Brew  
 Walden Environmental Engineering PLLC  
 16 Spring Street  
 Oyster Bay, NY 11771

## Sample Information

Matrix: AIR  
 Location Code: WALDENE-IPARK  
 Rush Request: 72 Hour  
 P.O.#: IPARK 0118.44  
 Canister Id: 490

## Custody Information

Collected by: EJ  
 Received by: CP  
 Analyzed by: see "By" below

Date                      Time  
 08/11/20                      15:40  
 08/12/20                      17:16

## Laboratory Data

SDG ID: GCG52615  
 Phoenix ID: CG52625

Project ID: IPARK 0018.44 POWERHOUSE GYM  
 Client ID: IA-5 (LEG STUDIO)

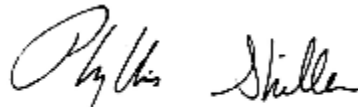
Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	Dilution
<b><u>Volatiles (TO15)</u></b>							
1,1,1-Trichloroethane	ND	0.200	ND	1.09	08/13/20	KCA	1
1,1-Dichloroethene	ND	0.100	ND	0.40	08/13/20	KCA	1
1,2,4-Trichlorobenzene	ND	0.250	ND	1.85	08/13/20	KCA	1
1,2-Dichlorobenzene	ND	0.150	ND	0.90	08/13/20	KCA	1
1,3-Dichlorobenzene	ND	0.150	ND	0.90	08/13/20	KCA	1
1,4-Dichlorobenzene	ND	0.150	ND	0.90	08/13/20	KCA	1
Acetone	5.40	1.00	12.8	2.37	08/13/20	KCA	1
Benzene	ND	0.050	ND	0.16	08/13/20	KCA	1
Carbon Tetrachloride	0.068	0.020	0.43	0.13	08/13/20	KCA	1
Chlorobenzene	ND	0.200	ND	0.92	08/13/20	KCA	1
Cis-1,2-Dichloroethene	ND	0.200	ND	0.79	08/13/20	KCA	1
Dichlorodifluoromethane	0.427	0.200	2.11	0.99	08/13/20	KCA	1
Ethylbenzene	ND	0.150	ND	0.65	08/13/20	KCA	1
m,p-Xylene	ND	0.150	ND	0.65	08/13/20	KCA	1
Methylene Chloride	ND	0.400	ND	1.39	08/13/20	KCA	1
o-Xylene	ND	0.150	ND	0.65	08/13/20	KCA	1
Tetrachloroethene	ND	0.100	ND	0.68	08/13/20	KCA	1
Toluene	0.237	0.200	0.89	0.75	08/13/20	KCA	1
Trichloroethene	ND	0.037	ND	0.20	08/13/20	KCA	1
Trichlorofluoromethane	1.24	0.150	6.96	0.84	08/13/20	KCA	1
Trichlorotrifluoroethane	ND	0.150	ND	1.15	08/13/20	KCA	1
Vinyl Chloride	ND	0.020	ND	0.05	08/13/20	KCA	1
<b><u>QA/QC Surrogates/Internals</u></b>							
% Bromofluorobenzene	99	%	99	%	08/13/20	KCA	1
% IS-1,4-Difluorobenzene	94	%	94	%	08/13/20	KCA	1
% IS-Bromochloromethane	97	%	97	%	08/13/20	KCA	1

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	
% IS-Chlorobenzene-d5	95	%	95	%	08/13/20	KCA	1

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL  
BRL=Below Reporting Level L=Biased Low  
QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

**Comments:**

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**Phyllis Shiller, Laboratory Director**

**August 13, 2020**

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# Analysis Report

August 13, 2020

FOR: Attn: Nora Brew  
 Walden Environmental Engineering PLLC  
 16 Spring Street  
 Oyster Bay, NY 11771

## Sample Information

Matrix: AIR  
 Location Code: WALDENE-IPARK  
 Rush Request: 72 Hour  
 P.O.#: IPARK 0118.44  
 Canister Id: 9544

## Custody Information

Collected by: EJ  
 Received by: CP  
 Analyzed by: see "By" below

Date            Time  
 08/11/20        11:05  
 08/12/20        17:16

## Laboratory Data

SDG ID: GCG52615  
 Phoenix ID: CG52626

Project ID: IPARK 0018.44 POWERHOUSE GYM  
 Client ID: FB-01

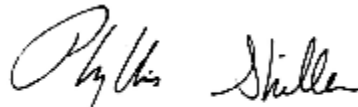
Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	Dilution
<b><u>Volatiles (TO15)</u></b>							
1,1,1-Trichloroethane	ND	0.200	ND	1.09	08/13/20	KCA	1
1,1-Dichloroethene	ND	0.100	ND	0.40	08/13/20	KCA	1
1,2,4-Trichlorobenzene	ND	0.250	ND	1.85	08/13/20	KCA	1
1,2-Dichlorobenzene	ND	0.150	ND	0.90	08/13/20	KCA	1
1,3-Dichlorobenzene	ND	0.150	ND	0.90	08/13/20	KCA	1
1,4-Dichlorobenzene	ND	0.150	ND	0.90	08/13/20	KCA	1
Acetone	ND	1.00	ND	2.37	08/13/20	KCA	1
Benzene	0.325	0.050	1.04	0.16	08/13/20	KCA	1
Carbon Tetrachloride	ND	0.020	ND	0.13	08/13/20	KCA	1
Chlorobenzene	ND	0.200	ND	0.92	08/13/20	KCA	1
Cis-1,2-Dichloroethene	ND	0.200	ND	0.79	08/13/20	KCA	1
Dichlorodifluoromethane	ND	0.200	ND	0.99	08/13/20	KCA	1
Ethylbenzene	ND	0.150	ND	0.65	08/13/20	KCA	1
m,p-Xylene	0.305	0.150	1.32	0.65	08/13/20	KCA	1
Methylene Chloride	ND	0.400	ND	1.39	08/13/20	KCA	1
o-Xylene	0.197	0.150	0.85	0.65	08/13/20	KCA	1
Tetrachloroethene	0.106	0.100	0.72	0.68	08/13/20	KCA	1
Toluene	0.411	0.200	1.55	0.75	08/13/20	KCA	1
Trichloroethene	ND	0.037	ND	0.20	08/13/20	KCA	1
Trichlorofluoromethane	ND	0.150	ND	0.84	08/13/20	KCA	1
Trichlorotrifluoroethane	ND	0.150	ND	1.15	08/13/20	KCA	1
Vinyl Chloride	ND	0.020	ND	0.05	08/13/20	KCA	1
<b><u>QA/QC Surrogates/Internals</u></b>							
% Bromofluorobenzene	103	%	103	%	08/13/20	KCA	1
% IS-1,4-Difluorobenzene	96	%	96	%	08/13/20	KCA	1
% IS-Bromochloromethane	99	%	99	%	08/13/20	KCA	1

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	
% IS-Chlorobenzene-d5	98	%	98	%	08/13/20	KCA	1

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL  
BRL=Below Reporting Level L=Biased Low  
QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

**Comments:**

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



**Phyllis Shiller, Laboratory Director**

**August 13, 2020**

**Official Report Release To Follow**

Criteria: None

State: NY

# Sample Criteria Exceedances Report

## GCG52615 - WALDENE-IPARK

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
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\*\*\* No Data to Display \*\*\*

Phoenix Laboratories does not assume responsibility for the data contained in this exceedance report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.



WCIP 2-7

# CHAIN OF CUSTODY RECORD AIR ANALYSES

P.O. # iPark0118-44 Page 1 of 2



397 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040  
Telephone: 860.645.1102 • Fax: 860.645.0823

800-827-5426  
email: greg@phoenixlabs.com

Data Delivery:  
 Fax #:  
 Email: nbr@phoenixlabs.com  
 Phone #: 516-624-7200

Report to: Erica

Customer: Walden Env.

Address: 16 Spring Street  
Oyster Bay NY 11771

Project Name: iPark0118-44 - Powerhouse Gym

Invoice to: Carl Marbet - iPark

Sampled by: Erica Johnston

Requested Deliverable: RCP  
MCP NJ Deliverables

Quote Number: \_\_\_\_\_

Phoenix ID #	Client Sample ID	THIS SECTION FOR LAB USE ONLY										Ambient/Indoor Air	Soil Gas	Grb (G) Composite (C)	TO-15	ANALYSES	
		Canister ID #	Canister Size (L)	Outgoing Canister Pressure ("Hg)	Incoming Canister Pressure ("Hg)	Flow Regulator ID #	Flow Controller Setting (ml/min)	Sampling Start Time	Sampling End Time	Sample Start Date	Canister Pressure at Start ("Hg)						Canister Pressure at End ("Hg)
52615	IA-7 (mezzanine)	10258	6.0	-30	-8	5592	10.8	8:45	15:57	9/1/20	-30	-8	X	X	X	X	X
52616	AA-1 (ambient air)	23336			-10	4490		8:58	15:39	8/11/20	-30	-9.5	X	X	X	X	X
52617	IA-8 (men's locker room)	13638			-9	5597		9:00	15:05	8/11/20	-29	-8	X	X	X	X	X
52618	IA-6 (cardio room)	19854			-9	4976		8:45	15:07	8/11/20	-30	-9	X	X	X	X	X
52619	IA-Dup	20565			-6	5385		8:42	15:03	8/11/20	-30	-8	X	X	X	X	X
52620	IA-1 (entry hallway)	20566			-9	7036		9:07	15:45	8/11/20	-30	-9	X	X	X	X	X
52621	IA-2 (reception area)	19628			-8	5352		8:36	15:30	8/11/20	-30	-9	X	X	X	X	X

Relinquished by: Kay Wright Date: 8-13-20

Accepted by: Erica Johnston Date: 8-13-20

Signature: [Signature] Date: 8/11/2020

State Where Samples Collected: NY

Turnaround Time:  
 1 Day  
 2 Day  
 3 Day  
 4 Day  
 5 Day

Requested Criteria:  
 MA: Indoor Air: Residential  
Ind/Commercial  
Soil Gas: Residential  
Ind/Commercial  
 NY: Indoor Air: Residential  
Ind/Commercial  
Soil Gas: Residential  
Ind/Commercial  
 PA: Indoor Air: Residential  
Ind/Commercial  
Soil Gas: Residential  
Ind/Commercial  
 VT: Indoor Air: Residential  
Industrial Sub-slab  
Residential

SPECIAL INSTRUCTIONS, OC REQUIREMENTS, REGULATORY INFORMATION:  
TO-15 special code list needed. See (10) (601)  
Bobbi/Greg Modified TO-15 analysis (8hr)  
per project chart.  
IND-CRT

WCIP 2-7

# CHAIN OF CUSTODY RECORD AIR ANALYSES

P.O. # : Park 0118.44 Page 2 of 2



587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040  
Telephone: 860.645.1102 • Fax: 860.645.0823

800-827-5426  
email: greg@phoenixlabs.com

Data Delivery:  
 Fax #:  
 Email: nbrowe@klden-assoclls.com  
 Phone #: 516-624-7200

Report to: Erica  
 Customer: Walden Env.  
 Address: 16 Spring St  
Oyster Bay, NY 11771

Project Name: Park 0118.44 - parkhouse gym  
 Invoice to: Carl Monheit - Park  
 Sampled by: Erica Johnston

Requested Deliverable: RCP  
 MCP NJ Deliverables

Quote Number:

Phoenix ID #	Client Sample ID	THIS SECTION FOR LAB USE ONLY										MATRIX			ANALYSES			
		Canister Size (L)	Outgoing Canister Pressure ("Hg)	Incoming Canister Pressure ("Hg)	Flow Regulator ID #	Flow Controller Setting (mL/min)	Sampling Start Time	Sampling End Time	Sample Start Date	Canister Pressure at Start ("Hg)	Canister Pressure at End ("Hg)	Soil Gas	Grab (G) Composite (C)	TO-15		APH		
52622		9767	6.0	-30		7011	10.3											
52623	IA-4 (man equipment area)	23329			-9	6593		8:41	15:04	8/11/20	-30	-9	X	X				
	IA-9 (mixed use studio)	28551			-8	6395		8:49	15:25	8/11/20	-30	-9	X	X				
		28623				7020												
		11297				3510												
		471				3502												
		19859				7027												
52624	IA-3 (trainer's turf)	28608			-7	6390		8:38	15:30	8/11/20	-30	-9	X	X				
52625	IA-5 (leg studio)	490			-7	3506		8:44	15:40	8/11/20	-30	-9	X	X				
52626	FB-01	9544			-7	3266		10:43	11:05	8/11/20	-29	-7	X	X				

Relinquished by: [Signature] Date: 8-12-20  
 Accepted by: [Signature] Date: 8-12-20  
 Signature: [Signature] Date: 8/11/20

I attest that all media released by Phoenix Environmental Laboratories, Inc. have been received in good working condition and are to be used in accordance with the terms and conditions as listed on the back of this document.

State Where Samples Collected: NY

Requested Criteria: MA (Please Circle)  
 Indoor Air: Residential, Inc/Commercial, Soil Gas, Residential, Inc/Commercial  
 TAC I/C, TAC RES, SVWC I/C, SVWC RES, GWV I/C, GWV CBS

Turnaround Time:  
 1 Day  
 2 Day  
 3 Day  
 4 Day  
 5 Day

Requested Deliverable: Vapor Intrusion  
 Indoor Air: Residential, Non-residential, Industrial, Sub-slab, Industrial

SPECIAL INSTRUCTIONS, QC REQUIREMENTS, REGULATORY INFORMATION:  
 TO-15 special code vst" needed. (02) (6L) (8HP)  
 See Bobby/Greg. Modified TO-15  
 analysis per project QAPP