

MEMORANDUM

DATE : May 27, 2023

TO : Shane LaFave / Roers Companies, LLC

FROM : Pratap Singh, Ph.D., PE / KSingh

SUBJECT : Weekly Progress Report for Week Ending 05/27/2023
Community Within the Corridor - East Block

COPY TO : Que El-Amin / Scott Crawford, Inc., Robert Reineke, PE, Robert Fedorchak, PE,
Project #40441B

The purpose of this memorandum is to summarize the work performed as a part of the emergency response for the referenced project for the week ending 05/27/2023. This document is intended to serve two purposes:

1. Summarizing the tasks performed during the past week, and
2. The action items for the following week.

The following tasks were performed this week which are summarized below:

1. Task #1 – GC Testing by KSingh & Hartman

KSingh continues to work on conducting gas chromatograph (GC) testing for measurement of TCE in various units of the East Block focused on the first floor. The focus of testing for TCE is concentrated in units that have detected elevated levels of TCE. The test results of TCE are shown in Tables 1 to 5 in Attachment A. Comprehensive data tables of Indoor Air Monitoring Data for TCE is provided in Attachment C. The findings of portable discrete testing for TCE are as follows:

- TCE detections ranged from 14 ug/m³ to 46 ug/m³ in unit 1045.
- TCE detections ranged from 89 ug/m³ to 170 ug/m³ in Unit 1050.
- TCE detections ranged from 18 ug/m³ to 40ug/m³ in unit 1051
- TCE was detected up to 32 ug/m³ in Unit 1052 where the concrete was filled in under water pipe going out the wall onto the 32nd Street. This number was improved after an open pipe coming out of the floor was sealed.
- TCE detections ranged from 2 ug/m³ to 5 ug/m³ in the First Floor Hallway.
- The two north blowers detections of TCE were 2 ug/m³ to 5 ug/m³.
- The two south blowers detections of TCE ranged from 7 ug/m³ to 11 ug/m³.
- TCE detections ranged from 16.6 ug/m³ to 42.5 ug/m³.
- TCE detections ranged from 7 ug/m³ to 8 ug/m³.

2. Task # 2 – Installation of Sump Pumps

Horner Plumbing completed the installation of three sump pumps. Minimal free water was noted. Excavated soils were placed in 55-gallon drums. The location of sump pits are shown in Figure 1. Horner is in the process of filling excavations back to required grade with structural fill for the purposes of sealing. As of 05/26/23, pumps were being installed and backfill was being placed around sumps. KSingh measured TCE in exhaust and has also begun to collect anemometer data to assess exhaust quality and quantity, and little flow was observed at access point 1.

In addition, inspection ports were installed. Excavated soil was drummed up for disposal with some soil stockpiled in garage and concrete in a rolloff box for disposal.

3. Task #3 – Televising of VMS Piping

Horner Plumbing completed installation of 13 access points in the VMS to facilitate televising of the VMS. The location of access points are shown in Figure 2. Water Blasting, LLC completed televising on 5/23/23. No blockage or water were observed. Once section of the VMS along Units 1045 and 1050 was not completed because access points were not completed. Televising of this section will be complete next week.

4. Task #4 – VMS Operations and Troubleshooting

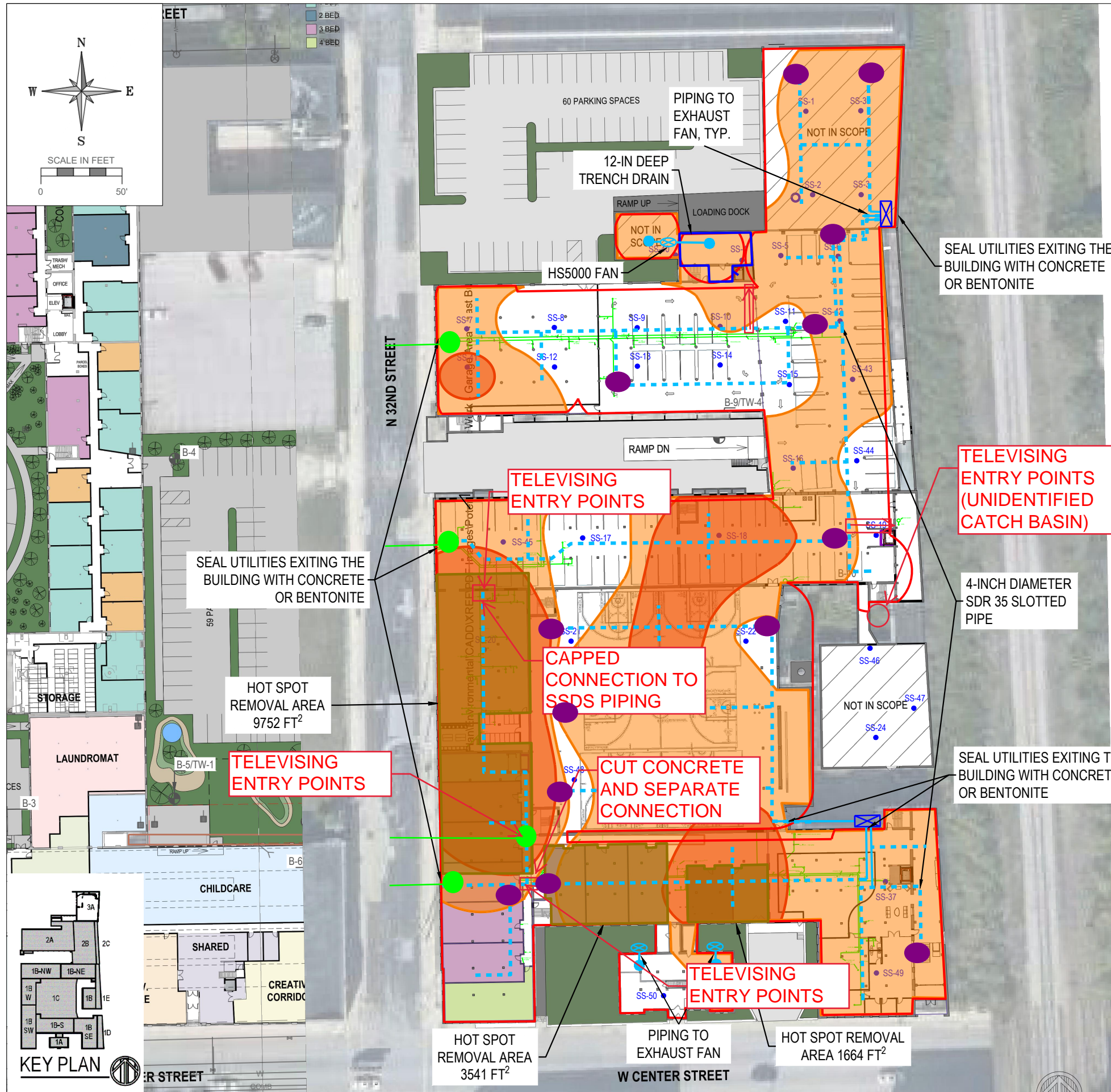
The following tasks were performed:

- All four blowers are functioning. Fliteway Technologies and KSingh are monitoring the operations of the VMS.
- Water extraction from the blowers has reduced significantly and no water was extracted throughout the week.
- The vacuum measurements in the 1st floor hallway in Buildings 1B-SW and 1B-W continue to be 0, and those in the Gym also reported 0. The vacuum measurement near the exit of 3100 W. Center Street was between -0.614 to -0.291 in H₂O.
- Vapor pins installed in the North Mechanical room, and in Units 1026, 1036, and 1058 had no vacuum detected. Vacuum measurements from all the blowers were also noted to be between – 8 and – 16 inches of water.
- A new vapor pin was installed in Unit 1050. The readings at this location indicated no vacuum. The results of vacuum measurements are shown in Table 6 in Attachment B.
- MMSD approved installation of connection to discharge into the storm sewer system on 5/26/23 via a telephone message.
- An additional VOC blower was ordered to conduct vacuum measurement testing in the proximity of VMS in Buildings 1B-W and 1B-SW. The blower will have 900 cfm capacity. By applying vacuum, we should be able to quantify the radius of influence in this area where no vacuum is observed, and this is the area where highest detections of TCE has been documented.
- It is also planned to open Unit 1035 in Building 1B-S where vacuum loss is taking place. Our goal is to monitor the storm drain below this unit for preferential pathway.

Action Items for Week of May 28, 2023 – June 3, 2023

KSingh plans to perform the following tasks in the upcoming week:

1. Install the remaining access points for CCTV Inspection in IB-W and IB-SW.
2. Conduct CCTV Inspection of remaining section.
3. Gain access to Unit 1035 and take vapor pin measurements; KSingh and Horner will identify where the storm drain is and isolate that area to eliminate a possible preferential pathway.
4. Prepare for electrical connection and conduct vacuum measurement testing on June 3, 2023, if blower is delivered and install new blower.
5. Prepare for continuous monitoring upon installation of new blower.
6. Temporarily seal the access points and the sump to facilitate conducting vacuum measurements beneath the slab in buildings 1B-W, and 1B-SW.
7. Continue discrete sampling in the various impacted units and add results to comprehensive table.
8. Conduct vacuum measurements at strategic locations within the buildings.
9. Continue to prepare comprehensive figure showing indoor air data.



LEGEND

- Sub-Slab Sampling Locations (51)
- ⊕ Previous Boring and Temporary Well Locations
- Known Elevator Shaft
- 1 - Bedroom Apartment
- 2 - Bedroom Apartment
- 3 - Bedroom Apartment
- 4 - Bedroom Apartment
- Studio Apartment
- WI Residential VRSL Exceedance Extents
- WI Large Commercial / Industrial VRSL Exceedance Extents
- Hot Spot Removal Area
- Slotted Horizontal Extraction Piping
- Solid Horizontal Extraction Piping
- Extraction Points
- Extraction Point Zone of Influence
- ⊗ Potential Blower Locations
- ⊗ Vapor Mitigation Fan
- Zone of Influence
- 12-Inch Trench Drain
- Underground Plumbing
- Trench System Extents
- Proposed Sump Pit
- Inspection Port and Televised Entry Point

NOTES:
1. SAMPLING LOCATIONS AND VAPOR EXTRACTION POINTS ARE APPROXIMATE

3636 North 124th Street
Wauwatosa, WI 53222
262-821-1171

CONSULTANT

CONSULTANT

CONSULTANT

PROJECT TITLE: COMMUNITY WITHIN THE CORRIDOR
2748 N 32ND STREET
MILWAUKEE, WI 53210
PROJECT NUMBER: 40441

CLIENT:
COMMUNITY WITHIN THE CORRIDOR LIMITED
PARTNERSHIP

REVISIONS	DATE	DESCRIPTION

DRAWN BY: JDS DATE: 04/02/2023
CHECKED BY: RR DATE: 04/02/2023

SHEET TITLE
INSPECTION POINTS AND ENTRY POINTS

FIGURE 2

Attachment A
Summary of Monitoring Results by Date

Attachment A
Monitoring Results by Date
On-site EPA Method TO-14 Data from Indoor Air Samples

Instrument: SRI 8610 Gas Chromatograph with ECD

Operator: KSingh

Table 1: Monitoring Results from 5/22/2023

Sample ID	Sample Location	Sample Time	TCE ($\mu\text{g}/\text{m}^3$)	PCE ($\mu\text{g}/\text{m}^3$)
IA - 578	Unit 1042	9:57	5.16	29.9
IA - 579	1st Floor Hallway	10:05	5.39	31
IA - 580	Fitness Room	10:24	16.6	2.1
IA - 581	SW Garage	10:34	7.84	15.8
IA - 582	SE Garage	10:52	6.6	11.7
IA - 583	N Garage	11:01	0.63	ND
IA - 584	NW Garage	11:11	0.62	0.514
IA - 585	Unit 1045	11:42	24.1	10.4
IA - 586	Unit 1050	11:52	90.9	8.65
IA - 587	Unit 2045	12:04	2.99	ND
IA - 588	Unit 2056	12:14	11.5	ND
IA - 589	Unit 3045	12:24	3.75	ND
IA - 590	Unit 3056	12:32	1.21	ND
IA - 591	Unit 1039	12:48	6.06	0.574
Reporting Limit ($\mu\text{g}/\text{m}^3$)			0.6	0.6

Table 2: Monitoring Results from 5/23/2023

Sample ID	Sample Location	Sample Time	TCE ($\mu\text{g}/\text{m}^3$)	PCE ($\mu\text{g}/\text{m}^3$)
IA - 592	Basketball Court 1	9:09	8.96	ND
IA - 593	Basketball Court 2	9:20	0	ND
IA - 594	Basketball Court 3	9:30	0.536	ND
IA - 595	Basketball Court 4	9:38	0.734	ND
IA - 596	Unit 1025	9:47	1.1	ND
IA - 597	Unit 1006	9:57	0.737	ND
IA - 598	Unit 1036	10:17	4.59	3.31
IA - 599	Unit 1050	10:25	88.5	ND
IA - 600	Unit 1045	10:44	46.3	ND
IA - 601	Unit 1048	10:54	45.7	ND
IA - 602	Unit 1052	11:11	32	ND
IA - 603	Unit 1049	11:30	66.1	ND
IA - 604	N Mech Room	11:46	0.737	ND
IA - 605	Unit 1058	11:55	1.46	ND
Reporting Limit ($\mu\text{g}/\text{m}^3$)			0.6	0.6

Table 3: Monitoring Results from 5/24/2023

Sample ID	Sample Location	Sample Time	TCE ($\mu\text{g}/\text{m}^3$)	PCE ($\mu\text{g}/\text{m}^3$)
10 ppbv		9:49	4.26	14
IA - 606	SSD 1 – South 7.5 HP	10:06	7.04	1.78
IA - 607	SSD 2 – South 10 HP	10:20	11.1	3.07
IA - 608	SSD 3 – North 7.5 HP	10:37	1.85	ND
IA - 609	SSD 4 – North 10 HP	10:47	4.7	ND
IA - 610	Unit 1050	10:58	147	ND
IA - 611	Unit 1045	11:08	13.7	ND
IA - 612	Unit 1025	11:35	0	ND
IA - 613	SE Garage	11:46	0.6	ND
IA - 614	N Garage	12:00	0.776	ND
IA - 615	Unit 2111	12:08	0	ND
IA - 616	Fitness Room	12:40	42.5	ND
IA - 617	Unit 1051	12:53	39.8	ND
IA - 618	Unit 1042	13:04	3.88	
Reporting Limit ($\mu\text{g}/\text{m}^3$)			0.6	0.6

Table 4: Monitoring Results from 5/25/2023

Sample ID	Sample Location	Sample Time	TCE ($\mu\text{g}/\text{m}^3$)	PCE ($\mu\text{g}/\text{m}^3$)
IA - 619	Unit 1039	9:26	1.19	ND
IA - 620	Unit 1040	9:35	5.29	ND
IA - 621	Unit 1041	9:52	9.13	ND
IA - 622	Unit 1042	10:08	10.1	ND
IA - 623	Unit 1043	10:17	12.2	ND
IA - 624	Unit 1044	10:25	29.3	ND
IA - 625	Unit 1050	10:40	170	ND
IA - 626	Unit 1045	10:49	38.1	ND
IA - 627	Unit 1051	11:02	18.2	ND
IA - 628	Unit 1052	11:13	16.8	ND
IA - 629	Storage Room	11:25	21.4	ND
IA - 630	Mens Locker Room	11:34	21.7	ND
IA - 631	Fitness Room	11:52	15.1	ND
IA - 632	Women's Locker Room	12:01	25.8	ND
Reporting Limit ($\mu\text{g}/\text{m}^3$)			0.6	0.6

Table 5: Monitoring Results from 5/26/2023

Sample ID	Sample Location	Sample Time	TCE ($\mu\text{g}/\text{m}^3$)	PCE ($\mu\text{g}/\text{m}^3$)
IA - 633	Unit 1025	10:14	0	ND
IA - 634	Unit 1058	10:23	0	ND
IA - 635	Unit 2045	10:33	11.8	ND
IA - 636	Unit 2056	10:44	66.4	ND
IA - 637	Unit 3056	10:53	6.99	ND
IA - 638	Unit 3045	11:01	8.11	ND
IA - 639	3rd Fl Hallway	11:11	1.71	ND
IA - 640	2nd Fl Hallway	11:19	2.74	ND
IA - 641	Unit 1036	11:29	2.37	ND
IA - 642	1st Fl Hallway	11:39	2.38	ND
Reporting Limit ($\mu\text{g}/\text{m}^3$)			0.6	0.6

Attachment B

Table 6: Comprehensive Vacuum Measurements (inches H₂O)

Location	22-May	23-May	24-May	25-May	26-May
Unit 1040	0	0	0	0	0
Unit 1044	0	0	0	0	0
Unit 1050	0	0	0	0	0
Stairwell 4	0	0	0	0	0
Baseball Court - 1	0	0	0	0	0
Baseball Court - 2	0	0	0	0	0
Baseball Court - 3	-0.029	0	0	-0.003	0
Exit 3100 W Center St	-0.291	-0.595	-0.603	-0.614	-0.498
SSD 1 – South 7.5 HP	-16	-15	-15	-15	-15
SSD 2 – South 10 HP	-16	-14	-14	-14	-13
SSD 3 – North 7.5 HP	-8	-8	-8	-8	-8
SSD 4 – North 10 HP	-12	-12	-12	-12	-12
N Mech Room	0	0	0	0	0
Unit 1026	0	-0.016	-0.015	-0.008	-0.013
Unit 1036	0	0	0	0	0
Unit 1058	-0.003	-0.009	-0.009	-0.008	-0.006
Unit 1050	0	0	0	0	0

Attachment C
Comprehensive Data Table

Community Within the Corridor - East Block

Table 7 - Discrete Sampling Test Results

Sample Location	30-Mar	31-Mar	1-Apr	3-Apr	4-Apr	5-Apr	6-Apr	7-Apr	10-Apr	11-Apr	12-Apr	13-Apr	14-Apr	15-Apr	17-Apr	18-Apr	19-Apr	20-Apr	21-Apr	24-Apr	25-Apr	26-Apr	27-Apr	28-Apr	1-May	2-May	3-May	4-May	5-May	8-May	9-May	10-May	11-May	12-May	15-May	16-May	17-May	18-May	19-May	22-May	23-May	24-May	25-May	26-May						
1045 Entry Floor Hole			400																																															
1045 North Wall			360																																															
1045 Wood Column			1500								352																																							
1050 South Wall Hole			9000																																															
1st Floor Hallway Center	15				3.5	17.7	64	25	81.1	35		42.7	63.3	106	181	147	8.5	22.4	7.4	7.8		4.7	17.7	2.7		14	9	3.5	2.3		3.49																2.38			
1st Floor Hallway North	10																																																	
1st Floor Hallway South	5.2																																																	
2011 Hallway	0																																																	
2nd Floor Corridor North	0																																																	
2nd Floor Corridor South	0																																																	
2nd Floor Hallway Center	0.7											3	3.6																																					
2nd Floor Hallway North	0.8	0																																																
2nd Floor Hallway South	0.8																																																	
Stairwell 2	3.2	2																			4.5				2.9																									
2nd Floor Stairwell 4	0																																																	
2nd Floor Stairwell 8	0																					12.4																												
3rd Floor Corridor	0																																																	
3rd Floor Hallway Center	0											3.3	2																																					
3rd Floor Hallway South	0																																																	
3rd Floor Stairwell 2	3.4					2.1																																												
Stairwell 3	0.6																																																	
3rd Floor Stairwell 4	0.7																																																	
Basket Ball Court	0.3																																																	
Basket Ball Court 2	0																																																	
Basket Ball Court 3	0																																																	
Basket Ball Court 4	0																																																	
Elevator	0																																																	
Laundry Room	0																																																	
Fitness Center	0									49.6	43.7		28.1																																					
Front Lobby	0																																																	
NW Garage	0.6																																																	
N Garage	0																																																	
SE Garage	0.8																																																	
Hallway Outside 3021	0																																																	
Hallway Outside 3035	0																																																	
Hallway Outside 3065	0.7																																																	
N Mechanical Room	0									6.26	2.4	5.9	14.8	7	7.3	7.2	5.3	7.9			10	7	7.2	7.8	4.5	13.7	11.5			10.1	10.9	11.8		6.89																
Men's Locker Room	0					60.7	123		122		428	82.9																																						
Women's Locker Room	0																																																	
Powerhouse	0																																																	
Unit 1006	0.3	0																																																
SSD Vent Pipe #1 - S - 7.5 HP	1.2	22	24.5	22	24.8	24	26.7	26.2	28	29	30.2	31.4	34.6	38.2	36.4		33.1	35.2	32																															
SSD Vent Pipe #2 - S - 10 HP	26	30	21.9	16.4	18.7	17.2	44.4	19.5	19	47.7	29.3	57.8	20.5	21.1	19.8	21.4	20.9	20.7																																
SSD Vent Pipe #3 - N - 7.5 HP	17.6	2.2	3	5	3.3	3																																												

Attachment D
Table 8 - Airflow Measurements from Blowers

Location	Pipe Size	5/26/2023	
		Measured Velocity	Flow Rate
	(inches)	(feet/minute)	(cubic feet per minute)
SW Hallway	4	98	8.55
NE Gym	4	78.7	6.87
South 7.5 HP Outlet	4	3609	314.94
South 10 HP Outlet	4	3839	335.02
North Blowers Outlet	6	3524	691.94