

April 9, 2024

Ms. Jennifer Meyer
Remediation and Redevelopment Program
Wisconsin Department of Natural Resources
1027 W. St. Paul Avenue
Milwaukee WI, 53212

Project # 40441B

**Subject: Proposed Plan for 3rd Round of Commissioning of Vapor Mitigation System
Community Within the Corridor – East Block
2748 N. 32nd Street, Milwaukee, WI 53210
BRRTS #: 02-41-263675, FID #: 241025400**

Dear Ms. Meyer:

On behalf of the Community Within the Corridor (CWC) Limited Partnership, K. Singh & Associates, Inc. (KSingh) proposes a 3rd Round of Vapor Mitigation System (VMS) Commissioning Plan for the CWC East Block property.

Project Background

CWC has redeveloped the property into a mix of 197 units of affordable rental housing, commercial spaces, community facilities and other amenities. The subject property (BRRTS #02-41-263675) is owned by CWC and located at 2748 N. 32nd Street, City of Milwaukee, Milwaukee County, Wisconsin. The parcel totals approximately 4.16 acres and is zoned as IM – Industrial Mixed (1 and 2). The subject property is covered by one- to three-story buildings. Historically, the East Block of the facility served various industrial purposes for over 100 years (since 1906).

First Round of Commissioning

Commissioning was performed in accordance with the Commissioning Plan that was submitted to the Wisconsin Department of Natural Resources (WDNR) on December 23, 2022, and updated on February 8, 2023. A detailed report with the results from the first round of the commissioning was submitted to WDNR on March 23, 2023. A total of 81 passive sampler kits were deployed on February 20–21, 2023 in the East Block facility, including one (1) outdoor air sample, which was collected for background monitoring. Passive air samplers were deployed for a period of one week and were collected from February 28, 2023, through March 1, 2023. Trichloroethylene (TCE) was reported in 19 samples in exceedance of the Residential Indoor Air Vapor Action Level (VAL) of 2.1 µg/m³ based on the February 2022 Quick Look-Up Table from WDNR. The maximum concentration of TCE detected in indoor air was 400 µg/m³. A total of 15 exceedances were located on the first floor of the facility, with three additional exceedances located on the second floor, and one exceedance located on the third floor.

The sub-slab depressurization system was tested between March 7–14, 2023. Forty-three locations were chosen to take measurements to get an accurate model of sub-slab depressurization from each suction point. The greatest vacuum measurements were observed in Buildings 3A and 1B-SE. Locations with the lowest measured vacuum include the southern wall of Building 2A, the eastern wall of Building 1B-NE, the southwestern wall of Building 1B-NW, the northern wall of Building 1B-W, and Building 1B-SW. The

locations of the lowest vacuum readings align with the locations of the highest TCE concentrations measured during passive indoor air sampling. The floor plan of the subject property showing the existing blower and sump locations is given in Figure 1, and vapor pin locations are shown in Figure 2.

Remedial Actions Taken

Given the results of the first round of commissioning, on March 25, 2023, the City of Milwaukee issued an evacuation order for all tenants at CWC – East Block. WDNR issued an Emergency Order to CWC on March 31, 2023. As a part of the Emergency Order and in an effort to improve the system based on the commissioning results, starting in April 2023, KSingh conducted discrete and continuous air sampling using the portable GC and submitted daily/weekly activity reports with test results to WDNR.

KSingh and CWC worked to identify how TCE was entering the building in the areas of concern. KSingh prepared a response to this effect in the form of an Emergency Corrective Action Plan (ECAP) submitted on April 19, 2023. On May 8, 2023, WDNR provided feedback and guidance on the ECAP and based on this, CWC implemented the corrective action outlined in the ECAP. This involved removing water from the underground piping, adding more fans/blowers to the VMS to help depressurize the VMS, and sealing cracks and open areas to ensure vapors did not enter the building. In May 2023, considerable work took place to modify the VMS so that it was functioning as intended.

The two primary goals of acceptable indoor air quality standards (TCE in indoor air less than 2.1 $\mu\text{g}/\text{m}^3$ and sub-slab depressurization of -0.004 inches of water or greater) had shown dramatic improvements based on the corrective actions implemented between May and June 2023. By mid-July 2023, TCE levels in indoor air had decreased throughout the entire building to safe levels except for in the Northern Mechanical Room where safe levels were achieved later. In addition, by Fall 2023 the required vacuum was achieved throughout the building except for the Northern Mechanical Room.

As part of the remedial actions recommended by the WDNR, source removal was recommended in the hotspot areas of Building 1B-W. As part of this excavation, over 400 tons of soil were removed and about 96 lbs. of TCE eliminated from the hotspot areas. The excavated soils were replaced by structural fill with fines less than 5%, which aid the removal of TCE.

Second Round of Commissioning

Commissioning was performed in accordance with the second round Commissioning Plan that was submitted to WDNR on November 28, 2023, with additional information on December 18, 2023, all of which was approved by WDNR on January 5, 2024. A detailed report with the results of the second round of the commissioning was submitted to WDNR on April 5, 2024.

The sub-slab depressurization system was tested on March 11, 2024. Fifty-five locations were chosen to take measurements to get an accurate model of sub-slab depressurization from each suction point. In accordance with the approved second round Commissioning Plan, a vacuum of -0.004 inches of water was utilized to determine that the system was operating adequately, and recorded measurements ranged from -0.007 to -3.880 inches of water. The greatest vacuum measurement was observed in the Lounge of Building 1D. The vapor pins in the Northwest Garage-W, Unit 1039, and outside Unit 1035 demonstrated the lowest vacuum readings.

The indoor air at CWC – East Block was sampled using a portable Gas Chromatograph (GC) as well as passive air sampler kits. A total of 130 discrete GC samples were collected during March 11–15, 2024

across all three floors of the building. TCE concentrations measured via GC and passive sampling methods were compared against the TCE VAL of 2.1 µg/m³. None of the 130 discrete GC samples exceeded the VAL for TCE, and the maximum detected TCE concentration across all three floors was 1.1 µg/m³. Nearly all the discrete GC samples had detected TCE concentrations below the reporting limit of 0.6 µg/m³.

A total of 70 passive sampler kits were installed on March 14, 2024 in the East Block facility, including one outdoor air sample, which was collected for background monitoring. Passive air samplers were deployed for a period of one week, from March 14–21, 2024. None of the 70 passive air samples exceeded the VAL for TCE, and the maximum detected TCE concentration across all three floors was 1.2 µg/m³. The background TCE concentration measured via passive sampling was < 0.14 µg/m³.

Continuous GC sampling for one week of Units 1045 and 1050 on Level 1 of the building took place from March 14–21, 2024. At no point during the weeklong continuous sampling period of Units 1045 and 1050 did the detected indoor air concentration of TCE exceed the VAL. The average and maximum detected TCE concentrations in Unit 1045 were both < 0.6 µg/m³, and Unit 1050 had an average detected TCE concentration of < 0.6 µg/m³ with a maximum of 0.93 µg/m³.

On March 11, 2024, air quality samples from blowers' exhaust were gathered in a manner similar to indoor air samples, and then analyzed using the portable GC. Based on the TCE concentrations detected in the exhaust during the second round of commissioning, the VMS was removing 0.27 lbs./week of TCE, confirming that mass reduction of TCE from the sub-slab soil is occurring at a reasonable rate.

Third Round of Commissioning Plan

The following commissioning actions will be performed for the third round in accordance with Appendix D of WDNR publication RR-800:

A. Building Preparation:

The building will be sealed for at least 24 hours prior to air testing to prevent any external contamination of air. An inspection of cracks and joints will be performed using smoke methods to determine if air is being drawn into the sub-slab. Cracks, joints, and utility penetrations will be tested using a Smoke Pencil™ kit to identify locations that are not fully sealed. Identified infiltration points will be sealed with caulk to prevent further infiltration.

B. Pressure Field Extension (PFE) Measurements:

The Pressure Field Extension (PFE) will be demonstrated by measuring the vacuum using vapor pins. A total of 55 vapor pins will be used to establish the depressurization throughout the subject property. As part of the interim emergency response, 42 vapor pins were installed in the building focusing on the TCE hotspot area. An additional 13 vapor pins were installed to address the entire footprint of the subject property in advance of the second round of commissioning. A water dam test will be applied to each vapor pin to ensure proper seal. Vacuum measurements will be performed using a digital manometer after the vapor pin passes the water dam test. Vapor pin locations are shown in Figure 2.

Readings will be recorded and compared to the standard of negative one Pascal or –0.004 inch-H₂O. If vacuum at some vapor pins do not meet the minimum vacuum goal, modifications will be made to the system including but not limited to increasing the blower exhaust.

C. Indoor Air Testing using Portable GC:

Indoor air sampling will be conducted in the residential and utility units at the East Block using the portable GC complying with the Standard Operating Procedure and Calibration Standards submitted to the WDNR on August 5, 2023. One hundred thirty samples from residential and utility units will be tested by collecting air samples in a glass syringe and analyzing it using the GC. The locations of the samples are shown in blue circles on the floor plan and in individual sections of the floor plan with the prefix "IA-" in Attachment A.

Out of the 130 samples, 46 sample locations are proposed on the first floor of the property, primarily addressing the hotspot areas. The GC sample locations are distributed evenly to supplement the passive samplers. The majority of the common areas and residential units that will not be sampled by the passive samplers are proposed to be sampled using GC.

Forty-one locations on the second floor and 43 locations on the third floor are proposed for GC testing based on the historical exceedances and data obtained during emergency response. Representative samples from the areas in Buildings 1B-NW, 1B-E, 1B-W, 1B-SW, and 1B-S with appropriate spatial distribution are proposed. These areas cover the passive sampler locations from the first and second rounds of commissioning. The number of sample locations were proposed to be higher than the passive sampler locations on the second and third floors to compensate for the lower number of proposed passive samplers.

D. Continuous Monitoring

The portable GC unit is proposed to be used on its continuous sampling mode for one week in residential Units 1045 and 1050 within TCE hotspot areas of Building 1B. This weeklong sampling will occur during the third-round commissioning event alongside the passive sampler deployment to verify that the indoor air data is representative of indoor air breathing space.

E. Indoor Air Testing using Passive Samplers:

In addition to the PFE measurements, indoor air samples will be collected and tested for TCE to document compliance with residential VALs using passive air samplers. The passive samplers will be installed at locations in the breathing zone, approximately chest height to top of the head, suspending it away from any walls. Passive samplers will be prepared, handled, and deployed in accordance with <https://radiello.com/pollution-monitoring/>.

Passive samplers will be installed at strategic locations throughout the East Block based on the exceedances observed during the first round of commissioning, historical exceedances observed during the GC testing since April 2023, and indoor air testing conducted during remediation efforts in November 2023. Forty-seven passive samplers will be installed on Level 1 including one outdoor air sample that will be collected for background monitoring. There will be 15 passive samplers placed on Level 2, and 8 on Level 3. Seventy passive air samples will be tested in total for the third commissioning round. The proposed locations are shown in red circles on the floor plan and in individual sections of the floor plan with prefix "EB-" in Attachment A. The supporting indoor air data as basis for sample location criteria is documented in Tables 1–3.

During the first round of commissioning, 33 passive samplers were installed on the first floor. Out of these, 14 samplers returned TCE concentrations greater than the VAL. As part of the emergency response, units in the hotspot areas were frequently tested for TCE using the portable GC on site

returning values higher than the VAL. For the second round of commissioning, an additional thirteen locations were installed on the first floor, particularly addressing the areas where excavation was carried out as part of the remedial action. To address variations caused by remedial action, passive samplers were strategically placed in units of high detection levels. Table 1 shows the first-floor data from previous rounds of commissioning as well as the GC readings in April and August 2023. The same 47 locations of passive samplers deployed throughout the first floor during the second round of commissioning are proposed for the third round.

Similarly, Table 2 shows the data pertaining to the second floor of the subject property. Out of the 25 passive samplers installed on the second floor during the first round of commissioning, only three (3) had TCE concentrations exceeding the VAL demonstrating little to no vertical diffusion of TCE. However, Units 2045 and 2056 had elevated levels of TCE in November 2023 due to the ongoing construction activities in the units right underneath them. Table 2 shows the TCE concentrations taken during the construction activities indicating that the second and third floors were not directly impacted by the construction activities and are not expected to have elevated levels at the time of site closure. Given this, the number of passive samplers on the second floor was reduced from 25 in the first round to 15 in the second round, while adding more GC samples, as discussed above. The same 15 locations of passive samplers deployed throughout the second floor during the second round of commissioning are proposed for the third round.

The third floor of the subject property had 19 passive samplers deployed, of which only one had a VAL exceedance during the first round of commissioning. Since the second and third floor residents are more likely to use the elevators than the stairs, passive samplers are proposed to be installed outside all the elevator doors on all three levels and in Stairs 2 and 3, which are farther away from the elevators and had high historic TCE concentrations. Table 3 lists the proposed third-floor passive sampler locations, including the corridors 3038 and 3047 since they serve as the common areas in the occupied units on the third floor. As seen in Table 3, all the samples tested on November 20, 2023 on the third floor had TCE concentrations below the reporting limit of 0.6 $\mu\text{g}/\text{m}^3$. Given this, the number of passive samplers on the third floor was reduced from 19 in the first round to 8 in the second round, while adding more GC samples, as discussed in the earlier section. The same 8 locations of passive samplers deployed throughout the third floor during the second round of commissioning are proposed for the third round.

F. Blower Efficiency:

Blower exhaust efficiency will be determined by measuring the velocity of the exhaust and the TCE concentrations taken by grab samples, which will be collected from the blower systems outlets from a port via a glass syringe and then using the portable GC during the third round of commissioning to determine system progress. The blower locations are shown in Figure 1. The layout of the VMS connecting to the individual blowers is shown in Attachment B. Please note that final as-builts of the VMS will be provided in the Construction Documentation Report.

Following completion of the third round of commissioning, a report documenting findings will be submitted to WDNR. The third round of commissioning is scheduled for May 2024 during the warm season.

Proposed Schedule

The following schedule is proposed for Commissioning:

- | | |
|---|-----------------------|
| • Building Preparation & Screening Activities | May 20–24, 2024 |
| • Maintenance of current vapor pins | May 20–24, 2024 |
| • Measurement of PFE at current vapor pins | May 28–29, 2024 |
| • Indoor Air Testing using GC | May 28–31, 2024 |
| • Passive Sampler Installation and Retrieval | May 31 – June 7, 2024 |
| • Receipt of Test Results from Passive Samplers | June 21, 2024 |
| • Submission of Commissioning Report | June 30, 2024 |

Please contact us if you have any questions or seek clarification regarding this submittal.

Sincerely,

K. SINGH & ASSOCIATES, INC.

K. M. Balachandran

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Attachments:

- | | |
|--------------|--|
| Figure 1 | Blower and Sump Locations for CWC East Block |
| Figure 2 | Vapor Pin Locations for East Block |
| Tables 1–3 | Supporting Data for Passive Sampling Locations |
| Attachment A | Indoor Air Sampling Locations |
| Attachment B | Vapor Mitigation System Layout |

FIGURES

East Building Level 1

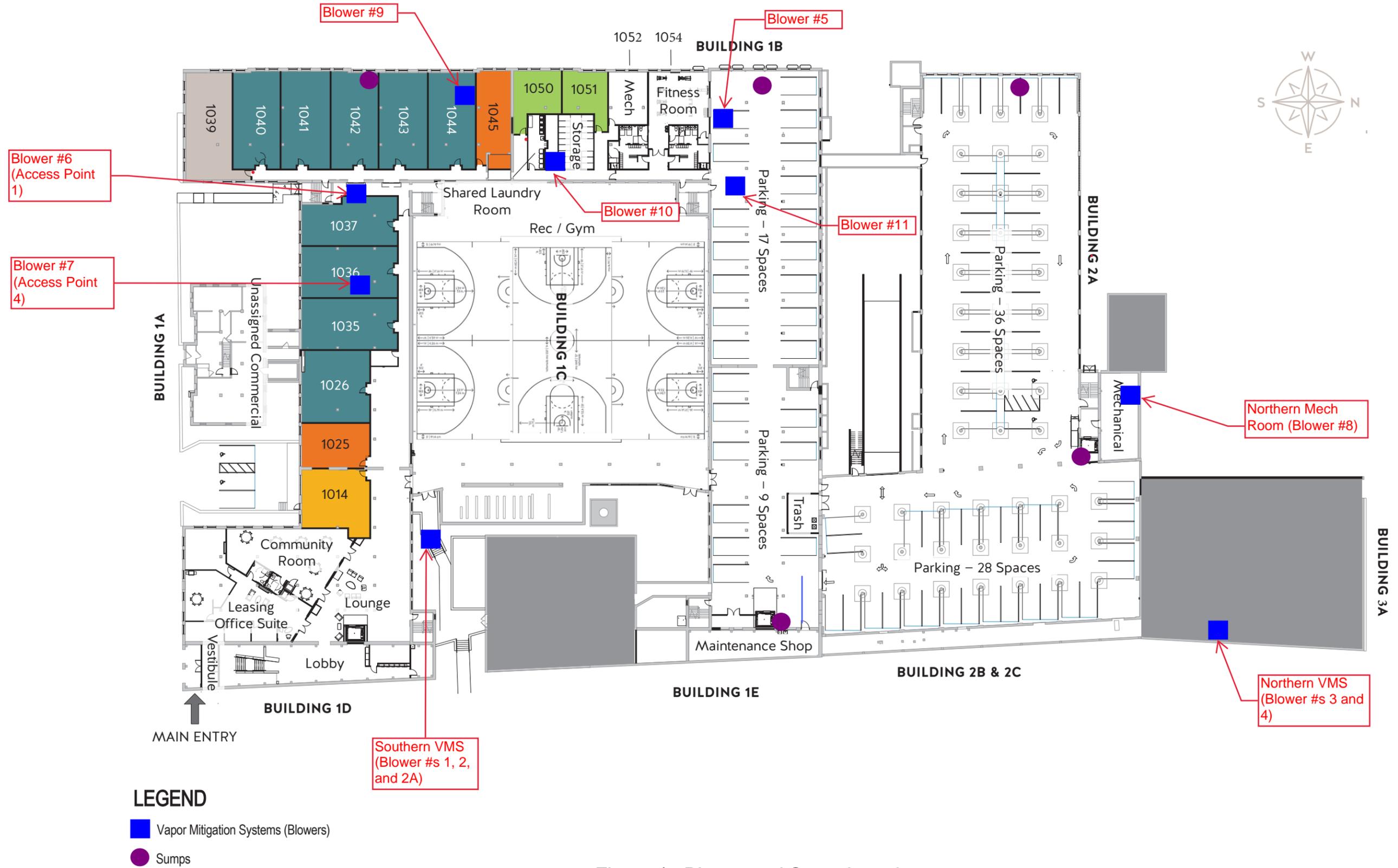


Figure 1. Blower and Sump Locations

East Building Level 1

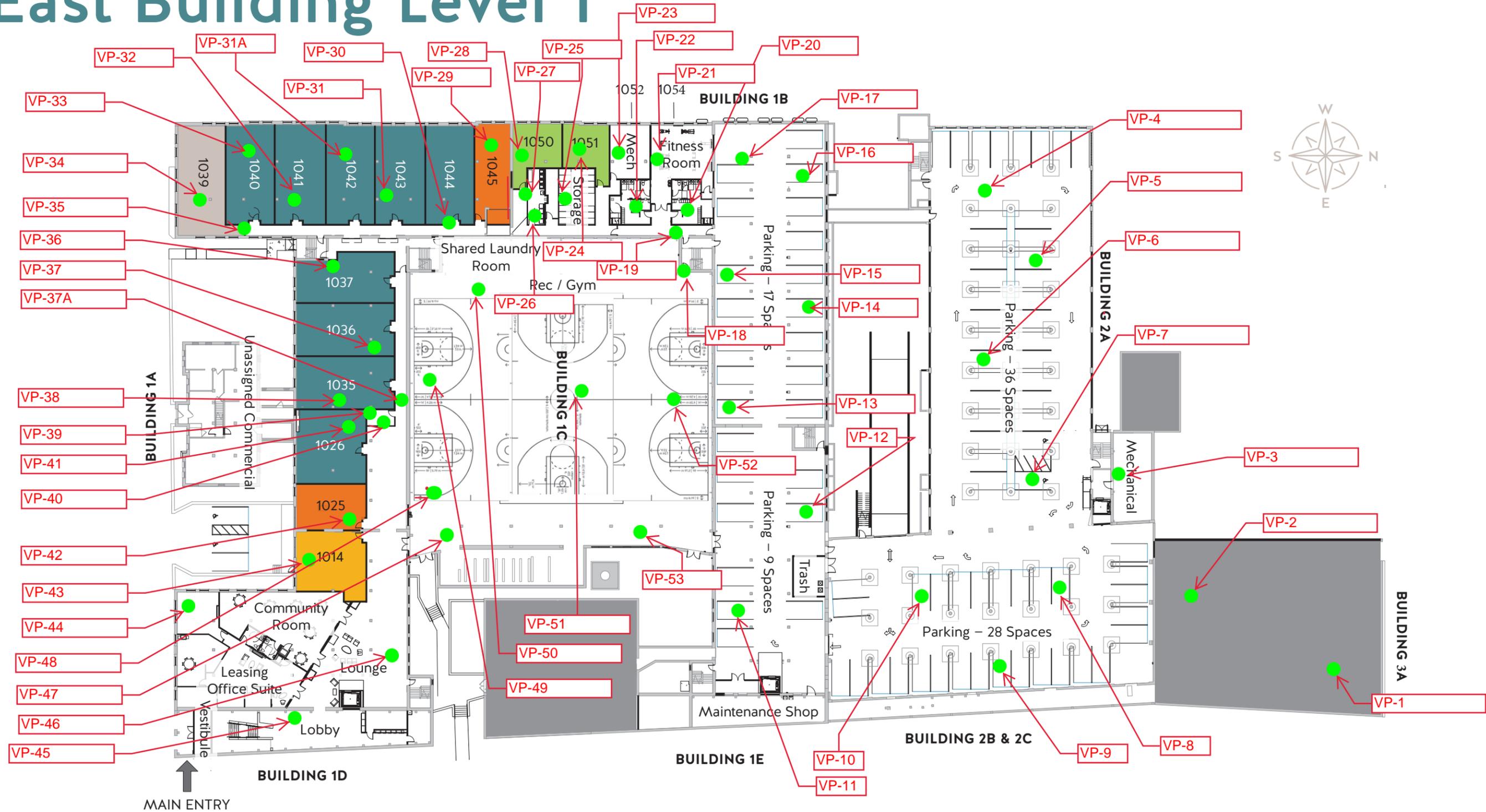


Figure 2. CWC EB Level 1 Map with Vapor Pin Locations

TABLES

**Table 1. Level 1 Passive Air Sampling Locations
Community Within the Corridor - East Block**

1st Round Commissioning			GC Testing		2nd Round Commissioning			3rd Round Commissioning	
February 2023			April 2023	August 2023	March 2024			May 2024	
Sample ID	Sample Location	TCE Reading (µg/m ³)	TCE Reading (µg/m ³)	TCE Reading (µg/m ³)	Sample ID	Sample Location	TCE Reading (µg/m ³)	Proposed Locations	47
EB-01-B	N Mech Room	4.9	14.8	9.9	EB-01-A	N Mech Room	1.2	EB-01-A	N Mech Room
EB-01-C	Stair 8	0.21			EB-01-B	Stair 8	0.22	EB-01-B	Stair 8
EB-01-D	Elevator 3	0.32			EB-01-C	Elevator 3	0.55	EB-01-C	Elevator 3
EB-01-E	NW Garage	0.13	0.60	< 0.6	EB-01-D	NW Garage	0.26	EB-01-D	NW Garage
EB-01-F	E Garage	0.25	0.80	< 0.6	EB-01-E	E Garage	0.15	EB-01-E	E Garage
					EB-01-F	Elevator 1	0.62	EB-01-F	Elevator 1
EB-01-G	Skywalk	0.82							
EB-01-H	SW Garage	1.1	21	< 0.6	EB-01-G	SW Garage	0.34	EB-01-G	SW Garage
EB-01-I	Elevator 2	0.23			EB-01-H	Elevator 2	< 0.14	EB-01-H	Elevator 2
EB-01-J	1053	0.13	428		EB-01-I	1053	0.62	EB-01-I	1053
EB-01-K	Gym	0.13	7.5	3.76	EB-01-J	Gym	0.25	EB-01-J	Gym
EB-01-L	SE Gym	0.13			EB-01-K	SE Gym	0.30	EB-01-K	SE Gym
EB-01-M	Stair 6	0.13		< 0.6	EB-01-L	Stair 6	< 0.14	EB-01-L	Stair 6
EB-01-N	1042	15	16.2	< 0.6	EB-01-M	1042	0.19	EB-01-M	1042
EB-01-O	1046	11			EB-01-N	1046	0.45	EB-01-N	1046
EB-01-P	1039	8.2	11.4	< 0.6	EB-01-O	1039	< 0.14	EB-01-O	1039
EB-01-Q	1036	0.96	< 0.6	< 0.6	EB-01-P	1036	0.32	EB-01-P	1036
EB-01-R	1027A	0.41			EB-01-Q	1027A	0.52	EB-01-Q	1027A
					EB-01-R	1001	0.78	EB-01-R	1001
EB-01-S	1014	0.14	< 0.6	< 0.6					
EB-01-T	Stair 1	0.20			EB-01-S	Stair 1	< 0.14	EB-01-S	Stair 1
					EB-01-T	Stair 2	< 0.14	EB-01-T	Stair 2
EB-01-V	1012	0.32							
EB-01-W	Stair 4	0.81	14.4	< 0.6	EB-01-U	Stair 4	0.28	EB-01-U	Stair 4
EB-01-X	Stair 3	3.2	0.60	< 0.6	EB-01-V	Stair 3	0.44	EB-01-V	Stair 3
EB-01-Y	1051	61	45.3	< 0.6	EB-01-W	1051	< 0.14	EB-01-W	1051
EB-01-Z	1050	400	706	2.4	EB-01-X	1050	0.30	EB-01-X	1050
EB-01-AA	1045	290	352	7.8	EB-01-Y	1045	0.43	EB-01-Y	1045
EB-01-AB	1044	46	95	2.5	EB-01-Z	1044	0.60	EB-01-Z	1044
EB-01-AC	1043	17	24	2.3	EB-01-AA	1043	0.48	EB-01-AA	1043
EB-01-AD	1041	13	19.9	< 0.6	EB-01-AB	1041	< 0.14	EB-01-AB	1041
EB-01-AE	1040	11	22.6	< 0.6	EB-01-AC	1040	< 0.14	EB-01-AC	1040
EB-01-AF	1037	3.2	2.0	< 0.6	EB-01-AD	1037	0.50	EB-01-AD	1037
					EB-01-AE	1038	0.24	EB-01-AE	1038
EB-01-AG	1035	0.70	< 0.6	< 0.6					
EB-01-AH	1026	5.0	< 0.6	< 0.6	EB-01-AF	1026	0.23	EB-01-AF	1026
EB-01-AI	1025	0.20	4.8	< 0.6					
					EB-01-AG	1047	0.42	EB-01-AG	1047
					EB-01-AH	Stair 5	0.15	EB-01-AH	Stair 5
					EB-01-AI	Stair 7	< 0.14	EB-01-AI	Stair 7
					EB-01-AJ	1049	0.87	EB-01-AJ	1049
					EB-01-AK	1056	1.2	EB-01-AK	1056
					EB-01-AL	1048	0.25	EB-01-AL	1048
					EB-01-AM	SW Garage Wall	0.31	EB-01-AM	SW Garage Wall
					EB-01-AN	NW Garage Wall	0.24	EB-01-AN	NW Garage Wall
					EB-01-AO	Building 3A	< 0.14	EB-01-AO	Building 3A
					EB-01-AP	Bball Court Center	0.38	EB-01-AP	Bball Court Center
					EB-01-AQ	Bball Court SE	0.34	EB-01-AQ	Bball Court SE
					EB-01-AR	1050 N Wall	0.35	EB-01-AR	1050 N Wall
					EB-01-AS	1043 Bathroom	0.49	EB-01-AS	1043 Bathroom
					EB-01-AT	1045 Bedroom	0.52	EB-01-AT	1045 Bedroom
					OA-01-A	RAMP	< 0.14	OA-01-A	RAMP

**Table 2. Level 2 Passive Air Sampling Locations
Community Within the Corridor - East Block**

1st Round Commissioning			GC Testing	GC Testing	2nd Round Commissioning			3rd Round Commissioning	
February 2023			April 2023	August 2023	March 2024			May 2024	
Sample ID	Sample Location	TCE Reading (µg/m³)	TCE Reading (µg/m³)	TCE Reading (µg/m³)	Sample ID	Sample Location	TCE Reading (µg/m³)	Proposed Locations	15
EB-02-B	Stair 8	0.22	< 0.6	< 0.6					
EB-02-C	Elevator 3	0.14			EB-02-C	Elevator 3	< 0.14	EB-02-C	Elevator 3
EB-02-D	2110	0.14							
EB-02-E	2078	0.17							
EB-02-F	Laundry - 2099	0.13							
EB-02-G	2096	0.14							
EB-02-H	2091	0.18							
EB-02-I									
EB-02-J	Elevator 2	0.19			EB-02-B	Elevator 2	0.22	EB-02-B	Elevator 2
EB-02-K	2060	0.60	< 0.6						
EB-02-L	Stair 5	1.6			EB-02-G	Stair 5	< 0.14	EB-02-G	Stair 5
EB-02-M	2062	0.31	< 0.6	< 0.6					
EB-02-N	2047	4.6			EB-02-L	2047	0.38	EB-02-L	2047
EB-02-O	2044	0.84	< 0.6	< 0.6	EB-02-J	2044	< 0.14	EB-02-J	2044
EB-02-P	2038	2.7			EB-02-H	2038	0.21	EB-02-H	2038
EB-02-Q	2039	1.4	2.5	< 0.6	EB-02-I	2039	< 0.14	EB-02-I	2039
EB-02-R	Stair 3	2.0	0.60		EB-02-E	Stair 3	0.33	EB-02-E	Stair 3
EB-02-S	2036	0.16	< 0.6	< 0.6					
EB-02-T	2027	0.39							
EB-02-U	Stair 1	0.24							
EB-02-V	Elevator 1	0.60	< 0.6		EB-02-A	Elevator 1	0.25	EB-02-A	Elevator 1
EB-02-W	2017	0.38	< 0.6	< 0.6					
EB-02-X	Stair 2	4.2	4.5		EB-02-D	Stair 2	< 0.14	EB-02-D	Stair 2
EB-02-Y	Stair 4	1.0	12.4	< 0.6	EB-02-F	Stair 4	0.27	EB-02-F	Stair 4
EB-02-Z	Stair 6	0.12	< 0.6						
					EB-02-K	2045	< 0.14	EB-02-K	2045
					EB-02-M	2056	0.17	EB-02-M	2056
					EB-02-N	2057	0.16	EB-02-N	2057
					EB-02-O	2077	< 0.14	EB-02-O	2077

**Table 3. Level 3 Passive Air Sampling Locations
Community Within the Corridor - East Block**

1st Round Commissioning			GC Testing	GC Testing	2nd Round Commissioning			3rd Round Commissioning	
February 2023			April 2023	August 2023	March 2024			May 2024	
Sample ID	Sample Location	TCE Reading (µg/m ³)	TCE Reading (µg/m ³)	TCE Reading (µg/m ³)	Sample ID	Sample Location	TCE Reading (µg/m ³)	Proposed Locations	8
					EB-03-A	Elevator 1	0.22	EB-03-A	Elevator 1
EB-03-A	Stair 8	0.22							
EB-03-B	Elevator 3	0.15			EB-03-C	Elevator 3	< 0.14	EB-03-C	Elevator 3
EB-03-C	3099	0.13							
EB-03-D	3092	0.11	< 0.6	< 0.6					
EB-03-E	Stair 7	0.11							
EB-03-F	3078	0.13							
EB-03-G	Elevator 2	0.15			EB-03-B	Elevator 2	< 0.14	EB-03-B	Elevator 2
EB-03-H	3075	0.18							
EB-03-I	3060	0.38							
EB-03-J	3061	0.46	< 0.6	< 0.6					
EB-03-K	3047	0.65			EB-03-G	3047	0.53	EB-03-G	3047
EB-03-L	Stair 3	1.3			EB-03-E	Stair 3	0.25	EB-03-E	Stair 3
EB-03-M	Stair 2	4.0	3.4	< 0.6	EB-03-D	Stair 2	< 0.14	EB-03-D	Stair 2
EB-03-N	3038	0.94			EB-03-F	3038	0.20	EB-03-F	3038
EB-03-O	3027	0.58							
EB-03-Q	3017	0.46	< 0.6	< 0.6					
EB-03-R	Stair 1	0.20							
EB-03-S	Stair 6	0.11							
EB-03-T	Stair 4	0.85	11.2	< 0.6	EB-03-H	Stair 4	0.24	EB-03-H	Stair 4

ATTACHMENTS

ATTACHMENT A

Indoor Air Sampling Locations

Attachment A
GC and Passive Air Sampling Locations
Basement - Building 1A, Level 1 - Building
1B-S and 1B-SW

CONSULTANTS:

LEGEND

- Passive Sampler Locations
- GC Sample Locations
- Additional Passive Sampler Locations added per WDNR's Feedback



Sample ID	IA-1039
Date	3/11/2024
TCE	< 0.6

1 NEW WORK PLAN - BASEMENT, BLDG 1A & LEVEL 01 BLDG 1B (SW & S)
Scale: 1/8" = 1'-0"

COMMUNITY WITHIN THE CORRIDOR - EAST BLOCK
3100 W. Center Street
Milwaukee, WI 53210
SHEET TITLE: NEW WORK PLAN - BASEMENT, BLDG 1A & LEVEL 01, BLDG 1B (SW & S)

REVISIONS:

1	10/09/20	Addendum #1
2	10/13/20	Addendum #2

SCALE	VARIES
PROJECT NUMBER	200102
SET TYPE	CONSTRUCTION DOCUMENTS
DATE ISSUED	09/25/20
SHEET NUMBER	A211E

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Attachment A
GC and Passive Air Sampling Locations
Level 1 - Building 1B-SE and 1D

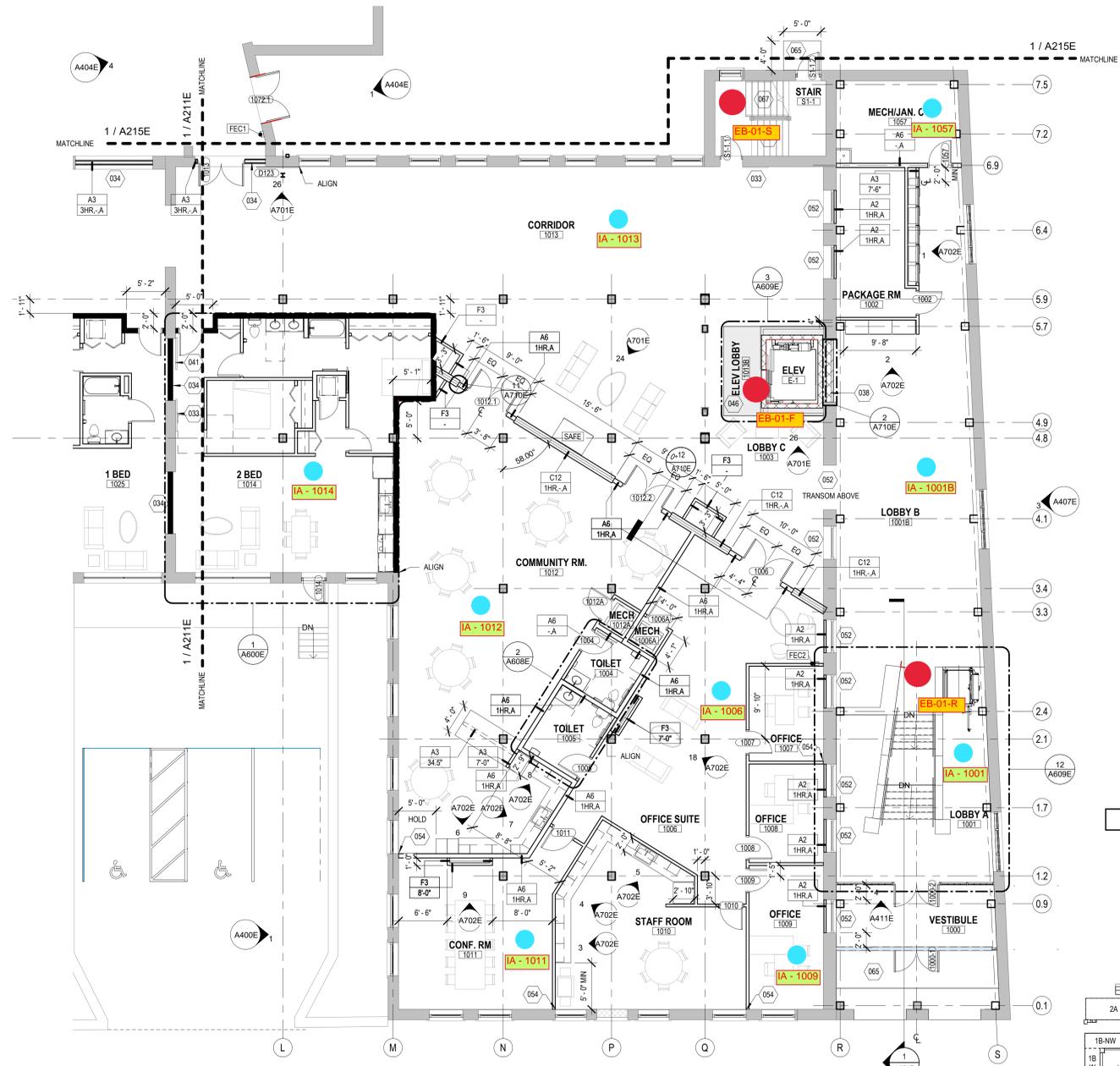


T 414.220.9640
751 N Jefferson St.
Suite 200
Milwaukee, WI 53202

CONSULTANTS:

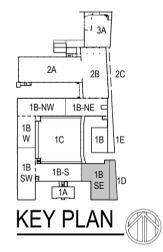
LEGEND

- Passive Sampler Locations
- GC Sample Locations
- Additional Passive Sampler Locations added per WDNR's Feedback



0.60

1 NEW WORK PLAN - LEVEL 01, BLDG 1B & 1D (SE)
Scale: 1/8" = 1'-0"



COMMUNITY WITHIN THE CORRIDOR - EAST BLOCK

2748 N. 32nd Street
Milwaukee, WI 53210

SHEET TITLE
NEW WORK PLAN - LEVEL 01, BLDG 1B (SE)

REVISIONS:

SCALE	VARIES
PROJECT NUMBER	200102
SET TYPE	CONSTRUCTION DOCUMENTS
DATE ISSUED	09/25/20
SHEET NUMBER	A212E

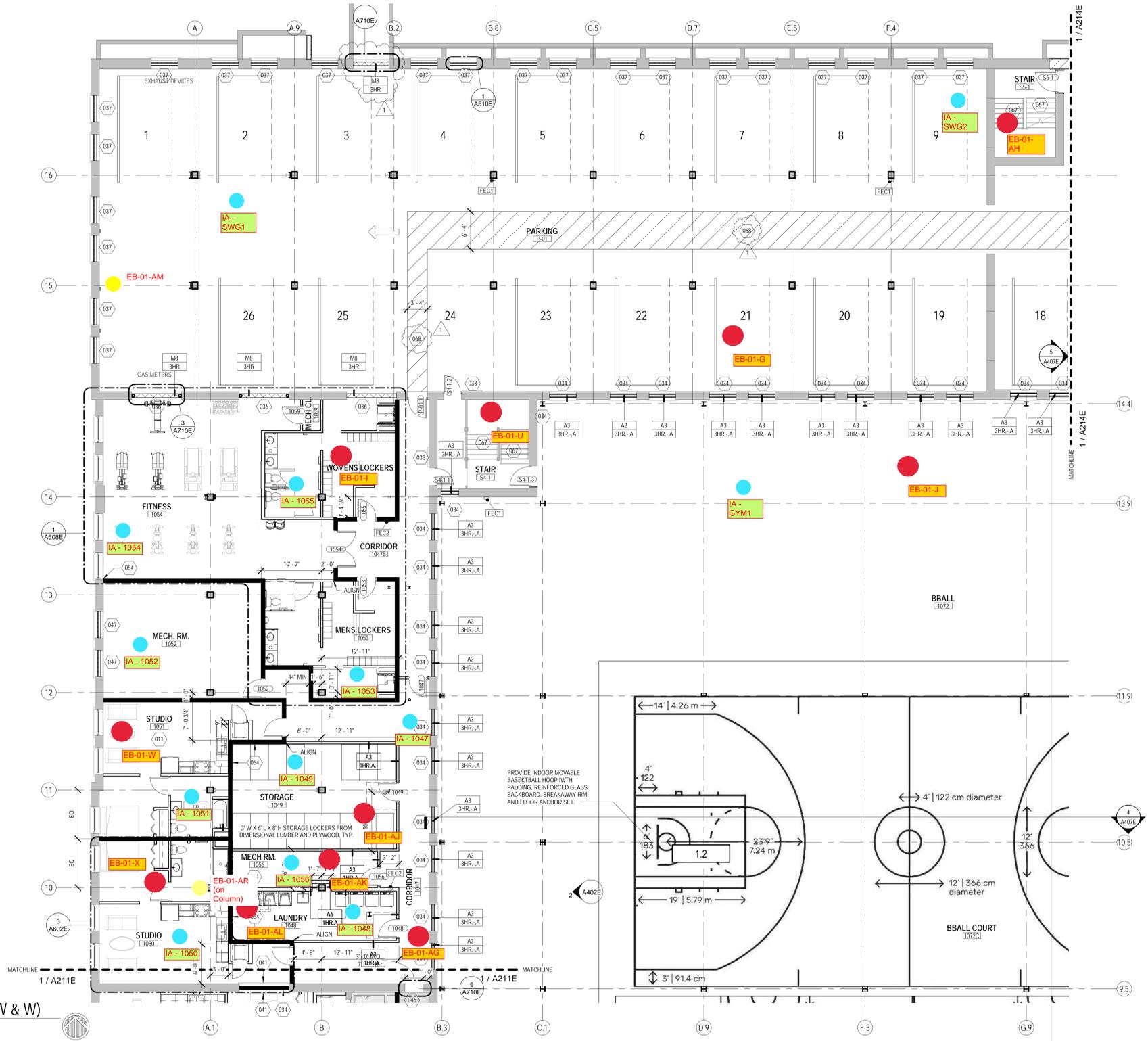
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Attachment A
GC and Passive Air Sampling Locations
Level 1 - Building 1B-W and 1B-NW

CONSULTANTS:

LEGEND

- Passive Sampler Locations
- GC Sample Locations
- Additional Passive Sampler Locations added per WDNR's Feedback



1 NEW WORK PLAN - LEVEL 01, BLDG 1B (NW & W)
Scale: 1/8" = 1'-0"
0' 2' 4' 8' 12'

COMMUNITY WITHIN THE CORRIDOR - EAST BLOCK
3100 W. Center Street
Milwaukee, WI 53210
SHEET TITLE: NEW WORK PLAN - LEVEL 01, BLDG 1B (NW & W)

REVISIONS:
1 10/09/20 Addendum #1

SCALE	VARIES
PROJECT NUMBER	200102
SET TYPE	CONSTRUCTION DOCUMENTS
DATE ISSUED	09/25/20
SHEET NUMBER	A213E

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Attachment A
GC and Passive Air Sampling Locations
Level 1 - Building 1B-NE and 1E

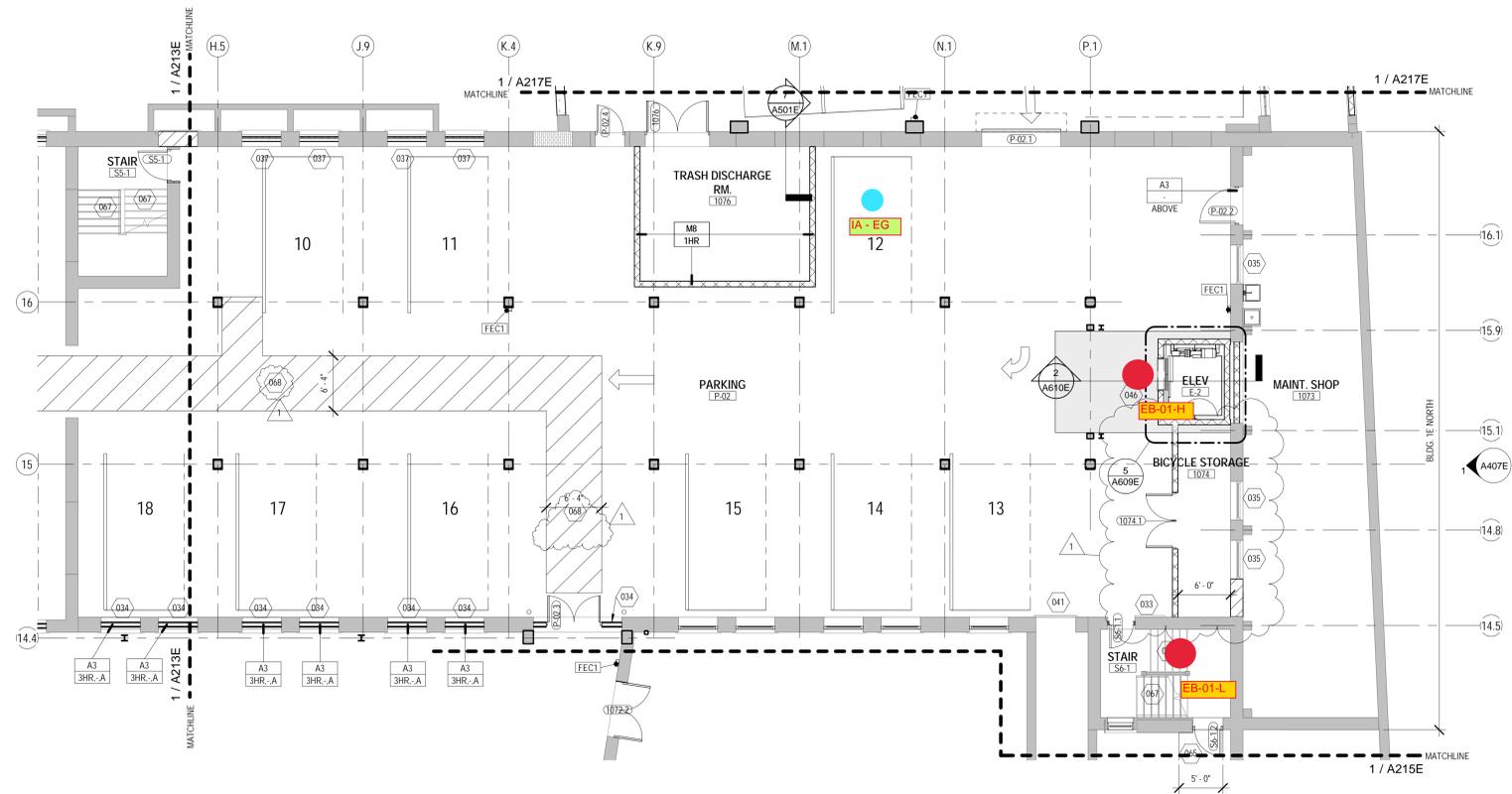


T 414.220.9640
751 N Jefferson St.
Suite 200
Milwaukee, WI 53202

CONSULTANTS:

LEGEND

- Passive Sampler Locations
- GC Sample Locations
- Additional Passive Sampler Locations added per WDNr's Feedback



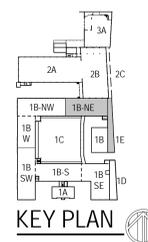
COMMUNITY WITHIN THE CORRIDOR - EAST BLOCK
3100 W. Center Street
Milwaukee, WI 53210
SHEET TITLE:
NEW WORK PLAN - LEVEL 01, BLDG 1B (NE) & 1E NORTH

REVISIONS:
1 10/09/20 Addendum #1

SCALE	VARIES
PROJECT NUMBER	200102
SET TYPE	CONSTRUCTION DOCUMENTS
DATE ISSUED	09/25/20
SHEET NUMBER	A214E

1 NEW WORK PLAN - LEVEL 01, BLDG 1B (NE) & 1E NORTH

Scale: 1/8" = 1'-0"
0' 2' 4' 8' 12'



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Attachment A
GC and Passive Air Sampling Locations
Level 1 - Building 1C

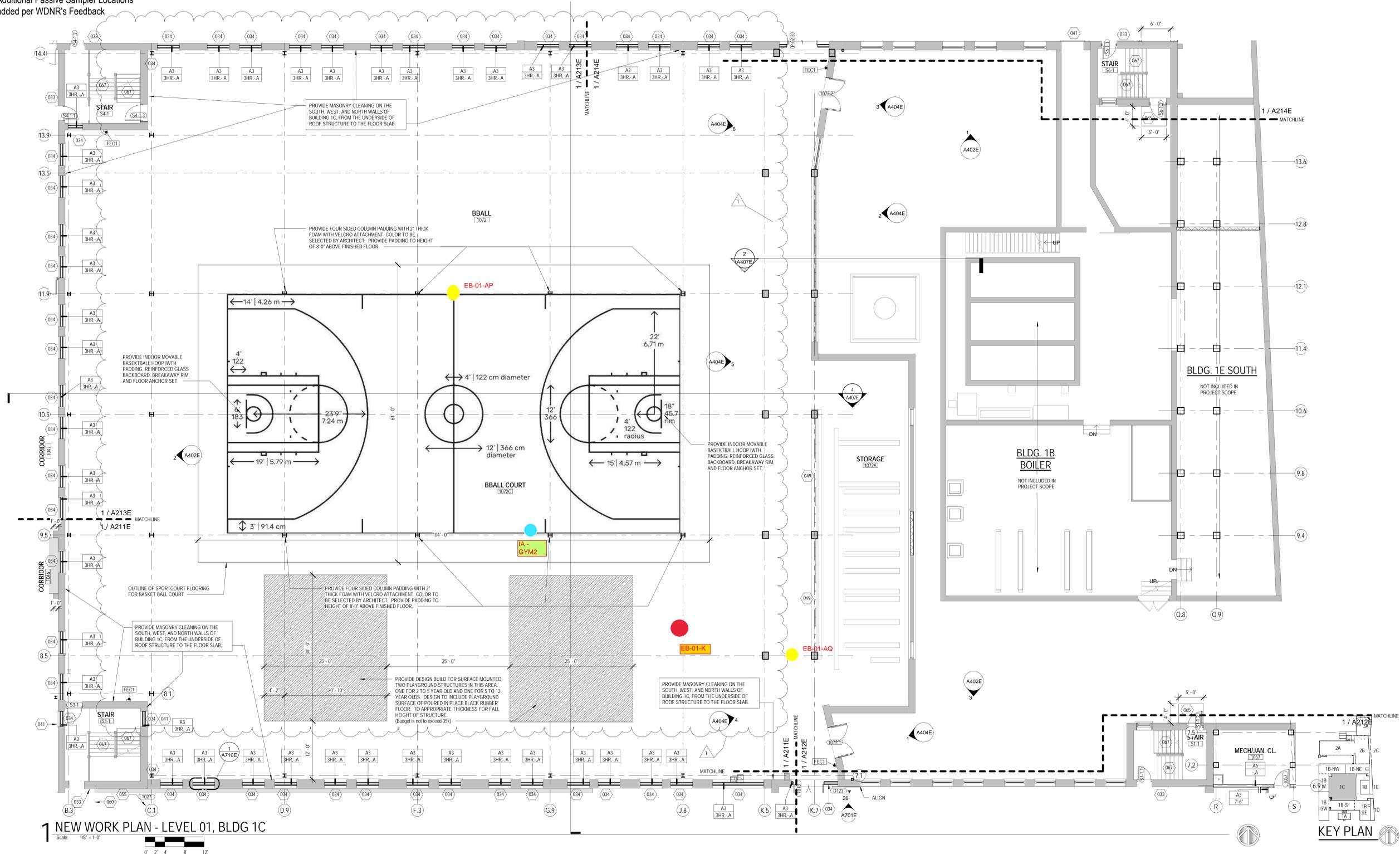


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751 N Jefferson St.
Suite 200
Milwaukee, WI 53202

CONSULTANTS:

LEGEND

- Passive Sampler Locations
- GC Sample Locations
- Additional Passive Sampler Locations added per WDNR's Feedback



1 NEW WORK PLAN - LEVEL 01, BLDG 1C

Scale: 1/8" = 1'-0"

COMMUNITY WITHIN THE CORRIDOR - EAST BLOCK

3100 W. Center Street
Milwaukee, WI 53210
SHEET TITLE
NEW WORK PLAN - LEVEL 01, BLDG 1C

REVISIONS:

1 10/09/20 Addendum #1

SCALE VARIES

PROJECT NUMBER 200102

SET TYPE CONSTRUCTION DOCUMENTS

DATE ISSUED 09/25/20

SHEET NUMBER **A215E**

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Attachment A
GC and Passive Air Sampling Locations
Level 1 - Building 2A

Sample ID	EB-01-AO
Date	3/21/2024
TCE	< 0.14
PCE	< 0.17



T 414.220.9640
751 N Jefferson St.
Suite 200
Milwaukee, WI 53202

CONSULTANTS:

COMMUNITY WITHIN THE CORRIDOR - EAST BLOCK

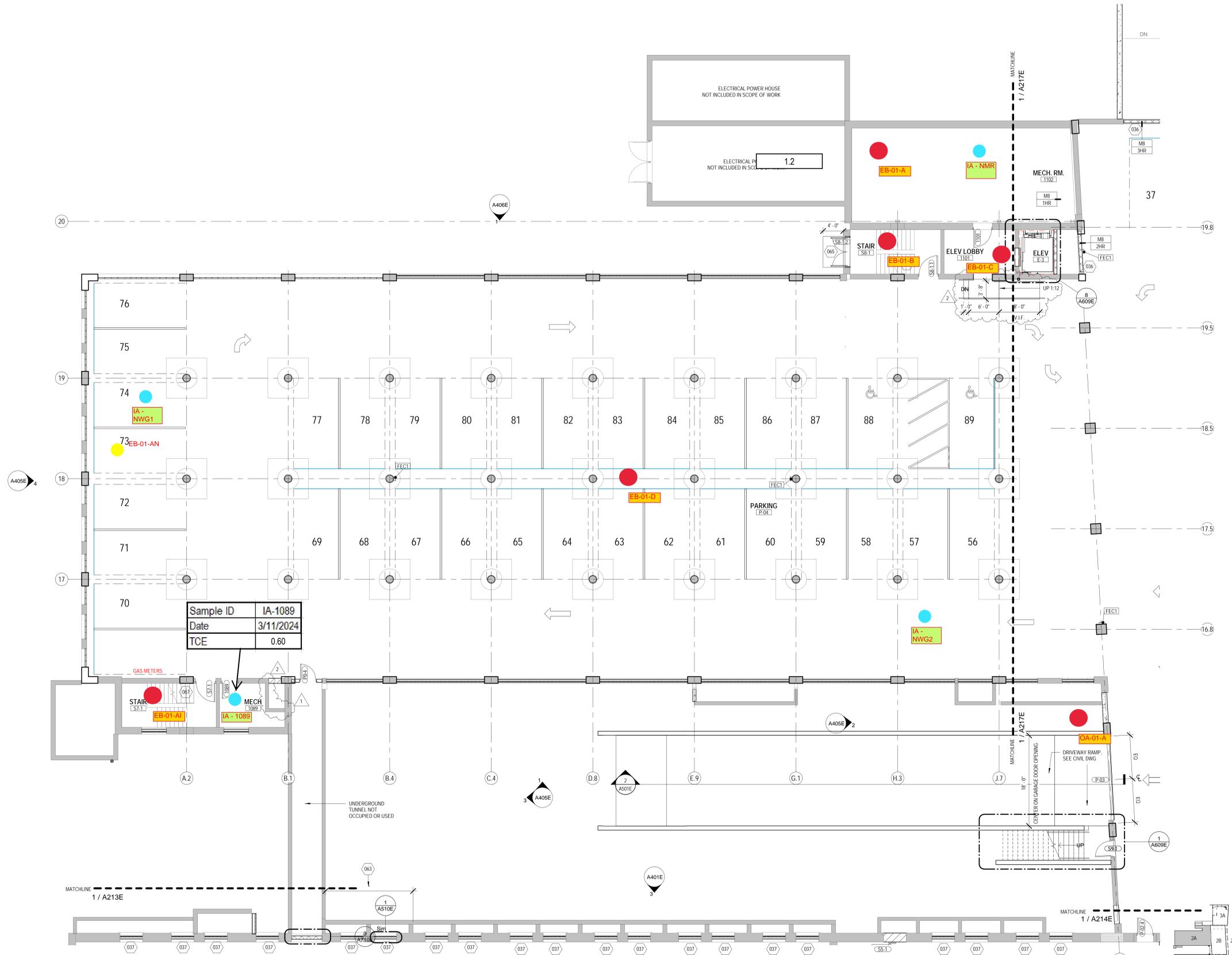
3100 W. Center Street
Milwaukee, WI 53210
SHEET TITLE
NEW WORK PLAN - LEVEL 01, BLDG 2A

REVISIONS:	
1	10/09/20 Addendum #1
2	10/13/20 Addendum #2

SCALE	VARIES
PROJECT NUMBER	200102
SET TYPE	CONSTRUCTION DOCUMENTS
DATE ISSUED	09/25/20
SHEET NUMBER	A216E

LEGEND

- Passive Sampler Locations
- GC Sample Locations
- Additional Passive Sampler Locations added per WDNR's Feedback

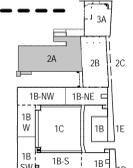


Sample ID	IA-1089
Date	3/11/2024
TCE	0.60

1 NEW WORK PLAN - LEVEL 01, BLDG 2A
Scale: 1/8" = 1'-0"



KEY PLAN

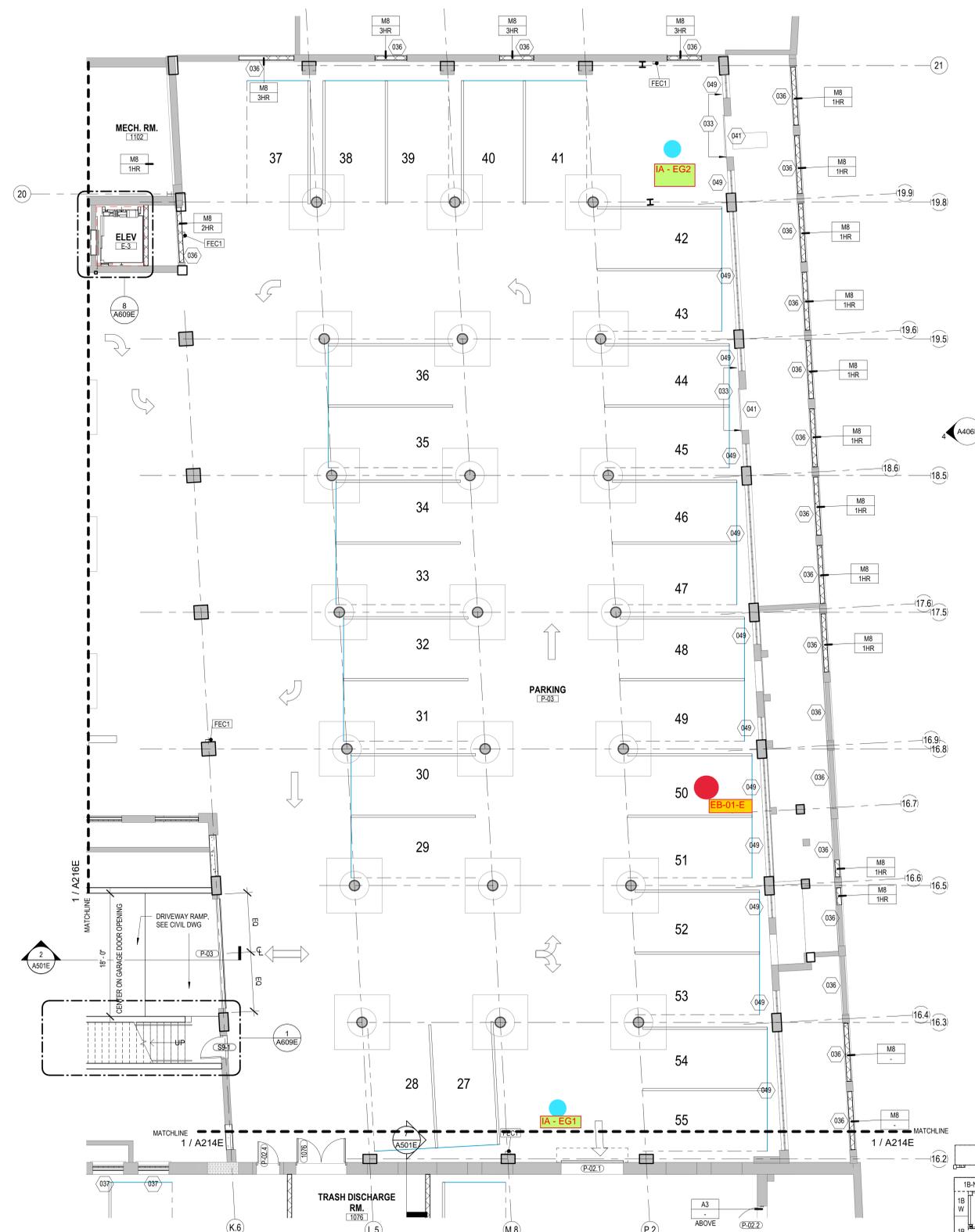


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Suite 200
Milwaukee, WI 53202

CONSULTANTS:



LEGEND

- Passive Sampler Locations
- GC Sample Locations
- Additional Passive Sampler Locations added per WDNR's Feedback

1 NEW WORK PLAN - LEVEL 01, BLDG 2B & 2C
Scale: 1/8" = 1'-0"



COMMUNITY WITHIN THE CORRIDOR - EAST BLOCK
2748 N. 32nd Street
Milwaukee, WI 53210
SHEET TITLE: NEW WORK PLAN - LEVEL 01, BLDG 2B & 2C

REVISIONS:

SCALE	VARIES
PROJECT NUMBER	200102
SET TYPE	CONSTRUCTION DOCUMENTS
DATE ISSUED	09/25/20
SHEET NUMBER	A217E

Attachment A
GC and Passive Air Sampling Locations
Level 2 - Building 1B-S and 1B-SW



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Suite 200
Milwaukee, WI 53202

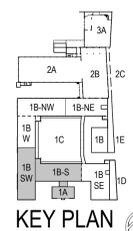
CONSULTANTS:

LEGEND

- Passive Sampler Locations
- GC Sample Locations
- Additional Passive Sampler Locations added per WDNR's Feedback



1 NEW WORK PLAN - LEVEL 01, BLDG 1A & LEVEL 02, BLDG 1B (SW & S)



COMMUNITY WITHIN THE CORRIDOR - EAST BLOCK

2748 N. 32nd Street
Milwaukee, WI 53210

SHEET TITLE:
NEW WORK PLAN - LEVEL 01, BLDG 1A & LEVEL 02, BLDG 1B (SW & S)

REVISIONS:

SCALE	VARIES
PROJECT NUMBER	200102
SET TYPE	CONSTRUCTION DOCUMENTS
DATE ISSUED	09/25/20
SHEET NUMBER	A221E

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Attachment A
GC and Passive Air Sampling Locations
Level 2 - Building 1B-SE



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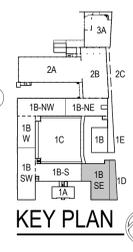
CONSULTANTS:

LEGEND

- Passive Sampler Locations
- GC Sample Locations
- Additional Passive Sampler Locations added per WDNR's Feedback



1 NEW WORK PLAN - LEVEL 02, BLDG 1B (SE)
Scale: 1/8" = 1'-0"
0' 2' 4' 8' 12'



COMMUNITY WITHIN THE CORRIDOR - EAST BLOCK

2748 N. 32nd Street
Milwaukee, WI 53210

SHEET TITLE
NEW WORK PLAN - LEVEL 02, BLDG 1B (SE)

REVISIONS:

SCALE	VARIES
PROJECT NUMBER	200102
SET TYPE	CONSTRUCTION DOCUMENTS
DATE ISSUED	09/25/20
SHEET NUMBER	A222E

Attachment A
GC and Passive Air Sampling Locations
Level 2 - Building 1B-W and 1B NW



T 414.220.9640
751 N Jefferson St.
Suite 200
Milwaukee, WI 53202

CONSULTANTS:

LEGEND

- Passive Sampler Locations
- GC Sample Locations
- Additional Passive Sampler Locations added per WDNR's Feedback



1 NEW WORK PLAN - LEVEL 02, BLDG 1B (NW & W)



COMMUNITY WITHIN THE CORRIDOR - EAST BLOCK

2748 N. 32nd Street
Milwaukee, WI 53210

SHEET TITLE:
NEW WORK PLAN - LEVEL 02, BLDG 1B (NW & W)

REVISIONS:

SCALE	VARIABLES
PROJECT NUMBER	200102
SET TYPE	CONSTRUCTION DOCUMENTS
DATE ISSUED	09/25/20
SHEET NUMBER	A223E

Attachment A
GC and Passive Air Sampling Locations
Level 2 - Building 1B-NE and 1E-N

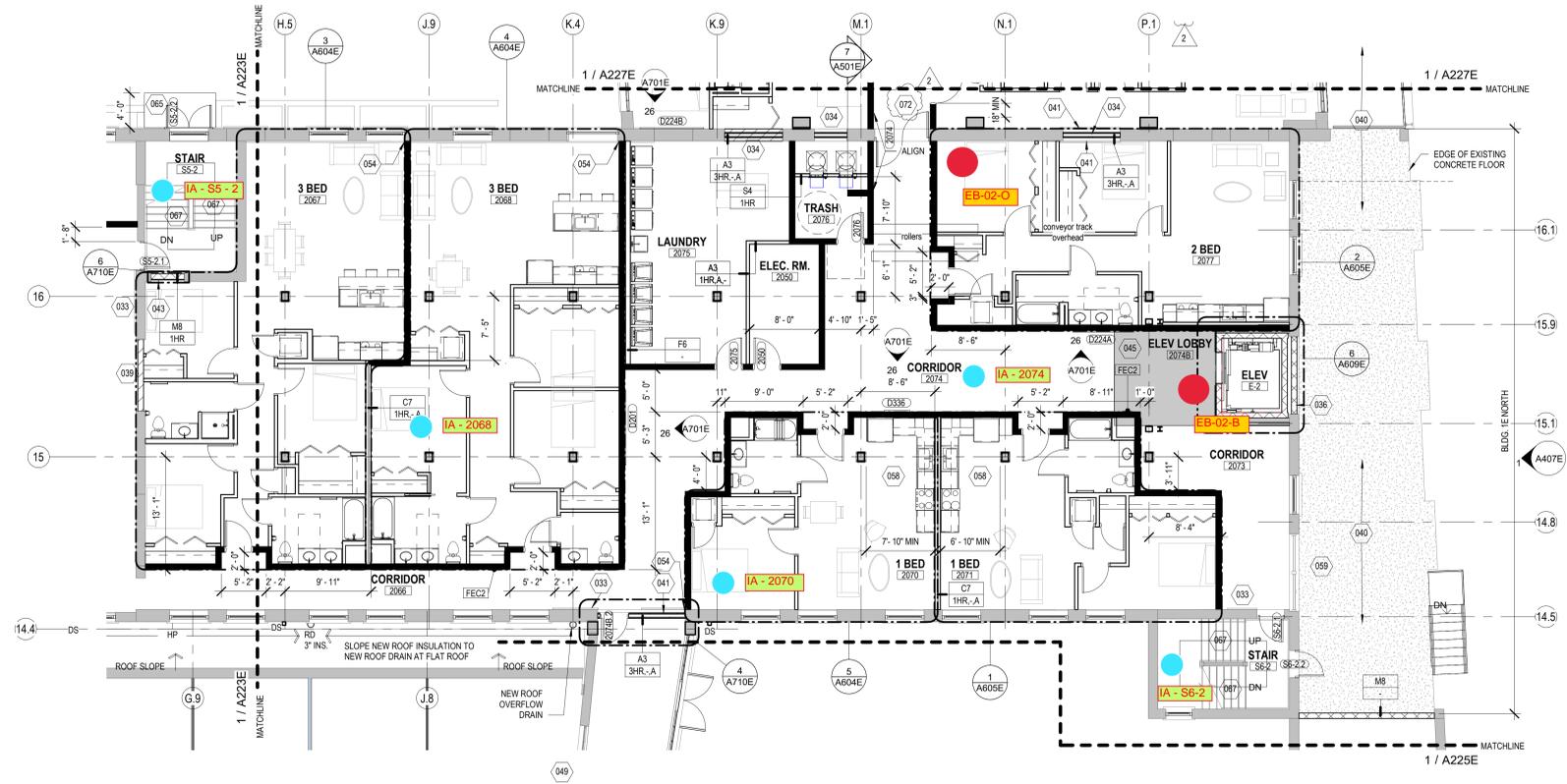


T 414.220.9640
751 N Jefferson St.
Suite 200
Milwaukee, WI 53202

CONSULTANTS:

LEGEND

- Passive Sampler Locations
- GC Sample Locations
- Additional Passive Sampler Locations added per WDNr's Feedba



COMMUNITY WITHIN THE CORRIDOR - EAST BLOCK

3100 W. Center Street
Milwaukee, WI 53210

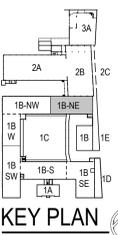
SHEET TITLE
NEW WORK PLAN - LEVEL 02, BLDG 1B (NE) & 1E NORTH

REVISIONS:

2 10/13/20 Addendum
ddendum#2

SCALE	VARIES
PROJECT NUMBER	200102
SET TYPE	CONSTRUCTION DOCUMENTS
DATE ISSUED	09/25/20
SHEET NUMBER	A224E

1 NEW WORK PLAN - LEVEL 02, BLDG 1B (NE) & 1E NORTH



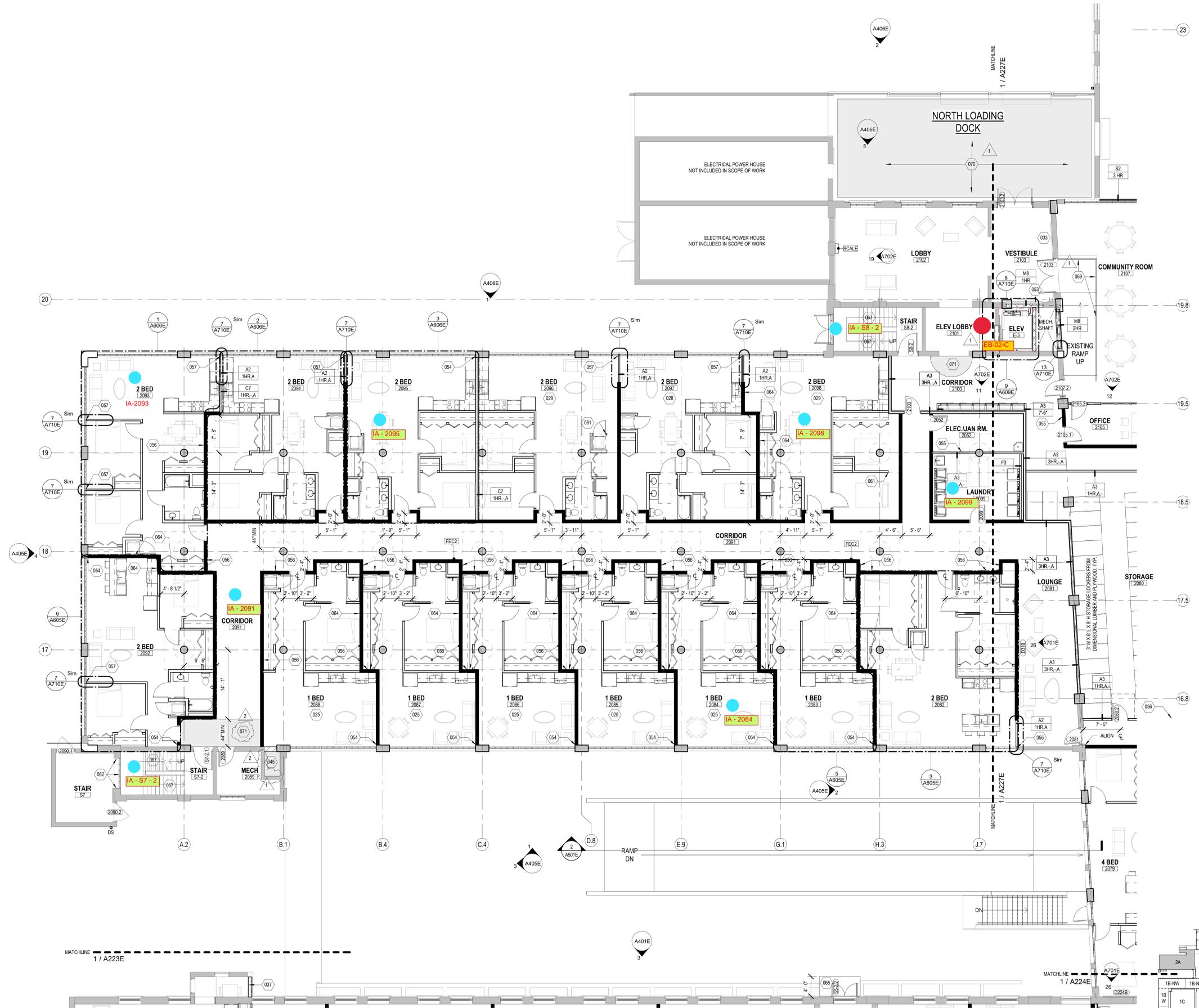
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Attachment A
GC and Passive Air Sampling Locations
Level 2 - Building 2A



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Suite 200
Milwaukee, WI 53202

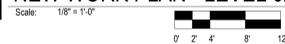
CONSULTANTS:



LEGEND

- Passive Sampler Locations
- GC Sample Locations
- Additional Passive Sampler Locations added per WDNR's Feedback

1 NEW WORK PLAN - LEVEL 02, BLDG 2A



KEY PLAN

COMMUNITY WITHIN THE CORRIDOR - EAST BLOCK

3100 W. Center Street
Milwaukee, WI 53210
SHEET TITLE
NEW WORK PLAN - LEVEL 02, BLDG 2A

REVISIONS:	DATE	DESCRIPTION
1	10/09/20	ADDENDUM #1
2	10/13/20	ADDENDUM #2

SCALE	VARIES
PROJECT NUMBER	200102
SET TYPE	CONSTRUCTION DOCUMENTS
DATE ISSUED	09/25/20
SHEET NUMBER	A226E

Attachment A
GC and Passive Air Sampling Locations
Level 2 - Building 2B and 2C

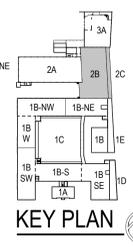
CONSULTANTS:



LEGEND

- Passive Sampler Locations
- GC Sample Locations
- Additional Passive Sampler Locations added per WDNR's Feedback

1 NEW WORK PLAN - LEVEL 02, BLDG 2B & 2C
Scale: 1/8" = 1'-0"



COMMUNITY WITHIN THE CORRIDOR - EAST BLOCK

3100 W. Center Street
Milwaukee, WI 53210

SHEET TITLE
NEW WORK PLAN - LEVEL 02, BLDG 2B & 2C

REVISIONS:
1 10/09/20 Addendum
ddendum #1

SCALE	VARIES
PROJECT NUMBER	200102
SET TYPE	CONSTRUCTION DOCUMENTS
DATE ISSUED	09/25/20
SHEET NUMBER	A227E

Attachment A
GC and Passive Air Sampling Locations
Level 3 - Building 1B-S and 1B-SW



T 414.220.9640
751 N Jefferson St.
Suite 200
Milwaukee, WI 53210

CONSULTANTS:

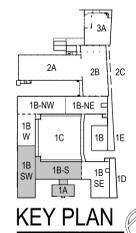
LEGEND

- Passive Sampler Locations
- GC Sample Locations
- Additional Passive Sampler Locations added per WDNR's Feedback



1 NEW WORK PLAN - LEVEL 02, BLDG 1A & LEVEL 03, BLDG 1B (SW & S)

Scale: 1/8" = 1'-0"
0 2 4 8 12



COMMUNITY WITHIN THE CORRIDOR - EAST BLOCK

2748 N. 32nd Street
Milwaukee, WI 53210

SHEET TITLE
NEW WORK PLAN - LEVEL 02, BLDG 1A & LEVEL 03, BLDG 1B (SW & S)

REVISIONS:

SCALE	VARIES
PROJECT NUMBER	200102
SET TYPE	CONSTRUCTION DOCUMENTS
DATE ISSUED	09/25/20
SHEET NUMBER	A231E

Attachment A
GC and Passive Air Sampling Locations
Level 3 - Building 1B-SE

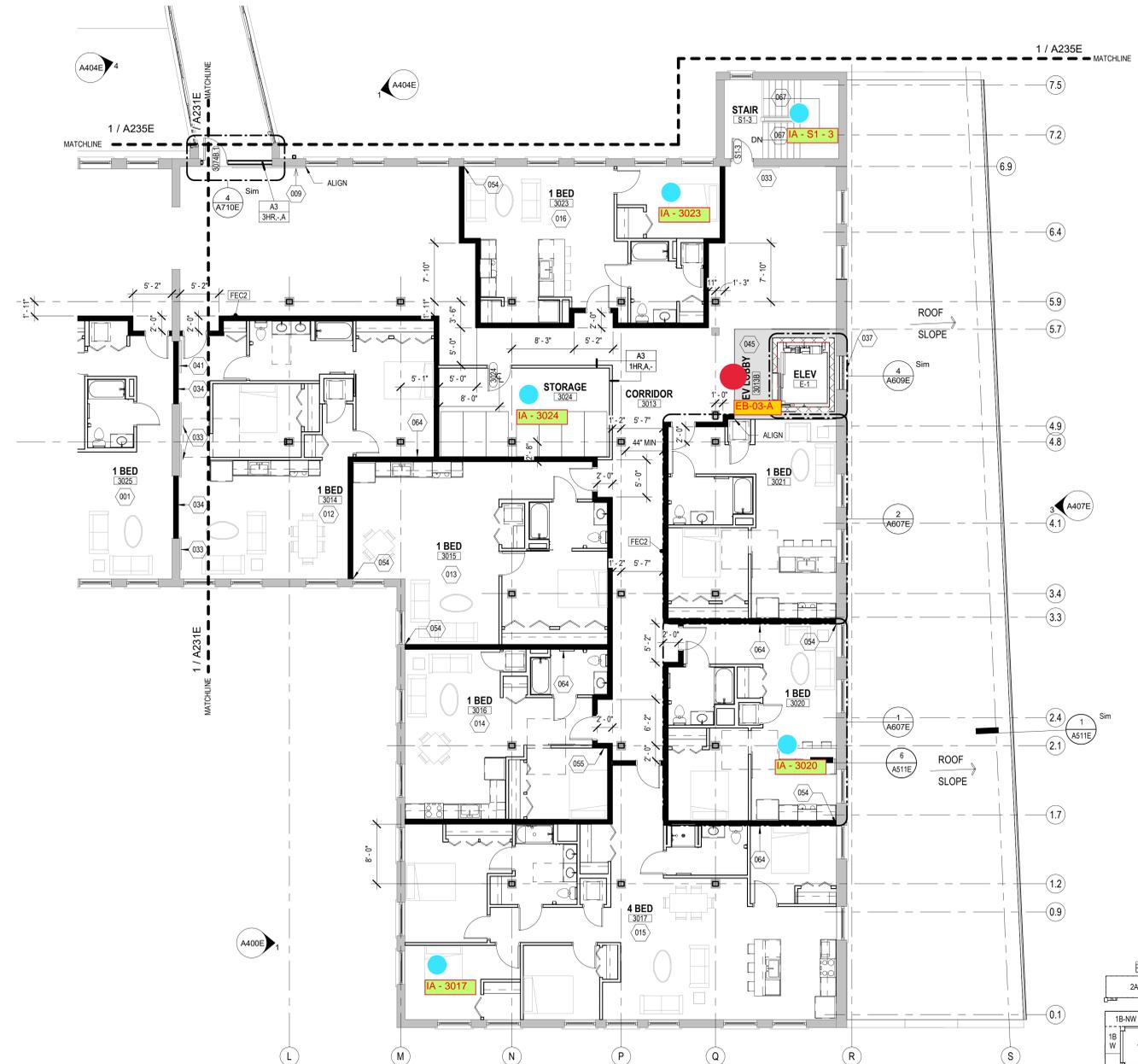


T 414.220.9640
751 N Jefferson St.
Suite 200
Milwaukee, WI 53202

CONSULTANTS:

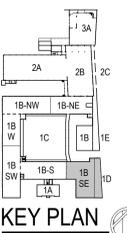
LEGEND

- Passive Sampler Locations
- GC Sample Locations
- Additional Passive Sampler Locations added per WDNR's Feedback



1 NEW WORK PLAN - LEVEL 03, BLDG 1B (SE)

Scale: 1/8" = 1'-0"
0' 2' 4' 8' 12'



COMMUNITY WITHIN THE CORRIDOR - EAST BLOCK

2748 N. 32nd Street
Milwaukee, WI 53210

SHEET TITLE
NEW WORK PLAN - LEVEL 03, BLDG 1B (SE)

REVISIONS:

SCALE	VARIES
PROJECT NUMBER	200102
SET TYPE	CONSTRUCTION DOCUMENTS
DATE ISSUED	09/25/20
SHEET NUMBER	A232E

Attachment A
GC and Passive Air Sampling Locations
Level 3 - Building 1B-W and 1B-NW



T 414.220.9640
751 N Jefferson St.
Suite 200
Milwaukee, WI 53202

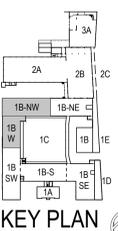
CONSULTANTS:

LEGEND

- Passive Sampler Locations
- GC Sample Locations
- Additional Passive Sampler Locations added per WDNR's Feedback



1 NEW WORK PLAN - LEVEL 03, BLDG 1B (NW & W)
Scale: 1/8" = 1'-0"
0' 2' 4' 8' 12'



COMMUNITY WITHIN THE CORRIDOR - EAST BLOCK

2748 N. 32nd Street
Milwaukee, WI 53210

SHEET TITLE
NEW WORK PLAN - LEVEL 03, BLDG 1B (NW & W)

REVISIONS:

SCALE	VARIES
PROJECT NUMBER	200102
SET TYPE	CONSTRUCTION DOCUMENTS
DATE ISSUED	09/25/20
SHEET NUMBER	A233E

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Attachment A
GC and Passive Air Sampling Locations
Level 3 - Building 1B-NE and 1E-N

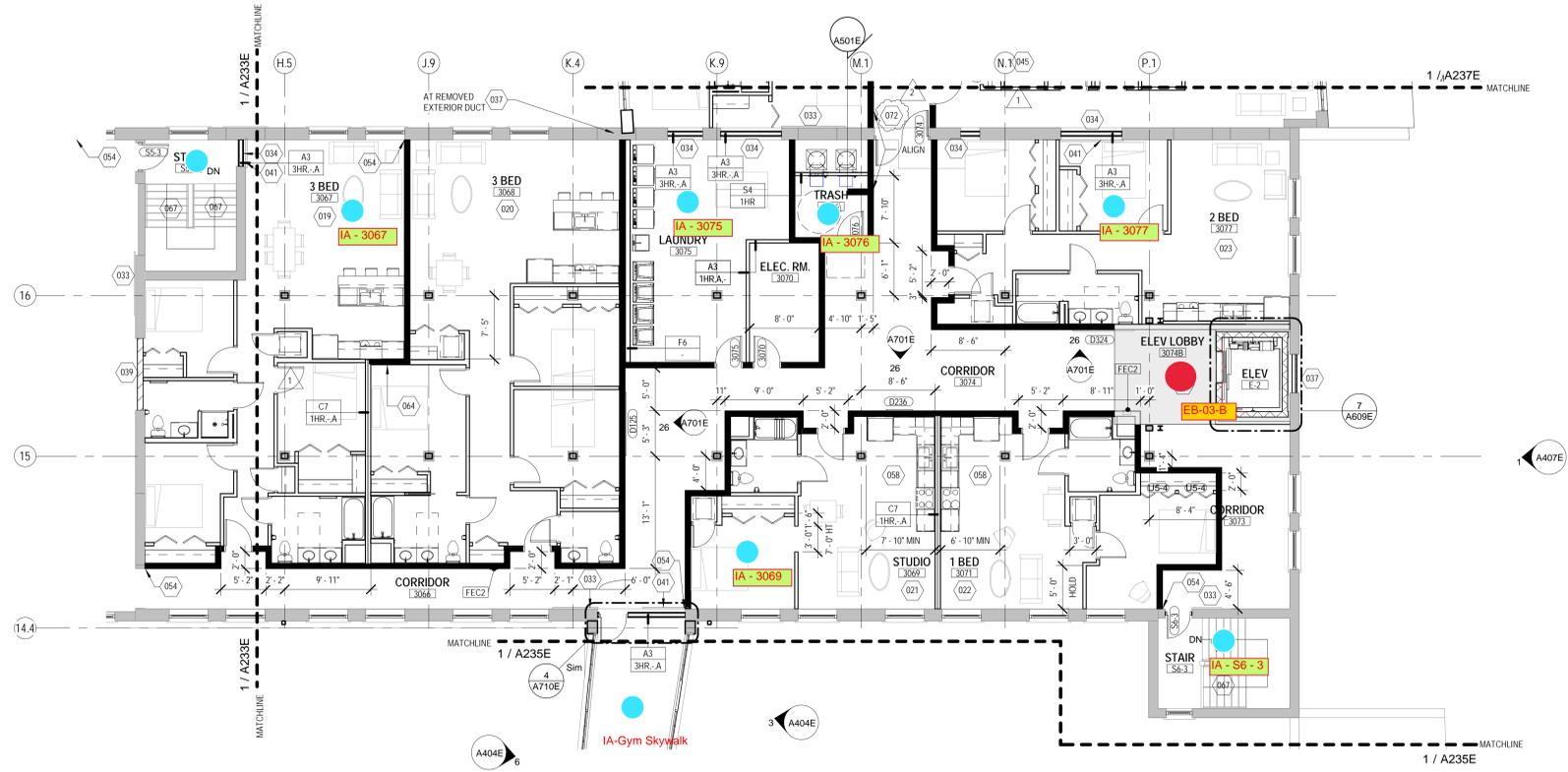


T 414.220.9640
751 N Jefferson St.
Suite 200
Milwaukee, WI 53202

CONSULTANTS:

LEGEND

- Passive Sampler Locations
- GC Sample Locations
- Additional Passive Sampler Locations added per WDNR's Feedback



COMMUNITY WITHIN THE CORRIDOR - EAST BLOCK

3100 W. Center Street
Milwaukee, WI 53210
SHEET TITLE:
NEW WORK PLAN - LEVEL 03, BLDG 1B (NE) & 1E NORTH

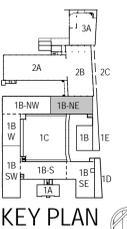
REVISIONS:

- | | | |
|---|----------|-------------|
| 1 | 10/09/20 | Addendum #1 |
| 2 | 10/13/20 | Addendum #2 |

SCALE	VARIES
PROJECT NUMBER	200102
SET TYPE	CONSTRUCTION DOCUMENTS
DATE ISSUED	09/25/20
SHEET NUMBER	A234E

1 NEW WORK PLAN - LEVEL 03, BLDG 1B (NE) & 1E NORTH

Scale: 1/8" = 1'-0"

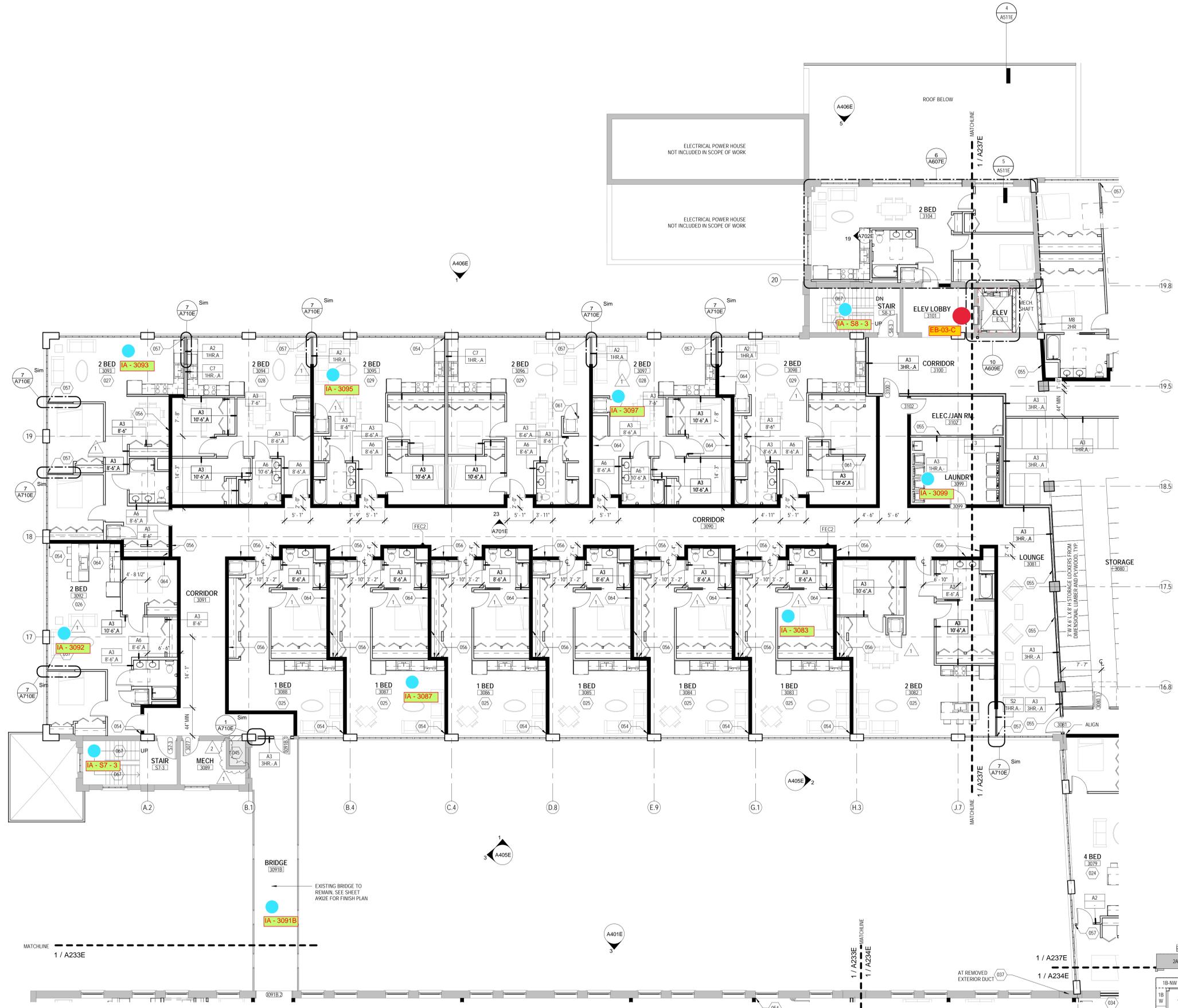


Attachment A
GC and Passive Air Sampling Locations
Level 3 - Building 2A



T 414.220.9640
751 N Jefferson St.
Suite 200
Milwaukee, WI 53202

CONSULTANTS:



LEGEND

- Passive Sampler Locations
- GC Sample Locations
- Additional Passive Sampler Locations added per WDNR's Feedba

1 NEW WORK PLAN - LEVEL 03, BLDG 2A

Scale: 1/8" = 1'-0"



KEY PLAN

COMMUNITY WITHIN THE CORRIDOR - EAST BLOCK

3100 W. Center Street
Milwaukee, WI 53210
SHEET TITLE
NEW WORK PLAN - LEVEL 03, BLDG 2A

REVISIONS:

- 1 10/09/20 Addendum #1
- 2 10/13/20 Addendum #2

SCALE VARIES

PROJECT NUMBER 200102

SET TYPE CONSTRUCTION DOCUMENTS

DATE ISSUED 09/25/20

SHEET NUMBER **A236E**

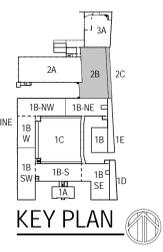
Attachment A
GC and Passive Air Sampling Locations
Level 3 - Building 2B

CONSULTANTS:



- LEGEND**
- Passive Sampler Locations
 - GC Sample Locations
 - Additional Passive Sampler Locations added per WDNr's Feedback

1 NEW WORK PLAN - LEVEL 03, BLDG 2B
Scale: 1/8" = 1'-0"
0' 2' 4' 8' 12'



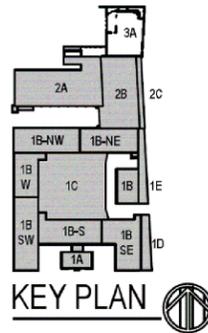
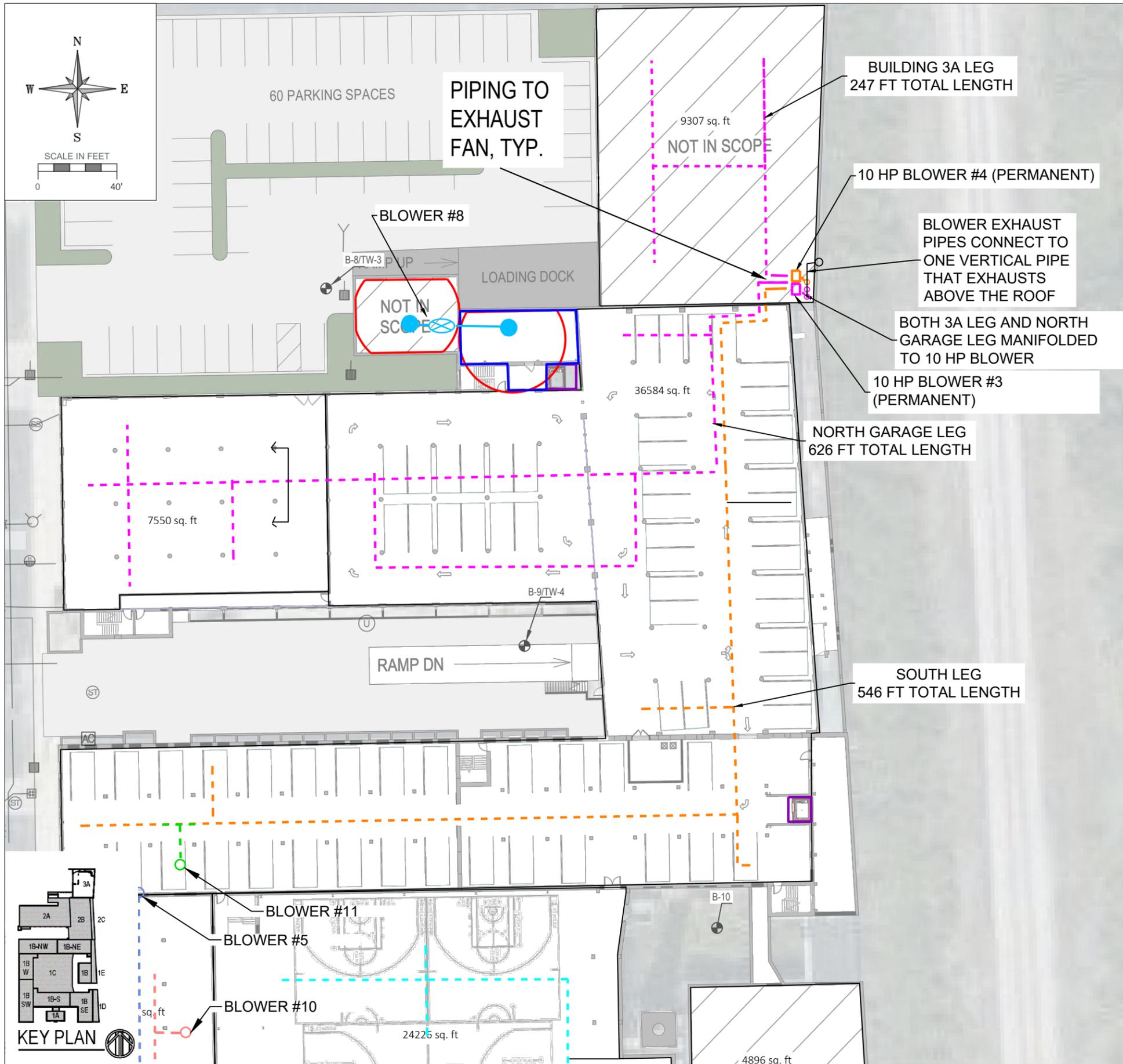
COMMUNITY WITHIN THE CORRIDOR - EAST BLOCK
3100 W. Center Street
Milwaukee, WI 53210
SHEET TITLE: NEW WORK PLAN - LEVEL 03, BLDG 2B

REVISIONS:
1 10/09/20# Addendum 1

SCALE	VARIES
PROJECT NUMBER	200102
SET TYPE	CONSTRUCTION DOCUMENTS
DATE ISSUED	09/25/20
SHEET NUMBER	A237E

ATTACHMENT B

Vapor Mitigation System Layout



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
- Slotted Horizontal Extraction Piping (North Garage and 3A leg)
- Slotted Horizontal Extraction Piping (SW Garage)
- Slotted Horizontal Extraction Piping (SE leg)
- Slotted Horizontal Extraction Piping (Building 1B-S leg)
- Slotted Horizontal Extraction Piping (Gym leg)
- Slotted Horizontal Extraction Piping (Building 1B-SW leg)
- Slotted Horizontal Extraction Piping (Building 1B-W Hallway)
- Slotted Horizontal Extraction Piping (Building 1B-W leg)
- Slotted Horizontal Extraction Piping (Units 1044, 1045, 1050)
- Slotted Horizontal Extraction Piping (Laundry Room, Mechanical Room, Storage Room)
- Slotted Horizontal Extraction Piping (SW Garage Connection)

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

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

SHEET TITLE

VAPOR MITIGATION
AS-BUILT LAYOUT SOUTH

