August 31, 2022

TRANSMITTED ELECTRONICALLY: kyle.forster@dec.ny.gov

Mr. Kyle Forster
Environmental Engineer
New York State Department of Environmental Conservation
625 Broadway
Albany, New York 12233

RE: Vapor Intrusion Mitigation System Installation
Building 403 - Glenville Business and Technology Park
Glenville, New York 12302
CHA Project No. 072605.000

Dear Mr. Forster,

As you may recall, BelGioioso Cheese (BelGioioso) constructed a new manufacturing facility in the Glenville Business and Technology Park located at 2165 Amsterdam Road, in the Town of Glenville, New York approximately two years ago and installed a sub-slab depressurization system (SSDS) as part of the new construction. Belgioioso is now proposing to expand its operations into a portion of Building 403, which is an existing structure within the park. The attached drawings include the results of the recent sub-slab vacuum extension testing that was performed inside the building as well as the proposed SSDS design for the portion of the building Belgioioso intends to occupy.

Building 403 was historically part of the Scotia Depot, commissioned as a United States Navy facility, and served as a storage and supply depot for naval forces along the Atlantic Coast and Europe, and as a storage and distribution point for National Stockpile Materials. The entire former depot property is currently listed in the New York State Inactive Hazardous Waste Disposal Site Remedial Program, Site No. 447023 due to historical releases that resulted in subsurface contamination. While most of the contamination at the Site has been remediated or is currently being addressed, a potential exists at the facility for vapors resulting from the remaining contamination to migrate into structures and impact indoor air quality. Therefore, the attached design drawings were prepared for the installation of an active SSDS to mitigate any vapors that may result from vapor intrusion into Building 403.

III Winners Circle, PO Box 5269, Albany, NY 12205-0269
T 518.453.4500 • F 518.458.1735 • www.chacompanies.com

Please review the attached drawings and let us know if you should have any questions or comments. You may contact me at your convenience at ssmith2@chacompanies.com or (315) 257-7227. If the documents are satisfactory to the Department, please provide written approval for our records.

Sincerely,

Scott M. Smith, P.E.
Vice President

SMS/

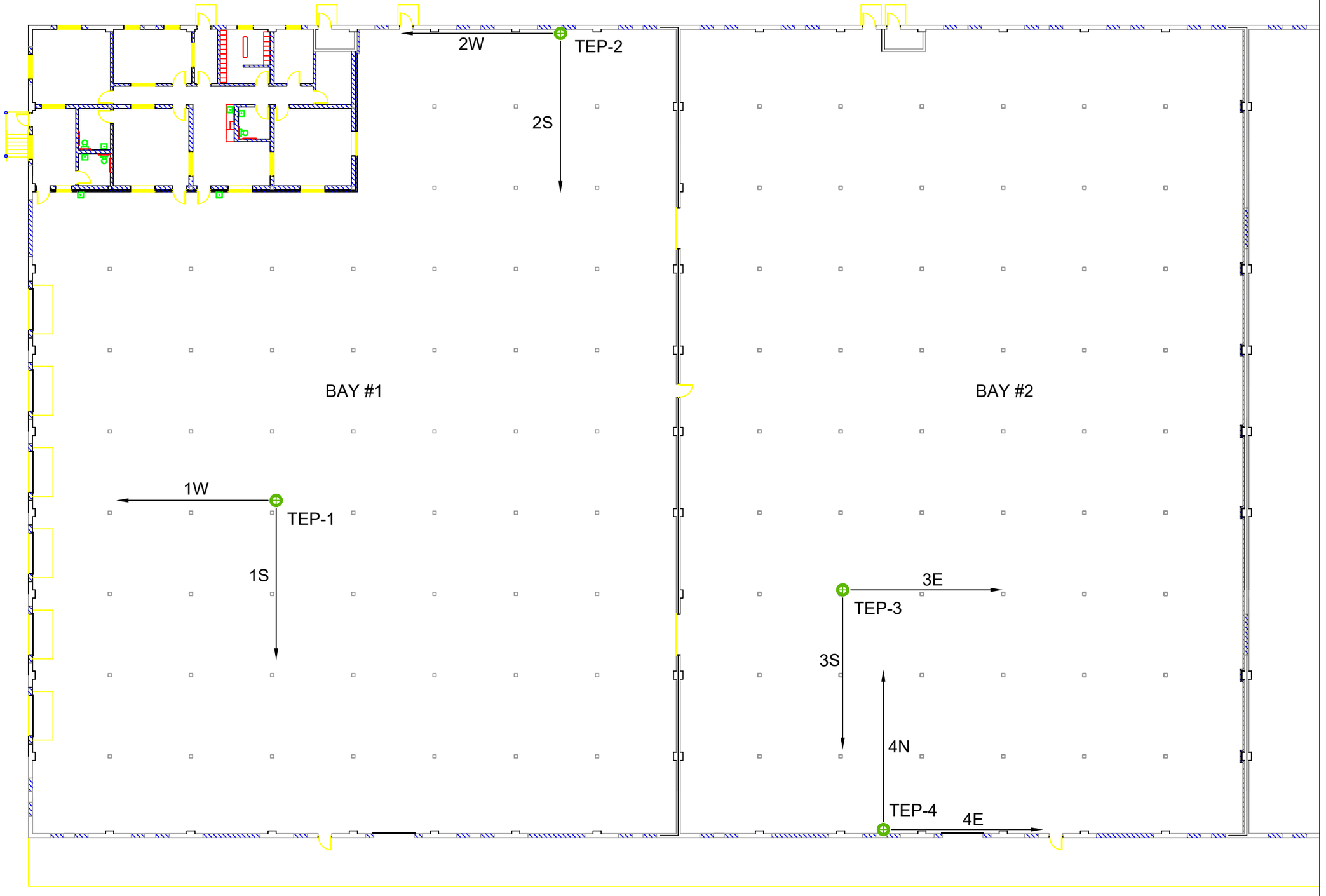
Enclosures: Sub-Slab Vapor Mitigation System Drawings

ecc: Andrew McKay (LeChase)
Ken Baker (LeChase)
Timothy Cronin (Belgioioso)
Keith Cowan (CHA)

\\cha-llp.com\proj\Projects\ANY\K6\072605.000\04_Corres\Outgoing\2022-09-01_CHA to DEC - Submission of Vapor Mitigation System Design for Belgioioso.docx

ATTACHMENT

Sub-Slab Vapor



Alpine Inc.
ENVIRONMENTAL SERVICES

DATE:
July 2022

Bldg 403
Glenville Business Technology Park
Scotia, New York 12302

DESCRIPTION:	DATE:
Draft	July 28, 2022

PROJECT NO:

SHEET NO:

V-1

SHEET TITLE:	Sub-Slab Vacuum Extension Test Locations		
DRAWN BY:	BG	CHECKED BY:	MS

Test Vacuum Application Location Identification: TEP-1

		No Fan	Fantech RN4 Speed: 10	Pressure Tech PT16 Speed: N/A	Radonaway HS5500 Speed: Medium	Radonaway HS5500 Speed: Max
Fan Pressure (" WC)		N/A	4.23" WC	10.89" WC	15.0" WC	16.0" WC
Discharge Opening (inches)		N/A	5.5"	4.5"	2.0"	2.0"
Fan Airflow (cfm)		N/A	63.0 cfm	23.5 cfm	50.0 cfm	57.0 cfm
Test Location ID	Distance to Test Location (ft)	Sub-slab to room differential pressure reading In inches of water column (" WC)				
1-01S	20	0.000	-0.029	-0.080	-0.135	-0.137
1-02S	25	0.000	-0.020	-0.067	-0.109	-0.097
1-03S	30	0.000	-0.002	-0.048	-0.071	-0.068
1-04S	35	0.000	0.000	-0.018	-0.016	-0.020
1-05S	40	0.000	0.000	-0.018	-0.016	-0.020
1-06S	45	0.000	0.000	-0.012	-0.016	-0.021
1-07S	50	0.000	0.000	-0.003	-0.011	-0.019
1-08S	55	0.000	0.000	-0.003	-0.006	-0.015
1-09S	60	0.000	0.000	-0.002	-0.004	-0.014
1-10S	65	0.000	0.000	-0.001	-0.002	-0.012
1-11S	70	0.000	0.000	0.000	-0.002	-0.005
1-12S	75	0.000	0.000	0.000	0.000	-0.004
1-13S	80	0.000	0.000	0.000	0.000	-0.001
Direction Change						
1-01W	20	0.000	-0.016	-0.042	-0.066	-0.076
1-02W	25	0.000	-0.012	-0.023	-0.048	-0.063
1-03W	30	0.000	0.000	-0.022	-0.024	-0.025
1-04W	35	0.000	0.000	-0.026	-0.032	-0.032
1-05W	40	0.000	0.000	-0.014	-0.025	-0.030
1-06W	45	0.000	0.000	-0.005	-0.018	-0.018
1-07W	50	0.000	0.000	0.000	-0.009	-0.016

Test Vacuum Application Location Identification: TEP-2

		No Fan	Fantech RN4 Speed: 10	Pressure Tech PT16 Speed: N/A	Radonaway HS5500 Speed: Max
Fan Pressure (" WC)		N/A	3.91" WC	3.97" WC	3.0" WC
Discharge Opening (inches)		N/A	5.5"	4.5"	2.0"
Fan Airflow (cfm)		N/A	82 cfm	52 cfm	64 cfm
Test Location ID	Distance to Test Location (ft)	Sub-slab to room differential pressure reading In inches of water column (" WC)			
2-01W	20	0.000	-0.029	-0.080	-0.135
2-02W	25	0.000	-0.020	-0.067	-0.109
2-03W	30	0.000	-0.002	-0.048	-0.071
2-04W	35	0.000	0.000	-0.018	-0.016
2-05W	40	0.000	0.000	-0.018	-0.016
2-06W	45	0.000	0.000	-0.012	-0.016
2-07W	50	0.000	0.000	-0.003	-0.011
Direction Change					
2-01S	20	0.000	0.000	-0.016	-0.011
2-02S	25	0.000	0.000	-0.007	-0.011
2-03S	30	0.000	0.000	-0.007	-0.010
2-04S	35	0.000	0.000	-0.006	-0.006
2-05S	40	0.000	0.000	-0.004	0.000
2-06S	45	0.000	0.000	0.000	0.000
2-07S	50	0.000	0.000	0.000	0.000
2-08S	55	0.000	0.000	0.000	0.000
2-09S	60	0.000	0.000	0.000	0.000
2-10S	65	0.000	0.000	0.000	0.000
2-11S	70	0.000	0.000	0.000	0.000
2-12S	75	0.000	0.000	0.000	0.000
2-13S	80	0.000	0.000	0.000	0.000

Test Vacuum Application Location Identification: TEP-3

		No Fan	Fantech RN4 Speed: 10	Pressure Tech PT16 Speed: N/A	Radonaway HS5500 Speed: Max
Fan Pressure (" WC)		N/A	4.8" WC	10.46" WC	17.0" WC
Discharge Opening (inches)		N/A	5.5"	4.5"	2.0"
Fan Airflow (cfm)		N/A	18 cfm	27 cfm	56 cfm
Test Location ID	Distance to Test Location (ft)	Sub-slab to room differential pressure reading In inches of water column (" WC)			
3-01E	20	0.000	-0.022	-0.045	-0.115
3-02E	25	0.000	-0.013	-0.033	-0.062
3-03E	30	0.000	-0.006	-0.032	-0.058
3-04E	35	0.000	0.000	-0.028	-0.038
3-05E	40	0.000	0.000	-0.016	-0.028
3-06E	45	0.000	0.000	-0.006	-0.018
3-07E	50	0.000	0.000	0.000	-0.018
3-08E	55	0.000	0.000	0.000	-0.009
3-09E	60	0.000	0.000	0.000	-0.001
Direction Change					
3-01S	20	0.000	-0.013	-0.042	-0.088
3-02S	25	0.000	0.000	-0.016	-0.046
3-03S	30	0.000	0.000	-0.018	-0.027
3-04S	35	0.000	0.000	-0.006	-0.006
3-05S	40	0.000	0.000	0.000	-0.013
3-06S	45	0.000	0.000	-0.006	-0.009
3-07S	50	0.000	0.000	0.000	-0.003
3-08S	55	0.000	0.000	0.000	-0.003
3-09S	60	0.000	0.000	0.000	-0.001

Test Vacuum Application Location Identification: TEP-4

		No Fan	Fantech RN4 Speed: 10	Pressure Tech PT16 Speed: N/A	Radonaway HS5500 Speed: Max
Fan Pressure (" WC)		N/A	4.3" WC	2.6" WC	2.0" WC
Discharge Opening (inches)		N/A	5.5"	4.5"	2.0"
Fan Airflow (cfm)		N/A	46 cfm	55 cfm	65 cfm
Test Location ID	Distance to Test Location (ft)	Sub-slab to room differential pressure reading In inches of water column (" WC)			
4-01N	20	0.000	-0.013	-0.003	-0.010
4-02N	25	0.000	-0.011	-0.002	-0.010
4-03N	30	0.000	-0.001	0.000	-0.007
4-04N	35	0.000	0.000	0.000	0.000
4-05N	40	0.000	0.000	0.000	0.000
4-06N	45	0.000	0.000	0.000	0.000
4-07N	50	0.000	0.000	0.000	0.000
4-08N	55	0.000	0.000	0.000	0.000
Direction Change					
4-01E	20	0.000	-0.028	-0.003	-0.014
4-02E	25	0.000	-0.013	-0.002	-0.008
4-03E	30	0.000	-0.010	-0.001	-0.008
4-04E	35	0.000	-0.009	0.000	-0.007
4-05E	40	0.000	-0.004	0.000	-0.006
4-06E	45	0.000	-0.002	0.000	-0.003
4-07E	50	0.000	-0.001	0.000	-0.001

Alpine Inc. ENVIRONMENTAL SERVICES

DATE: July 2022

Bldg 403
Glenville Business Technology Park
Scotia, New York 12302

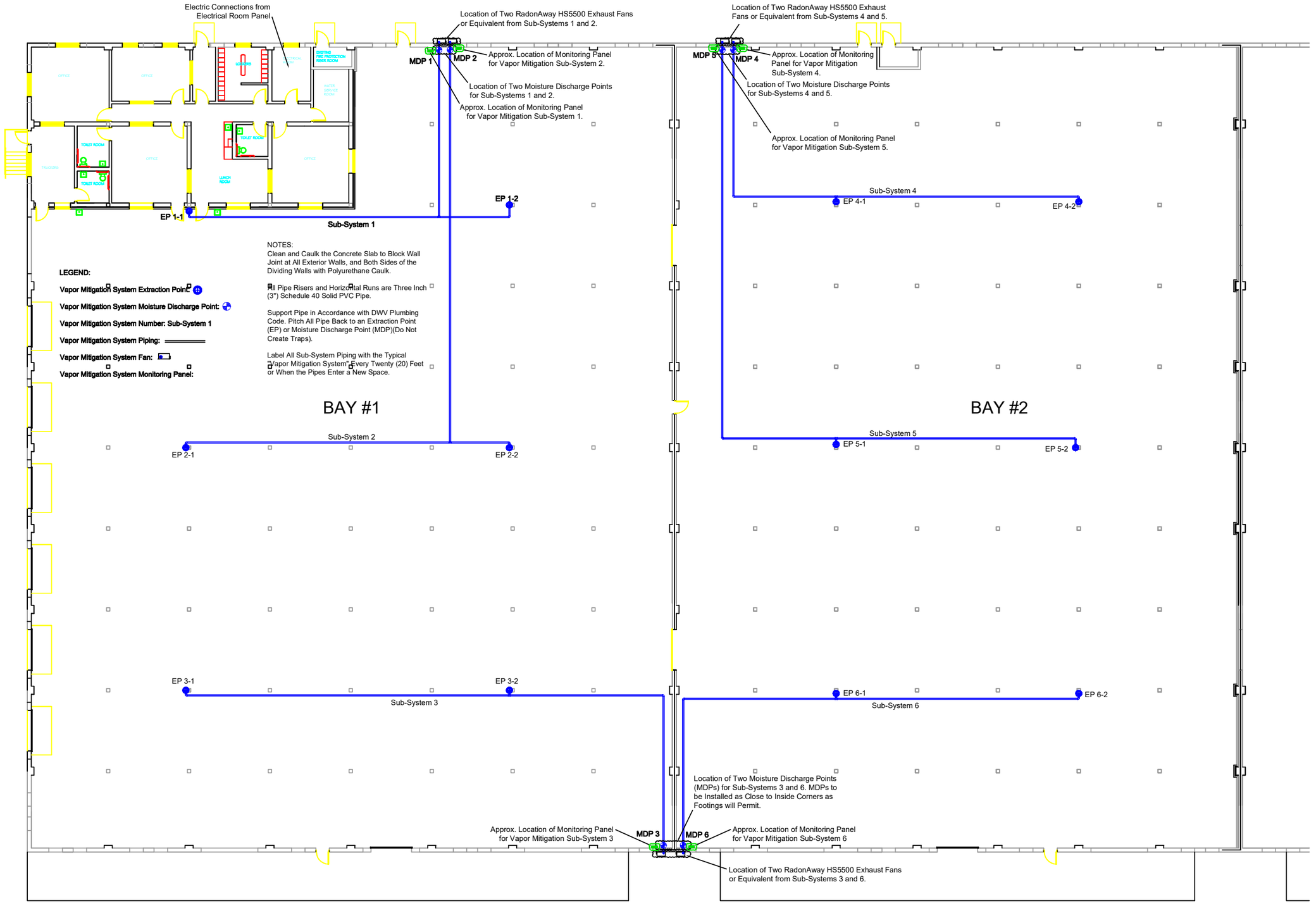
DESCRIPTION:	DATE:
Final	August 18, 2022

PROJECT NO:

SHEET NO:

V-1a

SHEET TITLE:	Sub-Slab Vacuum Extension Test Data		
DRAWN BY:	BG	CHECKED BY:	MS



Alpine Inc. ENVIRONMENTAL SERVICES

DATE: July 2022

Bldg 403
Glenville Business Technology Park
Scotia, New York 12302

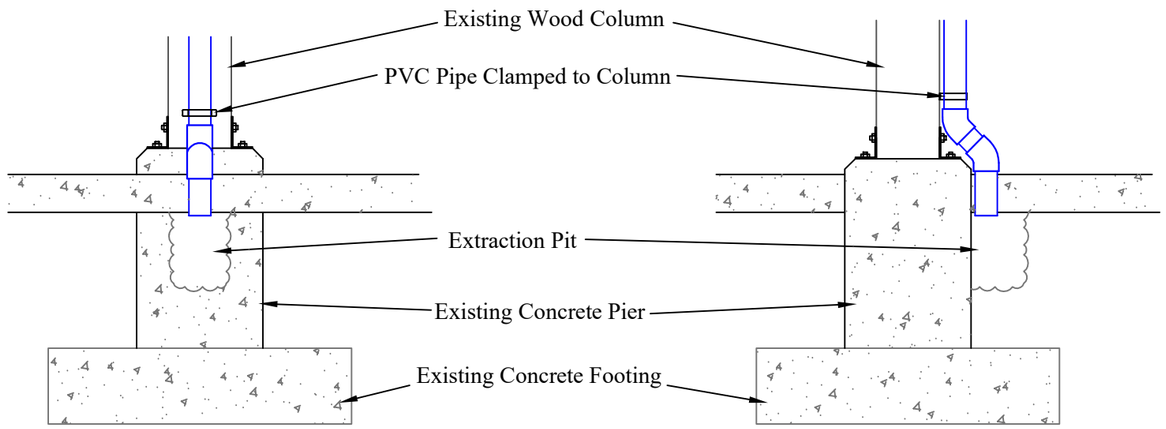
DESCRIPTION:	DATE:
Final	August 18, 2022

PROJECT NO:

SHEET NO:

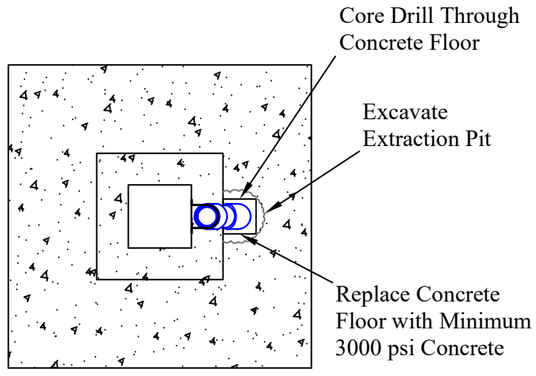
V-2

SHEET TITLE:	Sub-Slab Vapor Mitigation System - System Layout - First Floor			
DRAWN BY:	BG	CHECKED BY:	MS	



EXTRACTION POINT AT COLUMN FOOTINGS END VIEW
NOT TO SCALE

EXTRACTION POINT AT COLUMN FOOTINGS PIPE AT COLUMN BRACKET SIDE VIEW
NOT TO SCALE



EXTRACTION POINT AT COLUMN FOOTINGS TOP VIEW
NOT TO SCALE

Alpine Inc. ENVIRONMENTAL SERVICES

DATE: July 2022

Bldg 403
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Scotia, New York 12302

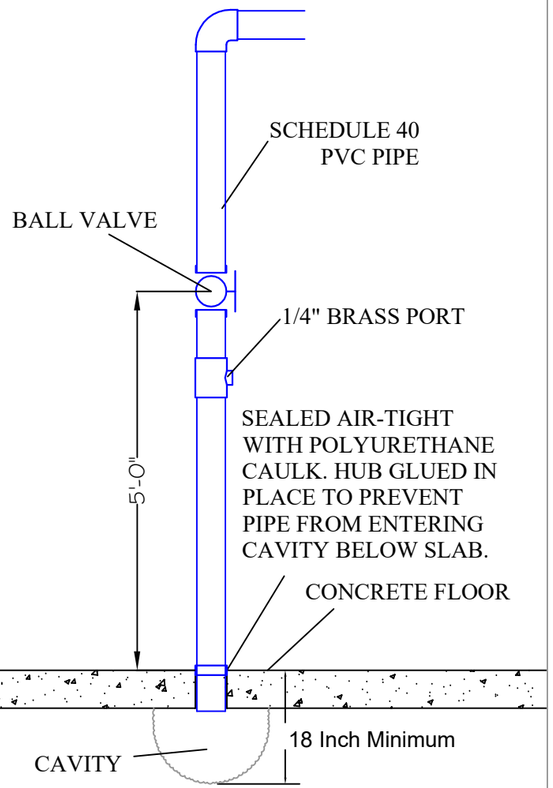
DESCRIPTION:	DATE:
Final	August 18, 2022

PROJECT NO:

SHEET NO:

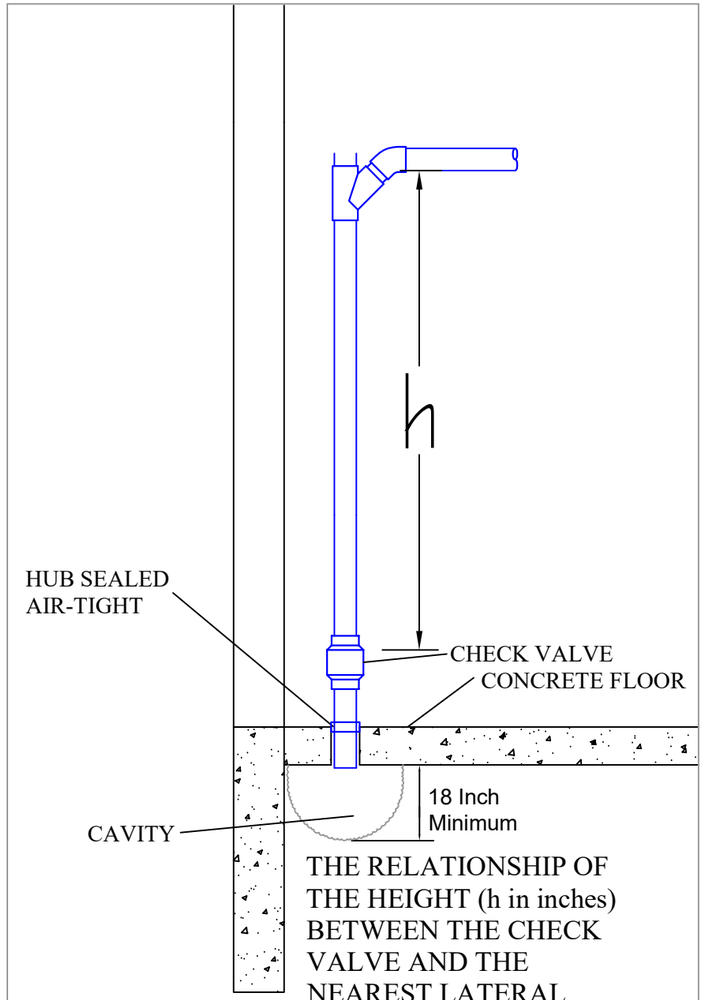
V-3a

SHEET TITLE:	Sub-Slab Vapor Mitigation System - Details 1		
DRAWN BY:	BG	CHECKED BY:	MS



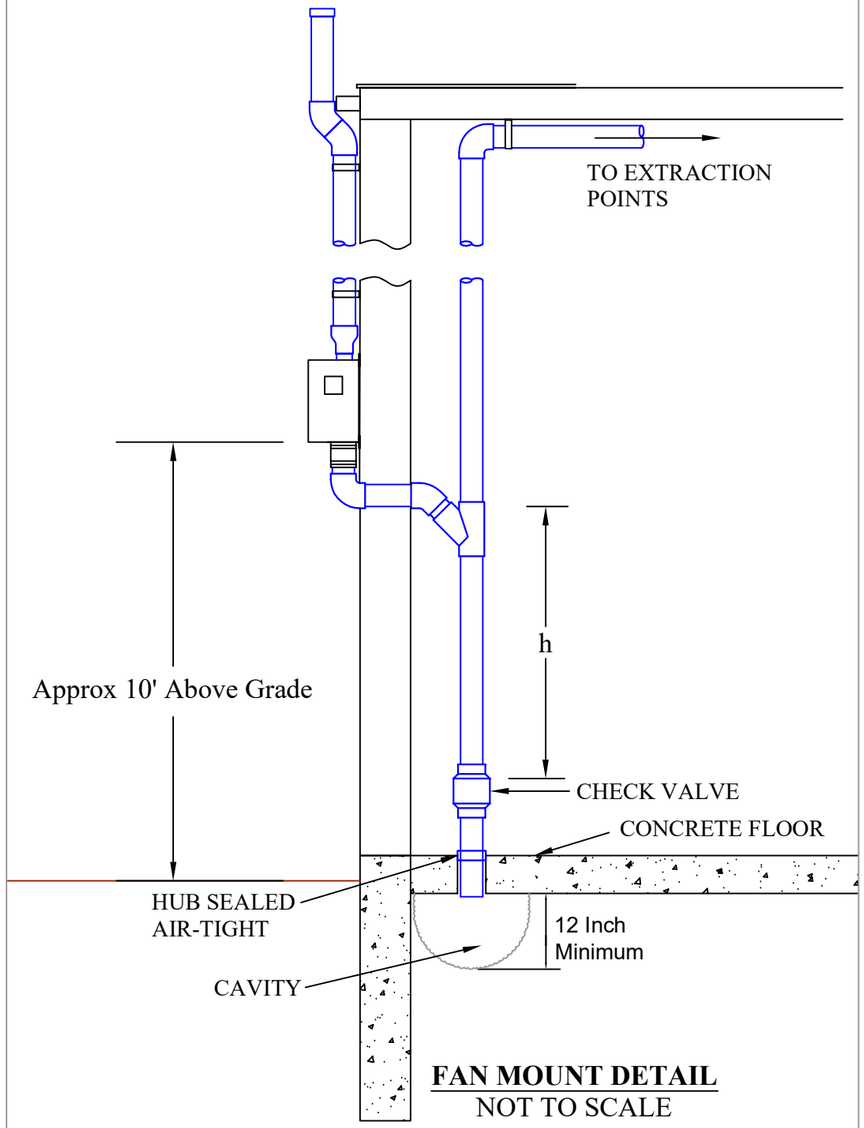
EXTRACTION POINT DETAIL
NOT TO SCALE

REFER TO DRAWING V-3a
FOR ADDITIONAL DETAILS



THE RELATIONSHIP OF THE HEIGHT (h in inches) BETWEEN THE CHECK VALVE AND THE NEAREST LATERAL PIPING ABOVE, AND THE CRACKING FORCE OF THE CHECK VALVE (Pc in pounds) IS AS FOLLOWS:
Pc (pounds) < h/4 (pounds/inch)

MOISTURE DISCHARGE POINT DETAIL
NOT TO SCALE



FAN MOUNT DETAIL
NOT TO SCALE

REFER TO DRAWING V-3c
FOR ADDITIONAL DETAILS

NOTES:
LABEL ALL SUB-SYSTEM PIPING WITH THE TYPICAL "VAPOR MITIGATION SYSTEM"
EVERY 20' OR WHEN PIPE ENTERS A NEW SPACE.

Alpine Inc. ENVIRONMENTAL SERVICES

DATE: July 2022

Bldg 403
Glenville Business Technology Park
Scotia, New York 12302

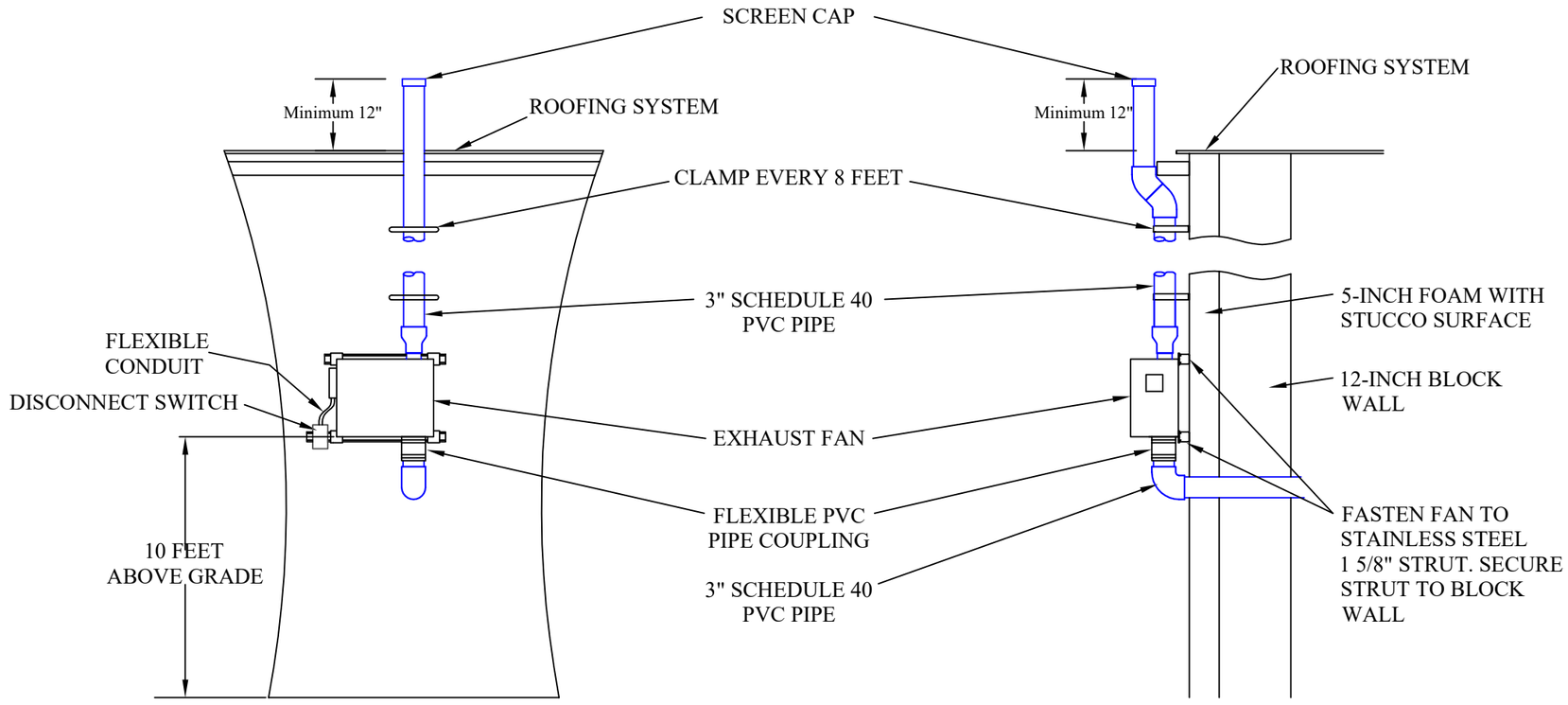
DESCRIPTION:	DATE:
Final	August 18, 2022

PROJECT NO:

SHEET NO:

V-3b

SHEET TITLE:	Sub-Slab Vapor Mitigation System - Details 2		
DRAWN BY:	BG	CHECKED BY:	MS



RADON AWAY HS 5500 FAN MOUNTING DETAIL
WALL MOUNT - FRONT VIEW
NOT TO SCALE

RADON AWAY HS 5500 FAN MOUNTING DETAIL
WALL MOUNT - SIDE VIEW
NOT TO SCALE

NOTE:
ALL STRUTS, CLAMPS, BOLTS, SCREWS, AND FASTENERS ON EXTERIOR TO BE STAINLESS STEEL.

ALL CLAMPS SHALL BE SECURED TO THE BLOCK WALL BEHIND THE STUCCO AND FOAM INSULATION.

Alpine Inc. ENVIRONMENTAL SERVICES

DATE: July 2022

Bldg 403
Glenville Business Technology Park
Scotia, New York 12302

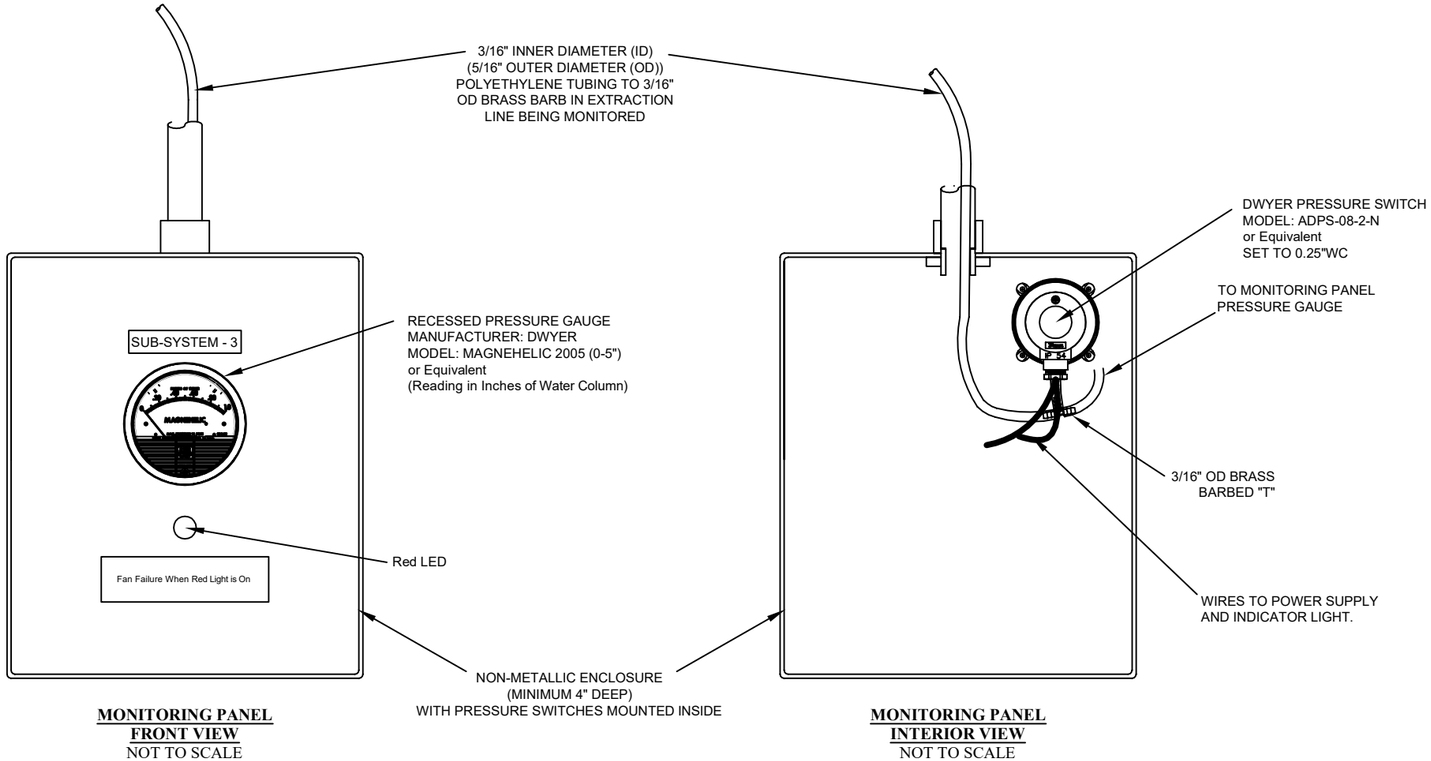
DESCRIPTION:	DATE:
Final	August 18, 2022

PROJECT NO:

SHEET NO:

V-3c

SHEET TITLE:	Sub-Slab Vapor Mitigation System - Details 3		
DRAWN BY:	BG	CHECKED BY:	MS



MONITORING PANEL
FRONT VIEW
NOT TO SCALE

MONITORING PANEL
INTERIOR VIEW
NOT TO SCALE

NOTE:
MONITORING PANEL TO BE MOUNTED AT MOISTURE DISCHARGE POINT OF EACH VAPOR MITIGATION SYSTEM.

ELECTRICIAN TO SUPPLY AND CONNECT A LOW PRESSURE SYSTEM INDICATOR RED LED LIGHT, CONNECTED TO A PRESSURE SWITCH TO ENGAGE WHEN EACH SUB-SYSTEM PRESSURE FALLS BELOW 0.25" WC.

Alpine Inc. ENVIRONMENTAL SERVICES

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Scotia, New York 12302

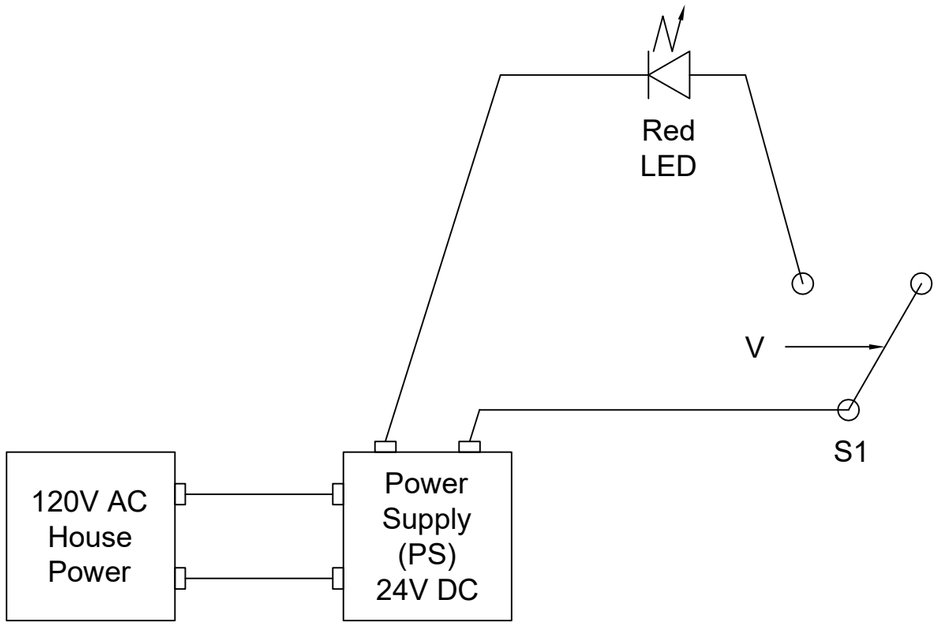
DESCRIPTION:	DATE:
Final	August 18, 2022

PROJECT NO:

SHEET NO:

V-3d

SHEET TITLE:	Sub-Slab Vapor Mitigation System - Details 4			
DRAWN BY:	BG	CHECKED BY:	MS	



INDICATOR PANEL WIRING DIAGRAM
(NTS)

S1: Dwyer Instruments ADPS-03-2-N Adjustable Pressure Switch or Equivalent, Set at 0.25" wc.

LED: UXCell 24V AC/DC Indicator Light, LED. Flush Panel Mount, 22 mm Diameter. (Red)

PS: Power Input: 120 V AC, 60Hz, 60W, Power Output: 24 V AC, 40 VA, UL Approved.

V: Sub-System Vacuum Input Through 3/16" Inner Diameter (5/16" Outer Diameter) Polyethylene Tubing to Pressure Switch Input.

Alpine Inc. ENVIRONMENTAL SERVICES

DATE: July 2022

Bldg 403
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Scotia, New York 12302

DESCRIPTION:	DATE:
Final	August 18, 2022

PROJECT NO:

SHEET NO:

V-3e

SHEET TITLE:	Sub-Slab Vapor Mitigation System - Details 5		
DRAWN BY:	BG	CHECKED BY:	MS