Report By:

National TAB
1329 E. KEMPER ROAD
SUITE 4210
CINCINNATI, OH 45246

Report: UC Pharmacy Relo PH1

Function: Test, Adjust, & Balance

Date: 09/03/2024

PROJECT

UC Pharmacy Relo PH1 (Cincinnati, OH)

3188 BELLEVUE AVENUE

Cincinnati, OH 45219

Client

Thomas J. Dyer Company

5240 Lester Road

Cincinnati, OH 45213

National TAB

Project: UC Pharmacy Relo PH1 (Cincinnati, OH)

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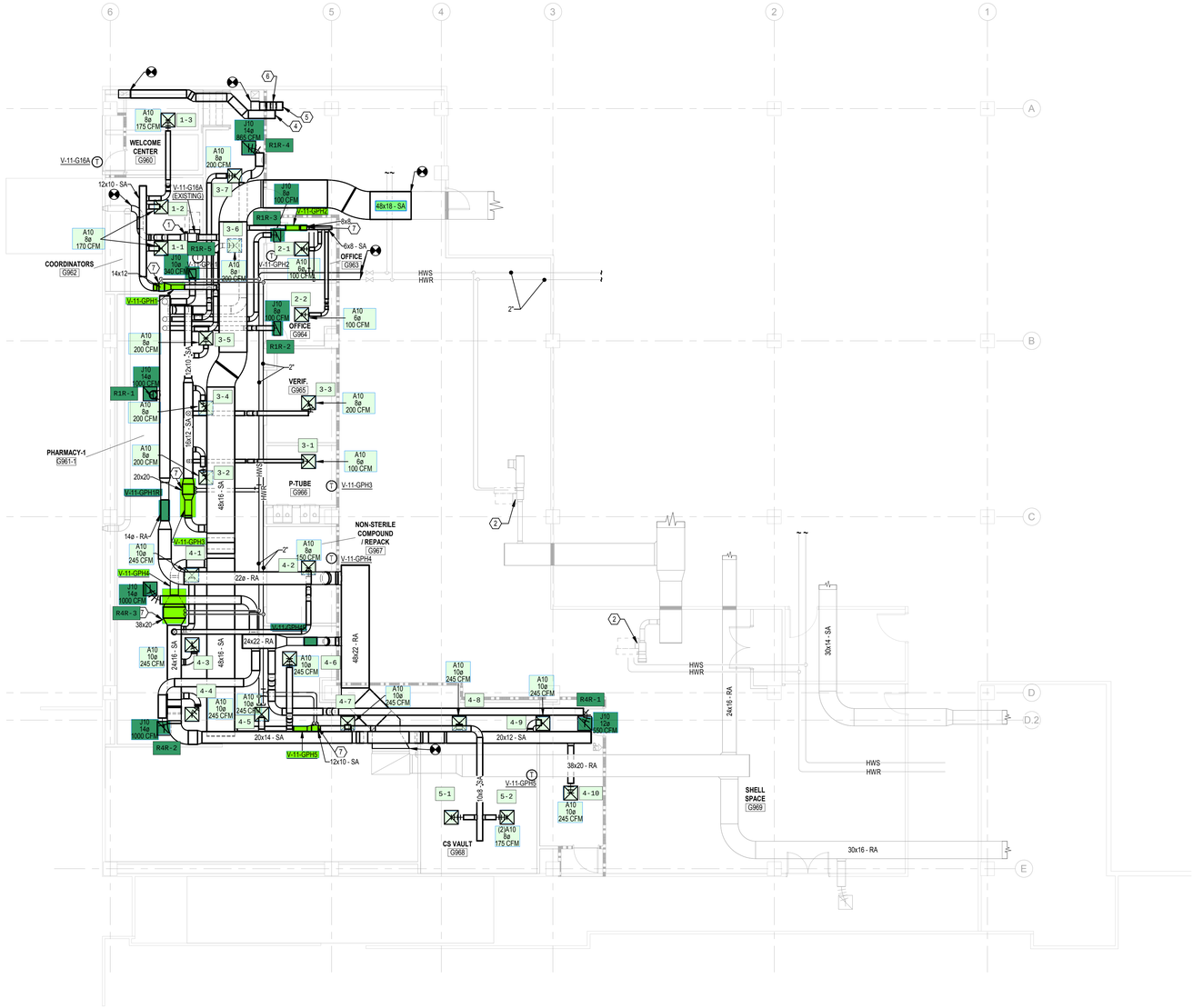
GENERAL NOTES

A. FIRE BARRIERS – OBC 717.5.2 EXCEPTION 3 / FIRE PARTITIONS – OBC 717.5.4 EXCEPTION 4

FIRE DAMPERS ARE NOT REQUIRED (UNLESS SHOWN ON FLOOR PLANS OR SCHEMATICS) AT PENETRATIONS OF FIRE BARRIERS WHERE SUCH WALLS ARE PENETRATED BY DUCTED HVAC SYSTEMS, HAVING A REQUIRED FIRE-RESISTANCE RATING OF 1 HOUR OR LESS IN AREAS OF THERE THAN GROUP H AND ARE IN BUILDINGS EQUIPPED THROUGH WITH AN AUTOMATIC SPRINKLER SYSTEM IN ACCORDANCE WITH SECTION 903.3.1.1 OR 903.1.2. HVAC SYSTEM SHALL BE CONSTRUCTED OF SHEET STEEL NOT LESS THAN 26 GAUGE. FLEXIBLE AIR CONNECTORS SHALL NOT BE PROHIBITED IN FULLY DUCTED SYSTEMS AT AIR HANDLING EQUIPMENT CONNECTIONS AND AT AIR CONNECTORS INSTALLATION TO CONNECT METAL DUCT TO A CEILING DIFFUSER AND IS LOCATED ENTIRELY WITHIN THE SAME ROOM AS THE CEILING DIFFUSER. THE FLEXIBLE AIR CONNECTOR SHALL NOT PAS THOUGH ANY WALLS, FLOORS, OR CEILINGS.

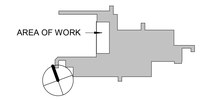
PLAN NOTES:

1. RELOCATE EXISTING VAV LOCATION SHOWN. REBALANCE TO CFM INDICATED.
2. REBALANCE EXISTING VAV TO 650 CFM MAX.
3. RELOCATE EXISTING THERMOSTAT FOR EXISTING VAV. EXTEND CONTROL WIRING FROM THERMOSTAT TO NEW VAV BOX LOCATION. CONNECT TO THE BAS.
4. CAPPED FOR PHASE TWO USP EXHAUST. HC SHALL COORDINATE NEW DAMPER ACCESS DOORS FOR EXISTING FIRE DAMPERS LOCATED IN SLAB ABOVE. DAMPERS SHOULD BE ACCESSIBLE FROM ABOVE CEILING ON GROUND FLOOR OR WALL AND DUCT ACCESS PANELS SHALL BE PROVIDED ON LEVEL 1 ABOVE.
5. CAPPED FOR PHASE TWO GENERAL EXHAUST. HC SHALL COORDINATE NEW DAMPER ACCESS DOORS FOR EXISTING FIRE DAMPERS LOCATED IN SLAB ABOVE. DAMPERS SHOULD BE ACCESSIBLE FROM ABOVE CEILING ON GROUND FLOOR OR WALL AND DUCT ACCESS PANELS SHALL BE PROVIDED ON LEVEL 1 ABOVE.
6. TRANSITION DUCT INTO OPEN SPACE BETWEEN BEAMS.
7. DUCT MOUNTED HEATING COIL FURNISHED WITH AIR VALVE.



1 **PARTIAL GROUND FLOOR PLAN - NEW WORK**
SCALE: 1/8" = 1'-0"

KEY PLAN



HEAPY
P: 937-224-0861 www.heapy.com
PROJECT NO. 2023-05229

STATE OF OHIO
BRIAN G. ARBOGAST
E - 69136
REGISTERED PROFESSIONAL ENGINEER
12/19/2023
2023-05229

12/20/23 Date

1. ISSUED FOR PERMIT AND CONSTRUCTION — Issue/Revision/Submission

BHDP ARCHITECTURE
303 WEST THIRD STREET
DAYTON, OHIO 45402
PHONE 513.271.1634

BHDP

CINCINNATI
COLUMBUS
RALEIGH
CHARLOTTE
www.bhdp.com

xx xx xx xx

UCMC PHASE 1 PHARMACY RELOCATION
3188 BELLEVUE AVENUE
CINCINNATI, OH 45219-2316

PARTIAL GROUND FLOOR PLAN - NEW

Project Manager: Approver
Drawn: SMG
Checked: BWS
Initial Drawing Date: 2023.12.20
Project Number: UCH0316

M101

Autodesk Docs://UCH0316 UCMC Phase I Pharmacy Relocation/2023-05229-MEP-Central.rvt — 12/20/2023 12:48:43 PM

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Project:UC Pharmacy Relo PH1 (Cincinnati, OH)

VAV - Single Duct

AIR VALVES/

Asset									
Asset Name	**Type**	**Inlet Size**	**Design Max CFM**	**Max CFM**	**Design Min CFM**	**Min CFM**	**Design Heat CFM**	**Heat CFM**	**Ak (max)**
V-11-GPH1	VAV		515	499	515	499	0	0	680

Completed By: Riley Frady on 08/20/2024

Diffuser Supply (GRD)

V-11-GPH1/COORDINATORS

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
1-1	G962	A10	8	170	218	163	95.9
1-2	G962	A10	8	170	198	175	102.9
1-3	G960	A10	8	175	169	161	92.0
Total				515	585	499	96.89 %

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VAV - Single Duct

AIR VALVES/

Asset									
Asset Name	**Type**	**Inlet Size**	**Design Max CFM**	**Max CFM**	**Design Min CFM**	**Min CFM**	**Design Heat CFM**	**Heat CFM**	**Ak (max)**
V-11-GPH2	VAV		200	219	200	219	0	0	680

Completed By: Riley Frady on 08/20/2024

Diffuser Supply (GRD)

V-11-GPH2/OFFICE

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
2-1	G963	A10	8	100	118	110	110.0
2-2	G964	A10	8	100	126	109	109.0
Total				200	244	219	109.5%

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VAV - Single Duct

AIR VALVES/

Asset									
Asset Name	**Type**	**Inlet Size**	**Design Max CFM**	**Max CFM**	**Design Min CFM**	**Min CFM**	**Design Heat CFM**	**Heat CFM**	**Ak (max)**
V-11-GPH3	VAV		1300	1325	1300	325	0	0	720

Completed By: Riley Frady on 08/20/2024

Diffuser Supply (GRD)

V-11-GPH3/G968

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
3-1	G966	A10	12	100	122	109	109.0
3-2	G961-1	A10	12	200	269	207	103.5
3-3	G965	A10	12	200	36	210	105.0
3-4	G961-1	A10	12	200	297	215	107.5
3-5	G961-1	A10	12	200	319	211	105.5
3-6	HALL	A10	12	200	278	187	93.5
3-7	HALL	A10	12	200	182	186	93.0
Total				1300	1503	1325	101.92%

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VAV - Single Duct

AIR VALVES/

Asset									
Asset Name	**Type**	**Inlet Size**	**Design Max CFM**	**Max CFM**	**Design Min CFM**	**Min CFM**	**Design Heat CFM**	**Heat CFM**	**Ak (max)**
V-11-GPH4	VAV		2355	2270	2350	2270	0	0	2260

Asset	Notes	Date	Written By
V-11-GPH4	No damper on 4-2 at top of duct, unable to finish device balance	08/20/2024	Riley Frady

Diffuser Supply (GRD)

V-11-GPH4/PHARMACY-1

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
4-1	G961-1	A10	14	245	282	240	98.0
4-2	G967	A10	14	150	202	178	118.7
4-3	G961-1	A10	14	245	314	225	91.8
4-4	G961-1	A10	14	245	233	206	84.1
4-5	G961-1	A10	14	245	321	233	95.1
4-6	G961-1	A10	14	245	259	278	113.5
4-7	HALL	A10	14	245	258	233	95.1
4-8	HALL	A10	14	245	280	259	105.7
4-9	HALL	A10	14	245	239	224	91.4
4-10	G969	A10	14	245	223	194	79.2
Total				2355	2611	2270	96.39 %

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VAV - Single Duct

AIR VALVES/

Asset									
Asset Name	**Type**	**Inlet Size**	**Design Max CFM**	**Max CFM**	**Design Min CFM**	**Min CFM**	**Design Heat CFM**	**Heat CFM**	**Ak (max)**
V-11-GPH5	VAV		350	358	350	358	0	0	676

Completed By: Riley Frady on 08/20/2024

Diffuser Supply (GRD)

V-11-GPH5/PHARMACY-1

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
5-1	G968	A10	8	175	185	167	95.4
5-2	G968	A10	8	175	216	191	109.1
Total				350	401	358	102.29%

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VAV - Single Duct

AIR VALVES/

Asset									
Asset Name	**Type**	**Inlet Size**	**Design Max CFM**	**Max CFM**	**Design Min CFM**	**Min CFM**	**Design Heat CFM**	**Heat CFM**	**Ak (max)**
V-11-GPH1R 1	VAV		2405	2402	1865	2402	0	0	1530

Completed By: Riley Frady on 08/20/2024

Diffuser Ret/Exh (GRD)

V-11-GPH1R 1/PHARMACY-1

Asset								
Asset Name	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
1R1-1	J10	14	1000		740		1037	103.7
1R1-2	J10	8	100		137		99	99.0
1R1-3	J10	8	100		126		105	105.0
1R1-4	J10	14	865		579		801	92.6
1R1-5	J10	10	340		270		360	105.9
Total			2405		1852	0	2402	99.88%

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VAV - Single Duct

AIR VALVES/

Asset									
Asset Name	**Type**	**Inlet Size**	**Design Max CFM**	**Max CFM**	**Design Min CFM**	**Min CFM**	**Design Heat CFM**	**Heat CFM**	**Ak (max)**
V-11-GPH4R 1	VAV		2550	2499	2550	2463	0	0	2700

Diffuser Ret/Exh (GRD)

V-11-GPH4R 1/G961-1

Asset								
Asset Name	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
R4R-1	J10	12	550		541		582	105.8
R4R-2	J10	14	1000		846		915	91.5
R4R-3	J10	14	1000		984		1002	100.2
Total			2550		2371	0	2499	98%

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Circuit Setter

HW CS/

Asset							
Asset Name	**Size**	**Type**	**Design GPM**	**Setting**	**Delta P**	**Final GPM**	**% to Design**
CS-1	0.75	AUTOFLOW	0.4	2-32 PSI	5.5	0.4	100.0
CS-2	0.75	AUTOFLOW	1.1	2-32 PSI	6.2	1.1	100.0
CS-3	1	AUTOFLOW	2.6	2-32 PSI	5.8	2.6	100.0
CS-4	1	AUTOFLOW	4.6	2-32 PSI	5.2	4.6	100.0
CS-5	0.75	AUTOFLOW	0.7	2-32 PSI	5.1	0.7	100.0
Total			9.4			9.4	100%