

Report By:

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



Report: TAB

Function: Test, Adjust, & Balance

Date: 02/18/2025

Completed By: National TAB

PROJECT

Poppy Bank (Walnut, CA)

1500 Newell Avenue

Walnut, CA 94596

Client

B&M Builders, Inc.

11330 Sunrise Park Drive

Suite C


Rancho Cordova, CA 95742

National TAB

Project: Poppy Bank (Walnut, CA)

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 Comfort. Under control.		1329 E Kemper Rd, Suite 4210	
		Cincinnati, OH 45246	
		will@nationaltab.com	
		P# (855)682-6822 / DIRECT# 513-889-8927	
COMPANY:	B&M Builders	JOB NAME:	Poppy Bank (Walnut Creek, CA)
	11330 Sunrise Park Drive Suite C, Rancho Cordova, CA 95742	LOCATION:	1500 Newell Ave suite f, Walnut Creek, CA, USA
EMAIL:	ecosta@bm-builders.com	QUOTE #:	26511
ATTN:	Eric Costa	BID DATE:	Tuesday, January 21, 2025

Thank you for allowing National TAB this opportunity to bid on the testing and balancing of this project. The following is our understanding of the scope of work and the associated cost.

TAB Scope:

- FCU's
- Air Devices
- Exhaust Fans
- Reporting & Project Management (*)

PROJECT MANAGEMENT & REPORTING: Our reporting and project management system is a live, streaming system powered by **FaciliBuild™ that coordinates our job schedule, interactively, with other networked trade participants and includes seamless file distribution, issue tracking and resolution, in project messaging, and a reporting system that has dynamic (not static) database. When we create a report, we create it with active equipment assets that allows the owner to import our results and continue its use for live maintenance recording. This allows you, at any time, to pull up the full history of your building's complete asset list. This system of assets can belong to the owner for the life of the equipment and your facility.*

This proposal includes a written report to be submitted upon completion of all work.

TOTAL PRICE = \$2,400.00

Any parts if required will be additional. However, no parts will be provided without initial approval unless National TAB, LLC has agreed with the client for a set fee to perform specific task. Lift rental to be additional if required if not provided by owner or GC. Work to be performed 1st shift only.

Not included in price: Title 24 Acceptance Testing (CA), Sheave or belt replacement, DALT, Sound and Vibration testing, Indoor Air Quality testing, or Pre-testing unless price is specified separately above.

WE HEREBY PROPOSE to furnish labor complete in accordance with NATIONAL TAB specifications, for the sum of: **\$2,400.00** US Dollars. Payment to be made as follows: **Terms as specified by our accounting department.**

<p>Acceptance of proposal - The above prices, specifications and conditions are satisfactory and are hereby accepted. You are authorized to do the work as specified. Payment will be made in accordance to terms agreed upon.</p> <p>Client Signature: _____</p> <p>Client Date of Acceptance: _____</p>	<p>Authorized Signature for NT:</p> <p style="text-align: center;"><u>William Turnbough</u></p> <p>Date: <u>Tuesday, January 21, 2025</u></p>
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Issue List

- FC-4 AND FC-5 ARE UNABLE TO MEET DESIGN AIRFLOW.



Poppy Bank (Walnut, CA)

Project Issue Information

Issue Name : FC-4 AND FC-5 ARE UNABLE TO MEET DESIGN AIRFLOW.
Description : Both AHU's are unable to reach their respective design airflows. FC-4 is at 689 out of 1800 CFM at maximized motor sheave and near FLA. FC-5 is at 538 / 2480 CFM at maximized motor sheave and near FLA. Recommend to have units inspected.
Created By : National TAB **Assigned To :** National TAB - Will Turnbough
Status : Open
Priority : Urgent **Asset Tag :**
Originated Date : 02/05/2025 - Zack Eismin - National TAB

National TAB

Project: Poppy Bank (Walnut, CA)

System/Unit: Fan Coil



Asset: F1

AREA:

Unit Data		
	Design	Actual
MFG	NA	MAGICAIR
Model Num	NA	HBB20ASAA10REB9G6BAAABM
Serial Num	-	W160184896
Type	-	AHU
Configuration	-	HORIZONTAL
Num Filters Size 1	-	1
Filter Size 1	-	20X20X2

Test Data		
	Design	Actual
SFAN CFM	1700	1812
SFAN RPM	-	1065
Motor Speed SetPt	-	1 TURNS OPEN
RL Voltage	-	286
RL Amperage	-	4.15
RA CFM	-	1491
OA CFM	310	321

Motor Data		
	Design	Actual
Motor MFG	-	BALDOR RELIANCE
Frame	-	NL
Horsepower	-	1.5
Motor Rpm	-	1750
Phase	-	1
Voltage (rated)	-	277
Amperage (rated)	-	4.75
Service Factor	-	1.15
Brake Horse Power	-	NL

Performance Data		
	Design	Actual
Suction ESP	-	-0.34"
Discharge ESP	-	0.49"
Total ESP	-	0.83"

Drive Data	
	Actual
Motor Sheave Size	3-3/4"
Motor Bore Size	5/8"
Fan Sheave Size	AK48
Fan Sheave Bore	3/4"
Belt CL Distance	15"
Num of Belts	1
Belt Size	BX48

Completed By: Zack Eismin on 02/18/2025

Unit Data - PHOTO LOG



02/04/2025

National TAB

Project: Poppy Bank (Walnut, CA)

Fan Coil



Diffuser Supply (GRD)

F1/

Asset							
Asset Name	Location	Type	Size	DESIGN CFM	CFM(1)	FINAL CFM	% to design
SGRD1	OFFICE	EXISTING		100	185	107	107.0
SGRD2	OFFICE	EXISTING		100	243	109	109.0
SGRD3	TELLER	D2	10	300	437	327	109.0
SGRD4	OFFICE	EXISTING		100	82	93	93.0
SGRD5	CORR	EXISTING		105	71	111	105.7
SGRD6	CORR	EXISTING		105	55	109	103.8
SGRD7	OFFICE	EXISTING		250	223	267	106.8
SGRD8	OFFICE	EXISTING		140	86	153	109.3
SGRD9	WORK RM	EXISTING		250	303	270	108.0
SGRD10	WORK RM	EXISTING		250	295	266	106.4
Total				1700	1980	1812	106.59%

National TAB

Project: Poppy Bank (Walnut, CA)

System/Unit: Fan Coil



Asset: F2

AREA:

Unit Data		
	Design	Actual
MFG	NA	MAGIC AIR
Model Num	NA	HBB20ASAA10RE13G3AAAARM
Serial Num	-	W150377811
Type	-	AHU
Configuration	-	HORIZONTAL
Num Filters Size 1	-	2
Filter Size 1	-	20X20X2

Test Data		
	Design	Actual
SFAN CFM	775	733
SFAN RPM	-	755
Motor Speed SetPt	-	1731
RL Voltage	-	287
RL Amperage	-	3.34
RA CFM	-	612
OA CFM	120	121

Motor Data		
	Design	Actual
Motor MFG	-	MARATHON
Frame	-	56
Horsepower	-	1/2
Motor Rpm	-	1725
Phase	-	1
Voltage (rated)	-	277
Amperage (rated)	-	3.4
Service Factor	-	1.15
Brake Horse Power	-	NL

Performance Data		
	Design	Actual
Suction ESP	-	-0.14"
Discharge ESP	-	0.31"
Total ESP	-	0.45"

Drive Data	
	Actual
Motor Sheave Size	3-3/4"
Motor Bore Size	5/8"
Fan Sheave Size	AK48
Fan Sheave Bore	3/4"
Belt CL Distance	15"
Num of Belts	1
Belt Size	AX47

Completed By: Zack Eismin on 02/04/2025

Unit Data - PHOTO LOG



02/04/2025

National TAB

Project: Poppy Bank (Walnut, CA)

Fan Coil



VAV - Single Duct

F2/

Asset											
Asset Name	MFG	Model Num	Type	Inlet Size	Design Max CFM	Max CFM	Design Min CFM	Min CFM	Design Heat CFM	Heat CFM	Ak (max)
VAV-2	PRICE	SDV8000	INLINE	12"	775	733					

Diffuser Supply (GRD)

VAV-2/

Asset							
Asset Name	Location	Type	Size	DESIGN CFM	CFM(1)	FINAL CFM	% to design
SGRD1	GN RR	EXISTING		50	54	54	108.0
SGRD2	GN RR	EXISTING		50	48	48	96.0
SGRD3	BREAK RM	EXISTING		210	227	191	91.0
SGRD4	STORAGE	EXISTING		65	128	71	109.2
SGRD5	OFFICE	EXISTING		100	35	91	91.0
SGRD6	OFFICE	EXISTING		100	117	93	93.0
SGRD7	OFFICE	EXISTING		100	76	91	91.0
SGRD8	OFFICE	EXISTING		100	79	94	94.0
Total				775	764	733	94.58%

National TAB

Project: Poppy Bank (Walnut, CA)
System/Unit: Fan Coil



Asset: F4

AREA:

Unit Data		
	Design	Actual
MFG	NA	MAGIC AIR
Model Num	NA	HBB20ASAA10RE13G3AAAABM
Serial Num	-	W150377796
Type	-	AHU
Configuration	-	HORIZONTAL
Num Filters Size 1	-	1
Filter Size 1	-	20X20X2

Test Data		
	Design	Actual
SFAN CFM	1800	689
SFAN RPM	-	772
Motor Speed SetPt	-	0 TURNS OPEN
RL Voltage	-	288
RL Amperage	-	3.3
RA CFM	-	411
OA CFM	270	278

Motor Data		
	Design	Actual
Motor MFG	-	MARATHON
Frame	-	56
Horsepower	-	1/2
Motor Rpm	-	1725
Phase	-	1
Voltage (rated)	-	277
Amperage (rated)	-	3.4
Service Factor	-	1.15
Brake Horse Power	-	NL

Performance Data		
	Design	Actual
Suction ESP	-	-0.21"
Discharge ESP	-	0.32"
Total ESP	-	0.53"

Drive Data	
	Actual
Motor Sheave Size	3-3/4"
Motor Bore Size	5/8"
Fan Sheave Size	Ak48
Fan Sheave Bore	3/4"
Belt CL Distance	15"
Num of Belts	1
Belt Size	AX47

Completed By: Zack Eismin on 02/04/2025

Notes:
MOTOR SHEAVE IS MAXED OUT UNABLE TO REACH DESIGN CFM OF 1800

Written By: Zack Eismin on 02/04/2025

Unit Data - PHOTO LOG



02/04/2025

National TAB

Project: Poppy Bank (Walnut, CA)

Fan Coil



VAV - Single Duct

F4/

Asset											
Asset Name	MFG	Model Num	Type	Inlet Size	Design Max CFM	Max CFM	Design Min CFM	Min CFM	Design Heat CFM	Heat CFM	Ak (max)
VAV-1	PRICE	SDV8000	INLINE	12"	1800	689					

Diffuser Supply (GRD)

VAV-1/

Asset							
Asset Name	Location	Type	Size	DESIGN CFM	CFM(1)	FINAL CFM	% to design
SGRD1	LOBBY	D4	12	229	292	231	100.9
SGRD2	LOBBY	D4	12	229	200	221	96.5
SGRD3	CAFE	D4	12	229	195	237	103.5
Total				687	687	689	100.29%

National TAB

Project: Poppy Bank (Walnut, CA)
System/Unit: Fan Coil



Asset: F5

AREA:

Unit Data		
	Design	Actual
MFG	NA	MAGIC AIR
Model Num	NA	HBB20ASAA10RE13G3AAAABM
Serial Num	-	W150377791
Type	-	AHU
Configuration	-	HORIZONTAL
Num Filters Size 1	-	1
Filter Size 1	-	20X20X2

Test Data		
	Design	Actual
SFAN CFM	2480	538
SFAN RPM	-	734
Motor Speed SetPt	-	0 TURNS OPEN
RL Voltage	-	287
RL Amperage	-	3.48
RA CFM	-	416
OA CFM	500	102

Motor Data		
	Design	Actual
Motor MFG	-	BALDOR RELIANCE
Frame	-	56
Horsepower	-	1/2
Motor Rpm	-	1725
Phase	-	1
Voltage (rated)	-	277
Amperage (rated)	-	3.6
Service Factor	-	1.15
Brake Horse Power	-	NL

Performance Data		
	Design	Actual
Suction ESP	-	-0.16"
Discharge ESP	-	0.21"
Total ESP	-	0.37"

Drive Data	
	Actual
Motor Sheave Size	3-3/4"
Motor Bore Size	5/8"
Fan Sheave Size	AK48
Fan Sheave Bore	3/4"
Belt CL Distance	15"
Num of Belts	1
Belt Size	AX47

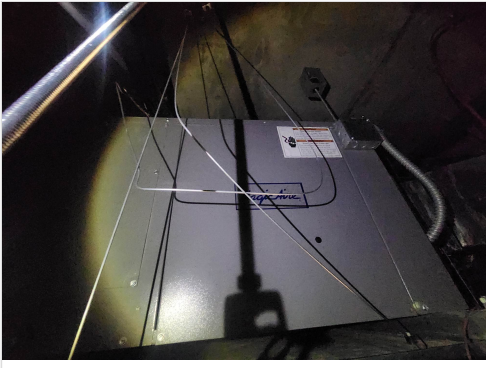
Completed By: Zack Eismin on 02/04/2025

Notes:

MOTOR SHEAVE IS MAXIMIZED DESIGN AIRFLOW OF 2480CFM CANNOT BE REACHED. OA SET TO 20% OF DESIGN FOR PROPORTIONAL BALANCING.

Written By: Zack Eismin on 02/04/2025

Unit Data - PHOTO LOG



02/04/2025

National TAB

Project: Poppy Bank (Walnut, CA)

Fan Coil



Diffuser Supply (GRD)

F5/

Asset							
Asset Name	Location	Type	Size	DESIGN CFM	CFM(1)	FINAL CFM	% to design
SGRD1	ENTRY	EXISTING		64	69	69	107.8
SGRD2	ENTRY	EXISTING		64	68	68	106.3
SGRD3	ENTRY	EXISTING		64	67	67	104.7
SGRD4	ENTRY	EXISTING		65	68		-
SGRD5	ENTRY	D4	12	129	139	139	107.8
SGRD6	ENTRY	D4	12	630	127	127	20.2
Total				1016	538	470	46.26%

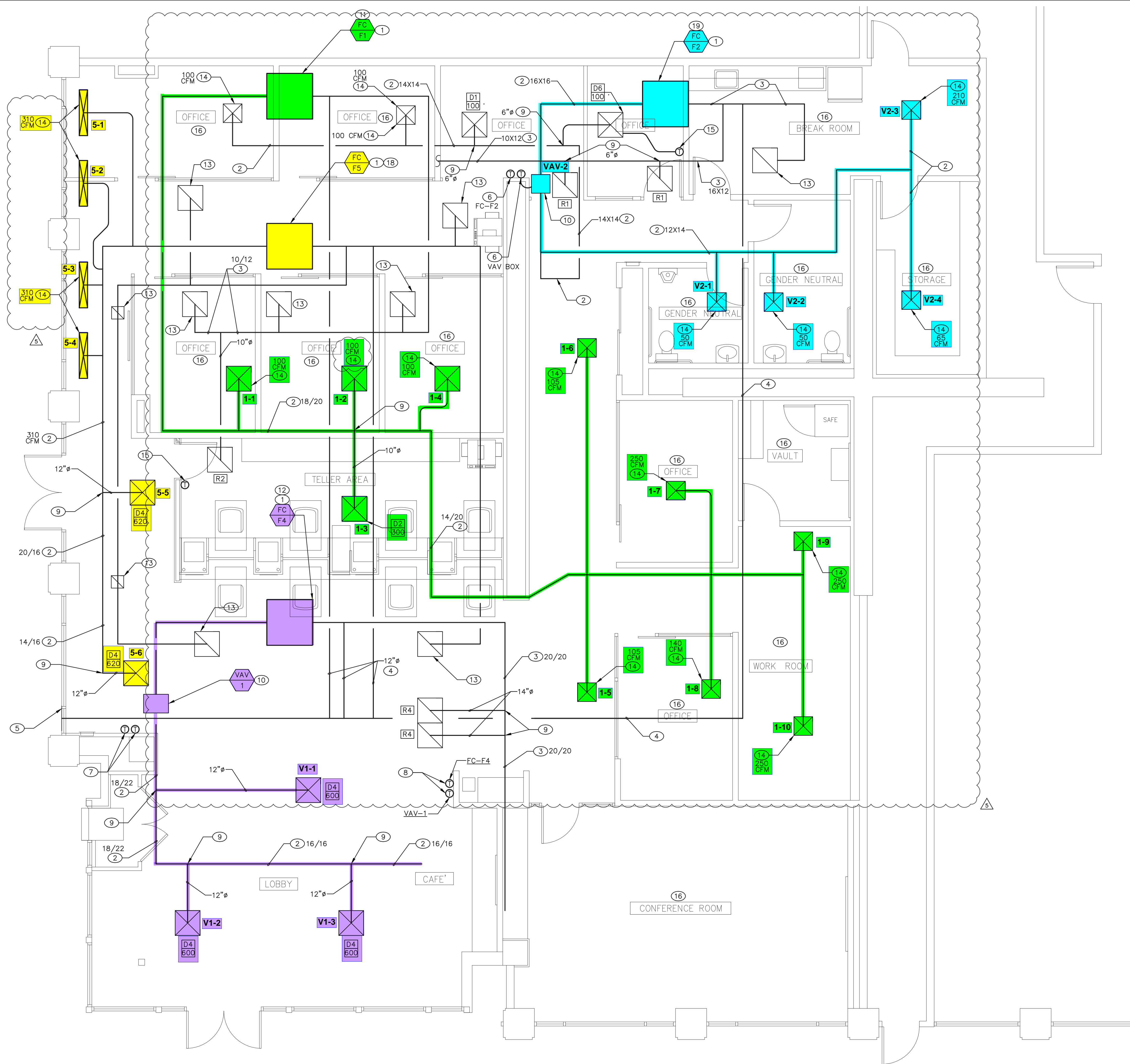


National TAB

Testing, Adjusting, and Balancing Equipment



Function		Range	Minimum Accuracy	Instrument Information	Calibration Date	Date Due
AIR	AIR PRESSURE	0 in wg to 10 in wg	2% +/- 0.001 in wg	Evergreen S-PVF-1 24D-00509	6/17/2024	6/17/2025
	AIR VELOCITY INSTRUMENT	50 fpm to 3900 fpm	+/- 5 % +/- 7 fpm	Evergreen S-PVF-1 24D-00509	6/17/2024	6/17/2025
	DIRECT HOOD READING	100 cfm to 2000 cfm	+/- 5 % +/- 7 cfm	Evergreen S-PVF-1 24D-00509	6/17/2024	6/17/2025
TEMPERATURE	AIR METER	-20 F to 240 F	+/- .5 % 2 F	Cooper SRH77A S/N 100516003	9/18/2024	9/18/2025
	AIR PROBE	-20 F to 240 F	+/- .5 % 2 F	Cooper SRH77A S/N 100516003	9/18/2024	9/18/2025
	IMMERSION METER	-20 F to 240 F	+/- .5 % 2 F	Cooper SRH77A S/N 100516003	9/18/2024	9/18/2025
	IMMERSION PROBE	-20 F to 240 F	+/- .5 % 2 F	Cooper SRH77A S/N 100516003	9/18/2024	9/18/2025
	CONTACT METER	-20 F to 240 F	+/- .5 % 2 F	Cooper SRH77A S/N 100516003	9/18/2024	9/18/2025
	CONTACT PROBE	-20 F to 240 F	+/- .5 % 2 F	Cooper SRH77A S/N 100516003	9/18/2024	9/18/2025
HUMIDITY	HUMIDITY PROBE	10 % RH to 90 % RH	3% of reading	Cooper SRH77A S/N 100516003	9/18/2024	9/18/2025
ELECTRICAL	VOLTAGE MEASUREMENT	0 VAC to 600 VAC	2 % reading +/- 5 digits	Klein Tools CL800 S/N 1220C-C1	9/18/2024	9/18/2025
	AMPERAGE MEASUREMENT	0 Amperers to 100 Amperes	2 % reading +/- 5 digits	Klein Tools CL800 S/N 1220C-C1	9/18/2024	9/18/2025
ROTATION	ROTATION MEASUREMENT	60 rpm to 5000 rpm	2 % reading 2 rpm	Shimpo DT 207Lp S/N D1690029R	9/18/2024	9/18/2025



SHEET GENERAL NOTES

- 1- THE CONTRACTOR SHALL VERIFY LOCATION OF ALL ROOF MOUNTED EQUIPMENT WITH ARCHITECT AND STRUCTURAL ENGINEER PRIOR TO BEGINNING WORK. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO THE ARCHITECT FOR APPROVAL BY THE STRUCTURAL ENGINEER SHOWING METHOD OF MOUNTING AND ATTACHMENT.
- 2- PRIOR TO BEGINNING WORK, THE CONTRACTOR SHALL COORDINATE LOCATION AND ROUTING OF HVAC EQUIPMENT WITH ALL OTHER TRADES.
- 3- THE CONTRACTOR SHALL VERIFY LOCATION OF ALL ROOF AND WALL PENETRATIONS WITH ARCHITECT AND STRUCTURAL ENGINEER PRIOR TO BEGINNING WORK.
- 4- CONTRACTOR SHALL VERIFY SITE CONDITIONS AND STRUCTURAL CONDITIONS PRIOR TO BEGINNING WORK.
- 5- PROVIDE FULL RADIUS ELBOWS WHERE SPACE ALLOWS BY STRUCTURE OR PROVIDE TURNING VANES IN ALL 90° TRANSITIONS PER SMACNA STANDARDS.
- 6- ALL DUCTWORK SIZES SHOWN ARE INSIDE CLEAR DIMENSIONS.
- 7- SEE AIR DISTRIBUTION DEVICE SCHEDULE ON THIS SHEET FOR DEVICES FOR LIVING AREAS.
- 8- REMOVE ALL EXISTING DUCTWORK UNLESS OTHERWISE NOTED. ALL DUCTWORK DEVICES AND EQUIPMENT SHOWN ARE NEW UNLESS OTHERWISE NOTED.

KEY NOTES

- 1- EXISTING FAN COIL UNIT LOCATED ABOVE CEILING TO REMAIN, WITH EXISTING CONDENSATE DRAIN, REFRIGERANT PIPING, OUTSIDE CONDENSING UNIT, OUTSIDE AIR, SUPPLY/RETURN DUCTWORK AND CONTROLS TO REMAIN.
- 2- EXISTING SUPPLY DUCTWORK ABOVE CEILING TO REMAIN.
- 3- EXISTING RETURN DUCTWORK ABOVE CEILING TO REMAIN.
- 4- EXISTING OUTSIDE AIR DUCTWORK ABOVE CEILING TO REMAIN.
- 5- EXISTING OUTSIDE AIR LOUVER TO REMAIN.
- 6- EXISTING THERMOSTAT TO REMAIN.
- 7- EXISTING THERMOSTAT TO BE RELOCATED.
- 8- RELOCATED THERMOSTAT IN NEW LOCATION.
- 9- CONNECT NEW DUCTWORK OF SIZE SHOWN TO EXISTING DUCTWORK OF SIZE SHOWN.
- 10- EXISTING VAV BOX ABOVE CEILING TO REMAIN.
- 11- REBALANCE EXISTING FAN COIL UNIT TO 1550 CFM S/A & 310 CFM O/A.
- 12- REBALANCE EXISTING FAN COIL UNIT TO 1800 CFM S/A & 270 CFM O/A.
- 13- EXISTING RETURN GRILLE TO REMAIN.
- 14- EXISTING SUPPLY DIFFUSER TO REMAIN.
- 15- PROVIDE NEW THERMOSTAT FOR NEW VAV DIFFUSER.
- 16- EXISTING HVAC TO REMAIN THIS ROOM.
- 17- REBALANCE EXISTING FAN COIL UNIT TO 2480 CFM S/A & 500 CFM O/A.
- 18- REBALANCE EXISTING FAN COIL UNIT TO 775 CFM S/A & 120 CFM O/A.

MECHANICAL PLAN
SCALE: 1/4" = 1'-0"

APEX Engineers
34145 PACIFIC COAST HIGHWAY, #141
DANA POINT, CA 92629
TEL: 702-968-9221 FAX: 702-951-7589

REGISTERED PROFESSIONAL ENGINEER
No. 030907
Exp. 03-31-25
MECHANICAL
STATE OF CALIFORNIA

OSL Construction
9240 OLD REDWOOD HWY
SUITE 200, WINDSOR, CA 95492

MECHANICAL PLAN
POPPY BANK at THE VILLAGE
1500 NEWELL AVENUE, SUITE F
WALNUT CREEK, CALIFORNIA 94596

JOB NO: 2023-266
SCALE: 1/4" = 1'-0"
DRAWN BY: KF
DATE: NOVEMBER 08, 2024
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REVISIONS:
10/31/2024
OWNER CHANGES

SHEET NO:
M1.2