

DATE: MARCH 12, 2024

REV:

**A100**

**PIZZERIA RESTAURANT**

92A MILTON AVENUE  
BALLSTON SPA, NY

**FLOOR PLAN**

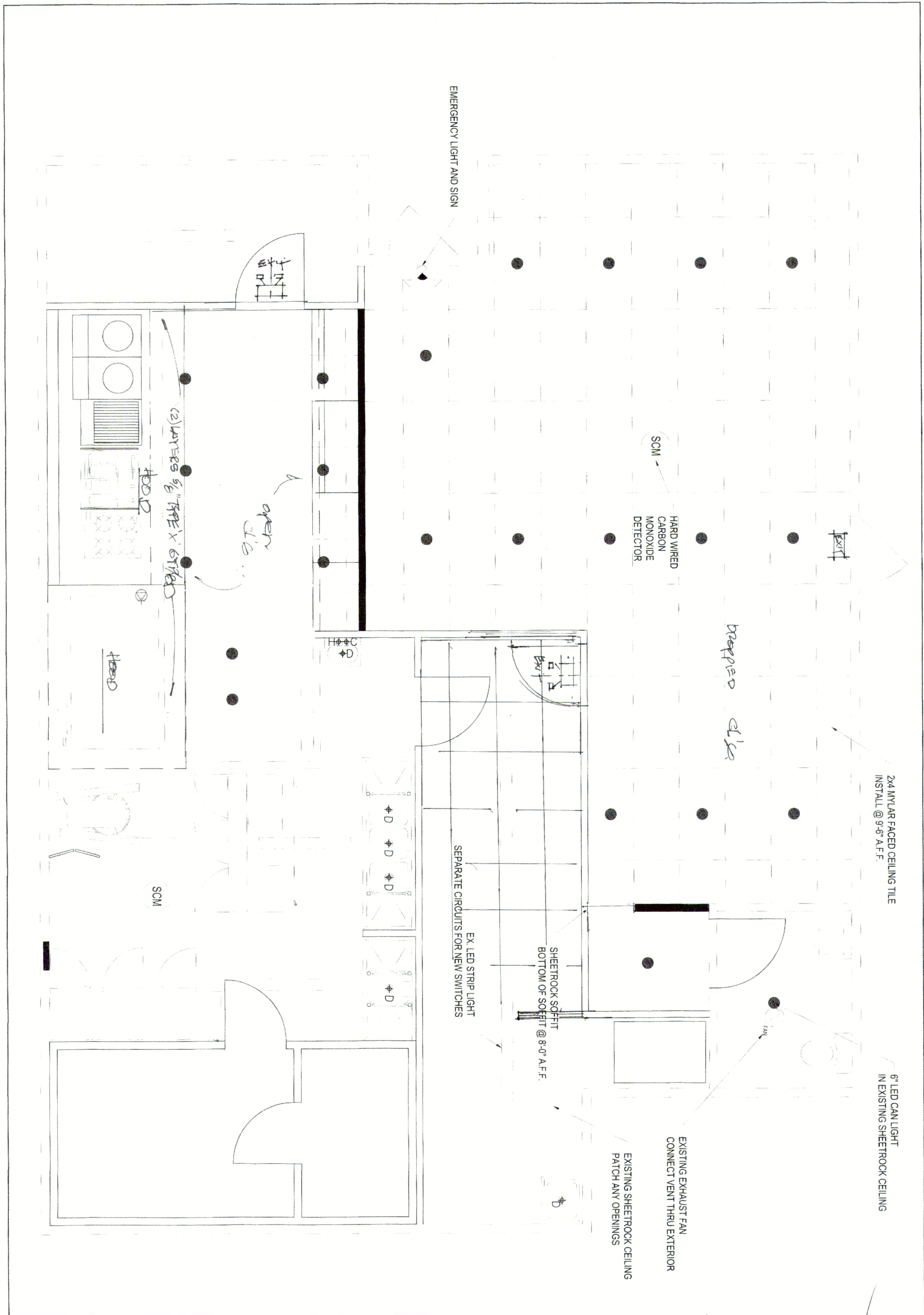
Architect

John Defino, R.A., N.C.A.R.B.  
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DATE *MARCH 12, 2014*

PIZZERIA RESTAURANT

Architect  
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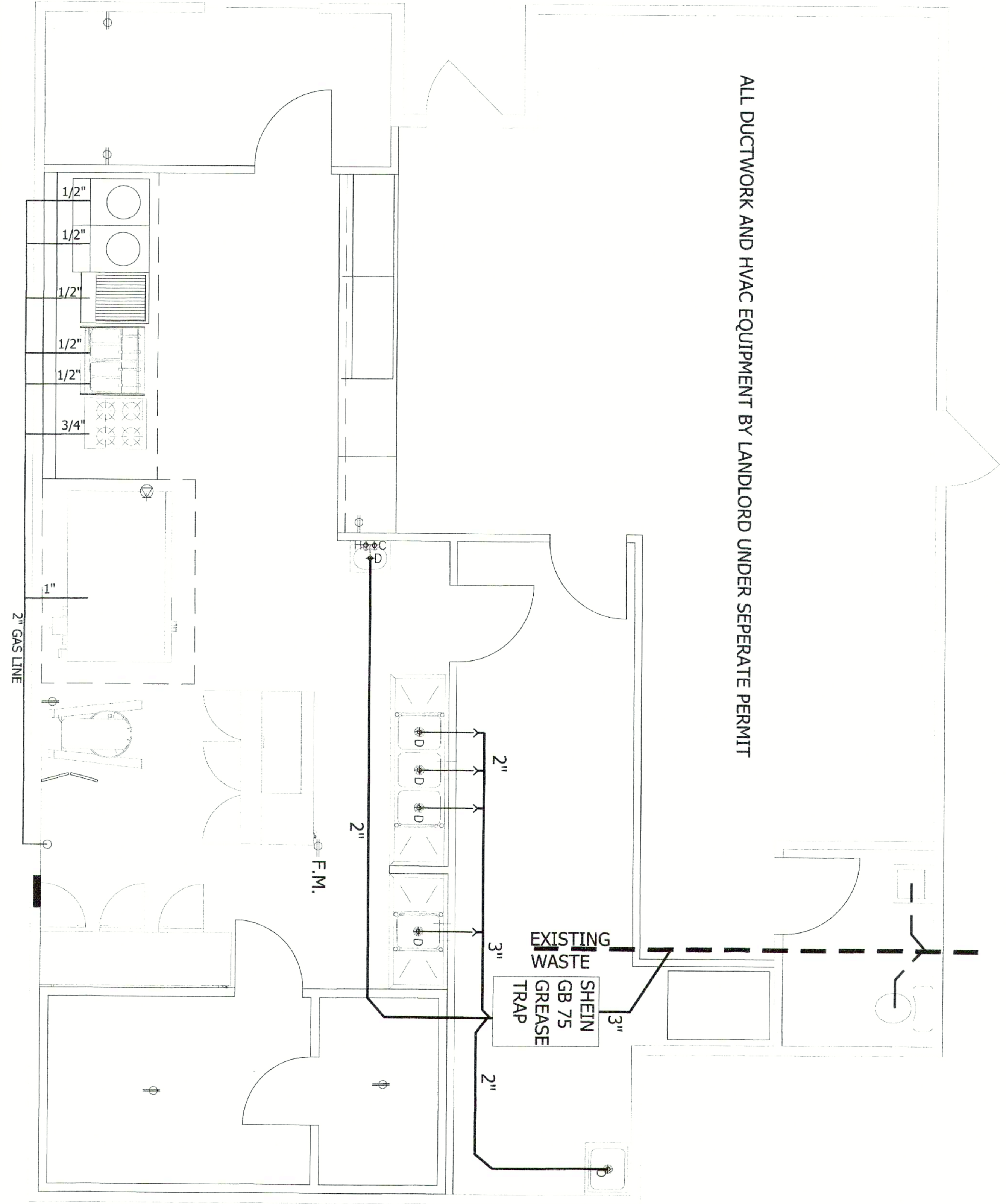
REV:

92A MILTON AVENUE  
 BALLSTON SPA, NY

**A101**

CEILING PLAN

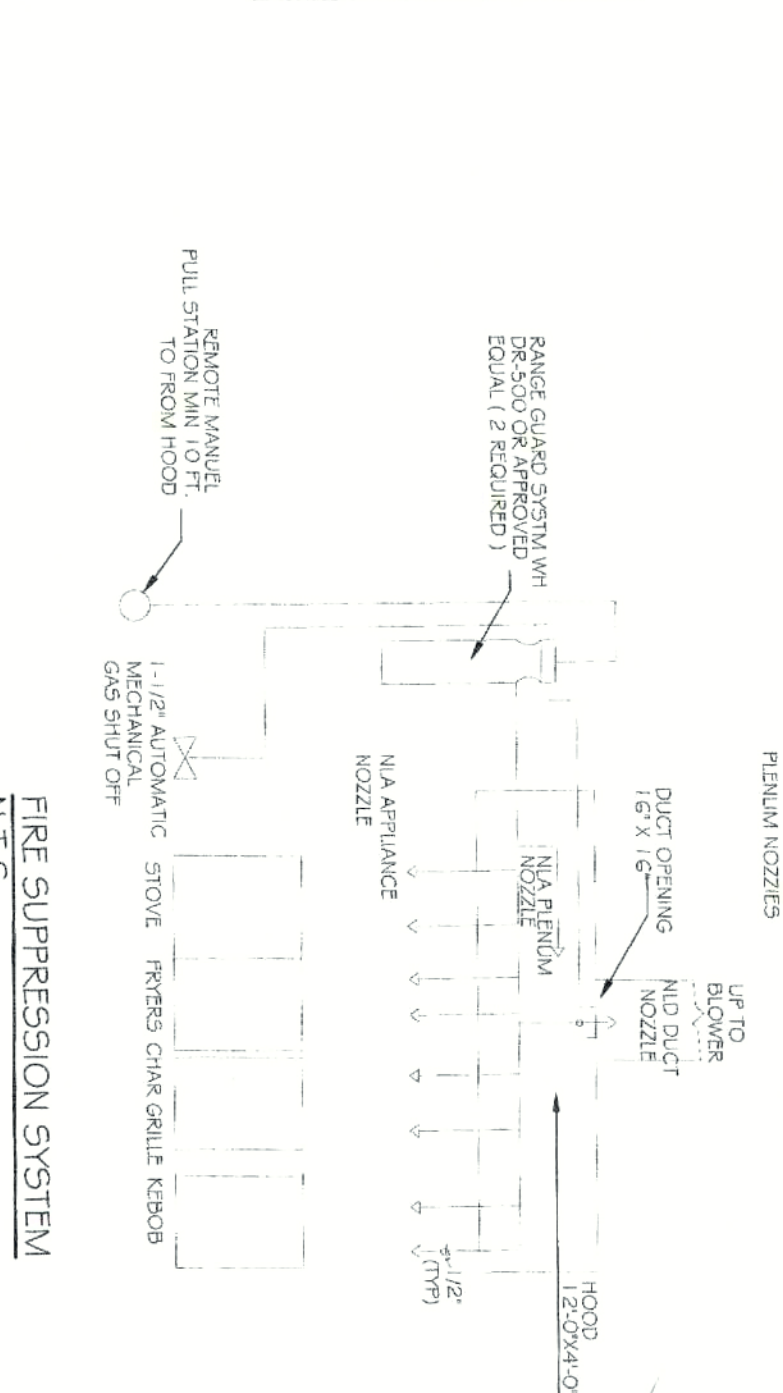
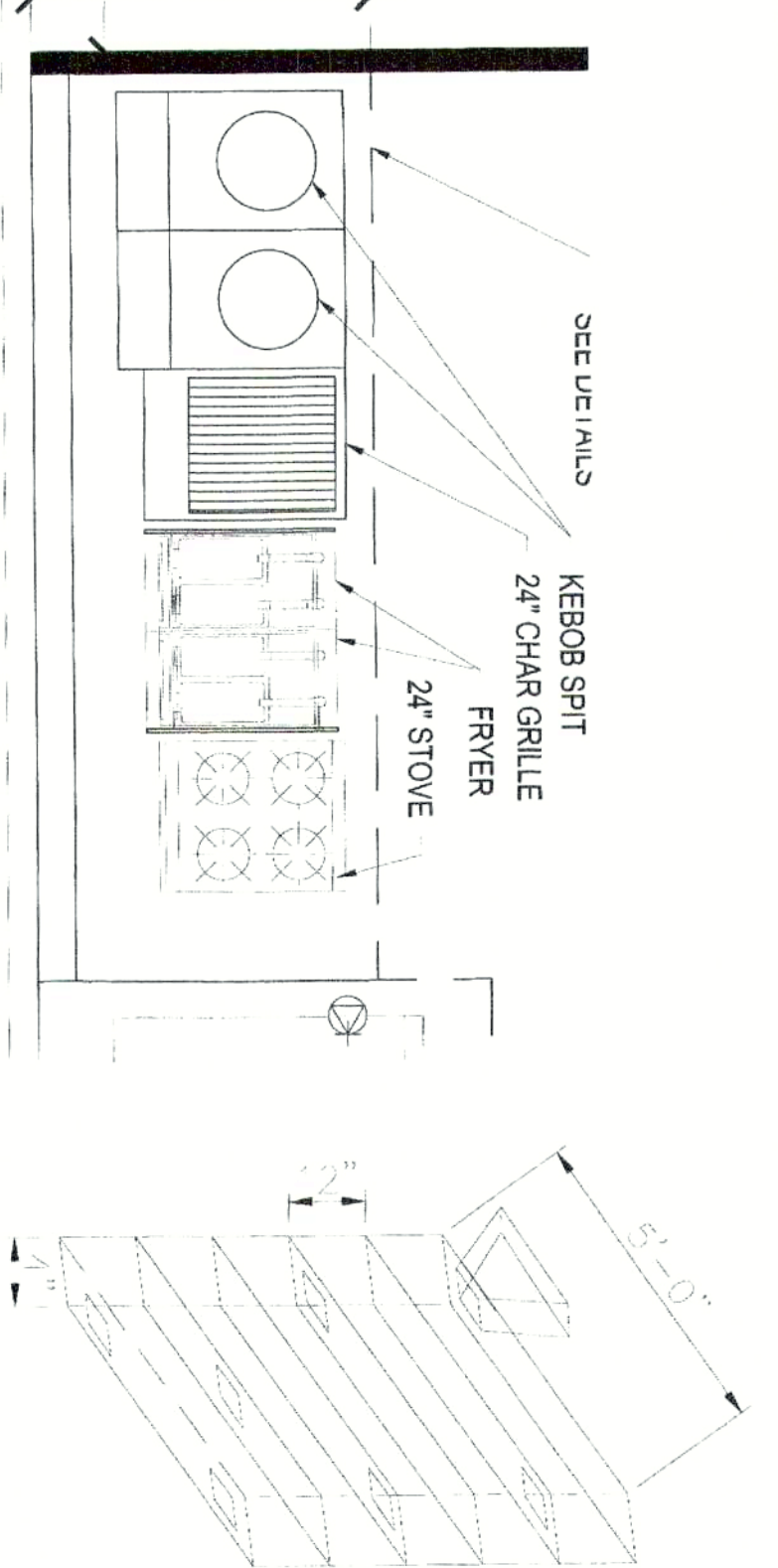
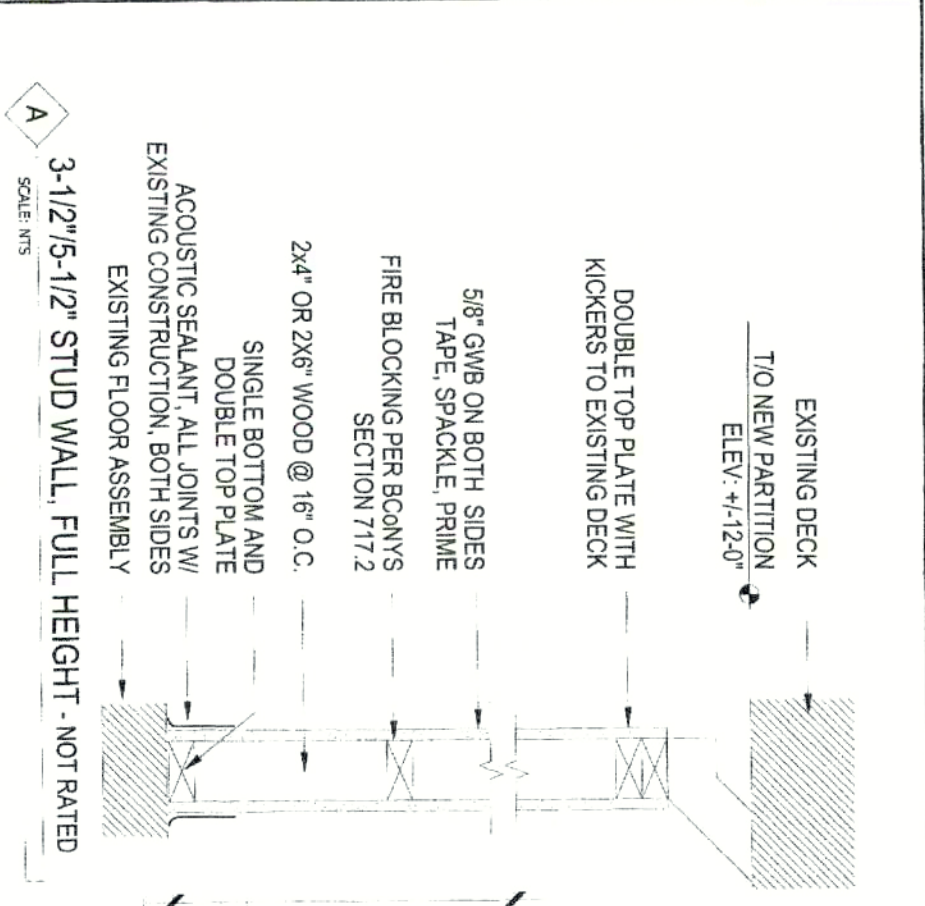




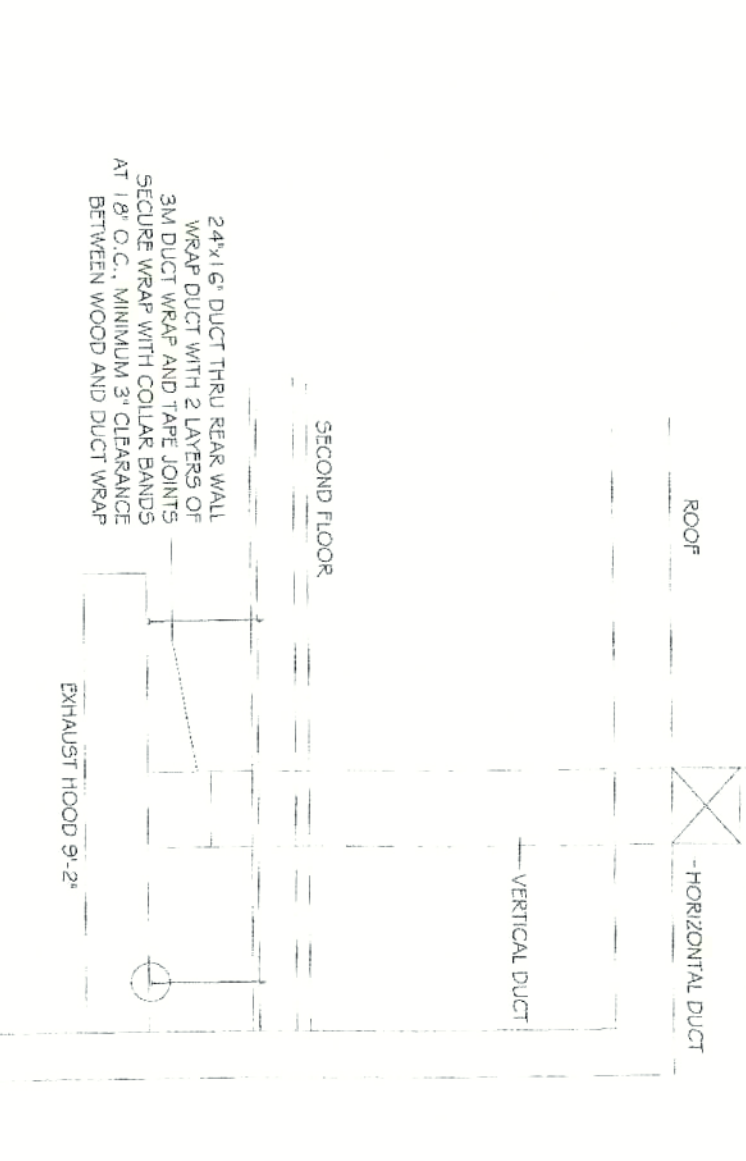
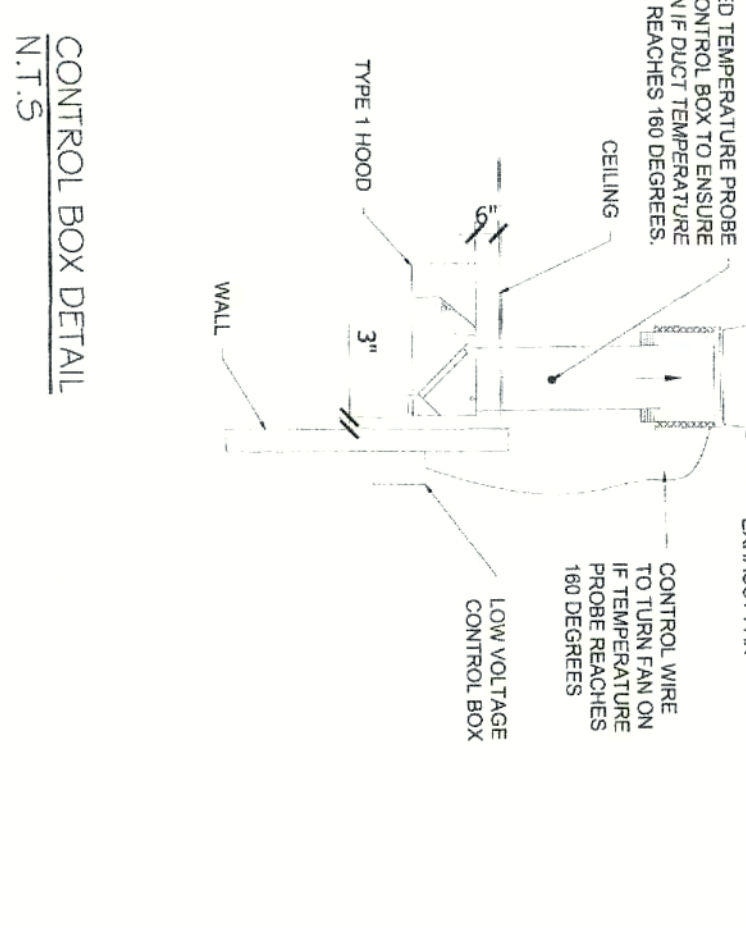
ALL DUCTWORK AND HVAC EQUIPMENT BY LANDLORD UNDER SEPERATE PERMIT

DATE: <i>MARCH 12, 2024</i>	PIZZERIA RESTAURANT	Architect	
REV:	92A MILTON AVENUE BALLSTON SPA, NY	John Defino, R.A., N.C.A.R.B. 12 Rowland Avenue Delmar, New York 12054	
<b>A102</b>	MEP PLAN	518-496-1656 jdefino19@gmail.com	





- HOOD VENTILATION SYSTEM NOTES:**
1. FIRE SUPPRESSION SYSTEM SHALL BE INSTALLED BY LICENSE OF INSTALLER UNDERNEATH THE HOOD.
  2. CONTRACTOR SHALL SUBMIT SHOP DRAWING AND MANUFACTURERS DATA BEFORE INSTALLATION.
  3. ALL WIRING AND ELECTRICAL EQUIPMENT SHALL COMPLY WITH NFPA 70 THE NATIONAL ELECTRICAL CODE.
  4. PROVIDE CLEAN OUT AT THE BASE OF EACH VERTICAL RISER THAT OVER 20", AND HORIZONTAL DUCT EVERY 12'.
  5. HOOD IS FABRICATED AS ACCORDING TO NFPA CODE 96. ALL SEAMS, JOINTS AND PENETRATIONS ARE CONTINUOUSLY WELDED AS LIQUID TIGHT AND CONSTRUCTED WITH NO. 18 GA. STAINLESS STEEL.
  6. DUCTS ARE CONSTRUCTED WITH 16 GA. IRON METAL AND SHALL BE WELDED AS LIQUID TIGHT.
  7. HOOD AND DUCT SHALL HAVE A MINIMUM CLEARANCE OF 18" FROM ANY COMBUSTIBLE MATERIAL.
  8. THE KITCHEN EXHAUST SYSTEM SHALL BE INSTALLED PER STATE AND LOCAL CODE AND CHAPTER 5 OF NATIONAL MECHANICAL CODE AND MANUFACTURERS SPECIFICATION.
  9. MAKE UP FAN AND EXHAUST FANS SHALL BE ELECTRICALLY INTERLOCKED, AND PROVIDE ONE SWITCH FOR BOTH FANS.
  10. A LIGHT TEST WILL BE PERFORMED ON ALL HOOD EXHAUST DUCT AFTER INSTALLATION TO ENSURE NO OPENING SIN THE DUCT. A NOTRIZED COPY OF REPORT SHALL BE SUBMITTED TO THE BUILDING DEPARTMENT AFTER COMPLETED TEST IS PASSED.



- FIRE SUPPRESSION SYSTEM NOTES**
1. FIRE SUPPRESSION SYSTEM SHALL BE INSTALLED BY LICENSED CONTRACTOR. CONTRACTOR SHALL SUBMIT SHOP DRAWING FOR APPROVAL BEFORE INSTALLATION.
  2. THE MECHANICAL PULL STATION SHALL LOCATED 10'-25" FROM THE RANGE HOOD.
  3. NOZZLES HEIGHT FROM COOKING EQUIPMENT MIN. 12" AND MAX. 50".
  4. THERE MUST BE 1/2" BETWEEN FRYER AND ANY OPEN FLAMES.

**AREA CALCULATION OF KITCHEN HOOD**

FACE AREA OF HOOD 12'-0" X 4'-0" = 48 S.F.

CFM REQUIRED AREA OF HOOD X 30 = 2,400 CFM

MAKE UP AIR 9x2 400 = 2,160 CFM

EXHAUST DUCT SIZE 16"x16" = 1.8 S.F.

DATE: MARCH 12, 2024

REV:

**A103**

PIZZERIA RESTAURANT

92A MILTON AVENUE  
BALLSTON SPA, NY

DETAILS

Architect

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DUCTWORK #2 PARTS - JOB#665301

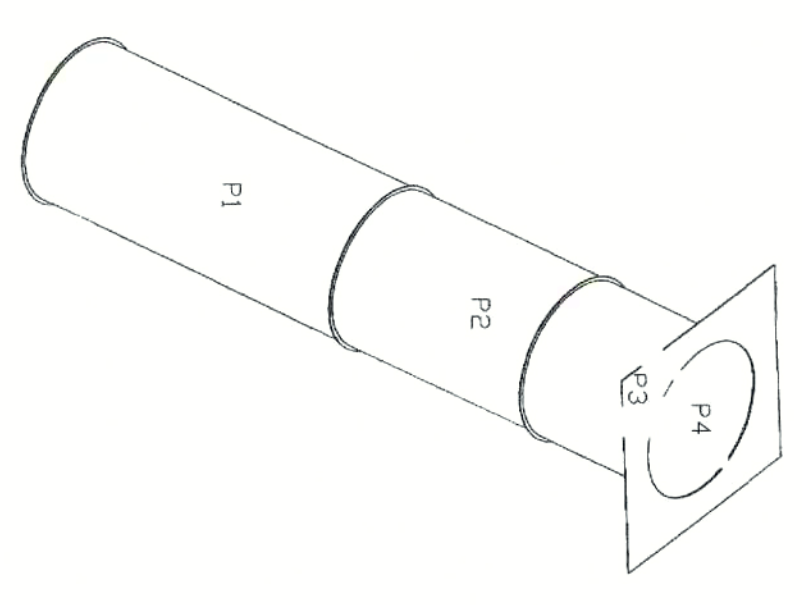
TAG	PART #	CFM	GPM	ZONE	CONVEGEBY	SP	WEIGHT	VELOCITY	QTY	DESCRIPTION
P1	VDV2047LT	2700				-0.0054	3108	1237.59	1	SINGLE WALL DUCT 20" DIAMETER, 47' LONG, FLANGE AT BOTH ENDS, STAINLESS STEEL
P2	VDV2029LT	2700				-0.0034	1942	1237.59	1	SINGLE WALL DUCT 20" DIAMETER, 29' LONG, FLANGE AT BOTH ENDS, STAINLESS STEEL
P3	VDV2030AJDKIT	2700				-0.0022	2505	1237.59	1	SINGLE WALL DUCT ADJUSTABLE, 20" DIAMETER, 29.5' LONG, FLANGE AT ONE END WITH A 20" ADJUSTABLE COLLAR - STAINLESS STEEL
P4	VDV2620TP	2700					942	1237.59	1	DUCT TO CURB TRANSITION, 26-1/2" CURB TO 20" DUCT, 16 GA ALUMINIZED USED ON BUILDING
SYSTEM AT P4										
V3M-200PLUS										
VDV200CLASY										
TOTAL WEIGHT							9000			
1 DUCT - 3M FIRE BARRIER 2000 PLUS SILICONE - USED AS SEALANT TO SEAL DUCT JOINTS										
3 DUCT 'V' CLAMP WITH NEW DESIGN 14 GA BRACKETS, 20" DUCT, ASSEMBLY.										

- SINGLE WALL FACTORY BUILT DUCTWORK
- ALL DUCTWORK IS REQUIRED TO BE INSTALLED WITH THE MAXIMUM SUPPORT SPACING LISTED BELOW.
  - FOR A COMPLETE LIST OF APPROVED SUPPORT METHODS, SEE THE INSTALLATION AND OPERATION MANUAL.
  - DUCTWORK SHALL SLOPE NOT LESS THAN 1/16" PER LINEAR FOOT TOWARDS THE HOOD OR AN APPROVED GREASE COLLECTION RESERVOIR.
  - WHERE HORIZONTAL DUCTS EXCEED 75 FEET IN LENGTH, THE SLOPE SHALL NOT BE LESS THAN 3/16" PER LINEAR FOOT.

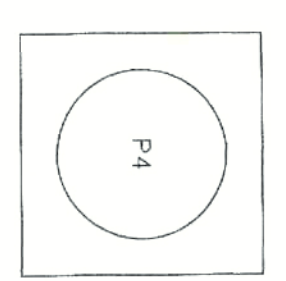
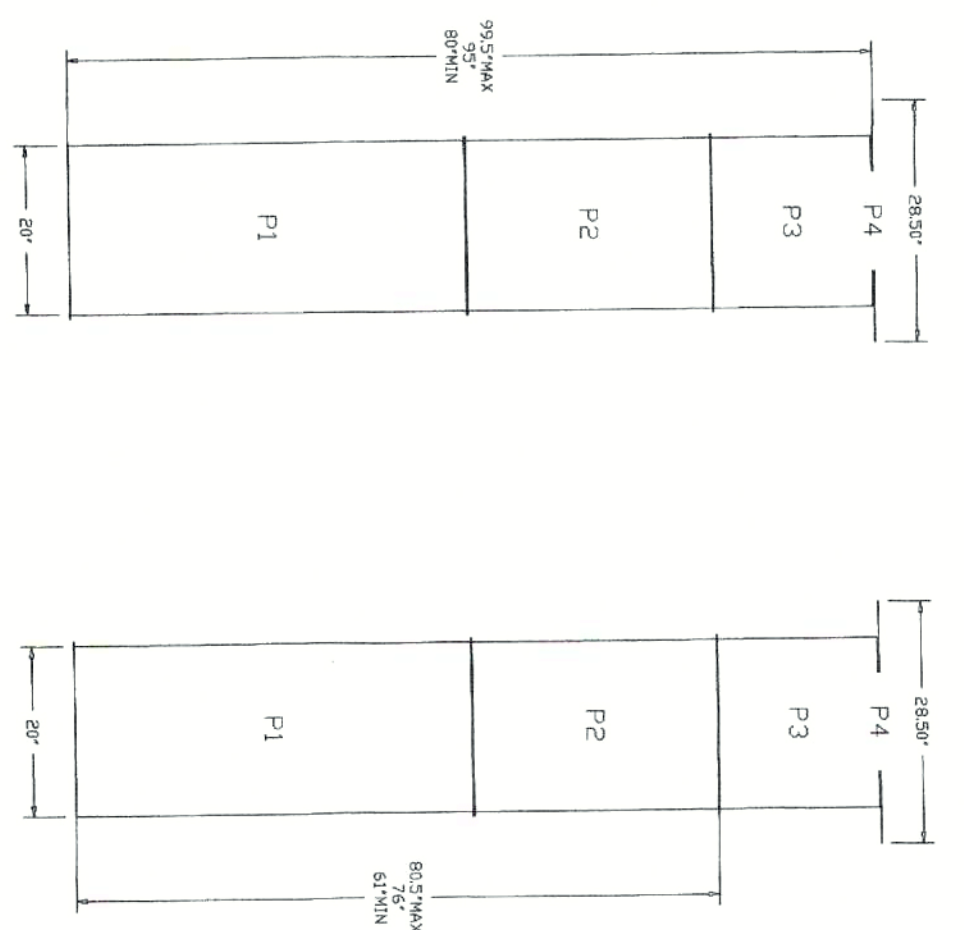
DUCT DIAMETER	HORIZONTAL SUPPORT (FT)	VERTICAL WALL SUPPORT (FT)	VERTICAL CURB SUPPORT (FT)
5"	10'	10'	24'
6"	10'	10'	24'
7"	10'	10'	24'
8"	10'	10'	24'
10"	10'	10'	24'
12"	10'	10'	24'
14"	10'	10'	24'
16"	10'	10'	24'
18"	10'	10'	24'
20"	10'	10'	24'
22"	10'	10'	24'
24"	10'	10'	24'
26"	10'	10'	24'
28"	10'	10'	24'
30"	10'	10'	24'
32"	10'	10'	24'
34"	10'	10'	24'
36"	10'	10'	24'

DO NOT LEAK TEST USING SMOKE BOMBS CONTAINING CHLORINES/CHLORIDES. CONSULT WITH CAPTIVEAIRE FOR PROPER LEAK TESTING METHODS.

DUCTWORK #2 SE VIEW



DUCTWORK #2 FRONT VIEW DUCTWORK #2 SIDE VIEW DUCTWORK #2 TOP VIEW



DATE: 3/7/2024  
 DRAWN BY: PJR  
 SCALE: 3/4" = 1'-0"  
 MASTER DRAWING

92 a Milton ave, Ballston spa, ny  
 92 Milton Avenue,  
 Ballston Spa, NY, 12020

SHEET NO. 16

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**CONSTRUCTION NOTES:**

1. THE INTENT OF THE DRAWINGS IS TO PRODUCE THE INTENDED RESULTS UNDER RECOGNIZED STANDARDS, EVEN IF NOT SHOWN, BUT REASONABLY INFERRABLE THEREFROM. THE CONTRACTOR SHALL CHECK ALL DRAWINGS FURNISHED TO HIM/HER IMMEDIATELY UPON THEIR RECEIPT AND SHALL PROMPTLY NOTIFY THE DESIGNERS OF ANY DISCREPANCIES. LARGER SCALE DRAWINGS WILL TAKE PRECEDENCE OVER SMALLER SCALE DRAWINGS, AND DETAILS TAKE PRECEDENCE OVER ALL. THE CONTRACTOR SHALL COMPARE ALL DRAWINGS AND VERIFY THE DETAILS BEFORE LAYING OUT THE WORK AND SHALL BE RESPONSIBLE FOR ANY ERRORS WHICH MIGHT HAVE BEEN AVOIDED THEREBY.
2. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE NEW YORK STATE 2020 AND LOCAL BUILDING CODES.
3. CONTRACTORS ARE TO NOTIFY ARCHITECT IMMEDIATELY IF ANY DISCREPANCIES OCCUR BEFORE PROCEEDING WITH THE RELATED WORK.
4. ALL WORK SHALL BE PERFORMED IN A MANNER THAT PROTECTS BUILDING OCCUPANTS, VISITORS AND THEIR POSSESSIONS. THE CONTRACTOR SHALL PROVIDE ADEQUATE VENTILATION DURING ALL WORK EMITTING FUMES AND ODORS SO AS NOT TO AFFECT ANY PERSON IN THE WORK AREA AND BUILDING IN GENERAL.
5. CONTRACTORS TO COORDINATE WITH OWNERS REPRESENTATIVE FOR SCHEDULING OF WORK CAUSING NOISE, DUST OR FUMES.
6. ALL EXISTING DIMENSIONS ARE TO FACE OF GYP. BD. (UNLESS OTHERWISE NOTED, ALL NEW DIMENSIONS ARE TO FACE OF STUD.)
7. CONTRACTORS ARE TO KEEP THE PREMISES FREE FROM ACCUMULATION OF WASTE MATERIALS, CONSTRUCTION DEBRIS AND RUBBISH, AND DISPOSE OF LAWFULLY.
8. ALL WORK SHALL BE CONFINED TO THE DESIGNATED PROJECT LIMITS EXCEPT FOR ANY REMOTE ELECTRICAL OR MECHANICAL ITEMS. ANY DAMAGE CAUSED BY THE CONTRACTOR TO THE ADJOINING IMPROVEMENTS SHALL BE REPAIRED BY THE CONTRACTOR AT HIS OR HER OWN EXPENSE.
9. ALL ITEMS TO REMAIN SHALL BE PROTECTED DURING THE CONSTRUCTION PERIOD.
10. FIRE SAFETY DURING CONSTRUCTION, ALTERATION OR REMOVAL SHALL BE IN ACCORDANCE WITH ART. 87, U.F.C., 1988 AS AMENDED.
11. CONTRACTOR SHALL COORDINATE ALL BLOCKING REQUIREMENTS FOR EQUIPMENT AND ACCESSORIES, ALL BLOCKING REQUIRED SHALL FOLLOW MANUFACTURERS RECOMMENDATIONS.
12. ALL PATCH WORK SHALL MATCH ADJACENT FINISHES, UNLESS OTHERWISE NOTED.
13. ALL CONCRETE IS 3000# FIBER-REINFORCED, UNLESS OTHERWISE NOTED.
14. ALL FASTENERS IN CONTACT WITH TREATED WOOD SHALL BE STAINLESS STEEL.
15. ALL WOOD IN CONTACT WITH CONCRETE OR EXPOSED TO THE WEATHER SHALL BE TREATED WOOD.
16. ALL WALLS PARALLEL TO FLOOR STRUCTURE SHALL HAVE DOUBLE JOISTS BELOW.
17. ALL SITE INFORMATION WAS GIVEN BY OWNER. OWNER IS RESPONSIBLE FOR BUILDING LOCATION. OWNER HAS BEEN ADVISED TO CONSULT A SURVEYOR FOR LOCATION OF ADDITIONS.
18. ALL FLOOR JOISTS AND ROOF RAFTERS TO BE SECURED WITH SIMPSON HANGERS.

**DRAWING SET INDEX**

NO.	SHEET NAME
T100	COVER SHEET AND NOTES
A100	FLOOR PLAN
A101	CEILING PLAN
A102	MEP PLANS
A103	DETAILS

SCOPE OF WORK - RENOVATION OF OLD LAUNDRY TO A PIZZERIA RESTAURANT.

**SYMBOL LEGEND**

	NEW CONSTRUCTION NOTE / WALL TYPE REFERENCE		WINDOW REFERENCE
	PERMANENTLY WIRED CARBON MONOXIDE DETECTOR		DOOR REFERENCE
	EXHAUST FAN - VENTED TO EXTERIOR		KEY NOTE

**CODE REVIEW**

1. THE GOVERNING CODE IS THE 2020 NYS BUILDING CODE.
2. THIS PROJECT HAS BEEN DESIGNED TO THE BEST OF MY BELIEF, KNOWLEDGE and PROFESSIONAL JUDGMENT TO BE IN COMPLIANCE WITH CHAPTER 11 ACCESSIBILITY OF THE BUILDING CODE OF NEW YORK STATE.
3. OCCUPANCY CLASSIFICATION: BUSINESS (B) - PREVIOUS OCCUPANCY WAS BUSINESS
4. CLASSIFICATION OF WORK: ALTERATION LEVEL 2
5. CONSTRUCTION CLASSIFICATION: TYPE 5B, NOT SPRINKLERED
6. ALLOWABLE HEIGHTS AND AREAS BASED ON TABLE 503:  
 BUSINESS (B): 9,000 SQFT  
 ALLOWABLE AREA W/O SPRINKLERS: 2 STORIES, 40 FT  
 ALLOWABLE HEIGHT W/O SPRINKLERS: 2 STORIES, 40 FT
7. ACTUAL HEIGHTS AND FIRE AREAS:  
 ACTUAL AREA: 1,750 SQFT TENANT  
 ACTUAL HEIGHT: 2 STORIES, 30 FT
8. OCCUPANT LOAD BY AREA:  
 SEATING AREAS @ 320 SQFT = 21 OCCUPANTS  
 1 OCCUPANT PER 15 SQFT  
 KITCHEN AREAS @ 800 SQFT = 4 OCCUPANTS  
 1 OCCUPANT PER 200 SQFT  
 TOTAL OCCUPANT LOAD = 25 OCCUPANTS
10. PLUMBING REQUIREMENTS  
 TYPE B REQUIREMENTS = 1 W/C REQUIRED  
 25 OCCUPANTS @ 1 W/C PER 25 = 1 W/C REQUIRED  
 25 OCCUPANTS @ 1 LAV PER 40 = 1 LAV REQUIRED  
 TOTAL REQUIRED PLUMBING = 1 W/C  
 = 1 MOP SINK, NEW TO BE PROVIDED, DRINKING FOUNTAIN NOT REQUIRED PER PCOVNS 410.2

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REV:

92A MILTON AVENUE  
 BALLSTON SPA, NY

**T100**

TITLE SHEET









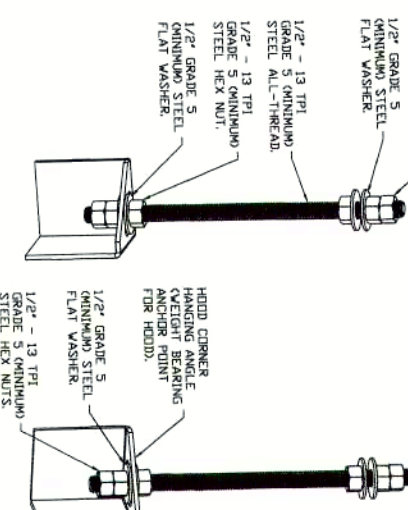
HOOD CORNER  
HANGING ANGLE  
(HARDWARE BY INSTALLER)



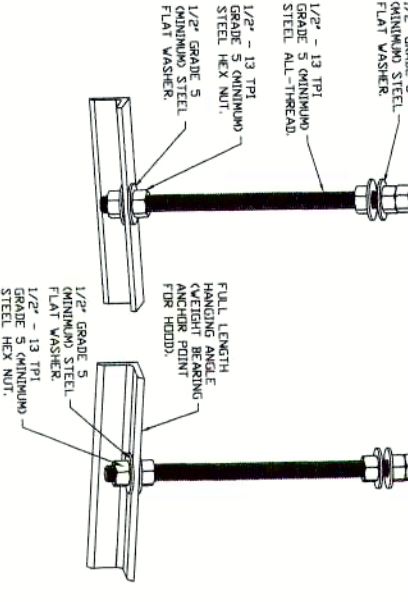
FULL LENGTH  
HANGING ANGLE  
(HARDWARE BY INSTALLER)



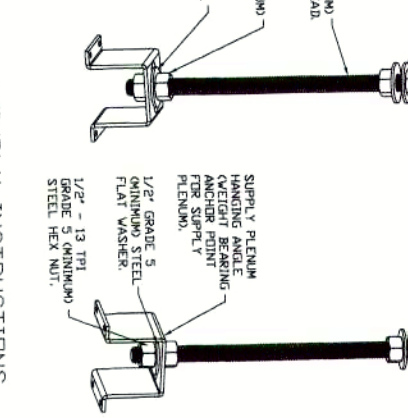
SUPPLY PLENUM  
HANGING ANGLE  
(HARDWARE BY INSTALLER)



HOOD CORNER  
HANGING ANGLE  
(HARDWARE BY INSTALLER)



FULL LENGTH  
HANGING ANGLE  
(HARDWARE BY INSTALLER)



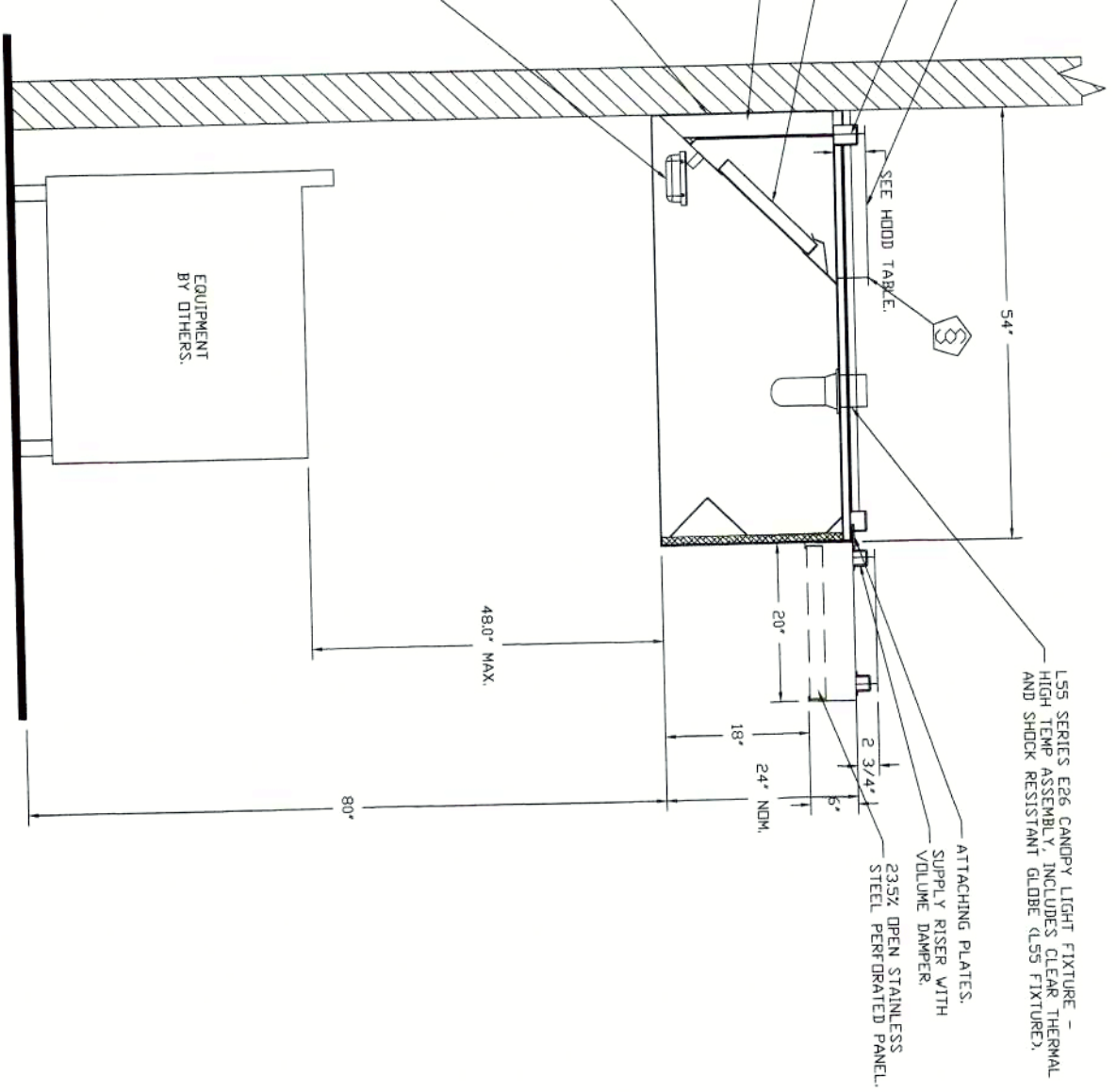
SUPPLY PLENUM  
HANGING ANGLE  
(HARDWARE BY INSTALLER)

ASSEMBLY INSTRUCTIONS  
HANGING ANGLE MUST BE SUPPORTED WITH 1/2\"/>

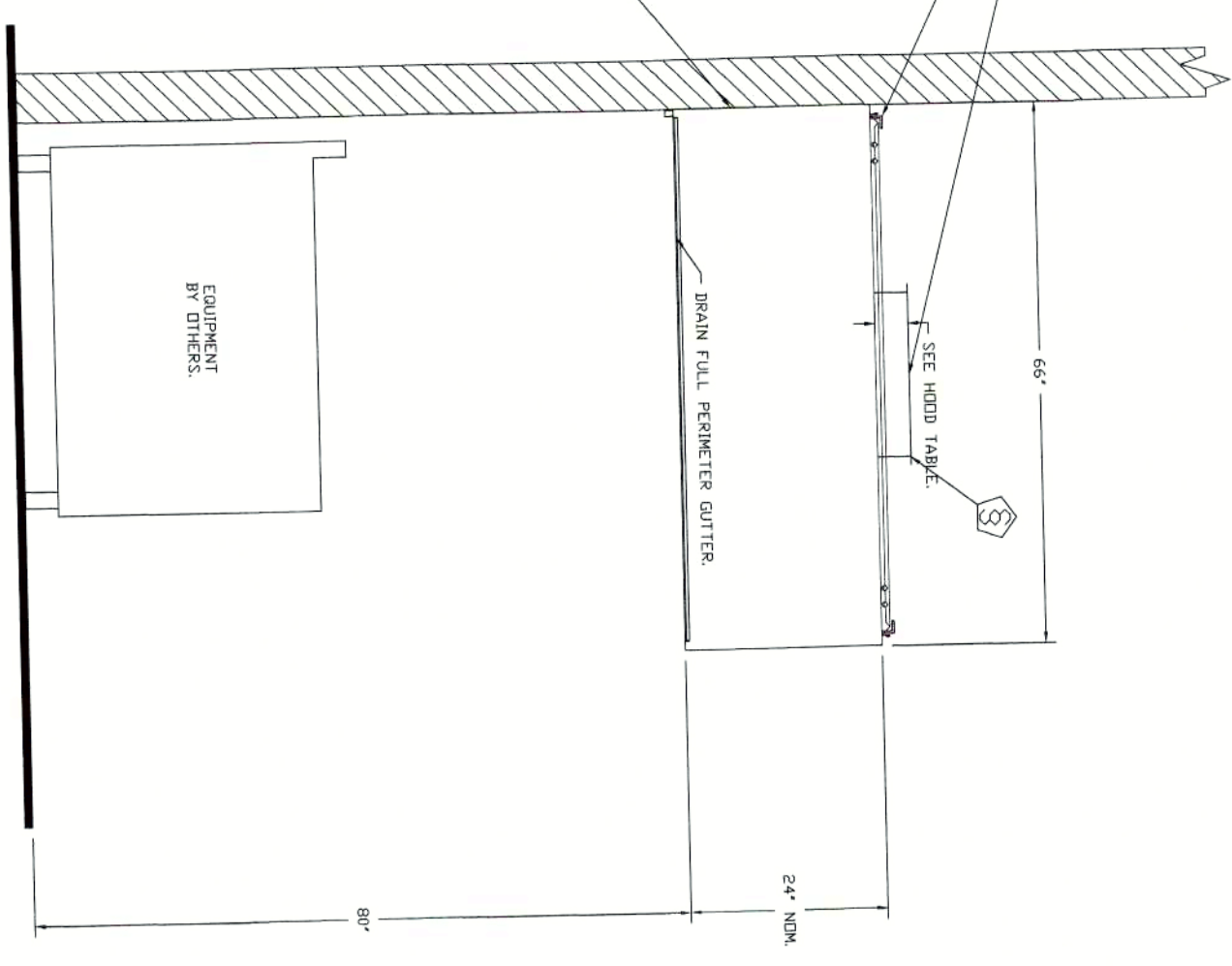
ASSEMBLY INSTRUCTIONS  
HANGING ANGLE MUST BE SUPPORTED WITH 1/2\"/>

ASSEMBLY INSTRUCTIONS  
HANGING ANGLE MUST BE SUPPORTED WITH 1/2\"/>

IT IS THE RESPONSIBILITY OF THE ARCHITECT/OWNER TO ENSURE THAT THE HOOD CLEARANCE AND COMBUSTIBLE MATERIALS IS IN COMPLIANCE WITH LOCAL CODE REQUIREMENTS.



SECTION VIEW - MODEL 5424VX-2-PSP-E  
HOOD - #1



SECTION VIEW - MODEL 6624VXB-C  
HOOD - #2

NO.	REVISIONS	DATE
1		
2		

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92 Milton Avenue,  
Ballston Spa, NY, 12020

DATE: 3/7/2024  
DWG.#: 6665301  
DRAWN BY: P-JR  
SCALE: 3/4" = 1'-0"  
MASTER DRAWING  
SHEET NO. 2





**FIRE SYSTEM INFORMATION - JOB#665301**

FIRE SYSTEM NO	TAG	TYPE	SIZE	MAX FP	DESIGN FP	INSTALLATION SYSTEM	LOCATION ON HOOD
1	TANK FS		40/4.0	40	37	FIRE CABINET RIGHT	RIGHT, HOOD 1

**GAS VALVE(S)**

FIRE SYSTEM NO	TAG	TYPE	SIZE	SUPPLIED BY
1	SC ELECTRICAL	2000		VENTILATION DIRECT

**FIRE SYSTEM PARTS LIST KEY**

FIRE SYSTEM NO	TAG	KEY NUMBER - PART DESCRIPTION	QTY BY FACTORY	QTY BY DIST
0	0	TANK FIRE SUPPRESSION POST-DISCHARGE PROCEDURE UTILITY CABINET LABEL SHEET.	1	0
0	0	TANK FIRE SUPPRESSION MAINTENANCE GUIDE UTILITY CABINET LABEL SHEET.	1	0
0	0	12-F29021-32144-01-360 DUCT FIRE THERMISTAT WITH 12 FOOT WIRE LEADS. NO. CLOSE ON TEMP RISE AT 360°F.	1	0
0	0	32-00002 QUIK SEAL - 1/2" QULJ.	1	0
0	0	4429K153 1/2" MALE NPT TO 1/2" FEMALE NPT ELBOW, BRASS.	2	0
0	0	4429K422 1/2" X 1/4" BRASS REDUCING BUSHING.	1	0
0	0	79529 1/2" X 1/2" PRO-PRESS ELBOW WITH 1/2" NPT FEMALE CONNECTION, VIEGA.	1	0
0	0	79580 1/2" X 1/2" PRO-PRESS TEE X 1/2" NPT FEMALE CONNECTION, VIEGA.	2	0
0	0	87-12004-001 SECONDARY ACTUATOR VALVE (SVA) - SINGLE ACTUATOR, REQUIRES PRIMARY RELEASE ACTUATOR, TANK FIRE SUPPRESSION.	1	0
0	0	87-12004-001 HOSE, SECONDARY ACTUATOR HOSE, 75' BRAIDED STAINLESS STEEL, TANK FIRE SUPPRESSION.	1	0
0	0	87-30001-001 TANK - PRESSURIZED TANK USED FOR TANK FIRE SUPPRESSION.	2	0
0	0	87-30003-001 PRIMARY ACTUATOR KIT (PAK) - ACTUATOR AND RELEASE SOLENOID ASSEMBLY, ONE NEEDED PER FIRE SYSTEM, SUPERVISED, TANK FIRE SUPPRESSION.	1	0
0	0	87-30012-001 HARDWARE, SVA BOLTS, TANK FIRE SUPPRESSION.	8	0
0	0	9054559C PRO PRESS 1/2 PRESS X PRESS 90 ELBOW LD.	7	0
0	0	9054559C PRO PRESS 1/2 PRESS X PRESS 90 ELBOW LD.	7	0
0	0	98694415 HARDWARE, DATANKLOCK LOCKING BRACKET SQUARE NUTS 5/16" ZINC, TANK FIRE SUPPRESSION.	4	0
0	0	A0034332 JUNCTION BOX FOR MANUAL PULL STATION, 15" DEEP BACK BOX, RED COLOR.	1	0
0	0	A3484 1/4" NPT SCRAPPER VALVE AND CAP, JB INDUSTRIES, 1/4" FLARE X 1/4" MPT HALF UNION, USED ON TANK SERVICE PORT.	1	0
0	0	B145 3/8" BLACK IRON 90 ELL.	3	0
0	0	DATANKLOCK DISCHARGE ADAPTER TANK LOCKING PLATE FOR FIRE SYSTEM TANK INSTALLATION IN UTILITY CABINETS, TANK FIRE SUPPRESSION.	2	0
0	0	TANK STRAP TANK STRAP - USED FOR TANK FIRE SUPPRESSION.	6	0
0	0	TCS-UT-TANKBRACKET TANK BRACKET FOR FIRE SYSTEM TANK INSTALLATION IN UTILITY CABINETS, TANK FIRE SUPPRESSION.	2	0
0	0	WK-283925-000 DISCHARGE ADAPTER, TANK FIRE SUPPRESSION.	2	0
16	16	79210 1/2" X 3/8" NPT MALE ADAPTER, VIEGA.	8	0
16	16	DL-F NOZZLE - TANK PROTECTION APPLIANCE COVERAGE NOZZLE (INCLUDES METAL BLOW OFF CAP, LANYARD, USED WITH CHROME-PLATED PIPE).	8	0
26	26	05A-3/8 QUIK SEAL - 3/8" QULJ.	8	0
34	34	A0034331 24VDC SINGLE ACTION MANUAL ACTUATION DEVICE (PUSH/PULL STATION) WITH PROTECTIVE COVER, ONE (1) NORMALLY OPEN CONTACT, RED COLOR.	1	0



REVISIONS	DESCRIPTION	DATE
Δ		
Δ		
Δ		

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92 a Milton ave, Ballston spa, ny  
 92 Milton Avenue,  
 Ballston Spa, NY, 12020

DATE: 3/7/2024  
 DWG.#: 6665301  
 DRAWN: PUR  
 BY:  
 SCALE: 3/4" = 1'-0"  
 MASTER DRAWING

SHEET NO. 3







**EXHAUST FAN INFORMATION - JOB#665301**

FAN UNIT NO	TAG	QTY	FAN UNIT MODEL #	MANUFACTURER	CFM	ESP	RPM	MOTOR ENCL.	HP	BHP	PHASE	VOLT	FLA	DISCHARGE VELOCITY	WEIGHT (LBS)	SQFTS
1		1	VXD180	VENTILATION DIRECT	3300	0.900	1207	DIP-PREMIUM 1500	1.2470	3	208	6.6	762 FPM	177	18.8	
2		1	VXD180	VENTILATION DIRECT	2700	0.300	881	DIP-PREMIUM 1000	0.4750	3	208	3.8	624 FPM	165	10.2	

**MUA FAN INFORMATION - JOB#665301**

FAN UNIT NO	TAG	QTY	FAN UNIT MODEL #	BLOWER	HOUSING	MIN CFM	DESIGN CFM	ESP	RPM	MOTOR ENCL.	HP	BHP	PHASE	VOLT	FLA	MCA	MDCP	WEIGHT (LBS)	SQFTS
3		1	V2D250-200	20WF-2-MOD	A2-D250	2000	2640	0.300	1129	DIP-PREMIUM 1000	1.000	0.8060	3	208	3.0	4.8A	15A	644	8.5

**GAS FIRBD MAKE-UP AIR UNITS)**

FAN UNIT NO	TAG	INPUT BTUS	OUTPUT BTUS	TEMP RISE	REQUIRED INPUT GAS PRESSURE	GAS TYPE	BURNER EFFICIENCY
3		218157	200704	72°F	7 IN. W.C. - 14 IN. W.C.	NATURAL	92

**FAN OPTIONS**

FAN UNIT NO	TAG	QTY	DESCRIPTION
1		1	GREASE BOX
1		1	2 YEAR PARTS WARRANTY
1		1	GREASE BOX
1		1	VAV PACKAGE W/ MANUAL CONTROL (VFD INCLUDED)
1		1	VFD FACTORY MOUNTED AND WIRED IN EXHAUST FAN
1		1	VFD MOUNTING BRACKET FOR DU/FR 180 - 200
1		1	EXHAUST FAN HEAT BAFFLE
1		1	2 YEAR PARTS WARRANTY
1		1	SIZE 2 TEMPERED COMMERCIAL DOWN DISCHARGE FOR DIRECT DRIVE AHUS
1		1	INLET PRESSURE GAUGE, 0-35"
1		1	MANIFOLD PRESSURE GAUGE, -5 TO 15" WC
1		1	BUTTERFLY MOD VALVE OPTION FOR MOD SIZE 2 (1" MOD VALVE)
1		1	MOTORIZED BACKDRIFT DAMPER FOR A2-D HOUSING - MEETS APCA CLASS 1A RATING
1		1	SEPARATE 120V WIRING PACKAGE (REQUIRED AND USED ONLY FOR DCV OR PREVIRE WITH VFD) - THREE PHASE ONLY
1		1	SIZE 2 DIRECT FIRBD HEATER LOW CFM PROFILE PACKAGE - USED ON HEATERS UNDER 2500 CFM
1		1	2 YEAR PARTS WARRANTY

**FAN ACCESSORIES**

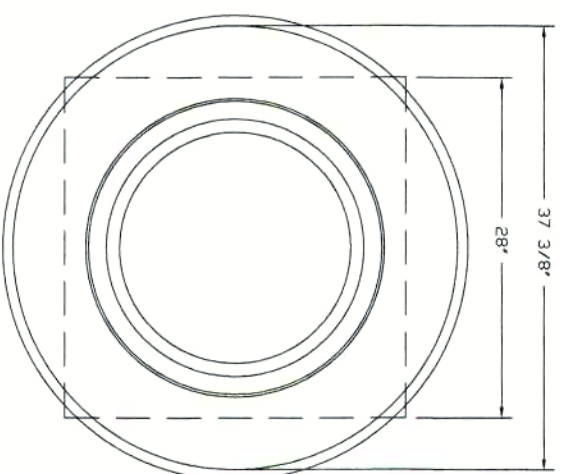
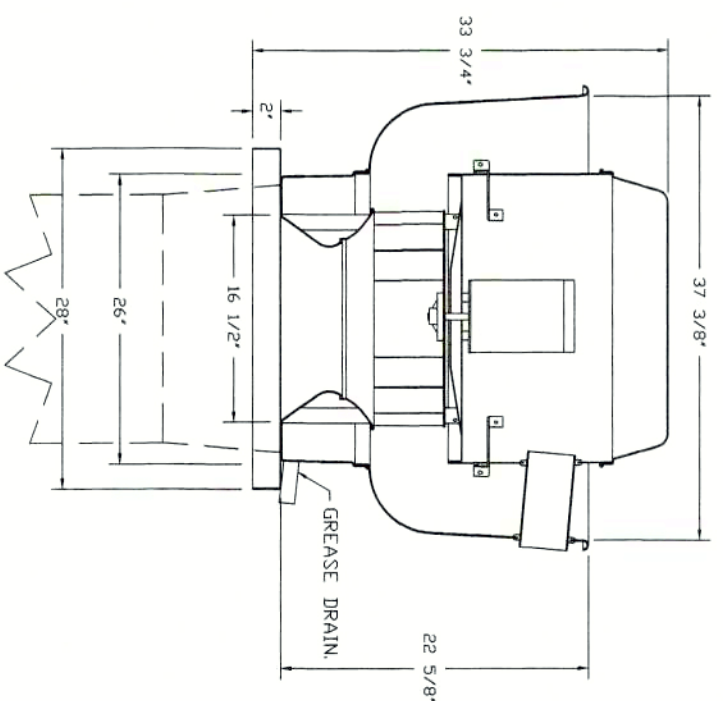
FAN UNIT NO	TAG	EXHAUST	SUPPLY
1		GREASE GRAVITY CUP	WALL MOUNT DISCHARGE DAMPER
1		WALL MOUNT DISCHARGE DAMPER	MOTORIZED WALL MOUNT
2		YES	YES
3		YES	YES

**CURB ASSEMBLIES**

NO	DN	WEIGHT	ITEM	SIZE
1	# 1	43 LBS	CURB	26.500"W X 26.500"L X 20.000"H VENTED HINGED.
2	# 2	43 LBS	CURB	26.500"W X 26.500"L X 20.000"H VENTED HINGED.
3	# 3	80 LBS	CURB	31.000"W X 79.000"L X 20.000"H INSULATED.

UNIT NUMBER	HMI #	HMI #	HMI LOCATION	TEMP AVERAGING	MODBUS ADDRESS
FAN #3	HMI #1 - UNIT	HMI #1	MOUNTED IN UNIT	NOT AVERAGED	55

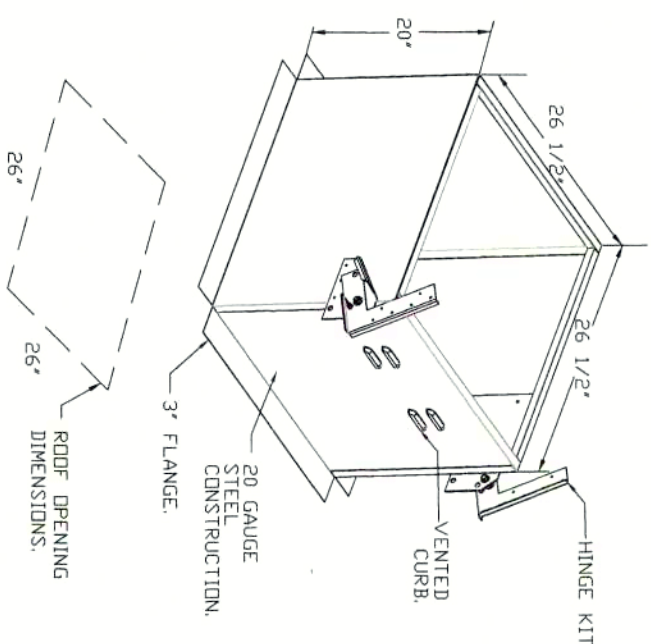
FAN #1, VXD180 - EXHAUST FAN



**FEATURES:**

- DIRECT DRIVE CONSTRUCTION AND BELT/PULLEYS
  - RESTAURANT MODEL
  - UL705 AND UL762 AND UL-C-5645
  - VARIABLE SPEED CONTROL
  - INTERNAL WIRING
  - INTERNAL OVERLOAD PROTECTION, SINGLE PHASE
  - INTERNAL OVERLOAD PROTECTION, THREE PHASE
  - GREASE CLASSIFICATION TESTING
  - NEMA 3R SAFETY DISCONNECT SWITCH
- TEMPERATURE TEST**
- EXHAUST FAN MUST OPERATE CONTINUOUSLY WHILE EXHAUSTING AIR AT 300°F (149°C) UNTIL ALL FAN PARTS HAVE REACHED AVERAGE TEMPERATURE OF 300°F (149°C). DETERMINING EFFECTS TO THE FAN WHICH WOULD CAUSE UNSAFE OPERATION.
- INTERNAL GRAVITY TEST**
- EXHAUST FAN MUST OPERATE CONTINUOUSLY WHILE EXHAUSTING BURNING GREASE VAPORS AT 600°F (316°C) FOR A PERIOD OF 30 MINUTES. DETERMINING EFFECTS TO THE FAN WHICH WOULD CAUSE UNSAFE OPERATION.

- OPTIONS:**
- GREASE BOX
  - 2 YEAR PARTS WARRANTY



92 a Milton ave, Ballston spa, ny  
 92 Milton Avenue,  
 Ballston Spa, NY, 12020

DATE: 3/7/2024  
 DWG #: 665301  
 DRAWN BY: PUR  
 SCALE: 3/4" = 1'-0"  
 MASTER DRAWING

SHEET NO. 5

**REVISIONS**

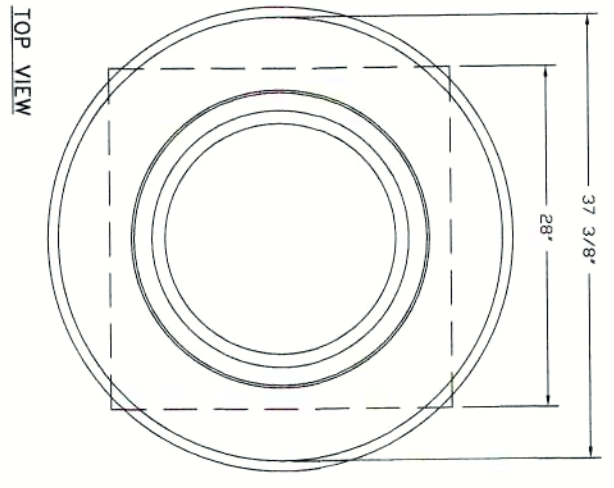
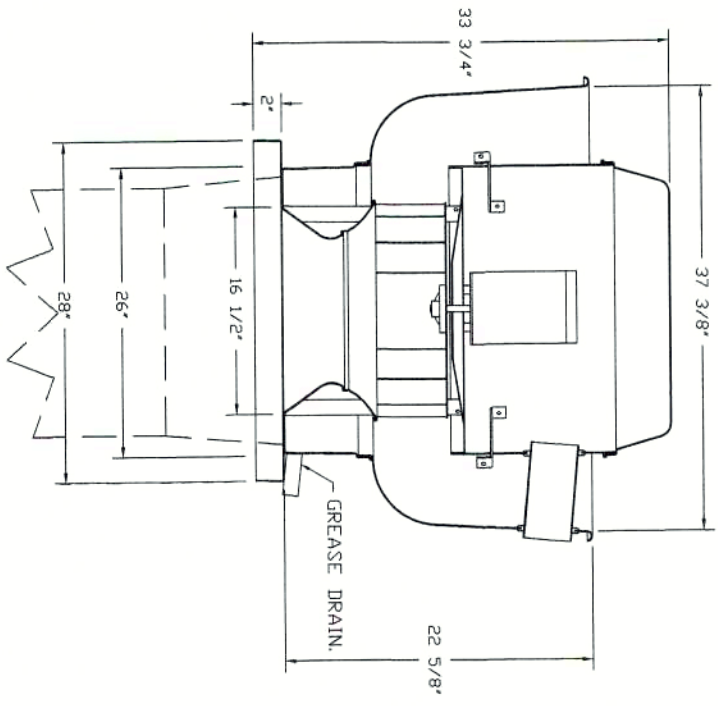
NO.	DESCRIPTION	DATE
1		
2		
3		

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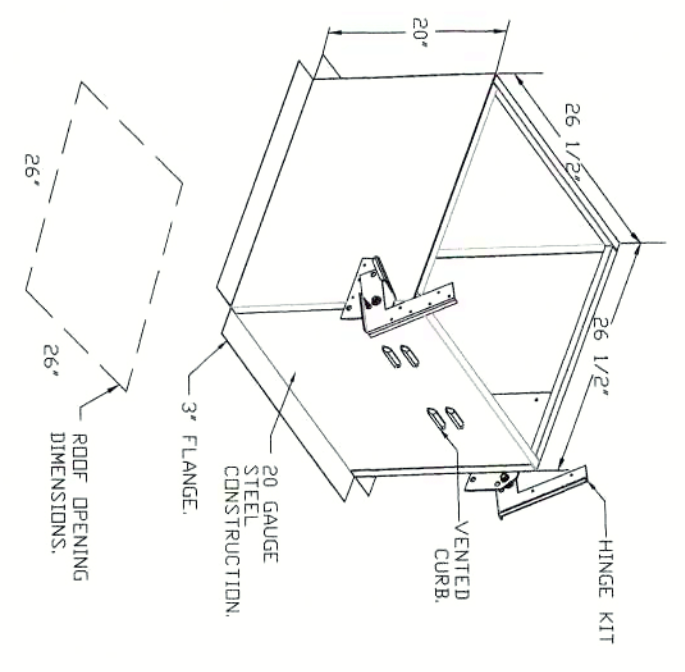
FAN #2 LX2080 - EXHAUST FAN



TOP VIEW

FEATURES:

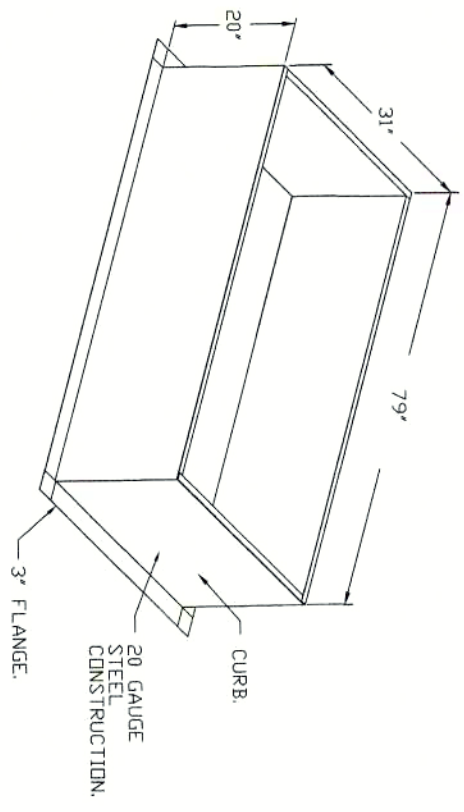
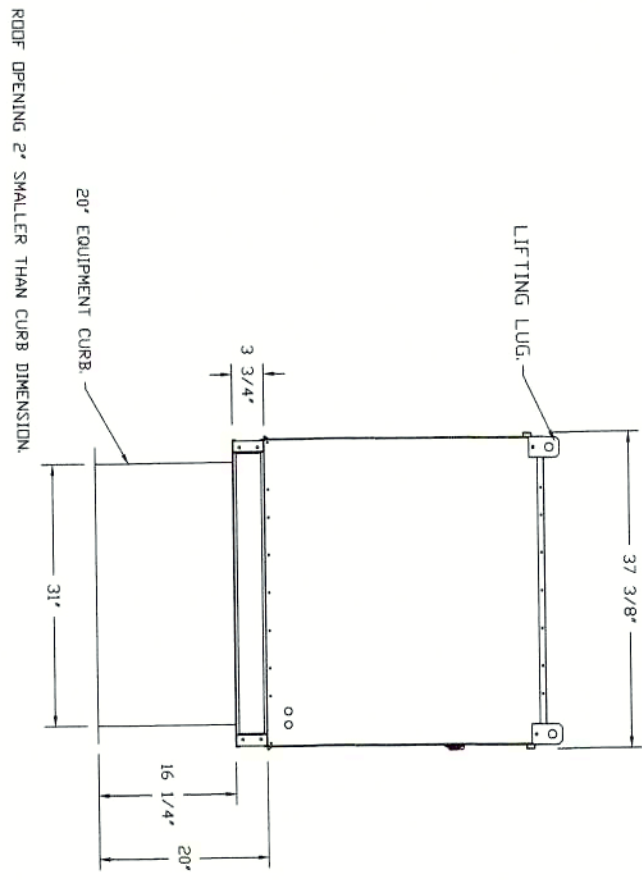
- DIRECT DRIVE CONSTRUCTION (NO BELTS/PULLEYS)
  - ROOF MOUNTED FAN.
  - RESTAURANT MODEL.
  - UL705 AND UL762 AND UL-C-5545
  - VARIABLE SPEED CONTROL.
  - INTERNAL WIRING.
  - THERMAL OVERLOAD PROTECTION (SINGLE PHASE).
  - HIGH HEAT DREATION 300°F (149°C).
  - GREASE CLASSIFICATION TESTING.
  - NEMA 3R SAFETY DISCONNECT SWITCH.
  - NORMAL TEMPERATURE TEST.
  - EXHAUST FAN MUST OPERATE CONTINUOUSLY WHILE EXHAUSTING AIR AT 300°F (149°C) UNTIL ALL FAN PARTS HAVE REACHED THERMAL EQUILIBRIUM, AND VIBRATION LEVELS ARE WITHIN SPECIFIED LIMITS. FAILURE TO DO SO WOULD CAUSE UNSAFE OPERATION.
  - ABNORMAL FLARE-UP TEST.
  - EXHAUST FAN MUST OPERATE CONTINUOUSLY WHILE EXHAUSTING BURNING GREASE VAPORS AT 300°F (149°C) UNTIL THE FAN BEGINS TO SHUT DOWN. FAILURE TO DO SO WOULD CAUSE UNSAFE OPERATION.
- DETAILS:
- GREASE BOX.
  - VAV PACKAGE w/ MANUAL CONTROL.
  - VAV FACTORY MOUNTED AND WIRED IN EXHAUST FAN.
  - 20" MOUNTING BRACKET FOR DU/DR 180
  - EXHAUST FAN HEAT BAFFLE.
  - 2 YEAR PARTS WARRANTY.



<b>REVISIONS</b>								
DATE:								
DESCRIPTION:								
DRAWN BY:	PUJ							
DWG. #:	6665301							
DATE:	3/7/2024							
		92 a Milton ave, Ballston spa, ny						
		92 Milton Avenue,						
		Ballston Spa, NY, 12020						
		<h1 style="margin: 0;">Ventilation Direct</h1> <p style="margin: 0; font-size: small;">www.ventilationdirect.com</p> <p style="margin: 0; font-size: x-small;">Sales &amp; Service</p> <p style="margin: 0; font-size: x-small;">14460 New Falls of Neuse Rd, Suite 149-293, Raleigh, NC, 27614 PHONE: (919) 573 - 1522 FAX: 9195731523 EMAIL: info@ventilationdirect.com</p>						
		<p style="margin: 0; font-size: x-small;">SCALE: 3/4" = 1'-0"</p> <p style="margin: 0; font-size: x-small;">MASTER DRAWING</p>						
		<p style="margin: 0; font-size: x-small;">SHEET NO. 6</p>						

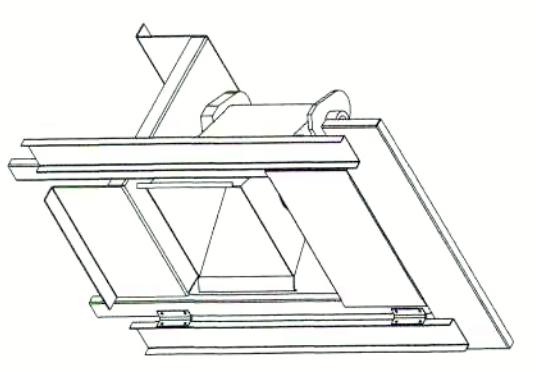
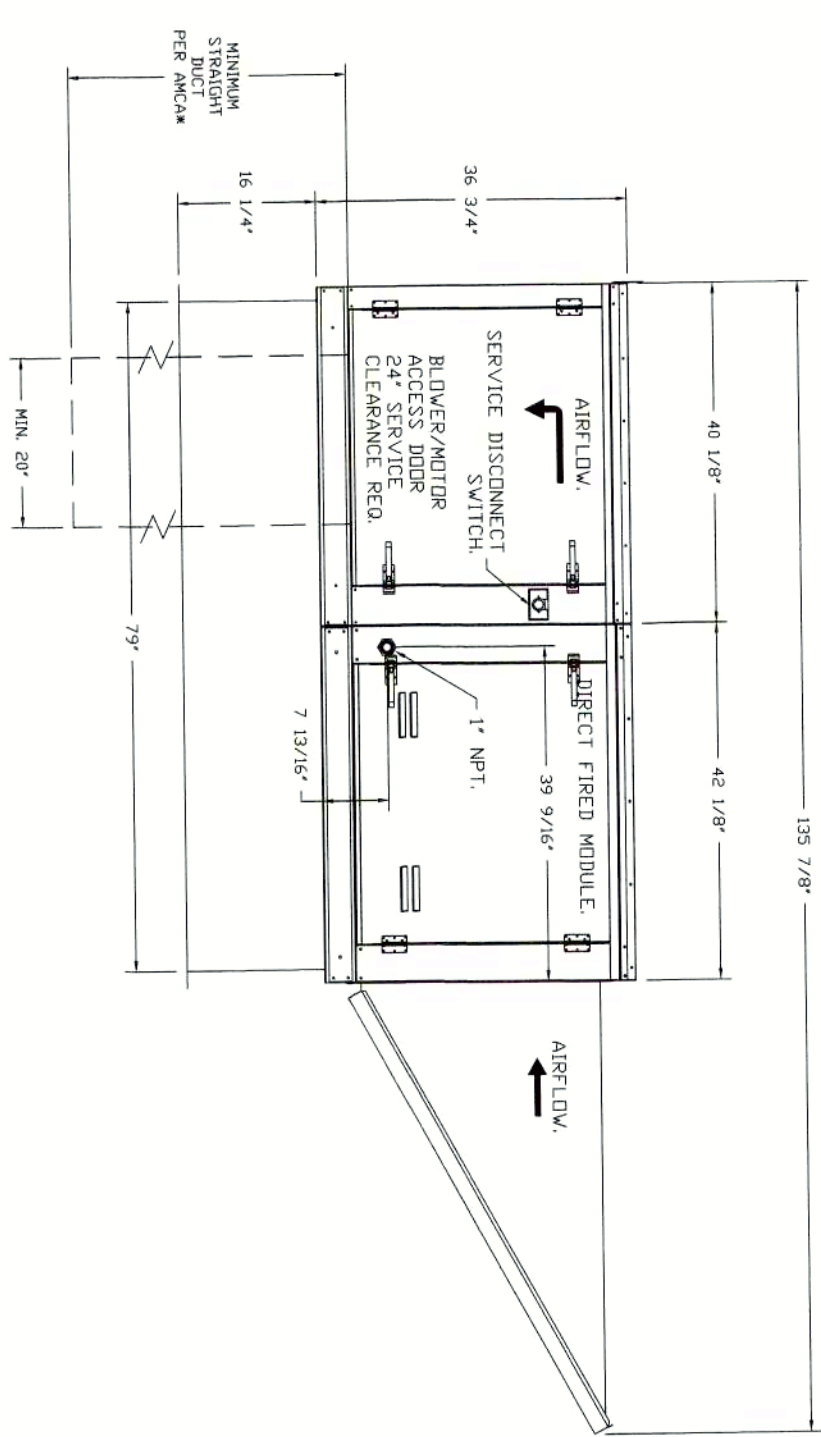
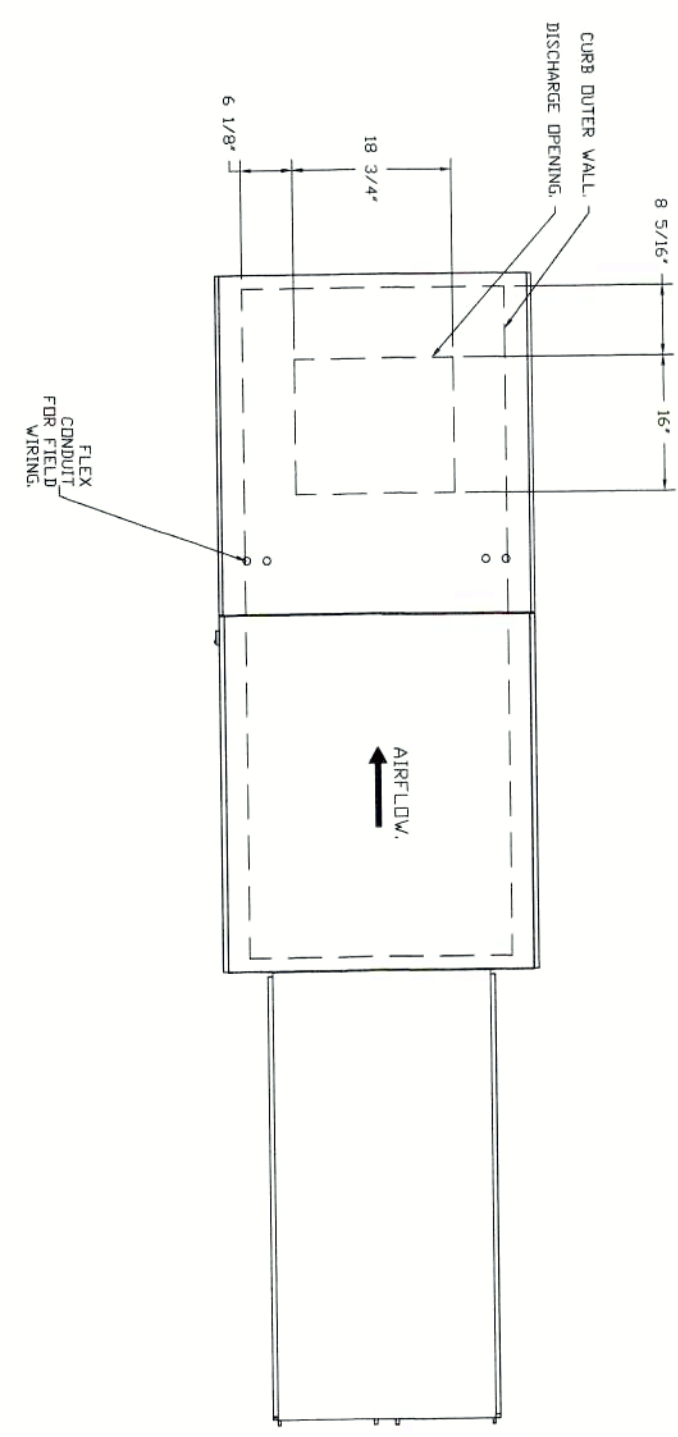


1. FAN #3 V20259-200 - HEATER
2. DIRECT GAS FUELED HEATER
3. DOWN DISCHARGE - AIR FLOW RIGHT -> LEFT
4. DOWN DISCHARGE - GAS FLOW LEFT -> RIGHT
5. DOWN DISCHARGE - GAS FLOW RIGHT -> LEFT
6. GAS PRESSURE GAUGE - 5 TO 15 INCHES W.C. 2.5" DIAMETER 1/4" THREAD SIZE
7. BUTTERFLY VALVE - 20" DIA. 2.5" W.C. 2.5" DIAMETER 1/4" THREAD SIZE
8. BUTTERFLY VALVE - 20" DIA. 2.5" W.C. 2.5" DIAMETER 1/4" THREAD SIZE
9. SEPARATE 120VAC WIRING PROVIDED FOR SEPARATE 120VAC HEATER UNITS V/EXTENDED SHAFTS. STANDARD GALVANIZED CONSTRUCTION. 3/4" REAR FLANGE. LVD LEAKAGE. LEAKS ACTUATOR INCLUDED
10. SEPARATE 120VAC WIRING PROVIDED FOR SEPARATE 120VAC HEATER UNITS V/EXTENDED SHAFTS. STANDARD GALVANIZED CONSTRUCTION. 3/4" REAR FLANGE. LVD LEAKAGE. LEAKS ACTUATOR INCLUDED
11. ELECTRICAL FROM DCV TO MSA SWITCH
12. ELECTRICAL FROM DCV TO MSA SWITCH
13. ELECTRICAL FROM DCV TO MSA SWITCH
14. ELECTRICAL FROM DCV TO MSA SWITCH
15. ELECTRICAL FROM DCV TO MSA SWITCH
16. ELECTRICAL FROM DCV TO MSA SWITCH
17. ELECTRICAL FROM DCV TO MSA SWITCH
18. ELECTRICAL FROM DCV TO MSA SWITCH
19. ELECTRICAL FROM DCV TO MSA SWITCH
20. ELECTRICAL FROM DCV TO MSA SWITCH



OPTIONS - FULL BOTTOM CORNERS.

SUPPLY SIDE HEATER INFORMATION:  
 INPUT TEMPERATURE = 31° TEMP. RISE = 72°  
 BTU'S CALCULATED @ ACTUAL AIR DENSITY  
 OUTPUT BTU'S AT ALTITUDE OF 0.0 FT. = 203070  
 INPUT BTU'S AT ALTITUDE OF 324 FT. = 200754  
 OUTPUT BTU'S AT ALTITUDE OF 324 FT. = 219156



DIRECT FIRED (DF) PROFILE PLATE ASSEMBLY

**DIRECT FIRED PROFILE PLATE SPECIFICATIONS:**  
 DESCRIPTION: DIRECT FIRED PROFILE PLATE ASSEMBLY SHALL BE PATENTED US PATENT NO. US669928B2, SELF-ADJUSTING PROFILE PLATES DESIGNED TO ENSURE PROPER AIR VELOCITY AND PRESSURE DROP ACROSS THE BURNER PROFILE PLATES. THE PROFILE PLATES SHALL BE CONSTRUCTED FROM 20 GAUGE STEEL WITH A MINIMUM THICKNESS OF 0.032 INCHES. THE PROFILE PLATES SHALL BE CONSTRUCTED WITH THE BLOWER MOUNTED DOWNSTREAM OF THE BURNER. THIS ARRANGEMENT WILL ENSURE A CONSISTENT AIRFLOW, REGARDLESS OF INLET AIR TEMPERATURE.  
 APPLICATION: DIRECT FIRED PROFILE PLATES ARE ENGINEERED TO AUTOMATICALLY REACT TO THE MOVEMENT OF SPRING HINGES WITHOUT THE NEED FOR ANY MOTORS OR ACTUATORS TO MECHANICALLY ADJUST THEM. THE PROFILE PLATES SHALL BE CONSTRUCTED FROM 20 GAUGE STEEL WITH A MINIMUM THICKNESS OF 0.032 INCHES. THE PROFILE PLATES SHALL BE CONSTRUCTED WITH THE BLOWER MOUNTED DOWNSTREAM OF THE BURNER. THIS ARRANGEMENT WILL ENSURE A CONSISTENT AIRFLOW, REGARDLESS OF INLET AIR TEMPERATURE.  
 ALL PROFILE PLATE ASSEMBLIES SHALL BE INCLUDED IN THE DF UNIT'S ETL LISTING AND COMPLY WITH COMBINED GENERAL CONSTRUCTION.  
 PROFILE PLATES SHALL BE FORMED FROM 20 GAUGE GALVANIZED STEEL.  
 PROFILE PLATES SHALL BE CONSTRUCTED FROM 20 GAUGE STEEL WITH A MINIMUM THICKNESS OF 0.032 INCHES. THE PROFILE PLATES SHALL BE CONSTRUCTED WITH THE BLOWER MOUNTED DOWNSTREAM OF THE BURNER. THIS ARRANGEMENT WILL ENSURE A CONSISTENT AIRFLOW, REGARDLESS OF INLET AIR TEMPERATURE.  
 DESIGN SHALL INCORPORATE PROPERLY TORQUED, PERMANENTLY MOUNTED SPRING HINGES.  
 SPRING HINGES SHALL BE MADE FROM PLATED STEEL.



92 a Milton ave, Ballston spa, ny  
 92 Milton Avenue,  
 Ballston Spa, NY, 12020

DATE: 3/7/2024  
 DWG.#: 6665301  
 DRAWN BY: PJR  
 SCALE: 3/4" = 1'-0"  
 MASTER DRAWING

SHEET NO. 7

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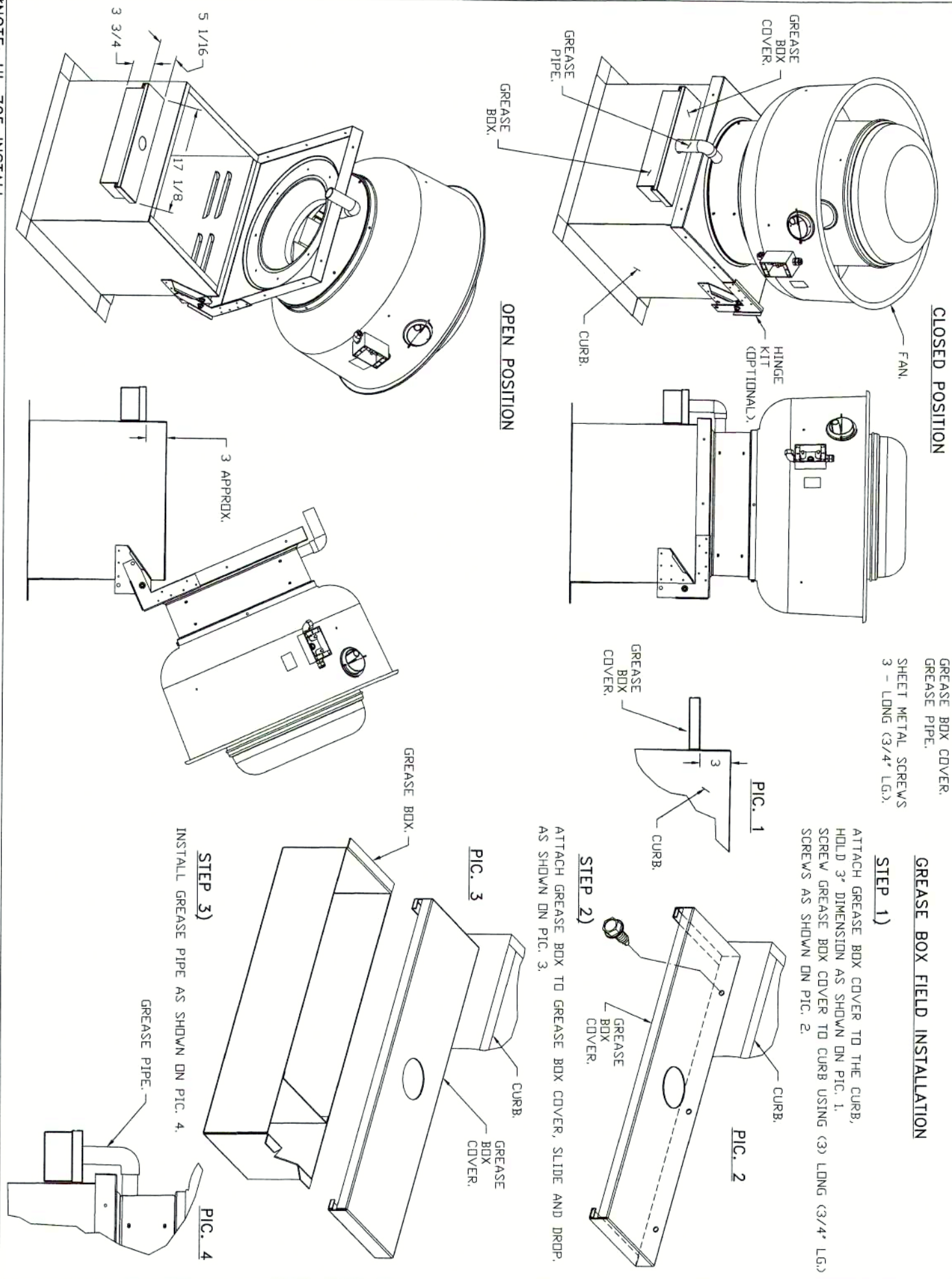
GREASE DUCT & CHIMNEY SPECIFICATIONS:  
 PROVIDE GREASE DUCT EQUAL TO VENTILATION DIRECT MODEL "VDW"  
 ROUND 20 GAUGE 430 STAINLESS STEEL DUCTWORK. MODEL "VDW"  
 IS LISTED TO UL-1978 AND IS INSTALLED USING "V" CLAMP LOCKING  
 CONNECTIONS SEALED WITH 3M FIRE BARRIER 2000 PLUS. MODEL "VDW"  
 DOES NOT REQUIRE WELDING PROVIDING IT HAS BEEN INSTALLED PER  
 THE MANUFACTURES INSTALLATION GUIDE.  
 PROVIDE RATED ACCESS DOORS AT EVERY CHANGE IN DIRECTION AND EVERY 12' ON CENTER.  
 PER MANUFACTURES LISTING MODEL "VDW" HORIZONTAL RUNS LESS THAN 75 FT. CAN BE  
 SLOPED 1/16" PER 12", HORIZONTAL RUNS MORE THAN 75 FT. CAN BE SLOPED 3/16" PER 12".  
 DUCT SHOULD BE SLOPED AS MUCH AS POSSIBLE TO REDUCE THE CHANCE OF GREASE  
 ACCUMULATION IN HORIZONTAL RUNS.

IF THE DUCT OR CHIMNEY IS WITHIN 18 INCHES OF COMBUSTIBLE MATERIAL, PROVIDE  
 UL-2221 OR UL-103 HT LISTED DOUBLE WALL GREASE DUCT OR DOUBLE WALL CHIMNEY  
 EQUAL TO VENTILATION DIRECT MODEL "VDW- 2R, 2R TYPE HT, 3R, OR 3Z" ROUND 20 GAUGE  
 430 STAINLESS INNER DUCT INSULATED WITH A 24 GAUGE 430 STAINLESS OUTER SHELL.

**CUSTOMER APPROVAL TO MANUFACTURE:**

APPROVED AS NOTED   
 APPROVED WITH NO EXCEPTION TAKEN   
 REUSE AND RESUBMIT   
 SIGNATURE \_\_\_\_\_  
 YOUR TITLE \_\_\_\_\_ DATE \_\_\_\_\_

**GREASE BOX INSTALLATION**



\*NOTE: UL 705 INSTALL.



REVISIONS	DATE	DESCRIPTION

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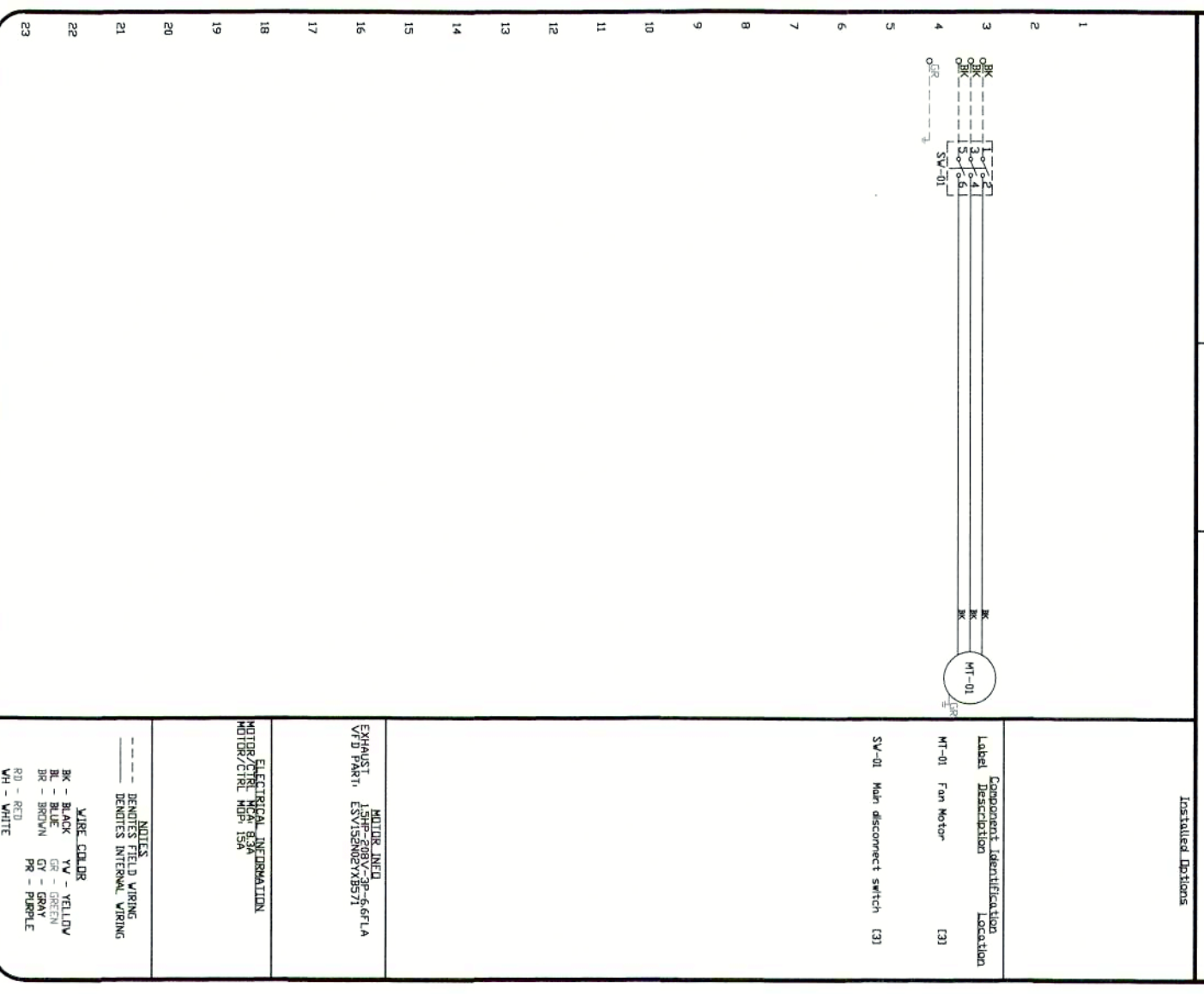
92 a Milton ave, Ballston spa, ny  
 92 Milton Avenue,  
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DATE: 3/7/2024  
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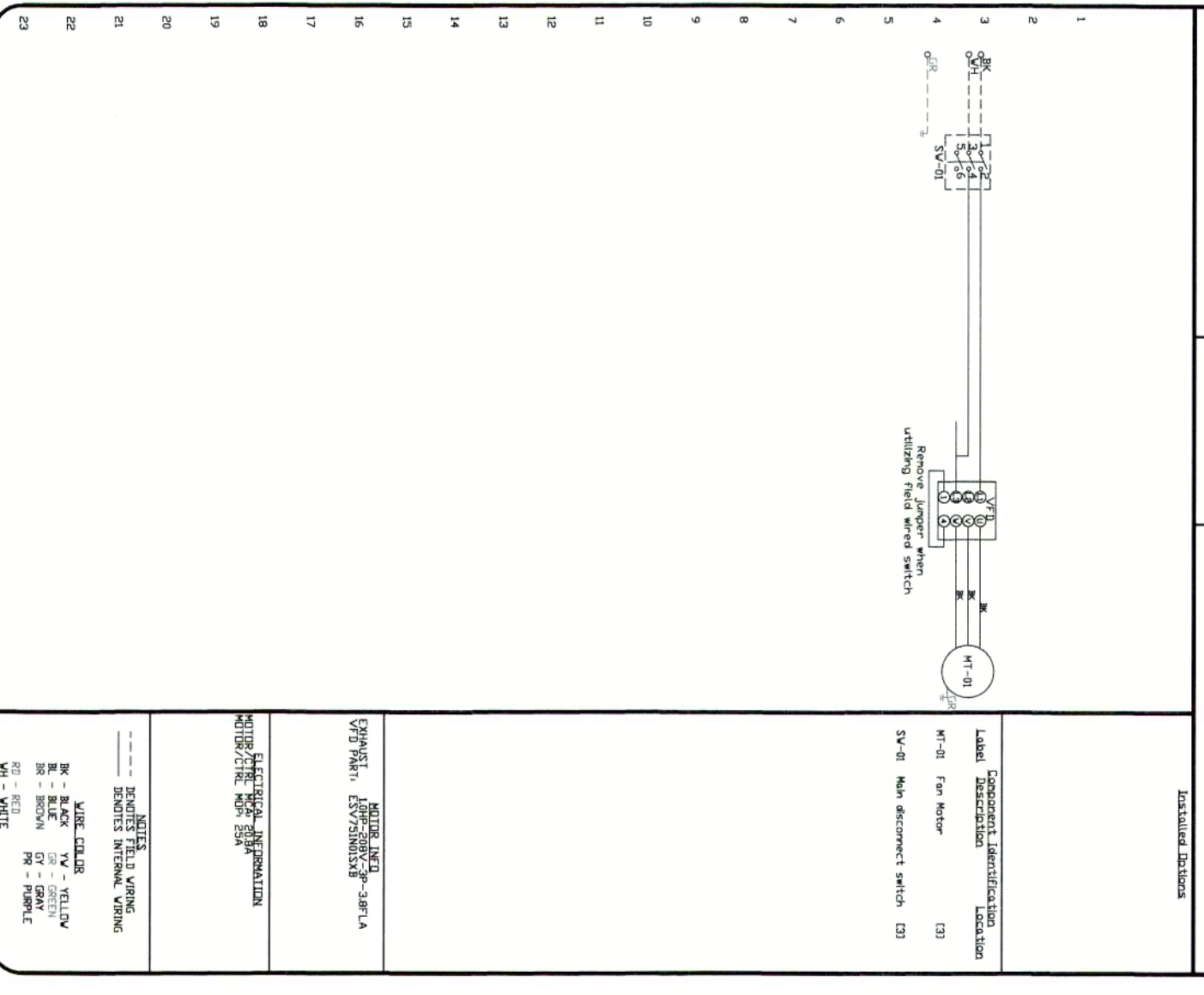
SHEET NO. 8



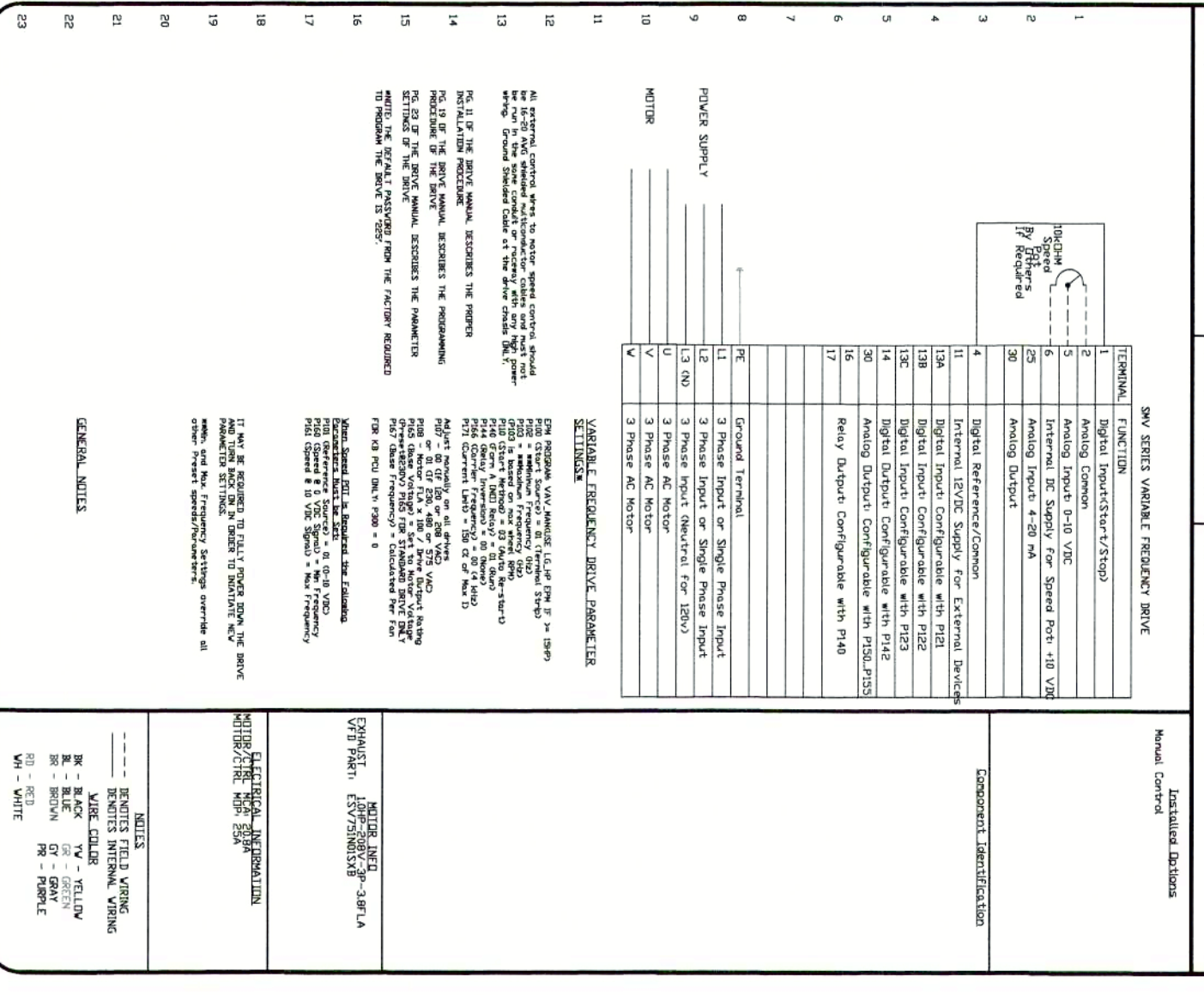
Exhaust Fan Wiring  
 DRAWING NUMBER: EMB665301-1  
 JOB: 6665301 - 92 a Milton ave, Ballston spa.  
 SHIP DATE: 3/7/2024  
 MODEL: Y0000



Exhaust Fan Wiring  
 DRAWING NUMBER: EMB665301-2  
 JOB: 6665301 - 92 a Milton ave, Ballston spa.  
 SHIP DATE: 3/7/2024  
 MODEL: Y0000



VFD Wiring  
 DRAWING NUMBER: VFB665301-2  
 JOB: 6665301 - 92 a Milton ave, Ballston spa.  
 SHIP DATE: 3/7/2024  
 MODEL: Y0000



REVISIONS	DESCRIPTION	DATE
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92 a Milton ave, Ballston spa, ny  
 92 Milton Avenue,  
 Ballston Spa, NY, 12020

DATE: 3/7/2024  
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 SCALE: 3/4" = 1'-0"  
 MASTER DRAWING



SHEET NO. 9

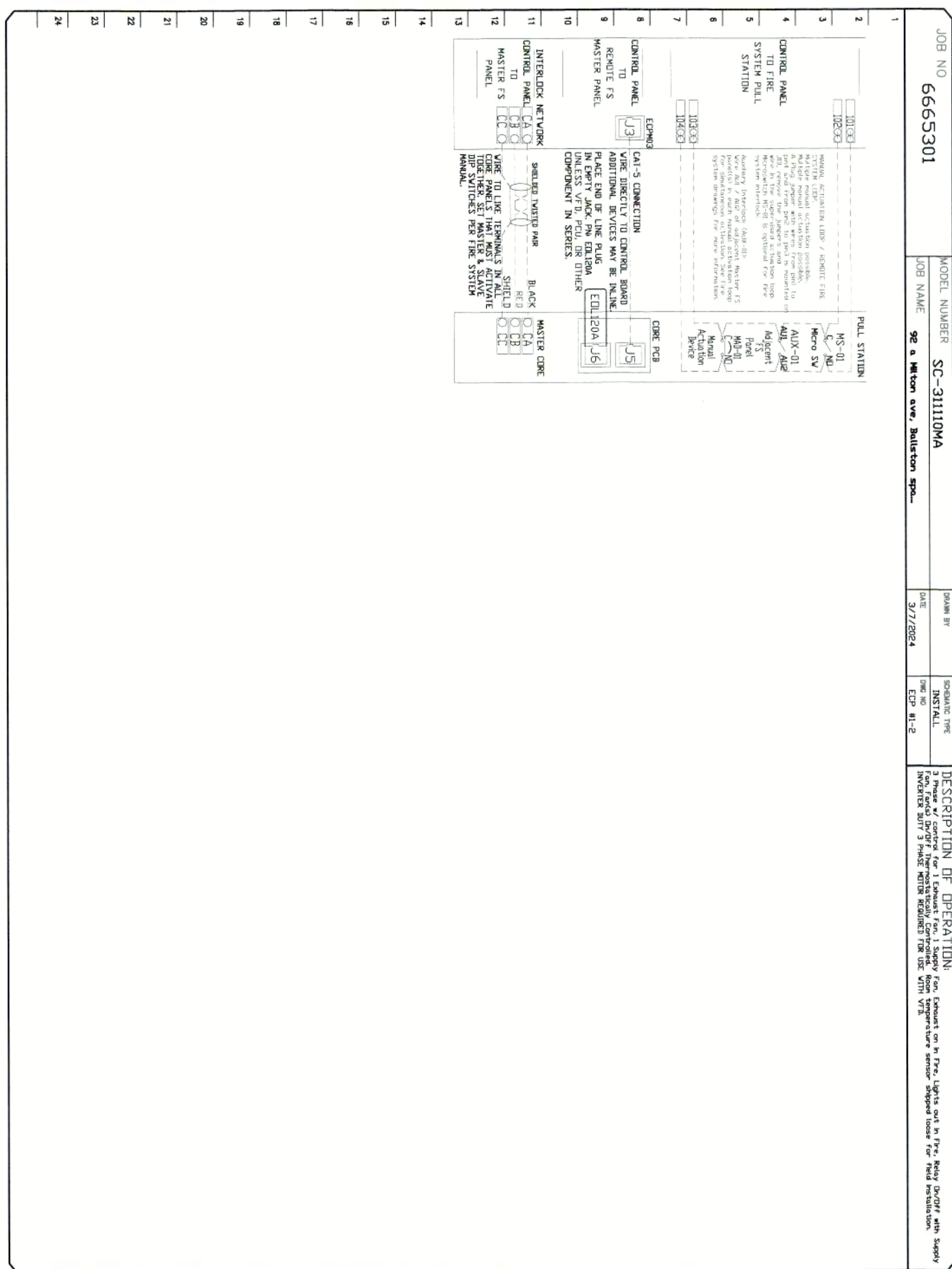
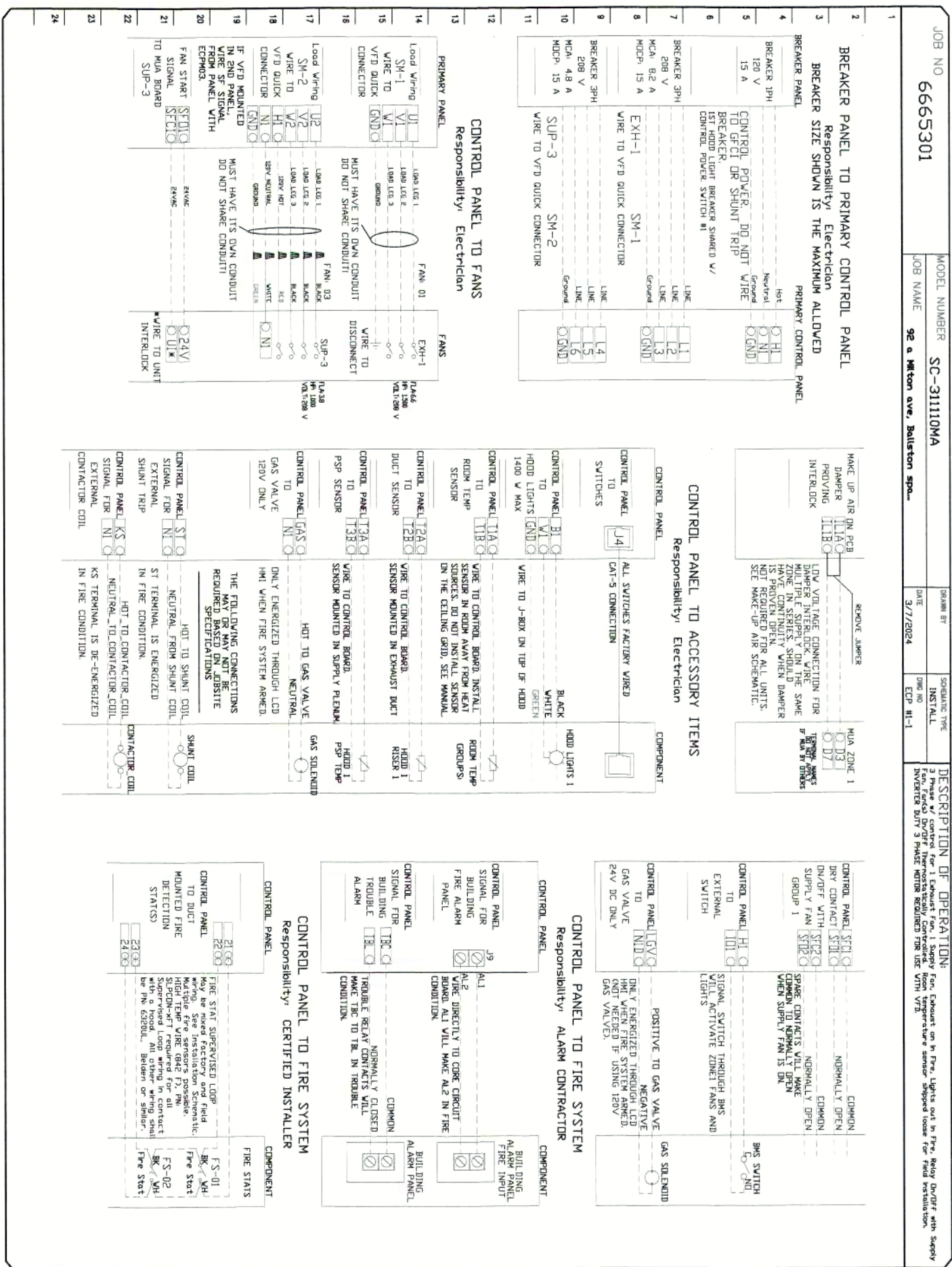






**ELECTRICAL PACKAGE - JOB#665301**

NO	TAG	PACKAGE #	LOCATION	SWITCHES	QUANTITY	OPTION	FANS CONTROLLED
1		SC-31110MA	WALL MOUNT IN SS BOX	SS WALL MOUNT BOX	1 LIGHT	SMART CONTROL S. THERMOSTATIC CONTROL V/ RELAY DIV/RT WITH SUPPLY	EXHAUST 3 1500I 208 6.6 SUPPLY 3 1000I 208 3.8



92 a Milton ave, Ballston spa, ny  
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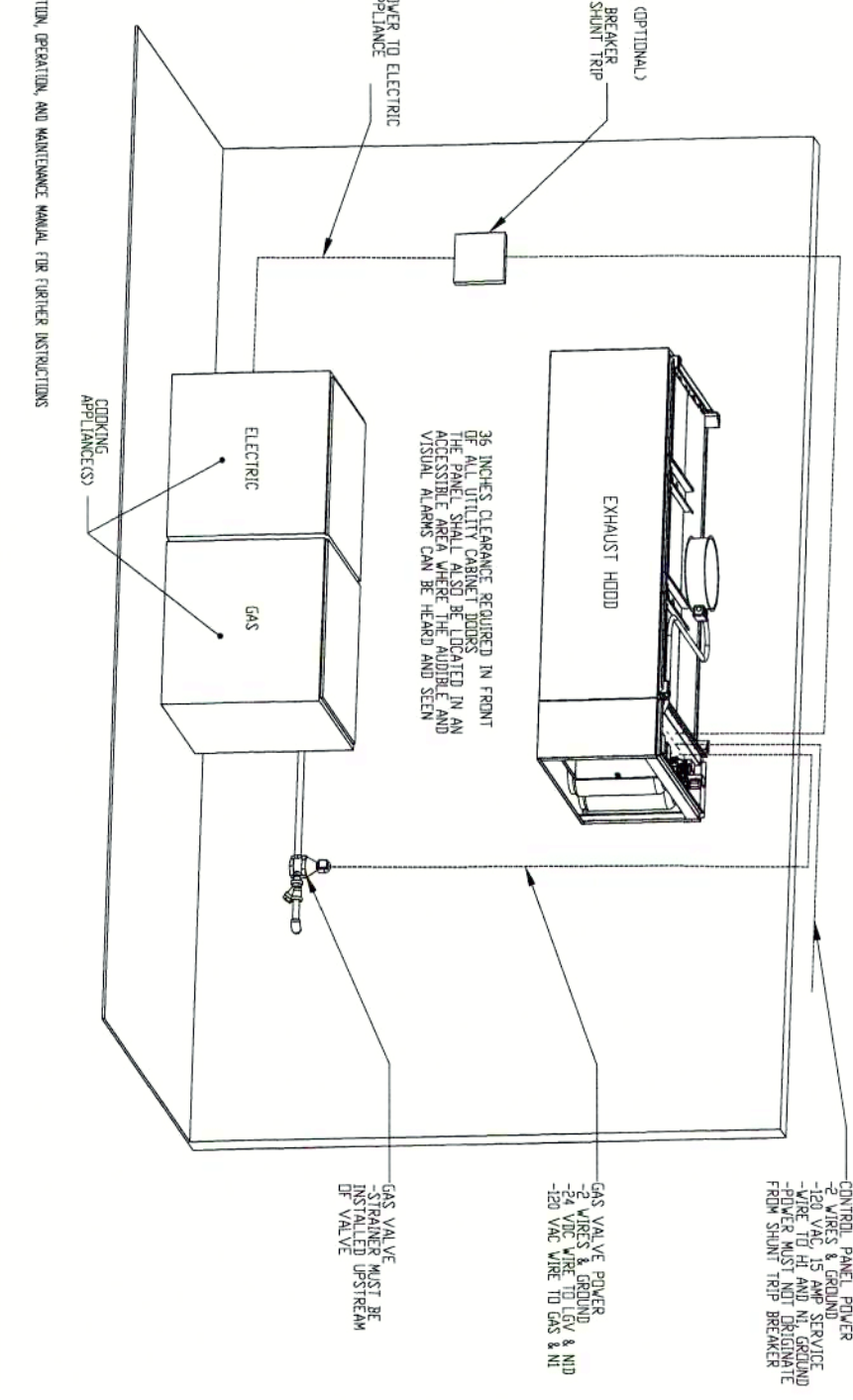


JOB NO: 6665301  
 MODEL NUMBER: SC-31110MA  
 JOB NAME: 92 a Milton ave, Ballston spa  
 DATE: 3/7/2024  
 REVISION: INITIAL  
 DATE: 3/7/2024  
 DESCRIPTION OF OPERATION: Fire System in Room 13 - ADAA

TANK PROTECTION ELECTRICAL DETAIL

FS-1: MASTER

ITEM	CONNECTION IN PANEL	CONNECTION IN DEVICE	VOLTAGE	AMPERAGE	COMMENTS
1	SHUNT TRIP BREAKER (OPTIONAL)	SHUNT TRIP BREAKER (OPTIONAL)	120 VAC	< 4 AMPS	SHUNT TRIP BREAKER (OPTIONAL)
2	CONTROL PANEL POWER	CIRCUIT BREAKER	120 VAC	15 AMPS	CONTROL PANEL POWER MUST NOT BE RUN THROUGH SHUNT TRIP BREAKER
3	RELOCATE DEVIAC ASST. AUTOM. (OPTIONAL)	SOLENOID	120 VAC	< 4 AMPS	KILL SWITCH TERMINALS MUST BE IN SERIES WITH OTHER KILL SWITCHES
4	GAS VALVE	RELOCATED/GREEN	120 VAC	< 6 AMPS	120V TO VALVE TO ASST. ELECTRICAL AUTOM. ASST. SOLENOID TO RELOCATE
5			120 VAC	< 1.0 AMPS	IF 120 VAC - 2 WIRE 1 GROUND AND 1 NEUTRAL TO BE RUN TO BE CONNECTED TO DEVIAC
6			120 VAC	< 1.0 AMPS	IF 120 VAC - 2 WIRE 1 GROUND AND 1 NEUTRAL TO BE RUN TO BE CONNECTED TO DEVIAC
7			120 VAC	< 1.0 AMPS	IF 120 VAC - 2 WIRE 1 GROUND AND 1 NEUTRAL TO BE RUN TO BE CONNECTED TO DEVIAC
8			120 VAC	< 1.0 AMPS	IF 120 VAC - 2 WIRE 1 GROUND AND 1 NEUTRAL TO BE RUN TO BE CONNECTED TO DEVIAC
9			120 VAC	< 1.0 AMPS	IF 120 VAC - 2 WIRE 1 GROUND AND 1 NEUTRAL TO BE RUN TO BE CONNECTED TO DEVIAC
10			120 VAC	< 1.0 AMPS	IF 120 VAC - 2 WIRE 1 GROUND AND 1 NEUTRAL TO BE RUN TO BE CONNECTED TO DEVIAC
11			120 VAC	< 1.0 AMPS	IF 120 VAC - 2 WIRE 1 GROUND AND 1 NEUTRAL TO BE RUN TO BE CONNECTED TO DEVIAC
12			120 VAC	< 1.0 AMPS	IF 120 VAC - 2 WIRE 1 GROUND AND 1 NEUTRAL TO BE RUN TO BE CONNECTED TO DEVIAC
13			120 VAC	< 1.0 AMPS	IF 120 VAC - 2 WIRE 1 GROUND AND 1 NEUTRAL TO BE RUN TO BE CONNECTED TO DEVIAC
14			120 VAC	< 1.0 AMPS	IF 120 VAC - 2 WIRE 1 GROUND AND 1 NEUTRAL TO BE RUN TO BE CONNECTED TO DEVIAC
15			120 VAC	< 1.0 AMPS	IF 120 VAC - 2 WIRE 1 GROUND AND 1 NEUTRAL TO BE RUN TO BE CONNECTED TO DEVIAC
16			120 VAC	< 1.0 AMPS	IF 120 VAC - 2 WIRE 1 GROUND AND 1 NEUTRAL TO BE RUN TO BE CONNECTED TO DEVIAC
17			120 VAC	< 1.0 AMPS	IF 120 VAC - 2 WIRE 1 GROUND AND 1 NEUTRAL TO BE RUN TO BE CONNECTED TO DEVIAC
18			120 VAC	< 1.0 AMPS	IF 120 VAC - 2 WIRE 1 GROUND AND 1 NEUTRAL TO BE RUN TO BE CONNECTED TO DEVIAC
19			120 VAC	< 1.0 AMPS	IF 120 VAC - 2 WIRE 1 GROUND AND 1 NEUTRAL TO BE RUN TO BE CONNECTED TO DEVIAC
20			120 VAC	< 1.0 AMPS	IF 120 VAC - 2 WIRE 1 GROUND AND 1 NEUTRAL TO BE RUN TO BE CONNECTED TO DEVIAC
21			120 VAC	< 1.0 AMPS	IF 120 VAC - 2 WIRE 1 GROUND AND 1 NEUTRAL TO BE RUN TO BE CONNECTED TO DEVIAC
22			120 VAC	< 1.0 AMPS	IF 120 VAC - 2 WIRE 1 GROUND AND 1 NEUTRAL TO BE RUN TO BE CONNECTED TO DEVIAC
23			120 VAC	< 1.0 AMPS	IF 120 VAC - 2 WIRE 1 GROUND AND 1 NEUTRAL TO BE RUN TO BE CONNECTED TO DEVIAC
24			120 VAC	< 1.0 AMPS	IF 120 VAC - 2 WIRE 1 GROUND AND 1 NEUTRAL TO BE RUN TO BE CONNECTED TO DEVIAC

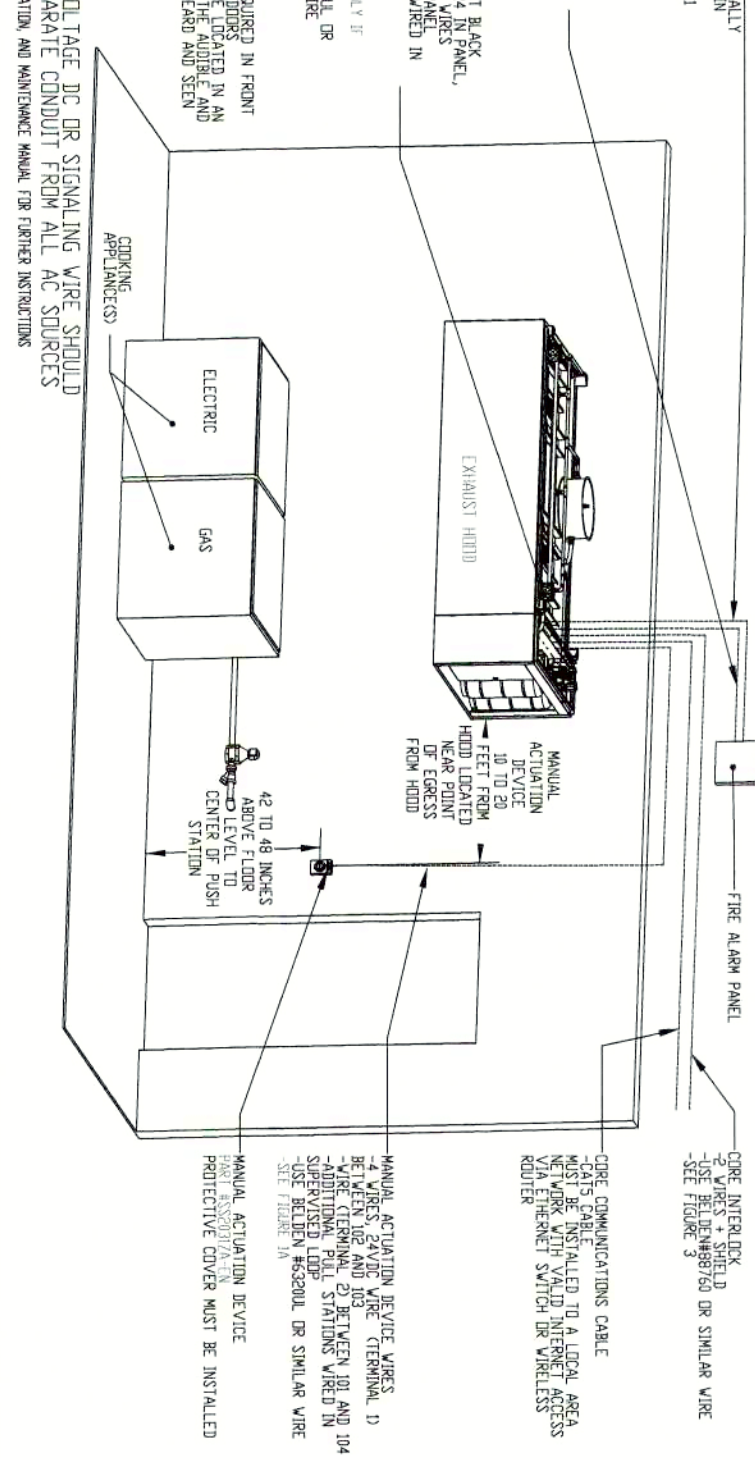


JOB NO: 6665301  
 MODEL NUMBER: SC-31110MA  
 JOB NAME: 92 a Milton ave, Ballston spa  
 DATE: 3/7/2024  
 REVISION: INITIAL  
 DATE: 3/7/2024  
 DESCRIPTION OF OPERATION: Fire System in Room 13 - ADAA

TANK PROTECTION LOW-VOLTAGE DETAIL

FS-1: MASTER

ITEM	CONNECTION IN PANEL	CONNECTION IN DEVICE	VOLTAGE	AMPERAGE	COMMENTS
1	MANUAL ACTIVATION DEVICES	1 & 2	24 VDC	< 1.0 AMPS	WIRE TERMINALS MUST BE MAINTAINED IN A CLEAN AREA WITH FIRE PROTECTION. WIRE TERMINALS MUST BE MAINTAINED IN A CLEAN AREA WITH FIRE PROTECTION. WIRE TERMINALS MUST BE MAINTAINED IN A CLEAN AREA WITH FIRE PROTECTION.
2	MANUAL ACTIVATION DEVICE COVER	N/A	N/A	N/A	MANUAL ACTIVATION DEVICE COVER MUST BE MAINTAINED IN A CLEAN AREA WITH FIRE PROTECTION. WIRE TERMINALS MUST BE MAINTAINED IN A CLEAN AREA WITH FIRE PROTECTION.
3	RELOCATE FIRESTAMP (RELOCATED)	24 AND 29	24 VDC	< 1.0 AMPS	WIRE TERMINALS MUST BE MAINTAINED IN A CLEAN AREA WITH FIRE PROTECTION. WIRE TERMINALS MUST BE MAINTAINED IN A CLEAN AREA WITH FIRE PROTECTION.
4	FIRE ALARM CONTACT	AL1, AL2	24 VDC	< 1.0 AMPS	WIRE TERMINALS MUST BE MAINTAINED IN A CLEAN AREA WITH FIRE PROTECTION. WIRE TERMINALS MUST BE MAINTAINED IN A CLEAN AREA WITH FIRE PROTECTION.
5	CORE INTERLOCKSD	CA, CA, CC	24 VDC	< 1.0 AMPS	WIRE TERMINALS MUST BE MAINTAINED IN A CLEAN AREA WITH FIRE PROTECTION. WIRE TERMINALS MUST BE MAINTAINED IN A CLEAN AREA WITH FIRE PROTECTION.
6	THROUBLE CONTACT	TRC, TR, TRK	24 VDC	< 1.0 AMPS	WIRE TERMINALS MUST BE MAINTAINED IN A CLEAN AREA WITH FIRE PROTECTION. WIRE TERMINALS MUST BE MAINTAINED IN A CLEAN AREA WITH FIRE PROTECTION.
7	CORE COMMUNICATIONS CABLE	R1-49 JACK	INTERNET CONNECTION	24 VDC	WIRE TERMINALS MUST BE MAINTAINED IN A CLEAN AREA WITH FIRE PROTECTION. WIRE TERMINALS MUST BE MAINTAINED IN A CLEAN AREA WITH FIRE PROTECTION.
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24					



92 a Milton ave, Ballston spa, ny  
 92 Milton Avenue,  
 Ballston Spa, NY, 12020

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 MASTER DRAWING

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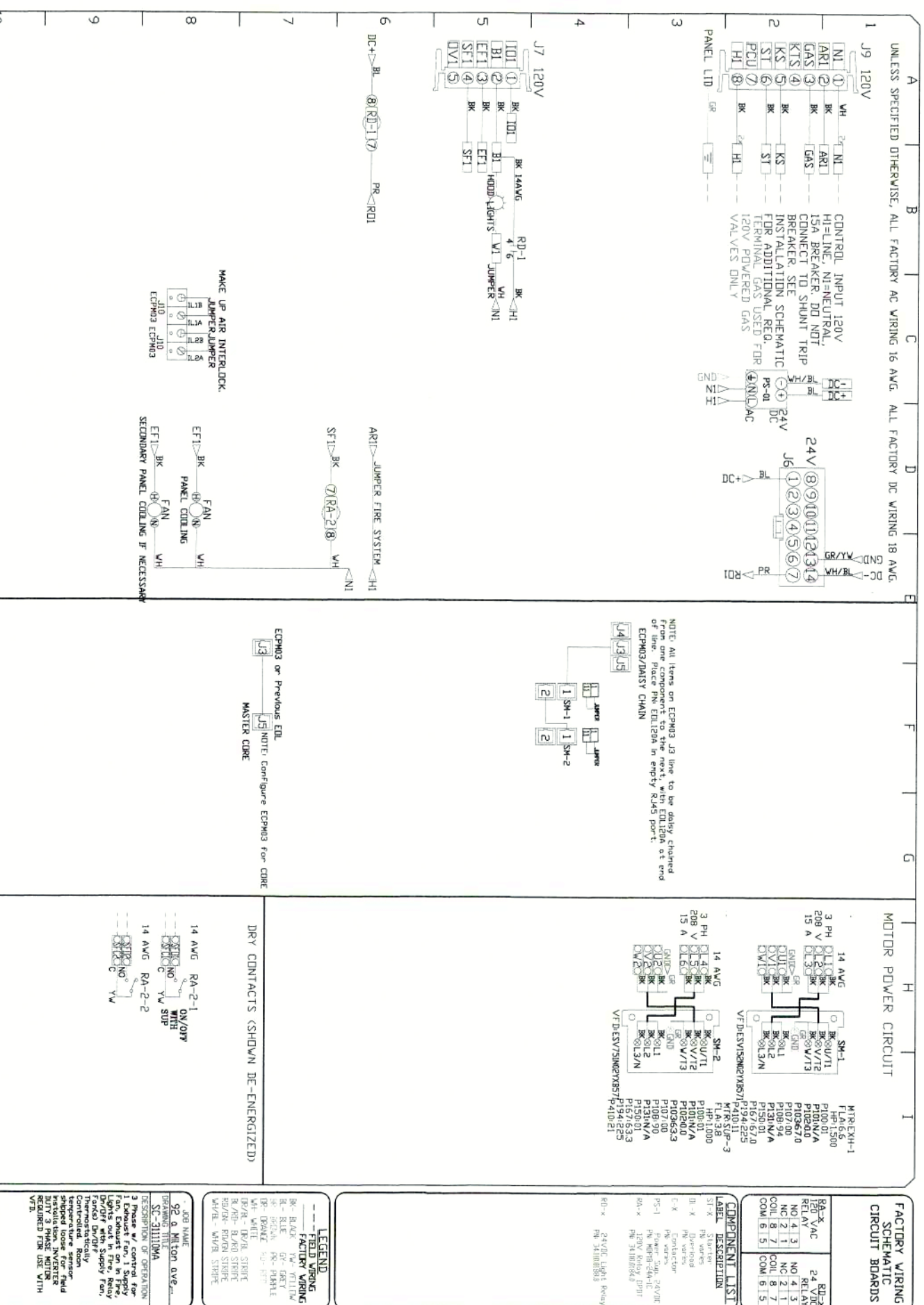
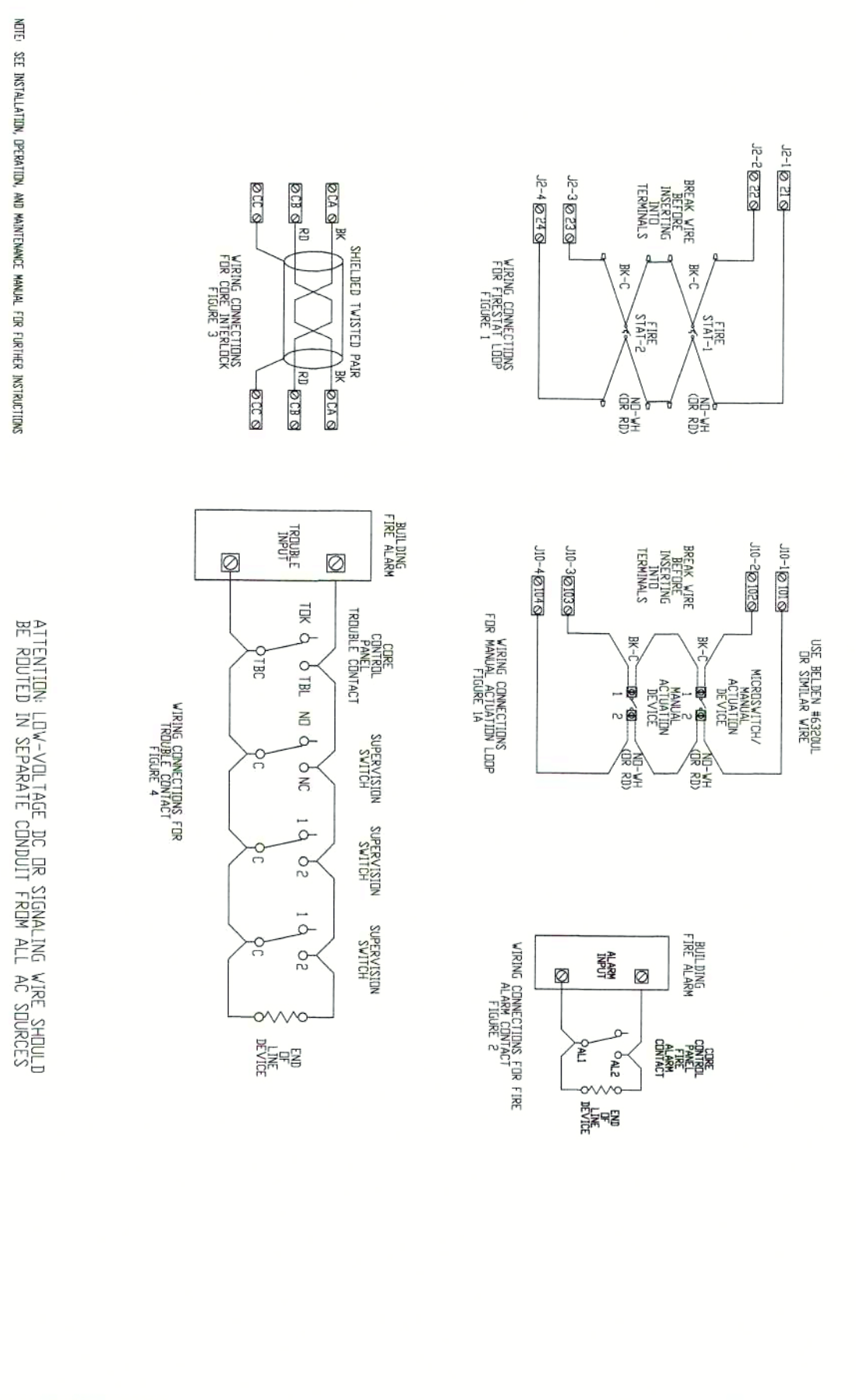
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JOB NO. 6665301  
 MODEL NUMBER SC-311100A  
 JOB NAME 92 a MILTON AVE, BALLSTON SPA, NY  
 DRAWN BY PJR  
 DATE 3/7/2024  
 REVISIONS: 1  
 DESCRIPTION OF OPERATION: Fire System #1 Tank FS - 4042

TANK PROTECTION LOW-VOLTAGE FIGURES

10/01/2023 Rev. 17  
 FS-1: MASTER



20 x 18 x 8.62 BOX

NOTE: SEE INSTALLATION, OPERATION AND MAINTENANCE MANUAL FOR SPECIFIC INSTRUCTIONS

ATTENTION: LOW-VOLTAGE DC OR SIGNALING WIRE SHOULD BE ROUTED IN SEPARATE CONDUIT FROM ALL AC SOURCES

UNLESS SPECIFIED OTHERWISE, ALL FACTORY WIRING IS AWG. ALL FACTORY DC WIRING IS AWG.

1 24V (8)(9)(10)(12)(14) (15)(16)(17) (18)(19)(20)(21)(22)(23)(24)

2 24V (8)(9)(10)(12)(14) (15)(16)(17) (18)(19)(20)(21)(22)(23)(24)

3 24V (8)(9)(10)(12)(14) (15)(16)(17) (18)(19)(20)(21)(22)(23)(24)

4 24V (8)(9)(10)(12)(14) (15)(16)(17) (18)(19)(20)(21)(22)(23)(24)

5 24V (8)(9)(10)(12)(14) (15)(16)(17) (18)(19)(20)(21)(22)(23)(24)

6 24V (8)(9)(10)(12)(14) (15)(16)(17) (18)(19)(20)(21)(22)(23)(24)

7 24V (8)(9)(10)(12)(14) (15)(16)(17) (18)(19)(20)(21)(22)(23)(24)

8 24V (8)(9)(10)(12)(14) (15)(16)(17) (18)(19)(20)(21)(22)(23)(24)

9 24V (8)(9)(10)(12)(14) (15)(16)(17) (18)(19)(20)(21)(22)(23)(24)

10 24V (8)(9)(10)(12)(14) (15)(16)(17) (18)(19)(20)(21)(22)(23)(24)

92 a Milton ave, Ballston spa, ny  
 92 Milton Avenue,  
 Ballston Spa, NY, 12020

DATE: 3/7/2024  
 DWG.#: 6665301

DRAWN BY: PJR  
 SCALE: 3/4" = 1'-0"  
 MASTER DRAWING

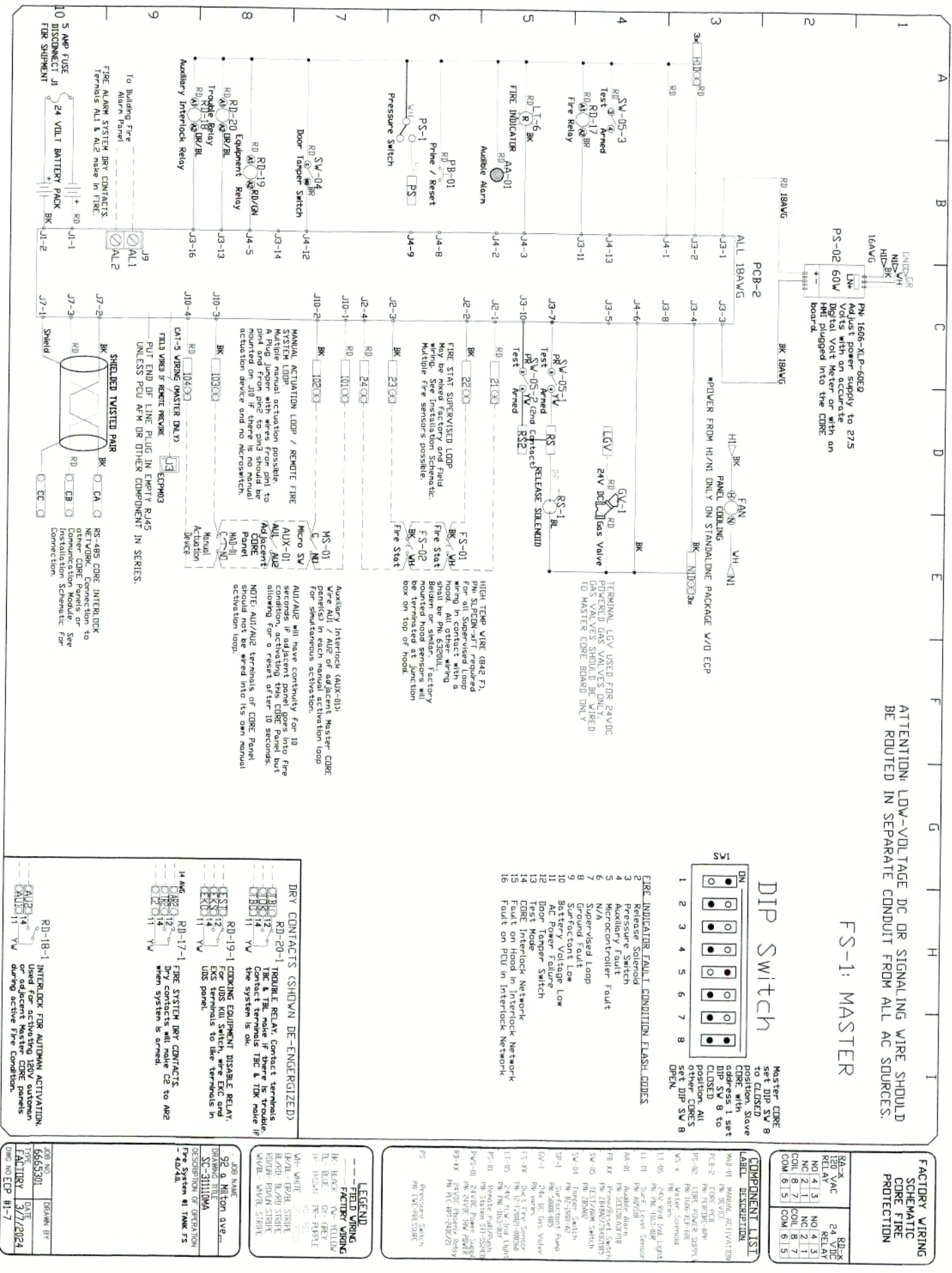
SHEET NO. 13



REVISIONS	DATE







92 a Milton ave, Ballston spa, ny  
 92 Milton Avenue,  
 Ballston Spa, NY, 12020

DATE: 3/7/2024  
 DWG.#: 6665301

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 BY: PJR

SCALE: 3/4" = 1'-0"  
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SHEET NO. 14

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**REVISIONS**

NO.	DESCRIPTION	DATE



DUCTWORK #1 PARTS - JOB#665301 DOUBLE WALL

TAG	PART #	CFM	GM	ZONE	COVEREDBY	SP	WEIGHT	VELOCITY	QTY	DESCRIPTION
HI-E1	VDW22DWRISER-2R-S	3300				-0.767	10.73	0.00	1	DOUBLE WALL RISER COVER - USED ON 18" INNER RISER 4' LONG - 2 LAYERS REDUCED CLEARANCE - 22" STAINLESS STEEL OUTER RISER SHELL ASSEMBLY. INCLUDES INSULATION & SINGLE V CLAMPS FOR INNER & OUTER CONNECTIONS.
P1	VDW1845DVAJTY-2R-S	3300				-0.0578	26.22	1867.42	1	DOUBLE WALL DUCT - 18" INNER 45 DUCT - 2 LAYERS REDUCED CLEARANCE - 22" STAINLESS STEEL OUTER SHELL.
P2	VDW1845DVAJTY-2R-S	3300				-0.0383	26.22	1867.42	1	DOUBLE WALL DUCT - 18" INNER 45 DUCT - 2 LAYERS REDUCED CLEARANCE - 22" STAINLESS STEEL OUTER SHELL.
P3	VDW1835DVALT-2R-S	3300				-0.0107	57.50	1867.42	1	DOUBLE WALL DUCT - 18" INNER DUCT 35' LONG - 2 LAYERS REDUCED CLEARANCE - 22" STAINLESS STEEL OUTER SHELL.
P4	VDW1847DVAJDTF-2R-S	3300				-0.0103	108.88	1867.42	1	DOUBLE WALL ADJUSTABLE DUCT TRANSITION PLATE - 18" INNER DUCT - 2 LAYERS REDUCED CLEARANCE - 22" STAINLESS STEEL OUTER SHELL. MAX LENGTH = 11' / MAX LENGTH = 48.5" / ADJUSTMENT = 30.5" / ADJUSTABLE SECTION MAY NEED TO BE CUT.
P5	ASSEMBLED V/P4 Q=8		3300				10.58	1867.42	1	DUCT TO CURB TRANSITION, 26-1/2" CURB TO 18" DUCT, 16 GA ALUMINIZED USED ON BDUR8 & 20.
SYSTEM AT P5	VDW261818TP					-0.8841	0.00			
RC1	VDW22DWRISER-2R-S						10.73		1	DOUBLE WALL RISER COVER - USED ON 18" INNER RISER 4' LONG - 2 LAYERS REDUCED CLEARANCE - 22" STAINLESS STEEL OUTER RISER SHELL ASSEMBLY. INCLUDES INSULATION & SINGLE V CLAMPS FOR INNER & OUTER CONNECTIONS.
	V3M-2000PLUS						0.80		2	DUCT - 3M FIRE BARRIER 2000 PLUS SILICONE - USED AS SEALANT TO SEAL DUCT JOINTS.
	VDW18DVCCLASY-2R-S						8.70		2	DUCT - 18" DUCT - 22" DOUBLE V-V CLAMP - 2R INSULATION & SINGLE V-V CLAMP INCLUDED - REDUCED CLEARANCE.
TOTAL WEIGHT							269.86			

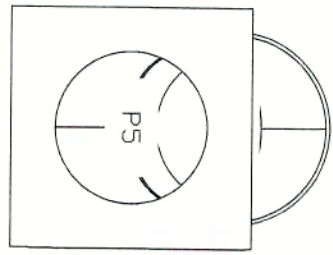
DUCTWORK #1 SE VIEW

- ALL DUCTWORK IS REQUIRED TO BE INSTALLED WITH THE MAXIMUM SUPPORT SPACING LISTED BELOW.
- FOR A COMPLETE LIST OF APPROVED SUPPORT METHODS, SEE THE ENTIRE INSTALLATION AND OPERATION MANUAL.
- DUCTWORK SHALL SLOPE NOT LESS THAN 1/16" PER LINEAR FOOT TOWARDS THE HOOD OR AN APPROVED GREASE COLLECTION RESERVOIR.
- WHERE HORIZONTAL DUCTS EXCEED 75 FEET IN LENGTH, THE SLOPE SHALL NOT BE LESS THAN 3/16" PER LINEAR FOOT.

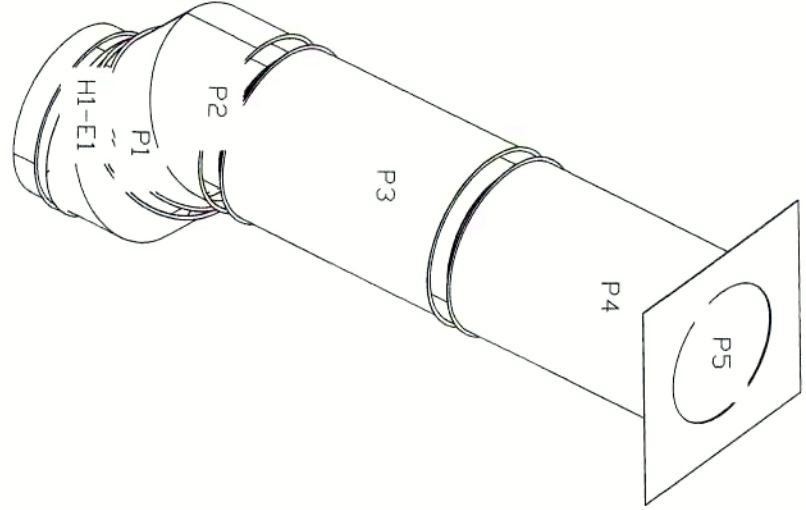
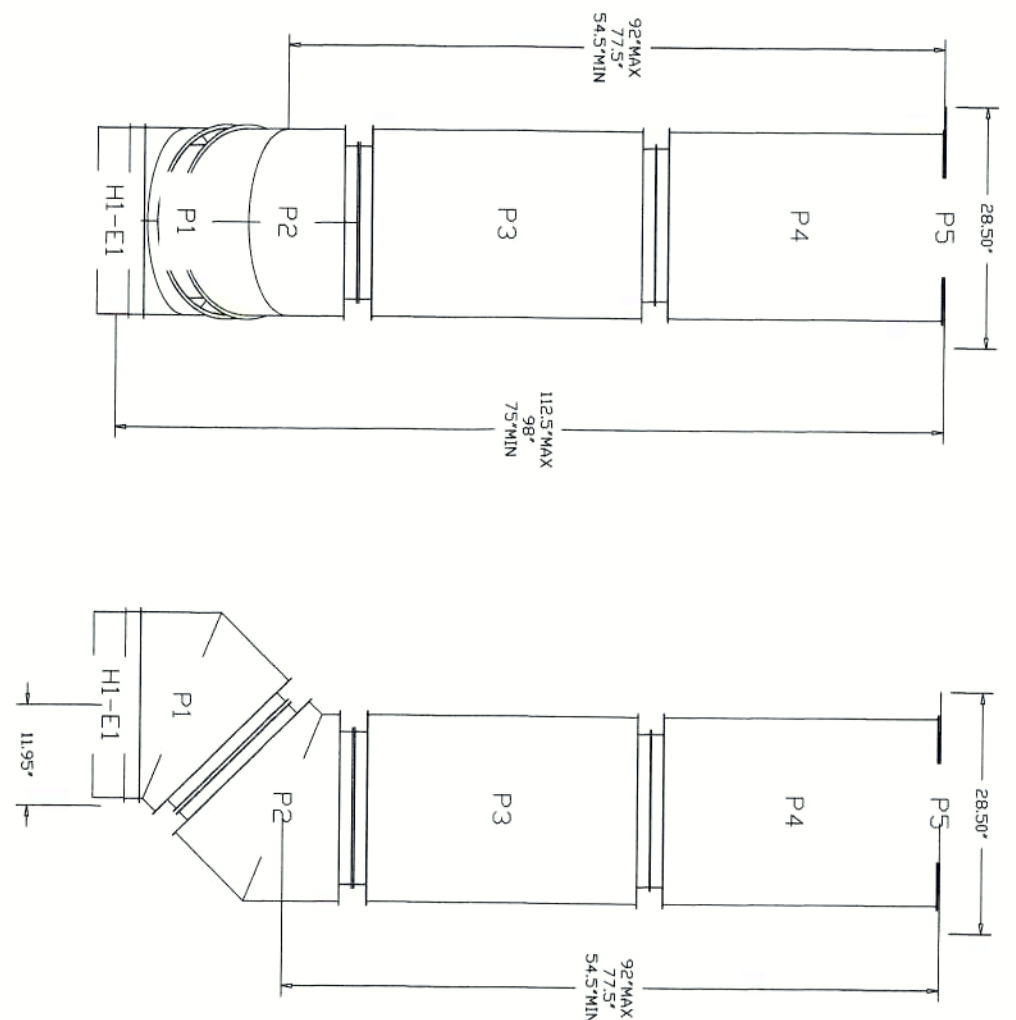
HORIZONTAL		VERTICAL			
DUCT DIAMETER	SUPPORT SPACING (FT)	TYPE	WALL SUPPORT (FT)	CURB SUPPORT (FT)	FLOOR SUPPORT (FT)
5"	7'	2R & 2R HT (5'-16")	20'	24'	24'
6"	7'	2R (18")	18'	24'	24'
7"	7'	3R & 3Z (5'-24")	10'	24'	24'
8"	7'	3Z (26'-36")	10'	20'	20'
10"	7'				
12"	7'				
14"	7'				
16"	7'				
18"	7'				
20"	7'				
22"	7'				
24"	7'				
26"	7'				
28"	7'				
30"	7'				
32"	7'				
34"	7'				
36"	7'				

DO NOT LEAK TEST USING SMOKE BOMBS CONTAINING CHLORINES/CHLORIDES. CONSULT WITH CAPTIVEAIRE FOR PROPER LEAK TESTING METHODS.

DUCTWORK #1 TOP VIEW



DUCTWORK #1 FRONT VIEW DUCTWORK #1 SIDE VIEW

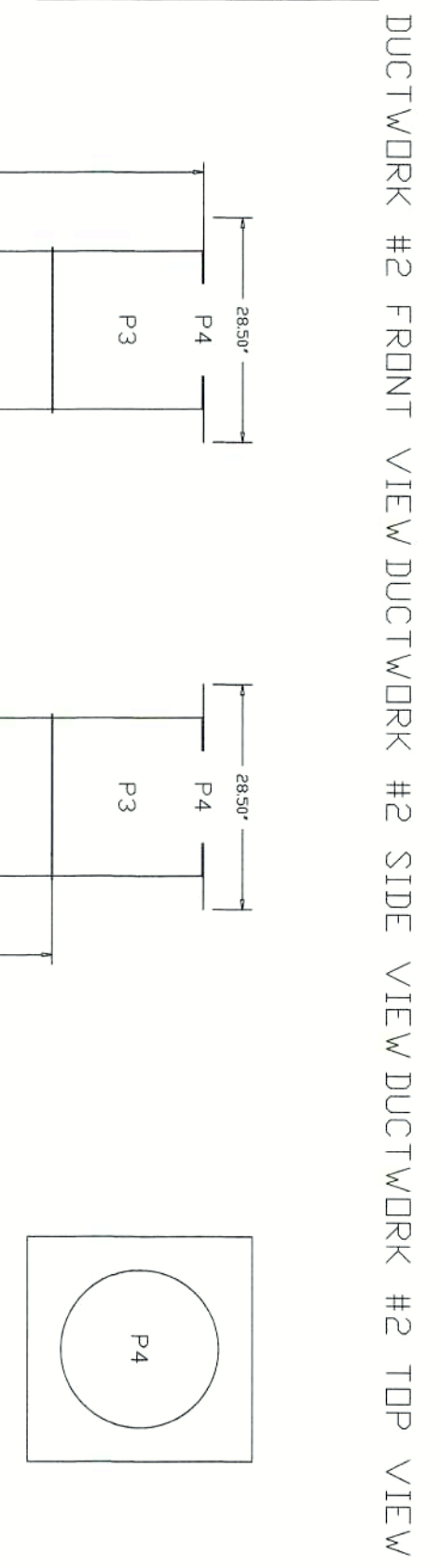


SHEET NO. 15	92 a Milton ave, Ballston spa, ny 92 Milton Avenue, Ballston Spa, NY, 12020	<h1>Ventilation Direct</h1> <p>www.ventilationdirect.com</p> <p>Sales &amp; Service</p> <p>14460 New Falls of Neuse Rd, Suite 149-293, Raleigh, NC, 27614 PHONE: (919) 573 - 1522 FAX: 9195731523 EMAIL: info@ventilationdirect.com</p>
DATE: 3/7/2024 DRAWN BY: PJR CHECKED BY: PJR SCALE: 3/4" = 1'-0" MASTER DRAWING	REVISIONS DESCRIPTION DATE	



DUCTWORK #2 PARTS - JOB#665301

TAG	PART #	CFM	GPM	ZONE	COVERED BY	SP	WEIGHT	VELOCITY	QTY	DESCRIPTION
P1	VDW2047LIT	2700				-00054	3108	1237.59	1	SINGLE WALL DUCT 20" DIAMETER, 47' LONG, FLANGE AT BOTH ENDS. STAINLESS STEEL.
P2	VDW2029LIT	2700				-00034	1942	1237.59	1	SINGLE WALL DUCT 20" DIAMETER, 29' LONG, FLANGE AT BOTH ENDS. STAINLESS STEEL.
P3	VDW2030AJDKIT	2700				-00022	2505	1237.59	1	SINGLE WALL DUCT ADJUSTABLE, 20" DIAMETER, 29.5" LONG, FLANGE AT ONE END WITH A 20" ADJUSTABLE COLLAR - STAINLESS STEEL.
P4	VDW2620TP	2700					942	1237.59	1	DUCT TO CURB TRANSITION, 26-1/2" CURB TO 20" DUCT, 16 GA ALUMINIZED, USED ON BUREAU
ASSEMBLED V/P3 D=B							1000			
SYSTEM AT P4	V3M-2000PLUS					-0246	080		1	DUCT - 3M FIRE BARRIER 2000 PLUS SILICONE - USED AS SEALANT TO SEAL DUCT JOINTS.
TOTAL WEIGHT	VDW20CLASY						141		3	DUCT "V" CLAMP WITH NEW DESIGN 14 GA BRACKETS, 20" DUCT, ASSEMBLY.
							9000			

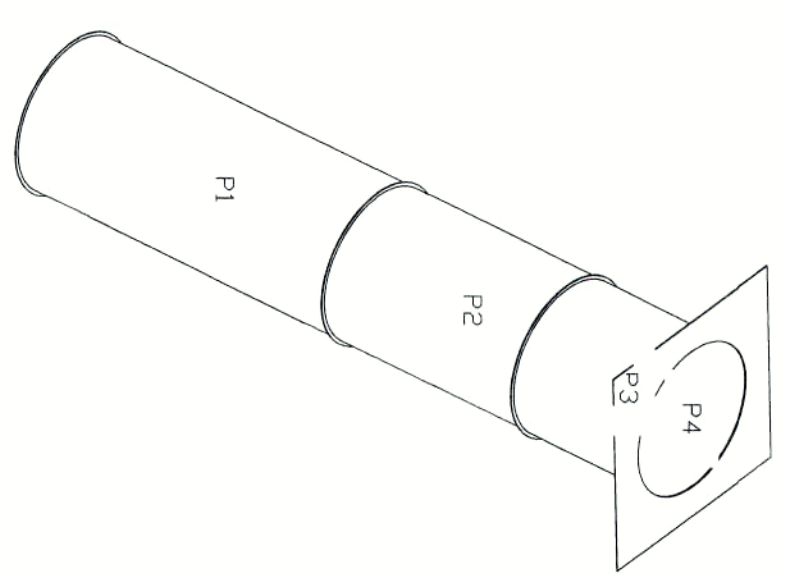


SINGLE WALL FACTORY BUILT DUCTWORK

- ALL DUCTWORK IS REQUIRED TO BE INSTALLED WITH THE MAXIMUM SUPPORT SPACING LISTED BELOW.
- FOR A COMPLETE LIST OF APPROVED SUPPORT METHODS, SEE THE INSTALLATION AND OPERATION MANUAL.
- DUCTWORK SHALL SLOPE NOT LESS THAN 1/16" PER LINEAR FOOT TOWARDS THE HOOD OR AN APPROVED GREASE COLLECTION RESERVOIR.
- WHERE HORIZONTAL DUCTS EXCEED 75 FEET IN LENGTH, THE SLOPE SHALL NOT BE LESS THAN 3/16" PER LINEAR FOOT.

DUCT DIAMETER	HORIZONTAL SUPPORT (FT)	VERTICAL WALL SUPPORT (FT)	VERTICAL CURB SUPPORT (FT)
5"	10'	10'	24'
6"	10'	10'	24'
7"	10'	10'	24'
8"	10'	10'	24'
10"	10'	10'	24'
12"	10'	10'	24'
14"	10'	10'	24'
16"	10'	10'	24'
18"	10'	10'	24'
20"	10'	10'	24'
22"	10'	10'	24'
24"	10'	10'	24'
26"	10'	10'	24'
28"	10'	10'	24'
30"	10'	10'	24'
32"	10'	10'	24'
34"	10'	10'	24'
36"	10'	10'	24'

DO NOT LEAK TEST USING SMOKE BOMBS CONTAINING CHLORINES/CHLORIDES. CONSULT WITH CAPTIVEAIRE FOR PROPER LEAK TESTING METHODS.



DUCTWORK #2 SE VIEW



292 a Milton ave, Ballston spa, ny  
 92 Milton Avenue,  
 Ballston Spa, NY, 12020

DATE: 3/7/2024  
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 6665301

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REVISION/ISSUE	DATE