

ROOFTOP UNIT SCHEDULE - TRANE

MARK	TOTAL COOLING MBH	SENSIBLE COOLING MBH	HEATING INPUT MBH	HEATING OUTPUT MBH	SUPPLY AIRFLOW	OA	HP	ESP	EER	IEER/SEER	VOLTAGE	PHASE	MCA	MOCP	MODEL	MANUFACTURER	REMARKS
AC#1	279.4	180.8	250	202.5	8,750 CFM	1,900 CFM	3.1 hp	0.80 in-wg	9.8	13	208 V	3	125 A	150 A	YSJ300A3S	TRANE	1,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17
AC#2	188	120.9	250	202.5	5,250 CFM	1,200 CFM	3.1 hp	0.80 in-wg	10.8	14	208 V	3	78 A	100 A	YSJ180A3S	TRANE	2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17
AC#3	188	120.9	320	259.2	5,250 CFM	1,200 CFM	3.1 hp	0.80 in-wg	10.8	14	208 V	3	78 A	100 A	YSJ180A3S	TRANE	2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17
AC#4	60.1	39.2	130	104	1,875 CFM	500 CFM	1 hp	0.80 in-wg	13	17.2	208 V	3	33 A	45 A	YHC06TE3R	TRANE	2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17

NOTES

- MECHANICAL CONTRACTOR TO VERIFY TRANE SUBMITTAL WITH CONSTRUCTION DOCUMENTS. NATIONAL ACCOUNTS - NO SUBSTITUTIONS PERMITTED - SEE DRAWING G-004.

REMARKS

- DIFFERENTIAL ENTHALPY ECONOMIZER WITH POWER EXHAUST.
- DIFFERENTIAL ENTHALPY ECONOMIZER WITH BAROMETRIC EXHAUST.
- 14" HIGH ROOF CURB.
- SEE DETAIL, 2/M-702T FOR SETTING OF CONTROL PARAMETERS BY MC.
- FACTORY INSTALLED 115V GFI SERVICE OUTLET. SEPERATE 115V CIRCUIT PROVIDED BY ELECTRICAL CONTRACTOR.
- FACTORY INSTALLED RETURN AIR SMOKE DETECTOR.
- FACTORY INSTALLED NON-FUSED DISCONNECT.
- 2" MERV 8 THROW AWAY FILTERS.
- HINGED PANELS FOR ACCESS TO FILTER(S), FAN BLOWER & MOTOR, COMPRESSOR(S) ACCESS AND CONTROLS.
- FACTORY COIL HAIL GUARD, FIELD INSTALLED.
- FRESH AIR TEMPERING KIT.
- HOT GAS DEHUMIDIFICATION OPTION WITH WALL MOUNTED HUMIDITY SENSOR.
- FACTORY INSTALLED BELT TENSIONER.
- FACTORY CONFIGURED PHASE LOSS PROTECTION.
- FACTORY INSTALLED CONDENSATE PAN DRAIN OVERFLOW SWITCH.
- FACTORY STAINLESS STEEL HEAT EXHANGER.
- 100K SCCR RATING.

HOOD SCHEDULE

MARK	EXHAUST CFM	SP @ TAB PORT	CAPTURE JET CFM & S.P.	TYPE	COLLAR SIZE	WIDTH	DEPTH	HEIGHT	MANUFACTURER	MODEL	REMARKS
HOOD#1L	1,204 CFM	0.13"	80 @ 0.30"	BACKSHELF	14"x8"	107"	37"	38"	HALTON	KVL-2-IC	1, 2, 3, 4, 5, 7, 8, 9, 12, 16, 21, 23
HOOD#1R	709 CFM	0.13"	47 @ 0.30"	BACKSHELF	8"x8"	63"	37"	38"	HALTON	KVL-2-IC	1, 2, 3, 5, 7, 8, 9, 12, 20, 21, 22
HOOD#2	701 CFM	.30"	30 @ 0.29"	BACKSHELF	8"x8"	42"	34"	38"	HALTON	KVL-C-IC	1, 2, 3, 6, 7, 8, 9, 13, 15, 16, 18, 21
HOOD#3	701 CFM	.30"	30 @ 0.29"	BACKSHELF	8"x8"	42"	34"	38"	HALTON	KVL-C-IC	1, 2, 3, 4, 6, 7, 8, 9, 13, 17, 21

NOTES

DIMENSIONS OF HOODS INCLUDE BACK AND SIDE SPACERS (HEIGHT DOES NOT INCLUDE CLOSURE PANELS). NATIONAL ACCOUNTS - NO SUBSTITUTIONS PERMITTED - SEE DRAWING G-004.

REMARKS

- STAINLESS STEEL CONSTRUCTION.
- PROVIDE FULL HEIGHT SS CLOSURE PANEL WITH ACCESS PANEL IN FRONT LARGE ENOUGH TO REMOVE CAPTURE JET FAN, FIRE SUPPRESSION COMPONENTS, AND/OR TO ACCESS KBD EQUALIZER JACK SCREW.
- PRE-PIPED FIRE SUPPRESSION SYSTEM.
- FIRE SUPPRESSION CABINET AND COMPONENTS ABOVE HOOD ON LEFT SIDE.
- 3" ZERO CLEARANCE TO COMBUSTIBLE BACK SPACER.
- 3" ZERO CLEARANCE TO COMBUSTIBLE CUSTOM BACK SPACER TO ACCOMMODATE PIN AND SLEEVE ELECTRICAL BOX.
- EQUIPMENT I.D. LABELS LOCATED ON FRONT LEADING EDGE OF HOOD.
- FACTORY WALL MOUNTING ANGLE AT TOP OF HOOD.
- INTEGRAL CAPTURE JET FAN.
- NOT USED.
- NOT USED.
- NOT USED.
- PIN AND SLEEVE ELECTRICAL BOX (DOUBLE CONNECTION). SEE ARCHITECTURAL AND ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.
- NOT USED.
- 3" ZERO CLEARANCE TO COMBUSTIBLE RIGHT SIDE SPACER.
- NOTCHED LEFT END SIDE PANEL.
- NOTCHED RIGHT END SIDE PANEL.
- 3"x3" HORIZONTAL AND VERTICAL TRIM ANGLE FOR RIGHT SIDE OF HOOD TO FINISH OFF GAP AT WALL.
- FULL LEFT END SIDE PANEL.
- FULL RIGHT END SIDE PANEL.
- HALTON KBD EQUALIZER.
- CONTINUOUS CAPTURE INTERNAL LEFT END CUTOUT.
- CONTINUOUS CAPTURE INTERNAL RIGHT END CUTOUT.

ELECTRIC HEATER SCHEDULE

MARK	HEATING INPUT	FRAME LENGTH	FRAME WIDTH	FRAME DEPTH	MOUNTING TYPE	VOLTAGE	PHASE	MOCP	MODEL	PART NUMBER	MANUFACTURER
EIH#1	6 KW	56"	8.5"	3.5"	WALL BRACKET	240 V	1	40 A	6000W	BH0420035	BROMIC

NOTES

- NATIONAL ACCOUNT NO SUBSTITUTIONS PERMITTED - SEE DRAWING G-004.

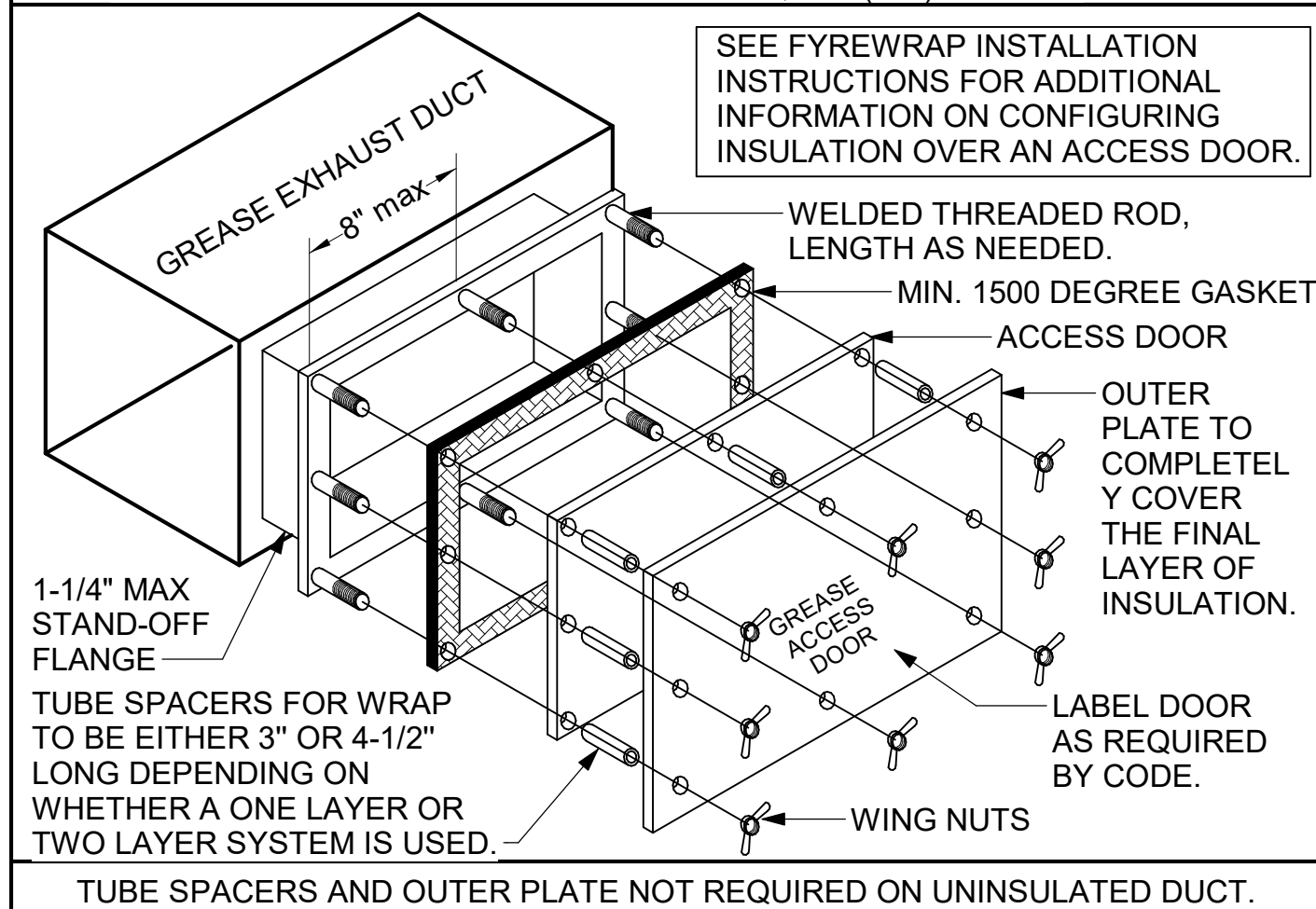
REMARKS

- STAINLESS STEEL LENS WITH BLACK EMISSIVE COATING.
- PROVIDE ENGRAVED PLASTIC LABEL AT EACH UNIT WITH UNIT DESIGNATION IN 1" HIGH WHITE LETTERS ON A BLACK BACKGROUND.
- PROVIDE BLACK HEATER WITH HIGH TEMPERATURE COATING, AND MANUFACTURER MOUNTING BRACKETS.
- PROVIDE BROMIC WALL MOUNTED ELECTRIC HEATER MODEL: BH0420033 FOR 220-240V SITES.

GREASE ACCESS DOOR SCHEDULE

MARK	OPENING SIZE	DOOR SIZE	REMARKS
A	9H X 14W	11H X 16W	1
B	5.5H X 14W	7.5H X 16W	1
C	12H X 12W	14H X 14W	1
D	10H X 14W	12H X 16W	1
E	6H X 14W	8H X 16W	1

1. ACCESS DOORS SHALL BE U.L. 1978 LISTED OR FIELD FABRICATED, REQUIRE NO TOOLS FOR REMOVAL AND MEET THE REQUIREMENTS OF THE CURRENT EDITION OF THE IMC. ACCESS DOOR ASSEMBLY SHALL BE WELDED IN PLACE TO THE GREASE EXHAUST DUCT AND THE ACCESS DOOR SHALL BE SECURED WITH THUMB SCREWS. ACCESS DOORS SHALL BE SEALED WITH A MINIMUM 1500 DEGREE GASKET MATERIAL EQUIVALENT TO THAT MANUFACTURED BY BRENTON INDUSTRIES, INC (800) 382-2491.



EXHAUST FAN SCHEDULE

MARK	FAN CFM	ESP	RPM	TIP SPEED	HP	AREA SERVED	VOLTAGE	PHASE	MOCP	MODEL	MANUFACTURER	REMARKS
EF#1	1,913 CFM	0.75 in-wg	1,331 RPM	5,226 FPM	0.75 hp	HOOD#1	120 V	1	25 A	150 CPS	LOREN COOK	1,2,3,4,5,6,7,8,9,10,11
EF#2	1,402 CFM	0.95 in-wg	1,199 RPM	4,708 FPM	0.75 hp	HOOD#2 & HOOD#3	120 V	1	25 A	150 CPS	LOREN COOK	1,2,3,4,5,6,7,8,9,10,11
EF#3	375 CFM	0.38 in-wg	1,550 RPM	3,091 FPM	0.125 hp	RESTROOMS	120 V	1	20 A	ACED-90C15DH	LOREN COOK	3,11,12,13,14,15,16

NOTES

- GREASE EXHAUST FAN RPM BASED ON 80 DEGREE F AIR AT 1000 FEET ABOVE SEA LEVEL.
- GREASE EXHAUST FANS TO BE U.L. 762 LISTED.
- NATIONAL ACCOUNT - NO SUBSTITUTIONS PERMITTED - SEE DRAWING G-004.

REMARKS

- UPBLAST, ARRANGEMENT 10, CCW ROTATION. SEE PLANS TO CONFIRM CONFIGURATION.
- FACTORY ALUMINUM FAN WHEEL.
- FACTORY INSTALLED PREWIRED NON-FUSED DISCONNECT.
- FACTORY STEEL INLET FLANGE AND INLET COMPANION FLANGE.
- INSTALL ROOFTOP SOLUTIONS G2 DRIP GUARD. MECHANICAL CONTRACTOR TO CONTACT ROOFTOP SOLUTIONS AT 800-913-7034.
- FACTORY WEATHER HOUSING W/ HINGED ACCESS DOOR.
- FACTORY DRAIN CONNECTION.
- FACTORY BOLTED ACCESS DOOR ON SCROLL.
- FACTORY INSTALLED BELT DRIVE WITH ADJUSTABLE MOTOR SHEAVE AND SPARE BELT..
- FACTORY STEEL OUTLET COMPANION FLANGE.
- INTEGRAL THERMAL OVERLOAD WITH AUTOMATIC RESET.
- BIRDSCREEN.
- BACKDRAFT DAMPER IN DUCT BY MECHANICAL CONTRACTOR AS SHOWN ON 5/M-501.
- STARTER BY ELECTRICAL CONTRACTOR. INTERLOCK WITH LIGHTS BY ELECTRICAL CONTRACTOR.
- 12" HIGH CURB.
- FACTORY INSTALLED AND WIRED SPEED CONTROLLER.

AIR DEVICE SCHEDULE

MARK	DESCRIPTION	LOCATION	NECK SIZE	FACE SIZE	FRAME TYPE	REMARKS
<varies>	<varies>	<varies>	<varies>	<varies>	<varies>	<varies>
A	PRICE MODEL APDC ALUMINUM SUPPLY AIR DIFFUSER WITH INDIVIDUALLY ADJUSTABLE CURVED AIR PATTERN CONTROLLERS.	DINING/ KITCHEN	8"	24"x24"	LAY-IN	1,7
B	VARITHERM PLAQUE DIFFUSER	OFFICE	14"x14"	16"x16"	BEVELLED	1,3,5,6
C	PRICE MODEL SMCD STEEL SUPPLY AIR DIFFUSER FIELD ADJUSTABLE AIR PATTERN CONTROLLERS.	ENTRY	14"x14"	16"x16"	BEVELLED	1,3,5,6
D	PRICE MODEL APDC ALUMINUM SUPPLY AIR DIFFUSER WITH INDIVIDUALLY ADJUSTABLE CURVED AIR PATTERN CONTROLLERS.	DINING	VARIES	16"x16"	SURFACE	1,3,5,6
F	PRICE MODEL 80 EGGCRATE RETURN AIR GRILLE WITH REMOVABLE WHITE CORE, FACTORY FLAT BLACK BACKPAN AND ROUND NECK.	DINING/ KITCHEN	VARIES	24"x24"	LAY-IN	1,7
J	PRICE MODEL SMCD STEEL SUPPLY AIR DIFFUSER FIELD ADJUSTABLE AIR PATTERN CONTROLLERS.	RESTROOMS	10"x10"	15"x15"	BEVELLED	1,2,3,5,6
K	PRICE MODEL APDDR ALUMINUM PERFORATED FACE RETURN AIR GRILLE.	RESTROOMS/ ENTRY	14"x14"	16"x16"	SURFACE	1,4,5,6
L	PRICE MODEL SDS 1" SLOT, 60" LENTH, WITH INSULATED PLENUMS, CONTINUOUS PIECES	DINING	10"	1" x 60"	LAY-IN	1

NOTES

- NATIONAL ACCOUNT - NO SUBSTITUTIONS PERMITTED - SEE DRAWING G-004

REMARKS

- STANDARD OFF WHITE FINISH.
- PROVIDE MODEL VCS3 NECK DAMPER.
- SEE DRAWING M-101 FOR THROW.
- PROVIDE MODEL VCR7 NECK DAMPER ON GRILLES IN RESTROOMS SERVING EXHAUST FAN.
- PROVIDE BACKPAN, MC TO SEAL JOINTS WITH MASTIC AND INSULATE EXTERNALLY.
- FIELD INSULATE BACKPAN AS SHOWN ON DETAIL 3/M-501.
- FACTORY INSULATED R-6 BACKPAN.
- PROVIDE RELIEF COLLAR ACCESSORY FOR VAV DIFFUSER.

AIR DOOR SCHEDULE

MARK	CFM	VELOCITY (FPM)	HEATING (KW)	HP	AREA SERVED	MODEL	MANUFACTURER	REMARKS
AD#1	1,543	2,338	10	3/4	DRIVE THRU	CHA-1-48E	POWERED AIRE	1, 2, 3, 5
AD#3	3,867	4,218	0	3/4	REAR DOOR	RBT-1-48	POWERED AIRE	4
AD#4	1,197	2,443	10	3/4	SERVING	CHA-1-36E	POWERED AIRE	1, 2, 3

NOTES

- NATIONAL ACCOUNT - NO SUBSTITUTIONS PERMITTED - SEE DRAWING G-004

REMARKS

- FACTORY PROVIDED, WIRED, AND UNIT MOUNTED SPEED CONTROLLER ABOVE CEILING.
- FACTORY WIRED DISCONNECT.
- FACTORY PROVIDED, FIELD INSTALLED BY MC, REMOTE WALL SWITCHES FOR HEATING ON/OFF AND FAN ON/AUTO SWITCH. SEE DETAIL, AIR CURTAIN WIRING DIAGRAM.
- FACTORY PROVIDED MAGNETIC DOOR CONTACT WITH FACTORY INSTALLED LOW VOLTAGE CONTROLS LOCATED IN AIR DOOR CABINET.
- PROVIDE WITH A DIVERTER BOX. PROVIDE WITH MOUNTING BRACKETS PER MANUFACTURER'S RECOMMENDATIONS.

GAS FIRED INFRARED HEATER SCHEDULE

MARK	INPUT (MBH)	FRAME LENGTH	FRAME WIDTH	FRAME DEPTH	MOUNTING TYPE	MODEL	MANUFACTURER
GIH	50	48"	13"	9.5"	Bracket	WB-N7-CM	SPACE-RAY

NOTES

- CONFIRM HEATER QUANTITY WITH CANOPY SHOP DRAWINGS.
- NATIONAL ACCOUNT - NO SUBSTITUTIONS PERMITTED - SEE DRAWING G-004.

REMARKS

- STEEL BURNER WITH CERAMIC BURNER TILES.
- STAINLESS STEEL LENS WITH BLACK EMISSIVE COATING.
- PROVIDE ENGRAVED PLASTIC LABEL AT EACH UNIT WITH UNIT DESIGNATION IN 1" HIGH WHITE LETTERS ON A BLACK BACKGROUND. MOUNT TO CANOPY DECK, FACING FORWARD, 12" Laterally FROM THE LONG SIDE OF THE HEATER.
- STAINLESS STEEL HEAT SHIELDS PROVIDED BY SPACE-RAY PACKAGE.

RECIRCULATING FAN SCHEDULE

MARK	CFM	ESP	RPM	HP	Area Served	MODEL	MANUFACTURER	REMARKS
RF-1	450 CFM	0.3	1144	58 W	TECH CLOSET	GCVF-700	LOREN COOK	1,2,3

NOTES

- NATIONAL ACCOUNT - NO SUBSTITUTIONS PERMITTED - SEE DRAWING G-004.

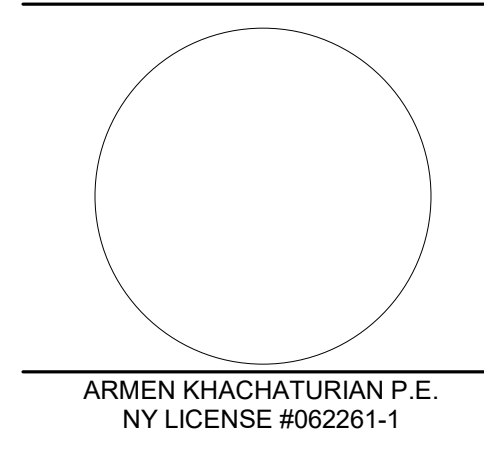
REMARKS

- PROVIDE NEMA 1 PREWIRED DISCONNECT.
- INTEGRAL POTENTIOMETER ON FAN MOTOR. SET TO FULL SPEED.
- PROVIDE THERMOSTAT / TEMPERATURE CONTROLLER. SET TO 76°F.



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 NY LICENSE #062291-1

CHICK-FIL-A
EXPRESSWAY PLAZA
 2280-2350 North Ocean Ave.
 FARMINGVILLE, NY 11738

FSR#04810
 BUILDING TYPE / SIZE: P14 SE BN
 RELEASE: 23.02
 PRINTED FOR
ISSUED FOR CONSTRUCTION

REVISION SCHEDULE

NO.	DATE	DESCRIPTION
1	8/4/2023	ISSUED FOR PERMIT
2	10/13/2023	OWNER CHANGES
4	3/28/2024	ISSUE FOR CONSTRUCTION

For Construction

CONSULTANT PROJECT # 2636
 DATE 03/28/2024
 DRAWN BY MM
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 SHEET EQUIPMENT SCHEDULES
 SHEET NUMBER

1. SECTION C15000 - MECHANICAL SPECIFICATIONS

PART I - GENERAL

1.01 SCOPE

- A. IT IS THE RESPONSIBILITY OF CONTRACTOR TO READ ALL SPECIFICATIONS AND CONSULT ALL DRAWINGS WHICH MAY AFFECT THE INSTALLATION AND COORDINATION OF HIS WORK WITH OTHER TRADES. CONTRACTOR SHALL COORDINATE AND MAKE MINOR ADJUSTMENTS IN LOCATION OF EQUIPMENT AND MATERIALS AS NECESSARY TO SECURE COORDINATION.
- B. COMPLETED INSTALLATION SHALL CONFORM TO ALL APPLICABLE FEDERAL, STATE AND LOCAL CODES AND ORDINANCES, INCLUDING BUT NOT LIMITED TO THE LATEST APPROVED EDITIONS OF NFPA-96, NFPA-90A, NFPA-54, SMACNA, ASHRAE 90.1 AND ASHRAE 62.
- C. SYSTEM LAYOUT IS SCHEMATIC AND EXACT LOCATIONS SHALL BE DETERMINED BY STRUCTURAL CONDITIONS, COORDINATION WITH OTHER TRADES, COORDINATION WITH FINISHES AND OTHER CONDITIONS. STRUCTURAL SUPPORTS SHALL NOT BE CUT OR ALTERED TO ASSURE FIT OF HVAC SYSTEM. TEN FOOT CLEARANCE SHALL BE MAINTAINED BETWEEN OUTSIDE AIR INTAKES AND EXHAUST FANS AND PLUMBING VENT TERMINALS.
- D. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DEFECTS, REPAIRS AND REPLACEMENTS IN MATERIALS AND WORKMANSHIP FOR A PERIOD OF ONE (1) YEAR AFTER FINAL PAYMENT IS APPROVED. CONTRACTOR SHALL HONOR FACTORY WARRANTIES ON ALL EQUIPMENT PROVIDED AS PART OF THIS SYSTEM.
- E. UPON COMPLETION OF PROJECT, ALL SYSTEM EQUIPMENT AND MATERIALS SHALL BE IN NEW, CLEAN CONDITION WITH ALL DAMAGE RESTORED TO CONDITION ACCEPTABLE TO THE OWNERS REPRESENTATIVE. ALL EQUIPMENT, COMPONENTS AND DUCTWORK, AND AIR DEVICES SHALL BE INSPECTED AND THOROUGHLY CLEANED, CLEARED OF DEBRIS, AND READY FOR USE. AT COMPLETION OF JOB, ALL MISCELLANEOUS TOOLS, SCAFFOLDING, SURPLUS MATERIALS, RUBBISH AND DEBRIS SHALL BE REMOVED BY CONTRACTOR.
- F. CONTRACTOR SHALL PROVIDE TWO SETS OF 2" MERV 8 OR HIGHER THROW AWAY TYPE FILTERS. A CLEAN SET SHALL BE PROVIDED PRIOR TO TEST AND BALANCE AND AGAIN PRIOR TO OPENING.

PART II - PRODUCTS

2.01 HEATING AND COOLING EQUIPMENT (C15730)

- A. FURNISH AND INSTALL R-410A ROOFTOP SINGLE PACKAGE COMBINATION ELECTRIC COOLING AND NATURAL GAS FIRED HEATING UNITS BY LENNOX AS SHOWN ON DRAWINGS. EQUIPMENT SHALL BE ARI CERTIFIED AND A.G.A. AND U.L. LISTED.
- B. ACCESSORIES SHALL INCLUDE LOW AND HIGH PRESSURE SAFETIES, CRANK CASE HEATER, OVERCURRENT AND OVERTEMPERATURE SAFETY, COMPRESSOR VIBRATION ISOLATORS, FILTER DRIERS, REFRIGERANT SERVICE VALVES, COIL-HAIL GUARDS WHERE SCHEDULED, CONVENIENCE OUTLETS FACTORY INSTALLED ON SCHEDULED UNITS, UNIT MOUNTED NON-FUSED DISCONNECTS, LOW AMBIENT OPERATION DOWN TO 30 DEGREES F AND EVAPORATOR FREEZE STAT.
- C. COMPRESSORS SHALL BE FULLY HERMETIC SCROLL TYPE WITH INTERNAL VIBRATION ISOLATORS. COMPRESSORS SHALL BE PROVIDED WITH A MINIMUM FIVE (5) YEAR FULL WARRANTY.
- D. THE UNIT HEAT EXCHANGERS SHALL BE STEEL WITH ALUMINIZED STEEL COATING. HEATING CONTROLS SHALL CONSIST OF REDUNDANT GAS VALVES, INTERMITTENT PILOT WITH ELECTRONIC SPARK OR HOT PLATE IGNITION SYSTEM, COMBUSTION/EXHAUST FAN PROTECTED BY CENTRIFUGAL SWITCHES, HEAT LIMIT SWITCHES, TIME-DELAY RELAY, FLAME, AND PILOT SENSORS. ALL UNITS SHALL BE CAPABLE OF TWO STAGES OF HEAT. HEAT EXCHANGERS SHALL HAVE A TEN (10) YEAR WARRANTY. BURNERS SHALL BE ALUMINIZED IN-SHOT TYPE. THE DRAFT MOTOR SHALL BE MONITORED BY THE CONTROL SYSTEM.

2.02 DUCTWORK (C15735)

- A. ACCEPTABLE MANUFACTURERS OF INSULATION ARE MANVILLE, OWENS CORNING OR KNAUF.
- B. ALL DUCTWORK SHALL BE SHEET METAL, UNLESS NOTED OTHERWISE (U.N.O.).
- C. DUCT DIMENSIONS SHOWN ARE INSIDE CLEAR DIMENSIONS, U.N.O.
- D. CONSTRUCTION OF DUCTWORK SHALL MEET SMACNA 1" W.C. PRESSURE CLASS STANDARD AND RECOMMENDATIONS. SMACNA SHALL BE FOLLOWED WITH RESPECT TO GAGE THICKNESS, JOINTS, REINFORCING, CONSTRUCTION, INSTALLATION AND SUPPORT FOR PRESSURE CLASS STATED. ALL TRANSVERSE JOINTS IN RECTANGULAR AND ROUND DUCT INCLUDING DUCT CONNECTION TO AIR DEVICE COLLAR SHALL BE SEALED PER SMACNA SEAL CLASS C WITH U.L. DUCT MASTIC SEALANT APPROVED FOR INTENDED USE. DUCT TAPE IS NOT AN ACCEPTABLE SUBSTITUTE FOR MASTIC UNLESS EQUAL TO HARDCAST FOIL-GRIP 1402 BUTYL RUBBER ADHESIVE TAPE.
- E. DUCT SHALL BE SUPPORTED AT BASE OF DUCT DROPS. CURB DUCT RAILS ARE NOT INTENDED TO AND SHALL NOT SUPPORT THE WEIGHT OF THE DUCT.
- F. ALL DUCT INSULATION SHALL MEET MINIMUM R-VALUE REQUIRED BY ASHRAE 90.1 LATEST EDITION. ALL DUCT WRAP SHALL BE MINIMUM 2" THICK, 3/4 PCF AND 6 R-VALUE INSTALLED WITH EITHER A VAPOR BARRIER WITH MAXIMUM PERFORMANCE 0.05 OR A MINIMUM 2 MIL ALUMINUM REINFORCED FOIL/KRAFT FACING.
- G. ALL DUCT DROPS FROM THE ROOFTOP UNITS SHALL BE EXTERNALLY INSULATED.
- H. SUPPLY AND RETURN AIR DUCTWORK SERVING ALL AREAS SHALL BE EXTERNALLY INSULATED.
- I. ALL AIR CONVEYANCE COMPONENTS SUCH AS, BUT NOT LIMITED TO DUCT, DUCT PLENUMS, GRILLES/DIFFUSERS, BACK PANS, AND BOOTS SHALL BE INSULATED. INSULATION TYPE IS COVERED ELSEWHERE IN THIS SPECIFICATION.
- J. RESTROOM RECTANGULAR EXHAUST AIR DUCTWORK SHALL BE LINED WITH 1" THICK, 1-1/2 PCF INSULATION. RESTROOM ROUND EXHAUST DUCT SHALL BE EXTERNALLY INSULATED PER SECTION 2.02F.
- K. TRUNK DUCTS SHALL BE ISOLATED FROM UNIT VIBRATION WITH THE USE OF NFPA AND U.L. APPROVED FLEXIBLE CONNECTORS INSTALLED AT THE TOP OF BOTH SUPPLY AND RETURN DROPS.
- L. INSULATED FLEXIBLE DUCT MAY BE UTILIZED FOR RUNOUTS TO GRILLES AND DIFFUSERS ONLY IN THE HORIZONTAL POSITION AND IN MAXIMUM LENGTHS OF 4'-0", NO EXCEPTIONS. SEE TAKE-OFF DETAIL ON DRAWING M-401.
- M. CONSTRUCTION OF FLEXIBLE DUCTWORK SHALL INCLUDE SPIRAL METAL HELIX BONDED TO A POLYESTER CORE, FIBERGLASS INSULATION WITH POLYETHYLENE OR MYLAR VAPOR BARRIER. ALL COMPONENTS SHALL HAVE APPROPRIATE U.L. APPROVAL AND SHALL BE EQUIVALENT TO THERMAFLEX MKE.
- N. FLEXIBLE DUCT SHALL BE INSTALLED PER THE "ADC FLEXIBLE DUCT PERFORMANCE AND INSTALLATION STANDARDS, 4TH ED" USING FOIL TAPE AND DRAWBAND ON THE INNER CORE AND TAPE OR DRAWBAND ON THE OUTER JACKET.
- O. DUCT TAPE SHALL BE EQUAL TO FASSON 181-B FX, 2-1/2" WIDE.
- P. SINGLE THICKNESS TURNING VANES SHALL BE INSTALLED AT 90 DEGREE TURNS IN SUPPLY DUCTWORK WHERE ANY ONE DIMENSION IS GREATER THAN 12".
- Q. RADIUSSED ELBOWS MAY BE SUBSTITUTED FOR 90 DEGREE ELBOWS AT THE DISCRETION OF THE CONTRACTOR. CENTERLINE RADIUS EQUAL TO; R=W PER FIGURE NO. 4-2 IN SMACNA HVAC DUCT CONSTRUCTION STANDARDS.
- R. EXTERNAL INSULATION ON BOTTOM OF DUCTS 24" OR WIDER SHALL BE SUPPORTED WITH STICK PINS ON 18" CENTERS. STICK PIN WASHERS SHALL BE COVERED WITH DUCT TAPE OR MASTIC.

2.03 CONTROLS (C15735)

- A. SYSTEMS SHALL BE COMPLETE WITH CONNECTIONS TO CFA-500 TEMPERATURE CONTROL PANEL AS MANUFACTURED BY SUNCOAST ENVIRONMENTAL CONTROLS (S.E.C.) (PH: 877-544-8679). THE PANEL IS PROVIDED AND MOUNTED BY THE ELECTRICAL CONTRACTOR. CONTROL WIRING TERMINATIONS ARE BY THE MECHANICAL CONTRACTOR WHERE PERMITTED BY THE AHJ.
- B. THE SMOKE DETECTORS SHALL BE FACTORY INSTALLED AND WIRED BY THE ROOFTOP UNIT MANUFACTURER.
- C. A FACTORY INSTALLED SMOKE DETECTOR IN THE RETURN AIR SECTION OF EACH AIR CONDITIONING UNIT SHALL STOP THE INDOOR FAN AND CLOSE THE OUTSIDE AIR DAMPER IN THE EVENT OF EXCESSIVE TEMPERATURE OR SMOKE. SMOKE DETECTOR SHALL BE LOCATED PRIOR TO ANY EXHAUST FROM THE BUILDING OR MIXING WITH FRESH AIR MAKE-UP. UPON DETECTION, THE SYSTEM SHALL NOT RESTART UNTIL THE DEVICE IS MANUALLY RESET. DEVICES SHALL BE LOCATED WHERE THEY CAN BE EASILY ACCESSED AND WHERE CLEAR OF FILTERS.
- D. CHICK-FIL-A HAS A NATIONAL ACCOUNT WITH SUNCOAST ENVIRONMENTAL CONTROLS FOR THE SMOKE DETECTOR TEST/RESET ANNUNCIATOR STATIONS. THE TEST/RESET STATIONS WILL BE PURCHASED BY THE ELECTRICAL CONTRACTOR AS A PART OF A NATIONAL ACCOUNT PACKAGE AND TURNED OVER TO THE MECHANICAL CONTRACTOR FOR INSTALLATION.
- E. THE REMOTE TEST/RESET ANNUNCIATORS SHALL BE PROVIDED BY THE ELECTRICAL CONTRACTOR AND INSTALLED BY THE MECHANICAL CONTRACTOR. INSTALLATION BY MECHANICAL SHALL INCLUDE MOUNTING OF THE ANNUNCIATORS AND ALL WIRING FROM EACH DEVICE TO THE RTU. ELECTRICAL WILL PROVIDE A JUNCTION BOX IN THE WALL WITH 1/2" CONDUIT STUBBED UP ABOVE THE CEILING FOR EACH REMOTE TEST STATION AS SHOWN ON THE ELECTRICAL PLANS. ANNUNCIATOR SHALL BE SUNCOAST CONTROLS REMOTE TEST/RESET STATION WITH POWER LED, TROUBLE LED, ALARM LED, 90DB HORN AND TEST/RESET BUTTON.
- F. THE RESTROOM FAN SHALL BE INTERLOCKED TO THE LIGHTS SERVING THE MEN AND WOMEN'S RESTROOMS. THE HOOD FANS SHALL BE CONTROLLED VIA THE SUNCOAST CFA-500 CONTROL PANEL. WIRING, RELAYS AND SWITCHES FOR CONTROL OF ALL FANS ARE BY ELECTRICAL CONTRACTOR.
- G. LENNOX UNITS - THERMOSTATS ARE PROVIDED AND INTEGRATED INTO THE TEMPERATURE CONTROL PANEL BY SUNCOAST ENVIRONMENTAL CONTROLS. SUNCOAST WILL PROVIDE A NETWORK THERMOSTAT U332-CFA THERMOSTAT PRE-WIRED IN THE TEMPERATURE CONTROL PANEL. A REMOTE TEMPERATURE SENSOR FOR EACH THERMOSTAT IS ALSO PROVIDED. MECHANICAL CONTRACTOR SHALL INSTALL ALL WIRING BETWEEN THE THERMOSTAT, THE REMOTE SENSOR AND THE ROOFTOP UNIT.
- H. MECHANICAL CONTRACTOR SHALL INSTALL CONTROL WIRING IN 1/2" CONDUIT WHERE REQUIRED BY CODE. WHERE NOT REQUIRED TO BE IN CONDUIT, ALL WIRING SHALL BE RUN PARALLEL TO STRUCTURAL MEMBERS OR PERPENDICULAR WITH NO DIAGONAL ROUTING. ALL WIRING SHALL BE SECURED TO THE FRAMING TO PREVENT SAGGING IN RUNS. WIRING TO ROOFTOP UNITS SHALL BE ROUTED THROUGH THE FACTORY THRU-BASE FITTING IN THE UNIT BASE. NO SPLICING OF WIRING WILL BE ACCEPTED. ALL WIRING ABOVE THE ROOF SHALL BE INSTALLED IN EXTERIOR GRADE FLEXIBLE CONDUIT. ALL CONTROL WIRING AND CONTROL WIRING CONDUIT SHALL BE FURNISHED AND INSTALLED BY THE MECHANICAL CONTRACTOR. WIRING SHALL BE INSTALLED IN ACCORDANCE WITH LATEST EDITION OF NEC. ALL LOW VOLTAGE CONTROL WIRING SHALL BE NO LESS THAN 18 AWG MIN. CONTROL WIRING CONDUCTORS SHALL BE SIZED TO ACCOUNT FOR LOAD AND LENGTH OF RUN TO ALLOW SUFFICIENT VOLTAGE AVAILABLE AT CONTROLLED DEVICE TO OPERATE THE SYSTEM RELIABLY.

PART III - EXECUTION

3.01 SCOPE

- A. FURNISH AND INSTALL SYSTEM IN ACCORDANCE WITH REFERENCED STANDARDS, APPLICABLE CODES, MANUFACTURER'S RECOMMENDATIONS AND AS INDICATED ON DRAWINGS.
 - B. CONTRACTOR SHALL INSTRUCT THE OWNER'S REPRESENTATIVE IN ALL MATTERS PERTAINING TO THE PROPER MAINTENANCE OF EQUIPMENT FURNISHED UNDER THIS CONTRACT THROUGH DEMONSTRATION AND EXPLANATION OF OPERATING & MAINTENANCE MANUALS.
 - C. CONTRACTOR SHALL PROVIDE A "SAMPLE MAINTENANCE PROPOSAL" TO THE OWNER'S REPRESENTATIVE IN ALL MATTERS PERTAINING TO THE PROPER MAINTENANCE OF EQUIPMENT FURNISHED UNDER THIS CONTRACT.
 - D. CONTRACTOR SHALL COMPLETE A/C EQUIPMENT STARTUP DOCUMENTATION PROVIDED BY OWNER AND/OR MANUFACTURER. THIS SHALL INCLUDE RE-TORQUE OF ALL FIELD AND FACTORY HIGH VOLTAGE CONNECTIONS.
- ### 3.02 LEED PROJECTS
- A. CONTRACTOR SHALL COMPLETE RECEIPT INSPECTION CHECKLISTS PROVIDED IN THE COMMISSIONING PLAN WITHIN 5 DAYS OF RECEIVING EQUIPMENT ON SITE.
 - B. CONTRACTOR SHALL COMPLETE PRE-FUNCTIONAL CHECKLISTS PROVIDED IN THE COMMISSIONING PLAN. CHECKLISTS SHALL BE RETURNED AT LEAST 5 DAYS PRIOR TO SCHEDULING FUNCTIONAL PERFORMANCE TESTING.
 - C. CONTRACTOR SHALL PROVIDE A TECHNICIAN TO ASSIST THE THIRD PARTY COMMISSIONING AUTHORITY WITH FUNCTIONAL TESTING. FUNCTIONAL TESTING SHALL OCCUR AFTER ALL CONTROLS HAVE BEEN INSTALLED AND VERIFIED AND AFTER TEST AND BALANCE IS COMPLETE. THE FUNCTIONAL PERFORMANCE TEST PROCEDURES CAN BE FOUND IN THE COMMISSIONING PLAN.
 - D. IF THE TOTAL TIME REQUIRED TO CORRECT PROBLEMS DURING TESTING IS GREATER THAN FORTY-FIVE (45) MINUTES (UNLESS EXTENUATING CIRCUMSTANCES EXIST), THE TEST SHALL BE CONSIDERED FAILED AND MUST BE REPEATED IN ITS ENTIRETY.
 - E. RE-TESTING: DURING THE COURSE OF THE RETEST, IF AT ANY POINT A MAJOR DEFICIENCY IS DISCOVERED, THE TEST WILL BE STOPPED, REPEAT TESTS UNTIL ACCEPTABLE RESULTS ARE ACHIEVED. IF MORE THAN TWO FUNCTIONAL PERFORMANCE TESTS (ONE INITIAL TEST AND ONE RETEST) FOR ANY TYPE OF EQUIPMENT DUE TO ISSUES THAT THE CONTRACTOR HAD DIRECT OR INDIRECT CONTROL OVER ARE REQUIRED, THE COSTS FOR THE CXA TO WITNESS RETESTING OF SIMILAR TYPES OF EQUIPMENT UNTIL SATISFACTORY RESULTS ARE OBTAINED SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

3.03 TEST & BALANCE

- A. OWNER SHALL TEST AND BALANCE MECHANICAL SYSTEM IN ACCORDANCE WITH NEBB, NBC OR AABC STANDARDS TO ASSURE CONFORMANCE WITH DESIGN. G.C. WILL MAKE MECHANICAL CONTRACTOR AVAILABLE DURING TEST AND BALANCE TO ASSIST TESTING AGENCY AND TO MAKE CORRECTIONS IMMEDIATELY NECESSARY. CONTRACTOR SHALL CORRECT ITEMS ON WRITTEN TEST AND BALANCE REPORT.
- B. ALL EQUIPMENT TO BE BALANCED MUST HAVE GONE THRU SUCCESSFUL START-UP PROCEDURE BY THE MECHANICAL CONTRACTOR (MC) PRIOR TO TAB VISIT.
- C. THE FLOOR OF THE RESTAURANT SHALL BE CLEARED OF DEBRIS, STAGED CONSTRUCTION MATERIALS, EQUIPMENT, ETC. WHICH MAY, IN THE OPINION OF THE TAB TECHNICIAN, OBSTRUCT ACCESS TO AIR DISTRIBUTION COMPONENTS IN AND ABOVE THE CEILING.
- D. EQUIPMENT ACCESS PANELS, DUCT AIR DEVICES SUCH AS BALANCING DAMPERS AND ACTUATORS SHALL BE ACCESSIBLE AND CLEAR OF PIPING, CONDUIT, FRAMING, SUPPORTS ETC...
- E. PROVIDE AN 8 FT PORTABLE A-FRAME STYLE LADDER DEDICATED FOR THE TAB TECHNICIAN'S USE DURING THE ENTIRE TAB EFFORT DURATION.
- F. THE MC SHALL BE AVAILABLE DURING THE ENTIRE DURATION OF THE TAB EFFORT AND HAVE ON-SITE THE RESOURCES AND TOOLS TO MAKE CORRECTIONS AS NEEDED UNDER THE DIRECTION OF THE TAB TECHNICIAN.

CANOPY GENERAL NOTES

- 1. COORDINATE NEW WORK WITH EXISTING CONDUIT, STRUCTURE, AND PIPING. FIELD VERIFY EXISTING CONDITIONS PRIOR TO START OF WORK.
- 2. COORDINATE LOCATION AND RESPONSIBILITIES FOR UNDERGROUND PIPING AND ASSOCIATED TRENCHING WITH GENERAL CONTRACTOR PRIOR TO START OF WORK.
- 3. EXPOSED GAS PIPING SHALL BE PAINTED BY GENERAL CONTRACTOR.
- 4. ACTUAL NUMBER OF GAS INFRARED HEATERS WILL BE DETERMINED BY SITE-SPECIFIC CANOPY LAYOUT AND EQUIPMENT LOCATIONS, AS INDICATED ON ARCHITECTURAL PLANS.
- 5. CONTROL WIRING FOR HEATERS BY EC. COORDINATE REQUIRED WIRE GAUGE WITH EC. SEE CONTROLS PLAN AND ELECTRICAL DRAWINGS, TYP.

GENERAL NOTES

- 1. DUCT SIZES SERVING DIFFUSERS AND GRILLES ARE SAME SIZE AS DIFFUSER OR GRILLE NECK UNLESS NOTED OTHERWISE.
- 2. FLEXIBLE DUCT AND INSULATION NOT SHOWN FOR CLARITY. SEE DETAIL 3/M-501 FOR FLEXIBLE DUCT INSTALLATION REQUIREMENTS.
- 3. AT EACH PIECE OF ROOF EQUIPMENT, PROVIDE A PLASTIC ENGRAVED LABEL WITH 1" HIGH WHITE LETTERS ON A BLACK BACKGROUND. THE LABEL IS TO HAVE A SELF ADHESIVE BACKING.
- 4. UNLESS NOTED OTHERWISE, MC TO ADJUST ALL DIFFUSER AIR PATTERN DEFLECTORS TO THROW HORIZONTALLY ALONG THE CEILING.
- 5. SUPPORT ALL DUCT DROPS AT BASE OF DROP FROM STRUCTURE.
- 6. ALL EXHAUST DUCTWORK AND UNFINISHED METAL ON ROOF EXCEPT STAINLESS SHALL BE PREPARED WITH TWO COATS OF SHERWIN WILLIAMS PRO INDUSTRIAL DTM ACRYLIC COATING, SEMI-GLOSS, WHITE. DEGREASE AND PRIME BARE METAL SURFACE WITH ONE COAT OF SHERWIN WILLIAMS PRO INDUSTRIAL PRO-CRYLACRYLIC UNIVERSAL PRIMER, WHITE, PRIOR TO PAINTING.
- 7. MAINTAIN 18" CLEARANCE FROM GREASE EXHAUST DUCTWORK ABOVE ROOF TO ANY COMBUSTIBLE CONSTRUCTION INCLUDING PARAPET WALLS.

KITCHEN HOOD SYSTEMS NOTES

- 1. CHICK-FIL-A MAINTAINS A NATIONAL ACCOUNT WITH HALTON CO. FOR THE HOODS. CHICK-FIL-A WILL PURCHASE AND PROVIDE THE HOODS FOR INSTALLATION BY THE MECHANICAL CONTRACTOR. THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR RECEIVING THE HOODS. CONTACT HALTON CO. AT 270-237-5600 FOR MORE INFO.
- 2. THE FIRE SUPPRESSION SYSTEM SHALL CONSIST OF A COMPLETE WET CHEMICAL SYSTEM FURNISHED BY HALTON. THE HOOD SHALL BE FURNISHED PRE-PIPED BY HALTON.
- 3. THE FIRE SUPPRESSION SYSTEM EXTERNAL TO THE HOODS SHALL BE INSTALLED IN ACCORDANCE WITH HOOD MANUFACTURER'S SHOP DRAWINGS BY AN AUTHORIZED INSTALLER SELECTED AND HIRED BY HALTON. COST FOR INSTALLATION INCLUDED IN PRICE OF HOODS TO CFA.
- 4. HOOD EXHAUST DUCTWORK SHALL BE 16 GA. BLACK STEEL WITH CONTINUOUS LIQUID TIGHT WELD OF JOINTS & SEAMS.
- 5. TURNS IN GREASE EXHAUST DUCTWORK SHALL BE LONG RADIUS TYPE, WITH A CENTERLINE RADIUS R=3W/2, UNLESS OTHERWISE NOTED. NO MITERED FITTINGS ALLOWED.
- 6. ALL STAINLESS STEEL CLOSURE PANELS SHALL BE SUPPLIED BY HOOD MANUFACTURER AND INSTALLED BY THE MECHANICAL CONTRACTOR ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
- 7. SLOPE ALL GREASE EXHAUST DUCT BACK TO HOOD AT 1/4" PER FOOT OF RUN.
- 8. WRAP NEW GREASE DUCT WITH UNIFRAX FyreWRAP. INSULATION ON ACCESS DOORS SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S INSTALLATION RECOMMENDATIONS. UNIFRAX FyreWRAP PRODUCT USED SHALL MEET LOCAL CODE REQUIREMENTS.
- 9. SUPPORT ALL HOODS WITH THREADED ROD AT EACH FACTORY SUPPORT POINT. EACH SUPPORT POINT MUST SUPPORT THE HOOD WEIGHT EQUALLY. ATTACH TO STRUCTURE AS DETAILED ON STRUCTURAL DRAWINGS. ATTACH HOOD TO WALL AT 16" INTERVALS ALONG FULL LENGTH OF HOOD ON TOP AND BOTTOM. ATTACHMENT TO WALL REQUIRES FIELD DRILLING OF SUPPORT ANGLE AT BACK OF HOODS. EACH WALL ATTACHMENT POINT MUST OCCUR AT A WALL STUD. ATTACHMENT HARDWARE TO BE #12-24 HEX HEAD SHEET METAL SCREW EQUAL TO TEXTRON SDS EDT265, LENGTH AS REQUIRED TO FULLY PENETRATE THE STUD.

LEGEND

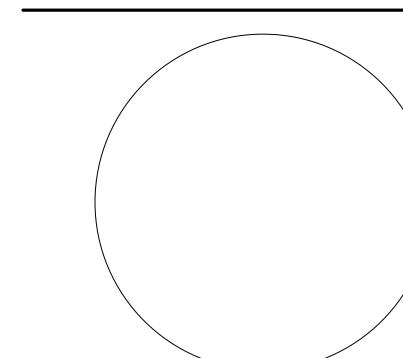
NO.	DATE	DESCRIPTION
1	8/4/2021	ISSUED FOR PERMIT
4	3/28/2024	ISSUE FOR CONSTRUCTION

A-12-400	TYPE - NECK SIZE - CFM	[EF#1]	EXHAUST FAN #1 (TYP.)
[Symbol]	SPIN-IN FITTING WITH MANUAL BALANCING DAMPER, WITHOUT SCOOP	[AC#1]	AIR CONDITIONING UNIT #1 (TYP.)
[Symbol]	SPIN-IN HARD) FLEXIBLE Ø DIFFUSER	[Symbol]	RETURN/EXHAUST (TYP.)
[Symbol]	REMOTE TEMPERATURE SENSOR	[Symbol]	SUPPLY DIFFUSER, SQ FACE (TYP.)
[Symbol]	HUMIDITY SENSOR	[Symbol]	PLAN NOTE REFERENCE
[Symbol]	SMOKE DETECTOR	[Symbol]	MANUAL VOLUME DAMPER
12x18	DUCT SIZE (reverse for elevation views) 1ST NUMBER - HORIZONTAL DIMENSION 2ND NUMBER - VERTICAL DIMENSION	[Symbol]	DIRECTION OF THROW ON DIFFUSER
[Symbol]	CLOSED AIR PATTERN DEFLECTOR	[Symbol]	CLOSED AIR PATTERN DEFLECTOR
[SW]	AIR DOOR SWITCH	[GIH]	GAS INFRARED HEATER (TYP.)
EC	ELECTRICAL CONTRACTOR	B/G	BELOW GRADE
MC	MECHANICAL CONTRACTOR	(T)	THERMOSTAT
EIH	ELECTRIC INFRARED HEATER		



Chick-fil-A
5200 Buffington Road
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ESELIN, NJ 08830
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NY STATE CERTIFICATE OF AUTHORIZATION #0019115



ARMEN KHACHATRYAN P.E.
NY LICENSE #002091-1

CHICK-FIL-A
EXPRESSWAY PLAZA
2280-2350 North Ocean Ave.
FARMINGVILLE, NY 11738

FSR#04810

BUILDING TYPE / SIZE: P14 SE BN
RELEASE: 23.02
PRINTED FOR: ISSUED FOR CONSTRUCTION

REVISION SCHEDULE

CONSULTANT PROJECT # 2636
DATE 03/28/2024

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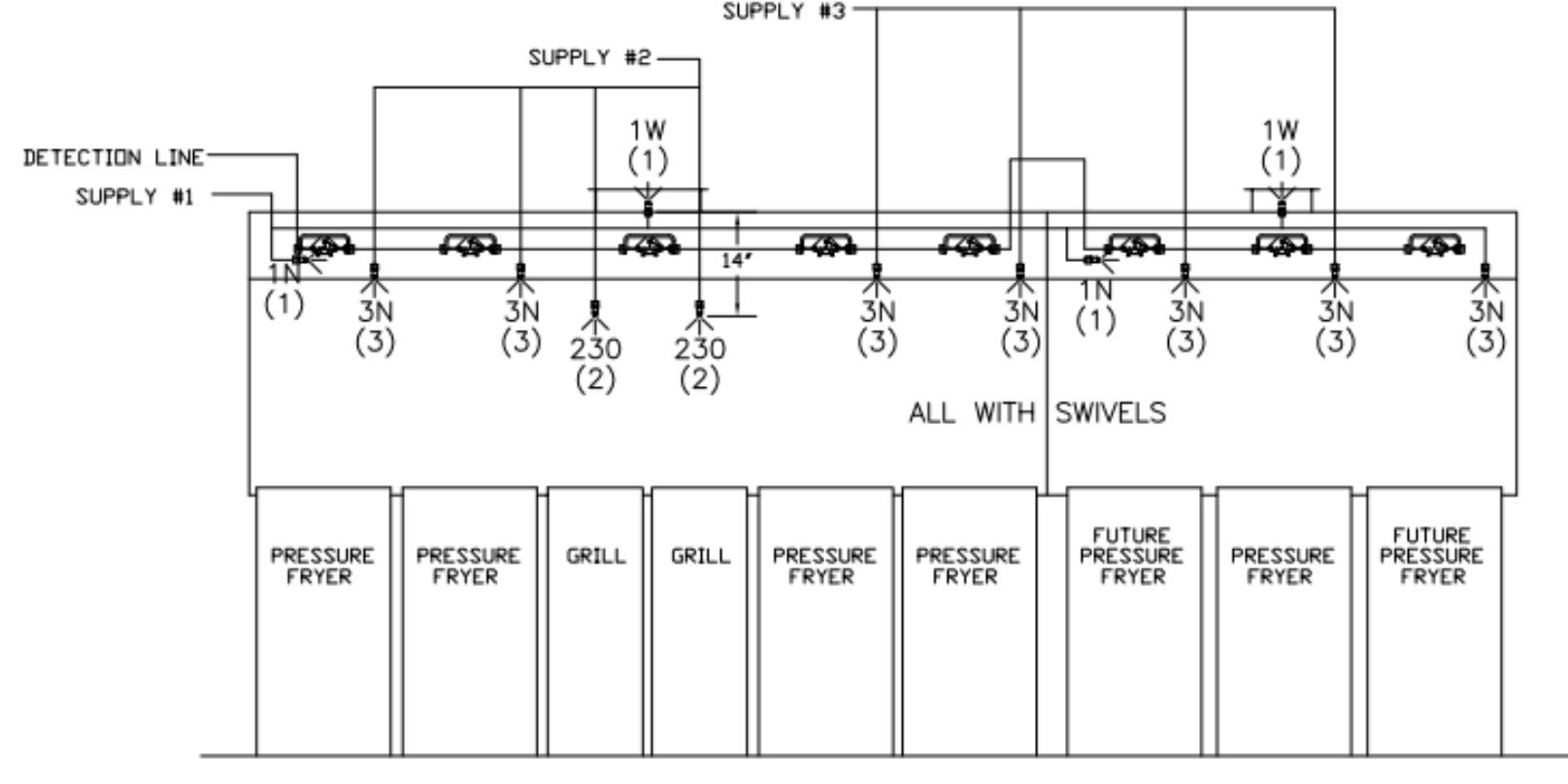
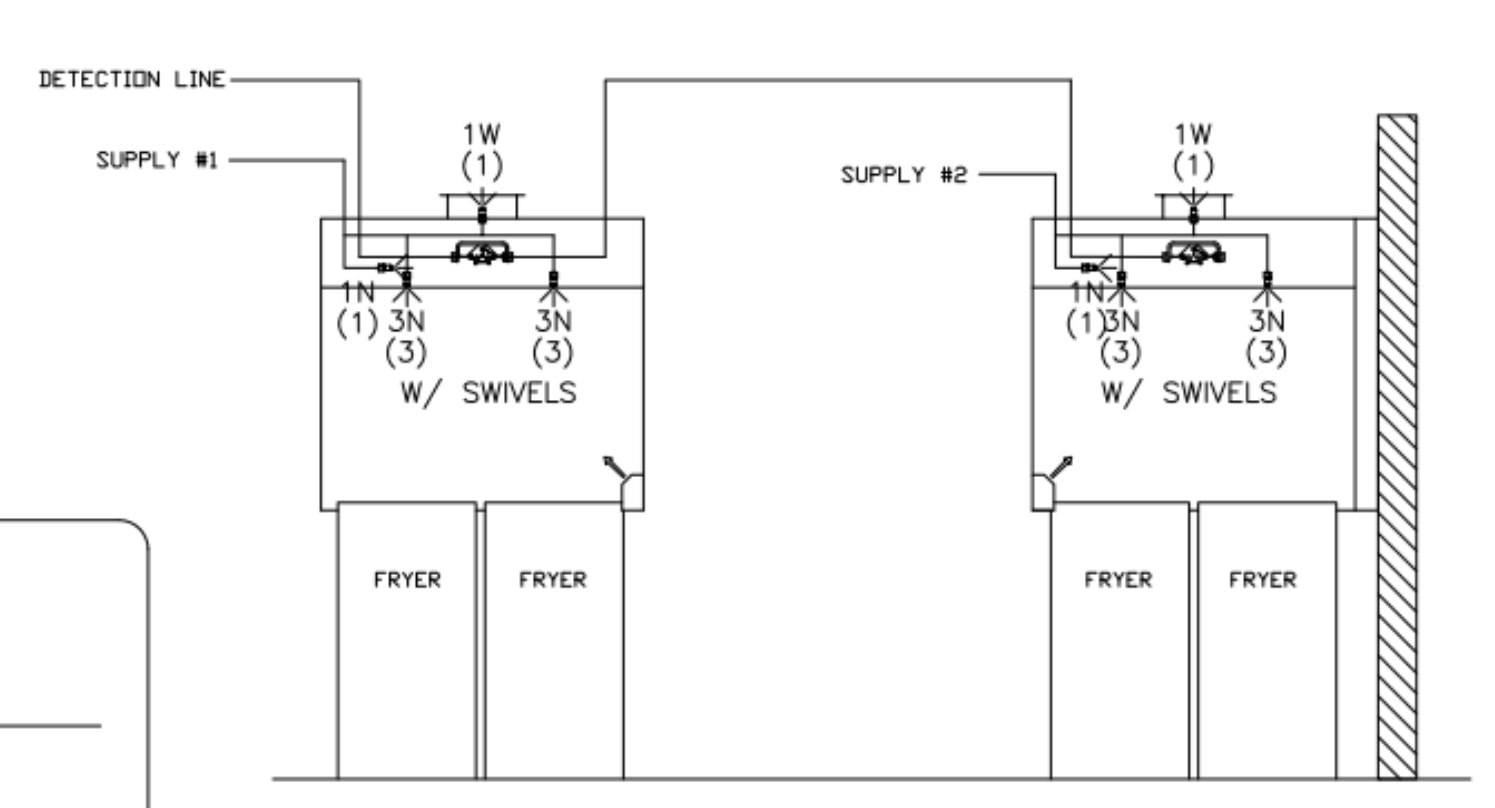
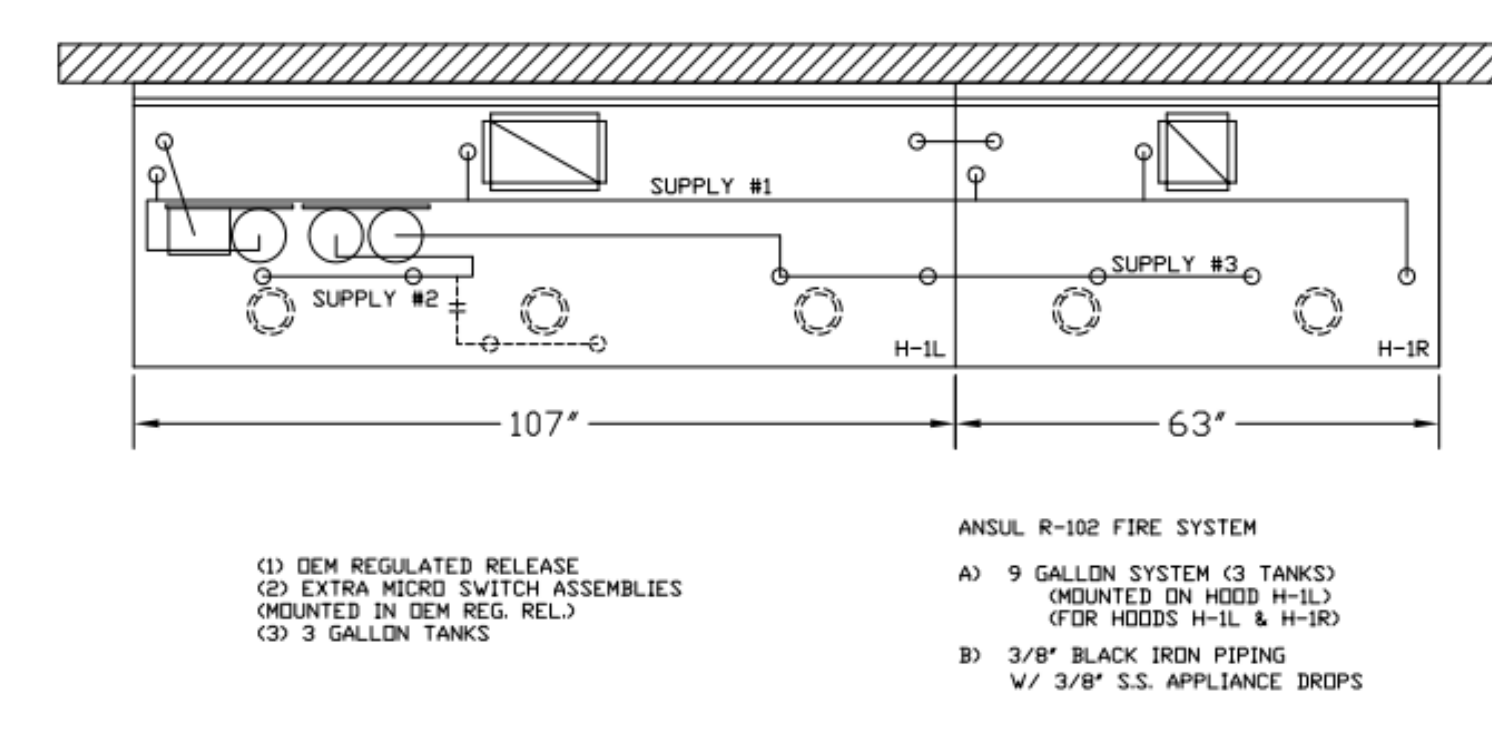
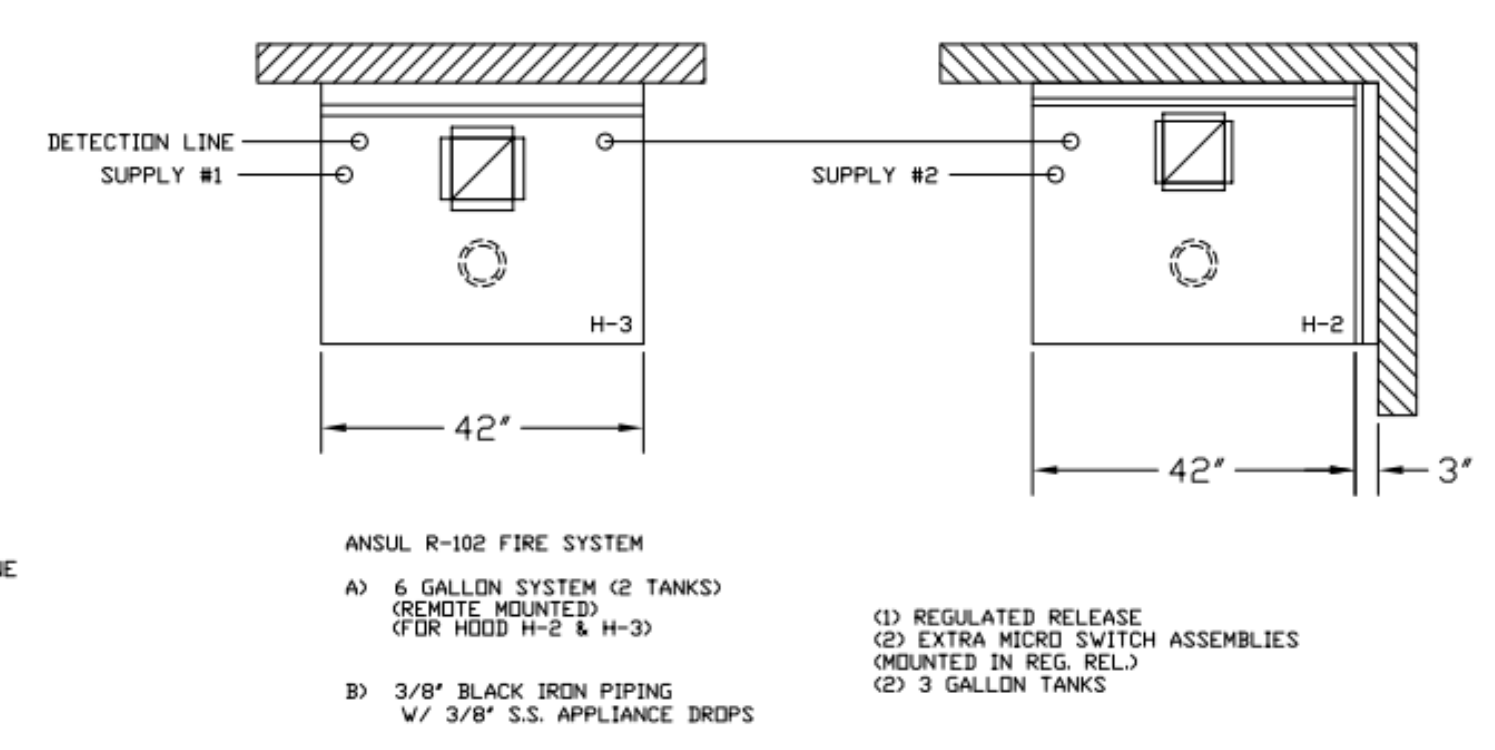
SHEET GENERAL NOTES, LEGENDS, SYMBOLS, AND ABBREVIATIONS

SHEET NUMBER

M-001

NOTE:
FIRE SYSTEM TYPE TO BE DETERMINED AT TIME OF ORDER RELEASE.

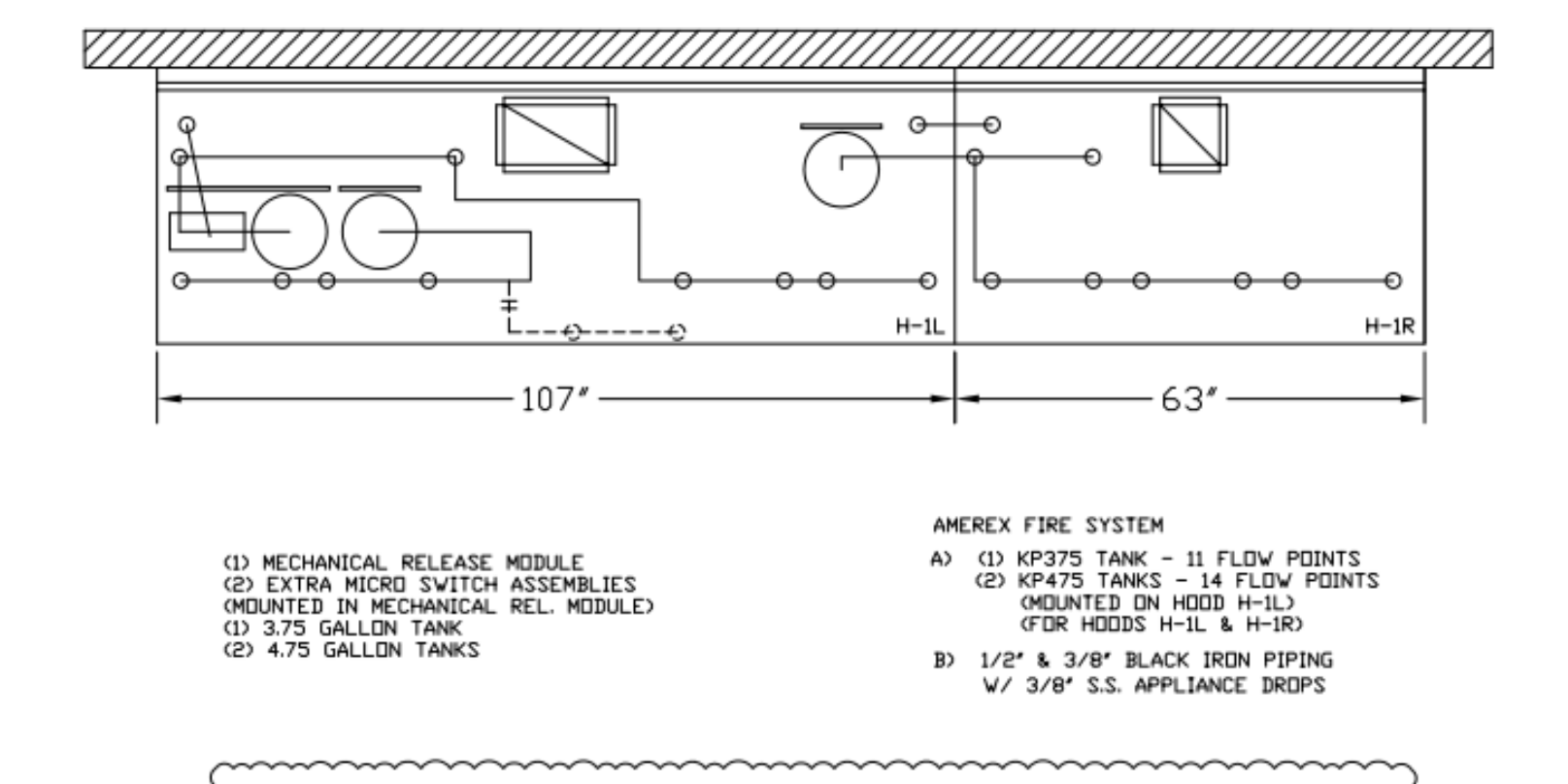
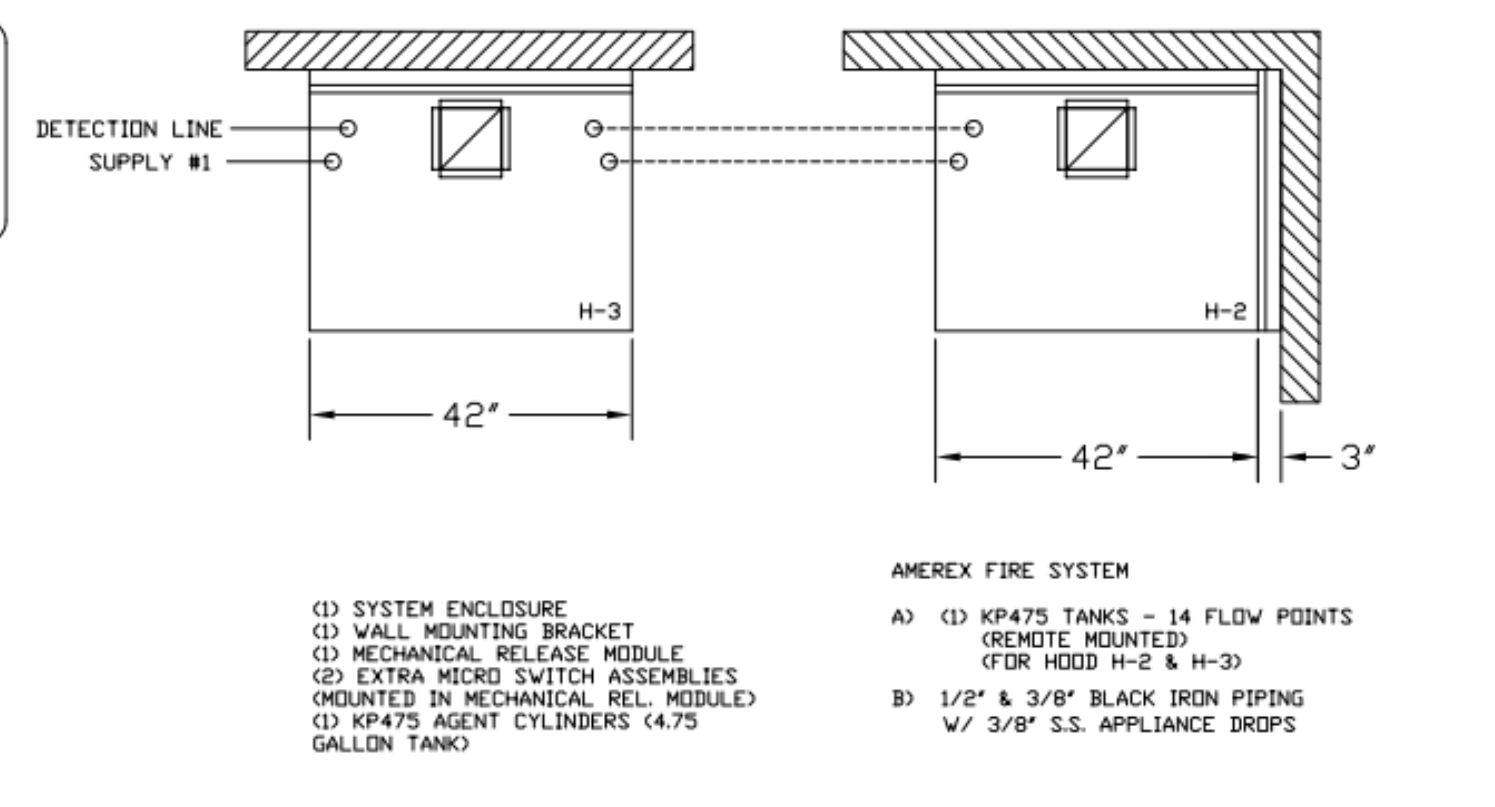
****PROTECTS HOODS H-2 & H-3****
REMOTE MOUNTED:
(1) REGULATED RELEASE (WITH ONE TANK)
(1) SINGLE TANK ENCLOSURE (WITH ONE TANK)



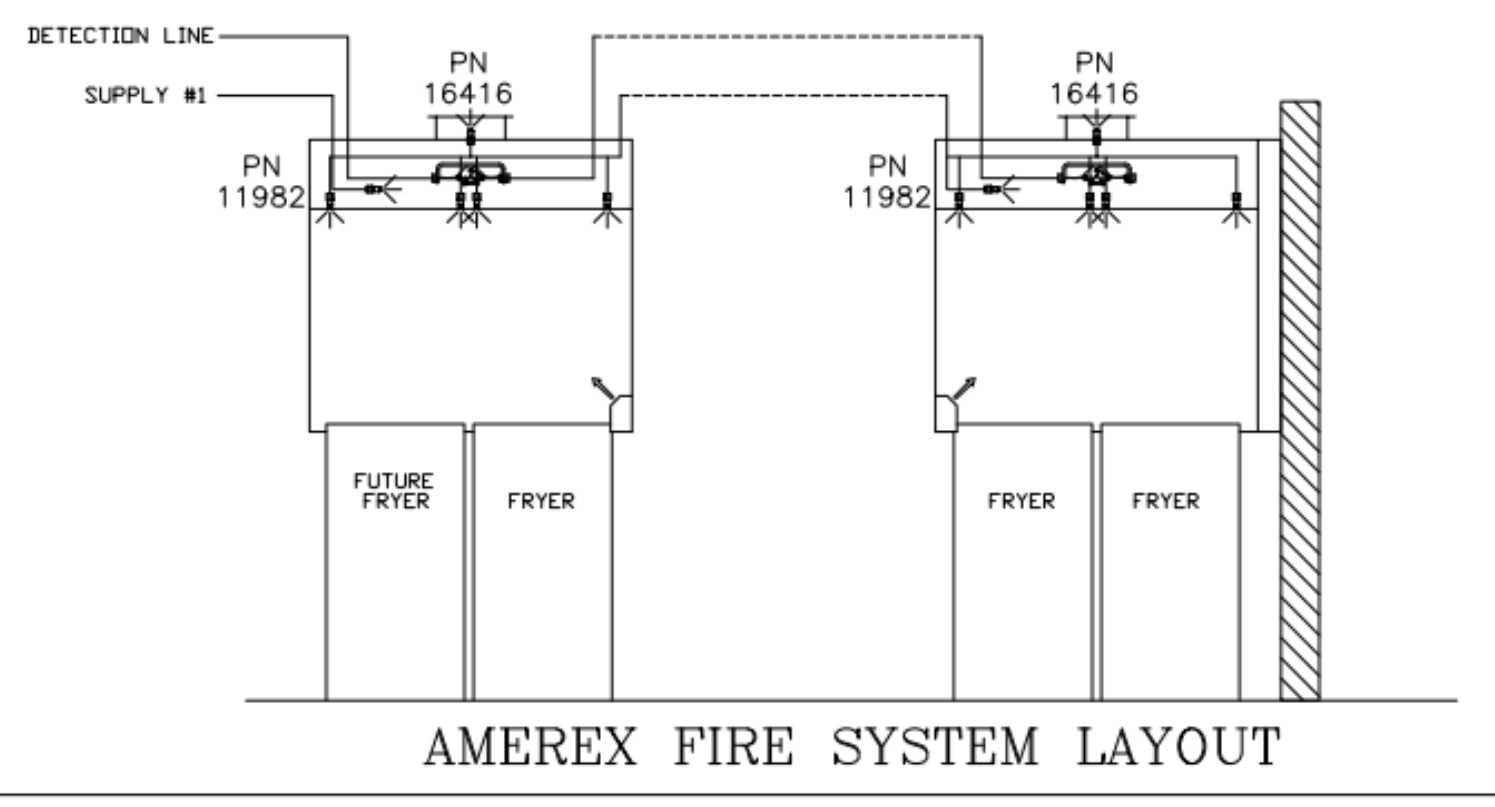
FIRE EXTINGUISHER
ISO VIEW W/BACKET
5 LBS. ABC MODEL B402 QTY: _____
10 LBS. ABC MODEL B456 QTY: _____
6 LTR CLASS K MODEL C-260 QTY: _____
SUPPLIED BY HALTON

1/2" BLACK IRON SUPPLY LINE REQ'D FROM TANK TO FIRST BRANCH LINE FOR 475 TANKS ONLY!

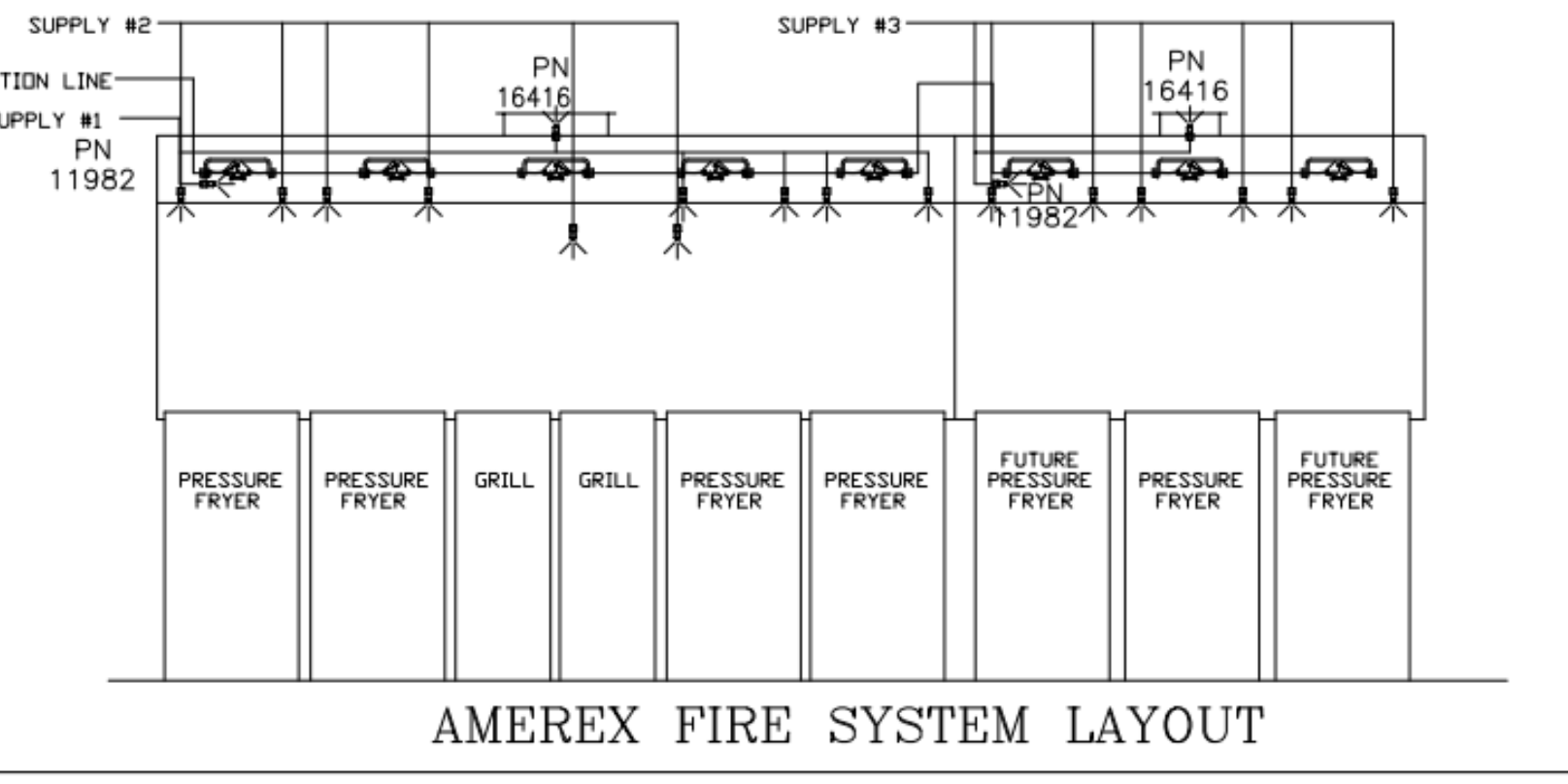
****PROTECTS HOODS H-2 & H-3****
REMOTE MOUNTED:
(1) SYSTEM ENCLOSURE
(1) WALL MOUNTING BRACKET
(1) MECHANICAL RELEASE MODULE
(1) KP475 AGENT CYLINDER (4.75 GALLON TANK)



ALL APPLIANCE NOZZLES FOR H-2 & H-3 ARE PN 11982 NOZZLES W/ SWIVELS.



ALL APPLIANCE NOZZLES FOR PRESSURE FRYERS ARE PN 13729 NOZZLES W/ SWIVELS. ALL GRILL NOZZLES ARE 14178 NOZZLES W/ SWIVELS.



FUSIBLE LINK RATINGS

ITEM	TEMP
OPEN FRYERS	450°
2 BURNER / FLAT TOP	450°
PRESSURE FRYERS	450°
GRILL	450°
EXHAUST COLLARS	450°



ANSUL R-102 FIRE SYSTEM NOTES
THREE TANK SYSTEM MOUNTED ON TOP OF (H-1L)
MAXIMUM FLOW POINTS = 33

ANSUL R-102 FIRE SYSTEM NOTES
TWO TANK SYSTEM REMOTE MOUNTED
MAXIMUM FLOW POINTS = 22

ITEM #	QTY	DESCRIPTION	FLOW PTS (TOTAL)
1W	4	DUCT NOZZLES	4
1N	4	PLENUM NOZZLES	4
230	2	APPLIANCE NOZZLES	4
3N	11	APPLIANCE NOZZLES	33
TOTAL FLOW POINTS - 45			

ITEM #	QTY	DESCRIPTION
#200	8	SERIES DETECTORS W/ FUSIBLE LINKS
#201	2	TERMINAL DETECTOR W/ FUSIBLE LINKS
#202	1	DEM REGULATED RELEASE W/ DOUBLE POLE MICRO SWITCH
#202	1	REGULATED RELEASE W/ DOUBLE POLE MICRO SWITCH
#203	5	3 GALLON TANKS
#204	1	SINGLE TANK ENCLOSURE
#205	2	REMOTE PULL STATION

ANSUL R-102 FIRE SYSTEM
UL LISTED PER STD LATEST STD 300

- FINAL INSTALLATION IS TO BE MADE IN ACCORDANCE WITH ALL APPLICABLE CODES
- ALL ELECTRICAL COMPONENTS FOR EQUIPMENT SHUT DOWN TO BE PROVIDED BY THE ELECTRICIAN. MICRO-SWITCH INSTALLED IN REGULATED RELEASE BY ANSUL INSTALLER
- REMOTE PULL STATION LOCATED PER MECHANICAL DRAWINGS



FUSIBLE LINK RATINGS

ITEM	TEMP
OPEN FRYERS	450°
2 BURNER / FLAT TOP	450°
PRESSURE FRYERS	450°
GRILL	450°
EXHAUST COLLARS	450°

AMEREX FIRE SYSTEM NOTES
(1) KP375 & (2) KP475 TANK SYSTEM MOUNTED ON TOP OF (H-1L)
MAXIMUM FLOW POINTS = 39

AMEREX FIRE SYSTEM NOTES
KP475 TANK SYSTEM REMOTE MOUNTED
(1) TANK
MAXIMUM FLOW POINTS = 14

ITEM #	QTY	DESCRIPTION	FLOW PTS (TOTAL)
16416	4	DUCT NOZZLES	4
11982	4	PLENUM NOZZLES	4
11982	8	APPLIANCE NOZZLES	8
14178	2	APPLIANCE NOZZLES	4
13729	14	APPLIANCE NOZZLES	28
TOTAL FLOW POINTS - 48			

ITEM #	QTY	DESCRIPTION
12508-P001	10	DETECTOR BRACKET ASSEMBLY
13334	1	KP375 AGENT CYLINDER
17379	3	KP475 AGENT CYLINDER
18001	1	MECHANICAL RELEASE MODULE W/ DOUBLE POLE MICRO SWITCH
25851	1	SYSTEM ENCLOSURE W/ DOUBLE POLE MICRO SWITCH
16920	1	WALL MOUNTING BRACKET
21481	3	REMOTE MANUAL PULL STATION

AMEREX FIRE SYSTEM
TESTED & LISTED BY UNDERWRITERS LABORATORIES, INC. TO UL STANDARD 300.

- FINAL INSTALLATION IS TO BE MADE IN ACCORDANCE WITH ALL APPLICABLE CODES
- ALL ELECTRICAL COMPONENTS FOR EQUIPMENT SHUT DOWN TO BE PROVIDED BY THE ELECTRICIAN. MICRO-SWITCH INSTALLED IN REGULATED RELEASE BY AMEREX INSTALLER
- REMOTE PULL STATION LOCATED PER MECHANICAL DRAWINGS

THIS DRAWING MUST BE CHECKED, SIGNED AND RETURNED TO THE APPROPRIATE FACTORY. PLEASE VERIFY THE FOLLOWING:
1. ALL DIMENSIONAL INFORMATION, MOUNTING POSITIONS AND/OR FUSIBLE LINK RATINGS.
2. THE LOCATION AND TYPE OF COOKING EQUIPMENT.
NOTE: TO APPROVE: THE MANUFACTURER'S EQUIPMENT SHALL BE INSPECTED BEFORE ANY OF THE EQUIPMENT POSITION MAY AFFECT EXHAUST AIRFLOW. HALTON MUST BE NOTIFIED IF ANY OF THESE CHANGES OCCUR. A RECALCULATION EXHAUST AIRFLOW MAY BE REQUIRED.
 REVERSE AND RESUBMIT
 APPROVED FOR FABRICATION
 WITH NO CHANGES
 WITH CHANGES AS NOTED



REV.	DATE	DESCRIPTION
1		
2		
3		
4		
5		
6		
7		

WEBSITE: WWW.HALTON.COM
HALTON CO. (USA)
100 INDUSTRIAL BLVD
SCOTTSVILLE, KY 42164
1-270-237-5600

MAIL APPROVED DRAWINGS TO APPROPRIATE FACTORY BELOW:
HALTON CO. (CANADA)
100 BREK PLAZE
MISSISSAUGA ON L4W 4R7
1-905-624-0301

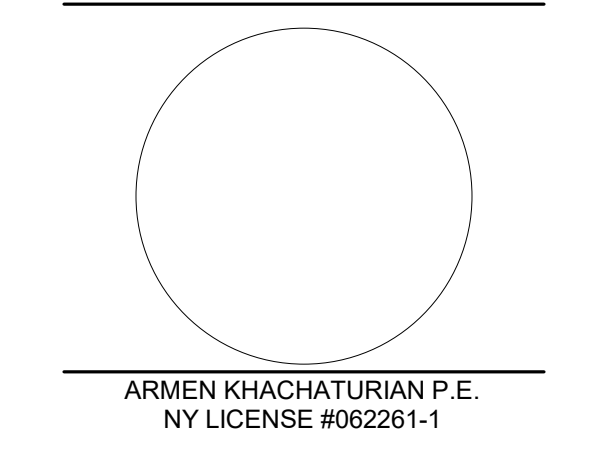
PROJECT: CHICK-FIL-A P14
LS/LE/SE/DTO/DTN BUILDING
LOCATION: ---
DRAWN BY: CG DATE: 08.09.22
SCALE: NTS
Halton Dwg: U22-606-02FS
Halton CARE FOR INDOOR AIR

Sheet MH-1.2



Chick-fil-A
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NY STATE CERTIFICATE OF AUTHORIZATION #0019115



ARMEN KHACHATURIAN P.E.
NY LICENSE #062291-1

CHICK-FIL-A EXPRESSWAY PLAZA
2280-2350 North Ocean Ave.
FARMINGVILLE, NY 11738

FSR#04810
BUILDING TYPE / SIZE: P14 SE BN
RELEASE: 23.02
PRINTED FOR
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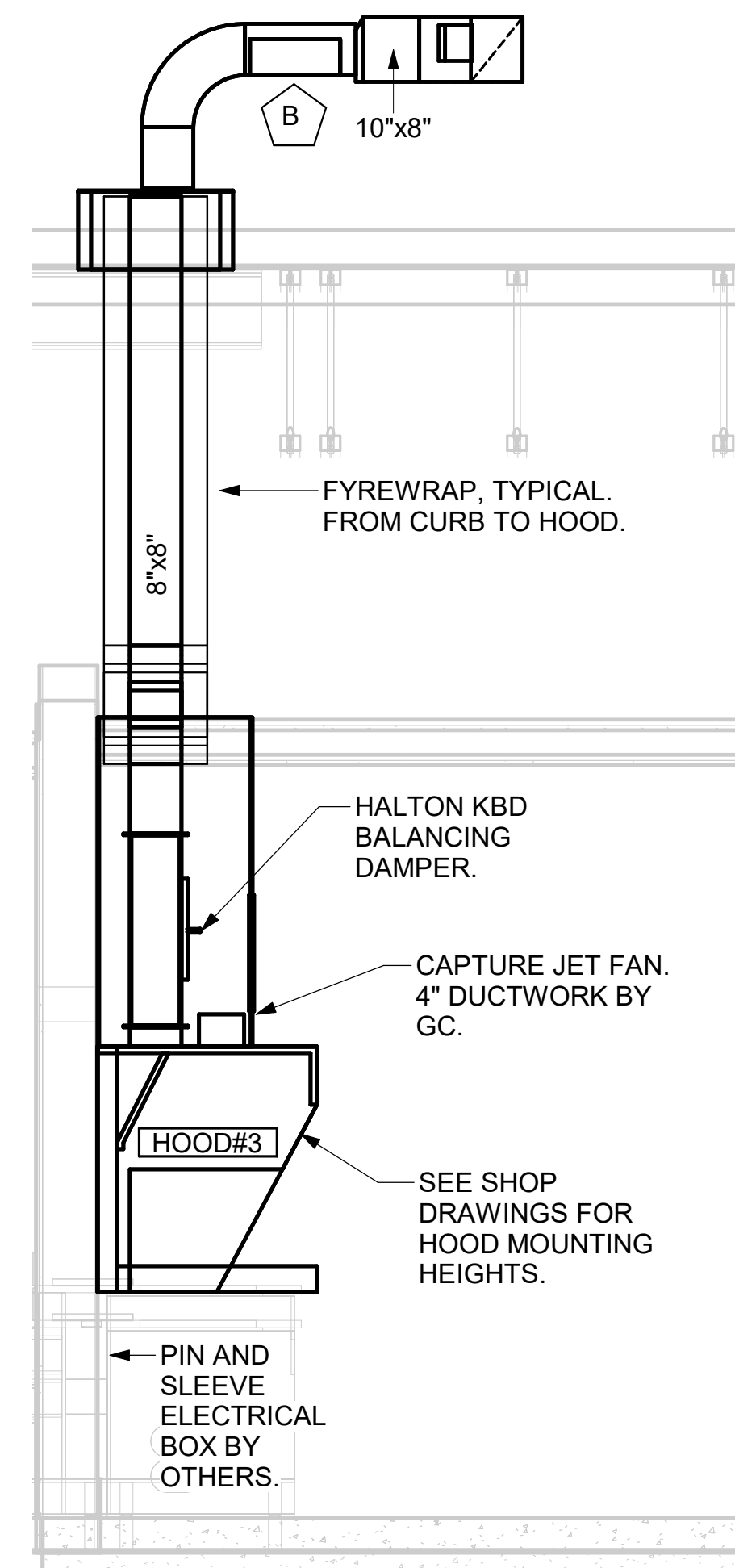
REVISION SCHEDULE
NO. DATE DESCRIPTION
1 8/4/2023 ISSUED FOR PERMIT
4 3/28/2024 ISSUE FOR CONSTRUCTION

CONSULTANT PROJECT # 2636
DATE 03/28/2024
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SHEET HALTON HOOD SHOP DRAWING
SHEET NUMBER

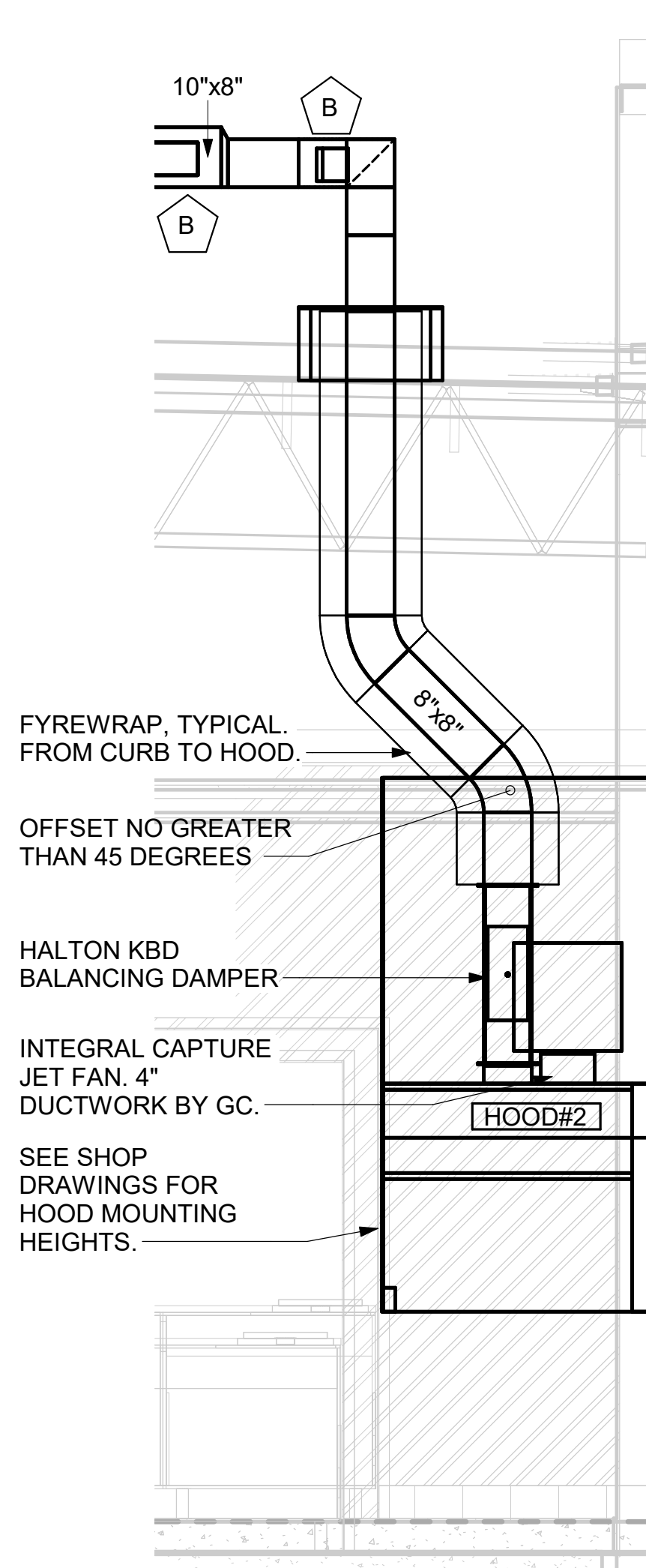
MH-1.2

GREASE EXHAUST DUCT CLEARANCE NOTE:
CLEARANCES ABOVE CEILING ARE TIGHT. MECHANICAL CONTRACTOR TO FIELD VERIFY EXACT ROUTING AND CLEARANCES PRIOR TO FABRICATING GREASE EXHAUST DUCT.

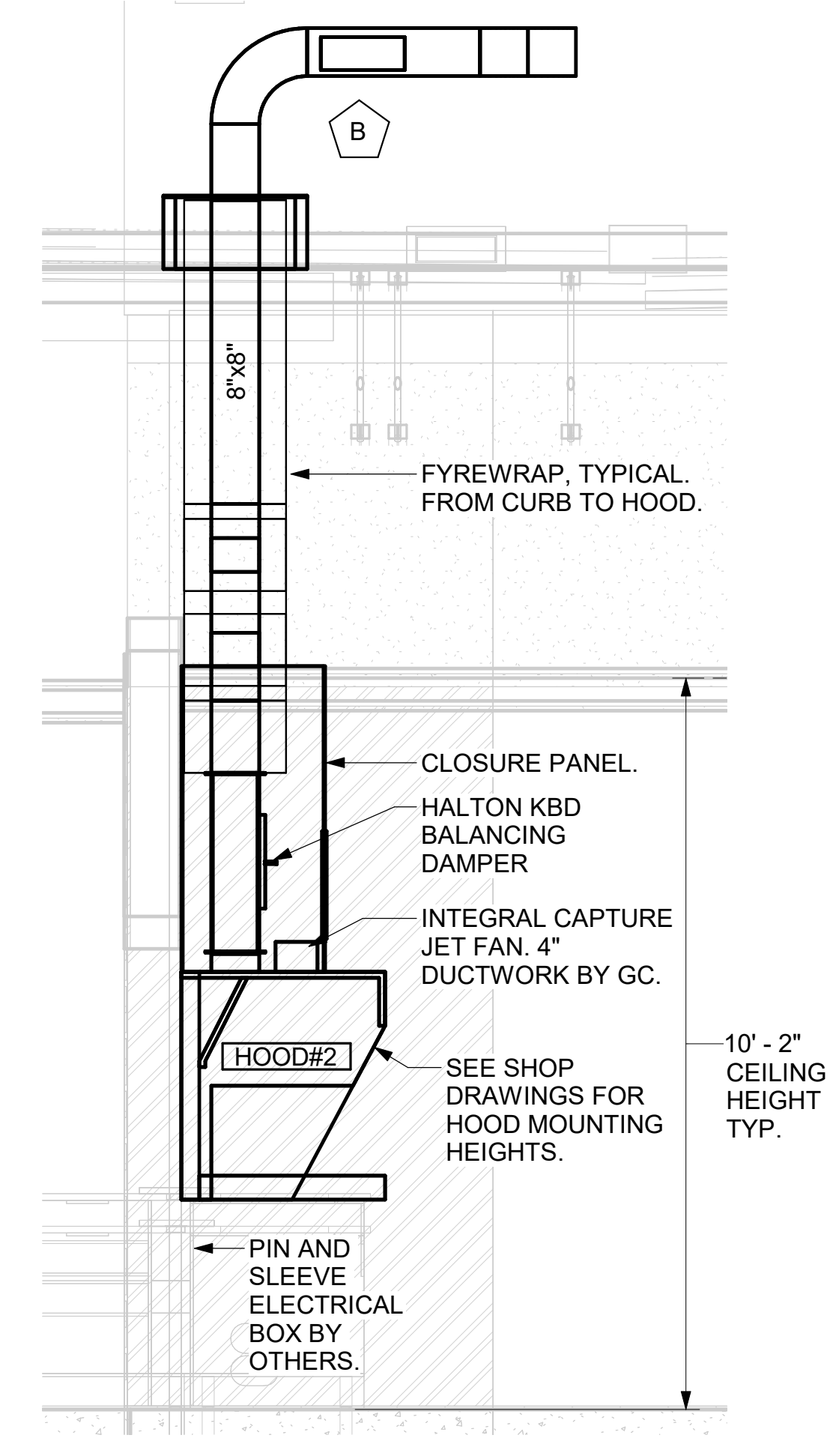
CLEANOUT DOOR NOTE:
DUCT WRAP SHALL BE APPLIED TO THE CLEANOUT DOOR PER THE WRAP MFR'S INSTALLATION INSTRUCTIONS. NO EXCEPTIONS. ALSO, THE CLEANOUT DOOR MUST BE REMOVABLE WITHOUT TOOLS AND MUST BE CLEARLY AND PERMANENTLY LABELED.



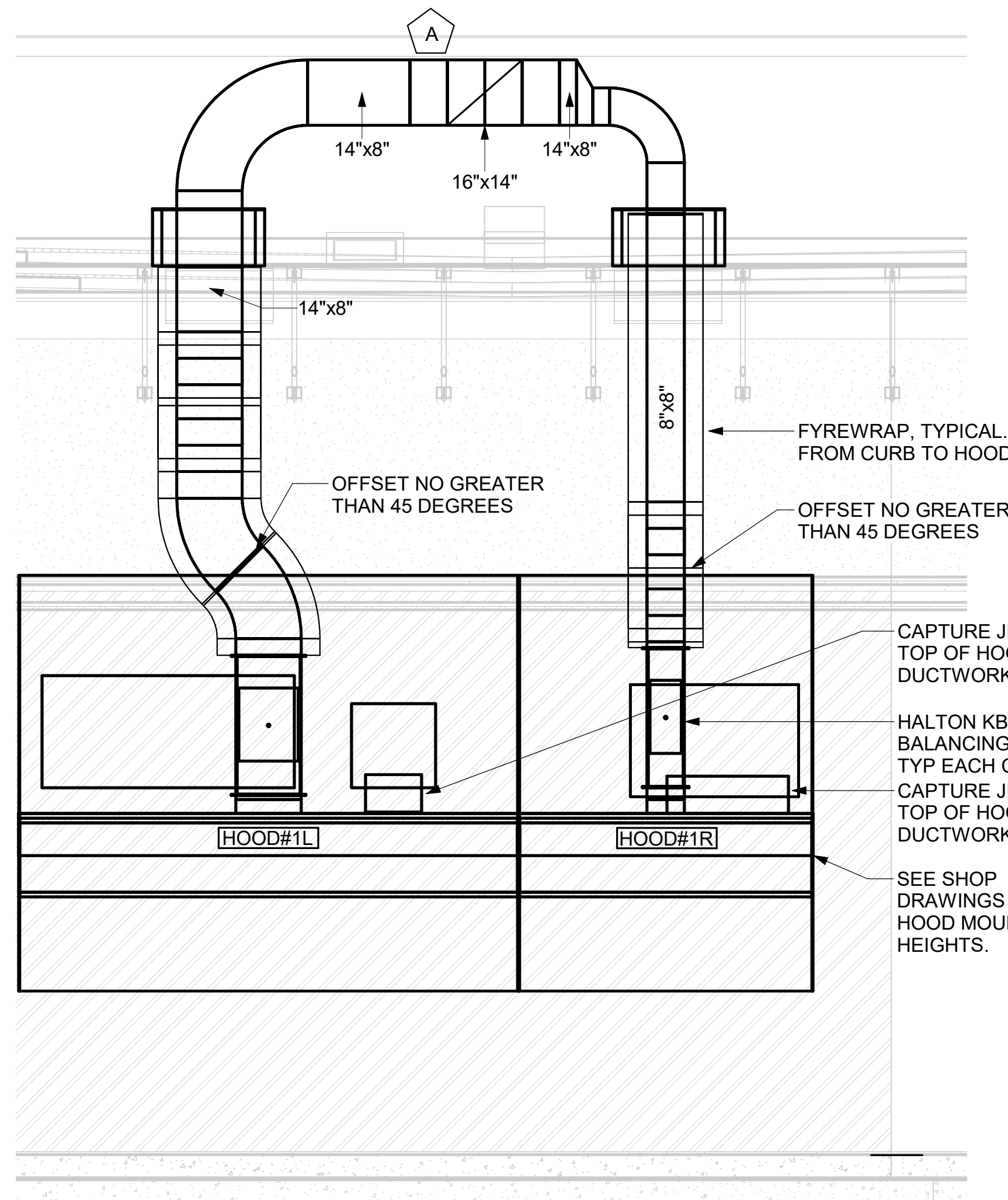
5 HOOD ELEVATION - HOOD#3
NOT TO SCALE



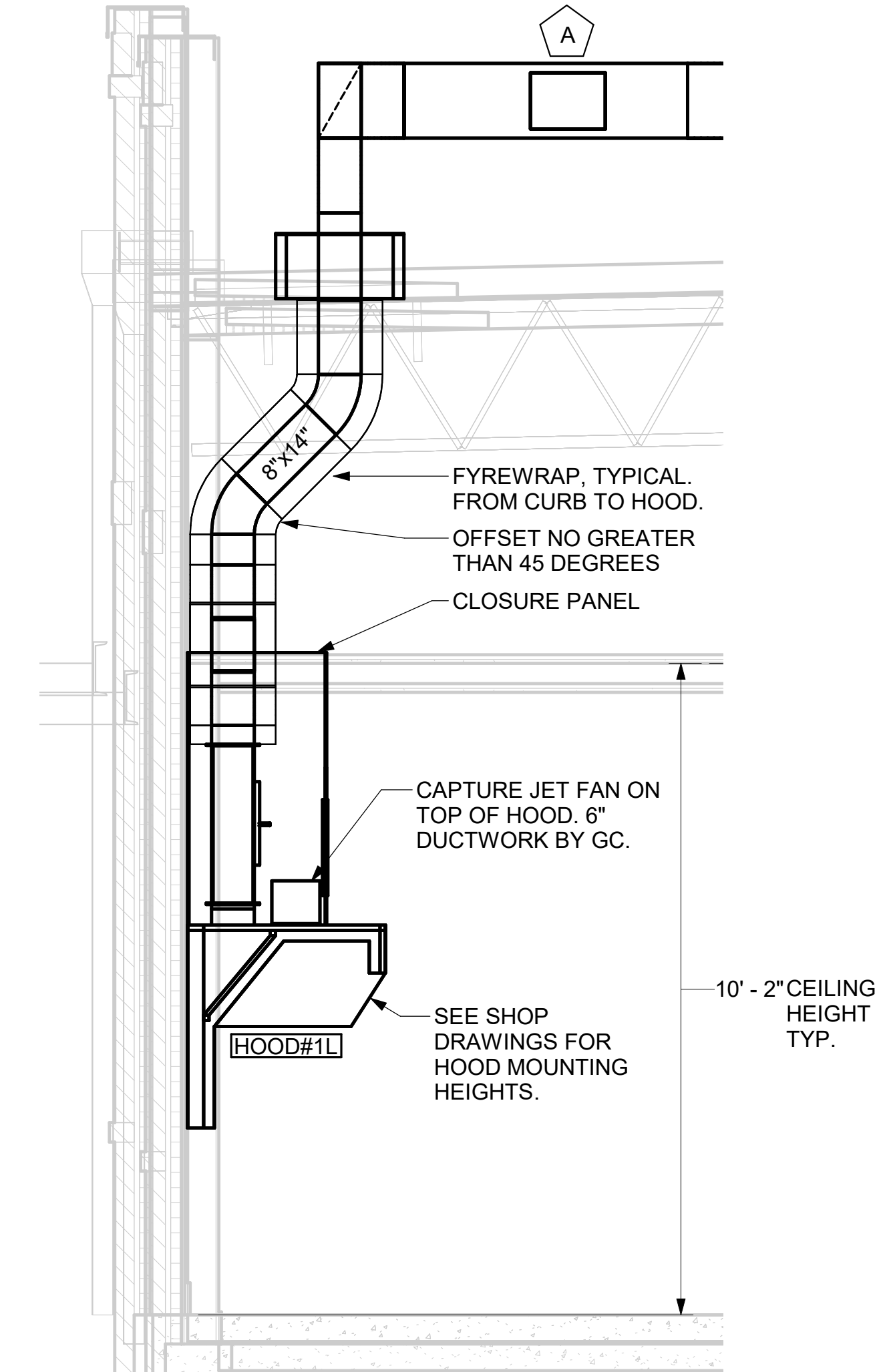
4 HOOD ELEVATION - HOOD#2 - FRONT
NOT TO SCALE



3 HOOD ELEVATION - HOOD#2 - SIDE
NOT TO SCALE



2 HOOD ELEVATION - HOOD#1 - FRONT
NOT TO SCALE



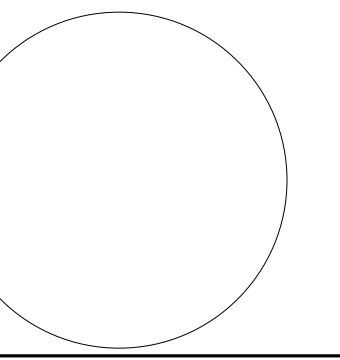
1 HOOD ELEVATION - HOOD#1 - SIDE
NOT TO SCALE



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CHICK-FIL-A
EXPRESSWAY PLAZA
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FARMINGVILLE, NY 11738

FSR#04810

BUILDING TYPE / SIZE: P14 SE BN
RELEASE: 23.02
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4	3/28/2024	ISSUE FOR CONSTRUCTION

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CONSULTANT PROJECT # 2636

DATE 03/28/2024

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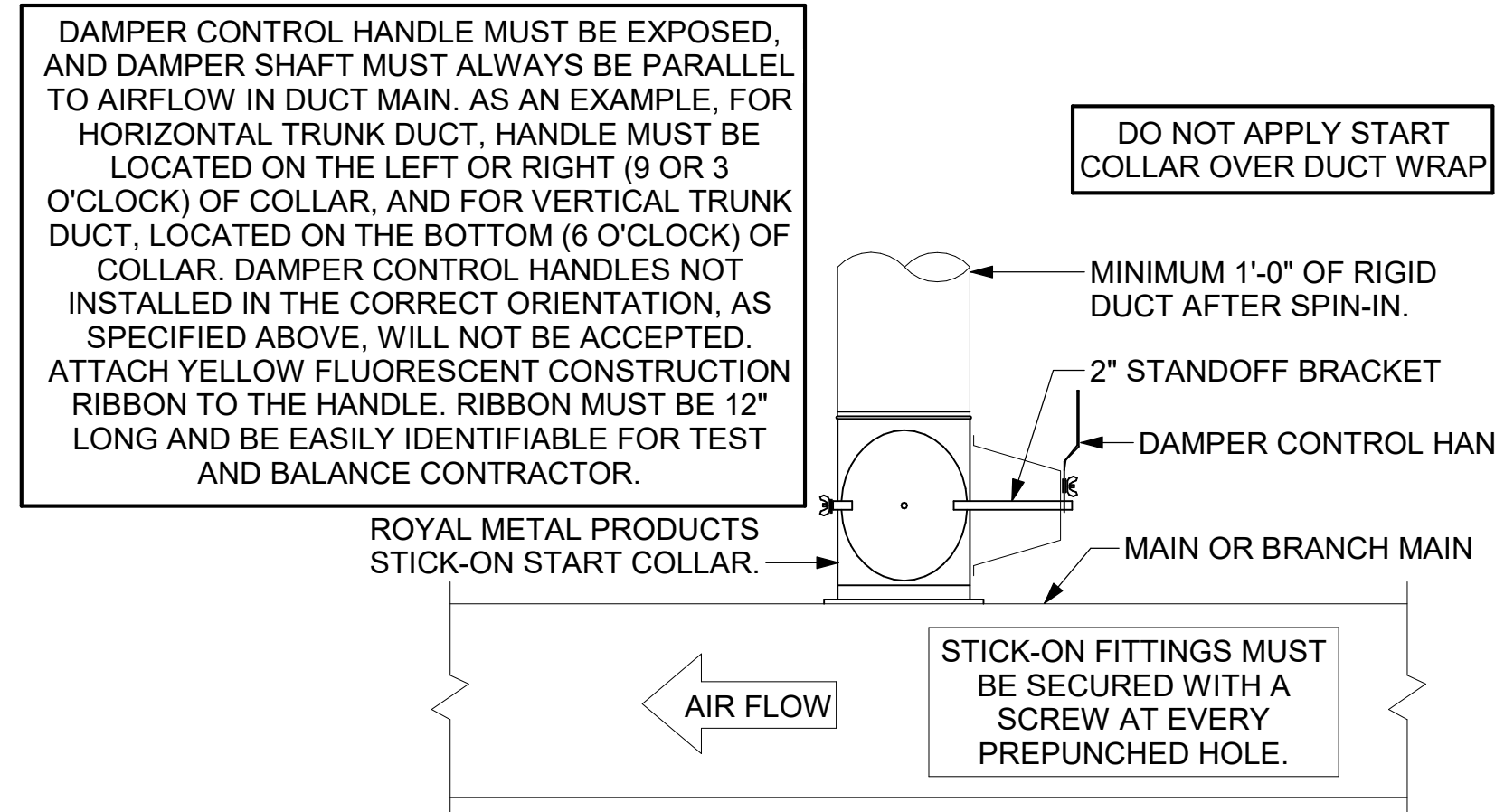
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SHEET EXHAUST HOOD ELEVATIONS

SHEET NUMBER

M-201

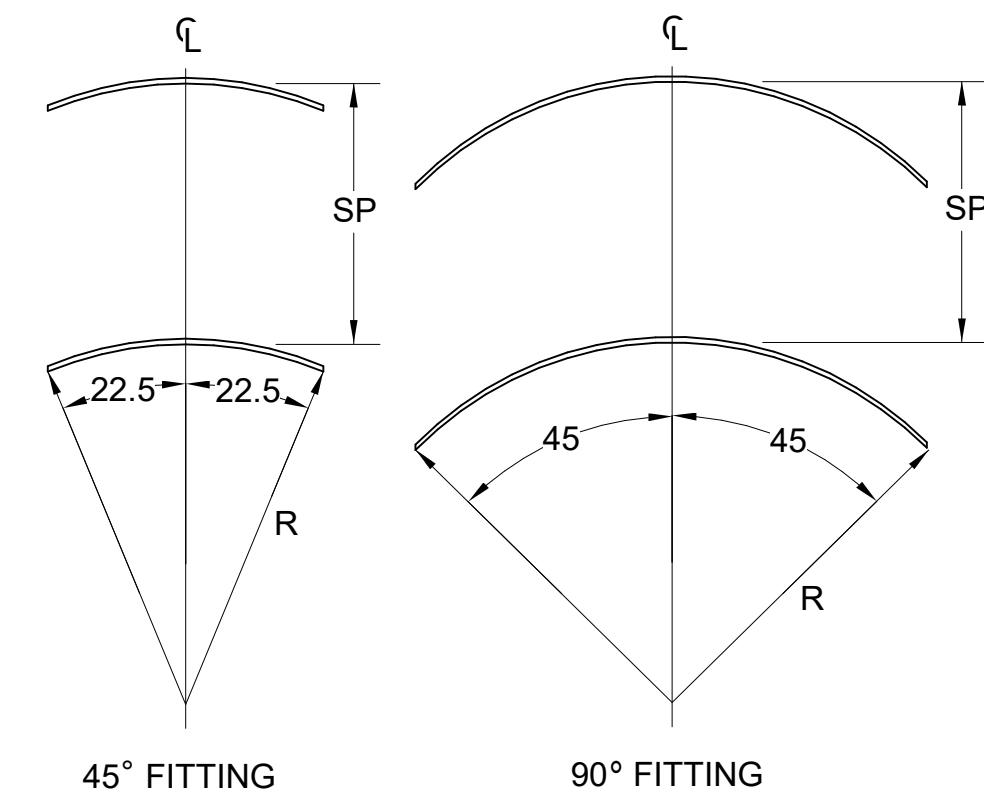
CHICK-FIL-A HAS A NATIONAL ACCOUNT WITH TOM BARROW COMPANY FOR THE ROYAL METAL PRODUCTS START COLLARS FOR BOTH WITH AND WITHOUT A MANUAL BALANCING DAMPER. THE MECHANICAL CONTRACTOR IS REQUIRED TO PURCHASE THE ROYAL METAL PRODUCTS START COLLARS DIRECTLY FROM TOM BARROW COMPANY. CONTACT MR. SCOTT GEORGE AT 404-351-1010 FOR PRICING AND AVAILABILITY. ROYAL METAL PRODUCTS START COLLARS NOT PURCHASED THRU TOM BARROW COMPANY WILL NOT BE ACCEPTED.



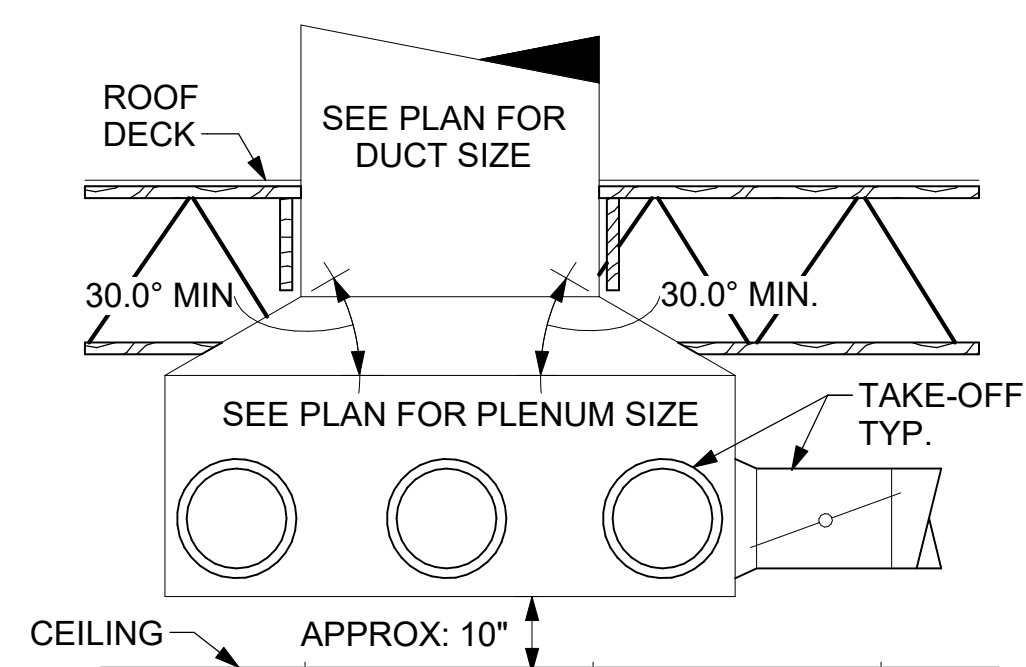
2 START COLLAR
NOT TO SCALE

R	SP	GA
2"	1.5"	24

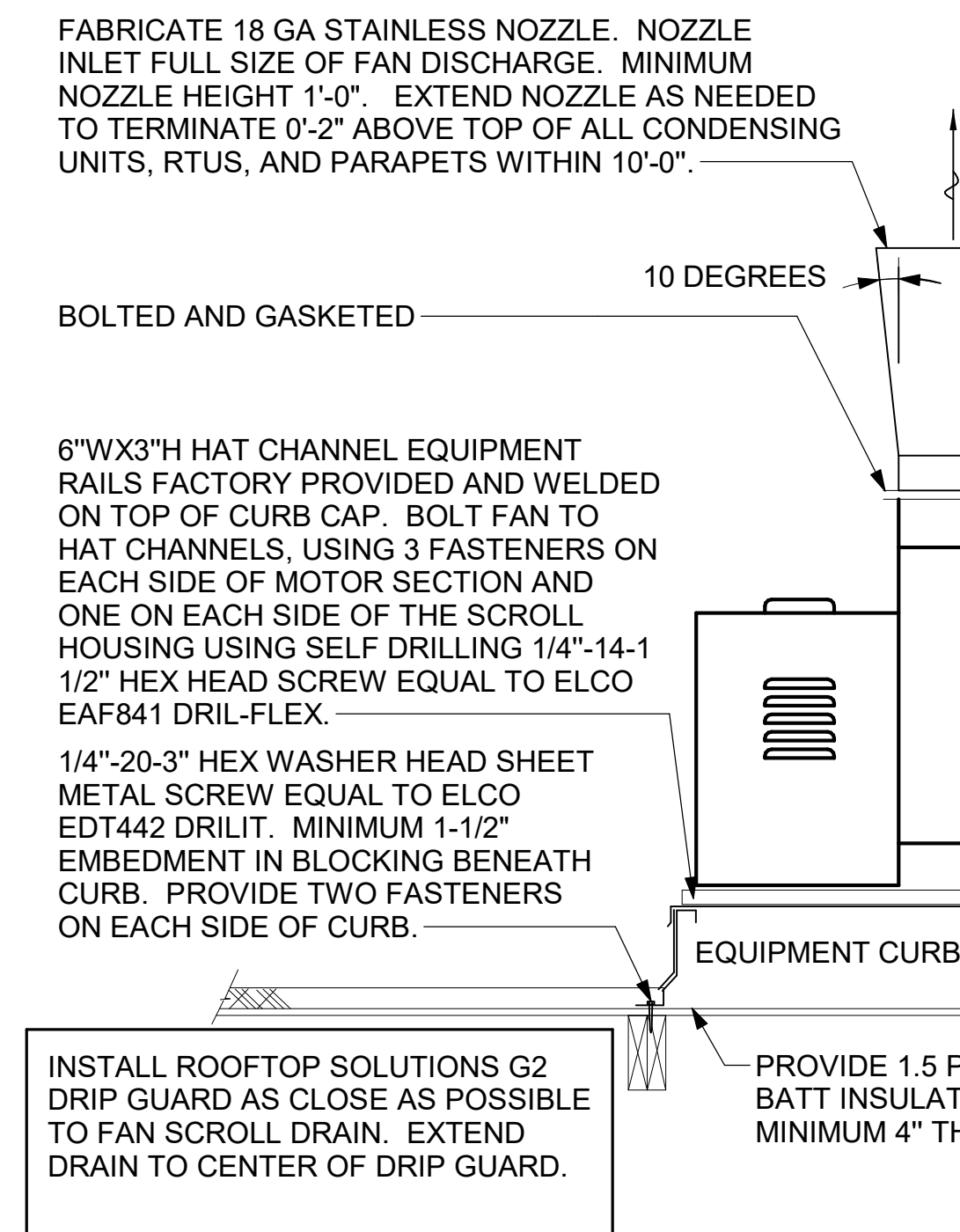
1. NO TRAILING EDGE.
2. SINGLE THICKNESS CONSTRUCTION.



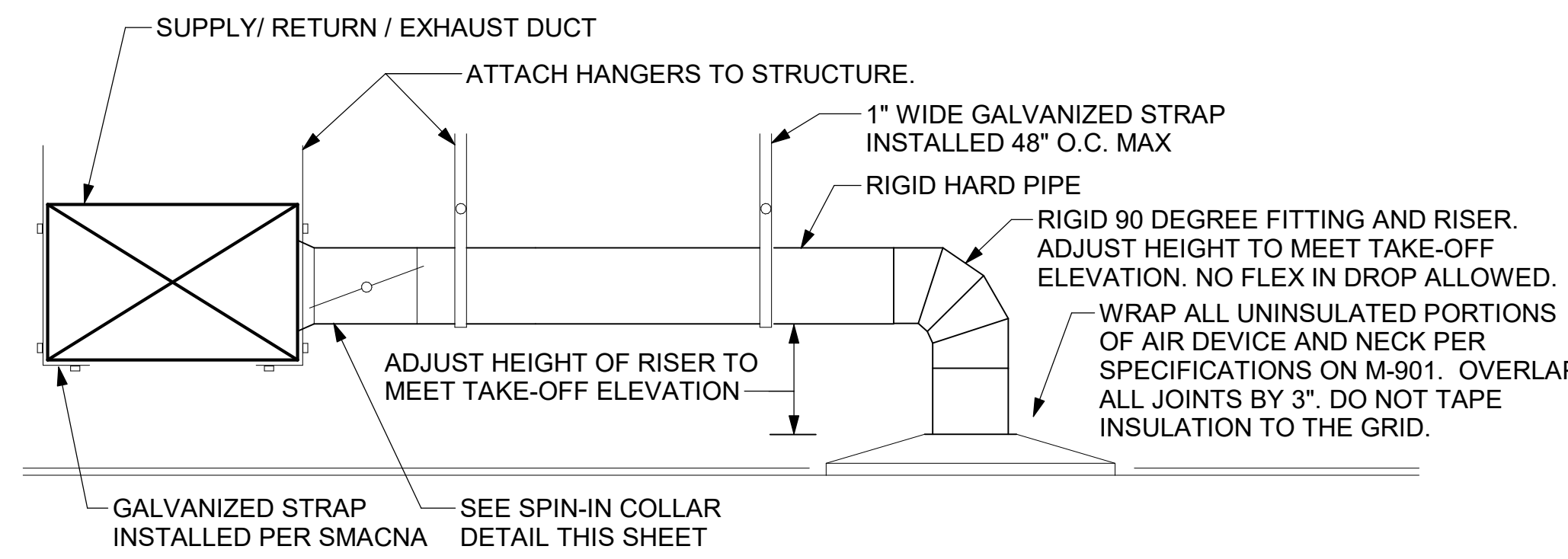
4 TURNING VANES
NOT TO SCALE



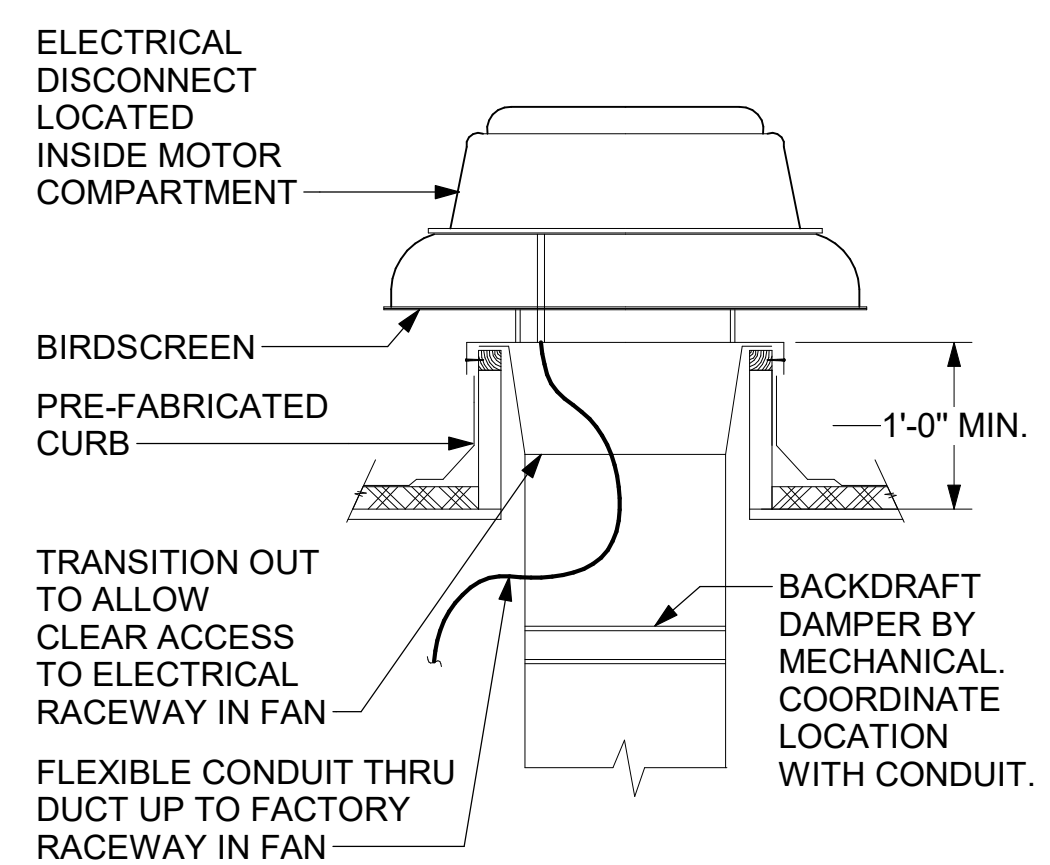
6 SAG/RAG/GRILLE TAKE-OFF
NOT TO SCALE



1 KITCHEN HOOD EXHAUST FAN
NOT TO SCALE



3 SAG/RAG/GRILLE TAKE-OFF
NOT TO SCALE



5 RESTROOM EXHAUST FAN
NOT TO SCALE

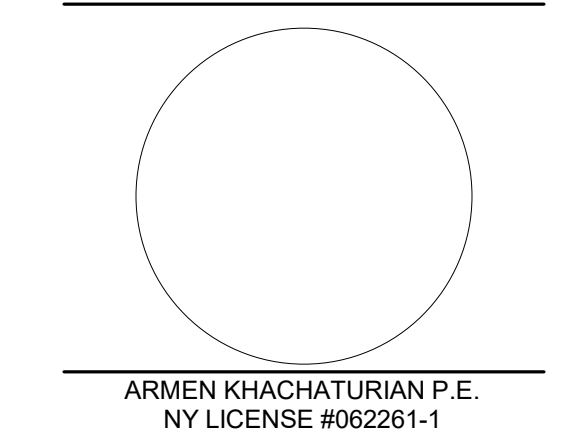
ALL DUCTWORK AND UNFINISHED METAL ON ROOF EXCEPT STAINLESS SHALL BE PREPARED WITH TWO COATS OF SHERWIN WILLIAMS B66-200 SERIES DTM WHITE ACRYLIC SEMI-GLOSS INDUSTRIAL MAINTENANCE COATING. DEGREASE AND PRIME BARE METAL SURFACE WITH ONE COAT OF SHERWIN WILLIAMS DTM ACRYLIC PRIMER PRIOR TO PAINTING.

- KEYED NOTES:
- EQUIPMENT CURB WITH REINFORCED BASE AND STEEL CURB CAP PROVIDED BY TOM BARROW COMPANY. WIDTH OF CURB SHALL BE 4" WIDER THAN FAN FOOTPRINT IN BOTH DIRECTIONS. HEIGHT OF CURB SHALL BE SUCH THAT NO PART OF ANY DUCT TO BE WITHIN 18" OF ROOF SURFACE. PROVIDE FACTORY EQUIPMENT RAILS WELDED TO CAP.
 - ALL DUCT ON ROOF TO BE SUPPORTED WITH MIRO 6-DS DUCT SUPPORT SYSTEM AT 6'-0" INTERVALS MAXIMUM. PROVIDE MIRO SUPPORT PADS AT EACH SUPPORT. ATTACH SUPPORT TO DUCT. PROVIDE A DUCT SUPPORT STAND AT EACH ROOF PENETRATION.
 - 12" HIGH INSULATED CURB PROVIDED BY TOM BARROW COMPANY. MECHANICAL CONTRACTOR TO PROVIDE 16 GA MINIMUM CURB CAP.



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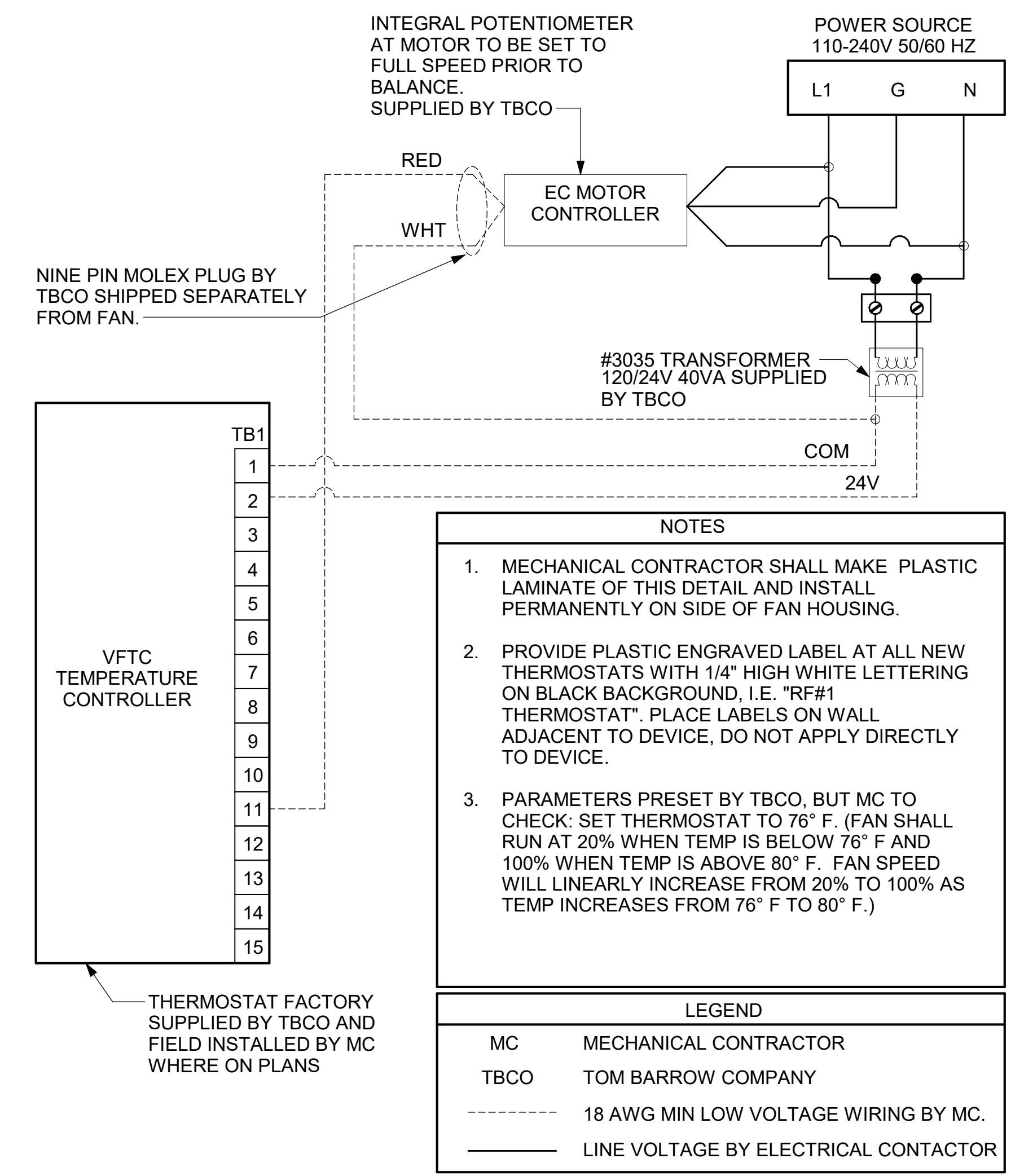
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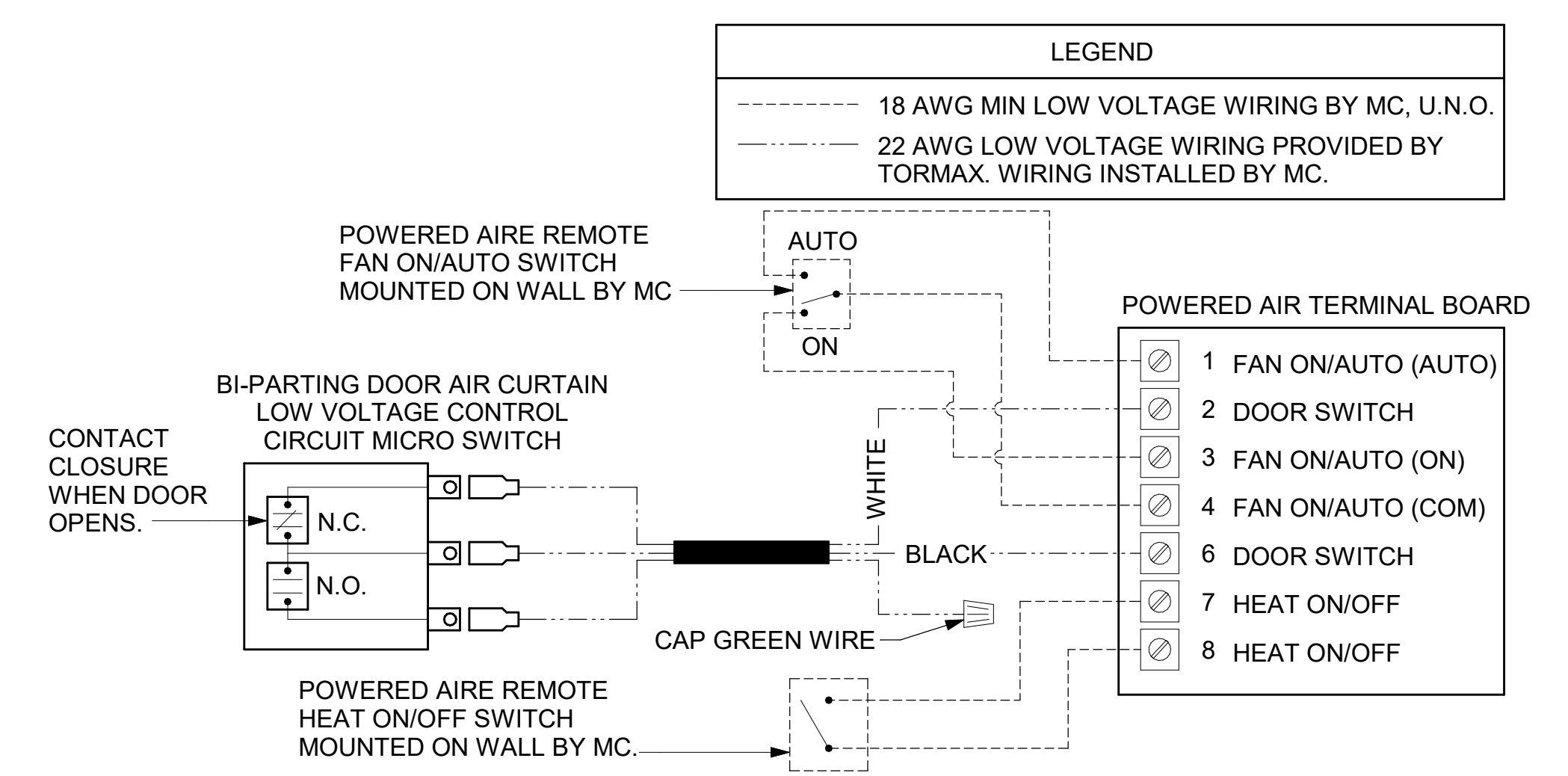
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SHEET DETAILS
SHEET NUMBER

M-501



1 TECH CLOSET CONTROL DIAGRAM
NOT TO SCALE

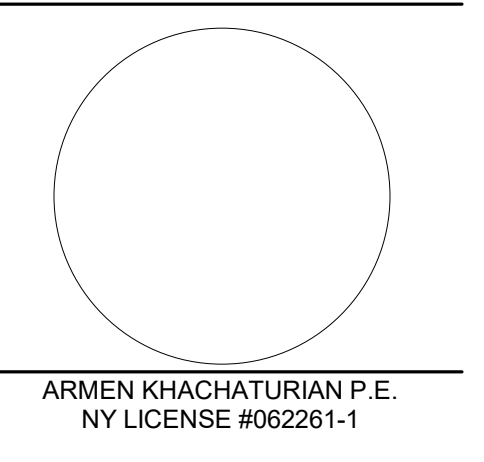


2 AIR CURTAIN WIRING DIAGRAM
NOT TO SCALE



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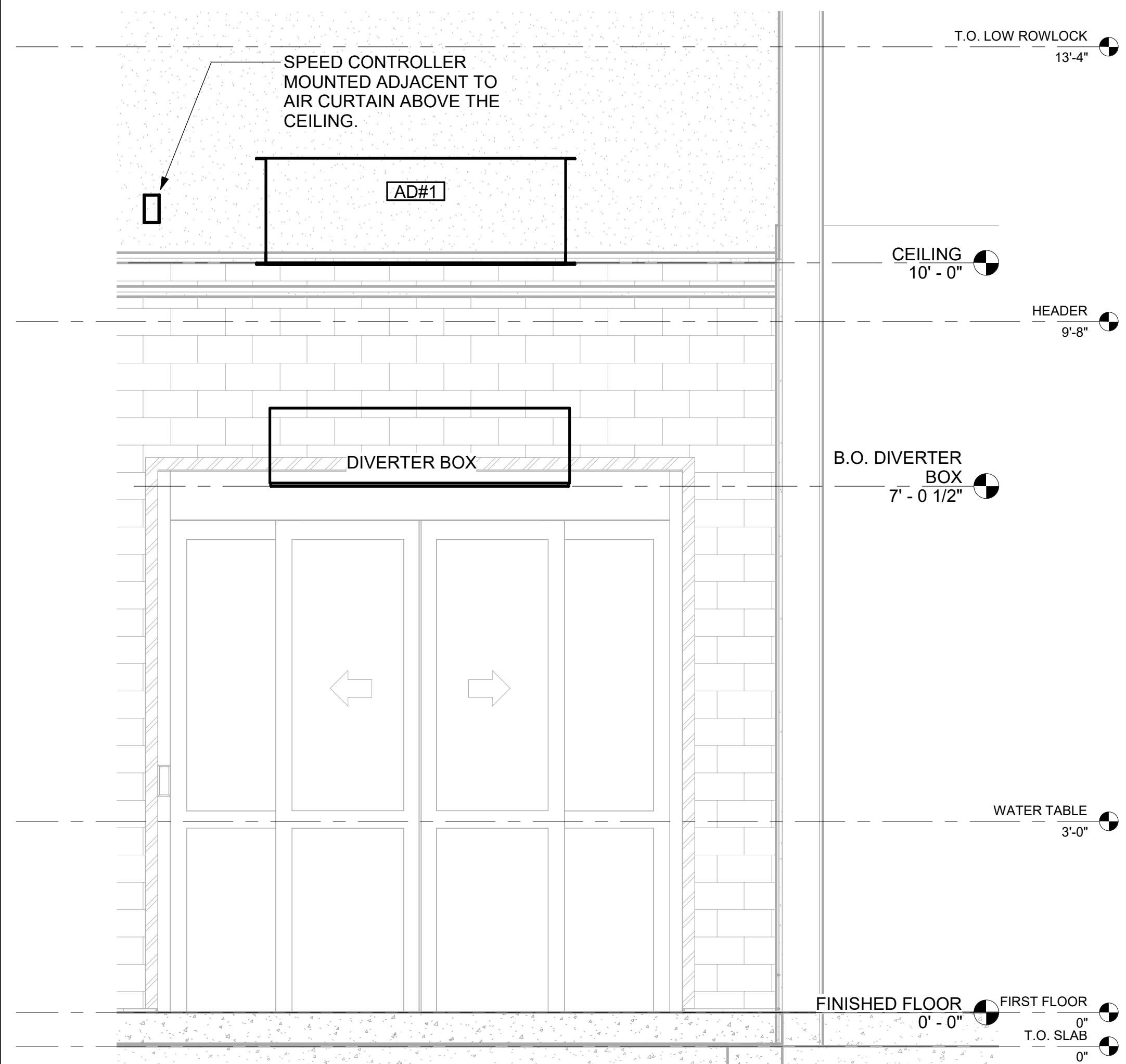
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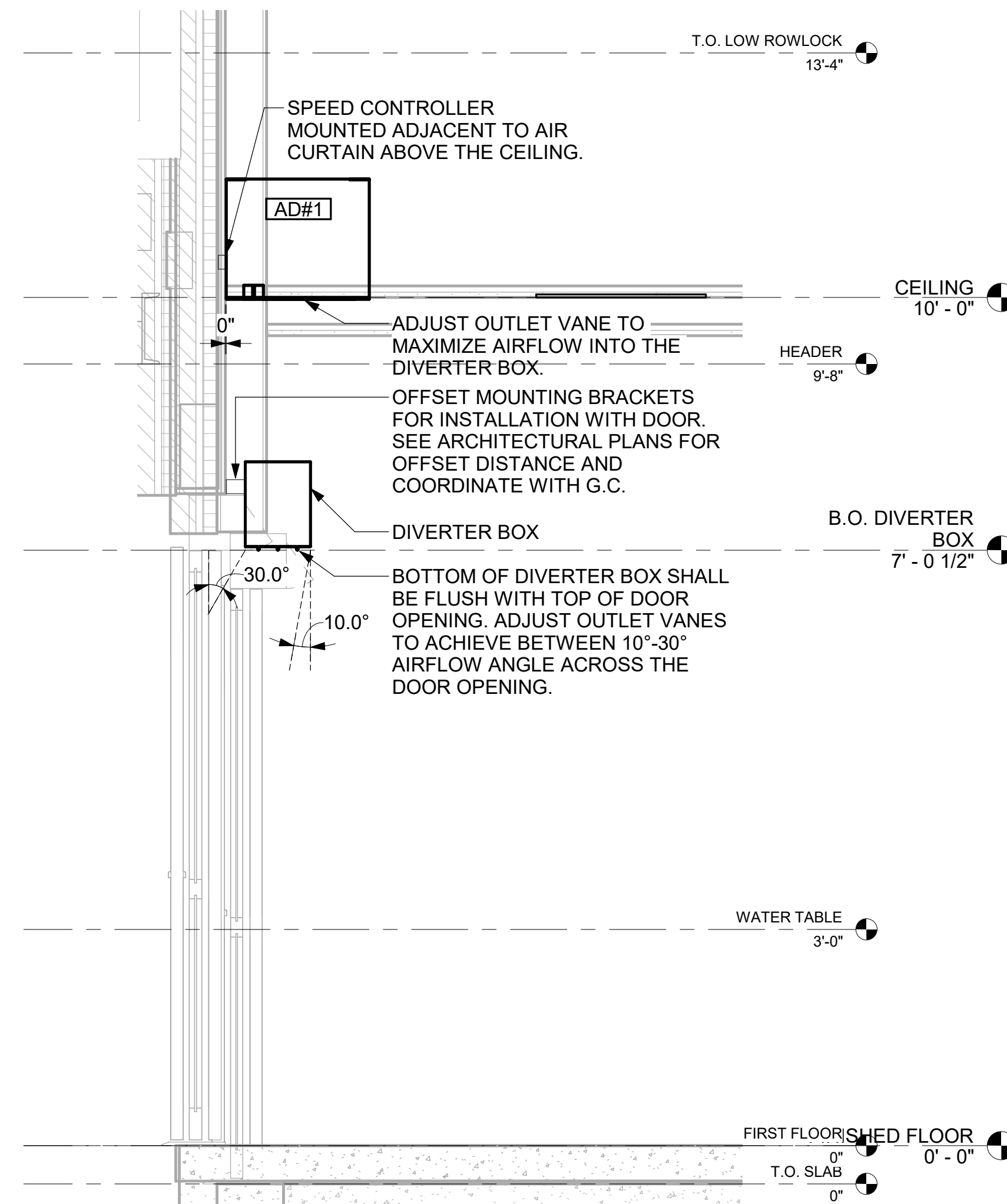
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DATE 03/28/2024
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SHEET CONTROL WIRING DIAGRAMS
SHEET NUMBER

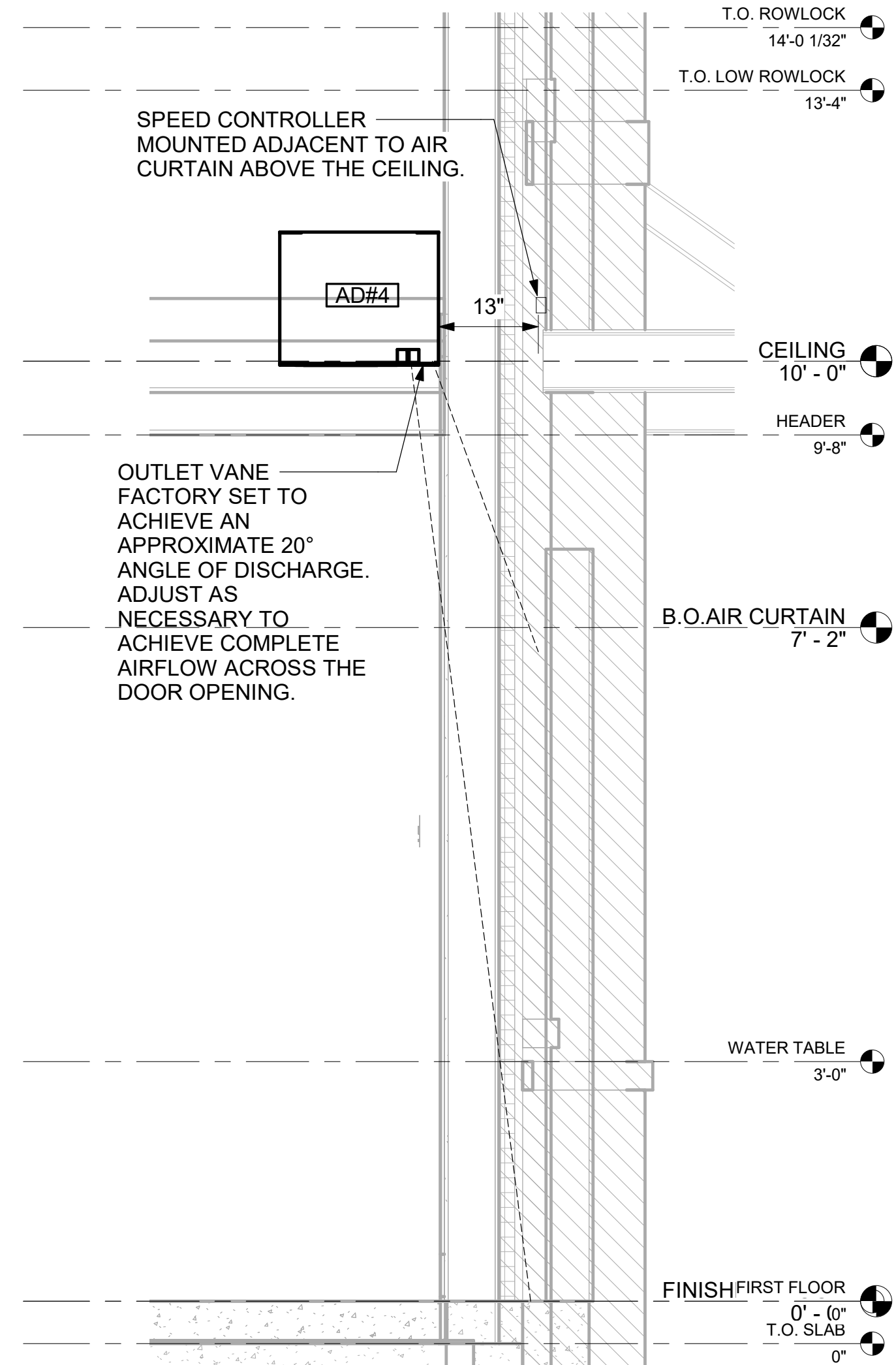
M-702



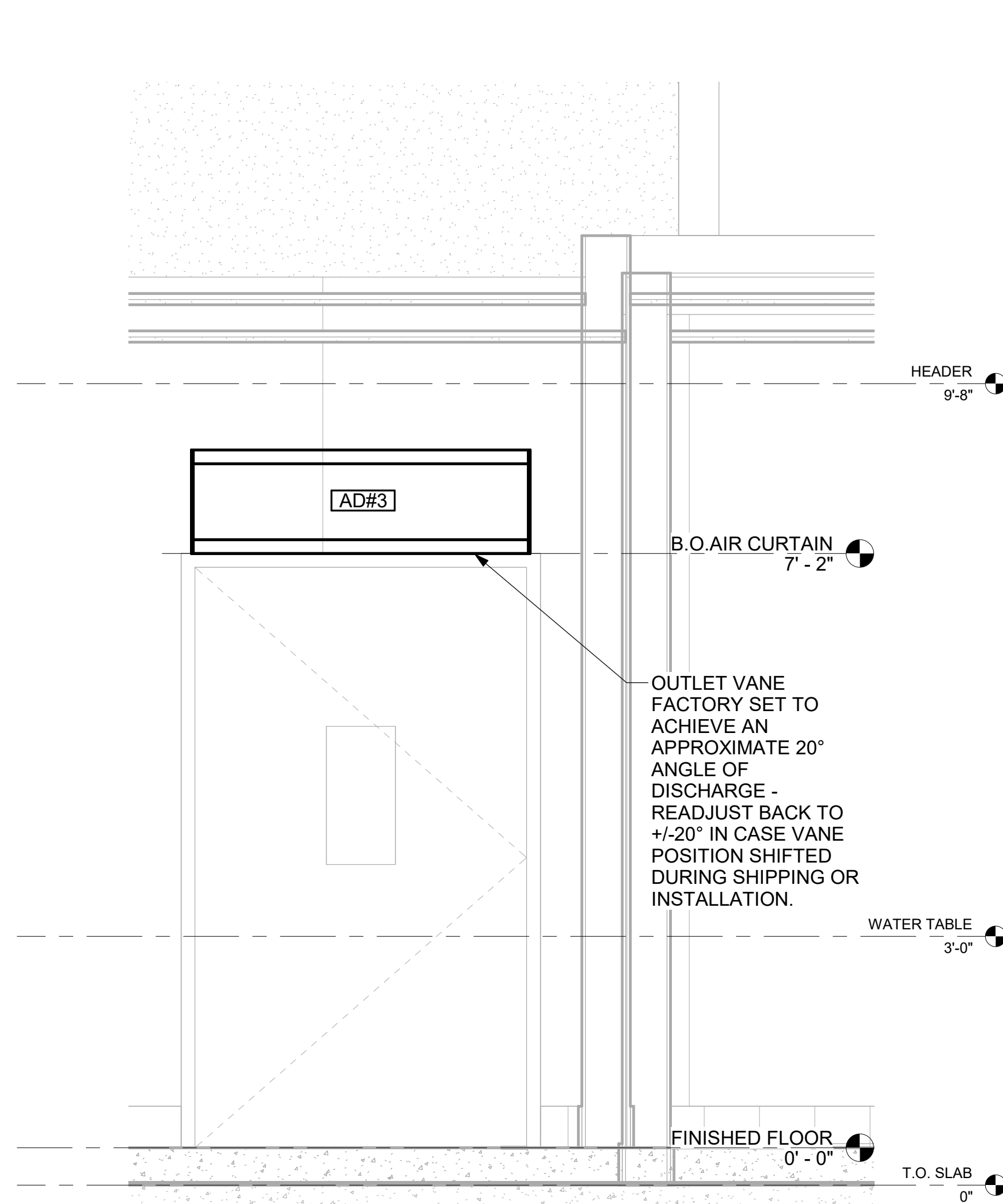
1 AD#1 FRONT VIEW
3/4" = 1'-0"



2 AD#1 SIDE VIEW
3/4" = 1'-0"



4 AD#4 SIDE VIEW
3/4" = 1'-0"



5 AD#3 FRONT VIEW
3/4" = 1'-0"



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SHEET
DETAILS

SHEET NUMBER
M-502

3/28/2024 12:32:46 PM Autodesk Docs:NY_04810_Expressway Plaza_2021.5_FSR#04810_Expressway Plaza_MECH.vt 30-SE-04810-M-701T-CONTROL WIRING DIAGRAMS

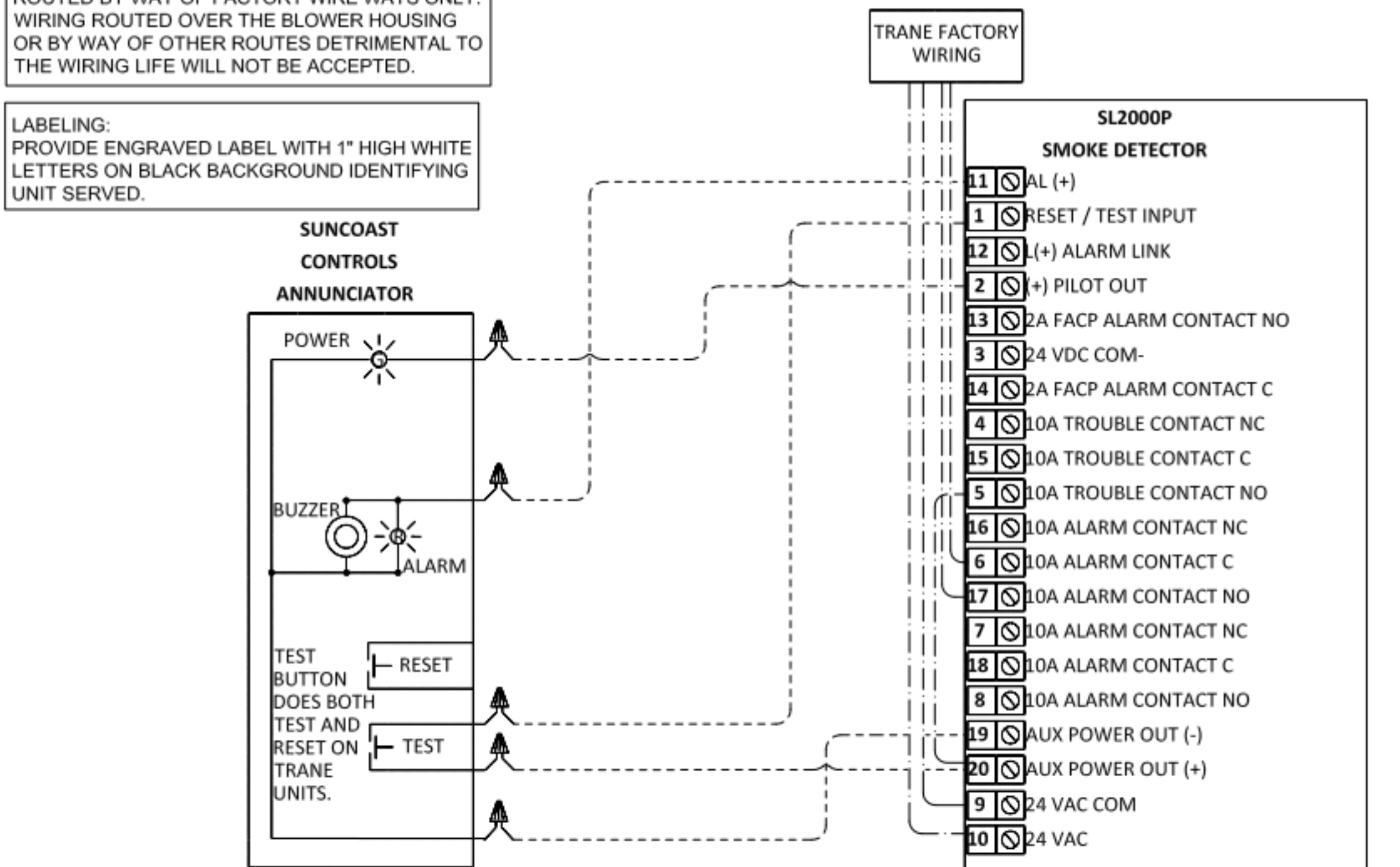
PROVIDE A PROFESSIONALLY LAMINATED COPY OF THESE DETAILS TO BE INSTALLED INSIDE THE ROOFTOP UNIT CONTROL CABINET. USE A SETON CHART FRAME STYLE # 88624, TELEPHONE NUMBER 800-243-8624, FOR MOUNTING THE DETAIL. ATTACH THE FRAME TO THE INTERIOR OF THE UNIT IN PLAIN AND EASY VIEW OF THE CONTROLS SECTION CONTACT ENGINEER OF RECORD FOR A REPRODUCIBLE COPY OF THE DETAIL.

LEGEND
----- 18 AWG MIN WIRING BY MECH CONTRACTOR
----- FACTORY ANNUNCIATOR DETECTOR WIRING
----- FACTORY TRANE WIRING

FIELD INSTALLED WIRING:
WITHIN THE ROOFTOP UNITS, WIRING SHALL BE ROUTED BY WAY OF FACTORY WIREWAYS ONLY. WIRING ROUTED OVER THE BLOWER HOUSING OR BY WAY OF OTHER ROUTES DETRIMENTAL TO THE WIRING LIFE WILL NOT BE ACCEPTED.

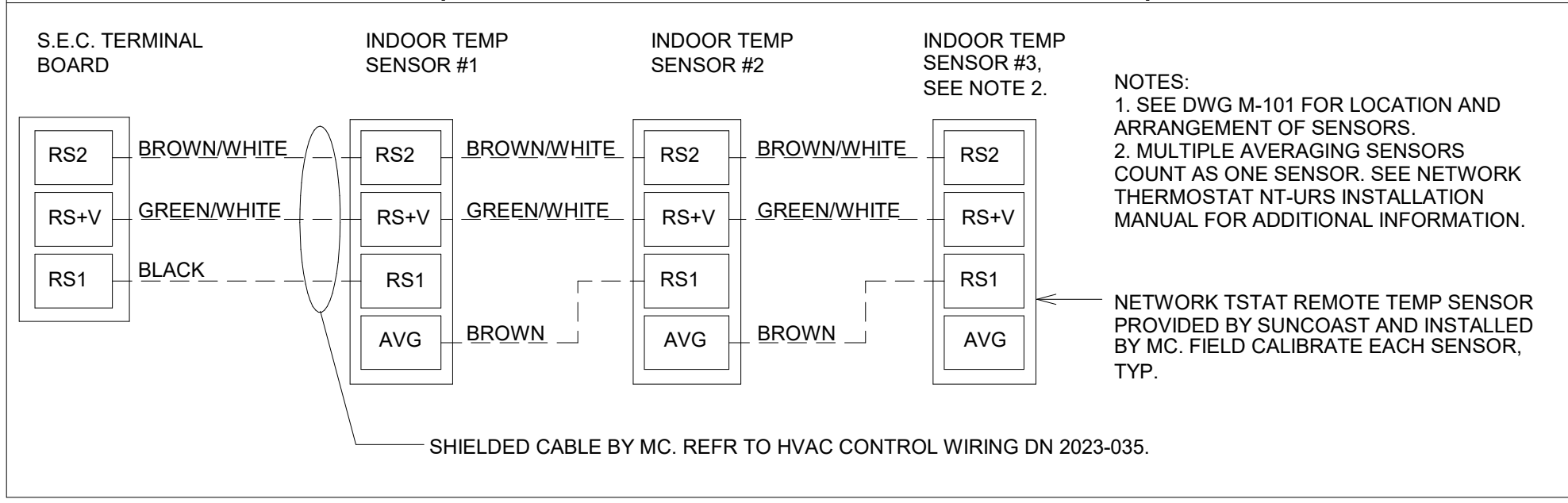
LABELING:
PROVIDE ENGRAVED LABEL WITH 1" HIGH WHITE LETTERS ON BLACK BACKGROUND IDENTIFYING UNIT SERVED.

SUPPLY SIDE DETECTORS:
IF SUPPLY SIDE SMOKE DETECTORS ARE SHOWN ON DWG M-101 AND CALLED FOR ON RTU SCHEDULE, THE CONTRACTOR IS TO RELOCATE FACTORY INSTALLED SUPPLY SMOKE DETECTOR FROM BLOWER SECTION TO DUCTWORK. SEE NOTES ON DWG M-101



1 SMOKE DETECTOR AND ANNUNCIATOR WIRING DIAGRAM - TRANE
NOT TO SCALE

AVERAGING SENSORS (WHERE SHOWN ON PLANS)

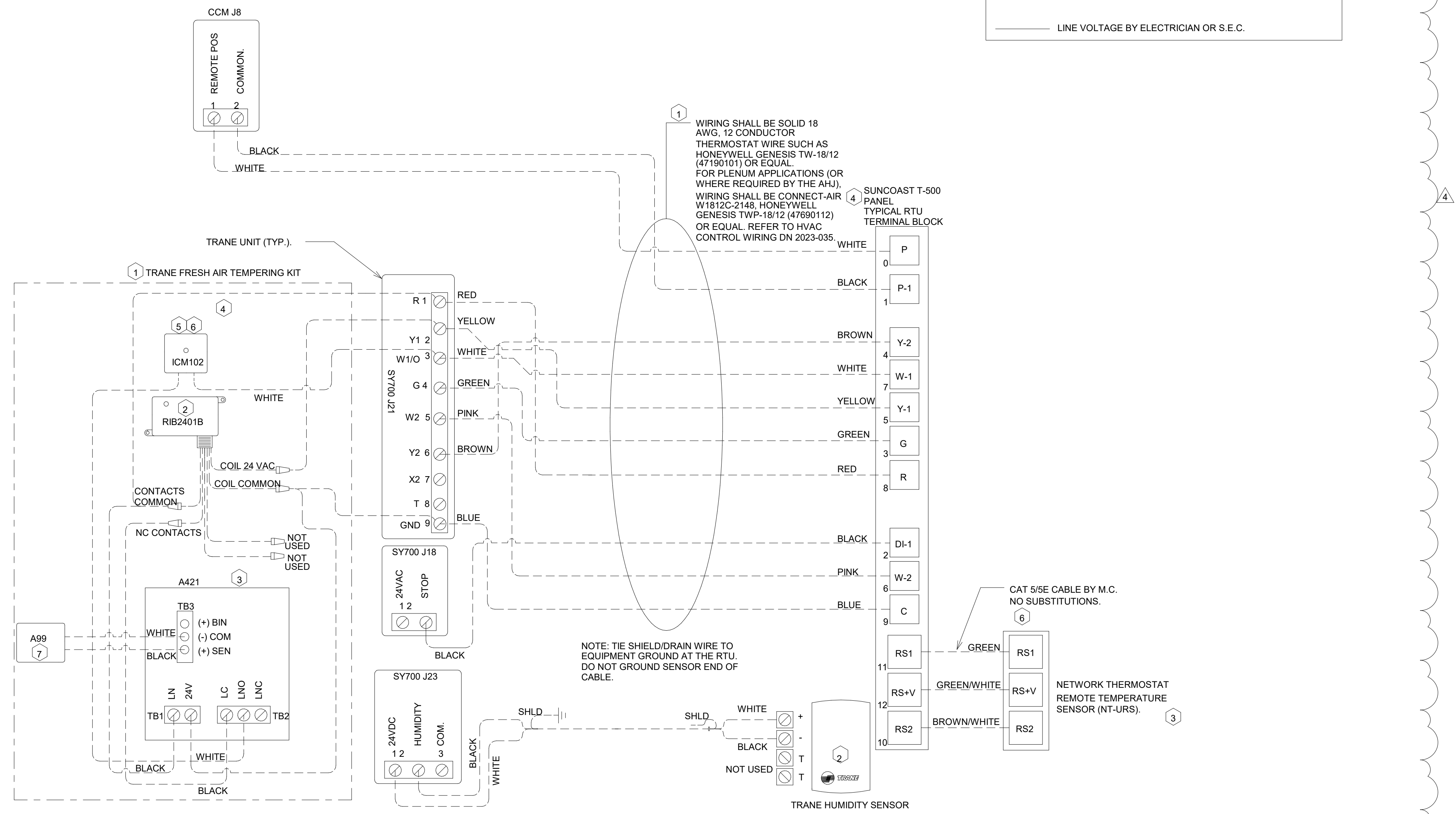


KEYED NOTES:
1. LOW VOLTAGE WIRING TO RTU TO BE ROUTED TO UNIT THRU FACTORY WIREWAY.
2. WIRING TO HUMIDITY SENSOR TO BE MADE WITH SINGLE 18/2 SENSOR CABLE: W221P-2003NT ONLY.
3. NETWORK TSTAT REMOTE TEMP SENSOR PROVIDED BY SUNCOAST AND INSTALLED BY MC. SENSOR IS INTENDED TO BE SURFACE MOUNTED AND DOES NOT REQUIRE A SINGLE GANG BOX OR CONDUIT. FIELD CALIBRATE EACH SENSOR. SEAL CABLE PENETRATION AT ALL WALL LOCATIONS.
4. FACTORY WIRING IN SUNCOAST T-500 PANEL NOT SHOWN FOR CLARITY. SEE SUNCOAST WIRING DIAGRAM FOR ADDITIONAL INFORMATION.
5. SY700 INTERFACE TO SET RELATIVE HUMIDITY. SET TO 60%.
6. CAT 5/6 CABLE BY M.C. NO SUBSTITUTIONS. REFER TO HVAC CONTROL WIRING DN 2023-035.

NOTES:
1. MECHANICAL CONTRACTOR SHALL MAKE PLASTIC LAMINATE OF THIS DETAIL AND INSTALL PERMANENTLY ON INSIDE DOOR OF ROOFTOP UNIT CONTROL COMPARTMENT.
2. SEE DETAILS THIS SHEET FOR SMOKE DETECTOR AND ANNUNCIATOR WIRING.
3. SET ALL THERMOSTATS FOR AUTO CHANGEOVER.
4. PROVIDE PLAC ENGRAVING LABEL AT ALL NEW SENSORS WITH 1/4" HIGH WHITE LETTERING ON BLACK BACKGROUND, I.E. "AC#2 HUMIDITY SENSOR" OR "AC#2 TEMP SENSOR". PLACE LABELS ON WALL ADJACENT TO DEVICE, DO NOT APPLY

LEGEND
S.E.C. SUNCOAST ENVIRONMENTAL CONTROLS (SUPPLIER OF TEMPFAN CONTROL PANEL) LOCATED IN THE KITCHEN
1 KEY NOTE REFERENCE
MC MECHANICAL CONTRACTOR
AC SUNCOAST RELAY FACTORY INSTALLED AND WIRED IN CFA-500 PANEL. ENERGIZED BY PUTTING STORE SWITCH IN "STORE OCCUPIED" POSITION
AN SUNCOAST RELAY FACTORY INSTALLED AND WIRED IN CFA-500 PANEL. ENERGIZED WHEN ANSUL FIRE SUPPRESSION SYSTEM IS ACTIVATED, AS NOTED.
----- ALL LOW VOLTAGE CABLING BY MC. ONLY USE CABLE SPECIFIED. NO SUBSTITUTIONS.
----- LOW VOLTAGE WIRING BY S.E.C.
----- LINE VOLTAGE BY ELECTRICIAN OR S.E.C.

FRESH AIR TEMPERING KEYED NOTES:
1. INSTALL FRESH AIR TEMPERING KIT AS RECOMMENDED BY TRANE.
2. RIB2401B SPDT RELAY FURNISHED BY TRANE AND INSTALLED BY CONTRACTOR IN CONTROL CABINET OF TRANE UNIT.
3. JCI A421 TEMPERATURE CONTROLLER FURNISHED BY TRANE AND INSTALLED BY CONTRACTOR. DIN-MOUNTED IN THE RTU CONTROL CABINET. SET TO 58F. LOCATE TRANE PROVIDED JCI A99 SENSOR IN THE SUPPLY DUCT DOWNSTREAM OF FIRST ELBOW. SECURE WIRING TO DUCT WITH TE6001-1 SENSOR DUCT MOUNTING PLATE PROVIDED BY TRANE; DO NOT RUN WIRING INSIDE DUCTWORK.
4. 18 AWG MIN. LOW VOLTAGE WIRING BY MC.
5. ICM102 TIME DELAY RELAY FURNISHED BY TRANE AND INSTALLED BY CONTRACTOR IN CONTROL CABINET OF TRANE UNIT.
6. SET TIME DELAY RELAY (ICM102) TO 2 MINUTES.
7. PROVIDE JCI TE6001-1 TEMPERATURE ELEMENT HOLDER FOR SUPPLY AIR TEMPERATURE SENSOR (A99).

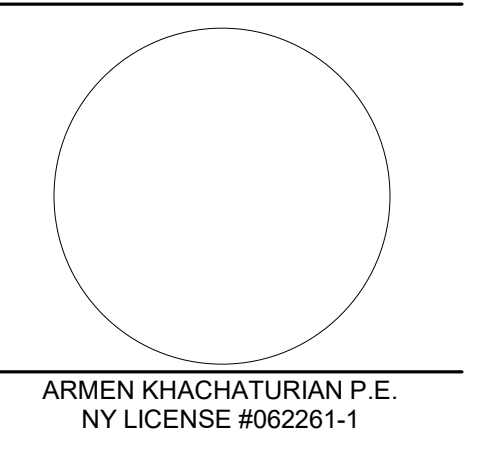


2 ROOFTOP UNIT CONTROL WIRING - TRANE
1/8" = 1'-0"



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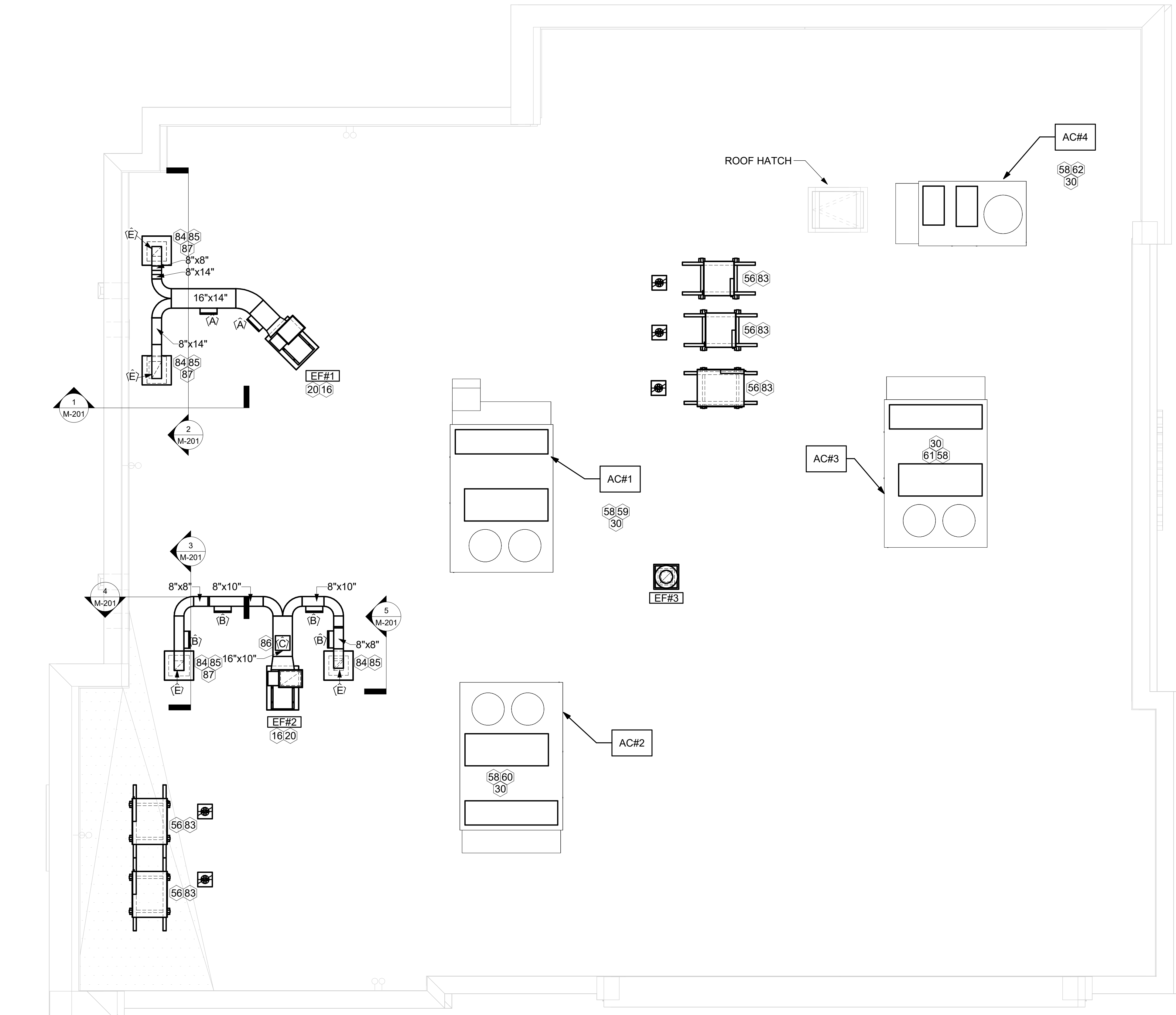
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SHEET CONTROL WIRING DIAGRAMS
SHEET NUMBER
M-701T

KEY NOTES

- 16 FABRICATE DISCHARGE AIR NOZZLE. VERIFY EXHAUST TERMINATION IS A MINIMUM 10'-0" FROM PARAPETS AND OUTSIDE AIR INTAKES. SEE DETAIL 1/M-501.
- 20 GREASE EXHAUST DUCT LOCATED ON ROOF SHALL SLOPE 1/4" PER FOOT TOWARDS THE HOOD, THE FAN, OR A COMBINATION OF THE TWO SUCH THAT NO PORTION OF THE RADIUS ELBOW AT THE CURB IS BELOW THE CURB CAP AND SUCH THAT THE FAN BASE SETS DIRECTLY ON THE CURB RAILS. THE BOTTOM OF THE RADIUS ELBOW MAY BE EVEN OR FLUSH WITH THE CURB CAP, BUT NOT BELOW THE CAP. THE DUCT AT THE FAN MUST BE CENTERED ON THE FAN INLET. THE MC MAY ADD A VERTICAL RISER AT THE RADIUS ELBOW LOCATED AT THE DUCT CURB AS NEEDED IN ORDER TO CENTER THE DUCT ON THE FAN INLET.
- 30 MECHANICAL CONTRACTOR TO SEE ARCHITECTURAL ROOF PLAN FOR NOTES REGARDING LEVELING FRAMES FOR RTUS. COORDINATE WITH GENERAL CONTRACTOR EXACT LOCATIONS AND SIZE NEEDED.
- 56 GC SHALL PROVIDE EQUIPMENT STANDS AS MANUFACTURED BY AVCOA OR EQUAL. STANDS SHALL BE INSTALLED PRIOR TO ROOF INSULATION SO THAT THE INSULATION IS CONTINUOUS UP TO THE PIPE POSTS. POSTS SHALL BE FLASHED IN ACCORDANCE WITH ROOFING MANUFACTURER'S INSTALLATION INSTRUCTIONS. COORDINATE BLOCKING BELOW THE ROOF DECK AS REQUIRED.
- 58 SUPPLY AND RETURN AIR DUCTWORK OPENING DROPS FROM THE UNIT SHALL BE FULL SIZE OF UNIT.
- 59 TRANSITION SUPPLY AIR DUCT TO 34"x24" AND RETURN AIR DUCT TO 32"x30". REFER TO SHEET M-101 FOR CONTINUATION. TRANSITIONS SHALL BE MADE ACCORDING TO SMACNA. CONTRACTOR TO PROVIDE ALL NECESSARY ELBOWS TO CONNECT TO MAIN DUCT ABOVE CEILING.
- 60 TRANSITION SUPPLY AIR DUCT TO 30"x20" AND RETURN AIR DUCT TO 30"x20". REFER TO SHEET M-101 FOR CONTINUATION. TRANSITIONS SHALL BE MADE ACCORDING TO SMACNA. CONTRACTOR TO PROVIDE ALL NECESSARY ELBOWS TO CONNECT TO MAIN DUCT ABOVE CEILING.
- 61 TRANSITION SUPPLY AIR DUCT TO 20"x30" AND RETURN AIR DUCT TO 20"x30". REFER TO SHEET M-101 FOR CONTINUATION. TRANSITIONS SHALL BE MADE ACCORDING TO SMACNA. CONTRACTOR TO PROVIDE ALL NECESSARY ELBOWS TO CONNECT TO MAIN DUCT ABOVE CEILING.
- 62 TRANSITION SUPPLY AIR DUCT TO 18"x16" AND RETURN AIR DUCT TO 16"x18". REFER TO SHEET M-101 FOR CONTINUATION. TRANSITIONS SHALL BE MADE ACCORDING TO SMACNA. CONTRACTOR TO PROVIDE ALL NECESSARY ELBOWS TO CONNECT TO MAIN DUCT ABOVE CEILING.
- 83 DO NOT DISCHARGE OF CONDENSING UNITS INTO CONDENSER SECTION OF ROOFTOP UNITS, TYP.
- 84 ROOF CURB FOR DUCT PENETRATION. SEE DETAIL 1/M-501.
- 85 TURN DOWN THRU ROOF. SEE M-101 FOR CONTINUATION.
- 86 ACCESS DOOR ON TOP OF DUCT.
- 87 DUCT PENETRATIONS ON ROOF MUST BE AT LEAST 18" FROM ADJACENT PARAPETS.



1 EQUIPMENT ROOF PLAN -TRANE
1/4" = 1'-0"



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SHEET: EQUIPMENT ROOF PLAN
 SHEET NUMBER: **M-102**

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