



Purchasing Division

ADDENDUM NO. 1

DATE: July 27, 2020
FROM: City of Grand Junction Purchasing Division
TO: All Interested Parties
RE: Avalon Lobby HVAC Replacement IFB-4816-20-SH

Bidders responding to the above referenced solicitation are hereby instructed that the requirements have been clarified, modified, superseded and supplemented as to this date as hereinafter described.

Please make note of the following:

1. **Attachment 1:** The drawings referenced in the above solicitation are attached to this Addendum.

The original solicitation for the project referenced above is amended as noted.

All other conditions of subject remain the same.

Respectfully,

A handwritten signature in blue ink that reads "Susan J. Hyatt".

Susan Hyatt, Senior Buyer
City of Grand Junction, Colorado

Attachment 1

DRAWING ABBREVIATIONS

AAV	AUTOMATIC AIR VENT
ABV	ABOVE
AC	AIR CONDITIONING UNIT
AD	ACCESS DOOR
ADR	AREA DRAIN (SEE SYMBOLS)
AFF	ABOVE FINISHED FLOOR
AH	AIR HANDLER (SPLIT REFRIG)
AHU	AIR HANDLING UNIT
AL	ACOUSTICAL LINING
ALUM	ALUMINUM
AP	ACCESS PANEL
ATC	AUTOMATIC TEMP. CONTROL
AVER	AVERAGE
AWT	AVERAGE WATER TEMP.
B	BOILER
BB	ELECTRIC BASEBOARD RADIATION
BDO	BACK DRAFT DAMPER
BFC	BELOW FINISHED CEILING
BFP	BACK FLOW PREVENTOR
BLDG	BUILDING
BLW	BELOW
BOB	BOTTOM OF BEAM
BOD	BOTTOM OF DUCT
BOP	BOTTOM OF PIPE
BSMT	BASMENT
BTU	BRITISH THERMAL UNIT
C	CHILLER
CAP	CAPACITY
CBV	CIRCUIT BALANCING VALVE
CD	CEILING DIFFUSER
CFH	CUBIC FEET PER HOUR
CFM	CUBIC FEET PER MINUTE
CFM	CUBIC FEET PER MINUTE
CHP	CONCRETE HOUSEKEEPING PAD
CHWP	CHILLED WATER PUMP
CHWR	CHILLED WATER RETURN
CHWS	CHILLED WATER SUPPLY
CI	CAST IRON
CL	CENTER LINE
CLG	CEILING
CMU	CONCRETE MASONRY UNIT
CO	CLEAN OUT
COL	COLUMN
COMP	COMPRESSOR
CON	CONCENTRIC
CONC	CONCRETE
COND	CONDENSATE
CONN	CONNECTION
CONT'N	CONTINUATION
CONTR	CONTRACTOR
CP	CONDENSATE PUMP
CT	COOLING TOWER
CU	CONDENSING UNIT
CUH	CABINET UNIT HEATER
CVB	CONSTANT VOLUME BOX
CWP	CONDENSER WATER PUMP
CWR	CONDENSER WATER RETURN
CWS	CONDENSER WATER SUPPLY
DA	DIRECT ACTING
DAMP	DAMP DAMPER
DB	DRY BULB
DEPT	DEPARTMENT
DIA	DIAMETER
DIAG	DIAGRAM
DIFF	DIFFERENTIAL
DISCH	DISCHARGE
DIV	DIVISION
DIW	DOWN IN WALL
DL	DOOR LOUVER
DN	DOWN
DS	DUCT SILENCER
DWG	DRAWING
DWP	DOMESTIC WATER PUMP
DX	DIRECT EXPANSION
EA	EACH
EAT	ENTERING AIR TEMPERATURE
EC	ELECTRICAL CONTRACTOR
ECC	ECCENTRIC
EF	EXHAUST FAN
EFF	EFFICIENCY
EJ	EXPANSION JOINT
EL	ELEVATION
ELEC	ELECTRIC
ELEV	ELEVATOR
ENT	ENTERING
EQ	EQUAL
EQUIP	EQUIPMENT
EQUIV	EQUIVALENT
ER	EXHAUST REGISTER
ES	END SWITCH
ESP	EXTERNAL STATIC PRESSURE
ET	EXPANSION TANK
EWC	ELECTRIC WATER COOLER
EWT	ENTERING WATER TEMPERATURE
EX	EXHAUST

EXPAN	EXPANSION
EXT	EXTERNAL
F	DEGREES FAHRENHEIT
F/D	FIRE DAMPER
F/S/D	WITH FIRE/SMOKE DAMPER ACCESS DOOR
FA	FROM ABOVE
FA	FREE AREA
FB	FROM BELOW
FC	FAIL CLOSED
FCU	FAN COIL UNIT
FCV	FLOW CONTROL VALVE
FD	FLOOR DRAIN
FD	FIRE DAMPER
FIN	FINISHED
FL	FLANGE
FLA	FULL LOAD AMPS
FLEX	FLEXIBLE
FLR	FLOOR
FO	FAIL OPEN
FOP	FLAT ON BOTTOM
FOP	FUEL OIL PUMP
FOT	FLAT ON TOP
FP	FIRE PROTECTION
FP	FIRE PUMP
FFM	FEET PER MINUTE
FFS	FEET PER SECOND
FRICT	FRICTION
FS	FLOW SWITCH
FT	FEET
FTR	FINNED TUBE RADIATION
FV	FACE VELOCITY
FX	FLEXIBLE CONNECTION
FXC	FLEXIBLE CONNECTION
GA	GAUGE
GAL	GALLON
GALV	GALVANIZED
GC	GENERAL CONTRACTOR
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
GR	GRILLE
GRS/LB	GRAINS PER POUND
H2O	WATER
HB	HOSE BIBB
HD	HAND DAMPER
HD	HEAD (SEE SCHEDULES)
NOM	NOMINAL
HP	HORSEPOWER
HP	HEAT PUMP
HR	HOUR

HT	HEIGHT
HTR	HEATER
HV	HEATING AND VENTILATING UNIT
HWC	HOT WATER CONVERTER
HWP	HOT WATER PUMP
HWR	HEATING HOT WATER RETURN
HWS	HEATING HOT WATER SUPPLY
HX	HEAT EXCHANGER
HZ	HERTZ
ID	INTERNAL DIAMETER
ID	INSIDE DIAMETER
IN	INCHES
INCL	INCLUDING
INT	INTERNAL
INV	INVERT
KW	KILOWATT
L	LENGTH
LAT	LEAVING AIR TEMPERATURE
LB	POUND
LD	LINEAR DIFFUSER
LF	LINEAR FEET
LN	LINEAR
LQ	LIQUID
LRA	LOCK ROTOR AMPS
LVG	LEAVING
LVR	LOUVER
LWT	LEAVING WATER TEMPERATURE
LWT	LEAVING WATER TEMPERATURE
MBH	THOUSANDS OF BTU PER HOUR
MC	MECHANICAL CONTRACTOR
MED	MEDIUM
MFR	MANUFACTURER
MH	MANHOLE
MIN	MINIMUM
MISC	MISCELLANEOUS
MOD	MOTOR OPERATED DAMPER
MTD	MOUNTED
MUA	MAKE-UP AIR UNIT
NC	NORMALLY CLOSED
NEG	NEGATIVE
NIC	NOT IN CONTRACT
NK	NECK
NO	NORMALLY OPEN
NO	NUMBER
NO	NORMALLY OPEN
NOM	NOMINAL
NTS	NOT TO SCALE
OA	OUTSIDE AIR
OAI	OUTSIDE AIR INTAKE

OAT	OUTSIDE AIR TEMPERATURE
OB	OFF BOTTOM
OB	OPPOSED BLADE DAMPER
OC	ON CENTER
OCC	OCCUPIED
OD	OUTSIDE DIMENSION
OD	OUTSIDE DIAMETER
OGH	OUTSIDE GROUND HYDRANT
OPG	OPENING
OOT	OFF TOP
OZ	OUNCE
PART	PARTIAL
PBD	PARALLEL BLADE DAMPER
PD	PRESSURE DROP (SEE SCHEDULE)
PDR	PLENUM DRAIN
PERF	PERFORATED
PH	PHASE
PNEU	PNEUMATIC
POS	POSITIVE PRESS
PRESS	PRESSURE
PRV	PRESSURE REDUCING VALVE
PS	PRESSURE SWITCH
PSI	POUNDS PER SQUARE INCH
PT	PRESSURE TRANSMITTER
PTAC	PACKAGED TERMINAL AIR CONDITIONER
PV	PLUG VALVE
PVC	POLYVINYL CHLORIDE
QUAN	QUANTITY
R	REGISTER
RA	RETURN AIR
RAG	RETURN AIR GRILLE
RAR	RETURN AIR REGISTER
RCP	REFLECTED CEILING PLAN
RD	ROOF DRAIN
RE	ROUNDED ENTRANCE/EXIT
REL	RELIEF
REQD	REQUIRED
RET	RETURN
RF	RETURN FAN
RH	RELATIVE HUMIDITY
RHC	REHEAT COIL
RICW	RUN IN CASEWORK
RIE	RUN IN ENCLOSURE
RIW	RISE IN WALL
RLA	RATED LOAD AMPS
RM	ROOM
ROD	ROOF OVERFLOW DRAIN
RPM	REVOLUTIONS PER MINUTE

SA	SUPPLY AIR
SAD	SUPPLY AIR DIFFUSER
SAR	SUPPLY AIR REGISTER
SCG	SMOKE CONTROL GRILLE
SCH	SCHEDULE
SCHEM	SCHEMATIC
SD	SMOKE DAMPER
SEF	SMOKE EXHAUST FAN
SF	SUPPLY FAN
SH	SENSIBLE HEAT
SP	STATIC PRESSURE
SPEC	SPECIFICATION
SQ	SQUARE
SS	STAINLESS STEEL
STD	STANDARD
STL	STEEL
STM	STEAM
STR	STRUCTURAL
SUCT	SUCTION
SYS	SYSTEM
TAD	TRANSFER AIR DUCT
TDH	TOTAL DYNAMIC HEAD
TEMP	TEMPERATURE
TG	TRANSFER GRILLE
TH	TOTAL HEAT
TP	TOTAL PRESSURE
TT	TEMPERATURE TRANSMITTER
TYP	TYPICAL
UC	UNDERCUT
UH	UNIT HEATER
UNOCC	UNOCCUPIED
UNON	UNLESS OTHERWISE NOTED
V	VOLTS
VA	VALVE
VAV	VARIABLE AIR VOLUME UNIT
VB	VACUUM BREAKER
VD	VOLUME DAMPER
VEL	VELOCITY
VI	VIBRATION ISOLATOR
VOLT	VOLTAGE
VTR	VENT THRU ROOF
W	WIDTH
W/	WITH
W/O	WITHOUT
WB	WET BULB
WB	WET BULB
WC	WATER COLUMN
WG	WATER GAUGE
WMS	WIRE MESH SCREEN

RESPONSIBLE DIVISION

UNLESS OTHERWISE INDICATED ALL HEATING, VENTILATING, AIR CONDITIONING, PLUMBING, AND OTHER MECHANICAL EQUIPMENT, MOTORS, AND CONTROLS SHALL BE FURNISHED, SET IN PLACE AND WIRED AS FOLLOWS:

ITEM	FURNISHED	SET	POWER WIRED	CONTROL WIRED
EQUIPMENT COMBINATION MAGNETIC MOTOR STARTERS, MAGNETIC MOTOR STARTERS AND CONTACTORS	23	23	26	--
FUSED AND UNFUSED DISCONNECT SWITCHES, THERMAL OVERLOAD SWITCHES AND HEATERS, MANUAL MOTOR STARTERS	26(1)	26(1)	26	--
MANUAL-OPERATING AND MULTI-SPEED SWITCHES	23	26	26	26
CONTROLS, RELAYS, TRANSFORMERS	23	23	26	23
THERMOSTATS (LOW VOLTAGE) AND TIME SWITCHES	23	23	26	23
THERMOSTATS(LINE VOLTAGE)	23	23	26	26
TEMPERATURE CONTROL PANELS	23	23	26	23
MOTOR AND SOLENOID VALVES, DAMPER MOTORS, PE & EP SWITCHES	23	23(2)	--	23(2)
PUSH-BUTTON STATIONS AND PILOT LIGHTS	23	23(2)	--	23(2)
HEATING, COOLING, VENTILATION AND AIR CONDITIONING CONTROLS	23	23	26	23
EXHAUST FAN SWITCHES	23	26	26	23(2)

- SUBSCRIPT FOOTNOTES:
 1) UNDER DIVISION 23 IF FURNISHED FACTORY-WIRED AS PART OF EQUIPMENT OR IF FURNISHED WITH COMBINATION STARTERS.
 2) IF ITEM IS FOR LINE VOLTAGE, SET IN PLACE AND CONNECT UNDER DIVISION 26. WHERE FACTORY MOUNTED ON EQUIPMENT OR ATTACHED TO PIPING OR DUCTS AND USING LINE VOLTAGE FURNISH AND SET UNDER DIVISION 23. CONNECT UNDER DIVISION 26.

LINE DESIGNATION SYMBOLS

CS	CONDENSER WATER SUPPLY
CR	CONDENSER WATER RETURN
RL	REFRIGERANT LIQUID
RS	REFRIGERANT SUCTION
RD	REFRIGERANT DISCHARGE
GS	GLYCOL SUPPLY
GR	GLYCOL RETURN
HWS	HOT WATER SUPPLY
HWR	HOT WATER RETURN
HPS	HEAT PUMP SUPPLY
HPR	HEAT PUMP RETURN
PC	PUMPED CONDENSATE
CF	CHEMICAL FEED
V	VENT PIPING
R	RELIEF PIPING
MU	MAKE-UP WATER
OF	OVERFLOW
D	DRAIN
FL	FILL LINE
G	NATURAL GAS
GV	GAS VENT
SW	SOFT WATER
SMS	SNOWMELT SUPPLY
SMR	SNOWMELT RETURN
CHWS	CHILLED WATER SUPPLY
CHWR	CHILLED WATER RETURN

PIPING ELEMENTS / VALVING

	EXISTING EQUIPMENT OR PIPE TO BE REMOVED.		RELIEF/SAFETY VALVE		ANCHOR
	GATE VALVE		GAS COCK		GUIDE
	GLOBE VALVE		FUSIBLE LINK VALVE-QUICK CLOSING		EXPANSION JOINT
	PLUG VALVE		FUSIBLE LINK VALVE-QUICK OPENING		FLOW SWITCH
	BUTTERFLY VALVE		AUTOMATIC FILL VALVE		TEMPERATURE TRANSMITTER
	BALL VALVE		MANUAL AIR VENT		PRESSURE TRANSMITTER OR PRESSURE SWITCH
	SWING CHECK VALVE		AUTOMATIC AIR VENT (EXTEND DISCHARGE TO DRAIN)		THERMOMETER
	LIFT CHECK VALVE		FLOW METER-VENTURI		GAUGE WITH GAUGE COCK & SYPHON (STEAM)
	GATE VALVE, ANGLE		FLOW METER-ORIFICE		AQUASTAT
	GLOBE VALVE, ANGLE		DIRECTION OF FLOW		GAS PRESSURE REGULATOR
	DIAPHRAGM VALVE		DIRECTION OF PITCH-RISE OR DROP		FLOAT OPERATED CONTROL VALVE
	BALANCING VALVE		STRAINER		BASKET STRAINER
	CIRCUIT SETTING BALANCING VALVE		STRAINER WITH BLOW OFF VALVE		STEAM TRAP
	THREE WAY CONTROL VALVE		PIPE RISING UP		ELECTRICALLY TRACED PIPING
	TWO WAY CONTROL VALVE		PIPE DROPPING DOWN		EXPANSION LOOP (WxH)
	SOLENOID VALVE		CONCENTRIC REDUCER		VACUUM BREAKER
	PRESSURE REDUCING VALVE (PRV)		ECCENTRIC REDUCER		
	TEMPERATURE/PRESSURE RELIEF VALVE		UNION - SCREWED OR FLANGED		
			STEAM LEAK DETECTOR		

HVAC & DUCTWORK SYMBOLS

	SECTION THROUGH RETURN OR EXHAUST AIR
	SECTION THROUGH SUPPLY OR OUTSIDE AIR DUCT
	SUPPLY OR OUTSIDE AIR DUCT
	ACCESS DOOR (BOTTOM OR SIDE)
	ACOUSTICALLY LINED DUCT
	DAMPERS, FIRE
	DAMPERS, MANUAL VOLUME
	INCLINED DROP IN DIRECTION OF ARROW
	INCLINED RISE IN DIRECTION OF ARROW
	TRANSITION, RECTANGULAR TO ROUND
	FLEXIBLE DUCT
	IN-LINE FAN
	TRANSITION, RECTANGULAR
	SPIN-IN COLLAR INTO ADAPTER ON TOP OF DUCT
	CEILING SUPPLY AIR DIFFUSER (CD)
	SIDEWALL SUPPLY AIR REGISTER (SR)
	ELBOW TURNED DOWN
	ELBOW TURNED UP
	ELBOW, RADIUS TYPE
	ELBOW, SQUARE OR RECTANGULAR TYPE WITH AIRFOIL TURNING VANES
	RETURN OR EXHAUST AIR DUCT
	CEILING RETURN AIR REGISTER (RR)
	SIDEWALL RETURN AIR REGISTER (RR)
	OPEN END DUCT
	FLEXIBLE CONNECTION
	CARBON MONOXIDE
	CARBON DIOXIDE
	THERMOSTAT
	FIRE SMOKE DAMPER

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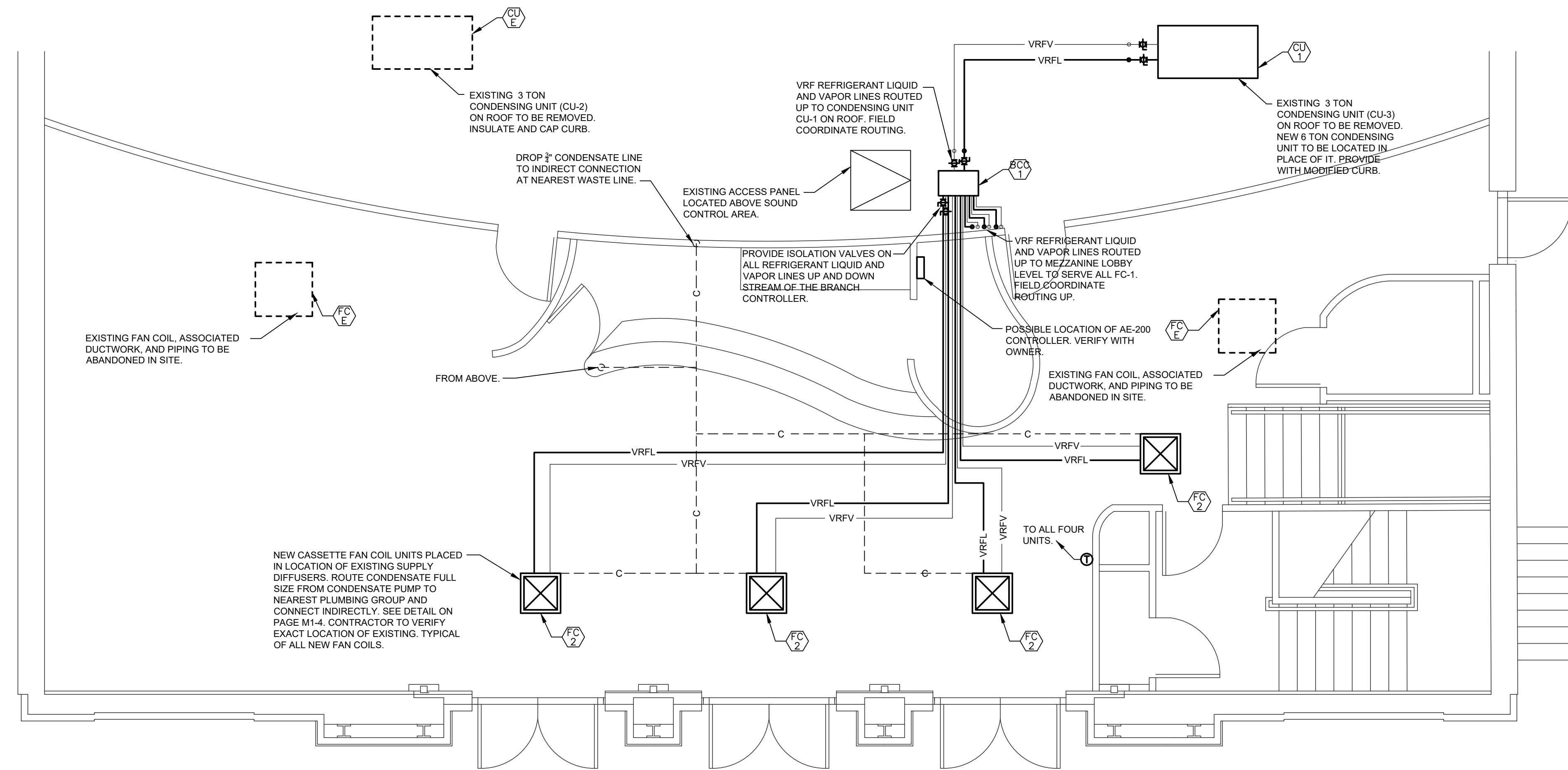
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Mechanical & Electrical Engineers

THE AVALON
LOBBY AND STAGE UPGRADES
645 MAIN STREET
GRAND JUNCTION, COLORADO

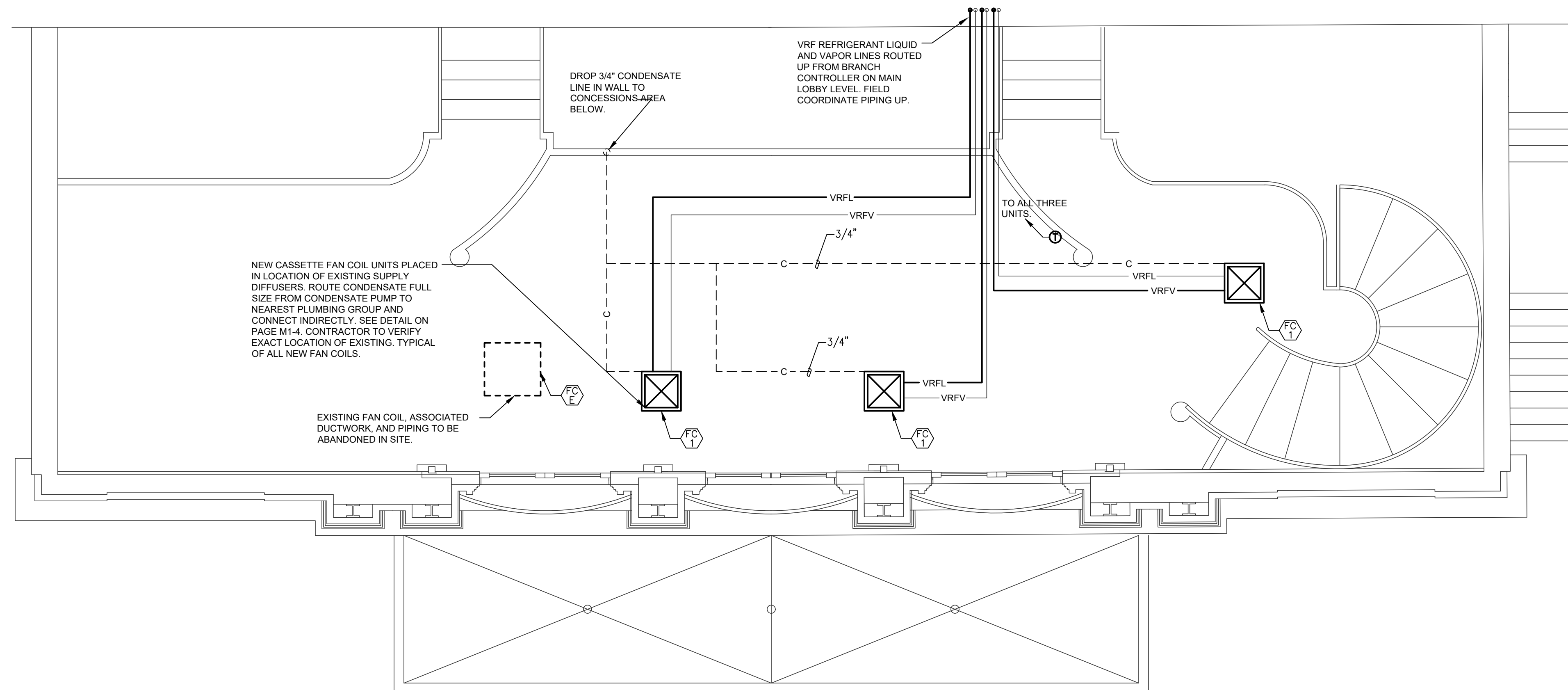
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JOB NO:	20-039
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SCALE:	AS SHOWN

SHEET NUMBER:
MO-1



MECHANICAL - MAIN LOBBY FLOOR PLAN
 SCALE: 1/4"=1'-0"
 NORTH



MECHANICAL - MEZZANINE LOBBY FLOOR PLAN
 SCALE: 1/4"=1'-0"
 NORTH

MECHANICAL GENERAL NOTES:

- DRAWING IS DIAGRAMMATIC IN NATURE. LOCATIONS AND SIZES MAY VARY DURING FIELD COORDINATION & INSTALLATION OF MECHANICAL, PLUMBING, & ELECTRICAL. DRAWINGS DO NOT NECESSARILY INDICATE EVERY REQUIRED OFFSET, FITTING, ETC. DRAWINGS ARE NOT TO BE SCALED FOR DIMENSIONS. TAKE ALL DIMENSIONS FROM ARCHITECTURAL DRAWINGS, CERTIFIED EQUIPMENT DRAWINGS AND FROM THE STRUCTURE ITSELF BEFORE FABRICATING ANY WORK. VERIFY ALL SPACE REQUIREMENTS COORDINATING WITH OTHER TRADES, AND INSTALL THE SYSTEMS IN THE SPACE PROVIDED WITHOUT EXTRA CHARGE TO THE OWNER.
- CONTRACTOR TO FIELD VERIFY LOCATIONS OF ALL EXISTING MECHANICAL EQUIPMENT AND DUCTWORK.
- EXISTING FAN COILS, ASSOCIATED DUCTWORK, AND PIPING TO BE ABANDONED IN SITE. EXISTING CONDENSING UNITS ON ROOF TO BE REMOVED.
- MAIN LOBBY AND MEZZANINE LOBBY TO BE NATURALLY VENTILATED PER 2018 I.M.C SECTION 402.2.
- IN LOCATIONS WHERE ROOF TOP EQUIPMENT IS TO BE REMOVED, INSULATE AND CAP CURB UNLESS OTHERWISE STATED.
- NEW RTU-S AND VRF AE-200 TO BE CONNECTED TO THE EXISTING TRANE TRACER SD SYSTEM AND COM TRUNK IN THE BUILDING. PROVIDE ALL COMMUNICATIONS INTERFACE NECESSARY AND PROVIDE PROGRAMMING AS NEEDED FOR INTERFACE.

DO NOT REPRODUCE THESE DRAWINGS AND SPECIFICATIONS WITHOUT THE EXPRESSED WRITTEN PERMISSION OF THE DESIGNER. THE DRAWINGS AND SPECIFICATIONS ARE INSTRUMENTS OF THE SERVICE AND SHALL REMAIN THE PROPERTY OF THE DESIGNER. WHETHER THE PROJECT FOR WHICH THEY ARE MADE IS EXECUTED OR NOT. THESE DRAWINGS AND SPECIFICATIONS SHALL NOT BE USED BY ANYONE ON ANY OTHER PROJECTS FOR ADDITIONS TO THIS PROJECT BY OTHERS EXCEPT BY THE EXPRESSED WRITTEN PERMISSION OF THE DESIGNER.

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 645 MAIN STREET
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M1-1

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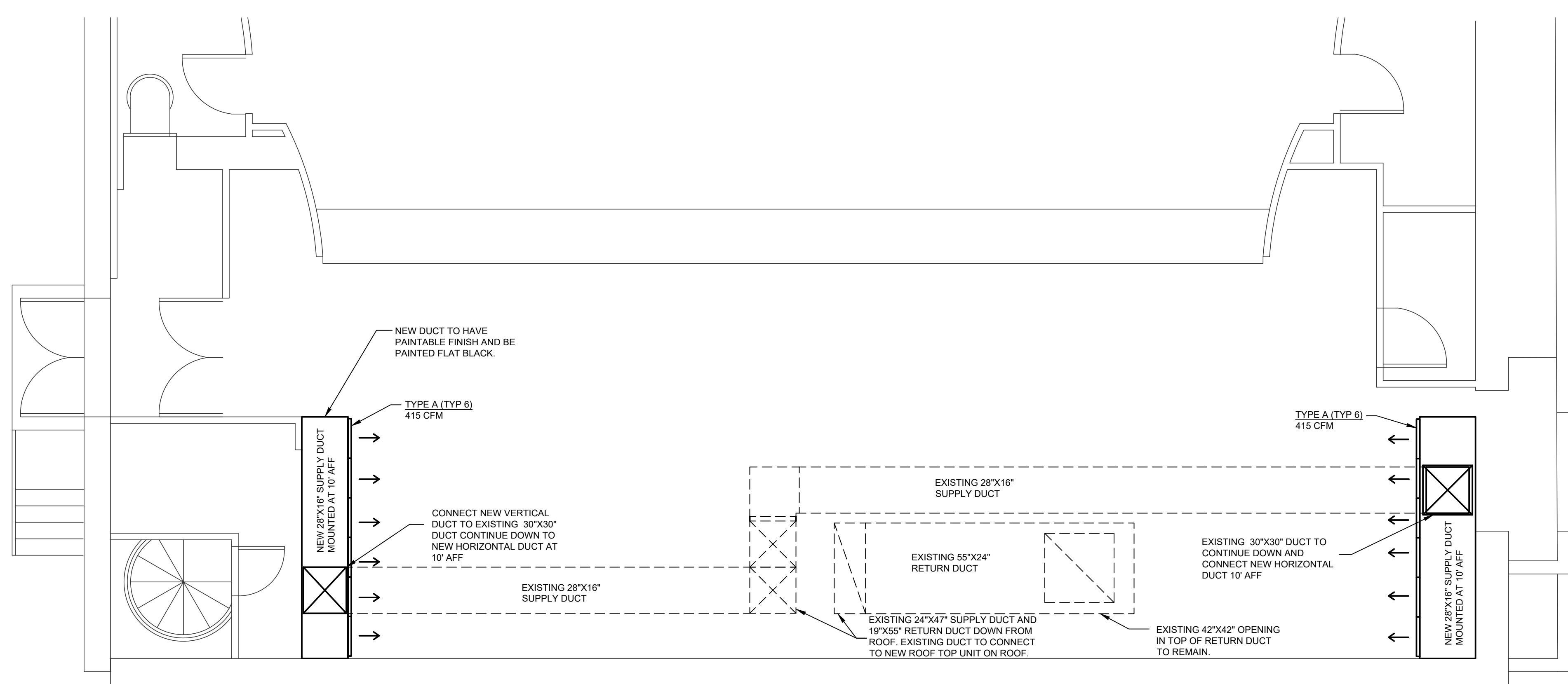
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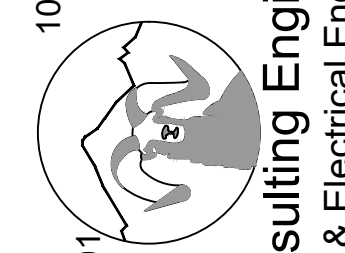


MECHANICAL - STAGE FLOOR PLAN
SCALE: 1/4"=1'-0"

- MECHANICAL GENERAL NOTES:**
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 - CONTRACTOR TO FIELD VERIFY LOCATIONS OF ALL EXISTING MECHANICAL EQUIPMENT AND DUCTWORK.
 - EXISTING FAN COILS, ASSOCIATED DUCTWORK, AND PIPING TO BE ABANDONED IN SITE. EXISTING CONDENSING UNITS ON ROOF TO BE REMOVED.
 - MAIN LOBBY AND MEZZANINE LOBBY TO BE NATURALLY VENTILATED PER 2018 I.M.C SECTION 402.2.
 - IN LOCATIONS WHERE ROOF TOP EQUIPMENT IS TO BE REMOVED, INSULATE AND CAP CURB UNLESS OTHERWISE STATED.
 - THE NEW CONTROLS FROM MANUFACTURER TO EXISTING CITY TRANE TRACER SC SYSTEM.

DO NOT REPRODUCE THESE DRAWINGS AND SPECIFICATIONS WITHOUT THE EXPRESSED WRITTEN PERMISSION OF THE DESIGNER. THE DRAWINGS AND SPECIFICATIONS ARE INSTRUMENTS OF THE SERVICE AND SHALL REMAIN THE PROPERTY OF THE DESIGNER. WHETHER THE PROJECT FOR WHICH THEY ARE MADE IS EXECUTED OR NOT, THESE DRAWINGS AND SPECIFICATIONS SHALL NOT BE USED BY ANYONE ON ANY OTHER PROJECTS FOR ADDITIONS TO THIS PROJECT BY OTHERS EXCEPT BY THE EXPRESSED WRITTEN PERMISSION OF THE DESIGNER.

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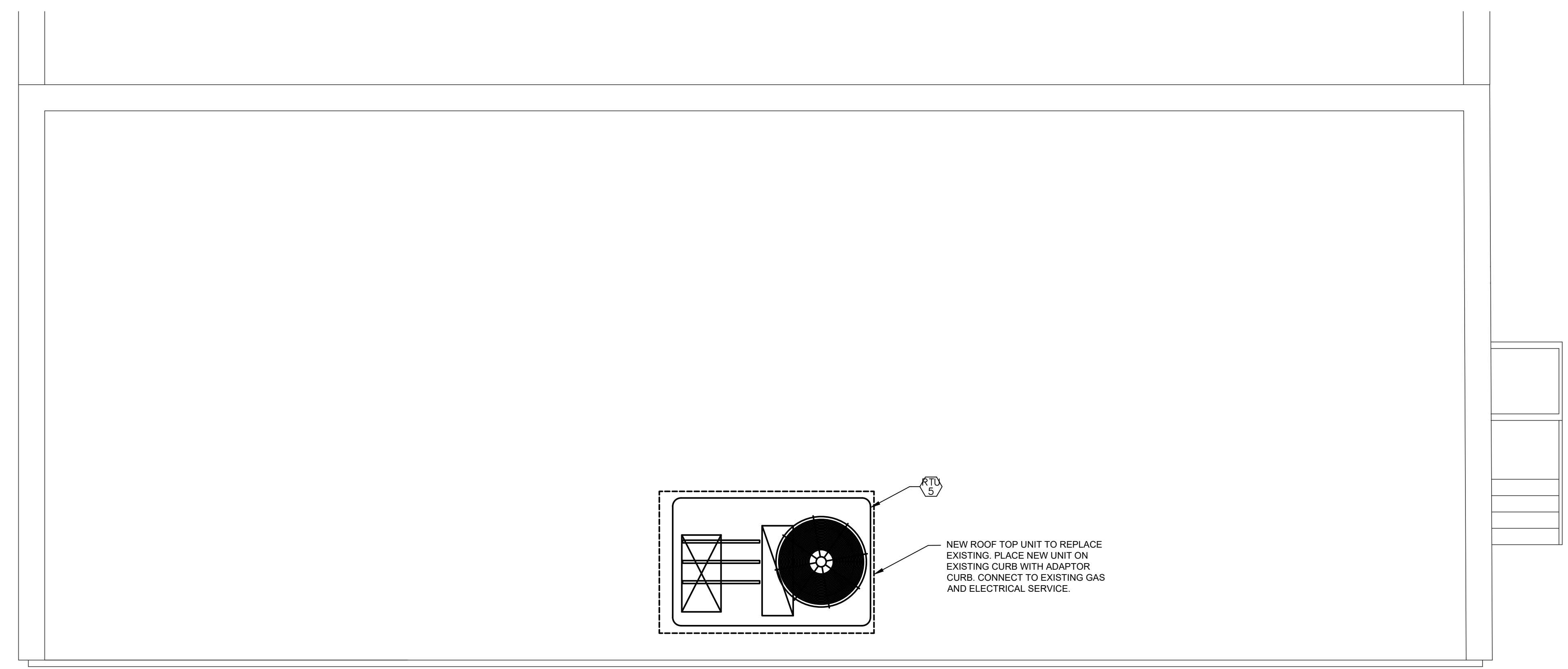
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- TIE NEW CONTROLS FROM MANUFACTURER TO EXISTING CITY TRANE TRACER SC SYSTEM.



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



ROOFTOP AIR HANDLING UNIT SCHEDULE																
EQUIPMENT NO.	SERVICE	SUPPLY AIR (CFM)	OUTSIDE AIR (CFM)	E.S.P. (IN. W.G.)	COOLING		HEATING		FILTERS	EVAP FAN (HP)	ELECTRICAL			UNIT WEIGHT (LBS.)	MANUFACTURER & MODEL	OPTIONS /ACCESSORIES
					NOM. (TONS)	GAS (CFH)	INPUT (MBH)	OUTPUT (MBH)			V./PH./HZ.	MCA (A)	MOC (A)			
RTU-5	STAGE	5,000	1,500	1.0	12.5	283	250	200	2" MERV 8	5	208/3/60	61	80	YHD150	NOTE-1	

NOTE:
1. PROVIDE WITH ADAPTER CURB, COIL GUARDS, TCI MODULE, 100% MODULATING ECONOMIZER, POWERED EXHAUST FAN, FACTORY UNITARY CONTROLS, FUSED DISCONNECT SWITCH, HIGH ALTITUDE KIT, POWERED CONVENIENCE OUTLET AND CO2 DEMAND CONTROLLED VENTILATION SENSOR AND SEQUENCE. PROVIDE RETURN DUCT SMOKE DETECTOR WITH AUDIBLE AND VISUAL ALARMS CONNECTED TO THE FIRE ALARM CONTROL PANEL.

VRF AIR COOLED CONDENSING UNIT SCHEDULE										
EQUIPMENT NO.	SERVICE	NOMINAL COOLING CAPACITY (MBH)	NOMINAL HEATING CAPACITY (MBH)	REFRIG. PIPING		ELECTRIC			MANUFACTURER & MODEL	OPTIONS/ACCESSORIES
				LIQUID	VAPOR	V./PH./HZ.	MOP (A)	MCA (A)		
CU-1	VRF SYSTEM	72	80	5/8	3/4	208/3/60	60	38	MITSUBISHI PURY-HP72TNU-A	NOTE 1

NOTES:
1. PROVIDE LINE SET AS RECOMMENDED BY MANUFACTURER, POWER DISCONNECT, AE-200 CONTROLLER WITH BACNET, POWERED CONVENIENCE OUTLET.

VRF BRANCH CIRCUIT CONTROLLER SCHEDULE									
EQUIPMENT NO.	SYSTEM NO.	# BRANCH CIRCUITS PER UNIT	LOCATION	ELECTRICAL			DIMENSIONS LxWxH INCHES	MANUFACTURE & MODEL	OPTIONS/ACCESSORIES
				MCA	MOC	V./PH./HZ.			
BC-1	1	7	MEZZANINE	0.4	1	208/1/60	25"X15.7"X10"	MITSUBISHI CMB-P108NU-JA1	NOTE-1

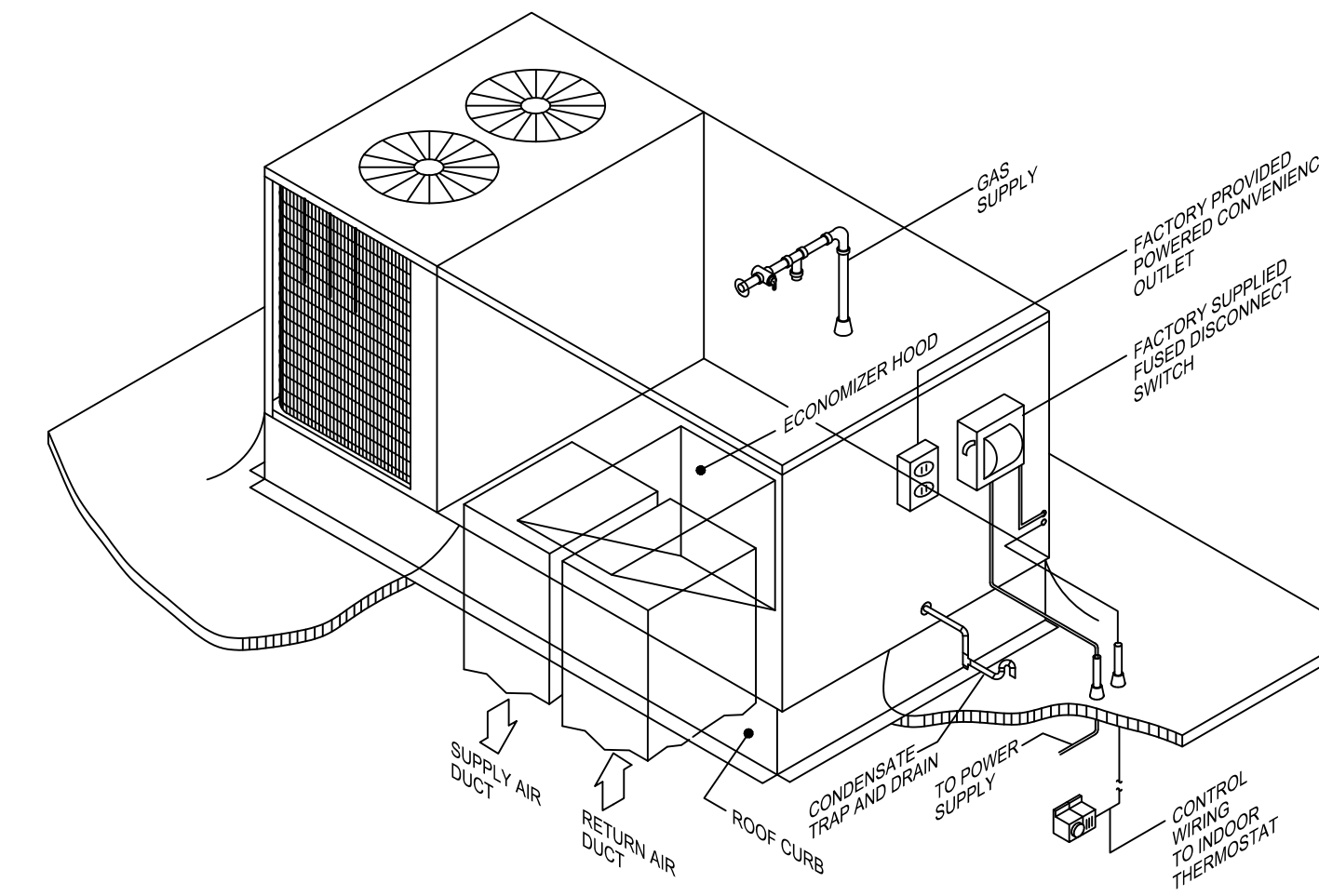
NOTES:
1. PROVIDE WITH POWER DISCONNECT, CONDENSATE CATCH PAN AND CONDENSATE PUMP, ISOLATION VALVES UPSTREAM AND DOWNSTREAM OF BRANCH CONTROLLER BOX.

INDOOR VRF UNIT EQUIPMENT SCHEDULE										
EQUIPMENT NO.	SERVICE	NOMINAL COOLING CAPACITY (BTU/HR.)	NOMINAL HEATING CAPACITY (BTU/HR.)	CFM	REFRIGERANT PIPING DIAMETER		ELECTRICAL		MANUFACTURER & MODEL	OPTIONS/ACCESSORIES
					LIQUID	SUCTION	MCA (AMPS)	V./PH./HZ.		
FC-1	MAIN LOBBY	12000	13500	390	1/4	1/2	0.35	208/1/60	PLFY-P12NCMU-ER4	NOTE-1
FC-2	MEZZANINE LOBBY	8000	9000	350	1/4	1/2	0.29	208/1/60	PLFY-P08NCMU-ER4	NOTE-1

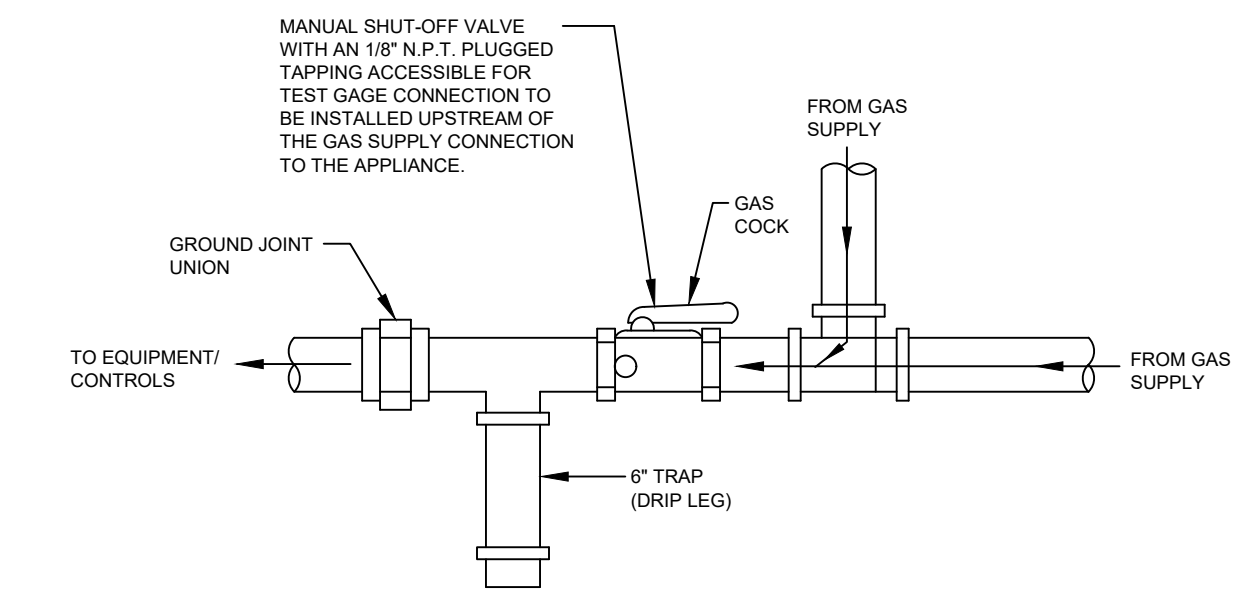
NOTES:
1. PROVIDE WITH POWER DISCONNECT, SIMPLE MA CONTROLLER, CONDENSATE PAN AND PUMP, ISOLATION VALVES ON CONNECTIONS TO UNIT. LINESET RECOMMENDED BY MANUFACTURER.

GRILLE-REGISTER-DIFFUSER SCHEDULE					
EQUIPMENT NO.	SIZE	MODEL	MANUFACTURER	FINISH	OPTIONS/ACCESSORIES
A	8"X24"	520	PRICE	FLAT BLACK	NOTE-1

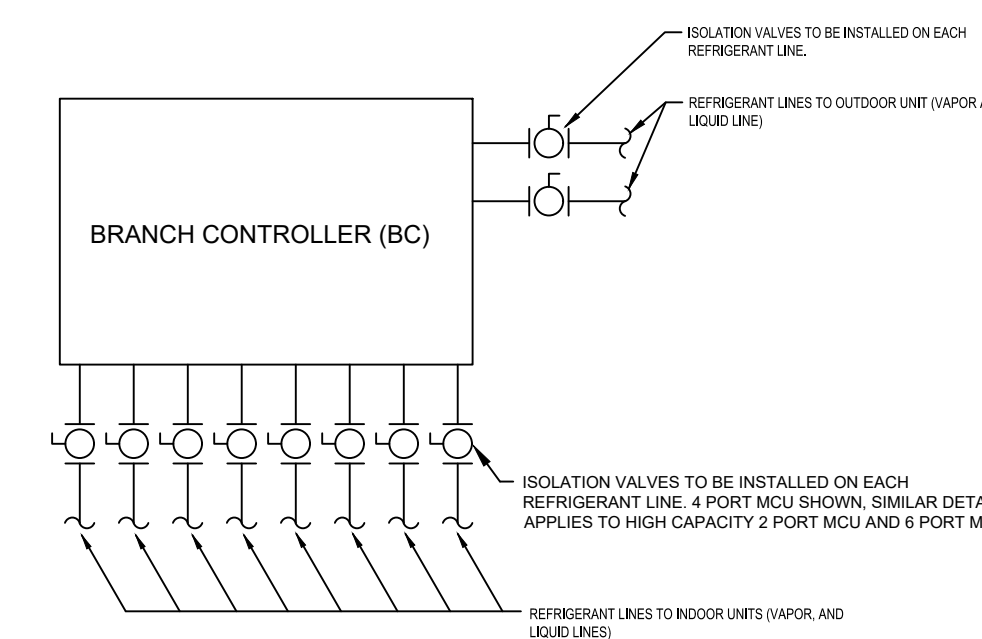
NOTES:
1. SUPPLY GRILLE MOUNTED ON DUCT. PROVIDE WITH OBD AND MANUAL ADJUSTMENT. DIFFUSER TO BE SET AT 22.5 DEGREE DEFLECTION.



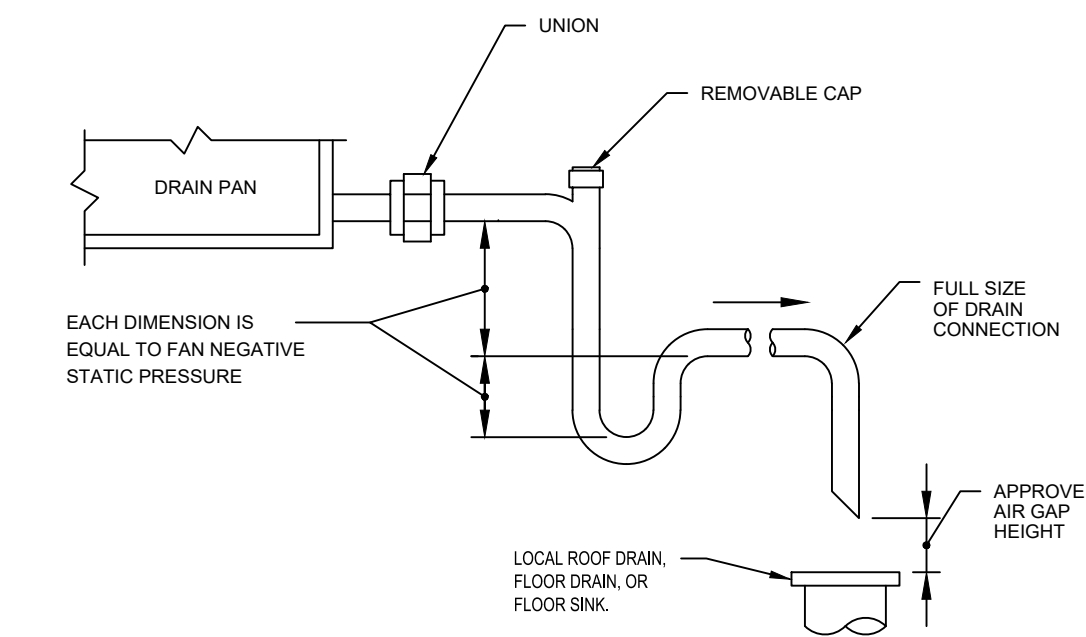
ROOFTOP PACKAGED HVAC UNIT DETAIL
NOT TO SCALE



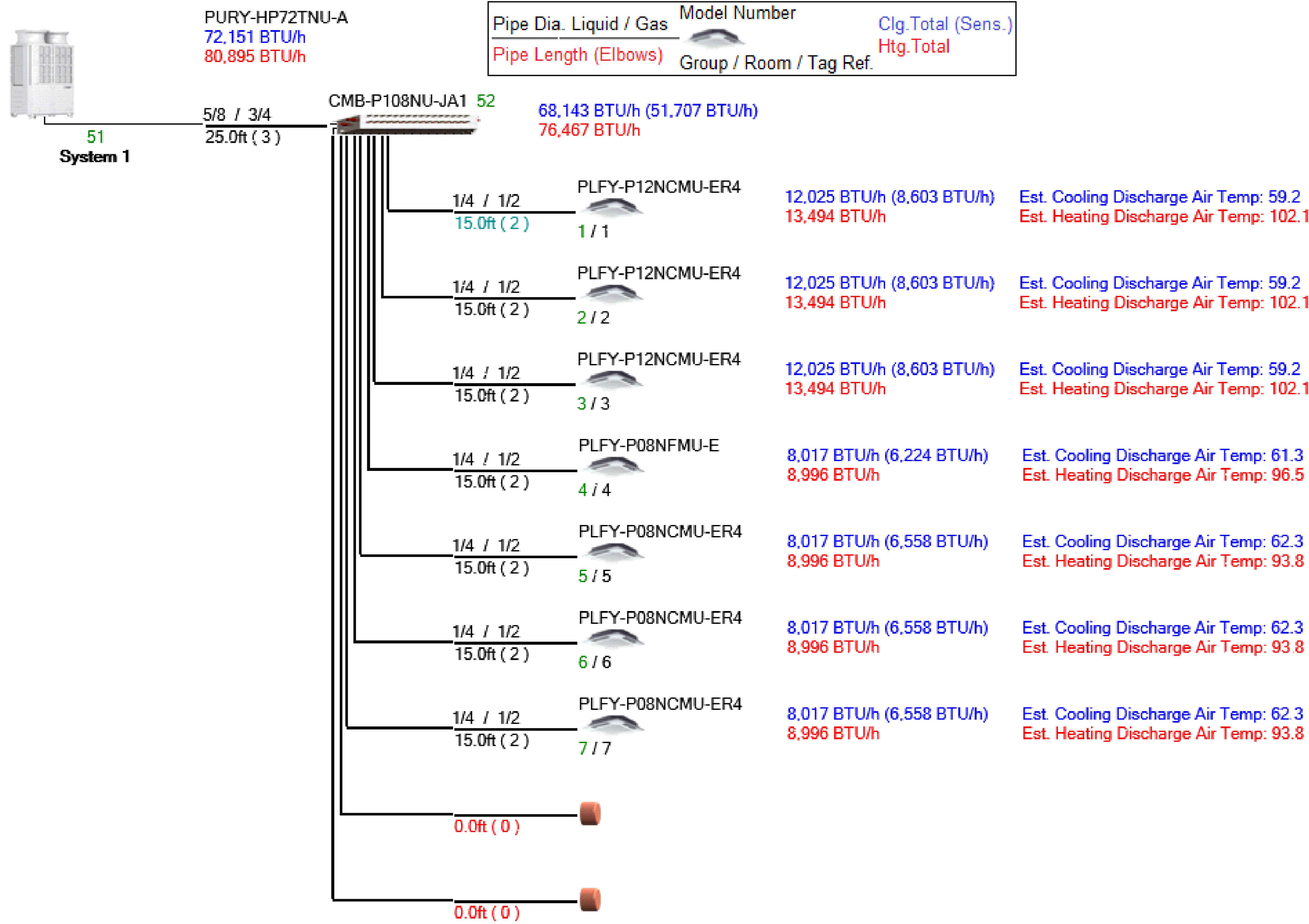
GAS CONNECTION TO EQUIPMENT DETAIL
NOT TO SCALE



TYPICAL MODE CONTROL UNIT VALVE LAYOUT
NOT TO SCALE



CONDENSATE DRAIN DETAIL
N.T.S.



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Bighorn Consulting Engineers, Inc.
Mechanical & Electrical Engineers

THE AVALON
LOBBY AND STAGE UPGRADES
645 MAIN STREET
GRAND JUNCTION, COLORADO

DATE: 04/16/2020
ISSUED FOR: FOR CONSTRUCTION

DATE: 4-16-2020
JOB NO: 20-039
DRAWN BY: BCE
CHECKED BY: BCE
SCALE: AS SHOWN
SHEET NUMBER:

DRAWING ABBREVIATIONS

Table with 2 columns: Abbreviation and Description. Includes items like AAU AUTOMATIC AIR VENT, ABV ABOVE, AC AIR CONDITIONING UNIT, etc.

COND CONDENSATE

Table with 2 columns: Abbreviation and Description. Includes items like CONN CONNECTION, CONT'N CONTINUATION, CONTR CONTRACTOR, etc.

EXPAN EXPANSION

Table with 2 columns: Abbreviation and Description. Includes items like EXT EXTERNAL, F DEGREES FAHRENHEIT, F/D WITH FIRE/SMOKE DAMPER ACCESS DOOR, etc.

HT HEIGHT

Table with 2 columns: Abbreviation and Description. Includes items like HTR HEATER, HV HEATING AND VENTILATING UNIT, HWC HOT WATER CONVERTER, etc.

OAT OUTSIDE AIR TEMPERATURE

Table with 2 columns: Abbreviation and Description. Includes items like OB OFF BOTTOM, OBD OPPOSED BLADE DAMPER, OC ON CENTER, etc.

SA SUPPLY AIR

Table with 2 columns: Abbreviation and Description. Includes items like SAD SUPPLY AIR DIFFUSER, SAR SUPPLY AIR REGISTER, SCG SMOKE CONTROL GRILLE, etc.

RESPONSIBLE DIVISION

UNLESS OTHERWISE INDICATED ALL HEATING, VENTILATING, AIR CONDITIONING, PLUMBING, AND OTHER MECHANICAL EQUIPMENT, MOTORS, AND CONTROLS SHALL BE FURNISHED, SET IN PLACE AND WIRED AS FOLLOWS:

Table with 5 columns: ITEM, FURNISHED, SET, POWER WIRED, CONTROL WIRED. Lists various equipment like EQUIPMENT COMBINATION, FUSED AND UNFUSED DISCONNECT SWITCHES, etc.

SUBSCRIPT FOOTNOTES: 1) UNDER DIVISION 23 FURNISHED FACTORY-WIRED AS PART OF EQUIPMENT OR IF FURNISHED WITH COMBINATION STARTERS. 2) IF ITEM IS FOR LINE VOLTAGE, SET IN PLACE AND CONNECT UNDER DIVISION 28...

LIGHTING LEGEND. NOTES: SYMBOLS SHOWN ARE STANDARD. VARIATION AND/OR COMBINATIONS MAY BE USED ON THE PLANS. THIS LIST SHOWS STANDARD SYMBOLS AND ALL MAY NOT APPEAR ON THE PROJECT DRAWINGS...

SWITCHES. \$ SINGLE POLE SWITCH, \$2 TWO POLE SWITCH, \$3 THREE-WAY SWITCH, \$4 FOUR-WAY SWITCH, \$5 DIMMER SWITCH, etc.

LIGHT FIXTURES. ALL FIXTURES: THE UPPER CASE LETTER INDICATES FIXTURE TYPE RE: THE LUMINAIRE SCHEDULE FOR SPECIFICATIONS. THE LOWER CASE LETTER INDICATES WHICH SWITCH CONTROLS THE LIGHT.

ELECTRICAL EQUIPMENT LEGEND. BRANCH CIRCUIT PANELBOARD, TELEPHONE TERMINAL BOARD, ELECTRIC MOTOR, FUSED SAFETY SWITCH / DISCONNECT COMBINATION, MOTOR STARTER, CONTACTOR, etc.

MAIN DISTRIBUTION GEAR. CIRCUIT BREAKER IN A PANEL BOARD, PAD MOUNTED UTILITY TRANSFORMER, FUSED DISCONNECT, ELECTRICAL METER SHOWN IN PLAN VIEW, etc.

ELECTRICAL DEVICE LEGEND. CEILING JUNCTION BOX - SURFACE/FLUSH, WALL JUNCTION BOX - SURFACE/FLUSH, DUPLEX RECEPTACLE, FLOOR MOUNTED RECEPTACLE, etc.

FIRE ALARM EQUIPMENT LEGEND. FIRE ALARM PULL STATION, FIRE ALARM HORN, FIRE ALARM STROBE, FIRE ALARM HORN/STROBE, CEILING MOUNTED SPEAKER, DUCT DETECTOR, REMOTE LAMP, SMOKE DETECTOR - STANDARD, 135° STANDARD HEAT DETECTOR, PIR DETECTOR, FLOW SWITCH, TAMPER SWITCH.

COMMUNICATION LEGEND. CLOCK ONLY, CLOCK / PA SPEAKER WALL MOUNTED, ROUND CEILING MOUNTED SPEAKER, SQUARE SPEAKER, INTERCOM PUSH TO CALL SWITCH, WIRELESS ACCESS POINT ABOVE THE CEILING, PROJECTOR, ABOVE THE CEILING PROJECTOR CONNECTION, WALL MOUNTED HDMI, PLAIN DATA OUTLET, PLAIN DATA OUTLET WITH MOUNTING HEIGHT.

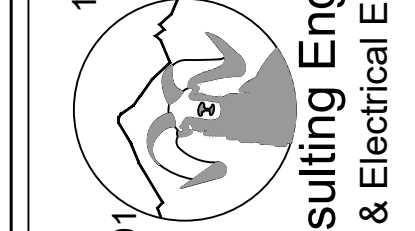
SECURITY SYSTEM LEGEND. SECURITY CAMERA, ADA DOOR OPERATOR PUSH BUTTON.

GENERAL NOTES: SYMBOLS SHOWN ARE STANDARD. VARIATION AND/OR COMBINATION MAY BE USED ON THE PLANS. THIS LIST SHOWS STANDARD SYMBOLS AND ALL MAY NOT APPEAR ON THE PROJECT DRAWINGS... FIELD COORDINATION DURING CONSTRUCTION IS IMPERATIVE. CONTRACTORS BIDDING THIS WORK MUST MAKE REASONABLE ALLOWANCES FOR UNFORESEEN CONTINGENCIES...

ABBREVIATIONS LEGEND. DRAWING KEYED NOTES, ROOM DESIGNATION, NIGHT/SECURITY LIGHT - DO NOT SWITCH, WEATHERPROOF, ABOVE FINISHED FLOOR, ABOVE COUNTER, GROUND FAULT CIRCUIT INTERRUPTER, etc.

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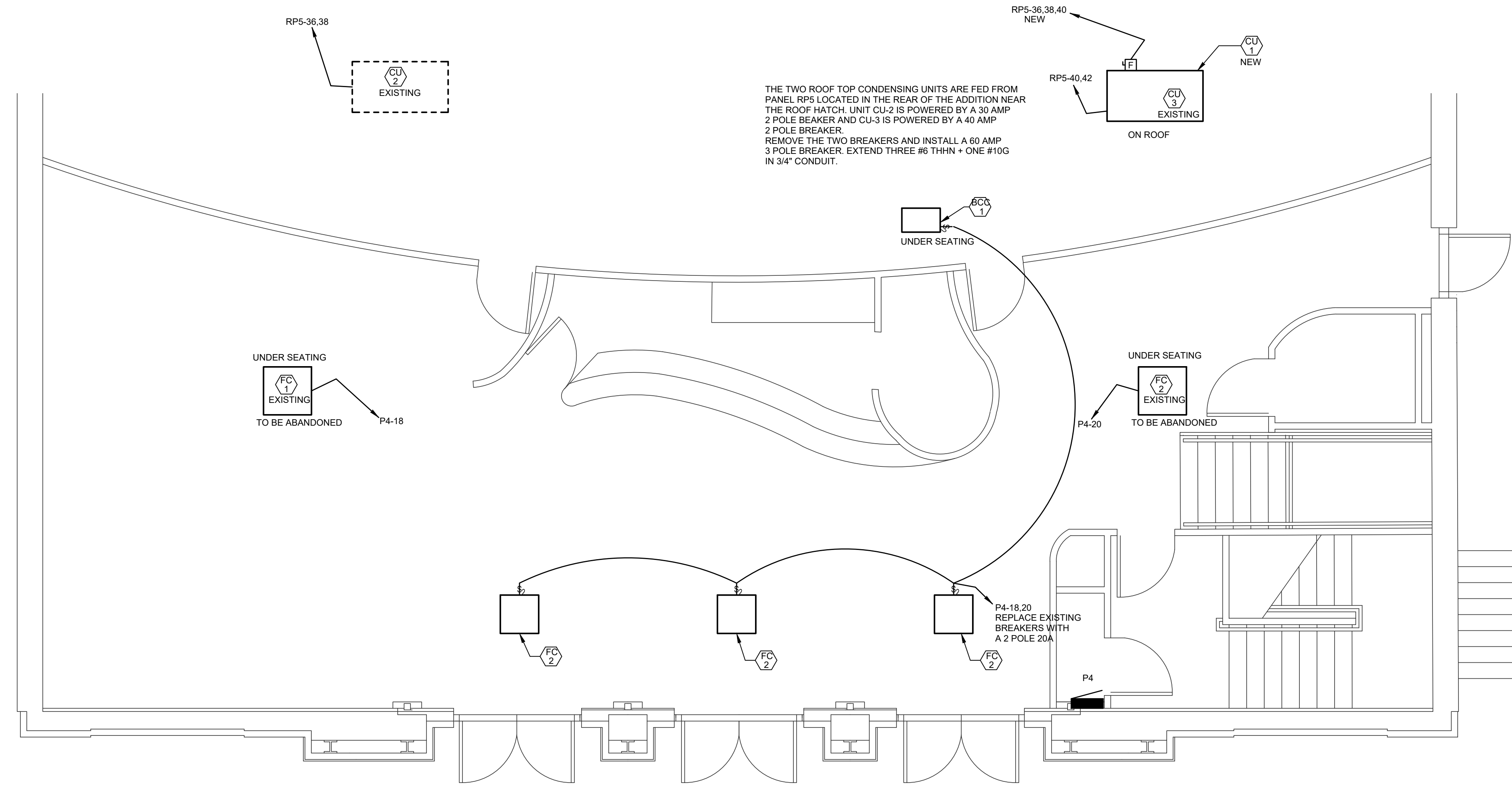


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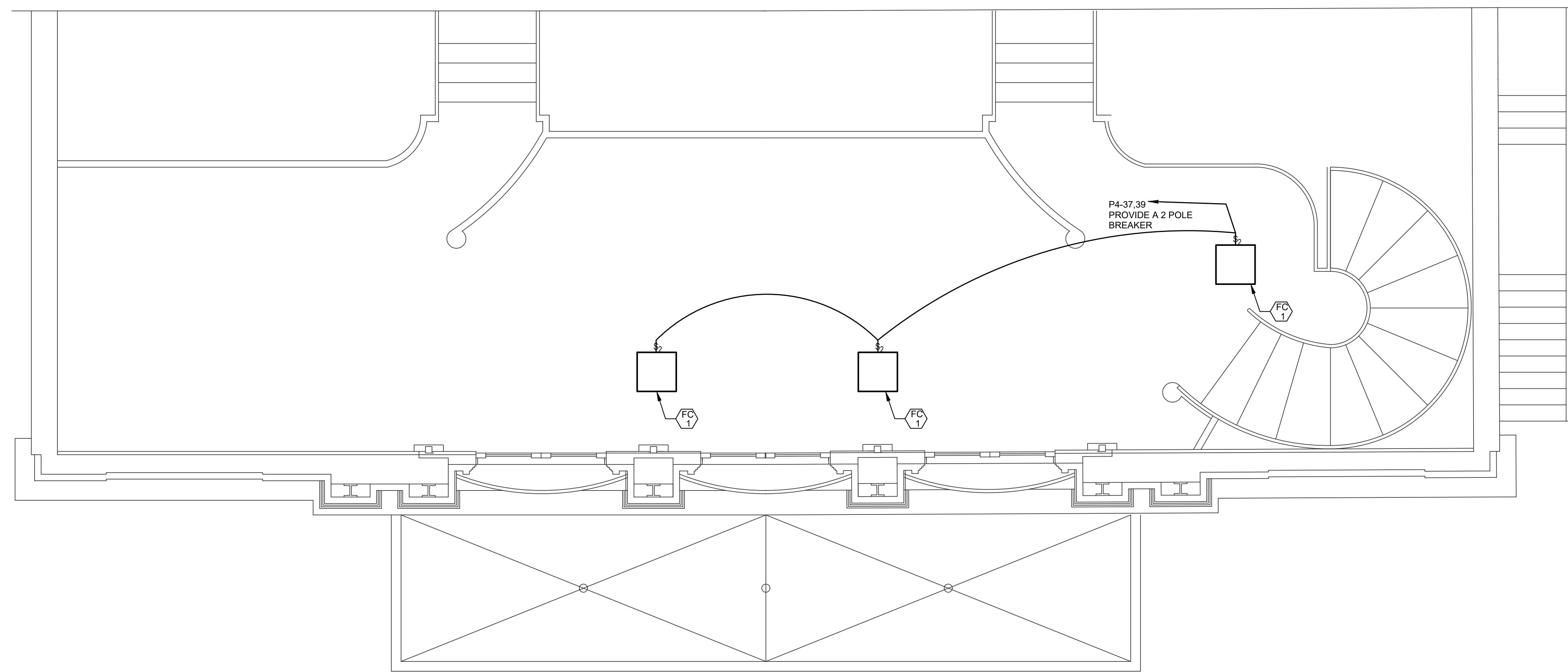
THE AVALON LOBBY AND STAGE UPGRADES 645 MAIN STREET GRAND JUNCTION, COLORADO

Table with 2 columns: DATE, ISSUED FOR. Shows dates from 04/16/2020 to 04/16/2020 and 'FOR CONSTRUCTION'.

Table with 2 columns: DATE, 4-16-2020; JOB NO., 20-039; DRAWN BY, BCE; CHECKED BY, BCE; SCALE, AS SHOWN; SHEET NUMBER, E0-1.



ELECTRICAL - MAIN LOBBY FLOOR PLAN
 SCALE: 1/4"=1'-0"
 NORTH



ELECTRICAL - MEZZANINE LOBBY FLOOR PLAN
 SCALE: 1/4"=1'-0"
 NORTH

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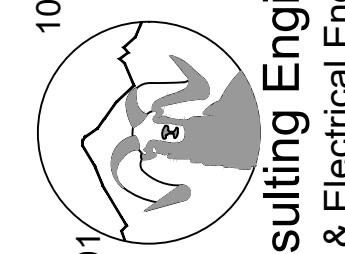
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04/16/2020	FOR CONSTRUCTION

DATE:	4-16-2020
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DRAWN BY:	BCE
CHECKED BY:	BCE
SCALE:	AS SHOWN
SHEET NUMBER:	E2-1

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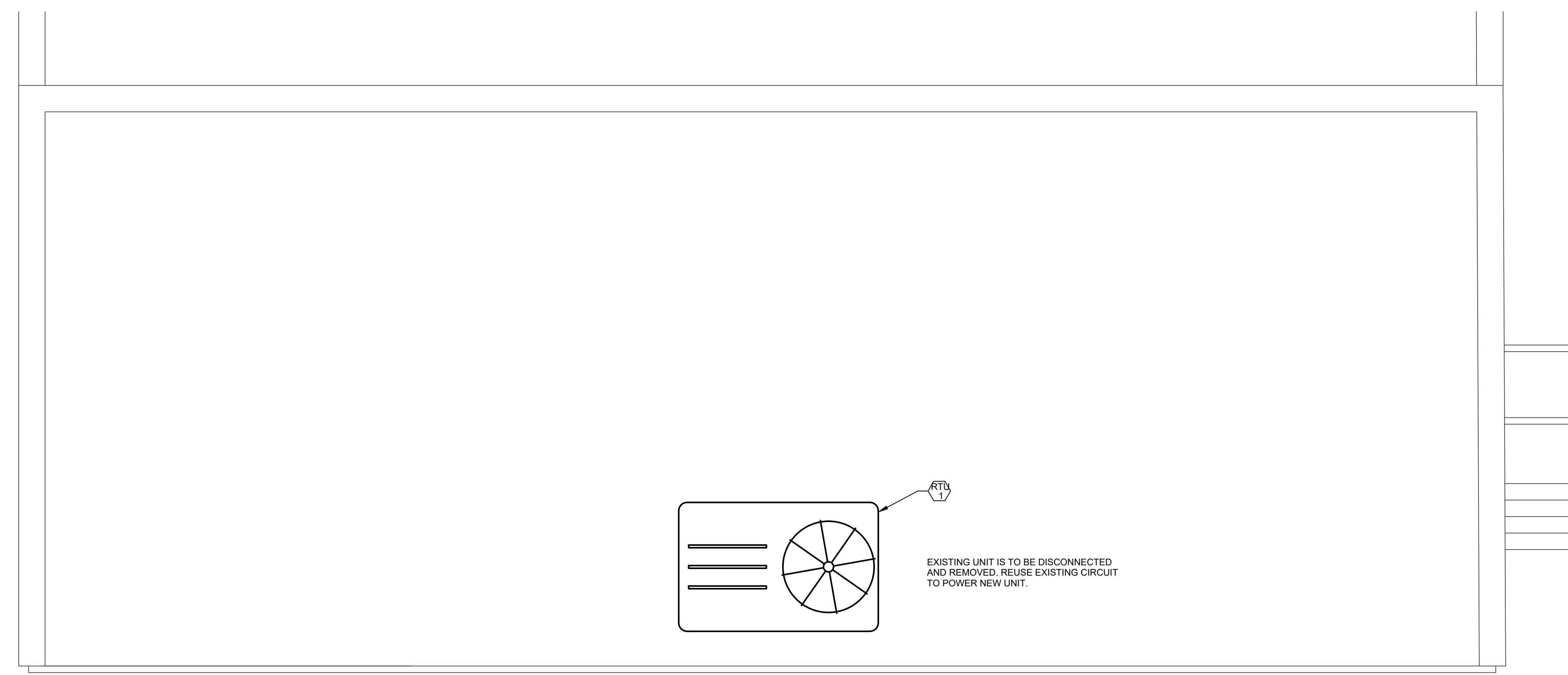
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DRAWN BY: BCE
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SCALE: AS SHOWN
SHEET NUMBER: **E2-3**

MECHANICAL EQUIPMENT SCHEDULE												
COMB: COMBINATION MOTOR STARTER		NR: NONE REQUIRED			CONT: CONTRACTOR							
MAG: MAGNETIC MOTOR STARTER		PI: PLUG-IN UNIT			MAN: MANUAL MOTOR STARTER							
					W/U: SUPPLIED WITH UNIT:							
UNIT NO	FUNCTION (NOTES)	LOAD	VOLTS	Ø	FULL LOAD AMPS	BRANCH CIRCUIT CONDUIT SIZE	NO. WIRE	WIRE SIZE	GRND WIRE SIZE	BRKR SIZE	START	DISC FUSE
BC	BRANCH SELECTOR		208	1	0.4A	1/2"	2	12	12	20A	NR	1/2
CU	CONDENSING UNIT		208	3	38A	1"	3	6	10	60A	NR	60
FC	FAN COIL UNIT		208	1	0.35A	1/2"	2	12	12	20A	NR	1/2
FC	FAN COIL UNIT		208	1	0.29A	1/2"	2	12	12	20A	NR	1/2
RTU	ROOF TOP UNIT		208	3	61.0A	1.25"	3	4	6	80A	NR	100
												80



ELECTRICAL - ROOF PLAN
SCALE: 1/4"=1'-0"
NORTH