<u>PIPING LEGEND</u>

	COLD WATE
	EXISTING PI
	EXISTING PI
c	CONDENSAT
	HEATING SU
	HEATING RE
CHWS	CHILLED WA
— — CHWR— — —	CHILLED WA
—— s ——Hs	HIGH PRESS
 S LS	LOW PRESS
	THERMOSTAT
	ELECTRICAL

INSTRUMENTATION AND EQUIPMENT TAGGING



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WATER PIPING
NG PIPING
NG PIPING TO BE REMOVED
INSATE PIPING
IG SUPPLY PIPING
IG RETURN PIPING
D WATER SUPPLY
D WATER RETURN
PRESSURE STEAM PIPING
RESSURE STEAM PIPING
OSTAT OR CONTROL WIRING
RICAL WIRING BY OTHERS

INSTRUMENT OR EQUIPMENT TYPE

- I INDICATOR, INDICATION
- V VALVE
- SH SWITCH HIGH
- SL SWITCH LOW ST STEAM TRAP
- SV SAFETY VALVE

GENERAL SYMBOLS LEGEND

Ø FD

Ø FD	FLOOR DRAIN
🐼 HD	HUB DRAIN
M	BALL OR GATE VALVE
🖍 тсv	TEMPERATURE CONTROL VALVE
ស៊ី	MIXING VALVE
× N	RELIEF VALVE
õ	PRESSURE GAUGE
	CIRCULATING PUMP
	TEMPERATURE INDICATOR
Ч р	REDUCER
	DOUBLE UNION
	CAP
- ◀	FLOW DIRECTION
	SLOPE PIPE THIS DIRECTION
\succ	TIE IN POINT
	Y STRAINER C/W VALVE
	STEAM TRAP - FLOAT & THERMOSTATIC
нDc	THERMOSTAT – LOW VOLTAGE HEATING/COOLING
$(\bar{\mathbb{T}})$	THERMOSTAT - LOW VOLTAGE
S	TEMPERATURE SENSOR
\square	SUPPLY DIFFUSER/GRILLE
	RETURN GRILLE
\square	EXHAUST GRILLE
BD	BALANCING DAMPER
M≁∽	MOTORIZED DAMPER
	NEW DUCTWORK
	EXISTING DUCTWORK
	DUCTWORK TO BE REMOVED
SIZE OF DIFFUSER	- TYPE OF DIFFUSER
$ \begin{array}{c} 150^{\phi} \\ 150^{-A} \\ 200 \\ 150^{-A} \end{array} $	
FUTURE AIR FLOW	(CFM)
SIZE OF GRILLE	



SIZE OF GRILLE 300¢ AIR FLOW

TYPE OF DIFFUSER

NOTE : WHERE ONLY ONE (1) AIRFLOW VALUE IS SHOWN BOTH EXISTING AND FUTURE AIRFLOW TO BE BALANCED TO VALUE SHOWN.

DRAWING LIST

M0 —	LEGEND AND GENERAL NOTES
M1 —	PARTIAL ROOF PLAN - TEMPORARY A
M2 —	AHU-8 VENTILATION & PIPING DEMOL
МЗ —	AHU-8 PARTIAL ROOF & PENTHOUSE
M4 —	AHU-8 FIRST FLOOR VENTILATION PLA
M5 —	AHU-18 VENTILATION & PIPING DEMO
M6 —	AHU-18 PARTIAL ROOF AND PENTHOU
M7 —	AHU-18 THIRD FLOOR VENTILATION P
M8 —	DETAILS & SCHEMATICS
M9 —	DETAILS & SCHEMATICS
M10 -	- PIPING SCHEMATICS
M11 -	- MECHANICAL SCHEDULES
E1 —	AHU-8 ELECTRICAL PLANS
E2 –	AHU–18 ELECTRICAL PLANS

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AHU RELOCATION LITION PLAN E PLAN AN IOLITION PLAN OUSE PLAN PLAN

> Sheet Title LEGEND AND GENERAL NOTES QEH AHU-8 & AHU-18 REPLACEMENT Sheet No. MØ of MII







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<u> </u>		
		Sheet Title
QEH AHU-8 & AHU-18 REPLACEMENT	AHU-8 PARTIAL ROOF/PENTHOUSE PLAN	
	Sheet No. M3 of M11	



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M9 / SCALE: NOT TO SCALE

TAG	
FE-08	EXISTING
FE-18	EX

														AIR HANI	DLING UNIT	SCHEDULE																	
TAG	STANDARD OF ACCEPTANCE		UNIT DIMENSIONS / WEIGHT	T COOLING	HEATING		RETURN FAN SECTION		AIR MIXING & SUMMER PREFILTER SECTION		ACCESS SECTION	CESS STEAM HEATING COIL SECTION			WINTER PRE-FILTER A SECTION S		ACCESS SECTION		CHILLED WATER COOLING COIL SECTION		HUMIDIFIER SECTION SECT		ACCESS SECTION	ESS SUPPLY FAN SECTION AC		ACCESS SECTION	FILTER	SECTION					
	MANUFACTURE	MODEL NO.	LxWxH MM (IN) / KG (LBS)	CAPACITY	CAPACITY	AIRFLOW / ESP	SECTION LENGTH	MOTOR POWER	VOLTAGE / PHAS	E SECTION LENGT	H PRE-FILTER	SECTION LENGTH	SECTION LENGTH	COIL CAPACITY	, STEAM PRESSURE	EAT / LAT (DB)	PRE-FILTER	SECTION LENGTH	SECTION LENGTH	SECTION LENGTH	FLOW EW1	Γ/LWT EAT/LA (DB)	T FLUID PRESSURE DROP	SECTION LENGTH	SECTION LENGTH	SECTION LENGTH	AIRFLOW / ESP	SECTION LENGTH	10TOR POWER	VOLTAGE / PHASE	SECTION LENGTH	FINAL FILTER	SECTION LENGTH
AHU-8	YORK	SOLUTION XTI-57x96	8100x2400x1425 (324x96x57) / 3128 KG (6882 lb)	142 kW (485 MBH)	253 kW (863 MBH)	8725 CFM / 1.5" H2O	1200 MM (48")	7.5 HP	575 / 3	875 MM (35")	MERV 8	450 MM (18")	600 MM (24")	253 kW (863 MBH)	69 KPa (10 PSI)	-23°C / 10°C (-10°F / 50°F)	MERV 8	483 MM (19 1/8")	525 MM (21")	475 MM (19")	227 LPM 6°C (60 GPM) (43°F	/ 15°C 26°C / 13' F / 59°F) (80°F / 55°	°C 22.7 KPa °F) (7.6 FT H2O	500 MM) (20")	200 MM (8")	750 MM (30")	12895 CFM / 1.0" H2O	1000 MM (40")	15 HP	575 / 3	675 MM (27")	MERV 14	525 MM (21")
AHU-18	YORK	SOLUTION XTI-57x96	7975x2400x1425 (319x96x57) 3155 KG (6940 lb)	145 kW (495 MBH)	253 kW (863 MBH)	11095 CFM / 1.75" H2O	1225 MM (49")	10 HP	575 / 3	875 MM (35")	MERV 8	450 MM (18")	600 MM (24")	253 kW (863 MBH)	69 KPa (10 PSI)	-23°C / 10°C (-10°F / 50°F)	MERV 8	483 MM (19 1/8")	900 MM (36")	775 MM (31")	228.3 LPM 6°C (60.3 GPM) (43°F	/ 15°C 26°C / 13' F / 59°F) (80°F / 55'	°C 22.4 kPa °F) (7.5 ft H20)	500 MM (20")	200 MM (8")	750 MM (30")	13000 CFM / 1.75" H2O	1675 MM (67")	15 HP	575 / 3	675 MM (27")	MERV 13	525 MM (21")
NOTE: UN	E: UNIT TO BE C/W HINGED DOUBLE WALL ACCESS DOORS, FACTORY INSTALLED THERMAL PANE REINFORCED GLASS VIEWPORTS, FACTORY INSTALLED MARINE LIGHTS, SUPPLY AIRFLOW MEASURING STATION, AND FILTERS C/W FRAME & SIDE ACCESS.																																

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	GRILLES, REGISTERS AND DIFFUSERS SCHEDULE								
MECHANICAL DATA									
TAG	MANUFACTURER	MODEL	COMMENTS						
A	E.H. PRICE	300x300 / SPD / 31 / VCR8E / B12	TYPE 31 T-BAR, SIZE AND CAPACITY AS INDICATED						
В	E.H. PRICE	600x600 / SPD / 31 / VCR8E / B12	TYPE 31 T-BAR, SIZE AND CAPACITY AS INDICATED						
С	E.H. PRICE	80 / F / VCS3 / B12	T-BAR LAY-IN F-FRAME, SIZE AND CAPACITY AS INDICATED						

NOTE: 1. CONTRACTOR TO VERIFY ALL CEILING TYPES PRIOR TO ORDERING MATERIALS. 2. GRILLES AND DIFFUSERS SMALLER THAN ONE FULL TILE LOCATED IN T-BAR CEILING SHALL BE SUPPLIED COMPLETE WITH PLASTER FRAME.

	FAN SCHEDULE											
		STANDARD OF	ACCEPTANCE						MOTOR		REMARKS:	
SERVICE	LOCATION	MANUFACTURER	MODEL NO.	AIR FLOW (CFM)	SP (INCHES)	DRIVE	RPM	HP	VFD RATED	VOLTAGE		
EXHAUST FAN (TO REMAIN)	MECH. ROOM 3600	СООК	150QMX	3845	2.0	BELT	1993	3	YES	575/3/60	ELECTRICAL TO INSTALL NEW VFD FC REMAIN.	
IAUST FAN	MECH. ROOM 4200	СООК	120QMX	1315	2.0	BELT	2167	1	YES	575/3/60	C/W DISCONNECT SWITCH, BELT GU ISOLATORS,14 GA. STEEL HOUSING, R	

	Sheet Title
QEH AHU-8 & AHU-18 REPLACEMENT	MECHANICAL SCHEDULES
	Sheet No. MII of MII

VFD FOR FAN. EXISTING FAN TO MAIN. ELT GUARD, CEILING MOUNTED SING, RE-GREASEABLE BEARINGS.

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PAN	EL: A											
LOCA	TION: MECHANICAL ROOM (RM.3600)			VOLTAGE: 600			AIC RATING: 10					
SUPPI	LY FROM: DP-4A1			PHASES: 3			MAINS TYPE: ALUMINUM					
ENCLOSURE: NEMA 1				NUMBER OF WIRES: 4			MAINS RATING: 100					
MOUN	ITING: SURFACE						MCB RA	TING: M	LO			
СКТ	CIRCUIT DESCRIPTION	TRIP	POLES	LOAD	PHASE	LOAD	POLES	TRIP	CIRCUIT DESCIPTION	СКТ		
1					А					2		
3	SF-8	25A	3		В		3	15A	RF-8	4		
5					С					6		
7					А					8		
9	EF-8	15A	3		В		3	70A	TEMPORARY AHU	10		
11					С					12		
13					А					14		
15	SPARE	15A	3		В		3	15A	SPARE	16		
17					С					18		
19					А					20		
21	SPARE	15A	3		В		3	15A	SPARE	22		
23					С		1			24		
	AFCI = GFI = BF	BREAK	ER TO HA TO HAVE	VE ARC-F GROUND	AULT CIR FAULT CI	Cuit inte Rcuit in	ERRUPTER	R PROTI	ECTION TECTION	·		

Scale	AS INDICATED
Date	JULY, 31, 2023
Drn By	E.N
Chk'd By	C.M
Project No. Tl	(23–103) # 2665–22058

1/07/2023

- EXISTING MCC TO REMAIN. REMOVE CONNECTION TO ALL BUCKETS FOR AHU-8 REPLACE LAMACOIDS WITH "SPARE".

KEY PLAN SCALE: N.T.S.

SUPPLY AND INSTALL NEW 100A/3P BREAKER TO FEED NEW PANEL A

LECTRICAL SCHEMATIC										
	MATERIAL	CONDUIT	AMPS							
	ALUMINUM	53mm EMT	100A							
	COPPER	21mm EMT	25A							

Sheet	Titl€

QEH AHU-8 REPLACEMENT

AHU-8 ELECTRICAL PLANS

Sheet No.

E-1 of 2

	EQUIPMENT SCHEDULE									
ELECT	RICAL									
WIRES	AMPS/KW/HP	CONNECTION	DISCONNECT	COMMENTS						
4	15 HP	DIRECT	VFD	FAN & VFD BY MECHANICAL. PROVIDE CONNECTION TO THE FIRE ALARM.						
4	10 HP	DIRECT	VFD	FAN & VFD BY MECHANICAL. PROVIDE CONNECTION TO THE FIRE ALARM.						
4	1 HP	DIRECT	VFD	FAN & VFD BY MECHANICAL. PROVIDE CONNECTION TO THE FIRE ALARM.						

31/07/2023	•
DD/MM/YY	

Scale AS INDI	CATED		Sheet Title		
JULY, 31	2023		AHU-18 ELECTRICAL PLANS		
Drn By	QEH	AHU-18 REPLACEMENT			
Chk'd By C.N			Sheet No.		
Project No. (23–1 TI <mark>#</mark> 2665-	3) 22058		E-2 of 2		

KEY PLAN SCALE: N.T.S.

WIRING SCHEDULE FOR MCC ELECTRICAL SCHEMATIC								
TAG	DESCRIPTION	BOND	MATERIAL	CONDUIT	AMPS			
A	ONE RUN OF 4C#1 AWG, RW90.	#6 AWG	ALUMINUM	53mm EMT	100A			
В	ONE RUN OF 3C#12 AWG, RW90.	#12 AWG	COPPER	21mm EMT	25A			