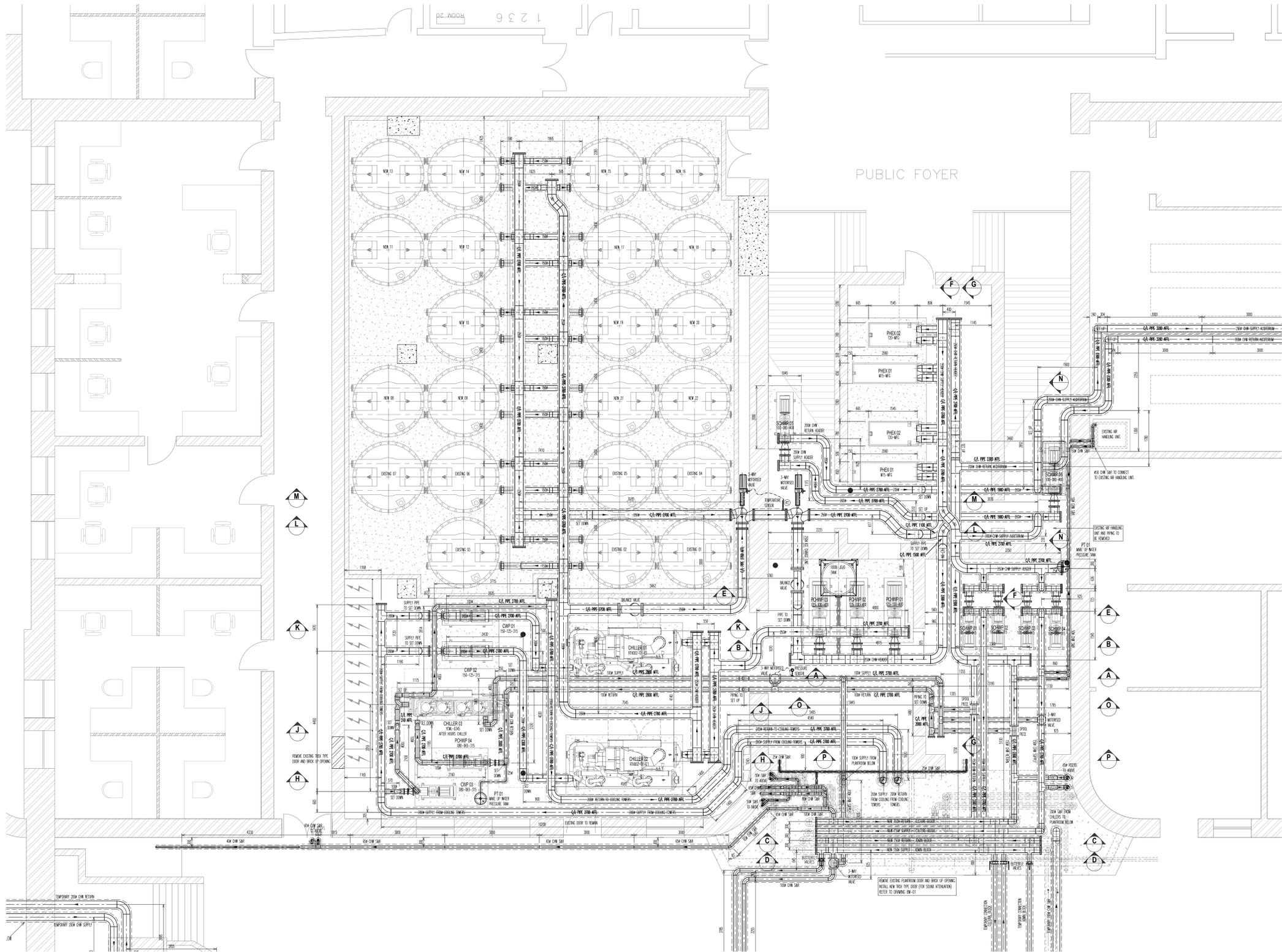


REFER TO DRAWING AC-05 FOR CONTINUATION

REFER TO DRAWING AC-03 FOR CONTINUATION



REFER TO DRAWING AC-04 FOR CONTINUATION

Pumps Schedule	
Primary Chilled Water Pumps	
Reference	PCHWP-01 / PCHWP-02 / PCHWP-03
Make	Elanorm
City Required	3
Model	125-100-400 GC TO PO
Motor	37kW
Coupling	FR025 HF
Base Plate	1600x1600x140
Flow Rate	60 l/s
Head	45m
Motor	37kW
Absorbed Power	33.6kW
FLA	68.1A
RPM	1440
Impeller	394 Diameter
Secondary Pumps - Auditorium	
Reference	SCHWP-05 / SCHWP-06
Make	Elanorm
City Required	2
Model	100-085-315 GC TO PO
Motor	30kW
Coupling	FR025 HF
Base Plate	1600x1600x140
Flow Rate	38 l/s
Head	32m
Motor	30kW
Absorbed Power	27kW
FLA	56.3A
RPM	1440
Impeller	329 Diameter
Secondary Chilled Water Pumps - Cultural Block	
Reference	SCHWP-07 / SCHWP-08
Make	Elanorm
City Required	2
Model	100-085-315 GC TO PO
Motor	18kW
Coupling	FR025 HF
Base Plate	1100x400x100
Flow Rate	21 l/s
Head	37m
Motor	18kW
Absorbed Power	17.3kW
FLA	28.2A
RPM	1440
Impeller	324 Diameter
Secondary Chilled Water Pumps - Admin Block	
Reference	SCHWP-09 / SCHWP-10
Make	Elanorm
City Required	2
Model	100-085-315 GC TO PO
Motor	18kW
Coupling	FR025 HF
Base Plate	1100x400x100
Flow Rate	21 l/s
Head	37m
Motor	18kW
Absorbed Power	17.3kW
FLA	28.2A
RPM	1440
Impeller	324 Diameter
Condenser Water Pumps	
Reference	CWP-01 / CWP-02
Make	Elanorm
City Required	2
Model	150-125-315 GC TO PO
Motor	30kW
Coupling	FR025 HF
Base Plate	1600x1600x140
Flow Rate	60 l/s
Head	37m
Motor	30kW
Absorbed Power	26.9kW
FLA	66.3A
RPM	1440
Impeller	330 Diameter
After Hours Chilled Water Pump	
Reference	CHWP-01
Make	Elanorm
City Required	2
Model	080-065-315 GC TO PO
Motor	11kW
Coupling	FR025 HF
Base Plate	1100x400x100
Flow Rate	17 l/s
Head	30m
Motor	11kW
Absorbed Power	7.4kW
FLA	22A
RPM	1440
Impeller	301 Diameter
After Hours Condenser Water Pump	
Reference	CWP-03
Make	Elanorm
City Required	2
Model	080-065-315 GC TO PO
Motor	11kW
Coupling	FR025 HF
Base Plate	1100x400x100
Flow Rate	17 l/s
Head	30m
Motor	11kW
Absorbed Power	7.4kW
FLA	22A
RPM	1440
Impeller	301 Diameter

Symbols Legend	
	INDICATES FULL BORE TRAPPED DRAIN POINT - BY BUILDER.

CHILLED WATER PIPING NOTES:	
1	ALL PIPE WORK AND FITTINGS SHALL BE INSTALLED AS PER THE SPECIFICATION.
2	ALL PIPING SHALL BE S.A.N.S 62 & 719 MEDIUM BLACK.
3	PIPE SIZES #15 TO #65 - S.A.N.S 62 MED BLACK BUTT WELDED ENDS TO ISO-R1 (8521) THREAD.
4	SIZE #80 TO #150 - S.A.N.S 62 MED BLACK BUTT WELDED.
5	SIZE #100 UPWARD - S.A.N.S 719 GRADE B MED BLACK BUTT WELDED WITH MINIMUM 6mm WALL THICKNESS.
6	ALL CHILLED WATER FITTINGS.
6.1	#15 TO #65 - SCREWED WALLEABLE CAST IRON
6.2	#80 UPWARDS - BUTT WELDED TO ASIS #16.9
7	ALL PIPE FLANGES UP TO 150# TO BE TABLE -D.
8	CHILLED WATER PIPE GASKETS.
8.1	FOR SCREWED PIPING USE THREAD SEAL (PTFE)
8.2	FOR FLANGES USE RUBBER INSERTION.
9	ALL FLANGE NUTS & BOLTS TO BE TO ASTM A193.
VALVES:	
1	ALL ISOLATING VALVES TO BE AS FOLLOWS:
2	#15 TO #65 - BALL VALVE, SCREWED BSP ENDS.
3	#80 TO #150 - LONG STEM BUTTERFLY VALVES.
PIPE INSULATION:	
1	ALL CHILLED WATER PIPING TO BE INSULATED AS PER THE SPECIFICATION.

Chillers Schedule															
Reference	Type	Make	Model	Water In	Water Out	Evap. kPa	Cond. kPa	l/s Evap.	l/s Cond.	Cooling Capacity	Power Voltage	Shipping Weight	Operating Weight	Total Amps	Count
CHILLER 01	Water Cooled Screw Compressor	Trane	RTHD D2 D1 E1	13 Deg Celcius	8.1 Deg Celcius	97.4	55.3	62	60.84	1172.73 kW	400V / 50Hz / 3Ph	5800 kg	6260 kg	455	1
CHILLER 02	Water Cooled Screw Compressor	Trane	RTHD D2 D1 E2	13 Deg Celcius	8.1 Deg Celcius	97.4	55.3	62	60.84	1172.73 kW	400V / 50Hz / 3Ph	5800 kg	6260 kg	455	1
CHILLER 03	Water Cooled Scroll Chiller	York	YCWLO34SE50	12 Deg Celcius	8 Deg Celcius	27	37.8	12.6	16.8	316.7 kW	400V / 50Hz / 3Ph	2338 kg	2481 kg	194.6	1

Heat Exchanger Schedule										
Reference	Make	Model	Volume Flow Rate [Hot Side]	Volume Flow Rate [Cold Side]	Outlet Temperature [Hot Side]	Outlet Temperature [Cold Side]	Pressure Drop [Hot Side]	Pressure Drop [Cold Side]	Weight	Count
PHEX-01	Alpha Laval	M15-MFG	66.5 l/s	62.0 l/s	6.0 Deg. Celcius	9.0 Deg. Celcius	60.9 kPa	2240 kPa	2240 kg	2
PHEX-02	Alpha Laval	T20-MFG	66.5 l/s	62.0 l/s	10.4 Deg. Celcius	10.0 Deg. Celcius	28.7 kPa	26.3 kPa	2270 kg	2

Make-Up Water Tanks Schedule									
Reference	Type	Make	Model	Connection	Max Pressure	Weight	Height	Diameter	Count
PT-01	Pressure Tank	Zimet	60L VERTICAL	25mm	10 Bar	17.0 kg	800 mm	380 mm	3

Icebank Tanks Schedule	
Make	Calmac
Model	1180 CA F
Net Usable Capacity	570 kWh
Maximum Operating Temperature	38 deg. Celcius
Maximum Operating Pressure	620 kPa
Weight Empty	610 kg
Weight Filled	7665 kg
Floor Loading	1900 kg/m2
Tanks New Quantity	15
Tanks Re-used Quantity	7
Total	22