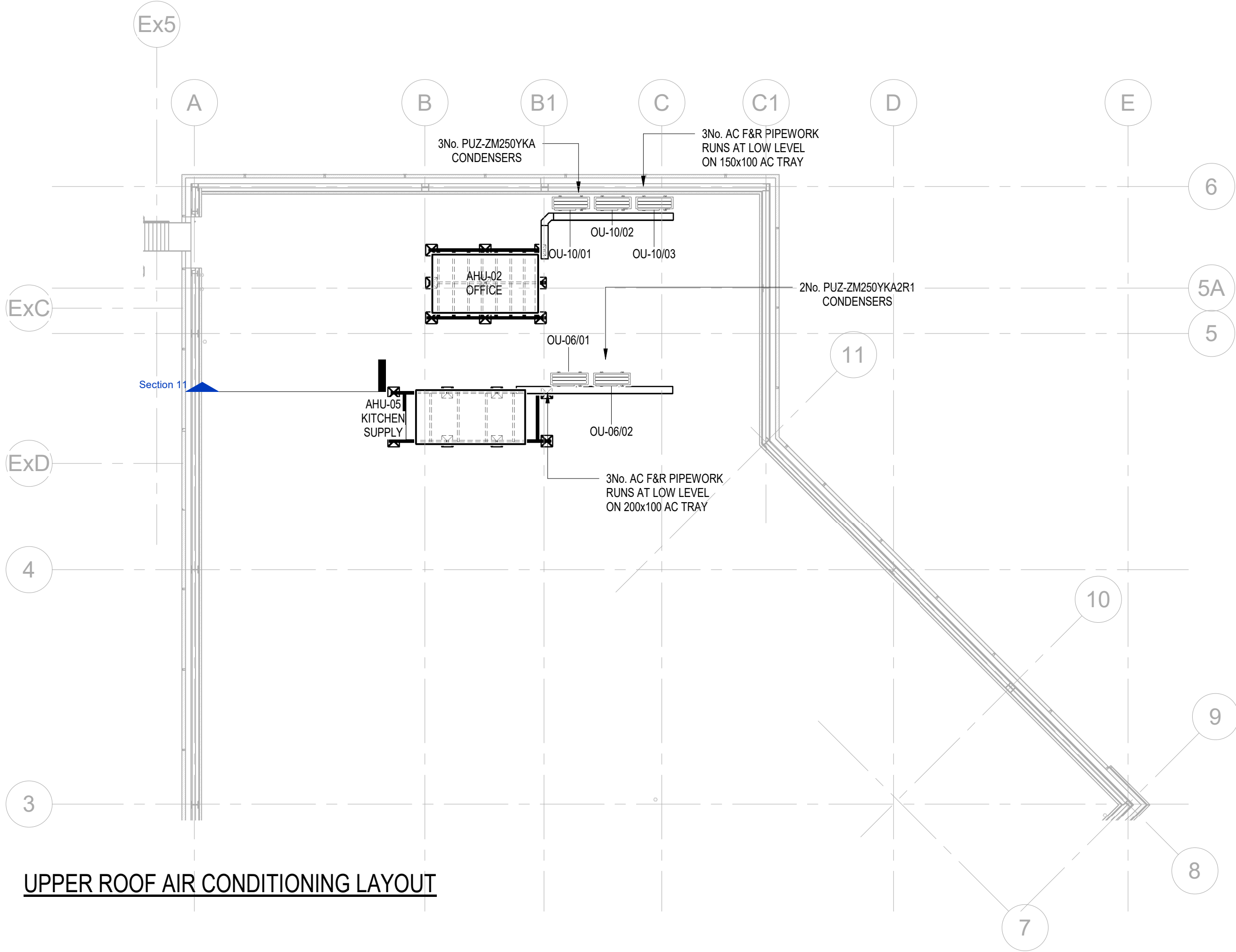
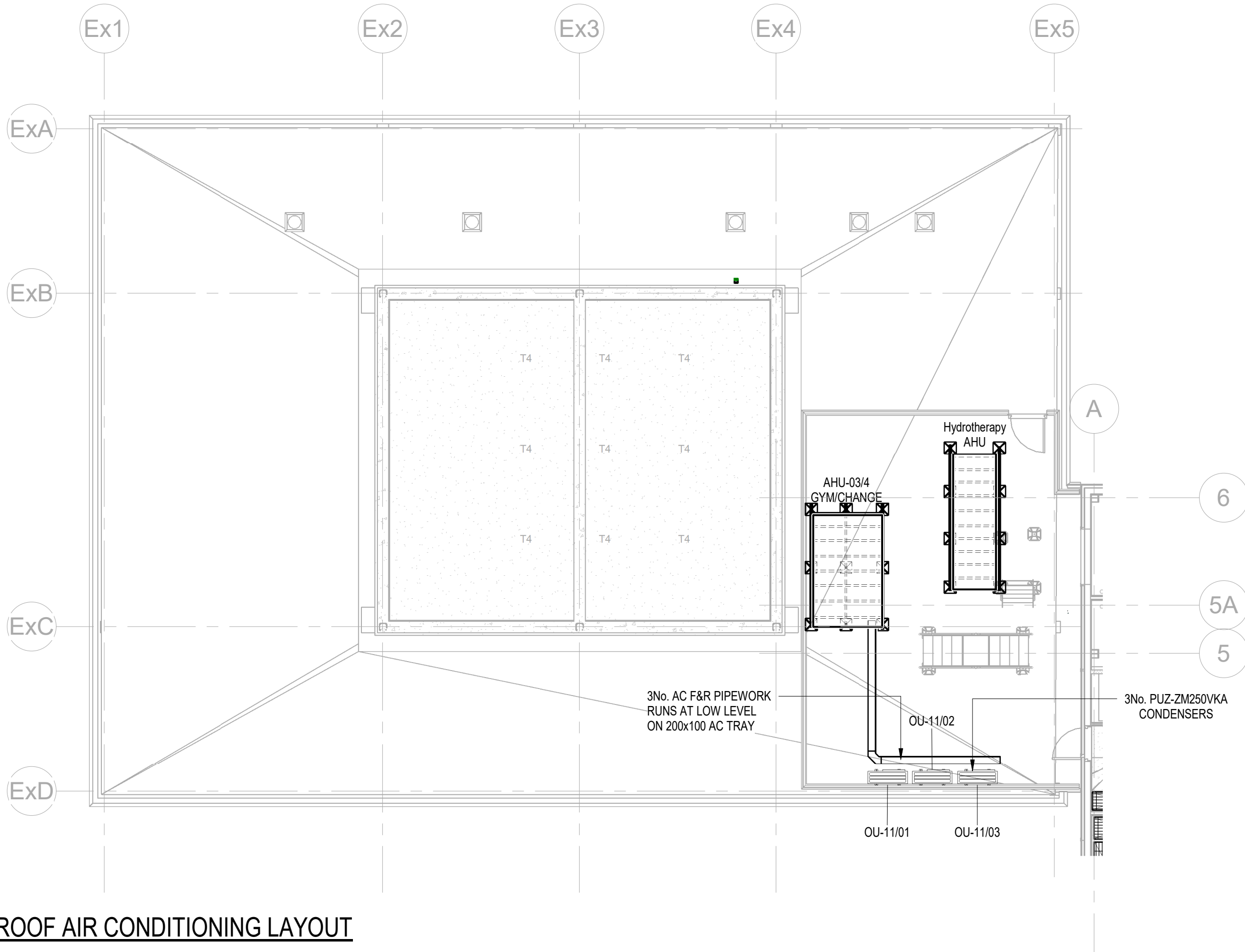


AIR CONDITIONING LEGEND	
SYMBOL	DESCRIPTION
	AC FLOW PIPEWORK
	AC RETURN PIPEWORK
	AC PIPEWORK TRAY
	AIR CONDITIONING CONTROLLER



UPPER ROOF AIR CONDITIONING LAYOUT



LOWER ROOF AIR CONDITIONING LAYOUT

HEATING / COOLING

1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT CONTRACT DRAWINGS & INFORMATION.
2. THIS DRAWINGS SHALL BE READ IN CONJUNCTION WITH BOTH THE ARCHITECTURAL AND STRUCTURAL ENGINEERING DRAWINGS
3. ALL PIPEWORK SHALL BE INSULATED AS DEFINED IN THE MECHANICAL SPECIFICATION UNLESS EXPOSED ADJACENT TO EMITTERS. EXPOSED PIPEWORK SHALL BE PAINTED TO THE ARCHITECT'S REQUIREMENTS.
4. PIPEWORK TO BE INSTALLED SUCH THAT NO HIGH POINTS OCCUR WITHIN ROOMS. MANUAL AIR VENTS / AIR BOTTLES / AUTOMATIC AIR VENTS TO BE INSTALLED AT ALL HIGH POINTS.
5. GENERAL ARRANGEMENT DRAWINGS DO NOT SHOW ALL NECESSARY VALVES, REFER TO DETAILS/SCHEMATIC DRAWINGS AND TECHNICAL SPECIFICATIONS FOR FULL REQUIREMENTS.
6. ALL EXTERNAL/EXPOSED PIPEWORK TO BE TRACE HEATED, INSULATED FOR FROST PROTECTION
7. THE UNDERFLOOR HEATING ZONES SHALL BE DEVELOPED BY THE UNDERFLOOR HEATING SPECIALIST TO INCLUDE ALL NECESSARY PIPE COILS AND TO CO-ORDINATE WITH ANY FIXED EQUIPMENT OR FURNITURE.
8. THE UNDERFLOOR HEATING SPECIALIST WILL SURVEY THE STRUCTURAL FLOOR SLAB AND CONFIRMING ITS SUITABILITY PRIOR TO COMMENCING WORKS.
9. ALL PIPEWORK DROP LOCATIONS SHALL BE AGREED WITH THE ARCHITECT. THE PROVISION OF BOXING DETAILS FOR PIPEWORK DROPS ARE TBC BY THE ARCHITECT.
10. REFRIGERATION LINES SHALL BE MOUNTED ON BASKET TRAY.
11. ALL PLANT AND EQUIPMENT IS TO BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS WITH ALLOWANCES FOR COMMISSIONING AND MAINTAINANCE.
12. ALL WALL MOUNTED FAN COIL UNITS SHALL BE MOUNTED AT A MINIMUM OF 100mm FROM CEILING LEVEL TO TOP OF UNIT

LEGEND

- LTHW - LOW TEMP HOT WATER
- VT - VARIABLE TEMPERATURE CIRCUIT
- CT - CONSTANT TEMPERATURE CIRCUIT
- UFHM - UNDER FLOOR HEATING MANIFOLD
- FCU - FAN COIL UNIT
- ODH - OVER DOOR HEATER
- AC - AIR CONDITIONING UNIT
- RP - RADIANT PANEL
- AHU - AIR HANDLING UNIT
- IDX - INDOOR COOLING UNIT
- ODX - OUTDOOR CONDENSING UNIT
- IV - ISOLATION VALVE
- SV - SAFETY VALVE
- PU - PRESSURISATION UNIT
- CS - COMMISSIONING STATION
- DC - DRAIN VALVE
- TP- TEST POINT
- T - TEMPRETURE GAUGE
- NRV- NON RETURN VALVE
- ACC - AIR COOLED CHILLER
- PH - PUMP & NUMBER
- STR - STRAINER



BUILDING SERVICES ENGINEERS
LIVERPOOL

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REVISION	ITEM REVISED	DATE
P01	PRELIMINARY ISSUE	24.04.25
P02	PRELIMINARY ISSUE	28.05.25
C01	CONSTRUCTION ISSUE	12.06.25
C02	CONSTRUCTION ISSUE- UPDATED AHU REFERENCE	17.07.25

CONSTRUCTION

CLIENT



ARCHITECT

Bowker
Sadler

CONTRACT

MCWFC

TITLE

ROOF - HEATING & COOLING SERVICES

DRAWN

SK

CHECKED

PG

SCALE

As indicated @ A1

DATE

FEB 24

DRAWING No

Z30565-ABE-ZZ-RF-DR-M-1102

REV

C02



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