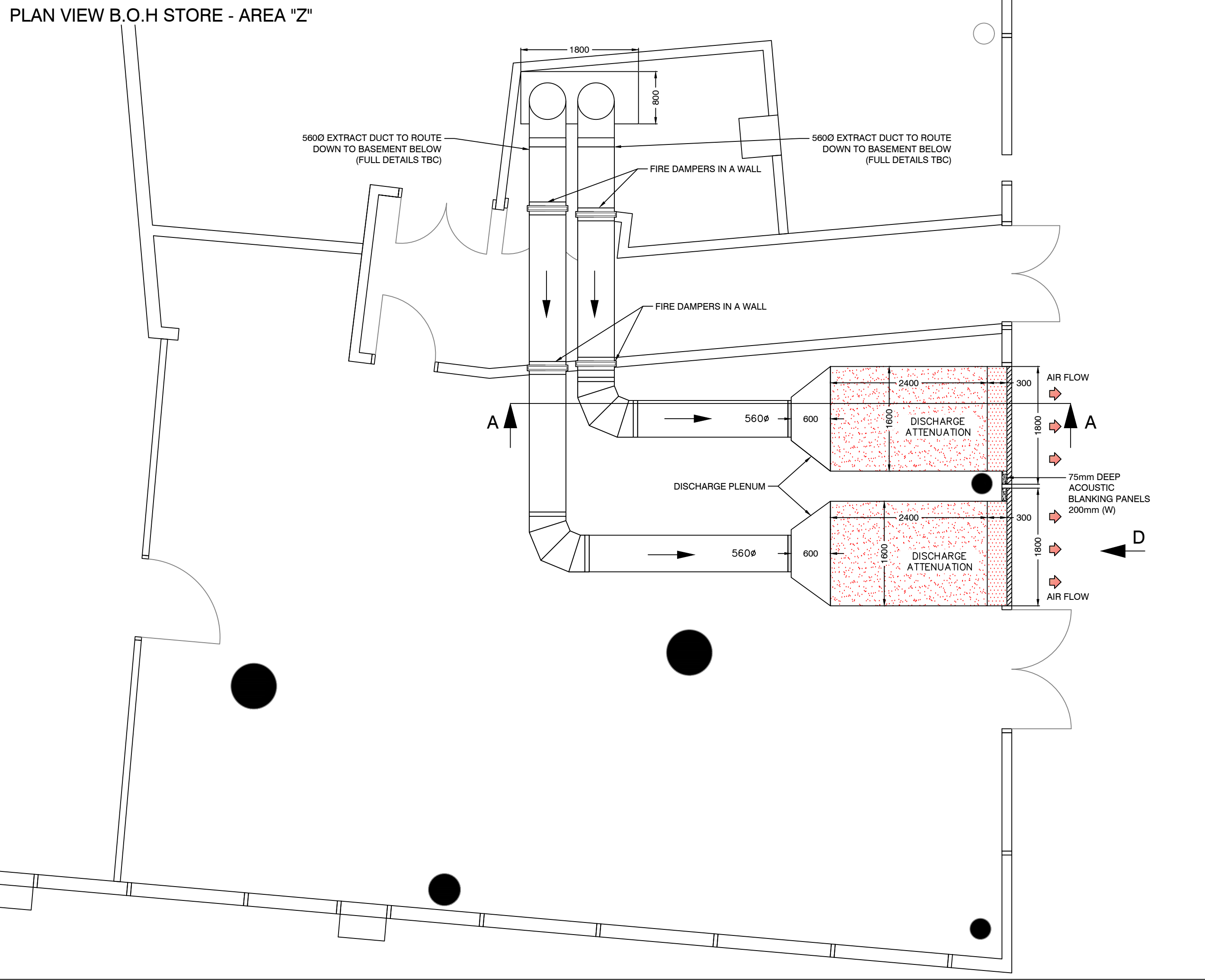


PLANT AREAS & DETAILS @ 1:50

PLAN VIEW B.O.H STORE - AREA "Z"



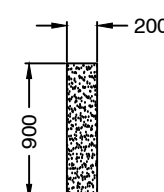
PLEASE NOTE:

NOISE EMISSIONS FROM THE GAS COOLER DISCHARGE LOUVRES HAVE BEEN PREDICTED AT THE NEAREST NOISE SENSITIVE RECEPTORS. APPROPRIATE ATMOSPHERIC-SIDE ATTENUATORS HAVE BEEN SELECTED TO ENSURE LOCAL AUTHORITY NOISE REQUIREMENTS WILL BE MET.

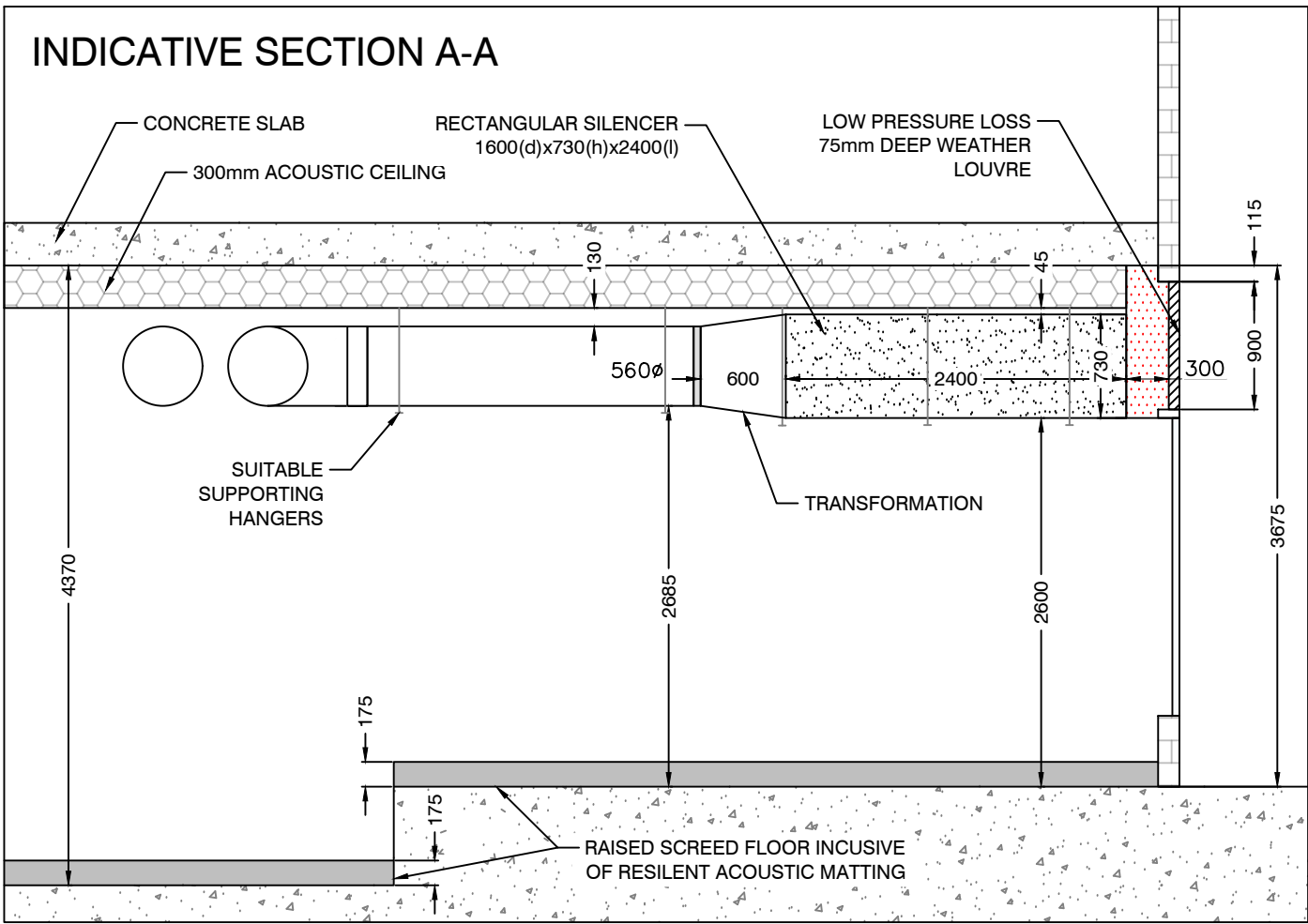
THE GAS COOLER IS LOCATED INSIDE A BASEMENT CAR PARK A CONSIDERABLE DISTANCE FROM THE CAR PARK ENTRANCE. NOISE BREAKOUT FROM THE COOLER ITSELF EMANATING FROM THE CAR PARK ENTRANCE IS LIKELY TO BE INSIGNIFICANT AND, THEREFORE, HAS NOT BE PREDICTED AT THE NEAREST RECEPTORS.

AS REQUESTED BY OTHERS, THE CO2 EXTRACT DISCHARGES INTO THE MAIN CAR PAK SPACE.

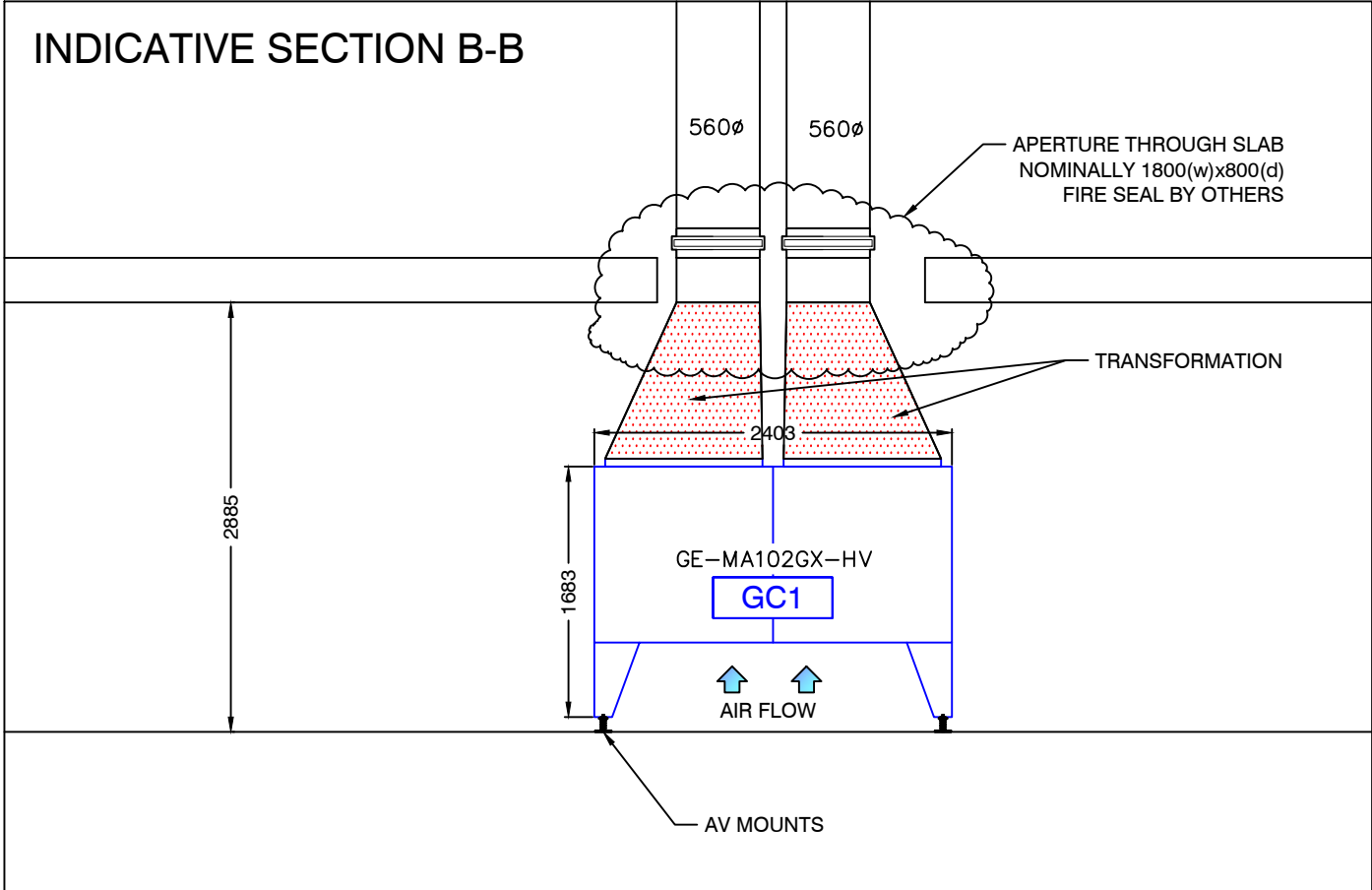
2No. 75mm DEEP ACOUSTIC PANELS
200mm (L) x 75mm (W) x 900mm (H)



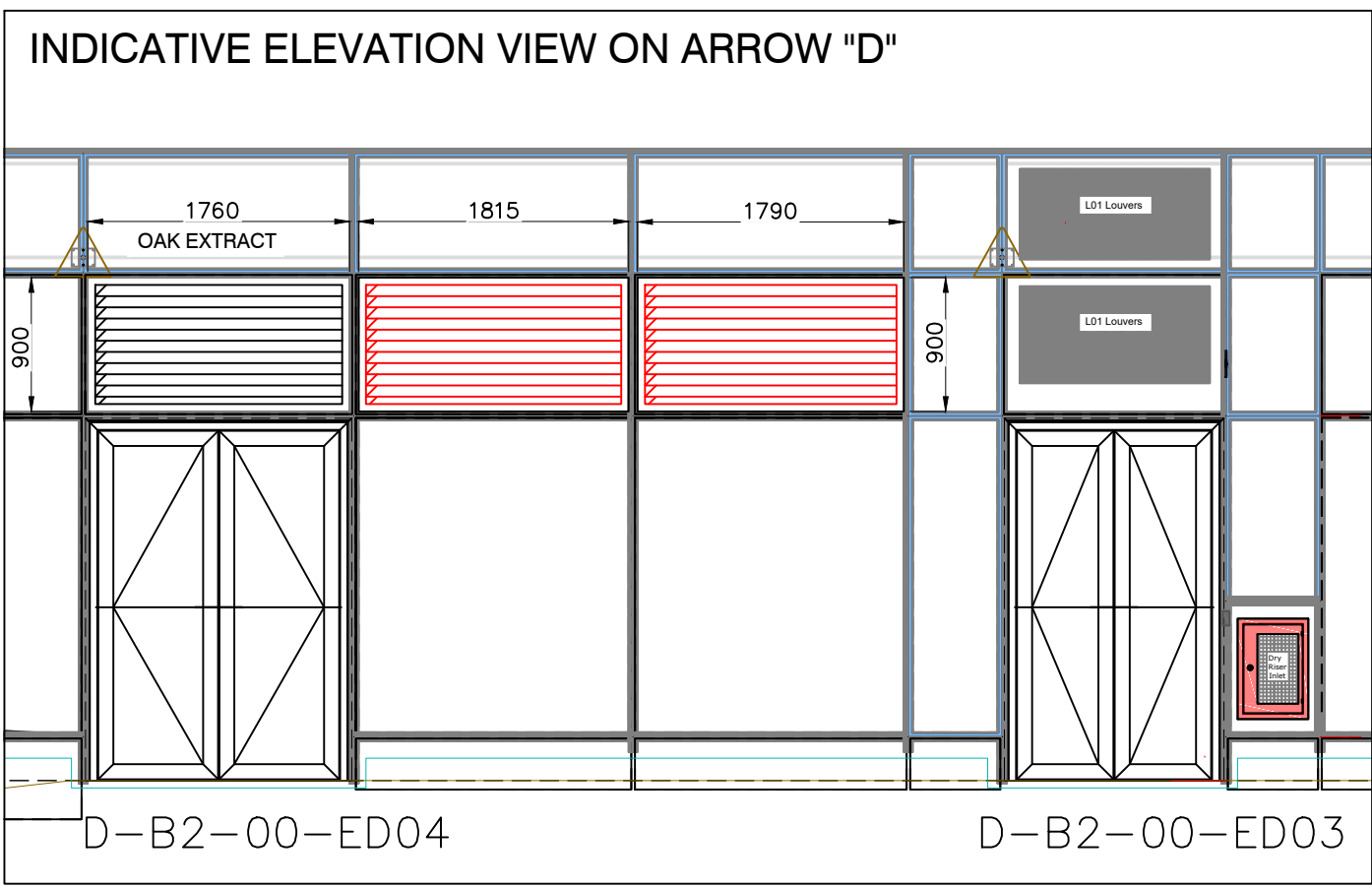
INDICATIVE SECTION A-A



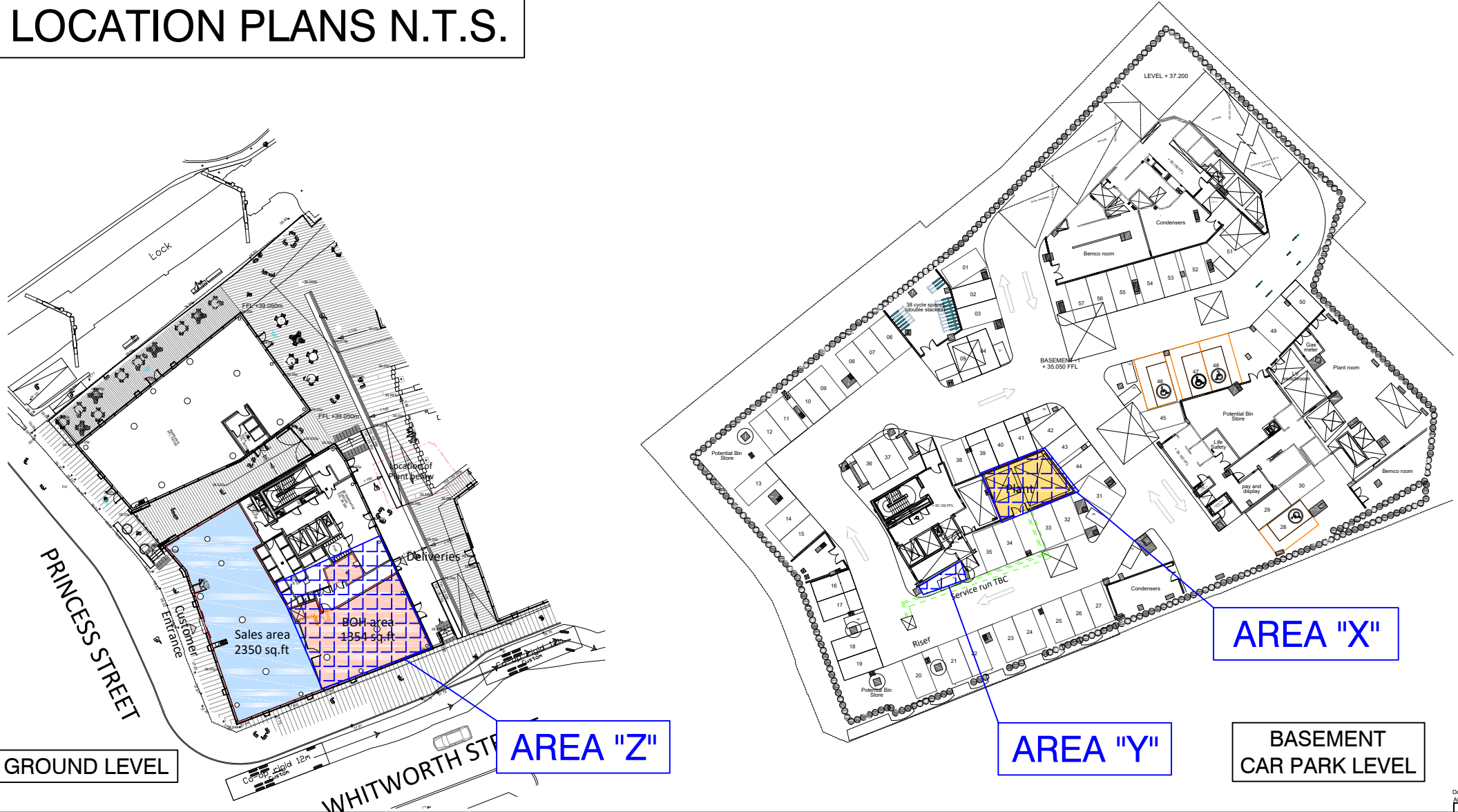
INDICATIVE SECTION B-B



INDICATIVE ELEVATION VIEW ON ARROW "D"

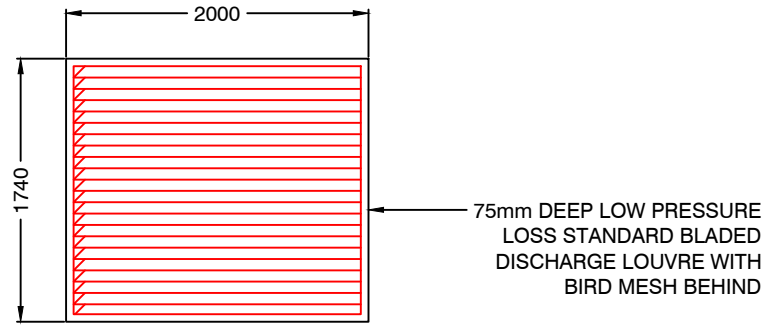


LOCATION PLANS N.T.S.

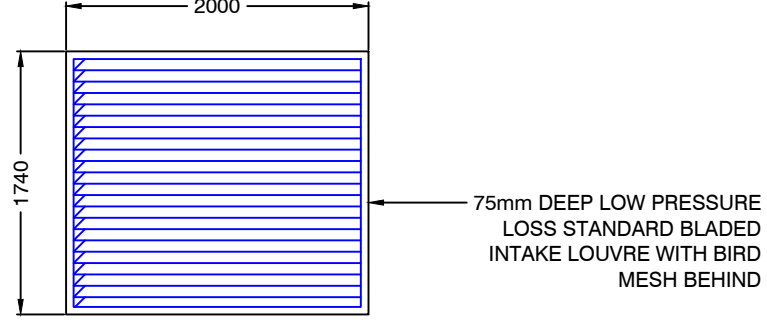


PLANT AREA & DETAILS BASEMENT CAR PARK LEVEL @ 1:50

DISCHARGE LOUVRE ELEVATION



INTAKE LOUVRE ELEVATION

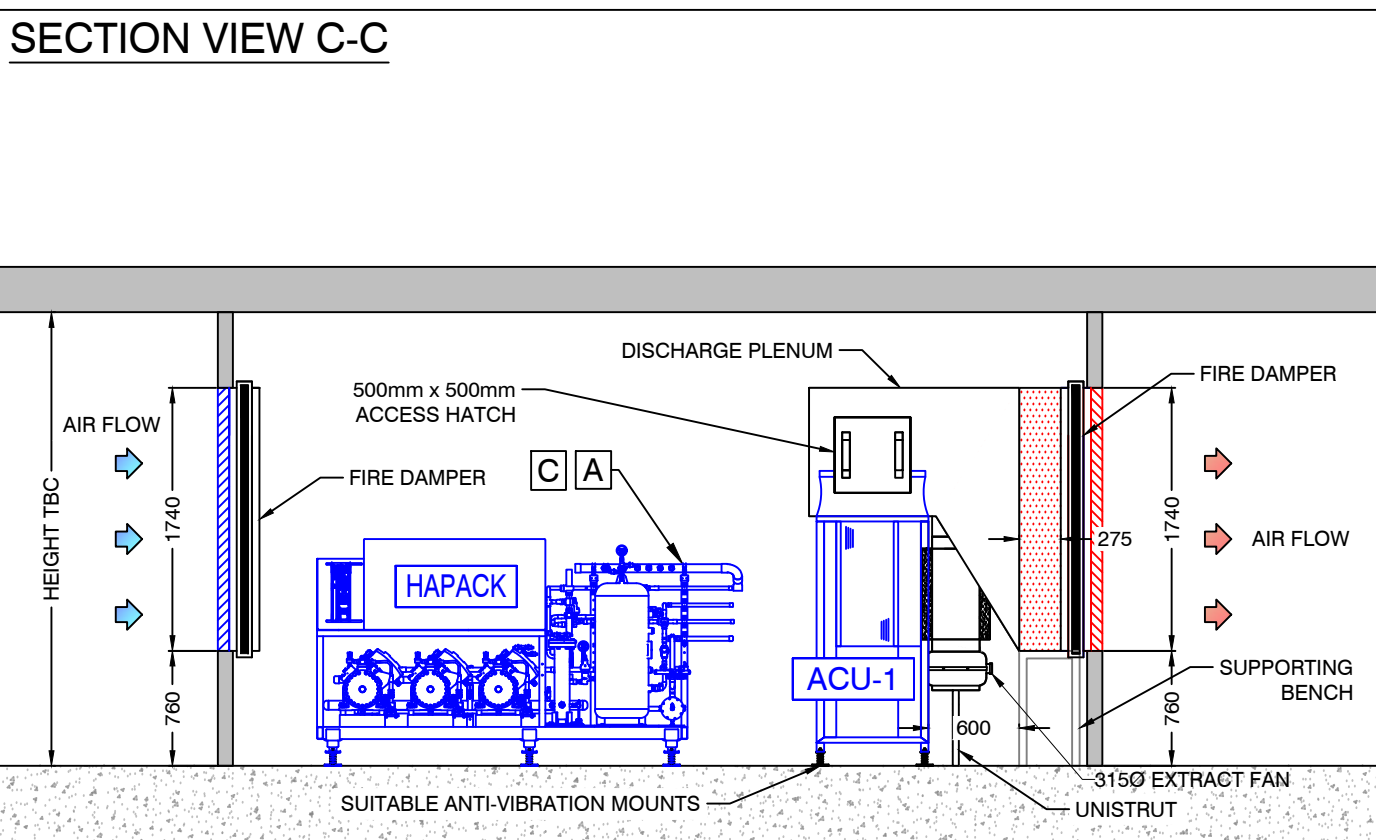


PLEASE NOTE:

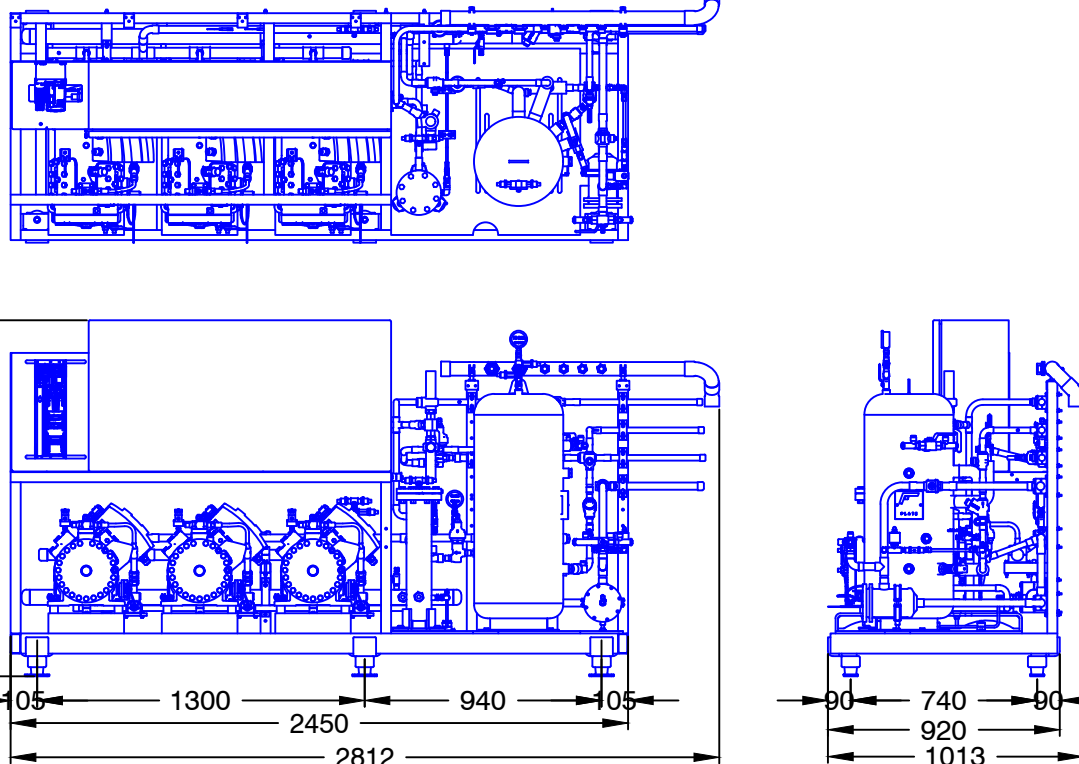
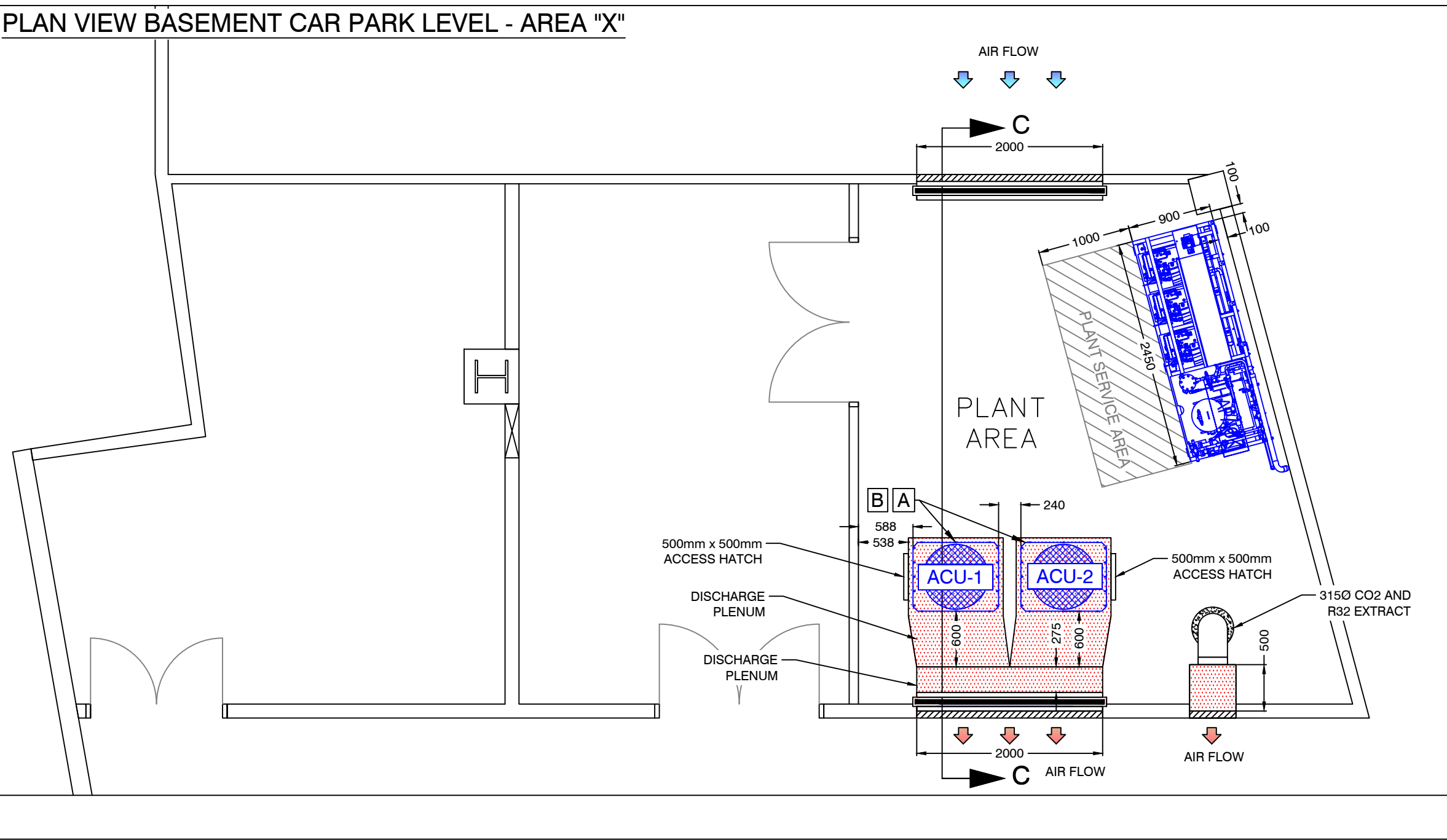
THE VRF/PAK PLANT ROOM IS LOCATED INSIDE A BASEMENT CAR PARK A CONSIDERABLE DISTANCE FROM THE CAR PARK ENTRANCE. NOISE FROM THE PLANT ROOM EMANATING FROM THE CAR PARK ENTRANCE IS LIKELY TO BE INSIGNIFICANT AND, THEREFORE, HAS NOT BE PREDICTED AT THE NEAREST RECEPTORS.

AS REQUESTED BY OTHERS, THE CO2 EXTRACT DISCHARGES INTO THE MAIN CAR PAK SPACE.

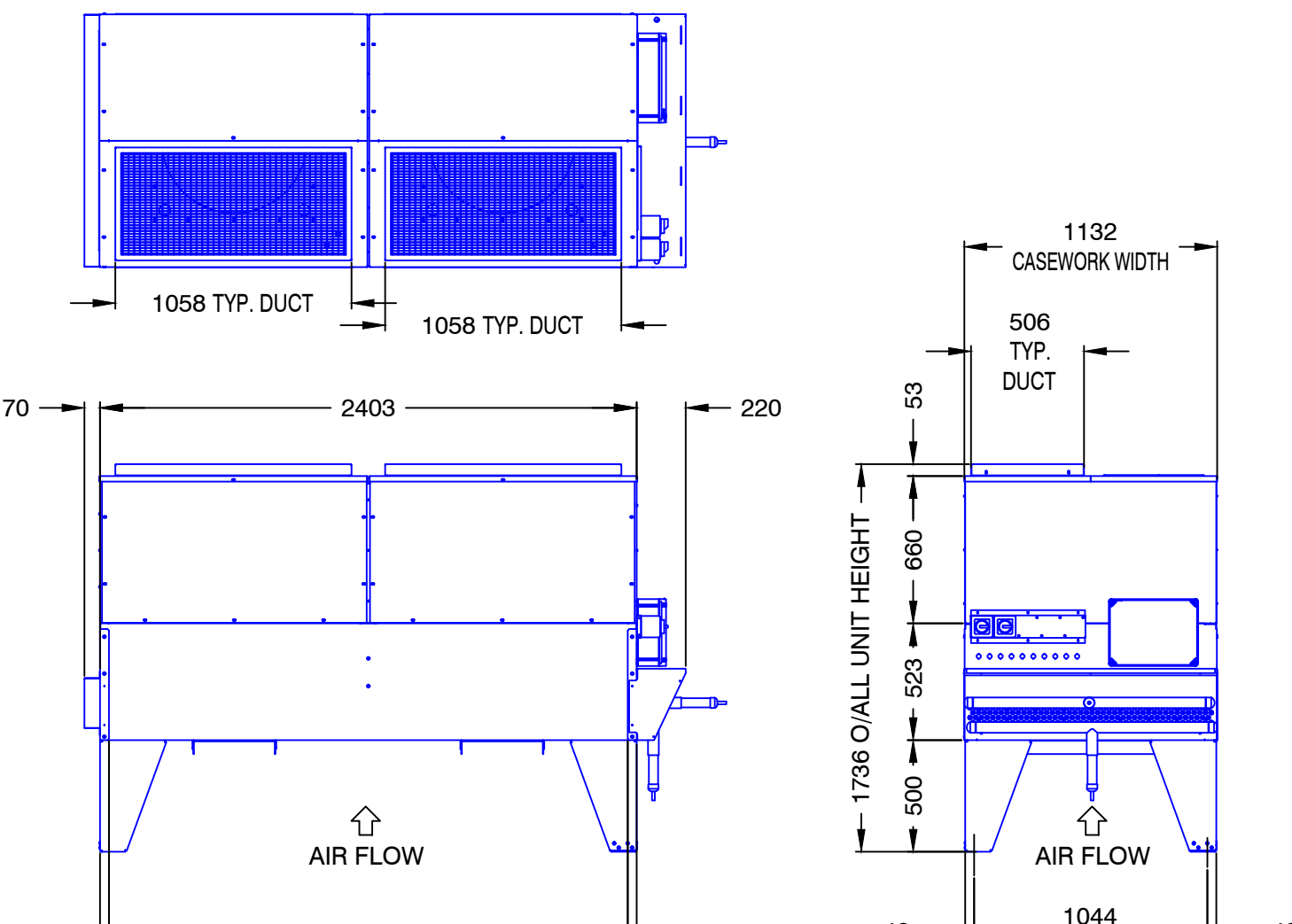
SECTION VIEW C-C



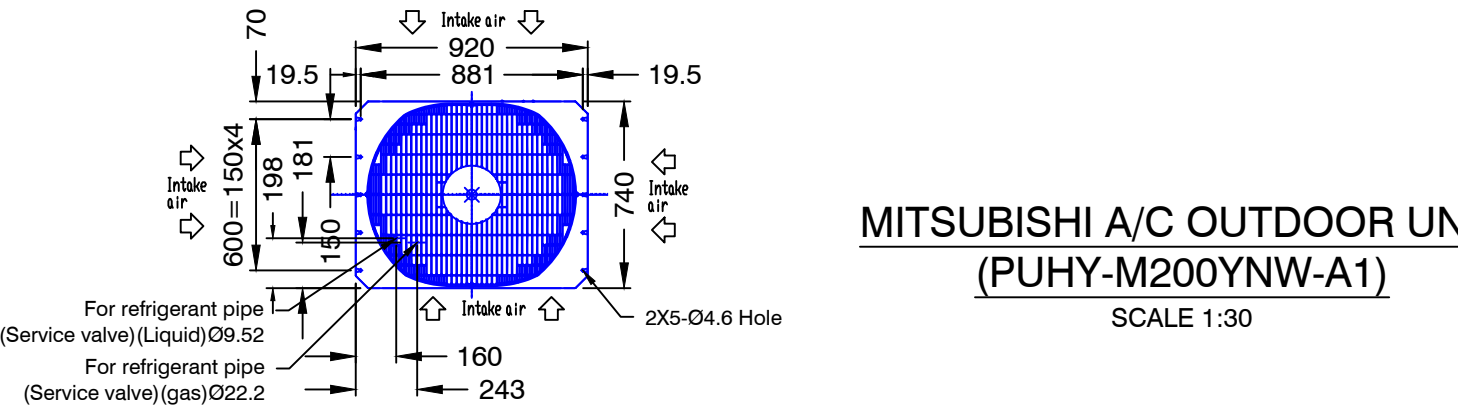
PLAN VIEW BASEMENT CAR PARK LEVEL - AREA "X"



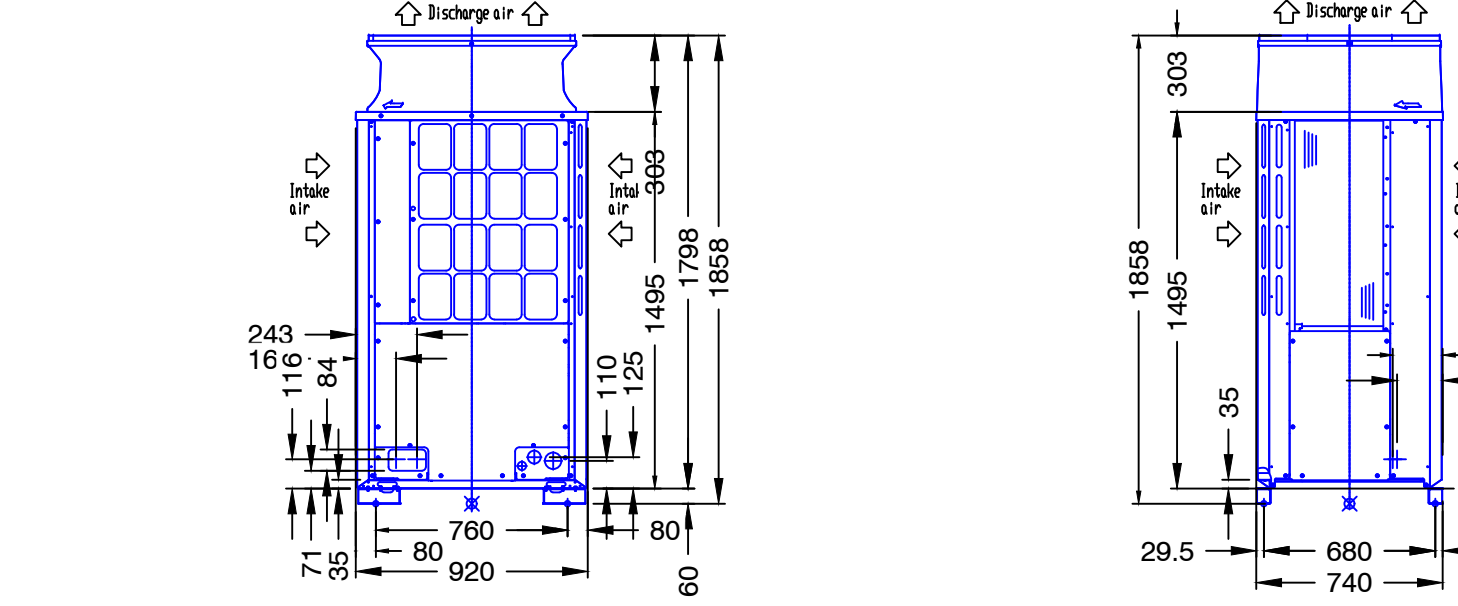
SPACE ENGINEERING PACK
SCALE 1:30



GAS COOLER - GE-MA102G3-063B-AM
SCALE 1:30



MITSUBISHI A/C OUTDOOR UNIT
(PUHY-M200YNW-A1)
SCALE 1:30



HAPACK		Space Engineering		ST 3A (Unhoused)		REFRIGERATION PACK SELECTION				PACK DETAILS						R744
Reference	Asset Number	Compressor Model	Manufacturer	New/Exist	SST (°C)	Evap Capacity (kW)	THR (kW)	Design current (A/ph)	Full load Current (A/ph)	Electrical Connection	Length (mm)	Width (mm)	Height (mm)	Weight (kg)	Max dBA Rating @ 10m	
HA1	TBC	4MTL-07X (INV)	Copeland	New	-6	12.20	19.30	14.22	17.50	415v/3ph/50hz	2932	1130	1458	650 (DRY)	50 @ 10M Free Field	
HA2	TBC	4MTL-07X	Copeland	New	-6	12.10	19.00	12.48	17.50							
HA3	TBC	4MTL-07X	Copeland	New	-6	12.10	19.00	12.48	17.50							
PACK TOTALS						36.40	57.30	39.18	52.50	Pressure Relief Valves (High):			Pressure Relief Valves (Low):			

GAS COOLER SELECTION														
Reference	Asset Number	Model	Manufacturer	New / Existing	Refrigerant	Gas Outlet / Ambient Temperature (°C)	TD (K)	THR (kW)	Current @ Design (per fan) (A)	Full Load Current (A)	Supply Voltage & Phase	Run speed signal voltage (0-10v) (Day / Night)	RDM Setback Setting (Day / Night)	Weight (kg)
GC1	TBC	GE-MA102G3-HV-063B-AM	KELVION	New	R744	37 / 35	2	63.20	4.2	5.9	415v/3ph/50hz	7.8	22 / 22	414

AIR CONDITIONING - SELECTION DETAILS														
Item (Sys-FCU)	Asset Number	Model	Make	New/Existing	Type	Refrigerant	Position	Duty - Cooling (kW)	Duty - Heating (kW)	MCB Rating	Electrical Connections	FLA	Weight (kgs)	Refrigerant weight (kg)
ACU-1		PUHY-M200YNW-A1	Mitsubishi	New	VRF Outdoor Unit	R32	Plantroom	22.4	25	20	380/415/50hz	16.1	222	11.5
ACU-2		PUHY-M200YNW-A1	Mitsubishi	New	VRF Outdoor Unit	R32	Plantroom	22.4	25	20	380/415/50hz	16.1	222	11.5

* FBOU (Fed by outdoor unit)



AB Group - Head Office
Bank Chambers, 2 Church Street,
Reigate, Surrey, RH2 0AN.

AB Group - Northern Office
Fourways House, 57 Hilton Street,
Manchester, M1 2EJ.

AB Group - Ipswich Office
Bristol Court, Betts Ave, Martlesham,
Ipswich, IP5 3RY

Tel: 0333 9000 180

Web: abgroup.com

SCALE 1:50

DO NOT SCALE

LEGEND

HA01-1 FIXTURE NUMBER

SERVICE AREA

KEYCLAMP

HIT & MISS FENCING

PLEASE NOTE THAT ALL CDM DESIGN / WORKS BY MAIN CONTRACTOR

NOTES

- A SMOOTH AND LEVEL BASE CONCRETE PLINTH REQUIRED FOR REFRIGERATION PLANT AND AC OUTDOOR UNITS - TO BE PROVIDED BY THE BUILDER.
- B AC UNIT - REQUIRED TO BE MOUNTED ON SUITABLE ANTI-VIBRATION PAD.
- C COMPRESSOR PACK - TO BE MOUNTED ON SUITABLE ANTI-VIBRATION MOUNT.
- D GAS COOLER - TO BE MOUNTED ON SUITABLE ANTI-VIBRATION PAD.
- E MINIMUM PLANT AREA FENCE TO BE 2.4M HIGH.
- F GAS COOLERS ARE SUPPLIED WITH ISOLATOR & CONTROL PANEL ON THE PIPE END, UNLESS OTHERWISE STATED.

PRELIMINARY

Site Address: Co-op Manchester, New Square
Princess Street, Manchester, M1 3NY

Drawing Title: PROPOSED REFRIGERATION PLANT
LAYOUT BASEMENT & ROOF AREA

Consultant: -

Design Engineer: D. Barnes

Date: 25.06.21

Drawn By: DD

01	Corrections made to format. No other revisions made	BSD	02.12.21	Checked By: D. Barnes	Drawing No: CR3 (A0)
00	Preliminary Issue	DD	25.06.21	Revision: 01	Scale: Various @ A0
Revision	Details	Drawn	Date	Contract No: QRC4348	Derived File: P1F4M0