

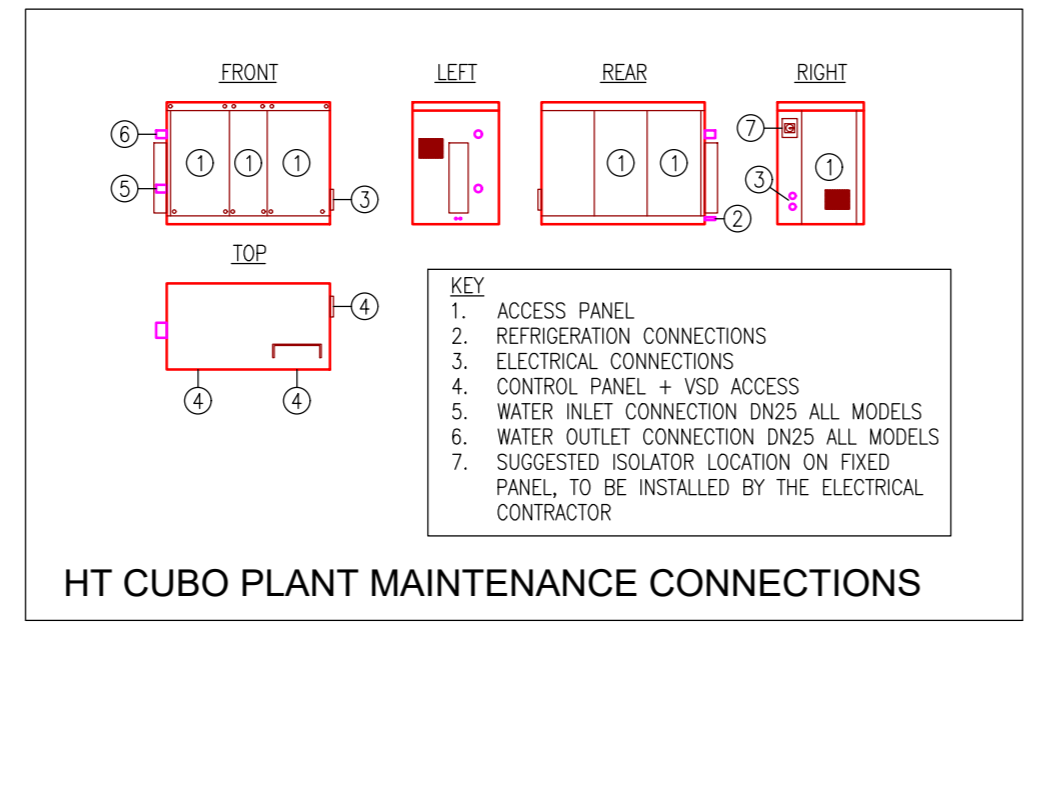
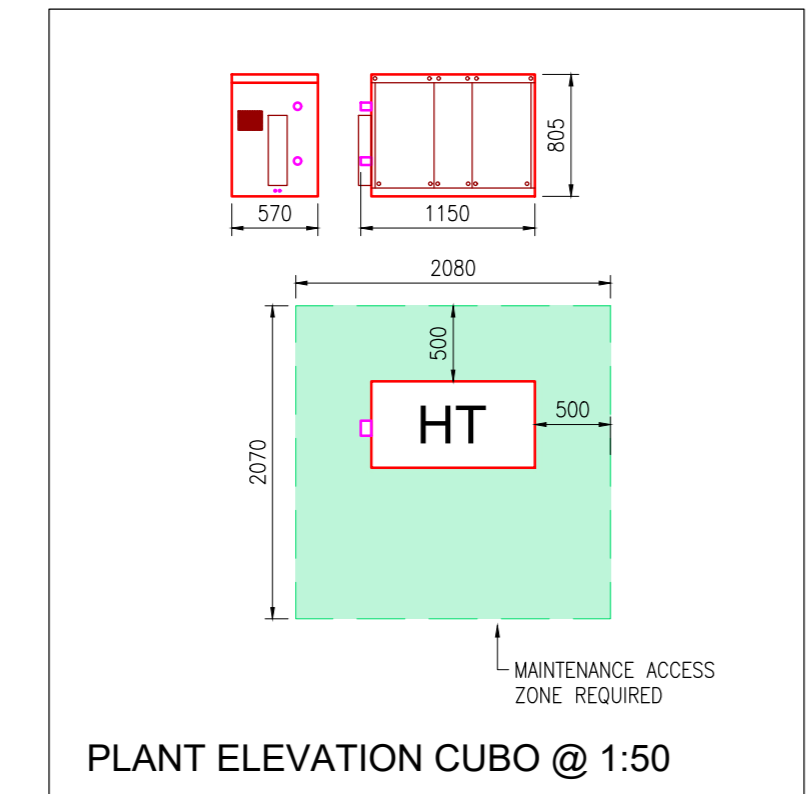
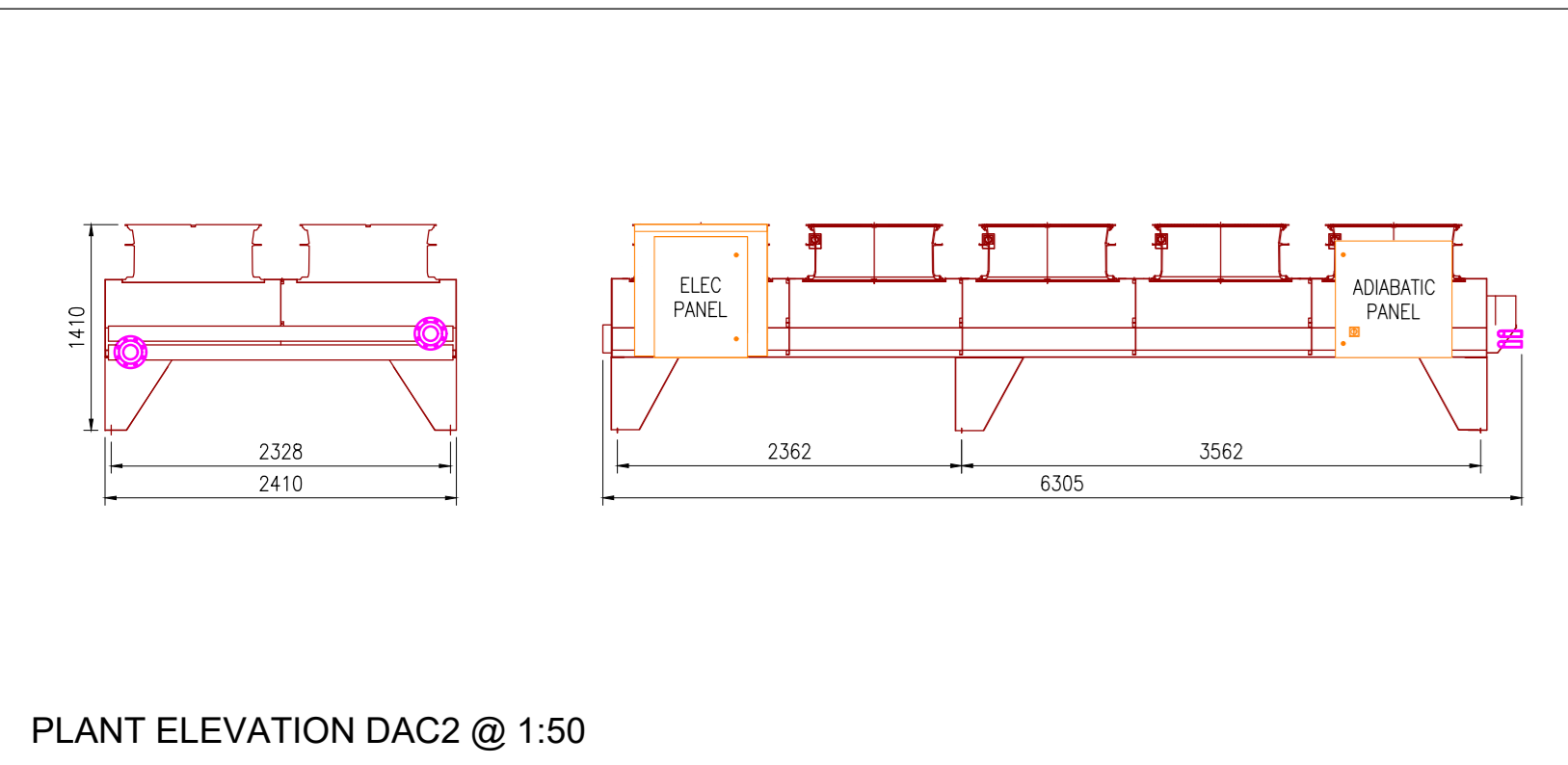
STORE RELATED										PLANT SELECTION										INSTALLATION										MECHANICAL / CAPACITY										ELECTRICAL & COMMS										ENGINEERING REV F
DAC REFERENCE NUMBER	YEAR OF INSTALL	STATUS	SUPPLIER	DAC MODEL REFERENCE	COASTAL / CORROSIVE ATMOSPHERE	COL / FIN MATERIAL CONSTRUCTION	APPROXIMATE UNIT HEIGHT INCLUDING FLUID (MM)	UNIT NOISE RATING (DB(A) @ 10M)	DESIGN MAXIMUM FAN SPEED (RPM)	DESIGN FAN CONTROL VOLTAGE REQUIRED (V)	HORIZONTAL OR VERTICAL INSTALLATION	HEIGHT OF LESS IF FITTED (MM)	ADIABATIC - INDIVIDUAL OR SHARED PANEL	DAC FLUID IN TEMP (°C)	DAC FLUID OUT TEMP (°C)	DAC COL FLUID PD (PA)	TOTAL COL VOLUME (L)	DAC CAPACITY (MM)	SUPPLY REQUIRED (VOLTS-PHASES-HZ)	TOTAL NUMBER OF FANS	FAN DIAMETER (MM)	FULL LOAD CURRENT PER FAN MOTOR (A)	TOTAL DAC FAN MOTOR FULL LOAD CURRENT (A)	REQUIRED SUPPLY FAN BANK A (A)	REQUIRED SUPPLY FAN BANK B (A)	CONNECT TO ALARM ZONE																								
DACT	2020	EXISTING	CLADE	ASL-ZAP-EC-143-ECMP-352-H	NO	CH/AM/2	870	25	352		HORIZONTAL	500	INDIVIDUAL	44	40	84	54.18	46	400V 3PH-N	6	800	3	12																											

STORE RELATED										PLANT SELECTION										INSTALLATION										MECHANICAL / CAPACITY										ELECTRICAL & COMMS										ENGINEERING REV G
DAC REFERENCE NUMBER	YEAR OF INSTALL	STATUS	SUPPLIER	DAC MODEL REFERENCE	COASTAL / CORROSIVE ATMOSPHERE	COL / FIN MATERIAL CONSTRUCTION	APPROXIMATE UNIT HEIGHT INCLUDING FLUID (MM)	UNIT NOISE RATING (DB(A) @ 10M)	DESIGN MAXIMUM FAN SPEED (RPM)	DESIGN FAN CONTROL VOLTAGE REQUIRED (V)	HORIZONTAL OR VERTICAL INSTALLATION	HEIGHT OF LESS IF FITTED (MM)	ADIABATIC - INDIVIDUAL OR SHARED PANEL	DAC FLUID IN TEMP (°C)	DAC FLUID OUT TEMP (°C)	DAC COL FLUID PD (PA)	TOTAL COL VOLUME (L)	DAC CAPACITY (MM)	SUPPLY REQUIRED (VOLTS-PHASES-HZ)	TOTAL NUMBER OF FANS	FAN DIAMETER (MM)	FULL LOAD CURRENT PER FAN MOTOR (A)	TOTAL DAC FAN MOTOR FULL LOAD CURRENT (A)	REQUIRED SUPPLY FAN BANK A (A)	REQUIRED SUPPLY FAN BANK B (A)	CONNECT TO ALARM ZONE																								
DAE2	2024	NEW	WEATHERITE	WD421200	NO	CH/AM/2	2,363	33	300		HORIZONTAL	500	INDIVIDUAL	44	40	49	184.24	342	400-3-50	10	800	3	30	15	15																									

STORE RELATED										PLANT SELECTION										INSTALLATION										MECHANICAL										REFRIGERATION										ELECTRICAL & COMMS										ENGINEERING REV C
PLANT REFERENCE NUMBER	YEAR OF INSTALL	STATUS	SUPPLIER	PLANT MODEL REFERENCE	SST (°C)	APPLICATION	APPROXIMATE UNIT HEIGHT (MM)	UNIT NOISE RATING (DB(A) @ 10M)	HEAT LOAD TO WATER CIRCUIT (kW)	FLUID FLOW RATE (kg/h)	MAXIMUM FLUID PRESSURE DROP (kPa) / REF. UNIT	REFRIGERANT TYPE	REFRIGERANT CHARGE (kg)	EVAPORATOR MODEL / NO. OF CONNECTIONS	COMPRESSOR MODEL / NO. OF MORE THAN ONE	RECEIVER SIZE (L) PER CLASSIFICATION	DESIGN MAXIMUM PRESSURES HIGH/L/LO/DC (BAR)	MINIMUM REFRIGERATION CAPACITY (kW)	SUPPLY REQUIRED (VOLTS-PHASES-HZ)	FULL LOAD CURRENT PER COMPRESSOR (A)	DESIGN CURRENT PER COMPRESSOR (A)	START CURRENT PER COMPRESSOR (A)	CONDENSING UNIT DESIGN CURRENT (A)	CONDENSING UNIT FULL LOAD CURRENT (A) - READ NOTE AT BOTTOM OF TABLE	COLORBOND CONTROLLER SUPPLIER AND MODEL	CONNECT TO ALARM ZONE																																		
HT5	2024	NEW	SCM	CUBO2 UNIT HQ T83 MTOX	-8	MEAT / DELI / FRV	150	41	10.70	0.29	25.00	R744	400g	105_105_100	DT42NF-10P2	8 / 8	120/8/20	1.1 / 2.8	230V 1PH					287	CAREL																																			
HT6	2024	NEW	SCM	CUBO2 UNIT HQ T83 MTOX	-8	MEAT / FRV	150	41	7.80	0.21	20	R744	400g	106_106_100	DT42NF-10P2	8 / 8	120/8/20	0.8 / 2.3	230V 1PH					287	CAREL																																			
HT8	2024	NEW	SCM	CUBO2 UNIT HQ T83 MTOX	-8	DAIRY	150	41	5.00	0.18	15	R744	400g	106	DT30NF-10P2	8 / 8	120/8/20	0.4 / 2.8	230V 1PH					248	CAREL																																			
HT9	2024	NEW	SCM	CUBO2 UNIT HQ T83 MTOX	-8	DAIRY	150	41	5.00	0.18	15	R744	400g	107	DT30NF-10P2	8 / 8	120/8/20	0.4 / 2.8	230V 1PH					248	CAREL																																			

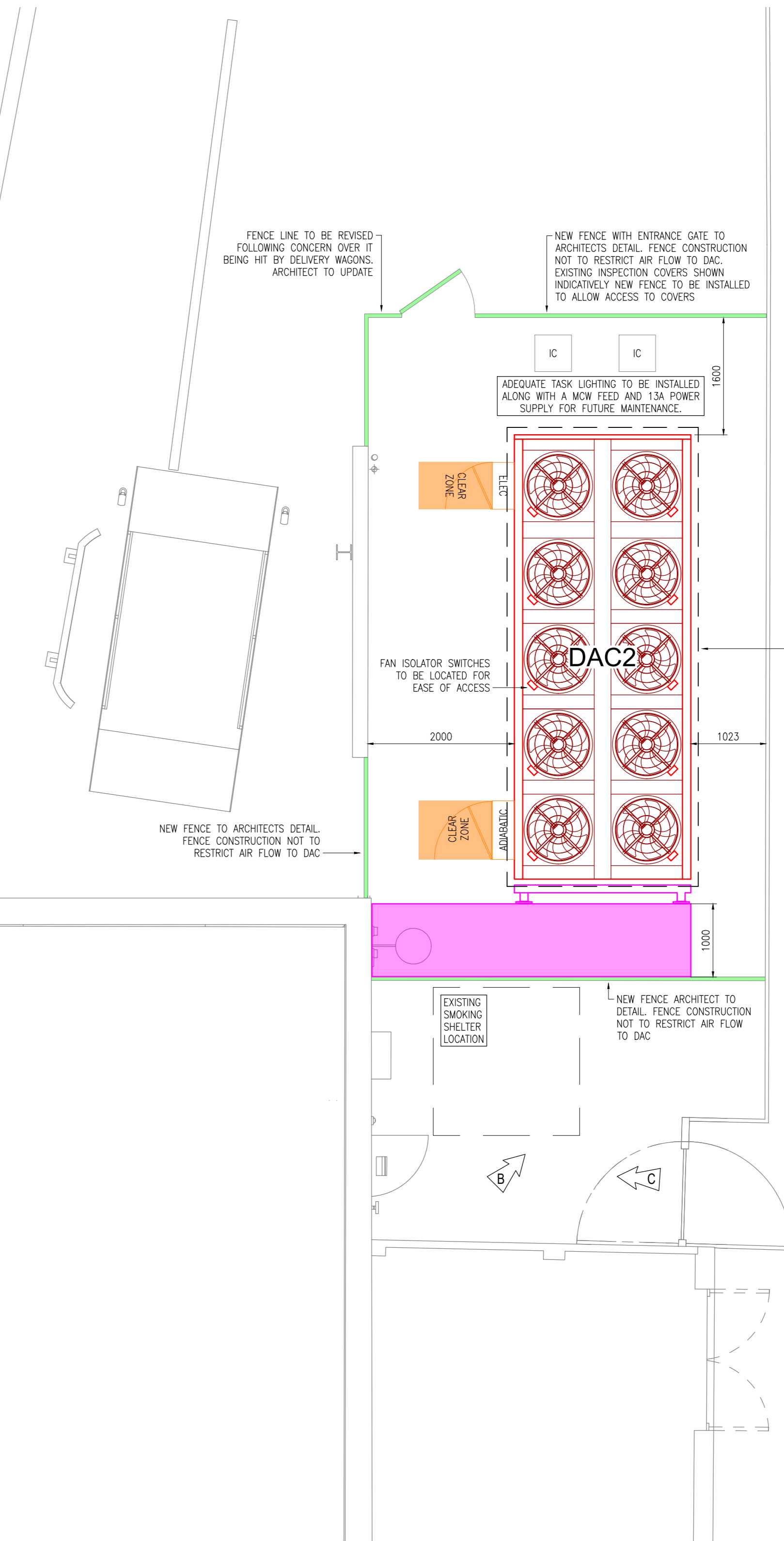
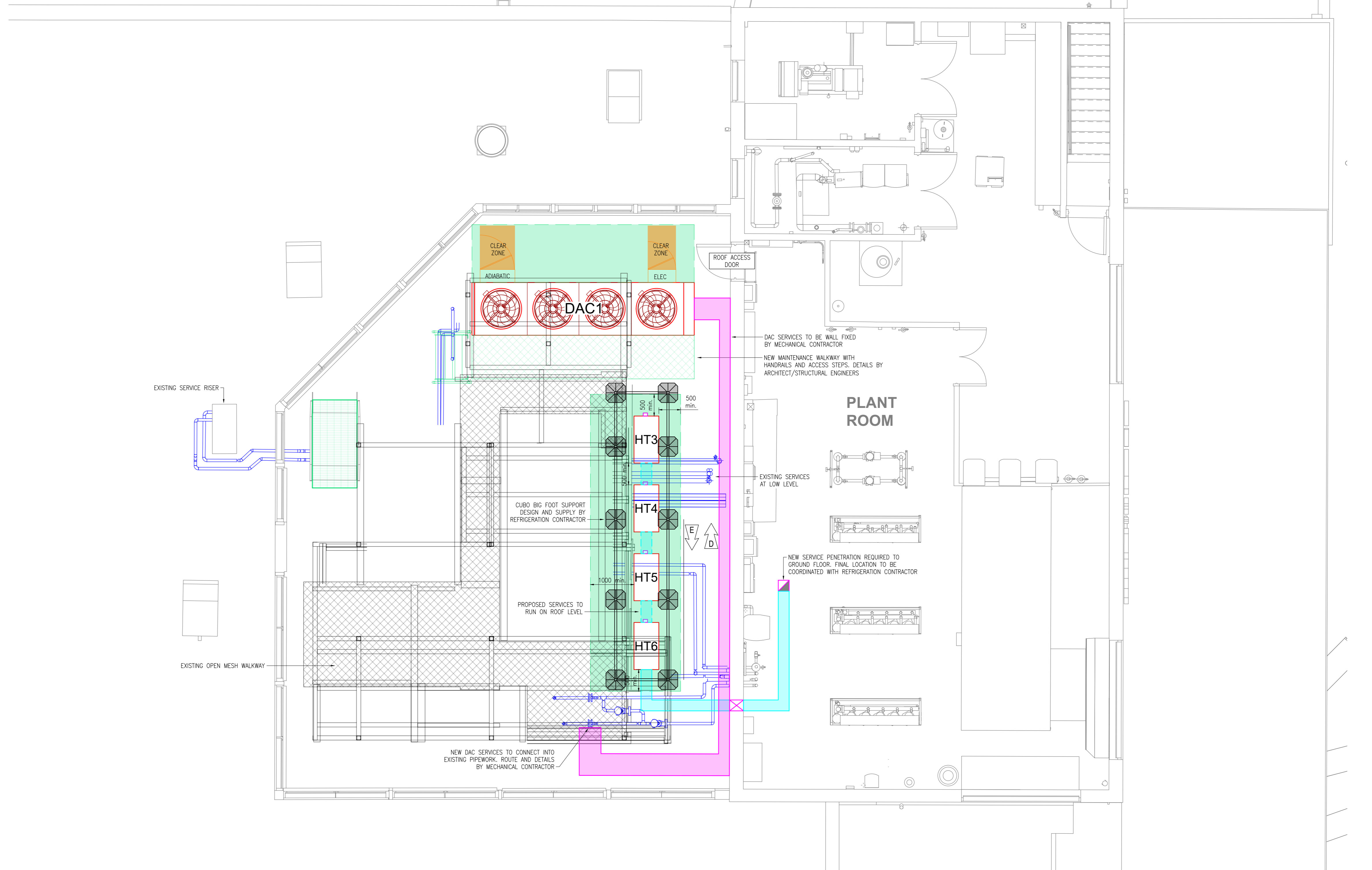
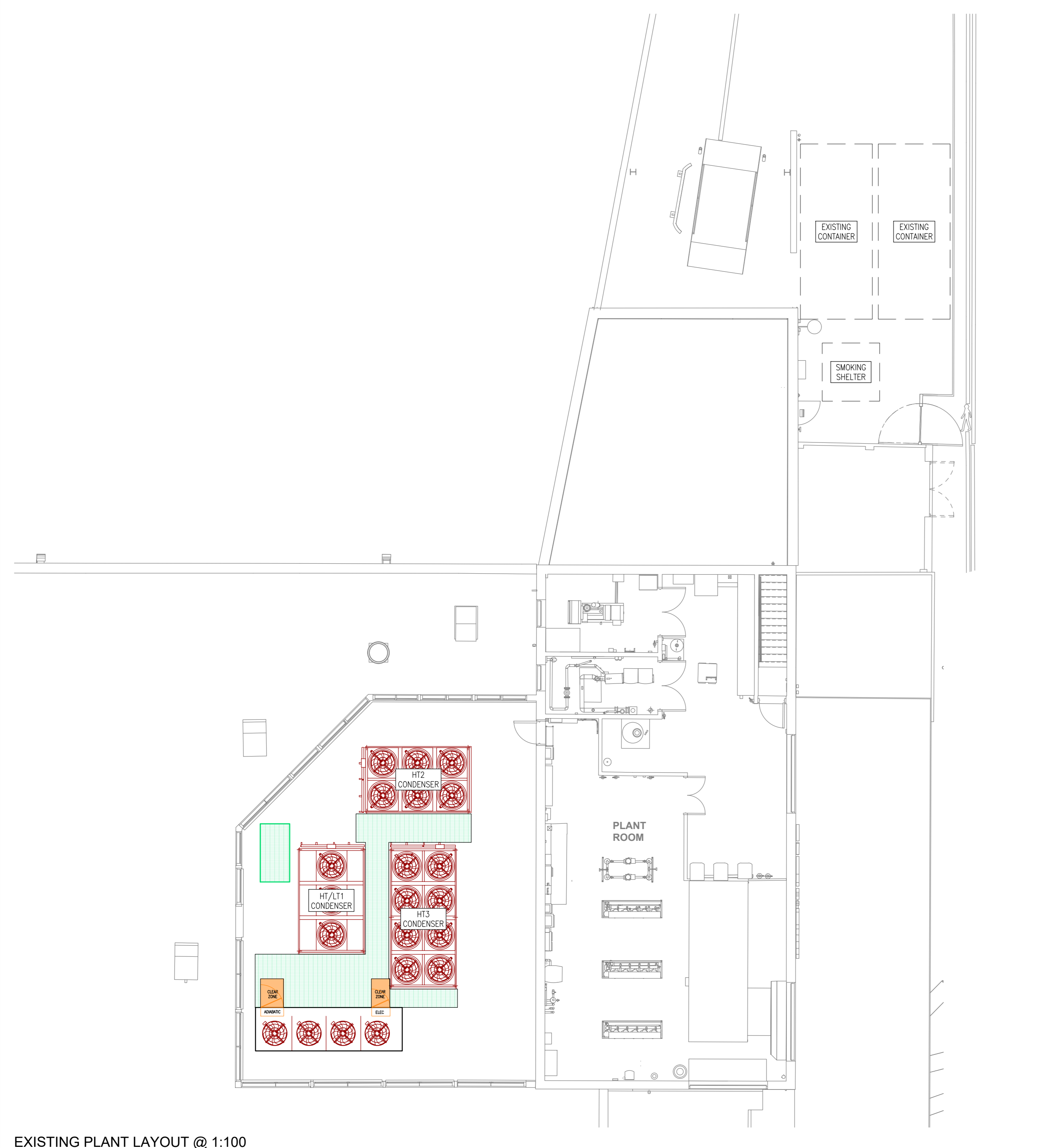
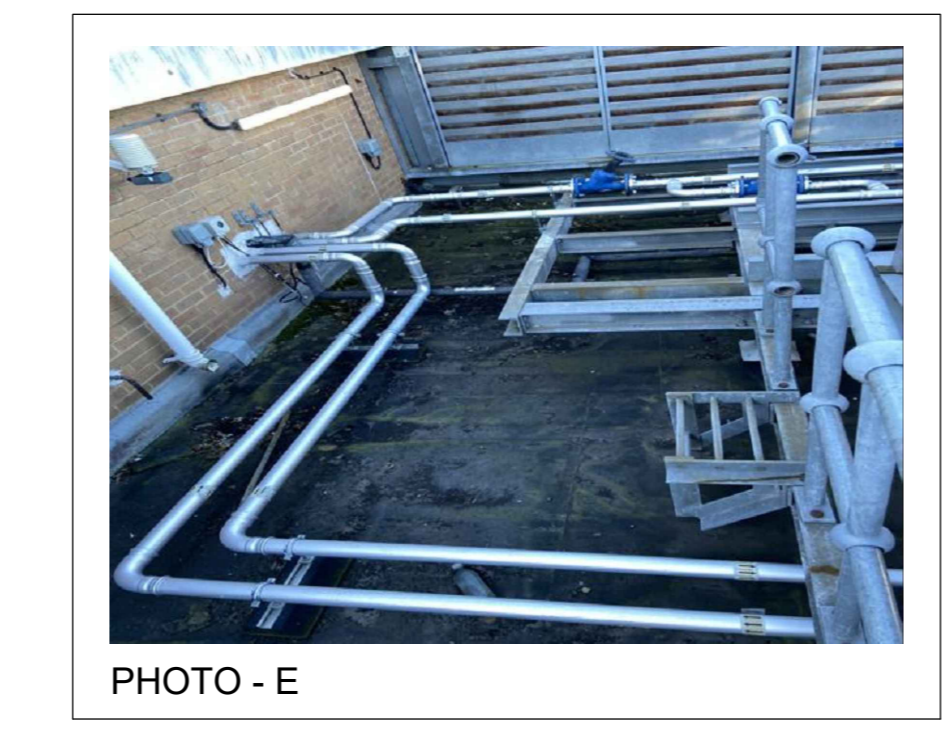
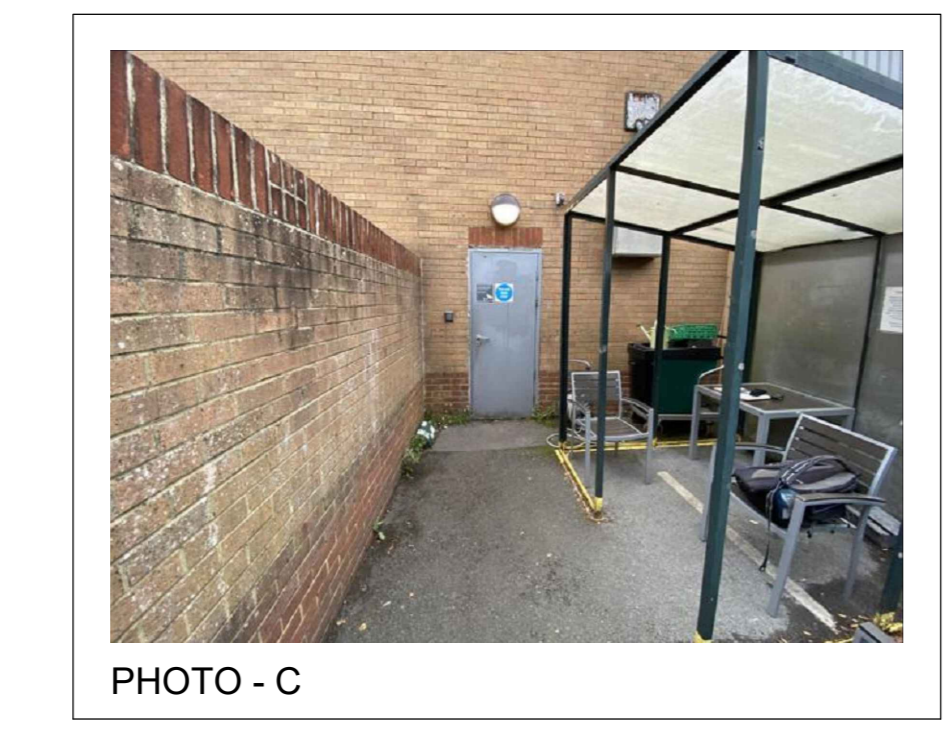
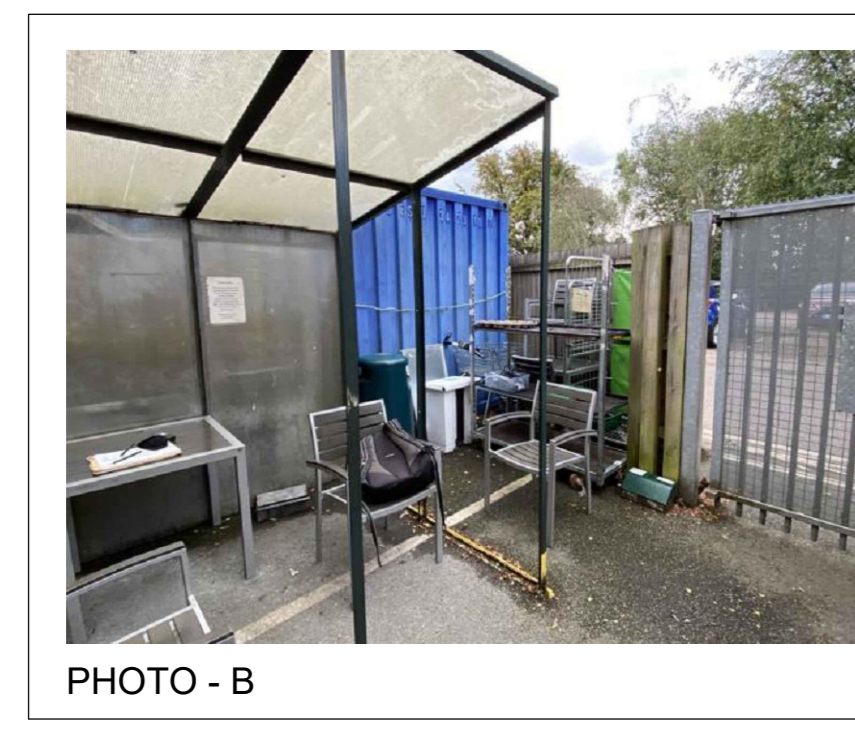
IMPORTANT NOTE: THE ELECTRICAL CURRENTS STATED ABOVE ARE FOR THE CLADE CONDENSING UNIT ONLY. AS THE UNIT ALSO ACTS AS A DISTRIBUTION BOARD, ALL CABLING MUST TAKE INTO ACCOUNT THE EVAPORATOR AND ANCILLARY ELECTRICAL LOADS, AND SUPPLIER BREAKER SIZES STATED ON THE RESPECTIVE SCHEDULES.

DESIGN CONDITIONS:
 FLUID: 18% PROPYLENE GLYCOL - FLUID FLOW RETURN TEMPERATURE: +40° / +41° (DB) (M)
 SATURATED SUCTION TEMPERATURE: FROZEN + 20°C MID / MEAT + 8°C MID / DAIRY + 5°C MID / FRV + 1°C MID
 BOTTOM GAS SUPERHEAT + 20K / USEFUL SUPERHEAT + 4K / LIQUID SUB-COOLING + 5K / CONDENSING TEMPERATURE + 51°C MID
 ELECTRICAL SUPPLY REQUIRED +400V / 3PHASE & NEUTRAL / 50HZ



GENERIC RISK ASSESSMENT

- Delivery and positioning of new plant unit housings to be reviewed against:
 - Drone access and positioning
 - Delivery vehicle access and road management
 - Lift management - "combined lift"
 - AV pad or shimming of units to supporting steelwork
- Manual handling of tools, materials and equipment to roof area to be considered for installation of packaged plant units, Dry Air Coolers / Condensers
- Test and commissioning - risk of medium and high pressure non-intentional release of leaks or strength test pressures. Risks associated with pressure testing of mechanical services to be considered, prior to release of pressures for final connections to be made and for services left with standing or test pressures (during installation periods prior to cabinet delivery). All pressure testing and/or release of test pressures and final connections are to be undertaken by trained and competent persons.
- Test and commissioning - risk of low voltage electrocution, risks associated with testing and commissioning of Water Chiller controllers to be considered to ensure that all panels are certified prior to connection of electrical services and all final connections are undertaken by trained and competent persons.
- Use of naked flame welding apparatus to be controlled by means of hot work permits and associated fire prevention requirements.
- Hydro-Carbon safety and awareness to be considered by all personal working on or around the plant, which contains this highly flammable/explosive refrigerant.
- Test and commissioning of Water Chiller Plant to be undertaken in line with established and agreed procedures for commissioning of mechanical systems.



NOTES

DO NOT SCALE FROM THIS DRAWING. ALL DIMENSIONS TO BE CHECKED ON SITE. COPYRIGHT PROTECTED.

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All refrigeration plant should be installed on appropriate and correctly sized anti-vibration pads / isolators / springs to prevent transmission of noise and vibration to the structure which it is installed upon. The minimum requirement is TCO type pads of cork / rubber construction which should also be installed to prevent contact corrosion for low vibration equipment (supplied by refrigeration contractor).

Any change to equipment supplier/sizeable to be communicated to Oaksmere Design Limited immediately to avoid coordination issues on site.

Secondary support steelwork for new plant to be detailed by structural engineer.

Denotes Mechanical Services Area for New DAC. Area to be kept clear of other services.

Denotes Refrigeration Services. Area to be kept clear of services to allow for maintenance.

Denotes Maintenance Access Route. Area to be kept clear of services to allow for maintenance.

Denotes New Mesh Maintenance Platform.

REV	DATE	DESCRIPTION	DRAWN	CHECKED
03	08.02.24	TENDER ISSUE	CW	DHL
02	24.01.24	NEW DAC SUPPLIER CONFIRMED AS WEATHERITE BY ARCHITECT. ENGINEERING SCHEDULES UPDATED TO SUIT.	CW	DHL
01	22.01.24	EXISTING DAC1 AND NEW CUBO'S RELOCATED FOLLOWING ON SITE COORDINATION. CUBO'S TO BE INSTALLED ON BIG FOOT SUPPORT BY THE REFRIGERATION CONTRACTOR	CW	DHL
00	15.12.23	ISSUED FOR INFORMATION	CW	DHL

This drawing is to be read in conjunction with Oaksmere Design Limited drawings: Proj. Colston Layout - 240_08675-06K-CR-00-00-H-180-00_R6P60gR6P650_A02-C-00

Please also refer to latest Oaksmere Design Limited Scope Of Works.

CLIENT: **WAITROSE & PARTNERS**

PROJECT: **WAITROSE BIGGIN HILL L4L 2024**

DRAWING: **PROPOSED REFRIGERATION PLANT LAYOUT GROUND / FIRST FLOOR ROOF LEVEL**

CONSULTANT: **Oaksmere design**

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 t +44(0)1473 588008 www.oaksmere.co.uk

STATUS: **TENDER** SCALE: **1:50** DATE: **12.12.23** DRAWN: **CW**

PROJECT No: **P22-0449** CONSULTANT No: **650** REV: **03**

FILE No: **240_08675-06K-CR-DZ-DG-H_180-00_R6P60gR6P650_A02-C-03**

WAITROSE & PARTNERS

PROPOSED REFRIGERATION PLANT LAYOUT GROUND / FIRST FLOOR ROOF LEVEL

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