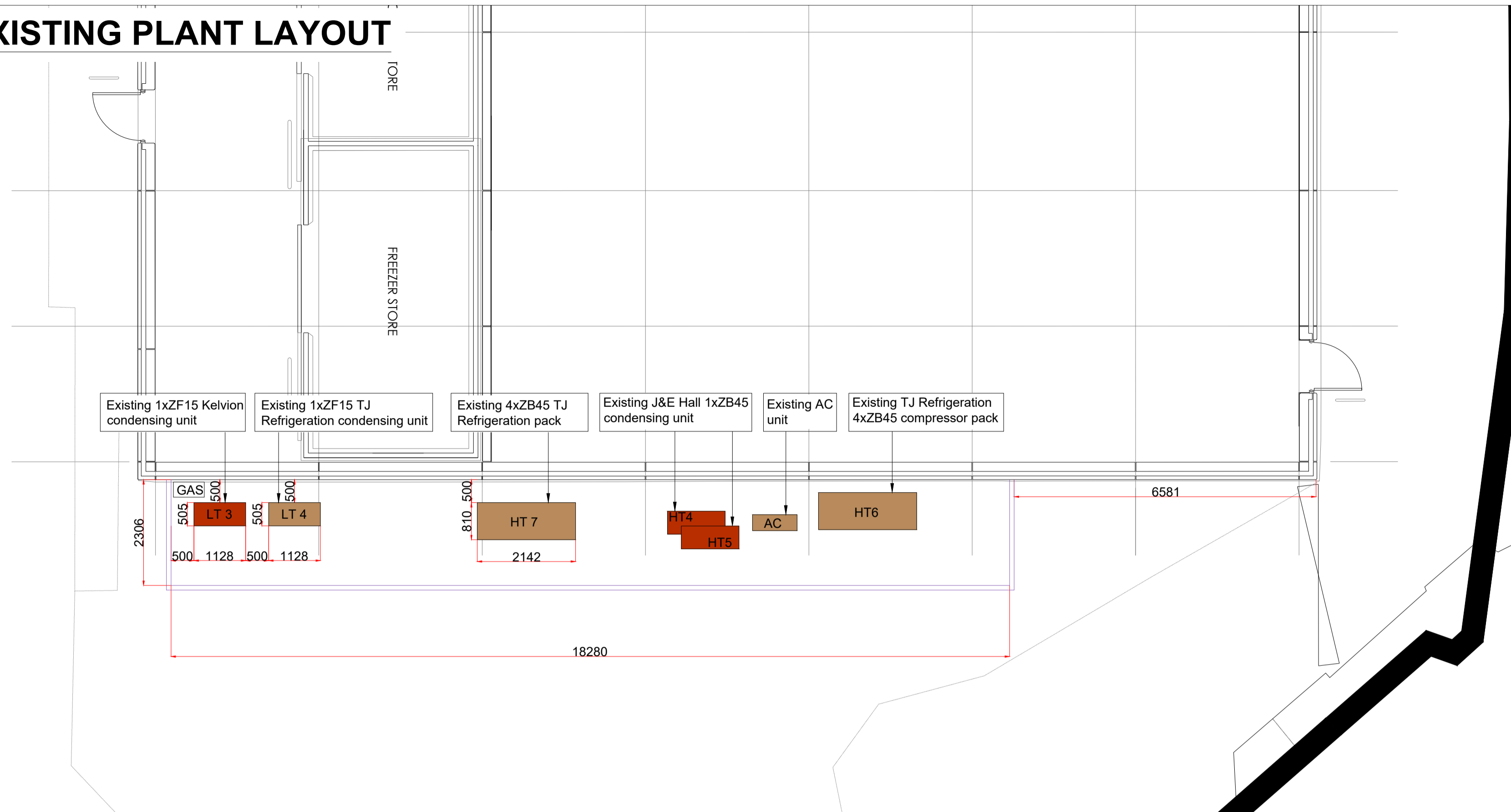
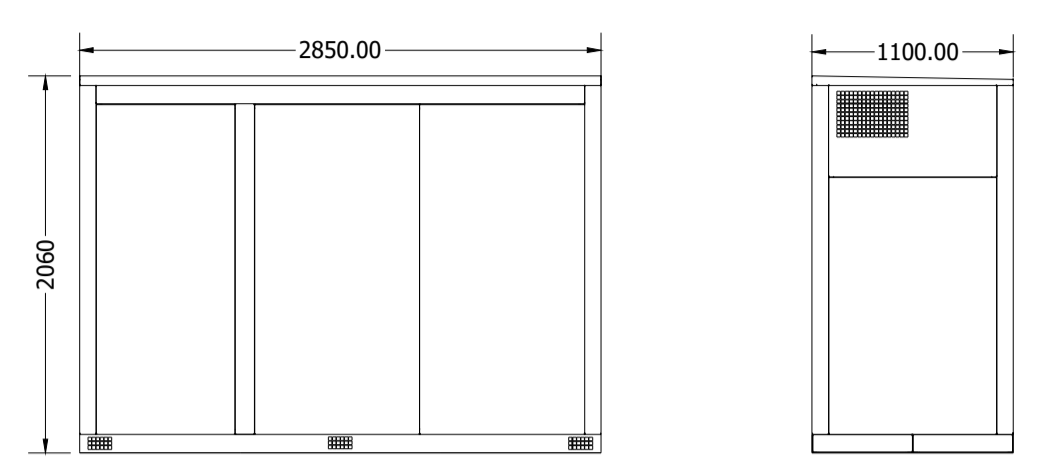


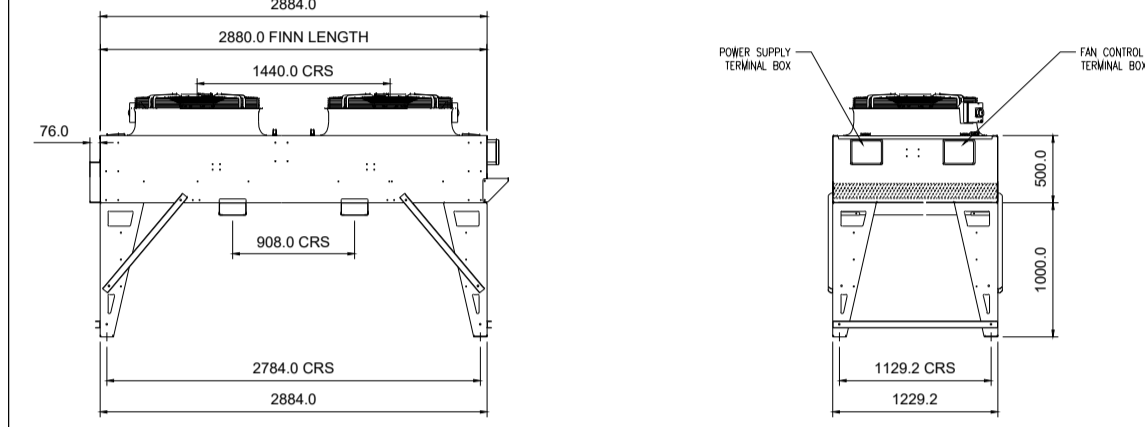
EXISTING PLANT LAYOUT



CLADE Reach-in Pack Housing (75kW) Noise Level @ 10m: 44 dBA



CLADE Gas Cooler- G45-145-Cu GFHE1.4-125CU-EC91.L3 Noise Level @ 10m: 45.1dB(A)



Weight (dry approx.): 666kg

Gas cooler data

Reference:	G45-145-Cu
Model:	GFHE1.4-125CU-EC91.L3
GAS COOLER	
Coil Code:	1 x CO-48-5-2.31-2880
Performance Sub-Critical	
Capacity	124.3 kW
Ambient	10 °C, 50 %RH
Condensing Temp.	20 °C
TD	10 K
Performance Supercritical	
Capacity	143.6 kW
Ambient	40 °C
Gas Pressure	100 Bar
Gas Inlet	100 °C
Gas Outlet	42 °C
Volume flow Inlet	15 m ³ /hr
Volume flow Outlet	5 m ³ /hr
Mass Flow	2893 kg/hr
Pressure drop	86 kPa
DUMP COIL	
Coil Code:	N/A
Capacity	
Ambient	
Evaporating Temp	
TD	
AIR PERFORMANCE:	
Volume flow humid	9.5m ³ /s, (34090m ³ /hr)
Height over sea level	0 m
Pressure	1013.25 hPa
Number of Fans	2
External Resistance	0 Pa
Supply	400v 3ph 50/60hz
Fan Type	EC - 910 mm diameter
Speed Design / Maximum	725 / 940 rpm
Total Power Input	1677.8 W
Energy Rating	A
Full Load Current / Motor	3.2 A
Sound Power Level	76.7 dBA
Mean Sound Pressure @ 10m	45.1 dBA
PHYSICAL:	
Tube material	Copper - Plain
No Rows	5
Fin Material	Copper
Fin Spacing	2.31 mm / 11 fpi
Surface	388.8 m ²
Internal Volume	30.8 dm ³
No Section / Coils	1 coil in 1 section
No Circuits	24
Connection Size	1 x 35 / 35
Unit Dimensions	Width: 1250 mm Height + Fan: 1175 mm Length over headers: 3180 mm
Weight (dry approx.):	666 kg

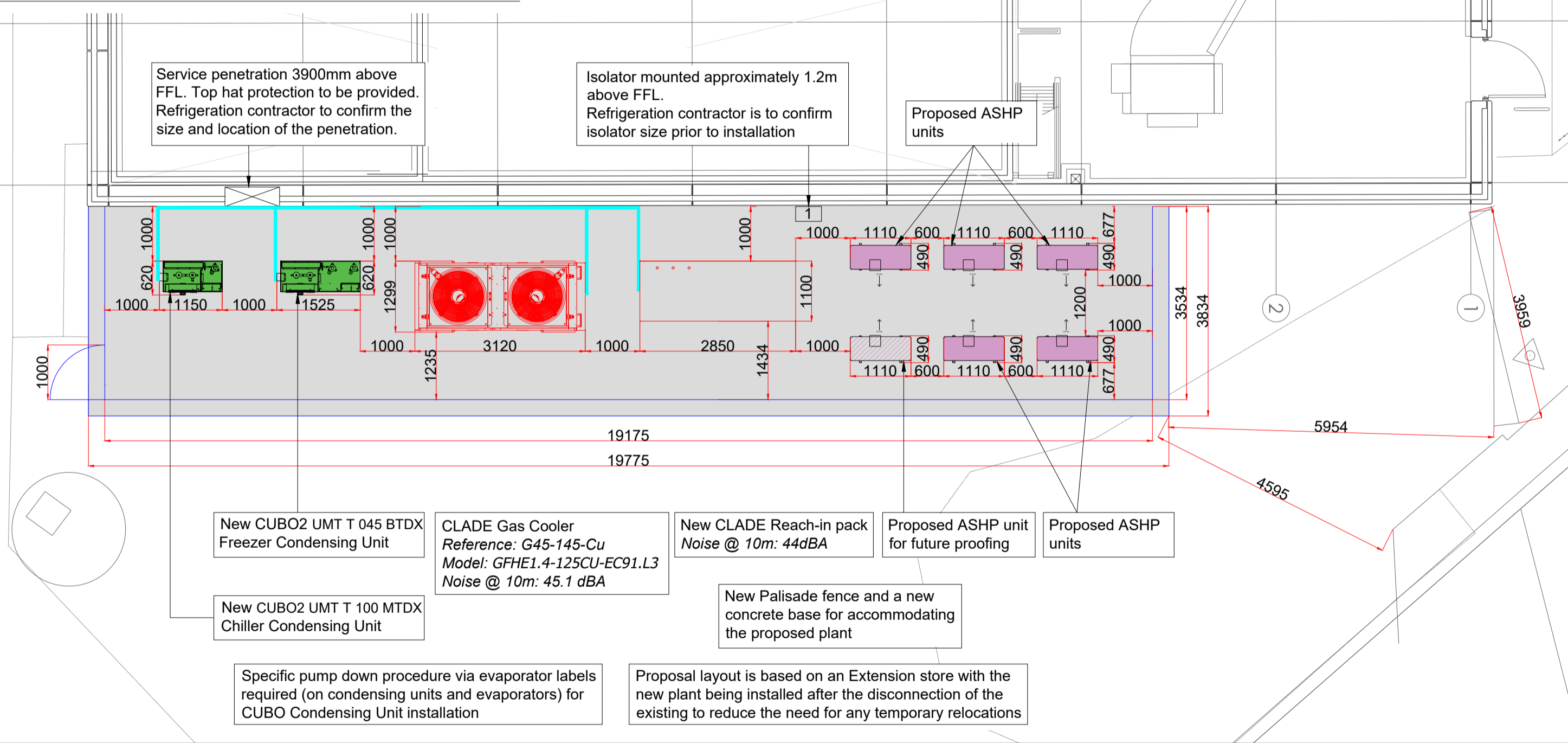
Plant Key:

- Existing - to remain in situ
- Existing - to be relocated
- Existing - to be removed for refurb
- Existing - to be removed for scrap
- New CLADE pack & Gas Cooler
- New CUBO condensing units
- New ASHP units
- Refrigeration service route

Builders Work Key:

- Existing - to remain in situ
- Existing - to be removed
- Temporary
- New
- New concrete base

PROPOSED PLANT LAYOUT



CUBO2- UMT T 100 MTDX

UMT T 100 MTDX	Dimensions/weight		STANDARD LIQUID RECEIVER		OPTIONAL LIQUID RECEIVER		Refrigeration connection		Sound Pressure	
	mm 1150x620x805 kg 150		PED I Liquid receiver 2x2.4 liters		PED II Liquid receiver 8 liters		Suction inch 3/8" (exc. UMTT 100.1/2) Liquid inch 3/8"		Day Operation: dB(A) 44 Night Operation: dB(A) 35	
Evaporation Temperature [°C]										
T amb [°C]										
Cooling Cap. [kW]										
COP										
min max										
40 1549 7904 1.58 1854 8193 1.57 2028 9113 1.57 2265 10366 1.75 2719 11672 1.94										
38 1583 7098 1.45 1854 8202 1.58 2188 9411 1.77 2534 10726 1.98 2892 12234 2.15										
32 1619 7047 1.53 1933 8211 1.73 2273 9491 1.97 2644 10866 2.25 3048 12314 2.52										
20 1976 7997 2.22 2371 11096 3.05 2390 12834 3.52 3306 14670 4.05 3852 15064 4.22										
MEPS 3.48 (according to Ecodesign Directive EN 2009/125/EC)										
V/Pk/Hz 480/24W/PE/50										

CUBO2- UMT T 045 BTDX

UMT T 045 BTDX	Dimensions/weight		STANDARD LIQUID RECEIVER		Refrigeration connection		Sound Pressure	
	mm 1525x620x805 kg 176		PED I Liquid receiver 8 liters		Suction inch 3/8" Liquid inch 3/8"		Day Operation: dB(A) 44 Night Operation: dB(A) 35	
Evaporation Temperature [°C]								
T amb [°C]								
Cooling Cap. [kW]								
COP								
min max								
40 877 3507 2920 1.20 1066 4263 3207 1.33 1208 4830 3290 1.47 1342 5369 3370 1.59								
38 877 3507 2810 1.25 1066 4263 3086 1.38 1208 4830 3176 1.52 1342 5369 3297 1.63								
32 877 3507 2930 1.40 1066 4263 2927 1.43 1208 4830 3097 1.52 1342 5369 3143 1.71								
20 877 3507 1770 1.98 1066 4263 2010 2.12 1208 4830 2090 2.31 1342 5369 2053 2.62								
MEPS 2.92 (according to Ecodesign Directive EN 2009/125/EC)								
V/Pk/Hz 230/14W/PE/50								

Sacrificial coating (Blygold) recommended- (Yes)

Note:

- All existing AC units retained.
- Refrigeration contractor to advise on service penetrations prior to core drill.
- Exposed Refrigeration services to receive top hat protection.
- Fire escape routes are to be maintained throughout the store refit and must not be obstructed at any time.
- New Palisade fence and concrete base to accommodate the proposed plant.

Pack Noise Rating

Dorin 75kW-PFE- Reach In Housing (45)	dB(A)	Octave Band Frequency (Hz)								dB(A) LpA @1m	dB(A) LpA @10m
		63.0000	125.0000	250.0000	500.0000	1000.0000	2000.0000	4000.0000	8000.0000		
CD4 75-7.3M	61	39	39	49	47	60	55	53	47		
CD4 75-7.3M	61	39	39	49	47	60	55	53	47		
CD4 90-9.2m	62	40	40	50	48	61	56	54	48		
CD 2000H	67	45	45	55	55	66	61	59	53		
LA47-A3p Vent Fan Inlet	50	39	42	46	42	43	45	44	34		
LA47-A3p Vent Fan Outlet	50	39	42	46	40	43	45	44	34		
Calculated Internal Sound Pressure Level	71	49	50	58	56	69	64	62	56		
*Correction for Internal Reflection/Frequency	5	5	5	5	5	5	5	5	5		
Total Internal Sound	76	54	55	63	61	74	69	67	61		
Attenuated Sound Pressure @ 1.0m	64	49	49	57	52	65	57	52	46		
Attenuated Sound Pressure @10m	44	12	14	17	13	22	24	15	<10		

Client: Aldi Stores Ltd.

Project Title: Aldi - ALLOA

Project Address: Whins Road, Alloo

Drawing Title: PROPOSED PLANT LAYOUT

Job No.	Originator	Zone	Level	Type	Role
79-E0528 WAVE	XX	00	DR	R	

System Classification: En.60.60.00-0001

Drawn	Checked	Date	Scale	Size
SP	RM	19-05-2021	1:75	A1

an employee owned company

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