

Project ASRS freezer



Project Description: Highbay freezer with automated storage and retrieval system
Customer: Albert Bartlett
Date: 07-10-2025





1. Organizational chart

2. Layout

3. Technical specifications



5. Timeline





CLIENT



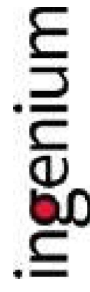
LOCAL ARCHITECT

- Permit
- environment



GENERAL CONTRACTOR

Subcontractor



TECHNIQUES
ENGINEER

Subcontractor



STABILITY
ENGINEER

Subcontractor



AUTOMATION
INTEGRATION



1. Organizational chart

2. **Layout**

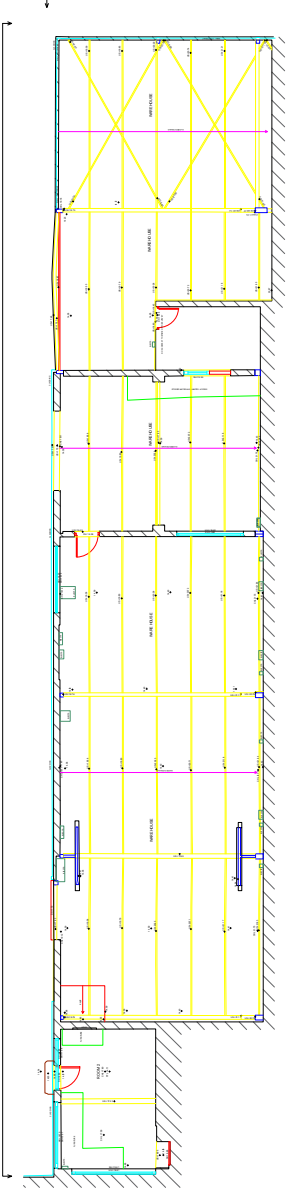
3. Technical specifications



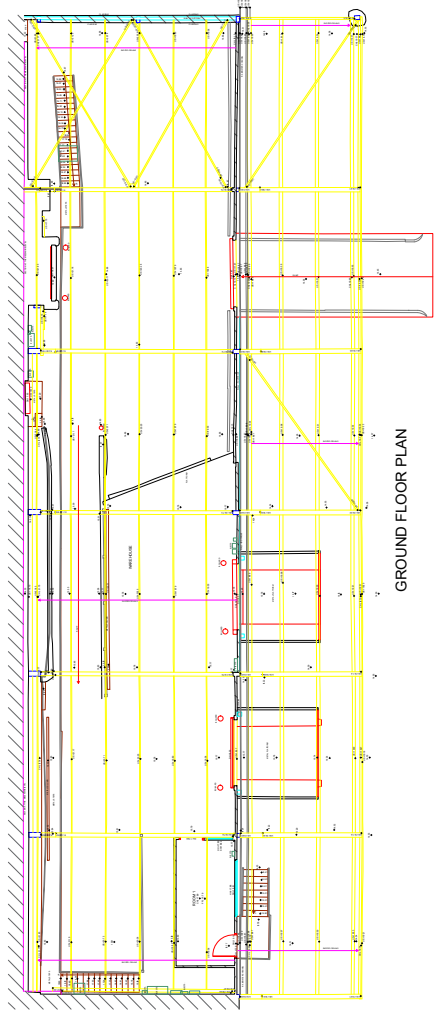
5. Timeline



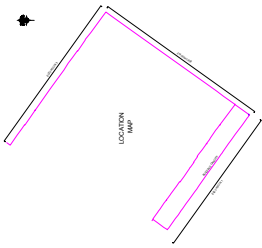
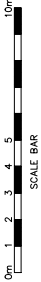
ELEVATION 3



ELEVATION 2



ELEVATION 1





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LAND SURVEYS

THE SURVEY PEOPLE

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JOB TITLE

GROUND FLOOR PLAN
Freezer Extension, Albert Bartlett,
North Walsham

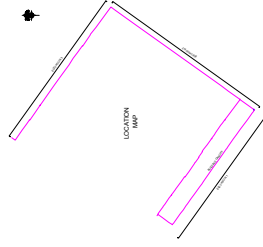
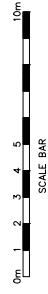
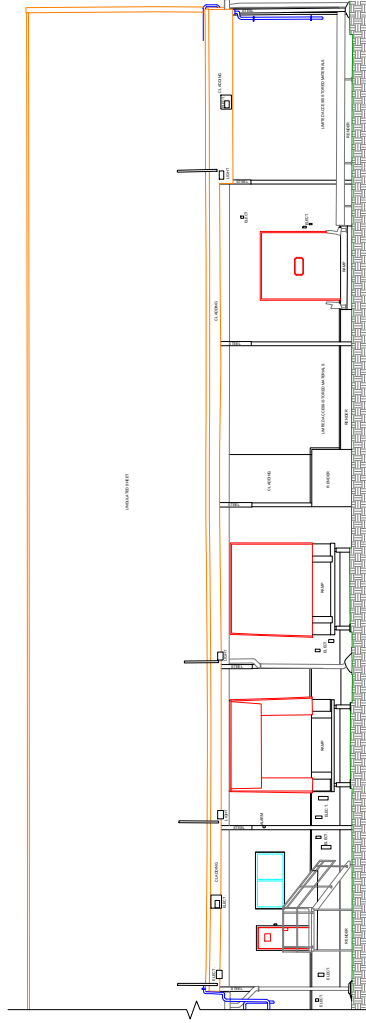
DATE SURVEYED
10/2024

DATE
10/2024

DRAWING NUMBER
10382-MBS

RR

CLIENT
TRUNDLEY



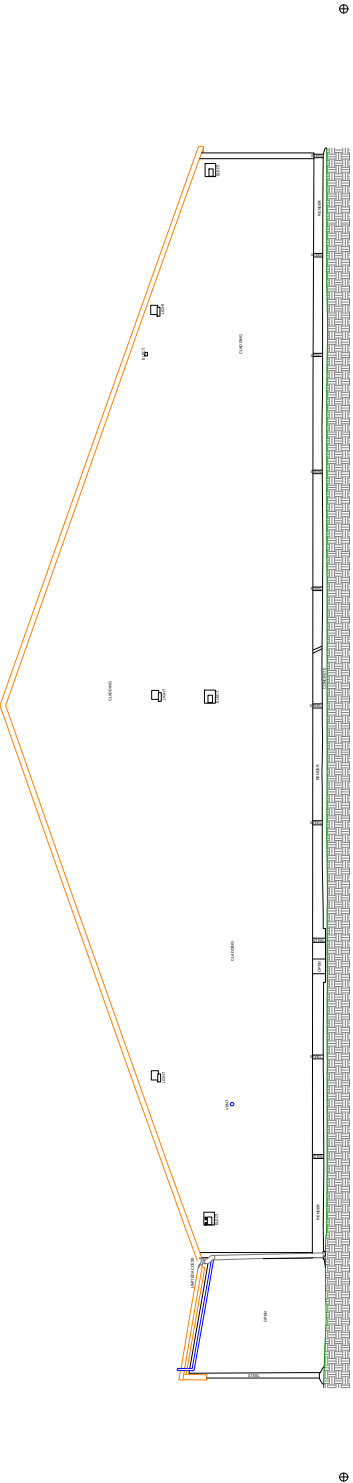
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ELEVATION 1
Freezer Extension, Albert Bartlett,
North Walsham

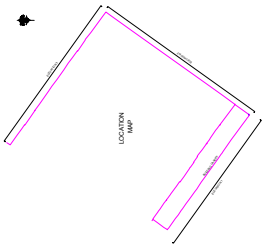
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DRAWING NUMBER 10382-MBS		

CURRENT

TRUNDLEY



ELEVATION 2





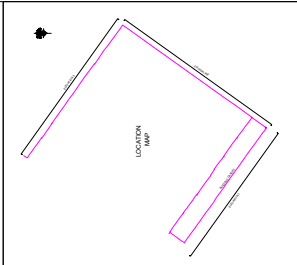
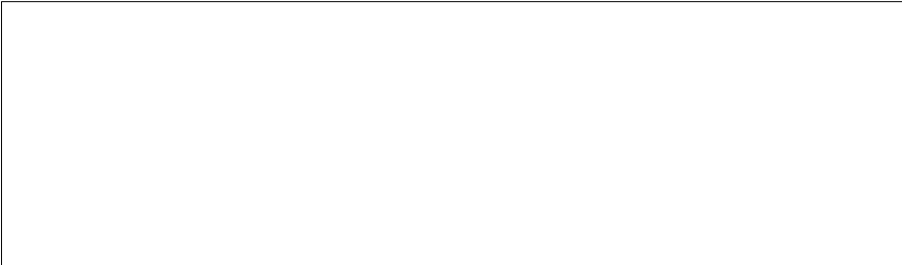
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JOB TITLE

ELEVATION 2 Freezer Extension, Albert Bartlett, North Walsham	
DATE SURVEYED 10/2024	DATE SURVEYED 10/2024
SCALE & SCALE A1 @ 1:100	SCALE & SCALE A1 @ 1:100
DRAWING NUMBER 10382-MBS	DRAWING NUMBER RR
CLIENT TRUNDLEY	





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JOB TITLE

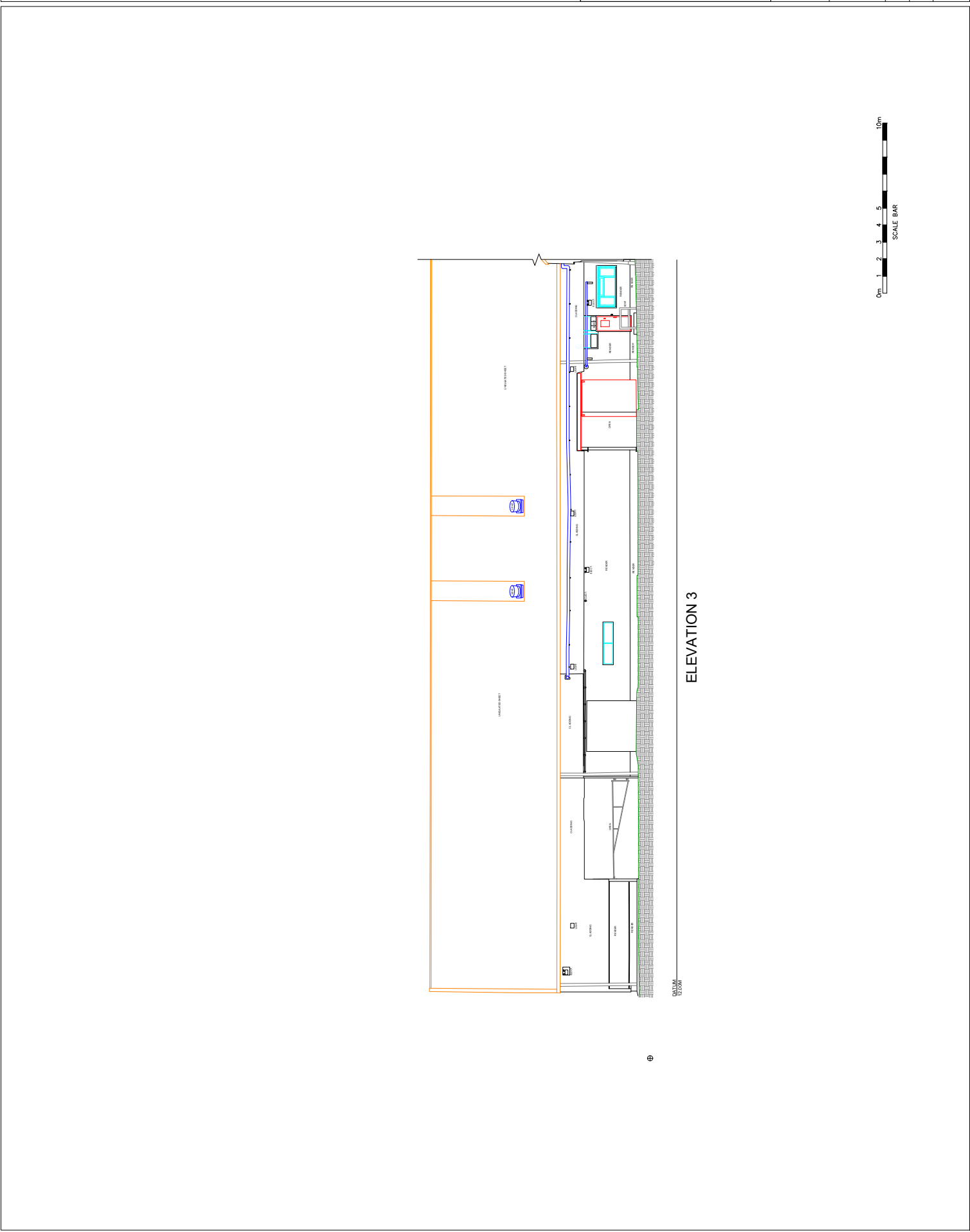
ELEVATION 3
Freezer Extension, Albert Bartlett,
North Walsham

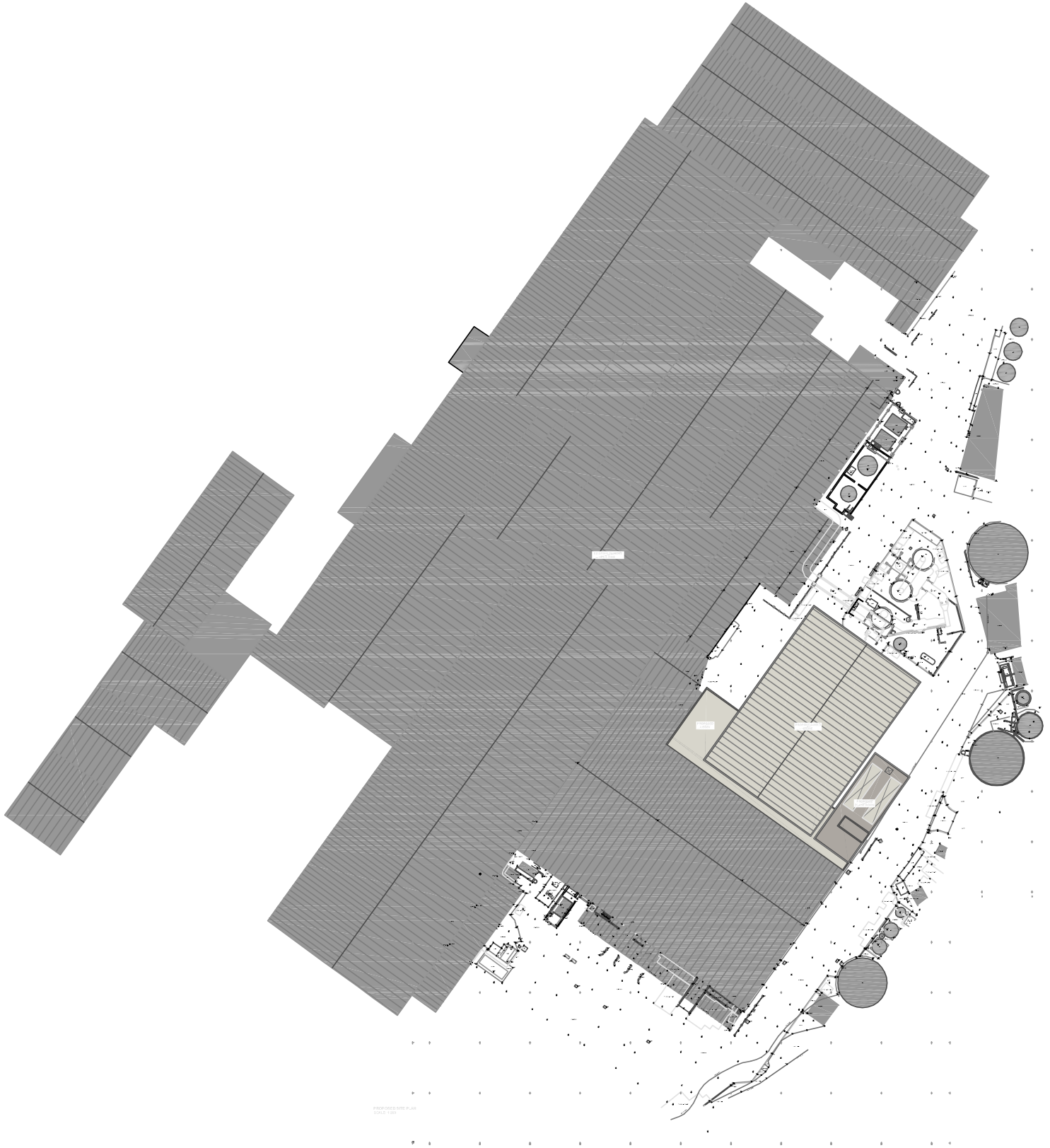
SHEET SIZE & SCALE
A1 @ 1:100

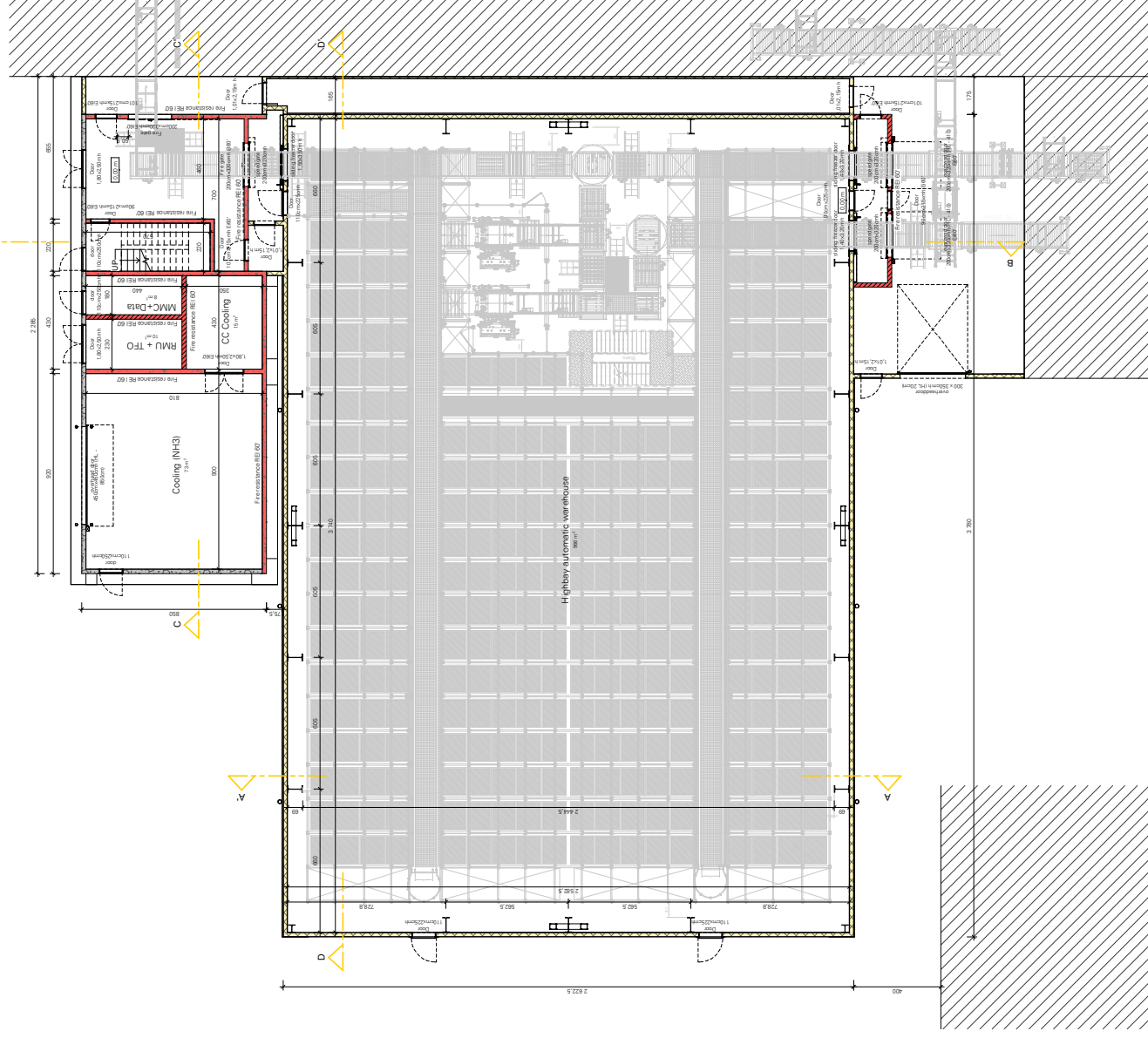
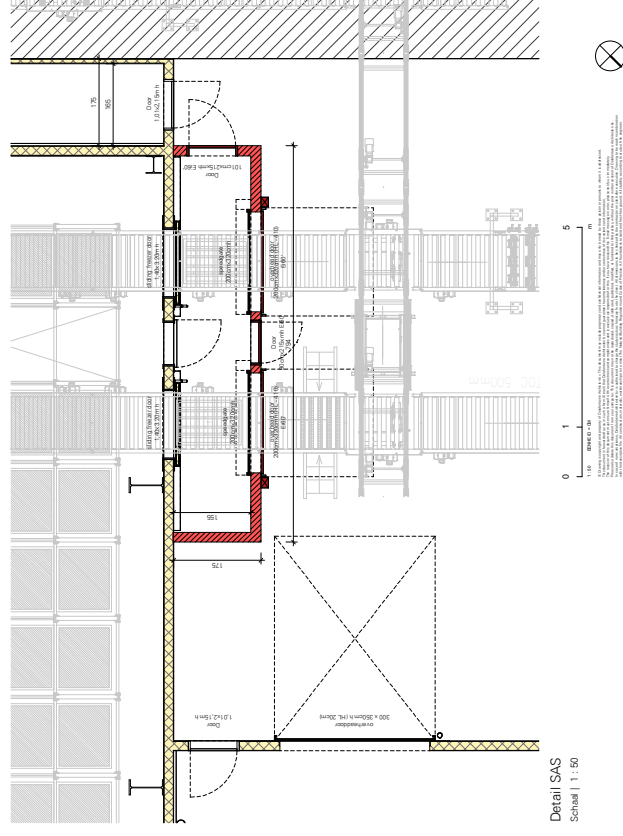
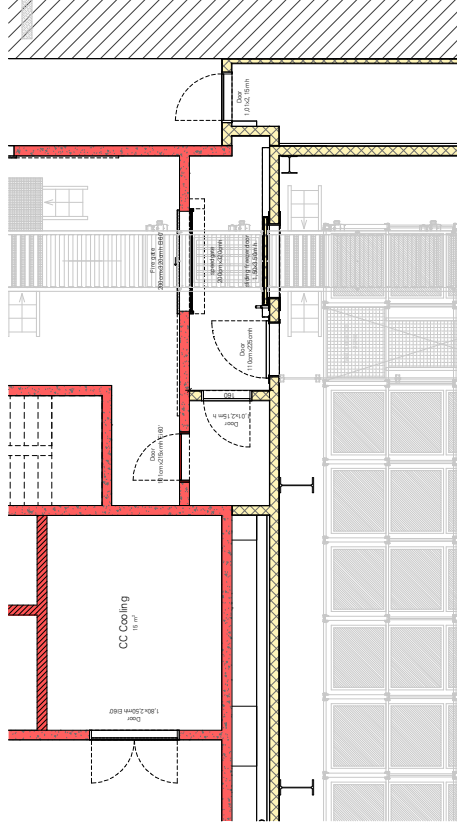
DATE SURVEYED
10/2024

DRAWING NUMBER
10382-MBS

CLIENT
TRUNDLEY







CUSTOMER	ALBERT BARTLETT		
PROJECT	COLDSTORE		
Floorplan & Detail			
DATE 17/10/2024	SCALE As indicated	DESIGNER QTV	
MODIFICATION	REVISION		
22/04/2024	A	Technical drawing	
23/04/2024	B	Update	
05/06/2024	C	Technical drawing, revision, water tank, sprayer	
11/06/2024	D	Spaced frame, working structure	
11/06/2024	E	Technical drawing, revision, water tank, sprayer	
20/07/2024	F	Update HSE structure, technical drawing	
17/10/2024	G	Revised drawing	

A

B

C

D

E

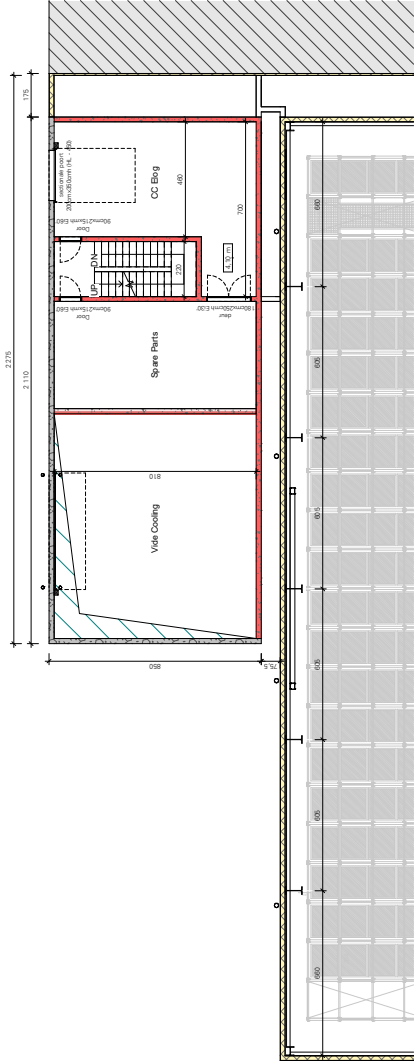
F

G

VCIFR

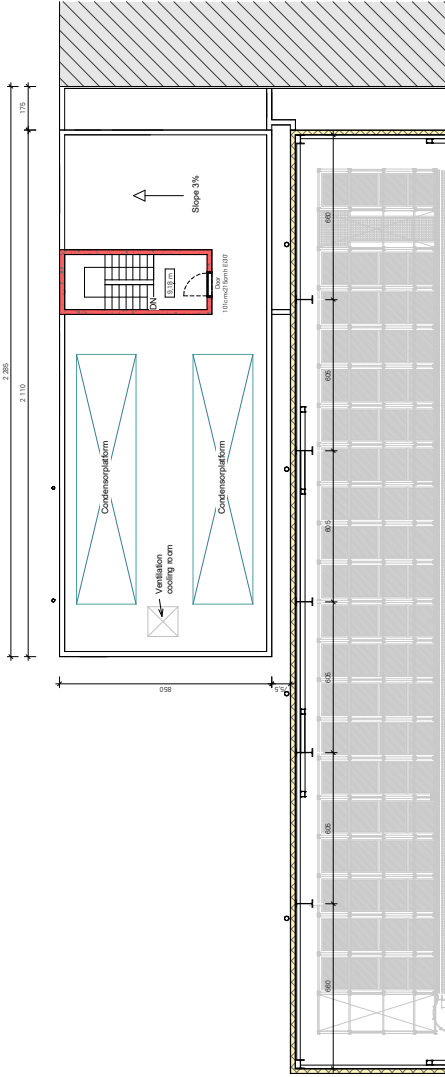


2408 - 06



VDP +4,10m ontwerp

Schaal | 1 : 100



VDP +S,18m Ontwerp

Schaal | 1 : 100



CLIENT	ALBERT BARTLETT		
PROJECT	COLDSTORE		
Floor +4.10 & Roof +9.00			
DATE	SCALE	DRAWN BY	
17/09/2024	1 : 100	Q.V	
REVISION	REVISION BY		
17/09/2024	A	Technical building	
22/04/2024	B	Update	
29/05/2024	C	Technical building, alarm, water tank, sprinkler	
05/06/2024	D	Update HB structure, Sprinkler tank	
16/09/2024	E	Update HB structure, technical building	
27/07/2024	F	Rack structure	
17/07/2024	G		
			
VCIR			
2408 - 07			
A	B	C	D
E	F	G	H

1. Organizational chart

2. Layout

3. Technical specifications

4. [REDACTED]

5. Timeline

[REDACTED]

3. Technical specifications

3.1 Structural assumptions

3.2 Electricity

3.3 Cooling

3.4 Automation

NOTA

Project: Albert Bartlett Coldstore		Opdrachtgever: Alheembouw
Dossier: 24029.001		
ACCOMPANYING NOTE ELECTRICITY		
Versie: 1 (2024-10-29)	Auteur: TDW	Revisie: FDE

1 ACCOMPANYING NOTE ELECTRICITY

1.1 ENERGY DISTRIBUTION

Not included, to be provided by Albert Bartlett

1.2 STRONG CURRENT

After the transformer, the ALSB will follow, containing a connection to the distribution board of the high-rise warehouse and direct feeds for the cooling system. Additionally, there will be a few spare connections available.

This ALSB is not included and provided by Albert Bartlett

Everything in and around the high-rise warehouse will be powered from the distribution board: lighting, control panels, sockets, power supplies for automation, etc., with sufficient reserve capacity in the board.

The cables that supply the largest loads have been defined:

- From the main distribution board to the distribution board of the high-rise warehouse
- From the main distribution board to the cooling supply
- From the distribution board of the high-rise warehouse to the automation supply (one 160A and two 125A)

Cable ladders will be used for routing between the transformer and the boards. Cabling from the distribution board of the high-rise warehouse to end users will be provided in cable trays. A cable tray is provided to each room around the freezer and inside the freezer itself.

In normal rooms, double hermetic sockets are provided with a few Mennekes boxes. The lighting is controlled by motion detection, and a control panel is present. In the freezer, there are no sockets, a control panel is available at each entrance for the lighting.

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Alle documenten en informatie in deze offerte worden vertrouwelijk ter uwer beschikking gesteld. De inhoud van dit voorstel blijft het intellectuele eigendom van Ingenium. Het voorstel is enkel gericht aan de geadresseerde organisatie en contactpersonen. De inhoud van dit voorstel mag niet verspreid worden naar derde partijen zonder de voorafgaande schriftelijke goedkeuring van Ingenium.

For the lighting, the following principles were followed:

Room	Lighting level	Fixture
Freezer: central zone	200 lux	Hermetic LED 6400lm
Freezer: corridor zone	200 lux	Hermetic LED 4600lm
Technical rooms	300 lux	Hermetic LED 6400lm

Some fixtures will be connected to a central emergency battery, functioning as emergency lighting, supplemented by a few emergency fixtures with decentralised emergency batteries.

1.3 COMMUNICATION

One data rack will be provided for all applications in the new building. A fibre connection will link the data rack to an existing data rack.

1.4 SECURITY

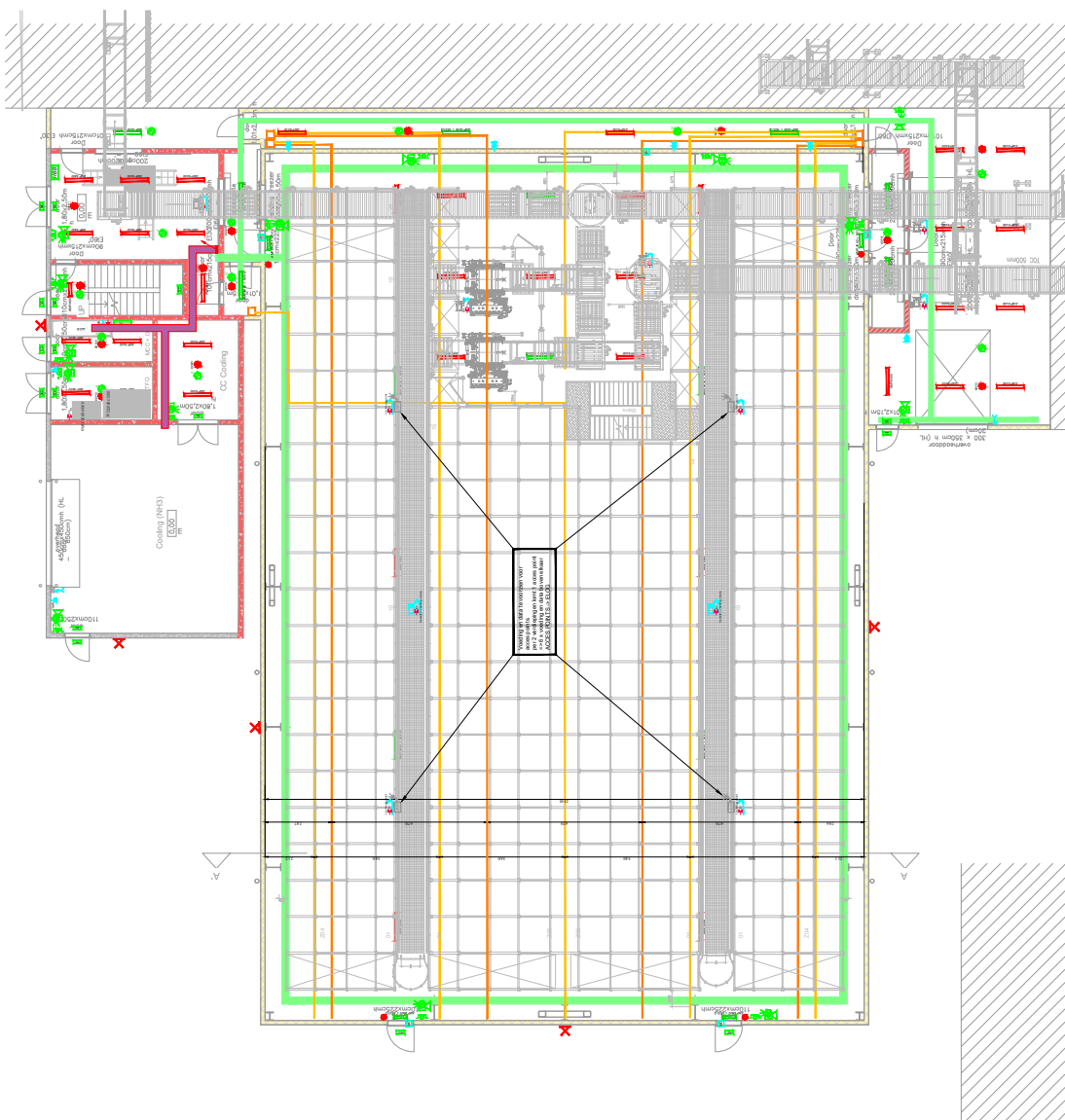
For security, all four doors in the freezer have a magnetic contact. Several indoor and outdoor sirens are distributed across the site, which will sound in case of an alarm. Additionally, there is CCTV monitoring focused on the automation.

In normal rooms, optical smoke detectors are used for fire detection. In the freezer, aspiration is applied at two levels. The aspiration unit itself is located just outside the freezer, along with a necessary heating cabinet. Only the suction pipe and the flexibles are resistant to the cold temperature in the freezer. Additionally, there are sufficient push buttons and sirens present throughout.

Access control (badge reader + electric lock) is not included.

1.5 LIGHTING PROTECTION

External lightning protection is present on the roof according to LPL IV class, with additional overvoltage protection for low-voltage installations.



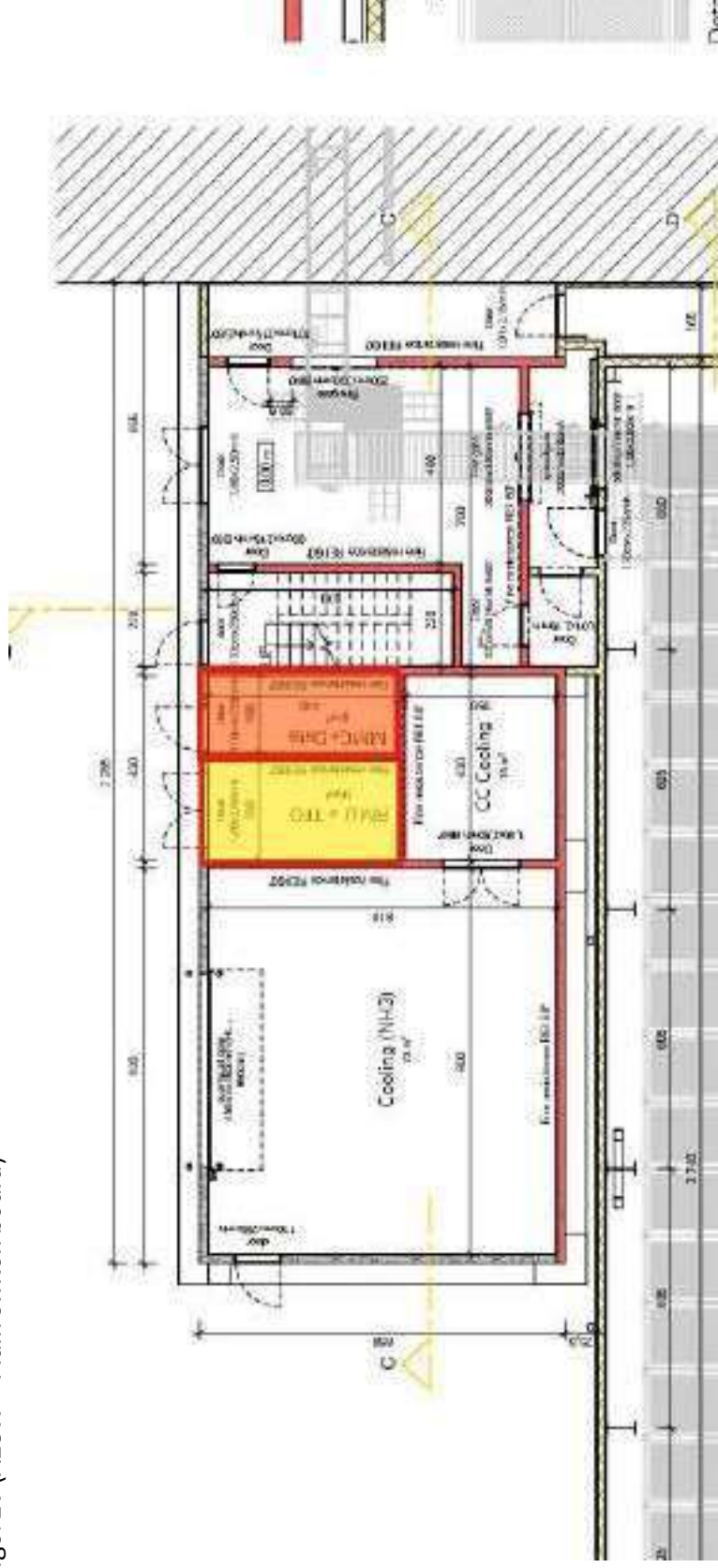


ALBERT BARTLETT - UTILITIES

*Please keep in mind that some techniques in the room may be strategically reorganised by the company that does the execution. The plans below have been made by Ingenium and were the basis of the price request.

HV-LV > Ground floor

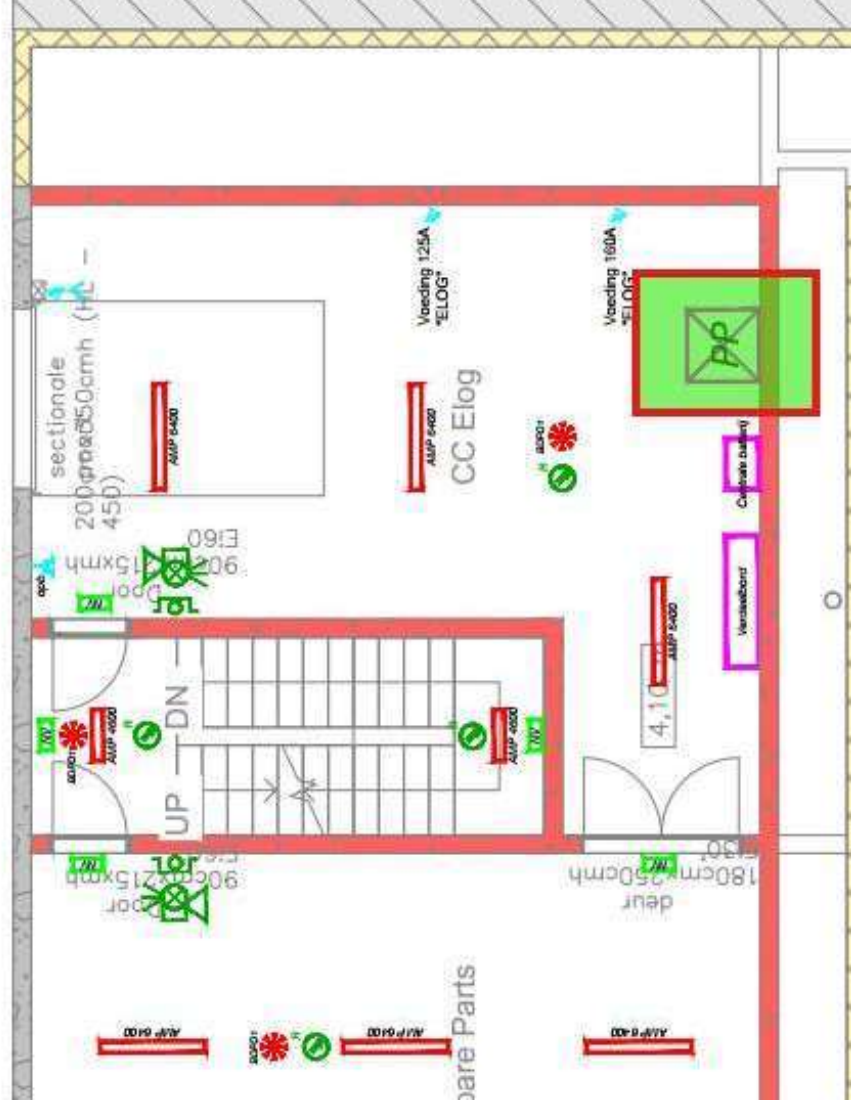
- Yellow: HV (transformer + cells)
- Orange: LV (ALSW = Main switch board)





DATA > FIBER (FLOOR 1)

- Green: position of the data rack by Ingenium.

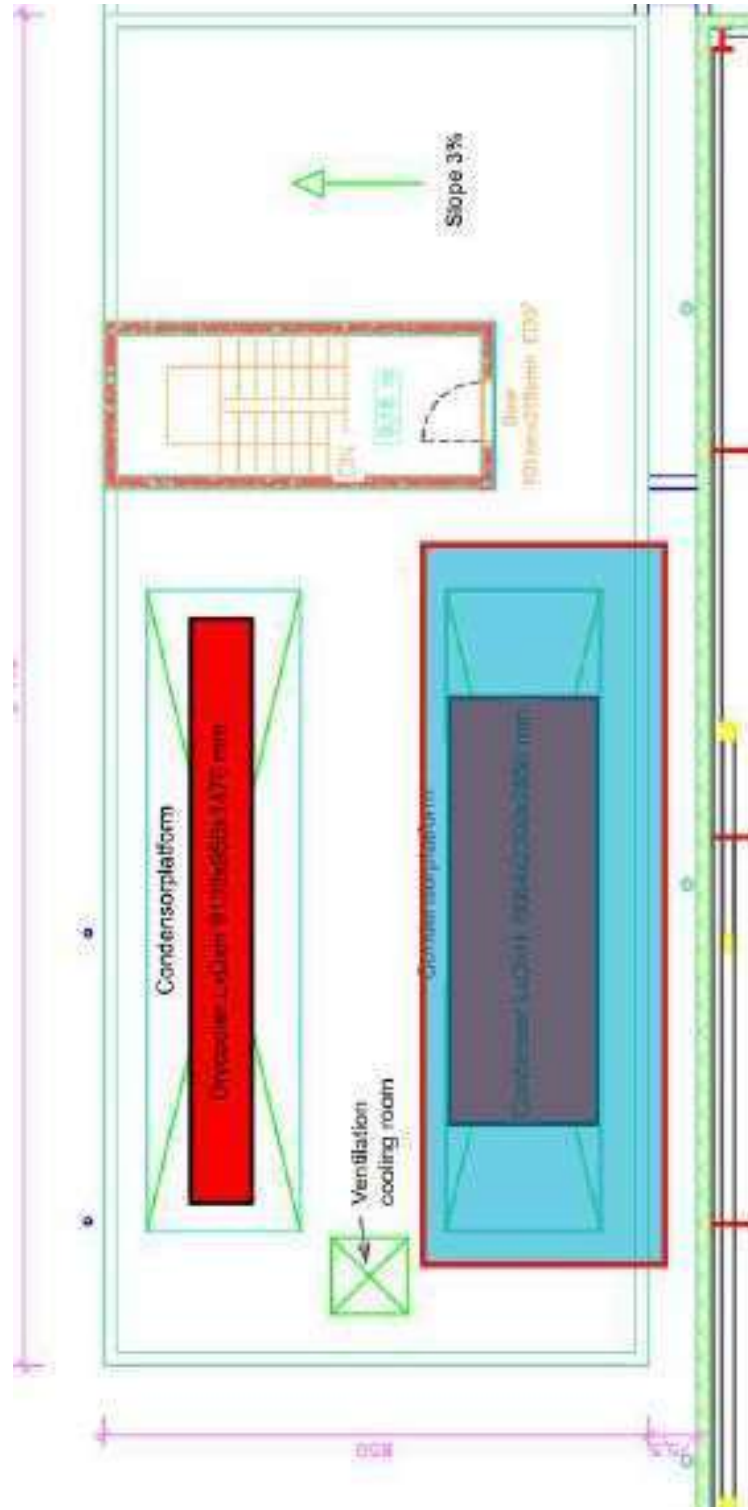




WATER

- Blue: the rooms that require water (exact position needs to be determined in execution phase):
 - Cooling (level 1)
 - Condensers (roof)
 - Emergency showers
 - eyewash (groundfloor): In the cooling room, by the entrance door
 - emergency shower (groundfloor): In the cooling room, by the entrance door





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2. Layout

3. Technical specifications

4. [REDACTED]

5. Timeline

6. [REDACTED]

