

General Notes

- This document is to be used for the stated purpose only and should not be used for any other.
- Dimensions are in millimetres, unless stated otherwise.
- It is the recipient's responsibility to print the document to the correct size & scale.
- All element changes and specifications should be made in consultation with the recipient.
- Scaling of this document is not recommended.

North

Scale(s)

900mm Scale 1:25

10m Scale 1:1000

NOTES:

For substation details including internal dimensions, doors and louvers, refer to
ipsum drawing: SUBSTATION GENERAL ARRANGEMENT UES117169-SUB

Foundations, reinforced concrete and topping screed

- Foundation to sustain weight of plant in any position with reinforcement to suit site conditions. Foundations and reinforcement concrete to structural engineer's requirements and details.
- Reinforced concrete to be as shown on the general arrangement drawing.
- Top of all concrete works to be finished smooth and level within a 2mm over 2000mm.
- Foundations below the substation foundation slab to be built in line with structural engineer's detail to suit ground conditions.
- Floor slab concrete strength to be a min. Of 35N/mm² 28 day cube strength.
- Reinforcement should be as per the specification within the design but be confirmed by the client's structural engineer to bear a load of 5000kg at any point.
- Class B engineering brick to be utilised for foundations as shown on the General arrangement drawing.

Roof

- To structural engineer's detail. See ipsum drawing.
- All reinforcement to be as per specification within the drawing.
- Hollow beams, precast planks or lightweight concrete on metal decking are not permitted.
- No services or drainage from above shall pass through the substation.
- Internal and external faces of the concrete roof slab to be fair faced.
- All external surfaces to be properly cured, prepared, primed and finished with a high-performance, two-coat aliphatic polyurethane waterproofing system (flat roof grade), incorporating glass fibre mat reinforcement within the initial coat, for example:
 - 1 no. coat of LPL bonding primer
 - 2 no. coats of LPL Decothane
 - Or equal approved system

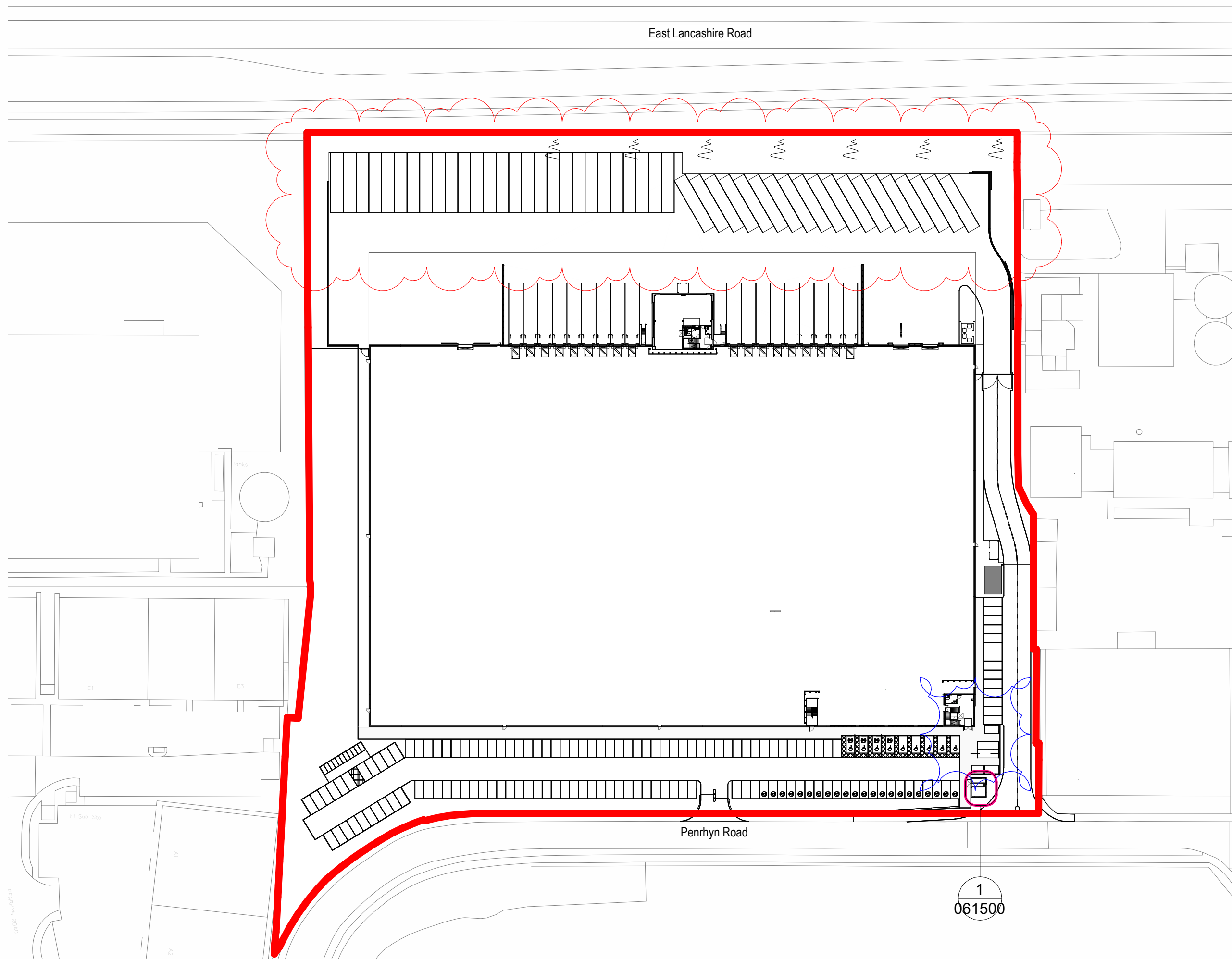
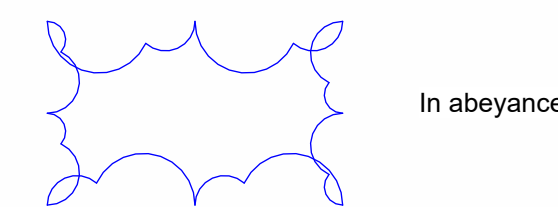
Walls

- Constructed of 215mm fully bonded brickwork to BS EN 771-1 laid english bond, bricks frogged 25N/mm² min. compressive strength, with neat struck joints, walls to provide flush finish internally.
- Engineering brick or block are not permitted.

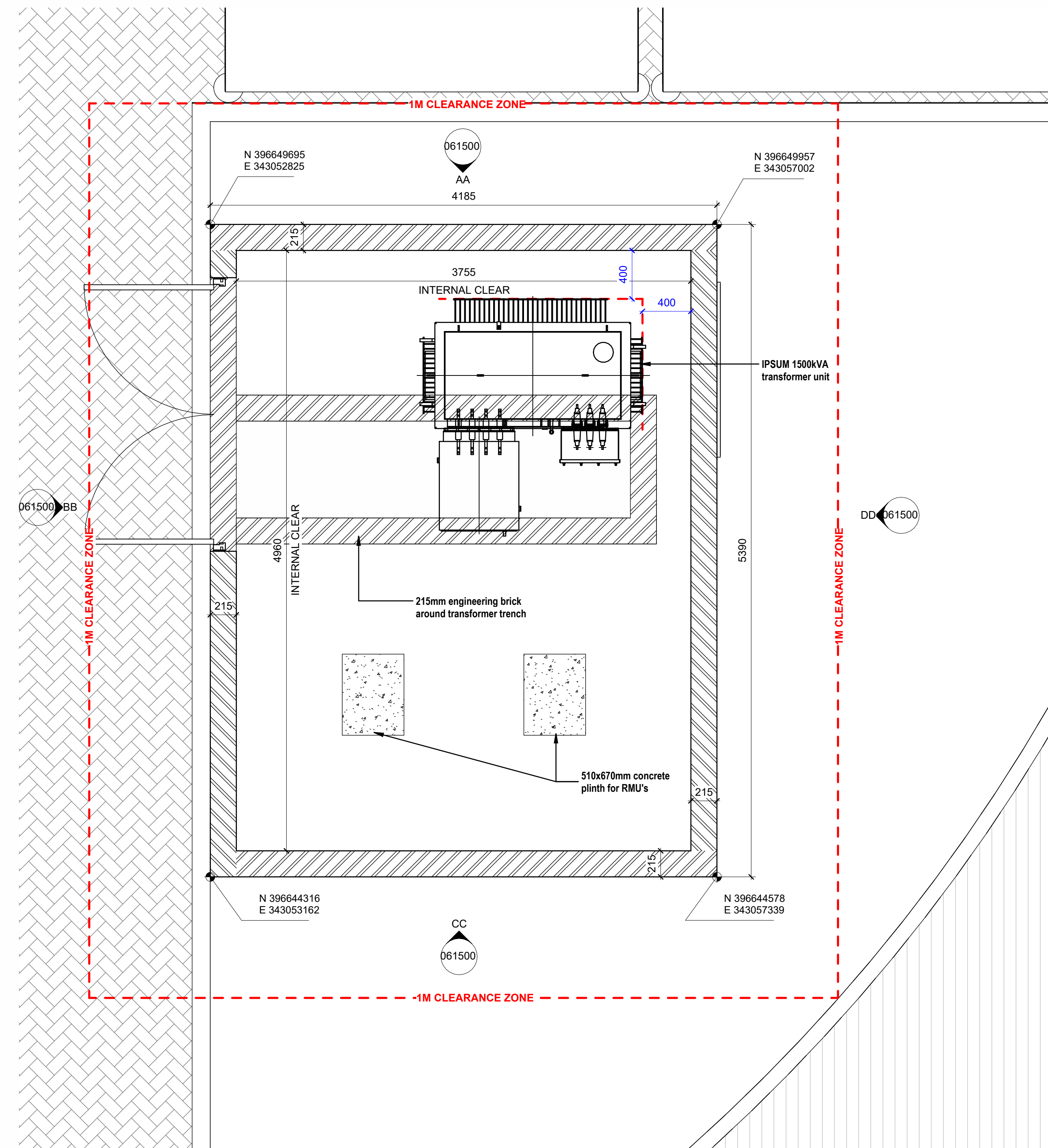
Doors

- Only SPEN/ALU approved doors shall be fitted.
- Double doors secured internally with standard padlock free issue by SPEN/ALU.
- When using bi-fold door, to be secured internally by panic bars, HASP and staple to external face secured with standard dual locking system provided by SPEN/ALU.
- Mastic pointing to frame surrounds externally.

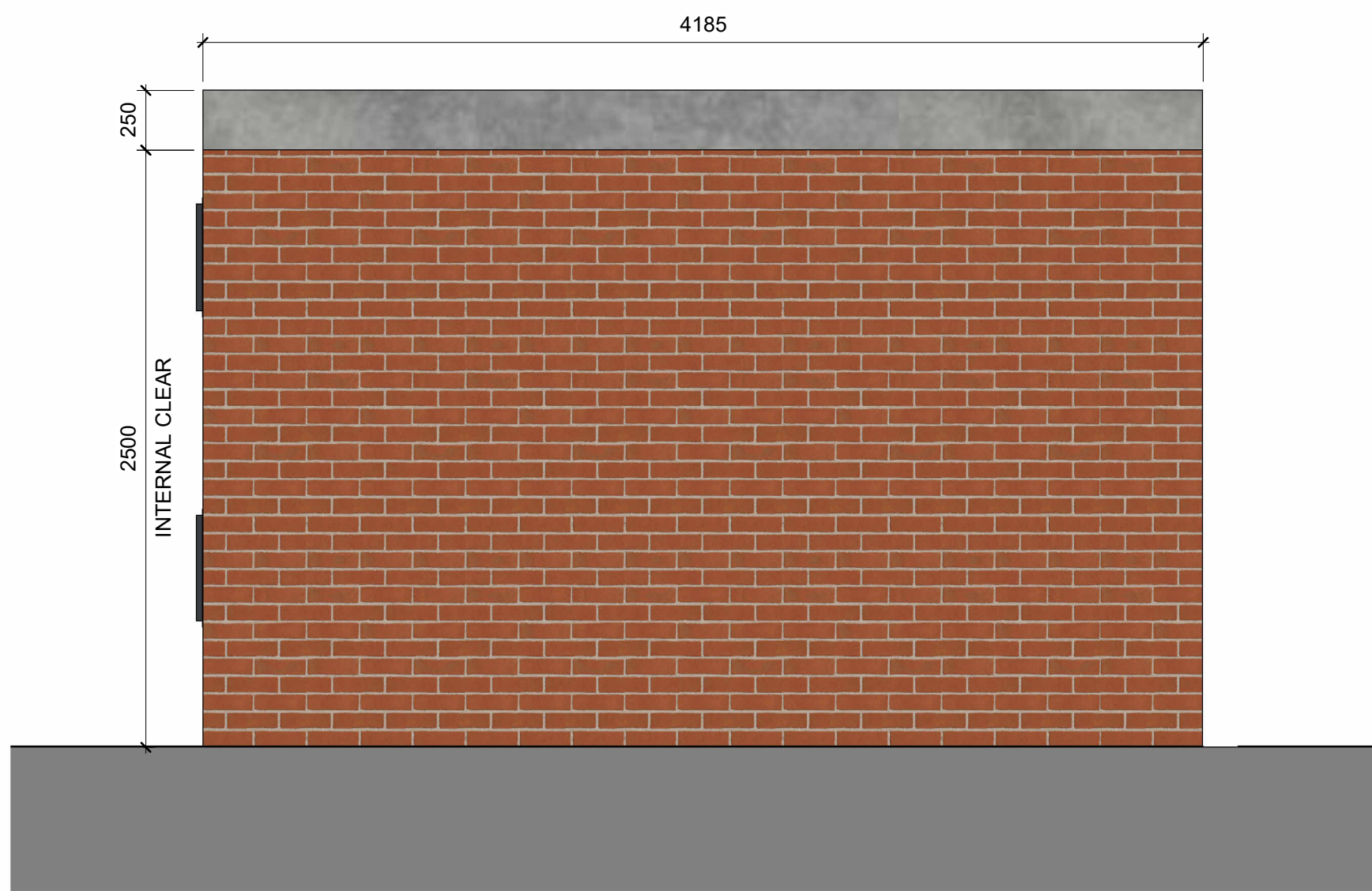
All information provided is subject to confirmation/information from IDNO.



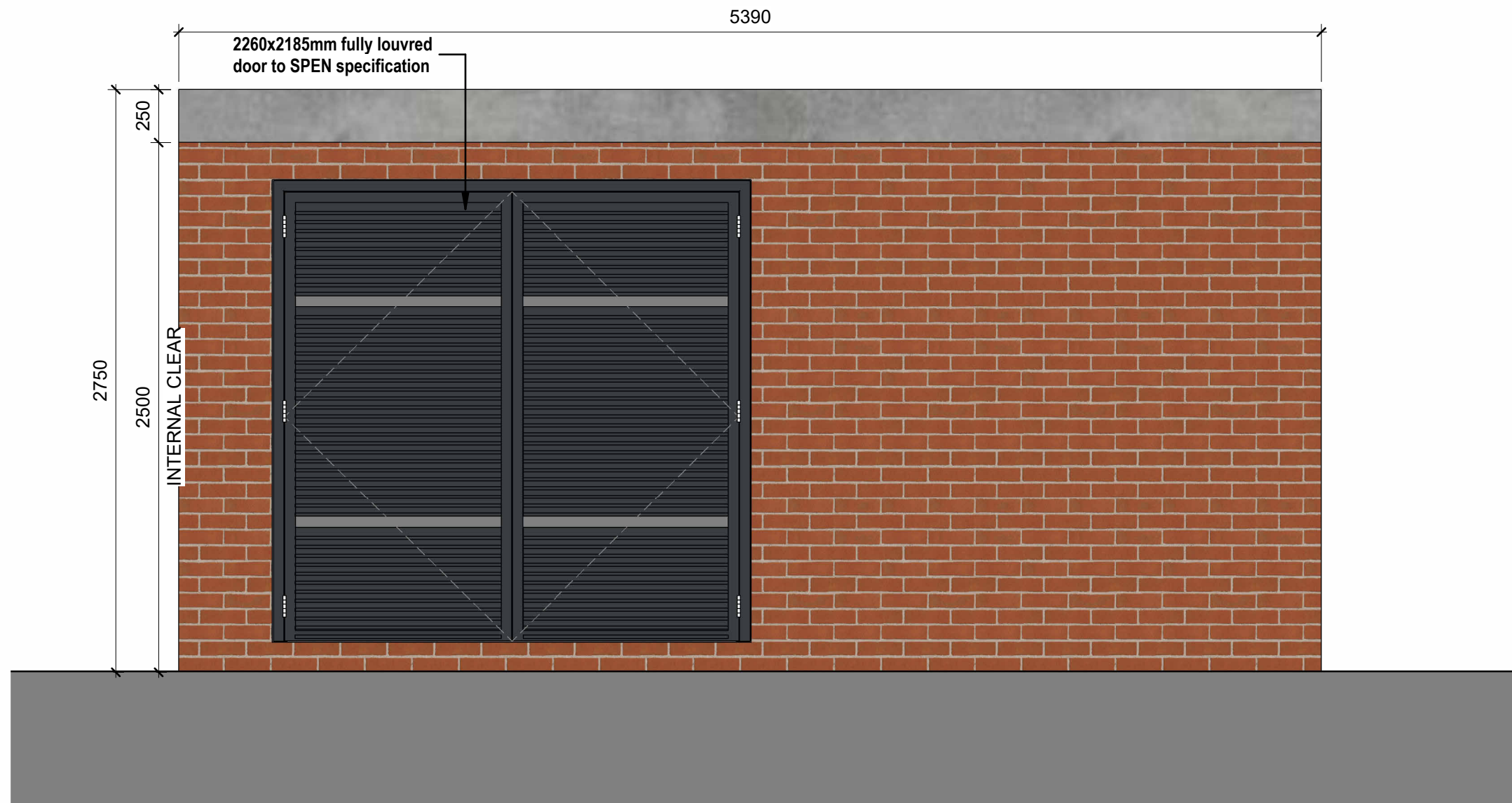
Sub-Station Location Plan
1 : 1000



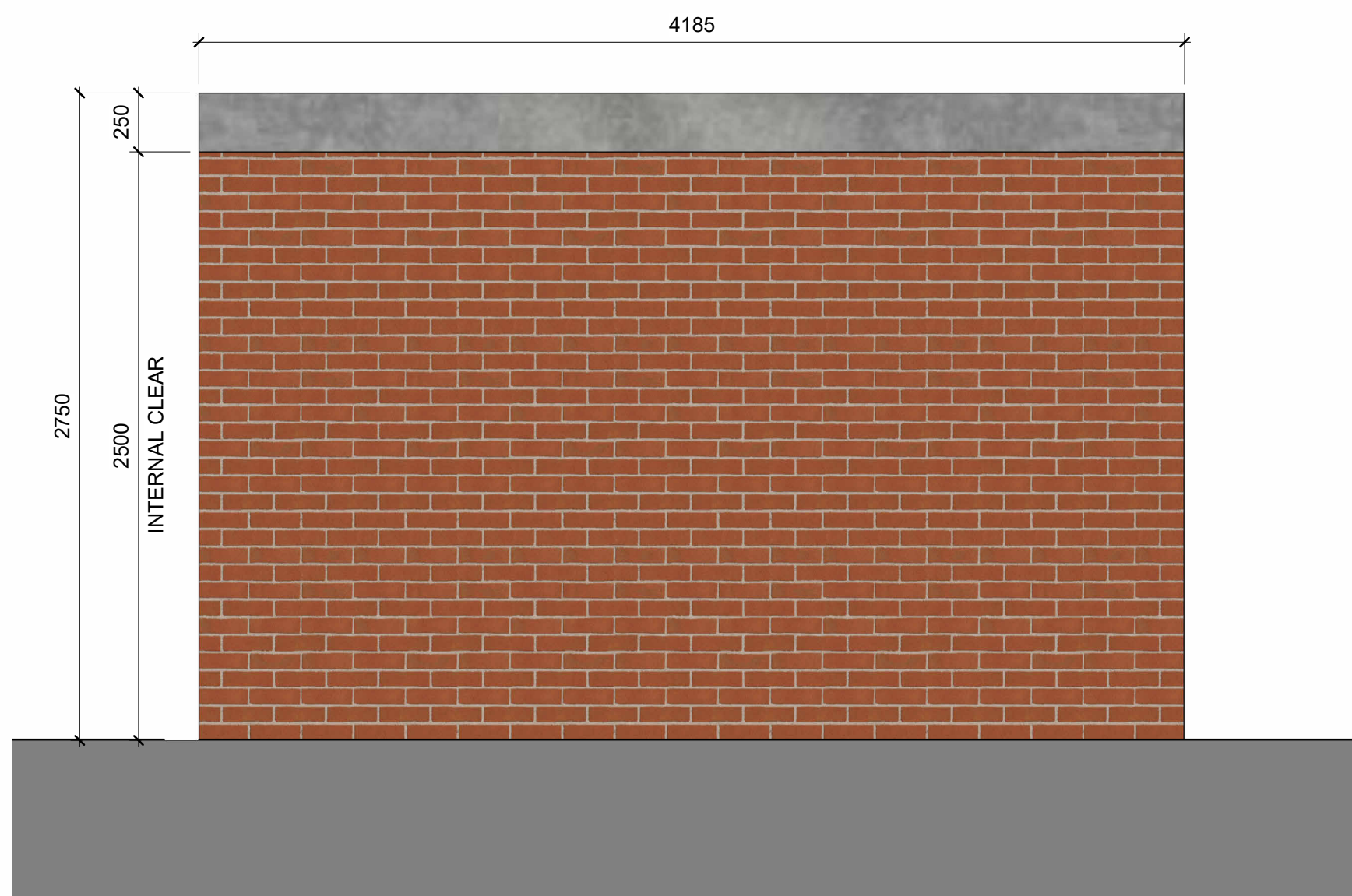
Sub-Station Setting Out - Callout 1
1 : 25



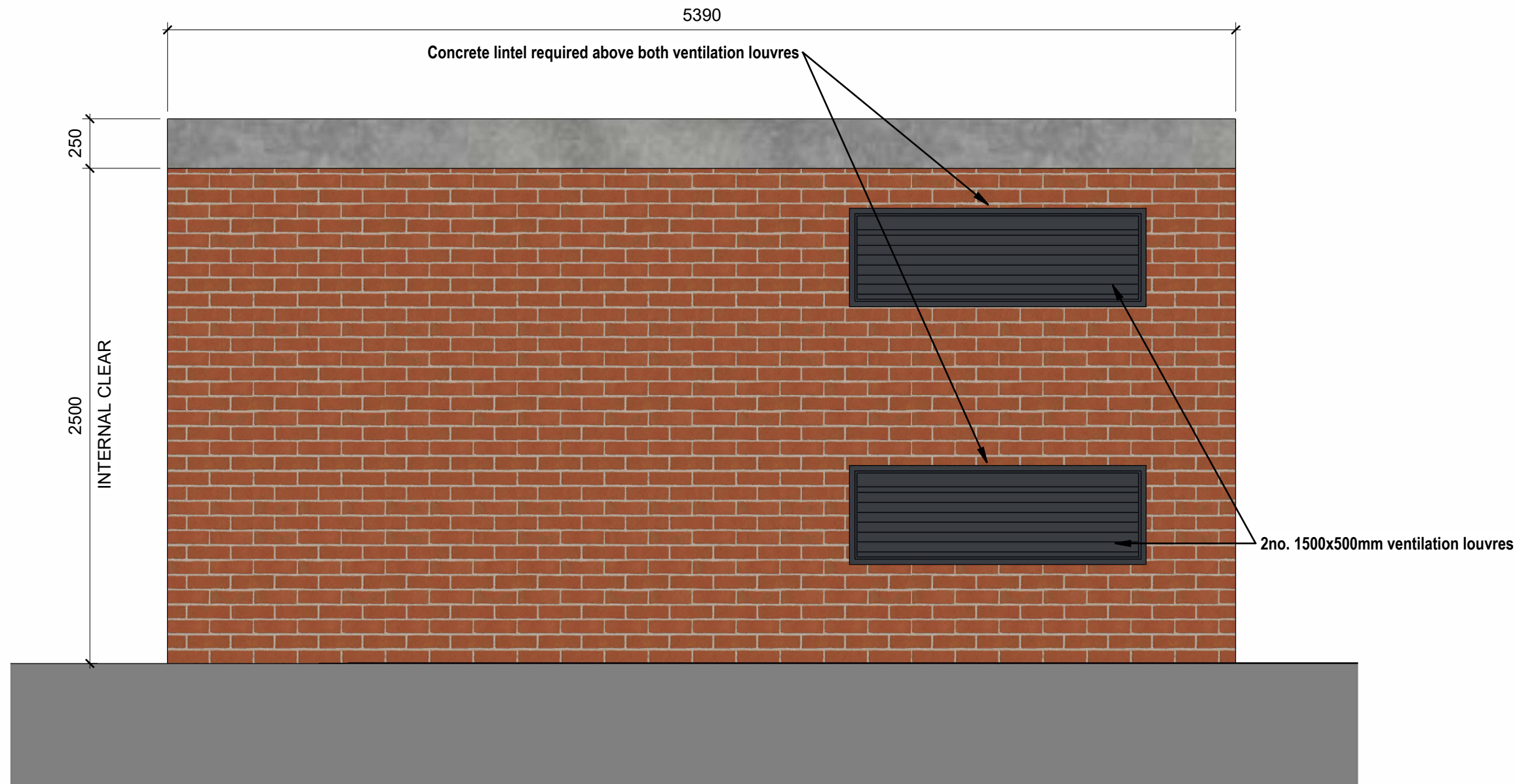
Ring-Main Unit/HV Enclosure Side Elevation AA
1 : 25



Ring-Main Unit/HV Enclosure Side Elevation BB
1 : 25



Ring-Main Unit/HV Enclosure Side Elevation CC
1 : 25



Ring-Main Unit/HV Enclosure Side Elevation DD
1 : 25

C01	Concrete yard updated. Abeyance cloud added to building entrance and cycle storage.	JH	IN	03/08/2026
P08	Waterproofing notes added.	JH	IN	03/08/2026
P02	Substation unit updated to align with contractor drawings. Refuse enclosure related following contractor discussions. Further information and detail added.	JH	LTS	24/03/2026
P01	Preliminary issue.	MJP	LPR	13/01/2026
rev	amendments	by	chk	date

Project Name

Penrhyn Road, Knowsley Business Park, Merseyside

Employer Project Address
Graftongate Knowsley Business Park

RIBA Workstage Status

3 - Spatial Coordination **S3 - Suitable for review and comment**

Drawn Checked Created Size

MJP LPR 18/12/2025 A0

UMC Reference Scale LOD LOI

21002 As indicated 3 3

Document Title

Sub-Station Details & Setting Out

Document Reference

L069 - UMC - 95 - EX.00 - D - A - 061500

Revision Note

Concrete yard updated. Abeyance cloud added to building entrance and cycle storage.

Issue Date Package Current Revision

03/08/2026 CONTRACT

C01