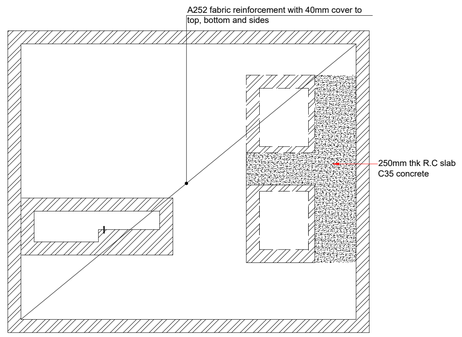
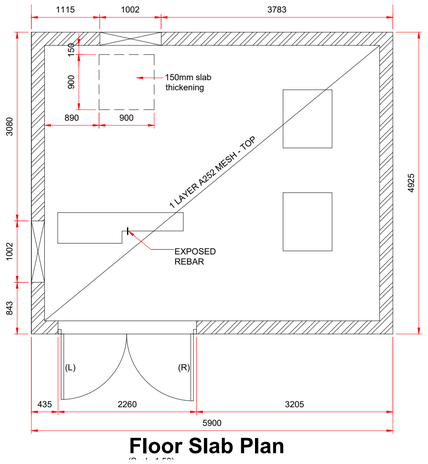
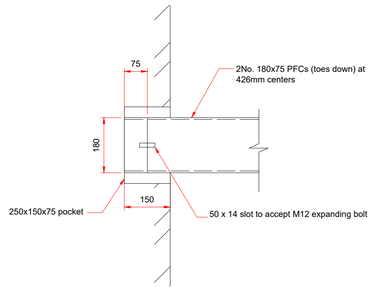


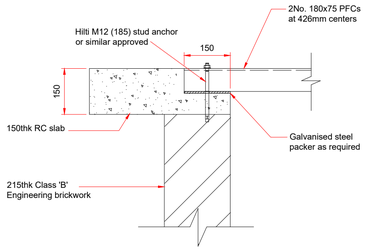
Foundation Plan
(Scale 1:50)



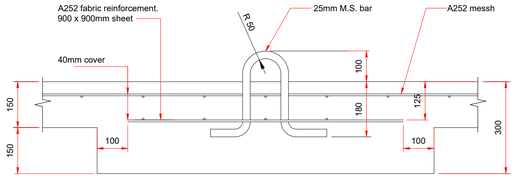
Floor Slab Plan
(Scale 1:50)



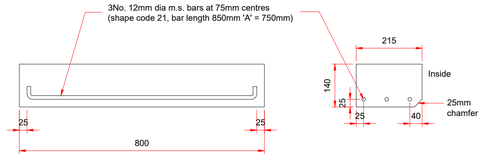
Sectional plan
(Scale 1:10)



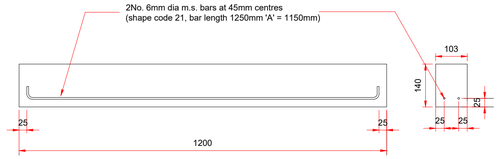
Detail 1
(Scale 1:10)



Detail of haulage eye (1No. required)
(Scale 1:10)



Lintel to cable slot
(Scale 1:10)



Lintel to vent opening
(Scale 1:10)

Lighting and Power

All wiring to be contained in surface mounted high impact PVC conduit and sourced from a quality manufacturer. All accessories to be metal-clad and sourced from a quality manufacturer e.g: MEM or MK.

The consumer unit will be single phase with a 100amp main switch, MCB outgoing circuits consumer unit to be 5-way and labeled to identify circuits. It shall be mounted 1200mm above finished floor level and sourced from a quality manufacturer. MCBs fitted to the consumer unit will comprise: Lighting 6amp. Each socket circuit 20amp. All MCBs shall be to BS EN 60898 Type B. The supply to the consumer unit and selection of conductors will be designed to provide a minimum capacity of 32amps.

If using MCB's as overcurrent protection all circuits need to have an additional 30mA RCD protection or preferably use 61009-1 RCBO's to supply all circuits rated under 32A

Lighting shall comprise 5 wall mounted bulkhead bayonet fittings to take 100w equivalent bulb. The light switch shall be positioned adjacent to the 'first leaf opening' door, be surface mounted at 1200mm to center above finished floor level and contain an illuminated locator.

One 13amp socket outlet with integral 30mA RCD protection will be provided for use with portable tools and equipment with consideration given to the mounting position. This socket shall have a neon indicator labeled

'test equipment only' (Radial circuit) sockets shall be metalclad type, comply with BS 1363 and be wall mounted adjacent to each other at a height of 450mm above ground level.

All power and lighting circuits shall comply with BS:7671 Requirements for electrical installation (IET Wiring Regulations 18th Edition Amendment 2) March 2022.

Manweb's Emergency Supply

35mm single phase supply from Manweb Network. Terminating a 100A c/out fused at 30A feeding 2 way distributuion board with:
1 x 6A cb to feed a baton lamp holder with 100w equivalent bulb and
1 xx 20A cb to feed an unswitched spur outlet for the battery charger and a double socket outlet.

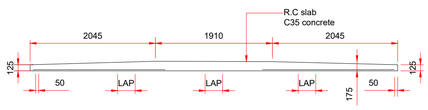
THE PROVISION OF ALL SMALL POWER & LIGHTING AND ASSOCIATED DUCTING REQUIREMENTS ARE THE RESPONSIBILITY OF THE CUSTOMER.
PLEASE REFER TO SPEN SPECIFICATION SUB-03-29 FOR FURTHER DETAILS.

1. This drawing to be read in conjunction with all relevant architect's, engineer's and mechanical and electrical engineer's drawings, specifications etc.
2. All dimensions to be checked on site.
3. Any discrepancies, contradictions to be notified to project architect / engineer.
4. Concrete
 The concrete is to be in accordance with the specification and attain the relevent cube crushing strength at 28 days
5. Foundations (Concrete 35N/mm² 28 day cube strength).
 Foundations are to be set on undisturbed organic strata that provide the required minimum design safe ground bearing capacity.
6. Floor (Concrete 35N/mm² 28 day cube strength).
 A flat, level and smooth floor surface is essential for installation of plant. Tolerance to finished level expressed as a maximum permissible deviation beneath a straight edge with feet placed anywhere on the floor shall not exceed 1mm in 1M or 3mm in 3M. Floors to be cured, prepared and painted with 2No. coats of non-slip floor paint on completion.
7. Brickwork
 All brickwork below D.P.C to be H.D category 1 min. 75N/mm² mean compressive strength and max 7% M.A and durability designation F2 S2 (Ex-engineering brickwork class B) in english bond except for exposed faces. External facing bricks to be HD category 1 min. 20N/mm² mean compressive strength, maximum 12% M.A and durability desigination F1 S1 or better. Internal bricks to be fair faced smooth textured solid concrete bricks, size to match external facing bricks and with a mean compressive strength of not less than 20N/mm².
8. Walls
 Leaves of collar jointed double stretcher walls to be tied together by means of 4mm min dia. stainless steel double-triangle ties (or better) laid in every 4th course at 375mm centres and set back 38mm from outer face, ties are to be staggered. Where cavity wall construction is proposed the constructor shall confirm by structural design calculation to the satisfaction of energy networks that the proposed cavity wall panel construction has equivalent lateral strength or better than that detailed on this drawing (eg stainless steel windposts or other stainless steel reinforcement system.)
9. Roof (35N/mm² 28 day cube strength)
 Internal/external faces of concrete to be fair faced. All external faces to be cured, prepared, primed and finished with a two coat high-performance (Aliphatic) polyurethane waterproofing system (flat roof grade) with glass fibre mat reinforcement to initial coat E.G.

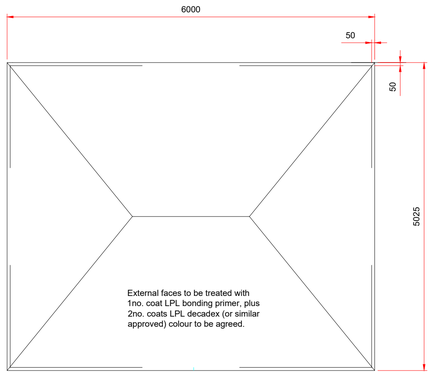
 1 No. coat of LPL bonding primer then
 2 No. coats of LPL decathane

 or equal system.

 All finishes to be applied strictly in accordance with the manufacturers recommendations. Where a superimposed pitched roof is proposed, the concrete sub-roof shall have a waterproof coating and provision must be made to shed rainwater from the roof slab externally in the event of a failure of the pitched roof. All proposals regarding construction of the pitched roof must be submitted to energy networks for comment before work commences.
10. Ventilation unit opening sizes for 1000kVA transformers shall be a minimum 1002 x 450mm. Typical ventilation indicated may not be adequate in certain supply conditions which might require additional or alternative ventilation arrangements.
11. Foundation and floor layout details indicated are typical for substation buildings housing indoor equipment and would not therefore be applicable to unit substation equipment or H.V switching station layouts.

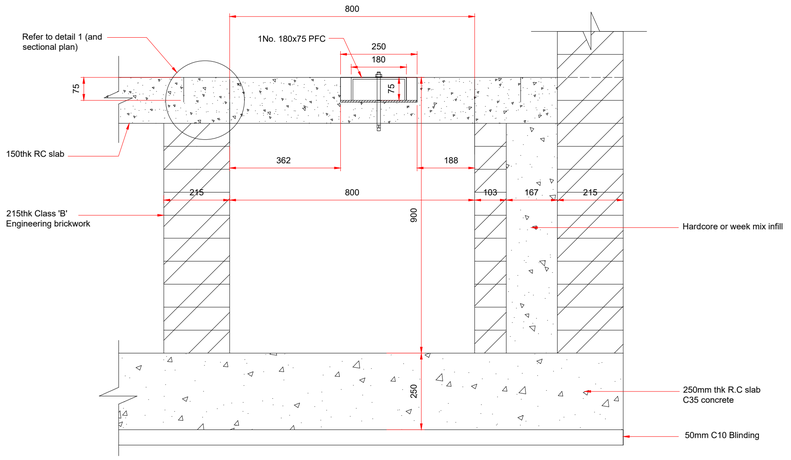


Section through roof
(Scale 1:50)



Roof Plan
(Scale 1:50)

NOTE:
THE DIMENSIONS SHOWN ON THIS DRAWING ARE REWORKED FROM THE ENERGETICS SOLKOR DRAWING PRE APRIL 2023 TO ALLOW A 750mm CLEARANCE AROUND ALL HV SWITCHGEAR AS REQUIRED BY SPEN.



Recess detail for switchgear support (Will also be mirrored)
(Scale 1:10)

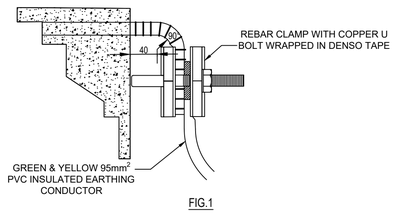


FIG.1

REBAR CONNECTION DETAIL
SCALE: NTS

Security Doors

Security doors shall meet the requirements of the local DNO. *The type (Steel or GRP) will be* based on risk assessment and local DNO's requirement. Standard security doors to be 45mm thick flush double pan construction formed from 1.2mm nominal thickness zinc coated steel. Doors to incorporate louvred panels top and bottom of each leaf. Right hand leaf viewed from outside to open out, with a dual locking facility to meet the requirements of the local DNO. Passive leaf to be secured with 16mm spring loaded bolts top and bottom. Both door leaves fitted with 90 degree hold open door stays. Each door leaf to have a minimum of 3 number heavy duty stainless steel hinges with dog bolts. Security strip to be provided to the leading edge of the opening door. Door sets to be fitted with weather seals. An overpanel with a removable transom and may be required, which shall be of the same construction as the door leaves. The removable transom shall be securely bolted in place internally to allow normal operation of the doors. Doors and frames to be polyester powder coated with colour to suit customer / Planning Authority requirements Door frames to be 1.5mm nominal thickness zinc coated steel sheet to BSEN 10152 (BS6687). Construction can be either single or double rebate providing there is sufficient width to cover any vertical damp proof course, and to provide sufficient fixing points. Mastic pointing to frames externally.

DESIGN NOT APPROVED

Rev	Revision Details	By	Date
001	Preliminary Design.	BM/GH	14.07.26

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Drawing Title:	DUAL RMU SOLKOR SUBSTATION		
DNO Reference:	S263867		
Project Reference:	EDB8487_Dye House, off Acorn Drive, Prescot, L34 1NL		1
Drawing Number:	EDB8487_ASSET077286_EL_200		
Client:	Tyson Construction Ltd		
OS Grid Reference:	345858 / 392780		
Utility:	EL	**Revision:**	001
Drawn By:	BM	**Checked By:**	GH
Date Drawn:	14.07.26	**Date Checked:**	14.07.26
Sheet Size:	A1	**Scale:**	1:500
Sheet:	2 OF 2	**Title Block:**	V.04.26.B