

## FLOOR:

- Foundations to be designed for a maximum weight of transformer of 40kN and a ground bearing pressure of  $80kN/m^2$ minimum

- Floor slab shall be designed to carry a minimum load of 7.5kNm². Floor to be level, steel float finish concrete, and sealed with approved concrete sealer or concrete paint before equipment installation. The foundations shown are for a substation built on natural ground, if ground is unsuitable the foundations are to be adjusted to structural engineers instructions.
- Earthed area of floor slab reinforcement shown hatched (on electrical layout) to inspected by Northern Powergrid clerk of works prior to pouring concrete.

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- Trench covers to be 25mm exterior quality WBP ply, maximum width 1200mm, each cover to have 2 No. 35mm diameter finger holes, covers to be painted two coats silver gloss paint both sides and all edges
- Floor to be cast to front face of door opening, providing solid threshold. External level to be 150mm below finished floor level, allow unrestricted access for gear, and have a level landing area
- External paving and site finishes shall be provided as agreed with Northern Powergrid representative on site. As a minimum this shall consist of paving to full width of substation doors x 1200 mm deep, with paving linking nearest highway path

## BRICKWORK:

- Masonry below ground level to be 7N/mm² dense concrete block or brick.
- Walls to be 250mm cavity walls with blockwork or brick inner leaf. Internal walls minimum 100mm thick 7N concrete block or brickwork. Leafs to be tied together with stainless steel double triangle wall ties to BS1243 at 450mm centres vertical and 900mm centers horizontal.
- Substation doors to be set back a minimum of 1500mm from back edge of footpath. Any proposed reduction in this clearance to be approved by Northern Powergrid following submission of site specific risk assessment and operational method statement 10. 215mm trench walls to be fair faced and flush pointed dense concrete block or brick

Care is to be taken to ensure that access to cable openings is not impaired.

Sanitary, Water or other Services to run through or under the substation

## REFERENCE DRAWINGS :

C978643 - Earth Point Connection Details

C1010063 Rev C — Internal Power & Lighting for 315 1000kVA Slide in UDE Substation

## Northern Powergrid will not install any equipment until the accommodation is deemed fit for purpose.Customer service will not be made live until completion certificate is issued. The customer shall provide full construction drawings minimum 15 days prior to commencement of works, to allow Northern Powergrid to check for compliance with their requirements. mmencement of site works to enable ements for the installation of Northern describe the building to architectural, epared By ieet No. 16.05. NORTHER WERGRID .16 TM Grid Reference Checked By AS SHOWN Ref No. ocument Details Lloyds Court, 315 $\supset$ STANDARD DISTRIBUTION 1000kVA 061924 78 Grey Street, Newcastle Upon Tyne, SLIDE IN UDE SUBSTATION DRAWING Historic Drawing No. $\equiv$ PREFABRICATED ENCLOSURE NE1 6AF

INTERNAL

CUBIC

CAPACITY

28.4m³

ROOM TEMP 30 °C TRANSFORMER HEAT

OUTPUT

Northern Powergrid Project Engineer to be site inspections to be carried out during

be

pe notified of construction.

Substation to be designed in accordance with Northern

Powergrid flood mitigation policy.

VENTILATION TO I

BE DESIGNED :

SPECIFICATION

TO

Customer or their agent to obtain all necessary construction work commences.

Planning and Building approvals before

This drawing is intended to indicate Powergrid apparatus and is not in a structural or other requirements.

minimum requir way intended to

FOR INTERNAL POWER SPECIFICATIONS SEE D C1010063 Rev C

DRAWING

CONFIGURATION OF CABLE TUNNELS AND DUCTS TO BE AGREED WITH ELECTRICAL ENGINEER / FPS CoW BEFORE FOUNDATIONS ARE BUILT.

CUSTOMER NOTES

The customer to carry out all necessary lighting a described including the provision of the LV supply. of any other areas or customers accommodation.

and

d heating installation and building work as The substation shall be wired independently

AND LIGHTING