

## CUSTOMER NOTES

EARTHED AREA OF FLOOR
SLAB REINFORCEMENT SHOWN
HATCHED TO BE INSPECTED
BY NORTHERN POWERGRID
CLERK OF WORKS PRIOR TO
POURING CONCRETE.

ELECTRICAL LA SCALE 1:50

LAYOUT

BACK EDGE OF FOOTPATH

215

910

440

290

850

700

250

BUILD 1/D 100

DUCTS SEALED IN THICK CONCRETE IN 6No 125mm

SCALE 1:50

PLAN

1500

FITTED WITH AZ
CYLINDER OR
PADLOCK
2 KEYS TO
CUSTOMER

890

CABLE TRENCH

460

 $\triangleright$ 

1No 75mm I/D RADIUS DUCT

3140

2640

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 heat ly. The si ating installation and building work as substation shall be wired independently

Northern Powergrid will not install any equipment until the purpose. Customer service will not be made live until com accommodation is deemed fit for pletion certificate is issued.

Customer or their agent to obtain all necessary Planning construction work commences. and Building approvals before

This drawing is intended to indicate Powergrid apparatus and is not in a structural or other requirements. e the any v minimum requirements for the installation of Northern way intended to describe the building to architectural,

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.

Northern Powergrid Project Engineer to be site inspections to be carried out during c Substation to be designed in accordance with Northern Powergrid flood mitigation policy. notified of commencement of site works to enable construction.

Date Issued

Checked By

Ref No.

C993723

16

INTERNAL

CUBIC

CAPACITY

29.8m³

FOR DETAILED SPECIFICATION

INFORMATION SEE TECHNICAL NPS/006/001

FITTING/CONDUIT TO BE PVC

(WALL MOUNIEL)

TUBULAR HEATERS BEHIND PLASTIC COAT
COVER (THERMOSTATICALLY CONTROLLED
COVER (THERMOSTATICALLY CONTROLLED)

COATED TO

FLUORESCENT TUBES IN IP56 FITTINGS (WALL MOUNTED)

CONSUMER UNIT WITH MCB'S

UNSWITCHED SPUR

SWITCHED SOCKET OUTLET (TEST)

SWITCHED LIGHT SWITCH

SOCKET OUTLET

## **NOTES**

## FLOOR:

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

bearing

- 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.
- 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.
- Earthed area of floor slab reinforcement shown hatched (on electrical layout) to be inspected by Northern Powergrid clerk of works prior to pouring concrete.
- 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
- 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 1200mm deep, with paving linking nearest highway path
- Substation construction to provide 0.25  $\mbox{W/m}^2$  °C to roof.
- Ceiling height to be minimum 2400mm, maximum 2800mm, and to give one hour fire protection. Ceiling to be concrete, plasterboard, fireboard or similar on suitable timber framework where required
- Roof to be non fragile, waterproof membrane to have minimum life expectancy of 15 years Timber roofs to have 18mm minimum ply decking. Pitched tile or slate roofs to have 18mm ply sarking to prevent access, with counter battens and sarking felt over ply. tile or slate roofs to be underdrawn with 12mm ply to prevent access. On sloping or tiered sites, measures shall be incorporated to prevent access on to roof.
- All roofs to be secured to walls via proprietary fixings or straps (explosion relief devices not acceptable) to be designed to BS6399 part 3. Pitched roofs shall have gable restraint straps fixed to roof framework.
- 12. Masonry below ground level to be 7N/mm² dense concrete block or brick.
- 13. Walls to be 215mm 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 centres horizontal.
- 14. 215mm trench walls to be fair faced and flush pointed dense concrete block or brick
- 15. Doors must be to Northern Powergrid specification. Each substation site will be given a security rating by Northern Powergrid, standard, enhanced or high, the minimum door specification shall match or exceed this site specific security rating. Door details must submitted for approval prior to placing an order with the supplier. must be
- 16. Door reveals & lintel soffits to be closed, closure to provide minimum 1hour fire protection

Trenches and cable routes linked to customer's accommodation to be closed off after cable installation. Closure to prevent physical access into substation and provide one hour fire

No structural steel within substation to be exposed. Steel doors shall be fixed to masonry and not to steel structural frame of building.

,1No 75mm I/D RADIUS DUCT

The position of the louvred ventilators should be such that they do not create a noise complaint.

No Gas, Sanitary, Water or other Services to run through or under the substation.

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

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.

## REFERENCE DRAWINGS :

C969428 — Roof Details (GRP/STEEL)
C978643 — Earth Point Connection Details

FOUNDATION PLAN
SCALE 1:50

NORTHERN POWERGRID SHOWN ocument Details Lloyds Court, STANDARD DISTRIBUTION EXTENSIBLE 78 Grey Street,  $\equiv$ E HV PANEL WILL : MASONRY Newcastle Upon Tyne, SUBSTATION DRAWING Historic Drawing No. WITH METERING ANNEXE Z E 1

6AF

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