

F FOOTPATH EQUIPMENT & SCALE 1:50

ENCLOSURE

Supplier Ref: ECE08R4 Commo Transformer Mounted Bottom Outgoing – LV Supply Transformer links on Right Hanc

Side

1250A ACB (Air Circuit Brewith 30V DC shunt trip)

aker) + 2 fee

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ways

Left

Side

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bottom

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Code

:218618

2590

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LEARTHED AREA OF FLOOR SLAB REINFORCEMENT SH HATCHED TO BE INSPECTE BY NORTHERN POWERGRIE CLERK OF WORKS PRIOR POURING CONCRETE.

ENT SHOWN USPECTED WERGRID PRIOR TO

1600A ACB (Air Circuit Breaker) + 2 feeder ways Left with 30V DC shunt trip) Supplier Ref: ECE09R4 Commodity Code:218619 Transformer Mounted, Bottom Outgoing - LV Supply Transformer links on Right Hand Side

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LV FUSE CABINET / ACB

LV Fuse Cabinet 1600A - 7 Way

Fuse

Cab

let

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Ref:ECE03R4

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, Fuse Cabinet 1600A – 5 Way Fuse Ca nly for 315 and 500kVA Transformers)

let

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Ref:

ECE02R4

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odity

2710 (Internal)

3140

LV Fuse Cabinet 800A - 3 Way Fuse (only for 315kVA Transformer)

Cabinet

L

Supplier

Ref:ECE01R4

Comm

nodity

Code:218581

Left

Side

(metering

CTs on bottom

3835 (Internal)

4265

315kVA Transformer 315kVA 3 Phase 50HZ 11000/433V, Supplier Ref: YEDL 122648 Commodity Code:122648 Oil Immersed Naturally Cooled Ground Mounted Transformer to ENA TS 35–1

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nase 50HZ 11000/433V, S Naturally Cooled Ground

Supplier

YEDL

Supplier Ref: Mounted Trai

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122671 Cor mer to ENA

modity Code:122671

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ase 50HZ 11000/433V, Supplier Ref: YEDL Naturally Cooled Ground Mounted Transforr

122770 Commodity Code:122770 mer to ENA TS 35–1

SECTION B-B scale 1:50

1000kVA Transformer 1000kVA 3 Phase 50HZ 11000/433V, Supplier Ref: YE Oil Immersed Naturally Cooled Ground Mounted Transf 800kVA Transformer 800kVA 3 Phase 50HZ 11000/433V, Supplier Ref: YEE

YEDL nsform

- 122861 Commodity ner to ENA TS 35–1

Code:122861

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TRANSFORMER

FPI (Nortroll 2350-NPG) on LHS 245880

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Ref:

Cable

Troll

2350

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Supplier Ref - Schneider RN2C-T1/21/RA0103853 Commodity Code: 103853 Inc: Ring Sw actuator wiring on both switches (630A), CTs Ring Sw VPIS, 3 hole plates, CES4s, stud, SF6 alarm contact Protection CT's - 100/50/5

11kV RMU Non-Fault protection

-Exte

200A Ring

Main

Unit

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Supplier Ref

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EQUIPMENT SCHEDULE

LINTEL OVER DOOR OPENING

		Checked By	Created 19 - 10 - 2016	
	STANDARD	JW Grid Referenc	Modified	
		AS SHOWN	Prepared By	
I	11kV 315 - 1000 KVA UDE IN MASONRY ENCLOSURE	Details	Manufacturer	
	Lloyds Court, 78 Grey Street, Newcastle Upon Tyne, NE1 6AF	NORTHERN		
	/www.northernpowergrid.com/asset/6/document/1828.xlsx	http:		
	THE			
	FILL LIST OF NORTHERN DOWERCRIN MATERIALS	NOTE.		
G				
)				
ΤЦ				
	nviroengineering.com www.bradburyuk.com psgroup.co.uk www.hodgson-sayers.co.uk	www.envin		
	plastics.co.uk www.primadc	•		
	SUPPLIERS SUBSTATION DOORS	GRP ROOFS		
	to be carried out during construction	Northern Pa		
	to be designed in accordance with Northern Powergrid flood mitigation policy D12.	Substation to b -IMP/001/012.	, ,	ב כ נ
ГП	other requirements.	structural		o Of ⊳
	s intended to indicate the minimum requirements for the installation of Northern aratus and is not in any way intended to describe the building to architectural,	This drawing i		
	r their agent to obtain all necessary Planning and Building approvals before work commences.	Customer or construction		
	Generator ( Earth Point			
	Roof Details Roof Details (GRP/STEEL)	C969426 -	ACB,	im of
	DRAWINGS :	REFERENC		
	strip around the substation is required for access and maintenance.	2.0 metre		
$\Box$	sk assessment and operational method statement.	of site sp		
	back a minimum of 1500mm		ACB,	im of
	nitary, Water or other Services to run through or under the substation.	No Gas, S		
	be taken to ensure that access to cable openings is not impaired.	Care is to	:218581	Code:2
	Door reveals & lintel soffits to be closed, closure to provide minimum one hour fire protection	11 Doc pro	ode:218582	code:
	to include ventilation where shown via steel door louvre cation and approval.		:218583	code:
	s to be enhanced security rated from Northern Powergrid approved suppliers. Details e submitted to Northern Powergrid for comment prior to ordering.	9 Doors to be		
$\cap$	yle wall ties to BS1243 at 450mm centres vertical and 900mm centres horizontal.			
	to be 215mm with blockwork or brick inner leaf. Internal walls minimum 100mm 7N concrete block or brickwork. Leafs to be tied together with stainless steel double	BRICKWORK: 8 Walls thick		22648
		pro		
	Roof shall be to Northern Powergrid specification. Other roof types shall only be used with written approval from Northern Powergrid. Must accommodate an explosion relief device and must support distributed loading of 1.8kN/m². All roofs to be secured to walls via	7 Roc wri		22671
		DF:		22770
	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	6 Ext sub		
Ψ	and all edges			122861
	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	5 Tre	_	
	or to be cast to front face of door opening, providing solid threshold. External level to 75mm below finished floor level, allow unrestricted access for gear, and have a level ding area.	4 Flo lan		
	hown hatched (on electrical layout) to be works prior to pouring.	3 Ear ins		
	to undertake a ground investigation survey, substation roundations to to Northern Powergrid for comment prior to construction.			
	concrete sealer or concrete paint before equi			
$\triangleright$	itions shown are based on a maximum weight of transformer of 40kN and a im ground bearing pressure of 80kN/m². Floor slab shall be designed to carry a located of 7.5kNm². Floor to be level, steel float finish concrete, and sealed with	1 Foundo minimu minimu	Earth	and
	CONSTRUCTION DETAILS	ELCOR:	UNITS TO BE INSTALLED	
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arthing	compiles	WIT	Earthing		carthing complies with Earthing Drawing CTUTU820 - (Loid Site)
arthing	complies	with	Earthing	g Drawing	Earthing complies with Earthing Drawing C1010864 – (Hot Site)
ng draw	ring to be	attac	ched wit	th design	ng drawing to be attached with design approval submission

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EARTH ו northernpowergric

(Earthing

PB TRIP – REQUIRED FOR ACB'S 30V Battery Unit with Charger Com Push Button Trip Commodity code:

code:

nmodity code: : 099457

215989

FOUNDATION PLAN SCALE 1:50

H10 "L" BAR 600mm A=500mm, B=100mm

500

BUILD IN 1 No 125mm I/D RIDGI-DUCTS EARTHING CABLES

1000kVA 100/5 with 7 800kVA 100/5 with 7 500kVA 50/5 with 10 315kVA 50/5 with 5A

h 7.5A 0/C 1 10A 0/C T

PROTECTION SETTINGS

CABLE

TRENCH

250

750

3140

SWA Cables – 4 core SWA 2.5mm (used with PB TRIP) commodity code: 099457

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1545

LV 300wF AI/Cu Commodity code -

110978

HV 300AI T XLPE Corr

nodity code

Ι

110400

CABLES

845

4265 T

50mm WIDE × 25mm DEEP REBATES TO RECEIVE 25mm PLYWOD COVERS

Transformer Mounted Bottom Outgoing -LV Supply Transformer links on Right Hand S

Side

800A ACB (Air Circuit Breaker) with 30V DC shunt trip)

+ 2 feeder

ways

Left

Side (metering CTs on

bottom

pplier Ref: ECE07R4

Con

dity

Code

:218617