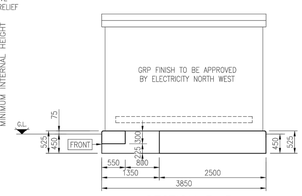



SECTION A–A

(SCALE 1:50)




SECTION B–B

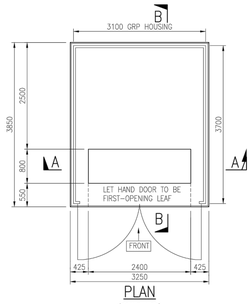
(SCALE 1:50)




NOTE
THE EARTHING TAPE IS ATTACHED TO THE MAIN REINFORCEMENT AND ROUTED TO EMERGE FROM THE INTERNAL FACE OF THE FORMWORK FOR THE FUTURE CONNECTION TO THE SWITCH HOUSE EARTHING SYSTEM.

DETAIL OF REINFORCEMENT/EARTHING CLAMP

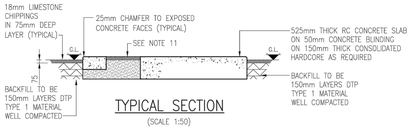
(SCALE 1:5)




PLAN

(SCALE 1:50)

CONCRETE GENERAL ARRANGEMENT

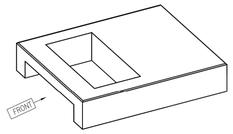



TYPICAL SECTION

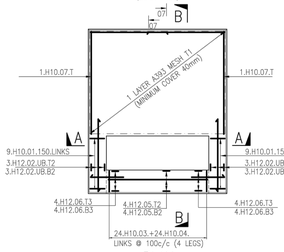
(SCALE 1:50)

GENERAL SPECIFICATION FOR GRP HOUSING ENCLOSURE

1. SUPPLIED/PURCHASED FROM NOMINATED SUPPLIER, UNDER FRAMEWORK AGREMENT.
2. DETAILS INCLUDING DOOR LOCKING SPECIFICATION ALL AS IN ES 301.
3. LOWER LEVEL VENTILATION MUST BE APPROVED BY ELECTRICITY NORTH WEST LIMITED & EQUIVALENT TO TOTAL AIR FLOW OF 0.75Metres³ (FOR DETAILED SPECIFICATION SEE ENGINEERING SPECIFICATION 301)

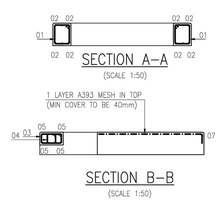



ISOMETRIC VIEW




PLAN

(SCALE 1:50)




REINFORCEMENT DETAILS

BENDING SCHEDULE TO BS 8666:2005

| Bar mark | Type & size | No. of mbrs | No. of bars in each | Total no. | Length of each bar † mm | Shape code | A * mm | B * mm | C * mm |
|---|---|---|---|---|---|---|---|---|---|
| 1 | H10 | 1 | 18 | 18 | 1725 | 51 | 340 | 440 | |
| 2 | H12 | 1 | 12 | 12 | 2500 | 21 | 430 | 1685 | 430 |
| 3 | H10 | 1 | 24 | 24 | 1525 | 51 | 465 | 215 | |
| 4 | H10 | 1 | 24 | 24 | 900 | 51 | 155 | 215 | |
| 5 | H12 | 1 | 8 | 8 | 2350 | 00 | 2350 | | |
| 6 | H12 | 1 | 16 | 16 | 1275 | 11 | 850 | 430 | |
| 7 | H10 | 1 | 2 | 2 | 3150 | 11 | 1760 | 1900 | |
| A393 MESH FABRIC = 7.5m2 | | | | | | | | | |

† Specified in multiples Of 25mm * Specified in multiples Of 5mm

GENERAL NOTES

1. DO NOT SCALE.
2. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
3. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ELECTRICITY NORTH WEST CODE OF PRACTICE ES352
4. ALL WORK TO CARRIED OUT IN ACCORDANCE WITH CURRENT BUILDING REGULATIONS AND RELEVANT BRITISH STANDARDS AND CODES OF PRACTICE.
5. CONTRACTOR TO OBTAIN UNDERGROUND CABLE & SERVICE RECORDS PRIOR TO COMMENCEMENT OF ANY WORKS.
6. THE CONTRACTOR MUST ASSUME THAT ANY EXISTING CABLES LOCATED WITHIN THE WORKS ARE LIVE AND LIAISE WITH THE ELECTRICITY NORTH WEST ENGINEER FOR ADVICE.
7. SITE SPECIFIC RISK ASSESSMENT TO BE UNDERTAKEN PRIOR TO COMMENCEMENT OF ANY WORKS.
8. FOUNDATION DESIGN HAS BEEN BASED ON A SUITABLE BEARING PRESSURE FOR MOST GROUND CONDITIONS INCLUDING CLAYS. FORMATION LEVEL FOR FOUNDATIONS TO BE TAKEN DOWN TO GROUND THAT IS SUFFICIENTLY FIRM TO PROVIDE PHYSICAL SUPPORT TO THE STRUCTURE.
9. FOUNDATION FORMATION LEVELS TO BE INSPECTED AND APPROVED PRIOR TO FOUNDATION CONSTRUCTION.
10. THE CONTRACTOR IS TO ENSURE THAT CONCRETE AND/OR ANY SCREEDING DOES NOT ENCROACH ON THE CABLE ENTRY POINT

CABLE TRENCH

11. CABLE AREA TO BE BACK–FILLED AFTER INSTALLATION OF ALL CABLES, WITH WELL CONSOLIDATED SAND, WITH A 75mm TOP LAYER OF SINGLE SIZE 14–20mm LIMESTONE CHIPPINGS.

GRP HOUSING

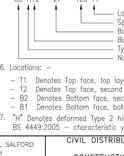
12. TO BE FROM ELECTRICITY NORTH WEST APPROVED SUPPLIER, DOORS TO HAVE HASP & STAPLE TO ACCEPT ELECTRICITY NORTH WEST PADLOCKS. LEFT HAND DOOR TO BE FIRST OPENING LEAF AND COMPLY WITH ES 301

THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH ELECTRICITY NORTH WEST ELECTRICAL SPECIFICATION REF. 400 D 5 AND ALL ASSOCIATED WORKS MUST COMPLY WITH THIS INFORMATION AND DETAIL IN FULL.

THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH ELECTRICITY NORTH WEST ES 301 & ES 352 AND ALL ASSOCIATED WORKS MUST COMPLY WITH THIS INFORMATION AND DETAIL IN FULL

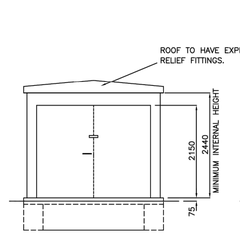
REINFORCEMENT NOTES

1. Concrete to be strength class C32/40 to BS 8500.
2. Loose bar reinforcement to have the following minimum laps UNO: –
   - H10 = 350mm
   - H12 = 420mm
3. Standard A393 fabric mesh to have a minimum lap of 270mm.
4. 40mm cover to all reinforcement UNO.
5. Bar references shall be interpreted thus: –

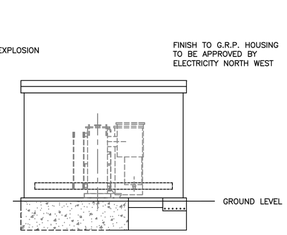



6. Locations: –
   - T1 Denotes Top face, top layer
   - T2 Denotes Top face, second layer
   - B2 Denotes Bottom face, second layer
   - B1 Denotes Bottom face, bottom layer
7. "H" Denotes deformed Type 2 high yield steel bars to BS 4449:2005 – characteristic yield strength 500MPa.

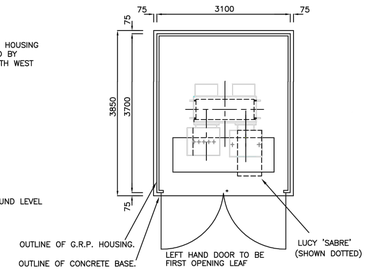
| | | | |
|---|---|---|---|
| electricity north west | FREDERICK ROAD, SALFORD M6 6QH TEL 0161 6041370 | CIVIL DISTRIBUTION SUBSTATION CONSTRUCTION DETAILS FOR SCHNEIDER GRP UNIT SUBSTATION | |
| DRAWN | GK | SCALE | 1:50 |
| APPROVED | WD | DATE | SEPT 2013 |
| OLD DWG NO | – | SHEET SIZE | A2 |
| SITE NAME | | | |
| P.F.R. NO. | | – | DWG STATUS APPROVAL |
| DWG NO | 900350–002 | REV | 4 |




FRONT ELEVATION




SIDE ELEVATION




PLAN

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revisions
A) MINOR MODS
B) MINOR MODS
C) LUCY "SABRE" OUTLINE SHOWN– OVERALL DIMENSIONS INCREASED TO SUIT ABOVE.
D) DRAWING APPD 23/09/03
E) TITLE MODIFIED
F) ISSUED FOR CIRCULATION
G) CONCRETE SPEC ADDED, TRENCH WIDENED COMPACTED STONE REPLACED WITH MASS CONCRETE 16–01–06
H) REVISED 28/12/06
i) REVISED 10/06/09
J) REVISED TO REF. ES 301 & ES 352 28/04/10

electricity north west

approved G.H.SMITH date 23/09/03

STANDARD G.R.P. UNIT SUBSTATION WITH SCHNEIDER RN2 SW/GR (Will also accommodate Lucy Sabre sw/gr)

site
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scale DO NOT SCALE

scheme number

drawing number ES352–A2–016/02J sheet

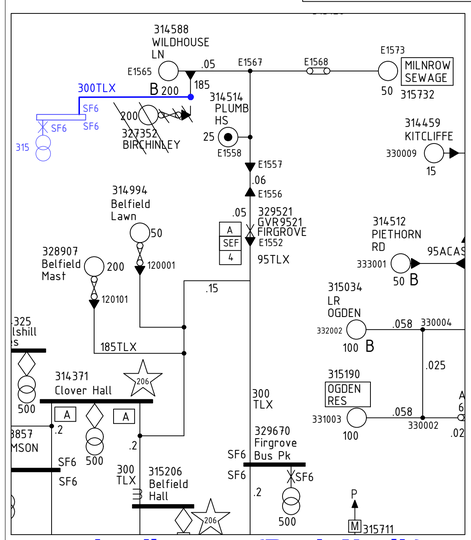
# Substation Civil Drawing ENWL 900350-002-4

# Historic View GRP Unit Substation Drawing

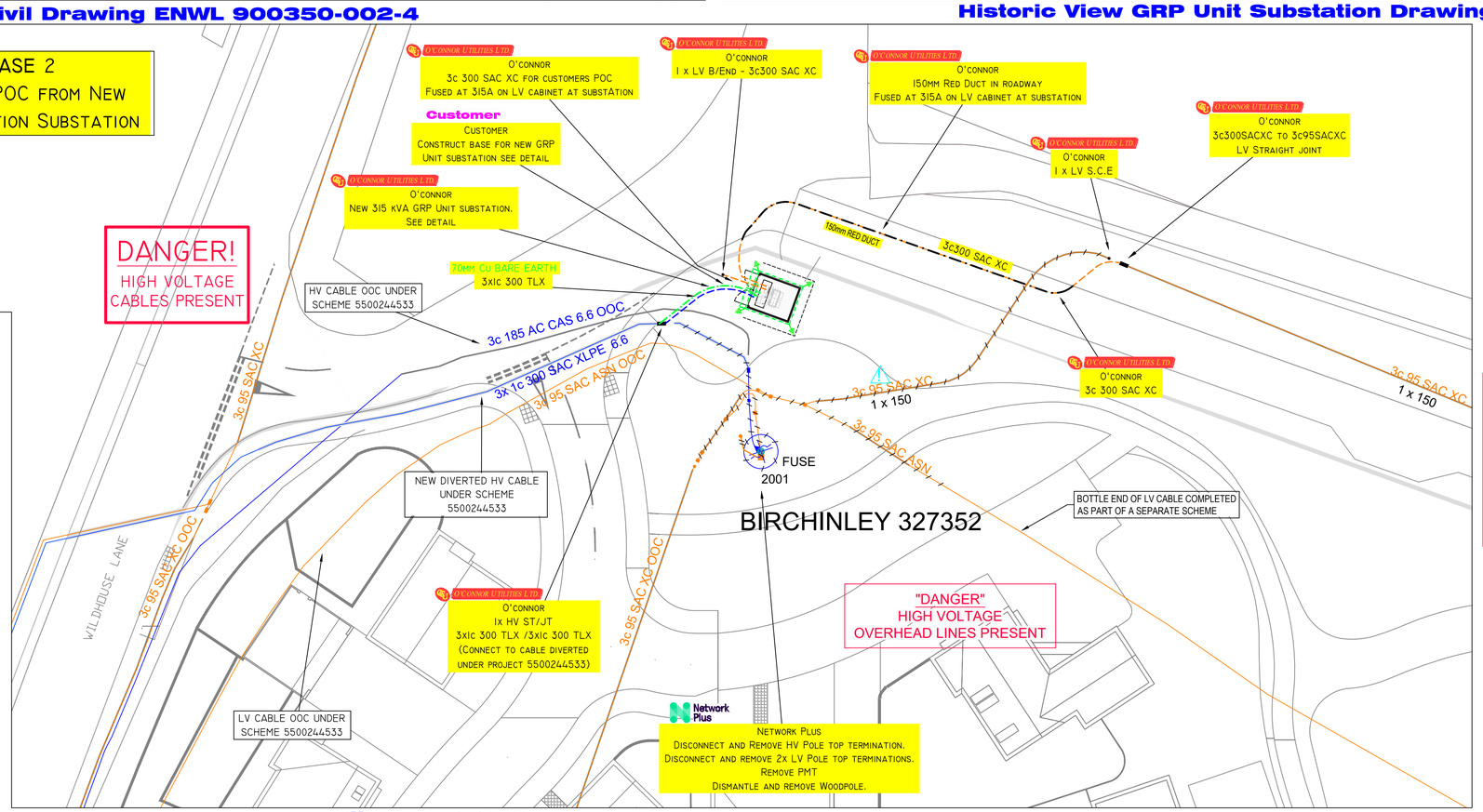
**DISCONNECTIONS:** *Test the cable for load prior to disconnecting- contact ENWL prior to disconnecting if load is present - where possible look to identify source, carry out visual checks for street lighting, feeder pillars etc which may be connected to the cable*

PHASE 2
PERMANENT POC FROM NEW LV DISTRIBUTION SUBSTATION

DANGER!
HIGH VOLTAGE CABLES PRESENT




hv diagram (Peak North)




Site Plan 1:250

DUCTING & MARKER TAPE
ALL DUCTING SHALL COMPLY WITH ELECTRICITY NORTH WEST LIMITED SPECIFICATION ES400D4. DUCTING SHALL BE RED AND DISPLAY THE WORDS "ELECTRIC CABLE DUCT" MARKER TAPE TO BE INSTALLED ABOVE ALL DUCTING AND CABLES. DUCTS AND MARKER TAPE TO BE INSTALLED IN ACCORDANCE WITH ELECTRICITY NORTH WEST LIMITED SPECIFICATION ES400E4

SITE SPECIFIC HAZARDS:
-
-
-
-
-
-
-
-
-
-
-

| REV | NOTES | DATE | ENG |
|---|---|---|---|
| B | SUBSTATION ROTATED. | 25–09–23 | JE |
| A | UNIT SUB, TEMP + NOTES | 03–07–23 | GB |
| | REVISIONS | | |

REVIEW OK YES/NO
REVIEWED BY
APPROVED BY
DATE

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**SERVICE ROUTES**

All service routes are indicative only and must be confirmed on site by the Electricity North West Limited representative. It is the responsibility of the customer to ensure that all service routes are within the demise of the property being supplied and that the exact location of ducting is clearly identified.

**For Construction**
Delivery Partner to obtain up to date utility records prior to commencing construction.

The details supplied on this drawing are intended to be used for information only and are not representative of any binding or contractual agreement between Electricity North West Limited and any other parties involved. The positions of existing mains is given for guidance only and, as such, no liability can be accepted by Electricity North West Limited for any damage caused to, nor any injury sustained, as a result of interference with such apparatus.Reference should be made to HSE guidance, HSG47, "Avoiding Danger from Underground Services" and GS6 "Avoidance of Danger from Overhead Power Lines".

ELECTRIC KEY

| | |
|---|---|
| HV 6.6kV EXISTING | |
| HV 6.6kV PROPOSED | |
| HV 11kV EXISTING | |
| HV 11kV PROPOSED | |
| HV ONSITE MADE LIVE | |
| LV EXISTING | |
| LV PROPOSED | |
| LV ON SITE MADE LIVE | |
| SERVICE IN 32-38mm DUCT | |
| ROAD CROSSING DUCT | |
| LIGHTING COLUMN | |
| BOTTLE END & EARTH ROD | |

Unless otherwise stated, all single-phase domestic services to be 35.5AC.XC and all domestic electricity meters to be installed in external meter boxes. Contractor to install Electricity North West Limited specification marker tape.

PLANNER: GB DRAWN: HMG
DATE: 01-02-23 GR: 392859,413830
SCALES 1:250@A1L SATS No:

(PHASE 2)
WILDHOUSE LANE, MILNROW
OL16 3TP

SCHEME No: 5500237572

SUPER. ORDER No: -

DRAWING No: 5500237572-01 (PHASE 2)

REVISION: B

electricity north west
Bringing energy to your door

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