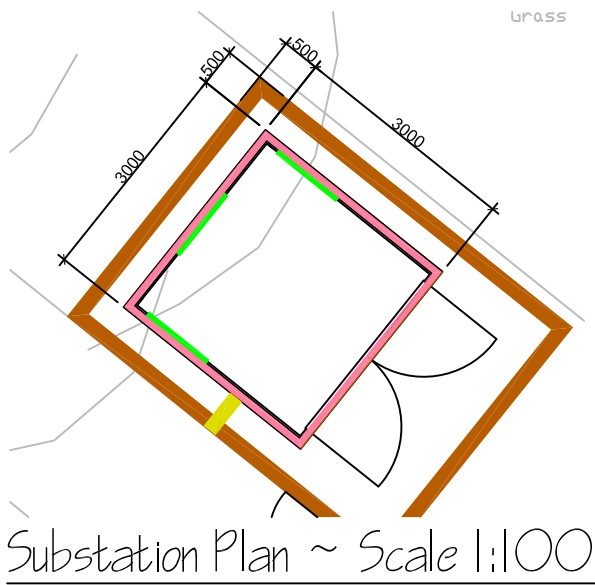
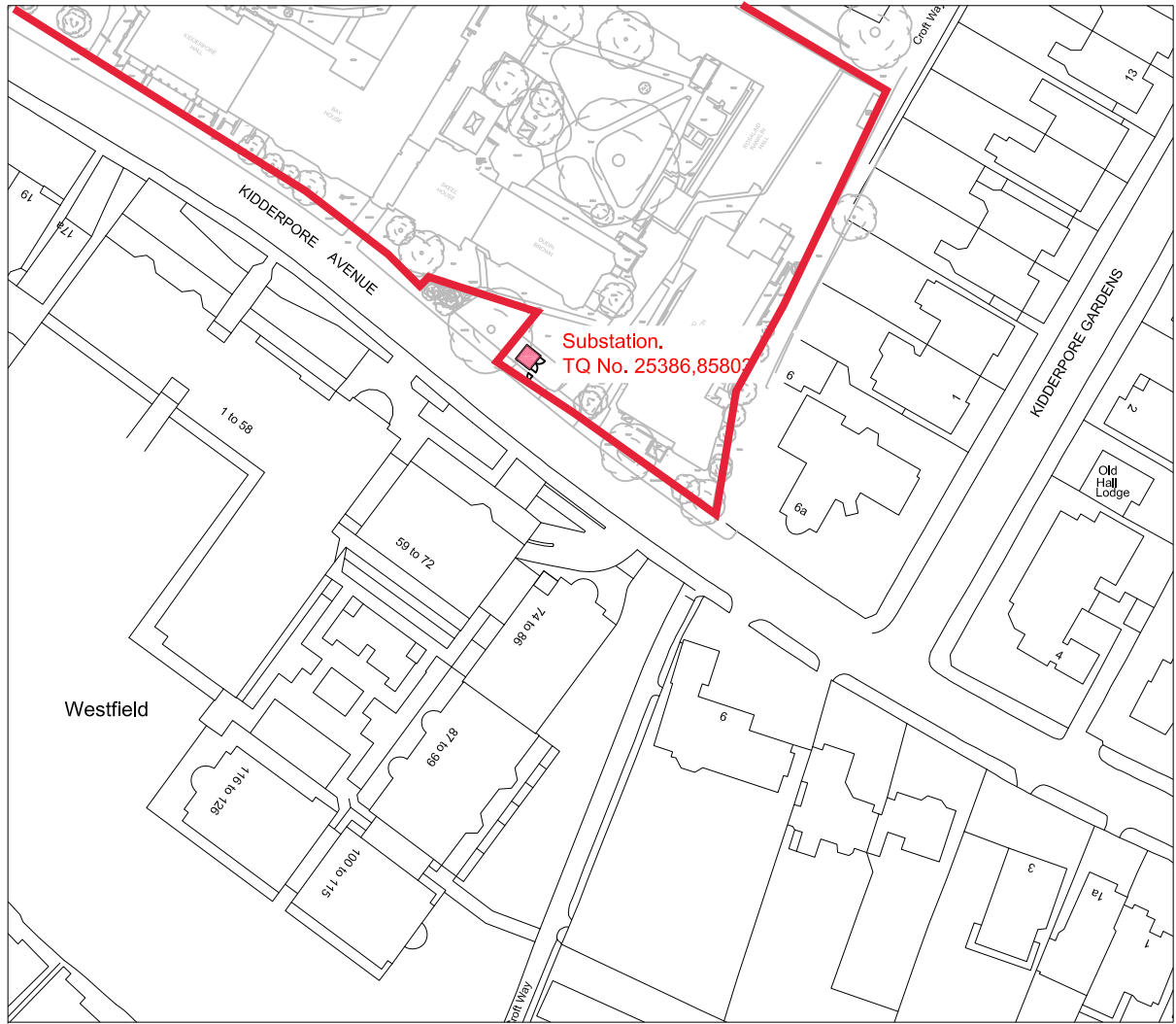
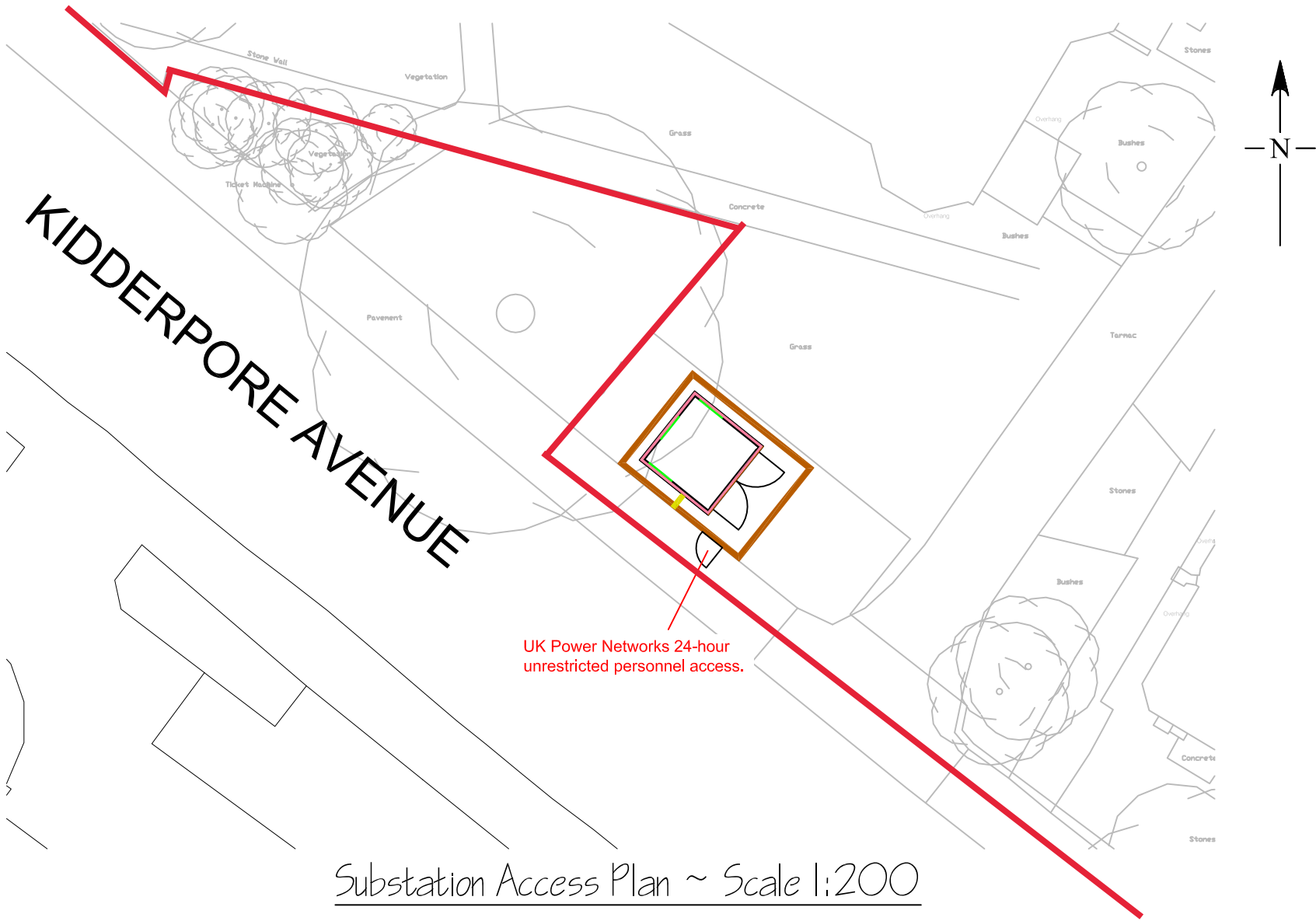
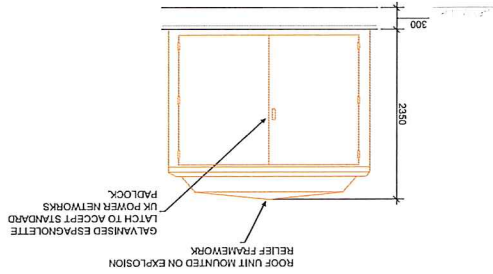




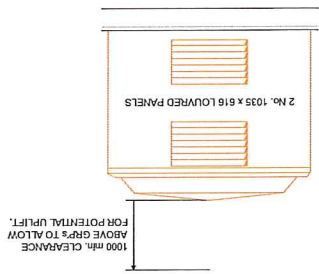
- Key.
- Substation.
 - Access for Cables.
 - 24 Hour Access for Men, Materials and Cables.
 - Ventilation.

Rev	Description	Revised By	Date
Issued For Information Only			
Substation Design Team			
Metropolitan Hse, 3 Darkes Lane, Potters Bar, EN6 1AG.			
Title			
Substation at:			
Kidderpore Avenue,			
London NW3 7ST			
Date Drawn		Scale @ A3	
18/ 04/ 16		As shown @ A3	
Drawn By		Building Officer	
P Hobbs		Tony Makri	
		Project Designer	
		Russell Rodrigues	
Drawing Number		Rev	
8500026554L		*	

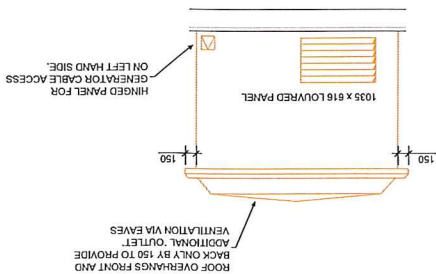
GPP Front Evaluation



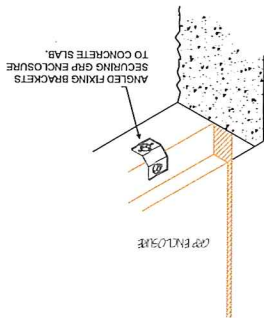
GPP Rear Evaluation



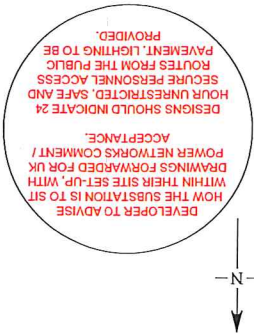
GRP Side Elevation



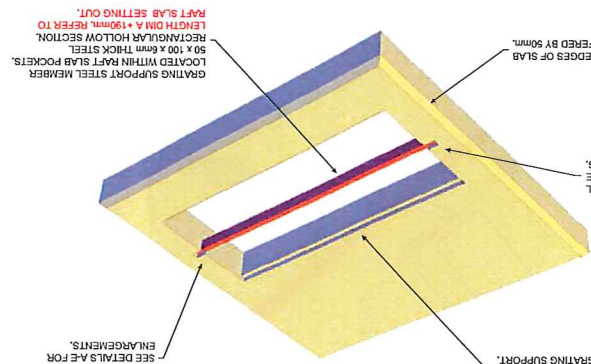
Fixing of Shell to Foundations



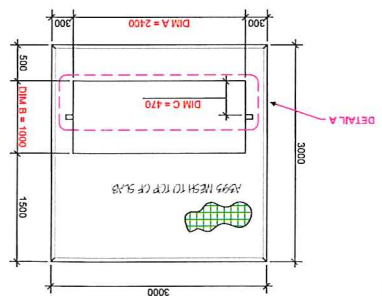
Substation Location Plan



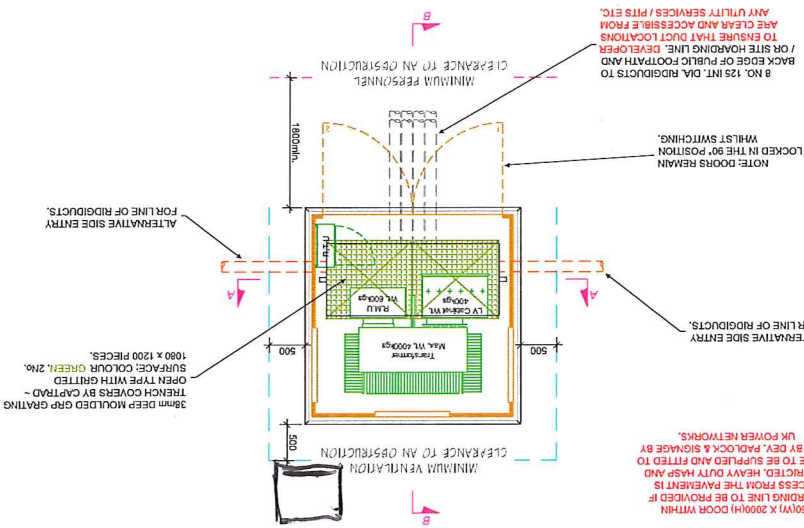
Kraft slab 3D View



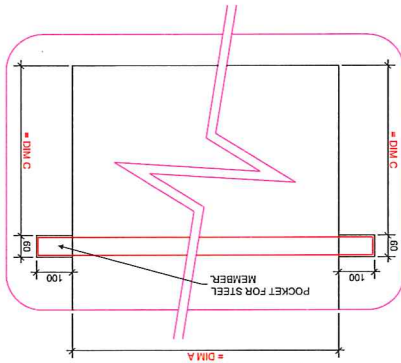
Raft Slab Plan ~ Setting Out Dimensions



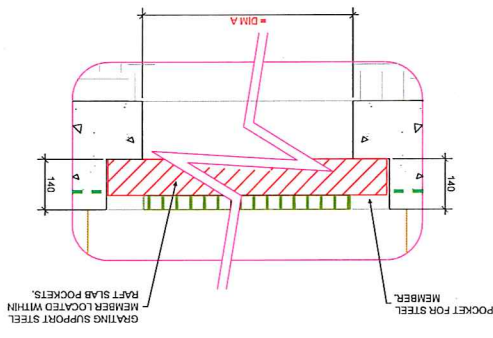
Substation Plan



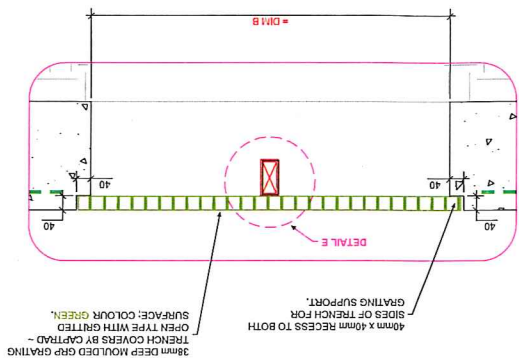
Detail A



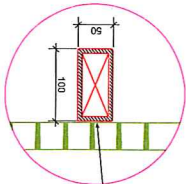
Detail B



Detail C



Detail E

[illegible][illegible]

Drawing Number

PACKAGE RAFT

3

Rev

3	Metropolitan Hse., 3 Darkes Lane, Porters Bar, EN6 1AG. Substation Design Team
Tempo Enclosure for Temporary Substation Package Arrangement. Sheet 1 of 2	Scale @ A1 Not to scale, use dimensions Bidding Officer Project Designer
Drawing Number Drawn By Drawn Class 25/05/12	N/A N/A N/A

Specification Notes - For the Attention of the Developer/Builder

- GENERAL NOTES:**
- THIS DRAWING IS NOT TO BE SCALED AND NO VARIATION TO THE STATED DIMENSIONS OR MATERIALS SPECIFIED WILL BE PERMITTED WITHOUT PRIOR WRITTEN CONSENT FROM UK POWER NETWORKS.
 - ALL DIMENSIONS ARE IN MILLIMETRES.
 - THE EARTHING SYSTEM SHALL BE PROVIDED BY THE DEVELOPER/CONTRACTOR UNLESS STATED OTHERWISE BY UK POWER NETWORKS.
 - WHEREVER POSSIBLE THE EARTHING SYSTEM SHOULD BE INSTALLED IN ASSOCIATION WITH THE GROUND WORKS TO ENSURE THAT EARTH ELECTRODES ARE CORRECTLY POSITIONED PRIOR TO PLACEMENT OF CONCRETE.

REBAR/MESH REINFORCEMENT

- THE CONNECTION TO THE REINFORCEMENT WITHIN THE PLINTH SHALL USE EXOTHERMIC WELDING OR SUITABLE CLAMPS.
- ALL CONNECTIONS TO THE REINFORCEMENT SHALL USE A MINIMUM OF 70mm² STRANDED HARD DRAWN COPPER CABLE OR 25mm x 3mm COPPER TAPE.

EARTH ELECTRODE

- THE EARTH RODS SHALL BE COPPER CLAD WITH APPROPRIATE FITTINGS, DRIVEN TO A MINIMUM DEPTH OF 2.4m.
- THE EARTH ELECTRODE SHALL BE AS FOLLOWS:
 - FOR EARTH FAULT LEVELS UP TO 8kV USE 70mm² BARE STRANDED HARD DRAWN COPPER CABLE OR 25mm x 3mm COPPER TAPE.
 - FOR EARTH FAULT LEVELS UP TO 12kV USE 120mm² OR 2 x 70mm² BARE STRANDED HARD DRAWN COPPER CABLE OR 25mm x 4mm COPPER TAPE.
 - FOR EARTH FAULT LEVELS UP TO 15kV USE 2 x 70mm² BARE STRANDED HARD DRAWN COPPER CABLE OR 25mm x 6mm COPPER TAPE.

EARTH RESISTANCE

- THE MAXIMUM RESISTANCE OF THE STANDALONE EARTHING SYSTEM SHALL BE SPECIFIED BY THE UK POWER NETWORKS DESIGNER.
- WHERE THE EARTHING SYSTEM IS INSTALLED BY A DEVELOPER OR CONTRACTOR CERTIFICATION CONFIRMING THE RESISTANCE OF THE STANDALONE EARTHING SYSTEM SHALL BE PROVIDED TO UK POWER NETWORKS PRIOR TO EQUIPMENT INSTALLATION.

BONDING

- NOT ALL EQUIPMENT BONDING IS SHOWN ON THE DRAWING. ALL EQUIPMENT SHALL BE BONDED IN ACCORDANCE WITH ECS 06-0023.

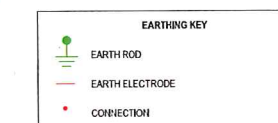
OTHER

- A 6-WAY EARTH BAR SHALL BE PROVIDED IN THE POSITION SHOWN ATTACHED TO THE PLINTH AROUND 100mm BELOW TOP OF SLAB.

FURTHER INFORMATION

- REFER TO:
 - EDS 06-0014 SECONDARY SUBSTATION EARTHING DESIGN
 - EDS 06-0023 SECONDARY DISTRIBUTION NETWORK EARTHING CONSTRUCTION

NOTE: THIS DRAWING ONLY SHOWS THE EARTHING ASSOCIATED WITH THE GROUND WORKS. ADDITIONAL EARTHING MAY BE REQUIRED TO ACHIEVE THE EARTH RESISTANCE VALUE AND TO ENSURE THE SUBSTATION IS SAFE. REFER TO THE RELEVANT EARTHING STANDARD FOR THE COMPLETE EARTHING AND BONDING REQUIREMENTS.



3	Earthling sheet added.	D Gabbitass	05/12/14
2	Re-drawn and Re-numbered.	D Gabbitass	06/06/14
1	Generator floor, was access note.	D Gabbitass	02/07/12
Rev	Description	Revised By	Date

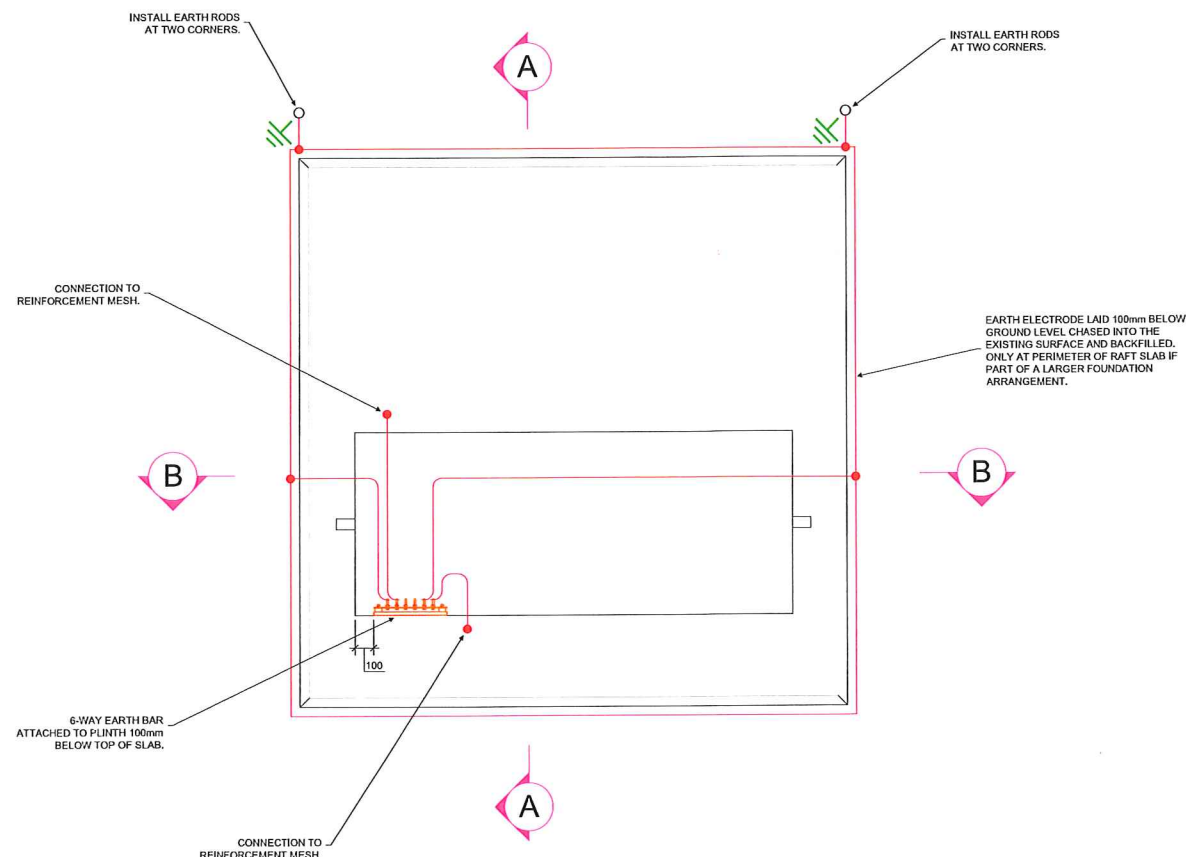
Issued For Information Only



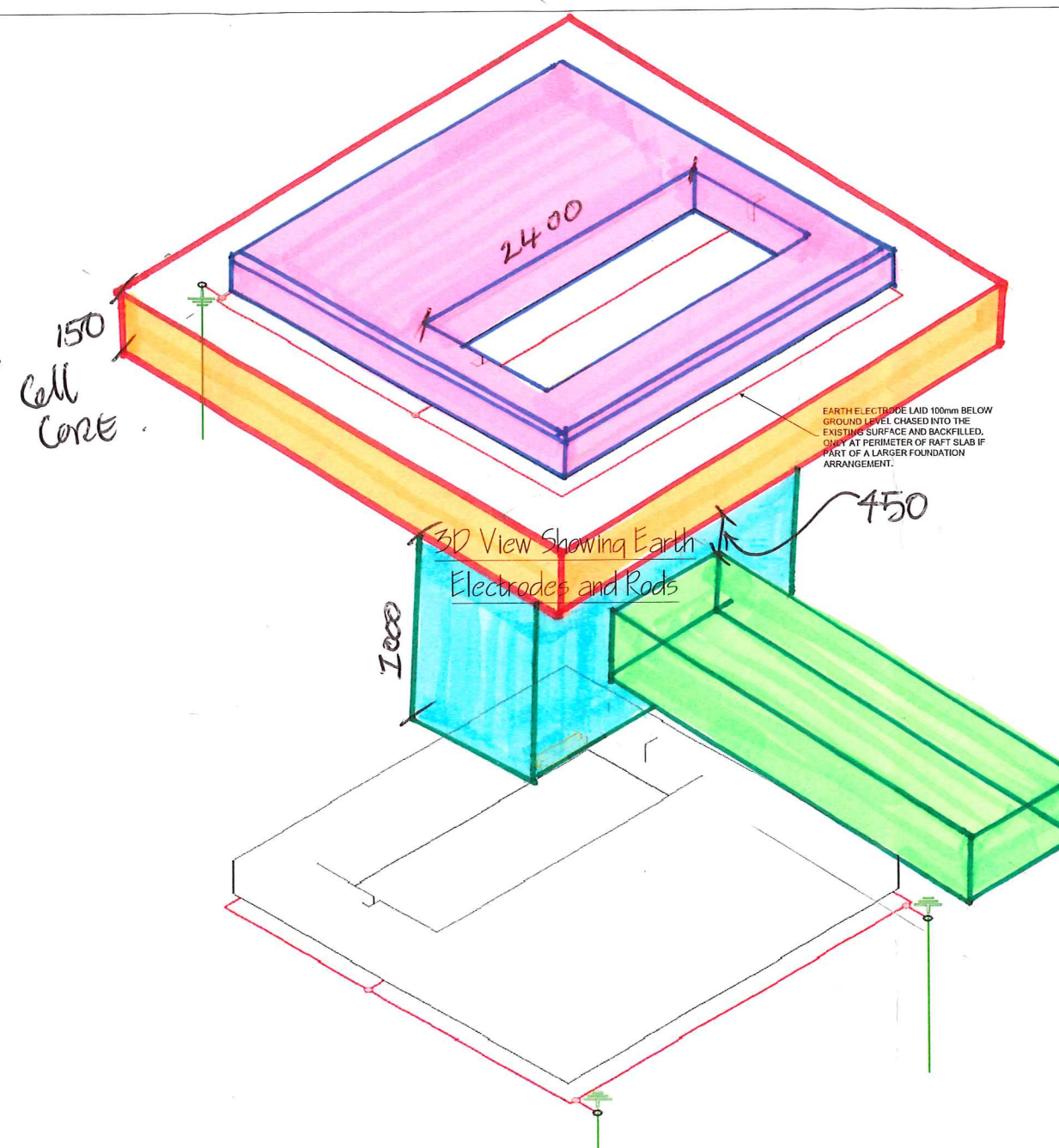
Substation Design Team
Metropolitan Hse, 3 Darkes Lane, Potters Bar, EN6 1AG.

Title
GRP Enclosure Earthing details for:
Temporary Substation Package Arrangement.
Sheet 2 of 2

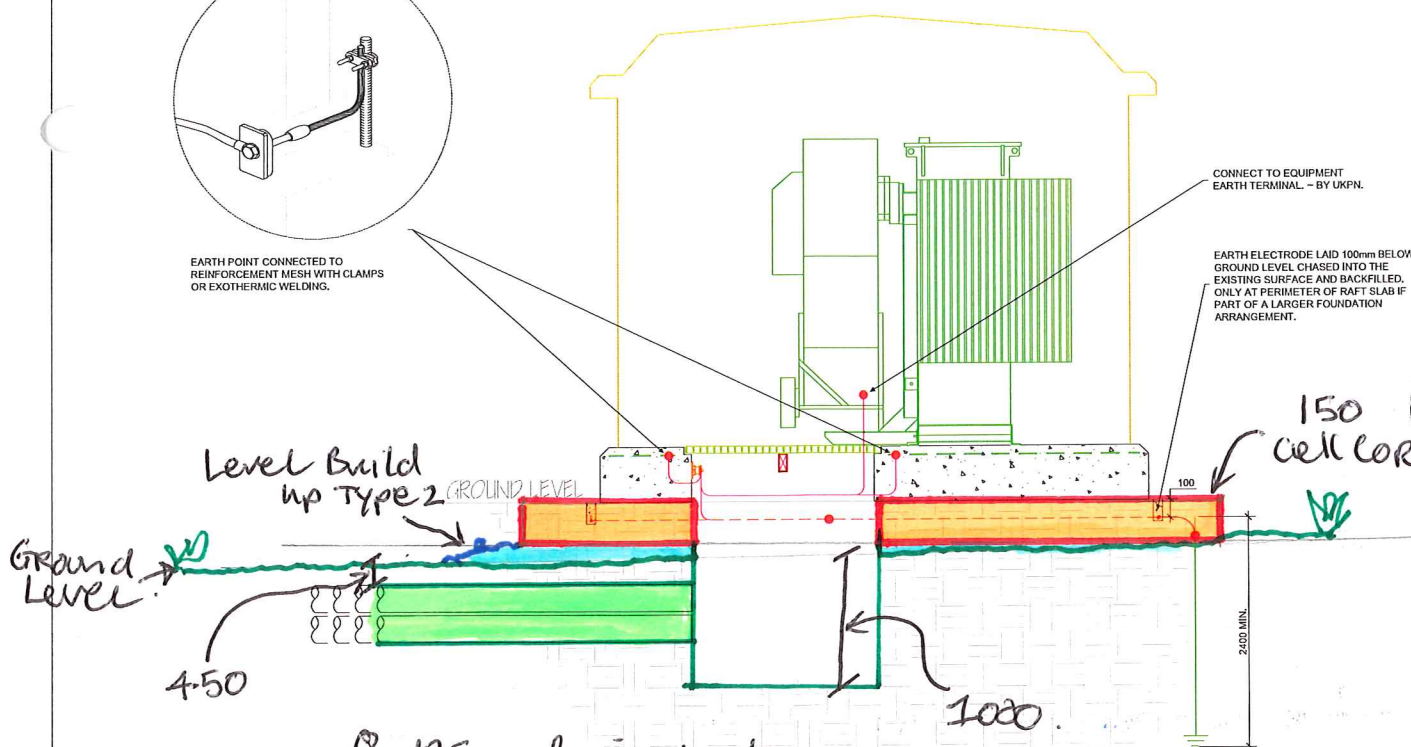
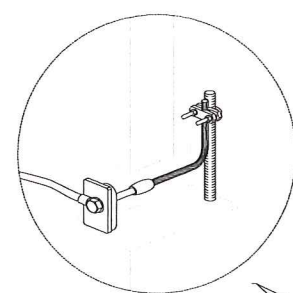
Date Drawn 25/05/12	Scale @ A1 Not to scale, use dimensions
Drawn By David Gabbitass	Building Officer N/A
Drawing Number	Project Designer N/A
	Rev



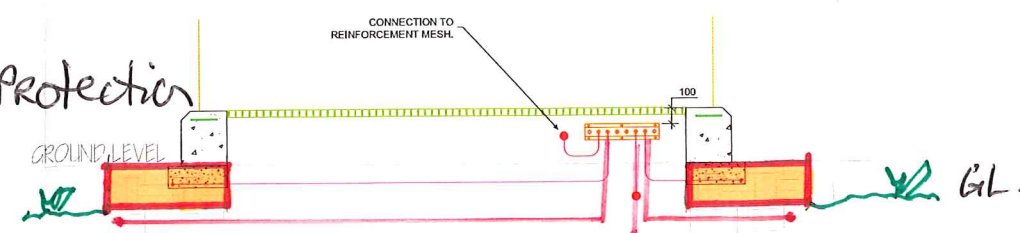
Raft Slab Plan



3D View Showing Earth Electrodes, Rods and Earth Bar



Section A~A



Electrodes laid 100mm Below GL Under 150mm cell core.

Section B~B

Ø 125mm Service Ducts.

Specification Notes - For The Attention of the Developer/Builder.

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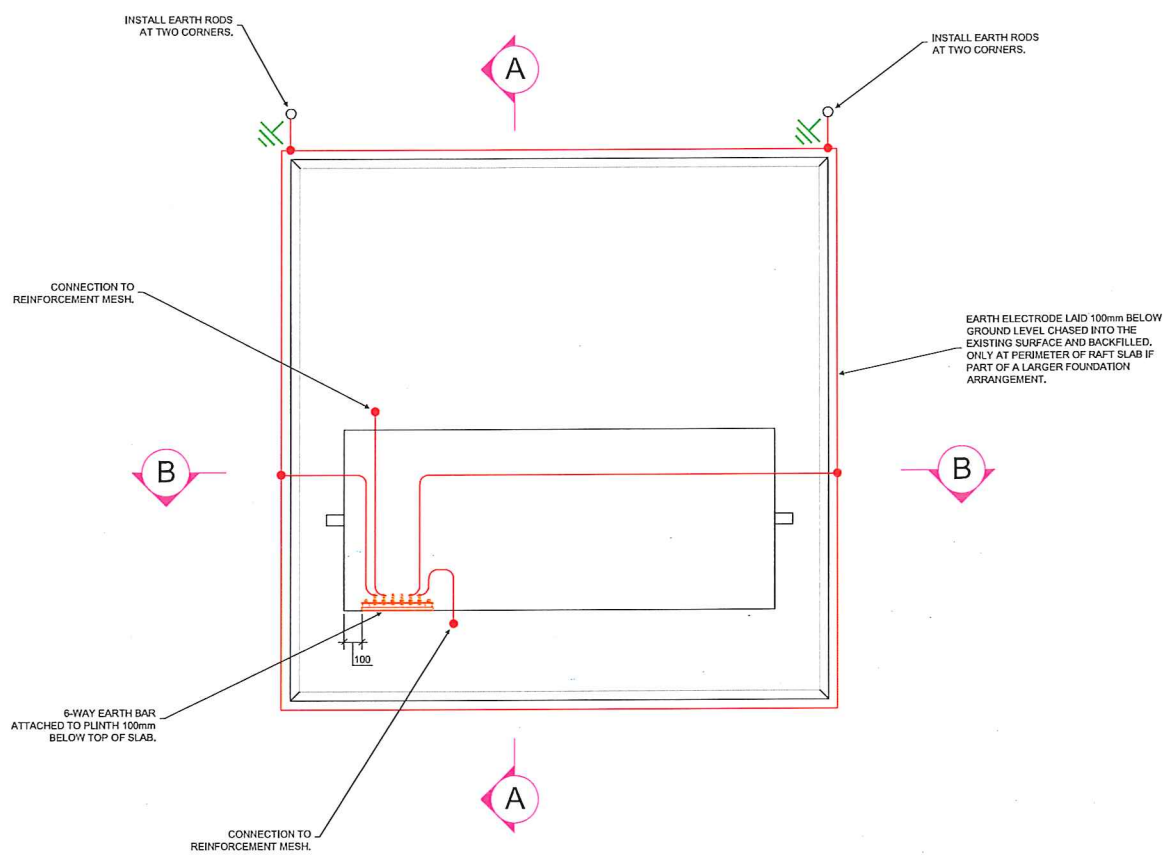
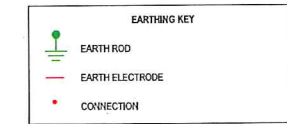
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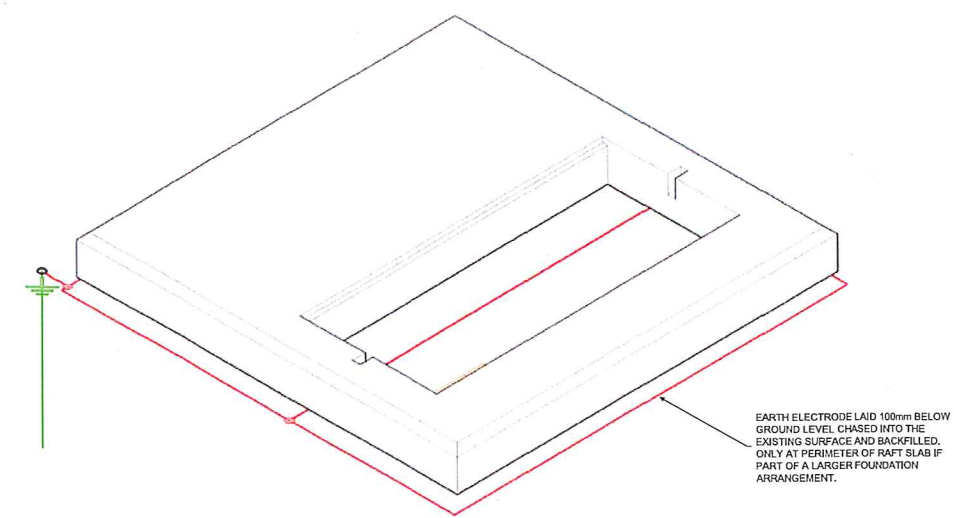
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- FURTHER INFORMATION**
- REFER TO:
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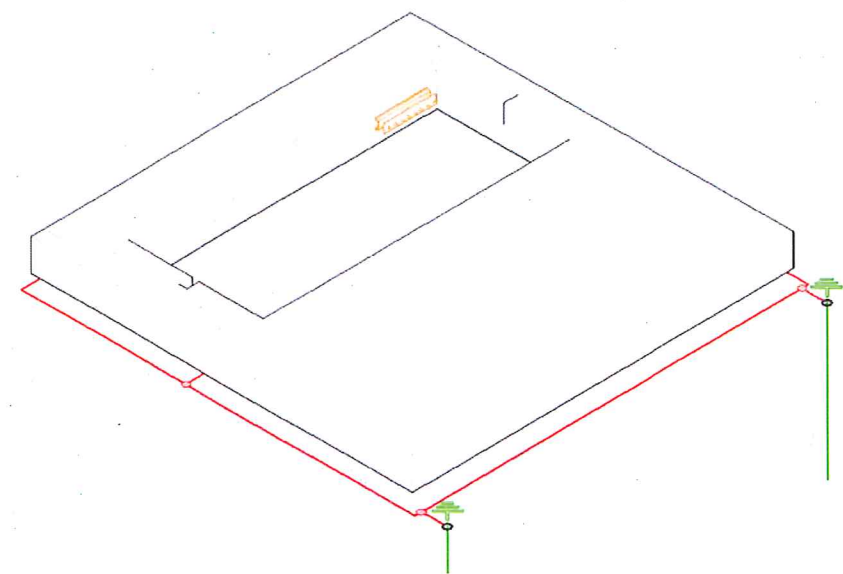
NOTE: THIS DRAWING ONLY SHOWS THE EARTHING ASSOCIATED WITH THE GROUND WORKS. ADDITIONAL EARTHING MAY BE REQUIRED TO ACHIEVE THE EARTH RESISTANCE VALUE AND TO ENSURE THE SUBSTATION IS SAFE. REFER TO THE RELEVANT EARTHING STANDARD FOR THE COMPLETE EARTHING AND BONDING REQUIREMENTS.



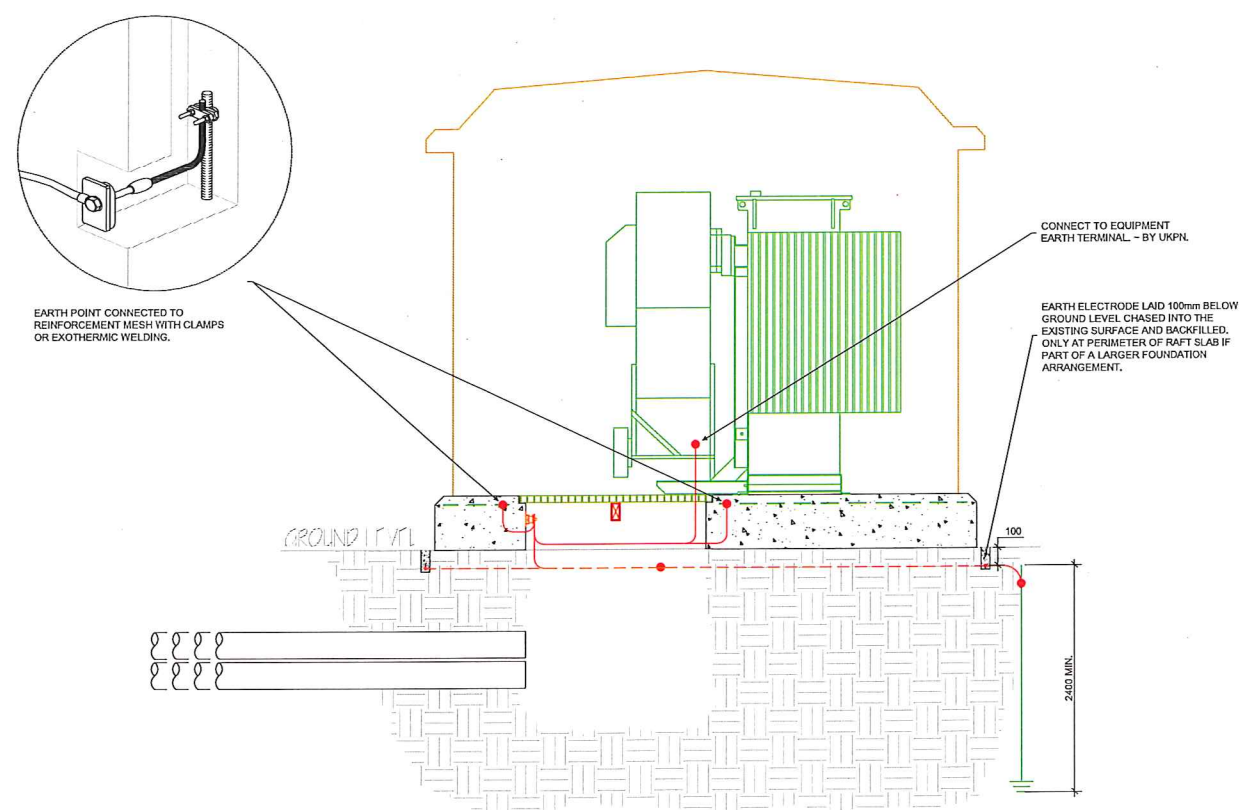
Raft Slab Plan



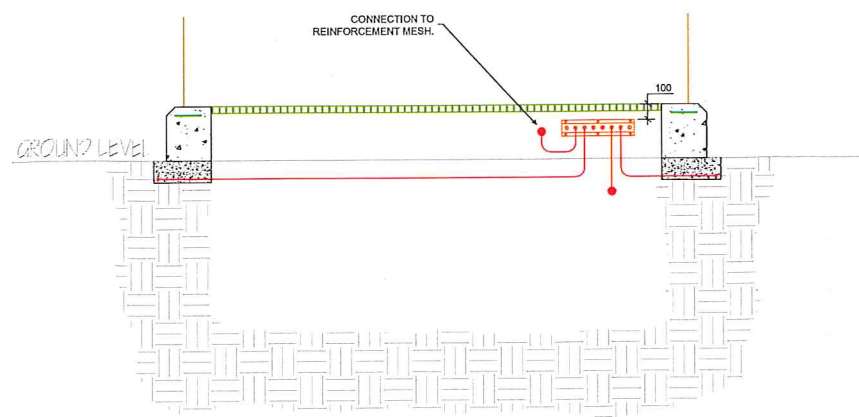
3D View Showing Earth Electrodes and Rods



3D View Showing Earth Electrodes, Rods and Earth Bar



Section A~A



Section B~B

3	Earthing sheet added.	D.Cabittass	05/12/14
2	Re-drawn and Re-numbered.	D.Cabittass	06/06/14
1	Generator Map, hub access note.	D.Cabittass	02/01/12
Rev	Description	Revised By	Date

Issued For Information Only

UK Power Networks

Substation Design Team

Metropolitan Hse, 3 Darkes Lane, Potters Bar, EN6 1AG.

Title
GRP Enclosure Earthing details for;
Temporary Substation Package Arrangement.
Sheet 2 of 2

Date Drawn 25/05/12	Scale @ A1 Not to scale, use dimensions	Project Designer N/A
Drawn By David Cabittass	Building Officer N/A	

