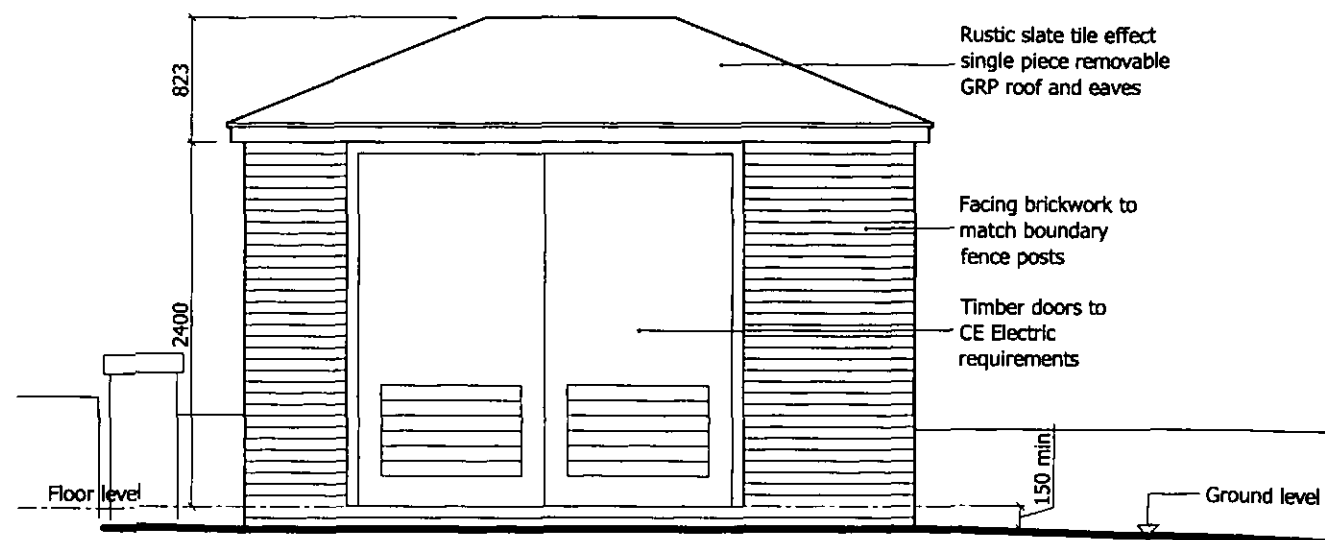
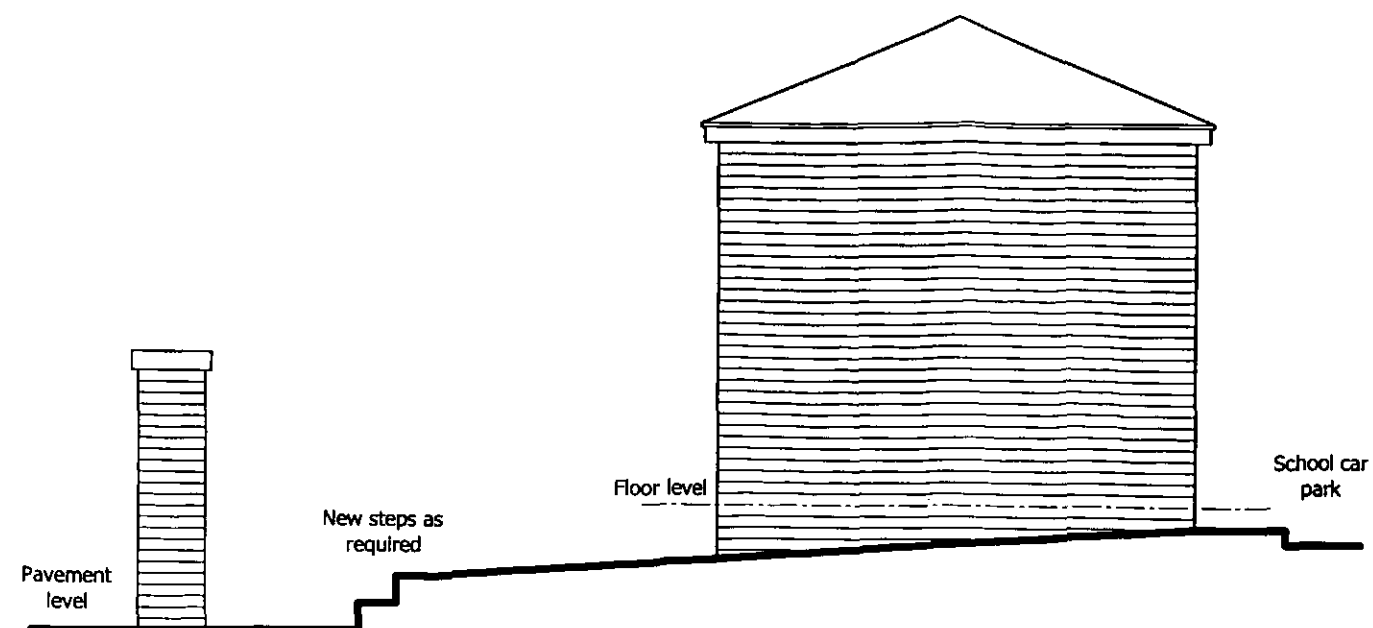
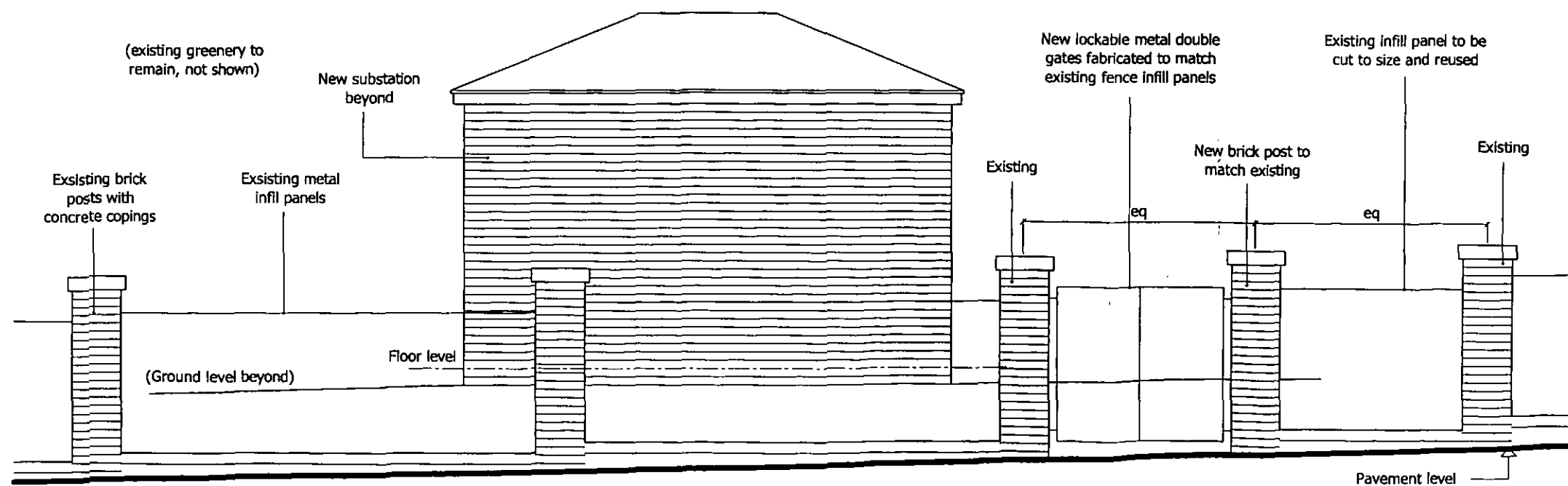




WEST ELEVATION



NORTH ELEVATION  
(SOUTH ELEVATION HANDED)



EAST ELEVATION  
(Viewed from Broadway)

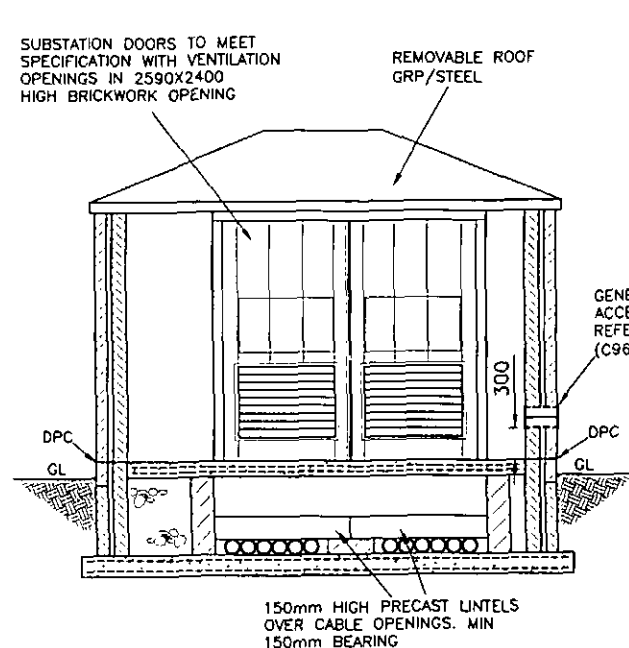
| P01 | FIRST ISSUE | SJL | 14.01.11 | PMG   |      |
|-----|-------------|-----|----------|-------|------|
| REV | DESCRIPTION | BY  | DATE     | CHK'D | AUTH |

**ATKINS**

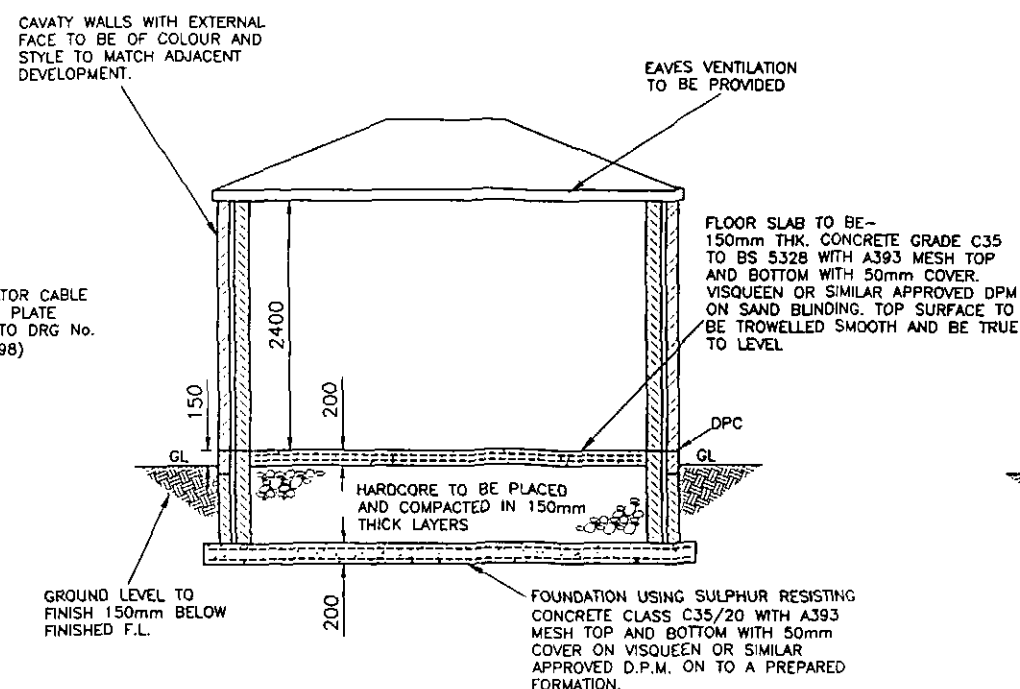
Atkins Limited  
3100 Century Way  
Thorpe Park  
Leeds  
LS15 8ZB  
England

Telephone +44 (0)113 306 6000  
Fax +44 (0)113 306 6002

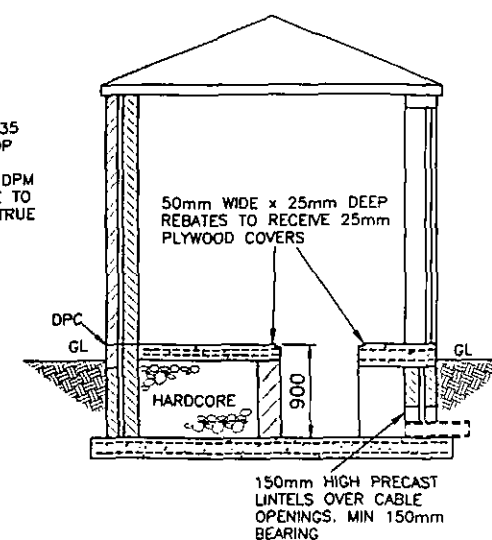
GRN\_SK\_140 PROPOSED SUBSTATION



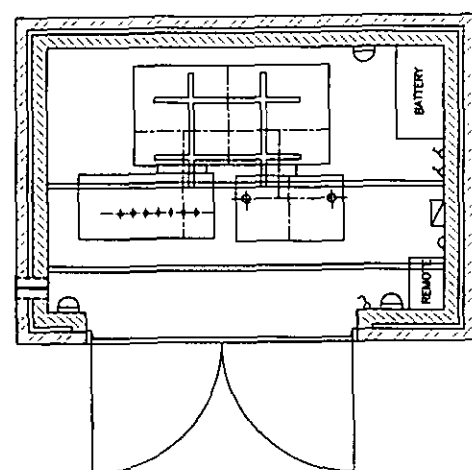
SECTION A-A  
SCALE 1:50



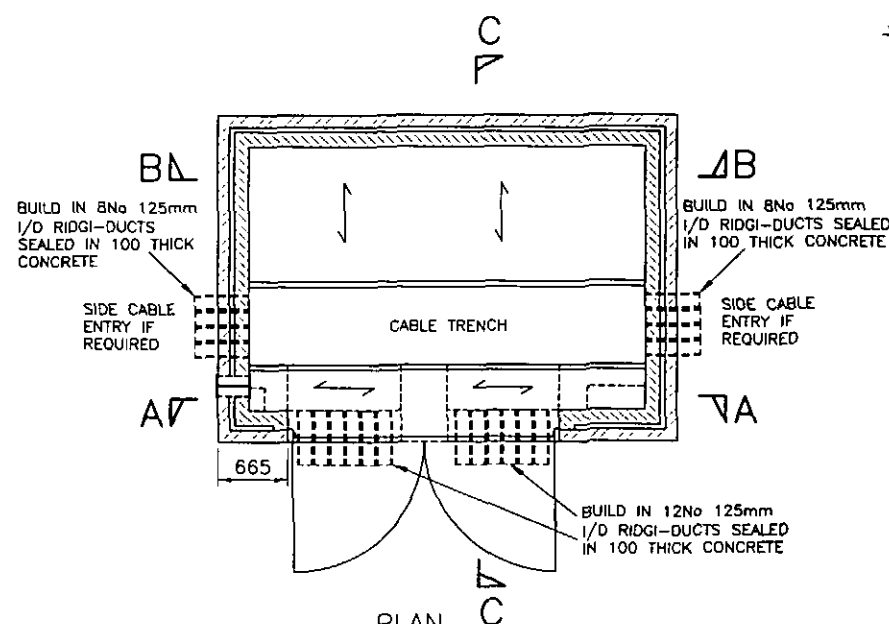
SECTION B-B  
SCALE 1:50



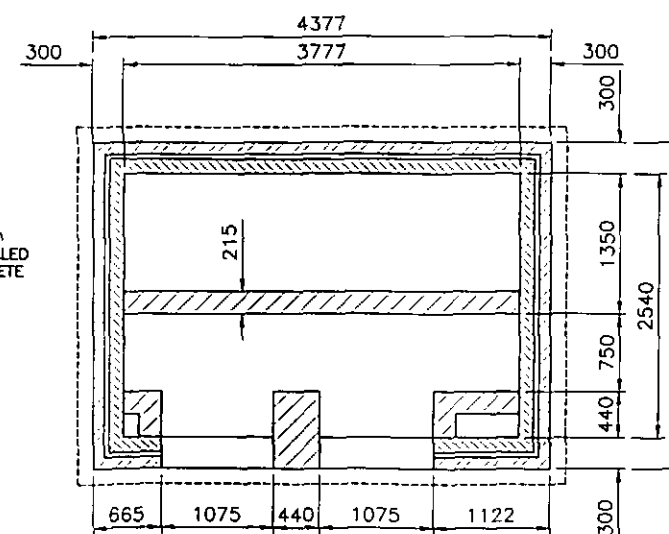
SECTION C-C  
SCALE 1:50



ELECTRICAL LAYOUT  
SCALE 1:50



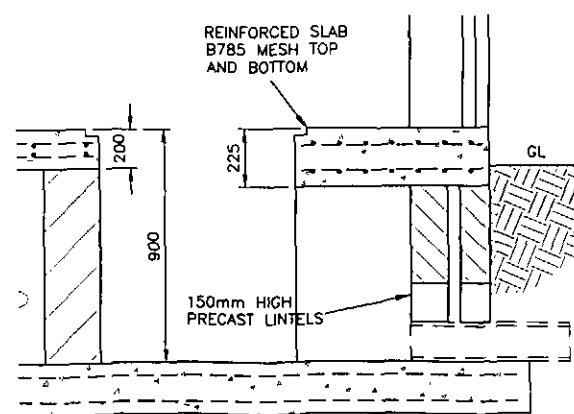
PLAN  
SCALE 1:50



FOUNDATION PLAN  
SCALE 1:50

- Light switch
  - 13A switched socket outlet
  - 13A fused connection outlet
  - Distribution board
  - Bulkhead wall light
- For detailed information see Technical Specification NPS/006/001

REINFORCEMENT REQUIRED  
A393 MESH, FOUND SLAB =  
150mm FLOOR SLAB =  
B785 225mm FLOOR SLAB =  
MIN LAP 400mm



TRENCH DETAIL  
SCALE 1:20

#### CUSTOMER NOTES

The customer to carry out all necessary lighting and heating installation and building work as described including the provision of the LV supply. The substation shall be wired independently of any other areas or customers accommodation.

CE Electric 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.

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

This drawing is intended to indicate the minimum requirements for the installation of CE Electric apparatus and is not in any way intended to describe the building to architectural, structural or other requirements.

The customer shall provide full construction drawings minimum 15 days prior to commencement of works, to allow CE Electric to check for compliance with their requirements.

Substation to be designed in accordance with CE Electric flood mitigation policy.

CE Electric Project Engineer to be notified of commencement of site works to enable site inspections to be carried out during construction.

INTERNAL CUBIC CAPACITY - 23.0m<sup>3</sup>

#### NOTES

##### FLOOR:

- Foundations shown are based on a maximum weight of transformer of 40kN and a minimum ground bearing pressure of 80kN/m<sup>2</sup>.
- 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 7.5kNm<sup>2</sup>. Floor to be level, steel float finish concrete, and sealed with approved concrete sealer or concrete paint.
- 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 glass 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 CE Electric 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.

##### ROOF:

- Substation construction to provide 0.25 W/m<sup>2</sup> °C to roof.
- Roof to be non fragile, waterproof membrane to have life expectancy of 15 years minimum. 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.

##### BRICKWORK:

- Masonry below ground level to be 7N/mm<sup>2</sup> dense concrete block or brick.
- Walls to be 300mm cavity walls with blockwork or brick inner leaf. Internal walls minimum 140mm 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.
- 215mm trench walls to be fair faced and flush pointed in hollow blockwork filled with concrete.

##### DOORS:

- Doors shall be to CE Electric type specification. Other door types shall only be used with prior written approval of CE Electric, must accommodate CE Electric double locking arrangement utilising Yale Type 82 cylinder deadlock and swivel locking bar, and must be provided with documentation proving LPS 1175SR 3 or similar minimum security rating.
- Doors to include ventilation where required via steel door louvres to CE Electric specification and approval.
- Door reveals & lintel soffits to be closed, closure to provide minimum 1 hour 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 min fire protection.

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

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

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

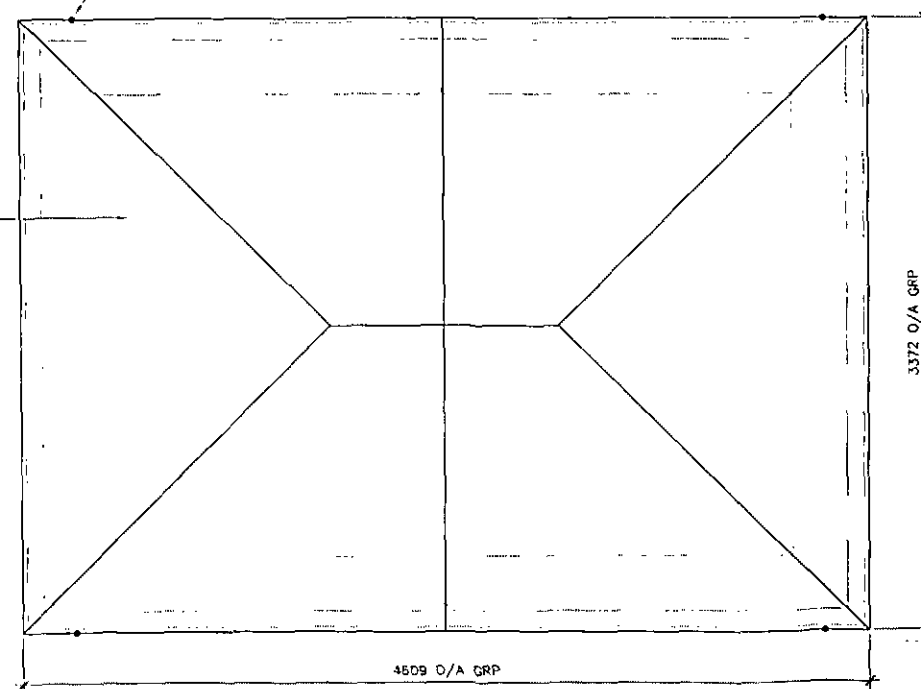
##### REFERENCE DRAWINGS :

- C969422 - Hardwood Ventilated Door Details
- C969423 - Standard Steel Door Details
- C969426 - Door Louvre Details
- C969428 - Roof Details (GRP/STEEL)
- C969998 - Generator Cable Access Detail

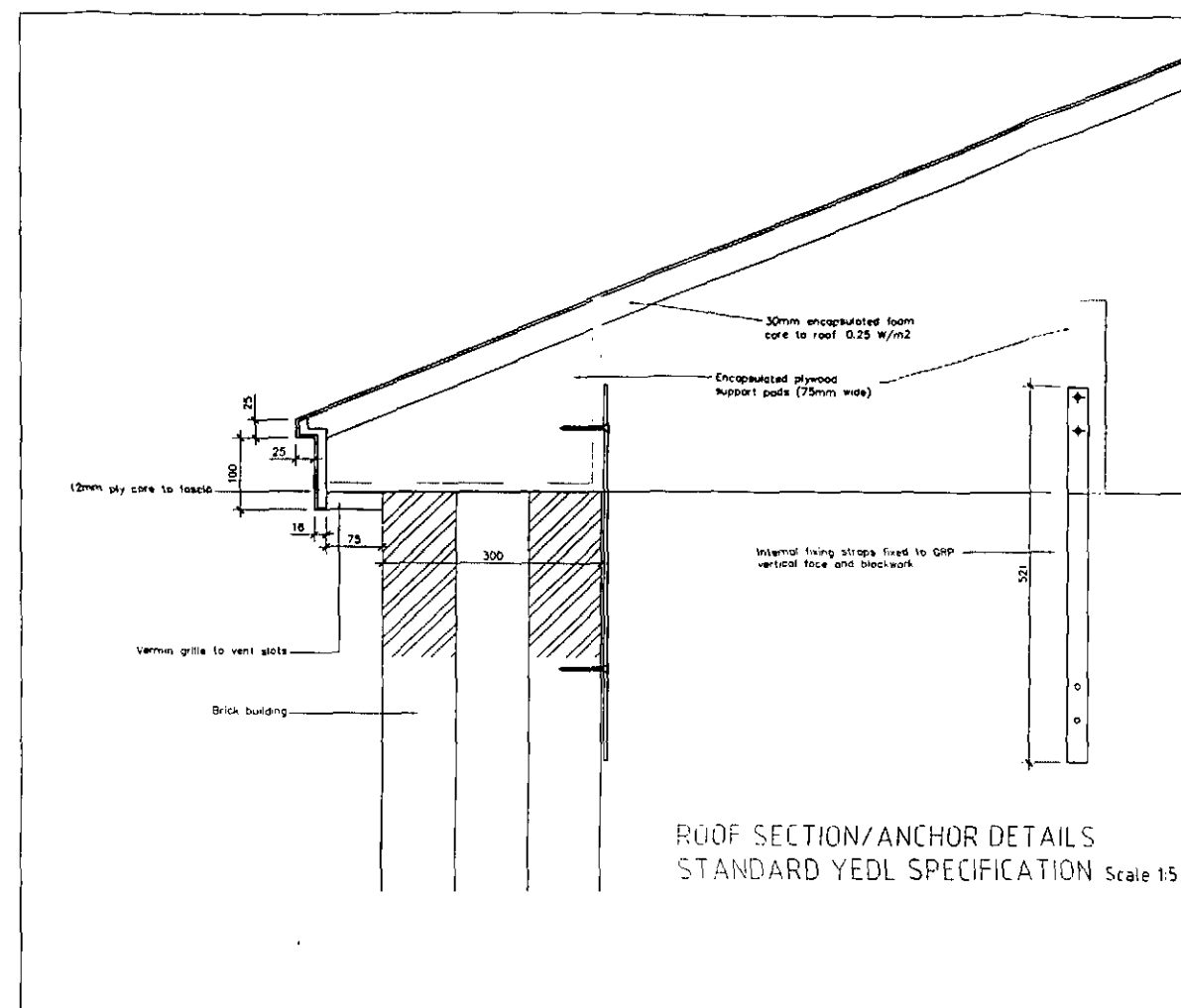
##### REFERENCE DOCUMENTS :

- IMP/003/001 - Code of Practice for the Construction and Building Design of Ground Mounted Secondary Substations.
- NPS/006/001 - Technical Specification for the Construction of Ground Mounted Secondary Substations.

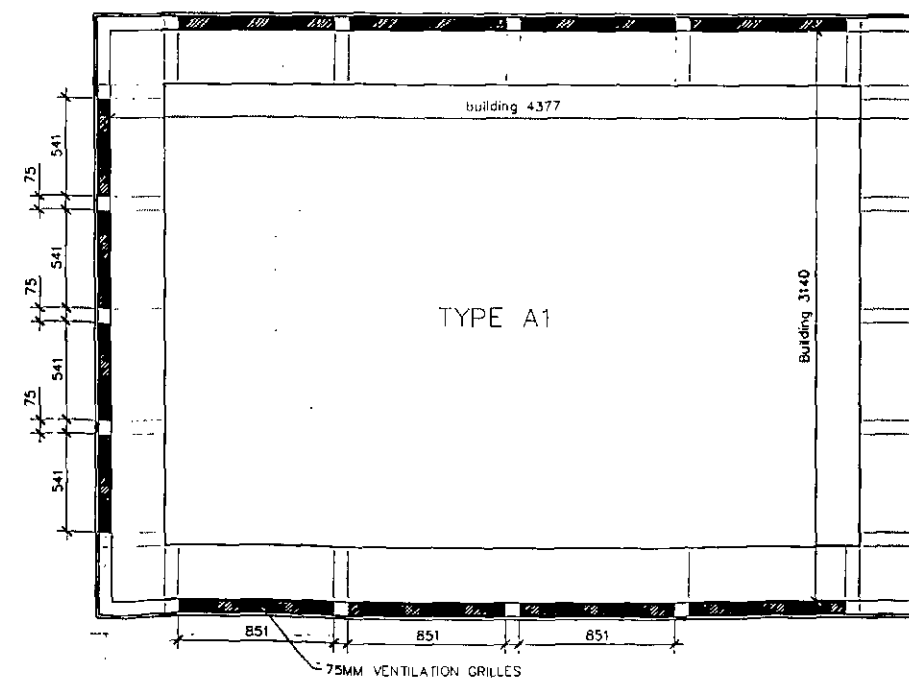
|                       |                |                                                            |         |
|-----------------------|----------------|------------------------------------------------------------|---------|
| <b>CE Electric UK</b> |                | Lloyds Court, 78 Grey Street, Newcastle Upon Tyne, NE1 6AF |         |
| Manufacturer Details  |                | TYPE A1<br>UDE SUBSTATION (BRICK)                          |         |
| Sheet No.             | Scale          | Document Details                                           |         |
| 1                     | AS SHOWN       | STANDARD DISTRIBUTION SUBSTATION DRAWING                   |         |
| Prepared By           | TD             | Ref No.                                                    | C969407 |
| Revised               | Grid Reference | Historic Drawing No.                                       | Y001S12 |
| Date Issued           | 07.10.08       | Checked By                                                 | CD      |
|                       |                | Revision                                                   | 0       |
|                       |                | Notes                                                      |         |



ROOF PLAN scale 1:10



ROOF SECTION/ANCHOR DETAILS  
STANDARD YEDL SPECIFICATION Scale 1:5



ROOF REF. PLAN scale 1:10

[illegible]

Spec-

Insulated to 0.25 W/m2

12mm ply support pads (see plan)

Std colour Pal 7016 Grey

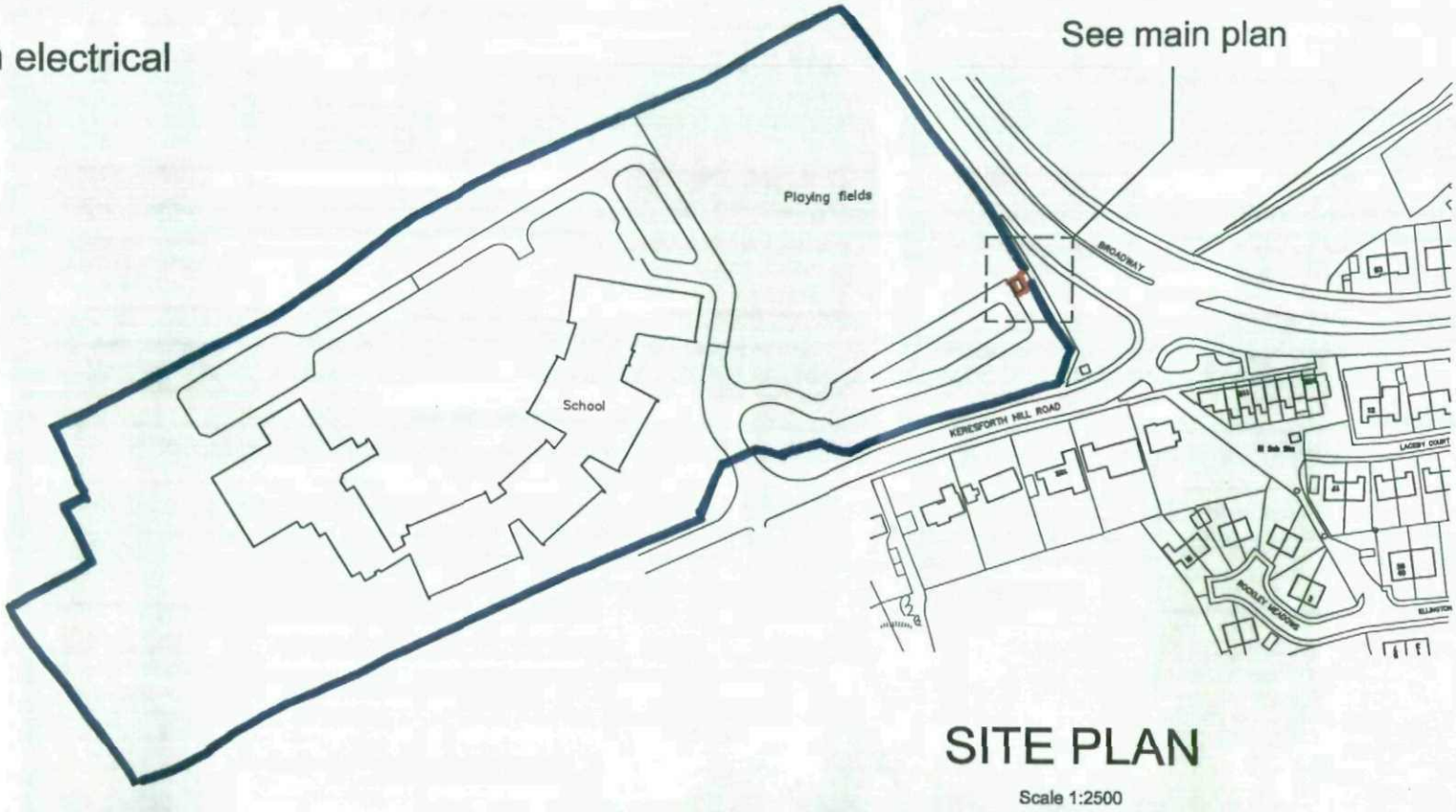
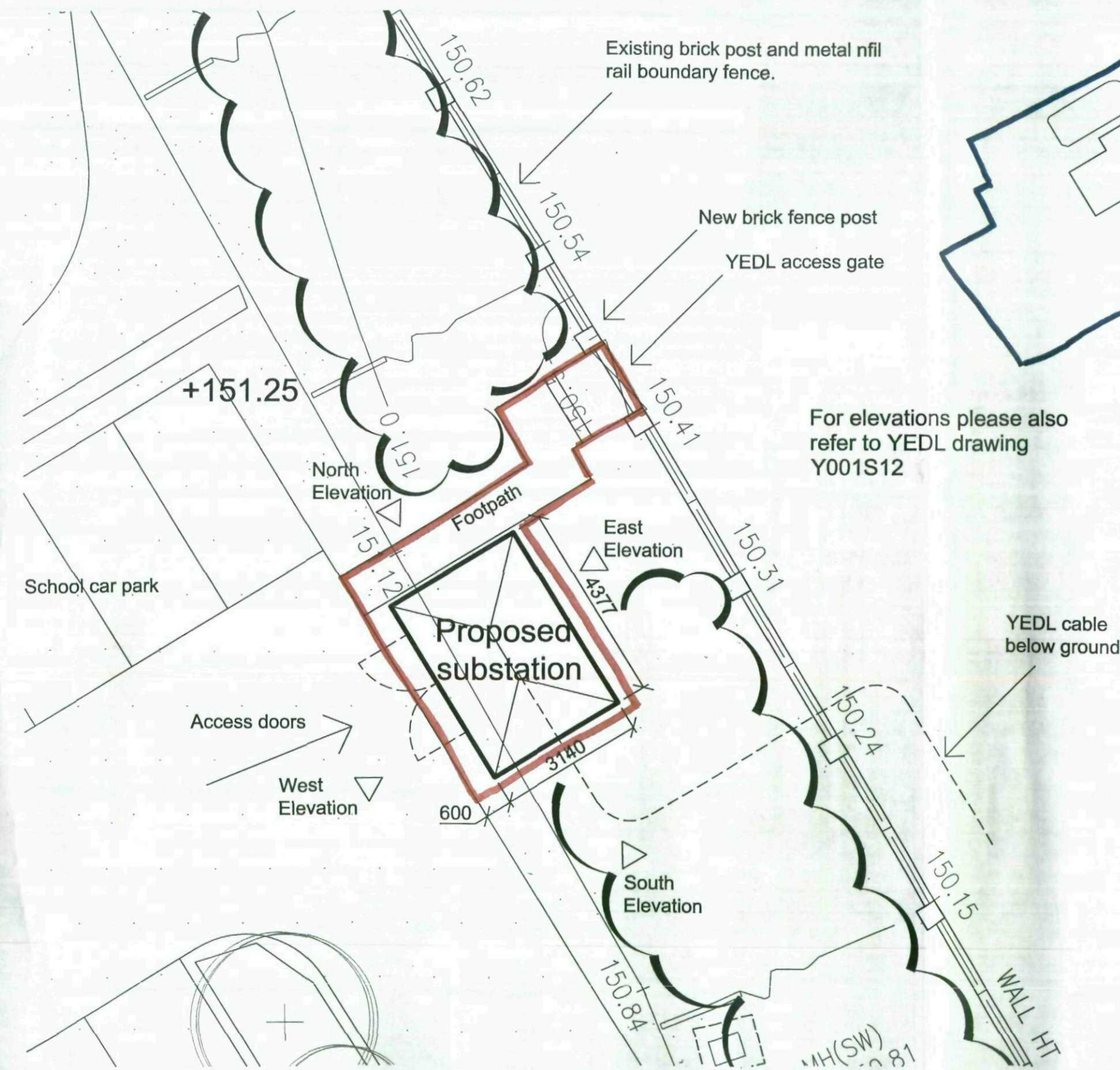
22.5 deg pitch

Rustic tile effect

|                                                                                                           |             |        |        |
|-----------------------------------------------------------------------------------------------------------|-------------|--------|--------|
| DWC STATUS                                                                                                |             |        |        |
| FOR APPROVAL                                                                                              |             |        |        |
| DESIGN                                                                                                    | DESCRIPTION | DATE   |        |
|                                                                                                           |             |        |        |
|                                                                                                           |             |        |        |
| LEADER                                                                                                    |             |        |        |
| FREEDOM                                                                                                   |             |        |        |
| ARCHITECT                                                                                                 |             |        |        |
| CE Electric                                                                                               |             |        |        |
| Architectural and Industrial GMP products                                                                 |             |        |        |
| DIESPEKER                                                                                                 |             |        |        |
| LIMITED                                                                                                   |             |        |        |
| SUITE 1 & 2 CENTRAL STREET<br>PLEASANT HEBB VICTORIA 3150 AUSTRALIA                                       |             |        |        |
| TEL 09234 43130 FAX 09234 43131<br>EMAIL <a href="mailto:info@diespeker.com.au">info@diespeker.com.au</a> |             |        |        |
| PROJECT                                                                                                   |             |        |        |
| YEB pyramid - Type A1                                                                                     |             |        |        |
| DATE                                                                                                      | DESIGN      | DATE   | DESIGN |
| Var                                                                                                       | LJ          | 5/5/09 | JJS    |
| DATE                                                                                                      | DESIGN      | DATE   | DESIGN |
| 2781                                                                                                      | 2787.01     |        |        |

# GRN\_SK\_138 PROPOSED SUBSTATION

This sketch has been prepared in support of a full application for the erection of an electrical substation at Greenacre School, Barnsley. S70 6RG



**SITE PLAN**  
Scale 1:2500

Revision history

| Nr  | Revision                                                   | By  | Date     | Chk |
|-----|------------------------------------------------------------|-----|----------|-----|
| P01 | First issue                                                | SJL | 22.12.10 | PMG |
| P02 | Application ref amended.                                   | SJL | 12.01.11 | PMG |
| P03 | Footprint dimensions amended.<br>Sheet size changed to A3. | SJL | 14.01.11 | PMG |

Drawn 22nd Dec 2010  
S. Lang  
Scale 1:100 @ A3