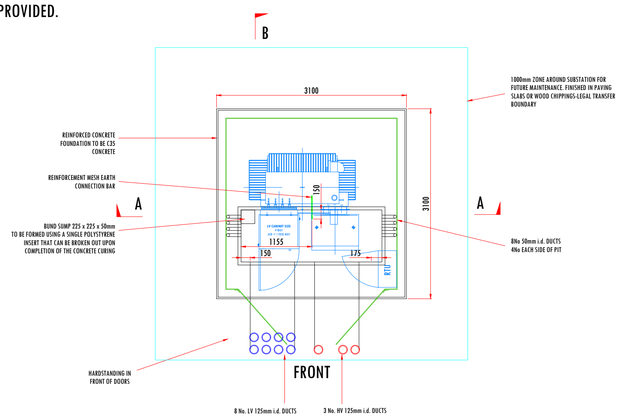
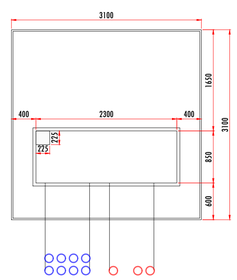
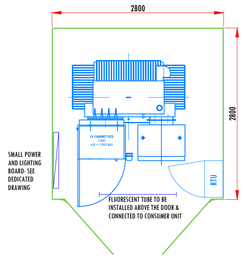
NOTE: REINFORCEMENT CONNECTIONS TO BE BE INSPECTED BY A POWER ON ENGINEER BEFORE CONCRETE POURING. WHERE THIS IS NOT POSSIBLE COMPREHENSIVE PHOTOGRAPHIC EVIDENCE MUST BE PROVIDED.



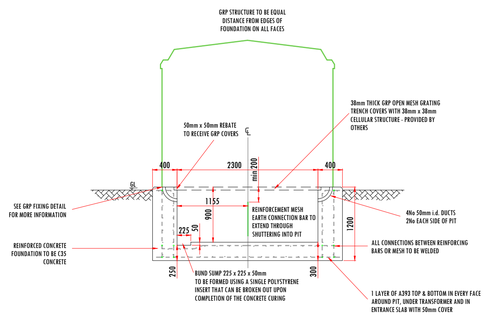
B FLOOR PLAN



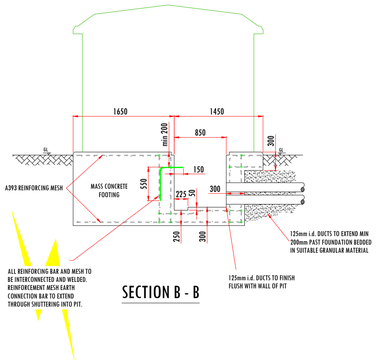
STRUCTURAL LAYOUT



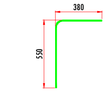
ELECTRICAL LAYOUT



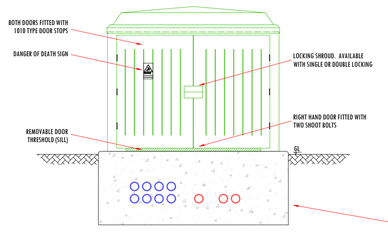
SECTION A - A



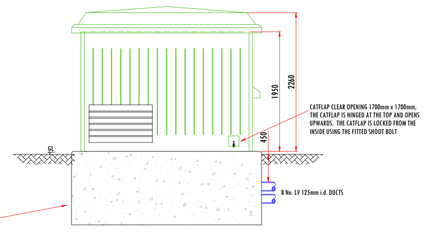
SECTION B - B



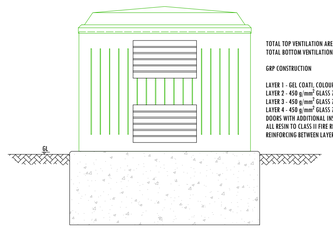
REINFORCING MESH EARTH CONNECTION BAR H10 "L" BAR, 900mm LONG, TO BE WELDED TO REINFORCING MESH TO MAINTAIN MINIMUM 200mm FROM TOP OF FOUNDATION.



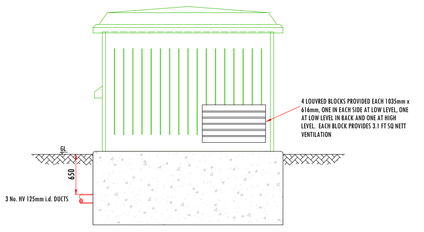
FRONT ELEVATION



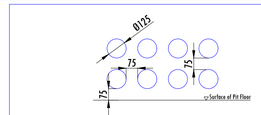
SIDE ELEVATION



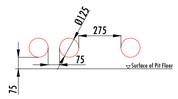
REAR ELEVATION



SIDE ELEVATION



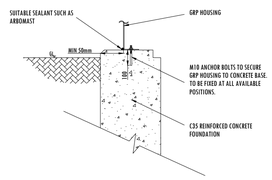
LV DUCT ARRANGEMENT



HV DUCT ARRANGEMENT

NB:
- ALL DUCT SIZES REFER TO INTERNAL DIAMETER
- DUCTS SHOWN AS VIEWED FROM **INSIDE** PIT

SCALE 1:20



GRP HOUSING TO FOUNDATION FIXING DETAIL 1:20

SPECIFICATION NOTES

ALL BUILDERS WORK TO BE PROVIDED BY CLIENT'S DEVELOPER / BUILDER UNLESS EXPRESSLY STATED OTHERWISE.

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 POWER ON.

ALL DIMENSIONS ARE IN MILLIMETRES.

THE RUNNING OF HEATING, GAS TELECOMS, WATER AND OTHER SERVICES THROUGH OR UNDER THE SUBSTATION AREA WILL NOT BE PERMITTED.

SUBSTATION LOCATION

IT IS IMPORTANT THAT THE POSITION AND ORIENTATION OF THE SUBSTATION IS DISCUSSED AND AGREED WITH THE POWER ON PROJECT DESIGNER PRIOR TO THE COMMENCEMENT OF ANY BUILDING WORKS ON SITE.

SUBSTATIONS SHOULD BE LOCATED ADJACENT TO A PUBLIC HIGHWAY OR REACHED BY A PRIVATE DEDICATED ACCESS WAY WITH FULL CONTROL AND ASSOCIATED LEGAL RIGHTS.

24 HOUR UNIMPEDED NETWORK OPERATOR PERSONNEL ACCESS IS REQUIRED AT ALL TIMES 365 DAYS OF THE YEAR. ANY DOORS OR GATES ON THE ACCESS ROUTE ARE TO BE LOCKED IN STANDARD NETWORK OPERATOR LOCKING SUITES.

ACCESS VIA 24HR SECURITY IS UNACCEPTABLE

CONSIDERATION IS TO BE GIVEN AT THE DESIGN STAGE IF ADJACENT SOFT LANDSCAPING IS PROPOSED - PLANTING SCHEMES MUST ALLOW ADEQUATE PROVISION FOR FUTURE PLANT GROWTH WITHOUT COMPROMISING ACCESS TO DOORS OR LOUVERS.

SUBSTATION DOORS MUST NOT ENCROACH OVER PUBLIC FOOTPATH.

FOUNDATIONS, CONCRETE & REINFORCEMENT

THE STANDARD DESIGN SHOWN IS BASED ON A NET INCREASE OF GROUND PRESSURE AT FORMATION LEVEL NOT EXCEEDING 25kN/m². THIS IS CONSIDERED ADEQUATE FOR NORMAL GROUND CONDITIONS, SHOULD SPECIAL SITE CONDITIONS EXIST THEN THE CLIENT'S STRUCTURAL ENGINEER IS TO DESIGN SUITABLE ALTERNATIVE FOUNDATIONS - ALL ALTERNATIVE PROPOSALS TO BE SUBMITTED TO POWER ON FOR COMMENT / APPROVAL PRIOR TO BUILDING WORKS COMMENCING ON SITE.

CONCRETE TO BE GRADE C35 WITH 20mm AGGREGATE, SULPHATE RESISTING TO CLASS 2 OF TABLE 7 IN BS5328 PART 1.

ALL REINFORCEMENT TO HAVE A MINIMUM COVER OF 50mm.

ALL EDGES ABOVE GROUND LEVEL TO HAVE 25mm X 25mm CHAMFERS.

TOP 150mm OF ALL CONCRETE WORKS TO BE SHUTTERED TO PROVIDE FAIR FACE FINISH.

TOP OF ALL CONCRETE WORKS TO BE FINISHED SMOOTH & LEVEL WITHIN +/-2mm WITH A STEEL TROWEL-IT SHOULD BE NOTED THAT A HIGH STANDARD OF WORKMANSHIP IS REQUIRED.

THE SLAB REINFORCEMENT MESH MUST BE BONDED TO THE SUBSTATION EARTH.

NOTE: NEW STANDARD BS EN 206-1 / BS 8500-1 NOW APPLIES. STRUCTURAL ENGINEER TO ENSURE ALL CONCRETE GRADES LISTED ABOVE CONFORM TO A MINIMUM OF CLASS 3.

GRP CONSTRUCTION

TOTAL WEIGHT OF STANDARD GTC SPECIFICATION TR7 GRP ENCLOSURE COMPLETE WITH LOCKING SHROUD IS 585kg.

ROOF IS SUPPLIED AS A SINGLE MOULDING INCORPORATING ENCAPSULATED TIMBER. MAX LOAD ON ROOF 2.5kN/m².

ROOF IS MOUNTED ON EXPLOSION RELIEF FRAMEWORK WITH MOUNTINGS ENCAPSULATED AND BONDED INTO THE CORNERS OF THE ENCLOSURE. THE ROOF IS CAPABLE OF RISING 1m AND RETURNING TO NORMAL POSITION.

DOORS HUNG ON 1½ PAIRS OF STAINLESS STEEL BUTT HINGES
DOOR STAYS TO HOLD EACH DOOR AT 90°.

ESPAGNOLETTE LOCKING SYSTEM - SECURED BY GTC ENERGY STANDARD PADLOCK AND DUAL PADLOCK TO UK POWER NETWORKS SPECIFICATION.

THE THRESHOLD SECTION BELOW THE DOORS IS REMOVABLE TO FACILITATE PLANT MOVEMENT.

VENTILATION

VIA HIGH AND LOW LEVEL LOUVERED PANELS IN SIDES AND REAR OF GRP ENCLOSURE. LOUVRES MUST NOT BE OBSTRUCTED AT ANY TIME. THE CLOSEST ANY SURROUNDING STRUCTURE MAY BE TO THE SIDE OF THE GRP ENCLOSURE IS 1000mm TO ENSURE VENTILATION IS NOT IMPEDED. A MINIMUM CLEAR AREA OF 500mm HARDSTANDING IS REQUIRED AROUND THE GRP ENCLOSURE..

COLOUR

STANDARD EXTERIOR COLOURS ARE MID BROWN 08-B-25 OR DARK GREEN 14-C-39 TO BS4800.

ASSEMBLY

THE GRP ENCLOSURE IS USUALLY DELIVERED FULLY ASSEMBLED.
AN OPTION FOR A FLAT PACK UNIT IS AVAILABLE.

CABLE ACCESS

GROUNDWORK FOR CABLE ENTRY TO BE FULLY EXCAVATED IN FRONT OF PLINTH BY DEVELOPER. DEVELOPER TO MAKE AVAILABLE SUITABLE PLATFORM ARRANGEMENT FOR ACCESS ONTO PLINTH WHILST EXCAVATION IS OPEN.

APPROVED SUPPLIERS:

GRP HOUSINGS

ENVICO ENGINEERING

EARTH /REINFORCEMENTS CONNECTIONS

ERICO

EARTHING

FULL EARTHING LAYOUT AND REQUIREMENTS SHALL BE PROVIDED WITHIN A SEPARATE DRAWING.

APPROVED POC LIBRARY DWG DATE: 13/05/19

Rev	Amendment	Date	Drwn	Chkd
1	GRP GRATING NOTE AMENDED	13/05/19	VM	AD
0	POC LIBRARY DRAWING BASED ON DRAWINGS GTC-E-SS-0002 R3-3 &E-EA-0003	15/11/17	AD	RDJB

POWER ON connections

IF IN DOUBT - ASK

Drawing Title: UKPN / ENC GRP PLINTH CONSTRUCTION DETAILS

Scale	Orig. Size	Sheet
VARIES	A1	1/1

Drawing No. POC-SS-0005