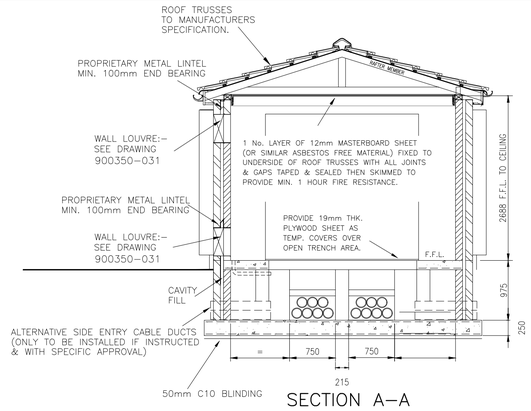
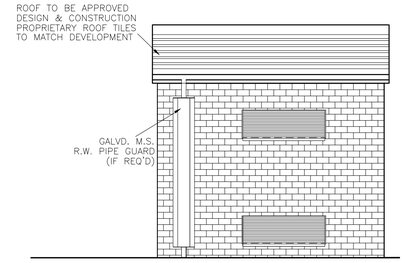


FRONT ELEVATION

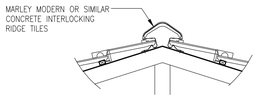
NOTE:
CAPABLE OF RECEIVING 'MERLIN GERIN' or LUCY 'SABRE' HV SWITCHGEAR

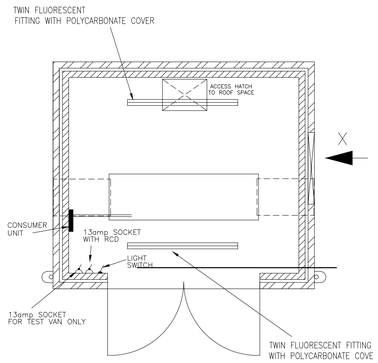


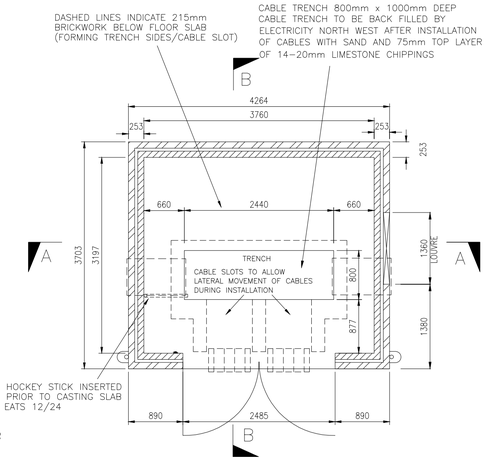
SECTION A–A



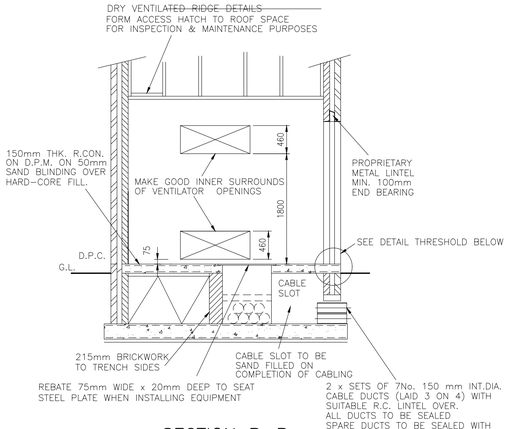
TYPICAL SIDE ELEVATION X



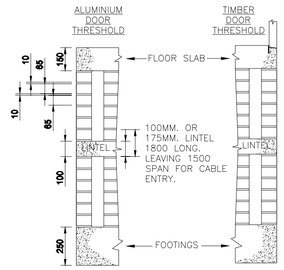




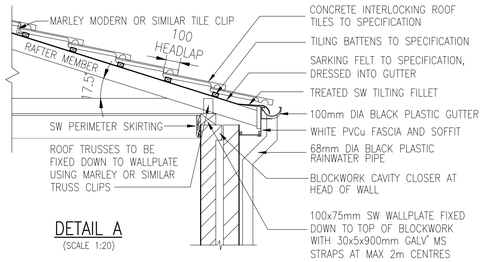
FLOOR PLAN



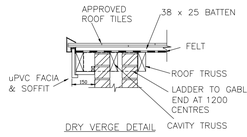
SECTION B–B



SECTION THRESHOLD DETAIL



DETAIL A
(SCALE 1:20)



DRY VERGE DETAIL

THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH ELECTRICITY NORTH WEST ES 352, ES 397 & ES 326 AND ALL ASSOCIATED WORKS MUST COMPLY WITH THIS INFORMATION AND DETAIL IN FULL

NOTES:

CONCRETE FOR BASES TO BE 1:2:4 MIX OF ORDINARY PORTLAND CEMENT
CONCRETE 35N/mm² (28 DAY STRENGTH)
20mm AGGREGATE SHALL BE PLACED & COMPACTED WITHIN ADEQUATE FORMWORK TO ENSURE THAT THE TOP SURFACES ARE TRUE TO PLANE WITH LEVEL FAIR FACE TROWEL FINISH.
NO DRILLING TO TAKE PLACE WITHIN 28 DAYS OF CASTING.
NO PERCUSSION DRILLS TO BE USED ONLY ROTARY DRILLS.
DO NOT OVER TIGHTEN BOLTS.
TYPICAL MAX WEIGHT OF PLANT = 6000Kg.

FOUNDATIONS – TO BE TAKEN DOWN TO GROUND THAT IS SUFFICIENTLY FIRM TO PROVIDE PHYSICAL SUPPORT TO THE STRUCTURE. SITE PHOTO'S TO BE TAKEN INDICATING EVIDENCE OF FOUNDATION DEPTH WHERE INCREASED DIG IS GREATER THAN 400mm.
THESE WILL BE PROVIDED FOR PAYMENT AND AUDIT PURPOSES.
FOUNDATIONS/PLINTH MUST BE SUITABLE WITH RESPECT TO GROUND CONDITIONS AND LOADING, AND MUST BE APPROVED BY ON–SITE STRUCTURAL ENGINEER.

CABLE TRENCH TO BE 800mm WIDE & 1000mm DEEP. CABLE TRENCH TO BE BACK–FILLED AFTER INSTALLATION OF CABLES WITH SAND AND 75mm TOP LAYER OF 14–20mm LIMESTONE CHIPPINGS.

FOR DESIGN PURPOSES, OPERATIONAL & JOINTING CLEARANCES HAVE BEEN BASED ON A 1000KVA TRANSFORMER & 5 WAY FUSE CABINET AS SHOWN.

SURFACE WATER DRAIN TO BE CONNECTED TO EXISTING IN A MANNER & AT A POINT TO BE AGREED WITH THE LOCAL AUTHORITY.

CABLE DUCTS TO BE SEALED AFTER INSTALLATION OF CABLES. SPARE DUCTS TO BE SEALED WITH EXPANDING FOAM AND DUCTS WITH CABLES TO BE SEALED. REFER TO ES 400 D 5 FOR ALL DUCTING SPECIFICATIONS.

WALLS – FOUNDATION TO GROUND LEVEL: TRENCH BLOCK OR 2No LEAVES OF ENGINEERING QUALITY BRICKWORK WITH 50mm CAVITY FILLED WITH WEAK MIX CONCRETE.
GROUND TO DAMP PROOF COURSE (DPC) LEVEL: 102.5mm ENGINEERING BRICK (IBSTOCK STAFFORDSHIRE SMOOTH SLATE BLUE) OUTER LEAF, 50mm CAVITY AND 100mm 7N/mm² BLOCKWORK INNER LEAF
HORIZONTAL DPC IN PITCH POLYMER, OR SIMILAR, ALL AROUND
ABOVE DPC LEVEL: 102.5mm FACING BRICKWORK (IBSTOCK CHESTER RED BLEND) OUTER LEAF, 50mm CAVITY AND 100mm 7N/mm² BLOCKWORK INNER LEAF. SOLDIER BRICK OUTER LEAF ABOVE DOOR IN IBSTOCK STAFFORDSHIRE SMOOTH SLATE BLUE ENGINEERING BRICK
CAVITY WALL TIES: HALFEN HTS C12 x 200mm STAINLESS STEEL CAVITY TIES AT MAX 750mm HORIZONTAL CTRS, 450mm VERTICAL CTRS & 225mm VERTICAL CTRS WHERE WITHIN 300mm OF THE OPENING.
LINTEL OVER DOOR: HARVEY A/MCBOEB/F IN STAINLESS STEEL, OR SIMILAR APPROVED, WITH MIN 150mm END BEARINGS.
MORTAR: CEMENT:LIME:SAND 1:1:6 MIX COLOUR NATURAL WITH BUCKET HANDLE POINTING.
CAVITY CLOSERS: BLOCKWORK RETURNED AGAINST THE BRICKWORK INCLUDING A VERTICAL DPC
FLOOR – STEEL FLOAT FINISH TO 3mm IN 3m LENGTH 150mm THK. C35 REINF. CONCRETE WITH A252 MESH AT BOTTOM + (40mm COVER) ON D.P.M. AND 50mm SAND BLINDING – OVER COMPACTED HARDCORE FILL. EXTRA REINFORCEMENT REQUIRED OVER CABLE SLOTS (SEE THRESHOLD DETAIL)

ROOF – MARLEY MODERN SMOOTH GREY INTERLOCKING CONCRETE ROOF TILES WITH MINIMUM 100mm HEADLAP ON 25x38 TREATED SW TO SUIT TILE SPACING ON
RUBBEROID IKO 1F' (BITUMINOUS) SARKING MEMBRANE TO BS EN 13707, BS 8747:2007 OR SIMILAR, ON
PROPRIETARY GANGNAIL ROOF TRUSSES (OR LOOSE RAFTERS) AT MAX 600mm CENTRES AND 17.5° PITCH, ON 100x75mm PRESERVATIVE TREATED SW WALLPLATE FIXED DOWN TO TO TOP CAVITY WALL INNER LEAF USING 30x5mm MS STPAPS AT MAX 1800mm CENTRES FIXED DOWN BLOCKWORK WALL
WHITE PVCu EAVES FASCIAS AND VENTILATED SOFFITS
DRY FIX RIDGE AND VERGES

LIGHTING & POWER – TO BE INSTALLED IN ACCORDANCE WITH ES 397.

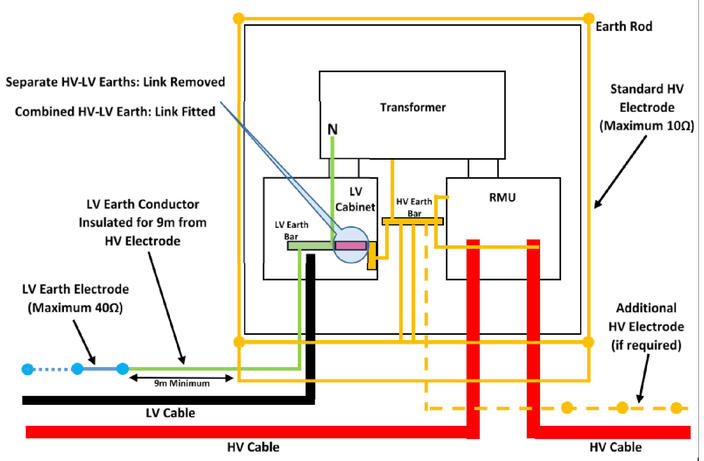
DOORS – LOUVRE–VENTED DOORS & IRONMONGERY TO ELECTRICITY NORTH WEST STANDARD SPECIFICATION

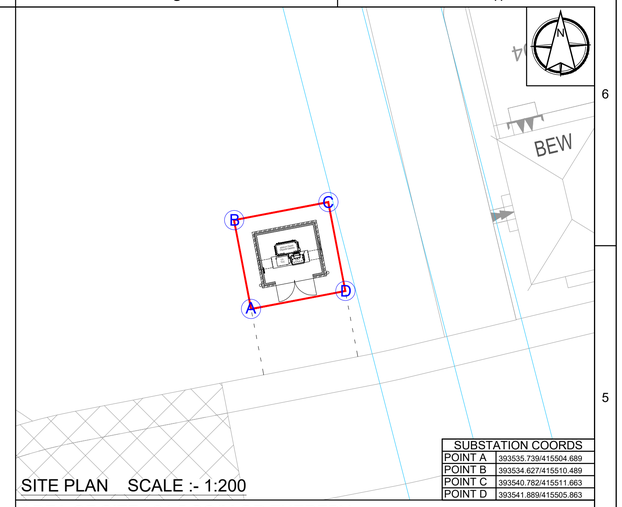
electricity north west
Bringing energy to your door

EARTHING DESIGN FOR 11/6.6kV DISTRIBUTION SUBSTATIONS AND EQUIPMENT

CP333

Fig. 3 – Ground-Mounted Substation Earthing System Showing Typical HV and LV Earthing Arrangements





SITE PLAN SCALE :- 1:200

SUBSTATION COORDS	
POINT A	393535.739/415504.689
POINT B	393534.627/415510.489
POINT C	393540.782/415511.663
POINT D	393541.889/415505.863

AREA OF SITE : 24.5 SQ/M OR THEREBY

LOCATION PLAN SCALE :- 1:1250

DESIGN NOT APPROVED

Rev	Revision Details	By	Date
001	Preliminary Design	JD/GH	19.12.25

THE PROVISION OF ALL SMALL POWER & LIGHTING AND ASSOCIATED DUCTING REQUIREMENTS ARE THE RESPONSIBILITY OF THE CUSTOMER.
REFER TO ENWL DOCUMENT:
ES397 ISSUE 3
ELECTRICAL INSTALLATIONS WITHIN DISTRIBUTION SUBSTATION

FOR EARTHING DESIGN READ WITH ENWL DOCUMENT:
CODE OF PRACTICE 333 - ISSUE 7 (CP333)
EARTHING DESIGN FOR 11/6.6kV DISTRIBUTION SUBSTATIONS AND EQUIPMENT

THIS GRP SUBSTATION ENCLOSURE AND PLINTH DRAWING IS EXTRACTED FROM ENWL DRAWING NUMBER:
900350-028 - REV 1
CONSTRUCTION DETAILS FOR INDOOR UNIT SUBSTATION

energetics
Design | Build | Connect
Fenick House, Lister Way
Hamilton International Technology Park
Glasgow, G72 0FT
Tel: 03300 587 400 Email: hello@energetics-uk.com

Drawing Title:	ENW BRICK-BUILT SUBSTATION 1 LAYOUT		
EDB Project No.:	EDB6116_Hollingsworth Road, Littleborough OL15 0AU		
DNO REF.:	5500353331/A		
Utility:	EL	Revision:	001
Drawing Number:	EDB6116_ENW_EL_100_1 OF 1		
Client:	Bloor Homes North West		
OS Grid Reference:	393543 / 415551		
Drawn by:	J. Daly	Checked by:	G. Hare
Date Drawn:	19.12.25	Date Checked:	19.12.25
Sheet Size:	As Shown	Scale:	A1

V.05.25.A