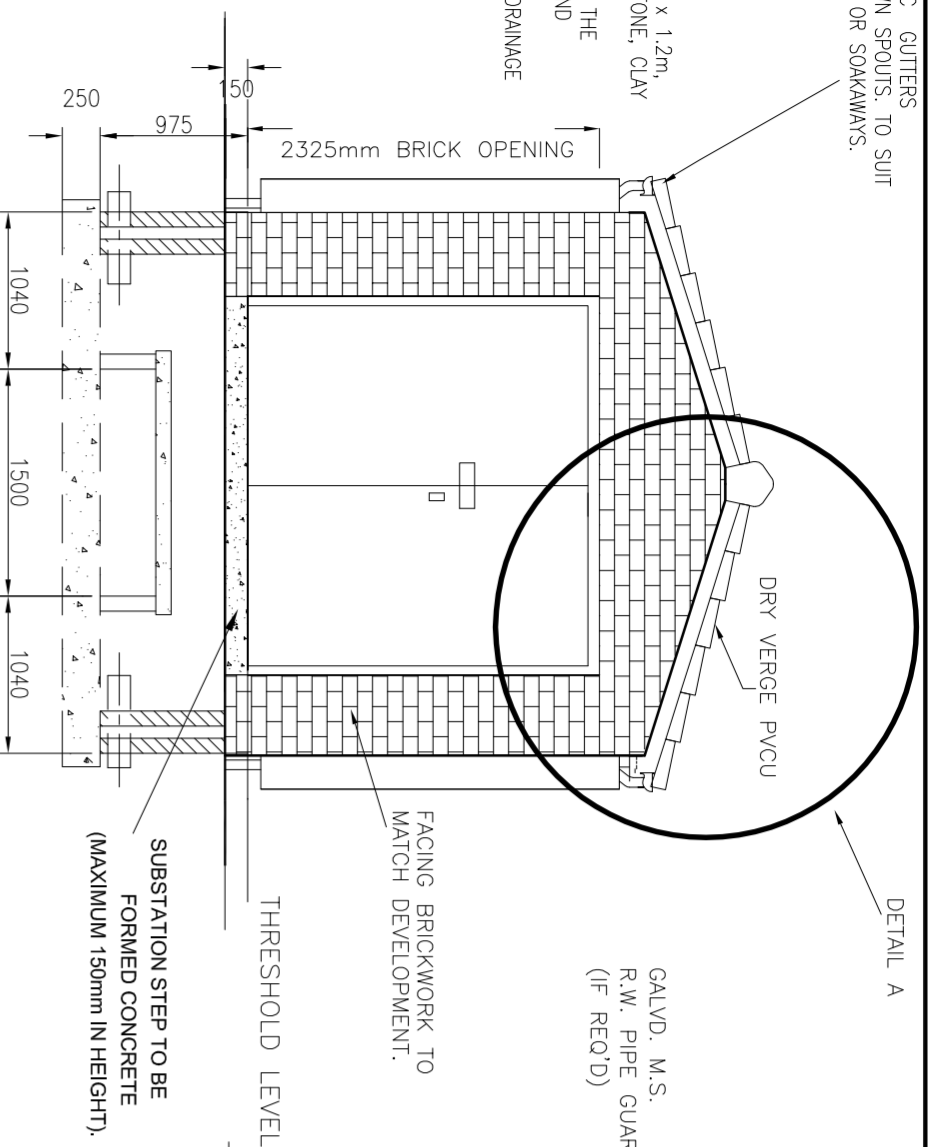


100mm HALF ROUND PVC GUTTERS
GUTTERS WITH 65mm DOWN SPOUTS, TO SUIT
LOCATION OF SITE DRAINS OR SOAKAWAYS.

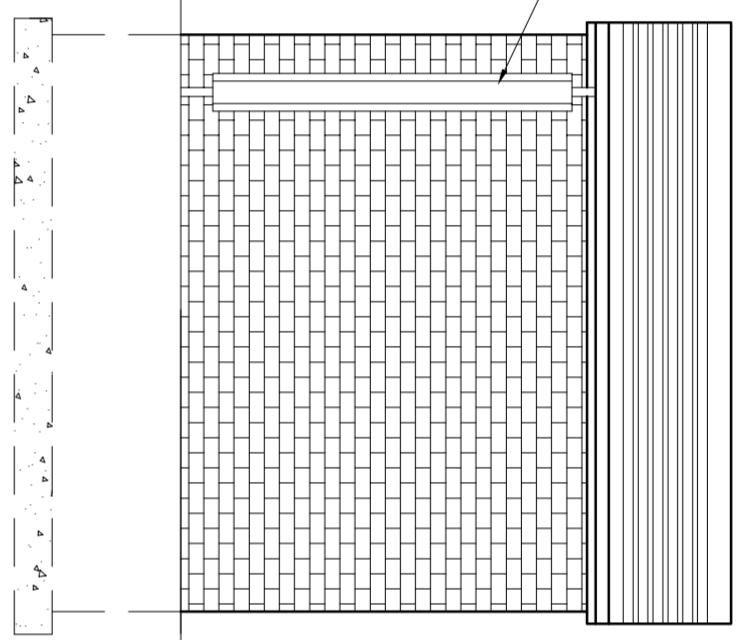
SOAKAWAY
MIN DEPTH 1.8m x 1.2m x 1.2m,
FILLED WITH GRANULAR STONE, CLAY
RAPPED
GULLIES AT THE BASE OF THE
DOWNPIPES, BELOW GROUND
DRAINAGE FROM GULLIES
INTO SOAKAWAY OR SITE DRAINAGE
SYSTEM



FRONT ELEVATION

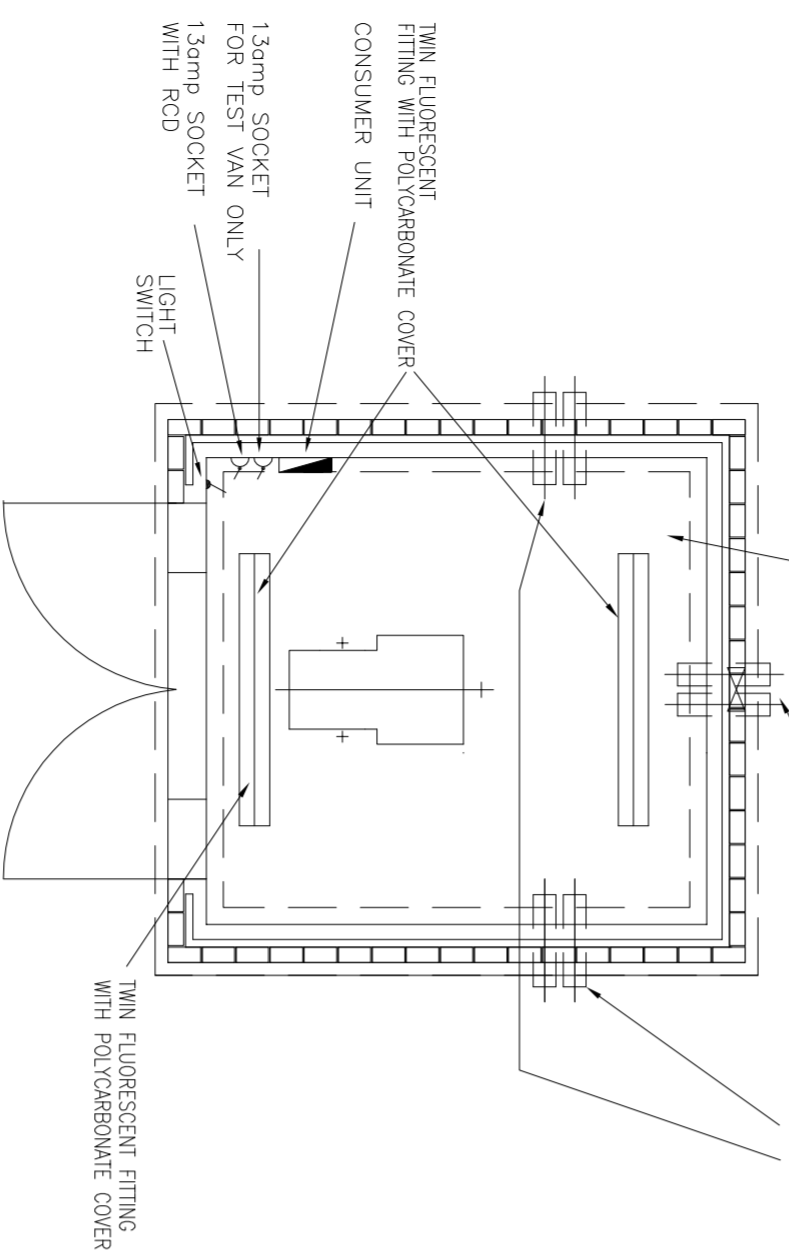
SIDE ELEVATION

CEILING TO BE LINED WITH 1 No.
LAYER OF 6mm THICK BOARD
UNDER 100mm GAP ASSASSIN
FREE MATERIAL, FIED IN A
STAGGERED PATTERN TO
UNDERSIDE OF ROOF TRUSSES
WITH ALL JOINTS & GAPS SEALED
MADE & SKIMMED TO PROVIDE
MINIMUM 1 HOUR FIRE
RESISTANCE.

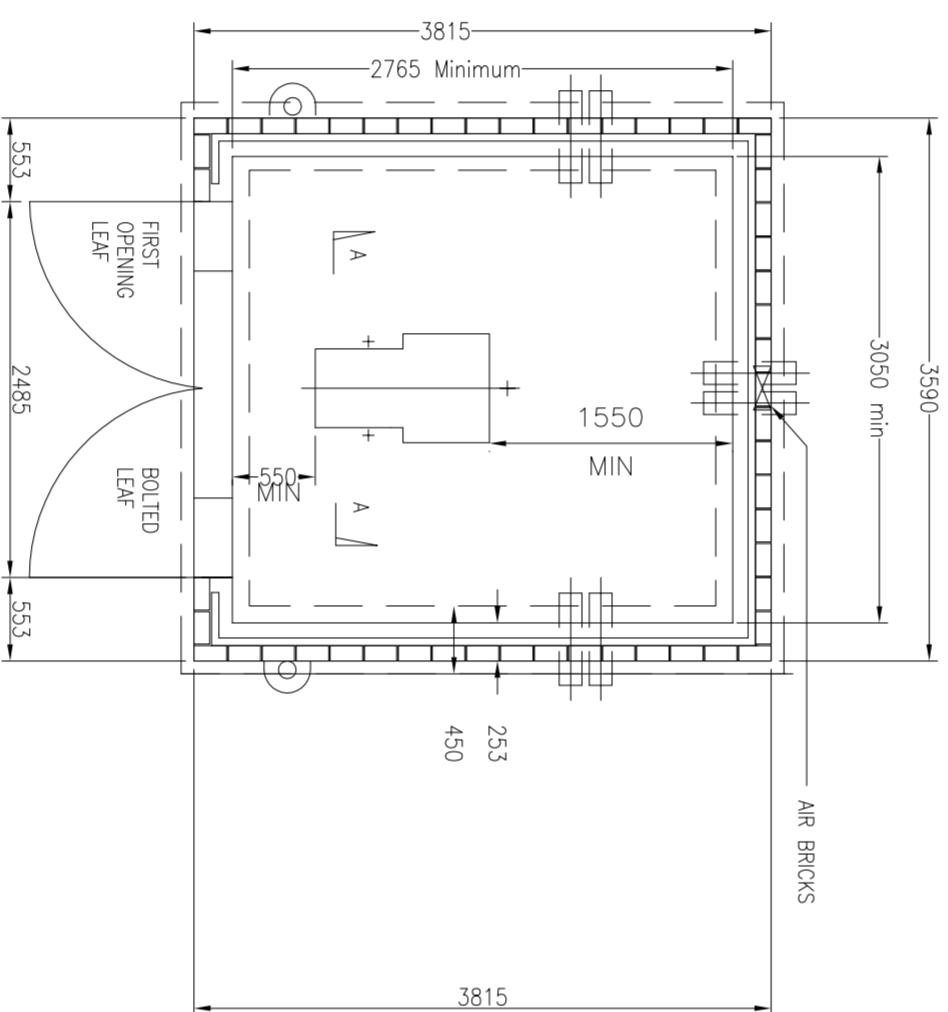


COMPOUND TO BE BACK FILLED WITH SAND, WELL
CONSOLIDATED WITH 75mm LAYER OF 14-20mm
LIMESTONE CHIPPINGS, ALL TO BE COMPLETED
AFTER INSTALLATION OF ALL CABLES.

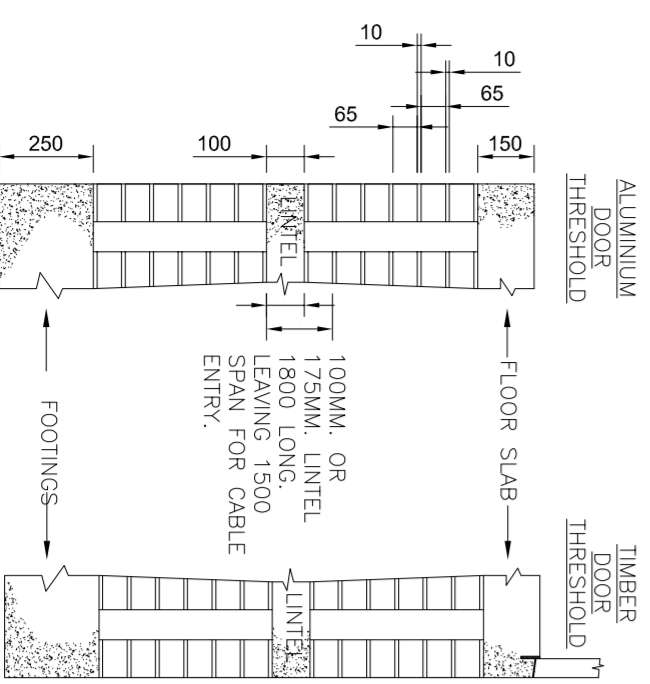
2 No. 150mmØ DUCTS IN 3 No. POSITIONS WITH
SUITABLE R.C. LINTEL OVER, ALL DUCTS TO BE SEALED.
SPARE DUCTS TO BE SEALED WITH EXPANDING FOAM.
DUCTS WITH CABLES TO BE SEALED. REFER TO ES 400
D. 5.



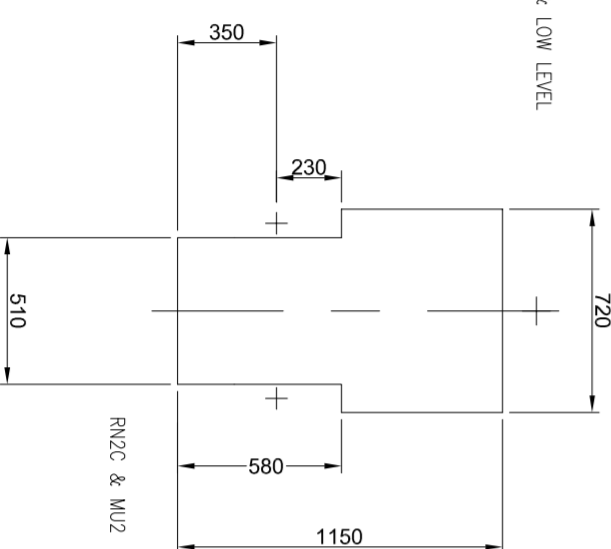
ELECTRICAL LAYOUT



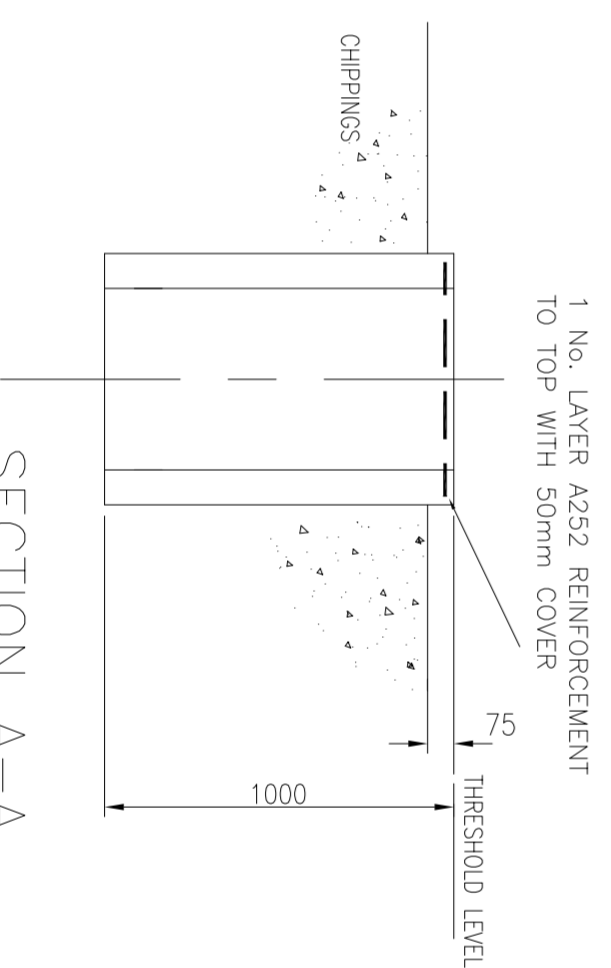
FLOOR PLAN



SECTION THRESHOLD DETAIL



SWITCHGEAR BASE DETAILS



SECTION A-A

GENERAL NOTES:

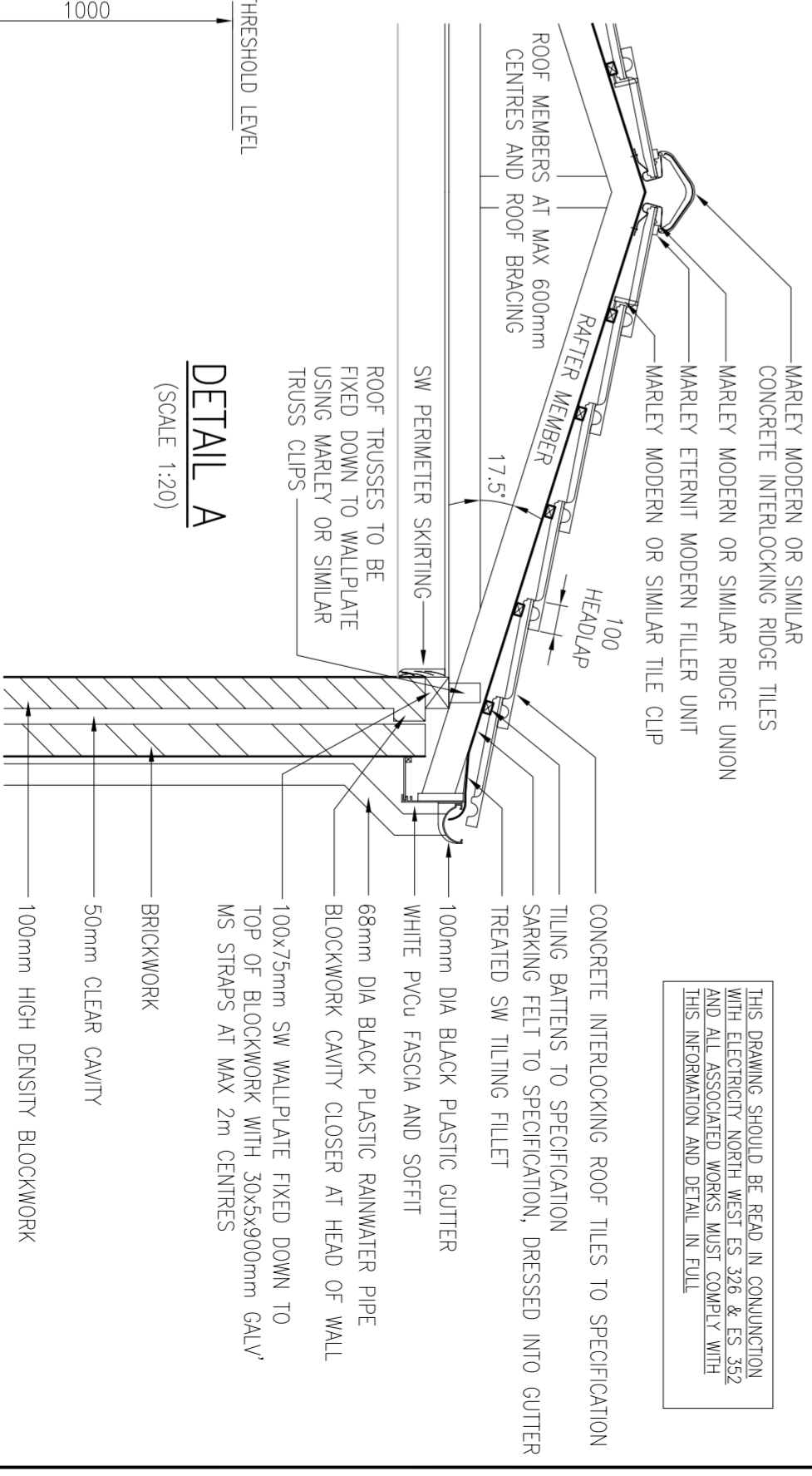
1. THIS DRAWING ILLUSTRATES A TYPICAL BRICK ENCLOSURE FOR EXTERNAL SWITCHGEAR. THE ACTUAL SIZE OF THE BUILDING WILL DEPEND ON THE EXTERNAL SWITCHGEAR TO BE ENCLOSED AND SHOULD BE READ IN ACCORDANCE WITH THE REQUIREMENTS IN ELECTRICITY NORTH WEST CODES OF PRACTICE CP326 & CP352.
2. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
3. ALL LEVELS ARE IN METRES AND RELATE TO AN ARBITRARY DATUM LEVEL OF +0.000m, BEING DPC LEVEL FOR THE BUILDING.
4. THE CONTRACTOR IS RESPONSIBLE FOR THE ACCURACY OF SETTING OUT ON SITE AND THE FABRICATION OF MATERIALS PRIOR TO CONSTRUCTION.
5. ALL DIMENSIONS TO BE SITE CHECKED.
6. ALL WORK TO CARRIED OUT IN ACCORDANCE WITH CURRENT BUILDING REGULATIONS AND RELEVANT BRITISH STANDARDS AND CODES OF PRACTICE.
7. THE CONTRACTOR IS TO ESTABLISH THE LOCATION OF ALL EXISTING SERVICES AND INFORM THE SENIOR AUTHORISED PERSON PRIOR TO COMMENCING ON SITE.

SPECIFICATION:

- GENERAL:**
- DO NOT SCALE. ALL DIMENSIONS ON THIS DRAWING ARE IN MILLIMETRES AND ARE TYPICAL SIZES FOR REFERENCE ONLY. FINAL DIMENSIONS ARE TO BE VERIFIED WITH ELECTRICITY NORTH WEST BEFORE PROCEEDING.
 - THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ELECTRICITY NORTH WEST CODE OF PRACTICE ES352.
 - ALL WORK IS TO BE CARRIED OUT IN ACCORDANCE WITH CURRENT BUILDING REGULATIONS, RELEVANT BRITISH STANDARDS AND CODES OF PRACTICE.
- SITE:**
1. CONTRACTOR TO OBTAIN UNDERGROUND CABLE & SERVICE RECORDS, PRIOR TO COMMENCEMENT OF ANY WORKS.
 2. THE CONTRACTOR MUST ASSUME THAT ANY EXISTING CABLES LOCATED WITHIN THE WORKS ARE LIVE AND LAISE WITH THE ELECTRICITY NORTH WEST ENGINEER FOR ADVICE.
 3. SITE SPECIFIC RISK ASSESSMENT TO BE UNDERTAKEN PRIOR TO COMMENCEMENT OF ANY WORKS.
 4. FOUNDATION DESIGN ON THIS DRAWING ASSUMES FORMATION FROM A SUITABLE BEARING LEVEL THAT IS SUFFICIENTLY FIRM TO PROVIDE PHYSICAL SUPPORT FOR THE STRUCTURE.
 5. FOUNDATION FORMATION LEVELS TO BE INSPECTED AND APPROVED PRIOR TO FOUNDATION CONSTRUCTION.

MATERIALS:

- FOUNDATIONS**
1. 600mm WIDE x 200mm DEEP STRIP FOOTINGS FORMED IN MASS CONCRETE
- WALLS**
2. FOUNDATION TO GROUND LEVEL: TRENCH BLOCK OR 2No. LEAVES OF ENGINEERING QUALITY BRICKWORK WITH 50mm CAVITY FILLED WITH WEAK MIX CONCRETE.
 3. 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.
 4. 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: HALFTEN HTS C12 x 200mm STAINLESS STEEL CTRS & TIES AT MAX 750mm HORIZONTAL CTRS, 450mm VERTICAL CTRS & 225mm VERTICAL CTRS WHERE WITHIN 300mm OF THE OPENING.
 5. LINTEL OVER DOOR: HARVEY A/MC80EB/F IN STAINLESS STEEL, OR SIMILAR APPROVED, WITH MIN 150mm END BEARINGS.
 6. MORTAR: CEMENT:TIME:SAND 1:1:6 MIX COLOUR NATURAL WITH BUCKET HANDLE POINTING.
 7. CAVITY CLOSERS: BLOCKWORK RETURNED AGAINST THE BRICKWORK INCLUDING A VERTICAL DPC
- ROOF**
10. MARLEY MODERN SMOOTH GREY INTERLOCKING CONCRETE ROOF TILES WITH MINIMUM 100mm HEADLAP ON
 11. 25x38 TREATED SW TO SUIT TILE SPACING ON
 12. RUBBEROID IKO 1F (BRUMMOUS) SARKING MEMBRANE TO BS EN 13707, BS 8747:2007 OR SIMILAR, ON
 13. PROPRIETARY GANGWAL ROOF TRUSSES (OR LOOSE RAFTERS) AT MAX 600mm CENTRES AND 17.5° PITCH, ON
 14. 100x75mm PRESERVATIVE TREATED SW WALLPLATE FIXED DOWN TO TOP CAVITY WALL INNER LEAF USING 30x55mm MS STRAPS AT MAX 1800mm CENTRES FIXED DOWN BLOCKWORK WALL
 15. WHITE PVCU EAVES FASCIAE AND VENTILATED SOFFITS
 16. DRY FIX RIDGE AND VERGES
- DRAINAGE**
17. 115mm BLACK PLASTIC DEEPFLOW GUTTERS
 18. 68mm I.D. BLACK PLASTIC DOWNPIPES
 19. PLASTIC RAINWATER GULLIES WITH RODDING POINTS
 20. DRAINAGE TO DISCHARGE INTO EXISTING MAIN SURFACE WATER DRAIN OR INTO A SOAKAWAY LOCATED A MINIMUM 5.0m FROM ANY STRUCTURE
- EXTERNAL SECURITY DOORS**
21. DOOR & IRONMONGERY TO ELECTRICITY NORTH WEST STANDARD SPECIFICATION



DETAIL A
(SCALE 1:20)

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

electricity north west		FREDERICK ROAD, SALFORD M6 6QH TEL 0161 6041370		CIVIL DISTRIBUTION SUBSTATION	
DRAWN	ASR	SCALE	1:25	SITE NAME	CONSTRUCTION DETAILS FOR STANDARD INDOOR BRICK SUBSTATION
APPROVED	WD	DATE	NOVEMBER 18	P.F.R. NO.	-
OLD DWG NO	-	SHEET SIZE	A2	DWG NO	900350-029
				REV	0