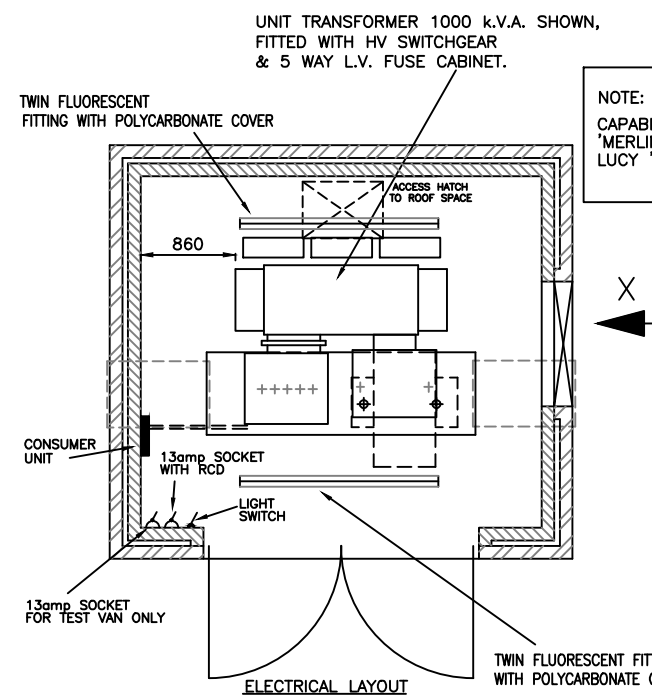


SOAKAWAY MIN DEPTH 1.8m x 1.2m x 1.2m, FILLED WITH GRANULAR STONE, CLAY TRAPPED GULLIES AT THE BASE OF THE DOWNPIPES. BELOW GROUND DRAINAGE FROM GULLIES INTO SOAKAWAY OR SITE DRAINAGE SYSTEM.

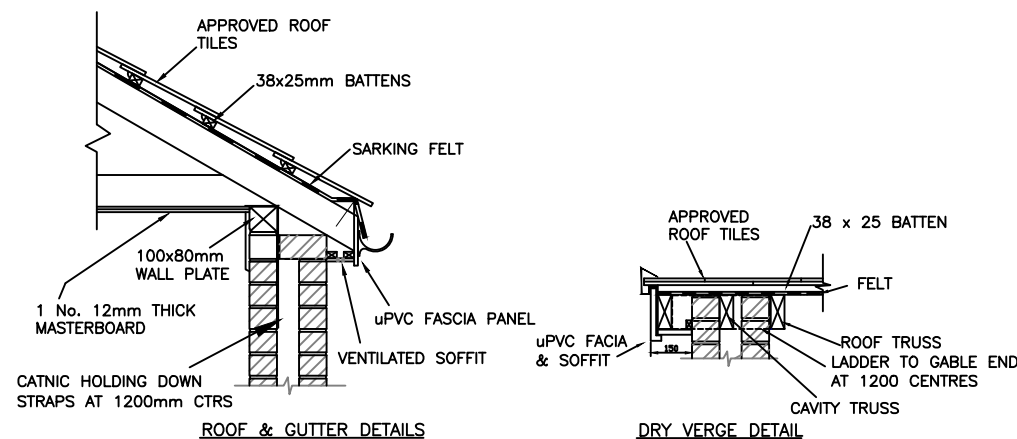
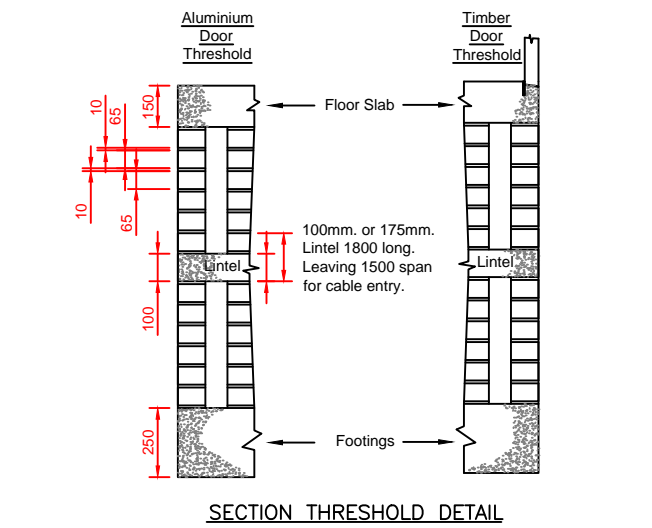
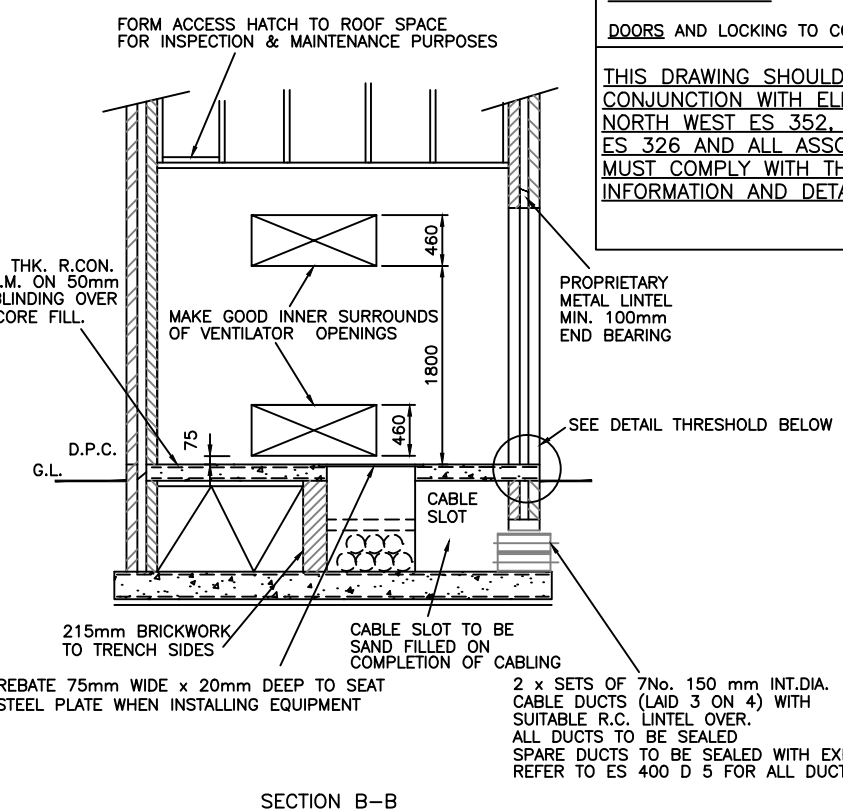
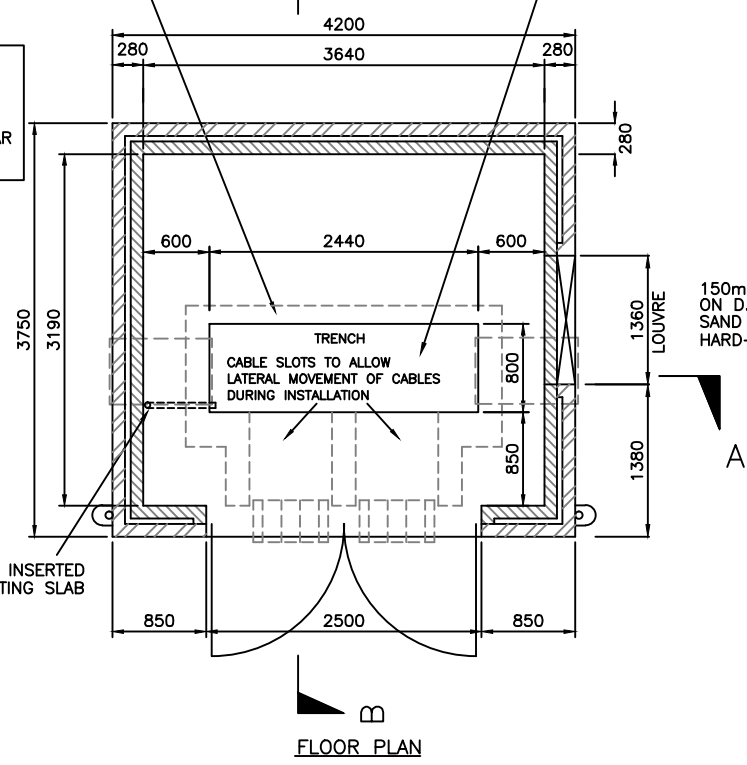
SUBSTATION STEP TO BE FORMED CONCRETE (MAXIMUM 150mm IN HEIGHT).

FRONT ELEVATION

ALTERNATIVE SIDE ENTRY CABLE DUCTS (ONLY TO BE INSTALLED IF INSTRUCTED & WITH SPECIFIC APPROVAL)



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



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 - TO BE 280mm CAVITY CONSTRUCTION, BOTH LEAVES TIED TOGETHER USING PROPRIETARY GALVANISED TIES EVERY 6TH COURSE AND AT 900mm CENTRES. WALLS TO INCORPORATE CAVITY TRAYS & WEEP HOLES WHERE APPROPRIATE. CAVITY TO BE CLOSED WITH DPC TO ALL OPENINGS. EXTERNAL LEAF TO BE FACING BRICKWORK MATCHING DEVELOPMENT. INNER LEAF TO BE SMOOTH TEXTURED, LIGHT COLOUR SOLID CONCRETE BLOCKS/BRICKS 3.5N/mm².

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 - TO BE CONSTRUCTED USING MARLEY ROOF TILES ON TREATED S.W. BATTENS FIXED OVER GOOD QUALITY ROOFING FELT ONTO BRACED TIMBER ROOF TRUSSES. WALL PLATES TO BE SECURED TO BRICKWORK USING PROPRIETARY GALVANISED STRAPS. ROOF CONSTRUCTION TO INCORPORATE CROSS VENTILATION AND ACCESS HATCH IN CEILING. ALL WORK TO BE CARRIED OUT TO CURRENT BRITISH STANDARDS AND CODES OF PRACTICE.

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

DOORS AND LOCKING TO COMPLY WITH ES 326

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

revisions	
A) MINOR MODS	
B) MINOR MODS	
C) LUCY 'SABRE' OUTLINE SHOWN- DOOR DETAILS ETC	
D) DRAWING APPD 23/09/03	
E) ISSUED FOR CIRCULATION	
F) VENTILATOR SIZES AMENDED	
G) HOCKEYSTICK ADDED	
H) VARIOUS DETAIL CHANGES	16-01-06
I) WALL LOUVRE REFERENCE UPDATED	30-10-06
J) FOUNDATION & SOAKAWAY DETAILS ADDED	15-05-09
K) REVISED WITH ES 397	27-04-10
L) SLAB SHOWN TO REST ON INNER LEAF	27-06-12



approved G.H.SMITH date 23/09/03

CONSTRUCTION DETAILS FOR INDOOR UNIT SUBSTATION

site - -
- -
- -

scale DO NOT SCALE

scheme number - - - - -

drawing number sheet
ES352 A2 006/02L