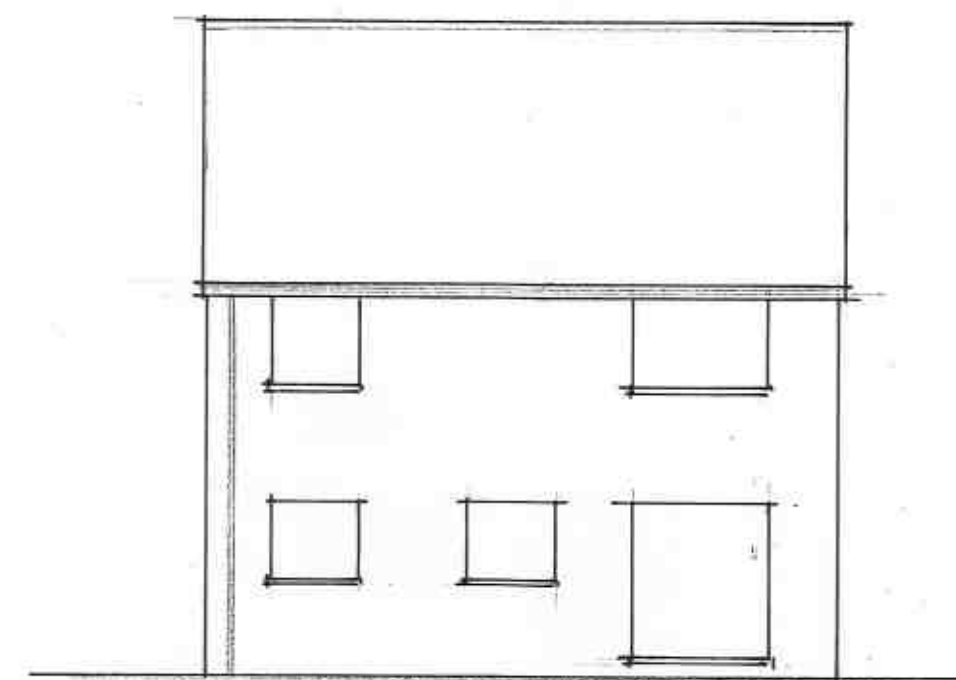
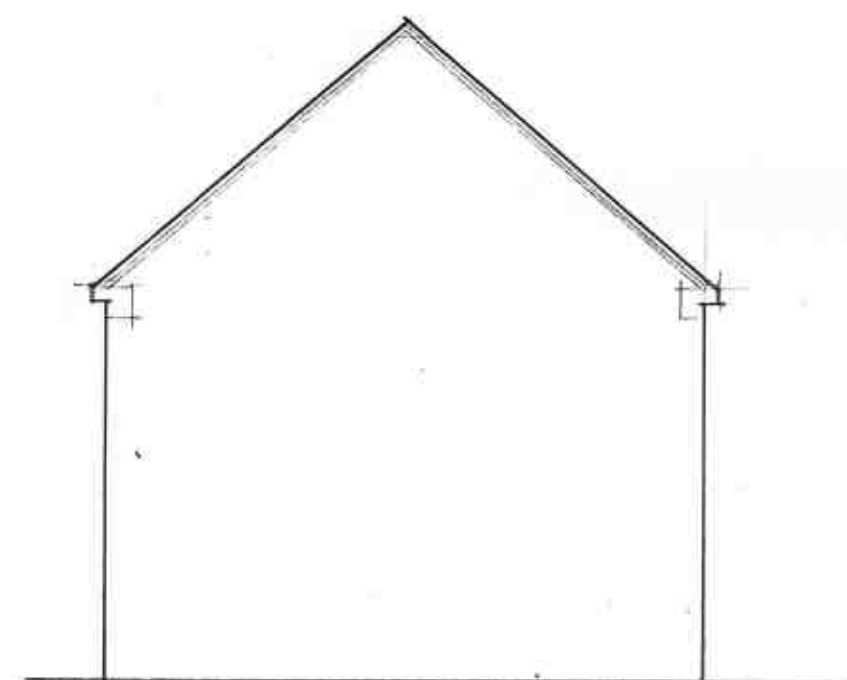


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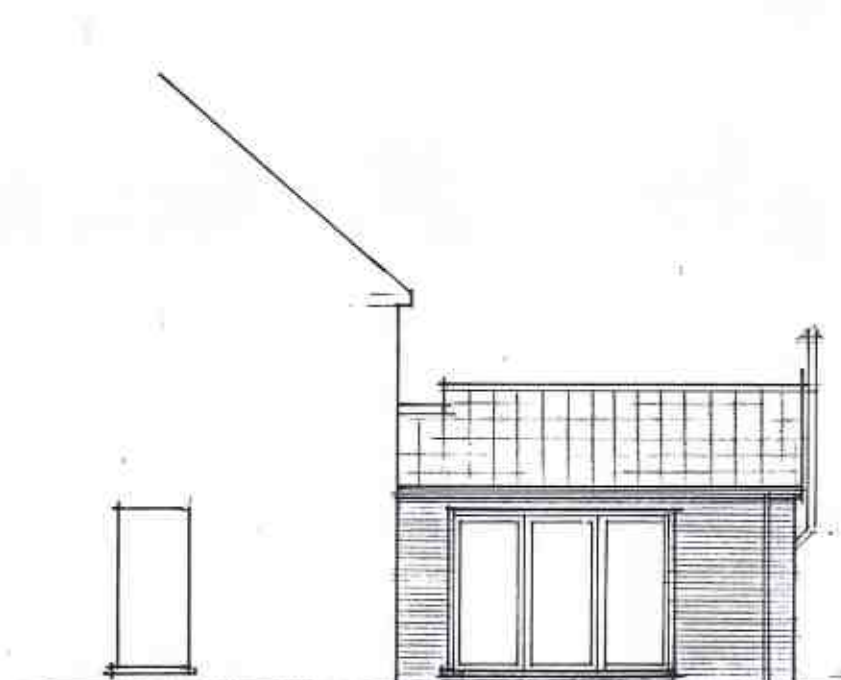
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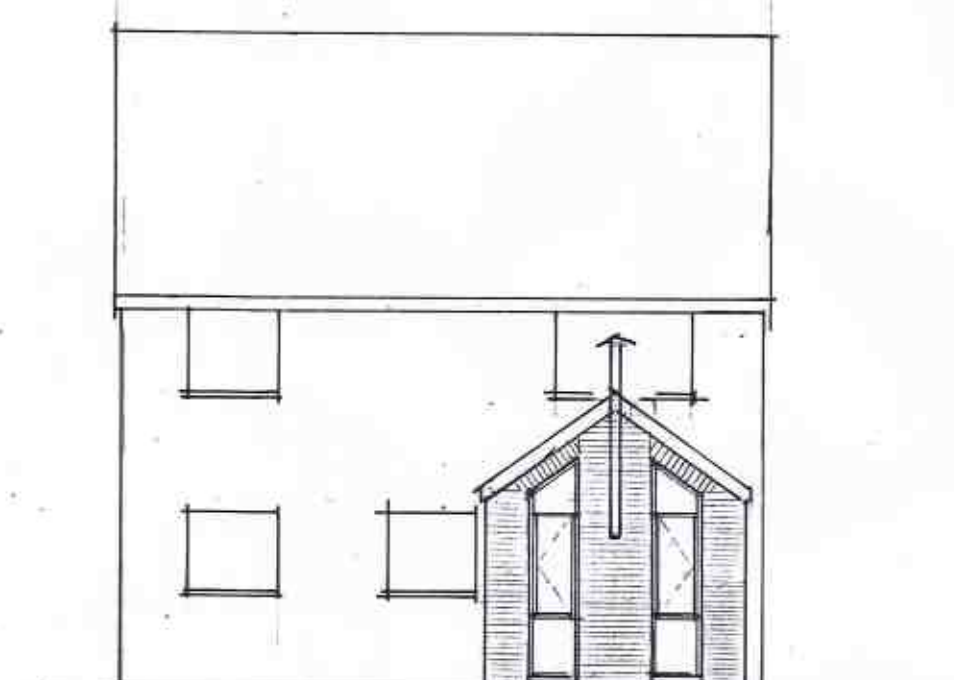
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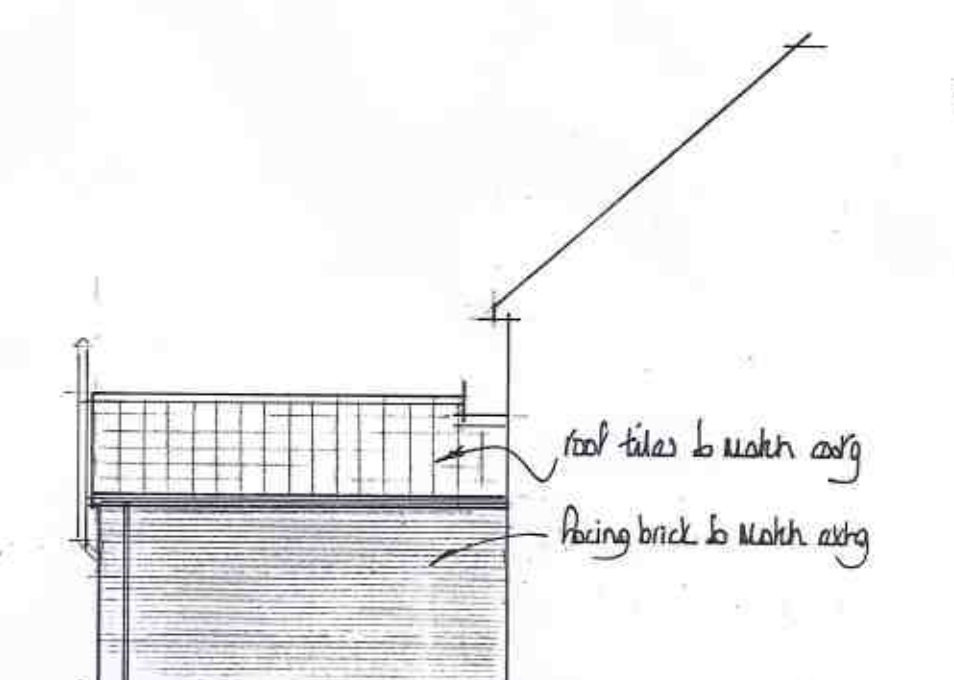
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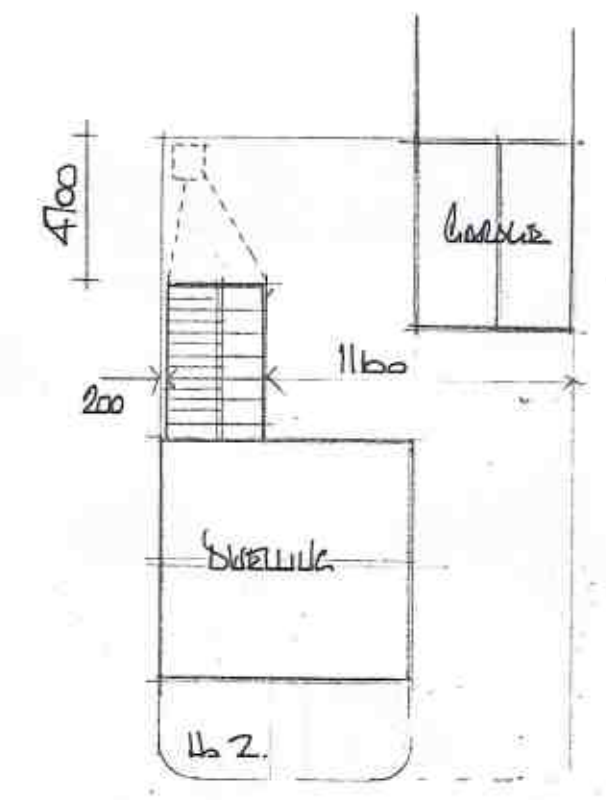
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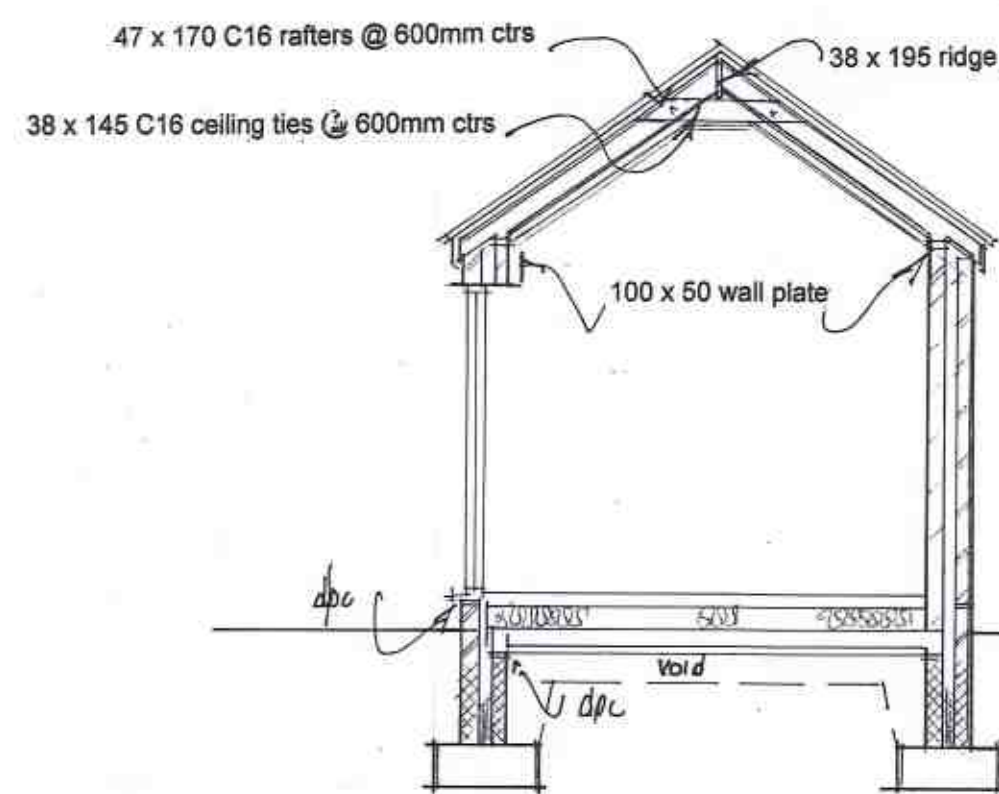
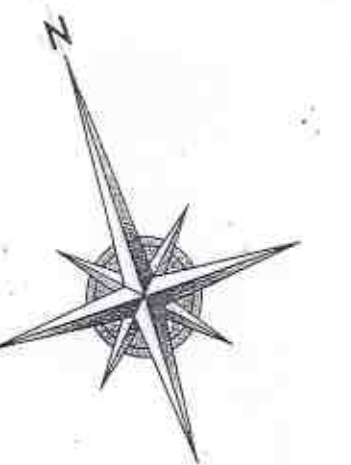
NORTH



WEST



BLOCK PLAN



SECTION A - A

#### FOUNDATIONS

Foundations to be ST4 grade concrete

300mm cavity walls foundations to be 700 x 230mm

Foundations to be taken down to a firm load-bearing strata, a min. 1.0m if in shrinkable sub soil, in accordance with the requirements of the Local Authority Building Control Dept. and in accord with the NHBC guidelines for building near trees.

Site soil surveys are recommended in respect of foundations to establish specific site conditions before foundation work is undertaken

#### FLOOR CONSTRUCTION

##### Ground

75mm screed separating membrane  
Ground floor insulation to achieve a U-value of 0.11W/m<sup>2</sup>.K (150mm PIR insulation board, lambda = 0.022W/m.K).  
Proprietary beam and block floor system installed in strict accord with manufacturer's instructions.

Full details and calculations of the floor system are to be forwarded to the Local Authority Building Control Dept for approval prior to installation.  
Beams and blocks to be bedded on dpc on supporting sleeper walls which are to be provided with ventilation as per the external walls - 225 x 75mm clay air brick every 2.0m.

The void beneath the floor, min 150mm from u/s of floor beams to ground, is to be ventilated by the use of proprietary 'periscope' vents positioned at centres along the perimeter wall to provide ventilation of at least the equivalent to 15% m<sup>2</sup> per linear metre of wall.

#### WALL CONSTRUCTION

##### Below Ground

To be 100mm Blue Engineering bricks/100mm 7N solid blocks - see structural engineer's details

##### Above Ground

To be 300mm o/a constructed as follows :-

100mm facing brick  
100mm full fill insulation ie Celotex CWS 36  
100mm Thermalit Shield insulation blocks, k = 0.15

All to be tied together using stainless steel wall ties positioned at distance not exceeding 750mm horizontally, 450mm vertically and staggered. To be at every block course vertically at all returns and reveals.

Internal finish to be 12.5mm plasterboard, dot and dab, with taped joints and skim finish to give a 'U' value of 0.28W/mK

#### DPC in Walls

To be a min. 150mm above finished ground level  
An insulating vertical cavity closer and dpc, i.e. Thermabate, is to be provided to all cavity closures.  
A dpc cavity tray, stepped as applicable, is to be constructed within the wall immediately above an abutment and drained using Ryton YTWEEEP vents.

#### LINTELS

Lintels to be IG stainless steel, or similar and equivalent, to have a min. 150mm end bearing and be installed in strict accordance with manufacturer's instructions with a dpc cavity tray over where applicable and drained using Ryton YTWEEEP vents.

Lintels to be protected with min. 15mm gypsum plaster skim finish to give a min. half hour fire protection.

#### WINDOWS & DOORS

Windows and doors to be powder coated aluminium with thermal break construction, double glazed using glass having a soft low E coating with an emissivity value of 0.05 with min. 16mm air gap to sealed units and weather stripped.  
Windows and external glazed doors to achieve a U-value of 1.3 0W/m<sup>2</sup>.K or less.

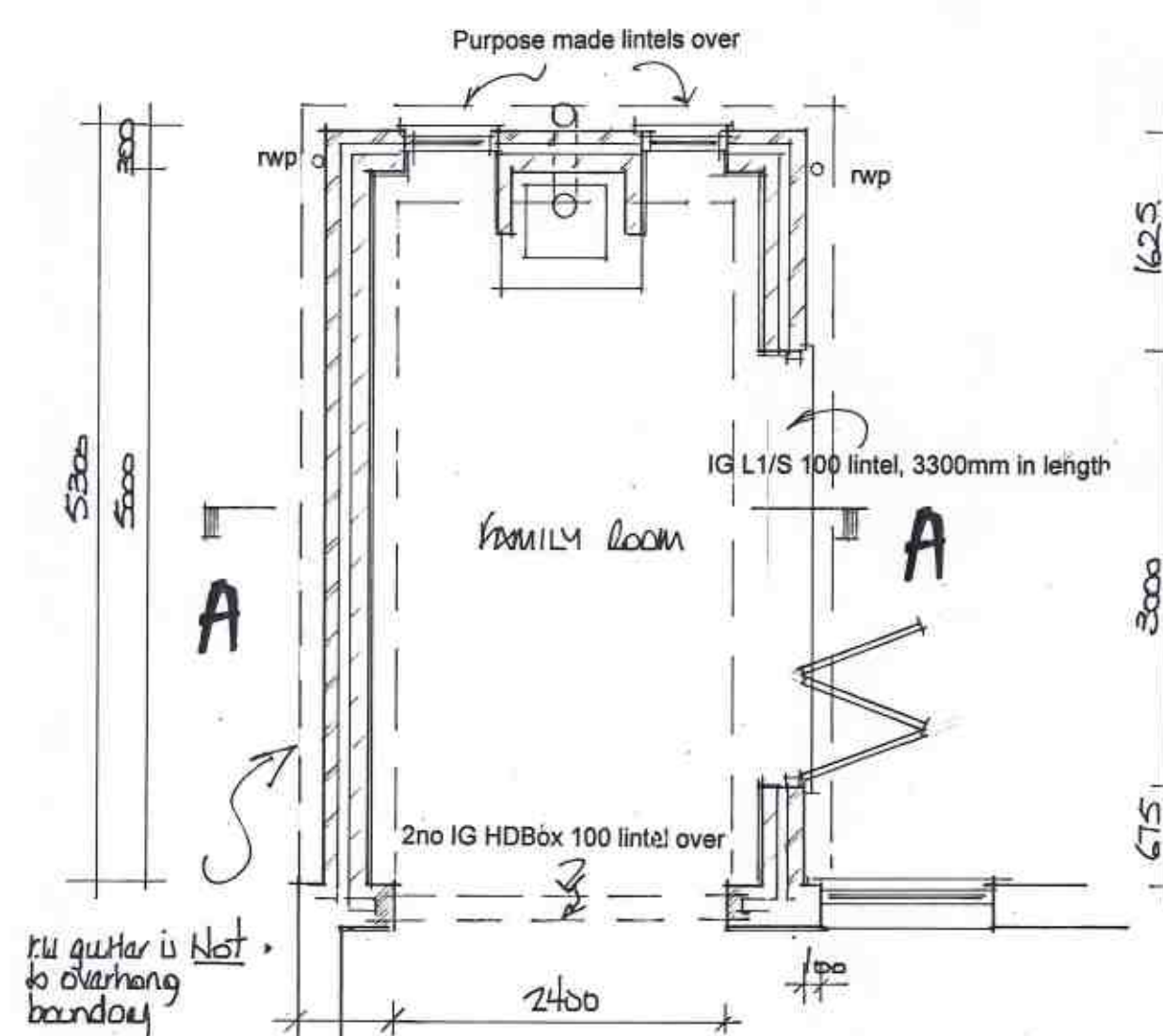
Double glazing manufacturer's certificate to be provided to prove compliance of the glazing to that specified.

Glazing to windows less than 800mm and doors (include sidelights to doors) less than 1500mm above floor level is to be laminated or toughened glass in accord with BS6206 : 1981.

Ground floor and other easily accessible windows (including easily accessible rooflights) should be secure windows in accordance with Approved Document Q paragraphs 2.2 and 2.3, windows should be made to a design that has been shown by test to meet the security requirement of the British Standards publication PAS 24:2012

All easily accessible door sets that provide access into a dwelling or into a building containing a dwelling should be secure door sets to the following:  
a. Manufactured to a design that has been shown by test to meet the security requirement of British Standard publication PAS 24:2012 or  
b. Designed and manufactured in accordance with Approved Document Q Appendix B.

200 550 640 1015 640 550



PROPOSED

Wood burning stove with flue connecting to ss twin skin flue externally installed by specialist. Flue to terminate 600mm above ridge level with ss cow. Flue size to be to suit stove and to incorporate rodding access.  
Hearth to stove to be a min 125mm o/a thickness, project 300mm from the face of the stove and extend 150mm past the cheeks.  
A permanent air entry opening, to BS8303 : 1986, of at least 50% of the throat area is to be provided where indicated.  
Install carbon monoxide alarm fixed to the ceiling 300mm from the wall and 1.0m horizontally from the open fire

#### VENTILATION

All habitable rooms are to have windows containing hinged or pivoted opening vents (which open greater than 30°) or sashes, the combined total of which is equal to not less than 1/20th of the floor area of the room.  
If the vents open at an angle of less than 30° then the combined total is to be not less than 1/10th of the floor area.

#### BACKGROUND VENTILATION

Background ventilation is to be provided either by trickle vents set within the construction of the windows or by airbricks through the walls with a controllable hit/miss vent on the inside. The area of the trickle vents to habitable rooms is to be a minimum of 8000mm<sup>2</sup>

#### ELECTRICAL INSTALLATION

The electrical installation is to be carried out by an electrician registered with NICEIC, ECA or NAPIT. The electrician is to issue a design, installation and test certificate under BS7671 upon completion of the works.

All switches, sockets, tv points and telephone jackpoints are to be located at a height between 450 and 1200mm above finished floor level.

The lighting is to be installed in compliance with the Domestic Building Services Compliance Guide.  
The lighting shall have a luminous efficiency greater than 45 lamp lumens per circuit-watt and a total output greater than 400 lamp lumens

All fixed light fittings should be fitted with low energy lamps.

External light fittings i.e. porch etc. are to be controlled by the fitting of passive infra red's with bulkhead fittings having sockets that can only be used with lamps having an efficacy greater than 40 lumens per circuit-watt.

#### HOT WATER/CENTRAL HEATING/WATER PROVISION & FLOW RATES

Space heating is to be an extension to the existing radiator system

All pipes not contributing to useful heat requirements are to be insulated using an insulation material with a thermal conductivity not exceeding 0.045W/mK and a thickness equal to the external diameter of the pipe up to a max. of 40mm.

Secondary heating is to be provided by wood burning stove, efficiency not less 65% (BS EN 13240).

#### DRAINAGE

##### Surface

Excavate for and lay in where indicated 100mm diam. flexible jointed UPVC drains on 100mm pea gravel bed from 100mm diam. upturned bend at base of downpipe to surface water soakaway.

Form soakaway where indicated a min. 5.0m from the nearest building. Excavate 1200 x 1200 x 1200mm deep, backfill with brick rubble to 300mm below ground level, lay in sheet polythene and make up with vegetable soil

Form soakaways where indicated in strict accordance with the design and specifications given by structural engineer

#### ROOF CONSTRUCTION

##### Tiles

The roof is to be covered with interlocking concrete tiles to match existing laid to gables in accordance with manufacturer's instructions and specifications

##### Battens

Approved quality tanal s/w battens, 25 x 50mm, are to be laid to a gauge to suit the slates and fixed with 90 x 3.35mm copper nails. Battens should be at least 1.2m in length and should be of sufficient length to be supported at each end and intermediately by at least 3 rafters, trusses or walls. Butt joints over intermediate supports should be staggered and the ends must be sawn.

##### Underlay

Approved breathable membrane, ie Tyvek or similar, is to be laid over the rafters lapped 150mm at the joins and secured with clout nails. The underlay should extend over the fascia board and into the eaves gutter. In order to prevent water traps behind the fascia it is recommended that a strip of 6mm marine plywood is provided to support the underlay. The ply is to be laid over the rafters and under the roofing felt positioned as close as possible to the last tiling batten and secured to the fascia.

##### Eaves

Eaves are to be formed with standard size tiles. Provide Ryton over fascia ventilator ref OFV1000, Ryton combed bird/insect and vermin guard in conjunction with Ryton Rafter Roll, RRV250 to enable adequate ventilation to the roof space. Eave tiles must be laid at the same pitch as the main body of tiling and should overhang the fascia by an amount sufficient to ensure that the water discharges into the centre of the gutter.

##### Verges

Verges are to be formed with 150mm wide asbestos cement strip onto which is bedded the tiles which form the verge projecting approx. 50mm over bargeboards or gable brickwork.

##### Ridge

The ridge is to be covered with segmental ridge tiles of the same colour as the main body of tiling, unless specified otherwise, and secured using a proprietary ventilated dry ridge system having ventilation equivalent to a continuous 6mm gap.

##### Abutments

Where roof tiling meets an abutment the tiling is to be cut closely as possible and dressed with code 4 lead flashing, stepped as applicable, dressed down over the tiles a min 150/200mm and up the wall 150mm woked and wedged a min 25mm into a mortar joint. A dpc cavity tray, stepped as applicable, is to be incorporated within the wall immediately above an abutment

##### Mortar

All bedding mortar is to consist of 3 parts sharp sand to 1 part Portland cement and should be struck off to give a smooth face and pointed in one operation.

##### Insulation

Where the ceiling line follows that of the rafters 90mm Kingspan Kooltherm between rafters with 62.5mm KK insulated plasterboard beneath to achieve 0.18W/m<sup>2</sup>.K

##### Ceilings

15mm plasterboard, fixed in accord with manufacturers instructions with all necessary noggins etc. and skim finish

##### Rainwater Goods

Supply and fix 115mm pvc gutters to brickwork with all necessary brackets, stop ends, outlets etc.

Supply and fix 64mm pvc downpipes securely clipped to walls at 1800mm cts with all necessary offsets, swannecks, adaptors etc. and taken into 100mm diam. upturned bend at base.

##### Strapping

Where rafters, ceiling and floor joists run parallel to walls they are to be strapped at 1800mm cts. Straps to be fixed to a min. 3No. rafters etc., having nogged between beforehand, and hooked into the cavity a min 150mm. Similar straps to be used at 1800mm cts. to hold down the wall plate.  
Straps to be 30 x 6mm galv. m.s.

EXISTING

GROUND FLOOR PLAN

EAST MIDLANDS  
DESIGN ASSOC.

Architectural Consultants

Willow Lodge  
Horseshoe Road  
Spalding  
Lincs  
PE11 3JA

Tel/fax :- 01775 767968  
Email :- willowlodge@talktalk.net  
Mobile phone :- 07710815044

Client  
MR D BERRY & MR H CROKSHAW

Project  
Extension to dwelling at  
2 Pine Court  
Spalding  
PE12 6FA.

Drawing  
Plan, Section & Elevations

Scale  
1:50, 1:100 & 1:250

Date  
June 22

Dwg No.  
1203/01

Drawn  
REV