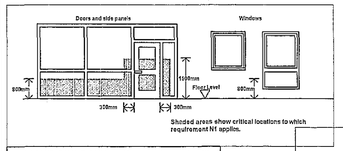
**Contractor to check all Dimensions on site prior to ordering materials / commencing work.Do Not Scale from this Drawing - If in doubt then please ask**

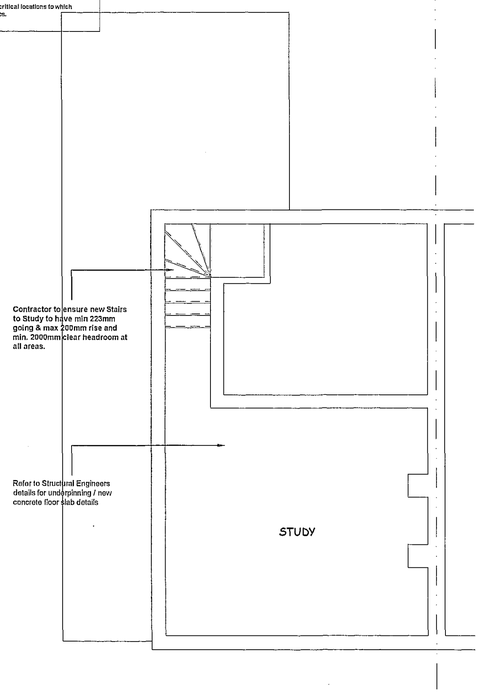



Shaded areas show critical locations to which requirement N1 applies.

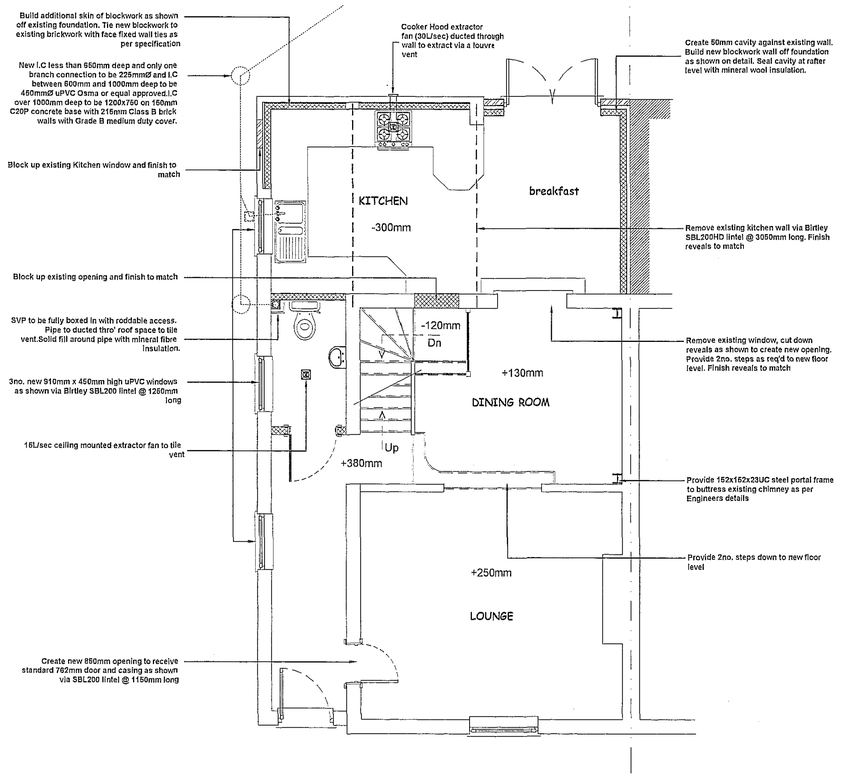
| BLOCK COMPARISON TABLE ( to achieve a 'U' value of 0.35W/m²K) | | |
|---|---|---|
| Manufacturer | 100mm thk Block type | Full Fill Cavity insulation thickness |
| Thermalite | Shield | 65mm |
| Plasmor | Fibolite | 85mm |
| | Aglite | 85mm |
| | Stronlite | 85mm |
| | Plascon | 100mm |
| Tarmac Topblock | Hemelite | 85mm |
| | Lignacite | 88mm |
| | Topcrete | 100mm |
| | Durox Supabloc | 65mm |

SOAKAWAYS
All rainwater to discharge into soakaways and to be min.of 5m from any building & a min.of 1m² filled with rubble to within 450mm of external ground level.Overlay rubble with polythene sheet and backfill with clean topsoil.Note the soakaway inlet pipe must discharge to the centre of the soakaway in all directions.The contractor should carry out percolation tests to determine the feasibility prior to constructing the soakaways. Detailed below is brief guidance on how to carry out the tests:
1. Excavate a trial pit to the same depth as the anticipated soakaway below the invert of the drain.
2. The trial pit should be 300mm - 1000mm wide and 1000 - 3000mm long.
3.It should have vertical sides trimmed square and, if necessary for stability filled with granular material.
4.When no granular material is used, it is advisable to place pegs into the trial pit at the 75% & 25% levels. This allows the water level readings to be taken accurately.
5.The trial pit should then be filled and allowed to drain three times to near empty, with readings taken for:
-The time taken for the water level to lower to the 75% level
-The time taken for the water level to lower to the 25% level
6.When granular material is used, a full height, perforated, vertical observation tube should be positioned in the pit so that the water levels can be monitored with a dip tape
7.The trial pit should be filled on three separate occassions to give a true reading on the ground conditions

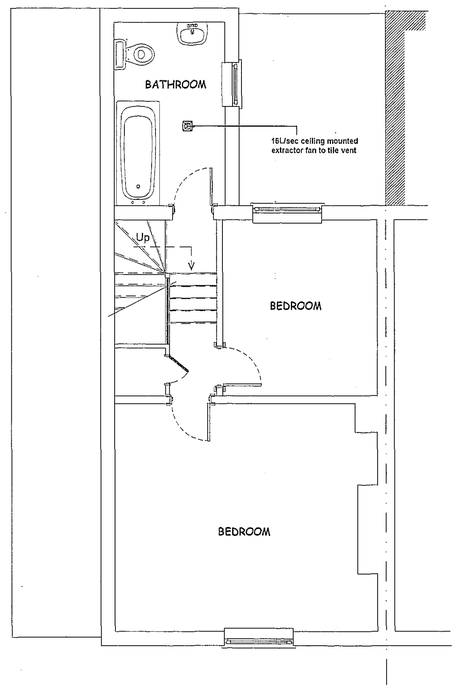
Available at this office is a Soil infiltration check sheet to be completed on site and a copy issued to the L.A Building Control Officer upon completion.



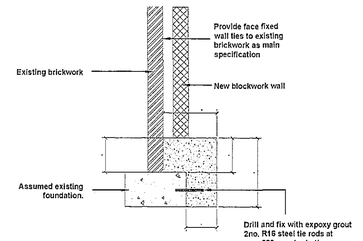

## PROPOSED BASEMENT PLAN
Scale 1:50




## PROPOSED GROUND FLOOR PLAN
Scale 1:50




## PROPOSED FIRST FLOOR PLAN
Scale 1:50




TYPICAL FOUNDATION DETAIL TO EXISTING WALL

Note: The detail shown is a typical constructional method to provide an inner skin of blockwork.This detail should be adapted to suit specific site conditions and always to the satisfaction of the Building Inspector.

FOUNDATIONS
Existing building area to be stripped of all vegetable matter and rubbish to a min.depth of 150mm before excavation commences.Concrete mix for foundations to be GEN3 in accordance with BS5328:1991.Foundations to external wall to be min.700mm wide x 225mm deep.Excavate down to solid firm strata i.e 750mm deep (min.1000mm if soil is of a shrinkable nature).Exact depth to suit conditions on site and to the strict approval of the L.A Building Inspector.Any irregularities in subsoil during excavation to be brought to the immediate attention of the Building Inspector & advice to be sought from a Chartered Structural Engineer.

WALLS BELOW D.P.C
3no.Courses of Class B brickwork below D.P.C on outer face and 1no.course of 7N/mm2 on inner skin of cavity face.Elsewhere to be either 7N/mm2 concrete blockwork or full width trench blocks.Both to be within 225mm of DPC level.Cavity to be filled to within 225mm min. of below DPC with lean concrete mix.

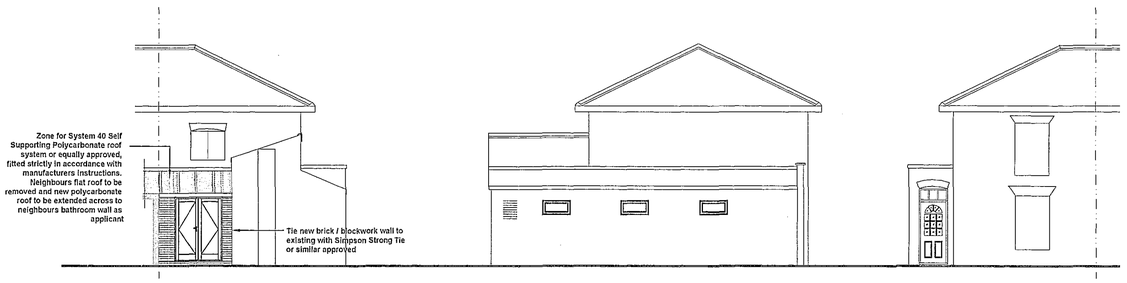
GROUND FLOOR
65mm mortar screed with a light gauge reinforcing chicken wire on 500 gauge polythene separating layer on a 50mm Celotex Double R GA3000Z rigid insulation board or similar approved, provide 30mm thick perimeter insulation between screed and floor insulation upto d.p.c level on 100mm thick GEN3 concrete sub-floor on a 1200 gauge DPM lapped onto DPC within walls on min.150mm clean and well compacted hardcore.Depth of hardcore must not exceed 600mm and must be compacted in 150mm thick layers.All service entries to be sealed with pressure sensitive tape. Floor to achieve a min 'U' Value of 0.25w/m²K.

DAMP PROOF COURSE (D.P.C)
Horizontal heavy duty polythene DPC "Hyload" or similar approved to all walls in accordance with BS 6515 and set min.150mm above all external ground levels.DPC in walls must be linked / lapped with DPM in ground floor.Provide performed cavity wall trays above windows & doors with weep vents at a max.of 2m centres with a min.of 2no.per opening.

EXTERNAL WALLS
All external walls to be 275mm overall thickness comprising of:
-100mm Facing Brickwork to match as closely as possible the existing
-75mm cavity filled with Crown Dritherm (or equal approved) built in as work progresses.Insulation batts should be kept clean and free from mortar droppings, all joints should be closely butted. Any cutting and fitting should be neatly done and not distort the layers of glass wool which comprise the material. All DPC's should be installed to ensure that penetrating water is directed only to the outer leaf.
-100mm Thermalite Shield insulating blockwork.
Continue wall insulation at least 150mm below top of perimeter floor insulation and support off wall ties.
External wall to achieve a min 'U' value of 0.35w/m²K.

CAVITIES
Close all cavity walls at jambs with Thermabate or similar approved insulated cavity closers fitted strictly in accordance with manufacturers instructions. Roof insulation to be continuous with wall cavity insulation.Install insulated Cavity Closers by Thermabate or equal approved, 25mm thick x 75mm wide (to equal cavity width) at jambs and cills of all openings in masonry cavity walls. Secure with the proprietary clips provided at maximum 600mm centres. Ensure that closers fit tightly to each other and to the lintel. The closer at the jamb must completely lap the closer at the cill.

WALL TIES
Stainless steel cavity wall ties to BS1243:1978.To be built into cavity wall as works proceeds and spaced at 750mm centres horizontally,450mm centres vertically and 300mm staggered around all openings.Ensure wall ties are level or at least sloping to the outside leaf.Bed ties a minimum of 50mm into each leaf and ensure wall ties are completely free from mortar droppings.




## PROPOSED REAR ELEVATION
Scale 1:100



## PROPOSED SIDE ELEVATION
Scale 1:100



## PROPOSED FRONT ELEVATION
Scale 1:100

RAINWATER DRAINAGE
uPVC guttering and downpipes to clients approval.Falls for guttering to be 1:600 and brackets fixed at max. 2m ctrs.Downpipes to be connected into underground drains via reducing adapter.Underground drains to be 110mm Ø Osma uPVC or similar approved with flexible joints laid on 100mm peagravel and min 150mm surronds laid to 1:100 falls to new soakaway.Soakaway specification detailed elsewhere.

ROOF / LOFT ACCESS
Provide insulated roof access trap door with a fully weathered sealed frame and a 38mm brass bolt or to clients requirements.

NOGGINGS
Fix min. 38x38mm timber noggings to all potential loose plasterboard ceiling edges and light fittings.Position of light fittings to be advised by client on site.

INTERNAL JOINERY .SKIRTING & ARCHITRAVES
All internal finished timber to be free from all defects and to clients approval prior to ordering any materials.

SMOKE ALARMS
To be self contained,interconnected and wired to a separately fused circuit with a battery back up.Smoke alarms to be fitted to utside of plasterboard ceiling to the ground floor max 7m from the kitchen / lounge and to be max. 3m from any bedroom door. All alarms to be strictly in accordance with BS 5446 and to be wired that when one alarm is triggered all alarms are activated.

MASONRY WALL CONNECTORS
Provide Simpson Strong - Tie or similar approved wall connectors to connect new & existing brick / blockwork.Use all specified fasteners.Fasteners must be spaced evenly, unless otherwise specified, and installed into the existing bricks or block and not into mortar joints.Insert wall ties provided at maximum 300 mm centres, bedding the ties into the mortar joints.Detailed site work instructions are provided with each wall connector system and must be adhered to at all times.In exposed locations it may be necessary to incorporate additional protection, for example the insertion of a vertical dpc.

CEILINGS
All ceilings to be 19mm plasterboard to BS1230.
Ceilings to be have Coving and skim finish to clients requirements.Plasterboard sheets to be fixed with joints staggered and must be layed perpendicular to all joint runs.Fix boards at a min.150mm centres.

HEATING SYSTEM
Provided from existing but all radiators are to be fitted with thermostatic radiator valves. All space heating pipework located outside the building fabric insulation layers to be wrapped with insulation material having a thermal conductivity at 40°C not exceeding 0.035 W/m°K and a thickness equal to the outside diameter of pipe upto max. of 40mm.It should be noted that central heating and hot water pipework in unheated areas may need increased insulation thicknesses for the purpose of protection against frost, refer to BRE Report No. 262 2002 Edition.

ELECTRICAL INSTALLATION
All electrical work required to meet the requirements of Part P must be designed, installed, inspected and tested by a person competent to do so. Prior to completion of the works the council Building Control Officers must be satisfied that either:
1. An electrical installation certificate issued under a competent persons scheme has been issued or
2. An appropriate electrical installation certificate has been issued for the work, and that it has been signed by a person competent to do so.The Engineer is to advise if any appliance or position of appliance does not conform to regulations. Contractor to seek advice from Client with regard to lighting requirements.

LINTELS
All lintels to cavity wall to be factory insulated Birtley Supergalv range unless noted otherwise or equalled approved.All lintels must have a min.150mm endbearing and installed in accordance with manufacturer's instructions.Do not allow masonry to overhang lintel by more than 25mm.
Note: lintels are not to have a continuous baseplate.

WINDOWS & DOORS
All windows to be uPVC to clients requirements based on styles shown on elevations.Fit with 4000mm² trickle ventilators to Kitchen, Utility,Bathroom & En-Suite windows and 8000mm² elsewhere all in accordance with manufacturer's recommendations.Patio doors to be fitted with 10000mm² ventilators.Opening vents to give 1/20 th of floor area rapid ventilation to all rooms.All glazing within 800mm of floor level and within 300mm of a door to a height of 1500mm of ground level to have toughened glass in accordance with Section N of the Building Regulations and BS6206 class B.All double glazed units to be installed in accordance with BS 6262 and to have a 16mm Air gap with a soft Low 'E' coating on glass inner pane to achieve a min 'U' value of 2.0 w/m²K.Note all windows to have a perimeter weatherseal both internally and externally and to be fully draught sealed.Provide frosted glass to all Bathroom, W.C's and En-suite windows.Ensure windows & doors are fitted within masonry reveal to overlap cavity closer by min. 40mm to avoid cold bridging.

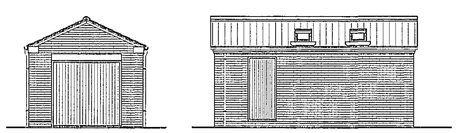
TIMBER WALLPLATES
All timber wallplates supporting roof trusses to be 100mm x 50mm bedded on top of wall.Timber to be SC3 grade and use a min. length of 3m and half-lap plates at joints and corners..Provide anchor straps as described in notes elsewhere.

ROOF FINISH
Concrete interlocking Double Pantile fixed in accordance with manufacturers instructions and in accordance with BS 5534:Parts 1 and 2.Set out to give true lines and regular appearance, fitting neatly at all edges, junctions and features.Fix roof covering to make the building sound and weathertight at the earliest opportunity.Repair any defects as quickly as practicable to minimise damage and nuisance & keep gutters and pipes free of debris and clean out at completion.Provide 50x25 preservative treated timber battens.Tiling battens should be not less than 1.2m long and continuous over at least 3 trusses.They should be fixed to every rafter member which they cross, or on which they are joined, with nails in accordance with BS5534: Part 1. The ends of the battens should be sawn square and butt jointed centrally on a rafter member so that adequate bearing and nailing can be provided for each end of each batten.Butt joints in battens should be arranged so that not more than one batten in four is joined on any one rafter.Generally all tiles at perimeter of roof to be clipped and nailed. Use Code 4 Lead flashing to any abutments with min.75mm upstand.

ROOF VENTILATION
Install Tyvek® or similar approved Breathable Membrane in accordance with manufacturers instructions which are briefly described below & BBA certificate 99/3635 (fourth issue) breather membranes in non-ventilated pitched roofs of any plan, any shape or any size under all types of roof coverings including tight jointed and fully interlocking tiles and synthetic slates. Installing Tyvek® underlay in accordance with the above certificate will enable a roof to meet all the requirements of the Building Regulations.
Installation Guidelines
Tyvek® SUPRO should be installed with min. 150mm overlaps as a standard bituminous felt underlay and secured with stainless steel staples or large headed galvanised clout nails.
Eaves:
There is no need to provide any vents into the loft at eaves, because a Tyvek® non-ventilated roof system does not rely upon air movement beneath the membrane to avoid damage by condensation.To avoid water ponding behind the fascia of closed eaves and to prevent prolonged exposure of the membrane to ultra-violet radiation, use a Tyvek® Eaves Carrier. Stop the membrane short of the fascia and lap it onto the Eaves Carrier.Pack closed eaves with fibrous insulation to reduce thermal bridging.
Verge detail:
Lap the Tyvek® underlay 50mm onto the gable or flying rafter.
Ridge/ hip detail:
Extend the Tyvek® underlay 150mm from each slope and overlap it at the ridge/ hip line. There is no need to provide vents at the ridge.
Valley detail:
Extend the Tyvek® underlay from each slope by 150mm beyond the valley centre line and seal the lap using Tyvek® Butyl Tape to form a watertight seal.
Abutments:
Turn up the Tyvek® underlay beneath flashings not less than 50mm.
Penetrations:
Seal around all penetrations using Tyvek® Butyl Tape.

ROOF INSULATION - SLOPED CEILINGS ( UNDER RAFTER )
The whole area of the ceiling to be insulated with 25mm thk Kraill Layer Tri Iso Super 9 Insulation to achieve a 'U' value of 0.19w/m²K fitted strictly in accordance with manufacturers instructions:
1. Unroll the insulation preferably vertical, starting from the top of the roof.
2. Staple the insulation product at 600mm ctrs on the uside of the rafters
3. Overlap the widths by min. 50mm and max. 100mm and tape joints with approved tape.
4.At the bottom of the roof slope, staple the insulation directly to the wallplate.
5.Nail 25mm thk cross battens to the rafters to create 25mm cavity / ventilation gap through the insulation and then attach p'board.
Roof Insulation 'U' Value Calculation sheet available on request

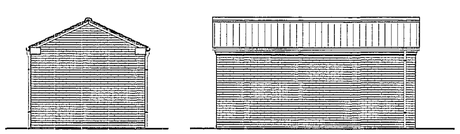
LATERAL RESTRAINT STRAPS
Tie roof structure to blockwork wall with 30X5 galvanised mild steel straps at max 1.8m ctrs where rafters and ceiling joists run parallel to blockwork walls.Also fit at max 1.8m ctrs to anchor wallplate to blockwork wall with min 3no. fixings per strap.Horizontal lateral restraint straps should be spaced not more than 2m centres and attached to at least 3 timber members through the use of noggings and packing. Attach to timber members with four steel screws or four 4 mm x 75 mm round nails for roofs and two into each joist for floors. The turn down end should be 100 mm at the centre of an uncut block or brick.Vertical restraint strapping should be at least 1m long. Where straps are fixed to masonry, hardened nails BSWG x 75 mm long or wood screws into plugs No 12 x 50 mm long should be used. The number of fixings should be in accordance with the design plans and the lowest fixing should be located within 150 mm of the bottom of the vertical strap.



**Front Elevation**
Scale 1:100



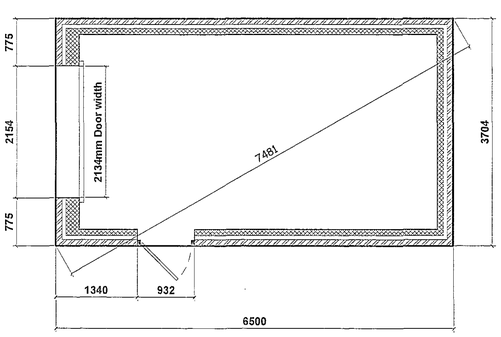
**Side Elevation**
Scale 1:100



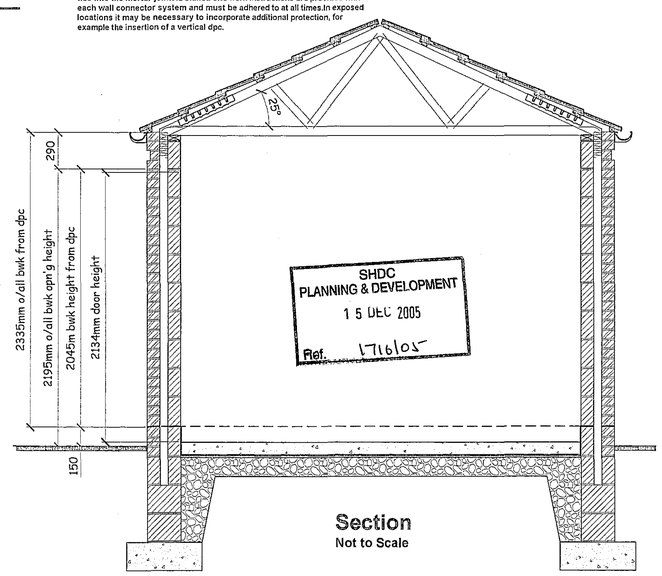
**Rear Elevation**
Scale 1:100



**Side Elevation**
Scale 1:100




**Floor Plan**
Scale 1:50




**Section**
Not to Scale

SHDC
PLANNING & DEVELOPMENT
15 DEC 2005
Ref. 1716/05

rev "A" - Extension amended & Garage details added

GENERAL CONDITIONS
Contractors are resonsible for checking all dimensions on site when work commences and before ordering any materials.Any discrepancies should be brought to the attention of the Client for remedial action before commencing further.

All details shown are based on typical site conditions for that area, any abnormal conditions should be brought to the attention of the Client and Local Authority.

The notes shown are mainly to cover the requirements of Building Regulations and should not be treated as full specification.

No allowance has been made for any Structural Calculations,a "SAP" calculation, Soil Investigation or Flood Risk Assessment.If deemed necessary then these will be a chargeable extra.All steel beam sizes shown on drawing are all subject to confirmation from Structural Engineer.

All materials not specified to be of a standard suitable for the work proposed and be fit for purpose.All work to be in accordance with good building practise and all necessary BS codes for Workmanship on Building Sites.

Client :
Mr A Pollock
23 Commercial Road
Spalding
PE11 2HA

DETAILED PLANS

Site :
Proposed Single Storey Rear Extension with Detached Garage

remway design Ltd
c / o South Lincs Plant Hire
Enterprise Way
Pinchbeck
Spalding
PE11 3YR
Tel / Fax: 01775 768 921
Mobile : 07815 112 058
e-mail: jason@remwaydesign.co.uk

Date : dec05 | Scale : As Noted

Drawing No:
rem 1086 - 03 "A"

PLEASE NOTE:
Due to areas of the structure being covered, unexposed or otherwise inaccessible the notes / specifications of existing materials are subject to confirmation of site when it is feasible to expose the relevant areas of construction.