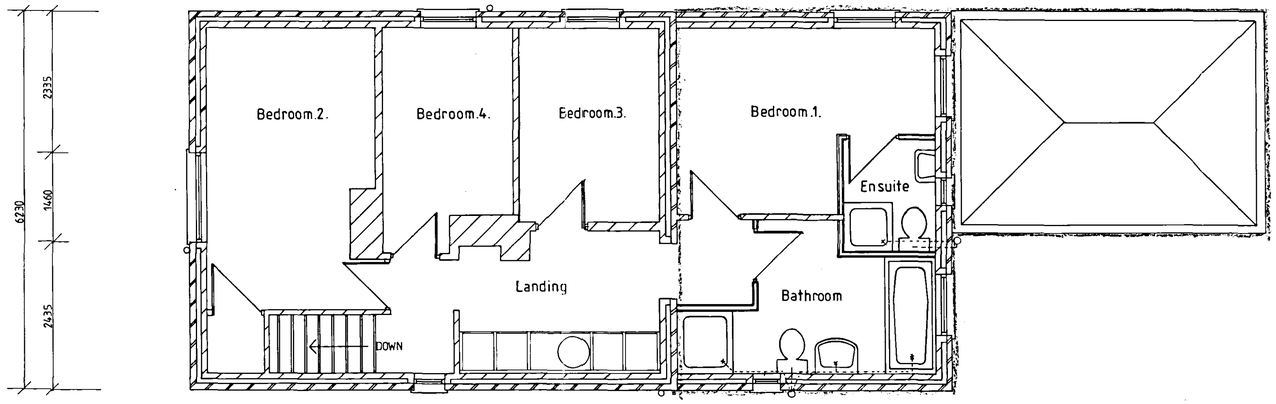
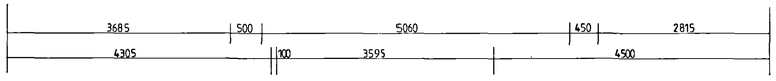






SHDC
PLANNING & DEVELOPMENT
18 APR 2006
Ref. 0536/06

DETERMINED PLAN

SPECIFICATION FOR CONSTRUCTION

SITE(S) PREPARATION.
Strip all top soil/vegetable matter from area occupied by buildings plus 2 m all round, provisionally allow 150 mm depth, and store in site stockpile for later reuse. Reduce levels/grade oversite to levels indicated on site plans.

DAMP PROOF COURSE.
To be 2000 gauge black polythene to BS 6515 or Bitumen bonded to BS 4396 laid to both faces of cavity wall and to all internal walls. To external walls D.P.C. to be laid 150 mm above ground level with D.P.C. to inner leaf linked to floor D P M. All D.P.C's to be bedded on mortar. All vertical and horizontal cavity closures to incorporate a D.P.C.
At roof to wall abutments, flexible cavity trays are to be used and are to rise 225 mm up the cavity.
Floors are to be provided with a D.P.C. at their junction with the roof by the use of 3 courses of slate engineering bricks to BS 3921 laid frush bond and bedded and jointed with mortar to dam flood provisionally in the paragraph external walls.

WALL CONSTRUCTION
(Sub-Structure) - To be constructed from Class A blocks/FL Quality Bricks to Local Authority Approval. Wall to consist of a 100 mm out skin, 65 mm cavity and 100 mm inner skin. Cavity to be filled to within 150 mm of ground level. Low mix concrete cavity filled to external splay finish. All to comply with IGE 6073. Mortar type to be used in accordance with BS 5628 Part 3 (Walls above ground level) - External walls to consist of 100 mm facing brickwork set 100 mm blank work with 15 mm render finish. (rest abrasion treatment). 65 mm cavity, filled with Crown Drideem Full Fill in accordance with manufacturers recommendations.
Cavity wall ties to be triple galvanised steel butterfly non-ferrous to all BS 1234:1978 and be fitted at 450 mm maximum vertical c/c's, 225 mm at reveals and 900 mm maximum horizontal c/c's.
Internal finish to block work to be 9.5 m Gyproc dri-wall system installed to manufacturers specification with 3 mm skim finish with steel trowel finish. All to give overall a maximum values of 0.45 w/m²C.
STUDWORK - 12.5 mm on edged plasterboard with plaster skim.
CEILINGS - 12.5 mm m edged plasterboard with artex finish to house, 12.5 mm Gyproc Fireline board with plaster skim to integral garages with fibred and taped joints to give ½ hour fire protection.
For t walls - all brickwork and BLOCK WORK joints to be thoroughly filled and all joint mortar to adjoining structure to be thoroughly combed to avoid air gaps. Wall construction to achieve a maximum 1 hour resistance and below through roof void up to underside of roof covering and fire stopped.

FOUNDATIONS (UNLESS THAT SPECIALIST DESIGN).
Foundations to external and internal load bearing walls normally to be 600x450 x 225 mm respectively. Thick concrete strip footings located centrally under walls. Foundation to be a minimum of 750 mm below ground level. Concrete to be ST3/GEN3 or equivalent grade. All to be in accordance with BS 5328 and BS 8110. For stepped foundations minimum overlap length to be at least twice the step height of thickness of foundation or 300 mm whichever is the greater. See specialist design for raft and suspended slab details. Excavation to be agreed with Building Control Officer.

INTERNAL WALLS.
Timber stud Partition - To be constructed from 75 x 50 mm studs at 400 mm maximum c/c's with maximum head and sole plate and intermediate noggings, studwork to be lined with 12.5 mm plaster board fixed with galvanised nails at 600 mm maximum c/c's and to have 12.6 3 mm skim finish. All first floor studwork to be built off double floor joists or off timber blocking pieces where perpendicular to span. All double up joists to be bolted together, using 12 mm diameter bolts and tooth plate connectors.

GROUND FLOORS
Finish to consist of 150 mm concrete slab (BS 5328) laid to fall. Concrete mix to ST3/GEN3 or equivalent with trowel finish on 1200 gauge polythene sheet damp proof membrane laid with joints sealed and lapped on sand blinding on 150 mm well compacted coarse suitable aggregate free hardcore. D.P.M. to lap onto D.P.C. of walls.

WINDOWS/DOORS OPENINGS.
Refer to schedules on drawings on external finishing schedule for details. Windows of treated softwood by Ahbott Joinery weather stripped and beaded for double glazing with 6 mm std grp or sealed unit. Windows to habitable rooms to be provided with hand ventilation giving 4000 sqlcms of free air ventilation and have a minimum 1/20 th floor area opening lights. Patio doors to have trickle ventilation of 10,000 sqlcms. If no opening lights are provided. Windows to kitchen, utility room, bathrooms and WC to be provided with hand ventilation giving 4000 sqlcms of free air ventilation.
All reveals to be sheeted applied VOPC and 12 mm bubble to avoid effects of cold bridging. U value of overal 1.98 taking mm deg C.
½ Hr Fire Resistance door and frame Incorporating 25 mm rebates and an automatic self closing device are to be provided to openings from integral garages to dwelling. Intumescent strips and to be incorporated in either door or frame. Window and Door frames must be cleaned around the openings into the brickwork with mortar mix.

FIRST FLOOR CONSTRUCTION.
All joists 200 x 50 mm (for specification thereof/interpreting quality (equivalent to or better than SC3 pines Softwood or Whitewood.) Spaced at 400 mm c/c's unless otherwise stated All compression joints to be bolted together at 900 mm c/c's with 2 mm dia mesh bolts c/w plate washers. All joints to be either built into inner leaf of cavity wall - supported on galvanised mild joist hangers to BS 6178. All timber to timber connections to be 1 mm thick galvanised mild steel hangers to BS 6178 fixed with 3.75 x 30 mm square twist shanknailed nails to every hole All timber to masonry connections to be 2.5 mm thick galvanised mild steel hangers to BS 6178 top flange fully embedded and all holes nailed.
Provide 38 x 38 mm SW Herringbone strutting where shown(at 2 m max c/c's).
Provide 2 No. 200 x 50 mm solid blocking where first floor steel partition is perpendicular to joists or where sole plate does not coincide with a joist.
Provide 30 x 5 mm steel bent (900 x 100) galvanised M.S. fixed restraint straps to external walls where shown(at 2 m max c/c's) fixed with 4 No. 30 mm ß gauge nail screws or 5 No. 3.5 x 50 mm galvanised round wire nails to 3 joists min c/w solid blocking cupped and edge-nailing between last joist and wall. All structural timber to be kept 48 mm minimum clear of chimneys/flue blocks, etc.
Floor decking shall be 8mm OS moisture resistant chipboard to BS 5669 fixed with shot-headed ring shank nails at a length of 2.5 times the boards thickness. Chipboard to be tongued and grooved and to be 19 mm thick and all joints shall be glued together with moisture resistant adhesive. An expansion gap of 10 mm shall be left at the junction with the walls.
Underside of floor joists shall be finished in 12.5 mm plasterboard with taped and filled joints to receive artex plus 2 coats of emulsion paint. All unreinforced plasterboard edges to be supported by noggins.

INTERNAL GARAGES.
Provide 150 mm mineral fibre quilt insulation to floors over integral garages. Garage ceiling to have a minimum of ½ hour fire protection to be achieved using a 12.5 mm thick Gyproc fireline board with staggered, fitted and taped joints, all joints to be fully supported on all edges, overlaid with 150 mm of mineral fire quilt insulation as before described Finish to ceiling to be 5 mm plaster skim.

ROOF COVERING.
Concrete interlocking, concrete/clay plain or traditional/fibre cement sheet with ridge/hip/valve/special fittings all as per specification and in accordance with BS 5534 Part 1:1990 38 x 25 mm treated S W battens, gauge to suit tiling, on BS 747 type 1F untorrable roofing felt or similar as underscored rafters as applicable. Contractor is to determine tile facing requirements from manufacturers published literature with due consideration for each site location, anticipated wind velocities and individual roof pitches. Roofing contractor to fit mineral fibre quilt fire stopping above and below roofing fell to head of party walls and fire stop cavity bases in strict accordance with manufacturers instructions.

ROOFSPACE VENTILATION AND INSULATION.
Provide eaves to eave ventilation equivalent to 10,000 sq mm/metre run or where eaves is dropped, 25,000 sq mm/metre run, together with high level vents giving 5,000 sq mm/metre run (use tile manufacturers dry ridge ventilator system). Use-cutter ventilating soffit boards, continuous over fascia ventilation strips as this specification. Insulation to roof spans Comprises 200 mm mineral fibre quilt to level areas(2 No. Layers of 100 mm quilt laid at right angles to each other) giving a 'U' value of 0.15 w/m² deg C and 180 mm of Rockwool RWA45 Flexible slabs (TR value: 3.830 m² K/W) or similar to all sloping ceilings/dormer abutms, are giving a 'U' value of 0.33 W/m² C.
Maintain 50 mm minimum air gap over insulation at sloping ceilings and provide 500 gauge Visqueen vapour barrier between insulation and plasterboard. Roof hatch to be insulated. Incorporate compressible cord pipe runs through walls and ceilings to be fully sealed with expanding foam sealant to restore heat losses to unbroken spaces.

DRAINAGE.
Foul and Storm Water Drainage (below ground).
Generally foul drainage to connect to foul sewer located and subsewers to discharge to rubble filled soakaways. Refer to drainage layout plans for full details. All to comply with BS 8301:1985. Pipes r .e ct ba 110 mm diameter. Hepworth superdecrete UPVC bedded and surrounded by 100 mm granular material: single size aggregate to BS 882. Pipes to be laid to a maximum gradient of 1:40 and a minimum gradient of 1:80. Pipes passing through walls are to be grounted with a concrete lintel over and a 50 mm gap all round the pipe with the opening having sealed each side with a rigid sheet material. A flexible joint is to be provided within 300 mm of the buildings external face. Inspection points up to 600 mm deep r ound from 250 mm UPVC Inspection Chambers. Inbetween up to 900 mm deep are to be up. r 450 mm UPVC Inspection Chambers. Inbetween over this depth are to be from 215 mm Class 1 engineering bricks, laid English bond on a 150 mm thick ST3/GEN3 concrete base. Manhole cover frame are to be 1200 mm x 750 mm. All manholes are to be rifled with Grade C cast iron covers to foul traffic and Grade B in all other areas. The foul manhole on sprivate drain run is to be within 12.5 m of a public sewer.

STORM WATER DRAINAGE(ABOVE GROUND)
117 mm half round on 108 mm square box UPVC guttering, fixed level using standard fascia brackets at 1000 m-m's and 68 mm dia/65 mm square rwp's sealed to drain at ground level. Cobestpoints as new specification. All to connect to storm sewer lateral. Where storm drains do not connect to the public storm sewer or there is not one available then storm water will discharge to soakaways which are to be a minimum of 5 metres from any building and to be 1500 mm deep and 1200 mm diameter; to be filled to within 450 mm of the ground level, with selected rubble or similar. Rodding eyes are to be provided at the head of drainage runs and to manhole pipes not discharging direct to manholes.

ROOF CONSTRUCTION.
Wall plates generally 100 x 50 mm treated SW, with bolt lapped joints and fully bedded, strapped down to supporting wall with 30 x 5 mm BMS Straps at 1.8 m ctr's. Cut and pitch rafters to be fully lorderscribed over and twice nailed to all supports. Trussed rafter roofs to be designed and manufactured by approved manufacturer and fixed, together with 900 x 25 mm sawn SW binders and bracing, in strict accordance with BS 5268 Part 3:1985 (and any subsequent amendment) at 600 mm maximum centres. Diagonal roof bracing should be fixed at approximately 45° on plan. Where trussr rafter tanks are supported by the roof trusses their load should be transferred to the adole points as specified in BS 5268 Part 3.
Provide 30 x 5 mm steel bent 900 x 100 galvanised mild steel lateral restraint straps to external walls at ceiling and rafter level where shown (at 2 m maximum ctr's) fixed with 4 No. 30 mm ß gauge ruk screws or 5 No. 3.5 x 30 mm galvanised round wire nails to 3 joists min c/w solid blocking cupped and edge-nailing between last joist and wall. All structural timber to be kept 48 mm minimum clear of chimneys/flue blocks, etc.
Floor decking shall be 8mm OS moisture resistant chipboard to BS 5669 fixed with shot-headed ring shank nails at a length of 2.5 times the boards thickness. Chipboard to be tongued and grooved and to be 19 mm thick and all joints shall be glued together with moisture resistant adhesive. An expansion gap of 10 mm shall be left at the junction with the walls.
Underside of floor joists shall be finished in 12.5 mm plasterboard with taped and filled joints to receive artex plus 2 coats of emulsion paint. All unreinforced plasterboard edges to be supported by noggins.
Roof timbers to be treated SW, with bolt lapped joints and fully bedded, strapped down to supporting wall with 30 x 5 mm BMS Straps at 1.8 m ctr's. Cut and pitch rafters to be fully lordercribed over and twice nailed to all supports. Trussed rafter roofs to be designed and manufactured by approved manufacturer and fixed, together with 900 x 25 mm sawn SW binders and bracing, in strict accordance with BS 5268 Part 3:1985 (and any subsequent amendment) at 600 mm maximum centres. Diagonal roof bracing should be fixed at approximately 45° on plan. Where trussr rafter tanks are supported by the roof trusses their load should be transferred to the adole points as specified in BS 5268 Part 3.
Provide 30 x 5 mm steel bent 900 x 100 galvanised mild steel lateral restraint straps to external walls at ceiling and rafter level where shown (at 2 m maximum ctr's) fixed with 4 No. 30 mm ß gauge ruk screws or 5 No. 3.5 x 30 mm galvanised round wire nails to 3 joists min c/w solid blocking cupped and edge-nailing between last joist and wall. All structural timber to be kept 48 mm minimum clear of chimneys/flue blocks, etc. Underside of roof timbers to be clad with 12.5 mm plasterboard with plaster skim or artex finish. Unreinforced edges to be supported by timber noggins.

Project.
Two Storey Extension at
24,Bell, Lane Moulton,
Spalding Lincolnshire

Drawing Type.
Ground and First Floor Layout.

Client.

Drawing N°	03
Scale	1:50
Drawn by	P.Grimwood
Date	9·01·06
Rev	