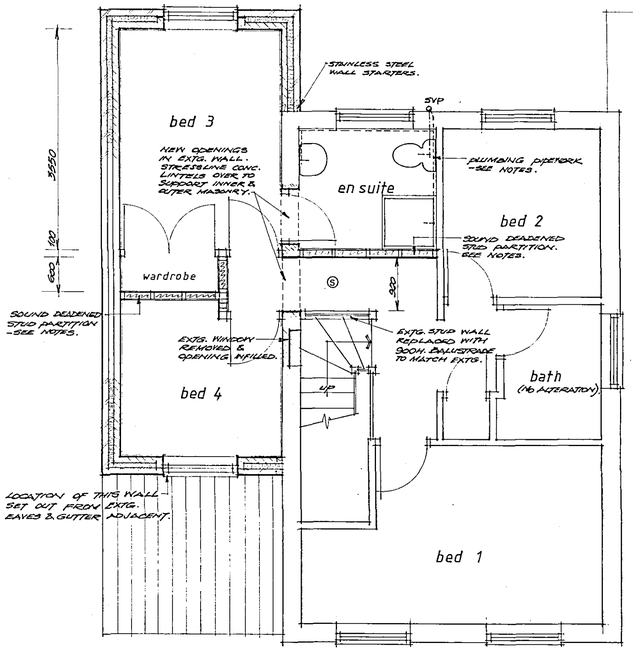
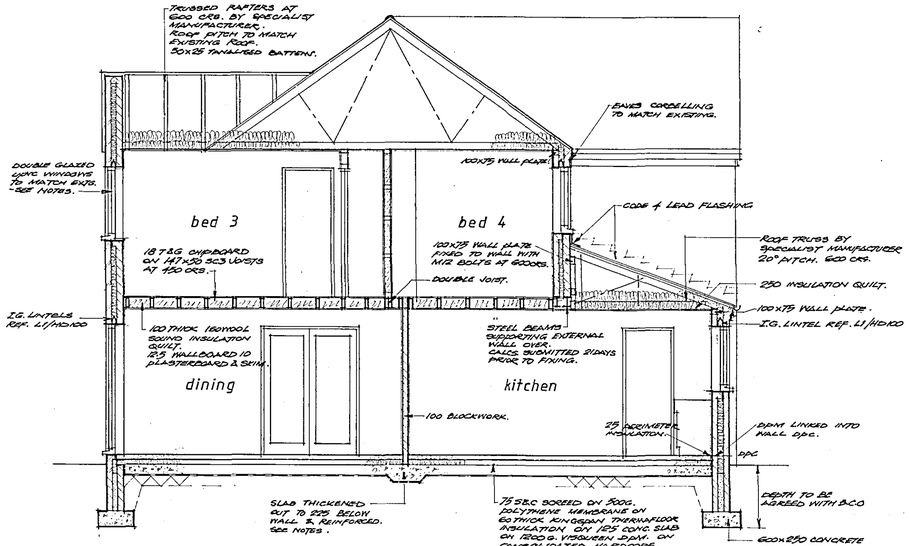
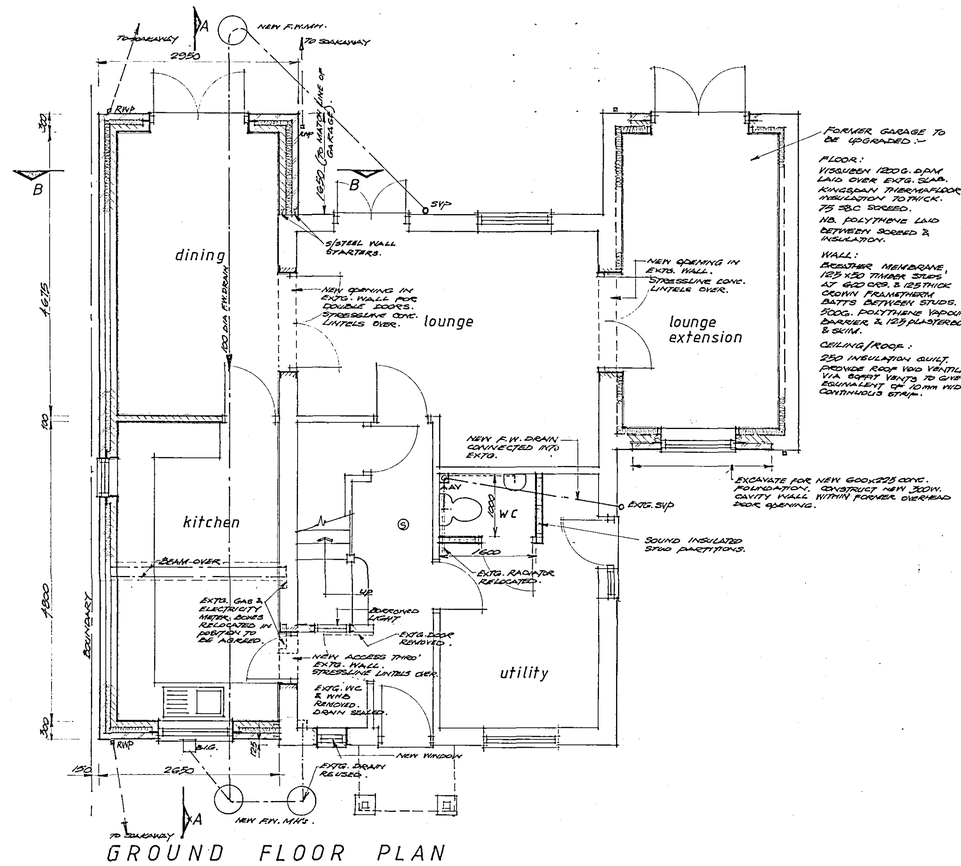


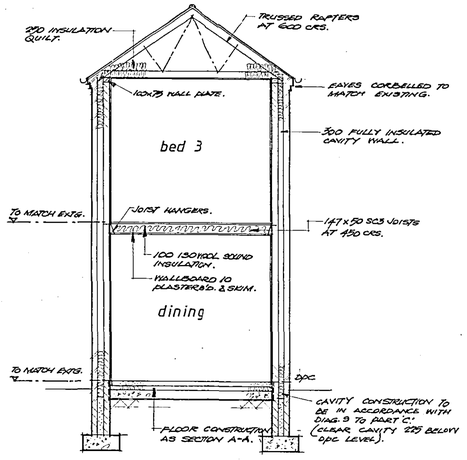
FIRST FLOOR PLAN



SECTION A~A



GROUND FLOOR PLAN



SECTION B~B

ENERGY EFFICIENT LIGHTING
The extension is to have low energy light fittings (lamps having a luminous efficacy greater than 40 lumens per circuit watt). eg fluorescent tubes and compact fluorescent lamps **not GLS tungsten lamps with bayonet cap or Edison screw bases.**

External light fittings are either to be controlled by photocell or by fixed lights incorporating energy efficient lamps (lamps having a luminous efficacy greater than 40 lumens per circuit watt).

BUILDING REGULATION NOTES

GENERALLY
The following notes identify the salient points only. All materials and workmanship to relevant and current British Standards and Codes of Practice. All supplies and systems to carry BBA certification wherever possible.

DRAINAGE
Excavate for foul and surface water drains together with manholes and inspection chambers along lines indicated on drawing. 100mm Upvc pipes, 1 in 60 fall for surface water and 1 in 40 fall for foul water unless noted otherwise. Pipework to be set in bed and surround of 150mm granular material, except under buildings and roadways where trenches to be filled with hardcore well rammed and consolidated. Where drains pass through external wall there is to be clearance of minimum 50mm all around and the opening is to be masked with rigid sheet material and lintel support over. Where crown of pipe is within 300 of underside of slab, pipe to be encased within concrete slab. No drain to be lower than foundation level unless detailed precautions adopted and described on the drawing.
Back inlet gullies to be Hepworth clay or plastic on to low back trap.
Bed & surround in 150 concrete
225mm diameter or 475mm polypropylene inspection chambers bedded & surrounded in 150 concrete where indicated with ductile iron cover and frame to BS 497 grade C, 450x600 (in pedestrian areas) unless stated otherwise.
Frame to be bedded in grease. Alternative: manholes formed from 150 thick concrete slab with one brick thick walls in class B engineering bricks laid English Bond. Salt glazed channels and inlet bends in cement mortar.
Benching trowelled smooth and cast iron cover and frames.
Drains under building to be bedded and surrounded with 150 pea gravel (pipes to be supersleve with plastic connectors) Where crown of pipe is within 300mm of underside of slab pipe to be encased with concrete integral with slab. Where pipe emerges from concrete provide flexible joint within 150 of concrete.

Stoneware trapped back inlet gullies with screw down cast iron grating connected to foul drain for kitchen waste.

Surface water to connect to soakaways as detailed on drawing positioned minimum five metres from building or as noted otherwise. Percolation test to BRE Digest 151 be carried out if required to determine the capacity of the soakaways which are to be designed to BRE Digest 365,1991

FOUNDATIONS
600x250 concrete strip foundations in 1:2:4 mix to external walls, 450x250 to 100 thick internal walls. Excavate to firm base 1000 deep to approval of BCO. Cut out and fill any soft spots with weak mix concrete. Include for foundation blocks (7N/mm2) or class B engineering brick up to 225 below DPC. Weak mix concrete cavity fill with top surface bevelled to outward fall and weep holes at approx. 2.0m centres. Brickwork below DPC to be min. 3 courses of class B eng. bricks

GROUND FLOOR
Remove top soil and any weak spots. Lay 150 min hardcore MOT type, 75>0 crushed stone, sulphate free and blind off with stone dust. Consolidate with roller or vibrator plate. Any hardcore fill exceeding 150 to be rolled & filled in layers not exceeding 150. Fill should not exceed 750mm. Lay 1200g polythene sheet damp proof membrane with 150 laps. Dpm to be carried up face of wall and overlapped into wall dpc

EXTERNAL WALL
102.5mm facing bricks to external wall laid stretcher bond, 100mm cavity filled with Drithem insulation or similar approved & 100mm 3.5N/sqmm min. unless noted otherwise, blockwork (Thermalite Shield 2000) & 15mm plaster finish. Stainless steel double triangle type cavity ties at 750mm horizontal centres and 450mm vertical centres, staggered and 225mm centres within 300mm of opening. Mortar to be 1:1:6 cement: lime: sand. Min. U value of 0.35 W/m2 K Below ground level: two skins 100mm Thermalite Shield 2000 blocks to a level 225mm below damp proof course with 100mm cavity filled with weak mix concrete struck off to an outward fall

DAMP PROOFING
Damp proof course to all internal and external walls, minimum 100mm wide pitch polymer sandwiched in mortar minimum 150mm above ground level.
Damp proof membrane: 1200g polythene with fully lapped joints taken up-around perimeter and lapped and sealed with damp proof course.
Cavity closers: Around all window and door openings. 150mm wide polystyrene backed damp proof course. 2000g black polythene cavity trays over all ground floor openings and gable windows extending past reveals with upstand of 150mm and with stop ends.

WALL DPC
Ruberoid 'Hyload' or equal approved 150 above ground or paving level. Dpc to be stepped as required with 150 minimum laps.

INTERNAL WALLS
Non-loadbearing
Tarmac Topblock solid 2.8 N/mm2 blockwork walls built off slab. (Slab to incorporate A193 mesh reinforcement under wall)
Loadbearing
Walls built off 450x250 concrete strip foundation (depth as main foundation) and incorporate dpc at floor level. Blockwork to be finished to receive plaster. (Blockwork below dpc to be 7N/mm2)

LINTELS
Lintels to be IG or Catnic insulated or similar heavy duty insulated galvanized mild steel lintels over all window and door openings; sized from manufacturers table for loadings and as identified on the drawings Minimum 150mm end bearings. Include for cavity trays and weep holes over all lintels.

WINDOWS, GLAZING AND VENTILATION
All windows to be double glazed and fully draughtproofed and weather stripped. Double glazed sealed units to have 16mm air gap and be glazed with low E glass to achieve a min. U value of 2.0 W/m2 K.
All glazing to conform to Document N of the current Building Regulations.
Safety glazing (6mm lamitated or 6mm toughened) to BS 6206 to a height of 1500 to all doors and sideights and in windows below 800mm in internal and external walls as indicated on diagram 1 Document N of the current Building Regulations.
All windows to first floor where glazing is below 800mm above finished floor level are to be guarded.
All windows to Bedrooms on first floor to have an unobstructed openable area of minimum 0.33 square metres and minimum 450mm wide by 450mm high. The bottom of the opening maximum 1100mm above floor level.

FIRST FLOOR
Floor joists to be as noted on the drawings and to be supported off hangers. Joists are not to be built into the external wall. Provide timber blockings at mid span where span exceeds 2.3 m For securing floors to walls with anchor straps see 'Lateral restraint straps'
Lay T&G flooring grade chipboard fixed in accordance with manufacturers instructions
Timber flooring to be insulated with 100 thick sound insulating mineral wool (Isowool) with a minimum density of 10kg/m

ELECTRICAL INSTALLATION
All electrical work required to meet the requirements of Part P (Electrical Safety) must be designed, installed, inspected and tested by a person competent to do so.
Prior to completion, the Building Control Officer is to be provided with evidence to demonstrate that either:
(a) the electrical work has been carried out by a member of a relevant Competent Person Scheme, or
(b) an appropriate electrical installation certificate has been issued for the work and that it has been signed by a person competent to do so.

SWITCHES AND SOCKETS
All switches and socketsare to be positioned between 450mm and 1200mm from the finished floor level.
Light switches for use by the general public to have large push pads and sign horizontally with door handles. Fixing height to be within the range of 900 to 1100, alternatively a pull cord switch with 50 dia. bangle is to be provided

SMOKE ALARMS
Self contained smoke alarms to be installed on each floor level to BS 5446 Paragraph 1.9 wired to a separately fused circuit at the distribution board and interlinked. Smoke alarms to be to within 3 metres of all bedrooms and within 7 metres of any other habitable rooms.

ROOF STRUCTURE
Trussed rafters spaced at maximum of 600mm centres, designed and manufactured by specialist including bracing, all to BS5268 Pt 3 1985 & BS 6399 Pt.1. Calculations to be provided 21 days prior to commencement of fixing. Include for 100x25 longitudinal stability rafter diagonals & web diagonals, all lap jointed over at least 2 trusses. Chevron bracing is required. Wallplates to be 75x100 softwood strapped down. (See "restraint straps")
Raised tie trusses to be designed to ensure that there is no horizontal thrust to the top of the wall. Calculations to be provided by manufacturer.

ROOF INSULATION
To flat ceilings
One layer of 100mm Crown wool insulation between joists, one layer 150mm at right angles over to achieve U value of 0.16 W/m2 K
NB Ensure all electric cables are above any insulation.

ROOF VENTILATION
Provide and lay vapour permeable membrane (Klober Permo or sim. approved) in accordance with manufacturers instructions. ie No need for under membrane ventilation.

LATERAL RESTRAINT STRAPS
To ceiling joists and up verges: 30 x 5mm galvanized mild steel at 2 metre centers perpendicular to walls. Straps to be taken over minimum of three rafters/joists/trusses with noggins (minimum half the joist depth x 38mm thick) between for fixing. Straps turned down inner face of cavity wall.

To floor: 30 x 5mm galvanized mild steel strap turned down the inner face of the cavity wall, carried over at least three joists. Nogging minimum half the depth of the joist x 38mm thick.

To wall plate: 30 x 5mm galvanized mild steel strap minimum 1000mm long once bent and fixed with minimum six fixings per strap at maximum two metre centres

STUD PARTITION WALLS (NON SOUND DEADENING)
75x50 studs, soleplate head and noggins. Floor joists doubled up under stud walls. Finish with 1 layer of 12.5 plasterboard and 3mm plaster skim finish to each side.

STUD PARTITION WALLS (SOUND DEADENING)
38x100 staggered verticals at 400 centres, and similar head, soleplate and noggins. Sole and head plates to have 3mm rubber isolating strips. Include for 100 layer of Isowool acoustic insulation slab and finish with 1 layer of wallboard 10 to each side with 3mm plaster finish.
Include for double joists below partition walls.

CEILINGS
All noggins and bearers as recommended in the British Gypsum White Book 12.5 or 15mm duplex plasterboard or wallboard 10 as noted on the drawings with 3mm plaster skim finish
Include for lockable roof hatch 760x550 fully draught stripped and insulated.

LEADWORK
2000g black polythene cavity trays and code 4 lead flashings to be provided to all brickwork and roof abutments. Code 4 lead flashings and soakers to chimney. Code 5 lead to valley gutters. All leadwork details as recommended by the Lead Sheet Association.

FORMING NEW OPENING
Needle, prop and strut as necessary and to the satisfaction of the Local Authority and form new opening in one brick thick internal walls plastered both sides. Opening size to suit new door. Insert 100 x 65mm prestressed concrete lintels over- minimum 150mm bearing each side (number to suit wall thickness). Make good to jambs with bricks toothed and gauged into existing with 1:1:6 cement:lime:sand mortar. Make good to plaster and threshold including angle beads as necessary.

BEAMS
Where beams are supported on external wall, paint ends of beams with bituminous paint. Provide min. of 200mm end bearing
Fully encase all steel beams with two layers of 12.5mm plasterboard with staggered joints supported on a swd frame. Calculations to be provided by structural engineer.

STEELWORK
Apply 2 coats red oxide prior to delivery to site and touch up when steel is in place.
Min. 100 bearing to each end onto padstones. Fire protect for 30mins. With 1 layer of Fireline board 12.5 thick or 1 layer of Glasroc fixed to timber soldiers wedge fixed to steel. Plaster skim finish.

PADSTONES FOR STEEL BEAMS
3 Courses of solid blue Staffordshire engineering bricks unless noted otherwise on the drawings.

WASTE PIPES
Waste pipes to be grey UPVC (or black externally) with diameters as follows: baths, sinks, showers and washing machines 40mm diameter, wash hand basins 32mm diameter, all to be fitted with a 75mm deep seal anti syphon bottle trap.
Soil and vent pipes to be 100mm diameter and to terminate minimum 900m above any window head within 3 metres in a durable cage.
Internal soil and vent pipes to be encased in minimum 25mm plasterboard and the void packed with mineral wool insulation.

RAINWATER GOODS
110mm nominal diameter gutters and 75mm diameter or similar square section downpipes in positions marked on plan.

VENTILATION OF ROOMS
Internal rooms without an opening window to have 10mm air gap below doors. Trickle vents to all windows to habitable rooms at a height of minimum 1750mm above finished floor level. 8000sqmm free air flow to habitable rooms, 4000sqmm to kitchens, bathrooms and utility.
Occupiable rooms - One twentieth of the floor area to be openable windows.
Extraction:
Kitchen-30 litres/sec where adjacent to hob, 60 litres/sec elsewhere
Utility- 30 litres/sec
Bathroom- 15 litres/sec
Rooms with WC- 6 litres/sec with 15 minutes overrun

Planning & Development
01 MAR 2005
Ref: 1088/04

R.MICHAEL GARNER
Architectural Consultant
45A OLD LINCOLN ROAD
CAYTHORPE GRANTHAM
LINCS NG32 3EJ
TEL/FAX 01400 273424

AMENDED PLAN
Ref. A1

CLIENT
M MORLEY & L RASTALL
2 CARRINGTON VIEW
TONGUE END
BASTON PE11 3HZ

PROJECT
EXTENSIONS AND ALTERATIONS TO DWELLING

DRAWING
PLANS & SECTIONS AS PROPOSED

SCALE	DATE	
1:50	FEBRUARY 2005	
PROJ. No 670122	DRG. No. 02	REV.