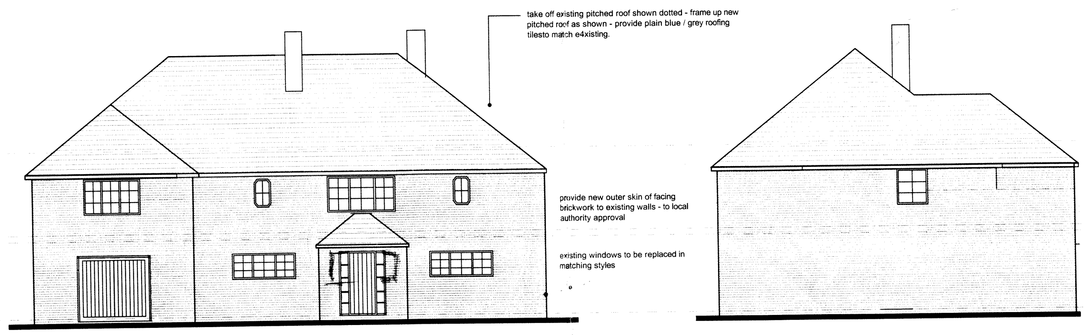
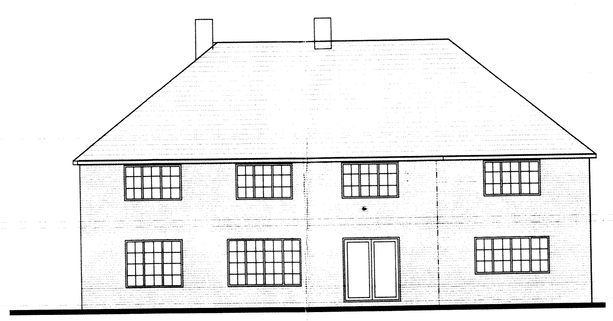
LEAD
Provide Code no. 4 lead flashing and soakers where pitched roof abuts cavity wall. Lead to be dressed up over soakers min 150 mm and to be linked to cavity tray at abutment. Cavity tray to be fixed in accordance with manufacturers recommendations. DPC to chimney stack to be stepped to 150 mm above line of tiled roof and Code 4 stepped lead apron flashing.

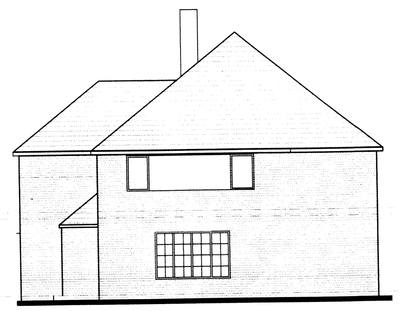
Provide tiles, felt and battens for main roof to new canopy roof on 100 x 50 mm rafters at max 450 mm ctrs. Pole plate to be 100 x 75 mm with framing anchors by Expamet type AL to BS2989. ceiling joists to be 50 x 100 mm at max 450 mm ctrs.



front elevation

side elevation


rear elevation


side elevation

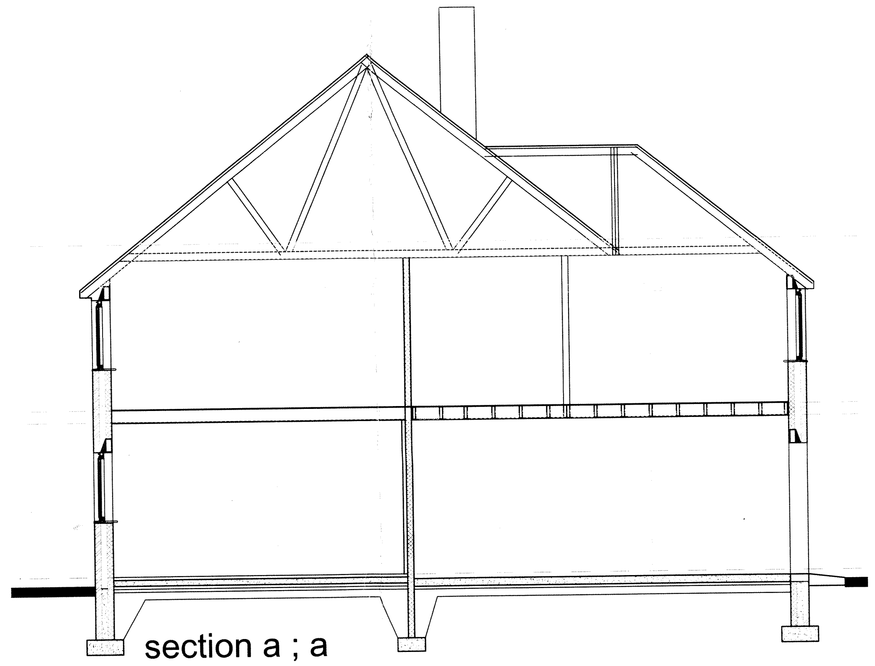
RAINWATER
New rainwater goods to be round section upvc 115 mm dia half round eaves gutters and 63 mm dia rainwater downpipes fixed in positions shown to discharge into new trapped storm water gullies where required. Rainwater goods to be BS4514.
New rainwater pipes to connect in new storm gulley with combined rodding access, with stoneware bends and 150 mm concrete bed and surround. Fit cast iron grating and frame to gulley.
If storm water dous not connect into existing drainage system then provide new via 1100 mm dia soakaway min 4.5 m away from any building or boundary and to be 1000 mm deep below lowest incoming invert. To be filled with clean stone or broken bricks with top soil replaced.

WINDOWS
All windows to bri glazed to achieve a max U value of 1.8 w/m2k in accordance with BS6262 and for safety glazing BS6206.
All windows to first floor habitable rooms to be fitted with escape windows total area of 0.33m2 - when opened at right angles to the frame with a minimum clear opening of 150mm in any direction.
provide windows as schedule or drawings with background ventilation via trickle vents installed in head of windows - min 8000mm2 to all habitable rooms & 4000mm2 to kitchen, bathroom, utility and wc.

METAL STRAPS
Galvanised MS 32 x 2.5 x 600 mm long holding down straps to pitched roofs at 1800 mm maximum centres with 90o twist 125 mm from top fixed to joists and to wall. Galvanised MS 32 x 6 mm lateral support straps at 2 m max centres to timber floors and gables fixed to timbers and bend down 100 mm into cavity behind inner leaf. Roof straps 1500 mm long, floor straps 1100 mm long. All straps to have supporting noggins not less than ¼ the depths of joists/rafters.

GROUND FLOOR
Ground floor construction is to comprise of 50 mm sand/cement screed laid on 100 mm concrete ground floor slab, laid on 1200 guage visqueen dpm (which is to be securely tapped and taped at joints and linked to dpc) laid on 75 mm Celotex GA2075 Double R insulation board and turned up at edge of slab laid on 50 mm sand blinding on 150 mm well compacted sulphate free hardcore,Ground floor to be constructed to achieve a maximum U value of 0.22 w/m2k.
Garage floor to comprise of 150 mm concrete floor slab with trowelled smooth dustproof finish with 1 in 60 m fall to door on 1200 guage visqueen damp proof membrane with 150 mm laps and united with wall dpc. Dpm to be laid on 50 mm sand blinding on 150 mm layers of well rolled and compacted sulphate free hardcore.

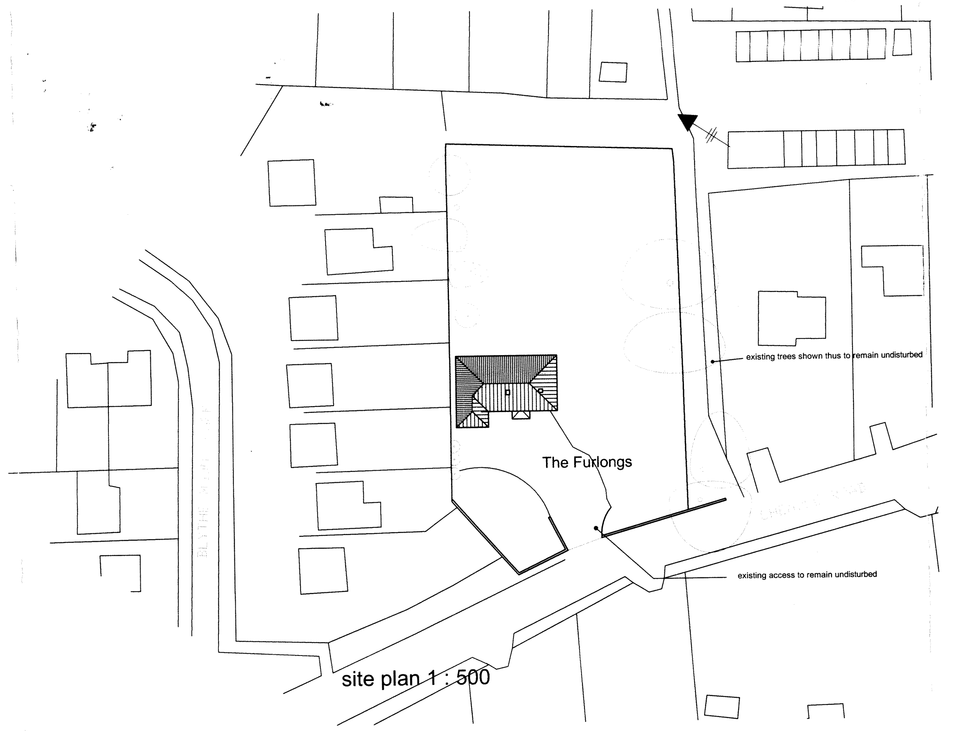
FOUNDATIONS
Concrete strip foundations under external walls to be 600 x 225 mm. If ground conditions at foundation level are unsuitable then foundations should be laid at an increased depth or the use of one layer b503 reinforcement mesh with min 50 mm concrete cover in foundations to approval of Local Authority Building Control.
Build internal walls in positions shown to be of 100 mm concrete blocks built up off concrete commons below ground off 450 x 225 mm foundations, where shown.
Provide 3 no. courses of facing brickwork below ground level and concrete common brickwork for all walls below ground level with a weak mix concrete up to 150 mm below dpc in cavity. Non load bearing internal walls that are not taken down to foundation level are to be built up off thickened out floor slab 400 x 225 mm.
New foundations shown on this drawing have been shown at the minimum required depth of 1000 mm below ground level. If upon excavation it is found that ground conditions at this level are unsuitable then foundations shall be laid at an increased depth on adequate load bearing strata. Final depth of foundations to be approved by Local Authority Building Control Department.& to be taken down beyond any influence of tree roots.


section a ; a

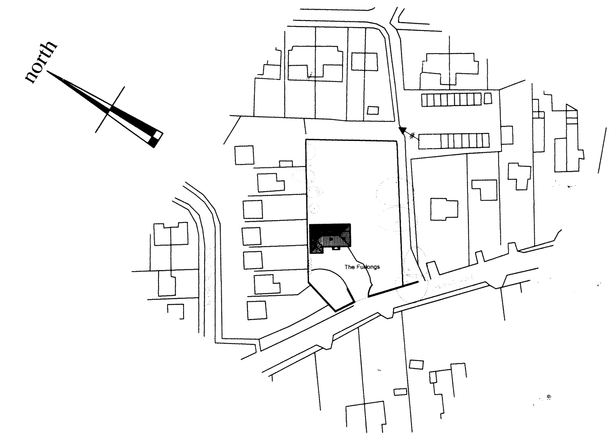
ROOF
Pitched roof construction to comprise of the selected roofing tiles on 38 x 25 mm softwood tanalised battens laid on one layer untearable roofing felt which is to conform to BS747 laid on truss rafters which are to be designed and manufactured by specialists and spaced at max 450 mm cts. Last 3 no. trusses running parallel to gable walls to be strapped at max 2000 mm cts with 30 x 5 mm Expamet hot dipped galvanised mild steel straps to BS2989. provide 12.5 mm plasterboard to underside of first floor ceiling tape and fill joints and skim to finish. Provide 100 x 50 continuous ceiling bearers and 100 x 25 diagonal wind bracing and horizontal ceiling bracing. All trusses to BS5268. Provide triple trusses or other support as requ by truss manufacturers to all projecting gables.
Traditional roof construction to comprise of same on rafters, size and spacings as on drawing. Provide purlins in roof space as on drawing. Ridge board, hip rafters, valley rafters, size on plan.
Provide 100 x 75 mm softwood tanalised wall plate to be fixed to top of inner skin of blockwork at max 1200 cts with 30 x 2.5 mm Expamet hot dipped galvanised mild steel to BS2989.
Roof to be constructed to achieve 0.16 w/m2k

FLOOR
Structural timbers shall be stress graded to C16 kiln dried regularised and treated. All new floors to comply with approved document part E of building regulations 2002.
First floor 25mm T & G boarding on C16 grade floor joists to sit in galvanised steel restraint type joist hangers or approved joist seals - sizes & centres as described on plan.
Alternatively sit in approved joist seals where built into external walls.
provide herring bone strutting between joists using 38mm thick softwood or galvanised steel, depth to be min 3/4 depth of joist, positoned centrally where joist span is 2.5 - 4.5m or 2no rows equally spaced where joist span exceeds 4.5m, strutting to be blocked solidly to perimeter walls.
provide and fix plasterboard to underside of joists, fill, tape and skim finish. Last three floor joints running parallel to wall to be strapped at max 1200 mm cts with 30 x 50 mm noggins at perimeter to all heading joints. All joints to be glued. Provide and fix plasterboard to underside of joists fill, tape and skim finish. Last three floor joists running parallel to wall to be straped at max 1200 mm cts with 30 x 50 mm galvanised mild steel straps to BS2989.
Provide two joists spiked together where running parallel to and under stud partition walls and where trimming stairwell opening.
Line to underside of ceilings with 12.5mm Gyproc wallboard 10 and lay 100mm Isowool general purpose roll in floor cavity.

DAMP PROOF COURSE
Provide and fix new vertical and horizontal dpcs to all jamb and cill losers.
DPC to BS743 to all walls min 150 mm above ground level. Alreflex 2L2 to all cavity returns at external openings or similar to eliminate cold bridging.



site plan 1 : 500



location plan 1 : 1250

CEILINGS
12.5 mm plasterboard and skim, taped and filled joints with plaster skim finish. Ceilings to underside roof spaces to have 100 mm fibreglass quilt insulation between joists and 170 mm fibreglass insulation over.
Ceilings over integral garages with rooms above are to be ½ hour fire resistant (2 layers 12.5 mm plasterboard and skim) and insulated to achieve 0.16 w/m2 oC with 270 mm fibreglass.
Where ceilings are formed to underside rafters lay 90 mm Celotex GA3000Z insulation between rafters and 40 mm below rafters.
It may be necessary to batten to underside of the rafter to ensure a 50 mm continuous air gap is achieved above insulation.
alternatively lay YBS superquilt multi layer insulation blanket between rafters maintaining min 50mm air gap -provide 25mm thick batten to retain insulation to top face of rafter - all fixed in accordance with manufacturers reqs

AIR BRICKS
Provide 215 x 150 mm airbrick to provide combustion air complete with fly proof internal screens to rooms containing gas appliances.

LOFT ACCESS
Provide Glidevale LA2 hinge down loft access trap insulated and double draught and vapour sealed size 568 x 718 mm.

ROOF VENTILATION
Provide Glidevale roof ventilation to all roofs with insulation at ceiling level. Ref RV along full length of eaves and fix Glidevale ref FV100 continuous ventilation along eaves equivalent to a 10 mm opening. All fixed in accordance with manufacturers recommendations.
Where there are sloping insulated ceilings provide Glidevale ref RV between rafters and Glidevale ref FV250 continuous ventilation along top of eaves, equivalent to a 25 mm opening. Provide Glidevale ref MR50 at roof abutment with cavity wall and Glidevale ref G ridge ventilators installed at 2.4 m centres to all ridges where roof is insulated.

SANITARY
New sanitaryware to be Clients choice of bath, wash hand basin and WC. Bath to have
40 mm dia pvc waste pipe with a 76 mm deep seal trap. Wash hand basin to have 32 mm dia pvc waste pipe with a 76 mm dia deep seal trap and WC to have 100 mm dia pvc waste pipe with a 50 mm deep seal trap. All to be connected into svp back inlet gulley or manhole.. See drawing for position and runs of pipework.
Also shower tray to have 75 mm deep seal trap with 50 mm dia upvc waste pipe.
Provide 40 mm upvc waste pipe to new kitchen sink to be connected to a back inlet gulley via 76 mm deep seal trap.

Provide new 100 mm svp in position shown to collect waste from sanitaryware. Connection of bath waste pipe into svp to be min 200 mm below connection of WC, svp to connect into main drains via slow radius curve (min 300 mm radius) and to cease 900 mm above head height of nearest window - head of pipe to be connected to a tile terminal with flexible hose connector. Provide lead collar at junction of roof where svp terminates roof structure. Box in svp as shown with 12.5 mm plasterboard, filled and taped joints with skim finish, provide glass fibre insulation to lag pipe.
Air admittance valves to be fitted to soil pipe in a position not liable to freezing, above the flood level of the highest sanitary fitting being served.

TIMBER PARTITIONS
Construct new partition walls in positions shown to be of 75 x 50 mm softwood vertical studs at max 450 cts. 75 x 50 mm softwood noggins fixed horizontally at max 600 mm cts. Provide 25 mm thick isowool acoustic partition roll (1200) insulation quilt between and finish both sides with 12.5 mm thick gyproc wallboard ten plasterboard with filled and taped joints and skim finish.

VENTILATION
Provide mechanical extract ventilation in kitchen capable of extracting at a min rate of 60 litres per second and trickle ventilation installed at head of windows capable of min 4000 mm2 clear air opening. Also provide mechanical extract ventilation to en-suites and bathroom capable of extracting at a min rate of 15 litres per second. Provide mechanical extract ventilation to utility to extract at a min rate of 30 litres per second and to WC to extract at a min rate of 6 litres per second. Where no opening light is available operated intermittently with light switch with a 15 min overrun facility. Provide 100 mm dia upvc pipe terminating with grille built into external wall.

GENERAL NOTES
All facing bricks to be free from defects, handled and not tipped, hand stacked and properly covered. Care shall be taken to ensure that the faces of bricks are kept free from mortar. No chipped or damaged bricks are to be used in the work.
All structural timber shall be C16 stress graded and pressure impregnated with an approved preservative.
Builder to enquire into the correct local statutory authority for the use of electric, gas and water services to allow for re-siting, encasing or stoppage of said services.

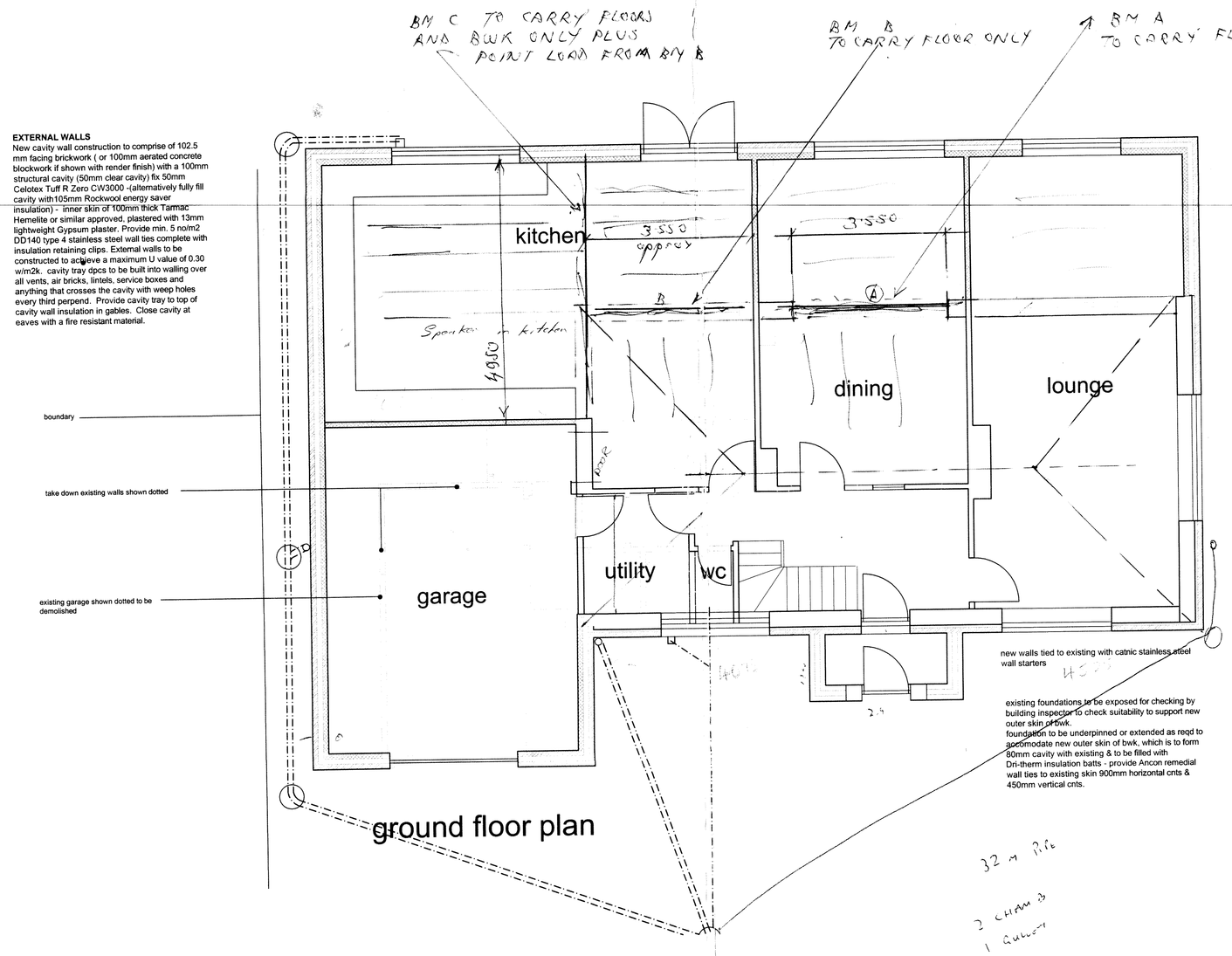
If no automatic fire detection is installed then there should be a suitable number of mains operated self-contained smoke alarms which confirm to BS5839-6: 2004 - Grade D - category LD3 standard. The system must be mains operated to BS5446-1: 2000 standard with standby power (battery backed up or capacitor) All self-contained smoke alarms to be fixed to ceiling at least 300 mm away from any light fittings and within 7 m of kitchen and living room and 3m of bedrooms interconnected and permanently wired to a separate fused circuit.

All electrical works to be by an approved NICEIC contractor and to be in accordance with IEE rules and regulations.
The design installation, inspection and testing of the electrical installation will be carried out in accordance with BS7671:2001 or an equivalent standard and approved document part 'p'.
All plumbing work to be in accordance with BS5572.
Close all cavities at eaves level with a fire resistant material.
Provide mastic to all external reveals of openings in cavity walls. Opening light casements of windows per room to be equal to or greater than 5 % of floor area.
All materials specified are to be
fixed in accordance with manufacturers recommendations Thermal conductivity of walls to be restricted to a 0.30 w/m2k. Thermal conductivity of ceiling to be restricted to a max 0.16 w/m2k.

Allow for altering & extending existing heating, plumbing & electrical installations as required for proposed works all carried out in accordance with latest regulations & standards. All new light, socket & radiator positions to be agreed with client

HEATING
New gas boiler to be condensing type with a minimum 'SEDBUK' value of 86 % complete with balance flue and guard to outside wall.

EXTERNAL WALLS
New cavity wall construction to comprise of 102.5 mm facing brickwork (or 100mm aerated concrete blockwork if shown with render finish) with a 100mm structural cavity (50mm clear cavity) fix 50mm Celotex Tuff R Zero CW3000 -(alternatively fully fill cavity with105mm Rockwool energy saver insulation) - inner skin of 100mm thick Tarmac Hemelite or similar approved, plastered with 13mm lightweight Gypsum plaster. Provide min. 5 no/m2 DD140 type 4 stainless steel wall ties complete with insulation retaining clips. External walls to be constructed to achieve a maximum U value of 0.30 w/m2k. cavity tray dpcs to be built into walling over all vents, air bricks, lintels, service boxes and anything that crosses the cavity with weep holes every third perpend. Provide cavity tray to top of cavity wall insulation in gables. Close cavity at eaves with a fire resistant material.



ground floor plan

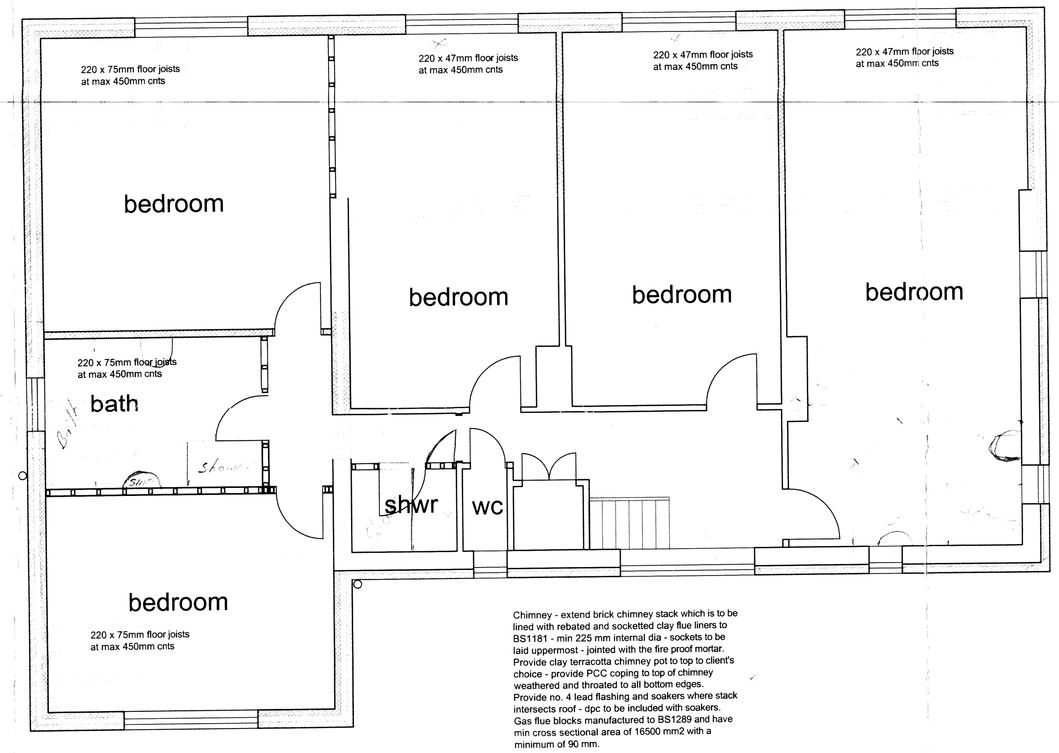
INSPECTON CHAMBERS
The contractor shall excavate for and construct new inspection chambers, size 450 mm dia to depths as shown on drawings in precast concrete bedded to manufacturers instructions with 450 mm dia medium duty manhole covers and frames set in mortar.
Provide all necessary bending and channelling to suit connections, all to the approval of the Local Authority inspector. Storm and foul manholes greater than 930 depth to comprise of 215 mm brick chambers to BS3921 internal dimensions 1200 x 750 mm build off 150 mm thick concrete (1:2:4) slab. All connections formed in half channels and finished with 1:3 cement/sand benching.

EXISTING DRAINAGE
All existing drainage runs are assumed and shall be ascertained by Contractor upon commencement of work.
NEW DRAINAGE
All new drains to be 100 mm dia Hepworths supasleeve vitrified clay pipes laid in straight lines at 1 in 40 m falls on trimmed trench bottoms with flexible joints, backfilled with selected as dug materials.
Provide 150 mm dia sleeve pipe with reinforced concrete lintels over a flexible joint each side where drains pass through foundation brickwork.
New 100 mm drains laid to falls and surrounded with 150 mm concrete where they pass under building.

BLOCK PARTITIONS
100 mm dense concrete block generally plastered both sides with lightweight gypsum plaster, except for semi exposed walls, og integral garage to be 150 mm insulated block to achieve a max U value of 0.30 w/m20C or cavity walling where door opening into garage.
Provide half hour fire resistant door complete with self closing device and 100 mm step down to garage from dwelling floor level.
internal block walls between habitable rooms and rooms containing sanitary appliances to be constucted to achieve an airborne sound reduction index of 40.2R(db) ,density 470kg/m3

LINTELS
Provide prefabricated Catnic Cougar steel lintels open backed to BS5977 Part 2:1983 with corrosion protection and continuous integral insulation.
Installed in accordance with the manufacturers recommendations, on a mortar bed, allowing a nominal 150 mm bearing at each end. Provide weep vents to lintels outer leaf complete with stop ends.

STEELWORK
See Structural Engineer's drawing for all steelwork calculations and details if provided otherwise, all steelwork to sit on three course deep RC padstones min 450 mm long and encased in 12.5 mm plasterboard and skim. All beams as purlins in roof space to have 100 x 75 mm wall plate bolted at max 900 mm cts to beam.



first floor plan

Client	Mr J Mc Adam
Project	Proposed alterations & extension to The Furlongs Cheadle Road Forsbrook,
	Plan as proposed and Existing No Change
	Date : Dec 2009 drg no : 01 scales : 1 :100.