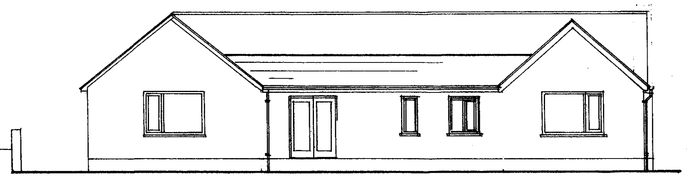
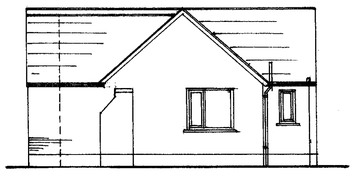
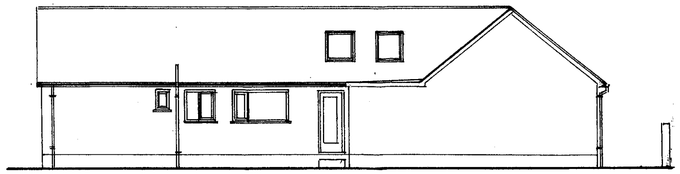
When smoke alarms are provided installation and compliance certificate must be provided to owner.
Occupants of building at completion of works should be provided with information relating to use and maintenance of alarms.
NEW PITCH ROOF – Layboards provided to existing roof to pick up new rafter feet. Wall plates to be bolted down at least 600mm. ALL LOW PITCH ROOFS LESS THAN 12½° TO BE PROVIDED WITH PROPRIETRY UNDER TILE COVERING I.E 'UNDUTILE OR SIMILAR'
TILING: Roof tiling on 38mm by 25mm treated soft wood battens on reinforced sarking felt onto rafters, (size as indicated on plans). Ceiling joists (size as indicated on plans) secured to rafters and wall plates. 100mm fibreglass insulation quilt laid between joists. Plus 200mm insulation quilt laid over joists. Allow for 25mm air space behind facia. (U value 0.16w/m²K).
WARM ROOF: (U value 0.16w/m2k) Roof to be covered with 12.5mm thick stone chippings bedded in hot bitumen onto 3 layers of roofing felt complying with BS747 and bonded together with hot bitumen bottom layer asbestos based or equivalent vapour barrier on Kingspan TR31 (96mm composite board) laid to firring pieces with 25mm K7 koolthern laid between joists to underside of kingspan to achieve 0.2 W/m2K. Firring pieces giving a fall of 1:60 united to joists size as indicated on plans. (Minimum size 150mm x 50mm). Underside of joists covered with 12.5mm thick plasterboard and plaster skim.



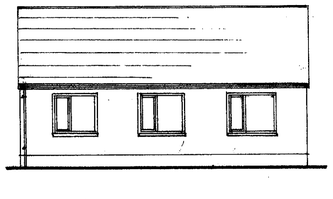
Front Elevation



Flank Elevation



Rear Elevation



Side Elevation

Internal Lighting
The installation of at least the following number of light fittings, which will **only** take lamps having a luminous efficiency greater than 40 lumens per circuit-watt

Rooms Created	Number of light fittings required	Rooms Created	Number of light fittings requires
1-3	1	7-9	3
4-6	2	10-12	4

External Lighting (fixed to building)
This includes lighting in porches, but not in garages or carports. The recommendation is that all external lighting should automatically extinguish when there is enough daylight (or when they are not needed at night) and have sockets that can only be used with lamps having a luminous efficiency greater than 40 lumens per circuit-watt.

Run electric cables in the first floor void above mineral wool.

Run new cables in stud wall filled with mineral wall in conduit.

Where recessed light fittings are installed, perforating the plasterboard, a fire resisting enclosure should be built around the light fitting to maintain an imperforate floor. The light fitting should then be of a type that is ventilated downwards through the ceiling.

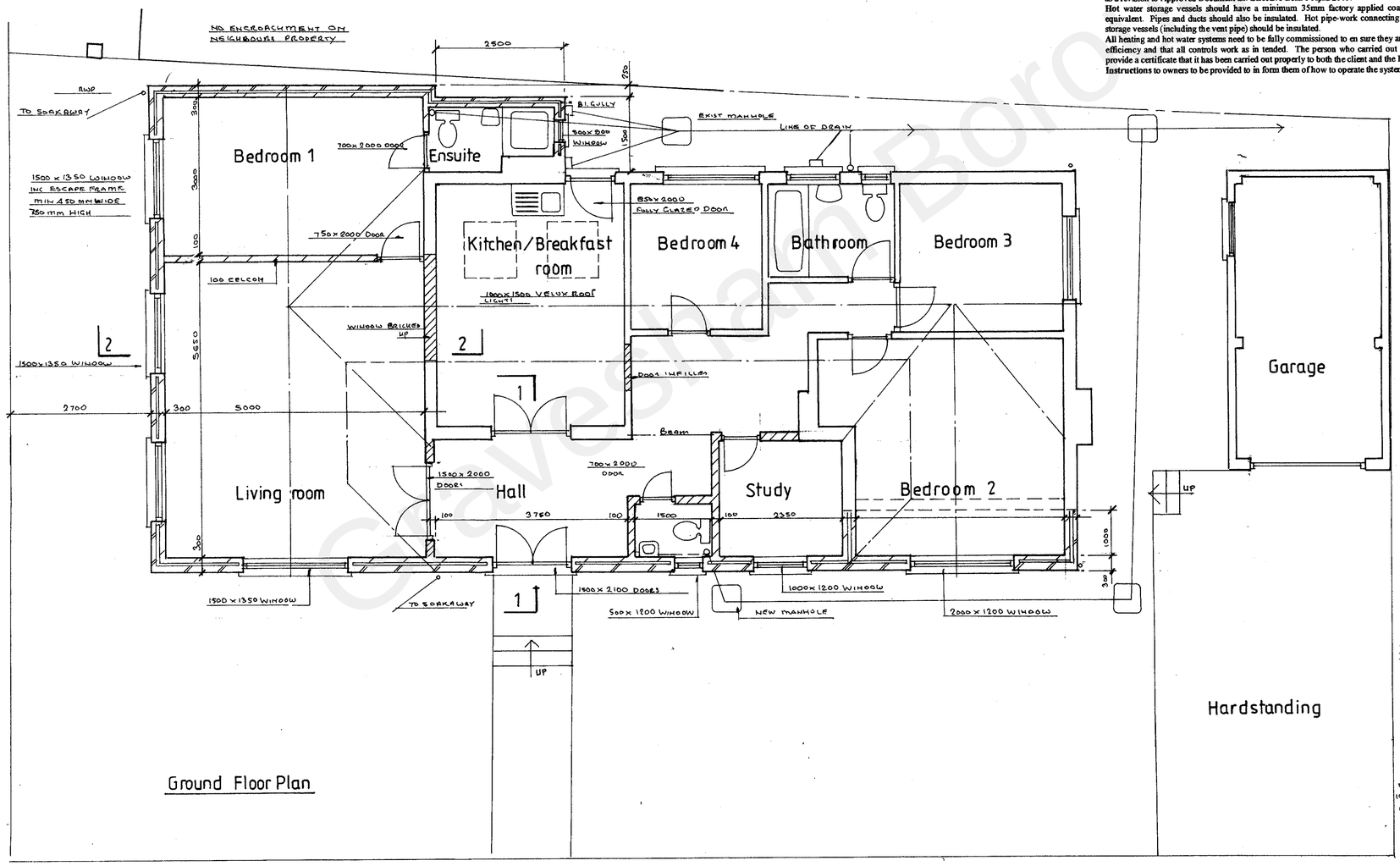
IMPORTANT NOTICE

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 local Council needs to be satisfied that Part P has been complied with. This will require an appropriate BS7671 electrical installation certificate to be issued for the work by a person competent to do so.

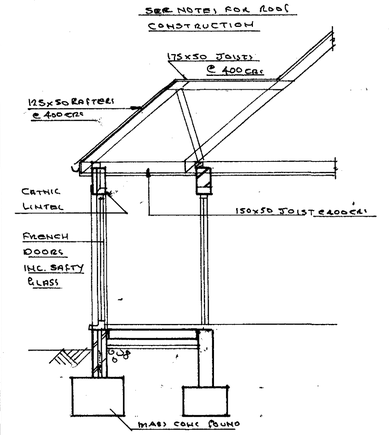
Heating and Hot Water Systems
The recommendations for the control of heating systems are extended to include the following:
Areas with differing heating needs should have individual temperature control – by the use of room thermostats or individual radiator valves.
Separate timing controls to be provided for space hearing and hot water (except5 for combination boilers and solid fuel appliances). The system design must allow the provision of only space heating, only water heating, or both when required.
Boiler controls must include provision to prevent the boiler operation when neither the space heating system nor the hot water system requires heat. The new boiler is now required to be a condensing boiler with a minimum SEDBUK rating of 86%. This requirement has recently been introduced by Government as a revision to Approved Document LI. Effective from 1 April 2005.
Hot water storage vessels should have a minimum 35mm factory applied coating of PU-foam or the equivalent. Pipes and ducts should also be insulated. Hot pipe-work connecting to boilers and hot water storage vessels (including the vent pipe) should be insulated.
All heating and hot water systems need to be fully commissioned to en sure they are operating at maximum efficiency and that all controls work as in tended. The person who carried out the commissioning must provide a certificate that it has been carried out properly to both the client and the Building Control Officer.
Instructions to owners to be provided to in form them of how to operate the system efficiently.

RECOMMENDATIONS: THE OWNER MAY NEED TO OBTAIN CONSENT FROM THAMES WATER TO BUILD OVER OR NEAR ANY SEWERS WITHIN THEIR PROPERTY.
ALL WORKS CARRIED OUT IN ACCORDANCE WITH SECTIONS AND NOTES. COPYRIGHT RESERVED. ALL DIMENSION TAKEN AS APPROVED BY CLIENT. DRAWING TAKEN AS APPROVED BY CLIENT
ANY EXISTING STRUCTURE EXPECTED TO SUSTAIN ADDITIONAL LOADS OR CHANGE IN LOAD CONDITIONS TO BE EXPOSED AND ASSESSED FOR ADEQUACY AND REPAIRED OR REPLACED AS NECESSARY.
IF APPLICABLE UNDERSIDE OF NEW FOUNDATIONS TO BE A MIN 1.00M FROM GROUND LEVEL AND SIZES ARE BASED UPON A GROUND BEARING PRESSURE OF 100Kn/ M². BOTH THE GROUND BEARING PRESSURE AND DEPTH OF NEW FOUNDATIONS ARE TO BE AGREED WITH BUILDING CONTROL ON SITE BEFORE FOUNDATIONS CAST.
ALL ITEMS, NOTES, DIMENSIONS AND GENERAL DESIGN CONTAINED ON THIS DRAWING ARE FOR GUIDANCE PURPOSES ONLY.
NOMINATED BUILDER OR PERSON—RESPONSIBLE FOR THE PROJECT SHOULD MAKE A THOROUGH CHECK PRIOR TO COMMENCEMENT OF WORKS AGAINST SITE, DRAINAGE SERVICE DRAWINGS, CURRENT *BUILDING REGULATIONS*, BRITISH STANDARDS AND CODES OF PRACTICE
THE ORIGNATOR (WESTLEIGH DESIGN) WILL NOT ACCEPT ANY LIABILITY FOR MISTAKES THAT COULD OCCUR
FOUNDATIONS: Foundations to be of size and depth to suit site conditions. Minimum 600mm wide and taken down to a minimum depth of 1m with 600mm minimum depth of concrete. Foundations to be taken down to invert level of any adjacent drains and within 1m of such drain runs. Foundation concrete should be composed of cement to BS 12:1978 and fine/coarse aggregate conforming to BS 882:1983 in proportions of 50kg of cement to not more than 0.1m of fine aggregate and 0.2m of coarse aggregate. Concrete Grade C35.
SOLID FLOORS: Solid ground floor slab to consist of 150mm well consolidated hardcore, 50mm blinding, 80mm or equivalent celotex floor insulation laid to manufacturers specification. 1200 gauge damp proof membrane (to be contiguous with new damp proof course) 150mm concrete slab with layer of A192 mesh and 75mm sand cement screed. U value 0.22w/m2K. A 25mm upstand of insulation must be provided around the perimeter of floors, including where the floor slab touches outside wall (usually at door thresholds). Provide air ducts to ventilate any suspended floors via air bricks at external walls.
CAVITY WALL: Walls (cavity) below dpc level to be two leaves of semi-engineering bricks with 100mm cavity between, as shown on drawing (cavity not to be filled with concrete above 100mm below dpc). Above dpc level to be 112mm brickwork outer leaf and then 100mm thermolite shield block inner leaf with 100mm cavity between both. Cavity filled with100mm dryberm rigid board, all to achieve U value of 0.30 w/m²k. The cavity wall insulation must be taken down below damp course level, finishing at the same level as the underside of the floor slab insulation. The cavity wall insulation and roof insulation must meet at the top of the wall (the detail used must also allow ventilation to be maintained if appropriate). Cavity wall insulation must be carried up to the full extent of gable walls. Two leaves tied together with patient stainless steel cavity wall ties at 450mm centres vertically and 750 mm horizontally. Tray dpc to be provided over lintels. Blocks laid 1:1:6 mortar mix with brick-tie or similar mild steel reinforcement to every third course of block work. Provide proprietary movement joints at max 6m distance. Walls to have a 12mm lightweight plaster internally. All cavity closures to reveals and cills must be insulated.
NEW WALLS: Damp proof courses to be lead core or other similar approved, lapped to a minimum 150mm at all joints and to be contiguous with dpm at 150mm above external ground level. Lintels (unless otherwise stated) to be Catnic steel lintels with 90mm mineral fibre insulation to inner void giving U-value of at least 0.30 W/m²k. Catnic lintels to have minimum 150mm end bearings. All wall and ceiling hinings to be plasterboard and plastered to give Class A of surface spread of flame. Lead flashing to be provided at all roof and wall abutments. Lead to be let into mortar course a minimum 150mm above roof level. New walls secured to existing with fixfix or similar connector. Galvanised restraining straps at 1200cets. to all wall and timber abutments.
STRUCTURAL TIMBERS: to be treated with approved timber preservatives and to be grade C24. Floor joists etc. must be net on joist hangers (and not built into the wall itself).
WINDOWS: All windows to be double-glazed and of a size not less than 10% of the floor area of each room. Window openings to provide a minimum of 1/20th of the floor area of each room. Ensure rooms have purge ventilation in accordance with Approved Document F(1/20th of the floor area for windows opening 30° or more, otherwise 1/10th of floor area). Glazing in timber or plastic frames – double glazing with 16mm gap and a 'soft' low E coating or double glazing with 16mm air gap. Argon filled and soft low E coating. (U value 1.8w/m2k.) Trickle vents should be located a minimum of 1.7m asove finish floor level.
POSITION AND HEIGHT OF ALL WINDOWS TO BE CHECKED BY CLIENT/BUILDER BEFORE CONSTRUCTION COMMENCES.
EXTERNAL DOORS should achieve the required area weighted average U-values specified in Table 2 of Approved Document L1b (2006). Doors (50% glass) – U-value=2.2 W/m²K or, centre pane U-value = 1.2 W/K. Glazing in relevant positions should comply with the requirements of Approved Document N i.e safety glass.
DRAINAGE: All underground drains to be of underground quality PVC pipes (e.g. Hunter-Marley etc) bedded and surrounded in 150mm peashingle to manufacturers recommendations. Large radius bend at bass of S&VP's. Drains passing through walls/foundations to be bridged with precast RC lintels. Manholes to have a minimum internal size of 600mm x 450mm with 150mm thick concrete base (concrete mix 1:2:4) Walls to be 225mm thick class B semi-engineering bricks (mortar mix 1:3) with flir faced brick-work internally and flush pointed. Vitrified clay main straight channel and branches benched in sand /cement 1:3 trowelled smooth (external manholes to have galvanised mild steel cover and frames). Fall of drains to be min. 1:40.
ABOVE GROUND DRAINAGE: Plumbing 100mm dia PVC S&VP with 100mm dia. branch to WC pan, 38mm dia. waste to bath/shower, kitchen sink and 32mm dia. waste to wash hand basin. Wastes greater than 2.5m in length to be increased to 50mm dia. Appliances to have 75mm deep seal traps. S&VP to terminate 900mm above top of nearest adjacent window with balloon guard. Wastes from ground floor appliances (except WC) to discharge to back inlet gully with pipes discharging below grating level but above water level
RAINWATER disposal to be by 100mm half round PVC gutter with 75mm dia. PVC down pipes connected to 100mm dia. Hepsleeve or similar drain run, bedded and surrounded in 100mm of peashingle discharging into soakaway sited at least 5m from any building. Soakaway to be size and depth to suit ground conditions. Soakaway construction to be 100mm concrete base with honeycomb brick walls (no gap greater than 25mm) with 150mm reinforced concrete lid.
CEILINGS – 12.5mm foil backed plasterboard to be provided to ceilings with 7mm plaster skim.
BACKGROUND VENTILATION to the new room(s) is required to comply with Table 1.2a of Approved Document F1 (2006) (equivalent areas) and provided to habitable rooms by means of controllable and secure ventilation opening having a total area of not less than 8,000 mm² located to avoid draffs/trickle ventilator) hit or miss ventilator. Background ventilation to bathroom to give 4000 mm² as above.
VENTILATION: Mechanical ventilation to be provided to bathroom/shower room having an output of at least 15 litres/second ducted direct to external air.
Mechanical ventilation to be provided to kitchen and utility room having an output of at least 60 litres/second ducted direct to external air.
Mechanical ventilation to be provided to kitchn incorporated in cooker hood having an output of at least 30 litres second ducted to external air. Mechanical ventilation to be provided to WC compartment having an output equivalent to 3 air changes per hour with 15min. overrun connected to light switch and ducted direct to external air.
STEEL WORK: Steel work to structural calculations. Steel beams to be encased with two layers of 12.5mm plasterboard fixed to 50mm x 25mm timber cradle with 7mm of gypsum plaster. Steel beams to rest on concrete padstones minimum end bearing of 225mm Twin beams to be diaphragm bolted together with spacers at 900mm centres. Steel Grade 43.
ESCAPE WINDOWS: Provided to all new first floor habitable rooms, being not less than 450mm wide with a minimum area of .33m² Cill height to be not more than 1100mm from finish floor level. Escape window to loft to be velux rooflight or similar with clear opening of 850mm high by 550mm wide, to be set back from eaves maximum 1.7m and bottom of opening to be not less than 600mm and not more than 1100mm.. Vents are required above and below roof lights.
GLAZING: In critical locations i.e. below 800mm height to be safety glass.
SOUND REGS FOR NEW STUD WALLS – To comply with Approved Document E (Sound Insulation) the partitions to bedrooms and bathrooms should be clad with two layers of plasterboard each side of timber or metal studs, each layer of a mass of 10 Kg/m² (wall type A) or, alternatively, (wall type B) a single layer of plasterboard of mass 10 Kg/m² each side with a minimum of 25mm mineral wool (mass 10 Kg/m²) suspended in the cavity. 12.5mm wallboard does not meet a mass of 10 Kg/m². Use 15mm wallboard, gypric Soundbloc (12.5mm), Gyproc wallboard TEN (12.5mm), Lafarge Echeck Wallboard (12.5mm), or similar.

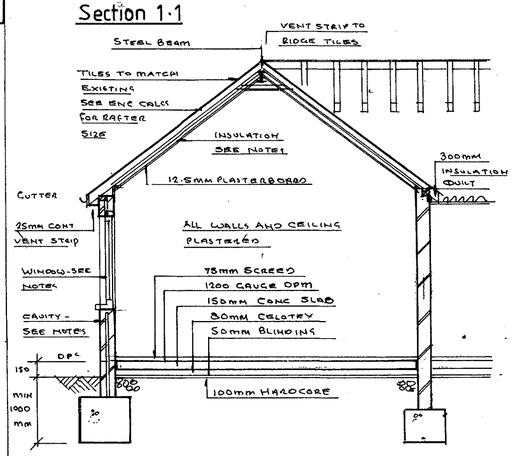


Ground Floor Plan

SEE NOTE 1 FOR ROOF CONSTRUCTION



Section 1-1



Section 2-2

No.	Date	Revisions

Westleigh Design

Client
Mr S Sumra
1 Russell Road
Gravesend
Kent DA12 2RT

Proposed Plans and Elevations

Project
Proposed Single Storey Extensions

- 5 FEB 2008
GR08/0104

Date	Area M²	Checked
jan 08		

Scale	Drawing No.	Revision
1 100 1 50	080108 2/2	

Gravesham Borough Council