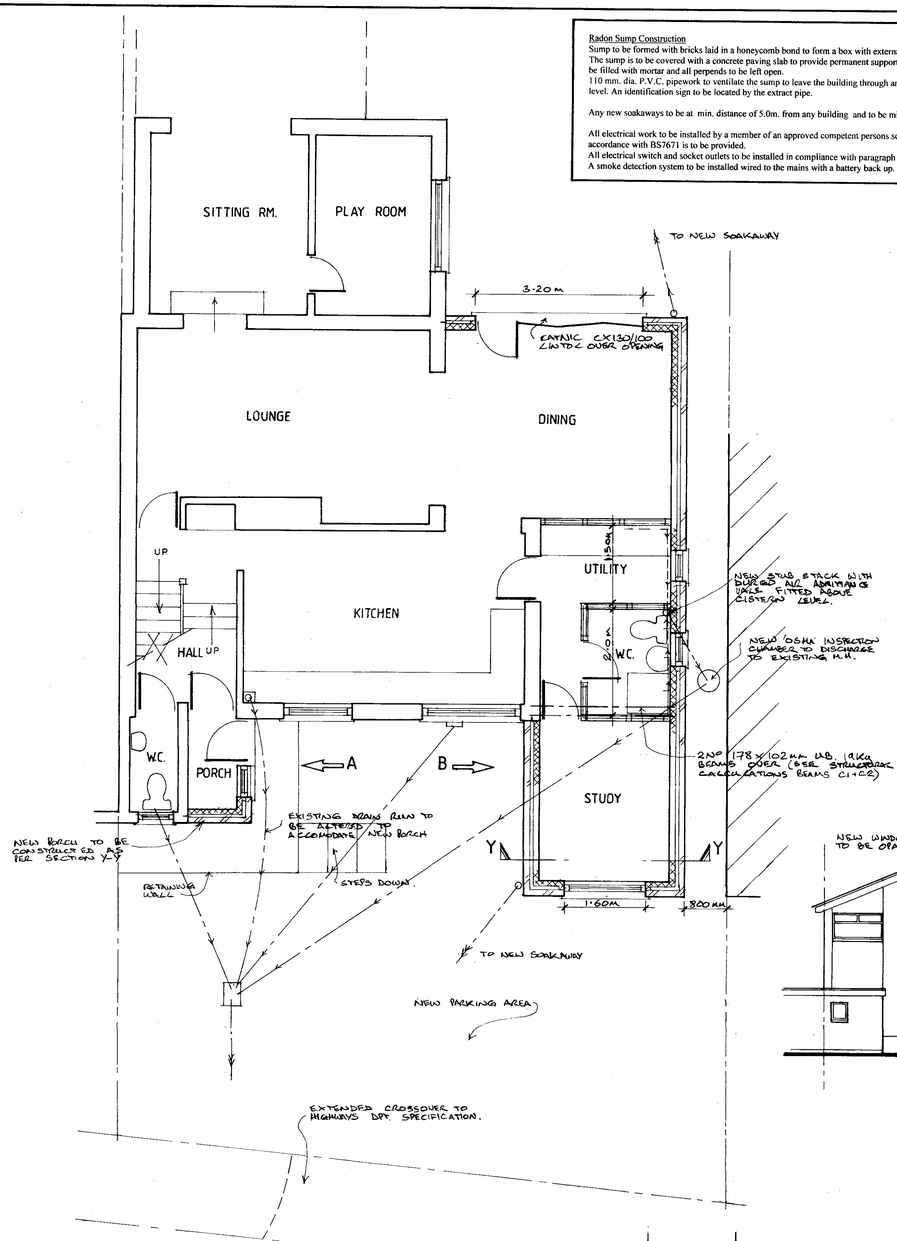
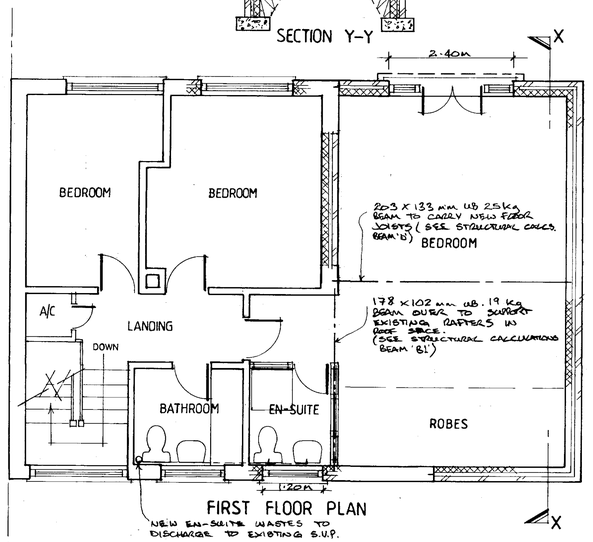
Radon Sump Construction
Sump to be formed with bricks laid in a honeycomb bond to form a box with external dimensions of 600 mm. x 600 mm. The sump is to be covered with a concrete paving slab to provide permanent support to the floor slab. Horizontal joints to be filled with mortar and all perpends to be left open.
110 mm. dia. P.V.C. pipework to ventilate the sump to leave the building through an external wall and capped off at low level. An identification sign to be located by the extract pipe.

Any new soakaways to be at min. distance of 5.0m. from any building and to be min. 1.0 m3 capacity.

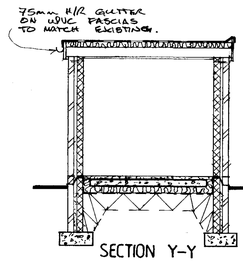
All electrical work to be installed by a member of an approved competent persons scheme and a completion certificate in accordance with BS7671 is to be provided.
All electrical switch and socket outlets to be installed in compliance with paragraph 8.3 of approved document M 2004.
A smoke detection system to be installed wired to the mains with a battery back up. All fitted in accordance with B.S. 5839.



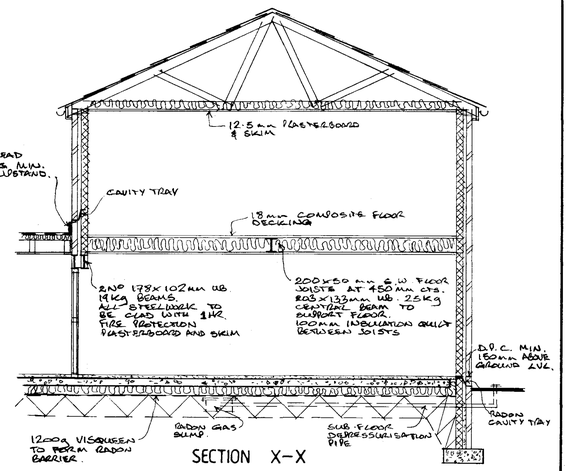
GROUND FLOOR PLAN



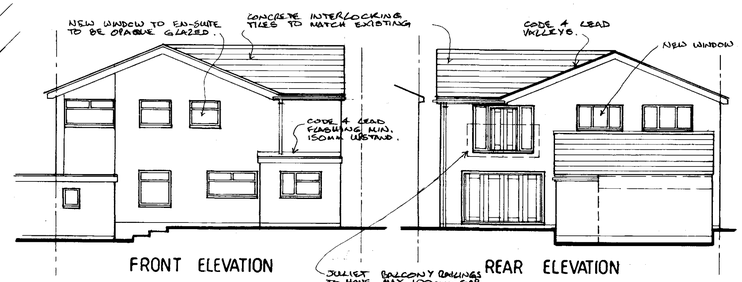
FIRST FLOOR PLAN



SECTION Y-Y

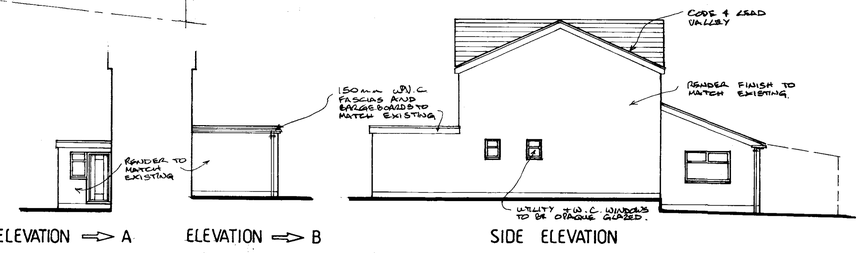


SECTION X-X



FRONT ELEVATION

REAR ELEVATION



ELEVATION ⇨ A

ELEVATION ⇨ B

SIDE ELEVATION

All new brickwork/blockwork to be fixed to existing using 'Furfix' or similar wall extension profiles. Furfix to be fixed in accordance with manufacturers instructions. Vertical D.P.C.'s to be disc cut into existing walls at relevant locations.

All drainage under or within 1.0 m. of building to be encased in 150 mm. Of concrete. Where pipes pass through walls concrete lintols used to span over. All underground drainage to be to B.S. 8301. All plumbing to be to B.S. 5572.

All habitable rooms to be ventilated by both a rapid ventilation opening of at least to 1/20 th. of the floor area, and by a background (trickle) ventilation opening equivalent to 8000 mm2 and bathrooms to be 4000 mm2

Kitchen to be mechanically ventilated to the outside air to give extraction of :
Extract fan – 60 litres/sec. Or Cooker hood - 30 litres/sec
Utility to be mechanically ventilated to the outside air to give min. 30 litres/sec extraction.
Bathrooms to be mechanically ventilated to the outside air to give min. 15 litres/sec. extraction with a 15 min. time delay.

Wastes from Utility, bathrooms and kitchen to discharge to foul sewer system via. 110mm. dia. W.C. waste, and 40mm. dia. p.v.c. waste pipes with 75mm. deep seal traps.
An in line blending valve is to be fitted to all baths to ensure the maximum hot water temperature is no more than 48 degrees centigrade.

Stud partitions to be of 100 mm. x 50 mm. s.w. studs at 600 mm. cts. with noggins to suit 100 mm. mineral wool infill to provide min. 40db sound insulation. 12.5 mm. plasterboard and skim to both sides

Catnic CG130/100 lintols over all external openings. Vertical and horizontal D.P.C.'s to all openings.
Glazing to be Pilkington K glass with a min. U-value of not less than 1.6 w/m2 k.
Glazing in critical locations to be toughened safety glass to comply with the test criteria as indicated in B.S. 6206 1981
Means of escape window to be provided to proposed first floor bedroom and ground floor study which have openable areas of at least 0.33 m. squared and be at least 450 mm. x 750 mm. in either direction. The bottom of the openable area should not be more than 1100 mm. above the floor.

Floor Specification.
40mm. Sand/cement screed on 150mm. Oversite concrete on100mm. Celotex on layer of 1200 g. visqueen on min. 150mm. on layer of consolidated hardcore. Floor to achieve a min. U-value of 0.18 w/m2 k.

Cavity wall specification.
100mm. concrete blockwork inner skin. Min. 125 mm. Cavity with 75mm. Celotex insulation bat .
100mm. Concrete blockwork with 19mm. render or facing brickwork to match existing.
9mm. Supalux cavity closures. Wall ties to be stainless steel with insulation bat retainers, and staggered 450mm. Vertical and 600mm. Horizontal. Wall to achieve a min. U-value of 0.21 w/m2k.

Main Roof Specification
Concrete interlocking tiles to match existing on 50 x 25mm. softwood treated battens at predetermined cts. On layer of 'Tyvek' breathable membrane on preformed trussed rafters to C.P. 112 & B.S. 5268 part3. Bracing to manufacturers specification. Calculations for trussed to be obtained from manufacturer prior to erection.
100 mm. x 50. mm. s.w. wallplates secured at 1.80 m. cts. With galvanised steel straps. Straps to have a min. cross sectional area of 30 mm. x 5 mm. 200 mm. layer of insulation quilt laid between ceiling joists and 200 mm. layer laid over the top. Roof to achieve a min. U-value of not less than 0.15 w/m2 k.

Flat Roof Specification
'ISIS 900' G.R.P. (or similar) roof, consisting of 2 layers of glass fibre chop strand mat 450g per layer, impregnated with Polyester resin, ratio- 2.5-1. Grey float coat finish, on 150mm. 'Celotex Tempdeck' on 19 mm. plywood decking , or similar warm roof construction (to provide a U-value of not less than 0.15 W/m2k) on s.w. firrings laid to falls on 175 mm. x 50mm. S.W. joists at 450 mm. cts. 12.5 mm. foilbacked plasterboard and skim to underside.
100 mm. x 50. mm. s.w. wallplates secured at 1.80 m. cts. with galvanised steel straps. Straps to have a min. cross sectional area of 30 mm. x 5 mm. .

Foundations to be 600mm. X 300mm. mass concrete. Depth of foundations to be determined on site, but to be below the invert of any drains within 1.0 m. and to be a min. of 900mm. below ground level.

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Project. PROPOSED NEW EXTENSIONS AND ADAPTATIONS TO EXISTING DWELLING at,
1, HAZEL GROVE, DINAS POWYS, VALE of GLAM.

P R O P O S E D

Scale 1:100, 1: 50	Drwg. No. SAE 02	Date. MARCH 2017.

meridian BUILDING DESIGN incorporating VALE COUNTY GRANTS AGENCY
Tel/Fax 02920 515952

All dimensions to be checked on site prior to commencement of works.
Exact Location of all services to be determined on site by owner/builder