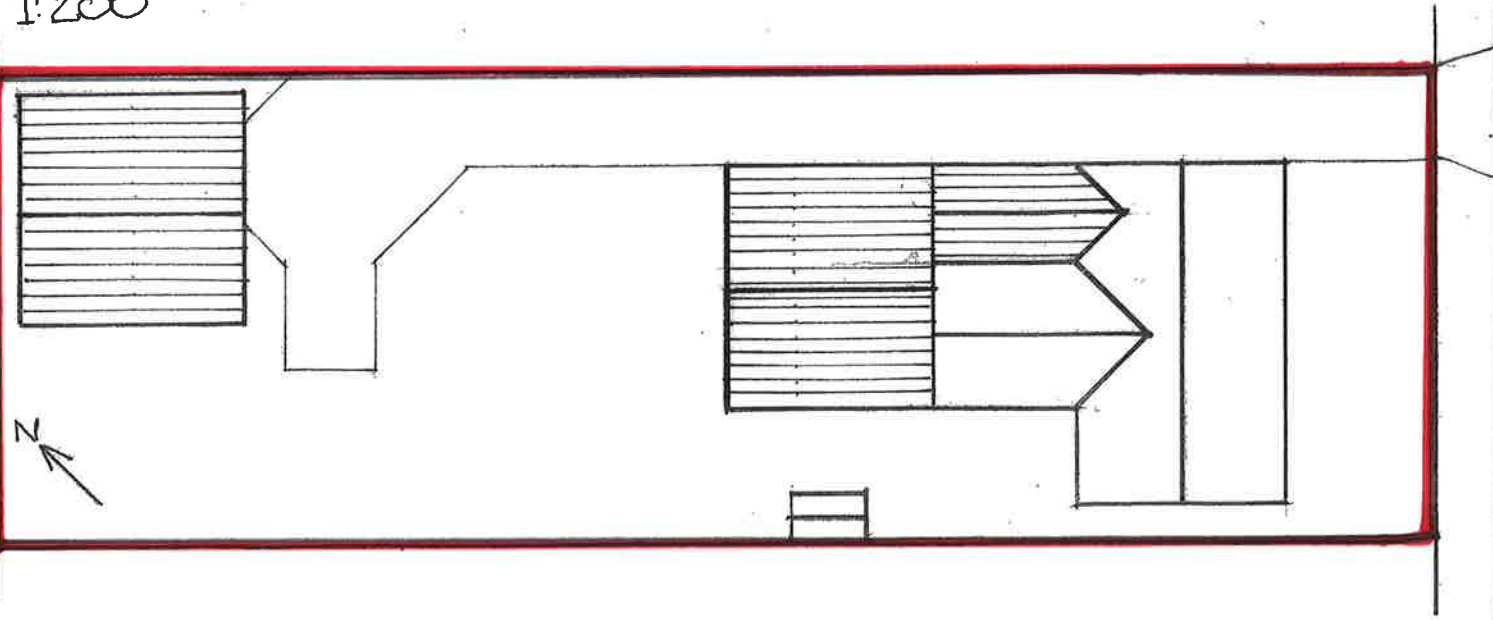


LOCATION PLAN
1:1250



BLOCK PLAN
1:200



GENERAL SPECIFICATION

FOUNDATIONS
Plain in-situ concrete, GEN mix 3, to BS 5328, 750 x 300mm under external walls, 450 x 300 mm under load bearing partitions. Where steps occur the concrete overlap to be twice height of step, foundation thickness or 300mm, whichever the greater.
Concrete blockwork, BS 6073: Part 1, 7N/mm² to DPC level. 125mm cavity with vertical twist stainless wall ties to BS 1243, max 750mm centres horizontally and 450mm vertically. Concrete GEN 1 mix 1 cavity fill to 225mm below ground level.
75mm fibre reinforced screed on 100mm oversite slab, 120mm Celotex XR 4000 floor insulation (0.019 Wm/K), or similar approved, turned up on edge of slab, 1200 gauge damp proof membrane turned up and on to horizontal DPC. 150 mm minimum hardcore bed well consolidated with 25mm dust/sand blinding.
Depth and final design of foundations to Local Authority approval.
Dwelling floor to have a min. 'U' value of 0.18 Wm²K minimum.

WALLS
100mm concrete block outer skin, rendered and dashed to match existing, 125mm wide cavity as before, with 75mm Celotex CG 5000 (0.02 WM/K) insulation or similar approved, fixed with retaining clips to inner skin to manufacturers requirements. 100mm concrete block inner skin plasterboard dot & dab and skimmed. Cavities closed at eaves level. Insulated I.G. lintels with DPC cavity trays to openings. Construct 25mm min. check rebates to all window and door reveals. The frame should be set back behind the outer leaf of masonry, damcor or similar approved insulated vertical DPC's at reveals to openings. Alternatively, an insulated finned cavity closer may be used. Ground floor partitions to be 100mm concrete blockwork rendered and skimmed. External walls to have a min. 'U' value of 0.21 W/m²K minimum.

STEEL SUPPORT BEAMS
See Structural Engineer's design and calculations.

FLOORS
50 x 200mm C24 sawn floor joists at 400mm centres, with herringbone strutting at centre span. Joists to be 'doubled - up' under line of partitions. Mild steel restraining straps at 2m centres extending over 3 No. joists, screwed to solid blocking support. 50 x 200mm plate bolted to wall at 400mm centres with joist hangers securely fixed as support for floor joists. 18mm weyroc tongued and grooved floor boarding moisture resistant screwed and glued to joists, to have a min. mass per unit area of 15kg/m². Ceilings to be lined with 15mm plasterboard, skimmed finish, with a-min. mass per unit area of 10kg/m². An absorbent layer of mineral wool (min. thickness 100mm, min. density 10kg/m³) laid in floor cavity.

ROOF
Second hand or Cement fibre slate, Eternit or similar approved, colour to match existing, on 25 x 38mm treated battens, on reinforced felt to BS 747, with 180mm minimum laps, all to be fixed strictly in accordance with the manufacturers instructions, with non ferrous fixings and to include all verge and ridge tiles. 50 x 150mm softwood rafters at 400mm centres, 25 x 175mm softwood ridge board, 100 x 50mm softwood wall plate securely fixed and restrained with ms wall plate straps at 1200mm centres. 500mm min. Grp/code 5 lead to valleys, on 150mm plywood support. Upvc fascia and bargeboard to match existing and fixed to rafter ends and gable ladders. Soffit to match existing with 25mm minimum continuous vented grilles. Rainwater goods to be UPVC, gutters laid to 1:600 fall minimum, with a flow rate of 3.23 litres/second. Downpipes to suit. 120mm overall thickness of Celotex FR5000 (0.22WM/k) loft insulation laid between rafters and ceilings to comprise one layer 50mm insulated composite plasterboard with skim finish.
Roof to have 'U' value of 0.15 W/m²K.

WINDOWS AND DOORS
Windows and doors to be upvc double-glazed with 16mm gap, glazing to be Low - E, EN = 0.15, supplied by FENSA registered manufacturer. Window openings to be 1/20 th min. of floor area to habitable rooms, and opening windows to other rooms. Windows to have opening area of at least 0.33m² and at least 450mm high and 450mm wide with the bottom of the openable area not more than 1100mm above the floor. Glazing in critical areas to be Part N.
Windows and doors to have 'U' value of 1.6 w/m².

ELECTRICAL INSTALLATION
Installation to be designed to comply with current I.E.E. requirements and be installed to N.I.C.E.I.C. 17th edition standards. Switches and sockets to be at appropriate heights between 450mm and 1200mm from floor level.
Provide lamps having a luminous efficacy greater than 40 lumens per circuit - watt in all locations. External lighting to have the ability to be automatically extinguished when there is enough daylight, and when not required at night.
Provide mains power smoke detectors with battery over-ride in locations as shown.
Mechanical ventilation to kitchen and utility room to have capacity of 60 litres/second. Mechanical ventilation to shower room and en suite to have capacity of 15 litres/second with 15 minute over-ride.

HEATING AND PLUMBING INSTALLATION
Extend existing gas fired central heating system, or if replaced, to be powered by gas fired condensing combination boiler rated A, with SEDBUK rating in excess of 86%. Temperature controls to be effected by individual thermostatic radiator valves. A timing device will be provided to control periods when the heating system operates. System controls must switch boiler off when heat is not required. All cold water feeds must be directly off the rising main supply. Wash hand basin waste to be 32mm min., bath, shower and sink waste to be 50mm min. 22mm overflows, 75mm deep seal traps. 110mm soil and vent pipe connected to new manhole. Provision should enable efficient operation without excessive boiler firing and primary circuit losses. Installation to be certified by Gas Safe registered plumber.

DRAINAGE - BELOW GROUND
100mm UPVC drainage pipes and fittings. Pipes laid to adequate falls and bedded and surrounded with granular material. Pipework beneath slab to be bedded and surrounded in concrete with minimum of 150mm cover. P.C.C. lintels over pipes where passing through walls, with 50mm space all around and rigid sheet material masking both sides. Manholes to be GRP/ Class B engineering brickwork with medium duty covers and frames. Foul drainage connected to existing foul sewer. Storm drainage taken to existing rainwater gullies, and soakaways minimum 5m from property.

MEANS OF ACCESS
Doorway clear opening widths to be 750mm min. and 800mm min. to corridors 900mm wide. Internal corridors to be 900mm wide min.

Name	D Williams		
Address	159 Swansea Road, Trebanos, Swansea SA8 4BS		
Project	Rear Kitchen and First Floor En Suite Extension		
Scale	1:1250 1:500	Drawing No	DW/19/05