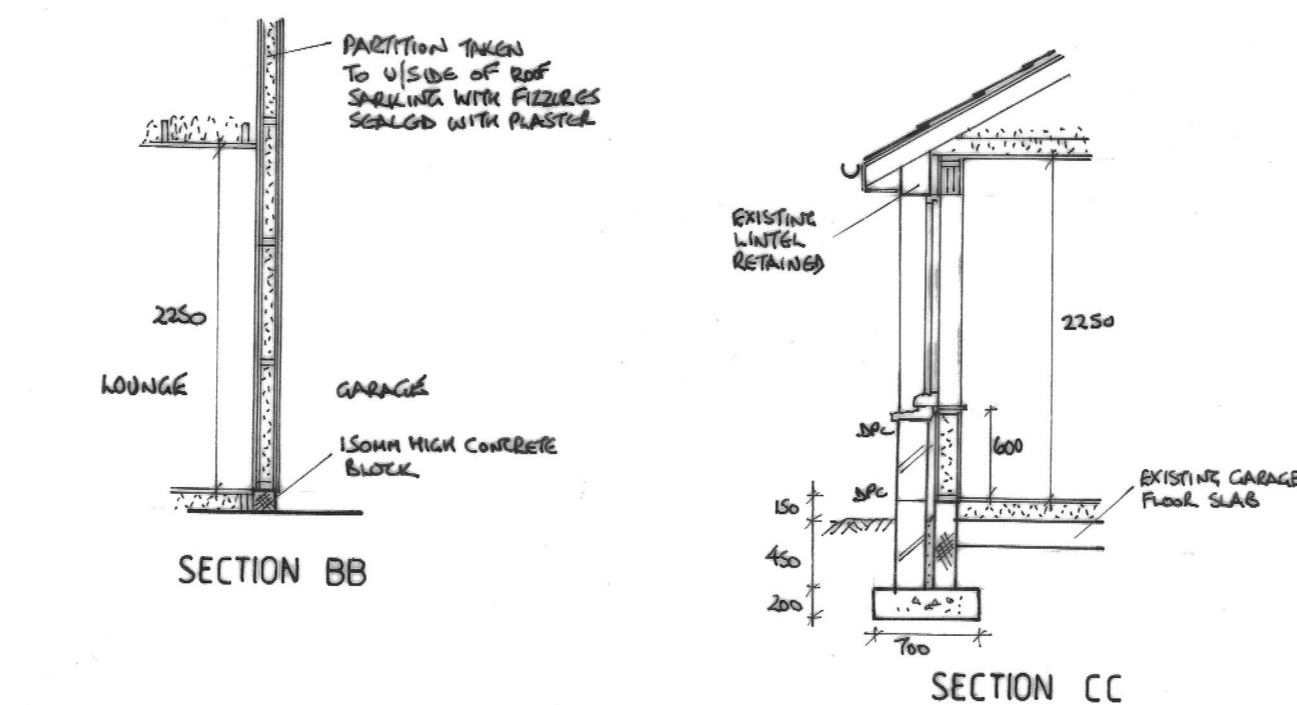


PROPOSED GROUND FLOOR PLAN

- ⊕ Denotes air admittance valve
- ⊕ Denotes carbon monoxide detector
- ⊕ Denotes mechanical vent
- ⊕ Denotes optical smoke alarm



PROPOSED REAR ELEVATION

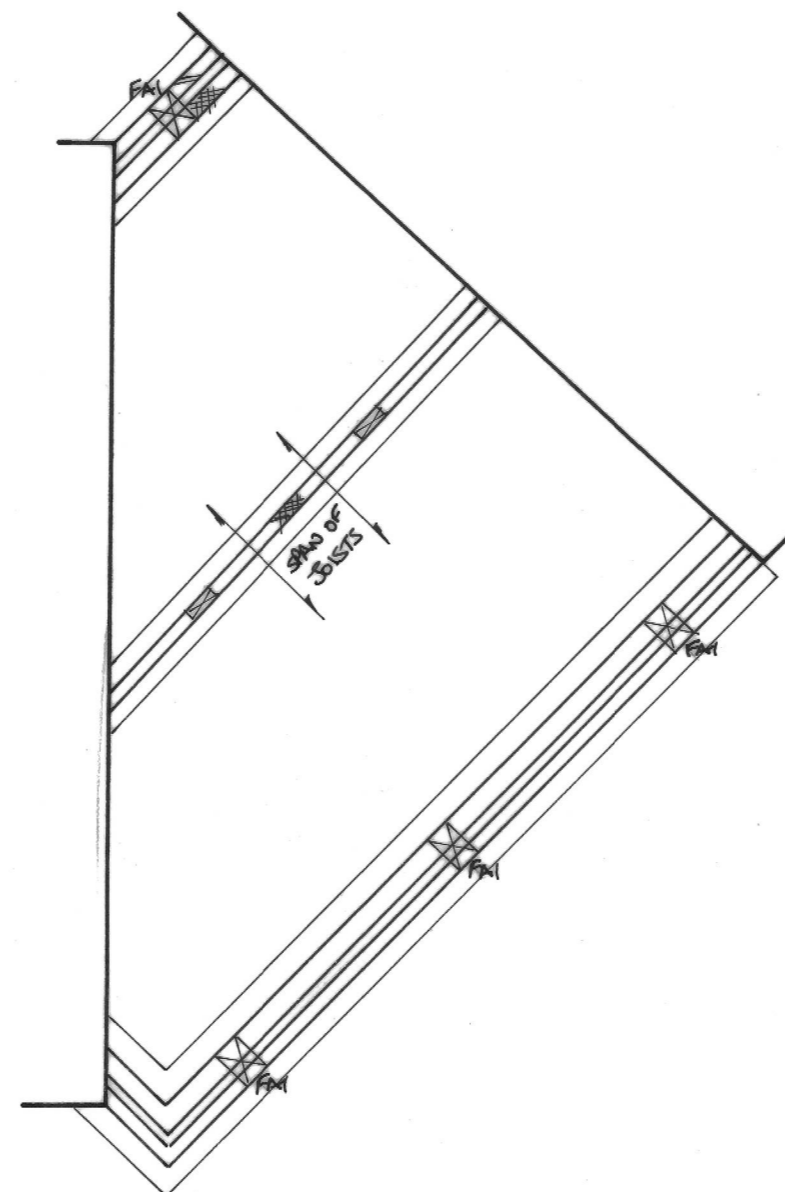
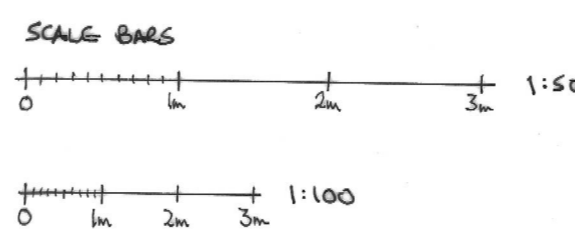


SECTION BB

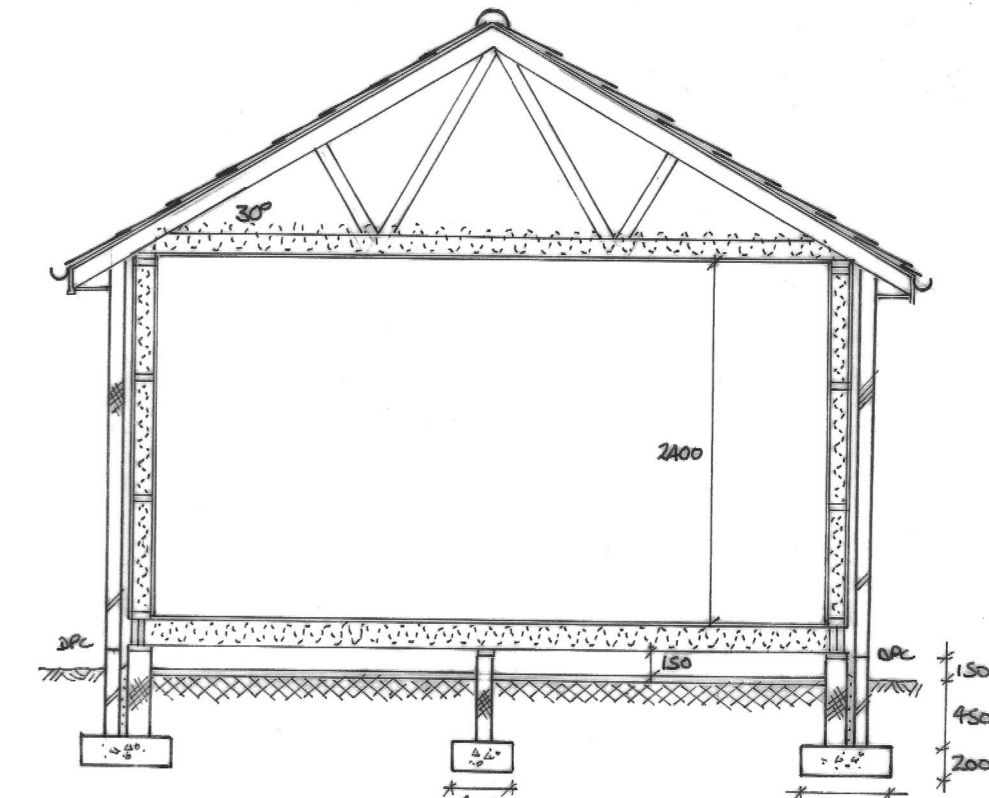
SECTION CC



PROPOSED FRONT ELEVATION



FOUNDATION PLAN



SECTION AA

**GENERAL**  
 Door threshold  
 150x100mm Robeslee type 'C' prestressed concrete lintel over outer leaf of new door opening to utility with 150mm end bearing. 2No 19x47mm header joists over inner leaf resting on 2No 97x45mm cripple studs each side.  
 Window & rear door  
 1800x1050mm upvc framed top hung double glazed window to utility room with 10,000mm<sup>2</sup> trickle vent located in top rail of window. Window to have an internal sill height of 100mm. All new glazing to achieve a U-value of 1.6W/m<sup>2</sup>°C. Opening casement and top hung windows to have restrictors fitted.  
 850x2050mm upvc framed half glazed rear door to have five bolted locking devices.  
 Drainage  
 50mm upvc waste from sink connected to the existing foul drainage system. 75mm deep seal trap to sink with access for rodding at all changes in direction of waste pipe. Air admittance valve installed adjacent to sink fitted in accordance with the manufacturer's instructions.  
 100mm upvc deep flow gutters and 75mm rainwater conductor trapped where necessary and connected to the existing rainwater drainage system.  
 Underground drainage to be 100mm upvc bedded in gravel. Minimum gradient of rainwater pipes to be 18mm/m run.  
 General  
 Catnic CFS steel lintels over new utility room window and door openings with 150mm end bearing. 3No 145x47mm header joists over inner leaf resting on 2No 145x45mm cripple studs each side. Code 4 lead cavity tray at junction of new roof and existing gable wall with 150mm upstand. Code 4 valley gutter to roof installed in accordance with the Lead Guide Book.  
 826x1981mm utility room and lounge doors to have clear opening widths of 775mm.  
 50x47mm fire stops around all new window and door openings and closing cavity at wallhead.  
 Glazing < 800mm above floor level to be toughened/laminated glass in accordance with BS6262 Part4:2005.  
 All new windows and external doors designed to meet the recommendations for physical security in Section 2 of 'Secured by Design'.  
 Windows to have a glazed area > 1/15<sup>th</sup> floor area of new lounge and opening area > 1/30<sup>th</sup> floor area of new lounge.  
 Utility room to be ventilated mechanically by extract fan capable of providing an intermittent extraction rate of 30l/s. Wall mounted fan fitted at a minimum height of 1750mm above floor level with weather/vermin proof grill over outlet.  
 Existing gas fired central heating boiler to be re-sited in utility room by registered 'Gas Safe' central heating engineer.  
 Existing central heating system with water filled radiators to be extended into new rooms.  
 Thermostatic valves fitted to all new radiators.  
 New heating and hot water pipes passing through unheated voids to be insulated in accordance with BS5422.  
 External walls now forming internal walls to be strapped and lined with 12.5mm plasterboard.  
 Any existing drainage passing below new extension to be encased in concrete or lintelled over.  
 Dpc to all sills, heads, jamba and lintels and minimum 150mm above ground level (bonded to existing).  
 Electrical sockets to be minimum 400mm above floor level and minimum 350mm from corners or other obstructions. Electrical light switches to be sited between 900mm and 1100mm above floor level.  
 100% of light fittings to be energy efficient. Optical smoke alarm fitted in new lounge and utility room in accordance with BS EN 14604:2005. Alarms to be interlinked to existing system. Electrical work installed in accordance with BS7671:2018.  
 Carbon monoxide detector sited 1m from boiler and 300mm from any wall in full compliance with BS EN 50291-1:2010. Detector powered by battery designed to operate for the working life of the detector.  
 Drainage laid to the satisfaction of the Local Authority and BS5572 & BS EN 14604:2005. Plasterboard joints to be filled and taped to receive decorative finish.  
 All sizes shown are in millimetres.  
 All finishes to be made good on completion of the works.  
 Contractor to verify all sizes on site prior to the commencement of works.  
 All sizes shown are in millimetres.  
 All finishes to be made good on completion of the works.

**EXTENSION Foundations**  
 600x200mm and 400x200mm concrete strip foundations taken down to depth of existing house foundations or 450mm below ground level whichever is the greater. One-layer A393 fabric reinforcement with 50mm cover to underside of foundation. Grade C35 concrete to be used.  
 Soil  
 Uphilled to ground level with hard dry material, 100mm thick bottoming blinded with sand, 1200 gauge 'Visqueen' dpm and 50mm concrete.  
 Underbuilding  
 300mm cavity wall comprising of 100mm blockwork outer leaf, 60mm cavity and 140mm blockwork inner leaf. 215x75mm air vents with clay cavity liners at 200mm c/cs. 100mm concrete block sleeper wall to take 100x25mm treated wallplate on dpc. Cavity filled to ground level with weak mix concrete.  
 Floor  
 22mm t&g chipboard flooring (V313) on 150x50mm timber joists at 600mm c/cs with 150mm Kingspan Kooltherm K103 insulation board laid between joists supported by 'Netlon'. U-value 0.15W/m<sup>2</sup>°C. Joists supported at existing wall with joists hangers on 150x50mm timber runner rambolted to wall with 10mm resin anchors at 900mm c/cs.  
 Walls  
 100mm facing brick/100mm thermalite block finished with 19mm dash roughcast (to match existing) outer leaf, 50mm cavity and timber frame inner leaf comprising of Kingspan Nilvent .17 breathable membrane on 9mm exterior grade plywood on 140x45mm timber studs at 600mm c/cs with 110mm Kingspan Kooltherm K12 insulation laid between studs on 250-gauge polythene vapour barrier on 12.5mm plasterboard internal finish. U-value 0.22W/m<sup>2</sup>°C. Cavity vented with perpendicular vents top and bottom of wall at 1200mm c/cs. Catnic BT-2 stainless steel wall-ties at 400mm c/cs vertically and 600mm c/cs horizontally. New brickwork/blockwork tied to existing walls with 'Furfix' or equal toothed wallties. Galvanised holding down straps at 1200mm c/cs securing timber kit to substructure brickwork. Timber kit secured to the existing walls with 8mm resin anchors at 500mm c/cs.  
 Roof  
 Marley concrete interlocking roof tiles (to match existing) to suit 30° roof pitch on 38x25mm existing battens on 13x38mm counter battens on one-layer reinforced roofing felt on 18mm sarking on 145x7mm roof trusses at 600mm c/cs with 200mm Kingspan Kooltherm K7 insulation board between joists on polythene vapour control layer with 12.5mm plasterboard ceiling finish. U-value 0.11W/m<sup>2</sup>°C. Trusses to be tied down with stainless steel clips to head binder. 21x250mm red pine facia and 10mm plywood soffit with 25mm continuous vent and fly proof cover. Vented ridge to roof.  
 GARAGE CONVERSION  
 Existing garage door lintel retained in current position.  
 Existing garage door and framed removed and opening built up to leave an internal eill height of 600mm with 215mm facing brick outer leaf (to match existing), 50mm cavity and timber frame inner leaf comprising of Kingspan Nilvent .17 breathable membrane on 9mm exterior grade plywood on 140x45mm timber studs at 600mm c/cs with 110mm Kingspan Kooltherm K12 insulation laid between studs on 250-gauge polythene vapour barrier on 12.5mm plasterboard internal finish. U-value 0.22W/m<sup>2</sup>°C. Cavity vented with perpendicular vents top and bottom of wall at 1200mm c/cs. Catnic BT-2 stainless steel wall-ties at 400mm c/cs vertically and 600mm c/cs horizontally. New brickwork tied to existing walls with 'Furfix' or equal toothed wallties.  
 Wall to be built off 700x200mm concrete strip foundation with one-layer A393 fabric reinforcement to bottom with 50mm cover. New timber frame inner leaf tied to existing walls with 8mm diameter resin anchors at 500mm c/cs vertically.  
 Separating wall to be 100x50mm timber stud at 600mm c/cs with 100mm Kingspan Kooltherm K12 insulation between studs and finished both sides with two layers 12.5mm plasterboard. Wall built off 140mm concrete block and taken to underside of roof sarking. Any fissures to be filled with plaster.  
 1200x150mm upvc framed double glazed top hung rear window to new lounge with 6,000mm<sup>2</sup> trickle vent located in top rail of window. Window to have an internal eill height of 900mm.  
 2250x1450mm upvc framed double glazed front window to new lounge with 600mm wide opening side casements and 6,000mm<sup>2</sup> trickle vent located in top rail of window. Window to be suitable for fire escape purposes having a clear opening width and height of 450mm and a minimum opening area of 0.33m<sup>2</sup>.  
 Remaining external walls of garage to have timber frame inner leaf comprising of Kingspan Nilvent .17 breathable membrane on 9mm exterior grade plywood on 140x45mm timber studs at 600mm c/cs with 110mm Kingspan Kooltherm K12 insulation laid between studs on 250-gauge polythene vapour barrier on 12.5mm plasterboard internal finish. U-value 0.22W/m<sup>2</sup>°C.  
 New floor to be 22mm t&g chipboard flooring (V313) on Polythene separation layer on 125x50mm timber runners at 600mm c/cs with 200mm Kingspan Thermafloor TF70 insulation laid between runners to give a U-value of 0.18W/m<sup>2</sup>°C.  
 Existing roof to have 200mm Kingspan Kooltherm K7 insulation board between joists on polythene vapour control layer with 12.5mm plasterboard ceiling finish. U-value 0.11W/m<sup>2</sup>°C.

Title  
 PARTIAL GARAGE CONVERSION AND  
 EXTENSION TO DWELLING HOUSE

Client  
 MR & MRS S BOYLE

Locus  
 98 JACKSON DRIVE STEPPS

Dwg No SB/02 Scale 1:50 1:100