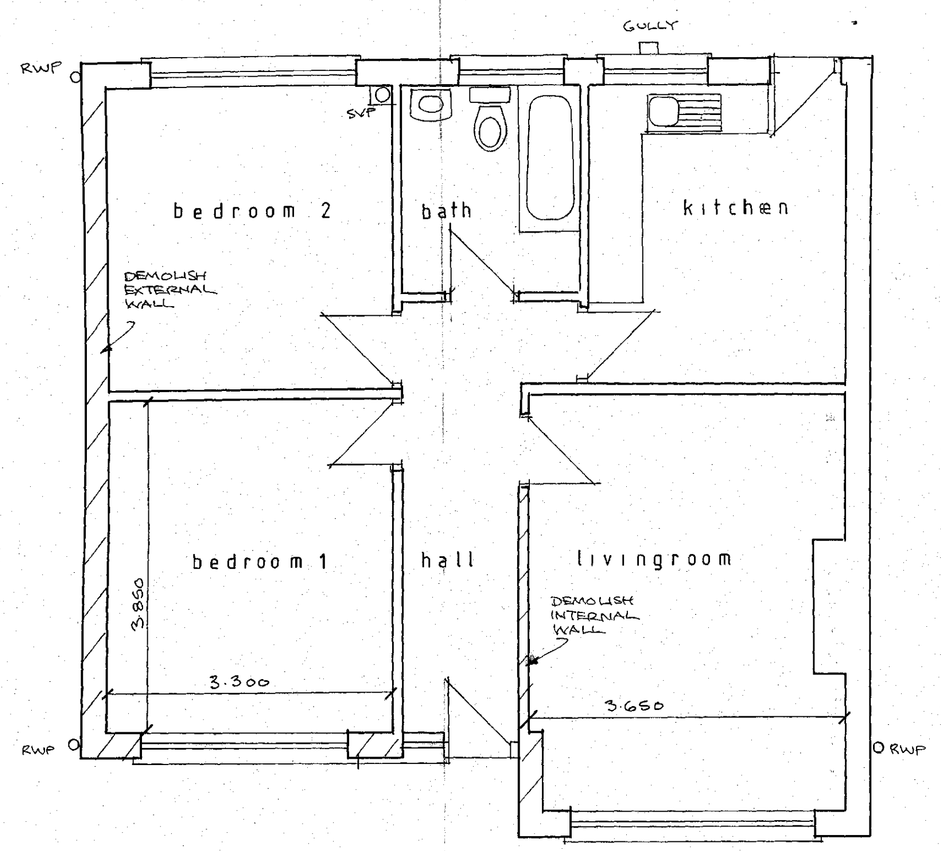
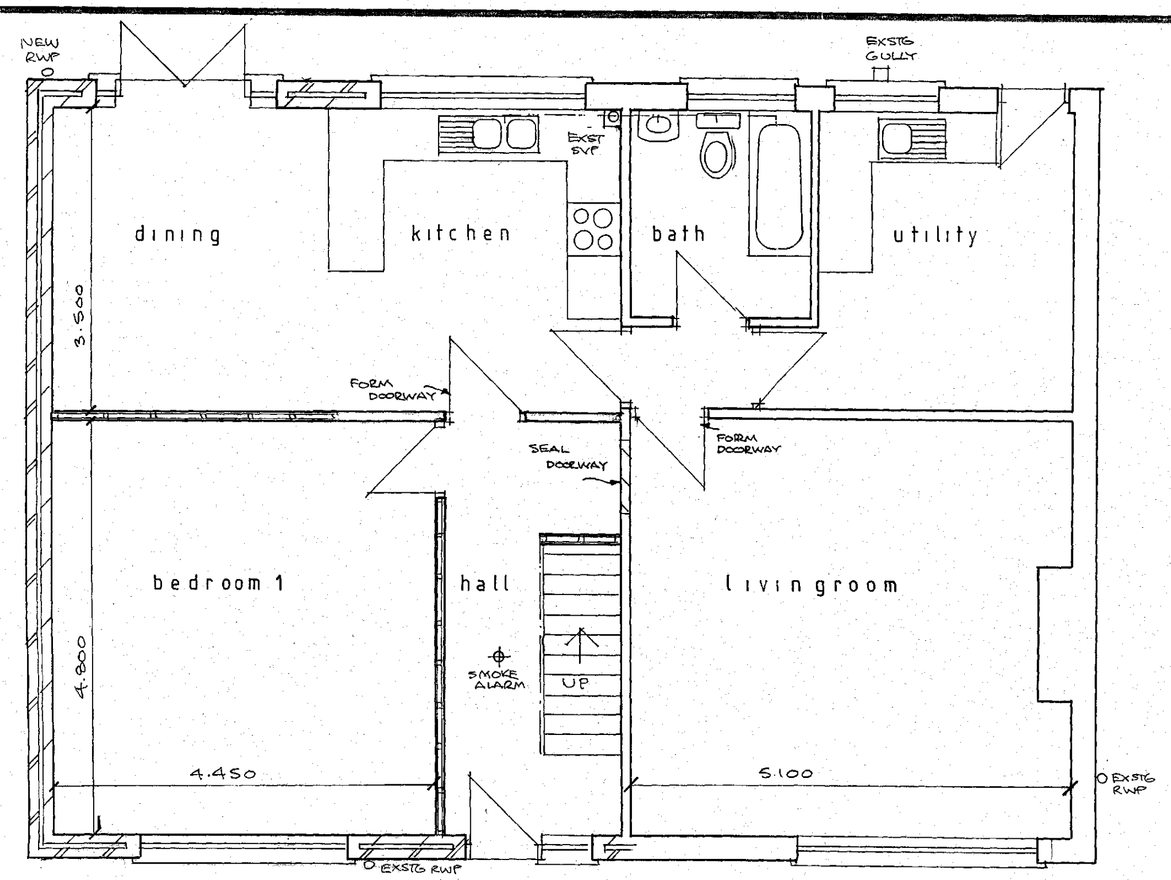
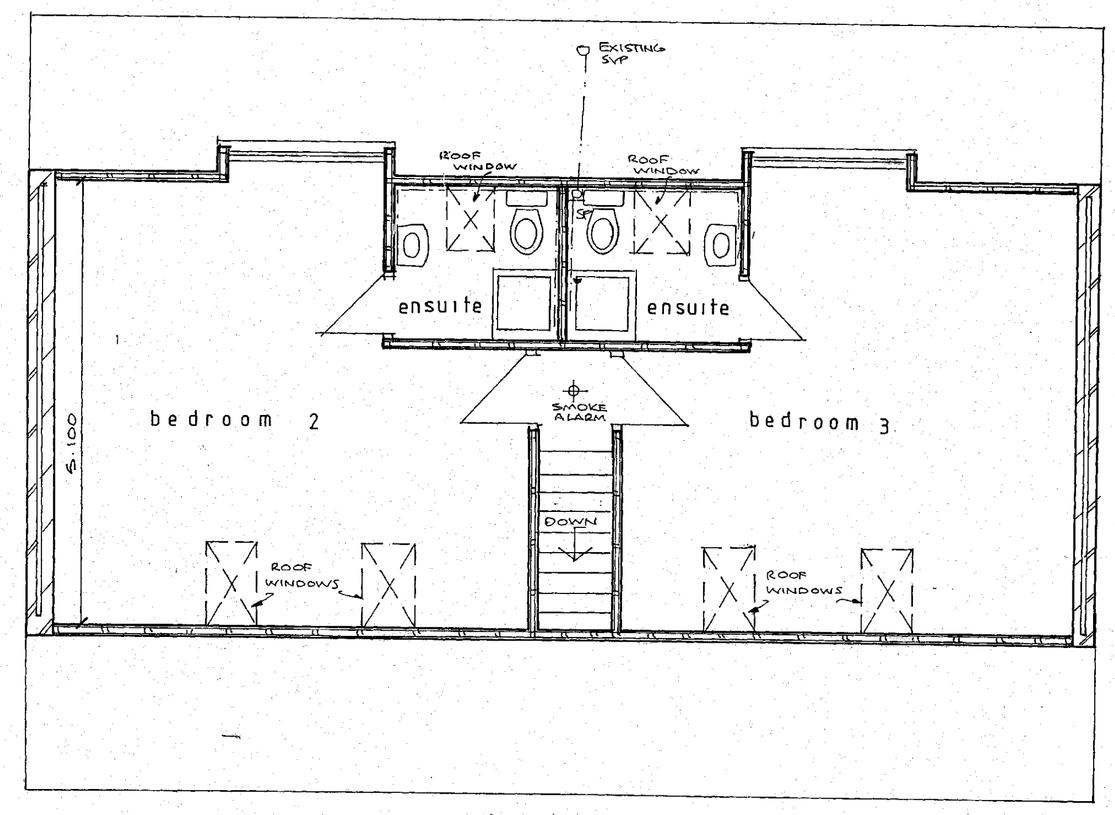


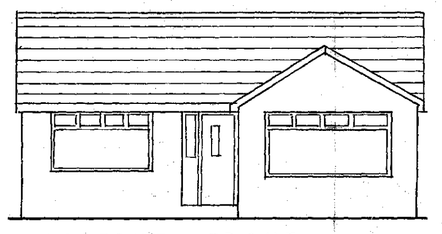
EXISTING GROUND FLOOR



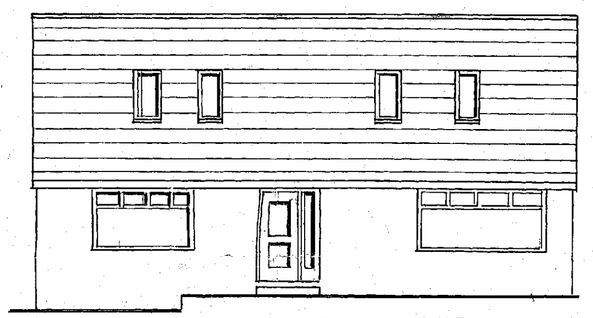
PROPOSED GROUND FLOOR



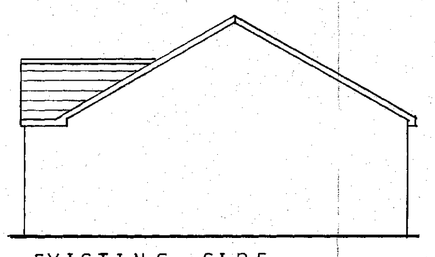
PROPOSED FIRST FLOOR



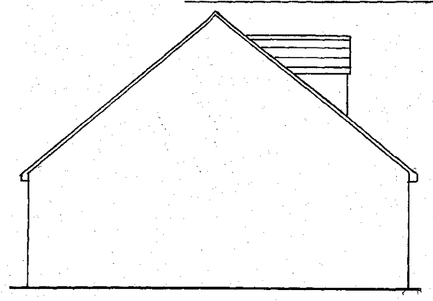
EXISTING FRONT



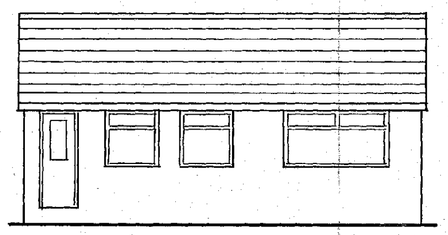
PROPOSED FRONT



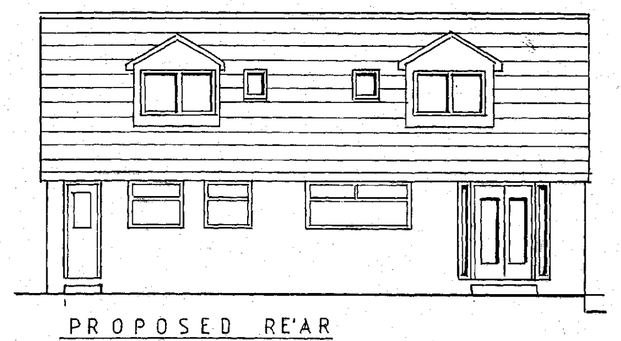
EXISTING SIDE



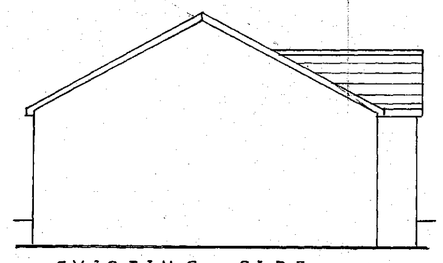
PROPOSED SIDE



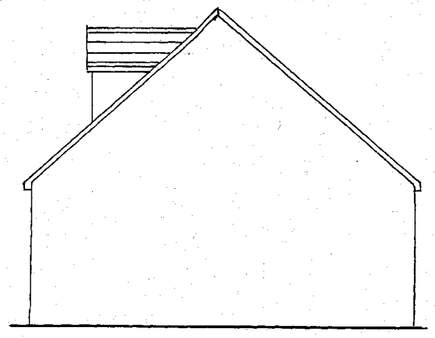
EXISTING REAR



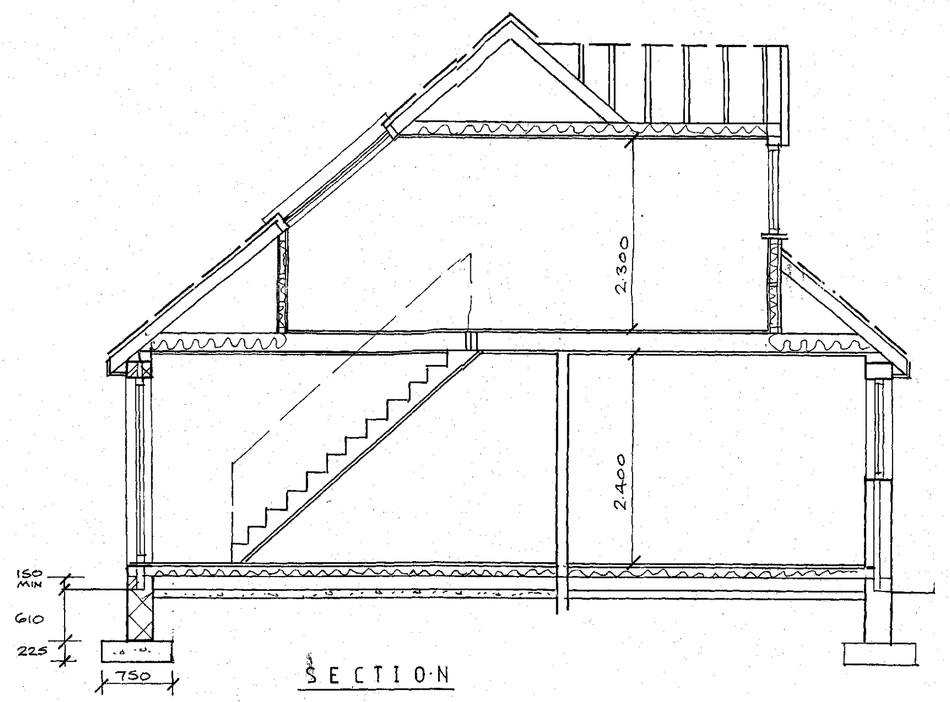
PROPOSED REAR



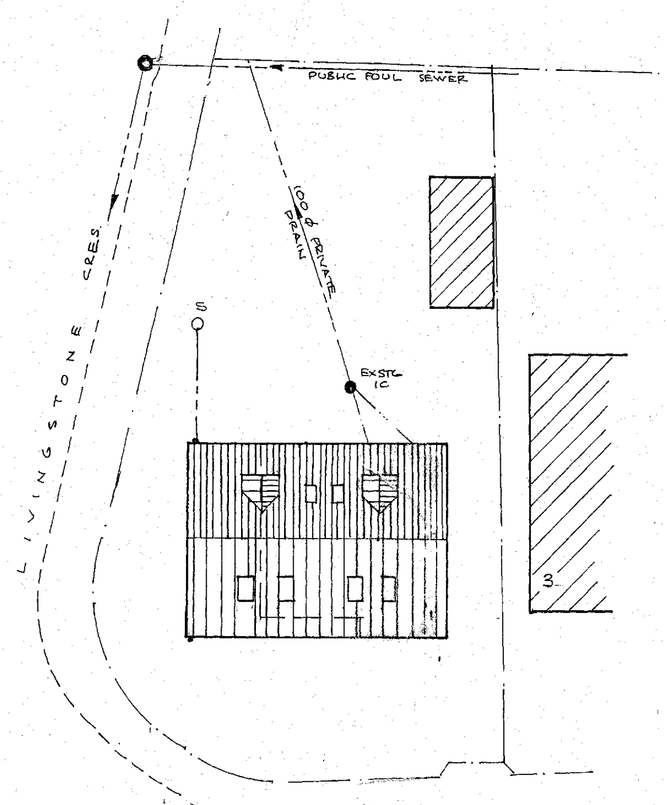
EXISTING SIDE



PROPOSED SIDE



SECTION



SITE 1/200

MAIN ROOF: Remove existing roof and retain tiles for reuse; new roof to consist reusing existing roof tiles on front elevation to retain matching appearance with neighboring properties and new interlocking concrete roof tiles to rear elevation and dormer roofs; tiles laid on 38 x 25 tiling battens on underlay felt to BS EN 13707; proprietary manufacture trussed rafters at 600 centres and 40 degree pitch designed, manufactured and installed in accordance with BS 5268 Part 3: 1985,; trusses to be Attic type room in roof and Dormer type room in roof with min 197 x 47 top and ceiling chords and 145 x 47 internal chords; compound trusses to trim roof around stairwell and dormers; all timber in trusses to be Class M50 to BS 4978; **Calculations to be prepared by truss manufacturer and submitted to Local Building Inspector for approval 28 days prior to installation on site;** trusses fixed both ends to 100 x 75 treated wallplates fixed to blockwork at 1800 centres with 30 x 5 x 1000 once bent galvanised m.s.straps; 30 x 5 galvanised mild steel anchors in lateral restraint to gables at max 1800 centres built into wall and nailed across first 3 trusses on top and bottom chord members; 100 x 50 ceiling binders at each internal chord; sloping roof insulation to stairwell to be 150 thickness of Kingspan Kooltherm K7 pitched roof board in two layers with first 75 thick layer laid on rafters under 38 x 38 counter battens and second layer laid between rafters (U value of 0.16 W/m^{2}K); roof void to be insulated with 300 Rockwool mineral fibre; insulation in two layers with first 150 thick layer laid between ceiling ties and second layer laid at 90 degrees (U value of 0.16 W/m^{2}K); 10mm foil backed plasterboard ceiling with 38 x 38 noggins at edges; 112 x 63 square section gutters to give a minimum fall of 1 in 100 and to discharge to 38 square section downpipes; PVCu soffit, fascia and soffit

DORMER ROOF: tiles, felt and insulation all as above on 100 x 38 rafters in Strength Class C16 timber at 450 centres; 97x 38 ceiling joists Strength Class C16 timber at 450 centres; 10mm foil backed plasterboard ceiling with 5mm plaster finish; 200 x 19 PVCu fascia board with 110 x 63 square section gutter to discharge to 50 square downpipe to main roof

NEW CAVITY WALLS: 112.5 thick external leaf in brickwork in colour to be approved by Planning Officer to match existing bungalow; 100 cavity and 100 Celcon 3.6 N/mm^2 standard grade insulation block inner leaf (or similar approved) with 5mm plaster skim finish; full fill cavity wall insulation of Rockwool mineral fibre (U value of 0.26 W/m^{2}K); wall ties 750 horizontally, 450 vertically, and 225 vertically at openings; cavities closed at reveals, cills and eaves and cavities to be continuous; Kingspan Kooltherm insulated cavity closers at openings fixed in accordance with manufacturer's instructions; brickwork and blockwork bonded to existing walls alternate courses; wall below ground level to be in 3.6 N/mm^2 trench blocks; Catnic Cougar CH90/100 open back lintels to openings with min 150 end bearing; tray dpc over lintels with weep holes in brickwork; dpc to be min 150 above adjacent ground level and to be tied into existing dpc; **Cavity walls built off concrete strip foundation to be minimum depth and size shown on section but will be taken down to depth and suitable strata as required by Part A of Approved Document to Building Regulations and local Building Inspector**

NEW GABLE WALL: New wall built up off existing cavity wall in 112.5 thick external leaf in brickwork in colour to be approved by Planning Officer and to match existing house; 50 cavity and 100 Celcon 3.6 N/mm^2 standard grade insulation block inner leaf with 5mm plaster skim finish; full fill cavity wall insulation in Rockwool mineral fibre wall ties 750 horizontally, 450 vertically, and 225 vertically at openings; **Foundations of existing walls to be exposed for inspection by Local Building Inspector to confirm suitability to carry additional loads**

DORMER CHEEKS: Brown PVCu interlocking board cladding on 38 x 25 battens with RSL Easy Soaker to battens; 100 x 50 Strength Class C24 timber soft wood studs fixed vertically at 400 centres with head and sole plates and intermediate noggins fixed at 600 bearing on Dormer roof trusses; 12mm thick structural plywood glued and screwed to the full height and width of the room side face of the stud wall and finished with 15mm plasterboard and skim; stud wall insulated with 60 thickness of Kingspan OPTIM-R Dormer System rigid vacuum insulation panel (U value 0.20 W/m^{2}K)

Attic Studs: 100 x 50 timber with 10mm foil backed plasterboard one side with 5mm plaster skim finish to room side and 18 thickness of external grade plywood to roof space side; walls insulated with 80 Kingspan Thermawall TW56 insulation board fixed between studs

Stud partition wall: 75 x 50 timber with 10mm plasterboard and 5mm plaster skim finish both sides; 25 thickness of 10kg/m^3 mineral fibre bats secured to stud work; floor joists doubled up under studs

FIRST FLOOR: 25 ptg boarding on truss bottom chords; 30 x 5mm lateral restraint straps at 1800 centres built into blockwork and nailed across first three bottom chords with timber noggins to brace straps; sound insulation of 10 thickness of 45kg/m^3 density sound insulation quilt laid on ceiling between bottom chords; 10mm plasterboard ceiling with 5mm plaster finish

NEW GROUND FLOOR: 25 ptg boarding on 170 x 50 joists in Strength Class C16 timber at 450 centres built into load bearing walls both ends and on sleeper wall to limit span to 3200; sleeper walls to be 112.5 thick honeycombed brickwork built off 450 x 150 concrete foundation with dpcs as detailed above; 30 x 5mm lateral restraint straps at 1800 centres built into blockwork and nailed across first three joists with timber noggins to brace straps; subfloor vented with 225 x 150 airbricks at 900 centres starting 450 from corners; airbricks boxed through cavity with fray dpc over; 110 thick Celotex tuff-R zero GA3000 insulation board fixed between joists on 25 x 25 timber battens screwed to joists (U value of 0.22 W/m^{2}K); 100 oversite concrete at or above adjacent ground level with min 150 clearance below bottom of joists

Plysolene Plyload Radon and methane gas dpm on sand blinding under oversite concrete, Radon barrier installed in accordance with manufacturer's instructions and to satisfaction of Local Building Inspector; gas dpm to extend to outer leaf with Plyload gas barrier cavity trays

STAIRCASE: 850 wide, 41 degree pitch timber staircase with 200 risers and 230 treads; headroom minimum 2000 measured vertically above pitch line and 1500 measured at right angles to pitch line; balustrade fixed to open side of stairs at ground floor level 1000 above pitch line with vertical spindles fixed at 100 centres; risers ex 25 timber, treads ex 38 timber and strings ex 250 x 38 timber; 10mm foil backed plasterboard ceiling with 5mm plaster finish to underside

VENTILATION: New windows to be 24mm Argon filled double glazed PVCu units fitted with low E coated glass; opening area minimum 5% floor area of room served with "trickle" ventilation 8000 mm^2 in area; escape windows to first floor bedrooms to have unobstructed openable area minimum 450 high x 450 wide; bottom of openable area min 1100 above floor level; Toughened safety glazing complying with BS6206:1981 to French windows and to glazing between finished floor level and 800 in windows and between finished floor level and 1500 in doors; PVCu doors to have min U value of 1.8 W/m^2 K

Velux roof windows: Ensuites to have Velux GPU 0050 top hung windows 550 x 980mm and bedrooms to have 2 No. 550 x 1180 Velux GPU 0050 top hung windows (or similar approved): roof windows to have 16mm double glazed units with low E coating glass (U-value 1.3 W/m^{2}K); roof windows fixed between trussed rafters trimmed in accordance with manufacturer's instructions using proprietary fixing kits and flashings

Ensuite: Velux window has some part of opening light 1750 above floor level and mechanical extractor fan min 15 litres/sec intermittent extraction rate

Utility room: vented with mechanical extractor fan of 30 litres/sec intermittent extraction rate

Kitchen: vented with mechanical extractor fan of 60 litres/sec intermittent extraction rate or 30 litres/sec incorporated in cooker hood

ELECTRICS: All electrical work to be carried out by "Competent Person Scheme" member who is qualified to complete a BS 7671 Installation Certificate; Certificate to be copied to Local Building Inspector; new lights to have energy efficient fittings

Smoke detectors/alarms: Optical type smoke detectors/alarms to landing and hallway fitted in accordance with BS 5839-6:2004; detectors to be wired to mains electricity with separate fuse in fuse box; 3 hour battery backup to detectors; all alarms interconnected so that all sirens sound if one detector is triggered

DRAINAGE: Ensuites to discharge to new internal 100 diameter SP which is to be connected through roof space to existing internal SVP; top of SVP removed and SP fitted with a Ventapipe 100 (or similar approved) air admittance valve to comply with requirements of BS EN 12380:2002; 75 deep seal trap to all appliances with 32 waste to hand basins, 38 waste to showers and 100 waste to WCs; no waste connected to SP within 200 of WC connection; new kitchen sink to existing Soil pipe via 38 waste and anti-syphon trap; new rainwater gully to serve rear of bungalow connected to 1m^3 soakaway situated min 5 metres from any structure; soakaway filled with clean hardcore free from vegetable and flaky material; **percolation test carried out to satisfaction of Local Building Inspector to prove suitability of ground;** all new drain connections made using 110 diameter PVC pipes with patent push fit flexible joints laid to a minimum gradient of 1 in 40

PLUMBING: Central heating and domestic plumbing insulated in accordance with requirements of Building Regulations; Thermostatic radiator valves to all new radiators; Hot and cold water to wash hand basin and bath with hot tap located on left hand side of basin; All work on gas fire and boiler installation to be completed by Gas Safe registered tradesmen in compliance with Part J of Building Regulations to satisfaction of Local Building Inspector

PROPOSED EXTENSION and ROOMS in ROOFSPACE at No. 1 RUSSELL CLOSE, MONK BRETTON, BARNSLEY

SCALE: 1/50th