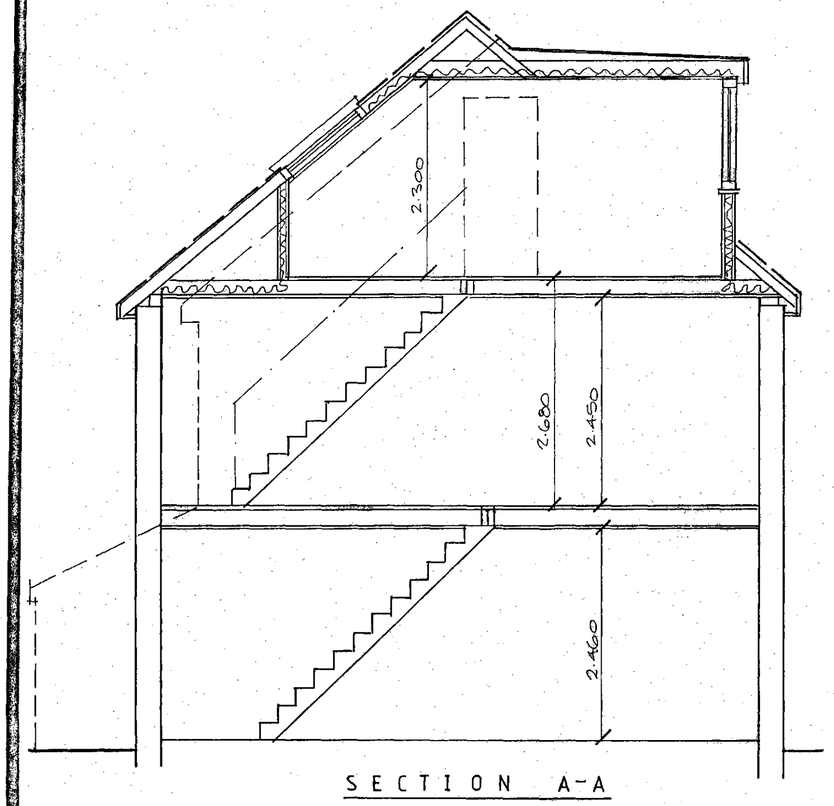
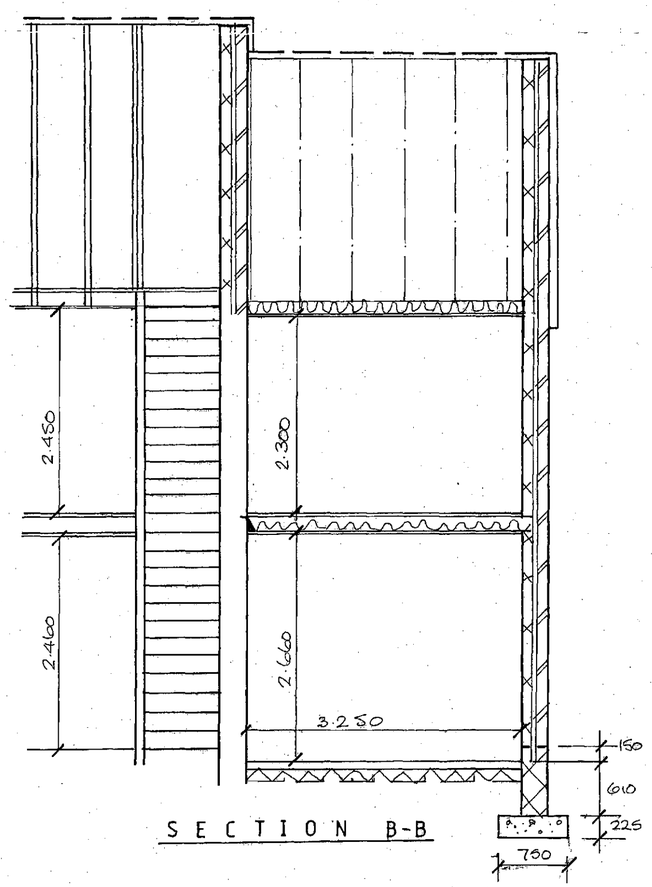



SECTION A-A




SECTION B-B

## ATTIC BEDROOM

**PITCHED ROOF**: Remove existing hipped roof and replace with new roof to consist of Redland "Rosemary" Classic clay roof tiles laid on 38 x 25 tiling battens on underlay felt to BS EN 13707; proprietary manufacture trussed rafters at 600 centres at 40 degree pitch designed, manufactured and installed in accordance with BS 5268 Part 3: 1985; trusses to be "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 stair well and dormer windows; 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 nailed 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 gable 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 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); 12.5 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:** Bauder Thermoplan T SV 12 single ply non-bituminous waterproof membrane on Kingspan dormer insulation system consisting of 25 thick Kingspan Thermaroof TR27 LPC/FM overlay, 50 thickness of Kingspan Optim-R rigid vacuum insulation panel on vapour control membrane of coated roofing felt complying with Type 3B to BS 747:2000 on 18 plywood decking (U value of 0.16 W/m$^2$K); roof restrained laterally at midpoint using 30 x 5 galvanised mild steel straps nailed across first 3 roof ties; 25 to 0 tilting fillets nailed to joists; membrane turned up fillets at roof edges and under existing roof covering minimum 230; 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 pitched roof

**NEW GABLE WALL:** New wall b 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**: Redland "Rosemary" Classic clay roof tiles on 50 x 25 battens with RSL Easy Soaker to battens; 100 x 50mm C24 soft wood studs fixed vertically at 400mm ctrs with head and sole plates and intermediate noggins fixed at 600mm bearing on Dormer roof trusses; 12mm thick structural plywood glued & screwed to the full height & width of the room side face of the stud wall and finished with 15 mm plasterboard and skim; stud wall insulated with 60 thickness of Kingspan OPTIM-R Dormer System rigid vacuum insulation panel (U value 0.20 W/m2K);

**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

**STAIRCASE:** 850 wide, 41.5 degree pitch timber staircase with 203 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 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 servedwith "trickle" ventilation 8000 mm$^2$ in area; Escape windows to have unobstructed openable area min 0.33 sq.m in area and minimum 450 high x 450 wide; bottom of openable area min 1100mm from floor

**Velux roof windows** No. Velux GPU 550 x 1180 top hung escape type windows (or similar approved), with 16mm double glazed units with low E coating glass (U value of 1.4 W/m$^2$K); roof windows fixed between trimmed rafters in accordance with manufacturer's instructions using proprietary fixing kits and flashings

Ceilings to ground and first floor rooms to be provided 30 minute fire resistance by double boarding with12.5mm plaster board with: 5mm plaster skim finish

**Smoke detectors/alarms:** Optical type smoke detectors/alarms to landings 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

Half hour fire resistant doors to all internal doors (except bathroom and ensuite) including between garage/kitchen; fire doors to be self-closing onto 25mm rebates; min 150 max 200 step down into garage from kitchen

Stud wall to be built in front of existing chimney breast in second floor; studwork frame attached to the ceiling and floor but not fixed to the original wall; 10kg/m$^3$ mineral fibre lining inside cavity tacked between studs with two layers of plasterboard over; perimeter and all other sound paths sealed with flexible acoustic sealant

## EXTENSION

**ROOF**: Redland "Rosemary" Classic clay roof tiles as existing roof laid on 38 x 25 tiling battens on underlay felt to BS EN 13707; (reuse tiles removed from existing roof on front and side); verge and eaves tiles twice clipped; proprietary manufacture trussed rafters at 600 centres at 40 degree pitch designed, manufactured and installed in accordance with BS 5268 Part 3:1985; trusses to have min 127 x 38 top and internal chords and min 147 x 38 ceiling chords; all timber in trusses to be Grade TR26 to BS EN 519:1995; trusses nailed 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; 100 x 25 diagonal wind bracing to underside of trusses; 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 each top and bottom chord member; 100 x 50 ceiling binders at 1800 centres; 13mm foil backed plasterboard ceiling with 38 x 38 noggins at edges; insulation to roof space to be 300 Rockwool mineral fibre; insulation in two layers with first 150 thick layer laid between ceiling ties and second layer laid at 90 degrees, ventilators at soffit to give an equivalent area as 12mm continuous air gap; **Calculations to be prepared by truss manufacturer and submitted to Local Building Inspector for approval 28 days prior to installation on site**

**OFF SHOT ROOF/CANOPY:** tiles, battens and felt all as main roof above on 125 x 38 rafters at 450 centres at 32.5 degree pitch; rafters to bear on wallplate over garage door and on 225 x 75 timber beam supported on 100 x 100 timber posts to canopy; canopy posts built into 340 x 340 x 600 high brick pillars on 150 thick x 450 x 450 concrete foundations to canopy; as other end of rafters supported on 150 x 75 timber bearer rawlbolted to house wall other end; Code 4 lead flashing lapped under roof coverings min 230 and turned up house wall min 150 and tucked in; rainwater goods as above

**CAVITY WALLS:** 112.5 thick external leaf in brickwork in colour to be approved by Planning Officer and to match existing house; 100 cavity and 100 Celcon 3.6 N/mm$^2$ standard grade insulation block inner leaf with 5mm plaster skim finish; partial fill cavity wall insulation to be 50mm Kingspan K8 cavity board insulation fixed to block side of cavity using double drip type retaining disc/clip installed drip downward (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 using proprietary bonding strips fixed to existing wall; wall below ground level to be in 3.6 N/mm$^2$ trench blocks; Catnic Cougar CG70/100 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**

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

**GARAGE FLOOR**: 150 compacted thickness of selected hardcore, 25 sand blinding, 1200 gauge dpm, 85 thick Kingspan Thermafloor TF70 urethane insulation board and 100 structural concrete (U value 0.22 W/m$^2$K); dpm tied into dpc; floor finished 300 below house floor level

**FIRST FLOOR:** 25 ptg boarding on 170 x 47 joists in in class C16 timber at 450 centres built into loadbearing walls one end and hung off heavy duty wall hangers fixed to existing wall other end; 30 x 5mm lateral restraint straps at 1800 centres built into brickwork and nailed across first three joists with timber noggins to brace straps; 12.5mm Promat "Supalux" fire resistant boarding to ceiling with 80 thick Kingspan Kooltherm K3 zero ODP rigid urethane insulation board fixed between joists on 25 x 25 timber battens screwed to joists to achieve a U walue of 0.22 W/m$^2$K; floor over garage also to have sound insulation consisting of 10 thickness of 45kg/m$^3$ density sound insulation quilt laid between joists

**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; windows to have "trickle" ventilation 8000 mm$^2$ in area;

**Ensuite:** vented with window having some part of opening light 1750 above floor level together with mechanical extractor fan of min 15 litres/sec capacity capable of intermittent operation with 15 minute overrun

**STEEL BEAMS**: 2 No.203mm x 102mm x 23 kg/m U.B.s bolted together with M24 Grade 8.8 bolts with tubular steel spacers over bolts; beams to bear on 150 long x 215 deep x 100 wide concrete padstone in Grade C30 concrete both ends; beams fire protected with 12.5mm Promat "Supalux" fire resistant boarding; **Calculations for steel beams submitted for approval**

2 No. Naylor Spanlite R6 prestressed concrete lintels to be fixed where wall removed to bathroom with min 150 end bearing

## GENERAL:

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

**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; (40%) of new lights to (utility room and study) to have energy efficient fittings

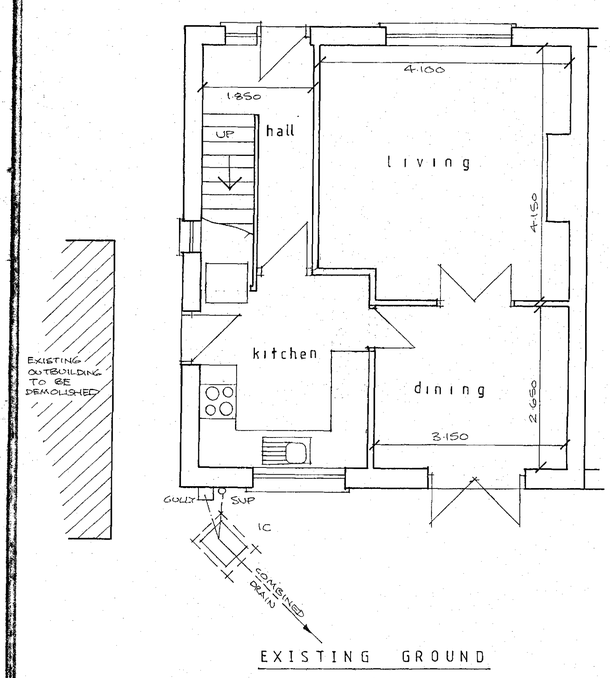
**DRAINAGE:** Ensuite to discharge to existing external 100 diameter SVP; 75 deep seal trap to all appliances with 32 waste to hand basin, 38 waste to shower and 100 waste to WC; no waste connected to SVP within 200 of WC connection; new rainwater gully at front and to 1 m$^3$ soakaways situated min 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; any drains passing under extension to be protected by taking foundations below level of pipework with concrete lintel to support walls; all work to satisfaction of Local Building Inspector;

**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

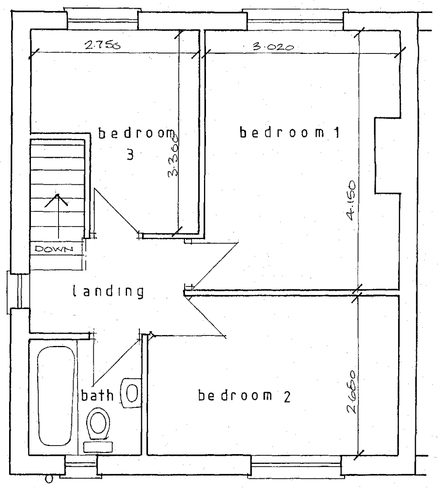
# DRAWING No2 OF 2 (SECTIONS and NOTES)

# PROPOSED TWO STOREY EXTENSION at SIDE, SINGLE STOREY EXTENSION at REAR and ROOM in ROOFSPACE at No. 79 GRAY ST, ELSECAR, BARNSLEY, S74 8JR

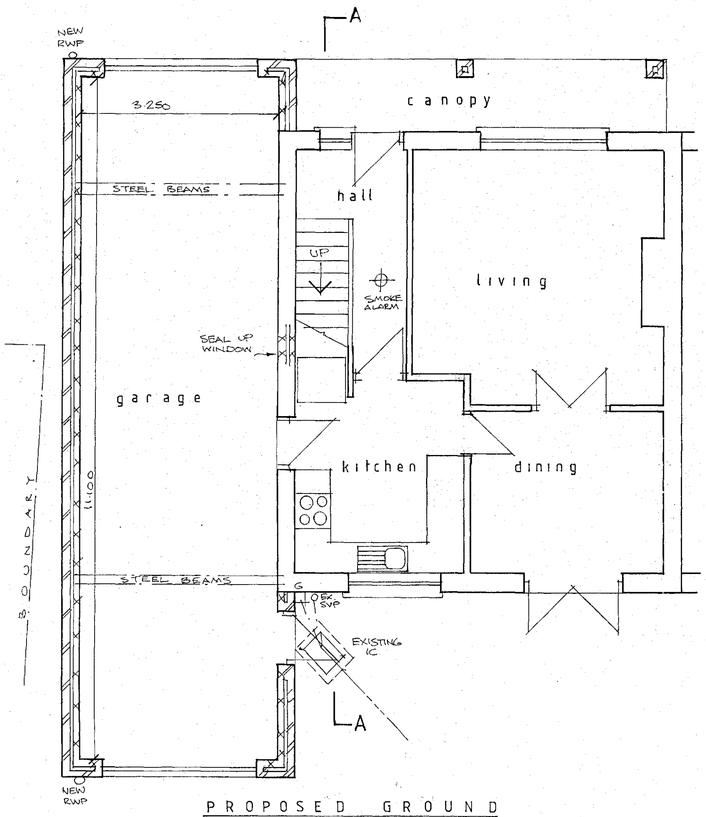
## SCALE 1/50th



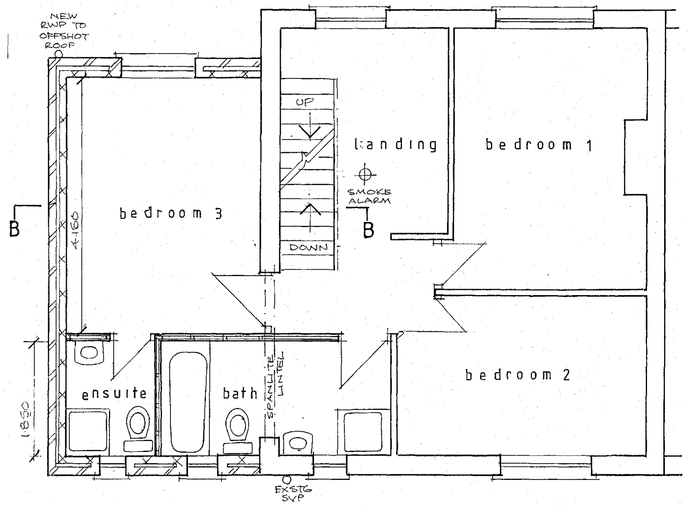

EXISTING GROUND




EXISTING FIRST




PROPOSED GROUND




PROPOSED FIRST

Roof to be Redland "Rosemary" Classic clay roof tiles as existing roof

Walls in brickwork in colour to be approved by Planning Officer and to match existing house

Windows and doors to be double glazed PVCu units

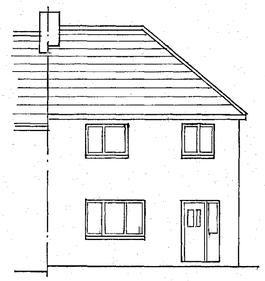
No alterations to boundary walls or access to highway

**DRAWING No.1 OF 2 (PLANS, ELEVATIONS and SITE PLAN)**

**PROPOSED TWO STOREY EXTENSION at SIDE, SINGLE STOREY EXTENSION at REAR and ROOM in ROOFSPACE at No. 79 GRAY ST, ELSECAR, BARNSLEY, S74 8JR**

**Drawing No. 1 (Plans, Elevations and Site Plan)**

**SCALES 1/50th and 1/100th**



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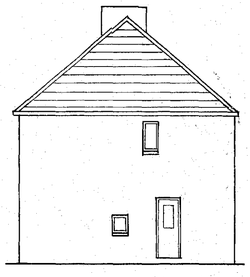
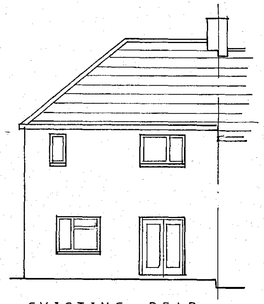
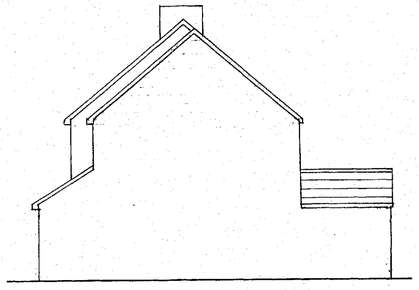


EXISTING SIDE



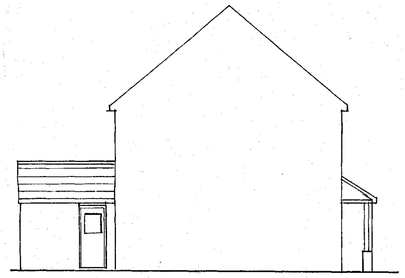
EXISTING REAR

PROPOSED FRONT

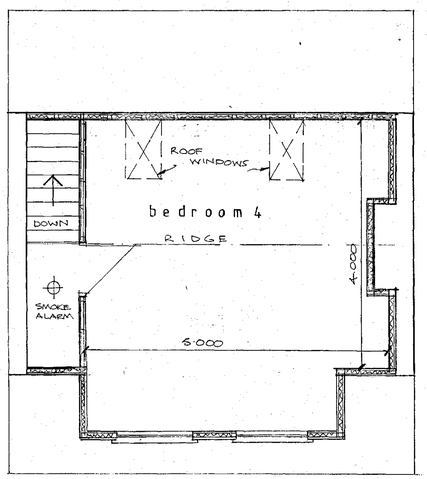


PROPOSED SIDE

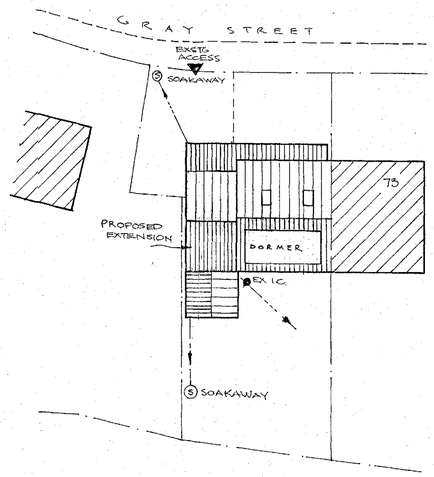
PROPOSED REAR



PROPOSED SIDE




PROPOSED SECOND FLOOR




SITE PLAN 1/200