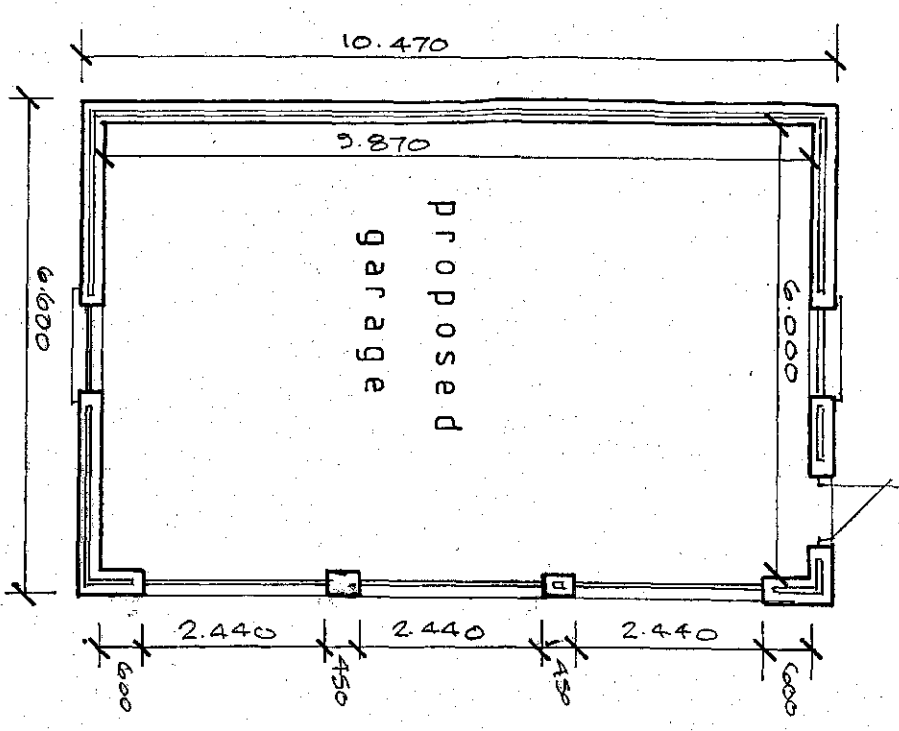
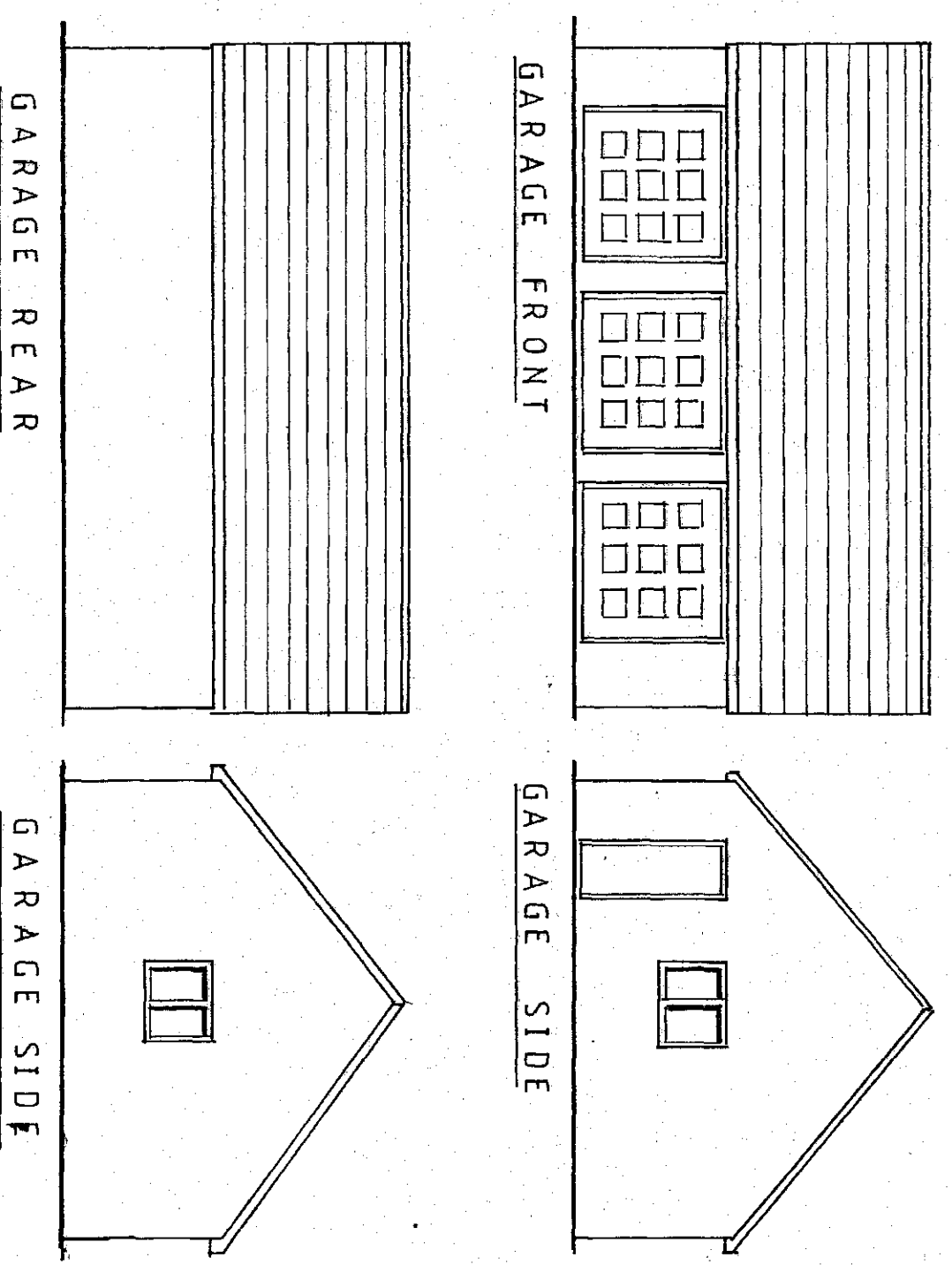
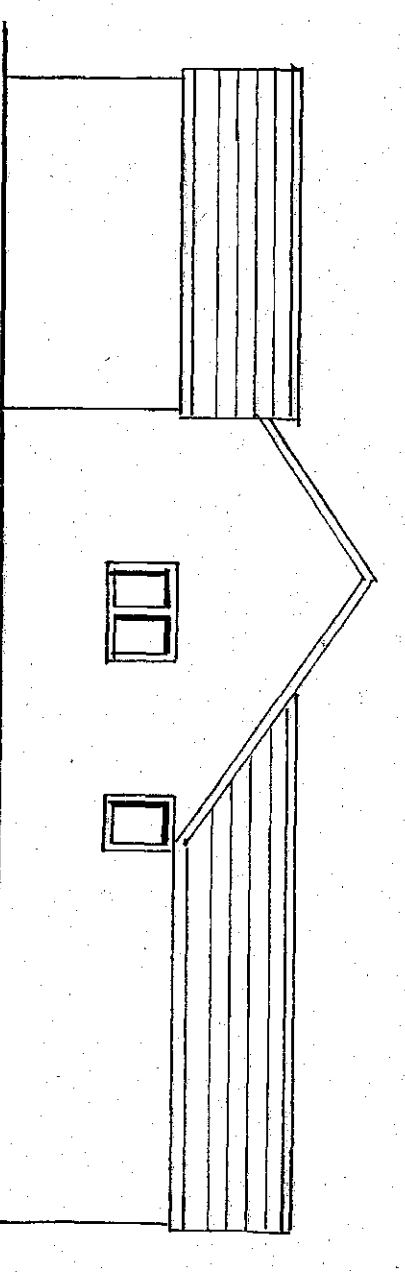
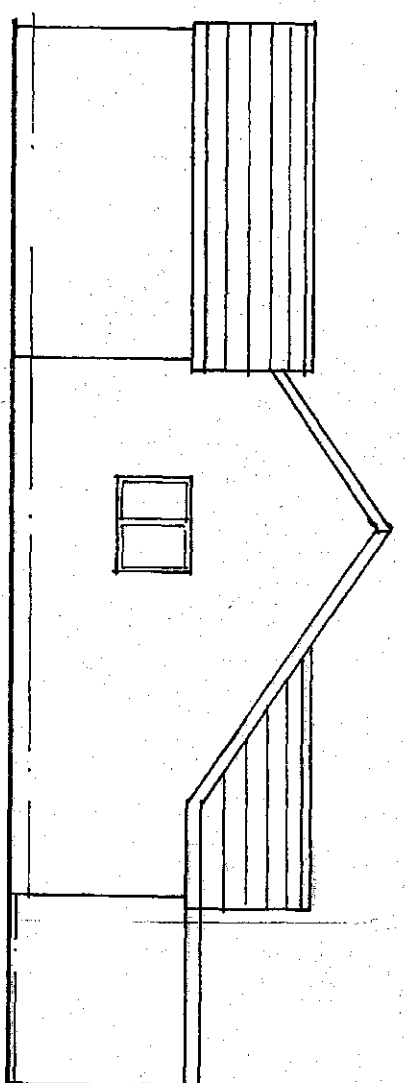
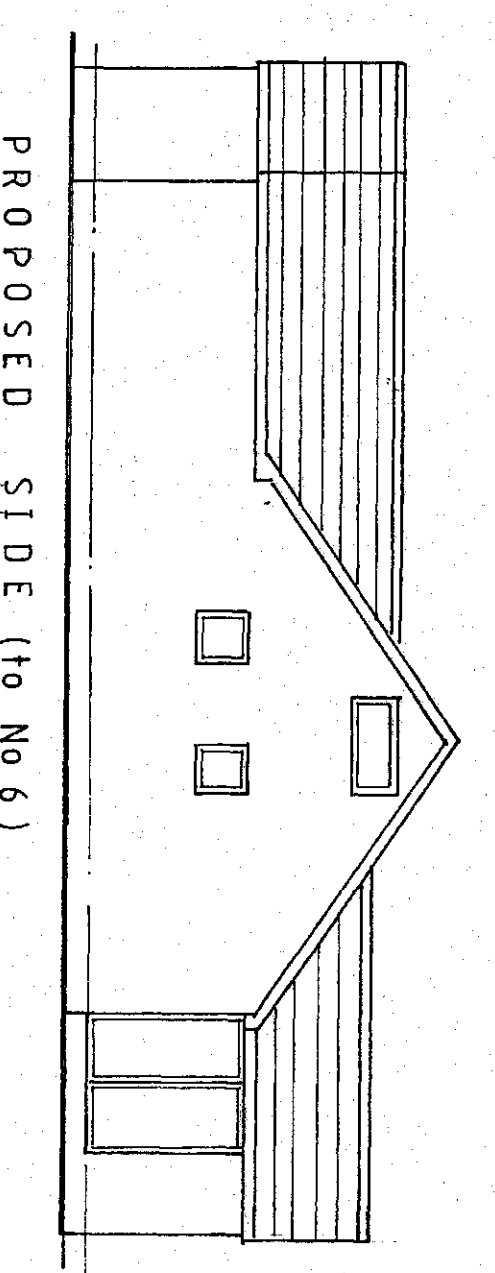
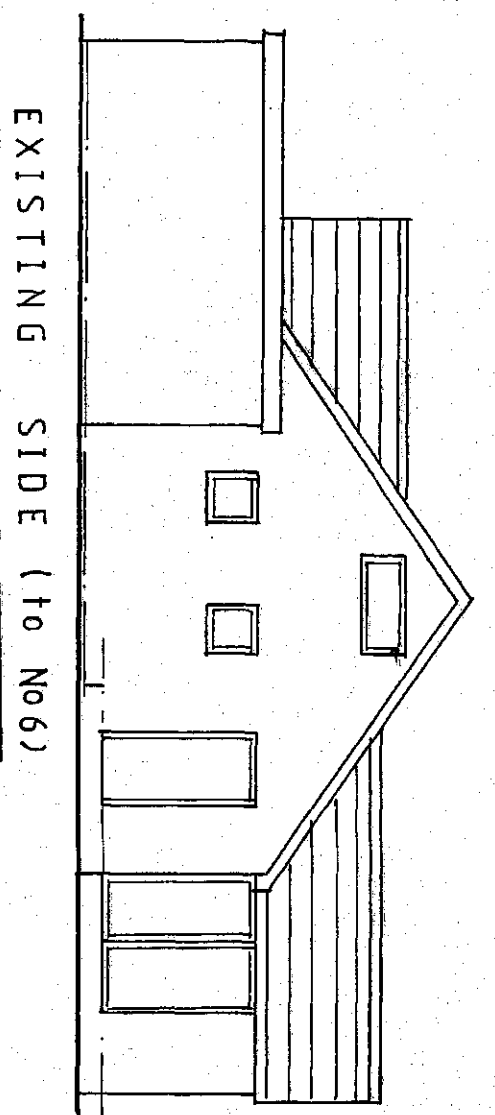
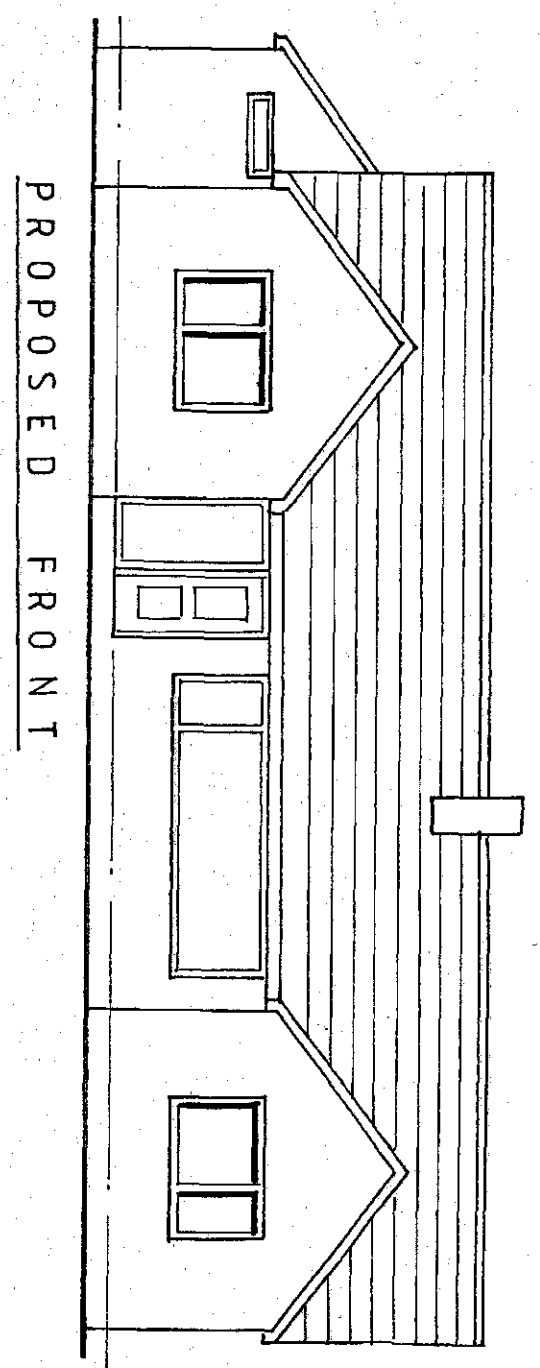
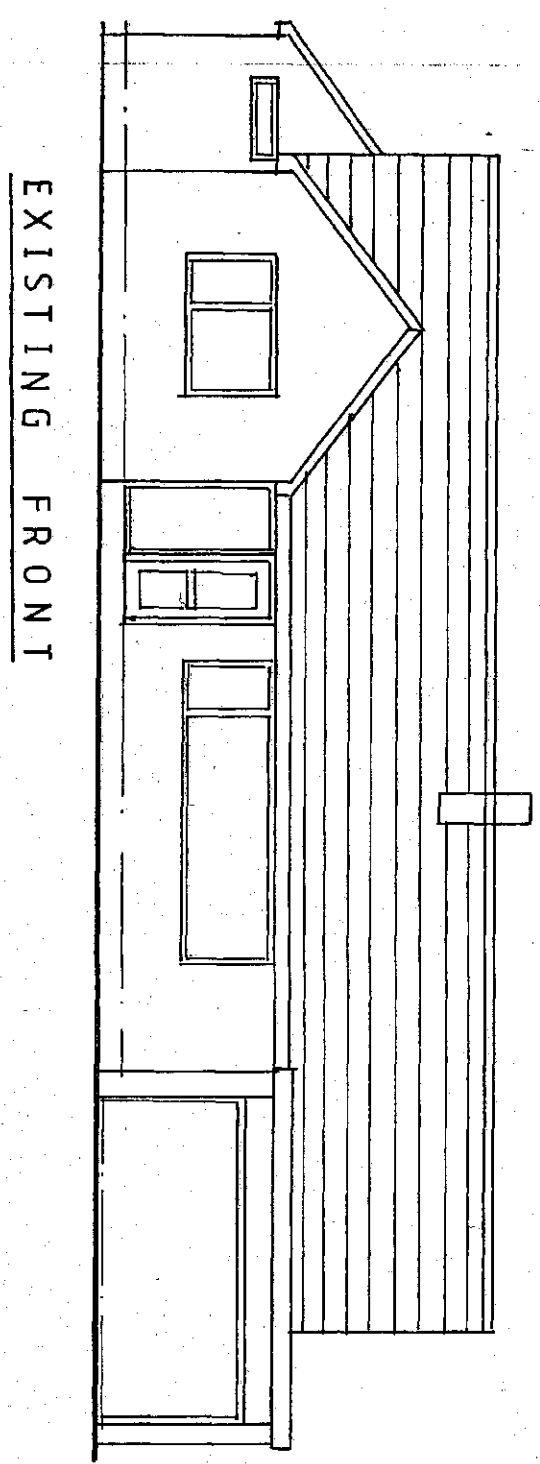
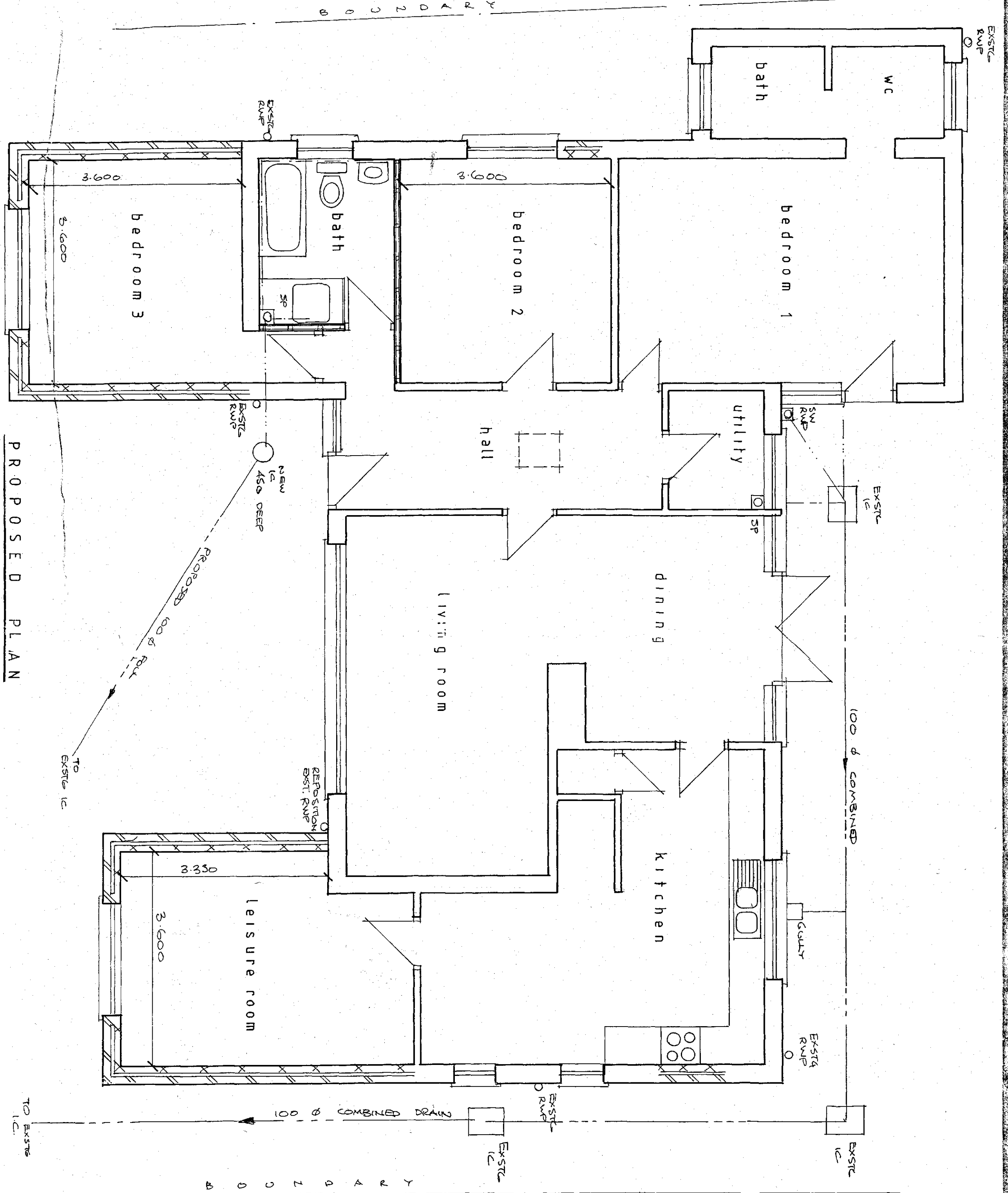
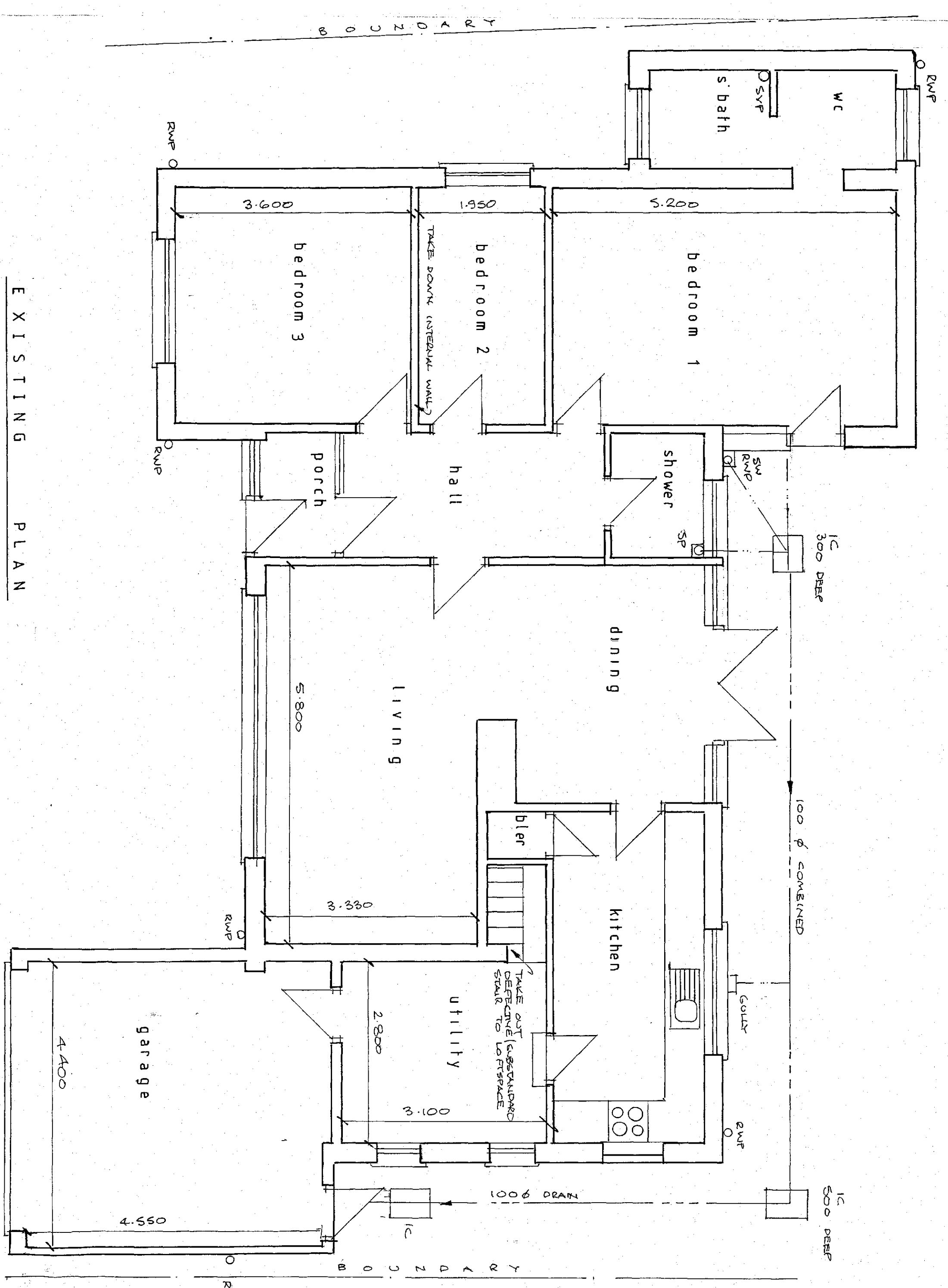




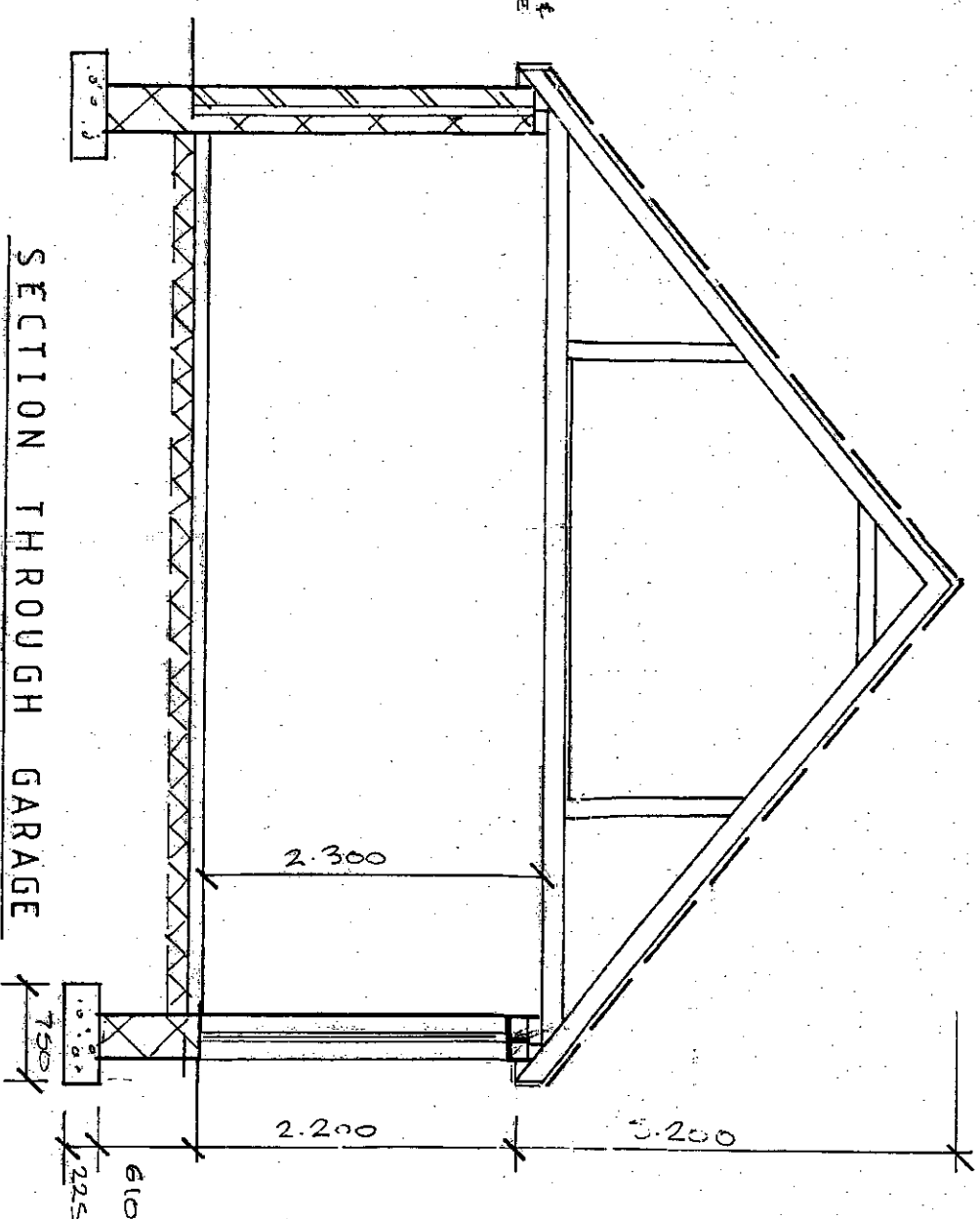
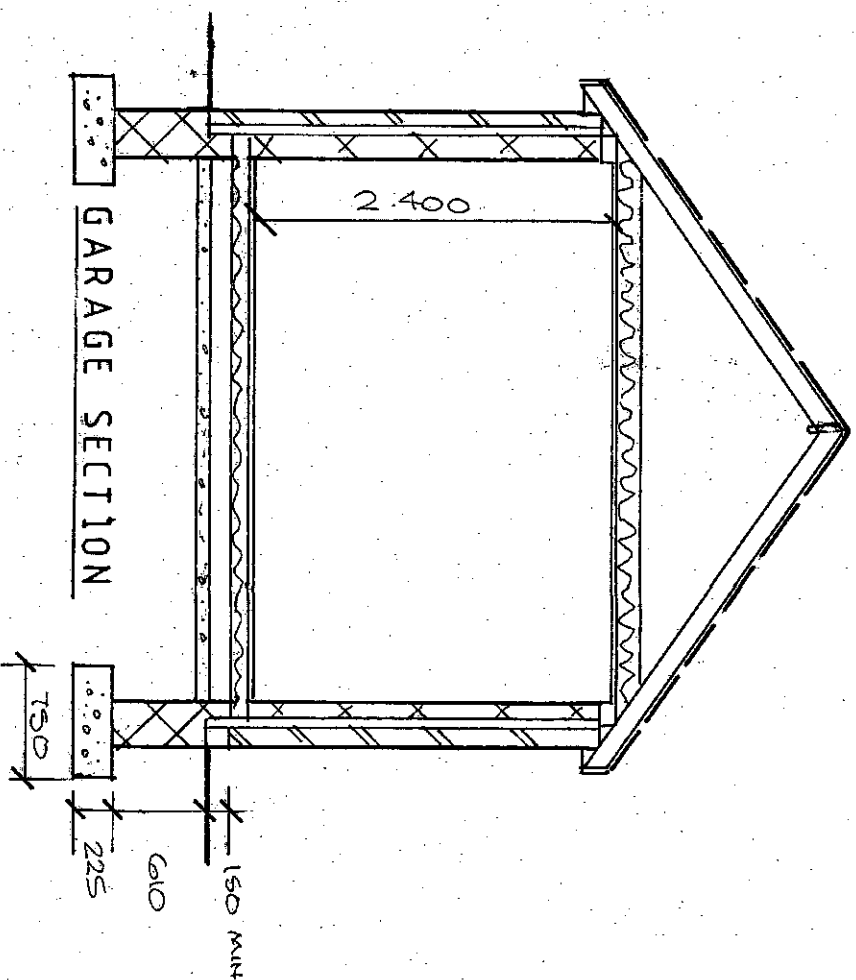
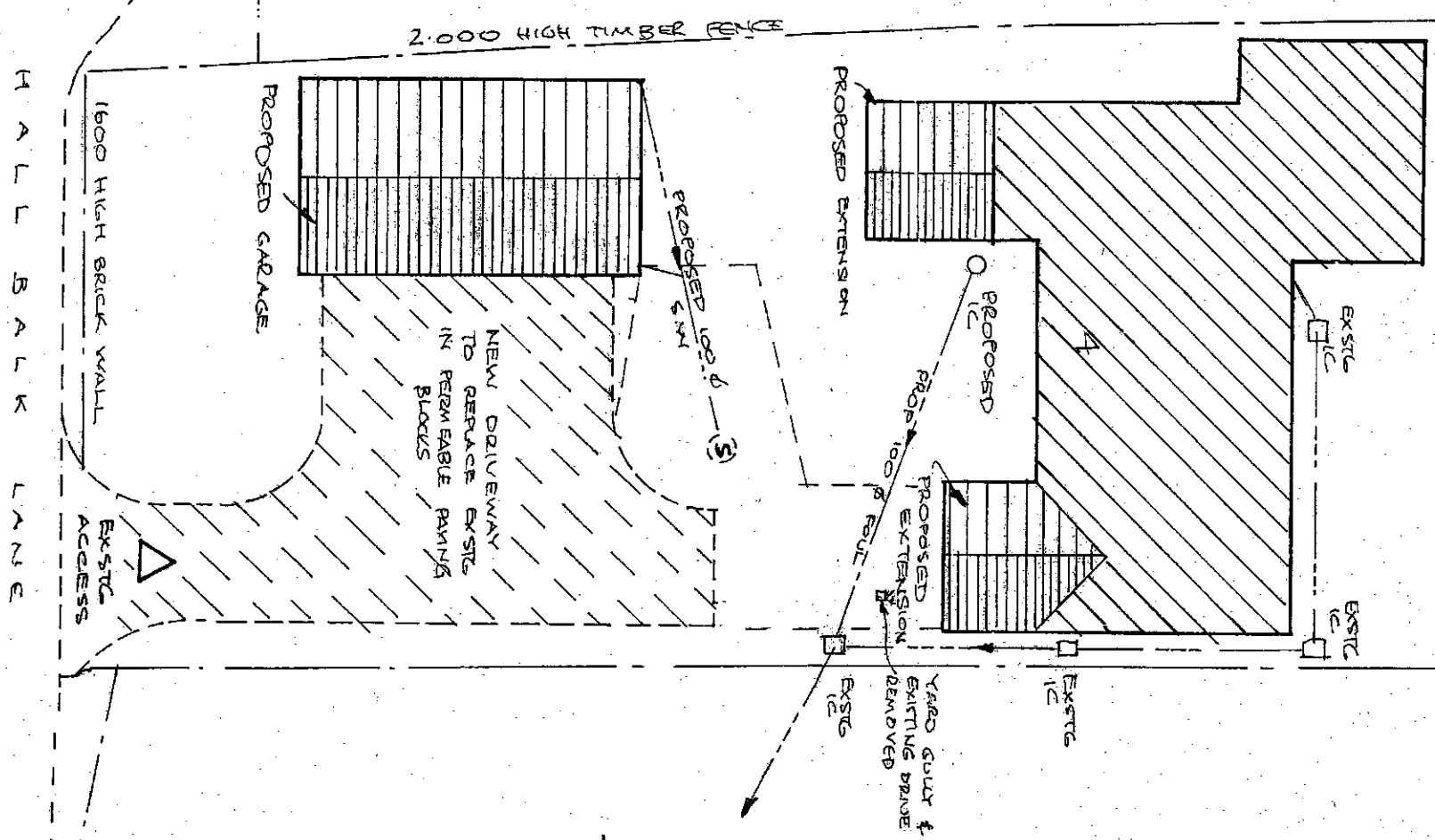
25 FEB 2013
COOPERATIVE MATH ROOM
Revised by: [signature]
Original copy

ROOF: Marley Double Roman interlocking roof tiles in colour to match existing bungalow roof
WALLS: Buff coloured facing brickwork to match existing bungalow
Existing surface water yard gully to impervious blockwork driveway removed and new permeable block driveway laid as described below, new gully to soakways so reduction in surface water flows to existing combined system minimum 50%

PROPOSED EXTENSIONS and DETACHED GARAGE at NO.4 HALL BALK LANE, BARNESLEY

SCALES: 1/50th and 1/100th

SITE PLAN 1/200



DRAINAGE: Bathroom connected to new Soil Pipe insulated for sound in accordance with Building Regulations; air admittance valve conforming to BS EN 12380:2002 fitted to top of soil pipe; anti-siphon traps to all bathroom appliances with 32 waste to hand basin, 38 waste to shower and bath and 100 waste to WC; foul flows to existing inspection chamber on combined drainage system via new 100mm in 450 diameter polypropylene with cast iron cover and frame on 150 concrete base

Existing surface water gully to impervious blockwork driveway removed and new permeable block driveway laid as described below; new garage to soakways so reduction in surface water flows to existing combined system minimum 50%

New drain connections made using 110 diameter plastic drainage pipes and fittings to EN1401-1 with push fit flexible joints laid to a minimum gradient of 1 in 40; drain 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

Garage rainwater gully to 1m³ 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

EXTENSIONS

ROOF: Double Roman interlocking roof tiles in colour to match existing bungalow roof on 38 x 25 rafter battens on underlay felt to BS EN 13707; verge and eaves tiles twice clipped; 125 x 38 rafters in class C16 timber at 450 centres at 35 degree pitch; rafters to bear on 200 x 25 ridge board one end and on 100 x 75 treated wallplate other end; wallplates fixed to blockwork at 1/3rd span using 30 x 5 x 600 once bent galvanised m.s. straps; PVCu soffit and fascia board; Code 4 lead valley to leisure room extension lapped under roof coverings min 230; roof to bedroom 3 extension; to have roofing felt lapped under existing roof coverings minimum 230; 110 x 63 gutters to discharge to existing rainwater goods; 10mm foil backed plasterboard ceiling with 38 x 38 noggin at edges on 170 x 44 ceiling joists at 450 centres in class C16 timber supported on wallplates both ends with 200 x 75 ceiling binders at mid span; 30 x 5 galvanised mild steel anchors in lateral restraint to gable at max 1800 centres built into wall and nailed across first 3 rafters and ceiling joists; insulation to ceiling 300 Rockwool mineral fibre laid in two layers with first 150 thick layer laid between ceiling joists and second layer laid at 90 degrees.

CAVITY WALLS: 112.5 thick external leaf in buff coloured facing brickwork to match existing bungalow; 100 cavity and 100 Celcon 3.6 N/mm² standard grade insulation block inner leaf (or similar approved) with 5mm plaster skim finish; full fill cavity wall insulation of Rockwool mineral fibre; wall ties 750 horizontally, 450 vertically, and 225 vertically at openings; cavities closed at reveals, eaves and eaves and cavities to be continuous; insulated cavity closer at openings fixed in accordance with manufacturer's instructions; 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 as required by local Building Inspector

Stud partition wall: 75 x 50 timber with 10mm plasterboard and 5mm plaster skim finish both sides; 25 thickness of 10kg/m³ mineral fibre bats secured to stud work; floor joists doubled up under studs

FLOOR: 25 pig boarding on 195 x 44 joists in class C16 timber at 450 centres built into load bearing walls both ends; 30 x 5mm lateral restraint straps at max 1800 centres built into blockwork and nailed across first three joists with timber noggin to brace straps; subfloor vented with 225 x 150 airbricks at 900 centres starting 450 from corners; airbricks boxed through cavity with tray dpc over; 70 thick Kingspan Thermalpro TFF70 insulation board (or similar approved) fixed between joists on 25 x 25 timber battens screwed to joists to achieve a U value of 0.22 W/m²K; 100 oversite concrete at or above adjacent ground level with min 150 clearance below bottom of joists

VENTILATION: New windows to be 16mm double glazed PVCu units fitted with low E coating glass; opening area minimum 1/20th floor area of room served with trickle ventilation 5 000mm² in area; windows minimum U value to be 1.6 W/m²K; toughened or safety glazing complying with BS6206:1981 to all glazing between finished floor level and 800 in windows and between finished floor level and 1500 in doors

Bathroom: window with obscure glazing having some part of opening light 1750 above floor level together with mechanical extractor fan of min 15 litres/sec capacity intermittent extraction rate with 15 minute overrun

Kitchen: vented with window and mechanical extractor fan of 60 litres/sec intermittent extraction rate (30 litres/sec if incorporated in cooker hood).

Utility: window with opening area minimum 1/20th floor area and mechanical extractor fan of 30 litres/sec intermittent extraction rate

Heating and plumbing: Central heating and domestic plumbing insulated in accordance with requirements of Building Regulations; Thermostatic radiator valves to new radiators; Hot and cold water to wash hand basin with hot tap located on left hand side; Boiler to be Condensing Combination boiler fixed to external wall in Kitchen to discharge to external balanced flue terminal via proprietary co-axial flue system provided by boiler manufacturer; all work in accordance with manufacturer's specifications

Central heating and domestic plumbing insulated in accordance with requirements of Building Regulations; Thermostatic radiator valves to all new radiators

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

GARAGE

ROOF: Double Roman interlocking roof tiles in colour to match existing bungalow roof; laid on 38 x 25 rafter battens on underlay felt to BS EN 13707; verge and eaves tiles twice clipped; proprietary manufacture Room in Roof (RiRo) trusses at 600 centres at 40 degree pitch; trusses designed, manufactured and installed in accordance with BS 5258 Part 3:1985; trusses to have min 147 x 46 top and internal chords and min 197 x 46 ceiling chords; all timber in trusses to be Grade TR26 to BS EN 415:1995; 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 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; Calculations to be prepared by truss manufacturer and submitted to Local Building Inspector for approval 28 days prior to installation on site

CAVITY WALLS: 112.5 thick external leaf in buff coloured facing brickwork to match existing bungalow; 50 cavity and 100 Celcon 3.6 N/mm² standard grade insulation block inner leaf; wall below ground level to be in 3.6 N/mm² trench blocks; wall ties 750 horizontally, 450 vertically, and 225 vertically at openings; cavities closed at reveals, eaves and eaves and cavities to be continuous; Ceramic Cougar CG50/100 open back lintels to personal door and rear elevation windows; Ceramic Cougar CH50/100 lintels over garage doors; min 150 end bearing to all lintels with tray dpc over top and weep holes in brickwork; dpc to be min 150 above adjacent ground level

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 Documents and Local Building Inspector

GROUND FLOOR: 150 compacted thickness of selected hardcore, 25 sand blinding, 1200 gauge dpm and 100 structural concrete; dpm tied into dpc

FIRST FLOOR: 25 pig boarding on trussed rafter bottom chord (area to be used for domestic storage only with access via retractable loft ladder)

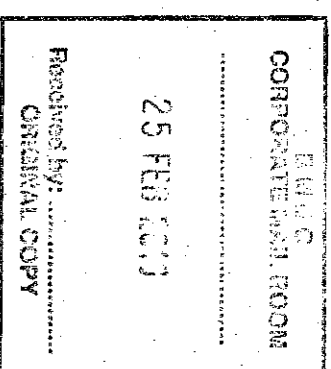
VENTILATION: 900 wide x 2000 high external door to be PVCu unit and electrically operated roller shutter doors to garage 2,440 wide x 2,000 high with manual opening system to allow operation in event of motor failure; 1200 wide x 1080 high 16mm double glazed PVCu window nls

GENERAL

Hot and cold water to sink and wash hand basin with hot tap located on left hand side of basin; heating and plumbing insulated in accordance with requirements of Building Regulations

ELECTRICS: all electrical work to meet the requirements of Part P (Electrical Safety) will be designed, installed and tested by a person competent to do so or an installer not registered with a Part P Competent Person self-certification scheme but qualified to complete a BS 7671 Installation Certificate; internal lights to bathroom, new bedroom and external safety lighting to have energy efficient fittings

DRIVEWAY: existing impermeable block driveway to be removed and new paved area to be permeable block paving with sub base of 250 bed of 5 to 20mm crushed limestone to BS EN 13242:2002 on geotextile membrane, overlapping joints by 300mm; 50mm base layer of 2.6mm single sized crushed stone to BS EN 13242:2002 on second layer of geotextile membrane; membrane brought up to the haunched edging and cut-off flush with the surface of the paving; blocks vibrated with a vibrating plate and 2.4mm clean quartzite or gritstone applied to the surface and brushed into joints



DRAWING 2 of 2 - SECTIONS, SITE PLAN and CONSTRUCTION DETAILS

PROPOSED EXTENSIONS and DETACHED GARAGE at NO.4 HALL BALK LANE, BARNESLEY

SCALES: 1/50th and 1/200th