

Roof construction:
New section of pitched roof constructed of interlocking concrete tiles to match existing and extended to manufacturer's recommendations on 25x25 fully treated battens on a sarking felt on built up roof constructed of:

- 25x100 rafters at 400mm c/c
- 25x100 ceiling joists at 400mm c/c
- 25x100 ceiling beams
- 25x100 ceiling to ridge
- 25x100 wall plates

All structural timber to be grade SC3 and marked dry or kiln dry.
Rafter and ceiling joists of pitched roof over front of garage and lobby with existing rafters built into new wall structure retained to areas below extension with existing ceiling joists above garage supported below new floor joists at approx 1.500m.

Uprive eaves and verge construction to match existing together with roof void ventilation in eaves to provide min. 10,000mm² per metre. Maintain min. 200mm vent gap above roof insulation at eaves.

25x50mm mild steel straps to be installed between new roof and suspended floor structure at average 1.800m c/c. Straps to rest to be installed at ceiling level and at ends of roof starts to gable to extend over 300mm above with solid noggings under together with where straps at right angles to floor joists.

New upvc gutters and downpipes to match existing and to connect to existing.

Roof insulation:
Install 12 layers of 100mm thick fibreglass quilt insulation with 1 layer between and 1 layer over ceiling joists.

Install 100mm thick fibreglass quilt insulation between floor joists above garage.

Ceilings:
New first floor ceilings formed of 9.5mm thick plasterboard with Arter finish and perimeter supported.

If ceiling above garage not 12.5mm fireline board or similar fire protection construction to provide min. 30 minute fire protection. The existing ceiling to have additional layer of 12.5mm thick plasterboard applied with all edges supported. Check remaining ground floor ceilings suitable below extension.

Suspended floor:
To be constructed of 15mm thick moisture resisting flooring grade Tardis chipboard on 4x125 joists at 400mm c/c.

Install cable joists spiked together below stud partition.

Foundations and existing lintels:
Existing foundations and lintels to be exposed where required to confirm suitability. Install cavity tray d.p.c. above existing ground floor lintels (see detail).

Windows:
Install new white upvc window frame to new bedroom approx 1.800 x 1.500. Re-use existing landing window frame in new section of bathroom and re-glaze in double glass.

New glass to be sealed double glazed units. No glass within 800mm of floor.

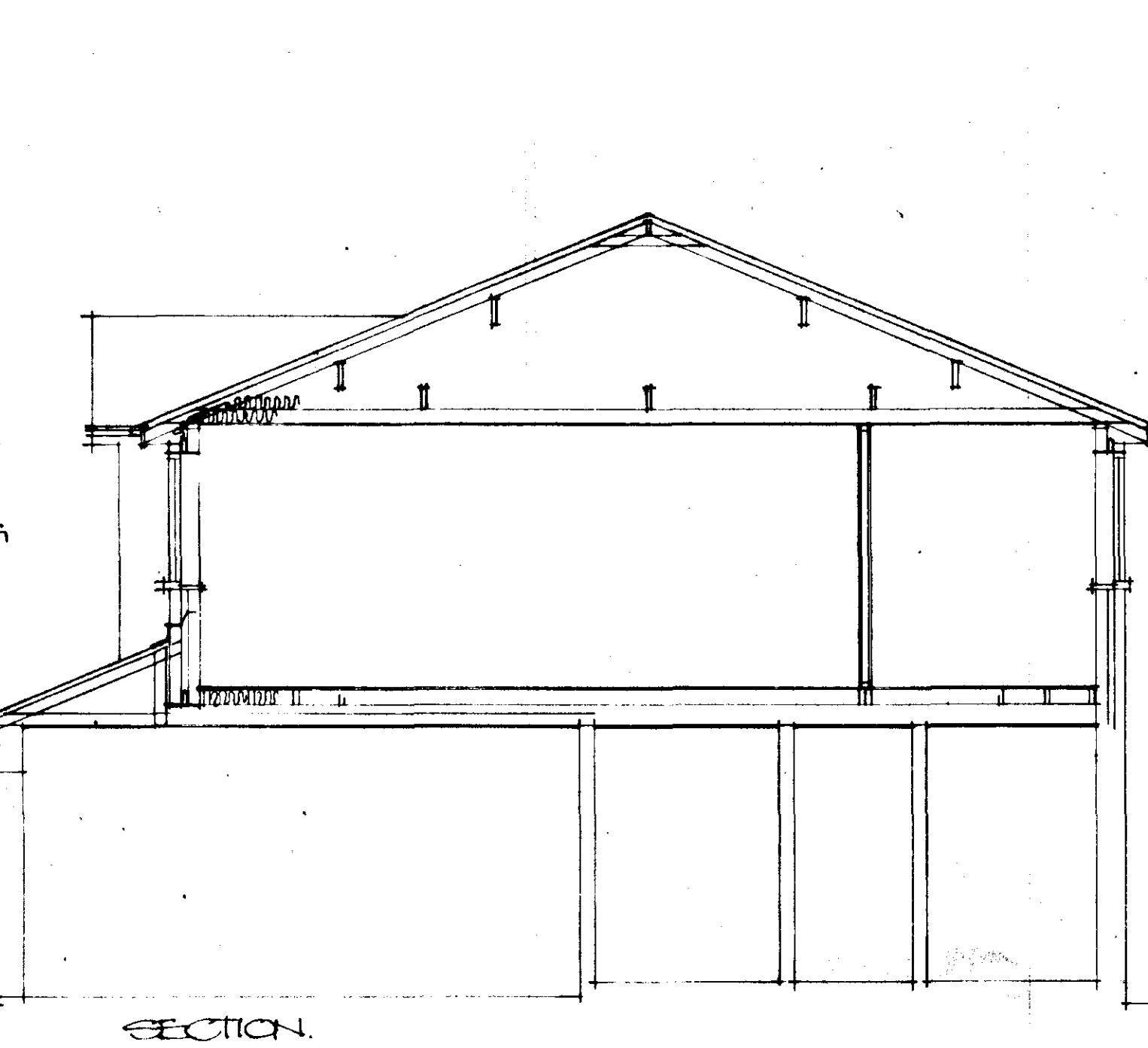
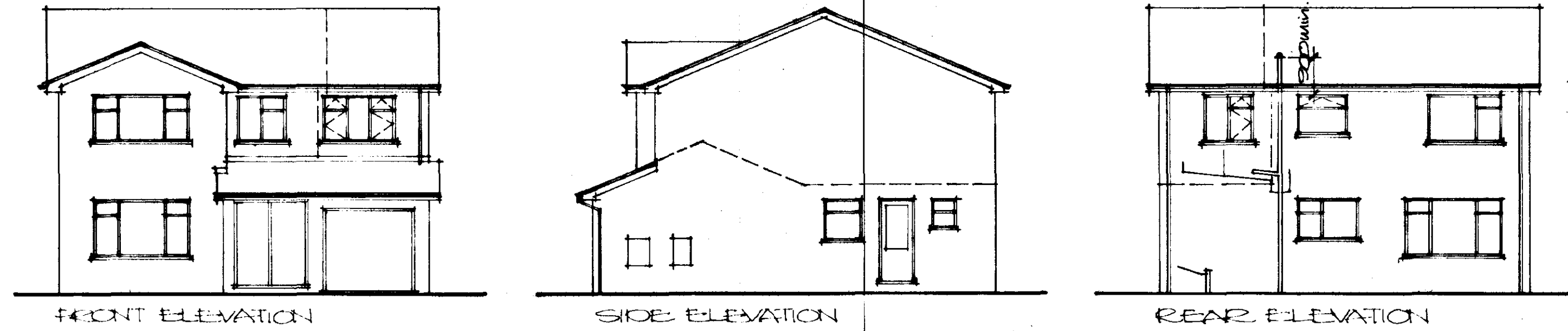
Opening lights to be draught sealed.

Install 12.5mm thick vents to provide min. 8000mm² background ventilation to bedroom continuing at least 400mm² background ventilation provided to bathroom.

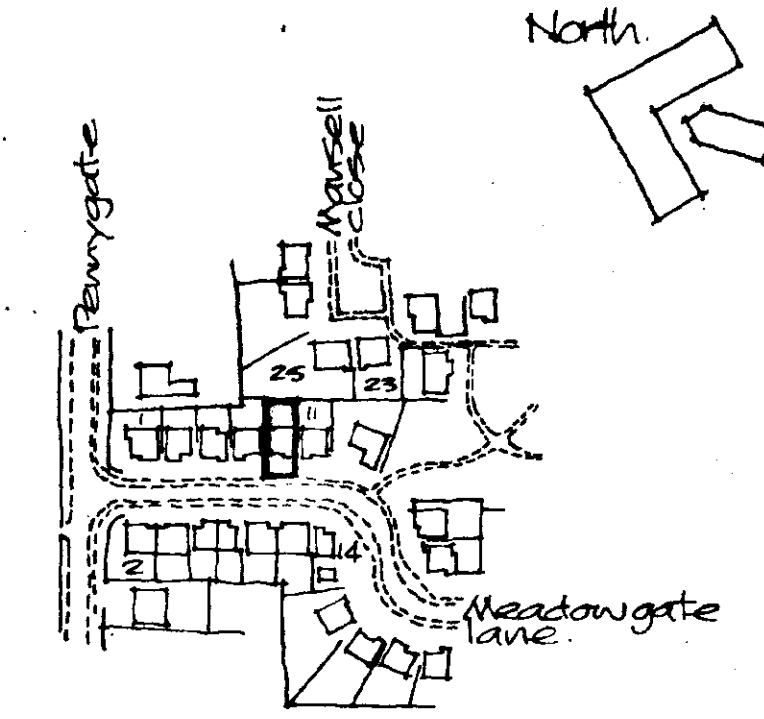
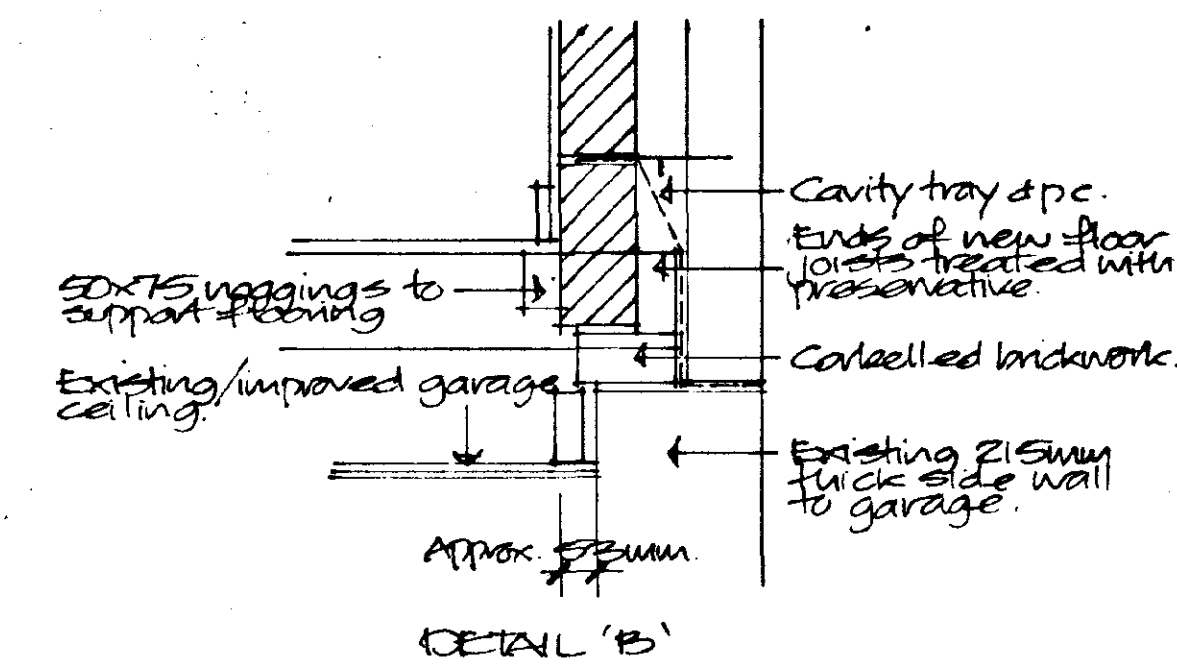
Bedroom window to provide at least 1/60th floor area as main ventilation (opening lights).

Heating:
Extend existing heating and hot water systems into proposal. New radiators to have thermostatic valves. All hot water pipes to be insulated with Armaflex or similar of thickness to match pipe outside diameter.

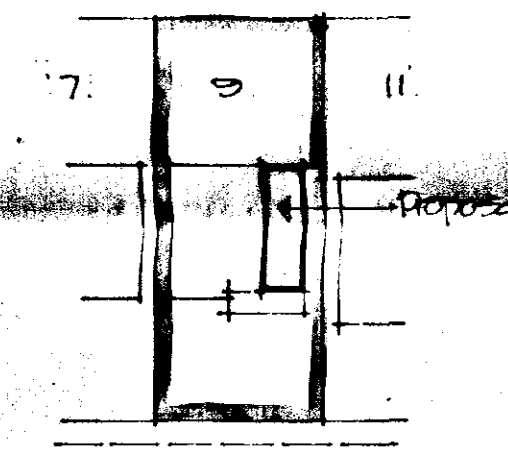
Stud partition:
New first floor stud partition formed of 50x75 studs at 400mm c/c clad both sides with 12.5mm plasterboard and skim with fibreglass packing between studs.



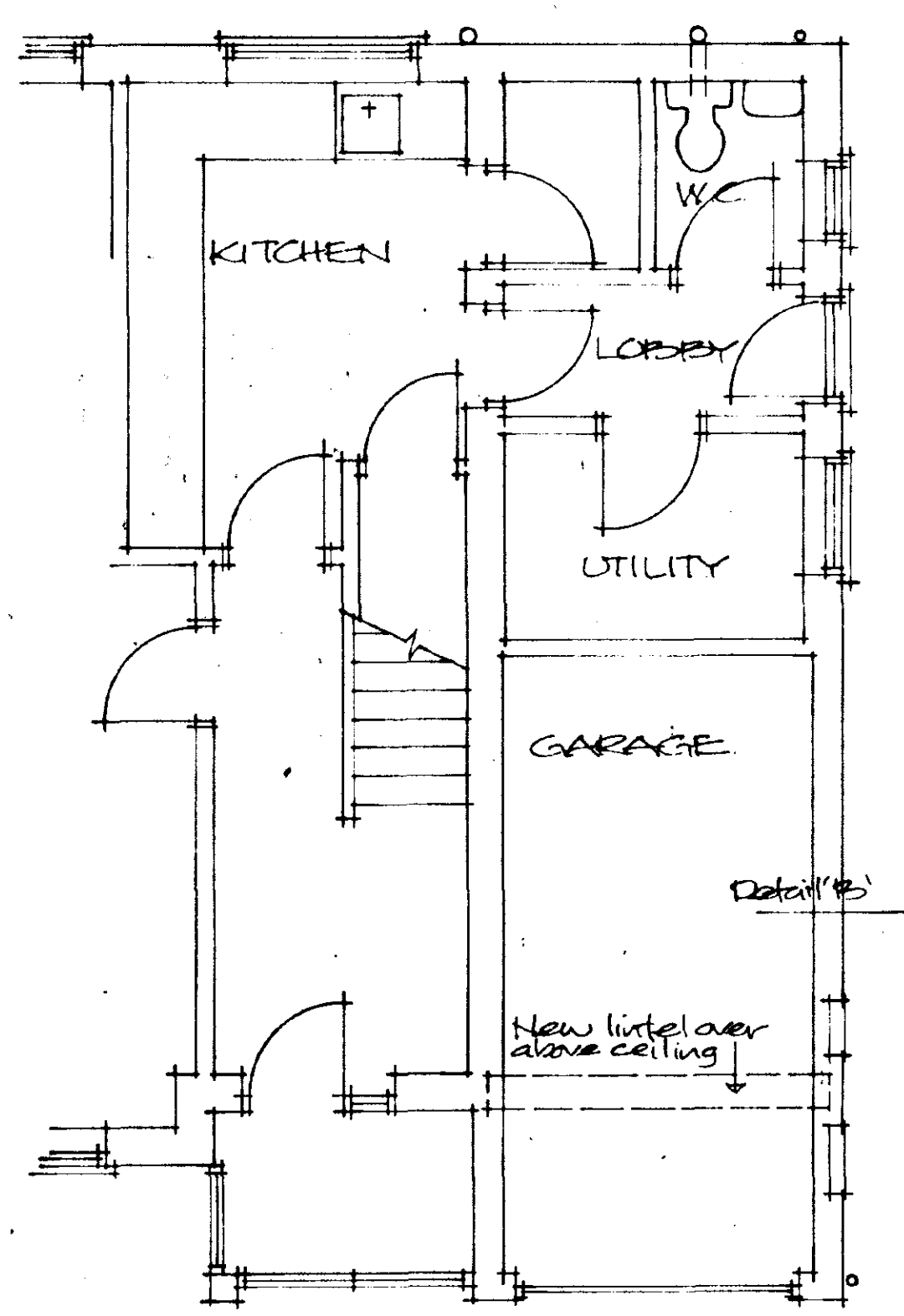
Cavity walls:
Constructed of 100mm facing brickwork, 65mm cavity and 100mm flinted standard blockwork or similar with dense plaster internal finish.
Install 25mm thick fibreglass cavity insulation batts installed to manufacturer's recommendations.
Average U value = 0.25 W/m²K.
Battens insulated d.p.c. to reveals with frames lapping d.p.c. by 100mm.
Lintels to be installed at 900mm c/c horizontally, 450mm c/c vertically and at 225mm c/c within 225mm of reveals.
Tops of cavities to be sealed.
New walls to be fully bonded into existing.
Lintels:
Install 16 type L1/550 steel lintel to bathroom window type L1/HP50 to bedroom window and over garage below house front wall and install 16 box lintel 100 steel lintel to opening through existing wall over bathroom and landing bedroom floor opening.
All lintels installed to manufacturer's recommendations.
Mechanical ventilation:
Install extract fan to bathroom to extract at min. 15 litres per second.
Above ground drainage:
Connect new bathroom fittings to existing soil and vent pipe (attest).
Drainage to comply with BS 5533.
Install 40mm dia. polypropylene waste from shower and 32mm dia waste from wash basin with 50mm dia combined waste.
Wash basin to have 75mm deep seal trap and shower to have 50mm deep cleanable trap.
Remove existing waste from existing bath.



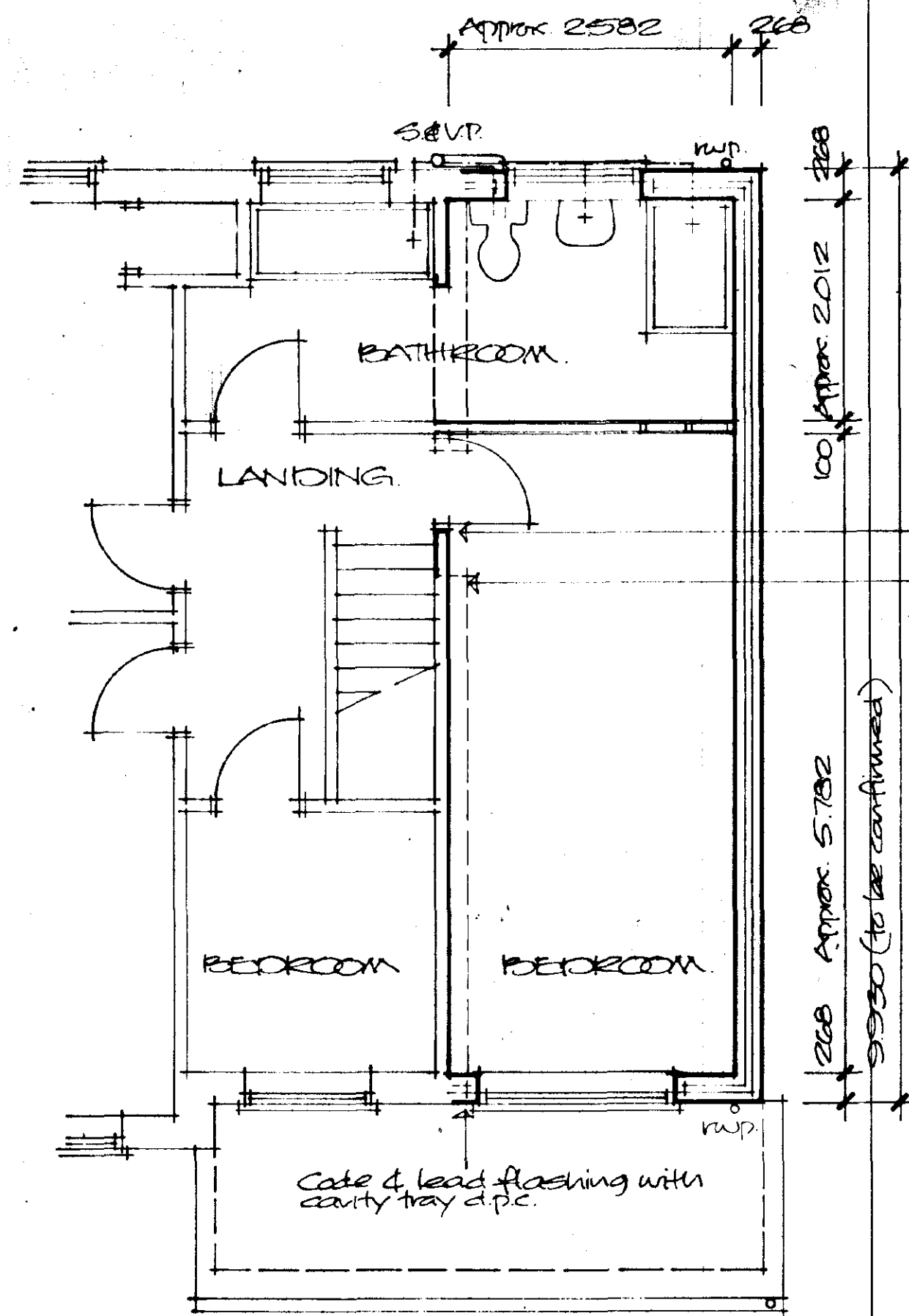
LOCATION PLAN
Scale 1:2500



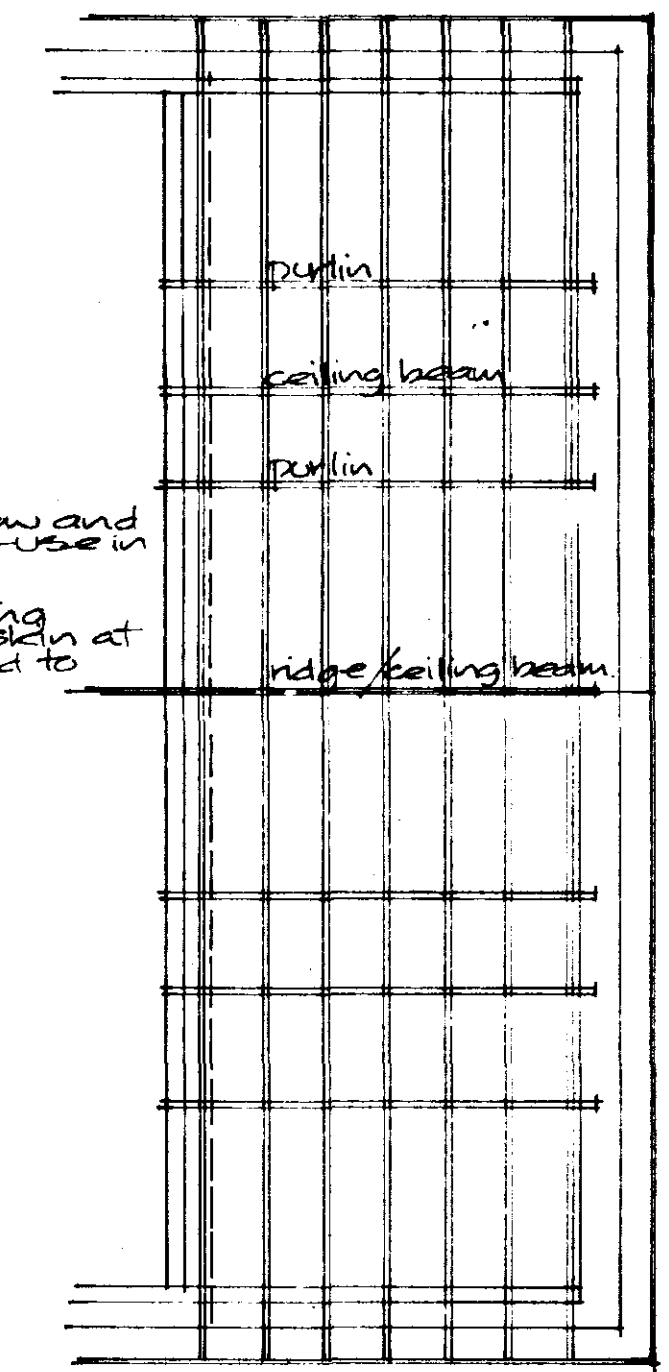
BLOCK PLAN
Scale 1:500



GROUND FLOOR



FIRST FLOOR



ROOF STRUCTURE LAYOUT

Remove window and frame and re-use in bathroom.
Remove existing facing brick side at this level and to gable over.

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Project
PROPOSED EXTENSION
TO HOUSE
9 MEADOWGATE LANE,
SPALDING.

Client
MR & MRS B. STICKSON

Scale
1:500/1:100

Date
July 01

Ref: 0855/01

PLAN