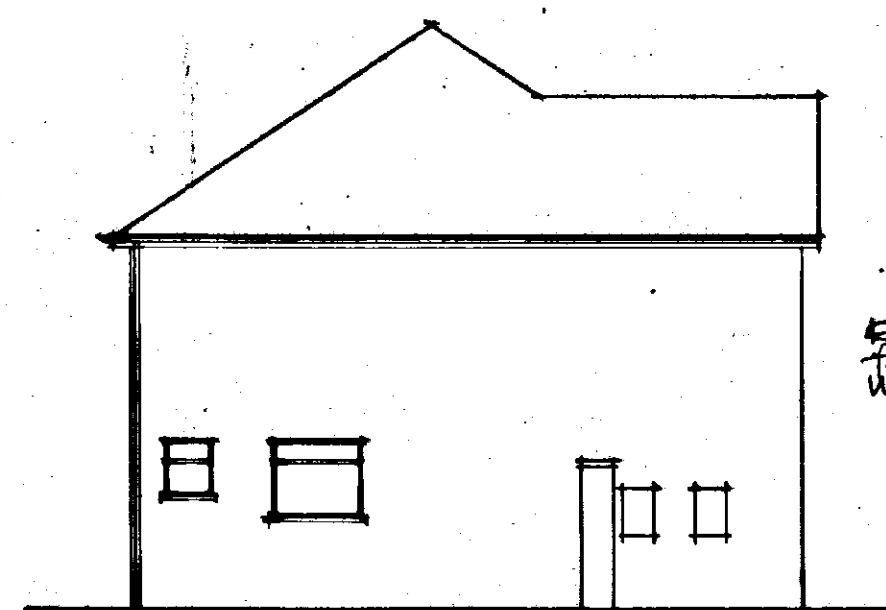
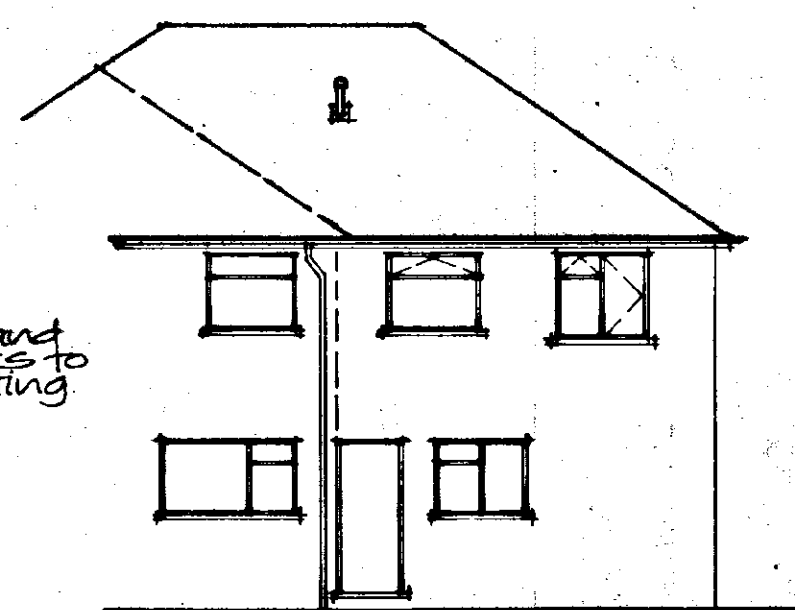




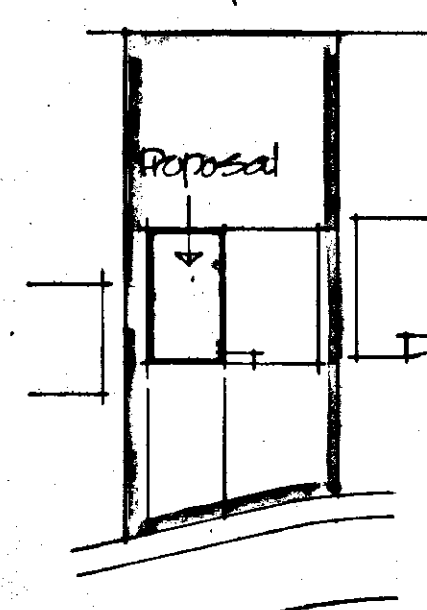
FRONT ELEVATION



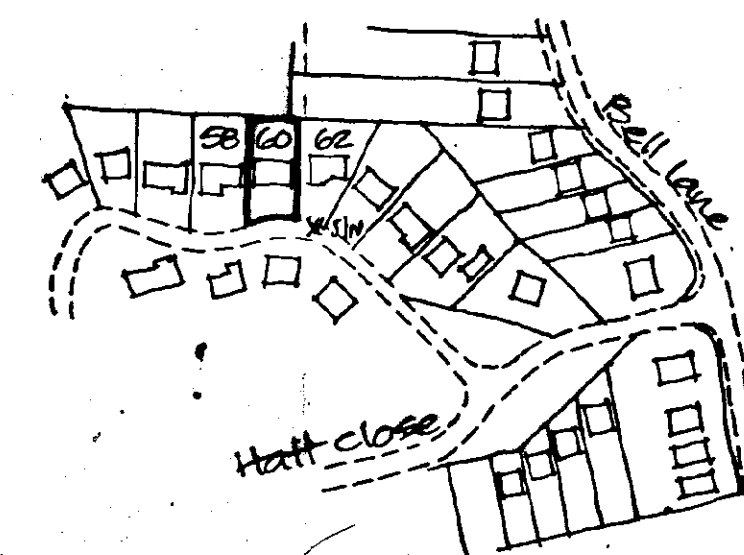
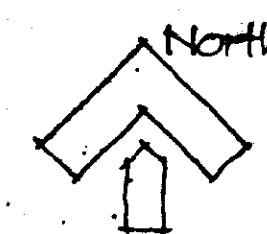
SIDE ELEVATION



REAR ELEVATION



BLOCK PLAN Scale 1:500



LOCATION PLAN Scale 1:2500

Roof construction:

Main new section of pitched roof constructed of interlocking concrete tiles to match existing installed to manufacturers recommendations on 25x50 fully treated battens on existing felt on generally built up timber hip roof formed of:

- 50x100 rafters at 450mm c/c
- 25x50 ridge board at approx. 1.800 c/c
- 25x50 ceiling joists at approx. 1.800 c/c
- 25x50 ceiling joists at 450mm c/c
- 25x50 ceiling joists at 450mm c/c
- 25x50 ceiling joists at 450mm c/c
- 25x50 ceiling joists at 450mm c/c
- 25x50 ceiling joists at 450mm c/c

Roof pitch to match existing (approx 35% to be confirmed). All structural timber to be graded SCS and marked dry at dry.

Refer to roof structure layout for more details.

Ceilings:

New first floor ceilings formed of 9.5mm plasterboard with Arflex finish and perimeter edges supported. New ceiling to garage formed of 12.5mm thick Gyproc Arflex board with Arflex finish and perimeter edges supported. Install 2 layers of Arflex board on timber cradles around new steel beam over garage.

Insulation:

Install 2 layers of 100mm thick fibreglass quilt insulation to new roof areas with 1 layer between and 1 layer over ceiling joists. Maintain min 25mm vent gap above insulation.

Install 1 layer of 100mm thick insulation above garage ceiling.

Eaves/roof ventilation:

New eaves to match existing incl provision but to incorporate roof void ventilation strip to provide min 10,000mm² vent perimeter.

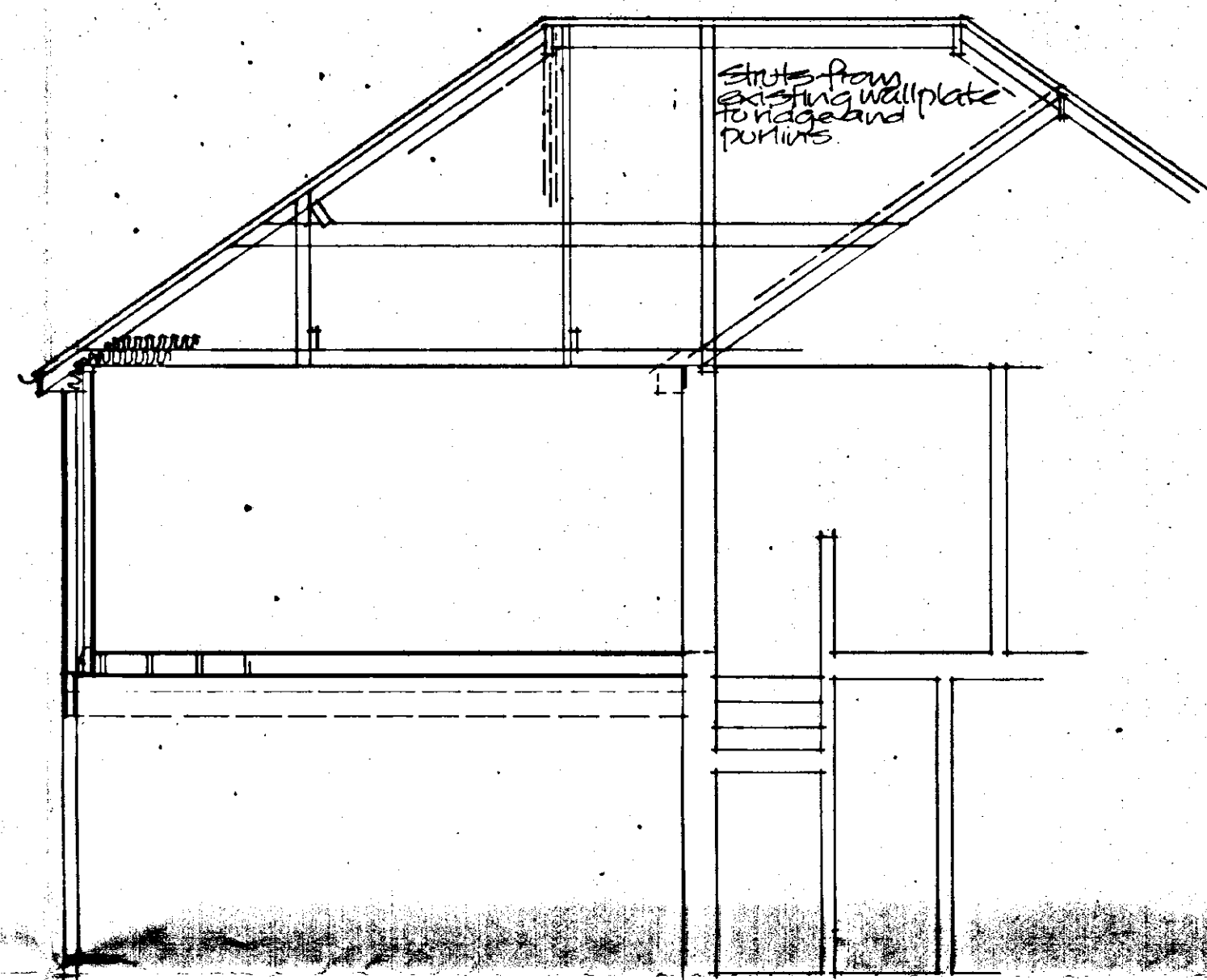
Gutters/drainpipes:

New gutters and downpipes to match existing and to be connected to existing. Provide additional downpipe adjacent to front entrance connected to 100mm dia drain leading to front garden in 100mm dia gully (drainage). Drains to be at least 100mm deep and taken to soakpit where there is at least 500mm from building.

30x30mm mild steel steps to be installed between roof structure and walls at each side of garage door and at each side of roof gable. New eaves to match existing to timbers they are to extend over 300mm timbers with solid nogging under.

Heating:

Existing heating and hot and cold water services extended into proposal with all hot water pipes insulated with Armaflex or similar of thickness 25mm above and 10mm below. New radiators to be fitted with thermostatic valves.



SECTION A-A

Cavity walls:

New cavity walls constructed of 100mm facing bricks with 60mm cavity and 100mm thick internal leaf. Blockwork with dense plaster internal finish. Walls insulated with 100mm thick fibreglass/mineral wool batts to meet manufacturers recommendations. Average U value approx 0.25 W/m²K. Cavity insulated with 100mm thick fibreglass/mineral wool batts to meet manufacturers recommendations. Cavity to be installed at 200mm c/c horizontally, 450mm c/c vertically and at 225mm c/c within 225mm of reveals. Any blockwork used below ground to be class A.

New ground floor walls to have flydamp dpc. linked to existing.

Top of cavity to be sealed with 50mm superior or similar.

Top of walls to be bonded to existing with furlex wall extension.

Lintels:

Install 16.5mm type L1/H50 steel lintels to rear bedroom and new bathroom window openings and type L1/H50 to garage door and side of garage supported on new piers and existing cavity wall.

Install prestressed concrete slab lintels over altered opening between existing and new landing.

Existing ground floor lintels below extension to be checked.

Install cavity tray dpc above lintels not protected by eaves.

Install 16.5mm type L1/H50 lintel above front bedroom window opening.

Windows:

New window frames to be white UPVC double glazed throughout with no glass within 600mm of floor level.

Install draught stripping to all opening lights.

Install thick draught strips to provide min 10,000mm² background vent to bedrooms and min 4,000mm² to bathroom.

Mechanical ventilation:

Install extract fan to new bathroom to provide min 15 litres per second extract.

Lower roof:

To be formed of tiles battens and sarking as main roof and with similar pitch. Sarking formed of 30x100 rafters and 25x50 ceiling joists with 25x100 rafters and 25x50 ceiling joists supported at eaves and 25x100 rafters bolted to wall and 25x50 ceiling joists bolted to rafters. Roof to be plasterboard with Arflex finish. Roof insulation to be 100mm thick fibreglass quilt insulation installed (unheated area). Eave and fascia to be roof.

Above ground drainage:

Install existing single stack soil and vent stack to enable new fittings to be connected. New 40mm dia polypropylene waste from new bath with new 40mm dia waste from wash basin. Plumbing to be 40mm dia. Fittings to have 15mm deep seal traps. New soil and vent stack to be within duct. Vent taken to roof terminal.

Stud partitions:

Formed of 50x75 studs at 400mm c/c with 50x75 sole and head plates and clad both sides with 12.5mm plasterboard and with mineral wool packing between studs.

Suspended timber floors:

Install new 205x102x23 UP over garage to support new timber suspended floor. Floor to have min 100mm bearing each end and 100x150x450 in situ concrete padstone at each end.

Floor over garage formed of 205x102x23 UP over garage to support new timber suspended floor. Floor to have min 100mm bearing each end and 100x150x450 in situ concrete padstone at each end.

Remaining floor to be formed of 205x102x23 UP over garage to support new timber suspended floor. Floor to have min 100mm bearing each end and 100x150x450 in situ concrete padstone at each end.

Where floor spans exceed 2.500 solid or herringbone purlins to be installed at mid span.

Side joists to be bolted to the underpartition between rear bedroom and bathroom.

Existing flat roof above garage removed.

Foundations:

Form 3m x 1.200 x 1.200 mass concrete grade slab pad foundations where indicated with min depth of 1.000 with top of concrete approx 150mm below ground level. Pad foundations to be cast in situ. Also enlarge existing foundation to allow for thickened wall.

Roof trusses:

Install 2 no gangnail roof trusses, compound truss and reducing trusses to new front gable.

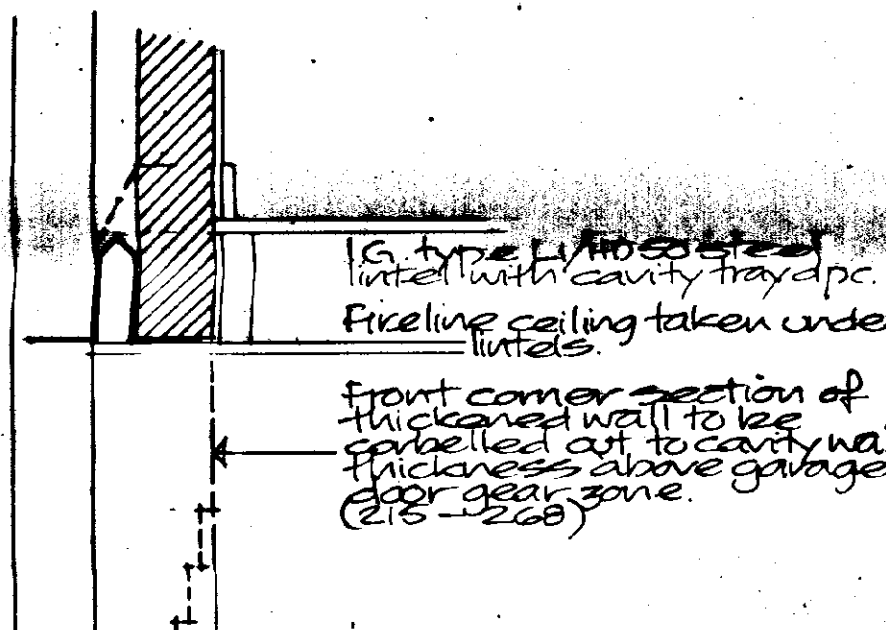
Trusses to be same pitch as remaining roof and to be at max. 800mm c/c.

Roof trusses to comply with B.S. 5268 Parts 2 and 3. Roofs to be made watertight to supply design certificate before work starts on roof.

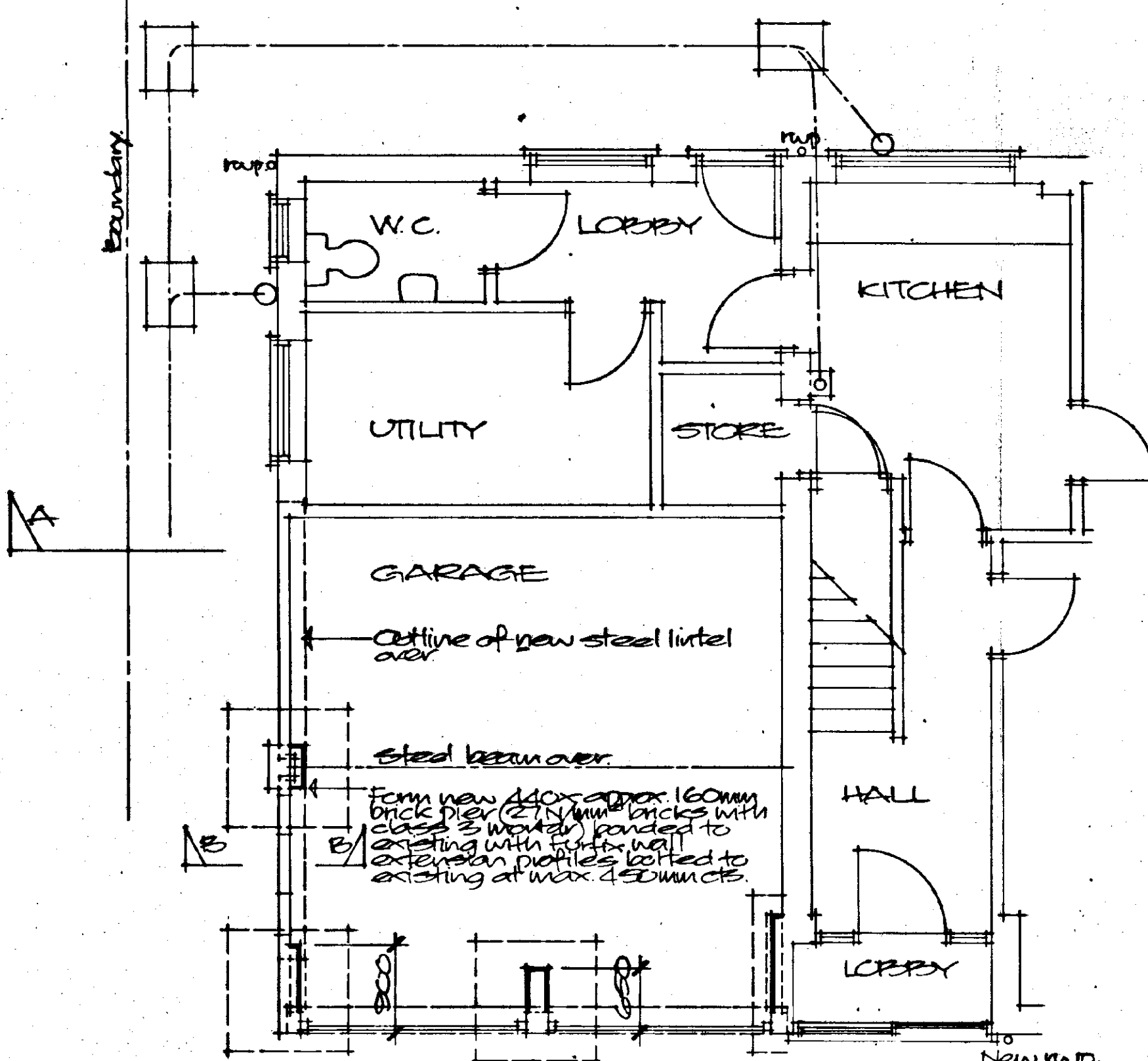
Install 25x100 longitudinal ties to gangnail section of roof with 2 at ceiling level and 1 at ridge level.

Valley gutter:

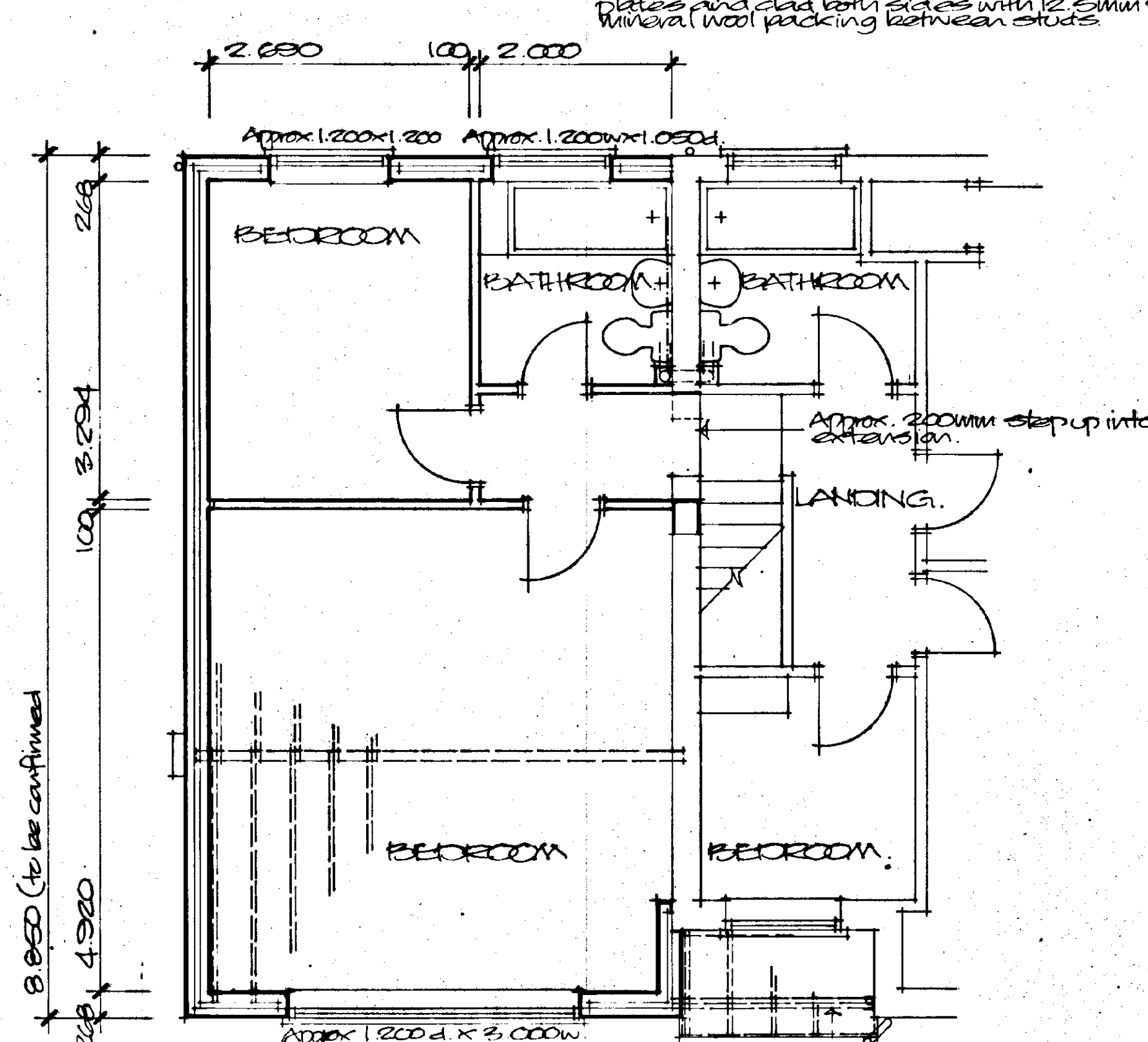
Install preformed fibreglass valley gutter complete with support to manufacturers recommendations.



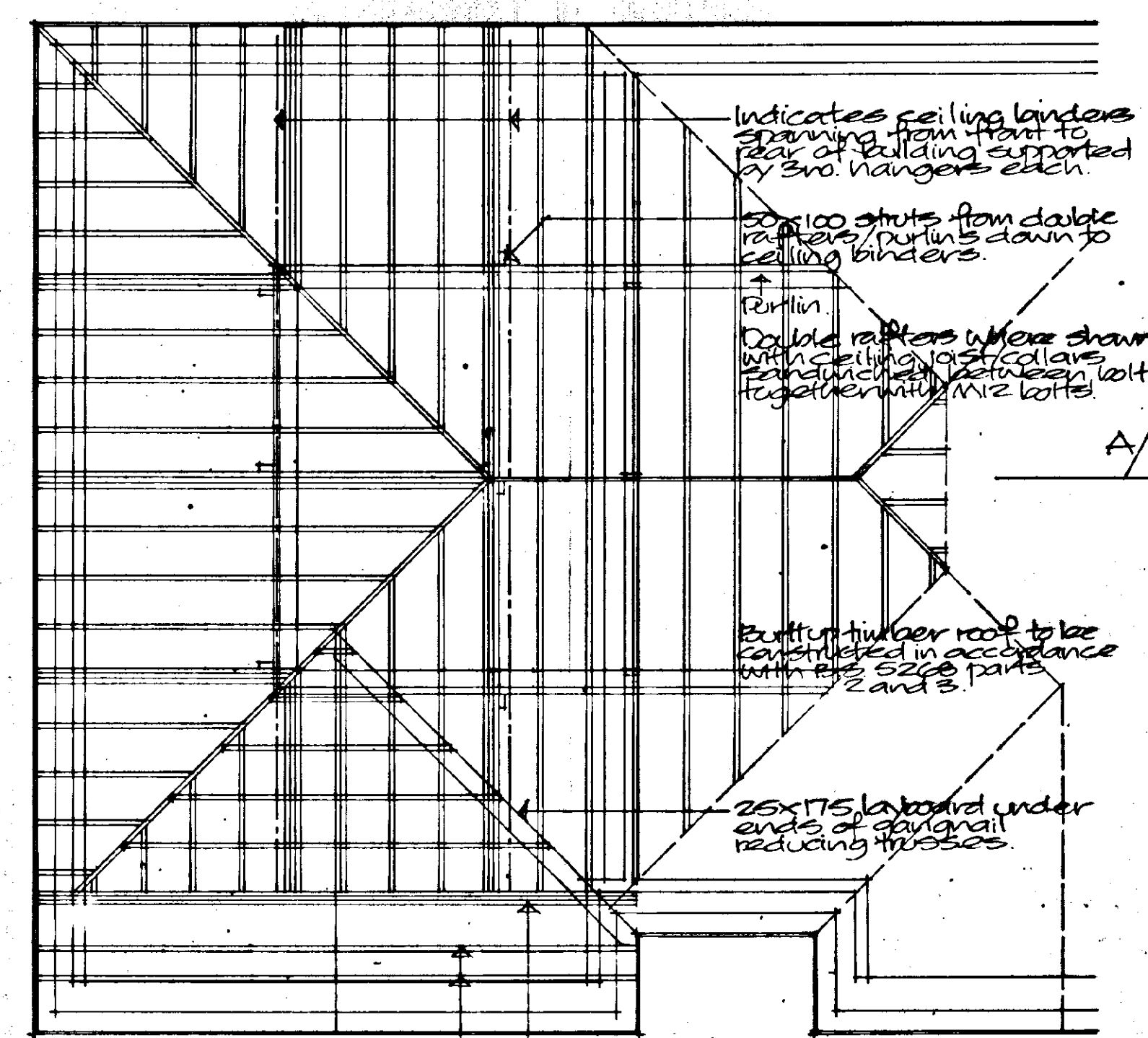
DETAIL SECTION B-B



GROUND FLOOR



FIRST FLOOR



ROOF STRUCTURE LAYOUT

DETERMINED PLAN

SOUTH HOLLAND DC HOUSING & PLANNING
11 AUG 1999
Ref: 08/11/99

BROADGATE BUILDERS LTD

The Race Ground
Spalding
Lincolnshire
PE11 3AP

Telephone: 01775 725816
Fax: 01775 725097

Project:
PROPOSED EXTENSION
TO HOUSE
60 HATT CLOSE,
MULTON

Client:
MR & MRS R. GRANT

Scale: 1/50
Date: August 99