

Gutters and fascia

100 mm upvc gutter connected to existing falls to outlet. Fixed to 19 mm exterior grade plywood fascia boards. Provide 12 mm exterior grade plywood soffits fixed directly to underside rafters with continuous upvc soffit ventilators to vent roof space to BS 5250.

Heating

To be supplied by existing balanced flue gas boiler condensing type, radiators and cylinder min Seabuck efficiency rating of 68%.

Radiators

Provide and fit thermostatic control valves to radiators.

Timber

All new timber to be tanalised and stress graded 4 BS:4471 Part 1 (1978) Dimensions for structural timber BS:5268: Part 5 Preservatives Treatment for Structural Timber

Skirting

120 x20 mm half round skirting primed and painted three coats (1 glass) to new extension

Partitions

Form all new partition walls in 75 x 50 mm sw studding at 400 mm centres with noggins at 600 mm vertical centres faced both sides with 12.5 mm plasterboard with skim finish. Insert 100 mm thick quilt insulation between to give a min density of 10kg/m2. All partitions running parallel with floor joists

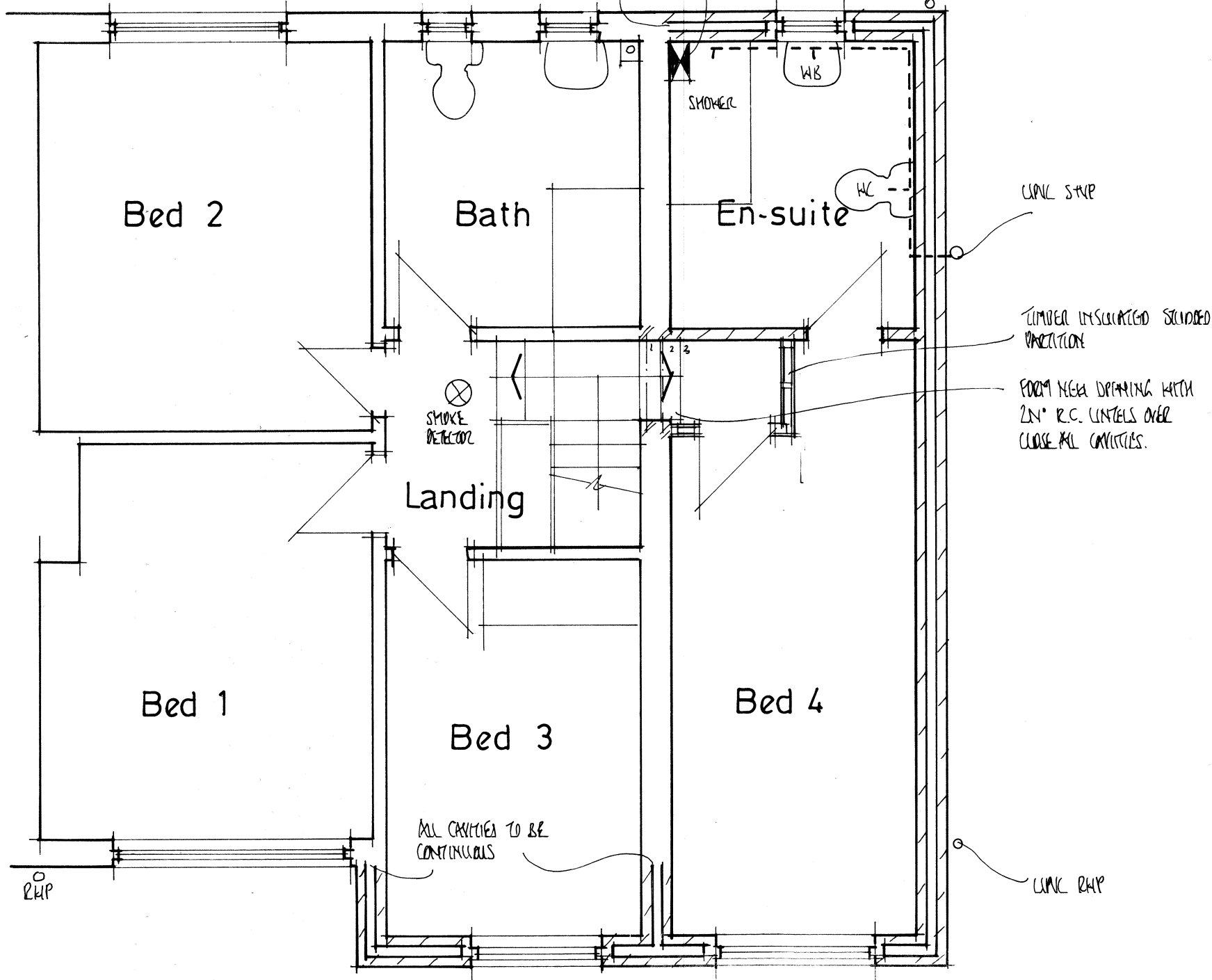
Garden

Patio

A

Truss roof
Conditional approval to be obtained prior to commencement of work. Truss calls to be submitted to LA. On initial visit to site. Trusses to be wind braced in accordance with BS 5268 part 3 1985. Grey concrete marley interlocking roof tiles on 19 x 38 mm sw battens on unsteerable roofing felt on new trusses at 600 centres Wind loading shall comply with BS5633 Ch V Part 2 (1972), provide continuous ridge vents.

SECTION A-A



FIRST FLOOR PLAN

Drains
100 mm drains min fall 1:40 all to comply with BS en 295

Drain Testing
The whole of the drainage system shall be tested when laid and again on completion to the satisfaction of the approved inspector.

Drainage
Any drains new or existing that pass through external walls, insert concrete lintels over (allow 50mm clearance between drain and underside of lintels)
Drains that run under a building to have min 100mm of granular or other flexible filling provided round the pipe if depth of drain below the surface exceeds 600mm. Where pipes have less than 600mm cover the pipes should, where necessary, be protected from damage by a reinforced concrete cover slab with a flexible filler and min 75mm granular material between the top of the pipe and the underside of the flexible filler below the slab. On sites where excessive subsidence is present additional flexible joints to be provided or other solutions such as suspended drainage where the pipe is adjacent to structures or where soil conditions change in the course of the pipe run. Where the crown of the pipe is within 300mm of the underside of the slab, special protection is to be provided in accordance with Part H of Building Regulations
Below ground drainage to be approved 100mm plastic or clay drainage system laid at minimum 1 in 40 falls - bedded and installed in accordance with manufacturer's recommendations
Proprietary inspection chambers to be provided as indicated and as necessary to provide rodding access to drainage runs. Sizes to suit depth - as recommended by manufacturer.
All gullies to be back inlet and roddable - wastes to discharge below grating but above water line

Ceiling to truss roof
To be under drawn with 12.7 mm foil-backed plasterboard and skim finish.

Roof void Insulation
To be 2 layers 200 mm thick rock wool laid between joists and cross-laid with 200 mm Rock wool to give total thickness of 400 mm and a U value of 0.11W/m2K

Gutters
Provide 100 mm upvc gutters fixed to fascia boards. Provide 25 mm cellular extrusion soffits with continuous upvc soffit ventilators to vent roof space to BS 5250

Fixings
Strap down new roof and ceiling with 1000 x 5 x 38 mm mild steel straps at 2 centres fixed across two rafters/joists with 3.35x50 wire nails at rafter and ceiling tie level

Valley roof
19 mm exterior grade plywood 300 mm either side. Insert no.4 lead in valley over felt 300 mm either side. Form saddle in lead

Ventilation
To be achieved at eaves with continuous 25 mm gap with fly mesh inserted to give through ventilation passage to BS 5250

Fascia
19 mm exterior grade plywood fascia/berge and soffit to new extension

Continuous Ventilated Ridge
Provide new continuous ventilated ridge to be mechanically fixed and bedded in sand/cement mortar, or dry fixed system in accordance with BS 5534 2014

New short Staircase
New staircase to be 225 x 32 mm sw strings 25 mm sw treads, 19 mm sw risers with sw blocks and wedges 200 mm rise 250 mm going 3 no. Treads. 850 mm wide. 2000 mm headroom. 950 mm high handrail map stick type, min 50 mm tread on winders at newel post.

Guardrail
Guarding to balcony to be BS 6399 part 1 with vertical spindles balusters at max 100 mm centres

New En-Suite
Provide mechanical extract ventilation to give min extract rate of not less than 15 litres per second which can be run intermittently but has a 15 minute over-run. Extract fan to be ducted to external air via 100mm dia flexible duct to terminate on outside wall at fitted grille. Extract fans to be positioned less than 400mm below ceiling. Ducts to be connected appropriate extract and discharge grilles (min 85% of the duct free area) with back draught device fitted to prevent draughts

New 50mm shower and bath, 40mm sink and 100mm wc waste to be provided to new en-suite and bathroom and connected to new soil and vent pipe. Anti-vac deep seal traps to be fitted to internal pipes. No opposed waste connections to be made within 200mm of W.C. connection with SVP

Boarding used as a flooring, to be moisture resistant. Chipboard of the grades with improved moisture resistance specified in BS 7331:199091 or BS EN 312 Part 5:199792. It should be laid, fixed and jointed in the manner recommended by the manufacturer. To demonstrate compliance the identification marks should be facing upwards. Any softwood boarding should be at least 22mm thick and from a durable species 93 or treated with a suitable preserver

Demolish

Carefully take down existing garage and porch, prepare site for new building works.

Foundations

Foundations to cavity walls to be constructed of concrete common brickwork up to 150 mm below ground level with Class B engineering brickwork from 6L to DPC level externally and concrete block work internally. Walls built off 700 x 200 (C20 mix-20N/mm2) concrete strip foundations, at min depth of 1000mm, to suit local ground conditions. If the ground is found to clay the footings are to be in accordance with NHBC guide 'Building Near Trees' and to be in accordance with BS 8004, BS 5837 and to satisfaction of the Local Building Authority Inspector. Precast concrete lintels to be laid over all openings for drainage and service runs with minimum 150 mm depth of concrete above lintels. Foundations to be taken down to the invert level of any drain passing within 1 metre

RC lintels to be provided over drains passing through walls. Walls below ground level to be filled with concrete cavity filling to 225mm below lowest dpc level. There should not be:
a. non-engineered fill (as described in BRE Digest 427) or wide variation in ground conditions within the loaded area, nor
b. weaker or more compressible ground of such a depth below the foundation as could impair the stability of the structure
Internal walls and timber floor sleeper walls to be taken down to a suitable bearing stratum to be agreed with Building Control

New steelwork

Steel beams e.g. r.s.j's, u.b's etc to be coated in zinc primer prior to building in and to be spaced and bolted together via M12 bolts and spacers of 1000mm c/s (unless specified by structural engineer). Fully encased in 2 layers of 12.5mm plasterboard and skim support on 50 x 50mm cradle to give half hour fire resistance (web flanges packed with mineral wool reduce cold bridging)

Lintels over openings to be proprietary insulated. Steel lintels e.g. Galvic or I.G. etc - lintel type to be suitable for loading configuration and spans. Install d.p.c. cavity tray over with stop ends and weep holes at 900mm c/s - min 2 per cavity tray. Where 100mm cavity is specified ensure correct lintel is used to deal with wider cavity. All lintels to be encased in plasterboard to give half hour fire resistance Internal door openings (max 1200mm opening size) to have 150mm x 100mm reinforced concrete lintels over or proprietary steel lintels of approval manufacture - min 150mm end bearing
New concrete lintels over new opening to BS5977 Part 2 1986 (150mm x 225mm) deep where shown
Cavities to heads of wall to be closed with mineral wool quilt and dressed over wall plate to prevent cold bridging
Check with the manufacturer regarding the chosen insulation's suitability for building exposure and for partial fills systems - the minimum acceptable residual cavity (50mm required)

New opening

Break open existing walls at ground floor level from floor to ceiling to form new opening as shown and provide and insert R.S.J.'s as indicated on plan, over supported both ends concrete padstones. Make good brickwork, plaster, floor and ceiling. Include for all necessary temporary support during execution of the works. See structural engineer's details and calculations. Upon exposing brickwork if any discrepancies appear regarding steelwork notify architect for assessment. Note any changes or costs incurred are solely the responsibility of the client. Assumptions on existing construction have been made with the limited information obtained during survey.

Forming new opening
Cut down existing brick wall to form new opening. Insert new lintel. Make good floor, wall and ceiling where necessary

Floors

All structural timber to be stress grade C16 and double vacuum preservative treated - unless otherwise indicated on construction notes
Moisture resistant floor (20mm chipboard/ply) or preservative treated min 20mm timber boarding to be provided to kitchens/utilities and bathrooms
Joists sizes/centres and spans are indicated on floor plans - Contractor to check indicated load-bearing walls are suitable to carry floor load. If found to be non load-bearing seek structural engineer's advice as to additional support necessary to be provided. Floor voids to be filled with 100mm - 10kg/m3 density acoustic quilt - 12.5mm. Ten (10kg/m3) plasterboard and skim finish to underside

Notches and holes to timber joists to be within the following limits. Notches - no deeper than 0.125 times depth of joist and not cut closer than 0.07 of the span, nor further away than 0.25 times the span. Holes - should be no greater diameter than 0.25 times the depth of joist - should be drilled off the neutral axis, and should not be less than 3 diameters (centres to centres) apart; and be located between 0.25 and 0.4 times span from the support. No notches or holes to be cut in roof rafters, other than supports where the rafter may be birdsmouthed to a depth not exceeding 0.33 the rafter depth (NO NOTCHING OF ROOF TIMBERS AND FLOOR TRIMMER BEAMS IS PERMITTED)

Double floor joists bolted together to be provided under stud walls and bath rubs - timbers bolted together using 5mm diameter double sided round toothed plate connectors and M12 grade 4.6 bolts at 600mm centres

Stud walls to be min 75mm x 50mm s.w studs at 400mm c/s - infilled 10kg/m3 quilt with 12.55. Ten (10kg/m3) plasterboard and skim finish

First Floor

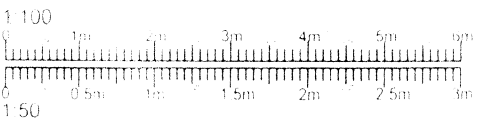
22 mm moisture resistant tongue and groove chipboard flooring (minimum mass per unit area 15kg/m2), on 50 x 200 mm C16 tandem softwood joists at 600 mm centres, to first floor levels of house, joists doubled up and spiked together beneath all first floor partitions. Joists built into external walls and packed as necessary. Lateral restraint provided by 30 mm x 5 mm galvanized mild steel straps of maximum 2000 mm centres, in accordance with Building Regulations, Galvic Herringbone joist struts at min. span between 2.5 m and 4.5 m and one third span greater than 4.5 m. Floor void between joists to incorporate minimum 100 mm of Rockwool Flexi quilt (minimum density 10kg/m3). Joists to be underlined with 12.5 mm Gyproc Wallboard TEN complete with skim finish to form ceiling.

Flashing

Insert no.4 lead apron flashing min up-stand 150 mm insert cavity trays over.

Roof Access Hatches

To be insulated and draught sealed to same standard as roof. Water pipes and tanks in lofts to be fully insulated to prevent freezing. Where roof structures abut external walls - ensure all residual gaps/edges are insulated



Scale Bar

Cavity walls.(Kingspan K108)

Cavity walls to be 300 mm overall construction to comprise of 100 mm outer skin of blockwork with white render finish with inner skin of 100 mm Thermolite Shield blockwork. Both skins laid on 1:6 mortar mix with plasticizer and bonded together with Ancor Stalfix RT2 cavity wall ties, suitable for cavities up to 100 mm wide, staggered in alternate rows and spaced 750 mm horizontally and 450 mm vertically. All cavities closed at eaves, door and windows openings with Thermabate or similar insulated cavity closers. 100 mm cavity partially infilled with 60 mm Kingspan Kooltherm K108 Cavity Board with blockwork lined internally with 12.5 mm plasterboard on dabs to provide a maximum "U" value of 0.22W/m2K. Plasterboard returned into all window and door openings and with continuous band of adhesive around all openings at base and heads of wall and at external corners, in accordance with Accredited Construction Details with details checked on site to maintain quality assurance. All new internal solid walls to comprise of 100 mm skins of dense concrete blockwork (7KN) with 12.5 mm Gyproc Wallboard on dabs with skim finish.

Damp Proofing

Horizontal dpcs to be provided to wall min 150mm above finished ground level (stepped where necessary). A minimum of 4 courses of engineering brick is to be provided below dpc level to prevent spalling damage
D.P.M.'s to lap both new and existing dpc's
Where a former external wall remains internal as a result of the extension - check condition of exst H.D.P.C's and clean out existing cavities. Where defective - insert injection dpc. Limelite cement based water proof rendering to be used to finish off walls (not gypsum based plaster)
Any air bricks covered by proposal to be ducted via 100mm dia ducts to new external walls and insert telescopic air bricks sleeved with cavity trays over to connect to outside air

Existing Structure

The existing structure including foundations, beams, walls and lintels carrying new and altered loads are to be exposed and checked for adequacy to support new imposed 'dead' and 'live' loading conditions prior to commencement of work and as required by the Local Authority Building Control Officer.

Cavity closer

Insert Isoform XCC insulated cavity closer to all new openings all as document I 2013. Width and fixing to suit opening

Steel Beams and Brick Piers

The design has required the use of a number of steel beams and brick piers as designed by a Structural Engineer.
The method of carrying out the safe and secure temporary support, needling and propping of the existing building structure whilst this building work is being undertaken is the sole responsibility of the builder who is to ensure that NO settlement or disturbance/cracking of the fabric of the building takes place during the construction process.

Timber ground floor

ex. 25mm thick s.w. t & g floor boards on 150 x 50 treated s.w. floor joists at max. 450mm centres (joist direction shown on plan), built into walls. Wrap ends of joists in d.p.c. where built into existing walls. Provide 150 x 50 treated s.w. herringbone strutting between joists at mid span. Provide 100mm thick Kingspan Kooltherm K103 floorboard laid between all floor joists supported on 25 x 25 treated timber battens fixed to floor joists, to give min. 'U' value of 0.13. Provide 100mm oversite concrete (top of concrete to be above external ground level) leaving min. 150mm air gap between top of concrete and underside of floor joists. Insert 225 x 150 mm airbricks with cavity tray over, every 2m to perimeter external walls

LOCATION PLAN SCALE 1:1250

PROJECT

PROPOSED TWO STOREY
SIDE EXTENSION.
DRAWING TITLE
PROPOSED LAYOUTS
AND SECTION.

CLIENT

MRS. BETH ALLEN.

ADDRESS

6, RAMSWORTH AVE,
RAMSBOTTOM. BL0 9ET.

SCALE

SCALE 1:50@A1 OCT 2021.

DRAWING No

ADL 10215712/3.