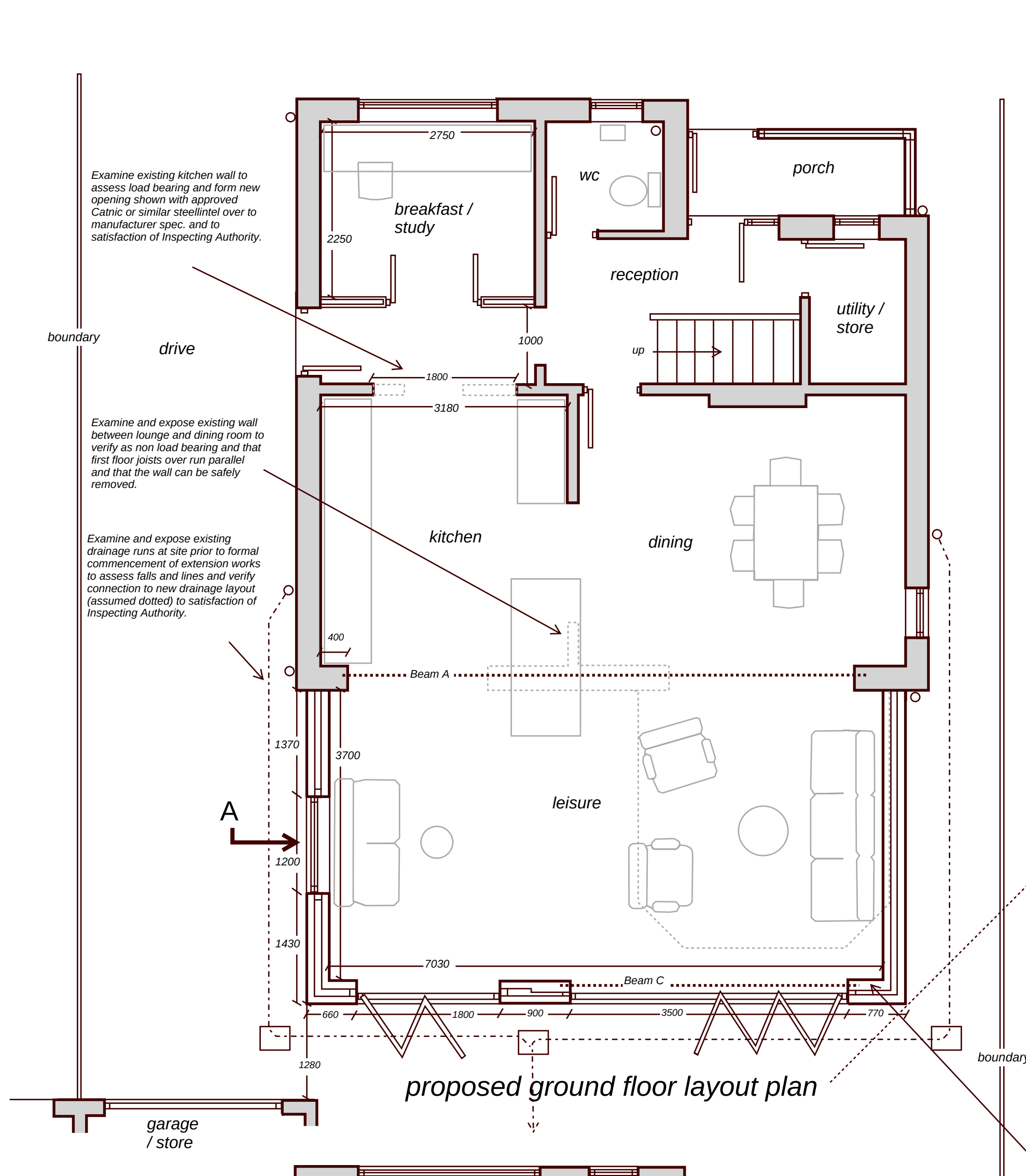
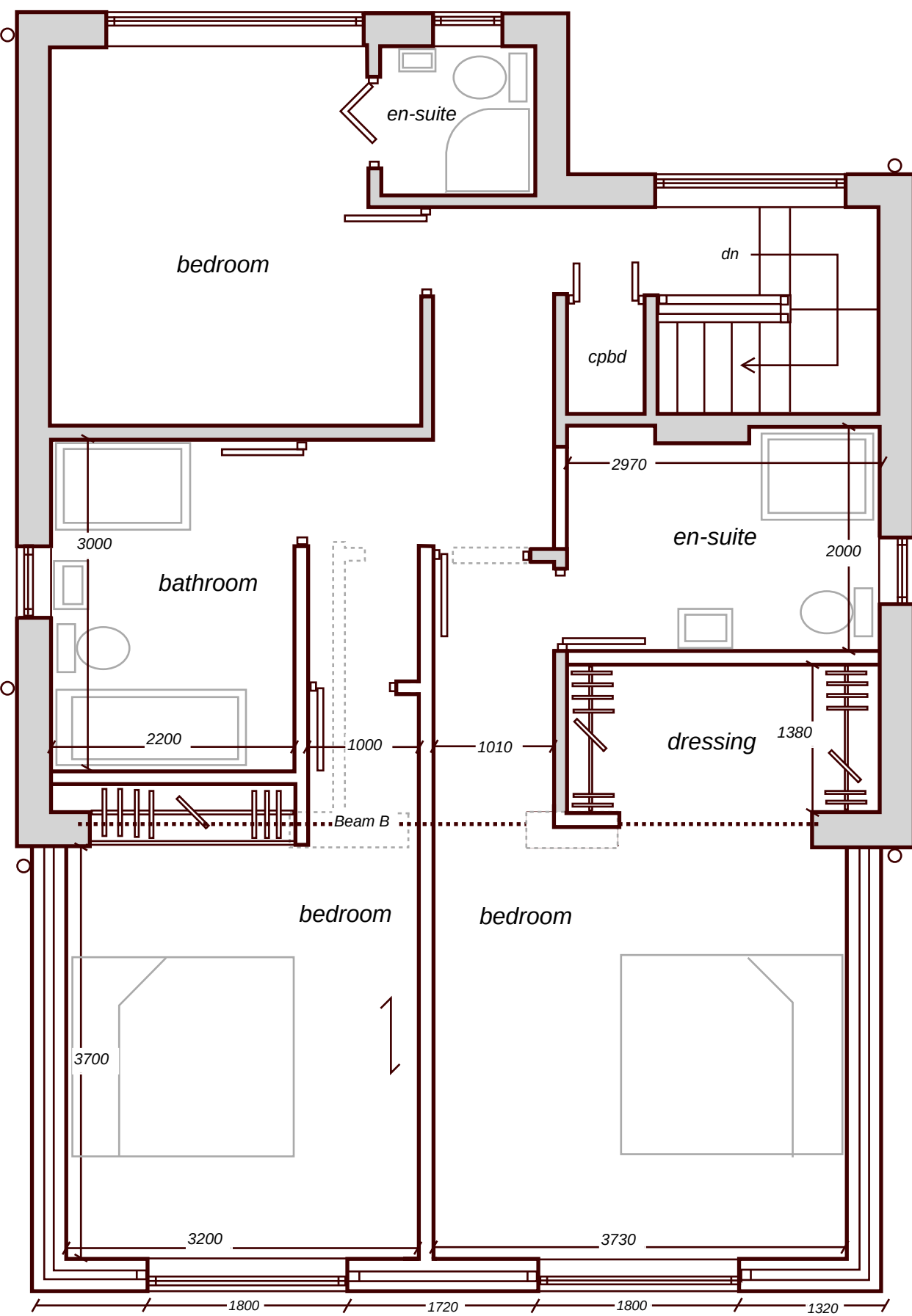
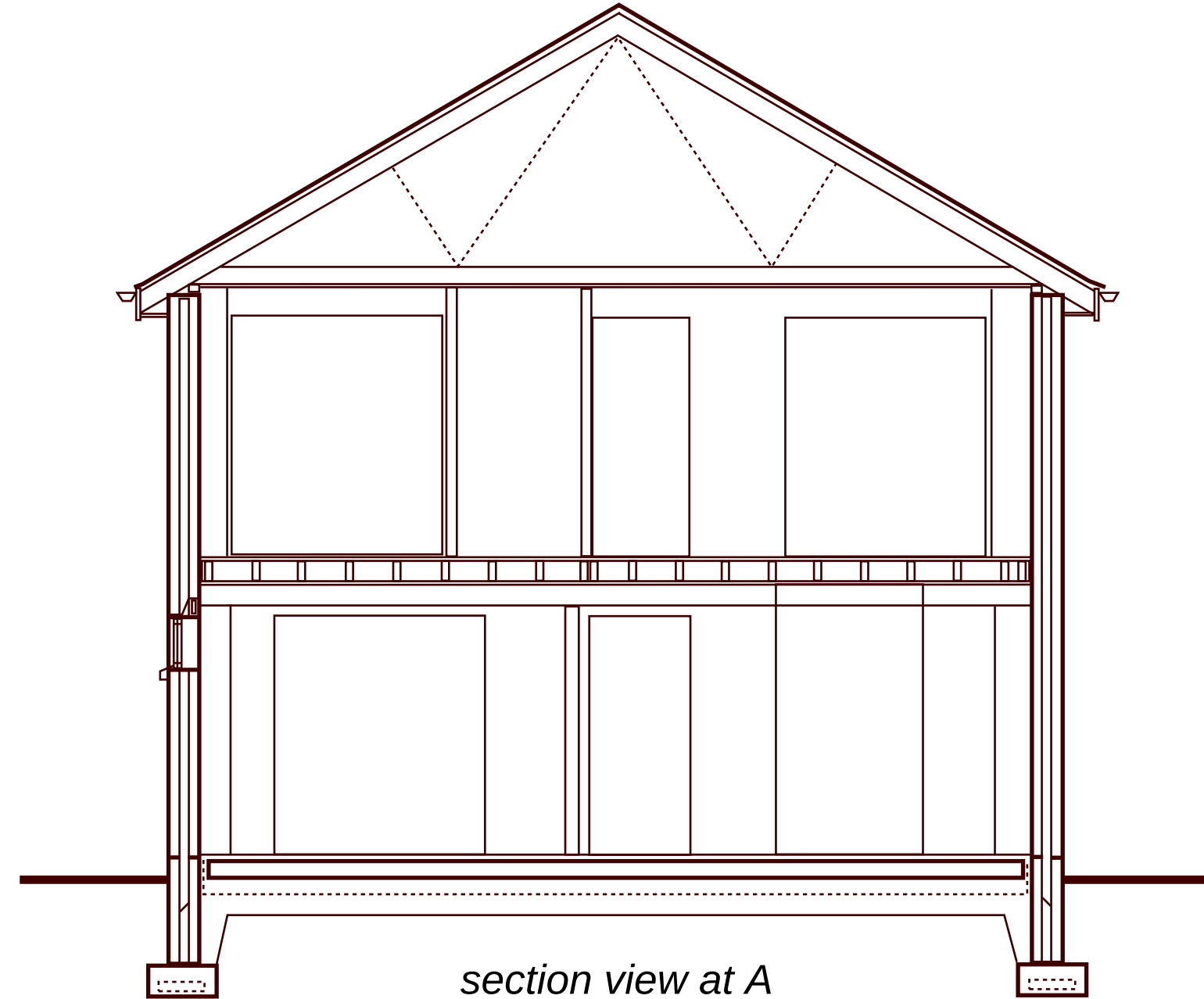
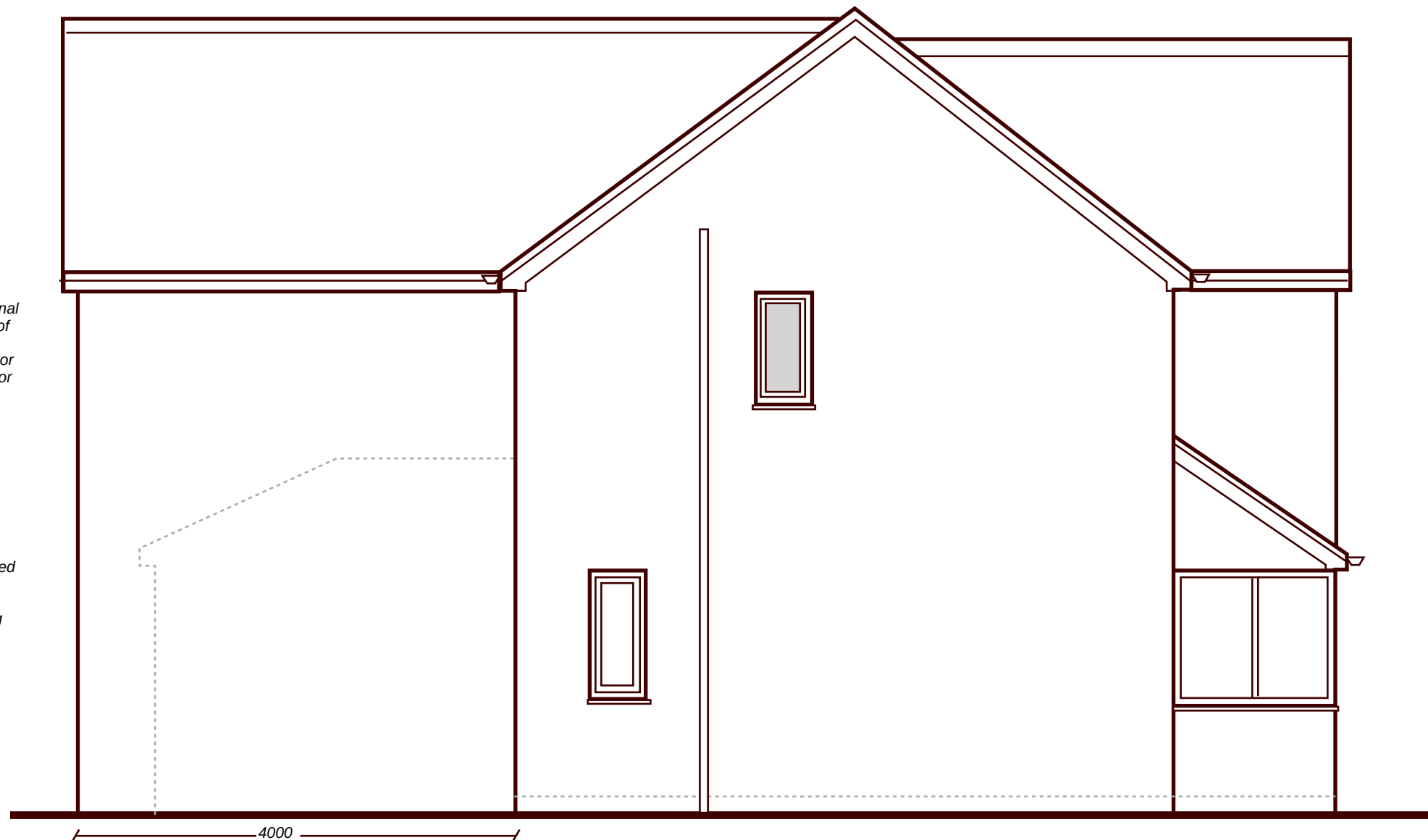
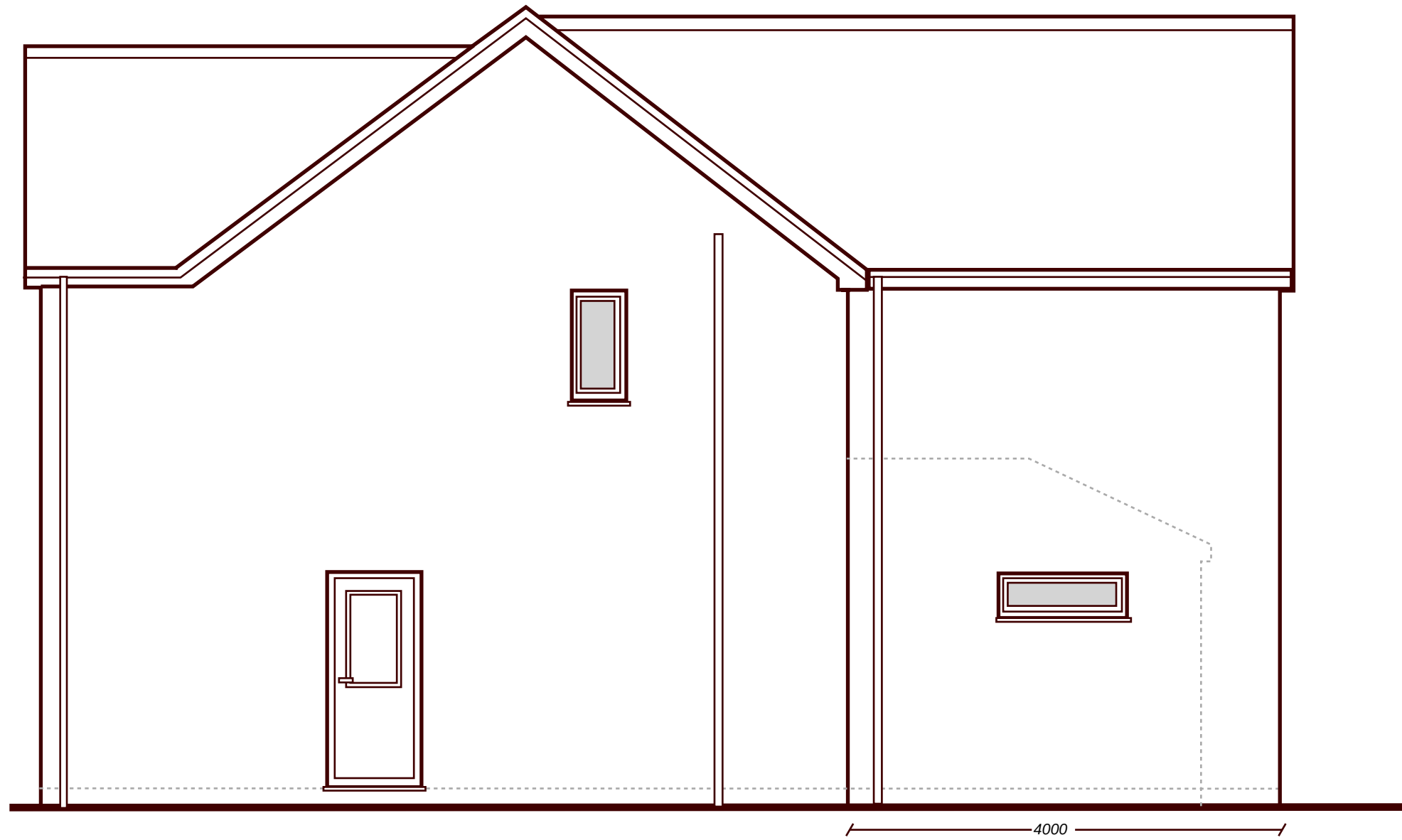




proposed ground floor layout plan



proposed first floor layout plan



***General Specification:**

***Preliminary Works:**
Carefully dismantle existing conservatory structure and grub existing floor and foundations if unsuitable to retain in situ. Examine existing drainage runs at site to assess falls and lines and verify new drainage layout. Remove all rubble from site to an authorised and licensed tip facility. Check existing foundations to assess ground bearing conditions etc. and assess soil type to verify new foundation type.

***Walls (External):**
Selected brickwork finish to match existing, min 100mm cavity enclosing Dritherm 32 insulation fill to manufacturer specification and internal leaf of approved 100mm load bearing thermal block work faced internally with plasterboard on treated battens or cement dabs. This or similar construction to achieve max 0.28 w/m² K U-Value.
*Note: new walling to be effectively bonded to existing structure to satisfaction of inspecting authority surveyor and wall ties to be stainless steel suitable for 100mm cavity width and compliant with DD140. Install Thermabate or similar insulated cavity closures at all opening jambs.

***Internal Walls (non load bearing):**
100x47 sw timber stud faced on 100x75mm sole plate and dpc faced with plasterboard incorporating vapour check and enclosing 100mm rockwool acoustic grade insulation.

***New Roof:**
Profiled concrete single lap tiles to match existing fixed in place in accord with manufacturer specification and BS5534 on treated battens on approved breathable membrane over prefabricated trussed rafter units by specialist design and supply compliant with BS5268 secured with purpose made steel clips to continuous 100x75mm sw wall plate anchored to supporting walls by approved galvanised ms straps at maximum 1000mm centres. Ensure all necessary handling, bracing and lateral restraint strapping to roof frame and adjacent structure is completed in accordance with manufacturer specification and compliant with BS5268. Horizontal Ceilings to have min. 100mm rock wool between joists and a further min. 200mm thickness laid across joists. Note: This or similar construction to achieve max 0.16 w/m² K U-Value.

***Lintels:**
Install Cantic or similar combined steel lintels over new openings where required with minimum 150mm end bearings to manufacturer spec. Carefully form new access doorway to extension as indicated and install precast concrete lintels over to manufacturer spec. Make good to all disturbed surfaces.

***Ground Floor Slab:**
*Extension floor slab to comprise floor finish to client requirement on min 60mm screed or power float finish to 125mm concrete slab reinforced with A193 mesh throughout on 1200g dpm over Celotex GA 4000 (70mm) or similar approved insulation board turned up in 25mm thickness at floor perimeter to avoid cold bridge. Lay further dpm over well blinded 150mm min. compacted natural stone sulphate free hardcore.
*U-Value max 0.22 w/m² K

***Foundation Detail:**
Subject to prior exposure of existing house foundation lay 600x300mm deep concrete strip foundations to new walls at depth to to suit site conditions and to satisfactory bearing strata to approval of inspecting authority. Reinforce throughout with 2 no layers B503 steel mesh.
*New foundation to create no surcharge on drainage lines at any point - to satisfaction of Inspecting Authority Surveyor. All works to be carried out with full agreement of client and adjoining neighbours and any disturbance to existing structures to be made good to satisfaction of all parties.

***Drainage:**
Lay new 100mm pvc drains on granular bed at min 1:40 falls to connect to existing system on site. Ensure adequate support and protection to all drains passing through walls and building footprint. Upvc rainwater goods to match existing carried to existing system as required. Internal waste plumbing to satisfy BS5572 with 75mm deep seal traps as required. Wastes to discharge to 100mm stub stack fitted with Dargo or similar air admittance valve positioned above flood level of fittings to full satisfaction of inspecting authority surveyor.

***Fenestration:**
Install high performance double glazed upvc / aluminium window and door units to match existing style using Pilkington Low E 'K' glass and min 25mm cavity - max 1.60 w/m² K U-Value. Opening casements to represent minimum 5% of adjacent floor as natural vent plus min 1000mm² trickle ventilators to head of frame.
*Escape Window: Where required provide opening casements to habitable rooms capable of safe egress in emergency i.e. min 0.33m² clear opening (say 800x450mm) set within 1100mm of internal floor level. Ensure that all doors and critical window areas are fitted with laminated or toughened safety glazing compliant with current BS:EN.12150.

***Floor - First:**
Lay new floor at same level as first floor with 21mm 1&g boarding across 195x50mm sw C16 joists at max 400mm centres (or 170x63mm C24 grade joists if ground floor ceiling height is compromised) supported off heavy duty galvanised ms joist hangers fixed to comply with manufacturer specification. Provide suitable strutting at mid span with end wedges as necessary. Under draw joists with plasterboard to achieve min 30 minutes fire resistance incorporating vapour control membrane where required and enclosing 150mm Acoustic Rockwool between joists throughout. Note any notching of floor joists for services to be minimal and compliant with BS5268 part 2-1991. Install double joists beneath partition line bolted together with M16 bolts and steel dog tooth washers at 600mm max centres.

***Ventilation:**
Natural ventilation from opening casements plus install mechanical extract fan to new bathrooms set to achieve min 15 litres/sec extract rate. Also install mechanical extract fan to kitchen area set to achieve min 60 litres/sec extract rate (30 litres/sec if over cooker hood).

***Heating:**
All boiler alterations and flue discharge criteria plus any extended space heating to be to the full requirements of a suitably qualified heating engineer and assessment of existing heating system plus compliant with current Part J Building Regulations. Install thermostatic control valves as necessary throughout.

***Electrical Work:**
All notifiable electrical work to be carried out by a suitably qualified contractor registered with an approved national body. A formal completion certificate to be issued in compliance with current Part P building regulations and to satisfaction of inspecting authority surveyor. Note: all lighting to be low energy type to client spec. *Install sockets to extension area to requirements of client and provide co-axial and satellite ports as needed. *Install a mains operated inter-linked smoke alarm system with battery back up to circulation areas and critical locations in compliance with BS5839 and to satisfaction of inspecting authority surveyor.

***Structural Works:**
Check direction of existing first floor joists and first floor walling to ensure assumed loadings in steel work calculations are verified. *Install steel beams encased in gyproc fire line board to achieve min. 30 minutes fire resistance. See Engineer's design sheets for all structural beam etc information.

*Beam schedule (All steel grade S355)

Beam A - 1 no 203 x 203 x 60 UC
Beam B - 1 no 254 x 146 x 37 UB
Beam C - 1 no 203 x 133 x 30 UB (+280x8mm rust protected steel plate welded to bottom flange incorporating 2000g dpc cavity tray)

*Note Contractor to assess bearing capacity of existing retained masonry to receive ends of new Beams and if necessary rebuild in bonded 7N/m² engineering quality concrete brick/ block to required bearing capacity beneath spreader pad stones to full satisfaction of inspecting authority.

***Important Note:**
This drawing has been prepared for submission to the Inspecting Authorities for necessary Statutory Approvals. Nominated contractor to verify all dimensions either written or scaled together with drainage lines and inverts etc. prior to commencement of formal construction work on this site and any discrepancies to be referred to the Client and Agent. All works to be carried out with full agreement of client and adjoining neighbours and any disturbance to existing structures to be made good to satisfaction of all parties. This drawing is not to be reproduced without prior consent.

**Proposed Two Storey Rear Extension and Alterations
at 11, Monyash Drive, Leek, Staffs ST13 5SY**

Scale 1-50 (A1) - proposed layout Dwg ref MD2b February 2022

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