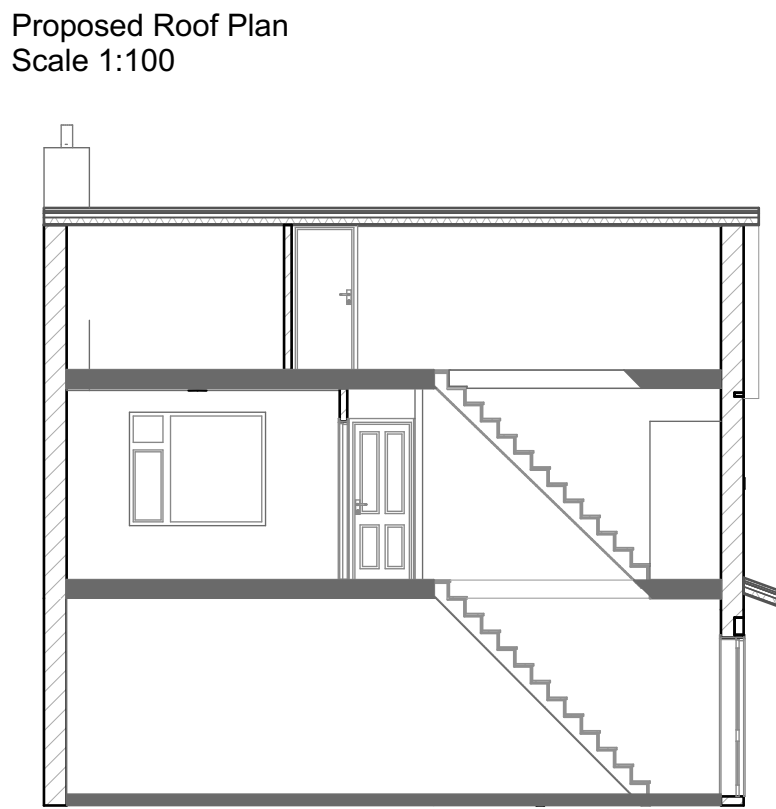
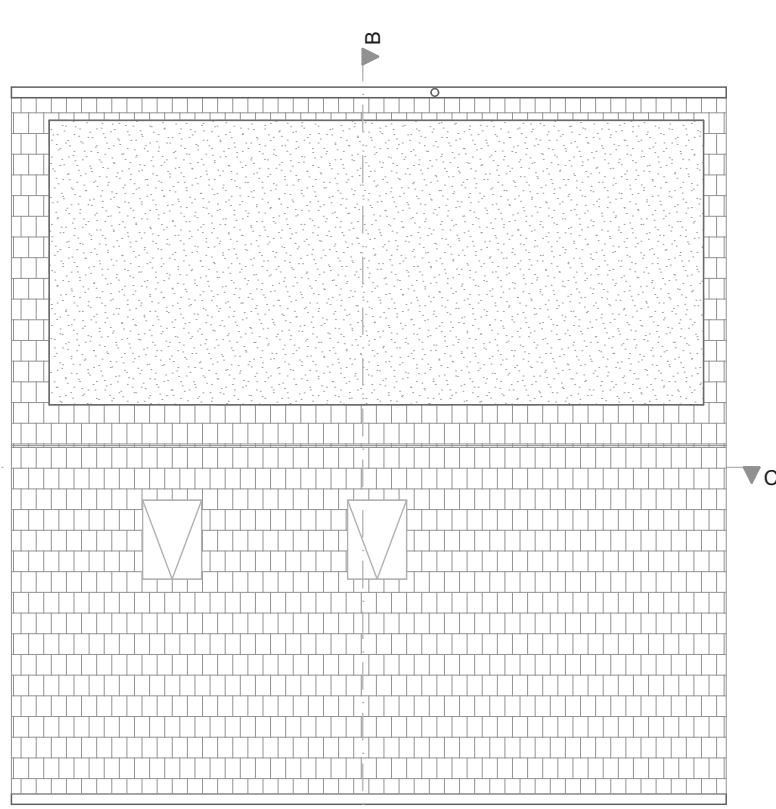
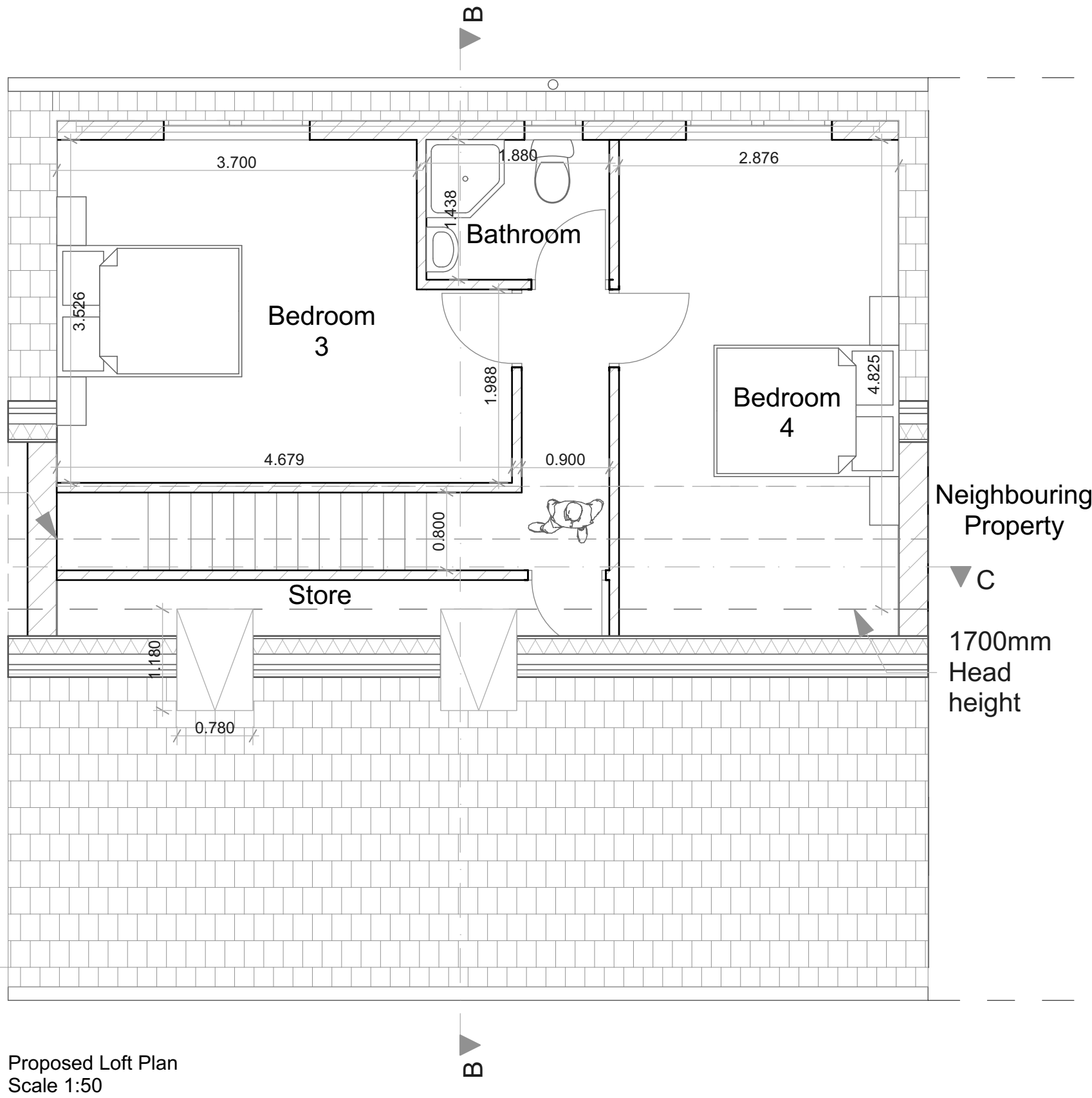
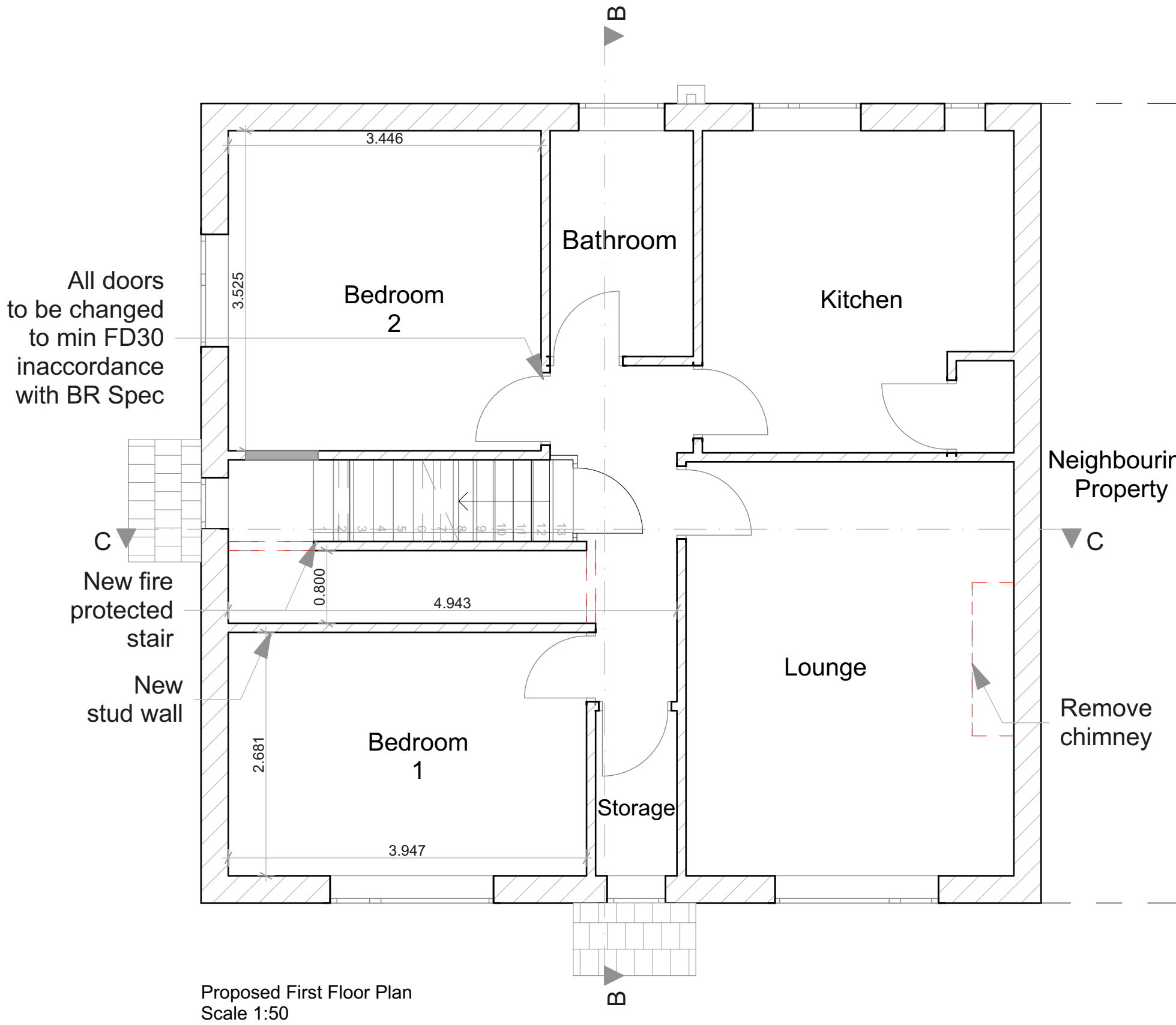




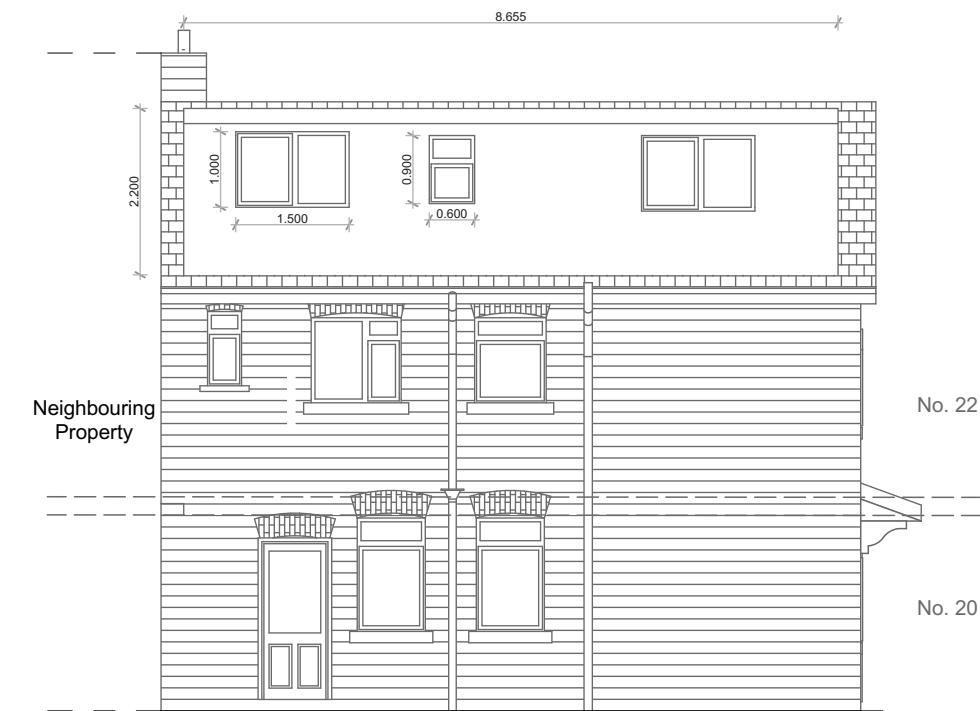
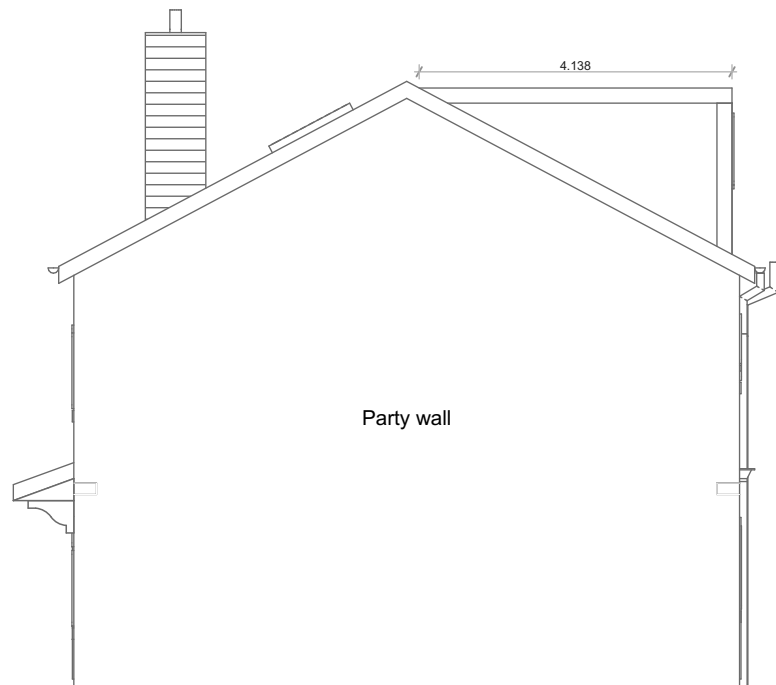
IMPORTANT

- > This drawing is copyright and remains the property of this practice
- > Do not measure from this drawing, except for the purpose of planning
- > All dimensions to be checked on site
- > Positions of anything existing must be confirmed on site prior to proceeding
- > Any structural elements drawn are indicative and should be calculated by a structural engineer

NOTES:

Contractor to investigate ground at earliest opportunity to assess most suitable footing and place cavity wall in best possible position to avoid damage to drains.

Contractor to be very cautious about using the dimensions on this drawing due to the angles of the walls and where the dimensions have been taken from. All measurements to be taken on site personally. Drawings for design purposes only.



UPGRADE OF PITCHED ROOF
(Imposed load max 0.75 kN/m² - dead load max 0.75 kN/m²)
Vented roof - pitch 22-45°
To achieve U-value 0.15 W/m²K
Existing roof structure to be assessed by a Structural Engineer and any alterations to be carried out in strict accordance with Structural Engineer's details and calculations, which must be approved by Building Control before works start on site. The existing roof condition must be checked and be free from defects, any defective coverings or felt to be replaced in accordance with manufacturer's details.
Roof construction - 47 x 150mm Grade C24 rafters at max 400mm centres, max span 3.47m. Insulation to be 100mm Sopratherm (Celotex) GA4000 between rafters and 60mm under rafters. Fix 12.5mm plasterboard (joints staggered) over VCL. Finish with 3mm skim coat of finishing plaster to the underside of all ceilings.
(Cavity of 25mm provided by fixing battens between plasterboard and under rafter insulation recommended where insulation under rafters exceeds 50mm).
Maintain a 50mm air gap above insulation to ventilate roof.
Provide opening at eaves level at least equal to continuous strip 25mm wide and opening at ridge equal to continuous strip 5mm wide to promote ventilation or provide equivalent high and low level tile vents in accordance with manufacturer's details.

MEANS OF ESCAPE - Fire doors
Form a protected escape stairway by providing half hour fire resistance to all partitions. Ceiling to be upgraded to provide half hour fire resistance or modified half hour fire resistance as appropriate. Stairway to be protected at all levels - from the loft room/rooms then leading directly to an external door at ground level (no inner rooms allowed). All doors on to the stairway must be FD20 rated fire doors to BS 476 or the European equivalent BS EN 1634 (fitted with intumescent strips rebated around sides & top of door or frame). Where applicable, any glazing in fire doors to be half hour fire resisting and glazing in the walls forming the escape route enclosure to have 30 minutes fire resistance to at least 1.1m above the floor level or stair pitch line.

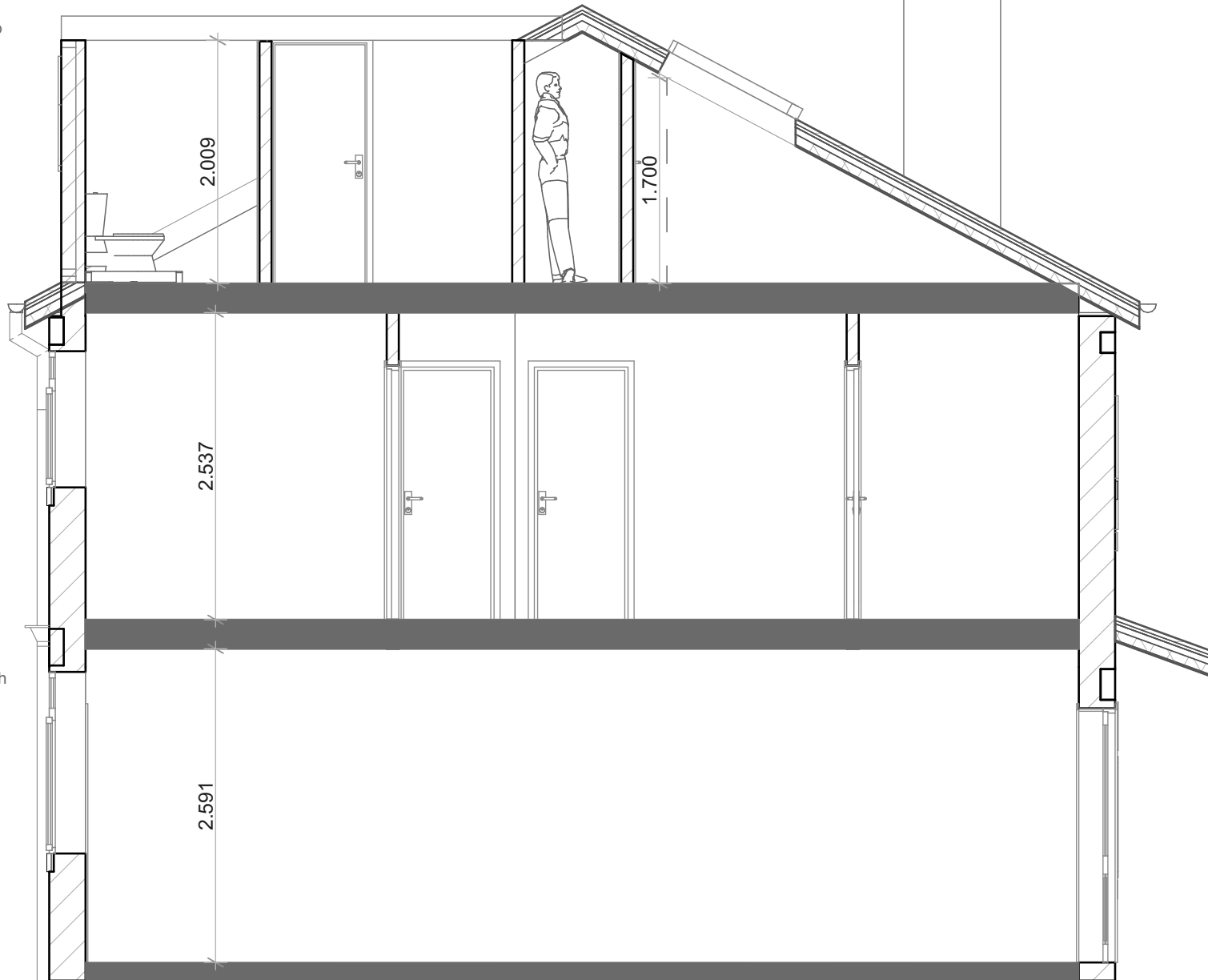
NEW AND REPLACEMENT WINDOWS
New and replacement windows to be double glazed with 16-20mm argon gap and soft coat low-E glass. Window Energy Rating to be Band B or better and to achieve U-value of 1.4 W/m²K. The door and window openings should be limited to 25% of the loft room floor area.
Insulated plasterboard to be used in reveals to abut jambs and to be considered within reveal soffits. Fully insulated and continuous cavity closers to be used around reveals.
Windows and door frames to be taped to surrounding openings using air sealing tape.

STAIRS
Dimensions to be checked and measured on site prior to fabrication of stairs. Timber stairs to comply with BS585 and with Part K of the Building Regulations. Max rise 220mm, min going 220mm. Two risers plus one going should be between 550 and 700mm. Tapered treads to have going in centre of tread at least the same as the going on the straight. Min 50mm going of tapered treads measured at narrow end. Pitch not to exceed 42 degrees. The width and length of every landing should be at least as great as the smallest width of the flight. Doors which swing across a landing at the bottom of a flight should leave a clear space of at least 400mm across the full width of the flight. Cupboard doors may open across the top landing where the swing is a minimum of 400mm from the tread. Min 2.0m headroom measured vertically above pitch line of stairs and landings. Handrail on staircase to be 900mm above the pitchline, handrail to be at least one side if stairs are less than 1m wide and on both sides if they are wider. Ensure a clear width between handrails of minimum 600mm. Balustrading designed to be unclimbable and should contain no space through which a 100mm sphere could pass. Allow for all structure as designed by a Structural Engineer.

DORMER FLAT ROOF
(Imposed load max 1.0 kN/m² - dead load max 0.75 kN/m²)
To achieve U-value of 0.15 W/m²K
Flat roof covering to be glass reinforced plastic (GRP) system with BROOF(I4) fire rating in accordance with BS EN 13501-1:2018 and with a current BBA or other approved accreditation. GRP to be laid in compliance with manufacturer's details by flat roofing specialist on 18mm exterior grade plywood, plywood to be laid on firs to give a 1:40 fall on 47 x 175mm grade C24 timber joists at 400 ctrs, max span 3.89m (see Engineer's details for sizes). Cross ventilation to be provided on opposing sides by a proprietary eaves ventilation strip to give 25mm continuous ventilation, with fly proof screen. Flat roof insulation is to be continuous with the wall insulation but stopped back to allow a continuous 50mm air gap above the insulation for ventilation. Insulation to be 120mm Sopratherm (Celotex) XR4000 between joists and 50mm Sopratherm (Celotex) GA4000 under joists. Provide 12.5mm plasterboard over vapour barrier to the underside of the insulation. Plasterboard to be fixed joists and finished with a plaster skim.
Provide restraint to flat roof by fixing using of 30 x 5 x 1200mm ms galvanised lateral restraint straps at maximum 2000mm centres fixed to 100 x 50mm wall plates and anchored to wall.

UPGRADING SOLID PARTY WALL
To achieve min U-value 0.18 W/m²K
The existing walls must be checked for stability and be free from defects. Provide a scratch coat render to existing wall surface. Insulate wall on the warm side using 100mm PIR insulation, e.g. Sopratherm (Celotex) GA4000 insulation board, fixed to 25 x 50mm battens at 600mm centres to provide a nominal 25mm cavity between the masonry and insulation. Fix a vapour control layer on the warm side of the insulation. Finish with 12.5mm plasterboard and a plaster skim.
All work in accordance with BS 8000-8:2023 Design and installation of dry lining systems.
The party wall to achieve a minimum 60 minutes fire resistance (REI 60).
At the junction where the roof structure meets the party wall, install 60 minute fire-resisting cavity barriers or use a fire stopping product such as fire-rated mineral wool batts or intumescent products. Eaves cavities and spaces behind fascias/soffits adjacent to party walls to be closed off with cavity barriers or fire-resisting material. Cavity barriers to be tested to BS 476 e.g. Rockwool Cavity Barriers or Knauf Firestop Slab.

HIP TO GABLE WALL SPECIFICATION
To achieve minimum U Value of 0.18 W/m²K
Engineer's Structural calculations and details to be provided for all elements of structure before works commence on site.
Existing Structure Assessment
Before construction of the new gable wall, foundations beneath the existing external wall to be exposed via a trial pit and assessed by a Chartered Structural Engineer to confirm their suitability for supporting the additional loadings of the new structure. If the existing foundations are found to be inadequate, underpinning will be required. A detailed underpinning design to be provided and approved by a Structural Engineer prior to work commencing on site. The structural integrity of the existing wall to be appraised to ensure it is stable and capable of supporting the additional load imposed by the new gable.
New Gable Wall Construction
Clean the existing wall top to remove dust, debris, or moss. Ensure the wall is level and in good condition. If required, level with mortar bedding or a thin concrete pad.
New gable wall outer leaf to consist of 102.5mm facing brickwork to match existing property. The inner leaf to be constructed using 100mm lightweight aerated concrete blocks with a thermal conductivity no greater than 0.15 W/m²K (e.g. Celcon Solar or Thermalite Turbo). All masonry is to be constructed using a 1:1.8 cement/sand mortar mix.
Stainless steel vertical twist wall ties to be incorporated in the construction at maximum spacings of 750mm horizontally, 450mm vertically, and 225mm at reveals and corners. Wall ties to be suitable for the cavity width and in accordance with BS EN 845-1:2013.
Insulation and Internal Finish
Fix 90mm Sopratherm (Celotex) GA4000 PIR insulation directly to the internal face of the blockwork. Over this, install timber battens to create a nominal 25mm service cavity, then apply a vapour control layer (VCL), followed by 12.5mm plasterboard and a 3mm finishing plaster skim.
Damp-Proofing and Fire Protection
Install cavity trays above all window and door openings, each with a minimum 150mm upstand. Provide vertical DPCs at all openings and junctions with abutting structures. Close all cavities at eaves and around openings using non-combustible insulated cavity closers such as Thermabate or similar.
Weep holes to be included with cavity trays—minimum two per opening, spaced no more than 900mm apart. Additionally, provide 30-minute fire-resistant cavity barriers around all openings, at the top of walls, and along any separating floor junctions. Cavity trays to be installed over these barriers where required. All trays and fire protection systems to be installed strictly in accordance with the manufacturer's instructions.
Lateral and Roof Restraint
Gable wall to be strapped to the roof structure at 2.0m centres. Solid timber noggins (38mm wide) to be provided between rafters at all strap positions. Where floor joists run parallel to the external wall, floor joists to be strapped to the wall at maximum 2.0m centres using the same type of galvanised straps. Straps to span a minimum of three joists and be supported by solid noggins fixed between the joists. All straps to be galvanised mild steel (30mm wide x 5mm thick x 1200mm long) and fixed across a minimum of three rafters.



Key

Walls to be removed

Door/Window blocked

Scale 1:100 @ A1

Scale 1:50 @ A1



Client
Mr R Ahmed
No. 22 Louis Avenue, BL9 5EQ

Date
June 2026

Drawing Scale
Various @ A1

Drawing Title
Proposed Plans & Elevations
Drawing Number
72-02-01 Proposed

Project
Proposed Loft Conversion with a Dormer

