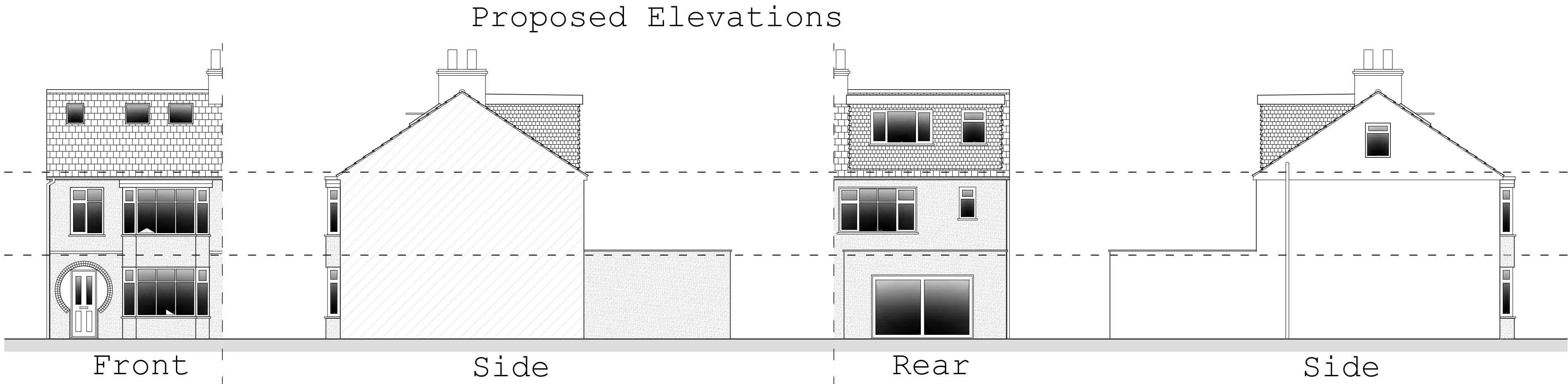
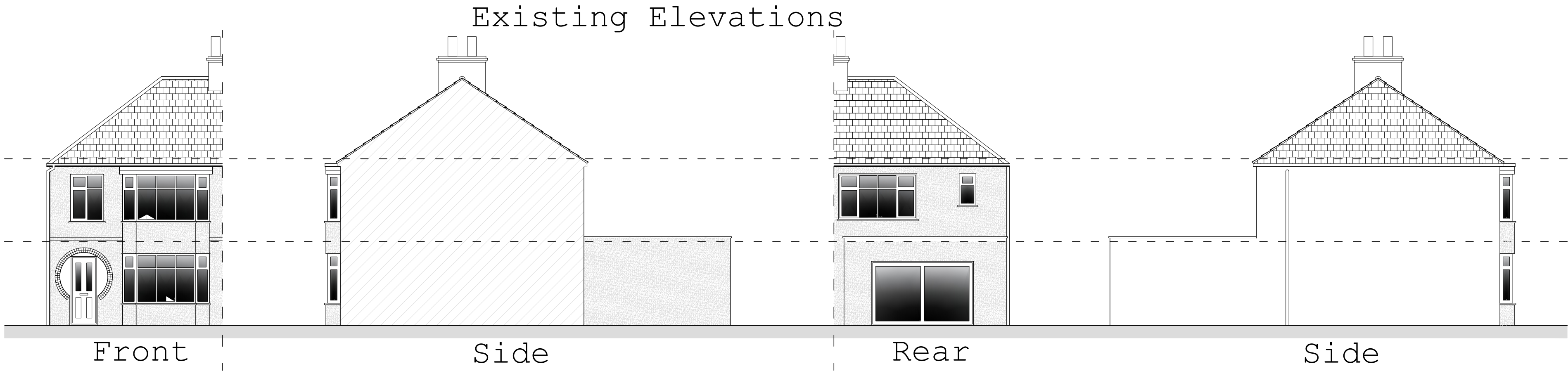


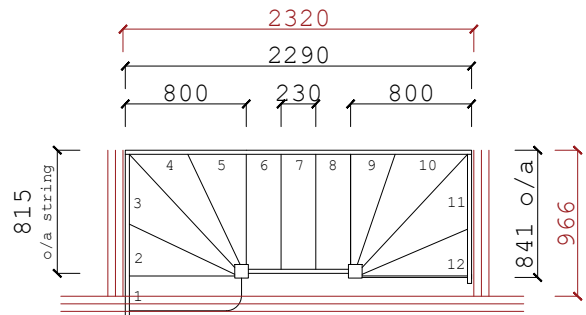


Volume Calculation

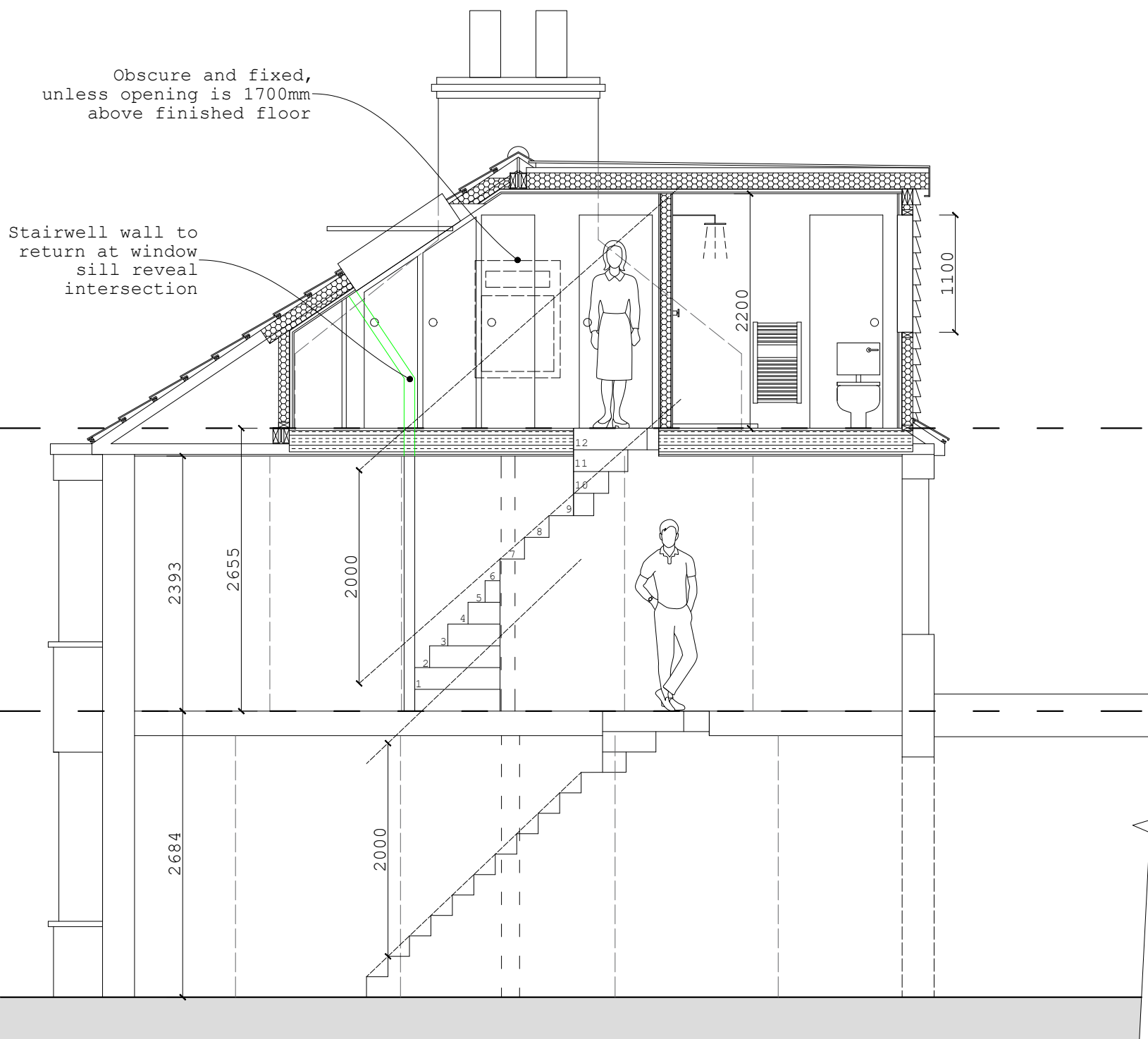
Existing = 49.96m³
Proposed = 56.78m³ > Additional = 9.82m³

Dormer = 20.2m³

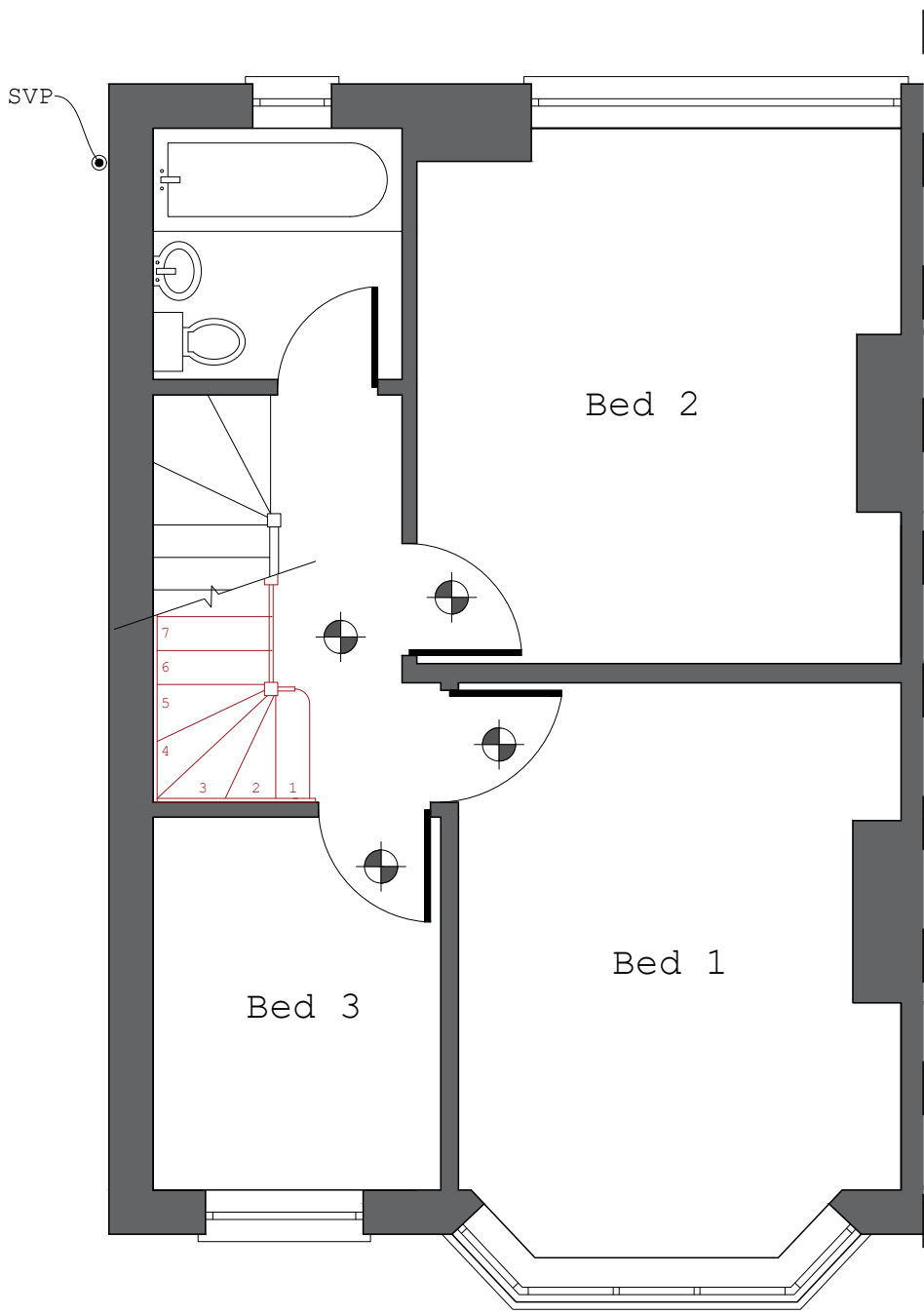
Total Additional Roof Volume = 30.02m³



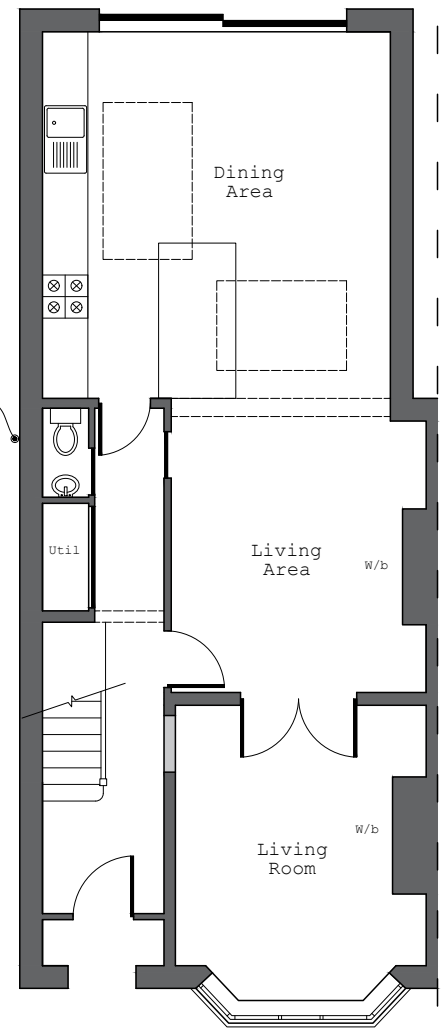
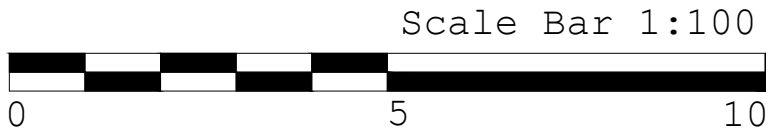
Stairs



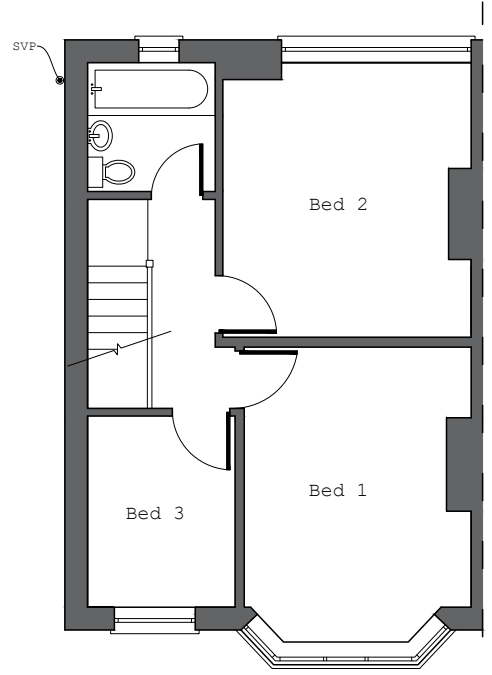
Section A:A



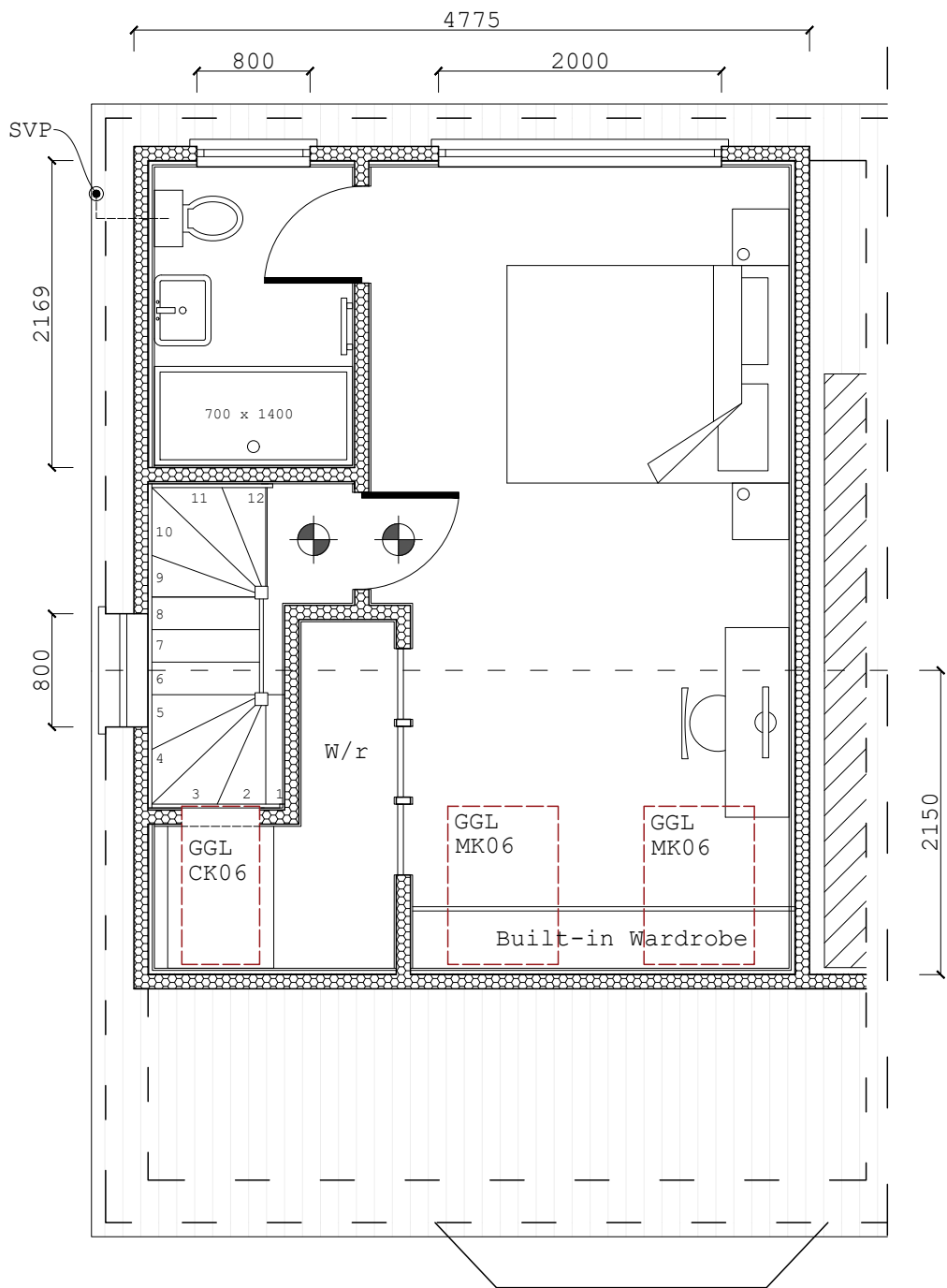
Proposed First Floor Plan



Existing Ground Floor Plan



Existing First Floor Plan



Proposed Loft Floor Plan

All dimensions are structural and need to be checked on site

Brief specification

Existing roof construction

Interlocking clay tiles on 75x50mm rafter @ 400mm centre. Existing ceiling 12.5mm plasterboard. First floor ceiling height 2613mm, gable wall bath stone block & brick cavity arrangement.

Walls & flooring

100x50mm stud walls at 400mm centre bolted with 6inch timber locking bolt screws to form purlin. 12.5mm plasterboard & skim with counter batten to maintain air flow. 50x125mm rafters alongside existing from perimeter stud work to ridge. 105mm Actis Hybris insulation in-between rafter and stud walls with Actis H control throughout. 100x50mm gable walls & partition walls with 100mm fibreglass insulation.

New floor structure

22mm T&G V313 flooring grade chipboard on joists at 400mm centres. 200mm fibreglass in-between joists. Both insulation and flooring to extend through to eaves. Steels to form perimeter beams, new joists to be supported by heavy duty joist hangers. Existing ceiling joists to be strapped to new beams.

Stairs

Staircase pitch 42° max, min going 220 & max riser 220mm. Tapered treads to measure 50mm at narrow end and 220 on the centre line. Headroom to be 2000mm min off pitch line & landing. Spindles 100mm max. Handrail to be 900mm min off the pitch line and landing line. Balustrades at 100mm apart.

Ventilation

Trickle vents to all windows min 800mm; ensure equivalent of continuous 25mm air gap at eaves level, 5mm continuous ridge ventilation is in place.

Electrics

All electrical work is required to meet the requirements of part P (electrical safety) to be designed, installed, inspected and tested by a competent person to do so. An appropriate BS 7671 electrical installation certificate to be issued for the work.

Fire regulations

☛ Denotes mains operated, fully integrated smoke alarms with battery backup on all floors, & to be positioned 300mm from any lights, wall and avoiding location over treads. Provide fibreglass cavity barrier around any beams to maintain full 1 hour fire resistance. Lighting to achieve of part L1B.

Drainage

32mm diameter PVC wastes to basin & showers, where waste runs exceed 1.7m use 50mm diameter. WC's are connected to existing SVP. Install mechanical extractor fan to shower room. SVP should terminate not less than 900mm above any opening within 3 meters.

Dormer Face & Cheeks

Vertical tiles hanging on tile battens & breathable roofing felt on BS 5747 on 9mm exterior OSB. 100x50mm studs at 400 centres with 105mm Actis Hybris and Actis H Control vapour barrier. 12.5mm plasterboard & skim. Dormer cheeks and external walls within 1m of the boundary need to provide minimum 30 minutes fire resistance from both side and the external surface/cladding should achieve Euro class B (class 0). Consider cementitious boards such as Promat Supalux (or similar approved product) fixed to the external face of the timber frame.

Dormer roof

Resitrex or rubber single ply roofing on 19mm plywood decking on 50x50mm tapered firing strips falling 50-0mm. Dormer joists at 400 centres with 105mm Actis Hybris & Actis H Control.

Title: Loft conversion with hip to gable with rear flat roof dormer
Client: Catherine Walker
Address: 239 Winsley Rd, BOA, BA15 1QS
Date: 29/04/26
Plan No: 1, Rev-B
Scale: 1:50, 1:100 @ A1
Local Authority: Wiltshire