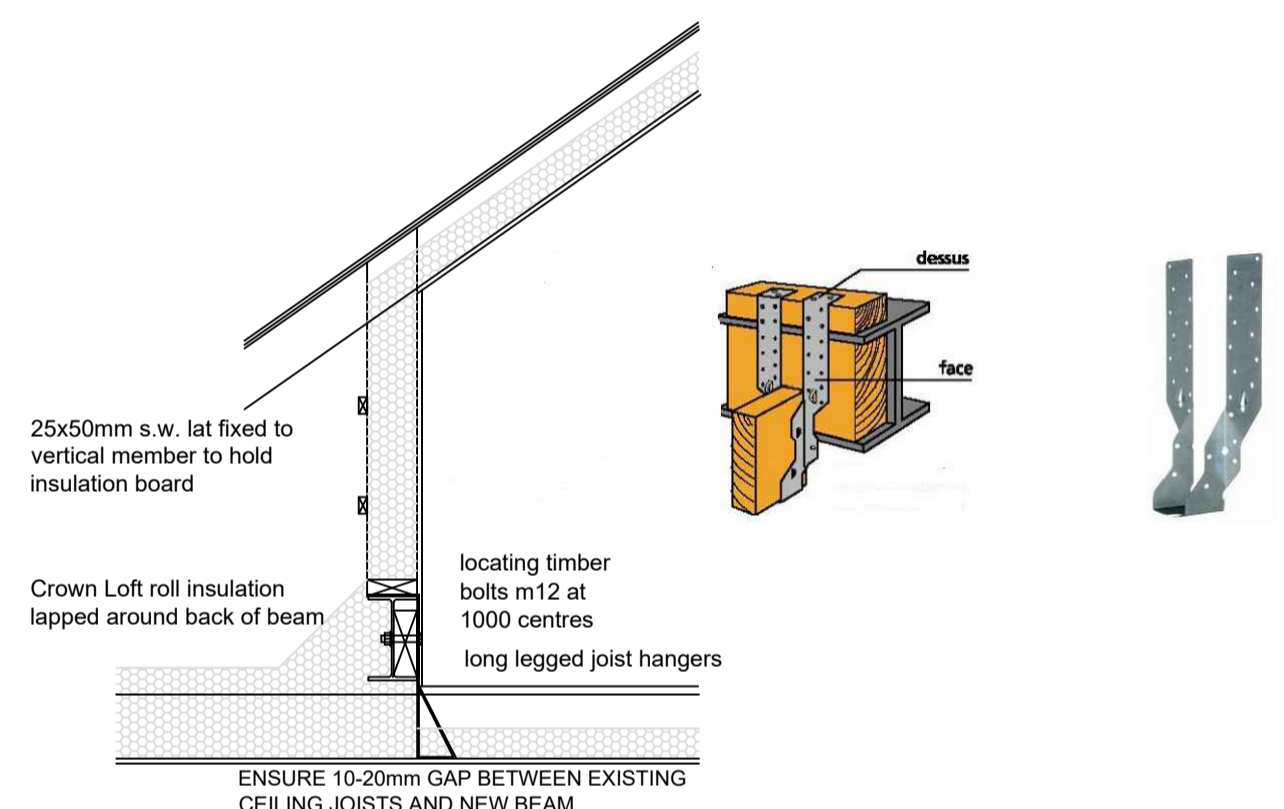
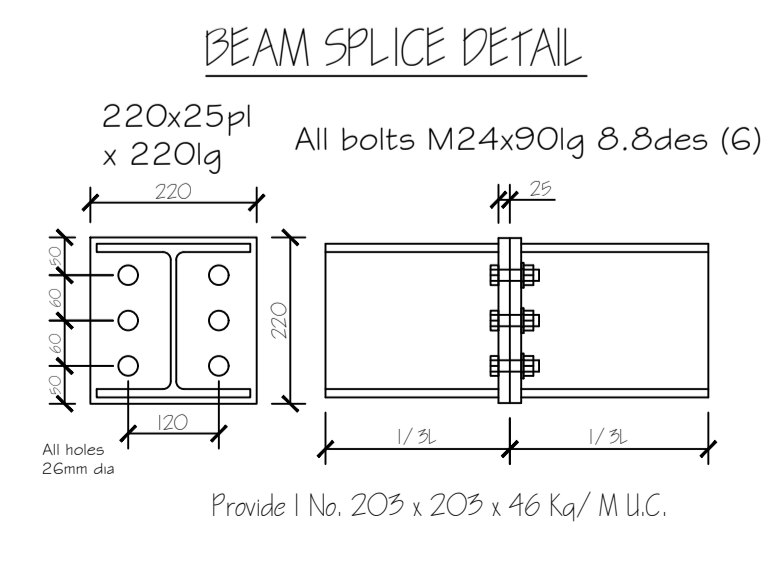
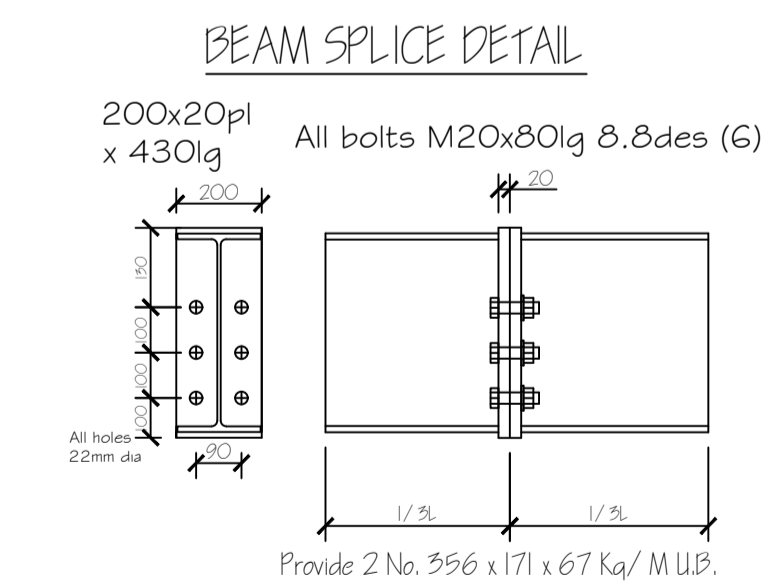
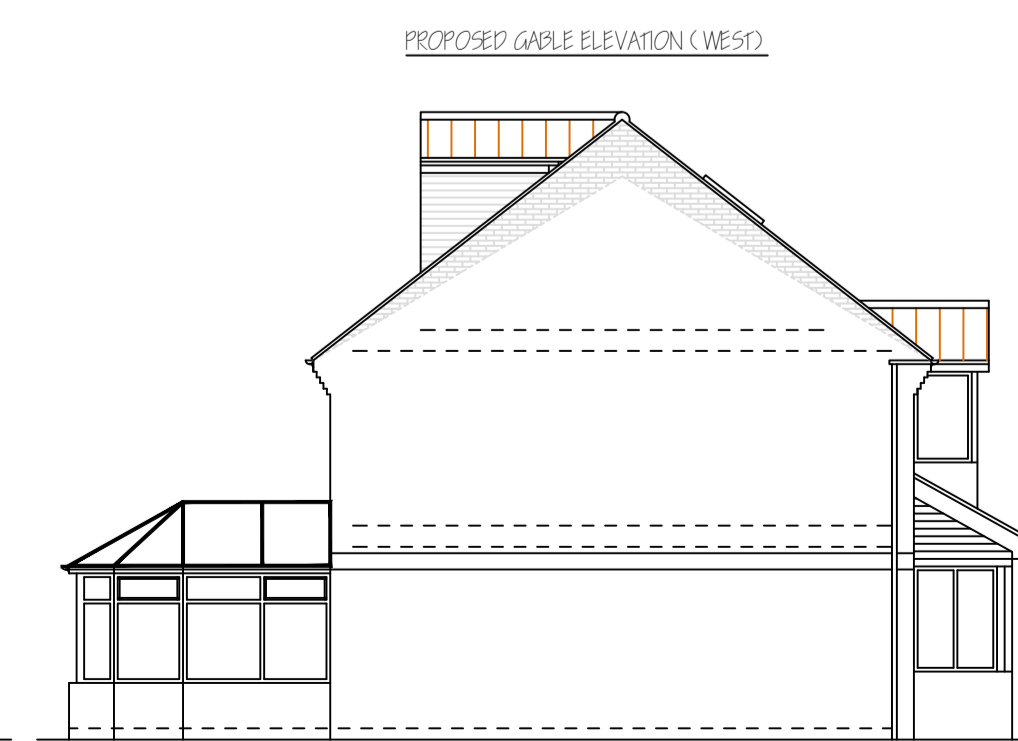
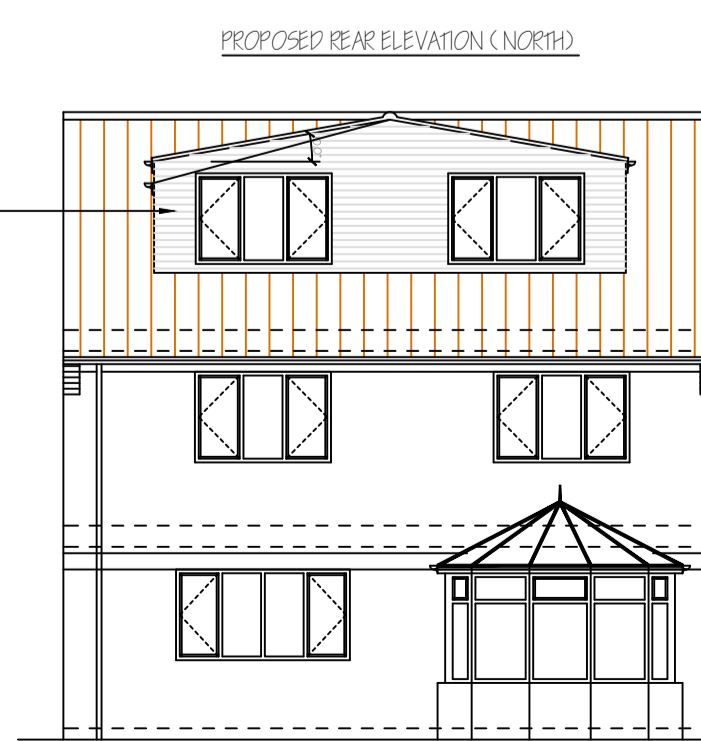
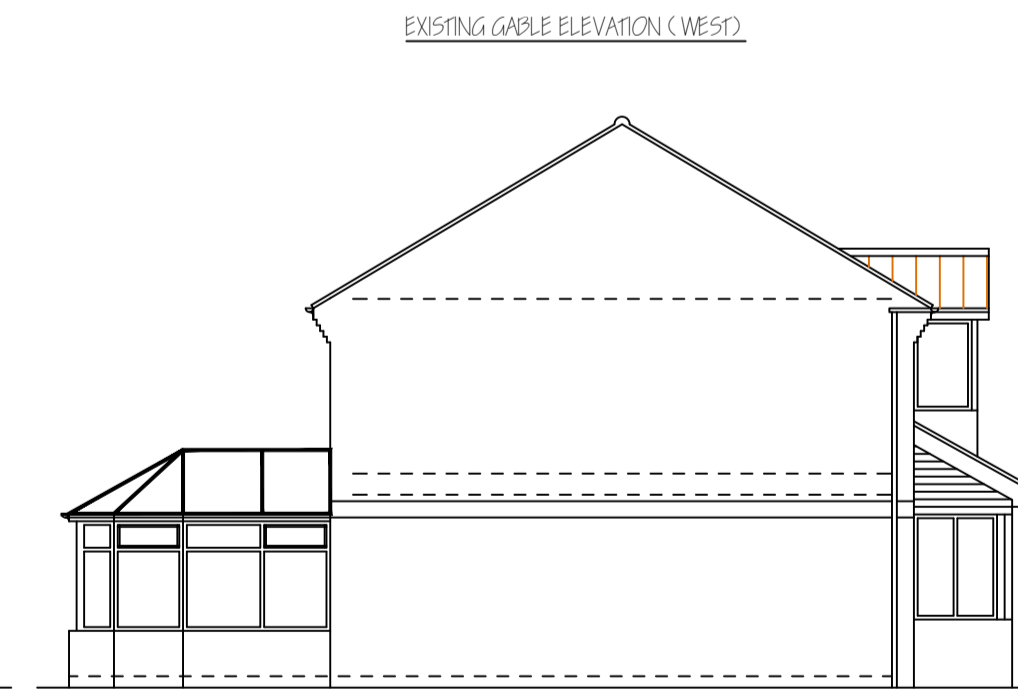
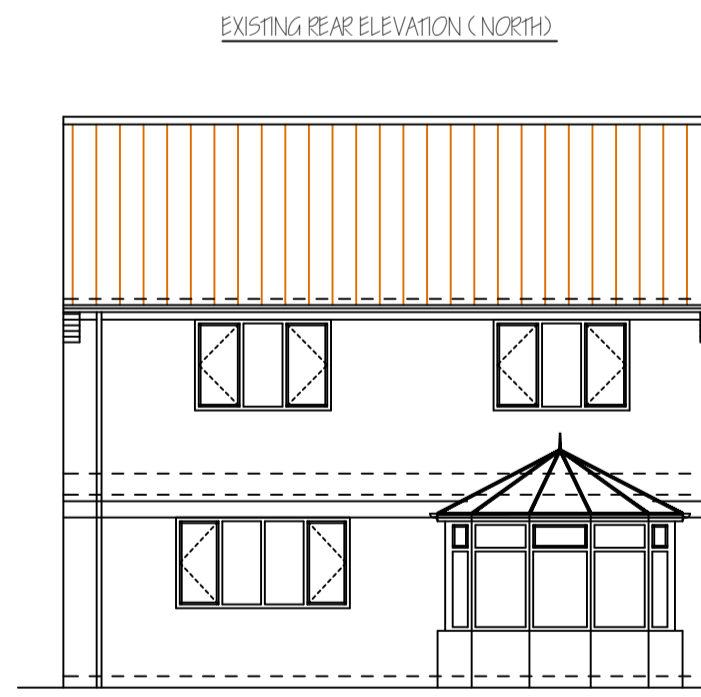
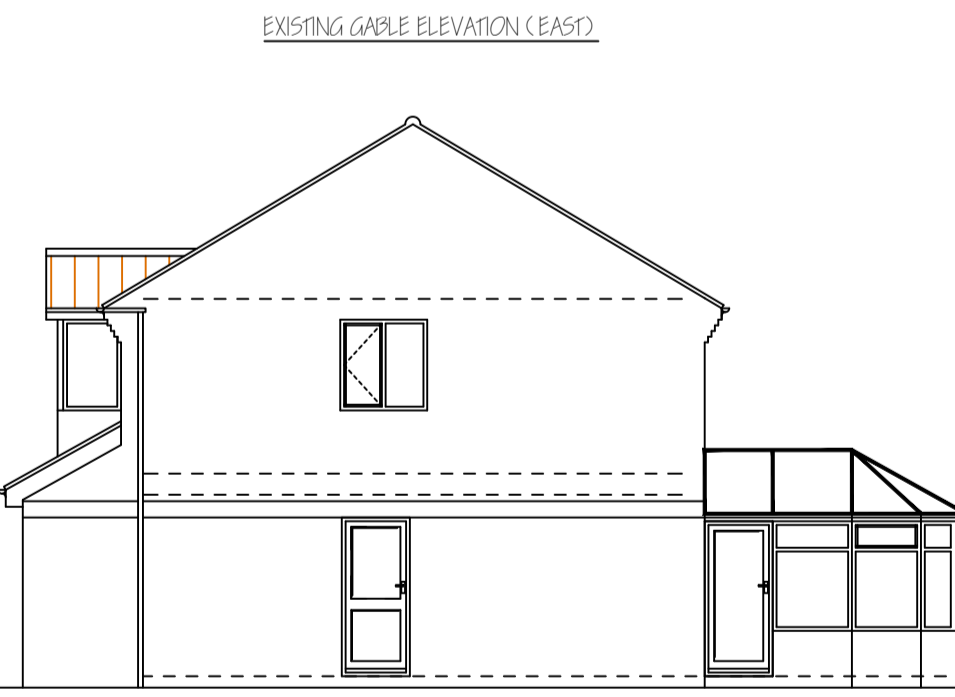
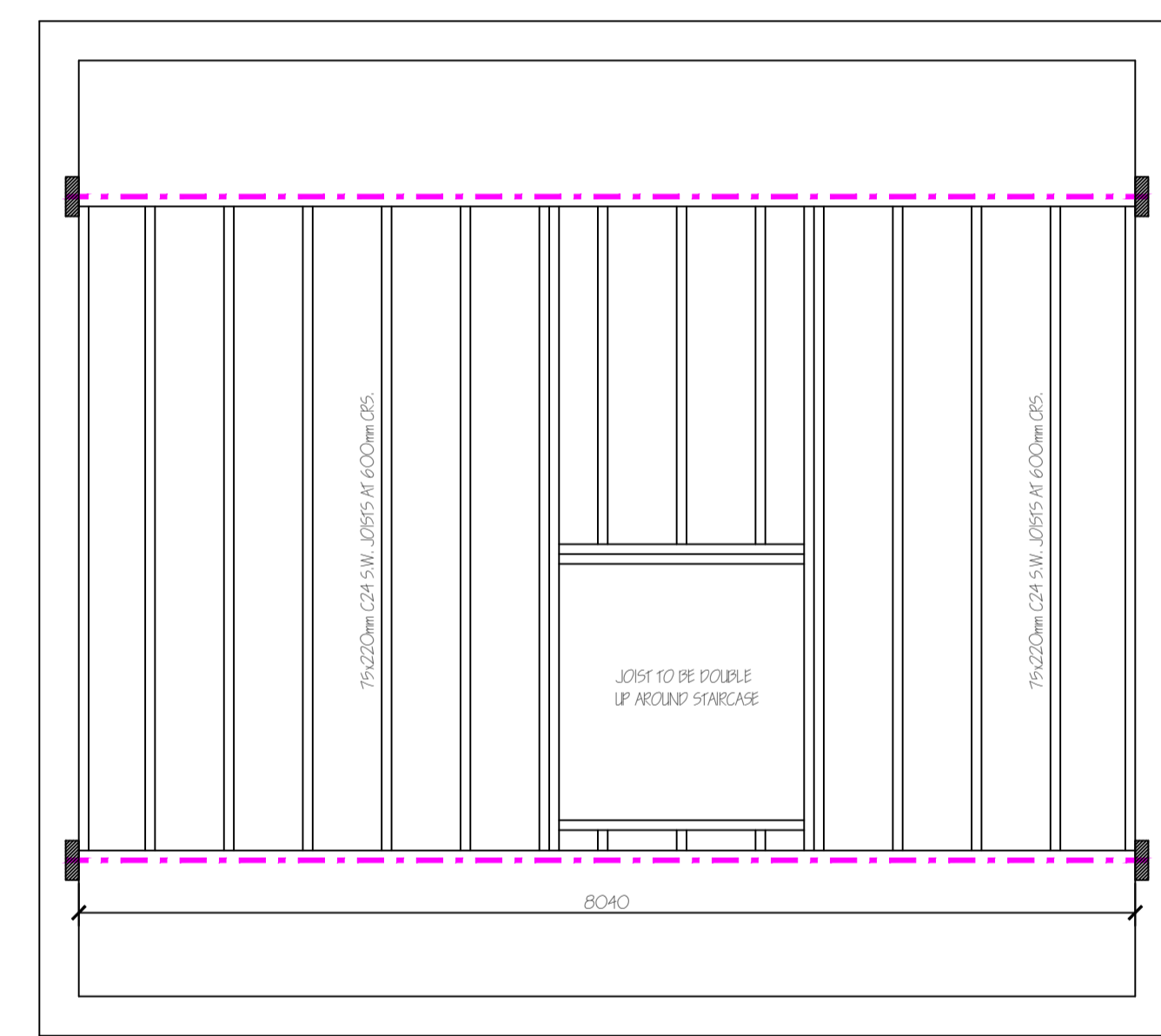


**BOTTOM OF ROOF DETAIL**



**PROPOSED SECOND FLOOR JOIST PLAN**



**DO NOT SCALE FROM DRAWINGS ALL MEASUREMENTS TO BE CHECKED ON SITE BY BUILDER AND CLIENT PRIOR TO COMMENCING WORK**

These drawings are intended for Planning Permission and Building Regulation Approval only. All works to be carried out in accordance with approved drawings only.

Where The Party Wall Etc Act 1996 applies, then a suitably qualified person shall be appointed.

All electrical work is to be undertaken by a competent person registered as part of the NICEIC Domestic Installers Scheme.

All sound testing is to be carried out by a UKAS Accredited acoustic engineer, a copy of any test results are to be forwarded to Local Authority Building Control.

CDM 2015 will apply to this project - The Clients duties under the Regulations are transferred to the appointed Contractor. The Contractor should be familiar with the requirements of the Regulations and with other required duties, provide the Client with a Construction Phase Plan for approval.

**NOTES:**

**EXTERNAL WALL CONSTRUCTION**  
Cavity walls to match existing with 100mm brick outer leaf in facings, Knauf Dritherm Cavity Slab 37 insulation (thickness to suit existing cavity) and 100mm 3.6 N/mm² Plasnor Fibrolite block inner leaf, to achieve a U-value of 0.28 w/m²K, with 12.5mm plasterboard dot and dabbed onto blockwork with skim plaster finish. Stainless Steel Wall ties to be provided at 450mm crs, vertically and 750mm crs, horizontally (300mm crs, vertically within 150mm of openings) in accordance with DD140 Part 2:1987. Clear cavity to be maintained at least 225mm below d.p.c. with insulation starting at ground level. Brickwork below d.p.c. to be 300mm cavity walls in semi-eng bricks or concrete trench blocks. All cavities to remain continuous.

**FIRST FLOOR CONSTRUCTION**  
22mm T & G boarding on 220x75mm C24 S.W. Joists at 600mm crs, built off steel beam with long legged joist hangers with solid timber block strutting minimum 38mm thick and three quarters joist depth at max. 2.4m crs. (Boarding in bathroom to be water resistant with identification showing). Three number joists running parallel to outer wall to be tied in using 1500 x 30 x 5mm s.s. anchor straps at max. 2m crs. 100mm Mineral wool insulation quilt (Min. Density 10 Kg/M³) laid between joist.

**NON-LOADBEARING PARTITIONS**  
75x50mm stud partitions with 12.5mm plasterboard (min. 10Kg/m²) with skim both sides built off double joists or sole plate, all stud work to be at 400mm crs. with 25mm thick mineral wool quilt with minimum (10Kg/m³) to be suspended between stud work.

**LOADBEARING PARTITIONS TO ROOF SPACE**  
150 x 50mm stud partitions with 12.7mm firelined plasterboard on internal side with skim finish built off sole plate. 150mm thick Kingspan insulation board to be placed between plasterboard and studs.

**GABLE WALLS IN LOFT**  
62.5mm Kingspan Thermawall TW17 insulation board incorporating 12.5mm plasterboard, to achieve a U-value of 0.55 w/m²K. Walls to be checked for fire spread and fire stopped at top.

**VENTILATION is required as follows**  
Bedrooms - one twentieth of the floor areas for rapid ventilation and 8000mm² per room for background ventilation, i.e. trickle vents. Bathroom, WC - Mechanical extract ventilation capable of extracting at a rate of not less than 15 litres per second which may be operated intermittently with a 15 minute overrun and 2500mm² background ventilation, i.e. trickle vents.

**INTERNAL DOORS**  
All doors to Hall and Landing to have ½ hour fire protection except bathroom (minimum standard FD20). Any doors with glazing to be replaced with solid fire doors.

**MAIN ROOF CONSTRUCTION (sloping ceiling)**  
Reuse existing Double Roman Concrete Tiles installed in accordance with BS5534 Code of Practice (Slatting & Tiling for pitched roofs), perimeter tiles to have a min of 2 fixings with 100mm headlap on 25x50mm s.w. battens on Permanent Breathable Membrane (BBA Certificate no. 0604311) on 150x47mm C16 s.w. rafters at 600mm crs. Rafters to be doubled up at side of Velux Windows and under dormer walls. Rafters to be birdsmouthed into steel beam at top of roof and birdsmouthed over existing 100x50mm s.w. preservative treated wall plates (rafters to be fixed to bearer and wall plate with metal truss clips). Three number gable end rafters to be tied to wall with 1800mm x 30mm x 5mm m.s. galvanised anchor straps at max. 1m crs. (solid packing and noggings required to straps). 150mm Kingspan K7 Insulation Board laid between rafters with minimum 50mm air space between roofing felt with 12.5mm plasterboard and skim finish, to achieve a U-value of 0.18 w/m²K. Insulation to tightly butted to wall insulation at eaves.

**DORMER PITCHED ROOF CONSTRUCTION (Steps Ceiling)**  
Plenum Clay interlocking low pitch roof tiles (colour to match existing) installed in accordance with BS5534 Code of Practice (Slatting & Tiling for pitched roofs), perimeter tiles to have a min of 2 fixings with 100mm headlap on 25x50mm s.w. battens on Permanent Breathable Membrane (BBA Certificate no. 0604311) on 150x47mm C16 s.w. rafters at 400mm crs. Rafters to be birdsmouthed over 2 No. 150x47mm C16 s.w. joists with 6x150mm m.s. plate bolted together with 8mm dia. bolts at 500mm crs. (3 bolts at ends) at top and birdsmouthed over 100x50mm s.w. preservative treated wall plates fixed to wall with m.s. anchor straps (rafters to be fixed to bearer and wall plate with metal truss clips). Three number gable end rafters to be tied to wall with 1800mm x 30mm x 5mm m.s. galvanised anchor straps at max. 2m crs. (solid packing and noggings required to straps). 100mm Kingspan K7 Insulation Board laid between rafters with minimum 50mm air space between roofing felt with 12.5mm Kingspan TW56 Insulation Board (incorporating 12.5mm plasterboard) below rafters with skim finish, to achieve a U-value of 0.18 w/m²K.

**WINDOWS**  
Velux windows to have double glass units with low E glass to achieve a U value of 1.6 W/m²K. Rooms with Velux windows to have Velux Telescopic Rod (ZC7200) for opening operations or similar approved (1 per room).  
All windows to be double glazed UP.V.C. frames with minimum opening vents greater than 1/20th of room floor area. Double glazed units to consist of 4mm thick Pilkington optifloat clear glass outer pane, 20mm air space 4mm thick Pilkington optitherm glass inner pane to achieve a U value of 1.4 W/m²K or comply with WER band C or better. All windows within 800mm from finished floor level and to all new doors feature frames (300mm either side) within 1500mm from finished floor level to have 4.4mm toughened safety glass. Escape Window to Habitable Rooms to have minimum clear opening of 750mm high x 450mm wide and to have an area greater than 0.33m², bottom of opening area to be not more than 1100mm above finished floor height, sash to be non lockable.

**EXISTING WALLS**  
Hall and Landing walls to be checked for ½ hour fire resistance by Builder and confirmed by Building Control Officer if not suitable walls to be over drawn with 12.5mm plasterboard and 2 coats of plaster skim (minimum thickness 5mm).

**EXISTING LINTELS**  
Any existing internal lintels subject to additional loading to be exposed and checked for adequacy, if unsuitable lintels to be replaced with Catic CN5x box lintels.

**RADIATORS**  
All new radiators to be fitted with thermostatic valves.

**ELECTRICAL INSTALLATION**  
All electrical works / installations shall be carried out in strict accordance with the current I.E.E. regulations and Chapter 74 of B.S. 7671:2018 and in accordance of Part P of the Building Regulations. Electrical works should be inspected and tested in accordance with Section 712 of B.S. 7671:2018 and Section 713 of B.S. 7671:2018. Test Certificates to B.S. 7671:2018 should be left with the user of the installation and a copy provided to the Building Control Officer. All new lighting and power outlets shall comply with B.S. 3676 or B.S. 1363.  
All lighting and power outlets to be placed between 450mm and 1200mm from finished floor level. Energy efficient light fittings only taking lamps with a luminous efficacy greater than 40 lumens to be fitted every 23m² or every 4 standard fittings which ever is the greater. (Location to be agreed with Client and Builder). Hardwired Mains operated interlinked smoke detectors with battery backup to BS5446-1:2000 to be fitted on All Floors (Location to be agreed with Client and Builder).

**DORMER WALL CONSTRUCTION**  
External face to be horizontal Dura Composite cladding with class B-s3-d2 fire resistance or similar approved on 25x25mm s.w. battens on 9mm Supalux boarding (to give ½ hour fire protection) on Kingspan Nivent Breathable sarking membrane on 18mm OSB3 T&G boarding on 150x50mm C16 s.w. Vertical Supports at 400mm crs, positioned under rafters. Horizontal bracing to be at 400mm crs, with 50mm clear cavity and 100mm Kingspan K112 insulation laid between vertical supports, with Vapour Barrier on 12.5mm plasterboard and skim finish on inner side. Code 4 lead flashing at junction of roof.

**HAZARDS**  
The following hazards must be addressed with regard to health & safety:

- Live services.
- Excavations.
- Handling major components.
- Working at height.
- Machinery & Equipment.

This list is not exhaustive, all hazards associated with building construction must be addressed & Risk Assessed specifically for this project. Any unforeseen Risk Element encountered to be reported to the Client.

**NOTE:**  
All materials specified may be substituted with alternatives providing they meet an equivalent or better quality and standard. Any changes must be agreed with the client and L.A. Building Control Officer.

Rev.	Date	Description

Project  
**Proposed Loft Conversion**

for  
**Mrs. S. Wilson, 50, Stainmore Drive, Great Lumley, Co. Durham. DH3 4SH Tel: (07843) 616121**

Title		Sheet 01	
A1 Scale	Drawn by	Date	Revision
1:50, 1:100	PA	Sept 2021	