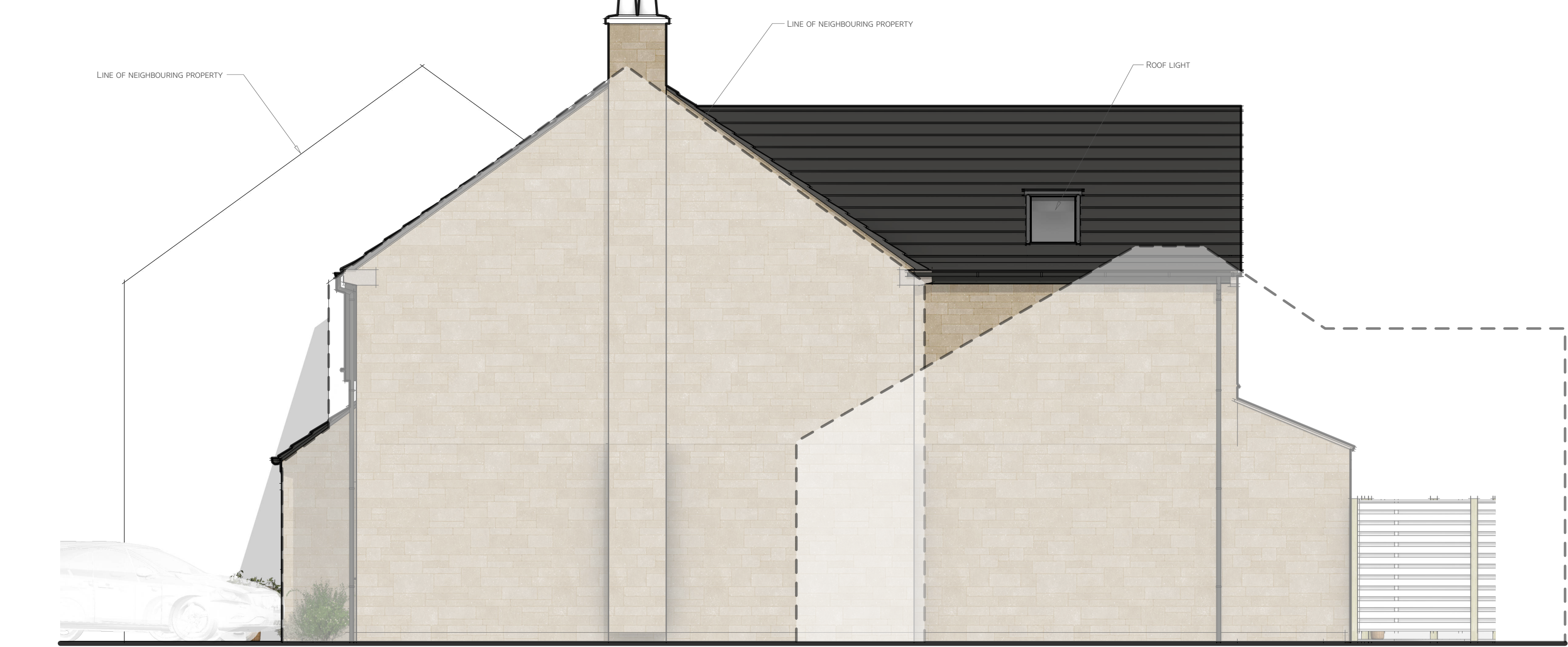




## FRONT ELEVATION



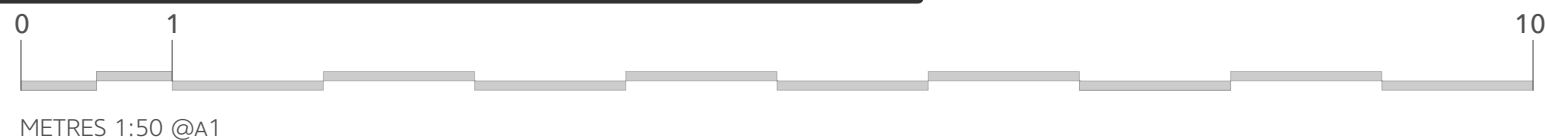
## REAR ELEVATION



## RIGHT ELEVATION



## LEFT ELEVATION



**GENERALLY:**  
All work is to comply with the current Building Regulations and all Codes of Practice.  
All materials are to be used in strict accordance with manufacturer's instructions and are to comply with all relevant British Standards.  
All timbers used in the structure must be tanalised C24 grade unless otherwise specified.  
All steelwork to be provided and installed as per Structural Engineers Design.

**FOUNDATIONS:**  
Excavate trenches (Contractor will allow a depth of 1200mm from the reduced levels) for foundations to the widths and depths indicated on the drawings. (600x225mm) ensure the foundation is taken down min 150mm below the adjacent foul drain & within 1.0m return fill in and ram selected excavated material around foundations. Allow for the supply and laying of concrete foundations (Trench fill is acceptable on approval of Building Control & Contract Administrator top of trench fill to be 300mm max from adjacent ground levels) For all loads bearing walls Section: 600 x 225mm. 450x200 and any others as required using: Concrete: Designated GEN1 or Standardised prescribed ST2, Maximum Aggregate Size: 20 mm. Coarse Recycled Concrete Aggregates: Permitted. Consistence Class: Contractor's choice. Admixtures: Concrete producer's choice.

**DAMP PROOF COURSE:**  
Provide Hyload or similar damp proof course (DPC) 150mm minimum above finished ground level and to be continuous with damp proof membrane (DPM). Vertical DPC to jamb of all openings in external walls to be insulated.

**FOUL DRAINAGE:**  
Provide 100mm diameter flexibly jointed PVC pipes, bedded in 150mm pea gravel to a fall of 1:40 and a minimum fall of 1:80 connected to existing foul drain system.  
Provide concrete lintels where pipes pass through walls and concrete covers where pipes pass under floor.  
SVP to be 100mm diameter encased within room with void filled with mineral wool insulation, and be taken via flexible ducting to a suitable tile or ridge vent that is at least 900mm above any window heads.  
Stub stack to be 100mm diameter and encased within room, stack to terminate 1000mm above floor level with durgo or similar pressure release valve. Provide vent to boxing. New inspection chambers to be preformed units by Messrs Osma or similar approved manufacturer and fitted with heavy duty covers where required

**WALLS:**  
Cavity masonry walls (where implemented) to consist of outer skin reconstituted stone to match 100mm cavity full filled with CavityTherm manufactured to BS EN 13165 by Xtratherm, including corner boards and ancillary detail components comprising of CFC/HCFC free engineered jointed rigid Polyisocyanurate (PIR) with a lambda value of 0.021 W/mK with heavy low emissivity foil facings and engineered outer skin to achieve a U-value of 0.20W/m²K for the wall element. Inner skin 100mm dense concrete blockwork or Thermatite Aircrete High Strength 7 or similar. Internal face fitted with Celotex PL5000 37.5mm laminated board dot and dabbed to blockwork and finished with a plaster skim. Timber frame elements to consist of 50mm cavity, reflective breather membrane on 9mm OSB sheathing on 140x38mm graded treated timber studs at 600mm cts infilled with 140mm wood fibre insulation, 50mm rigid insulation, 25mm service void then 11mm OSB sheathing and 12.5mm plasterboard with plaster skim.

**INTERNAL WALLS:**  
Studwork (internal walls) to be constructed in 50 x 100mm studs with 12.5mm plasterboard and plaster skim to both sides. Taped and jointed complete with beads and stops. All stud walls are to be filled with mineral wool acoustic insulation to a density of at least **40kg/m²**

**LINTELS:**  
Provide Castic for IG lintels as specified on drawing and as details. To be fitted as in accordance with manufacturers instructions, all with minimum 200 mm end bearing. If contractor is required to change any lintels then Building Inspector must be informed.

**LATERAL RESTRAINT:**  
Provide 30 x 5mm galvanised mild steel straps from walls over first 3no. rafters, ceiling joists and floor joists at 2000mm maximum centres. Turn straps down walls into cavity. Between timber members provide solid nogginns under straps and allow for packing between the timber members and wall.

**GROUND FLOOR:**  
The contractor will allow for constructing the following floor: Fine Concrete Levelling Screed Thickness: 50 mm (minimum); Mix: Cement: total aggregate 1:4-5. Sand: coarse aggregate, between 3:1 and 3:2, adjusted to facilitate trowelling (or pumped liquid screed). Provide a VCL layer over and under insulation supply and lay Celotex 100mm thickness of FRS500 insulation insulation with 20mm vertical edge insulation of Kingspan Thermafloor TF70 board to the depth of the screed and slab to all exposed edges of floor. Supply and lay Lay 100mm minimum thick ST2, or Gen1 concrete floor slab with a trowel smooth surface ready for finishes.  
1200g (300 micrometer) continuous polythene damp proof membrane (DPM) and radon gas proof barrier is to be laid over sand blined hardcore, lapped and sealed at all joints and linked to DPC's in walls. To provide basic protection from radon gas, the damp-proof course within the cavity wall should be in the form of a cavity tray and sealed to DPM to prevent radon from entering the building through the cavity. Sealing of joints in the barrier and sealing around service penetrations. Sand blined hardcore mechanically compacted in 150mm layer

**ROOF:**  
Main roof to be interlocking concrete tiles to match existing (TBC) on 25x38 treated timber battens on breathable underfelt (Dupont Tyvek Supro or similar), roof construction to be 47x175 C24 treated timber rafters, jack rafters and hip rafter @ 600mm cts. Rafters sat on 100x50 graded, treated timber wall plates half lapped at corners. Ceiling joists to be 175x47 C24 treated timber. All spans in accordance with Eurocode 5 span tables. 150mm Celotex XR400 PIR insulation between joists with PL4000 trimmed back at eaves to provide adequate ventilation.

**EXTRACT FOR SHOWER ROOM**  
Provide mechanical extract ventilation to shower room ducted to external air capable of extracting at a rate of not less than 15 litres per second. Vent to be connected to light switch and to have 15 minute over run if no window in the room. Internal doors should be provided with a 10mm gap below the door to aid air circulation. Ventilation provision in accordance with the Domestic ventilation compliance guide. Intermittent extract fans to BS EN 13141-4. All fixed mechanical ventilation systems, where they can be tested and adjusted, shall be commissioned and a commissioning notice given to the Building Control Body.

**EXTRACT TO W/C**  
W/C to have mechanical ventilation ducted to external air with an extract rating of 15l/s operated via the light switch, to have a 15min overrun if no window in room. Internal doors should be provided with a 10mm gap below the door to aid air circulation. Ventilation provision in accordance with the Domestic ventilation compliance guide. Intermittent extract fans to BS EN 13141-4. All fixed mechanical ventilation systems, where they can be tested and adjusted, shall be commissioned and a commissioning notice given to the Building Control Body.

**EXTRACT TO KITCHEN**  
Kitchen to have mechanical ventilation with an extract rating of 60l/sec or 30l/sec if adjacent to hob to external air, sealed to prevent entry of moisture. Internal doors should be provided with a 10mm gap below the door to aid air circulation. Ventilation provision in accordance with the Domestic ventilation compliance guide. Intermittent extract fans to BS EN 13141-4. Cooker hoods to BS EN 13141-3. All fixed mechanical ventilation systems, where they can be tested and adjusted, shall be commissioned and a commissioning notice given to the Building Control Body.

**SMOKE DETECTION**  
Mains operated linked smoke alarm detection system to BS 5446 - 1:2000 and BS5839-6:2004 to at least a Grade D category LD3 standard and to be mains powered with battery back up. Smoke alarms should be sited so that there is a smoke alarm in the circulation space on all levels/ storeys and within 7.5m of the door to every habitable room. If ceiling mounted they should be 300mm from the walls and light fittings. Where the kitchen area is not separated from the stairway or circulation space by a door, there should be an interlinked heat detector in the kitchen.

**ESCAPE WINDOWS**  
Provide emergency egress windows to any newly created first floor habitable rooms and ground floor inner rooms. Windows to have an unobstructed openable area of 450mm high x 450mm wide, minimum 0.33m sq, the bottom of the openable area should be not more than 1100mm above the floor. The window should enable the person to reach a place free from danger from fire.

**SAFETY GLAZING**  
All glazing in critical locations to be toughened or laminated safety glass to BS 6206 and Part N of the current building regulations. i.e. within 1500mm above floor level in doors and side panels within 300mm of door opening and within 800mm above floor level in windows.

**NEW AND REPLACEMENT WINDOWS**  
New and replacement windows to be double glazed with 16mm argon gap and soft coat low-E glass. Window Energy Rating to be Band C or better and to achieve U-value of 1.6 W/m²K. The door and window openings should be limited to 25% of the extension floor area plus the area of any existing openings covered by the extension.

**NEW AND REPLACEMENT DOORS**  
New and replacement doors to achieve a U-Value of 1.80W/m²K. Glazed areas to be double glazed with 16mm argon gap and soft low-E glass. Glass to be toughened or laminated safety glass to BS 6206 and Part N of the current Building Regulations.

**HEATING**  
Extend all heating and hot water services from existing and provide new TVRs to radiators and underfloor heating to main living area and new master suite. Heating system to be designed, installed, tested and fully certified by a GAS SAFE registered specialist. All work to be in accordance with the Local Water Authorities bye laws, Gas safety requirements and IEEE regulations.

**PARTY WALL ACT**  
The owner, should they need to do so under the requirements of the Party Wall Act 1996, has a duty to serve a Party Structure Notice on any adjoining owner if the building work involves works on or to an existing Party Wall including:  
Support of beam, Insertion of DPC through wall, Raising a wall or cutting off projection, Demolition and rebuilding, Underpinning, Insertion of lead flashings, Excavations within 3 meters of an existing structure where the new foundations will go deeper than adjoining foundations, or within 6 meters of an existing structure where the new foundations are within a 45 degree line of the adjoining foundations.

A Party wall agreement is to be in place prior to start of works on site.