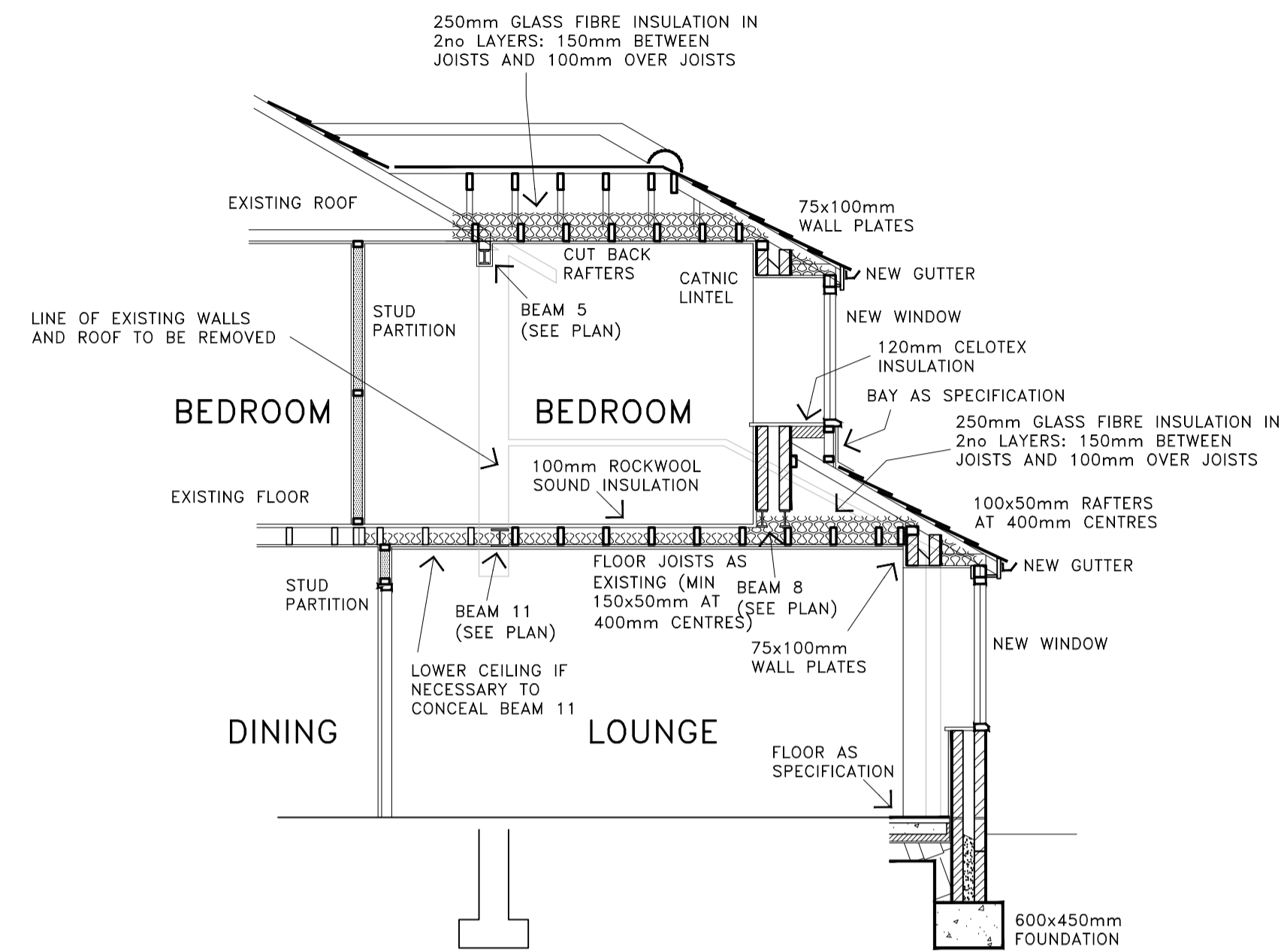
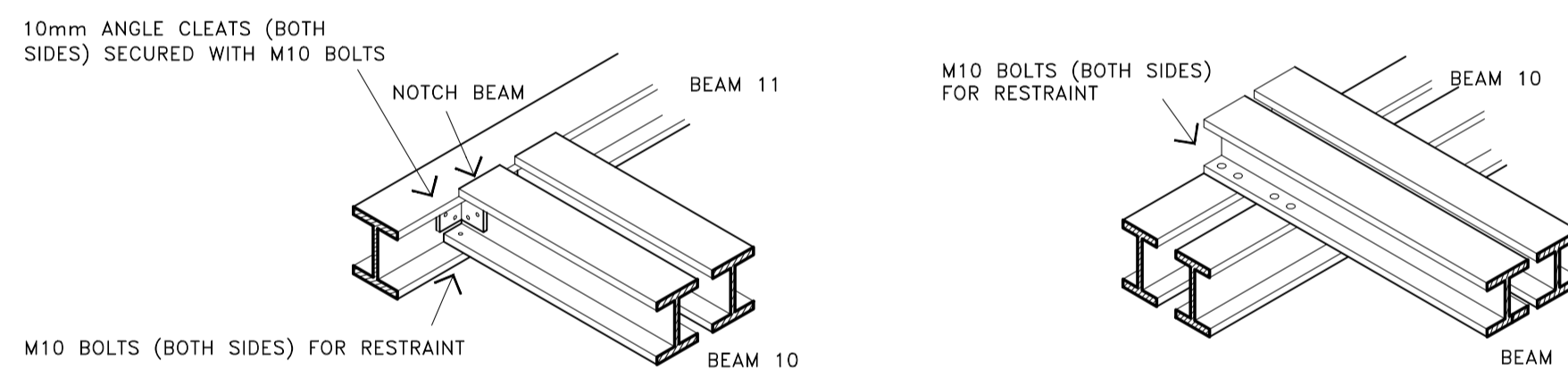


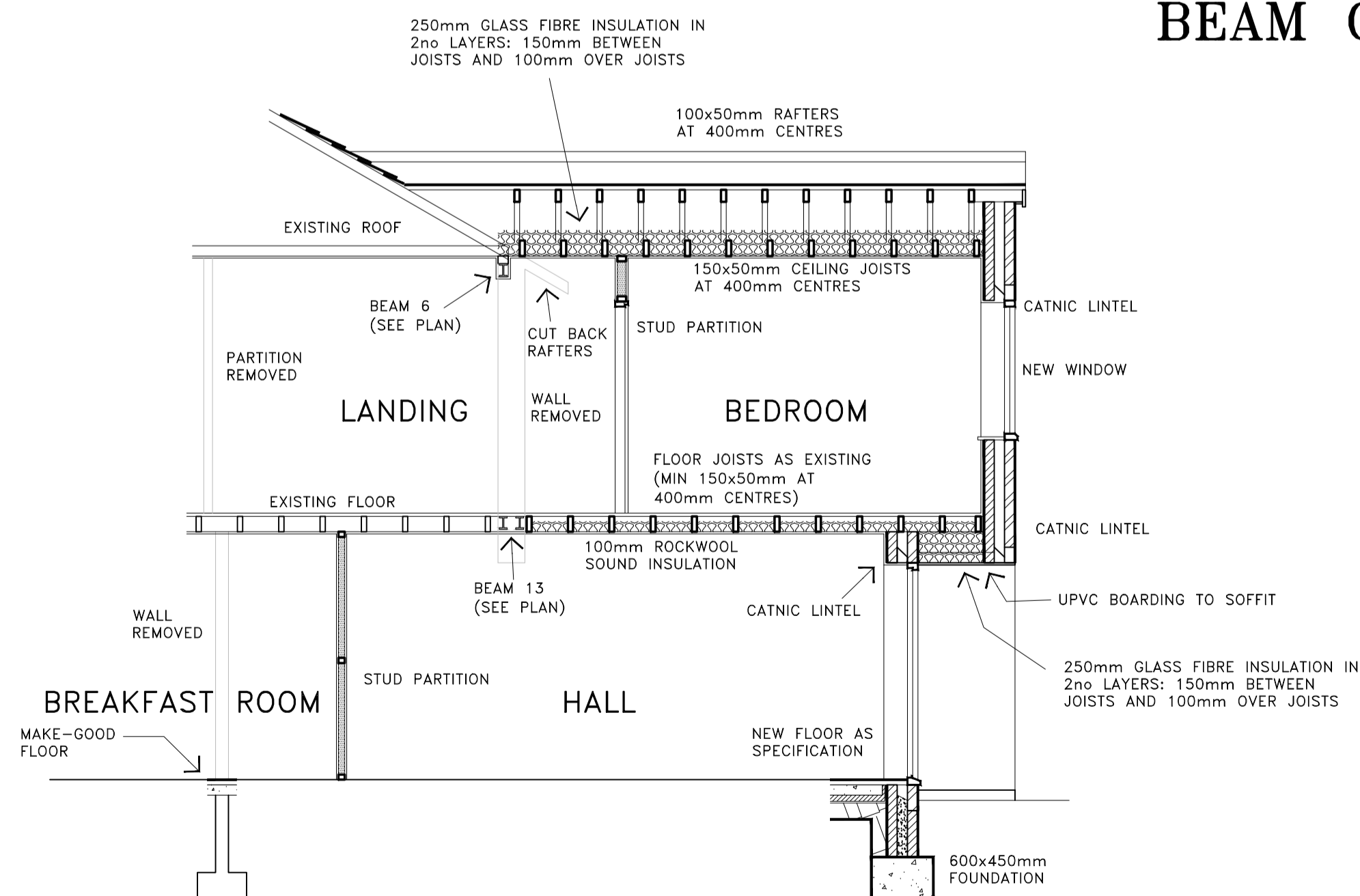
SECTION A-A



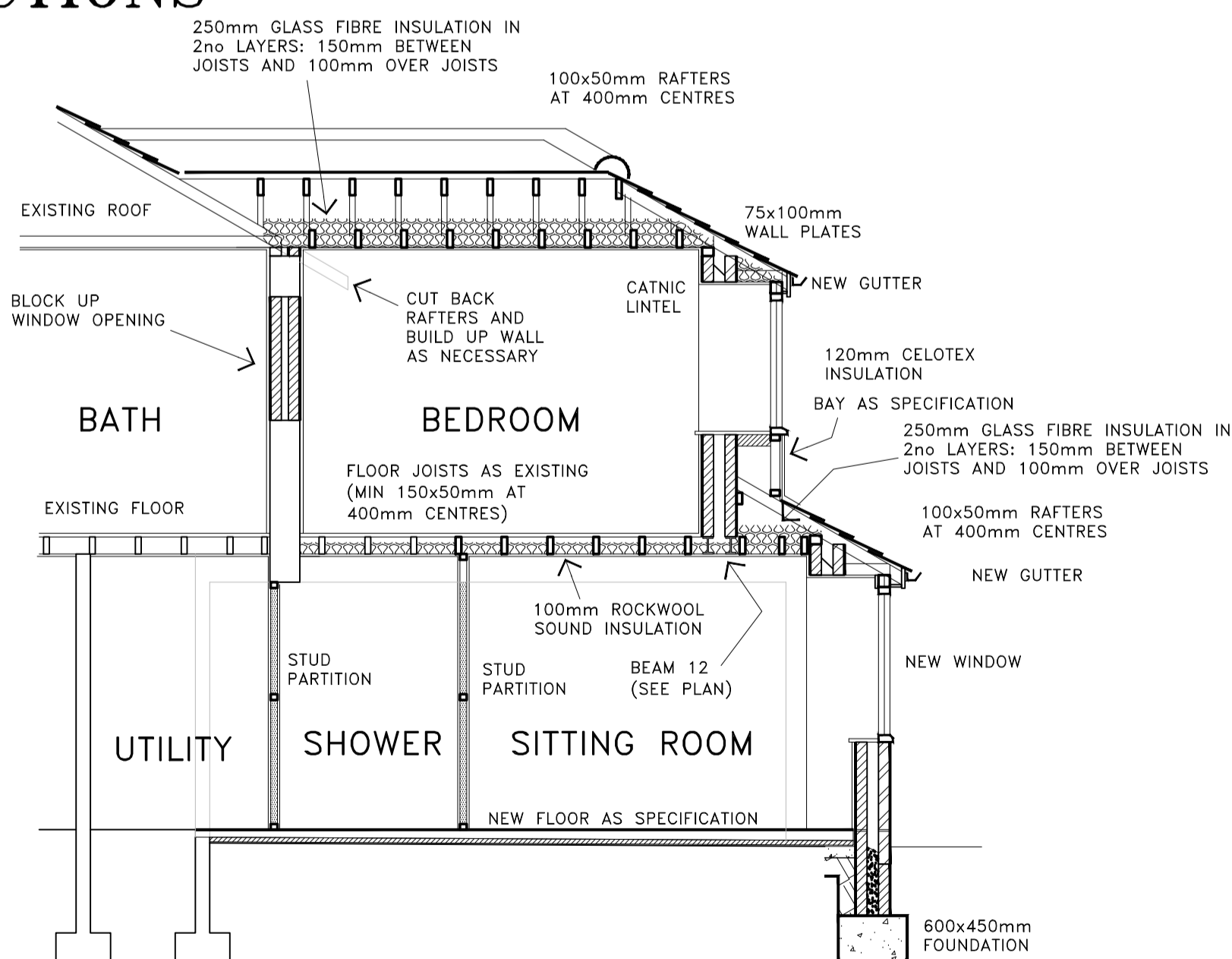
SECTION B-B



BEAM CONNECTIONS



SECTION C-C



SECTION D-D

**SPECIFICATION SERVICES:**  
 Plumbing heating and electrical installations to be carried out as instructed by client by suitably qualified installers to all current standards & regulations. All electrical work to be in accordance with BS 7671:2001 and to meet the requirements of Part P (electrical safety) of the Building Regulations 2000 (as amended); designed, installed, inspected, tested and certified by a suitably competent person. Building Control to be provided with EITHER an electrical installation certificate issued under the Competent Persons Scheme OR a Building Notice and appropriate fee.  
**EXISTING STRUCTURE:**  
 Any items of existing structure that are affected by the alterations (including foundations) to be exposed at the request of the Building Inspector to determine the suitability to take additional loads.  
 Work to site dimensions only and report as soon as possible any discrepancies which require amendments.

**SPECIFICATION FOUNDATIONS:**  
 Concrete strip foundations, size as shown, depth 1m or down to load bearing sub-soil and below invert of any adjacent drains - to the satisfaction of the Building Inspector. Note - final design of foundations subject to site investigation by builder.  
**CAVITY WALLS:**  
 100 mm brickwork, 100mm cavity, with 100mm Driftherm Cavity Slab 32 insulation, 100mm Blockwork inner leaf. Asos d.p.c. minimum 150mm above ground level. Class 'B' engineering brickwork below d.p.c. to outer leaf down to 2 courses below ground level. Cavity filled to 150mm below d.p.c. with lean-mix concrete. Thermobate Insulated Cavity Closers to all vertical and horizontal external reveals. Stainless steel wall ties to be spaced 750mm horizontally, 450mm vertically in staggered formation. New walls 50% bonded to existing. (Alternative construction: 75mm cavity and Driftherm Cavity Slab 32 insulation with inner leaf of 100mm Durox Supabloc.)  
**GROUND FLOOR (general):**  
 50mm sand/cement screed on 100mm concrete on 100g polythene vapour control layer on 80mm Celotex (or similar) on 120g polythene d.p.m. (continuous with d.p.c.) on 150mm sand-blinded clean hardcore.  
**GROUND FLOOR (ex garage):**  
 75mm sand/cement screed on 100g polythene vapour control layer on Celotex (or similar) on 120g polythene d.p.m. (continuous with d.p.c.) on existing floor. Thickness of Celotex to be maximum possible without breaking up existing floor.  
**FIRST FLOOR:**  
 22mm tongue & groove boarding on chamber joists - see section for timber sizes. Provide full depth strutting at mid span, 100mm Rockwool in floor void between habitable rooms for sound insulation.  
**PITCHED ROOF:**  
 Concrete interlocking tiles on 38x25mm lath on Tyvek vapour permeable tile underlay (draped between rafters with 10mm gap below battens to allow vapour disperse) on timber rafters (See section for all roof timber sizes and spacings).  
**BAY WINDOW FRONT:**  
 code 5 lead cladding on 12mm plywood on 100x50mm timber studing.  
**STUD PARTITIONS:**  
 75x50mm timber studs, sills heads and noggins faced both sides with 13mm plasterboard & skim, built off double joists where parallel to partition. Voids to be filled with Rockwool.  
**LATERAL RESTRAINT:**  
 Wall plate & first floor joists tied to external walls with 30x6mm galv m.s. straps at 2000mm centres. 3no and rafters tied similarly to gable wall.  
**GLAZING:**  
 Glazed doors, and any windows within 300mm of doors or with sill height lower than 800mm, to be fitted with toughened or laminated glass to BS6206:1981. (Does not apply to panes with width less than 250mm).  
**VENTILATION:**  
 Windows to habitable rooms to have opening vents not less than 5% floor area of room plus 8000mm<sup>2</sup> controllable trickle ventilation.  
**MECHANICAL VENTILATION:**  
 Mechanical ventilation ducted to outside air to be provided to give the following extraction rate:  
 Kitchen - 60/s intermittent or 30/s cooker hood.  
 Bathroom and shower rooms - 15/s intermittent.  
 Utility - 30/s intermittent.  
**PLUMBING:**  
 New appliances to be fitted with deepseal traps with the following waste sizes: basins 32mm; baths 40mm; showers 40mm. New SVP's to terminate min 900mm above any opening window within 3m and to be fitted with bird mesh and rodding access.  
**DRAINAGE:**  
 New drains to be 100mm Marley Solid Wall pvc laid to fall 1 in 40 surrounded and bedded in pea-gravel. Where drains are below new building they are to be protected by concrete lintels through foundation walls (and, if within 300mm of floor slab, surrounded by 150mm of concrete). All connections to be to the satisfaction of the Building Inspector. manhole to be 450mm dia Marley Solid Wall inspection chamber system.  
**SOAKAWAYS:**  
 Soakaways to be formed from square or rectangular pits filled with rubble, located min 5m from buildings. Siting and size to be determined by percolation test and agreed with the Building Inspector.  
**FIRE PROTECTION:**  
 Steel beam to be encased in 2no. layers of 13mm plasterboard with staggered joints, and 5mm plaster.  
**SMOKE ALARMS:**  
 Provide mains operated, self contained smoke detectors to BS 5839-6:2004 where shown. Units to be interconnected and wired to current IEE regulations.  
**ESCAPE WINDOW:**  
 New windows to habitable rooms at first floor to have opening units with a clear area of min 0.33m<sup>2</sup> and a minimum width/height of 450mm. Bottom of opening to be between 800-1100mm above finished floor level.  
**ROBUST CONSTRUCTION:**  
 Ensure continuity of insulation at all openings, perimeters and at junctions of roofs, wall, and floors.  
**BOILER:**  
 If a new or replacement boiler is fitted it is to be fitted, vented and flued in accordance with the manufacturers instructions and to all relevant legislation. Boiler to be fan assisted condensing type and to have SEDBUK efficiency in Band A or B (minimum 86% efficiency). Boiler and flue to be positioned in accordance with Building Regulations App. Document J.  
**WINDOWS/EXT DOORS:**  
 New windows/external doors double glazed with low-E glass (16mm min gap Argon filled). Outside edge of frames to be sealed with mastic. Draught seals to be fitted to all openings.

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