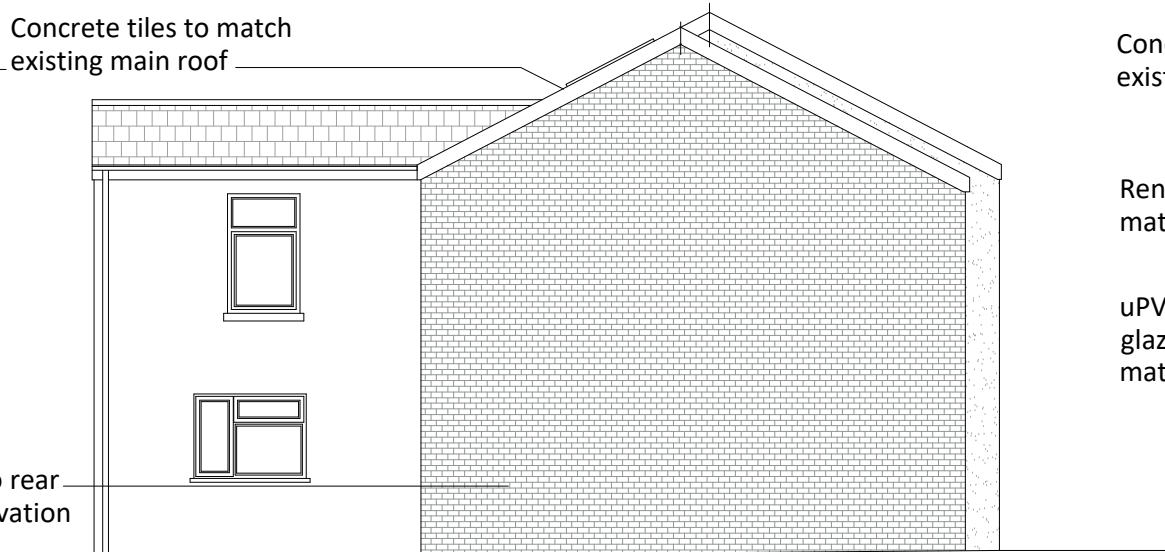




PROPOSED REAR ELEVATION
scale 1:100



PROPOSED SIDE ELEVATION
scale 1:100



PROPOSED FRONT ELEVATION
scale 1:100

UNDERGROUND FOUL DRAINAGE

Underground drainage to consist of 100mm diameter UPVC proprietary pipe work to give a 1:40 fall. Surround pipes in 100mm pea shingle. Provide 600mm suitable cover (900mm under drives). Shallow pipes to be covered with 100mm reinforced concrete slab over compressible material. Provide rodding access at all changes of direction and junctions. All below ground drainage to comply with BS EN 1401-1: 2009.

ABOVE GROUND DRAINAGE

All new above ground drainage and plumbing to comply with BS EN 12056-2:2000 for sanitary pipework. All drainage to be in accordance with Part H of the Building Regulations. Wastes to have 75mm deep anti vac bottle traps and rodding eyes to be provided at changes of direction.

Size of wastes pipes and max length of branch connections (if max length is exceeded then anti vacuum traps to be used)
Wash basin - 1.7m for 32mm pipe 3m for 40mm pipe
Bath/shower - 3m for 40mm pipe 4m for 50mm pipe
W/C - 6m for 100mm pipe for single WC
All branch pipes to connect to 110mm soil and vent pipe terminating min 900mm above any openings within 3m. Or to 110mm upvc soil pipe with accessible internal air admittance valve complying with BS EN 12380, placed at a height so that the outlet is above the trap of the highest fitting. Waste pipes not to connect on to SVF within 200mm of the WC connection. Supply hot and cold water to all fittings as appropriate.

AUTOMATIC AIR VALVE

Ground floor fittings from Utility room to be connected to new 110mm UPVC soil pipe with accessible internal air admittance valve complying with BS EN 12380, placed at a height so that the outlet is above the trap of the highest fitting and connected to underground quality drainage encased with pea gravel to a depth of 150mm.

PIPEWORK THROUGH WALLS

Where new pipework passes through external walls form rocker joints either side wall face of max length 600mm with flexible joints with short length of pipe bedded in wall. Alternatively provide 75mm deep pre-cast concrete plank lintels over drain to form opening in wall to give 50mm space all round pipe: mask opening both sides with rigid sheet material and compressible sealant to prevent entry of fill or vermin.

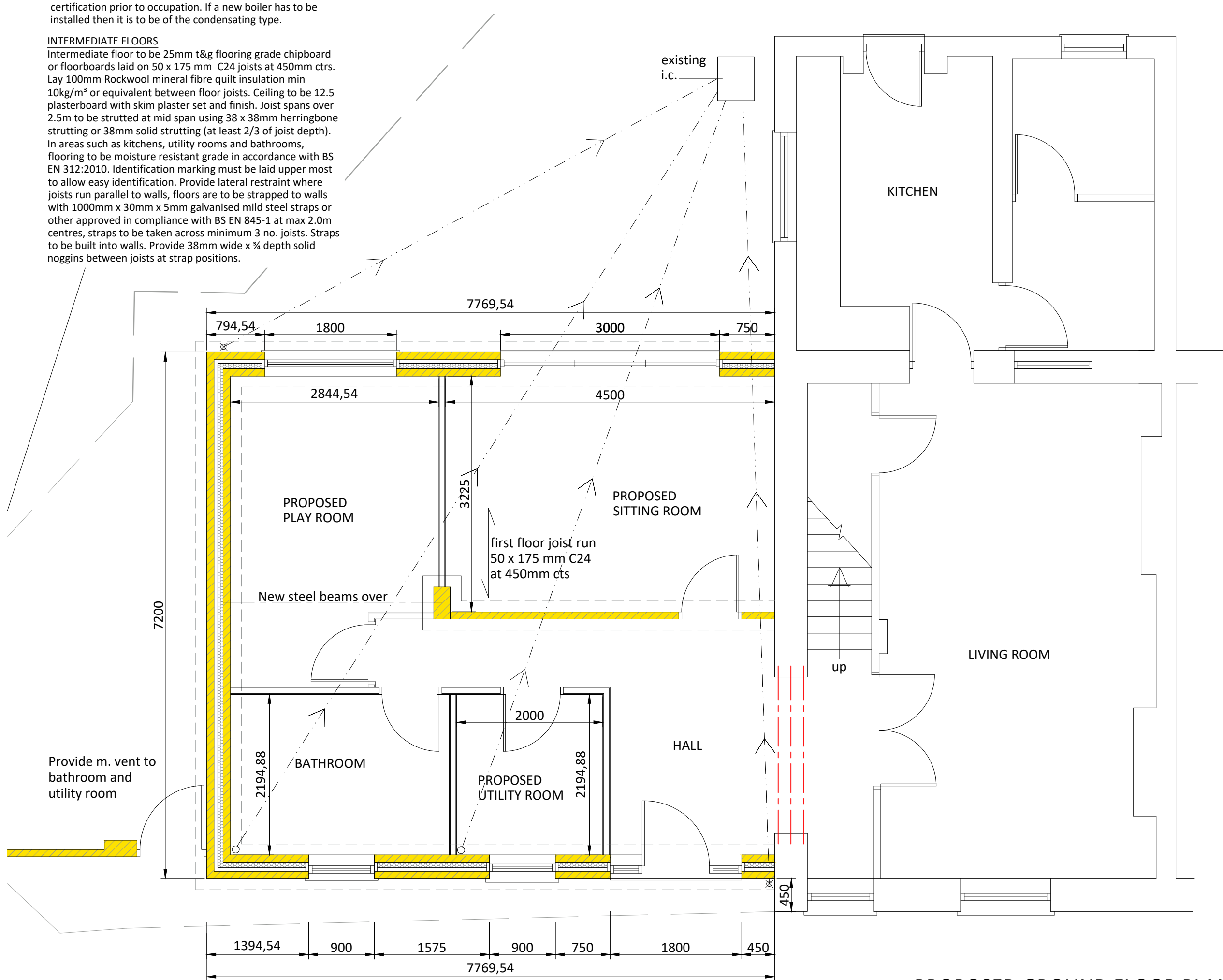
HEATING

Existing central heating system to be extended to accommodate the new extension. System to be checked for capability and any heating installation should be under taken by a qualified person who must also provide all relevant installation / testing certification prior to occupation. If a new boiler has to be installed then it is to be of the condensating type.

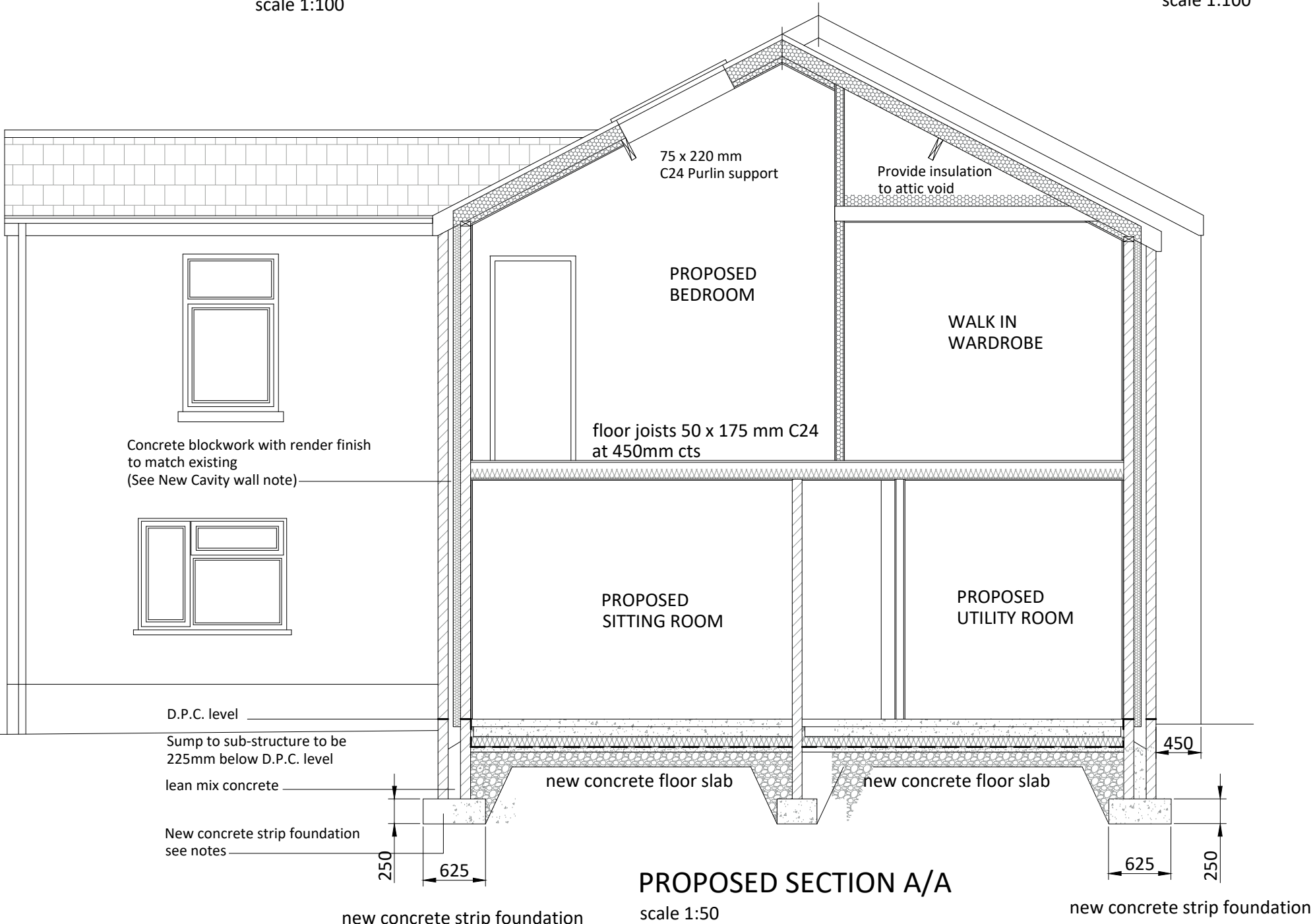
INTERMEDIATE FLOORS

Intermediate floor to be 25mm t&g flooring grade chipboard or floorboards laid on 50 x 175 mm C24 joists at 450mm ctrs. Lay 100mm Rockwool mineral fibre quilt insulation min 10kg/m² or equivalent between floor joists. Ceiling to be 12.5 plasterboard with skim plaster set and finish. Joist spans over 2.5m to be strutted at mid span using 38 x 38mm herringbone strutting or 38mm solid strutting (at least 2/3 of joist depth). In areas such as kitchens, utility rooms and bathrooms, flooring to be moisture resistant grade in accordance with BS EN 312:2010. Identification marking must be laid upper most to allow easy identification. Provide lateral restraint where joists run parallel to walls, floors are to be strapped to walls with 1000mm x 30mm x 5mm galvanised mild steel straps or other approved in compliance with BS EN 845-1 at max 2.0m centres, straps to be taken across minimum 3 no. joists. Straps to be built into walls. Provide 38mm wide x ¾ depth solid nogginns between joists at strap positions.

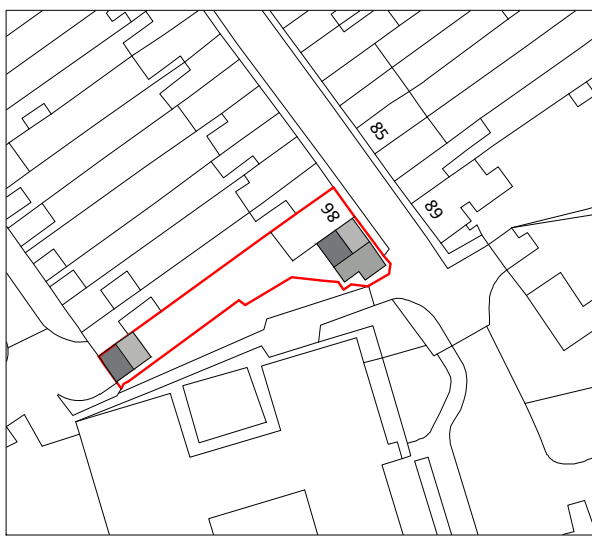
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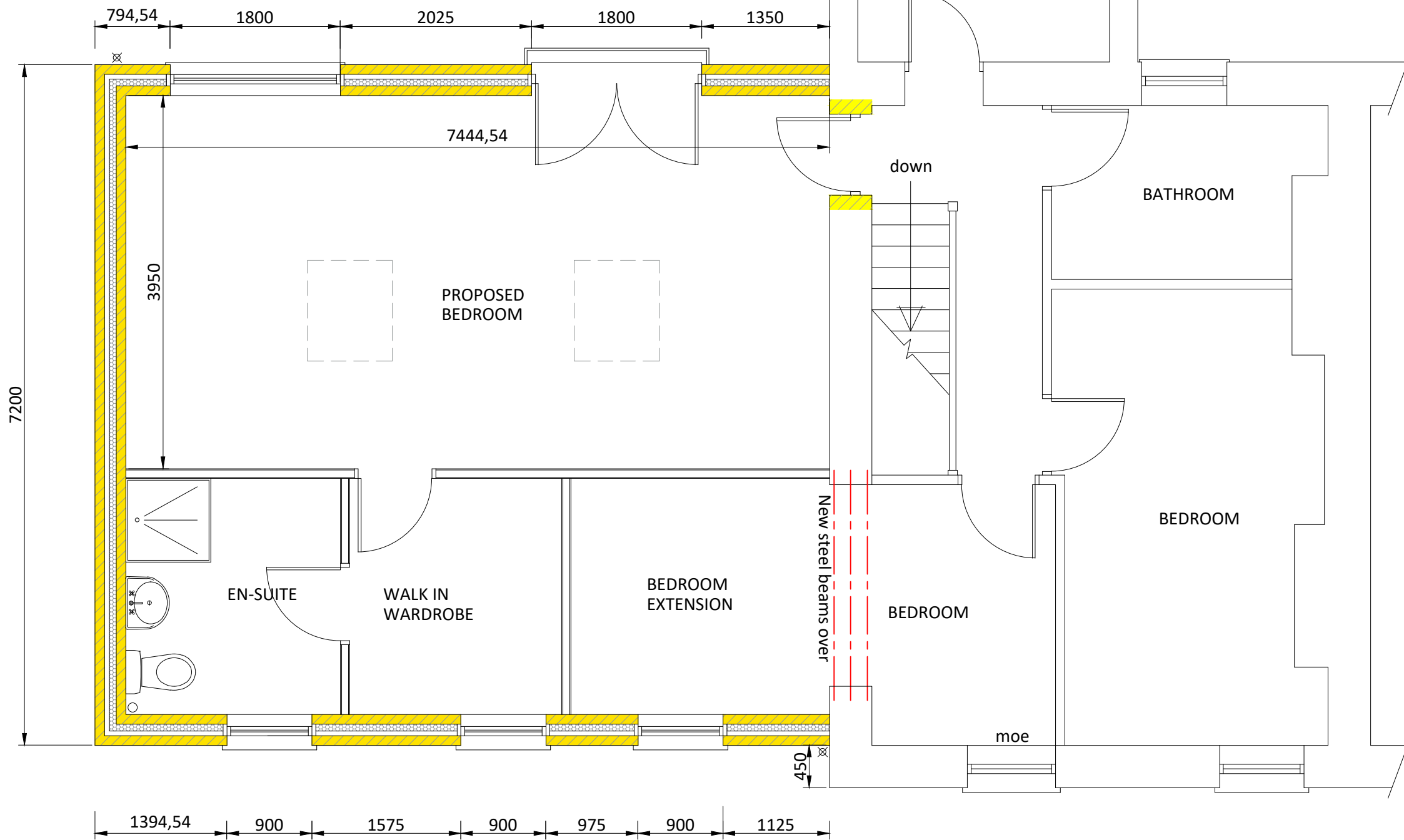
PROPOSED GROUND FLOOR PLAN
scale 1:50



PROPOSED SECTION A/A
scale 1:50



LOCATION PLAN
scale 1:1250



PROPOSED FIRST FLOOR PLAN
scale 1:50

ROOF:
Roof to be covered with concrete roof tiles. All fixings to follow manufacturers recommendations for site exposure. 50 x 25mm treated softwood battens gauged following roof tiles manufacturers instruction regarding minimum headlap. Tyvek Supro or similar high performance breathable roofing underlay with min. 150mm laps.

New rafters to be 150 x 50 set 450 centres, with one end secured to cavity wall plate 100 x 75 mm and ceiling joist, opposite end off new 150 x 75 mm wall plate secured via rawbolts to wall at 600 mm centres with rafters birds mouthed over. Rafters set at pitch to match main roof. New ceiling joists to be 150 x 50 mm set 450 mm centres. secured one end to cavity wallplate

Install minimum of 270mm thick mineral wool insulation above the ceiling joists (lay a 100mm thick layer between the ceiling joists with a 170mm thick layer laid perpendicularly over the ceiling joists - Rockwool Roll bats or equivalent - construction to achieve a minimum U-value of 0.160Wm²/K.

PITCHED ROOF VENTILATION

Maintain a 50mm air gap above insulation in the roof pitch 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.

LEAD VALLEYS

Provide galvanised mild steel straps to anchor roofs to new cavity walls, to have minimum cross section 30 x 5mm

Valley lead and two tiling fillets to be supported on min 19mm thick and 225mm wide marine ply valley boards on either side of the rafters. Lead to be laid in lengths not exceeding 1.5m with min 150mm lap joints and be dressed 200mm under the tiles. Roofing tiles to be bedded in mortar placed on a tile slip to prevent direct contact. Valley to have a minimum 100mm wide channel (125mm minimum for pitches below 30°). All work to be in accordance with the roof cladding manufacturers and the Lead Development Association recommendations.

LATERAL RESTRAINT

To meet min U value required of 0.18 W/m²/K Solid ground floor to consist of 150mm consolidated well-rammed hardcore, blinded with 50mm sand blinding. Provide a 1200 gauge polythene DPM, DPM to be lapped in with DPC in walls. Floor to be insulated over DPM with 100mm thick Celotex FR5000. 25mm insulation to continue around floor perimeters to avoid thermal bridging. A VCL should be laid over the insulation boards and turned up 100mm at room perimeters behind the skirting, all joints to be lapped 150mm and sealed, provide 100mm ST2 or Gen2 ground bearing slab concrete mix to conform to BS 8500-2 over VCL. Finish with 65mm sand/cement finishing screed with light weight reinforcement. Where drain runs pass under new floor, provide A142 mesh 1.0m wide within bottom of slab min 50mm concrete cover over length of drain.

CEILING

Generally to be 12.5mm thick Gyproc Wallboard plasterboard ceilings. Foil backed plasterboards to be used in Kitchen and Bathrooms. All plasterboard to have min. weight of 10 kg/m².

All plasterboard joints shall be reinforced with proprietary joint reinforcement tape (Gyproc FT50) in the preparation for a smooth, seamless plaster skim finish.

RAINWATER DRAINAGE

Rainwater goods to be new 110mm UPVC half round gutters taken and connected into 68mm dia UPVC downpipes. Rainwater taken to existing drainage system via 110mm dia UPVC pipes surrounded in 150mm granular fill.

ELECTRICAL

All electrical work required to meet the requirements of Part P (electrical safety) must be designed, installed, inspected and tested by a competent person registered under a competent person self certification scheme such as BRE certification Ltd, BSI, NICEIC Certification Services or Zurich Ltd. An appropriate BS7671 Electrical Installation Certificate is to be issued for the work by a person competent to do so. A copy of a certificate will be given to Building Control on completion.

EXTRACT TO BATHROOM AND UTILITY ROOM

To have mechanical vent ducted to external air to provide min 15 litres / sec extraction. Vent to be connected to light switch and to have 15 minute over run 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.

INTERNAL STUD PARTITIONS

100mm x 50mm softwood treated timbers studs at 400mm ctrs with 50 x 100mm head and sole plates and solid intermediate horizontal nogginns at 1/3 height or 450mm. Provide min 10kg/m² density acoustic soundproof quilt tightly packed (eg. 100mm Rockwool or Isowool mineral fibre sound insulation) in all voids the full depth of the stud. Partitions built off doubled up joists where partitions run parallel or provide nogginns where at right angles, or built off DPC on thickened concrete slab if solid ground floor. Walls faced throughout with 12.5mm plaster board with skim plaster finish. Taped and jointed complete with beads and stops.

CONSTRUCTION NOTES.

All works to be carried out in accordance with the current Planning, Building Regulations and Subsequent Amendments. No variations should be made to the approved drawings without the express permission of the Local Authority Building Inspector.

This drawing is intended only for Planning & Building Control Usage. This is not a construction drawing. This drawing may be scaled for planning purposes only.

The contractor must check dimensions prior to commencement of works and report any discrepancies. The contractor is responsible for locating existing services on site and ensure that any diversions, terminations, extensions are carried out by an approved sub-contractor.

SITE PREPARATION

Ground to be prepared for new works by removing all unsuitable material, vegetable matter and tree or shrub roots to a suitable depth to prevent future growth. Seal up, cap off, disconnect and remove existing redundant services as necessary. Reasonable precautions must also be taken to avoid danger to health and safety caused by contaminants and ground gases e.g. landfill gases, radon, vapours etc. on or in the ground covered, or to be covered by the building.

STRIP FOUNDATION

Provide 250mm x 625mm concrete foundation, concrete mix to conform to BS EN 206-1 and BS 8500-2. All foundations to be a minimum of 750mm below ground level or to level of existing foundations, exact depth to be agreed on site with Building Control Officer to suit site conditions. All constructed in accordance with 2004 Building Regulations AL2 and BS 8004:1986 Code of Practice for Foundations. Ensure foundations are constructed below invert level of any adjacent drains. Sulphate resistant cement to be used if required. Please note that should any adverse soil conditions be found or any major tree roots in excavations, the Building Control Officer is to be contacted and the advice of a structural engineer should be sought.

SOLID FLOOR INSULATION UNDER SLAB

To meet min U value required of 0.18 W/m²/K Solid ground floor to consist of 150mm consolidated well-rammed hardcore, blinded with 50mm sand blinding. Provide a 1200 gauge polythene DPM, DPM to be lapped in with DPC in walls. Floor to be insulated over DPM with 100mm thick Celotex FR5000. 25mm insulation to continue around floor perimeters to avoid thermal bridging. A VCL should be laid over the insulation boards and turned up 100mm at room perimeters behind the skirting, all joints to be lapped 150mm and sealed, provide 100mm ST2 or Gen2 ground bearing slab concrete mix to conform to BS 8500-2 over VCL. Finish with 65mm sand/cement finishing screed with light weight reinforcement. Where drain runs pass under new floor, provide A142 mesh 1.0m wide within bottom of slab min 50mm concrete cover over length of drain.

WALLS BELOW GROUND

All new walls to have Class A blockwork below ground level or alternatively semi engineering brickwork in 1:4 masonry cement or equal approved specification. Cavities below ground level to be filled with lean mix concrete min 225mm below damp proof course. Or provide lean mix backfill at base of cavity wall (150mm below damp course) laid to fall to weepholes.

EXISTING TO NEW WALL

Cavities in new wall to be made continuous with existing where possible to ensure continuous weather break. If a continuous cavity cannot be achieved, where new walls abuts the existing walls provide a movement joint with vertical DPC. All tied into existing construction with suitable proprietary stainless steel profiles.

PARTIAL FILL CAVITY WALL

To achieve minimum U Value of 0.21W/m²/K, to be 20mm two coat sand/cement render to comply to BS EN 13914-1:2005 with waterproof additive on 100mm medium dense block. Ensure a 50mm clear render cavity and provide 75mm Celotex CG5000 insulation fixed to inner leaf constructed using 100mm medium dense block, 0.51 or lower. Internal finish to be 12.5 mm plasterboard on dabs. Walls to be built with 1:1.6 cement mortar.

DPC Provide horizontal strip polymer (hyolad) damp proof course to both internal and external skins minimum 150mm above external ground level. New DPC to be made continuous with existing DPC's and with floor DPM. Vertical DPC to be installed at all reveals where cavity is closed.

WALL TIES

All walls constructed using stainless steel vertical twist tie retaining wall ties built in at 750mm ctrs horizontally, 450mm vertically and 225mm ctrs at reveals and corners in staggered rows. Wall ties to be suitable for cavity width and in accordance with BS 5268-6.1: 1996 and BS EN 845-1: 2003

INTERNAL MASONRY PARTITIONS

Construct non load bearing internal masonry partitions using dense concrete blocks built off floor slab and tied at 225mm centres with proprietary steel profiles or block bonded to all internal and external walls. Walls faced throughout with 12.5mm plasterboard on dabs with skim plaster finish or 13mm lightweight plaster.

A Aug.2021 Two storey extension set back, single storey extension reduced

H. D. WILLIAMS Ltd.

F.R.I.C.S.

CHARTERED QUANTITY SURVEYOR
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Project Proposed Side Extension and Rear Garage
at
86, Yew Street, Troedyrhiw.

Title PROPOSED FLOOR PLANS, ELEVATIONS
AND SECTION

Date June, 2021 Scale 1:100 / 1:50 @ A1

Drawing Number Job Ref. Revision
hdw/ph/rj21.02a

