



PROPOSED REAR 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 chingle. 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

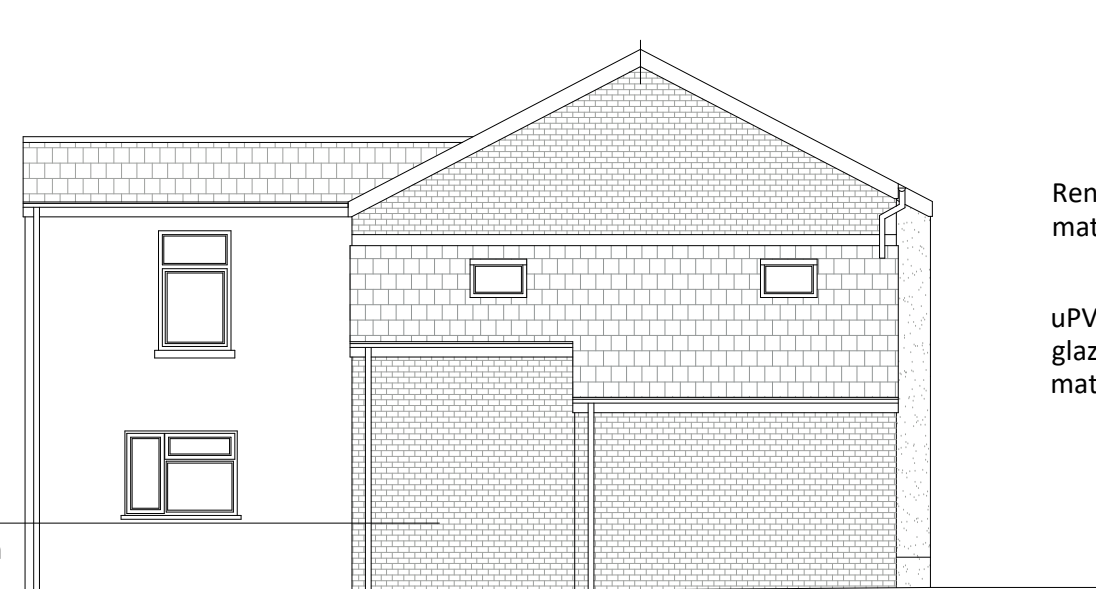
Where new pipework passes through external walls form rocker joints either side wall face of max length 600mm with flexible joints with short length of pipe bedded in wall. Alternatively provide 75mm deep pre-cast concrete plank lintels over drain to form opening in wall to give 50mm space all round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

HEATING

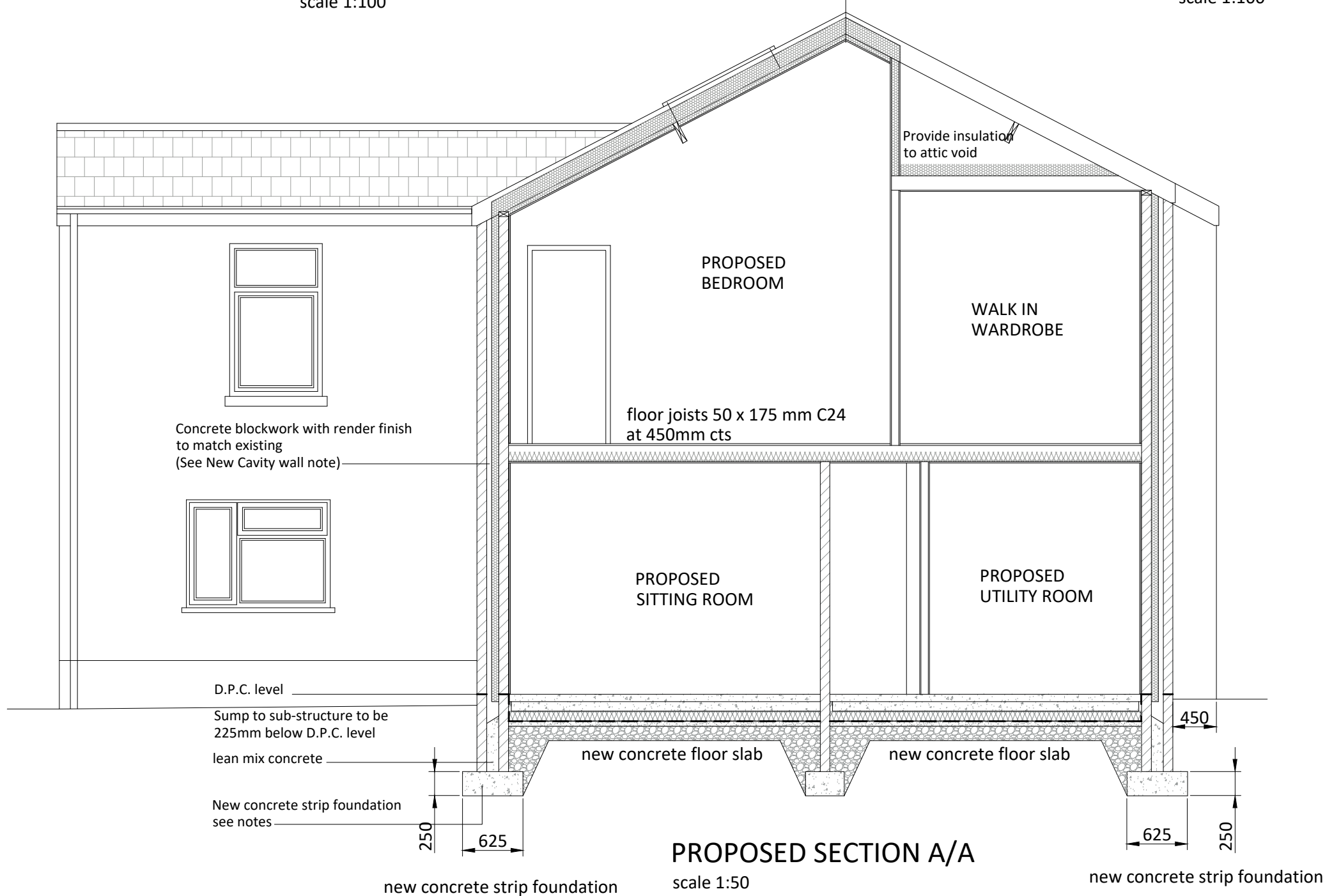
Existing central heating system to be extended to accommodate the new extension. System to be checked for capability and any heating installation should be under taken by a qualified person who must also provide all relevant installation / testing certification prior to occupation. If a new boiler has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

INTERMEDIATE FLOORS

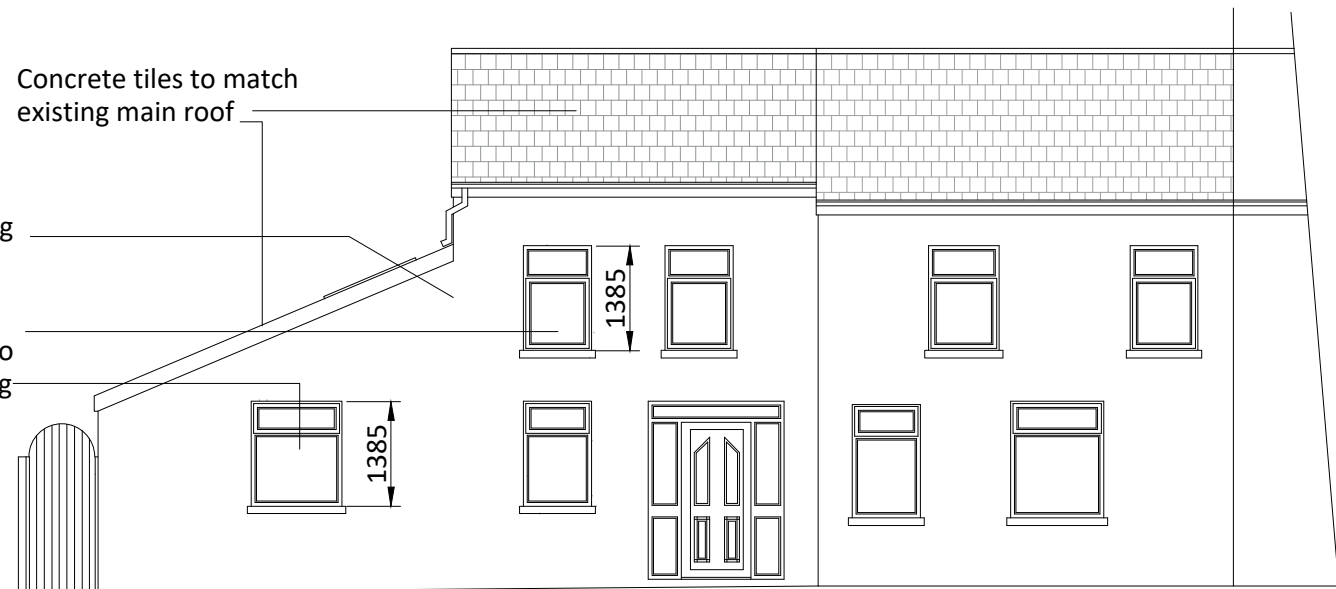
Intermediate floor to be 25mm t&g flooring grade chipboard or floorboards laid on 50 x 175 mm C24 joists at 450mm ctrs. Lay 100mm Rockwool mineral fibre quilt insulation min 10kg/m² or equivalent between floor joists. Ceiling to be 12.5 plasterboard with skim plaster set and finish. Joist spans over 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 noggings between joists at strap positions.



PROPOSED SIDE ELEVATION
scale 1:100



PROPOSED SECTION A/A
scale 1:50



PROPOSED FRONT ELEVATION
scale 1:100

CAVITIES TRAYS

Provide cavity trays over openings. All cavities to be closed at eaves and around openings using Thermabate or similar non combustible insulated cavity closers. Provide vertical DPCs around openings and abutments. All cavity trays must have 150mm upstands and suitable cavity weep holes (min 2) at max 900mm centres.

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.

ESCAPE WINDOWS (windows as marked on plans as moe)

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.

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, BS EN 14179 or BS EN ISO 12543-1:2011 and Part K (Part N in Wales) of the current Building Regulations.

SAFETY GLAZING

All glazing in critical locations to be toughened or laminated safety glass to BS 6206, BS EN 14179 or BS EN ISO 12543-1:2011 and Part K (Part N in Wales) 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.

BACKGROUND AND PURGE VENTILATION

Background ventilation - Controllable background ventilation via trickle vents to BS EN 13141-3 within the window frame to be provided to new habitable rooms at a rate of min 5000mm², and to kitchens, bathrooms, WCs and utility rooms at a rate of 2500mm² Purge ventilation - New Windows/rooftlights to have openable area in excess of 1/20th of their floor area, if the window opens more than 30° or 1/10th of their floor area if the window opens less than 30° 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.

TRUSSED RAFTER ROOF

Pitched roof to be formed using proprietary prefabricated manufactured trusses. Design of roof trusses to be produced by specialist truss manufacturer to BS EN 595:1995 and submitted to Building Control for approval prior to commencement of work. Trusses to be placed at max 600ctrs in accordance with BS 8103-3:2009 and BS EN 1995-1. All strapping, fixing and bracing to be in accordance with manufacturer's instructions. Mechanically fix trusses to 100 x 50mm sw treated wall plates using galvanized steel truss clips. Form ceiling using 12.5mm plasterboard and min 3mm thistle multi-finish plaster and lay 150mm Rockwool insulation between ceiling joists with a further 170mm layer over joists (cross direction). Provide polythene vapour barrier between insulation and plasterboard. Ensure opening at eaves level at least equal to continuous strip 25mm wide in two opposite sides to promote cross-ventilation.

ROOF COVERINGS

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

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

Lead-lined valleys to be formed using Code 5 lead sheet. 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

Provide galvanised mild steel straps to anchor roofs to new cavity walls, to have minimum cross section 30 x 5mm secured to manufacturers instruction at 1800mm centres. Similar straps to be provided to secure 100 x 75 mm wall plate to cavity walls to be 30 x 5 x 1000mm profile twice bent and secured to manufacturers instruction at 450mm centres.

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. Intermitent 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 noggings at 1/2 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 noggings 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.

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.

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 Useage. 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 150mm 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 A1/2 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/m²K 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 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

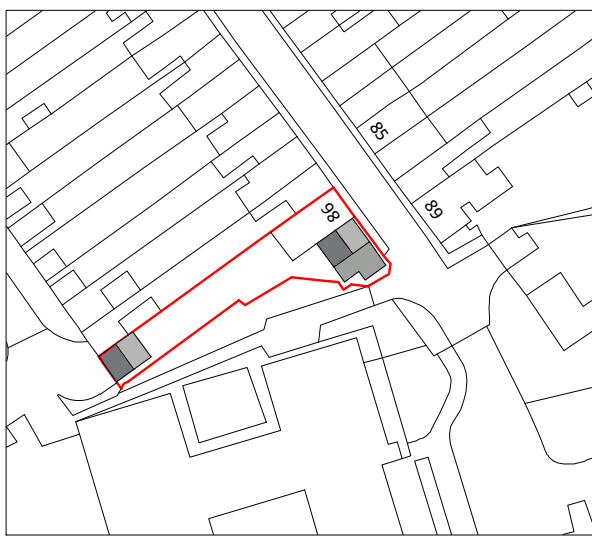
To achieve minimum U Value of 0.21W/m²K, to be 20mm two coat sand/cement render to comply to BS EN 13914-1:2005 with waterproof additive on 100mm medium dense block. Ensure a 50mm clear rigid cavity and provide 75mm Celotex CG5000 insulation fixed to inner leaf constructed using 100mm medium dense block, 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

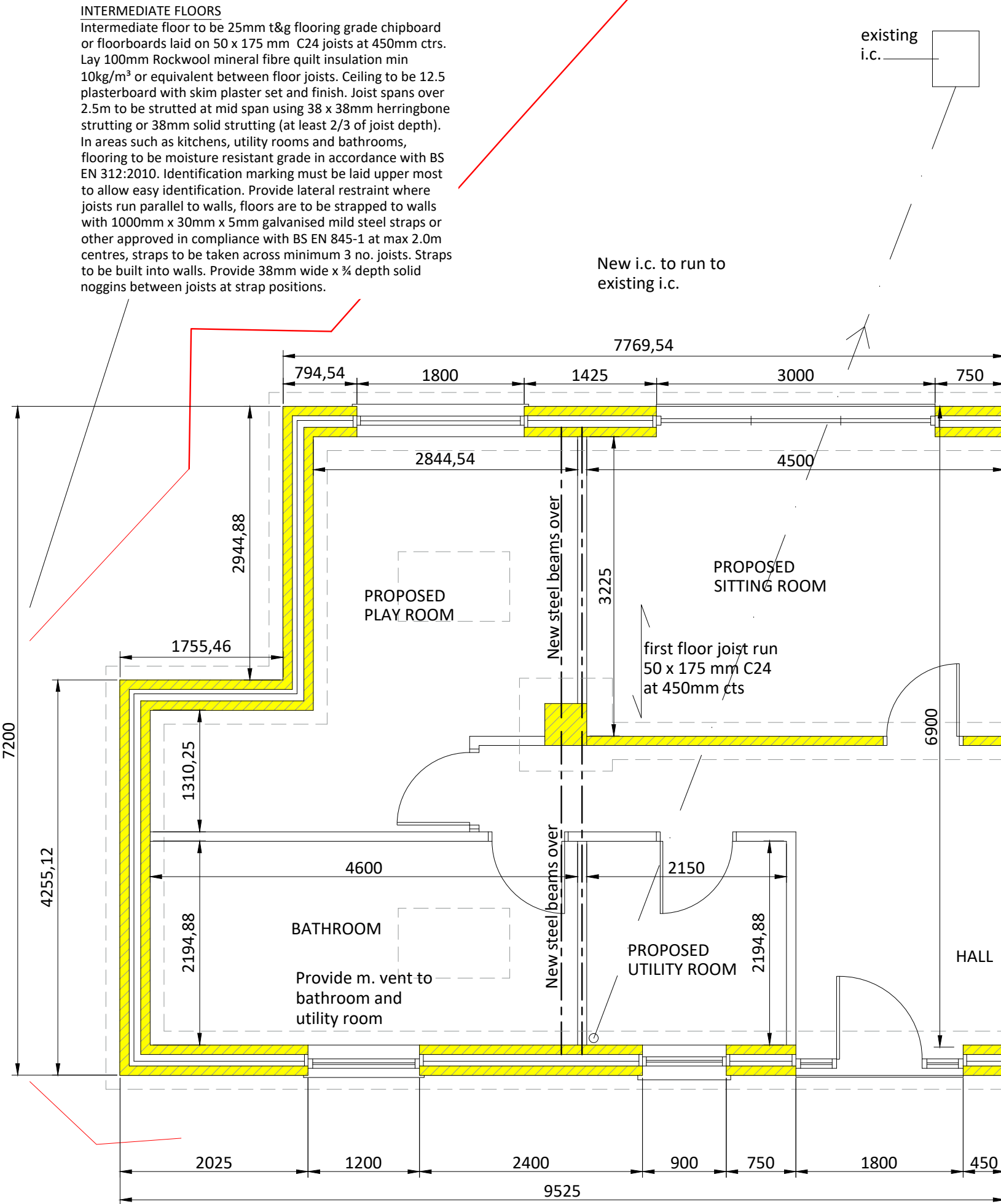
Provide horizontal strip polymer (hyolad) damp proof course to both internal and external skins minimum 150mm above external ground level. New DPC to be made continuous with existing DPC's and with floor DPM. Vertical DPC to be installed at all reveals where cavity is closed.

WALL TIES

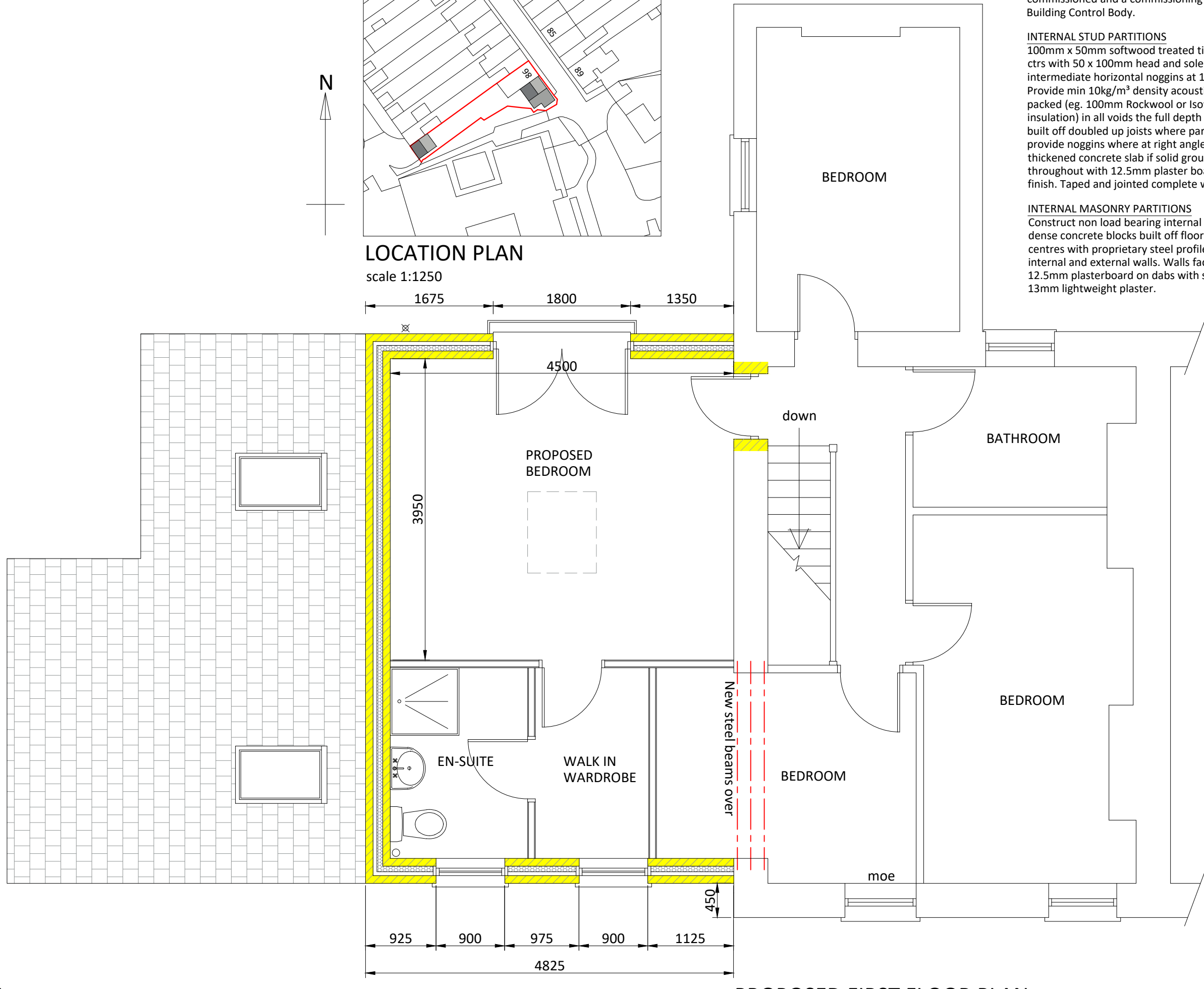
All walls constructed using stainless steel vertical twist type retaining wall ties built in at 750mm ctrs horizontally, 450mm vertically and 225mm ctrs at reveals and corners in staggered rows. Wall ties to be suitable for cavity width and in accordance with BS 5268-6.1: 1996 and BS EN 845-1: 2003



LOCATION PLAN
scale 1:1250



PROPOSED GROUND FLOOR PLAN
scale 1:50



PROPOSED FIRST FLOOR PLAN
scale 1:50

Revision	Date	Description
H. D. WILLIAMS Ltd. F.R.I.C.S. CHARTERED QUANTITY SURVEYOR MAINTFESURWR SIARTREDIG 123, Treallaw Road, Tonypandy, Mid Glam., CF40 2NP. Tel. (01443) 441078 Fax (01443) 434191 email: hdwilliams1@hotmail.co.uk		
Client	Mr & Mrs. R. James 86, Yew Street, Troedryhiw, Merthyr Tydfil. CF48 4EE	
Project	Proposed Side Extension and Rear Garage at 86, Yew Street, Troedryhiw.	
Title PROPOSED FLOOR PLANS, ELEVATIONS AND SECTION		
Date	June, 2021	Scale 1:100 / 1:50 @ A1
Drawing Number	hdw/ph/rj21.02	Job Ref.
Revision		
		the mark of property professionalism worldwide