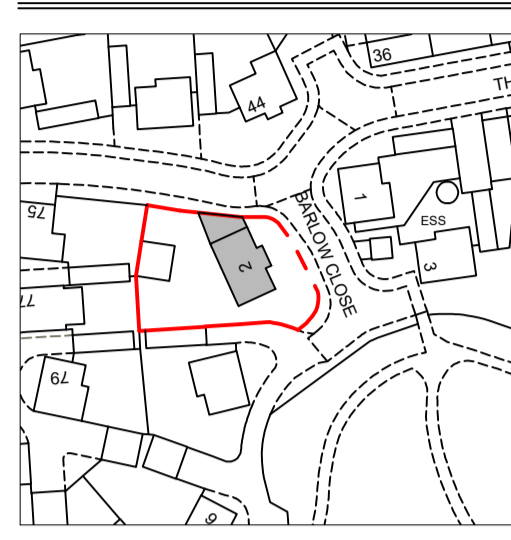
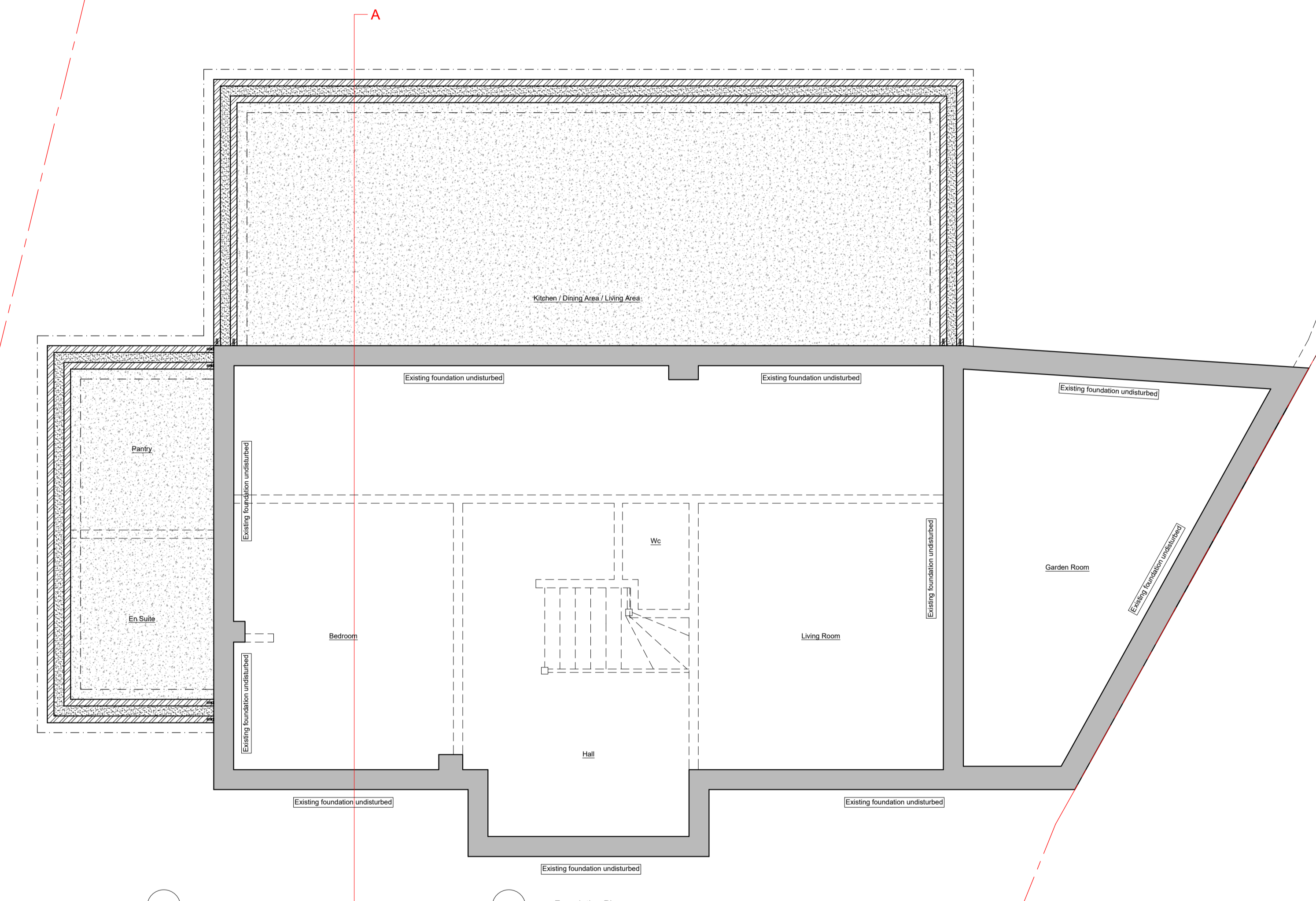
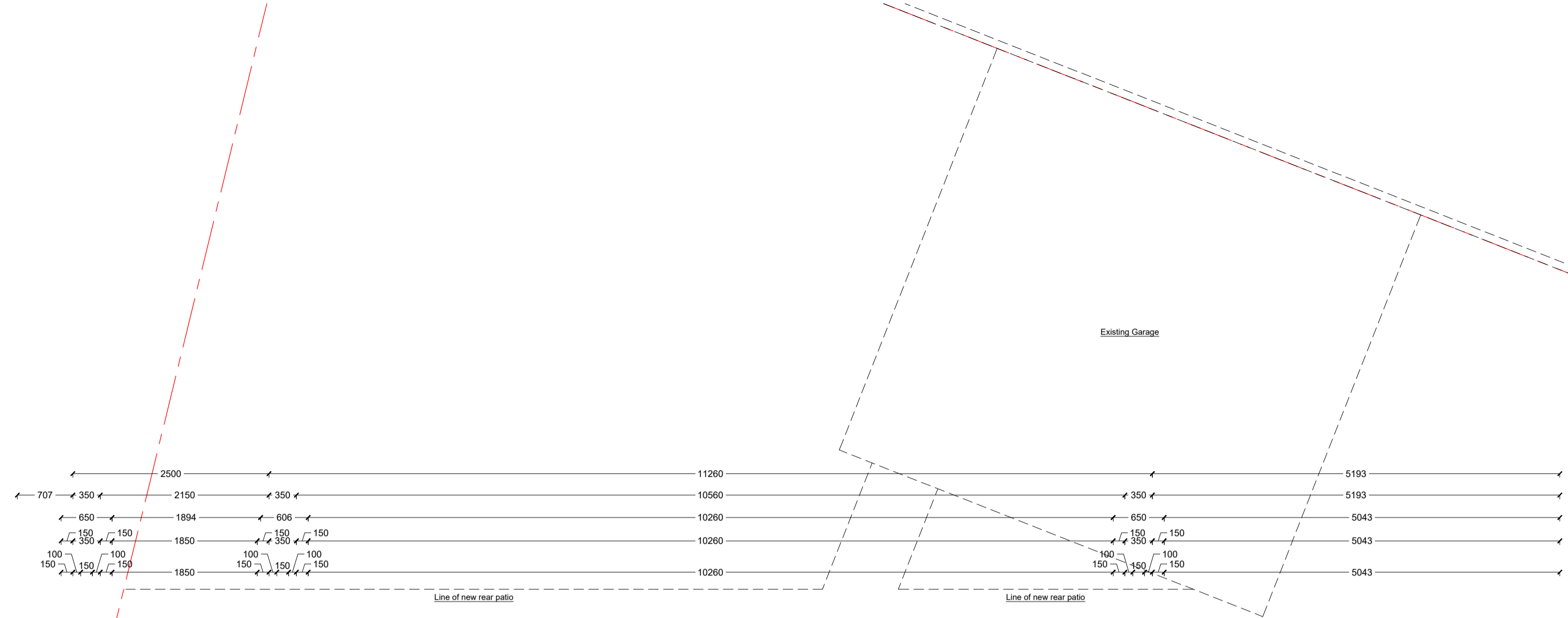


**NOTES:**  
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 All dimensions should be checked on site prior to works commencing.  
 Variations in squareness, depth of plaster etc, must be checked for. Where new walls are shown as aligned with existing walls, physical removal of brickwork and / or plaster to establish the actual position of the wall being attached to must be checked.  
 Any discrepancies should be reported in writing immediately.  
 When printing off PDF's, check that the drawings are printed to correct paper size and scale.  
 Documents should be used as to the drawing status described.  
 Property owner to ensure that all aspects of the 'Party wall act, 1999' are complied with prior to any works commencing on site.  
 These drawings are not to be re-drawn, copied or sold unless permission has been given by Signature Buildings Ltd.



Location Plan  
 Scale 1:1250  
 0 10 20 30 40 50 60 70 80  
 SCALE 1:1250



Foundation Plan As Existing - Scale 1:50

**BOUNDARY LINE**  
 Red dashed line indicates assumed boundary line (mid point between party wall). Contractor to check and owner to confirm when setting out.

**TRENCH FOUNDATION**  
 -Provide 600mm x 600mm wide trench fill foundations. All foundations to be a minimum of 1m below ground level, exact depth to be agreed on site with Building Control Officer to suit site conditions.  
 -Concrete mix to meet British Standard found in Part 4 of the Building Regulations  
 -Subgrade resistant cement to be used if required.  
 -Foundations to be constructed below invert level of any adjacent drains.  
 -Ensure there is heavy precautions to foundations greater than 1.5m deep.  
 -Where foundations are to be stepped, foundations should overlap by twice the height of the step, or 1m whichever is the greater. The height of the step shall be in accordance with Part H of the Building Regulations.

**FOUNDATION NEAR SEWER**  
 Foundations as to guidance notes and to be a minimum of 1000mm below original ground level. If foundations are within 1m of sewer then foundation depth to be min. 150mm below bottom of sewer.

**EXTERNAL WALLS BELOW GRND**  
 Wall to be Class A blockwork or semi engineering bricks in 1:4 masonry cement or equal approved specification. Cavities below ground level to be filled with lean mix concrete min 225mm below DPC.

**DPC**  
 Provide horizontal strip polymer (hyback) 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.

**SOLID FLOOR INSULATION OVER SLAB (SCREED FINISH)**  
 -Minimum U Value required of 0.22 W/m<sup>2</sup>K  
 -Solid ground floor to consist of 150mm insulation. Blended with 50mm sand bedding.  
 -Provide 150mm ST2 or GenC ground bearing slab over a 120 gauge polythene DPM. DPM to be lapped in with DPC in walls.  
 -Floor to be insulated over side and DPM with min 75mm thick Celotex GA400 joints tightly lapped and as to manufacturer's instructions.  
 -25mm insulation to continue around floor perimeter to avoid thermal bridging.  
 -Lay Polythene VCL over the insulation boards, all joints to be lapped 150mm and sealed.  
 -Finish with 65mm sand/tondement finishing. If existing floor is suspended, provide ventilation tubes in proposed floor to maintain ventilation.

**NOTE:**  
 Contractor to check structural engineers notes and calculations for special foundations, i.e. pad foundations, steel post connections, below floor level steel work etc.

**EXISTING TO NEW WALL**  
 -Cavities in new wall to be made continuous with existing where possible to ensure continuous weather break.  
 -Where new walls abut the existing walls provide a movement joint with vertical DPC and pointed with flexible mastic as to manufacturer's instructions. All tied into existing construction with suitable proprietary stainless steel profiles.

**EXTERNAL WALLS ABOVE GROUND**  
 -To achieve minimum U Value of 0.28W/m<sup>2</sup>K  
 -External 105 facing brick (to match existing)  
 -Cavity 150mm cavity full fill with Dabremk4 (as to manufacturer's details)  
 -Inner leaf 100mm standard Airocrete 0.45 K Value or less  
 -Finish with 12.5 plasterboard on dot & dab  
 -Walls to be built with 1:1.6 cement mortar.

**WALL TIES**  
 All walls constructed using stainless steel wall ties or as to insulation manufacturer's recommendations.  
 -The first run of wall ties to be located at 600mm centres horizontally at base of insulation. Subsequent runs of wall ties to be no more than 900mm centres horizontally 450mm vertically and 225mm ctrs at reveals and corners in staggered rows.  
 -Wall ties to be suitable for cavity width and as to British Standards.

**EXISTING TO NEW WALL**  
 -Cavities in new wall to be made continuous with existing where possible to ensure continuous weather break.  
 -Where new walls abut the existing walls provide a movement joint with vertical DPC and pointed with flexible mastic as to manufacturer's instructions. All tied into existing construction with suitable proprietary stainless steel profiles.

**CAVITY CLOSERS**  
 All cavities to be closed around openings using an insulated non-combustible cavity closer with a minimum thermal resistance path of 0.45 m<sup>2</sup>kw. Provide vertical DPC's around openings and abutments.  
 Window or door frame to overlap cavity closer by no less than 30mm. Seal joints with sealant.

**CAVITY BARRIERS**  
 30 minute fire resistant/acoustic proprietary cavity barriers or similar to be provided at top of walls (unless cavity is totally filled with insulation), gable end walls and vertically at junctions with separating walls & horizontally at separating walls with cavity tray over installed according to manufacturer's details.

**WINDOWS & DOORS**  
**Safety Glazing** - All glazing in critical locations to be toughened or laminated safety glass, i.e. within 1500mm above floor level in doors and side panels within 300mm of door opening and within 600mm above floor level in windows.  
**Windows** - New and replacement windows to be double glazed with 16mm argon gap and soft low-E glass. Window Energy Rating to be Band C or better and to achieve U-values of 1.8 W/m<sup>2</sup>K.  
**Doors** - New and replacement doors to achieve a U-Value of 1.8 W/m<sup>2</sup>K. Glazed areas to be double glazed with 16mm argon gap and soft low-E glass.

**LEAD WORK AND FLASHING**  
 All lead flashings, any valleys or soakers to be Code 5 lead and laid according to Lead Development Association. Flashings to be provided to all joints and below window openings with welded upstands. Joints to be lapped min 150mm and lead to be dressed 200mm under ties, etc. All work to be undertaken in accordance with the Lead Development Association recommendations.

**WARM FLAT ROOF**  
 To achieve U value 0.18 W/m<sup>2</sup>K  
 -Single ply membrane i.e. Sarnafil, roofing providing AA fire rating for surface spread of flame with a curf to EBA or WILFAS Certificate and laid to specialist specification over 100mm Celotex Crown-Bond.  
 -Insulation bonded to VCL (either polythene or reinforced aluminium foil) on 15mm external quality plywood decking or similar approved or 50mm Kingspan to minimum 1m x 80 fall.  
 -70mm Celotex GA400 between joists.  
 -Joists C24 @ 400mm c/c as to Structural Engineer's details and calculations if otherwise specified. Underneath joists to have 12.5mm plasterboard and skim.  
 -Tiebar blocking at 1.0 spacing or as to engineer's details if specified otherwise.  
 -Products installed as to manufacturer's instructions.

**ROOF WINDOWS**  
 Min U-value of 1.6 W/m<sup>2</sup>K  
 Roof lanterns to be double glazed with 16mm argon gap and soft low-E glass. Window Energy Rating to be Band C or better. Roof lanterns to be fitted in accordance with manufacturer's instructions with beams doubled up joists as to Engineer's details and suitable flashings etc.  
 Roof lantern to have a AA, AB or AC fire rating if within 1m of boundary.

**FLAT ROOF STRAPPING**  
 -Unless specified by Engineer, resistant to flat roof by fitting of 32 x 100mm centres fixed to maximum 2000mm centres fixed to 100 x 50mm wall plates and anchored to wall.

**PROPOSED JOISTS/AFTER SPAN**  
 Proposed direction or position. Check guidance notes to structural engineers for sizes and specification.

**CATNICKLETS ABOVE EXTERNAL OPENINGS**  
 Use suitable Catnic Lintel for opening width and cavity thickness. Lintels to have a minimum bearing of 150mm on each end. Stay ends, DPC trays and sleep holes to be provided above all externally located lintels.

**STEEL BEAMS**  
 Supply and install new structural elements such as new beams, roof structure, floor structure, bearings, and joistlines in accordance with the Structural Engineer's calculations and details. New steel beams to be encased in 12.5mm Gyproc FireLine board with staggered joints. Gyproc FireCase or painted in Nuttline S or similar intumescent paint to provide 12 hour fire resistance as agreed with Building Control. All fire protection to be installed as detailed by specialist manufacturer.

**STRUCTURAL TIMBER**  
 Supply and install new structural elements such as new posts, purlins, roof structure, floor structure etc in accordance with the Structural Engineer's calculations and details.

**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 roggins at 1.0 height or 450mm.  
 -100mm Rockwool mineral fibre sound insulation packed the full depth of the stud.  
 -Partitions built off double up joists where partitions run parallel or provide roggins where at right angles, or built off DPC on mechanical concrete slab if solid ground floor.  
 -Provide 12.5mm plaster board with skim plaster finish.

**EXTRACT**  
 Mechanical ventilation ducted to external air with an extract rating of:  
 Shower Room/Bathroom/WC: 15ls operated via the light switch. Vent to have a 15min overrun if no window in room  
 Utility Room: 30ls  
 Kitchen: 30ls; adjacent to hob, sealed to prevent entry of moisture.

**KEY (Extract - where applicable):**  
 Mechanical Extract (to external air):   
 Boiler Flue (to external air):

**KEY (Fire - where applicable):**  
 Mains operated linked smoke alarm detection system with battery back up: (SD)  
 Fire Door (30 Minute Rated): (FD30)  
 Heat Detector: (HD)

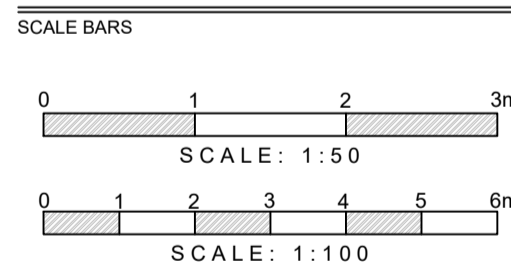
**DRAINAGE**  
 Drainage to connect with existing. Drainage layout as shown or alternative layout to be agreed on site with the BCO.

**AUTOMATIC AIR VALVE**  
 Ground floor fittings from WC to be connected to new 110mm gPVC soil pipe with accessible internal air admittance valve, placed at a height so that the outlet is above the trap of the highest fitting and connected to underground quality drainage enclosed with pea gravel to a depth of 150mm.

**STAIRS**  
 Max rise 220mm, min going 220mm. Two risers plus one going should be between 550 and 700mm. Tapered treads to have going in centre of tread at least the same as the going on the straight. Min 50mm going of tapered treads measured at narrow end. Pitch not to exceed 42 degrees. The width and length of every landing should be at least as great as the smallest width of the flight.  
 Doors which swing across a landing at the bottom of a flight should leave a clear space of at least 400mm across the full width of the flight.  
 -Min 2.0m headroom measured vertically above plot line of stairs and landings. Handrail on stairs to be 900mm above the pitchline, handrail to be at least one side if stairs are less than 1m wide and on both sides if they are wider.  
 -Ensure a clear width between handrails of minimum 600mm. Balustrading designed to be undrivable and should contain no spaces through which a 100mm sphere could pass. Allow for all structure as designed by a Structural Engineer.

All work under construction must be protected overnight and during adverse weather conditions in accordance with relevant standards.

**NOTE:**  
 Contractor to check structural engineers notes and calculations for special foundations, i.e. pad foundations, steel post connections, below floor level steel work etc.



PLEASE NOTE:  
 1:100 = 1CM IS 1M.  
 1:50 = 1CM IS 0.5M



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**PROJECT:**  
 Single storey rear & side extension & internal alterations

**SITE:**  
 2 Barlow Close, Hatfield, Herts, AL10 9GZ

**DRAWING TITLE**  
 Proposed foundation plan

**DRAWINGS STATUS**  
 Building control

PAPER SCALE	DATE
A1	March, 2023
DRAWN T.A.K	CHECKED HR
DRAWING REF: SHZ	REVISION A