

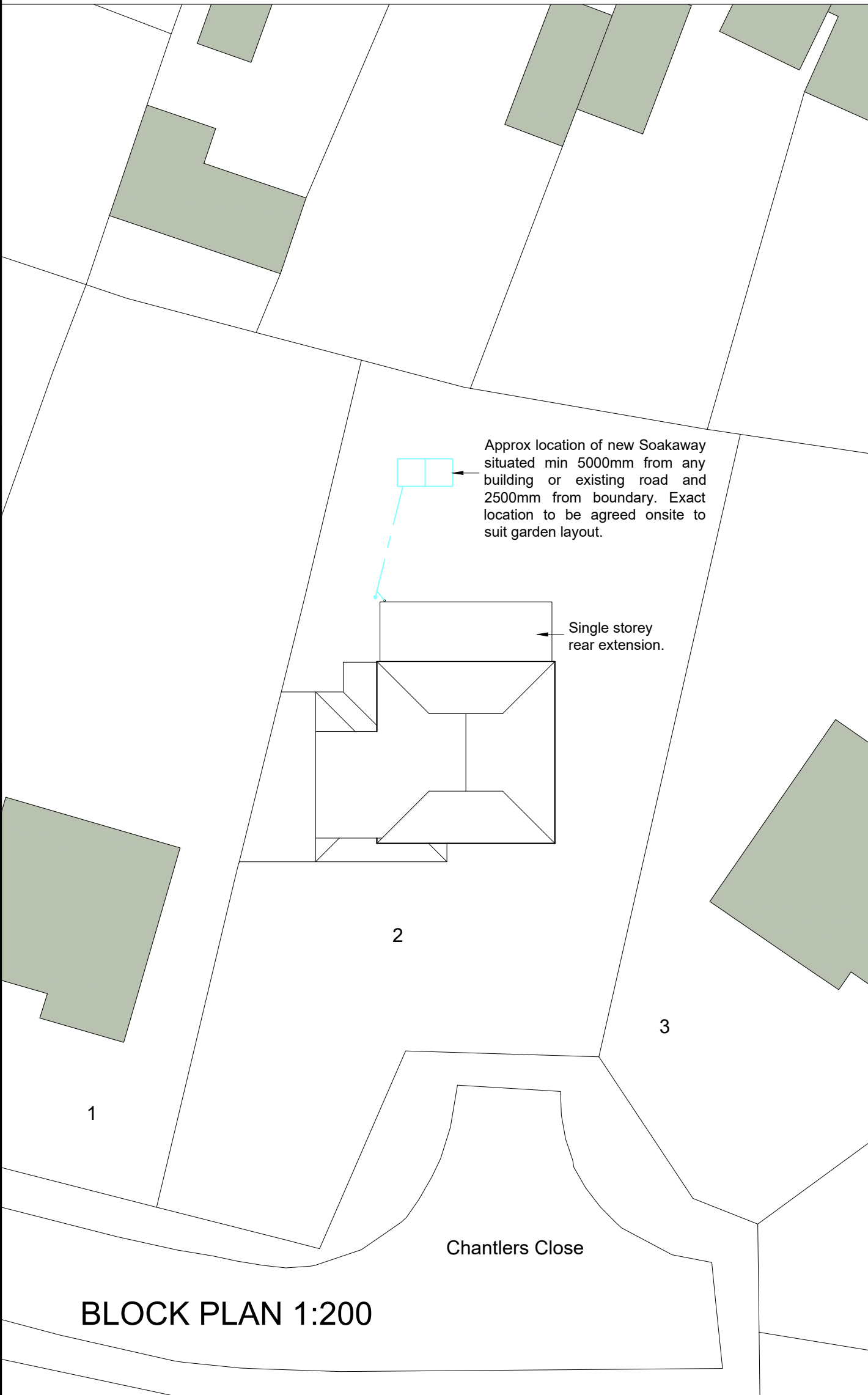


EAST ELEVATION

SOUTH ELEVATION

WEST ELEVATION

* Denotes safety glazing.



BLOCK PLAN 1:200

FOUNDATIONS:

To extended area provide 600mm Gen 3 trench fill foundations and pads under beams as structural engineers design and details. All foundations to be a minimum of 1000mm below ground level, exact depth to be agreed on site to suit site conditions. Lowest point of foundation to be on line 45° up from lowest point of any existing drain run.
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 or difference in soil type be found or any major tree roots in excavations, the Building Control Officer is to be contacted and the advice of the structural engineer should be sought.

DPC

Provide horizontal strip polymer (hyload) damp proof course to both internal and external skins of cavity wall 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. Insulated cavity closer's to be used at all door and window openings in external cavity walls installed in accordance with manufacturer's instructions.

SUSPENDED BLOCK AND BEAM FLOOR

To achieve a minimum U-value of 0.18 W/m²K (P/A ratio 0.5).
Remove vegetation and organic material from the site. Provide 50mm concrete blinding where required.
The underside of beams to be not less than 150mm above ground level.
Precast concrete beams to be supplied and installed in accordance with the beam manufacturer's layout drawings and structural calculations. Details and calculations to be submitted to Building Control prior to commencement of works. Beams to have a minimum bearing of 100mm onto loadbearing walls with DPC provided beneath bearings.
Provide in-fill concrete blocks conforming to BS EN 771-3. Lay blocks and grout joints where required in accordance with manufacturer's recommendations. Provide double beams below non-loadbearing partitions where required by the beam manufacturer.
Lay 1200g DPM over beam and block floor with 300mm lapped joints, double wetted and sealed with appropriate tape.
Provide 100mm Celotex GA4000 (or equal) rigid floor insulation over DPM. Continue 25mm perimeter insulation around floor edges to reduce thermal bridging.
Lay 500g separating layer over insulation and provide 65mm sand/cement screed finish, prepared as necessary for final floor finishes.
Provide cross ventilation to the underfloor void by ventilators located on at least two opposing external walls. Ventilation openings to provide:
1500mm² per metre run of external wall, or
500mm² per m² of floor area, whichever is the greater.
Any sleeper walls to be honeycombed or otherwise detailed to allow adequate air movement below the floor.

CAVITY WALLS:

Description below gives a U-Value of 0.18 W/m²K
All new walls below ground to be constructed using blockwork/trench blocks compliant with BS EN 771 and suitable for below ground level or semi engineering brickwork. Walls to be built using 1:4 masonry mortar mix or equal approved specification to BS EN 1996-1-1. 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.
New cavity walls to comprise of 102.5mm brick work (to match existing), 100mm cavity, 100 inner leaf of 3.6N lightweight block, (max Thermal Conductivity of 0.15W/mK), e.g. Celcon solar, Thermatite turbo.
As works progress full fill the cavity with 90mm Celotex ThermaClass Cavity Wall 21 or 90mm Kingspan Kooltherm K106 insulation (or equal) leaving 10mm cavity between the insulation and outer skin as manufacturer's details. Internal finish to be 12.5mm plasterboard on dabs.
Walls above ground to be built with 1:1.6 cement mortar.
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 5628-6.1: 1996 and BS EN 845-1: 2003.
Provide cavity trays over openings. All cavities to be closed at eaves and around openings using Thermabable insulated combustible insulated cavity closer. Masonry units that have different physical characteristics should not be block bonded. They should be separated by a vertical movement joint or horizontal slip plane whichever is appropriate.
Insulation in walls to meet with insulation in roof and floors to form a continuous layer to help avoid cold bridging. All insulation to be fitted strictly in accordance with manufacturers details.

EXISTING STRUCTURE

Existing structure including foundations, beams, walls and lintels carrying new and altered loads are to be exposed and checked for adequacy prior to commencement of work and as required by the Building Control Officer.

STRUCTURAL BEAMS/POSTS:

Supply and install new structural elements such as new beams, posts, roof structure, bearings, and padstones in accordance with the Structural Engineer's calculations and details. New steel beams to be encased in 2 layers of 12.5mm plasterboard or 12.5mm Gyproc FireLine board with staggered joints, or painted in Nulifire S or similar intumescent paint to provide 1/2 hour fire resistance as agreed with Building Control. All fire protection to be installed as detailed by specialist manufacturer.

WARM FLAT ROOF

(imposed load max 1.0 kN/m² - dead load max 0.75 kN/m²)
To achieve U value 0.15 W/m²K
Flat roof covering to be single ply roofing membrane with BROOF(t4) fire rating in accordance with BS EN 13501-1:2018 and with a current BBA or other approved accreditation. Roof covering to be laid in compliance with manufacturer's details by flat roofing specialist. Single ply membrane to be fixed over 150mm Celotex XR4000 insulation (provide 18mm exterior quality plywood over insulation if required by roof covering manufacturer).
Insulation to be installed over a vapour control layer (VCL) and fixed to 18mm exterior-grade plywood laid on 50 x 150mm grade C24 joists at 400 ctrs, (as Engineer's details). Joists laid at max 15°.
Underside of joists to be fitted with a vapour barrier and finished with 12.5mm plasterboard and a plaster skim coat.
Provide restraint to flat roof by fixing of 30 x 5 x 1200mm ms galvanised lateral restraint straps at maximum 2000mm centres fixed to 100 x 50mm wall plates and anchored to wall.

INTERNAL MASONRY PARTITIONS

Construct non load bearing internal masonry partitions using dense concrete blocks built off thickened 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.

INTERNAL STUD PARTITIONS

50mm x 100mm softwood treated timbers studs at 400mm ctrs with 50 x 100mm head and sole plates and solid intermediate horizontal noggins at 1/3 height or 450mm. Provide min 10kg/m² density acoustic soundproof quilt lightly packed (eg. 100mm Rockwool or Iso wool 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 noggins where at right angles. Walls faced throughout with 12.5mm plaster board with skim plaster finish. Taped and jointed complete with beads and stops. Use moisture resistant plasterboard to WC and kitchen sides.

THERMAL BRIDGING:

Care shall be taken to limit the occurrence of thermal bridging in the insulation layers caused by gaps within the thermal element, (i.e. around windows and door openings). Reasonable provision shall also be made to ensure the extension is constructed to minimise unwanted air leakage through the new building fabric.

WINDOWS & DOORS

New 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 1.4 W/m²K.

New doors to achieve a U-Value of 1.4 W/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.

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.

External door and window frames to be positioned so as to overlap the insulated part of the DPC/Closer and lintels by at least 30mm.

ROOF LIGHTS

Min U-value of 1.3 W/m²K.
Roof-lights to be double glazed with 16mm argon gap and soft low-E glass. Window Energy Rating to be Band C or better. Roof lights to be fitted in accordance with manufacturer's instructions, with rafters doubled up to sides and suitable flashings provided.

CONSERVATION OF HEAT:

All external doors and windows to have flexible seal to wall.
To external doors and windows: - internal soffits, jambs and cills to have finish on 20mm PIR insulation below.
Closure below external door cill to include 20mm PIR insulation behind face brickwork.
Seal joints adjacent to floor and ceiling at boxing of concealed services.
Pipes to be sealed where they penetrate or project into hollow voids.

12.5mm plasterboard and skim coat plaster.

Line underside of joists with VCL and 25x38mm battens to create services void (if required).

50x150mm C24 roof joists at 400mm c/s.
18mm exterior grade plywood.

Polythene vapour control layer over plywood turned up at edges and taped to the top surface on the insulation board.

150mm PIR insulation as described in notes.

Grey single ply membrane, installed in accordance with manufacturers recommendations.

Gutter drip to roof covering manufacturers detail.

Wall insulation carried up to meet with roof insulation to avoid cold bridging.

Catnic CG 90/100mm lintels over new door openings. Allow for min 150mm bearing to each side of opening.

100mm matching brick, 100mm insulated cavity (as notes), 100mm lightweight blockwork (lambda 0.15), with 12.5mm plasterboard on dabs.

Windows and doors by specialist manufacturer to an agreed detail/design.

DPM linked continuously with DPC.

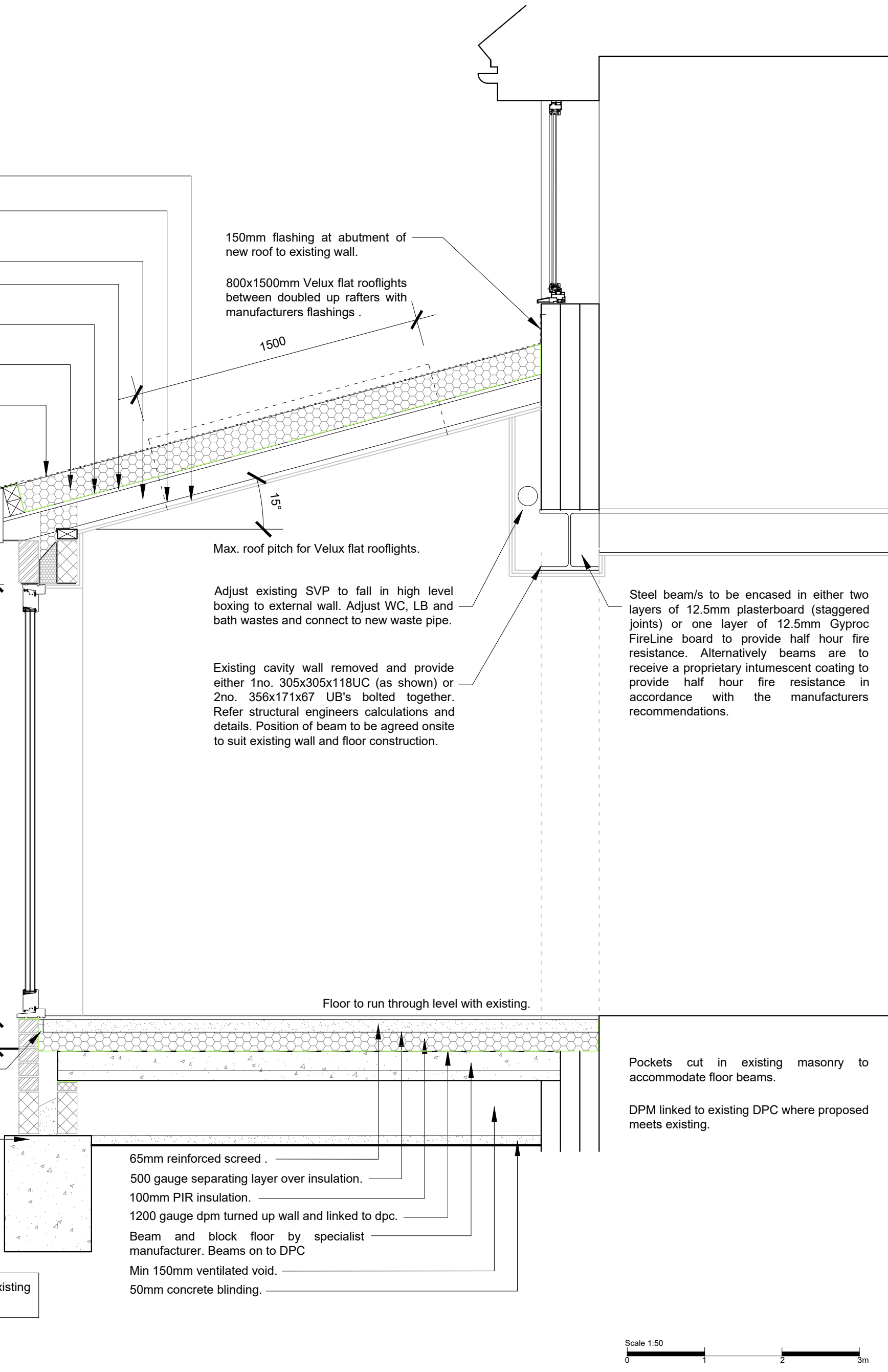
DPC. Min 150mm above ground level.

Min 25mm PIR insulation upstand to slab and screed at perimeter.

Depth of foundation to be agreed onsite with Building Control Officer and Lowest point of foundation to be on line 45° up from lowest point of any existing drain run.

SECTION 1:20

Care to be taken when excavating adjacent to existing dwelling not to undermine existing foundations.



Notes:

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DO NOT SCALE from this drawing.
All dimensions are approximate and in millimeters. Contractors are to verify all dimensions on site before setting out, commencing work, ordering materials and prior to any fabrication etc. Any discrepancies to be reported to this company.

This is not a construction drawing. This drawing is a Building Regulation drawing prepared for submission to Building Control for the purposes of obtaining Building Regulation approval.

A	Updated following structural engineers designs	NJA	26/06/26
Rev:	Description:	By:	Date:
Status:	Building Regulations		
TONY RYDER DESIGN Residential & Commercial Design Consultancy Design Studio Woodbridge Suffolk Office +44 1473 511650 Mobile +44 7733 323274 tonyryderdesign.co.uk Email - tony@tonyryderdesign.co.uk			
Client:	Mr & Mrs		
Project:	Proposed Rear Extension & Alterations		
Site Address:	2 Chantlers Close East Grinstead West Sussex RH19 1LU		
Detail:	Elevations, Block Plan & Section		
Scale @ A1:	Date:	Drawn:	Checked:
1:50, 1:200 & 1:20	June '26	NJA	TR
Project No:	Drawing No:	Revision:	
TRD - 41	02	A	