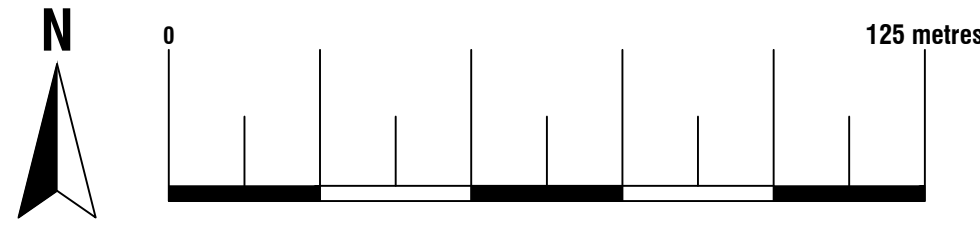
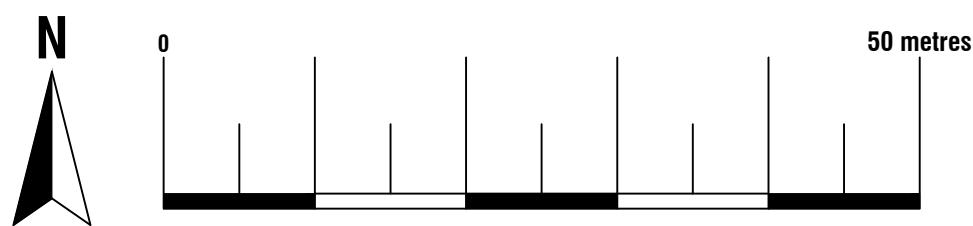




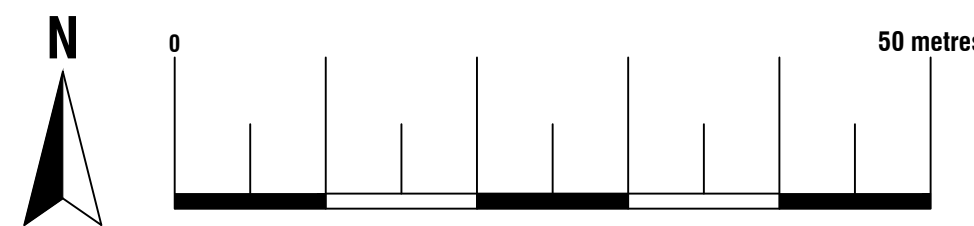
Location Plan
Scale 1:1250
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OS 100047474



Existing Block Plan
Scale 1:500
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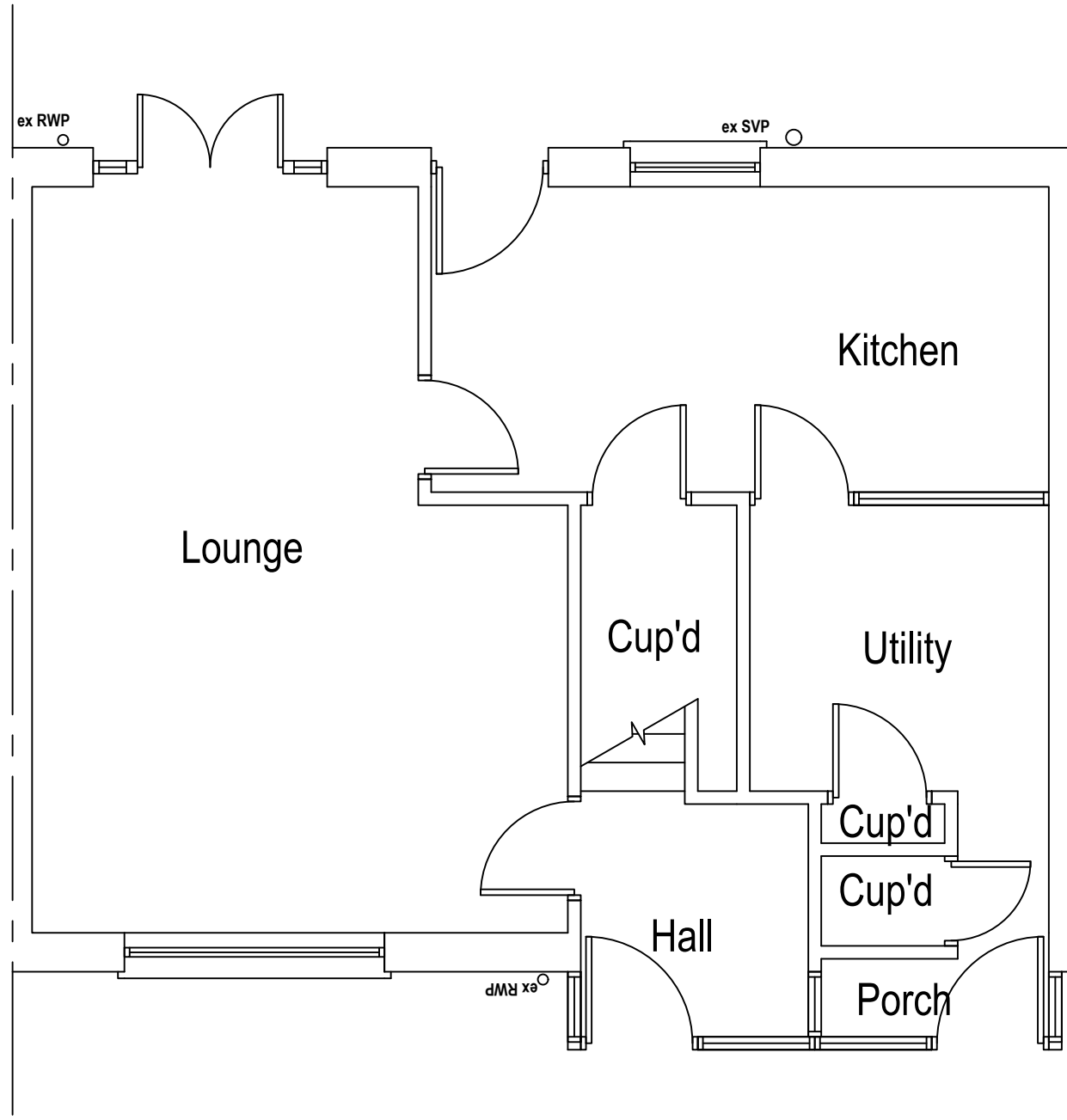
Proposed Block Plan
Scale 1:500
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OS 100047474



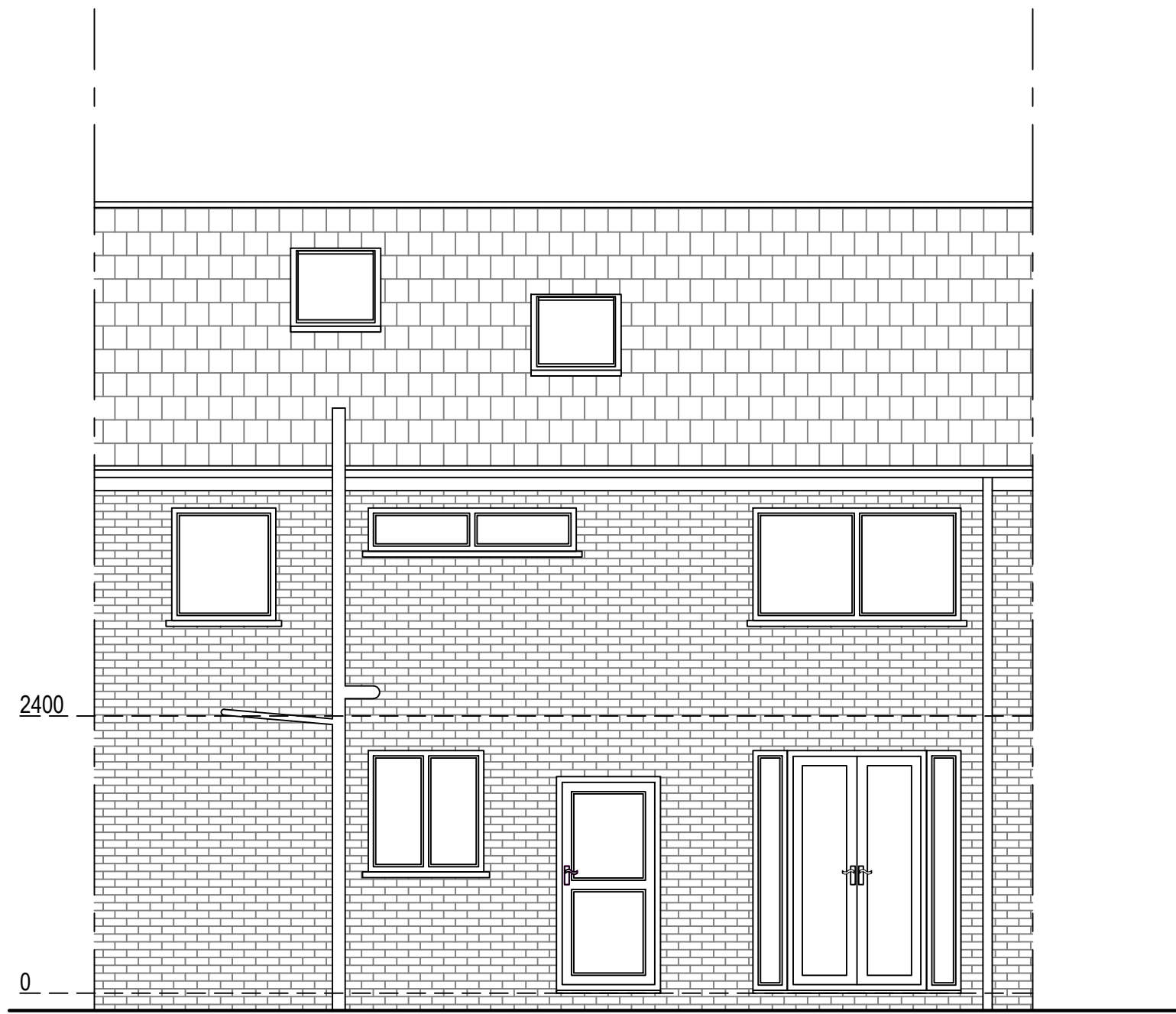


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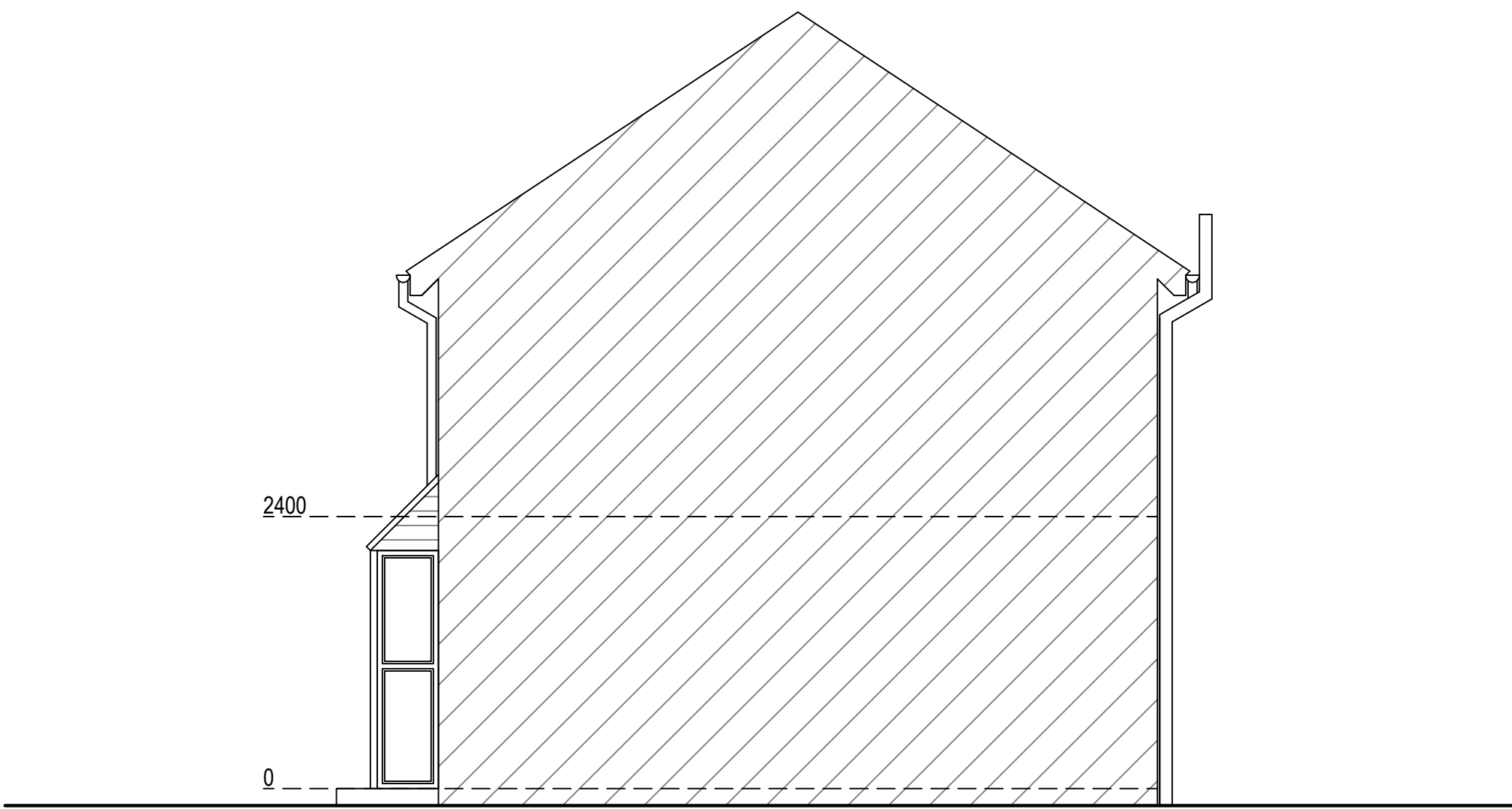
Site	2 Goyt Walk, Whitefield, Manchester M45 8RL	Date	06.10.2022
		Sheet	22-0994 D01 Rev 0
		Job	New Extension
		Scale	As Shown@A1
		Title	As Shown



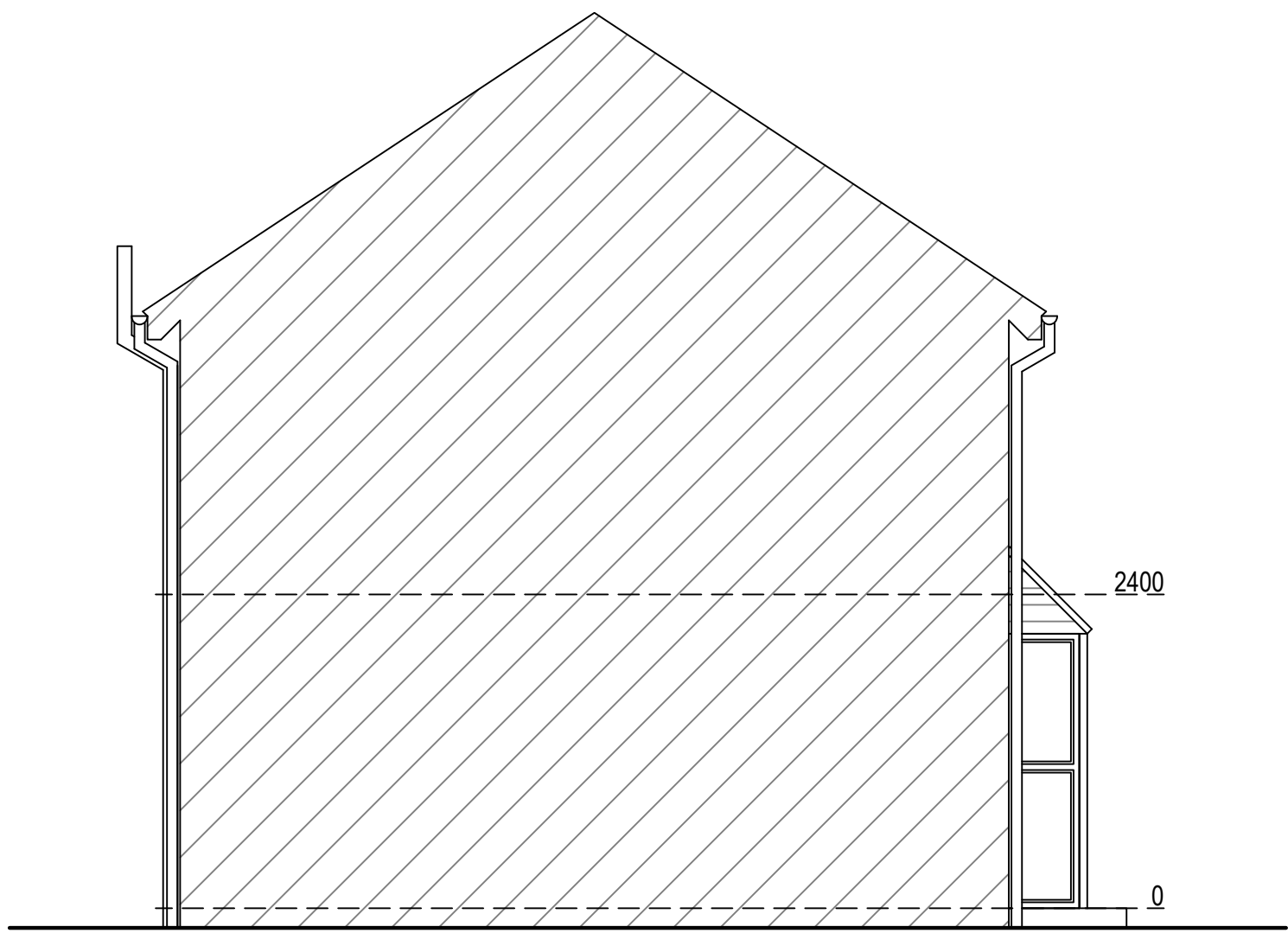
Existing Ground Floor Plan
Scale 1:50



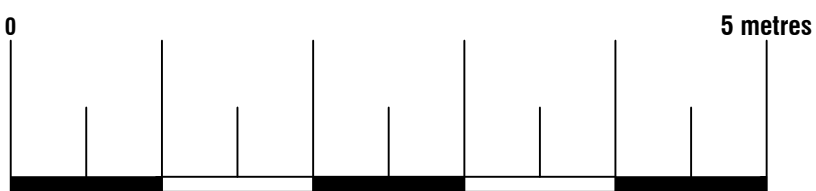
Existing East Elevation
Scale 1:50



Existing South Elevation
Scale 1:50



Existing North Elevation
Scale 1:50





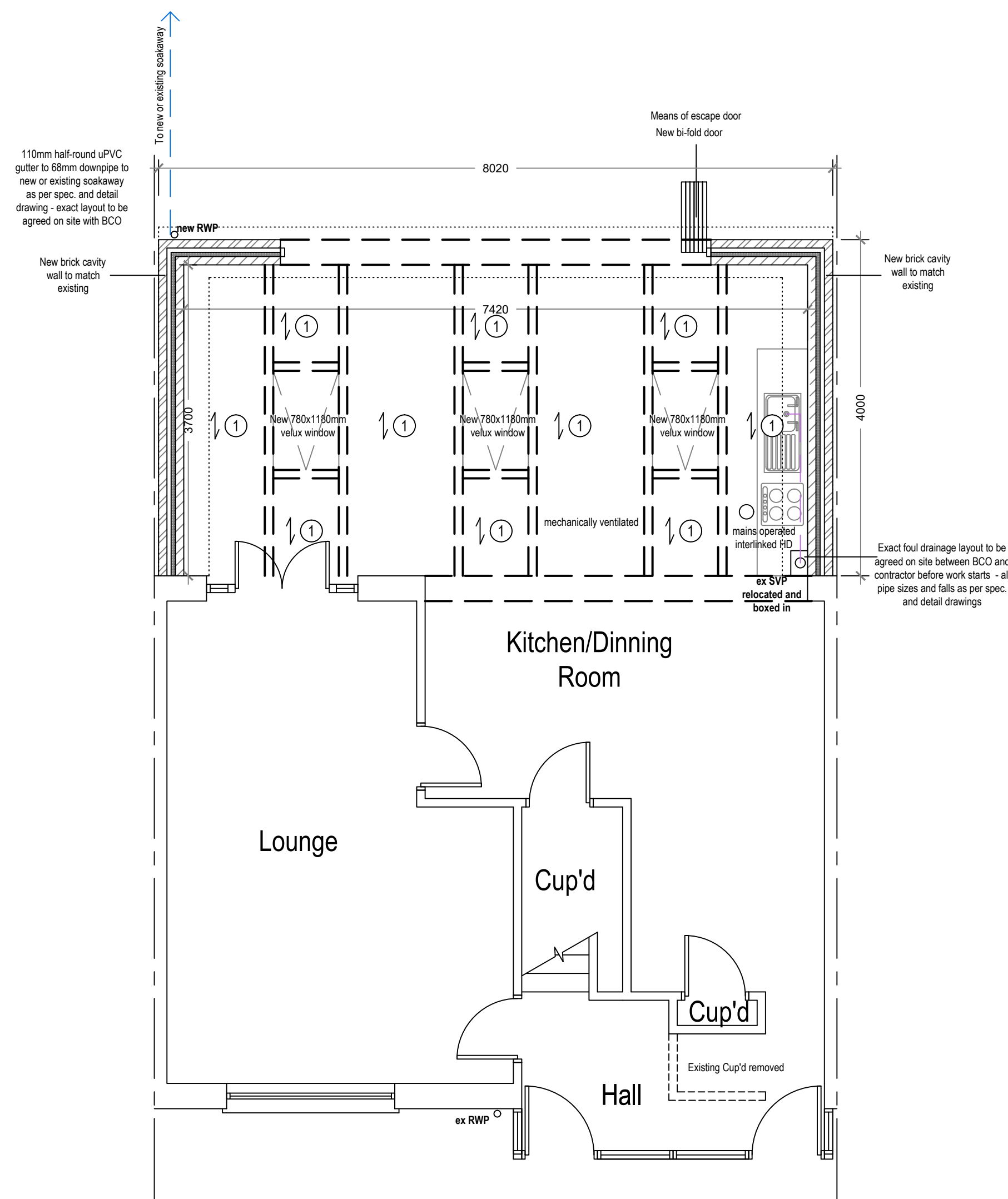
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Site	2 Goyt Walk, Whitefield, Manchester M45 8RL	Date	06.10.2022
		Sheet	22-0994 D02 Rev 0
		Job	New Extension
		Scale	As Shown@A1
		Title	As Shown

Diagram illustrating the vertical arrangement of structural elements:

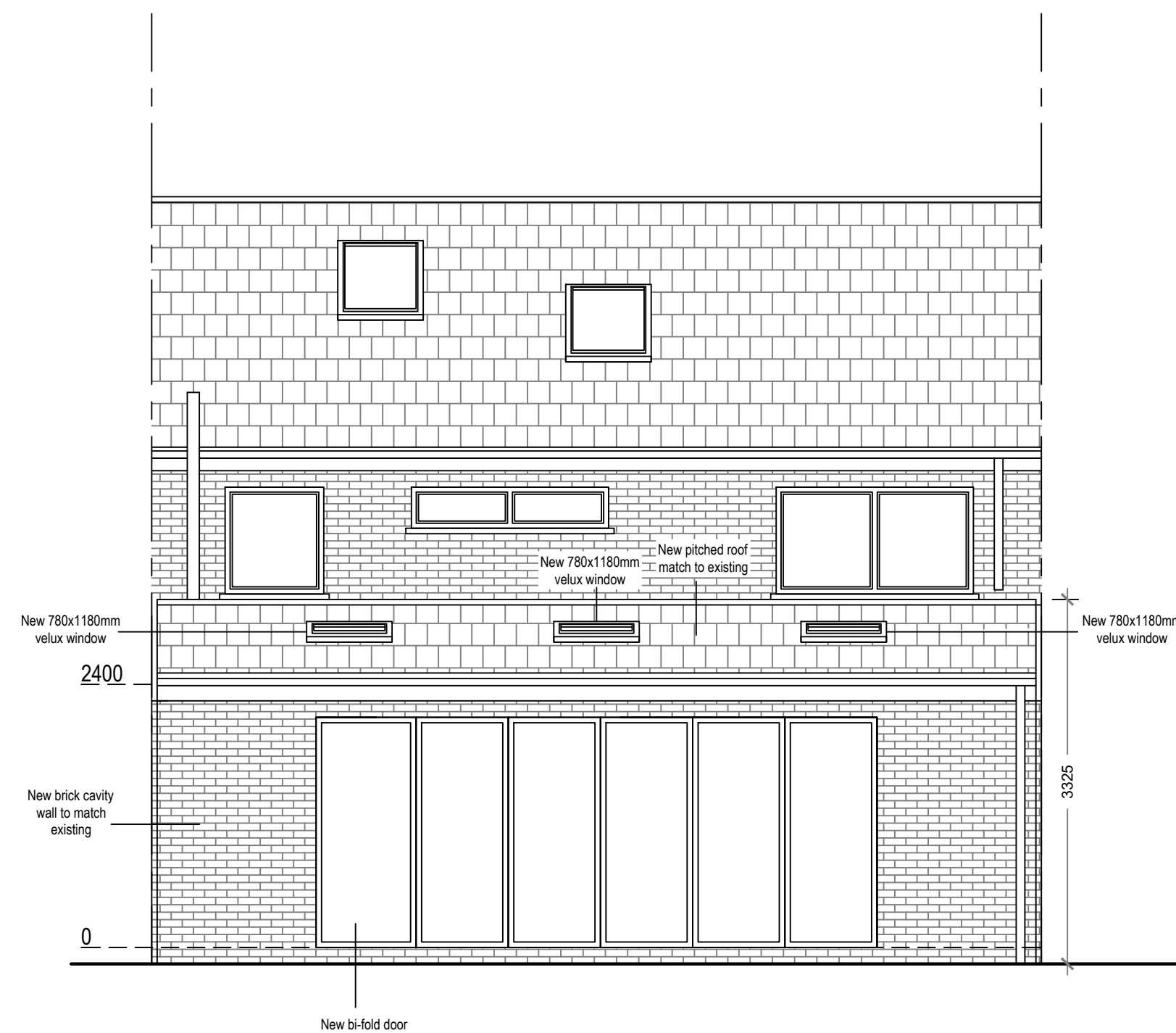
- Boundary line
- Rainwater drainage layout
- Waste drainage layout
- Details above
- timber/steel beam above sized and specified by Structural Engineer - fire proofed as per spec. and detail drawing
- Proposed foundation

47 x 170mm C24 rafters above
as per spec. and detail drawing
@ 400mm crs

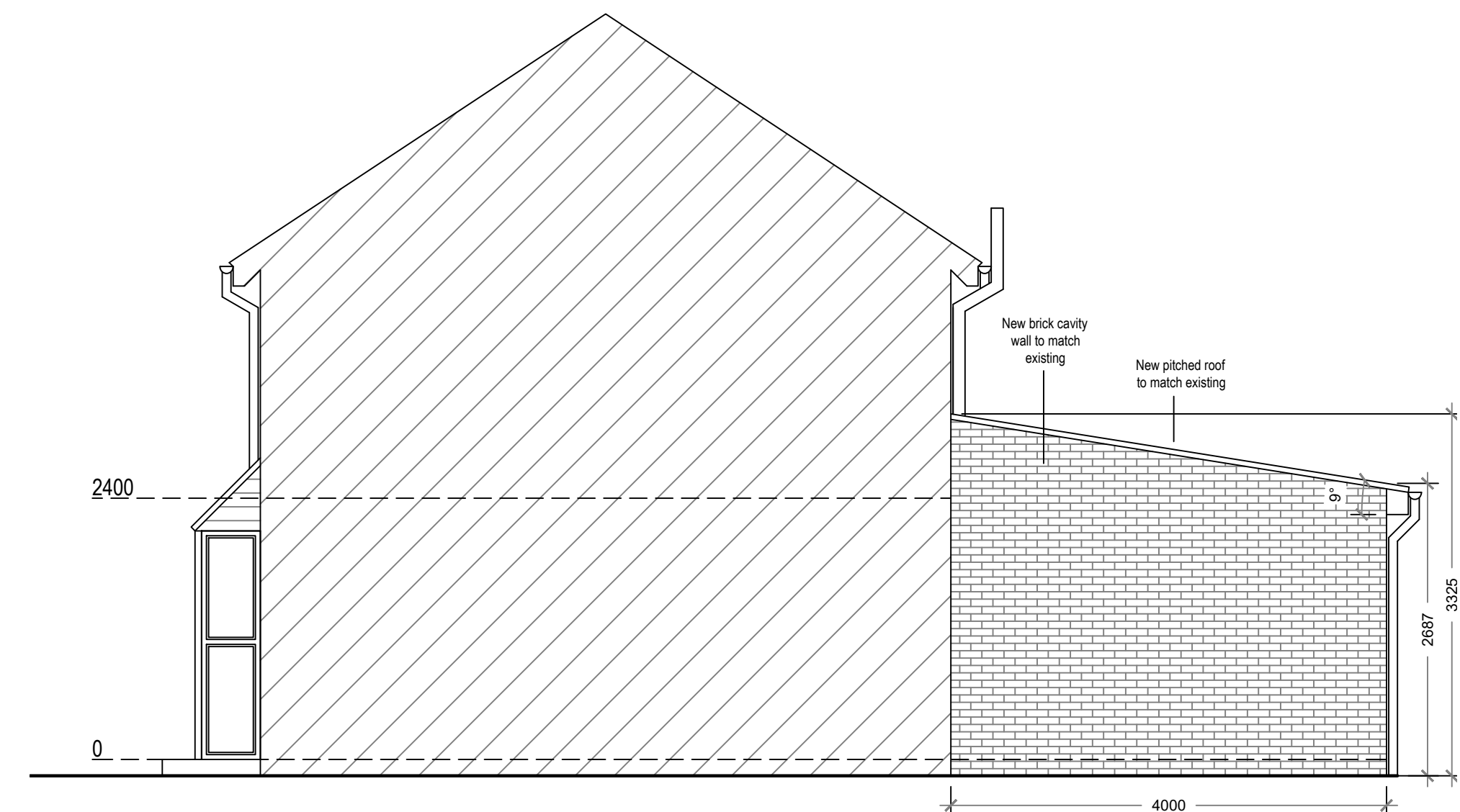


Proposed Ground Floor Plan

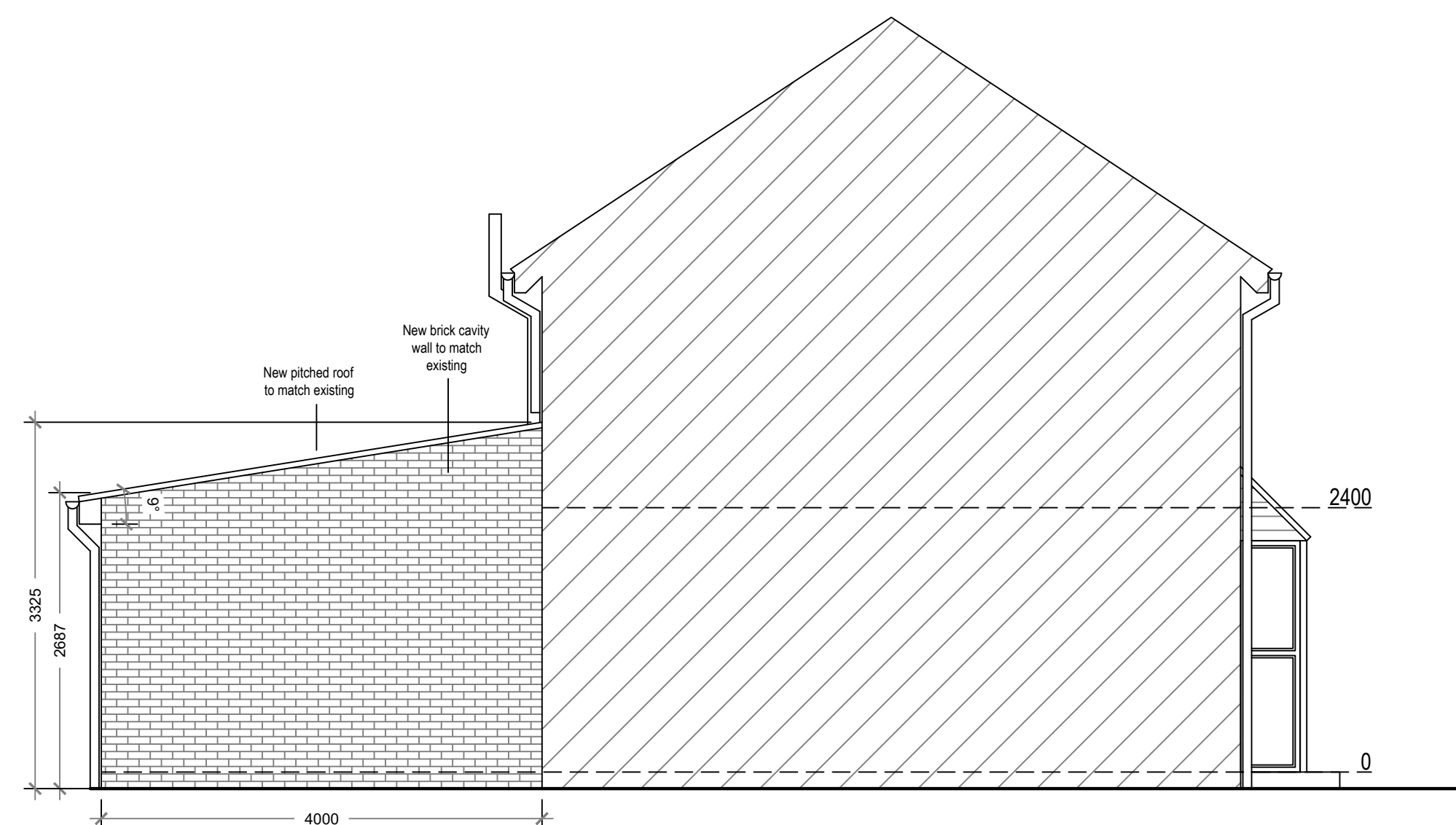
Scale 1:50



Proposed East Elevation
Scale 1:50



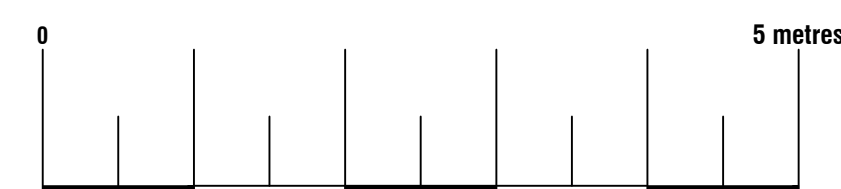
Proposed South Elevation
Scale 1:50



Proposed North Elevation
Scale 1:50

If the proposed area of any new glazing accounts for more than 25% of the new floor area (minus the area of existing glazing being removed) the client may be required to obtain SAP Calculations from a SAP Assessor before Building Control can fully approve the plans. If in doubt please contact Arkiplan:

Lytchett House, 13 Freeland Park, Wareham Road, Pool, Dorset BH16 6FA
0845 852 0852 enquiries@arkiplan.co.uk



Site

2 Goyt Walk, Whitefield,
Manchester M45 8RL

Date	06.10.2022
Sheet	22-0994 D03 Rev 0
Job	New Extension
Scale	As Shown@A1
Title	As Shown

PLANNING NOTE
Under new regulations that came into force on 1 October 2008 an extension or addition to a house is considered to be permitted development and not requiring an application for planning permission, subject to the following limits and conditions.

- No more than half the area of land around the "original" house would be covered by additions to buildings.
- No extension forward of the principal elevation or side elevation fronting a highway.
- No extension higher than the highest part of the roof.
- Maximum depth of a single storey rear extension to be 8m (4m on designated land and Site of Special Scientific Interest) if a detached house, or 6m (3m on designated land and Site of Special Scientific Interest) for any other house.
- Maximum height of a single storey rear extension to be four metres.
- Maximum ridge and eaves height no higher than existing house.
- Roof pitch of extensions higher than one storey to match existing house.
- Roofs to be similar in appearance to existing roof.
- Upper-floor, side-facing windows to be obscure glazed, any opening to be 1.7m above the ground.

The owner, should they need to do so under the requirements of the Party Wall Act 1996, has a duty to serve a Party Structure Notice on any adjoining owner if building work on, or to near an existing Party Wall involves any of the following:

- Support of beam
- Insertion of DPC through wall
- Raising a wall or cutting off projections
- Demolition and rebuilding
- Underpinning
- Insertion of lead flashings
- Excavations within 3 metres of an existing structure where the new foundations will go deeper than adjoining foundations, or within 6 metres of an existing structure where the new foundations are within 45 degree line of the adjoining foundations.

A Party Wall Agreement is to be in place prior to start of works on site.

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.

The client must abide by the Construction Design and Management Regulations 2015. The client must appoint a contractor, if more than one contractor is to be involved, the client will need to appoint (in writing) a principal designer (to plan, manage and coordinate the planning and design work) and a principal contractor (to plan, manage and coordinate the construction and ensure there are arrangements in place for managing and organising the project).

The domestic client is to appoint a principal designer and a principal contractor when there is more than one contractor, if not your duties will automatically transferred to the contractor or principal contractor.

The designer can take on the duties, provided there is a written agreement between you and the designer to do so.

The Health and Safety Executive is to be notified as soon as possible before construction work starts if the works:

(a) Last longer than 30 working days and has more than 20 workers working simultaneously at any point in the project.
Or:
(b) Exceeds 500 person days

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.

All works are to be carried out in a workmanlike manner. All materials and workmanship must comply with Regulation 7 of the Building Regulations, all relevant British Standards, European Standards, Agreement Certificates, Product Certification of Schemes (Kite Marks) etc. Products conforming to a European technical standard or harmonised European product should have a CE marking.

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.

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.

Install low energy light fittings that only take lamps having a luminous efficiency greater than 45 lumens per circuit watt and a total output greater than 400 lamp lumens. Not less than three energy efficient light fittings per four of all the light fittings in the main dwelling spaces to comply with Part L of the current Building Regulations and the Domestic Building Services Compliance Guide.

Extend all heating and hot water services from existing and provide new TVRs to radiators. Heating system to be designed, installed, tested and fully certified by a GAS SAFE registered specialist. All work to be in accordance with the Local Water Authorities bye laws, the Gas Safety (Installation and Use) Regulations 1998 and IEE Regulations.

An opening or recess greater than 0.1m² shall be at least 550mm from the supported wall (measured internally) construction for pier less than 550mm to be specified by engineer.

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.

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.

New external 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.

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 abut the existing walls provide a movement joint with vertical dpc. All tied into existing construction with suitable proprietary stainless steel profiles connected to the existing wall and tied centrally to the proposed brick/ blockwork at 450 centres.

Movement joints to be provided at the following maximum spacing:
 Clay brickwork - 12m.
 Calcium silicate brick - 7.5-9m.
 Lightweight concrete block - density not exceeding 1,500kg/m³ - 6m.
 Dense concrete block - density exceeding 1,500kg/m³ - 7.5-9m.
 Any masonry in a parapet wall (length to height ratio greater than 3:1) - half the above spacings and 1.5m from corners.
 Movement joint widths for clay bricks to be not less than 1.3mm/i.e. 12m = 16mm and for other masonry not less than 10mm.
 Additional movement joints may be required where the aspect ratio of the wall (length: height) is more than 3:1.
 Considerations to be given to BS S628 Code of practice for use of masonry.

Kitchen to have mechanical ventilation with an extract rating of 80l/sec or 30l/sec if adjacent to hob to external air, sealed to prevent entry of moisture. 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. Cooker hoods to BS EN 13141-3. 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.

Gable walls should be strapped to roofs at 2m centres. All external walls running parallel to roof rafters to be restrained at roof level using 1000mm x 30mm x 5mm galvanised mild steel horizontal straps or other approved to BSEN 845-1 built into walls at max 2000mm centres and to be taken across minimum 3 rafters and screw fixed. Provide solid noggin between rafters at strap positions. All wall plates to be 100 x 50mm fixed to inner skin of cavity wall using 30mm x 5mm x 1000mm galvanized metal straps or other approved to BSEN 845-1 at maximum 2m centres.

All lead flashings, any vales or soakers to be Code 5 lead and laid according to Lead Development Association. Flashings to be provided to all jambs and below window openings with welded upstands. Joints to be lapped min 150mm and lead to be dressed 200mm under tiles, etc. All work to be undertaken in accordance with the Lead Development Association recommendations.

New rainwater goods to be new 110mm UPVC half round gutters taken and connected into 68mm dia UPVC downpipes. Rainwater taken to new soakaway, situated a min distance of 5.0m away from any building, via 110mm dia UPVC pipes surrounded in 150mm granular fill. Soakaway to be min of 1 cubic metre capacity (or to depth to Local Authorities approval) with suitable granular fill and with geotextile surround to prevent migration of fines. If necessary carry out a porosity test to determine design and depth of soakaway.

Trench of soakaway to be provided slightly larger than designed depth after porosity test (if required) but just over 1m3 min from invert level of pipe. Provide suitable geotextile over the base and up the sides of the trench over 100mm level and compact bed of coarse sand. Install AquaCell crate units or equivalent as manufacturer's details. Geotextile to be wrapped around crates. Provide 100mm of coarse sand between the trench walls and over the AquaCell structure. Backfill with suitable material.

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.

AUTOMATIC AIR VALVE
Ground floor fittings from WC 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.

ESCAPE WINDOWS / DOORS
Provide emergency egress windows / doors to any 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.

DPC 150mm above ground level
 50mm residual cavity
 Facing brickwork
 Blockwork inner skin
 Lean mix cavity fill 225mm below DPC
 225mm x 600mm concrete foundation.
 Concrete mix to conform to BS EN 206-1.
 Depth to be 1000mm deep depending on
 ground conditions to be agreed with BCO
 Eccentric foundation if needed
 due to Structural Engineer
 details

Provide 225mm x 600mm concrete foundation, concrete mix to conform to BS EN 206-1 and BS 8500-2. All foundations to be a minimum of 1000mm below ground level, exact depth to be agreed on site with Building Control Officer to suit site conditions. All foundations in accordance with 2010 Building Regulations A1/2 and BS 8004:1986 Code of Practice for Foundations. Ensure foundations are constructed below invert level of any adjacent drains. Base of foundations supporting internal walls to be min 600mm below ground level. 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.

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.

102.5mm facing brick

Provide a 50mm clear residual cavity

Stainless steel retaining wall ties type suitable for cavity width built in at 750mm ctrs horizontally, 450mm vertically and 225mm ctrs at reveals and corners in staggered rows

skin

100mm standard block K value 0.15 (Celcon Standard, Thermaite Shield, Toplite Standard)

Internal finish 12.5mm lightweight plaster or plasterboard on dabs

Provide horizontal strip polymer (hyload) damp proof course to both leafs minimum 150mm above external ground level made continuous with floor DPM

To achieve minimum U Value of 0.28W/m²K
Provide 102.5mm facing brick to match existing construction. 50mm clear residual cavity, 50mm Celotex CW4000 insulation fixed to 100mm standard block K value 0.15 (Celcon standard, Thermalite, Toplite standard.) Internal finish to be 12.5mm plasterboard on dabs with a plaster skin. Walls to be built with 1:1:6 cement mortar.

Provide horizontal strip polymer (hyload) 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.

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 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.

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 abut the existing walls provide a movement joint with vertical DPC. All tied into existing construction with suitable proprietary stainless steel profiles.

30 minute fire resistant cavity barriers to be provided at at tops of walls, gable end walls and vertically at junctions with separating walls & horizontally at separating walls with cavity tray over installed according to manufacturers details.

DPC 150mm above ground level lapped to DPM
 65mm concrete sand cement screed with light reinforcement
 A VCL should be laid over and under the insulation

100mm Celotex GA4000 insulation
 100mm thick concrete slab
 1200g damp proof membrane
 150mm sand blined hardcore

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 100mm ST2 or Gen2 ground bearing slab concrete mix to conform to BS 8500-2 over a 1200 gauge polythene DPM. DPM to be lapped in with 25cm in walls. Floor to be insulated over slab and DPM with min 100mm thick Celotex GA4000. DPM 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. Finish with 65mm sand/cement finishing screed with light mesh reinforcement. Where drains runs pass under new floor, provide A142 mesh 1.0m wide and min 50mm concrete cover over length of drain. Where existing suspended timber floor air bricks are covered by new extension, ensure cross-ventilation is maintained by connecting to 100mm dia UPVC pipes with 100mm concrete cover laid under the extension. Pipes to terminate at new 65mm x 215mm air bricks with cavity tray over.

102.5mm facing brick

Polyurethane foam insulation

Weep holes (min 2 per lintel at 450mm centres)

Joint filled with polyethylene foam and sealant pointing

Ensure masonry overhang does not exceed 25mm

Lintel drip to project forward of the frame

Window frame and glazing to architects specification

100mm blockwork

50mm clear residual cavity, 50mm Celotex CW4000 insulation fixed to innerleaf

Cavity tray with stop ends

Lintel to have a nominal 150mm bearing at each end

Ensure lintel is fully bedded on bricklaying mortar

Window head - overlapping insulation at least 25mm to prevent thermal bridge

Bed window on impregnated foam strip

Subsill to overhang brickwork by 50mm

Dpc

102.5mm facing brick

Proprietary insulated cavity closer

Continuous ribbon of plaster adhesive

Suitable plasterboard

100mm brickwork

50mm clear residual cavity, 50mm Celotex CW4000 insulation fixed to innerleaf

The diagram illustrates a cross-section of a window frame assembly. On the left, a vertical section of the window frame is shown, with a 'Window frame and glazing as specified by architect' label. To the right of the frame is a 'Dpc (where required) should protrude into the cavity by 25mm'. Below the dpc is a 'Proprietary insulated cavity closer to avoid thermal bridge'. The cavity is filled with 'Insulation' (hatched pattern). A '30mm min' dimension is indicated for the overlap of the insulation. The bottom of the assembly is labeled 'Continuous plaster dab around corner'. The top of the assembly is labeled 'Thermal break of insulating foam with sealant pointing'. The bottom of the assembly is labeled 'Continuous plaster dab in keys'.

Thermal break of insulating foam with sealant pointing

Window frame and glazing as specified by architect

Continuous plaster dab in keys

Continuous plaster dab around corner

Dpc (where required) should protrude into the cavity by 25mm

Proprietary insulated cavity closer to avoid thermal bridge

Provide a minimum overlap of 30mm between the window frame and the cavity closer

30mm min

Technical cross-section diagram illustrating the installation of a cavity tray and lead flashing at a roof-to-wall junction. The diagram shows the roof structure, wall, and the assembly of the cavity tray, lead flashing, timber fillet, ventilator, airspace/batten, and exterior plywood. The cavity tray is positioned 150mm above the roof structure, and the lead flashing is positioned 150mm above the roof structure and 75mm above the roof tiles.

Labels and dimensions:

- Cavity tray min 150 above roof structure
- Code 4 lead flashing min 150mm above roof structure
- Timber fillet 75 x 75mm
- 25mm ventilator
- 25mm airspace / batten
- 22mm exterior quality plywood
- Cavity tray min 150mm above roof structure and lead flashing min 75mm above roofing tiles

A technical cross-section diagram of a roof assembly. The diagram shows a series of rafters with insulation installed between them. The insulation consists of two layers: a bottom layer of Celotex XR4000 and a top layer of Celotex PL4000. A ventilation strip is installed along the eaves, creating a gap between the insulation and the roof structure. The diagram is labeled with various components and their specifications.

continuous 5mm wide opening or the equivalent area is required to the length of the ridge

Roofing tiles

Sarking felt to BS747

47 x 170mm grade C24 rafters at max 400mm centres span to eave details

Cross ventilation to be provided by a proprietary eaves ventilation strip equivalent to a 25mm continuous gap at eaves level with insect grill and 50mm air gap between felt and insulation

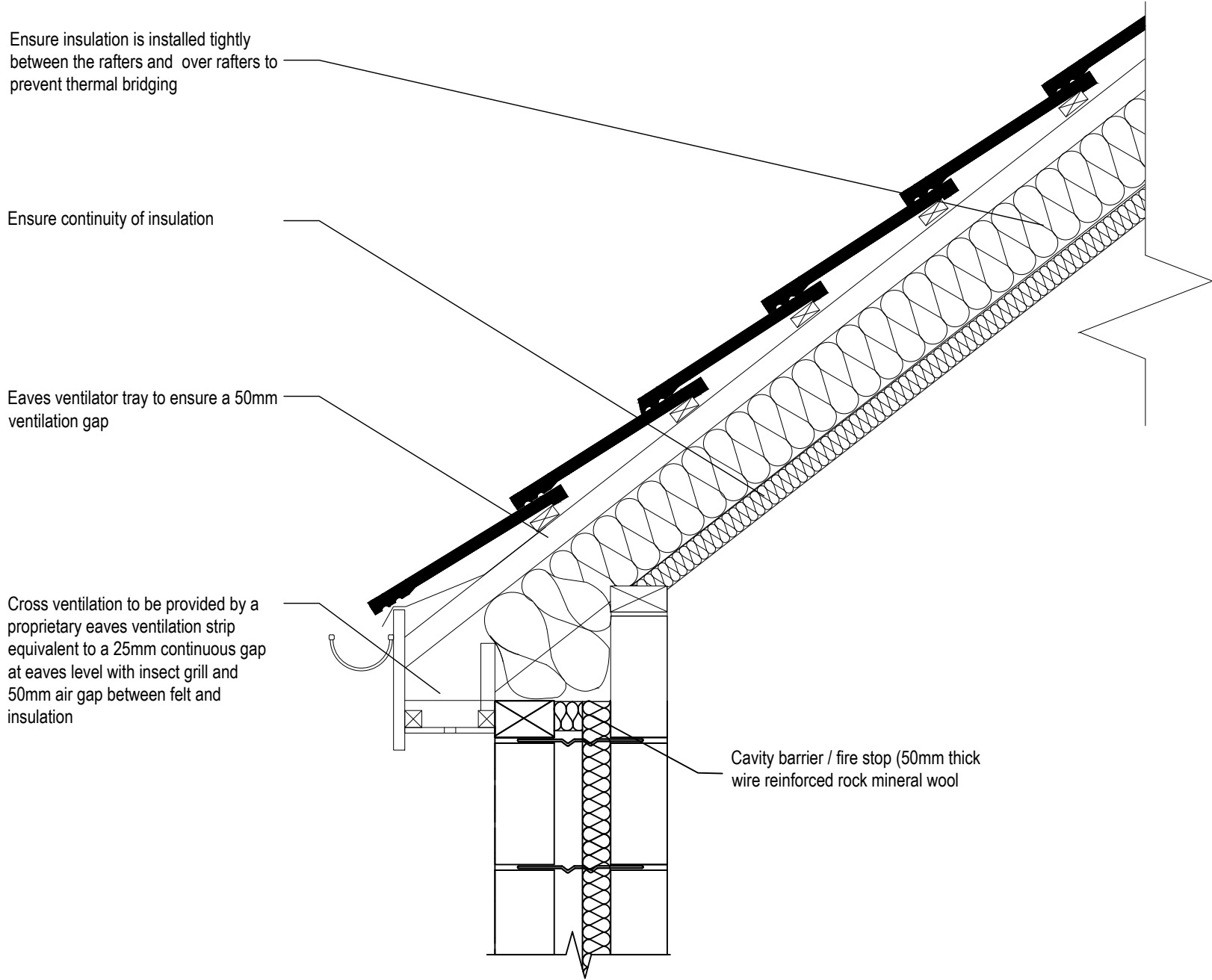
Rafters infilled with 120mm Celotex XR4000 insulation and 52.5mm Celotex PL4000 insulated plasterboard under rafters

To achieve U-value 0.18 W/m²K
Timber roof structures to be designed by an Engineer in accordance with NHBC Technical Requirement R5 Structural Design. Calculations to be based on BS EN 1995-1-1. Roofing tiles to match existing on 25 x 38mm tanalised sw treated battens on sarking felt to relevant BBA Certificate. Supported on 47 x 170mm grade C24 rafters at max 400mm centres max span 3.92m. Rafter supported on 100 x 50mm sw wall plates. Insulation to be 120mm Celotex G4000 between rafters and 52.5mm Celotex PL4000 insulated plasterboard under rafters. Provide 5mm skim coat of finishing plaster to the underside of all ceiling.

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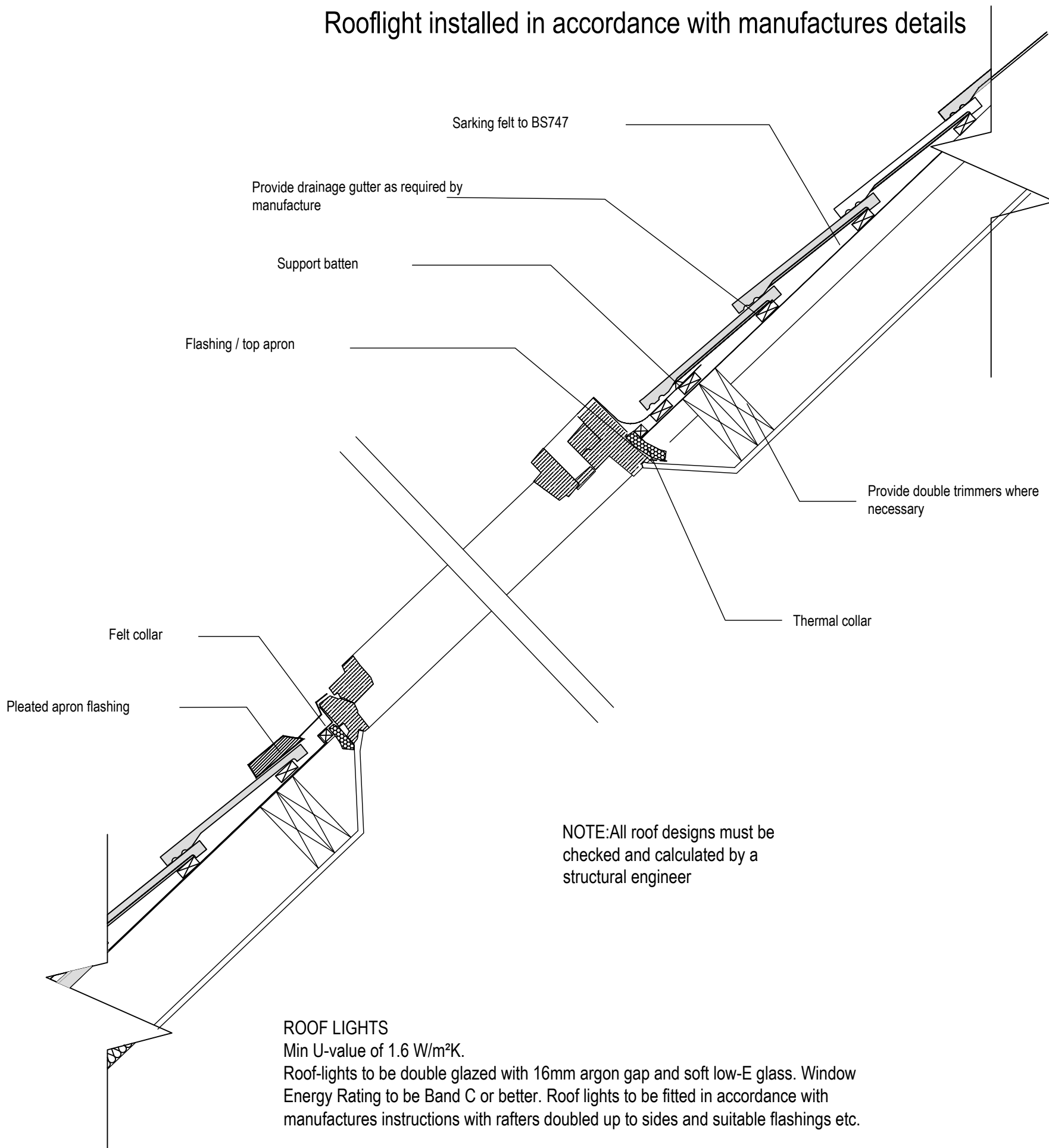
Site	2 Goyt Walk, Whitefield, Manchester M45 8RL	Date	06.10.2022
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		Title	Specification & Section Detail Drawings 1:10

COLD ROOF EAVES DETAIL



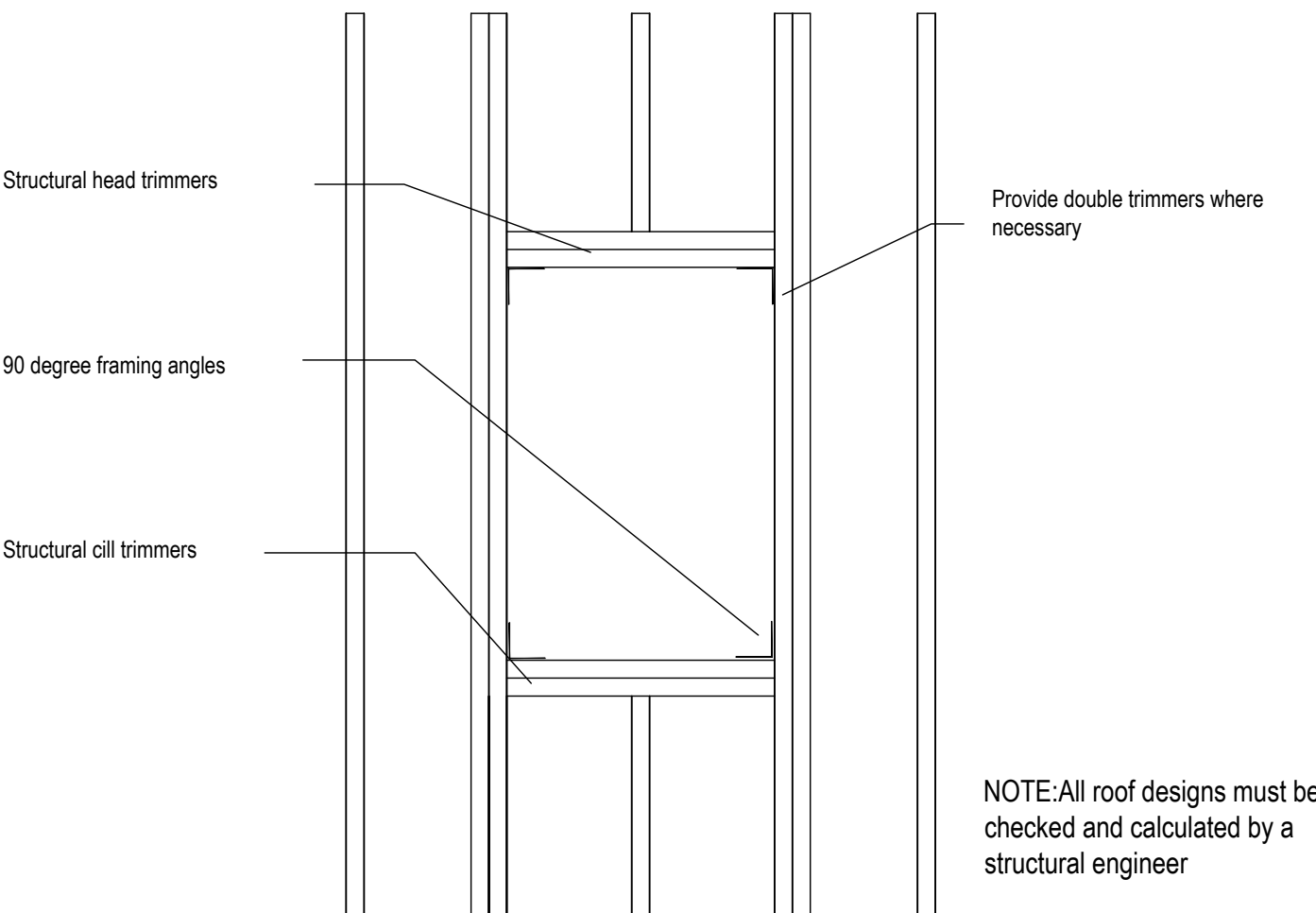
ROOFLIGHTS (SECTION)

Rooflight installed in accordance with manufactures details



ROOFLIGHTS (STRUCTURE)

Rooflight installed in accordance with manufactures details



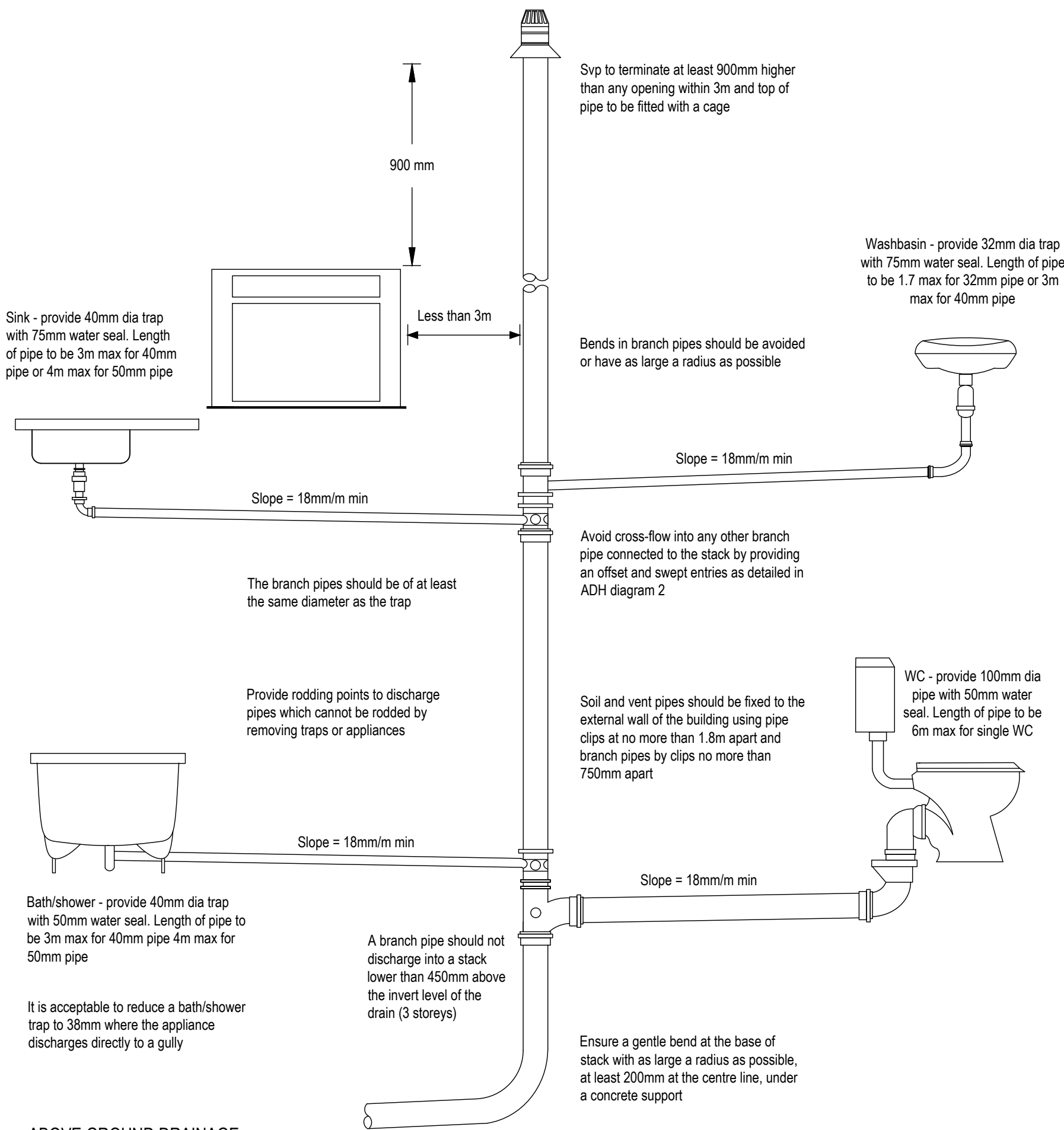
ROOF LIGHTS
Min U-value of 1.6 W/m²K.
Roof-lights to be double glazed with 16mm argon gap and soft low-E glass. Window Energy Rating to be Band C or better. Roof lights to be fitted in accordance with manufactures instructions with rafters doubled up to sides and suitable flashings etc.

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		Scale	As Shown@A1
		Title	Section Detail Drawings 1:10

ABOVE GROUND DRAINAGE
SCALE 1:20



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 4m for 40mm pipe
- Bath/shower - 3m for 40mm pipe 4m for 50mm pipe
- W/C - 6m for 100mm pipe for single WC

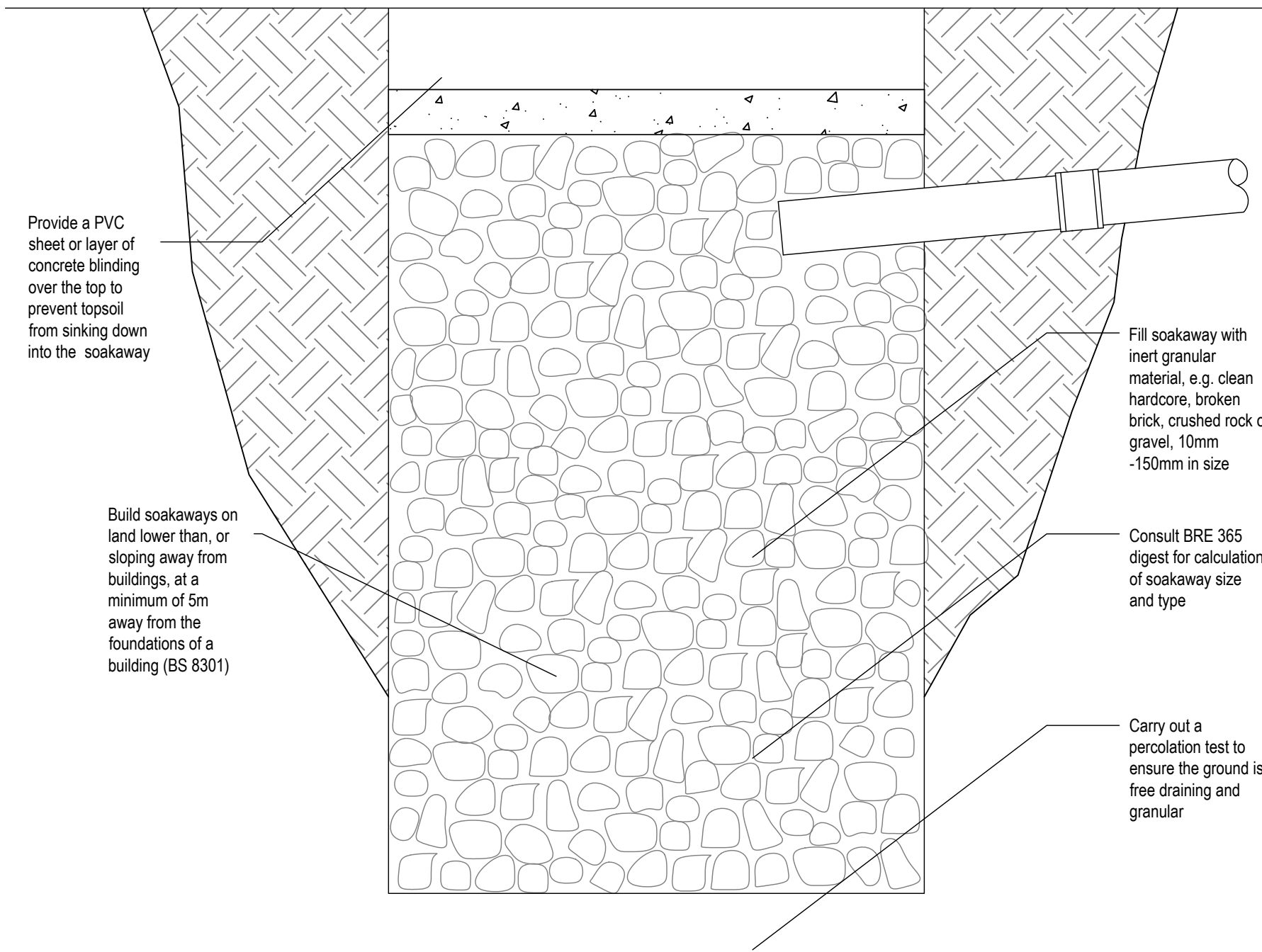
All branch pipes to connect to 110mm soil and vent pipe terminating min 900mm above any openings within 3m, or to 110mm upvc soil pipe with accessible internal air admittance valve complying with BS EN 12380, placed at a height so that the outlet is above the trap of the highest fitting. Waste pipes not to connect on to SVP within 200mm of the WC connection. Supply hot and cold water to all fittings as appropriate.

SOAKAWAY OPTIONS -

please confirm on site with the BCO the required method

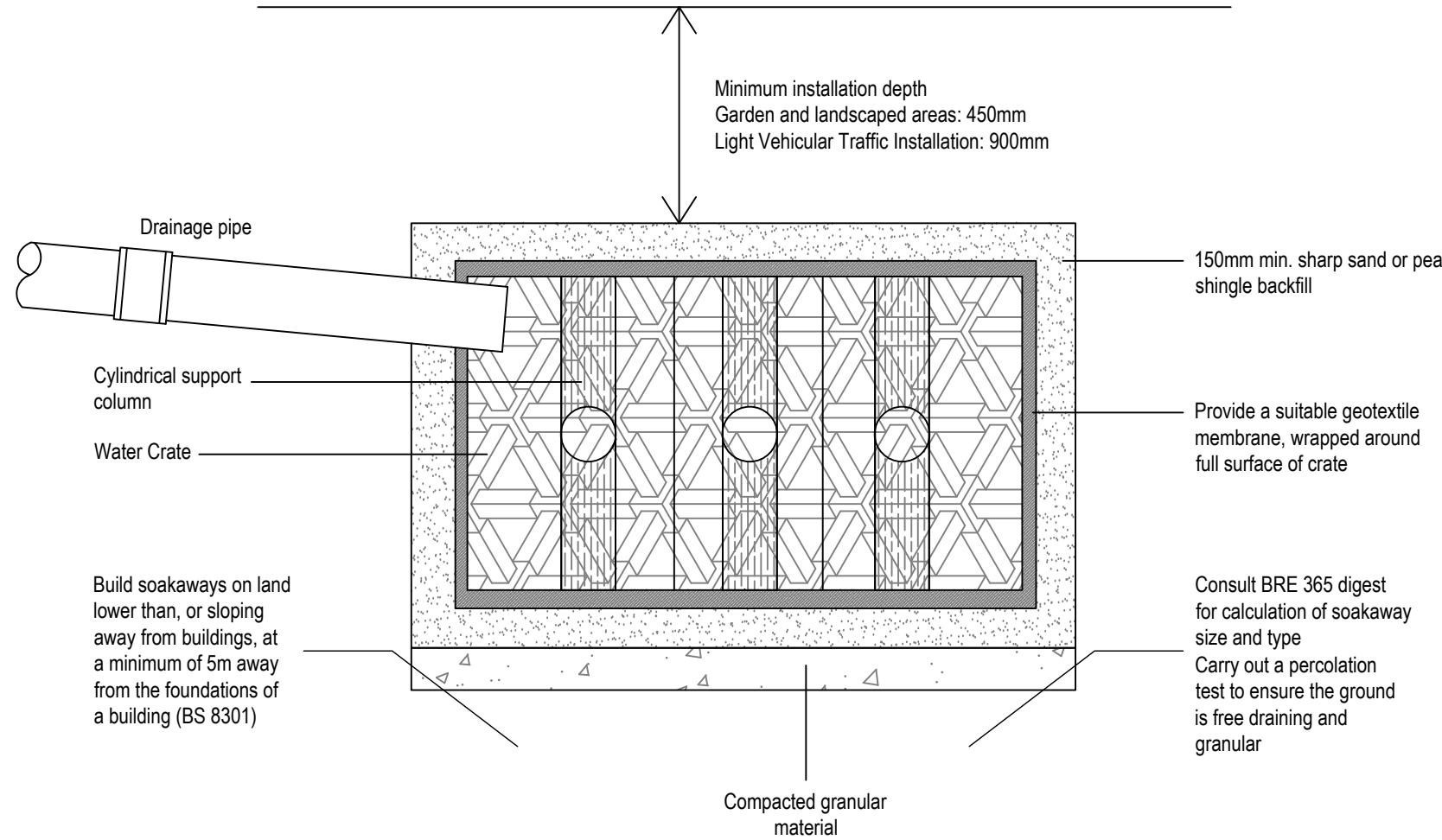
SOAKAWAY

Soakaway size and type dependent on space requirements, site layout, topography, water table, subsoil type, etc.
Designed to BS EN 752:2017 and BRE digest 365



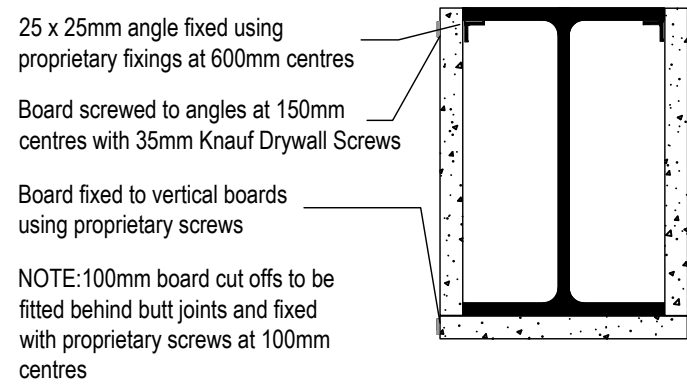
SOAKAWAY CRATES

Soakaway size and type dependent on space requirements, site layout, topography, water table, subsoil type, etc.
Designed to BS EN 752



FIRE PROTECTION OF STEEL BEAM

(Knauf fire board - as section 6 :2012 of manufacturer's details)



BEAMS
Supply and install new structural elements such as new beams, roof structure, floor structure, bearings, and padstones 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 Nullfire 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.

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		Sheet	22-0994 D06 Rev 0
		Job	New Extension
		Scale	As Shown@A1
		Title	Section Detail Drawings 1:10