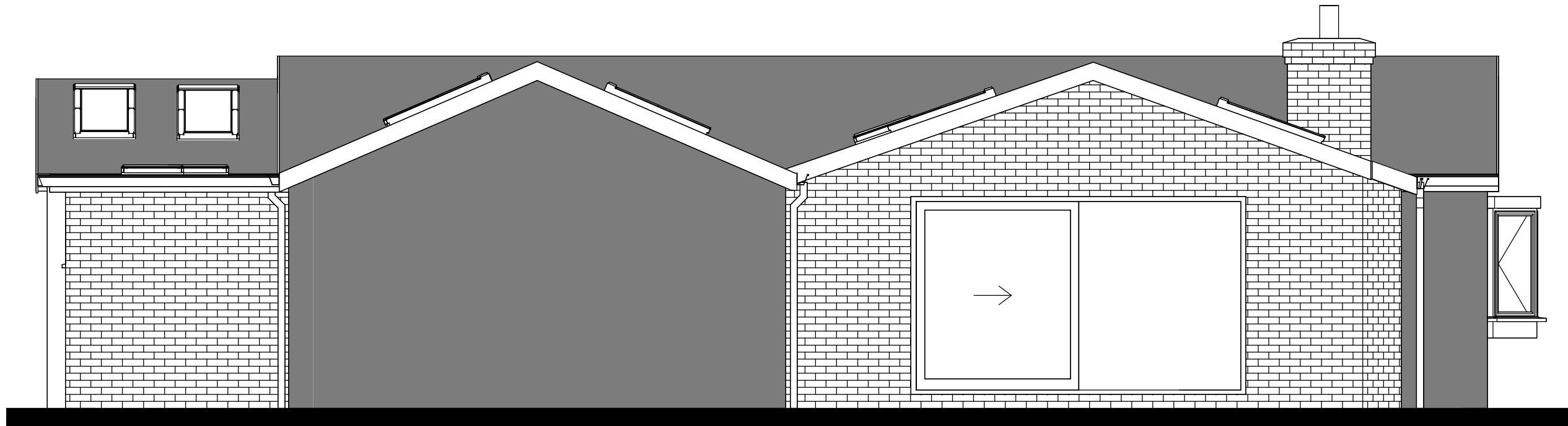
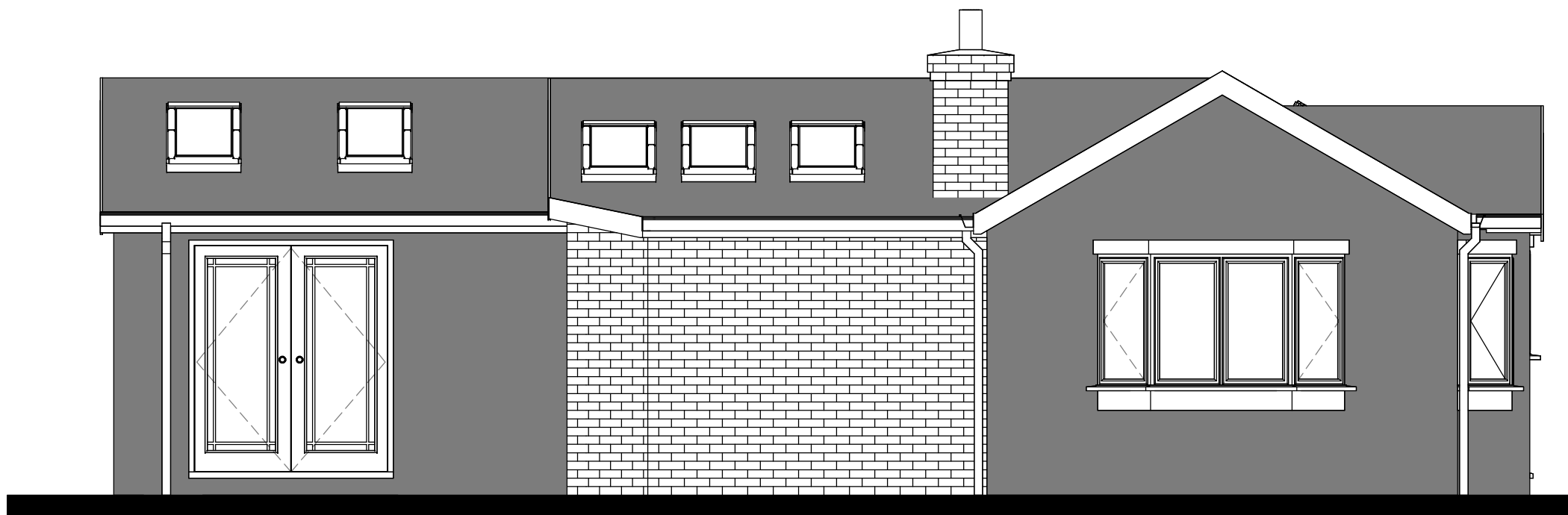




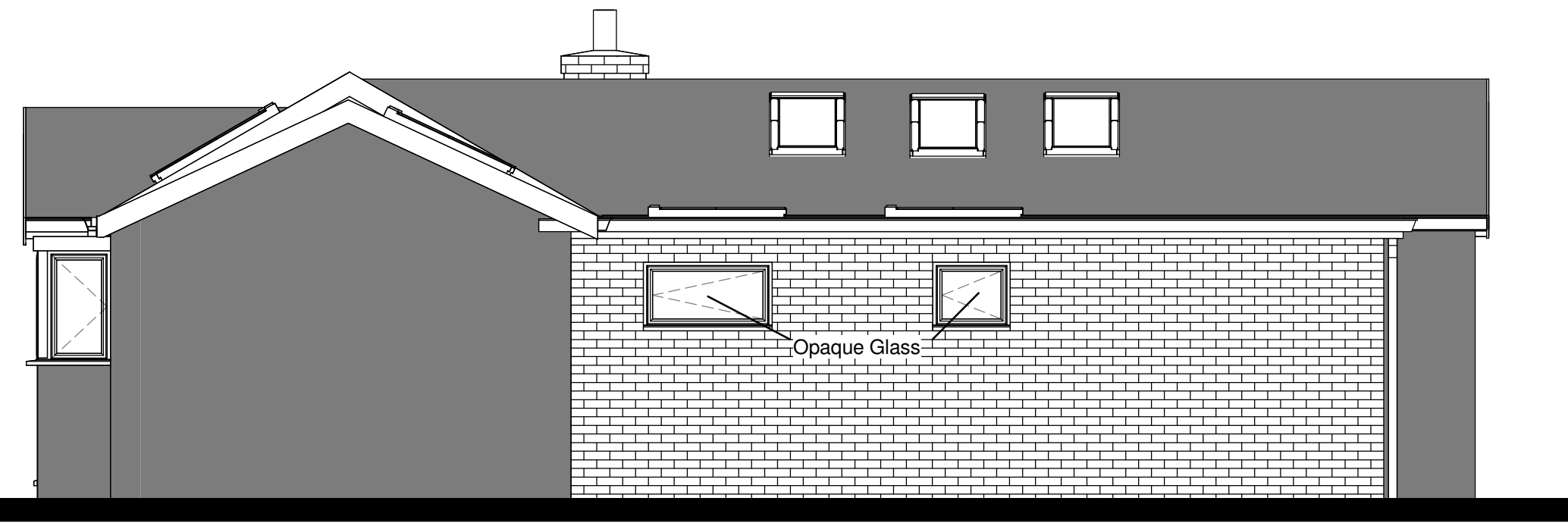
2 Proposed Front Elevation
1 : 50



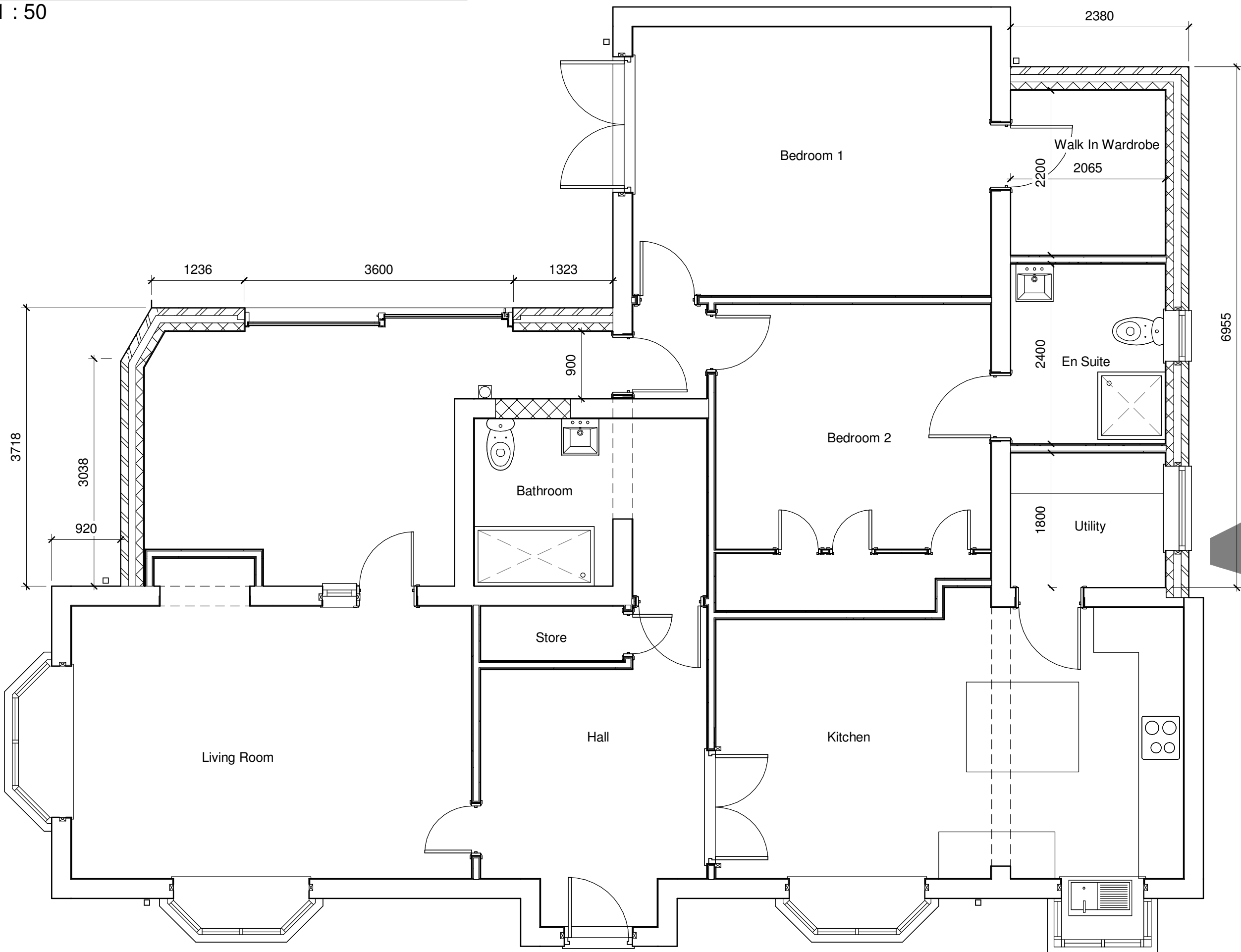
3 Proposed Rear Elevation
1 : 50



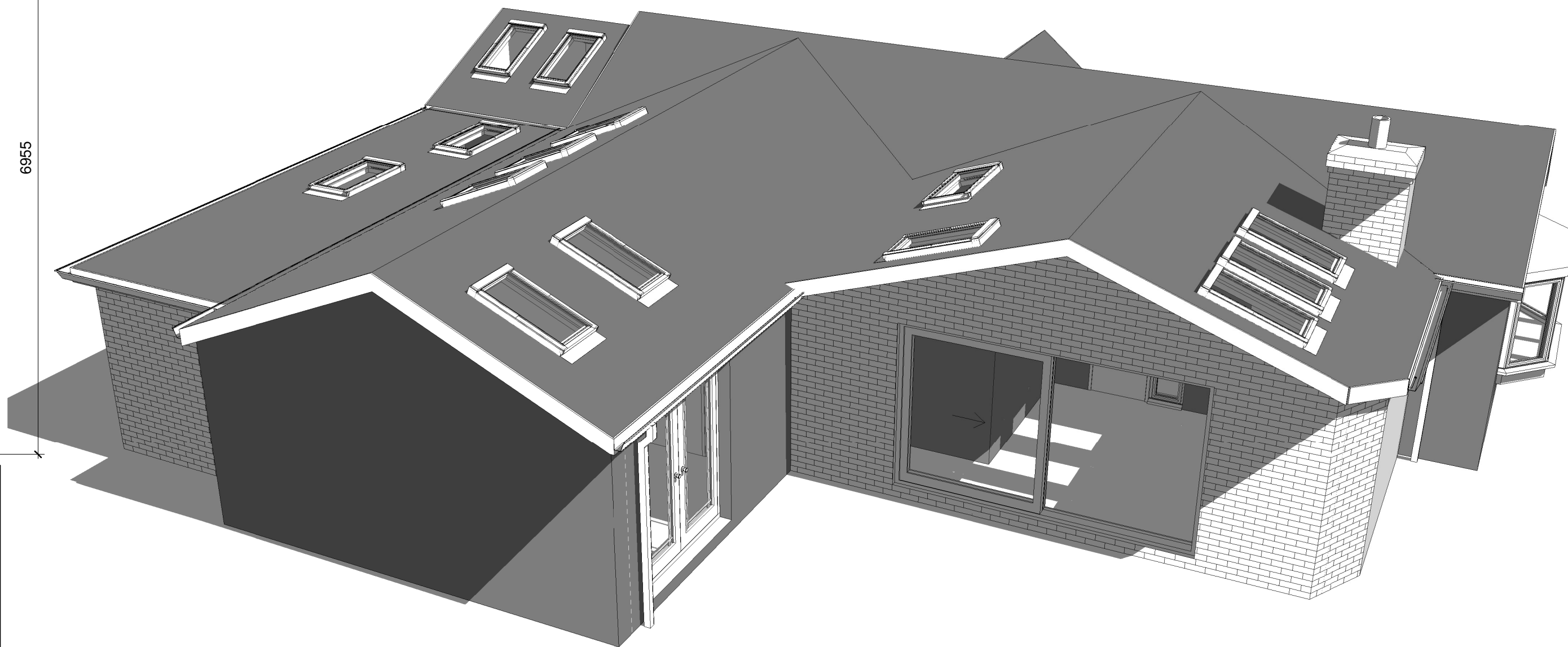
4 Proposed West Elevation
1 : 50



5 Proposed East Elevation
1 : 50



6 Ground Floor Proposed
1 : 50



7 3D View 1

SCALE 1:100
0m 5m 10m

PRIOR TO COMMENCEMENT:
The client should arrange for a detailed site investigation prior to the commencement of any works or preparatory works, to establish the condition of the subsoil, and the location of any drains, sewers, or other services within or adjacent to the site.
Work must not be commenced prior to the granting of Planning Permission, and/or Building Regulations approval.

FOUNDATIONS:
To comply with BS8004 Code of practice for Foundations 2015 Edition, size and depth to suit ground conditions to the satisfaction of the Local Authority Building Control Officer (L.A. BCO).
Foundations with increased loading to be exposed for inspection by the BCO, to determine load bearing capacity, and underpinned to engineers design if required by the BCO.

BRICKWORK:
Cavity walls: Outer leaf 102mm facing brickwork to match existing, (minimum crushing strength 5N/mm²), 150mm Thermalite Shield inner leaf, and 150mm wide cavity incorporating 150mm thick Pilkington Ditherm insulation, or other approved, (thermal conductivity of chosen insulation is not to be greater than 0.18 W/m²K). Both leafs are to be bed on mortar to BS 5628 Pt: 1978, with all joints suitably pointed.
Cavity ties to be stainless steel, to suit 150mm cavity, spaced at 750mm horizontal and 450mm vertical. Cavity barriers to comply with Building Regulation Approved Document Part 6, Section 6, per 2013 amendment. Cavity ties are to be continuous.
Tooth and bond new brickwork to existing, and maintain clear cavity where new wall joins existing, or bond new brickwork to existing using FURFIX or CHOCODILE, stainless steel profile ties, installed in accordance with the manufacturers instructions.
Bridging of the cavity shall be removed by the installation of a type B vertical dpc, by Cavity Trays Ltd. Cavity trays to the junction of extensions roofs and the abutting new walls.
Internal partitions: 100mm Thermalite Shield blockwork, on concrete footings.
Semi exposed internal walls shall be insulated using Pilkington 10.40 Crown Dry Liner; U value of semi exposed internal walls not exceeding 0.50 W/m² K.
All external and internal load-bearing and non load-bearing walls to have Hyloard damp proof course 150mm above ground level. All new door & window openings are to have vertical and horizontal dpc's built into the jamb in the form of a Type H Cavcoseal to suit 150mm cavity, by Cavity Trays Ltd, to eliminate cold bridging at reveals. Window and door frames are to be externally pointed in mastic sealant, pointed smooth. External & internal load bearing walls below dpc level are to be Engineers blue brickwork.
The external cavity wall is to be filled with a weak concrete mix, to within 225mm of the dpc level, and splayed to the outer leaf with type W weep vents at 900mm centres. The inner block leaf shall be finished with two coat plaster, 9mm Carlite Browning & 3mm Finishing plaster. Expansion joint to be included in brickwork at minimum intervals of 6m or as agreed by L.A. BCO.

INTERNAL PARTITIONS:
75 x 50mm softwood vertical studs @ 400mm centres, including head & sole plates secured to the structure, cut and fit 75mm Pilkington Crown Lightweight Roll fibre glass insulation between the vertical studs; plate either side using 12mm full backed plaster board secured to the studs using screws for plasterboard @ 200mm centres, with 50 x 50mm nogings to all unsupported sheet edges and joints. Finish with a 3mm coat of Thistle Board Finishing plaster, with lute reinforcement incorporated into sheet, and perimeter joints.
Provide 2 additional joists to support partitions running parallel to roof joists as per Eurocode 5 span tables.

GROUND FLOOR:
150mm thick layer of mechanically compact store hardcore; 25mm thick sand blinding; 1200g vacuum DPM to underside and edges of the new floor slab dressed over the inner brick leaf at dpc level; 120mm thick layer of Celotex Floor Slab insulation boards, (or other approved), with a 25mm thick vertical layer of insulation board to the external perimeter of the floor. U Value 0.13W/m²K; (thermal conductivity of chosen insulation is not to be greater than 0.031 W/mK); 100mm thick 1.2/4/20mm agg, concrete slab; 25mm asphalt screed; U value of ground floor is not to exceed 0.22W/m² K.

PITCHED ROOF: to be traditional roof construction or trussed roof
Roof pitch to extension, approximately 20 degrees to match existing roof tiles, to match existing tiles, verges, ridge, valleys, hips and abutments to be in accordance with tile manufactures fixing specification, rafters fixed to 100 x 75mm wallplate. Trussed Rafters, and wallplate to be strapped to wall with 30 x 5 x 1000mm m/s straps @ 200mm c/c. Straps to span end two rafters/ceiling joists, with solid strutting between.
Covering: breathable roofing membranes with 150mm side and laps and 50mm lap into gutter, 25 x 50mm treated battens to BS5534:2014. Ceilings to be plastered with 12.5mm full backed plasterboard with 5mm skim finish. 300mm Pilkington Crown Lightweight Roll fibre glass, (or other approved), 100mm cut and fitted between the roof joists with a further 200mm laid perpendicular to joists on top of first layer.
(thermal conductivity of chosen insulation, is not to be greater than 0.04W/mK).
U value of roof is not to exceed 0.11 W/m² K. Provide airspace between insulation and felted under tiles at eaves, with Glidewale standard eaves ventilator fixed between rafters. Provide ventilation to roofspace equivalent to a continuous gap 10mm at eaves and 5mm at ridge.
Provide code 4 lead flashings to all intersections with walls. Allow for all joinery at eaves, a fitting fillets, WBP plywood fascia, barge board, softboard, s/w batters etc.
Install Remedial cavitytray at abutment with existing gable Foot of the rafters must be tied to ceiling members via 75x50mm straps over 4 joists.
Truss roof as manufacturers specifications, calculations by Truss Manufacturer and presented to the L.A. BCO.

DRAINAGE AND PLUMBING:
All drainage works and fittings to the complete satisfaction of the BCO.
Assumed run of existing drains. Exact position to be determined on site prior to commencement.
Drains under building to be surrounded in minimum of 100mm granular or flexible filling. Where crown of pipe is within 300mm of the underside of the slab the pipe should be protected by reinforced cover slabs with flexible filter & minimum of 75mm of granular material between the top of the pipe and the underside of the flexible filter below the slabs. Approved Document H 2015 paragraphs 2.23 & 2.44. If existing drain is not exposed other than in the foundation trenches, it is assumed that it is already bedded in granular material, unless there is a problem with the drain, it should be left undisturbed.
All redundant drains to be grubbed up and removed from site. All new drainage below ground to be 100mm dia. Supersew with flexible joints laid to a fall of 1 in 40, including all bends, gullies, manholes, coddling eyes etc.
New inspection chambers to have 150mm concrete base, 225mm Class B engineering brick walls, with airtight cover and frame.
Gullies 100mm halfround, RWP's 53mm dia., into back inlet access gullies.
Extend hot and cold water services into extension area and install new appliances as chosen by the client. New PVC wastes to be 40mm dia. To baths, showers and sinks, 32mm dia. wash basins. All to have 75mm deep seal traps, and have rodding access fitted to all changes in direction. Waste pipes to be either connected to back inlet access gullies, or separately connected to S & VP (no connection to be made within 200mm of WC branch).
Soil and vent pipes to be 100mm dia. UPVC with slow radius bend to foot of stack, terminating min 900mm above any opening within 3m of stack.

STAIRS
New stairs to have a maximum rise dimension of 220mm. A minimum going of 220mm and a maximum pitch of 42 degrees. A hand rail is to be provided at 900mm above the pitch line of the stair. Guarding is to be such that a 100mm sphere will not pass through.
Headroom above the new stair is to be a minimum of 2m when measured from the pitch line of the stair.

GENERAL:
These plans are to be used only for submission to the Building Control Office and / or Planning Office.
These plans are to approximate scale, and all dimensions are to be checked on site.
Work must not be commenced prior to the granting of Planning Permission or Building Regulation approval.
All work is to be carried out in accordance with the current Building Regulations, and the relevant British Standards, to the entire satisfaction of the local authority Building Control Officer.
Glazing in doors below the height of 1500mm from ground level, and in adjacent glazed screens within 300mm to be either toughened or laminated safety glass to BS6262 Pt 4. Glazing in windows below the height of 900mm from ground level, to be either toughened or laminated safety glass to BS6262 Pt 4. Glazing to be Pilkington K Glass or Equivalent.
Windows and doors are to be double glazed. Windows to have opening vents min. 1/20th of floor area of the room, and are to incorporate a trickle vent/min. 800mm². Kitchen Utility, to have mechanical extract ventilation with a capacity of not less than 15 l/s. 15 minute over-run facility in accordance with approved document L 2022, appendix G, this property has an estimated SAP rating of less than 60, and as a result U values for the following elements has been allowed for:-
Pitched roof- 0.11
Flat Roof- 0.15
Exposed walls- 0.18
Ground Floor- 0.13
Windows & Doors- 1.4
Glazing- 1.4
Supply and fit 1 No. 1st floor window to each habitable room to be used as a means of escape in case of fire, min dimension of opening 0.33m2 450mmx735mm
Cill height to be 1100mm
Total area of windows/rooftlights & external doors shall not exceed 22.5% of the total floor area.
All new intels to be standard from the Catnic range, type as specified.
All existing intels with increased loading to be exposed and checked to prove adequacy, and replaced if deemed necessary by the BCO.
All structural steelwork and supports is to be designed by a qualified structural engineer prior to commencement of the works and be protected to 1/2 hour fire protection with 12mm superlux board or similar approved.
All timber to be double vacuum impregnated with preservative.
Contractor to provide windows, doors, internal joinery and decoration to Clients requirements.
Contractor to supply and fix lighting points, switches and socket outlets as directed by client, all to comply with the current edition of the IEE Regulations 18th edition to BS7671 Part P, installed by a NICEIC approved contractor, and provide a Test Certificate upon completion to the client and Local Authority.
Drawings to be read in conjunction with any structural calculations (if applicable) and roof truss manufactures instructions/calculations (if applicable) a value of new external walls to be 0.18w/m²K calculations provided by block manufacture, glazing units to be double glazed with 20mm air gap and a soft low e coating. Supply & Fit low energy lighting
Supply & Fit Central Heating system Heating appliances to have Sedtuck rating of 78.
All heating controls to have thermostatic controls and thermo radiator valves. Temperature at bath to be limited to 48 degree centigrade.
New boiler to be installed and commissioned by a Gas Safe registered engineer and a commissioning certificate provided upon completion.
Sound insulation to 1st floor to be a minimum of 150mm mineral wool.
Wall and roof insulation to be continuous.
Provide low energy lighting. Provide interconnected mains operated smoke alarms to circulation areas to BS5839 Parts 1-9 with battery backup.



CS 2 Architectural

Address 23 Blacklow Brow
Huyton
L36 5XE

Project Proposed Single Storey Rear & Side Extension
Plans & Elevations

SCALE (@ A1)
1:100 1:50

DRAWING NUMBER 2

CONTACT: