

All structural steel to be calculated by client structural engineer

FOUNDATIONS :
Foundations are designed for clay ground conditions with no man made fill or rubble. Foundation mix to be C20 grade. Aggregates to comply with BS882. Foundations to be excavated to a minimum depth of 1000mm. Ground strata to be inspected and confirmed as suitable by building control officer prior to concrete pour. Concrete depth to be a minimum of 200mm and to be 150mm wider than wall on both sides. Concrete to be fully tamped to remove air content and floated to a level finish.

GROUND FLOOR SLABS :
Insulated floor slabs to achieve a U-Value of 0.13w/m²K. Ground excavated and cleared of all vegetation and organic material. 150mm minimum compacted limestone hardcore sub-base with 25mm sand blinding covered with 1200q visqueen damp proof membrane. Damp proof membrane to be lapped by minimum 150mm at joints and taken up to and overlapped with damp proof course. 150mm minimum concrete base of C20 grade. Aggregates to comply with BS882. 100mm PIR insulation board laid over concrete. Vapour control layer. Finishes to solid ground floor to be either power floated smooth concrete, or minimum 75mm thick sand and cement screed. Finished floor slab to be no lower than damp proof course level. For solid floor slabs abutting to suspended timber floors 40mm dia. pvc pipes are to be installed in floor slab from new air bricks to existing air bricks to provide cross flow ventilation to existing floors.

EXTERNAL MASONRY WALLS :
External walls designed to achieve a minimum U-Value of 0.18w/m²K. Below damp proof course level 100mm dense concrete block and 100mm wide engineering brick to be used. Damp proof course level to be a minimum of 150mm above external ground level. External walls to be constructed from 102.5mm face brick to match existing. Brickwork interface with existing walls to be formed by stainless steel anchor ties. Existing cavity walls to be cut to form continuous cavity with new brickwork. Cavity trays to be installed over all wall interruptions including ducts, vents, etc. Cavity trays shall be stepped up a minimum of 150mm to inner leaf to provide suitable drainage fall. Cavity to be 100mm wide with full fill Dtherm insulation or similar approved. Insulation to be inserted on to top of wall ties and bent around corners. Insulation to be taken up to top of brickwork in all situations. Inner leaf to be constructed from 100mm Thermalite Accrete Hi-Strength 10 block (or equivalent). Cavity walls to be restrained by approved wall ties complying with BS5526: Pt 3 : 1985 and spaced at 6 courses vertically and 750mm horizontally. Additional wall ties are to be installed at all wall openings for stability. Lintels to have a minimum of 200mm end bearing. Expansion joints to be provided at 6m crs for brickwork / 8m crs for blockwork.

FLAT ROOF :
Flat roof membranes are to be epdm single ply membranes providing a waterproof seal to the finished roof deck. Membrane to be lapped up by 150mm at vertical abutments and fully sealed to vertical member to prevent water penetration. Soffit ventilation (25,000mm²) to be installed to projecting flat roof soffits. Flat roof joists to be counter battened to provide cross flow ventilation. RAV-FL abutment ventilators to be provided to flat roof / vertical abutments to allow for cross flow ventilation.

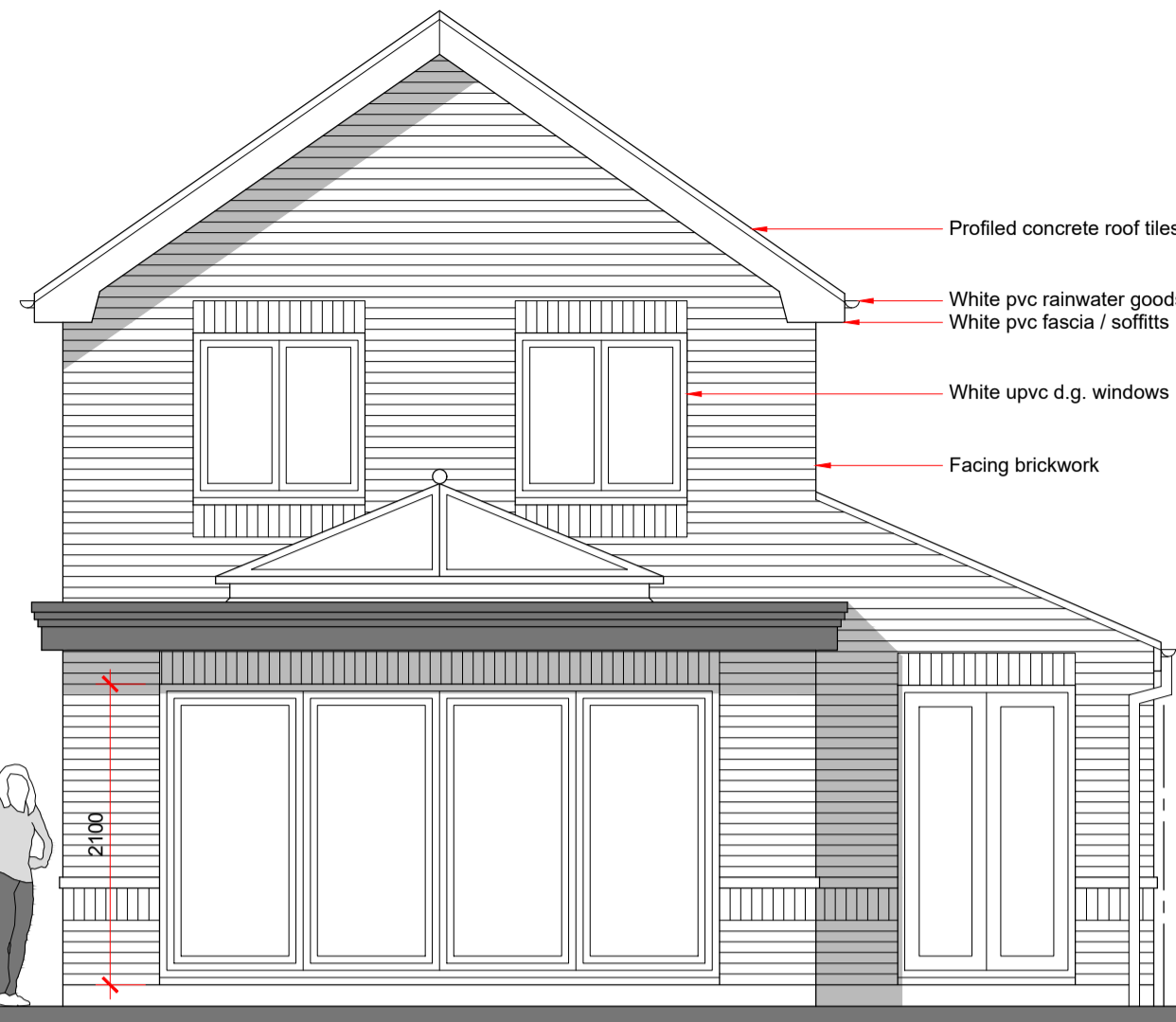
INTERNAL WALL FINISHES :
All walls and ceilings to be finished with 12.5mm plasterboard and smooth skim. Plasterboard to be secured to masonry with dry wall adhesive dabs. Plasterboards to Bathrooms, Utility Rooms, Kitchens etc. to be moisture resistant grade. Plasterboards fixed to timber members (ceilings, studwork, etc...) to be secured with 50mm dry wall screws at 200mm centres. All plasterboard joints to be staggered and have joint tape applied. Plasterboards to all steel beams and columns to be two layers thick, smooth skim finished and achieve a minimum of 1/2 hour fire resistance.

WATERPROOFING :
Approved flashings, soakers and aprons to be applied to external abutments to prevent water entering the building. Lead flashings to have a minimum of 150mm vertical upstand. Gutters and downpipes to be PVC. Gutters to be 'deep flow' type and all downpipes to discharge to approved surface water drain gully in accordance with building control officers recommendation.

DRAINAGE :
Drainage system to be verified on site post excavation in conjunction with B.C.O. prior to new connections being made. For separate systems foul drainage only to be connected to existing foul drainage. All new drains to be hepaleave or similar flexible P.V.C. pipe with 150mm pea gravel beds and surround laid in accordance with manufacturer's instructions. 100mm diameter drains to be laid to a minimum fall of 1:40. 150mm drains to be laid to a minimum fall of 1:100. All gullies to have rodding access and have trap system to prevent release of drainage gas. Soil vent pipes to be a maximum of 6m away from W.C.s and discharge to atmosphere at least 900mm above highest opening window or 3m away horizontally. Capes to prevent vermin / bird access to be fixed to soil vent pipe heads. Where drains pass through sub-structure walls pre-stressed concrete lintels to span over drainage pipe and allow a minimum of 50mm clearance to the top of pipe. Inspection chambers and rodding points to be provided at all pipework junctions and at the head of drain runs.

SANITARY PIPEWORK :
All new internal sanitary pipework to be 'push fit' type. Bottle traps to be provided to wash hand basins, bath, showers, and sink outlets. Pipework to be installed to provide a minimum of 1:40 fall to external gullies / drainage outlet points. All new pipework to be tested and approved by building control officer prior to handover.

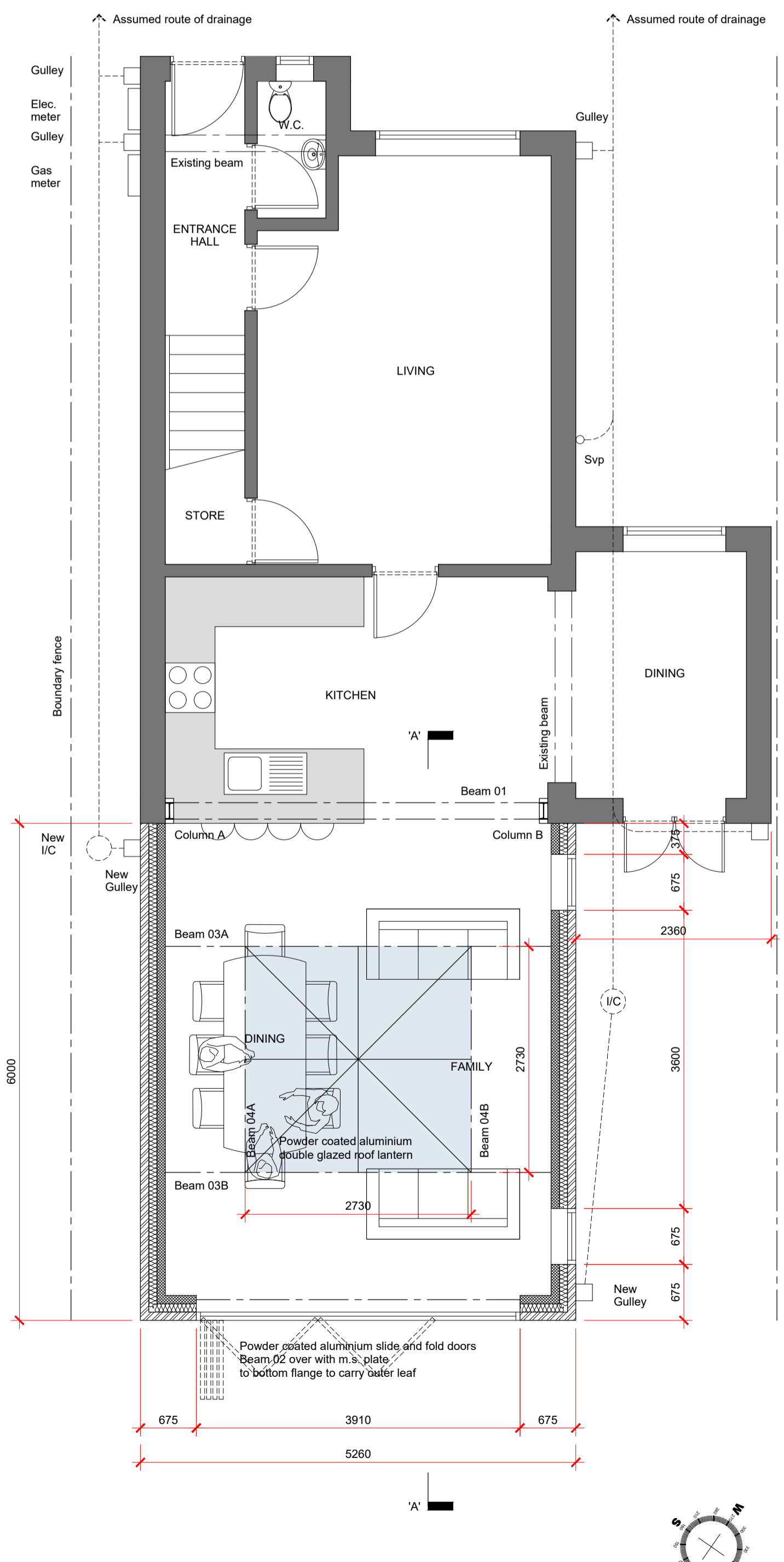
ELECTRICAL WORK :
All electrical work to comply in all aspects with current NIC / EIC regulations and be installed and commissioned by an approved Part P of the building regulations qualified contractor. Power outlets to be no lower than 450mm from finished floor level. Wall located light switches to be no higher than 1200mm above finished floor level.



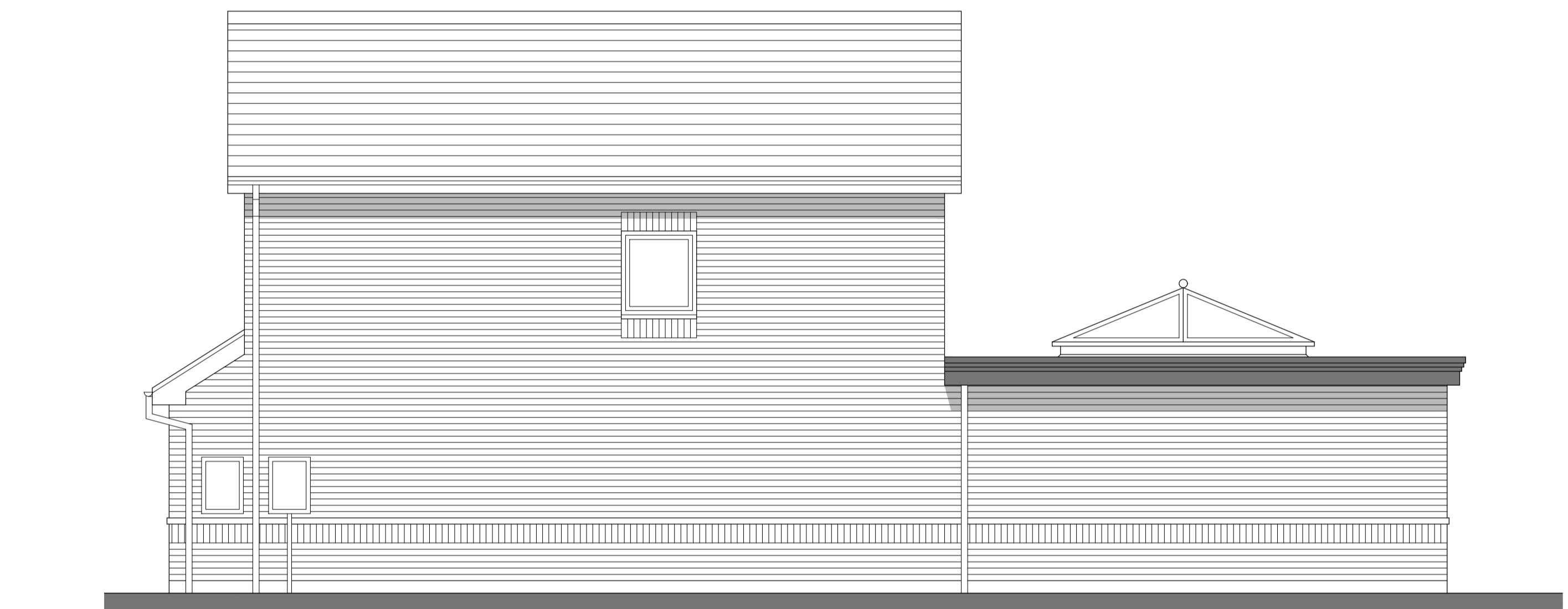
NORTH EAST ELEVATION



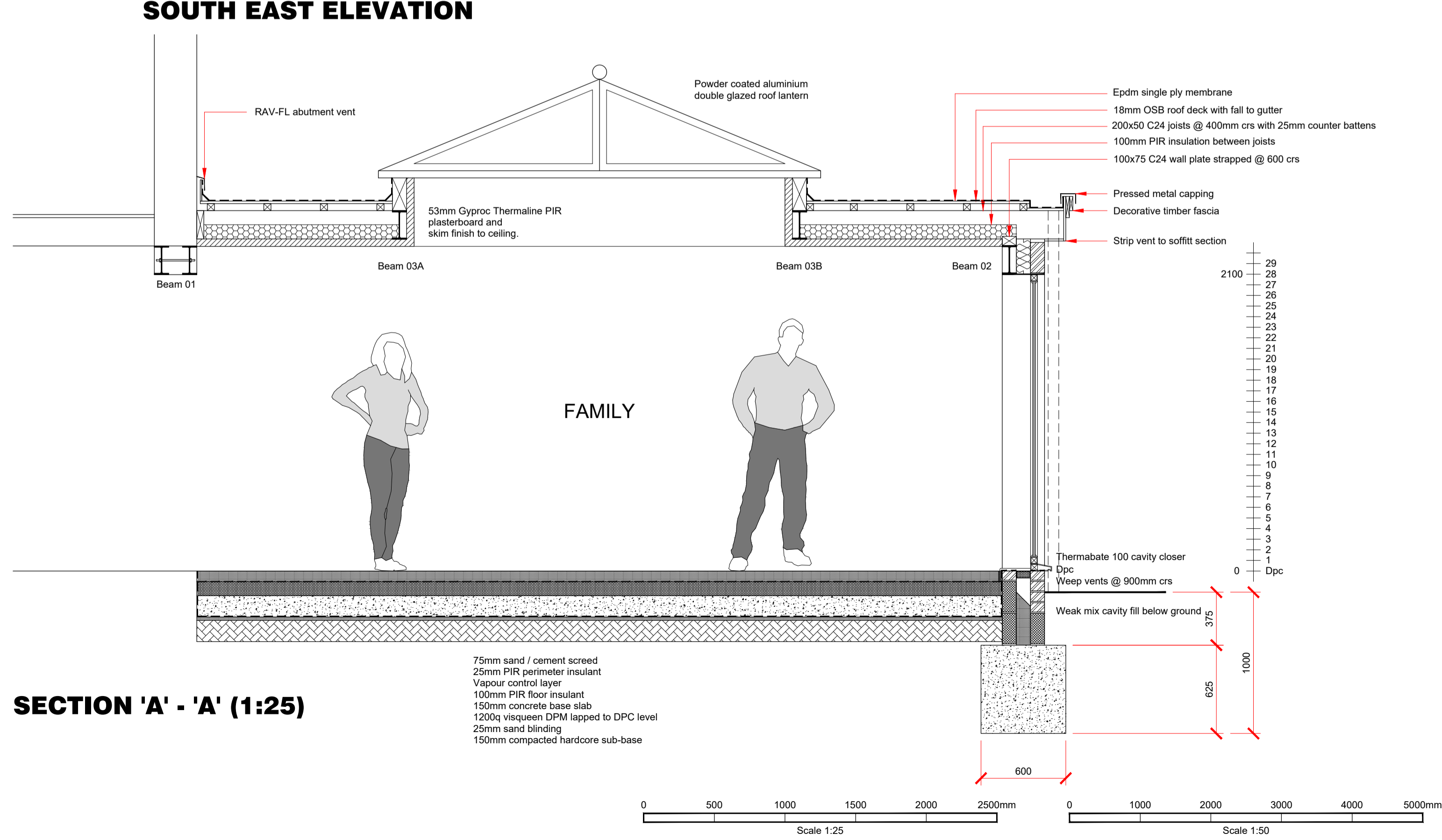
NORTH WEST ELEVATION



GROUND FLOOR PLAN



SOUTH EAST ELEVATION



SECTION 'A' - 'A' (1:25)

NOTES
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Client / contractor to ensure all agreements relating to 'party wall etc...' act 1996' are in place prior to commencement of works.
All dimensions are to be checked on site. Do not scale from printed copies. For any errors or queries please contact Bryson Architecture Ltd.
TIMBER JOISTS :
All new timber joists (ceilings, roofs, etc...) to be from timber grade C24. Joists to be hung from galvanised carbon steel hangers to BS 1678 : Part 1. Provide mid span strutting of the same section size as the joist. Service holes (cables, pipes, etc...) to be sited in the centre of the joist and to be no larger than 1/5 joist depth.
JOINERY ITEMS :
All doors, door handles, door hinges, door architraves, skirting boards, stairs parts, picture rails, dado rails and window boards are to match that of the existing property unless altered at the specific request of the client.
CAVITY CLOSERS :
Approved cavity closers (Thermabate or similar) to be provided at all door and window openings to prevent damp ingress and thermal bridging.
WINDOWS AND DOORS :
All windows and doors to be composed of low emissivity glazed units and to achieve a minimum u-value of 1.4w/m²K. Toughened safety glass in accordance with BS6206 to be provided to all areas below 1500mm above finished floor level.
ROOF WINDOWS :
New roof windows to be installed in accordance with manufacturers instructions.
VENTILATION TO HABITABLE ROOMS :
Habitable rooms (kitchens, lounges, studies, etc...) to have opening windows with ventilation apertures of not less than 1/20 of the room floor area. In addition they shall be provided with controllable background ventilation of 8000mm² minimum and sited at least 1.75m above finished floor level.
MECHANICAL VENTILATION :
Kitchens to be provided with mechanical extract ventilation of 60 litre per second extract capacity.
FIRE DETECTION SYSTEM :
A mains operated fire alarm and detection system, as described in BS 5839-6: 2004, should be installed within the circulation spaces of all new habitable rooms.

General Health and Safety items :
Falls from height:
Make sure ladders are in good condition, at a 1:4 angle and tied or footed. Prevent people and materials falling from roofs, gable ends, working platforms and open edges using guardrails, mid rails and toe boards. Make sure fragile roof surfaces are covered, or secure working platforms with guard rails are used on or below the roof.
Collapse of excavations:
Shore excavations; cover or barrier excavations to prevent people or vehicles from falling in.
Collapse of structures:
Support structures (such as walls, beams, chimney breasts and roofs) with props; ensure props are installed by a competent person.
Exposure to building dusts:
Prevent dust by using wet cutting and vacuum extraction on tools; use a vacuum cleaner rather than sweeping; use a suitable, well-fitting mask.
Exposure to asbestos:
Do not start work if it is suspected that asbestos may be present until a demolition/refurbishment survey has been carried out.
Electricity:
Turn the electricity supply and other services off before drilling into walls. Do not use excavators or power tools near suspected buried services.
Protect members of the public, the client, and others:
Secure the site; net scaffolds and use rubbish chutes.

REVISION DETAILS	Date
02 Issued for approval	22-07-2021
01 Issued for approval	11-06-2021

Draft
 Preliminary
 For Approval
 Planning
 Building Regulations
 Tender
 Contract
 Construction
 As Built

PROJECT

Single Storey Rear Extension to:
12 Wilfred Owen Drive
Claughton
Wirral
CH41 0HA

DRAWING TITLE

Proposed plans, elevations and section

Scale @ A1:
1:25 / 1:50

DRAWING NO: 2021 083 002 **Revision:** 02

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