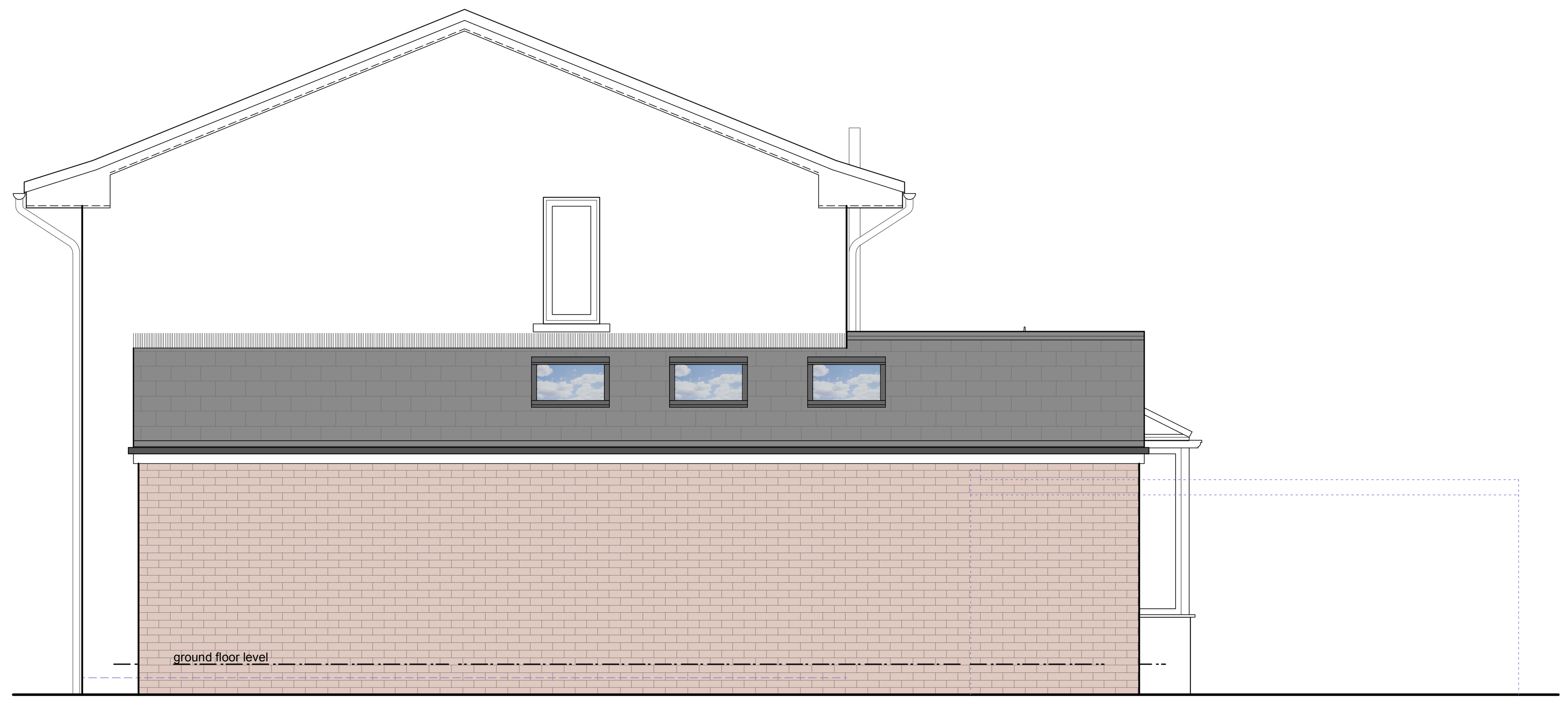
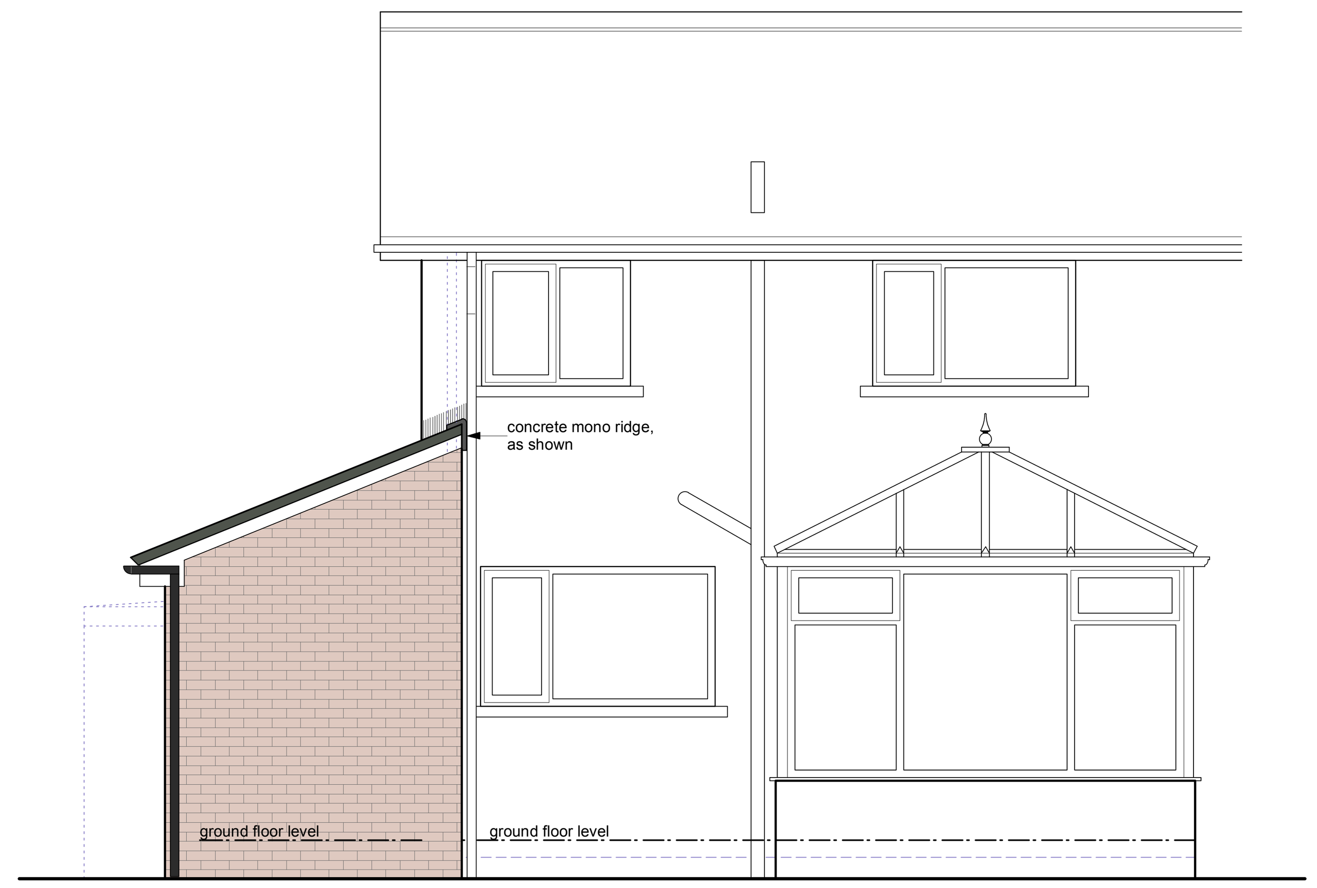
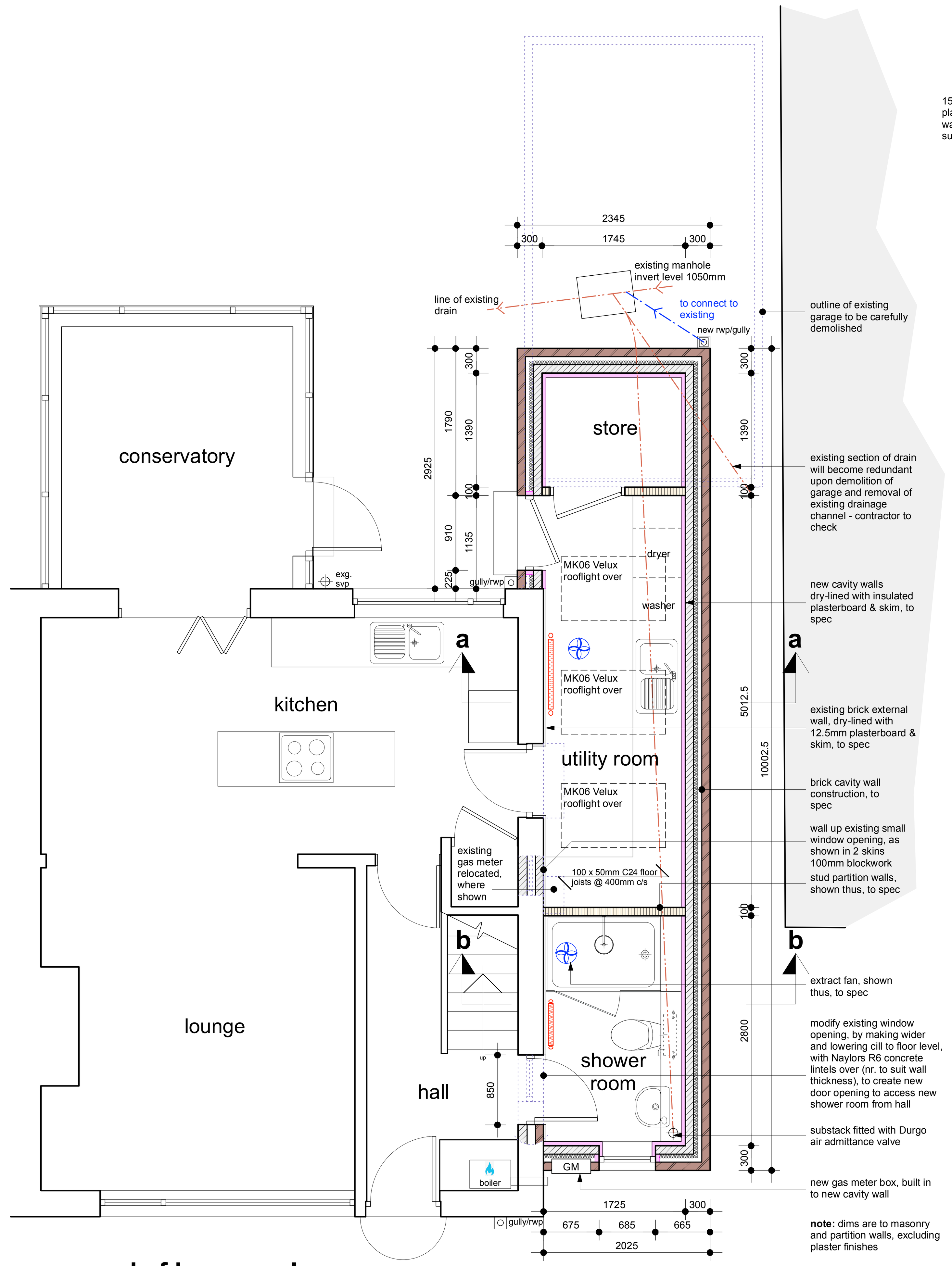
north elevation - front



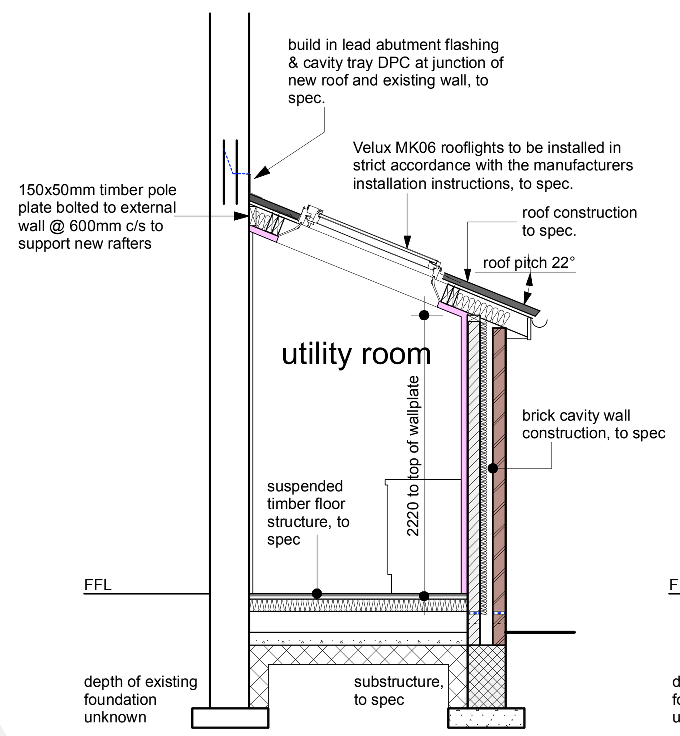
west elevation - side



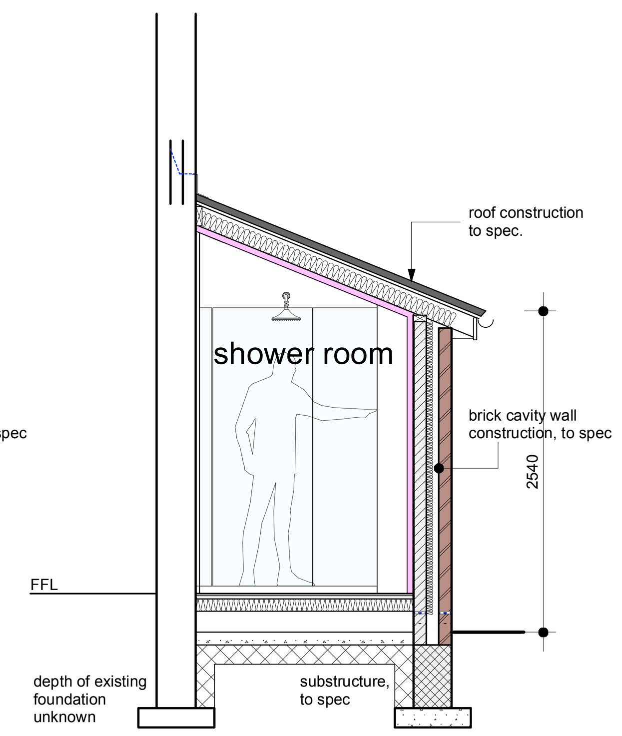
south elevation - rear



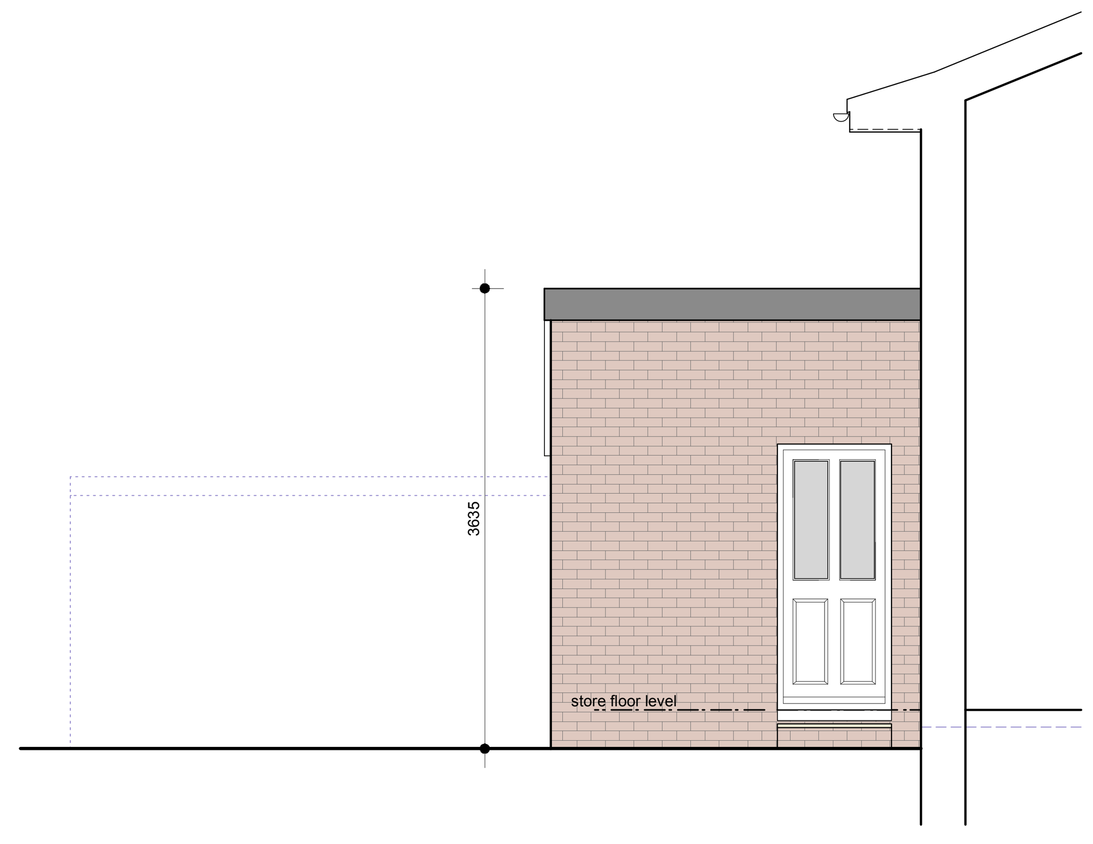
ground floor plan



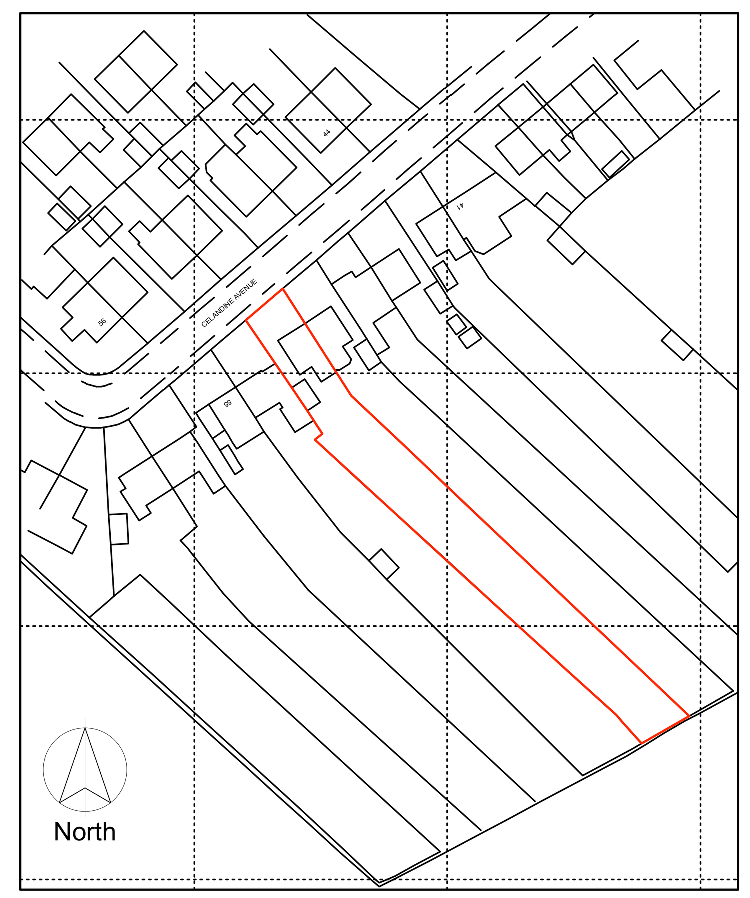
section a-a



section b-b



east elevation - side



location plan - 1:1250

SUBSTRUCTURE
Excavating & Filling
Carry out all excavations as necessary in order to achieve the required formation levels for new foundations, floor structures, drainage trenches and external works, to achieve the finished levels shown on the drawings. Dispose of all surplus materials arising from the above excavation work.

Concrete Foundations:
Mass concrete strip foundations for external cavity walls are to be laid in C30 grade ready mixed concrete. Strip foundations to be min. 150mm thick with min. 150mm projection beyond thickness of supported wall, with a min. top cover of 600mm externally (final depth of foundations subject to agreement with KC Building Control.

Foundation Walls:
Walls below ground to be built up in 2 skins of class 'A' concrete blockwork or foundation blocks, to the same thickness as the walls above. Build in s/steel safety type wall ties @ 450mm vertical & 750mm horizontal staggered c/s in double skin walls and fill cavity up to external ground level in lean mix concrete. Lay min. 150mm thick hardcore bed for oversite concrete in well-consolidated sulphate free crushed stone, blinded with sand to receive DPM.

SUPERSTRUCTURE
Suspended Timber Ground Floors:
Allow 20mm for floor finish, to clients specification, on 22mm thick T & G jointed moisture resistant flooring grade chipboard on C24 grade floor joists @ 400mm c/s (see floor plans for floor joist sizes).
Incorporate 100mm thick Kingspan Thermafloor TF70 rigid board flooring insulation, tightly fitted between joists (floor construction to give a U-value not greater than 0.22W/m2K).
Build into external cavity walls 225 x 75mm clay air bricks and liners @ approx. 1.5m c/s, with cavity tray DPC over, to provide sub-floor ventilation. Lay 100mm thick oversite concrete in C20 mix concrete on sand blinded hardcore as previously described. Maintain a min. 150mm clearance between underside of floor joists and top of oversite concrete.

New External Cavity Walls (brick):
Cavity walls to be constructed with an outer leaf of 102.5mm thick facing brick to match existing. Maintain a max. 100mm wide structural cavity. Inner leaf to be 100mm thick loadbearing lightweight aggregate blockwork (min. 3.5N/mm2). Incorporate 50mm thick Kingspan Kooltherm K108 Rigid Board cavity insulation within cavity, held tight against blockwork using proprietary wall tie retaining clips. Blockwork to be dry-lined internally with 37.5mm Kingspan K118 insulated plasterboard & 3mm skim finish on scrim-reinforced joints (wall construction to give a U-value not greater than 0.18 W/m2K). Build in s/steel safety type wall ties @ max. 450mm vertical & 750mm horizontal staggered c/s & @ 225mm vertical c/s adjacent openings. Close tops of cavities with 9mm Supalux cavity closers or similar approved board.
Openings to have IG L1/S100 type lintels over, installed in accordance with manufacturers instructions (unless otherwise specified on drawing). Install proprietary weep hole ducts (in colour to match wall) over all openings, @ 600mm c/s (min. 2 per opening).
All openings to have proprietary cavity closers to all reveals, with a stepped cavity tray DPC above opening & a horizontal cavity DPC below the cill. Build in a continuous horizontal DPC to both leaves of cavity wall, located min. 150mvvcm above the adjacent external ground level. All new walling to be tied to existing walling with s/steel proprietary wall starter system. Provide a soft joint between new and existing masonry comprising 10mm compressible filler board and two part polysulphide sealant.

Internal Walls (studding):
To be formed with 100 x 50mm sw. studs @ 400mm c/s with 100 x 75mm sw. head & sole plates & 100 x 50mm sw. noggins @ 1200mm staggered c/s. Partitions to be faced both sides with 12.5mm plasterboard & 3mm skim finish on scrim-reinforced joints, except to shower side. Shower side to be faced with 12.5mm Marmox Multiboard (or similar approved waterproof tile backer board) installed in strict accordance with manufacturers recommendations with all adhesives, washers, screws and tapes. Partition between utility room and shower room to incorporate 100mm mineral wool sound insulating quilt (min. density 10kg/m3) packed tightly between studs.

New Windows & Exterior Doors:
Manufactured to BS.7412 in white PVCu to match existing (final external door spec to clients choice). To be fitted with hermetically sealed unit double-glazing with a min. 16mm gap between panes (windows to have a U-value not greater than 1.4 W/m2K). Opening lights to be weather-sealed and to provide min. 5% of floor area to rooms served. Windows to be fitted with trickle-vents to give min. 4000mm2 to shower room. Any glazing extending to less than 800mm above finished floor level (windows) and 1500mm above finished floor level (doors & side panels) to be safety glazing to BS. 6206. All glazing to comply with BS.6262.

Roof Windows:
Install Velux roof windows to the references & sizes shown on the drawing. Velux to be double glazed and to have a U-value not greater than 1.3 W/m2K. To be installed complete with the appropriate flashing kit (dependent on roof finishes) in accordance with the manufacturers installation instructions. Generally double-up roof timbers where trimming around roof window openings. Roof windows to incorporate trickle ventilation to give min. 2500mm2 to utility room.

Internal Doors:
Generally to be interior quality timber doors/frames for paint finish, to match existing (final spec to be agreed with client).

Lean-to Roof (traditional):
All roof timbers to be in C24 grade timber. Roofs to be surfaced with single lap flat profile concrete interlocking tiles to match existing (colour – dark grey). Tiles to be laid in strict accordance with manufacturers fixing instructions, with a min. 75mm headlap, on 38 x 25mm tanalised sw. battens (at c/s to suit tile gauge) fixed over Proctors Roofshield vapour permeable roofing membrane, on 150 x 50mm sw. rafters @ 400mm c/s, seated on and secured down to 100 x 50mm sw. wallplate, secured to block inner leaf with 1000mm long galv. ms. holding down straps @ 1000mm c/s.
Eaves to have 25mm sw. fascias and 12mm exterior quality ply soffits on 50 x 50mm sw. framing. Incorporate 120mm thick Kingspan Kooltherm K107 roof insulation between rafters, rafters underdrawn with 37.5mm Kingspan Kooltherm K118 insulated plasterboard & 3mm skim finish on scrim-reinforced joints (roof construction to have a U-value not greater than 0.15 W/m2K).
Build in 150mm high Code 4 lead flashings/soakers and cavity tray DPC at junction of new roof and existing wall where shown.

Lateral Restraint:
To be provided in roof by 1200 long x 30 x 5mm galv. m.s. straps secured with 8swg. X 75mm long nails to 3nr. rafters and built into wall @ 1.2m c/s. Incorporate sw. packs & noggins at strap locations, min. 50mm thick x half rafter depth.

Roof Drainage:
New roof to drain to UPVC gutter, profile & colour to match existing, on brackets secured to fascia. Matching 68mm dia. RWP's secured on pipe clips to manufacturer's instructions. RWP's to discharge to vitrified clay trapped gully's where shown on drawing, fitted with cast alloy grating.

Below Ground Drainage:
New surface water & foul drains to connect to existing as shown via 110mm dia. Hepworth Plastidrain (or similar approved) pipes and fittings - all to BS EN 1401-1: 1998. Pipes to be laid to an even fall of min. 1:40 (foul), 1:80 (sw.) & shall generally be laid with a 150mm granular bed & 150mm cover of selected fill. New foundations to be taken down below invert of existing drains in close proximity. Drains passing through walls to be bridged over with conc. lintels, maintaining a min. 50mm clearance from the crown & sides of the pipe. Drains with less than 1.2m cover beneath driveways & hardstandings to be laid in accordance with pipe manufacturers instructions.

Inspection Chambers (if required):
To be constructed in proprietary p.c. concrete sections, set & jointed in 1:3 cement/sand mortar, or built in 215mm Class B engineering brickwork, built off a 150mm C25P mix concrete base slab. Channels within manholes to be benched up in similar concrete with a smooth trowelled finish.
Polypropylene I.C.'s may be used down to a max. invert of 1000mm, installed in accordance with manufacturers laying instructions. Chambers to be fitted with medium duty airtight cover & frame.

SU**Above ground Drainage:**
In UPVC pipework with solvent welded joints, installed in accordance with BS 5572:1994 COP. No ground floor branches to connect to stack within 450mm of drain invert. Where ground floor WC discharges directly to drain the drop to invert is not to exceed 1.5m.

Waste runs to appliances as follows:

	min. dia.(mm)	max. run (mm)
WC	100	no limit
Sink	40	3000
"	50	4000
Shower	40	3000
"	50	4000
Washbasin	32	1700
"	40	3000

Use 75mm deep seal traps or if max. run is exceeded use re-sealing trap.

Mechanical Ventilation:
Shower room to have extract fan with a min. extract rating of 15 litres/sec.
Utility room to have extract fan with a min. extract rating of 30 litres/sec.
All fans to be ducted to outside air and fitted with suitable vent terminal.

Heat Producing Appliances:
Heating engineer responsible for extending existing central-heating system to cater for alterations, including provision/sizing of new radiators complete with TRV's. Heating engineer to inspect the existing system to assess its adequacy and suitability to be extended and also to assess and report on the adequacy of the existing C.H. boiler to cater for the increase in space heating requirements prior to commencement of the works on site. If larger output boiler is required, the Contractor must confirm the requirements to the building owner at tender stage. All works to be carried out by a GAS SAFE registered installer qualified to self-certify the installation upon completion.

Electrical:
Existing general power & lighting circuits to be extended/modified to cater for the extension & alterations, to building owner requirements. All installation work to be carried out by qualified electricians fully conversant with BS 7671. All electrical work is to comply with the requirements of Part P (electrical safety) and must be designed, installed, inspected and tested by a person competent to do so, with an appropriate BS 7671 electrical installation certificate issued upon completion.

Accessible Switches & Socket Outlets:
Switches & socket outlets for lighting etc. to be located at a height of not less than 450mm and not more than 1200mm above finished floor level.

rev.	description	date	drawn	appvd
P01	Drawing originated	15.03.24	NG	NG/TS

project: Single storey side extension
at
51 Celendine Avenue
Salendine Nook, Huddersfield
HD3 3US
for
Mr R & Mrs P Green

title: GA as Proposed
number: 24017D-02-P01
scale: 1:50
size: A1

ARCHITECTURE AND DESIGN
The Old Police Station 16 Bridge Lane Holmfirth HD9 7AN
T: 01484 685411 E: hello@adp-architects.com
W: www.adp-architects.com
RIBA Chartered Practice