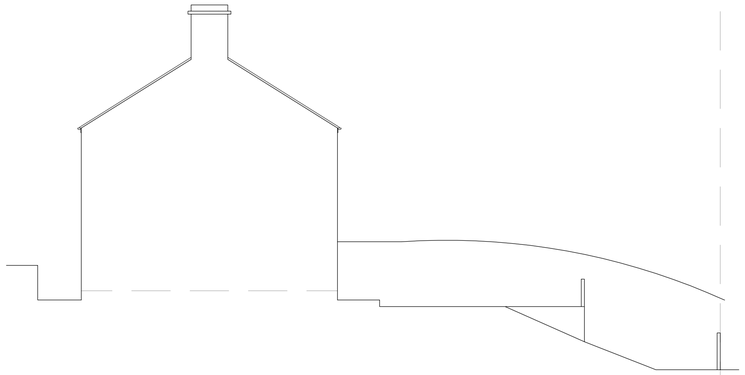
EXISTING ELEVATIONS

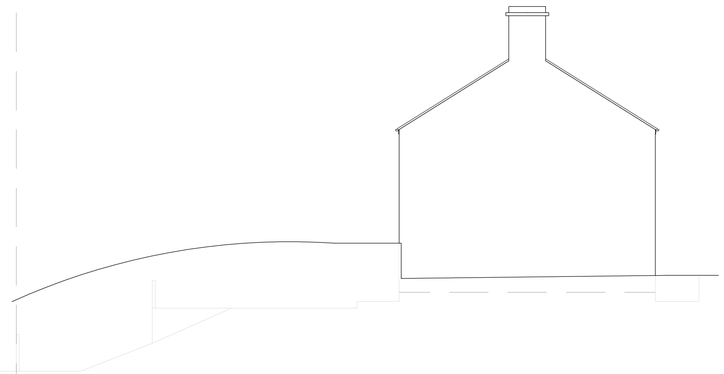
SCALE 1:100

NORTH



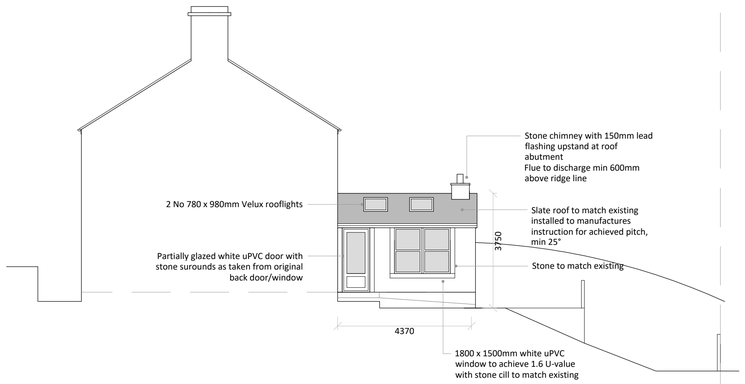
EAST

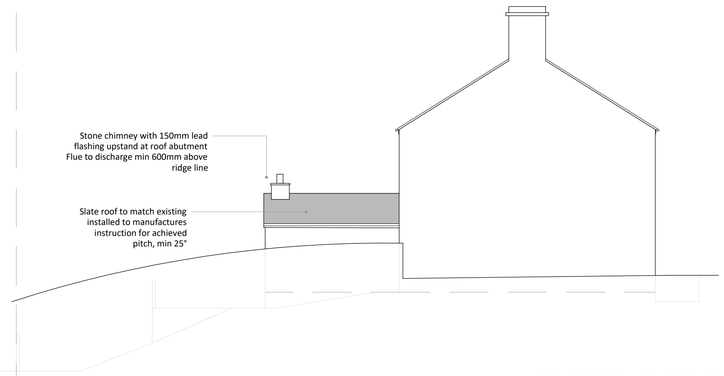
SOUTH



PROPOSED ELEVATIONS

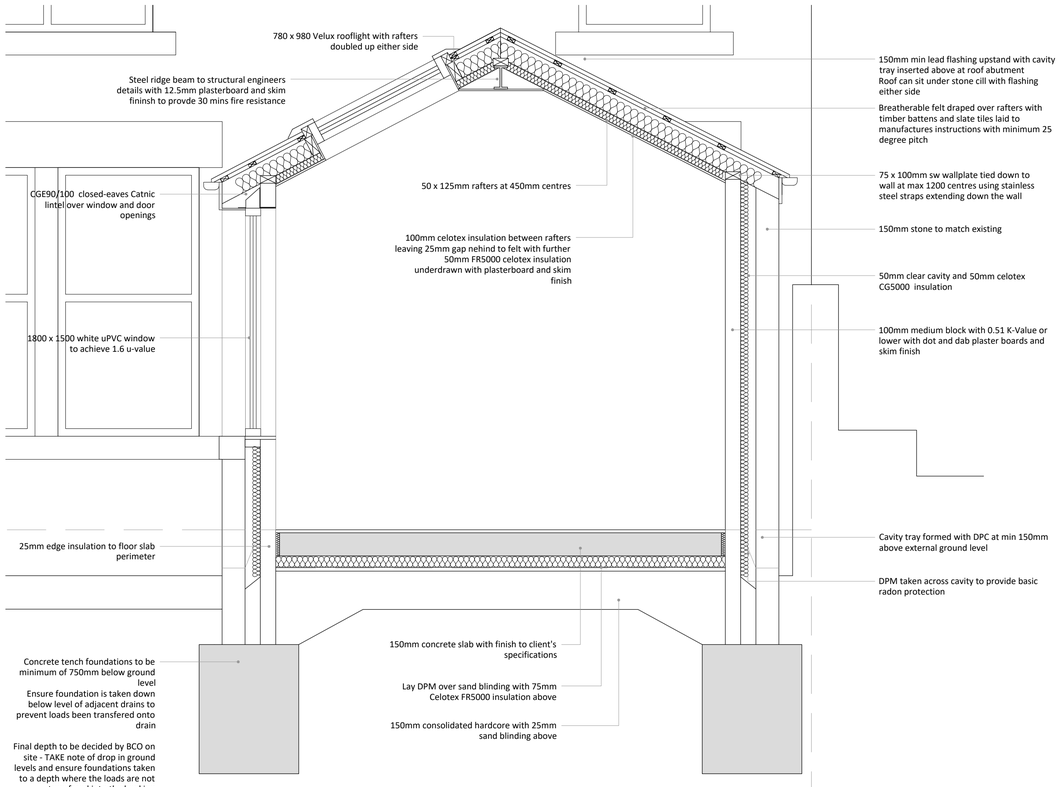
SCALE 1:100





PROPOSED SECTION

SCALE 1:20



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.

MATERIALS AND WORKMANSHIP
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.

BASIC RADON PROTECTION
Provide a 1200g (300 um) radon membrane under floor slab lapped 300mm double welted and taped with gas proof tape at joints and service entry points. Carry membrane over cavity and provide suitable cavity tray and weep holes.

SITE PREPARATION
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.

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.

LINTELS
- For uniformly distributed loads and standard 2 storey domestic loadings only
Lintel widths are to be equal to wall thickness. All lintels over 750mm sized internal door openings to be 65mm deep pre-stressed concrete plank lintels. 150mm deep lintels are to be used for 900mm sized internal door openings. Lintels to have a minimum bearing of 150mm on each end. Any existing lintels carrying additional loads are to be exposed for inspection at commencement of work on site. All pre-stressed concrete lintels to be designed and manufactured in accordance with BS 8110, with a concrete strength of 50 or 40 N/mm² and incorporating steel strands to BS 5896 to support loadings assessed to BS 5977 Part 1.
For other structural openings provide proprietary insulated steel lintels suitable for spans and loadings in compliance with Approved Document A and lintel manufactures standard tables. Stop ends, DPC trays and weep holes to be provided above all externally located lintels.

OPENINGS AND RETURNS
An opening or recess greater than 0.1m² shall be at least 550mm from the supported wall (measured internally).

TRENCH FOUNDATION
Provide 750mm x 600mm trench fill foundations, 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 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. 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 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 a structural engineer should be sought.

SOLID FLOOR INSULATION UNDER SLAB
To meet min U value required of 0.22 W/m²K
Solid ground floor to consist of 150mm consolidated well-rammed hardcore. Blinded with 25mm sand blinding. Provide a 1200 gauge polythene DPM, DPM to be lapped in with DPC in walls. Floor to be insulated over DPM with 75mm thick Celotex.
25mm 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, provide 150mm ST2 or Gen2 ground bearing slab concrete mix to conform to BS 8500-2 over VCL.

Where drain runs pass under new floor, provide A142 mesh 1.0m wide within bottom of slab 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 to terminate at new 65mm x 215mm air bricks built into new cavity wall with 100mm concrete cover laid under the extension. Ducts to be sleeved through cavity with cavity tray over.

WALLS BELOW GROUND
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.

PARTIAL FILL CAVITY WALL
To achieve minimum U Value of 0.28W/m²K
Provide 100mm facing stone to match existing construction. 50mm clear residual cavity, 50mm Celotex CW4000 insulation fixed to 100mm brick internal finish to clients specification. Ensure non combustable material used. Walls to be built with 1:1:6 cement mortar.

DPC
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.

WALL TIES
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

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

UNVENTED PITCHED ROOF
Pitch 22-45° (imposed load max 0.75 kN/m² - dead load max 0.75 kN/m²)
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 breathable sarking felt to relevant BBA Certificate. Supported on 47 x 100mm grade C16 rafters at max 400mm centres max span 1.77m. Rafters supported on 100 x 50mm treated sw wall plates. Allow min 20mm air space to allow for drape of breathable felt. Insulation to be 80mm Celotex GA4000 between rafters and 62.5mm Celotex PL4000 insulated plasterboard with VCL under rafters. Provide 5mm skim coat of finishing plaster to the underside of all ceilings.
Restraint strapping - Ceiling joists tied to rafters (if raised collar roof consult structural engineer). 100mm x 50mm wall plate strapped down to walls. Ceiling joists and rafters to be strapped to walls and gable walls, straps built into cavity, across at least 3 timbers with noggins. All straps to be 1000 x 30 x 5mm galvanized straps or other approved to BSEN 845-1 at 2m centres.

LEAD WORK AND FLASHINGS
All lead flashings, any valleys 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.

HEARTHS AND FIREPLACES FOR WOOD BURNING STOVE (with recess)
Fireplace walls to consist of non-combustible material of minimum 200mm thickness to the side, 100mm thick in the back wall recess, lined with suitable fire bricks.
Hearth to be of non-combustible material minimum 125mm thickness with no combustible material within 250mm.
Hearth to have projections extending outwards (to the sides) at least 150mm from the sides of the jambs and extending forwards at least 500mm from the front of the jambs.
Hearth also to extend 150mm outwards (to the sides) from the sides of the appliance and to extend forwards at least 300mm from the front of the appliance. Stoves to be 50mm minimum away from walls.
Boundary of hearth to be visually apparent.

WOOD BURNING STOVE
Ensure the wood burning stove is installed by an APHC, HETAS, NAPIT or NICEIC accredited specialist in compliance with Part J. Supply a suitable flue, hearth and CO / Carbon Monoxide alarm and provide ventilation to ensure the necessary combustion air and to prevent the depletion of oxygen in the room. There must not be an extractor fan fitted in the same room as the stove. A notice plate giving operating and maintenance instructions must be provided and fixed in an obvious place and the Part J installation checklist is to be completed and a copy given to Building Control.

THE INSTALLATION CHECKLIST, TESTING AND NOTICE PLATE
On completion of the works ensure compliance with the following:
- Checklist from Approved Document J Appendix A to be completed and given to owner and Building Control body.
- Flue should be smoke tested and tested for spillage.
- A notice plate to be completed and permanently fixed within the building where hearths and flues are fitted in compliance with Approved Document J.

SAFETY GLAZING

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 WINDOWS & DOORS

New and replacement 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 1.6 W/m²K. The door and window openings should be limited to 25% of the extension floor area plus the area of any existing openings covered by the extension.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.

M 1:100
0 1 2 3 4 5 6 7 8 9 10 [m]

M 1:20
0 0.2 0.4 0.6 0.8 1 1.2 1.4 1.6 1.8 2 [m]

PLANS ARE TO BE READ IN CONJUNCTION WITH STRUCTURAL ENGINEERS DETAILS

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CHECK ALL MEASUREMENTS ON SITE PRIOR TO WORK COMMENCING

IF ON SITE CHANGES ARE TO BE MADE CONTACT PLAN DRAWER

WOOD BURNING STOVE IS TO BE INSTALLED TO MANUFACTURES SPECIFICATION AND PERMANANT VENTIALTION PROVIDED WHERE NECESSARY

Building Regulations Elevations & Section

Single Storey Rear Extension

3 Hillside
Chaple Milton
Chapel-en-le-Frith
High Peak
SK23 0QQ

Scale - 1:100 @ A1
unless stated
Drawn By - EH
Date - 02.2018

Rev	Description	Date

DRAWING REF: 3HS/BR/01

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