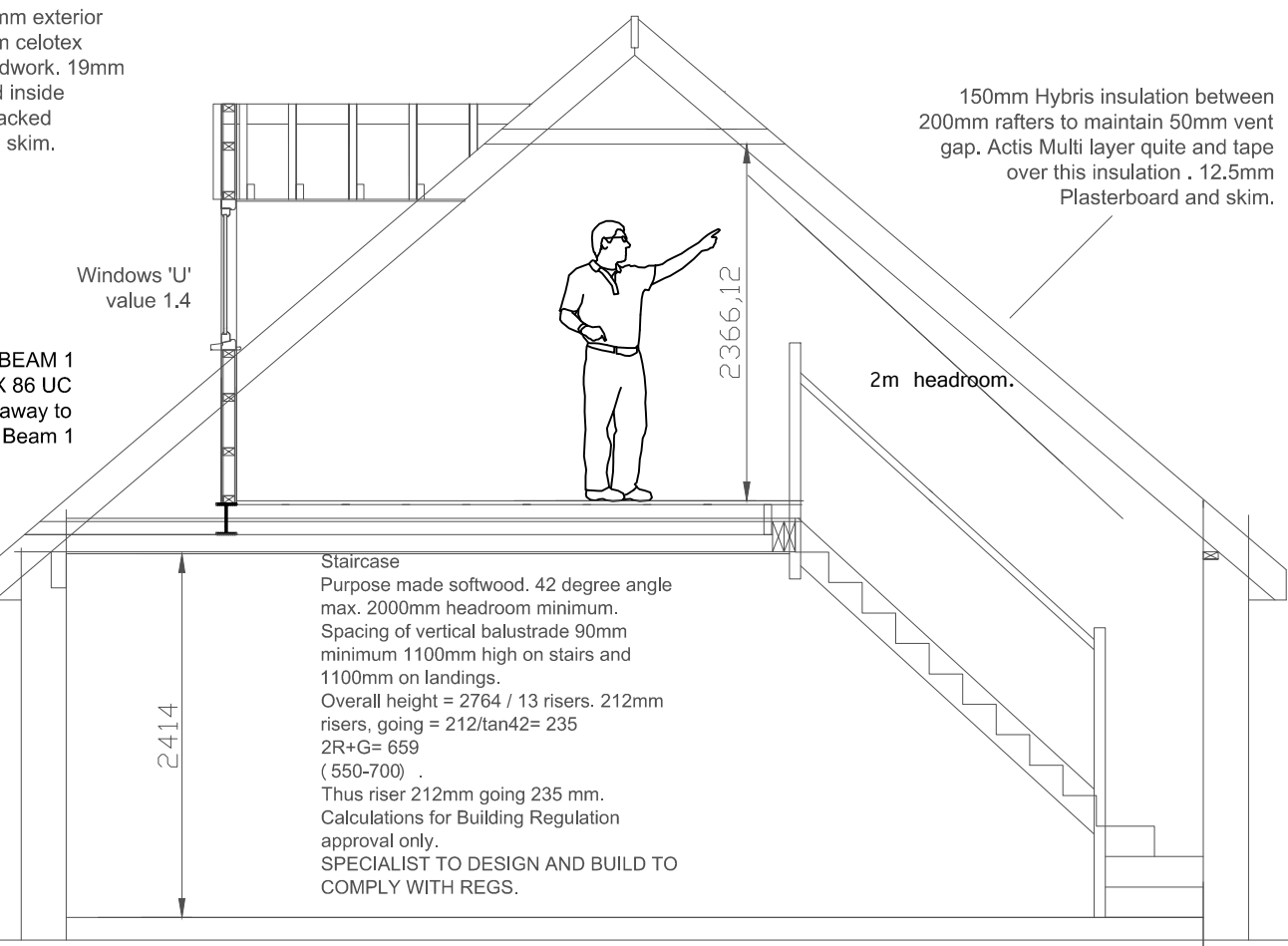
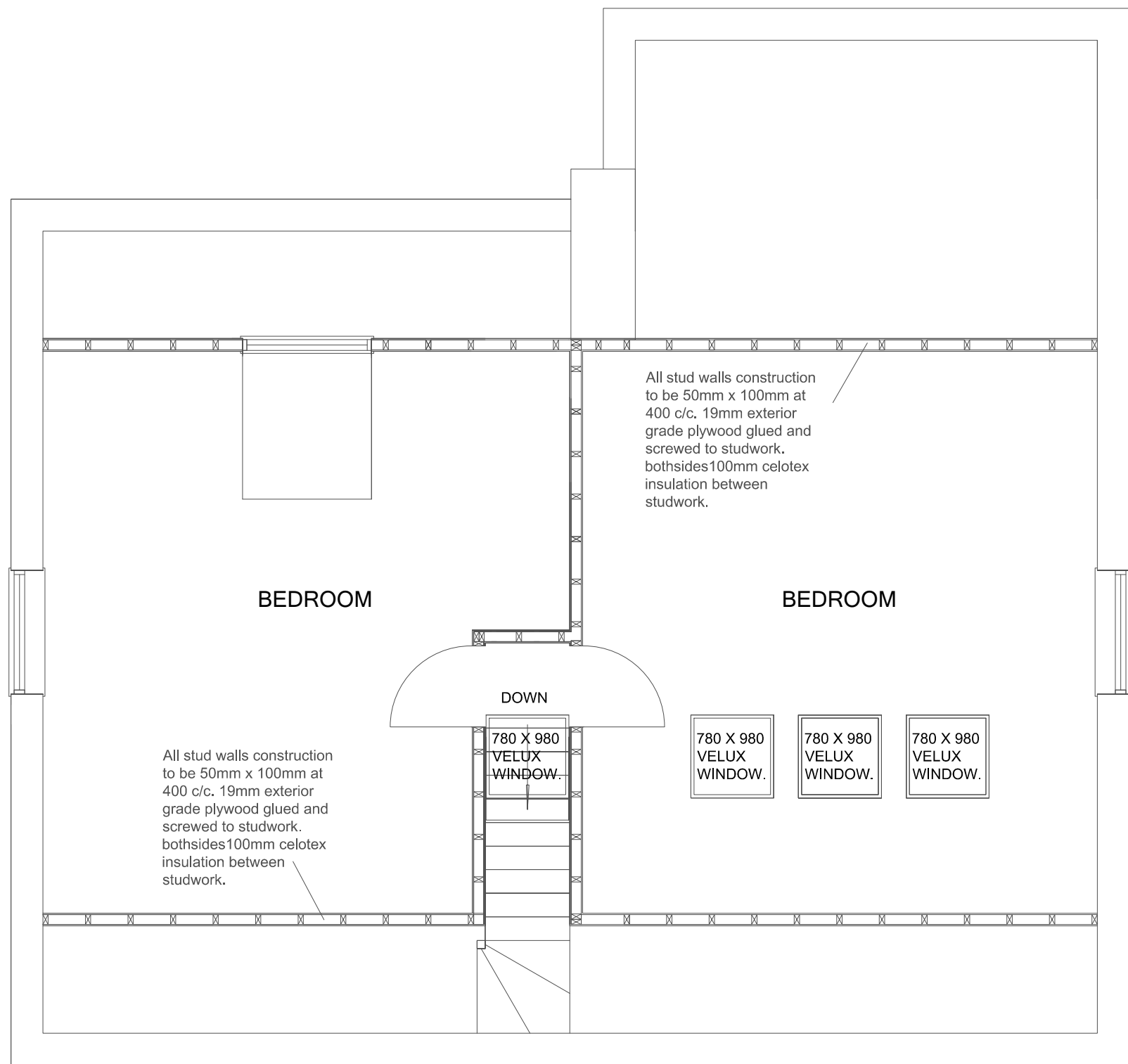




FLOOR JOISTS AND BEAM DETAIL.



PROPOSED 1st FLOOR PLAN 1:50

General Notes
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

Structure
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 Project Structural Engineer or Building Control Surveyor.

New Structure
Beams, Lintels and Fire Protection
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 30 minutes fire resisting construction with staggered joints. Openings and Wall Returns
An opening or recess greater than 0.1m² shall be at least 665mm from the supported wall (measured externally).

Foundations

600mm x 750mm trench fill foundations grade of ST2. All foundations to be a minimum of 1000mm below ground level, exact depth to agreed on site with Building Control Surveyor to suit site conditions. All constructed in accordance with the Building Regulations 2010 A12 and BS 8004:1986 Code of Practice for Foundations. Ensure foundations are constructed below invert level of any adjacent drains. 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 trees in the vicinity of excavations, the Building Control Surveyor is to be contacted and the advice of a structural engineer may need to be sought.

Ground Floors
Solid Floor - Insulation Over Slab
Solid ground floor to consist of 150mm consolidated well compacted hardcore. 1200mm gauge polythene DPM. 100mm concrete. DPM to be lapped in with DPC in walls.

External Walls
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 maximum 225mm below damp proof course. Or provide lean mix backfill at base of cavity wall (150mm below damp course) laid to fall to weep holes.

To meet minimum U value required of 0.28 W/m²K, Provide horizontal strip polymer (hyalod) damp proof course to both leafs 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. 102.5mm thick brickwork outer leaf. Cavity width to suit insulation manufacturer's specification. All walls constructed with stainless steel vertical twist type retaining wall ties built in at 750mm centres horizontally, 450mm vertically and 225mm centres at reveals and corners in staggered rows. Wall

lies to be suitable for cavity width and in accordance with BS 1249, inner leaf to be insulated blockwork to achieve the u-value with the chosen insulation. The cavity trays should be installed in accordance with the manufacturer's instructions using proprietary cavity closers. Provide vertical DPC's around openings and abutments. All cavity trays must have 150mm upstands and suitable cavity weep holes (min 2) at max 900mm centres. 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. The existing wall to be made continuous with the new wall by using a 12.5mm standard plasterboard dry lining on cavity beads with lightweight plasterboard to finish.

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.

Thermal Bridging and Air Leakage

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.

Roofs
Roof.

Trussed roof be in accordance with BS 5268 or cut roof to be in accordance with Euro code 5 span tables 3rd Edition. Gable walls should be

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 maximum 2000mm centres and to be taken across minimum 3 rafters and screw fixed. Provide solid nogging 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 100mm galvanised metal straps or other approved to BSEN 845-1 at maximum 2m centres. Installation requirements to manufacturer's specification for warm or cold roof. Ceiling finished with 12.5mm plasterboard and min 3mm thistle multi-finish plaster.

Lead Work
All lead flashings, any valleys or soakers to be Code 6 lead and laid according to Lead Development Association. Flashings to be provided to all jams and

below window openings with welded upstands. Joints to be lapped minimum 150mm and lead to be dressed 200mm under tiles, etc. All work to be undertaken in accordance with the Lead Development Association recommendations.

Electrics
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. 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 the B. Inspector.

Internal Lighting
Install low energy light fittings. 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.

Heating - Gas Heating
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.

Heating and hot water will be supplied via a wall mounted condensing vertical balanced flue pressurised boiler with a minimum SEDBUK rating of 86%. No combustible materials within 50mm of the flue. System to be fitted with thermostatic radiator valves and all necessary zone controls and boiler control interlocks. The system will be installed, commissioned and tested by a "competent person" and a certificate issued that the installation complies with the requirements of Approved Document L1B.

Escape Windows
Provide emergency egress windows to any newly created first floor habitable rooms and ground floor inner rooms. Windows to have an unobstructed openable area of minimum 0.33m sq, with a minimum dimension of 450mm in a direction, 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

Windows & Doors
Roof Lights
Min U-value of 1.4 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 manufacturer's instructions with openings to be trimmed in accordance with Trada Euro code 5 span tables 3rd Edition.

All glazing in critical locations to be toughened or laminated safety glass to BS 6206 and Approved Document N 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.

Window Energy Rating to be Band C or better and to achieve U-value of 1. 4 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.

Door U-Values
New and replacement doors to achieve a U-Value of 1. 4 W/m²K. Glass to be toughened or laminated safety glass to BS 6206 and Approved Document N of the current Building Regulations.

Ventilation

Background ventilation - Controllable background ventilation via trickle vents to BS EN 13141-3 within the window frame to be provided to new habitable rooms at a rate of minimum 5000mm²; and to kitchens, bathrooms, WCs and utility spaces at a rate of 2500mm².

Purge ventilation - N Windows/rooftops to have openable area in excess of 1/20th of their floor area, if the window opens more than 30° or 1/10th of their floor area if the window opens less than 30°.

Internal doors to kitchen, bathroom/shower rooms, WC's and utility rooms should be provided with a 10mm undercut ventilation from finished floor level to aid air circulation.

Ventilation provision in accordance with the Domestic ventilation compliance

Extract Ventilation - All Wet Rooms
Provide mechanical extract ventilation to all wet rooms ducted to external air capable of extracting at a rate of not less than listed below: Shower Room/Bathroom/En-suite 15 litres per second, WC 6 litres per second, Utility 30

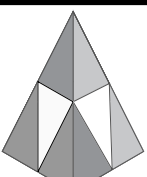
litres per second, Kitchen 30 litres per second at cooker hood or 60 litres per second elsewhere. Vent to be connected to light switch and to have 15 minute over run if no window in the room. Internal doors should be provided with a 10mm undercut ventilation below the door to aid air circulation. Ventilation provision in accordance with the Domestic ventilation compliance guide. Intermittent extract fans to BS EN 13141-4.

Pitched Roof Ventilation
Maintain a 50mm air gap above insulation in the roof pitch to ventilate roof.
Provide opening at eaves level at least equal to continuous strip 25mm wide and opening at ridge equal to

continuous strip 5mm wide to promote ventilation. Alternatively use proprietary breathable membrane to BS 4016-1997. Suitable ridge tiles to be provided to aid cross ventilation.

Drainage

New rainwater goods to be new 110mm UPVC half round gutters taken and connected into 68mm diameter UPVC downpipes. Rainwater taken to existing storm water system or new soakaway, situated a minimum 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 with geotextile surround to prevent migration of fines. If necessary carry out a porosity test to determine design and depth of soakaway or taken to alternative outfall.

client		Mr Cottrell	
SITE ADDRESS		128 The Street Broughton Gifford SN12 8PH	
PROJECT Proposed Loft Conversion and dormer.			
 RAND PLANNING CONSULTANCY LTD		Phil Rand Cherry Tree House Clardon lane Purton, Wiltshire SN5 4HN	
		TEL 01793 771128	
Drawn by Phil Rand		Drawing No 02	
Scales 1:500 1:100 1:50		Date 18th February 2026	