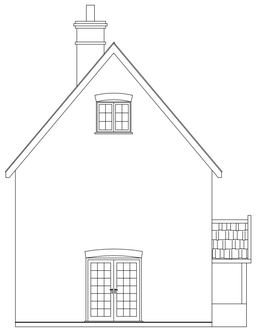
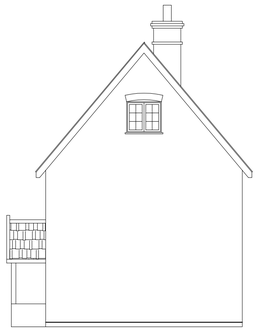
PROPOSED SOUTH ELEVATION



PROPOSED WEST ELEVATION

PROPOSED NORTH ELEVATION



PROPOSED EAST ELEVATION

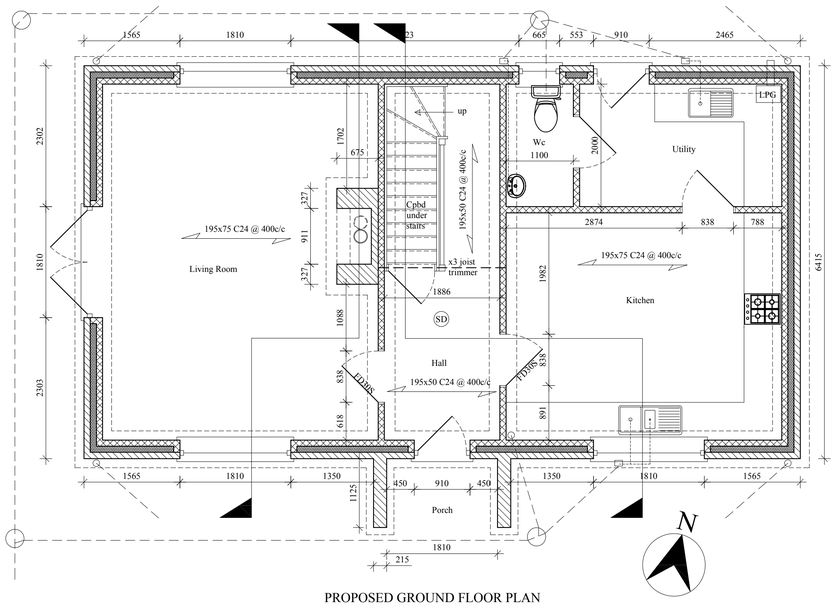
Foundations are to be min 600mm and 450mm wide x 450mm thick Gen 1 strip foundations min 1000mm deep onto an undisturbed subsoil layer. Foundation depths to be taken from the NHBC Table 4.2 where trees and clay subsoils are found.

Masonry below ground is to be 302mm overall thickness with an outer skin of 102mm facing bricks, 100mm cavity filled to ground level with lean mix concrete and an inner skin of 100mm dense concrete blocks, all bedded in 4:1 sand and portland cement morter.

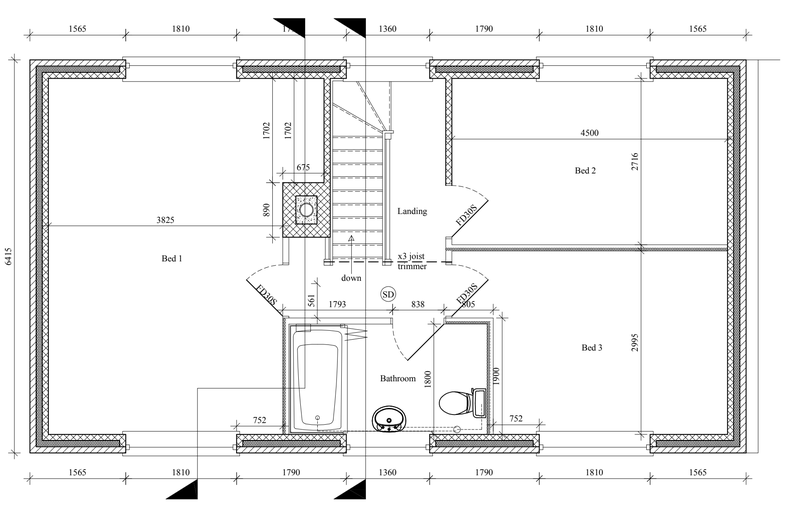
Masonry above Dpc is to be an outer skin of 102mm facing bricks laid in English bond with Lime morter, a 100mm cavity full filled with Crown Dri-therm cavity batts and an inner skin of 100mm Durox super blocks bedded in 6:1 sand and portland cement morter, Ancon stainless steel wall ties are to be provided at 900mm c/c horizontally and 450mm c/c vertically, the ties are to be sufficiently long to cross each skin by 75mm, the inner face is to be provided with 12mm thick Lime render and plaster coats. Lintels are to be Catnic Cougar CG90/100type with 150mm end bearings over all openings except the first floor windows which will be Catnic CH90-100 with min 150mm end bearings also.

Ground floor OPTION 1 is to be 50mm of 3:1 sand and cement screed on 100mm Gen2 oversite concrete with 1 layer of A142 reinforcement at mid depth on 100mm of Celotex GA4000 on 1 layer of 1200g damp proof membrane on 150mm of mechanically compacted and sand blinded Type 1 granular material.
OPTION 2 is to be 75mm of sand and cement screed on 100mm of Celotex GA4000 on pre cast block and beam floor with a min 150mm void below and225mmx75mm air bricks and periscope ventilators at max 1800mm c/c all round the perimiter. Any floor insulation is to be min 250mm below the surface within the hearth area.

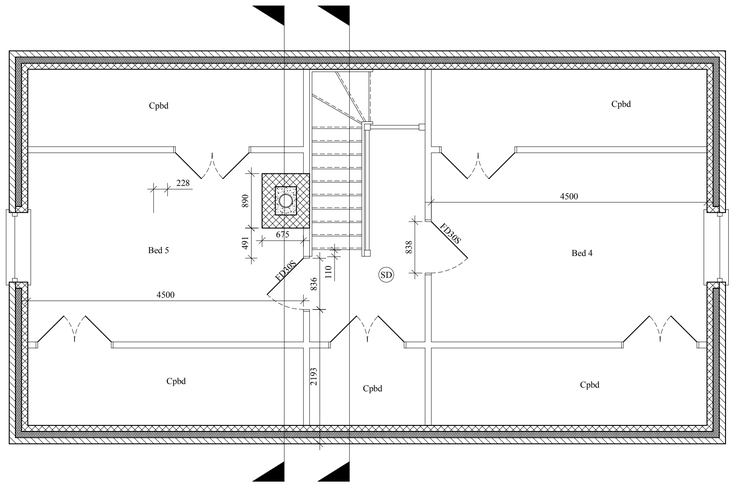
First floor is to be 22mm t&g chipboard on 195x75mm C24 joists at 400mm c/c, x2 joists are to be provided beneath first floor stud partitions, rows of solid noggins are to be provided at max 2000mm c/c, the floor is to be underdrawn with 1 layer of 15mm soundblock plasterboard and skim plaster, 100mm of sound deadening Rockwool with a density of at least 10kg/m³ is to be provided within the floor void.



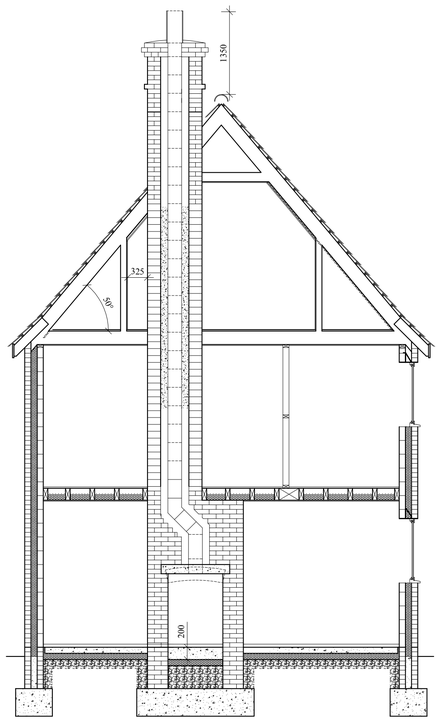
PROPOSED GROUND FLOOR PLAN



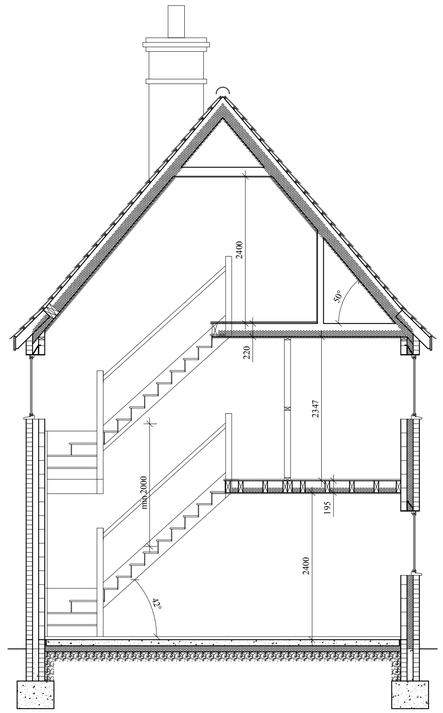
PROPOSED FIRST FLOOR PLAN



PROPOSED SECOND FLOOR PLAN



SECTION THROUGH CHIMNEY



SECTION THROUGH STAIRS

PROPOSED FIRST FLOOR PLAN

Windows and doors are to be oak colour upvc framed with 28mm double glazed sealed units, any glazing to doors, side lights to doors and within 800mm of floor level are to be safety glass, all frames are to be set back 30mm over the cavity, all reveals are to be closed with thermabate cavity closers or returned in block work onto 1 layer of Damcor insulated DPC, background ventilation equal to at least 5000mm² is to be provided to each room by trickle ventilator strips in the window and door heads, purge ventilation is to be provided to all habitable rooms by means of openable doors and windows equal to at least 5 % of each rooms floor area. All habbitable rooms are to have doors or windows suitable for means of escape in the event of a fire, clear unobstructed openings of at least 450mm wide and 735mm high are to be provided with a cill height of no more than 1000mm above floor level. The ow level landing window will need a restrictor stay to prevent the window opening more than 100mm.

The stairs are to be 13 equal risers of no more than 220mm and 12 equal treads of no less than 220mm,The pitch is to be no steeper than 42 degrees, 2000mm clear and unobstructed headroom is to be provided over the entire flight and both top and bottom landings and a handrail is to be provided at least 900mm above the pitch line with spindles at 100mm c/c. Winding treads are to be min 50mm at the norrowest point.

The fire place is to be 325mm thick cheeks and 215mm thick back supporting a 150mm thick concrete pad with 2 layers of nested A393 mesh with 50mm bottom cover supporting a 225mmØ flue liner encased in min 215mm masonary all round with a sand, lime and vermiculite flexible infill morter, the chimney is to project to be at least 600mm above the highest ridge, combustion air supply is to be provided according to the kw output of the chosen wood burning appliance, the hearth is to project at least 225mm infront of the appliance and be at least 50mm higher than the nominal floor level, prior to completion the chimney construction check list and the Hearth Notice are to be provided. A DPC isto be provided in the chimney stack above the point at which it projects above the tiled surface of the roof. Lead flashings are to be proveded between the stack and the roof and at the sloping sides of chimney stack. A HEATAS installation and commissionin certificate will be provided at completion.

The electrical installation is to be carried out by a Part P registered installer who will provide certification showing compliance with Part P prior to completion, 100% of all light fittings are to be energy efficient providing at least 45 lumens per circuit watt, a mains operated fire alarm system with battery back up is to be provided in the circulation spaces within the dwelling not more than 7.5m from any habitable room, detectors are to be interconnected and power is to be drawn from a separately fused circuit.

Foul drainage is to be 50mmØ wastes to shower, sinks and baths and 110Ø to w.c's,all connecting to 110mmØ below ground drainage laid at 1:60 falls and bedded 100mm all round in 10mm pea staone and connecting to new 6-10 person package treatment plant which will discharge to a large soak away which shall be designed from the results of a percolation test
Upvc inspection chambers are to be provided at each junction and change of direction, where drains pass into the building they are to be overspanned with pre cast concrete lintels and have 50mm clear space all around, all wastes are to be provided with 75mm deep water traps to prevent the ingress of drain smells, external gulleys are to be the rodable bottle type, a concrete gulley kerb is to be provided around. The SVP shall teminate at a vented ridge tile atleast 900mm above any openable windows within 3.0m horizontally.

Surface water drainage is to be Upvc gutters discharging to 68mmØ downpipes connecting to 110Ø below ground drainage discharging to rubble soakaways if ground conditions allow, or to a crate attenuation system designed from the results of a pecolation test..

Mechanical extraction is to be provided in the utility and bathrooms equal to 30lt/sec and 60lt/sec in the kitchena all are to be Humidi-stat controlled.

Steel beams,pad stones and the trimming of the first floor joists for the stair opening are to be designed by a Structural Engineer and installed per his instructions, all steel beams are to be clad with 2 layers of 12,5mm plasterboard and skim plaster.
The trimming design of the second floor stair opening is to be provided by the Attic truss manufacturer.

Heating and hot water are to be provided from an "A" Rated LPG fired combination boiler, fuel is to be drawn from the main poultry unit tanks, a fire check valve is to be provided at the point where the gas supply pipe enters the dwelling. Secondary heating is to be provided by a wood burning stove with a max output of 5Kw, positioned on a hearth raised min 50mm above the nominal floor level, A HEATAS registered installer is to provide certification for the stove installation andan OFTEC registered installer is to do the same for the installation and commissioning of the LPG system. , temperature limiting devices are to be provided to the bath limiting water temp to 48 degrees C to prevent a person being immersed in scalding water. All radiators are to be fitted with thermostatic valves, the room stat is to be positioned in the hall.

PROPOSED SECOND FLOOR PLAN

The main roof is to be tiles on 25x50mm tanalized battens on 1 layer of Tyvek Supro sarking felt on gang nail attic trusses supported on the 100x50mm wall plates on the inner cavity wall leaf, Gable restraint and wall plate straps are to be 3x30x1500mm stainless steel at 1500mm c/c, Insulation is to be 175mm of Celotx GA4000 between the rafters with an additional continuous 40mm thick layer to the under side. the bottom floor joists section is to be finished with 22mm t&g chipboard and under drawn with 1 layer of 15mm sound block plasterboard and skim plaster, 100mm of sound deadening as per the first floor is to be provided within the floor void. Timber fascia, barge and cappings are to be provided, the feet of the gang nail trusses are to be cut off flush with the inner face of the outer cavity leaf and replaced with treated and stained 50x150 rafter feet that can be seen from below externally, the dummy rafter feet are to be fixed 5 degrees shallower that the main rafter pitch to double as eaves sprockets and over clad with Marine ply.

An energy assessment of the dwelling is to be undertaken including a TER and a DER, an EPC is to be provided at completion along with a construction checklist confirming the materials and construction techniques used are in accordance with those used to to calculate the TER and DER. Prior to completion the dwelling is to be air pressure tested.

Disabled access and approach shall be provided , the principal entrance door shall provide a clear unobstructed opening of at least 775mm and have a level threshold, a smooth hard paved access path shall be provided at least 1.0m wide from a hard paved vehicle hard standing for alightment and access to the dwelling from a vehicle. All switches and sockets are to be positioned between 450mm and 1200mm from finished floor level.

A wholesome mains water supply is to be provided to the new dwelling, water use is to be limited to 125lt per person per day, a water use calculation will be provided.

Background ventilation provision. Table 5.2a in Approved doc F requires min 114000mm² for the size of dwelling, therefore trickle vents equal to 5000mm² each are to be fitted to window frames in each room, where the windows are single opener width 1no is to be provided and where windows are double opener width 2no are to be provided and where the windows are treble pane 3no are to be provided this will provide a total of 140000mm²

A 1200mm x1200mm concrete pad is to be provided to the rear of the garage building for the storage of refuse and recycling bins

First and second internal partitions are to be 50x100mm sole and head plates with 50x100mm studs at 400mm c/c, double studs are to be provided at the hanging and clapping sides of doors, the walls are to be clad either side with 1 thickness of 12.5mm plasterboard and skim plaster, where the partitions separate, bedrooms, bathrooms and wc;s from habbitable rooms min 50mm of sound deadening with a density of at least 10kg/m³ is to be provided in the cavity. Ground floor partitions are to be 100mm light weight block with render and skim plaster either side, ensure that socket and switch boxes are not positioned back to back.

DO NOT SCALE
Any dimension discrepancies are to be reported to the designer.

The designer takes no responsibility for any works carried out prior to any structural design being undertaken and an Approval Notice being issued by Building Control.