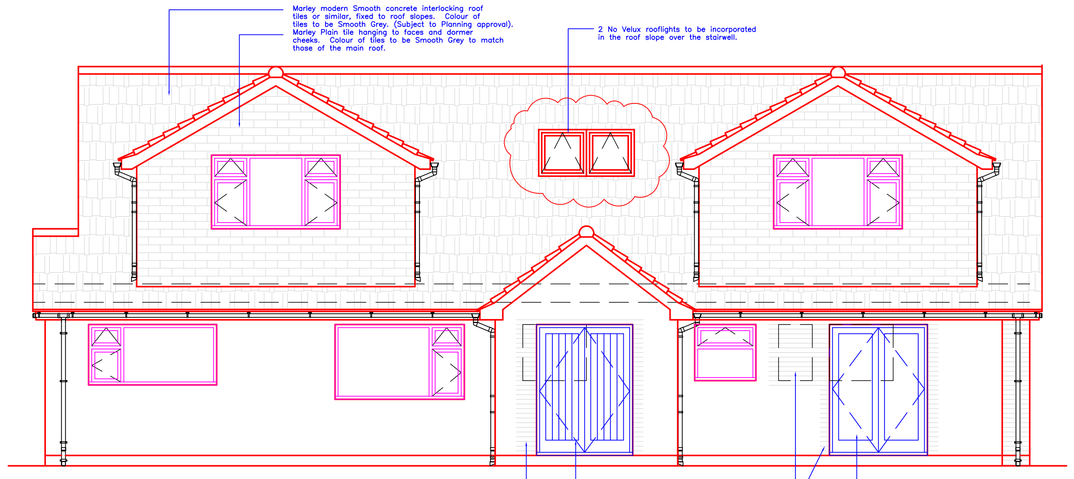
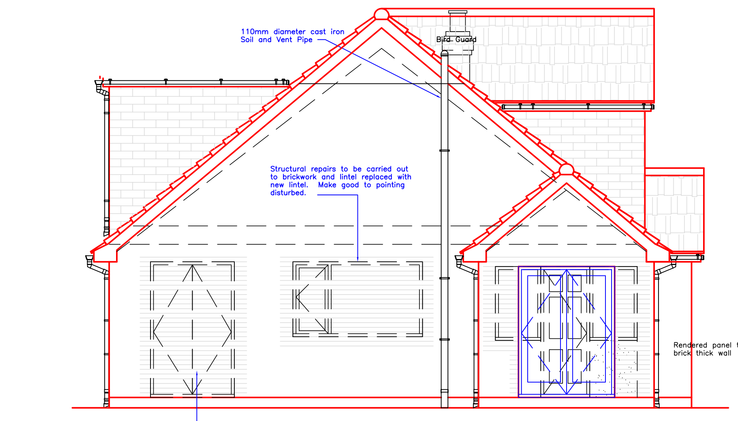
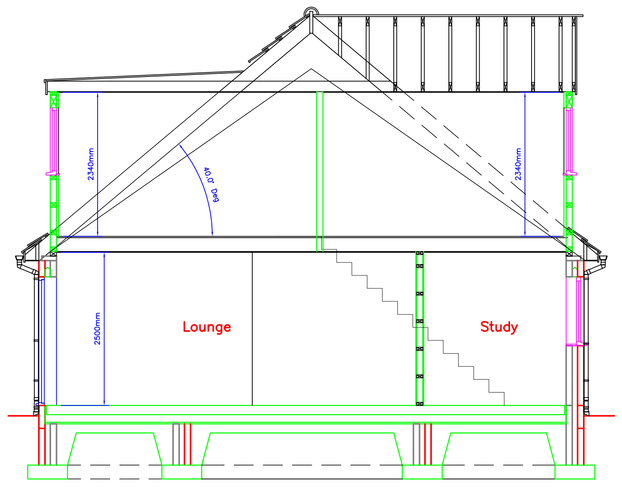


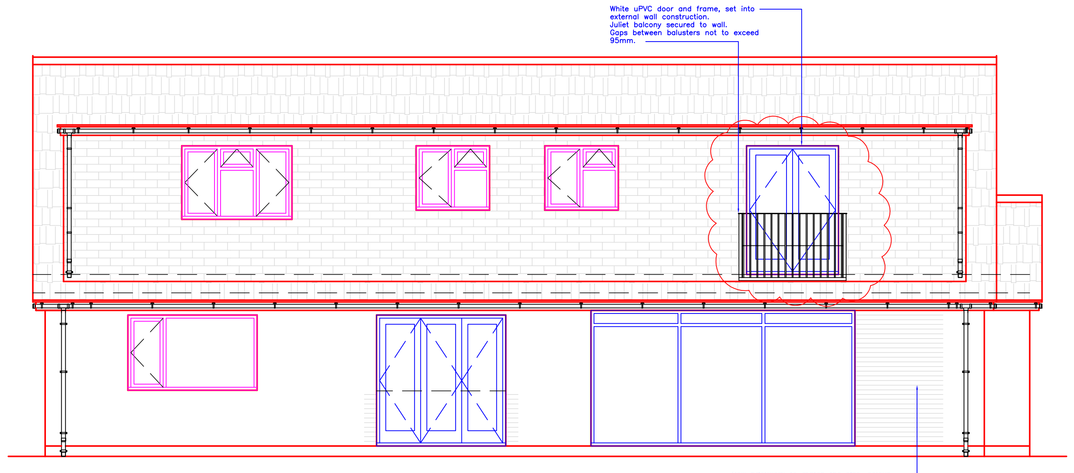
FRONT ELEVATION



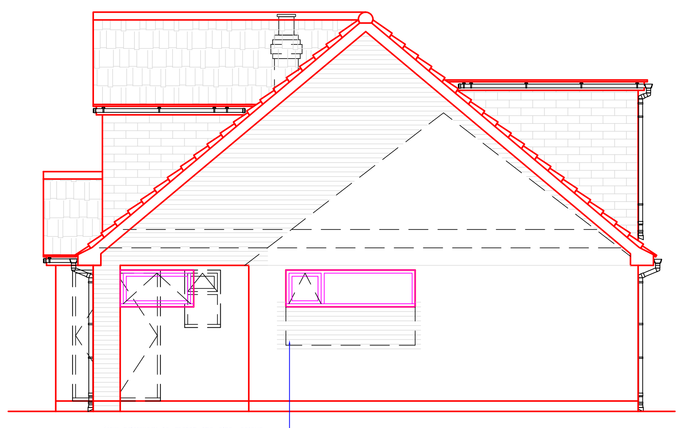
LEFT ELEVATION



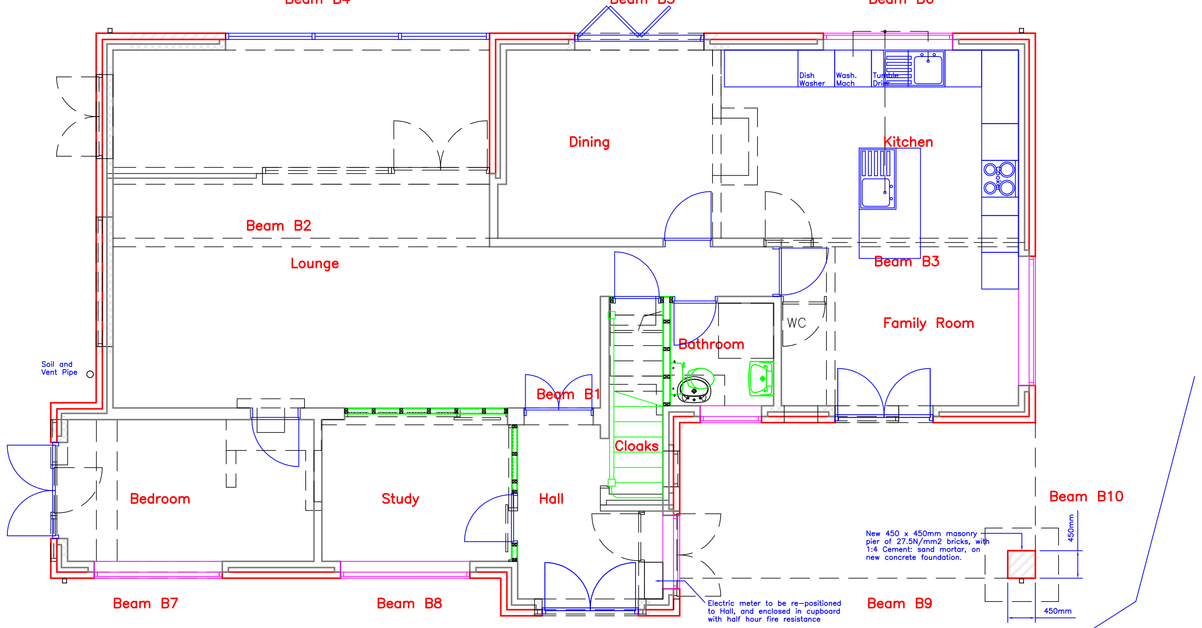
SECTION 1 – 1



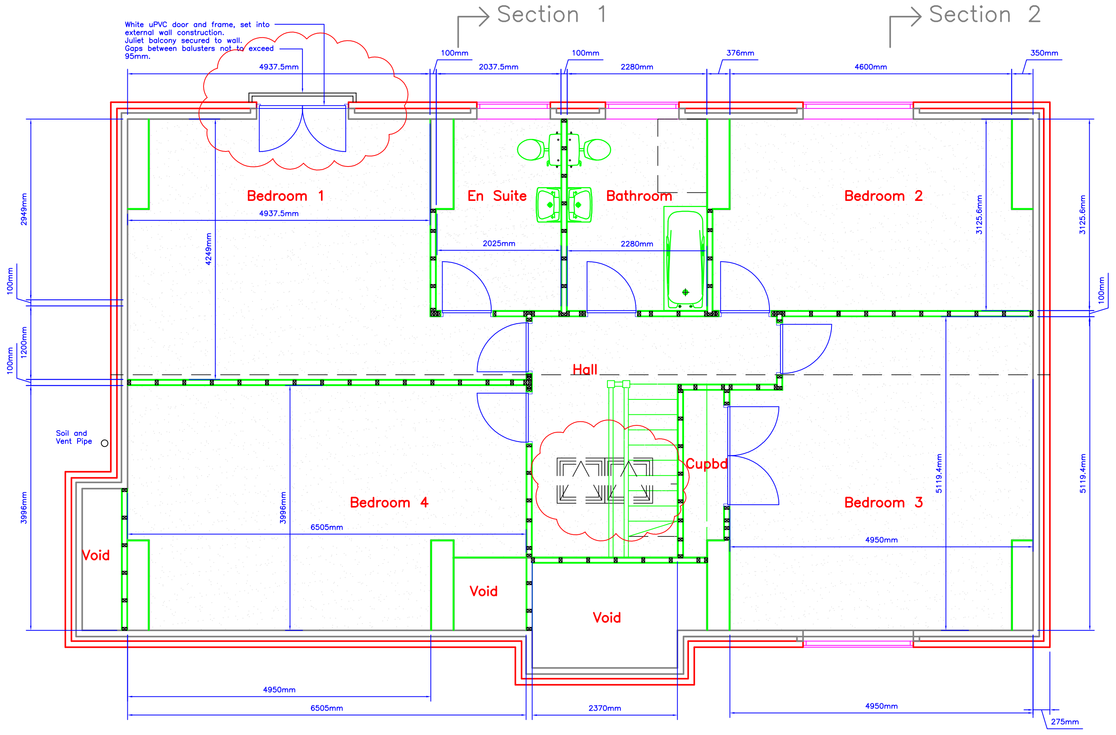
REAR ELEVATION



RIGHT ELEVATION



GROUND FLOOR PLAN



ROOF LEVEL PLAN

DETAILS OF STRUCTURAL BEAMS AND MASONRY COLUMN.
To be read in conjunction with Structural Engineer's details.
Beam B1
203 x 203mm x 23kg/m UB built below floor depth, with padstones 225 x 100 x 150mm deep.
Beam B2
203 x 203mm x 46kg/m UC to be built below floor depth, with padstones to be 300 x 100 x 150mm deep.
Beam B3
203 x 133mm x 25kg/m UB built below floor depth, with padstones 225 x 100 x 150mm deep.
Beam B4
203 x 133mm x 30kg/m UB with 75 x 125mm wallplate bolted to the top flange, All as Beam B9. Padstones to be 450 x 100 x 215mm deep, with minimum end bearing of 200mm. Joists, roof etc. to be fixed to the wallplate.
Beams B5, B6, B7 and B8
178 x 102mm x 19kg/m UB's with 75 x 100mm wall plate bolted to top flange. Use M12 bolts at 750mm staggered centres. Floor joists etc. fixed to wall plate. Padstones to be 225 x 100 x 150mm deep. End bearing to be minimum of 175mm.
Beam B9
203 x 133mm x 30kg UB with 75 x 125mm wall plate bolted to top flange. Use M12 bolts at 750mm staggered centres. Padstone to end to be 330 x 100 x 215mm deep. Alternative if bearing on inner leaf use 450 x 100 215mm deep.
Beam B10
203 x 102mm x 25kg UB with 8mm thick plate welded to the bottom flange. Plate to be width of cavity wall. Weld to be 6mm fillet weld at 150mm hit and miss centres.
NEW MASONRY COLUMN
450 x 450mm pier using bricks of minimum 27.5N/sq.mm compressive strength laid in 1:4 masonry cement: sand mortar. Padstone to be 225 x 225 x 215mm deep.

FOUNDATIONS
Existing foundations to be substantiated where appropriate.
Foundations to new structural column to be in accordance with the Structural Engineer's design.
Minimum depth of foundations to be 1 metre below the general ground level.
Any new foundations to be lower than influence of existing drains.
The Applicant will appoint a Structural Engineer to design foundations Where Ground conditions dictate.

DAMP PROOF COURSES
All walls in superstructure to be built up of a bituminous damp proof course.
DPC to be a minimum of 150mm above ground level.
Damp Proof Course is to be continuous with, and lapped into, the Damp Proof Membrane.

UPPER FLOOR CONSTRUCTION
22mm thick tongued and grooved floor boarding, fixed across timber joists at regularised centres. See Roof truss designer's calculations.
Floor joists strapped down to walls with 30 x 5mm galvanized mild steel straps at maximum 2 metre centres.
Floor void insulated with 100mm thick mineral wool sound insulation of minimum density 10kg/m3.
12.7mm thick Duplex plasterboard and skim to soffit of joists.
Timber struts / herringbone struts to be provided at mid span of joists.
Floor joists are to be doubled up under bathroom area.
Floor joists are to be tripled under first floor stud partitions.
Additional noggins to support timber partitions at right angles to floor joist span.

EXTERNAL WALLS (BRICKWORK)
Outer leaf of approved Facings brickwork to match those of main dwelling.
Brickwork to all elevations are to be raked out to a depth of 20mm, and pointed in 1:1:6 cement: lime: sand (grey) coloured mortar.

EXTERNAL WALL CAVITY
75mm wide cavity with 25mm wide residual cavity adjacent to brickwork, 50mm thick Celotex CG4000 cavity wall insulation, DD140 type wall ties at max. 750mm centres horizontally, and 450mm centres vertically.
Wall tie centres to be decreased to 300mm at vertical jambs.
Wall insulation to be continuous with roof insulation.

INNER LEAF OF CAVITY WALL
100mm thick blockwork to approved standard. (Celcon Solar / Super Solar

Inner face of wall to receive two coats of lightweight plaster and skim coat.

CAVITY WALL CLOSURES
Wall cavity to be closed at all sills, jambs and heads with Thermabate Cavity closers.
Cavity wall to be firestopped at all external openings and at eaves, and to top of wall between garage and dwelling.

PARTY WALL CONSTRUCTION
Party walls / fire walls to be taken up to underside of roof coverings.

'U' VALUES OF CONSTRUCTION
External walls and floors to have relevant structures and insulation to Achieve new U Values.
External wall to achieve a U value of 0.28W/m2K.
Pitched roof with insulation at rafter level to achieve a 'U' Value of 0.18W/m2K.
Windows to achieve a U Value of 0.18W/m2K.
Floors to achieve a U Value of 0.22W/m2K.

STUD PARTITIONS
75mm x 50mm treated, Grade SC3 timber with members horizontally, and Vertically at a maximum of 600mm centres.
75mm thick Rockwool thermal insulation quilting fixed between studding members.
12.7mm thick plasterboard fixed to both faces, finished with lightweight Plaster Skim coat.
FIRE RESISTANCE
All elements of construction to be half hour fire resistant.

PITCHED (WARM) ROOF CONSTRUCTION.
Marley Modern concrete interlocking roof tiles, Smooth Grey colour fixed on 50mm wide x 25mm deep tanalised timber tiling battens, across 1 layer of Tyvek Permo breathable membrane, fixed across 47 x 225mm timber rafters as designed by the roof truss manufacturer. Rafters to be doubled up around Velux rooflights. 130mm thick Kingspan K7 insulation between roof rafters, and underdrawn with K18 dry lining board comprising of 25mm thick insulation and 12.5mm thick plasterboard. Maintain minimum 25mm air space between insulation and Tyvek Permo breathable membrane.
Pitch of roof to be 40 degrees. Rafters to be birdsmouthed over timber wallplate.
100mm thick Rockwool thermal insulation quilt (10kg/m3) laid between Ceiling Joists, and 170mm thick Rockwool thermal insulation quilt (10kg/m3) laid across top of ceiling joists.

FLAT (WARM) ROOF CONSTRUCTION
12.5mm limestone chippings, bedded in hot bitumen, laid over two layer high performance bitumen roofing felt to BS 747, laid over a BS 747 type 3G vapour diffusing layer, laid dry and butt jointed (mineral face down)over 80mm thick Celotex double-R RG2000 board, loose laid with tight butt joints over a vapour control layer of felt, on 19mm thick Sheathing grade plywood, Laid across 50mm wide firring pieces to give a minimum falls of 1 in 80, laid across, and fixed to timber joists at regularised centres (as truss designers calculations / design.
Ceiling to be underdrawn with 12.5mm thick Duplex plasterboard, and finished With a skim coat of lightweight plaster.

LEADWORK
150mm high upstand lead flashing at abutment of dormer walls / cheeks and main roof pitches.
Provide the equivalent of 5mm wide continuous ventilation gap to abutment Of Mono pitch roof and abutting wall.
Eaves ventilation equivalent to 25mm continuous air gap to be provided.

FASCIAS, BARGEBOARDS AND SOFFITS
New solid core uPVC, Grey coloured, fascia boards to be installed throughout. Glidevale (or similar approved) eaves ventilator units fixed full length to the fascia and soffit board to provide continuous ventilation to the roof void.
The roof eaves should not be obstructed with insulation quilt, or other materials.

ANCHOR STRAPS
30mm x 5mm galvanized mild steel anchor straps 1000mm long, built in at Maximum 2 metre centres, and strapped over 100mm wide x 75mm deep treated timber wall plate(s).
Straps built into roof on pitch line of roof to restrain roof rafters.
Where the straps are at right angles to the roof timbers, timber noggins 50mm wide x 100mm timber noggins fixed between rafters, to support roof straps.

LINTOLS (EXTERNAL WALLS)
All lintels over existing windows and doors to external walls to be inspected, and replaced with a suitable Catnic lintel where required.
Catnic lintol type CN4, or similar approved, with minimum 150mm end bearing.
Lintols voids to be filled with Rockwool insulation quilt.

LINTOLS (INTERNAL WALLS)
Lintels over existing internal walls to be opened up for inspection, and replaced with new 100mm wide x 150mm high steel reinforced concrete lintols, with minimum of 150mm end bearing per end where required.

RAINWATER GUTTERS AND DOWNPIPES
110mm diameter half round uPVC rainwater gutters, to discharge into 68mm diameter uPVC rainwater pipes. Rainwater pipes to discharge into trapped waste gullys.

SOIL AND VENTILATION PIPE
110mm diameter uPVC soil and ventilation pipe to extend above roof eaves level, or a minimum of 900mm above window within 3 metres horizontal distance.
Soil and ventilation pipe to be straight and vertical.
Bird guard fitted to the top most point of SVP.
Lowest connection to the soil and ventilation pipe to be a minimum of 760mm above the invert level of the drain.
Access point fitted above ground level.
All sanitary appliances to be connected direct to the Soil and Vent pipe.
Slow radius rest bend fitted to bottom of SVP, and discharge into a manhole.
75mm deep seal on trap, and 40mm diameter upvc waste pipe to sink.
75mm deep seal on trap, and 32mm diameter upvc waste pipe to basin.
75mm deep seal on trap, and 40mm diameter upvc waste pipe to shower.
Shower trap to be accessible.

NOTES

The client will supply the following items which will be fitted and installed by the contractor.
Kitchen units, sink unit, work tops, cupboards, cabinets and white goods.
Ceramic floor and wall tiles for the bathrooms / wet areas and kitchen.
Internal doors and door ironmongery.
Electric light fittings internally and externally.
Paving materials for pathways, drive and patio areas.
Skirting boards and architraves to all areas.
The client sill supply all radiators which are to be fitted by the contractor.
All sanitary ware, including shower fittings, shower screen and accessories.
The wood burning stove and the lounge fire are to be supplied by the client, and fitted by approved Gas Safe installers.

DRAINAGE BELOW GROUND LEVEL
All existing drains to be cleaned, flushed out and tested to ensure they are watertight and operational.
The size, depth and direction of flow of drains are shown on the drawings For identification purposes only.
The exact size, depth, direction of flow, and positions are to be fully determined on site prior to commencement of works, or laying any drains by the Contractor.
All drains under building, and drains within 1 metre of building to be Fully encased in 150mm thick concrete all round.
Drains passing through the structure to have a steel reinforced concrete Lintol over, supporting the structure so as not to interfere with the drainage.
All new drains to be 100mm diameter Supasleve, laid to give a self Cleansing velocity.
Manholes greater than 900mm deep to comprise 150mm thick concrete base; 65mm thick steel reinforced, precast concrete manhole rings, backed with Minimum 150mm thick Grade 25 plain concrete. 150mm thick concrete cover surround, with airtight metal cover and frame set into slab.
Manholes less than 900mm deep to be Hepworths pvc pre-formed chamber, with metal cover and surround, bedded, and surrounded in 150mm thick concrete. Cover and frame set in 150mm thick concrete.
All new rainwater and waste gulleys to be trapped.
Gulleys bedded and surrounded in concrete, and fitted with a suitable grating.

PVCU WINDOW FRAMES
Light grey coloured PVCU frames – fully draught stripped, with inner structural frame, and thermal breaks, to comply with BS. Windows to be draught stripped.

GLAZING
Any glazing below 800mm from floor level, 1500mm for doors, and any Glazing Within 300mm to be toughened or laminated safety glazing to BS 6206.
Glazing to be "Low Emissivity" double glazed units with minimum 18mm / 24mm Wide air space; Obscure glazing to Bathrooms, toilets etc.

VENTILATION REQUIREMENTS (Minimum)
Habitable Rooms
Window opening area 1/20th of floor area. 8000 sq.mm background ventilation.
Kitchen
4000 sq.mm background ventilation to be provided.
A mechanical extract providing 30 litres per second (adjacent to a hob) Or 60 litres elsewhere.
Utility
8000 sq.mm background ventilation.
Mechanical extract providing 30 litres per second.
Bathroom
4000 sq.mm background ventilation.
Mechanical extract providing 15 litres per second, with 15 minute over-ride facility.
Mechanical extract fans to have a 15 minute over-ride in Bathrooms and W.C's.

ENERGY SAVING LIGHTING
Luminous efficiency of lamps greater than 40 lumens per circuit watt.
Provide energy saving lighting to all new rooms where applicable.
EXTERNAL DOORS
New external front door to be double doors of approved timber construction hung in a timber frame. Other doors to be light grey coloured uPVC framed doors, fitted with 4 locking points and security locks.

INTERNAL DOORS
Internal quality doors to be as specified on the drawings / schedules.

SANITARY WARE
Sanitary ware to be as specified by the Client.
Sanitary ware fitting to comply with British Standards Specification.

ELECTRICAL INSTALLATION
All electrical works covered by Part P (Electrical safety) must be designed, installed, inspected and tested by a person competent to do so. This person must be registered with an authorised self-certification scheme (eg. BRE Certification, ELECSA, NICEIC, or NAPIT Certification).
Prior to completion an appropriate BS 7671 electrical certificate must be provided by the Competent person.
Quantities and positions of fittings as per schedule / or agreed with Client.
Test equipment and installations on completion of the works, upgrade Certifing if required.

GAS INSTALLATION
All works to gas installations to comply with CORGI Standards, and Codes Of Practice. Provide Gas Safety Certificate.

HEATING INSTALLATION
Install new central heating boiler and radiators to current Standards and Requirements. New radiators to have thermostatic radiator valves (TRV's). Radiators and boiler supplied by the client.

KITCHEN UNITS
Kitchen units to Client's specification and requirements.

DECORATIONS
Ceilings & Walls – 1 mist coat and 2 coats of white emulsion paint.
Joinery Items – 1 primer coat, 1 undercoat and 2 gloss finishing coats of paint to approved colour(s).

SMOKE DETECTORS
Smoke detectors to be provided in the Hall, and on Landing area, supplied From an independent ring main, and to be inter-connected.

HEAT DETECTOR
Heat detector to be provided in the Kitchen, supplied from an independent ring main, and to be inter-connected.

HEIGHT OF HABITABLE ROOMS
The minimum height of habitable rooms is to be 2.3 metres.

STRUCTURAL STEEL BEAMS
Structural steel beams in accordance with the Engineer's designs.
Steel beams to be seated on Grade 25 concrete padstones.
Steel beams encased to give a minimum of half hour fire resistance.

MOISTURE CONTENT OF STRUCTURAL TIMBERS
All structural timbers to be stamped 'KD' or 'DRY' to ensure that Moisture content does not exceed 20%.
CEILING RAFTERS SIZE 50 x 150mm Grade SC4 @ 450mm centres.
ON SATISFACTORY COMPLETION OF THE WORK REMOVE ALL DEBRIS ARISING FROM THE WORKS.

STATUTORY SERVICES
The Contractor will include for the re-location of the electric, gas and water services to positions shown on the drawings, including for all excavation works required, and inspections by the relevant Utilities Services Departments.

REPAIRS TO FLOORS
Flooring within the dwelling is to be lifted and the underfloor void to be inspected for rot. Any treatment and repairs to be carried out, and all infected timbers to be replaced as necessary.

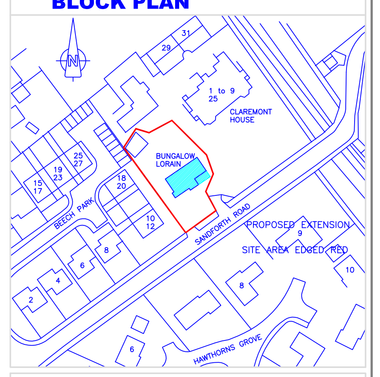
BOUNDARY FENCING
The contractor is to carry out the replacement of fencing to the perimeters of the site, with new fencing as agreed by the client.

SITE AREA
The contractor is to arrange for the removal of all vegetation within the site area, and prepare the site for landscaping works, installation of patios, pavings and planting areas to the client's requirements.

ELECTRICAL INSTALLATIONS
Power supply to be provided to position close to front entrance gates.
Power supply to be provided to the garage in the rear garden.

Rev.	Date	Amendments
G	06/01/15	Velux rooflights to front elevation modified
		French doors and Juliet balcony to Bedroom 1
F	12/12/14	First floor plan and windows to rear dormer
		amended to suit truss layout
E	05/11/14	Structural elements added
D	11/10/14	Amendments to plans as email 09/10/2014
C	09/10/14	Amendments to plans as email 07/10/2014
B	06/10/14	Amendments to plans and elevations
A	06/10/14	Amendments to plans and elevations

BLOCK PLAN



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Liverpool, L12 1LN

Drawing Title: Building Regulations Drawing

Dwg No: 03 | Revision: G
Scales: 1:50, 1:1250 | Date: 19/10/2014

Dimensions shown are to structural elements and not to finished surfaces.

Scale in Metres
1 0 1 2 3

Existing Floor Area	= 112.30 sq.m
Area of Extension	= 120.00 sq.m
New Floor Area	= 232.30 sq.m