

Second floor joists Provide new 170 x 47mm C24 timber floor joists at 400mm centres as layout plan and calculations supported onto steel beams and internal load bearing walls. All multiple joists should be bolted together with m 12 bolts at 450mm centres, with double-sided tooth plate connectors. Existing lintels taking additional loads to internal openings should be exposed to ascertain their adequacy for the purpose. Provide central noggins to floor joists to prevent twisting where span exceeds 2.4m and ensure that the existing 100 x 50mm ceiling joists are securely strapped to the new floor joists where the binders are removed. Provide 21mm thick t&g boarding to the floor or equivalent with a minimum mass of 15 kg/m². Provide 100mm thick, 10 kg/m³ mineral wool sound insulation to the floor structure supported on chicken wire stapled to the sides of the new floor joists. Electrical cables should be fixed to the structure above the insulation to enable heat dissipation. Sound insulation work to the new floor structure should extend to the full width of the property and into the eaves. First floor joists to be packed off existing wall plates by 25mm. Floor joists connections onto the hanger via joist hangers as calculation details.

External dormer walls to be constructed in 100 x 50mm timber studwork with horizontal and vertical noggins. Provide 100mm x 50mm head and sole plates to all studwork construction. Dormer face to be braced with 12.5mm plywood and lined with breathable felt behind 25mm x 18mm timber battens to create air void. Provide 18mm render to B.S. 5262 on e.m.l. Insulated between uprights with 80mm thick Celotex double R insulation with 25mm celotex to the internal face behind a 12.5mm plasterboard internal lining with a plaster skim. Dormer cheeks within 1.0m of the boundary to be lined both sides with 9.5mm supalux boarding or equivalent behind the plywood bracing. Provide lintel over the dormer windows as calculation sheet 5. Provide code 4 lead flashings and soakers to all roof abutments. Install new obscured glazed window to the side gable with proprietary insulated catnic lintel over the opening with 150mm end bearings. Provide 30 x 5mm holding down straps at 1.2m centres to the gable at floor, rafter and ceiling level. Provide 25 x 18mm battens between the render finish and the plywood to provide a ventilated air gap where appropriate as may be requested by Building Control. Alternative dormer finish to be tile hanging on battens on breathable felt on plywood sheathing.

Provide tiles to suit the 13 degree roof pitch on 18 x 25mm tile battens laid at gauge to suit on breathable roofing felt installed in accordance with the manufacturer's instructions on 175 x 50mm rafters at 350mm centres spanning onto the ridge beam and fixed to the existing ridge board. Insulated between rafters with 150mm Celotex insulation and provide 25mm to the underside of the sloping ceiling. Provide 100 x 50mm high level ceiling tie bolted to the rafters with m8 bolts and double sided tooth plate connectors. Provide a full width spanning 152 UC37 beam to support the rafters. See

Note dormer roof or new ridge to be no higher than the existing ridge line.

Partitions to be 100 x 50mm treated s/w studwork at 400mm centres with horizontal noggins at 1200mm centres fixed both sides with a layer of 12.5mm gyproc wallboard with all joints taped and filled prior to plastering. Insulate internal studwork walls with 100mm fibreglass. Provide 100mm Celotex double R to exposed roof areas, to ashlar walls, to party wall partition and to the new gable construction. Provide beams below parallel studwork as layout plan.

Insulation to the sloping ceilings

calculation sheets and roof plans/sections.

Provide 50mm thick Celotex insulation between the rafters with 60mm to the underside fixed to the rafters. Ensure that a minimum 50mm air gap is achieved between the rafters. Plasterboard lining and plaster skim to the underside. Provide soffit ventilation to the front and rear elevations and high level tile vents to encourage cross ventilation of the sloping ceiling areas. The front roof pitch is to be stripped and re-felted with breathable felt in which case the inter rafter insulation could be increased to 60mm with 50mm to the underside of the rafters.

Provide 100mm dia. half round gutter to the new dormer roofs and connect to the existing surface water drainage system by running onto the existing roof pitch with a proprietary shoe. Gutter to be laid to fall to 63mm dia. rainwater down pipes. Provide a new 63mm diameter rainwater down pipe to the front elevation to take discharge from the newly gable end roof. Roof water from the main roof pitch to the front elevation to connect to a 1m³ soakaway sited at least 5m from any structure.

The existing bathroom connects to the SVP to the side elevation connects directly to the below ground drainage system. New bathroom to connect to the existing SVP which is to be raised 900mm above the new gable end window if it is to be openable. The siting of appliances to the bathroom has yet to be agreed and is subject to clients approval. A conditional approval is requested for this matter and necessary associated below ground drainage alterations. In any case provide upvc waste pipes to new appliances with 75mm deep seal traps. 38mm diameter pipe work to wash hand basin and shower. Provide rodding eyes to waste bends. Proprietary 100mm diameter waste pipe to w.c. Ensure all pipework is adequately supported and clipped to an adequate structure. Pipework to be laid to appropriate falls to the SVP.

New external windows/door to match existing and to be double-glazed to achieve a minimum 'U' value of 1.6 W/m² °C in UPVC frames. (16mm air gap with 'soft' low-E coating). Glazing to 'critical areas' to be safety glass to B.S. 6206:1981. Critical locations include any glazing within 800mm of the floor level in windows and 1.5m of the floor level in doors. Ensure that the windows to the new bedroom and bathroom achieves minimum 1/20th floor area ventilation with 8000mm² background ventilation. Provide 15 litres/second mechanical ventilation to the new bathroom. Guarding to patio doors to be 1100mm high above the finished floor level and to be laminated glass. Conditional approval requested for glazing design and fixing.

Ensure 40mm separation between the new structural timber and the existing chimney breasts to the party wall side. Chimney stack to terminate minimum 1.0m above the ridge line of the front pitched dormer. Consultation with the adjoining property regarding this matter following the guidelines outlined in the party wall Act 1996 where appropriate.

Means of escape provision.

Install mains operated and interlinked smoke detection to each level as shown. Provide mains operated and interlinked heat detection to the kitchen. Ensure all rooms opening onto the staircase enclosure at ground, first and second floor levels are provided with ½ hour fire resisting doors. Doors marked * to have 25 x 25mm door stops or intumescent strips. Any glazing to borrowed lights are to be altered to Georgian Wired Glass or fire resisting glass in a suitable framework.

Staircase specification.

Steps to the new staircase to have a rise of 195mm and a going of 220mm. The minimum going of the tapered treads is to be 50mm. Maximum pitch of the staircase to be 42°. Minimum headroom requirement throughout the length of the flight and to the landing areas is 2.0m. Ensure that the existing headroom to the existing staircase is not prejudiced. Provide a handrail to the length of the flight between 900 - 1000mm above the pitch line. Any balustrade to be minimum 900mm high, be non-climbable with no gaps in excess of 100mm wide.

Exact rise and going of each step to be calculated on site once floor levels set prior to the ordering of the staircase.

Client Approval	
Signature:	Date:

All dimensions must be checked on site and not scaled from this drawing.

All works are to be undertaken in a 'workmanlike' manner with suitable and BRE approved materials and components. All to be in accordance with Building Regulations 2000 (as amended). No part of the sub structure or super-structure should protrude over the boundary line. The designer is neither responsible for the works undertaken on site nor the manner in which any appointed contractor undertakes the works indicated. The internal layout and positioning of the internal doors and sanitary appliances is diagrammatic and shown for statutory approval purposes. The final arrangements and positions are subject to approval by the client. Any omissions, errors or changes on site are to be reported to the designer. Floor/ceiling and fascia/soffit/gutter levels to the new extension to line through with those of the existing property.

he scope of the works involve the formation of a loft conversion with a rear pitched roof dormer.

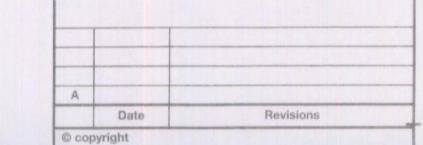
The existing electricity system should be extended to the new parts of the accommodation by a qualified electrical engineer registered as a competent person in accordance with Part P of the Building Regulations. Installation and test certification will need to be given to the Local Authority Building Control Office in accordance with BS 7671. Switch and socket outlet positions to be agreed with the client. The new lighting system should be provided with 75% of fittings that can only take lamps having a luminous efficacy greater than 45 lumens per circuit watt.

Boiler
The existing boiler located within the roof space is to be reposition where agreed with the Local Authority Building Control Officer, Any new boiler to have a SEDBUK rating of 96%. Works to the boiler to be undertaken by a Gasafe registered engineer and certification to be given to the Local Authority on completion and commissioning of the system. All pipe work should be insulated as necessary. Provide thermostatic radiator valves to the new radiators, positioned to the clients' request. Note boiler outlet and mechanical ventilation outlets must not project over the

All skirting, door linings and architraves to be s/w profile to match existing, all adequately primed all round prior to fixing. Decorative finish subject to client approval and

Notices shall be served on adjoining owners when the work is relevant to the Act, and a party wall surveyor appointed. See Party wall booklet.

The contractor shall be aware of his/her obligations and responsibilities under the Health and Safety Executive CDM Regulations and a 'planning supervisor' appointed



ALL EXTERNAL FINISHES AND MATERIALS ARE TO MATCH THE EXISTING IN COLOUR, TEXTURE AND APPEARANCE

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LOFT CONVERSION

Drawing Title PLANS SECTION AND ELEVATIONS FOR LOFT CONVERSION

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Date JAN 2014

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