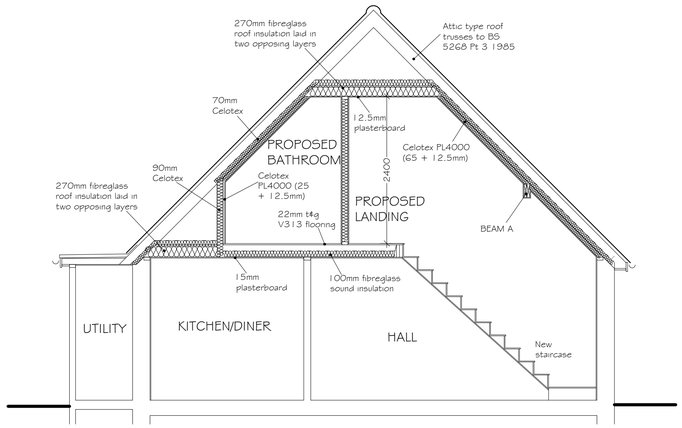
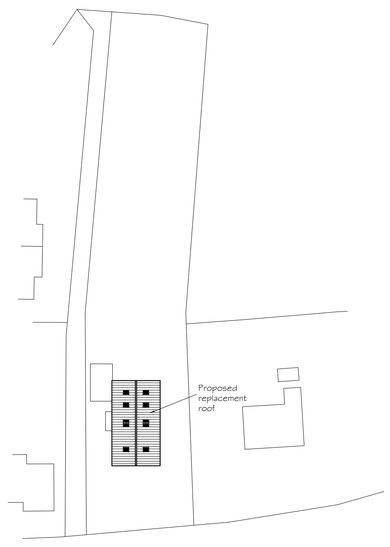


SECTION A - A 1:50



SITE PLAN 1:500

Construction Notes Continued

VELUX ROOFLIGHTS - Provide Velux double glazed roof lights where indicated on plan with glazing and trickle ventilation as same specification as window/doors. Provide double trusses either side of rooflights.

REPLACEMENT ATTIC TRUSS ROOF CONSTRUCTION - Existing main roof structure to be removed and replaced with new licensed manufacturers prefabricated attic type roof trusses at maximum 600mm centers all designed, installed and braced in accordance with BS 5268. Pt 3. 1985 (final design layout and truss calculations to be submitted to Building Control for approval prior construction of roof) supported off existing timber wall plates. Roof finish to comprise of Marley Modern roof and ridge tiles fixed to 50 x 25mm s/w treated tile battens fixed on one layer of Proctor Roofshield vapour permeable membrane. Horizontal ceilings to be insulated with 270mm fibreglass quilt laid in two layers 90 degrees to each other 100mm between joists and 170mm over joists. Insulate sloping ceiling with minimum 70mm Celotex between rafters ensuring a 50mm ventilation gap is maintained above the insulation and provide Celotex PL4000 insulation board (65 + 12.5mm) to underside of rafters with taped joints and a plaster skim coat finish to suit clients' choice. Provide fascia board and soffit to match existing.

VENTILATION - Mechanical ventilation to be provided to bathrooms, shower rooms, utilities, kitchens and WC accommodation where present. Mechanical vents to be generally manually operated fans with 15Litres/second discharge rate to bathrooms, shower rooms and WC accommodation, 30Litres/second to utilities and 60 Litres/second to kitchens all ducted directly to outside. Windowless WC and other wet area accommodation fans to be linked to light switch and have a 15 minute overrun. All new internal doors serving accommodation to have a 10mm air transfer gap at bottom.

STAIRCASE AND BALUSTRADE GUARDING - Provide new timber staircase giving access to new first floor accommodation. Width minimum 800mm wide with max. 220mm risers and min. 220mm goings. Max 42 degree pitch with minimum 2m headroom. Provide handrail and guarding to new staircase and landing and ensure staircase construction has no gaps allowing a 100mm sphere to pass through. Handrails to be positioned 900mm above pitch line and landing with vertical balustrades spaced at max. 100mm c/c. First floor french doors serving proposed bedroom to be guarded with 1100mm high toughened glass balustrading within stainless steel frame with no gaps exceeding 100mm.

BEAM - Provide timber beam in position indicated on plan bearing on girder trusses.

SMOKE DETECTION - Provide mains operated, interlinked smoke detection system in accordance with BS5839-6:2004 permanently wired to a separately fused circuit at distribution board with smoke detectors fitted with a capacitor or battery back up. Smoke detectors to be provided in hall and on each floor level on landings within 7m of doors to habitable rooms. Detectors to be situated at least 300mm from any wall and light fitting.

WOODBURNER, METAL CHIMNEY & HEARTH - Twin wall insulated metal chimney system serving new wood burner to comply with BS4543: Part 1: 1990 and installed in strict accordance with manufacturers instructions terminating at least 1m above highest point of intersection with roof. No combustable material to be placed within 40mm of flue. Provide permanent open air vents for combustion air with a total free area of at least 300m2/kw rated ouput up to 5kw appliance output and then 550mm2/kw of appliance rated output above 5kw. Form constructional hearth min. 125mm thick from non- combustable material (total thickness can include the floor screed) protruding 300mm beyond appliance with 150mm on returns. A robust indelibly marked information notice plate for the hearth and the flue use to be provided and securely fixed next to the electricity consumer units. Spillage test to be carried out in living room to ensure adequate ventilation has been provided for working appliance while mechanical vent in kitchen is operating.

BOILER AND HEATING - Existing boiler to be checked for adequacy for additional heat demand and replaced if necessary with oil fired balanced flue condensing boiler positioned to suit clients choice in agreement with Local Authority Building Control. Boiler to achieve a SEDBUK 2005 rating of 90% or 88% if calculated under SEDBUK 2009. Flue outlet to be minimum 600mm from any opening window or door and guarded externally if within 2m of ground level. Heating system to be adapted and extended to accommodate project and repositioning of boiler if necessary. Radiators to be fitted with thermostatic radiator valves and heating system to be controlled with a programmer and room stat. Hot water cylinder if provided to have factory-applied coating of 35mm thick PU-foam having a minimum density of 30kg/m3 ensuring the heat losses from the cylinder comply with the 'Domestic Building Services Compliance Guide 2013'. Hot water supply to the bath to be regulated to ensure it does not exceed a temperature of 48°c with all other hot water supply outlets not to exceed a temperature of 60°c.

PLUMBING - All appliances to have pvc waste systems with 75mm deep seal anti-syphon traps with cleaning eyes on all waste pipes on changes in direction. Where indicated basins to have 32mm waste pipes, baths, showers and sinks to have 38mm waste pipes all discharging into new or existing 100mm dia. soil and vent pipes, trapped gullies or 100mm dia. stub stacks. New or extended SVP's where present to terminate 900mm above any opening within 3m and fitted with a vermin proof cage. Above waste pipes where exceeding permitted lengths (Up to 1.7m for 32mm dia. wastes and 3m for 38mm) to be increased to 50mm dia. where permitted lengths exceeded including common wastes where indicated on plan. Any bends within wet part of a SVP to be provided with rodding access points. Any waste pipes in excess of 40mm in diameter passing through fire separating walls or floors to be fitted with half hour fire collars where passing through roof/floor or encased in two layers 15mm plasterboard to give half hour fire resistance.

DRAINAGE - New drains where indicated to comprise 100mm dia. upvc pipes bedded on and surrounded in 150mm pea shingle. Pipes laid generally to 1:40 falls with a max 1:80 fall where a WC is connected at the head of the run. Provide new drains, gullies and upvc inspection chambers in positions where indicated on plan all connected to existing drainage system. Inspection chambers fitted with medium duty covers in gardens and foot paths and heavy duty covers in drives. Inspection chambers in drives to be bedded on and surrounded in 150mm of concrete.

SURFACE WATER DRAINAGE - 100mm half round upvc guttering fixed to fascia board and discharging into existing downpipes (positions as indicated on plan).

ROBUST CONSTRUCTION - Robust Construction should be utilised throughout the proposed works ensuring the wall insulation is taken 150mm below damp proof course level to overlap with the floor perimeter insulation upstand and meets at eaves level with the roof insulation to maintain continuity.

Construction Notes

GENERAL SPECIFICATION - All works are to comply with the current Building Regulations, British Standards and Codes of Practice referred to herein but not specifically mentioned. The works shall be carried out to the full satisfaction of the local authority Building Control Officer, Approved inspector or other body including submission of all necessary notices and payment of fees. All products referred to on the drawing and this specification are to be used strictly in accordance with the manufacturer's recommendations. Before starting any works, all site conditions and dimensions are to be checked and verified by the builder and any discrepancies reported to the Client. Allow to supply and fix/apply all new finishes/fittings to match existing unless otherwise specified, eg. doors/frames, windows, door and window furniture, skirtings, architraves, dado/picture rails etc. All softwood used in a structural capacity to be FSC or PEFC certified, min C16 grade (to BS 5268 pt 2, 1991) unless otherwise specified.

STRUCTURAL DESIGN - Construction specification to be read in conjunction with any structural calculations relating to project.

ELECTRICS - All electrics to be wired in accordance with latest IEE Regulations. Power outlets and light fittings to be located as directed by applicant. Efficient lighting to be provided in new building/extension/alterations with at least 75% of the total of all new light fittings to have a luminous efficacy greater than 45 lumens per circuit-watt. Fixed external lighting to be controlled via. sensors which automatically turn off lights when not required and when there is sufficient daylight. Each external light fitting should not have a lamp capacity exceeding 150W. All electrical work required to meet the requirements of Part P (Electrical Safety) must be designed, installed, inspected and tested by a registered person competent to do so. Prior to completion the Council should be satisfied that Part P has been complied with. This will require an appropriate BS 7671 electrical installation certificate to be issued for the work by a registered person competent to do so.

METERS - Where existing gas and electric meters/boxes need re-locating, applicant should contact relevant service providers and all work to be carried out by nominated contractors.

HEALTH AND SAFETY - The client is to be aware that the work shown should only be executed by competent builders who are fully proficient in all forms of safety procedure relating to all aspects of building, demolition and temporary shoring and the safe operation of all plant and equipment including personal protection. The Principal Contractor is responsible for preparing a Construction Phase Health and Safety Plan before commencing work, which shall include all necessary method statements and risk assessments and details of welfare facilities relating to the work shown on the plans and detailed in the specification. This document shall be made available to the Client if required. For domestic clients, the Principal Contractor is responsible for notifying the HSE if the project is to last more than 30 working days or involve more than 20 workers working simultaneously at any point in the project or exceed 500 person days. Upon completion of the work, if there has been more than one contractor involved in the project, the Principal Contractor shall provide a Health and Safety File to the Client. This shall contain as-built information, details of underground services, any hazardous materials used, health and safety maintenance instructions, maintenance manuals, all certificates and consents and details of any residual hazards that remain.

PARTY WALL ACT - Main contractor to ensure that there will be no undermining of foundations to adjacent properties and where applicable new works of any nature that are within 3 meters of adjacent owners property and boundary walls, the main contractor is to ensure all relevant notices are served, and agreements obtained in accordance with the Party Wall Act 1996, before any works are commenced.

ENCROACHMENT - No part of the structure above or below ground is to encroach over the boundary of adjacent properties without written consent from owners.

EXISTING STRUCTURE - Expose existing foundations and lintels where necessary for inspection by local authority Building Control where additional loading occurs before commencement of works on site.

FRONT DOOR INFILL FOUNDATIONS IF REQUIRED - Final depth and size to be agreed on site with Local Authority Building Control Officer. Foundations shown in 1:3:6 mix concrete (20mm agg)/Gen 1. Min. depth of 1m below finished ground level. Where trees are present in cohesive sub-soils depth to be determined in accordance with NHBC Standard foundation depth guidance notes - Chapter 4.2 or Structural Engineer consulted for final design. Drains where present passing through foundations to be sleeved and surrounded in a flexible material with vermin shield to outside face of foundations. Foundation to be provided under new load bearing internal wall where indicated on plan. Foundations taken below invert levels of any adjacent drains within 1m and public sewers where indicated on plan with Build Over Agreements sought from Anglian Water prior to any commencement of work within 3m of public sewers.

SUB-STRUCTURE - Solid walls below ground level where present to consist of solid fletton brickwork to correspond with thickness of walls above dpc including any piers indicated. Provide cranked air bricks ducted through oversite preparation to any existing airbricks if present. Ducting to be formed by 2 no. 63mm dia. down pipes laid side by side.

INFILL GROUND FLOOR CONSTRUCTION - Where indicated on proposed ground floor plan, provide 65mm Sand Cement screed on 100mm oversite concrete on 500 gauge vapour check barrier on 100mm Celotex flooring grade insulation on 1200g polythene DPM on 100mm minimum well consolidated and blinded hardcore. Provide perimeter insulation upstand (Min. R-value 0.75m2KW) on edges of floor slab adjacent external walls and semi-exposed walls. 1200g polythene dpm to have min. 600mm laps and taped joints. DPM to unite with DPC in internal and external walls. Provide A142 reinforcement fabric 1.2m wide in oversite concrete on lines of internal non load beaning block partition walls and underground drainage/ducting where present.

DAMP PROOF COURSE - 'Hyload' or similar approved damp proof course to full thickness of all solid walls, individual skins of cavity walls, partitions and cills, all having a minimum of a 100mm sealed lapped joints. Continuous damp proof course to be provided around the building/extension and lapped onto the existing dpc's, positioned in all external walls at least 150mm above surrounding ground or paving level.

WALL CONSTRUCTION - Raise existing external gable end walls in construction to match that below and finish walls internally with Celotex PL4000 insulation board (65 + 12.5mm) on dabs with taped joints and a plaster skim coat finish. Raised gables to be finished with 2 coat sand/cement render externally over existing and raised masonry construction. Ashlar wall voids to be filled with 90mm Celotex insulation and finish internally with Celotex foam backed plasterboard PL4000 (25 + 12.5mm) and a plaster skim coat. Ground floor internal partition wall to be constructed in 100mm blockwork built off existing floor where indicated. First floor partition walls constructed in timber stud work built off double floor joist/noggins where indicated. Studwork partition walls constructed of regularised 100 x 50mm C16 grade timbers at 400mm centres with 100 x 50mm head plate, sole plate and noggins to suit plasterboard joints. Provide fibreglass insulation to infill voids and finish both sides with 15mm plasterboard with taped joints and a plaster skim coat.

FIRST FLOOR CONSTRUCTION - Provide 22mm t&g V313 flooring grade chipboard on trusse floor members. Ceiling to comprise of min. 15mm plasterboard with filled and taped joints to receive a finish to suit clients choice. Floor voids filled with 100mm fibreglass sound insulation. Provide double trusses under 1st floor stud partition walls. Strutting of joists to be provided at mid span where joists span between 2.5 - 4.5m and 2 rows of strutting at one third span positions where span more than 4.5m.

LATERAL RESTRAINT - Restraint straps to be provided at 2m c/c at roof level and floors above ground level where present. Straps to span minimum 3 no. joists with noggins between joists on line of straps.

LINTELS - All lintels are to be galvanised steel lintels in masonry walls, 'catnic' or similar approved, with propriety cavity tray where required and attaining 150mm end bearings. Lintels in external walls to be clad with 15mm lightweight plaster coat to inside face of lintel. Lintel types as indicated on plan.

WINDOWS/DOORS - Provide upvc/powder coated aluminium windows and doors where indicated with trickle vents to give 8000mm2 (5000mm2 equivalent area) to each habitable room and 4000m2 (2500mm2 equivalent area) to bathrooms, ensuites, shower rooms, utilities, cloakrooms and kitchens. The windows and doors are to provide a minimum of 5% of floor area in openable window area to each room. The windows and doors are to be double-glazed with sealed units with a 16mm argon gas filled air gap and low-E glass (Emmissivity value = 0.05) to achieve a max. 'U' value of 1.8 for doors and 1.6 for windows fitted with draught seals and frames sealed at junction with walls with a flexible sealant. Provide emergency egress windows to new first floor habitable rooms including bedrooms and ground floor inner rooms where present. Emergency egress windows to have an opening casement fitted to allow an unobstructed area minimum 750mm x 450mm. Bottom of openable area of egress window to be not more than 1100mm above finished floor level. All new internal doors serving accommodation to have a 10mm air transfer gap at bottom.

SAFETY GLASS - All glazing in windows within a distance of 800mm above finished floor/ground floor level and glazing in doors and adjacent sidelights within a distance of 1500mm to be safety glass to comply with BS 6206 1981.

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Scale Bars

0 5m 10m 15m 20m
1:500
0 1m 2m 3m 4m
1:100
0 1m 2m
1:50

Project: Proposed replacement roof strucrure to form new first floor accommodation and alterations

Drawing Number	Scales	Paper Size	Revisions	Drawn
21/05/0142	1:50, 1:100, 1:500	A1	-	B.B