SPECIFICATION OF BUILDING WORKS IN REFERENCE TO PLAN 1692 ABC

SUSAN LOPPY, ARROCHAR, PRESCOT ROAD, MELLING, L31 1AN

PROPOSED EXTENSIONS WITH DORMERS AND REFURBISHMENT

JULY 2023

All work to be carried out to the satisfaction of the Building Control Officer and in accordance with the latest amendments to the building regulations.

A building control certificate shall be issued upon completion.

The original house is a detached bungalow, built from outer leaf 100mm face brickwork, 65mm cavity & 100mm internal brick.

The existing roof is traditionally constructed with timber rafters, purlins, roofing felt, timber batten and concrete roof tiles.

Windows and front door entrance are white UPVC.

The proposal would be to add an outrigger and front/rear Dormers to the property enabling an upper floor, housing four bedrooms and bathrooms, also a right hand side extension to house an integral garage.

FOUNDATIONS :-

Dig out foundation strip to a minimum of 900mm deep or to the satisfaction of the building officer, Lay concrete foundation (1:3:6) 700mm wide x min 150mm thickness.

Two leaves footing bricks or suitable trench blocks with 125mm cavity, facing brick external leaf up to DPC. Weak mix concrete in cavity to within 150mm from DPC (150mm from ground level to DPC).

BASE :-

Dig out base to incorporate 250mm compacted hardcore, 50mm blind sand, 1200 gauge visqueen barrier, 100mm Kingspan Thermafloor TF70 slabs tape jointed, 25mm Jab slab polystyrene upstands all round external perimeter, 1200mm visqueen barrier lapped over DPC, 150mm concrete slab, finish floor with minimum 65mm sand & cement fibre screed.

Floor U value of 0.18 W/m2 K.

The new garage floor level to be lower than the house floor by a minimum of 150mm.

DRAINS :-

Any drains that pass under buildings to be encased in 100mm concrete. Any drains passing under new walls to have concrete lintels over.

All pipework shall be 100mm diameter with falls of 1:40, surrounded by pea shingle, rodding access to be provided. All underground drainage to comply with BS7158 & BS801.

Inspection chambers to be installed upon excavation and design of any new drain runs, in agreement with the B.S.

New foul drainage installed for the new downstairs W.C.

New soil stacks at each side elevation to carry bathroom & en/suite waste through from the loft void.

All drainage is to be confirmed upon excavation and to the satisfaction of the building inspector.

RAINWATER :-

New roddable rainwater gully to be installed and connected to the underground pipework on the existing system.

Rainwater system to be checked upon excavation.

A percolation test should first take place to see if the ground is suitable.

If there is need for the soakaway then dig out a minimum 1m cubed pit, 5m from the nearest building, install 100mm PVCU pipework with a fall of 1:40, surround pipe in pea shingle. Pipe should terminate into the trench below the surface, line the pit with a geotextile material then fill with gravel, top off the trench with the material 250mm from surface then finish with soil, grass.

To the satisfaction of the building inspector.

MAIN STRUCTURE :-

Outside leaf to be 100mm Plasmor Aglite block, internal leaf to be 100mm Plasmor Fibolite block with 125mm cavity, housing 75mm Kingspan Thermawall TW50 + 50mm cavity clearance, 12.5mm plasterboard dot & dabbed with neat thistle finish.

Finish with ivory 'K' render

To achieve a U value of 0.18 W/m2K.

Thermabate or similar cavity closers fitted to all openings.

Fit Horizontal DPC to main abutments.

Walls ties to be stainless steel, 750mm ctrs horizontally, 450mm vertical,

225mm ctrs at reveals & corners in staggered rows, to be in accordance with BS 1243.

Bluebird or similar stainless steel butterfly ties to be fitted vertically to block work leaf.

Thermalite 150mm Turbo block wall to dividing garage/utility for fire prevention.

NEW FIRST FLOOR :-

Timber floor joists, 198mm x 47mm C16 @ 400 ctrs, resting on existing single leaf internal solid walls.

Chipboard, 22mm T & G flooring.

INTERNAL STUDDING :-

All internal first floor studding to be 98mm x 47mm set at 450mm ctrs, to have Rockwool soundproofing between studs.

OUTRIGGER ROOF :-

To be constructed with a traditional build using 198mm x 47mm C16 rafters @ 400 ctrs, 225mm x 75mm C16 purlins & 150mm x 25mm timber ridge.

98mm x 47mm timber wall plate fixed to inner leaf with bent M/S straps @ 1.8m ctrs.

Valley boards with code 4 lead flashings.

TYVEK breathable felt.

Tannalised 25mm x 50mm timber tile battens.

Grey Marley Modern concrete roof tiles.

Concrete matching ridge tiles.

Roof void to be insulated with two layers Rockwool roll insulation, 150mm laid between rafters with 150mm cross laid over.

To achieve U value 1.40 W/m2

Finish ceiling with 12.5mm plasterboard and neat skim.

EXISTING ROOF :-

Existing roof timbers are 100mm x 38mm to be upgraded by adding 98mm timber under, making a full 198mm rafter, continue over new garage with 198mm x 47mm C16 timber rafters @ 400ctrs.

Insulate between all rafters with 150mm Kingspan Thermopitch TP10 leaving a 25mm min air gap.

Continue timber purlins into end gable.

Roof loft voids to be insulated with Rockwool, two leaves of 150mm cross laid. U value 1.40 W m/2 K.

VELUX ROOF LIGHT :-

Velux roof light (MK04) fitted to the front elevation roof using manufacturers supplied flashing kit (EDZ).

Rafters and trimmers to be doubled up around the openings using M/S joist hangers.

U value of 1.40 W/m2.

FIRE DOOR :-

FD30 fire door and frame with intumescent strips to garage/utility entrance..

LINTELS :-

CN7 or similar, insulated to give U value not exceeding 1.2 W. end bearings to be 150mm minimum. To be installed to manufacturers details.

Concrete 'Naylor' lintels, 150mm x 100mm x 2 to be used over new internal doorway openings.

Lintel over new Bi-Fold doors is to be a fabricated steel beam with an 8mm steel plate welded under because of span size.

Double plate any internal steal beams with two layers 12.5mm plasterboard or 'Fireline, board.

WINDOWS & BI-FOLD DOORS :-

White UPVC windows & Aluminium Bi-Fold doors fitted and are to achieve a U value of 1.40 W/m2K. Soft low - E glass 16mm argon filled.

Toughened or laminate safety glass to BS 6206 & part K section 5 (glazing in critical locations) of the current building regulations, within 1500mm above floor level to doors & side panels, within 300mm of door openings & within 800mm above floor level to windows.

FRONT ENTRANCE DOOR :-

New front entrance black composite door with white UPVC combination frame.

VENTILATION :-

Background ventilation – controllable background ventilation via trickle vents to BS EN 13141- 3 within the widow frame at a rate of min 5000mm2. openings to be in excess of $1/20^{\text{th}}$ of floor area.

LEAD FLASHINGS :-

All Lead work to be code 4 with a minimum lap covering of 150mm.

FACIA & SOFFIT BOARDS :-

White UPVC facia, soffit and barge-boards fitted. Black PVCU gutters & Downspouts.

DOWNSTAIRS W.C :-

Fit out newly formed W.C with a close - coupled toilet and wash hand basin. Drainage to run into the existing waste run. Anti vacuum trap to be used on basin. Ensure good ventilation.

INTERNAL PLASTERING :-

Internal walls to be Dot & Dabbed, ceilings to be screw fixed with 12.5mm thistle board, scrim and neat skim.

ELECTRICS :-

All electrical work carried out to meet the requirements of part P (electrical safety) must be designed, installed, inspected and tested by a competent person registered under self certification scheme such as BRE certification Ltd, BSI, NICEIC certification services or Zurich Ltd. An appropriate BS7671 Electrical installation certificate is to be issued with a copy each given to the council & householder. Low energy lighting to be installed.

SMOKE DETECTORS :-

Mains operated smoke / heat detectors with battery back up & linked to hall, landings and all new areas, to be installed to BS 5446-1:200 & BS5839 6:2004 to at least a grade D category with battery backup.

Smoke alarms should be sited so there is an alarm in the circulation space on all levels / storeys & within 7.5m of the doorway to every habitable room. If ceiling mounted they should be 300mm from walls & light fittings.

HEATING :-

New heating system using double panel convector radiators with TVR valves. Any pipework passing through solid walls are to be adequately sleeved & insulated.

If a new gas boiler is to be installed or relocated then a gas safe registered engineer should provide a certificate of completion, with copies given to the householder & building control officer.

ESCAPE WINDOWS :-

Provide emergency egress opening widows to any newly created habitable first and second floor rooms, to have an unobstructed openable area of min width 450mm & 750mm height to ensure 0.33sq of clear opening. The bottom of the openable area should not be more than 1100mm above the floor.

DRAINS :-

Drains to be inspected upon excavation.

Underground drainage to be100mm diameter UPVC proprietary pipework & to give a fall of 1:40. Surround pipes in pea shingle. All underground drainage to conform with BS7158 & BS801.

BATHROOM & EN/SUITES :-

Provide hot & cold supplies together with waste fitments, to new family bathroom & en/suites.

Connect all wastes into new side elevation soil vent stacks using manufacturers fittings and anti vacuum traps.

Ensure these windows have obscure glazing.

CAVITY TRAYS:-

Cavity trays to be used where required with plastic weep inserts above

EXTRACTOR FANS :-

New bathroom, en/suites and W.C to have mechanical ventilation to outside air, with an extract rating of a minimum 15/Ltrs/second and a timed overrun of 15 minutes.

Kitchen & Utility to have mechanical ventilation to outside air with an extract rating of 60 Ltrs/second or 30 Ltrs/second if adjacent to a hob or external air.

LIMITING U VALUES FOR NEW FABRIC ELEMENTS IN EXISTING DWELLINGS

FLOOR - 0.18 W m/2 WALL - 0.18 W m/2 PICHED ROOF - 0.15 W/m2 FLAT ROOF - 0.15 W m/2 WINDOWS - 1.40 W m/2 DOORS - 0.25 W m/2