SPECIFICATION AND STANDARD NOTES FOR PROPOSED KITCHEN EXTENSION TO EXISTING PROPERTY AND PROPOSED CONSTRUCTION OF DETACHED GARAGE/STORE/FAMILY ROOM TO REAR GARDEN AT GLEN COTTAGE, 39 EASTGATE, COWBRIDGE, VALE OF GLAMORGAN, CF71 7EL FOR MR & MRS E. LOWE

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PROPOSED KITCHEN EXTENSION TO EXISTING PROPERTY AND PROPOSED CONSTRUCTION OF DETACHED GARAGE/STORE/FAMILY ROOM AT GLEN COTTAGE, 39 EASTGATE, COWBRIDGE, VALE OF GLAMORGAN

STANDARD CONSTRUCTION NOTES AND DETAILS

FOUNDATION

Cavity walls are to be taken down to 600mm x 300mm concrete strip foundations and internal 100 mm thick concrete block walls are to rest on 500mm x 200mm concrete strip foundation, where applicable. All foundations are to be taken down to a minimum of 750mm below external ground level or to an adequate load bearing strata. If necessary, foundations may have to be set deeper to achieve load-bearing strata. All foundations are to be taken down below invert level of existing drain runs. Foundations near boundaries are to be a minimum dimension of 500 x 500mm mass concrete to allow for eccentric loading.

SUB-STRUCTURE

Cavity walls below damp proof course level are to be built of 100mm dense concrete block external skin to within 225mm of DPC level and 3 courses of Class B semi-engineering brickwork (depth of brickwork dependent on ground levels). 125mm cavity is to be filled with lean mix concrete to within 150mm of DPC level. Provide 100mm minimum dense concrete block internal skin (subject to width of internal skin above DPC level). DPC to cavity and solid partition walls to be at least 150mm above outside ground levels.

CAVITY WALLS

New external walls are to attain a minimum "U Value" of 0.28 w/m2k, where practicable, by use of 100mm dense concrete block outer skin (rendered externally to match existing) – 125mm cavity filled with "Rockwool Energy Saver Full Fill" – 100mm thermal block inner skin with plasterboard on dabs to inner face of new external walls (or equivalent method to satisfy current Building Regulations). BBA approved wall ties are and clips are to be positioned at 900mm centres horizontally and at 450mm centres vertically, staggered and every course near a jamb I.G. Lintels type L1 / S with tray DPC over (or equivalent) are to be used above all new openings. At eaves and verge levels use a minimum 9mm 'supalux' board bedded in cement mortar to cover cavity to form barrier. Where internal masonry ground floor partition walls abut external cavity walls, tooth and bond new work to existing or use "Furfix" profiles

WALL TIES

Wall ties to be positioned at 900mm centres horizontally and 450mm centres vertically and doubled up at all door and window openings with all ties and cavities kept clean at all times and free of cement droppings.

LOAD-BEARING INTERNAL WALLS (Where applicable)

200mm concrete block thermal wall rendered and skimmed to be tooth and bonded into main cavity walls or secured with "Firfix" profiles to provide required U-value. Internal walls are to rest on separate foundation on firm load-bearing strata as referred to on plan.

SUB-FLOOR

Lay 65mm sand and cement screed on 100mm concrete slab on 1200 gauge polythene DPM on 25mm blinding on 150mm compacted and graded hardcore. Note: Slab to be reinforced with steel mesh in accordance with NHBC guidelines (if depth of fill exceeds 600mm). **New solid ground floors are to attain a minimum "U Value" of 0.25 w/m2k by use of 75mm "GA 4070 Celotex" boarding as insulation to new floor areas (rated "U Value 0.20 w/m2k).** Provide polythene membrane above and below insulation boards and provide insulation upstands to floor perimeter to meet a minimum R – value of 0.75m2k/w by use of "Celotex TB 4020" of upstand thickness equal to total of insulation board and screed thickness. Allow expansion gap of 10mm.Garage floor to be traditional construction of 150mm concrete on 150mm well consolidated hardcore.

PITCHED ROOF CONSTRUCTION

Pitched roofs to be fibre cement roofing tiles to match existing property fixed to 28 x 25mm treated S.W. battens on un-tearable, roofing felt to B.S. 747 on prefabricated clear span stress-graded TDA trusses to CP 112 set at 600mm centres. Provide 100mm x 25mm softwood timbers as binders secured across trusses at apex and 1/3rd points. Wind bracing to be provided by 100mm x 25mm softwood timbers secured to underside of rafters from eaves to ridge at 45 degrees – all as per BS 5268 Part 3. Trusses to be secured to 100mm x 50mm wallplate by 100mm galvanized roundhead nails or galvanized truss clips. Lateral restraint to be provided by 30mm x 5mm mild steel straps secured to underside of rafters with 75mm x 50mm noggins between and built into perimeter walls. Provide wallplate straps at 2.0m centres. Ceiling to be 12.5mm "Duplex" plasterboard with joints filled with scrim finish and finished in 6mm skim. Roof ventilation is to be provided by 25mm soffit vent strip with a fly proof screen. Provide a minimum of 50mm clear gap between insulation and roofing felt to assist through ventilation. **New pitched roof areas are to achieve U-value of 0.16 w/m2k by use of 100mm "Rockwool" insulation laid between ceiling joists with 170mm "Rockwool" insulation laid on top of and across ceiling joists or if "raked" type roof employed over kitchen area, "Celotex" insulation boards of required thickness to be utilized..**

Design and calculations for roof trusses are to be provided to and approved by Local Authority Building Control Section prior to commencement of work on site.

DRAINAGE GENERAL

Drains, generally, are to be 100mm diameter laid to minimum falls of 1 in 40 and are to be connected to main sewer via existing inspection chamber(s). Drains are to be laid on 150mm granular bed and surround. Where pipes run under any part of building, they are to be "bridged" by lintels to provide support above pipes. Maintain 50mm gap around drains. All back inlet gullies, where provided, are to be fitted with rodding access. Inspection chambers are to be constructed on 100mm concrete base with 225mm semi-engineering brick walls and are to be fitted with medium duty air-tight cover and steel frame.

STORM DRAINAGE

Provide 100mm half round white UPVC rainwater gutters to be fixed to fascia and connected via 68mm diameter white UPVC down pipe to discharge into back inlet gully. Gully is to be connected to separate storm drain or new soakaway via 100mm diameter UPVC drain pipe. All new soakaways are to be positioned at least 5.0m away from any building.

FOUL DRAINAGE

Wash hand basins are to be connected via 32mm diameter waste pipe to discharge into 100mm diameter soil and vent pipe, stub stack or below grating level into back inlet gully. Sink units and baths (if required) are to be connected via 38mm diameter waste pipes to discharge as indicated above. Combined wastes from wash hand basins or sink units are to be 50mm diameter. All sanitary ware wastes are to have 75mm deep seal traps. Water closets are to be connected via 100mm diameter pipes discharging either below ground foul drainage system or via 100mm diameter soil and vent or stub stacks. Soil and vent pipes, stub stacks and back inlet gullies are to be connected via 100mm diameter UPVC below ground quality drain pipe to inspection chamber. Refer to drainage layout. All internal soil and vent pipes are to be encased in plasterboard and skim and are to be well insulated and are to be fitted with a mesh balloon terminal at least 900mm above first floor window head level. Air admittance valves (durgo valve or similar) are to be positioned above cistern level of appliances connected thereto.

WINDOWS/DOORS

Windows and glazed doors are to be double-glazed white UPVC and windows are to have opening lights of area not less than 5% of respective floor area. Part of opening light is to be a minimum of 1.75m above respective floor level. Fit 4,000mm2 adjustable ventilators to heads of all new windows to kitchen and 8,000mm2 to all other rooms. Low-E, En = 0.05, softcoat glass is to be fitted to all windows and glazed doors with a minimum 16mm air-filled gap (to achieve "U Value" of a minimum of 1.8 w/m2k and g – value of 0.65).

WINDOWS/MEANS OF ESCAPE

All windows situated in habitable rooms are to have an unobstructed opening of 850mm high x 500mm wide with a maximum cill height of 1100mm to provide means of escape in the case of fire.

VENTILATION

Provide extractor fans in shower room and kitchen to be ducted to external air. Fans to have minimum extract rate of 30 litres per second to shower room operated by light switche and 60 litres per second to kitchen.

ELECTRICAL INSTALLATION

The electrical installation is to be carried out by a competent, qualified person and must comply in all aspects to current I.E.E. regulations. The electrical operative must liaise with the electrical supply utility provider regarding electrical loadings and the nature and location of the supply and its suitability for installation, earthing arrangements and location of external meters. No conduit or wiring shall be exposed and all wires in the roof space are to be clipped to the top of ceiling joists and not covered with roof insulation. No conduit or wiring is to be placed in the cavities of external walls.

GAS INSTALLATION

The gas installation (if required) is to be carried out by a competent, qualified person and must comply in all aspects to current Gas Safety regulations. The gas operative must liaise with the gas supply utility provider regarding the nature and location of the supply and its suitability for installation and location of external meters.

WATER INSTALLATION

The water installation (if required) is to be carried out by a competent, qualified person and must comply in all aspects to local Welsh Water (Dwr Cymru) by-laws. The water operative must liaise with the water supply utility provider regarding the nature and location of the supply and its suitability for installation including depth of incoming supply/insulation, etc to prevent frost damage and, where applicable, the location of water meters.

HEATING INSTALLATION

The heating installation is to be carried out by a competent, qualified person and must comply in all aspects with current codes of practice, Building Regulations and associated Approved Documents.

AUTOMATIC SMOKE DETECTORS

Automatic smoke detectors (if required) are to be connected via the mains supply and are to have battery back-up and are to be placed in appropriate positions. Detectors are to be interlinked.

GENERAL NOTES

1. Fit cavity trays, Code 4 lead flashings and soakers to all abutments.
2. All new glazing is to comply with Document "N".
3. Constructor is to check all site dimensions prior to commencement of works.
4. Constructor is to leave site clean and tidy on completion of all works.
5. Constructor is to liaise with local authority and all utility providers to ensure that all their directions/instructions are fully implemented.
6. All works are to be undertaken within boundaries of site and adjacent owners' consent must be obtained if entry into any adjoining property is necessary to carry out any works.
7. General – all works are to be carried out in accordance with current Building Regulations and Approved Documents and any subsequent amendments.
8. Radon barrier may need to be provided in foundation courses subject to local Building Control requirements.
9. If any building work affects adjacent property, written notice must be served on respective adjoining owner in compliance with the Party Wall Act requirements.
10. All electrical work must meet the requirements of Part P (Electrical Safety) section of the Building Regulations and must be designed, installed, inspected and tested in accordance with BS 7671 by a "qualified person" who is competent to so do.
11. All gas installation work must meet the requirements of the Gas Safety regulations and must be installed, inspected and tested on completion by a qualified Gas Safety operative.
12. All water installation works must comply with local Welsh Water (Dwr Cymru) by-laws and regulations.
13. **Trial hole to be excavated prior to kitchen extension being commenced to ensure the existence of adequate sub soil conditions, due to the proximity of the "well" to the side of the existing kitchen.**
14. A minimum of 2 no car parking spaces to be incorporated within the property boundaries to the rear of the property adjacent to the rear access. A further car parking space will be provided by the new garage area, providing a total of 3 no car parking spaces to the rear of the property.
15. Existing foul drains provided to the side of the rear annex of the property are to be checked for depth and access for connection prior to works commencing.
16. See structural calculations for proposed Universal Beam to be incorporated in proposed Family Room area.