29 Gardner Road, Fishersgate

Proposed Rear Extension

BUILDING REGULATION NOTES

- THIS DRAWING TO BE READ IN CONJUNCTION WITH STRUCTURAL ENGINEERS CALCULATIONS AND RECOMMENDATIONS
- ***No work should be undertaken until all consents (Planning and Building Regulations) have been received and approved. Any work undertaken is done so at the clients risk.***
- Careful inspection is to be carried out prior to the removal of any structural elements to ensure proper and adequate support is provided and maintained by new works.
- All building work is to be carried out in accordance with all current building regulations and codes of practice in force at this time.
- Any parts of structure covered over or inaccessible have not been inspected and no responsibility is accepted for these areas including underground.
- If the proposed works are altered on site and deviate away from the plan then it is the responsibility of the builder to notify the Architect and the Local Authority to ensure the alterations do not have impact on the design or the Local Authority approvals. None of the measurements on this drawing should be exceeded for whatever reason without consulting the Local Authority. If they are it could result in further permission being required for the works.
- No work to encroach over the boundary of the neighbour's property.
- All electrics, heating, plumbing and decorations to be altered/extended all to client's choice.
- This drawing and construction notes are for the purposes of Building Regulation approval only and do not represent a detailed specification or working site drawings.
- All lengths of proposed beams to be measured on site prior to ordering, to verify structural engineer's dimensions.
- All contractors must comply with all current Health and Safety legislation and the following Health and Safety Approved Codes of Practise:-
  Management of Health and Safety at Work.
  Managing Construction for Health and Safety.
- The building fabric should be constructed so that there are no reasonably avoidable thermal bridges in the insulation layers caused by gaps within the various elements, at the joints between elements and at the edges of elements such as those around window and door openings. Reasonable provision should also be made to reduce unwanted air leakage through the new envelope parts.
- ***The property owner is reminded of the requirement to serve a Party Structure Notice on any adjoining owner should they need to do so under the requirements of the Party Wall Act 1996.***

ADUR & WORTHING PLANNING SERVICES	
PLAN	AWDM/ 0610/16
DATE VALID	21 APR 2016

1

Foundations

750 x 450mm trench fill foundations (1:2:4 concrete mix). All foundations to be minimum 1.0m below ground level with the exact depth to suit site conditions. New foundations to go down to invert level of any adjacent drains. The depth and size of the footings are the minimum specification to comply with the current Building Regulations. Depth/size and full details of the footing to be agreed with the Building Control on site.
All foundations taking additional loads are to be exposed and checked for adequacy and suitability for ground conditions prior to commencement of work.
All existing lintels taking additional loads are to be exposed and checked for adequacy on commencement of work and replaced if necessary.

External Walls

Cavity walls comprising matching facing brick outer leaf with min. 100mm cavity filled with 100mm DriTherm Cavity Slab 32 Ultimate (0.032W/mK). Inner leaf 100mm Thermalite Turbo 2.9N block. (NOTE: See structural calculations for details of any load bearing blockwork). All walls constructed using 1:1:6 mortar or 1:5 masonry cement mortar. Finished with 13mm lightweight plaster internally. Providing a U value of 0.25 W/m^2K. Ensure stainless steel wall ties are used and are designed for a 100mm cavity. New walls to be bonded to the existing or certified stainless steel profiles to be used.
Horizontal strip polymer (hyload) damp proof course in each leaf of new walls min. 150mm above adjacent ground level in external leaf. DPC to be lapped with existing wall DPC and with floor DPM. Vertical DPC to be installed at all reveals where cavity is closed.
Blockwork below ground level to be Class A dense concrete or alternatively semi engineering brickwork. Cavities below ground level to be filled with lean mix concrete up to ground level and min. 225mm below damp proof course.
Ensure that at all openings no cold bridging occurs by using a proprietary system such as Thermabate Closers, or similar approved.
All walls constructed with stainless steel wall ties built in at 450mm centres vertically and 750mm centres horizontally in staggered rows. Doubled up at corners and reveals. Cavities closed at eaves level with slate and to be continuous.
All external walls running parallel to roof to be restrained at roof level using 1000 x 30 x 5mm galvanised mild steel horizontal restraint straps built into wails at max 1200 centres and screw fixed to joists.

Ground Floors

Suspended timber — to be 22mm flooring grade T & G chipboard to BS 5669 type 11/111 decking on 150 x 50mm treated floor joists at 400mm centres with solid strutting at mid span insulated with 150mm Celotex XR4000 flooring grade insulation (GA3000) between joists on 100 x 50mm treated timber plates, DPC honeycomb walling at 1.8m maximum built off thickened up oversite, 100mm concrete base, 1200 gauge polythene, DPM linked to all DPCs and 150mm minimum consolidated clean hardcore. 75mm minimum air space between concrete and underside of wall plates and 150mm air gap between concrete and underside of the floor joists. To achieve a U value of 0.13 W/m^2K.
Suspended floor ventilation to be provided in external walls to provide cross ventilation of $1500mm^2$ minimum per metre run of wall with 225mm x 75mm air bricks at 1.5m centres.

Pitched Roof

Timber roof structures to be fixed in accordance with BS Codes of Practice no CP3 and CP112.
Roof tiles (tiles to be able to be laid on the proposed shallow pitch) to match existing on 25 x 38mm sw treated battens on breathable roofing membrane on C16 grade rafters at max 400mm

centres. 100 x 50mm wall plate strapped to walls at 2000mm centres using 30 x 5mm mild steel straps. C16 grade ceiling joists at 400mm centres spiked to rafters. Fascia to match existing with soffit of Masterboard' fitted with continuous 25mm vent and fly-proof screen.
Skeilings (sloping ceilings) to be insulated with Celotex 2 layer method. Fit securely 75mm thick Celotex GA4000 insulation between joists leaving a minimum airspace of 50mm between the insulation and the membrane. Fit a second board of 50mm Celotex GA4000 under rafters and secure with 25 x 47mm vertical battens fixed through batten / insulation into rafter. Tape all joints with Celotex insulation tape and vapour seal all perimeter boards with sealant. 12.5mm foil faced plasterboard (vapour barrier) to be fixed to timber battens. All to achieve a U value of 0.18 W/m^2 K. Refer to Celotex for installation and fixing instructions.
Rafters to be restrained to gable walls with 1000 x 30 x 5mm mild steel straps at 1.2m centres screw fixed securely.
Provide code 4 lead stepped cavity tray and cover flashing at junction of pitch roof and existing cavity walling.
Please note that the roof tiles agreed with the planning authority should be able to be laid on the shallow pitch of the proposed roof. Contractor to check with the tile manufacturer to identify the minimum pitch that the roof tiles can be laid.
All rafters to be birdsmouthed onto timber plates
An eaves carrier shall be installed, draped into the gutter as recommended by the manufacturers of breathable membrane.

Beams and Lintels
Catnic or similar approved lintels to be used over door and window openings with min. 150mm bearings. All voids within lintels to be filled with 150mm fibreglass.
Steel beams to be encased to provide ½ hour fire protection with encasing in 2 layers of 12.5mm Gyproc wallboard nailed to timber cradles vertically and longitudinally not less than 44mm x 44mm spaced at 600mm centres, with all joints staggered.

Ventilation
New windows to provide openable ventilation area of not less than 1/20th of the floor area of the rooms which they serve, all fitted with a minimum 8000mm^2 trickle ventilator.
All new windows and doors to be double glazed timber or UPVC with a minimum U value of 1.4 W/m^2 K.
Velux rooflights to be fitted in accordance with manufacturers instructions, fitted with minimum 8000mm^2 trickle ventilator and to have a minimum U value of 1.4 W/m^2 K. Double up rafters either side. Contractor to check with manufacturer to ensure that the chosen rooflights can be fitted within the new pitch of the roof. (i.e. some rooflights have minumum / maximum pitches). If necessary Contractor to contact Velux direct to obtain necessary installation details.

Surface Water Drainage
Rainwater to 100mm half round PVC gutter laid to falls to the 65mm downpipes as shown to discharge to soakaway.
New soakaway min. 5m away from any building to be 1m^3 below invert of drain, filled with hardcore and covered with 50mm lean mix concrete on 1000 gauge polythene. Drain to be 100 dia UPVC laid to min. fall of 1 in 40, bedded and surrounded in pea beach.The new soakaway shall be designed to have a storage capacity for a 1 in 10 year storm and will depend on the soil permeability and the surface area of the roof that needs to be drained. Rainfall intensity for drainage design should be on average 0.021 litres/second/m^2. The following guidance should be used for draining an area of roof:-

- Rubble filled 16-18m^2 or roof per 1m^3 soakaway
- Aquacell crates – 40m^2 of roof per 1m^3 soakaway

Glazing
Any glazing located in walls less than 800mm from floor level or 1500mm in a door (inc. 300mm each side) to be toughened or laminated safety glass in accordance with clause 5.3, BS6206.

Heating
All alterations and extensions to the heating and hot water systems shall be designed, installed and commissioned in accordance with the Domestic Building Services Compliance Guide 2010.
A commissioning plan is to be provided showing which fixed building services are to be commissioned and which fixed building services are not to be commissioned indicating the reasons why. Please note that either notification via a relevant Competent Person Scheme or a commissioning certificate will need to be provided upon completion of the works.

Smoke Detectors
At least one number mains operated self-contained smoke alarm to BS 5446: Part 1 to be installed in the circulation space of each storey.
All smoke alarms within dwelling to be inter-connected, be permanently wired to a separate fused circuit at the distribution boards in accordance with IEE Regulations. They may operate at a low voltage via a mains transformer.
Smoke alarms must be installed within 7m of the living room and kitchen door, within 3m of all bedroom doors and within 15m of each other in corridors or landings. If ceiling mounted, smoke alarms should not be installed within 300mm of a light fitting. If wall mounted, smoke alarm should not be over radiator and should be fixed elsewhere within 150 and 300mm of the ceiling.

Electrical Safety
All electrical work undertaken is to meet the requirements of Part P (Electrical Safety) of the Building Regulations and should be designed, installed, inspected and tested by a 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 7671:2008 electrical installation certificate to be issued for the work. Work undertaken by a competent person.

Lighting
A minimum of 75% of all new internal fixed light fittings to be energy efficient type taking only low energy lamps or if standard fittings 75% of bulbs to be low energy lamps with integrated control gear (e.g bayonet or Edison screw base compact fluorescent lamp).