

PARTY WALL MATTERS

Party wall agreement (party wall Three Metre notice) to be signed and agreed with affected neighbouring property/properties a minimum of 60 days prior to the building works commencing on site.

WINDOWS / ROOM VENTILATION

All windows and doors to be double-glazed with 4mm glass and 16mm air gap between panes, argon filled and coated with low E. Provide 8000mm squared trickle ventilation within window frame to each habitable room. Provide minimum 5% ventilation to all habitable rooms. Provide mechanical fan to Kitchen extracting at 30 litres per second within cooker hood. All glass in doors to be toughened or laminated safety glass to BS 6206. Roof lights to achieve A-A fire rating.

PLUMBING

All hot and cold water plumbing to be installed in accordance with relevant British standards and codes of practice. Extension of central heating and provision of radiators to be discussed with client prior to works commencing. Provide thermostatic radiator controls to all new radiators in extension area. Insulate new pipe and ducted work located with 40mm insulation to achieve 0.035W/m2 o K. Provide and deposit details of heating controls, thermal efficiency and operating instructions for new Boiler with the Local Authority Building Control Department prior to installation on site. Boiler to be wall mounted and room sealed condensing boiler situated a minimum of 2.5m away horizontally from any neighbouring boundary and a minimum of 2.1m vertically from ground level. Boiler to achieve a minimum of SEDBUK rating of 86% and must be installed by a authorised Corgi installer.

ELECTRICAL INSTALLATION

All wiring to be 1.5mm core PVC insulated and chased into walls. Position and number of pendants, sockets and all electrical fixtures and fittings to be agreed with client. The installation of electrical works relating to the extension area should be carried out in accordance with current IEE and electricity board regulations. Provide one low voltage light fitting to extension area suitable for lamps of efficacy of greater than 40 lumens per circuit watt. All electrical work is to meet the requirements of Approved Document P (electrical safety) and must be designed, installed and inspected by a person competent to do so. Prior to completion the person competent to do so must issue an appropriate electrical installation and test certificate to BS 7671.

NOTE: All windows and doors to be double-glazed with 4mm glass and 16mm air gap between panes, argon filled and coated with low E. Provide 8000mm squared trickle ventilation within window frame to each habitable room. Provide minimum 5% ventilation to all habitable rooms. All glass in doors to be toughened or laminated safety glass to BS 6206.

ROOF CONSTRUCTION

Form extension roof spanning from existing outer wall to existing outer party wall. Provide code 4 lead cover flashing to pitched roof/wall abutments. Form 150 x 50 C16 rafters spanning between both walls fixed to timber, chemically fixed to wall. Pitched roof to be covered with Install roofing tile to match existing or similar with a pitch of min. 15 degree minimum with 75 headlap. Tiles to match existing roof colour as close as possible on 25x35mm tiling battens on untearable roofing felt on rafters. Rafters to be birds mouthed over wall plate. Lay 100mm Celotex between rafters. Fix 45mm Celotex insulation to under side of rafter with vapour barrier to underside and finish with 12.5mm plasterboard and plaster scrim. Fix wall plate to wall with chemical fixing bolts set at 600 centers. All rafters are to be set at 400mm centres. Fix 25mm continuous fascia ventilation at low level and continuous abutment ventilator at main wall junction to create cross ventilation.

SURFACE WATER DRAINAGE

Provide rain water hopper to side of new extension and connected into rainwater downpipe to side of extension. Downpipe to discharge to gully into 100mm pipe into new soakaway to rear of new extension.

FIRE PROTECTION

Encase all structural members with two layers of 12.5mm plasterboard, wire bound at 100mm centres finish with 13mm plaster scrim or coated with Nullifier intumescent paint to achieve full half hours fire resistance. All beams to achieve half hour fire protection.

COLD BRIDGING DETAILS

Extend insulation from cavity wall up to junction of ceiling insulation. Provide DPC tray over door and window openings. Close all cavity walls with thermabate insulated cavity closers/blockwork. Return floor insulation up at edge with a minimum of 25mm thickness between concrete/screed and wall construction. Extend cavity wall insulation 100mm below Dpc level.

GENERAL NOTES

Provide code 4 lead cover flashing to pitch roof/wall abutments. Fix cavity walls to existing using vertical stainless steel profiles and seal externally with mastic strip. Provide vertical Dpc around door/window frames.

FOUNDATIONS

Foundations to be designed in accordance with NHBC guide: Building near Trees. Foundation trenches to be mass filled with 1:3:6 concrete mix using sulphate-resisting cement. Foundation trenches to be a minimum of 600mm wide and 1m deep. Depth of foundations to be below the invert level of any drainage located within 1m of foundation trenches. Building Control Surveyor to inspect ground bearing conditions on site and foundation to be excavated to required depth. Use concrete blocks or bricks below Dpc level. All existing drains passing under building to be encased in concrete. Where drains pass through foundation trenches stop concrete either side of drain and lintel over with 2No 150x100mm reinforced concrete lintels.

WALLS

Ground floor extension walls to rear to be 300mm cavity construction with 100mm Matching facing brick work with a 100mm cavity filled with Dritherm cavity batts and inner skin of 100mm Thermalite shield 2000 blocks. Use 1:1:6 mortar mix of cement, lime and sand. Use stainless steel vertical twist type ties to cavity set at 900mm horizontal and 450mm vertical spacings. Finish internally with 12mm plasterboard and 6mm plaster scrim. Cavity to be filled with weak concrete to within 150mm of DPC level and to be closed to roof level with blockwork. Provide movement joints at 6m centers and within 3m of a corner. Movement joints are to be filled with flexible material. New walls are to be fixed to existing walls using Fairfix metal profiles. Provide wire bed reinforcement to block work walls above and below any window and door openings. Provide code 4 lead or zinc flashing to rear wall/pitched roof abutments. U Value of walls to be 0.30W/M2 K.

OVERSITE CONSTRUCTION

Remove existing topsoil to firm base. Lay flooring to client spec on 75mm sand and cement screed on 500 gauge separating membrane on 100mm Kingspan insulation on 100mm concrete on 1200 gauge polythene membrane DPM laid with joints lapped and sealed on 50mm sand blinding on 150mm compacted hardcore. Lap DPM into wall DPC. Any services passing through floor area should not be encased in floor screed accessible trunking should be provided. Provide 4No air bricks and 100mm dia ducts through new floor to ventilate existing suspended timber floor. U value of floor not to exceed 0.25W/M2 K.

BELOW GROUND DRAINAGE

New drains to be Osma Upvc pipes laid in accordance with BS5995 Part 6 1980. Surround drains in 150mm peashingle to a minimum 1:40 fall. Also see note with reference to Thames Water.

NOTE: BELOW GROUND DRAINAGE

New drains to be Osma Upvc pipes laid in accordance with BS5995 Part 6 1980. Surround drains in 150mm peashingle to a minimum 1:40 fall. Lay in new drain run with rodding eyes at change of direction. Connect new drain to existing SVP. Connect kitchen sink to 40mm dia branch pipe. Connect sink waste gully into manhole. Invert level of manhole 450mm. If drainage is found to be the property of Thames Water contractor must adhere to Thames Water specification. See specification.

Structural Steelwork

- All Materials and workmanship to be in accordance with BS5950
- Structural Steelwork sections to be Grade S275JR for internal steel and S275J2 for external steel in accordance with EN10025:Part 2:2004
- Bolts to be Grade 8.8 unless noted otherwise
- Welds to be 6mm continuous fillet, unless noted otherwise
- Contractor to verify all dimensions on site before commencing any work or making fabrication drawings which are to be issued to the engineer for approval. No dimensions are to be taken from drawings. Discrepancies are to be reported to the engineer prior to proceeding. The engineer requires 7 working days to check and make comments on any fabrication drawings.
- Steel fabricator to design all connections for maximum moments and reactions indicated on drawings or within the calculation document issued to the contractor unless part of the engineers design brief.
- Steelwork which is not required to be galvanized or encased in concrete to be blast cleaned/wire brushed free from mill scale, rust and other contaminants and painted with two coats of approved primer as soon as possible but no longer than 4 hours after cleaning.
- Uncased columns and beams located within an external wall to have a minimum gap of 40mm from face of external or alternately 25mm minimum impermeable insulation from the face of the steel the the external wall, unless galvanized.
- All steel encased in concrete to be unpainted.
- All pockets formed in brickwork or blockwork for steel beams to be made good in C35 Concrete.
- Bolted connections to have a minimum of 4 M16 Bolts per member, unless noted otherwise
- Steels to have a minimum bearing of 100mm
- External Steelwork and where otherwise noted to be galvanized to a minimum of 140 microns thickness unless noted otherwise and in accordance with BS728.
- HSFG bolt connections are to be metal to metal and painted on site after the connection has been completed and load indicating washers are in their final position

Masonry

- All Materials and workmanship to be in accordance with BS5628 Code of Practice for the Structural Use of Brickwork
- Brickwork to have average crushing strength of 20.5N/mm2 unless noted otherwise
- Blockwork belowground to be high density concrete blocks with a minimum compressive strength of 10N/mm2, above ground provide aerated lightweight blocks with a minimum compressive strength of 7.3N/mm2 unless nother otherwise
- Mortar to be Class ii below ground and Class iii above ground unless noted otherwise.
- 'Hyload' DPC or similar approved to all walls.
- Wall ties to be stainless steel vertical twist type ties to comply with BS1243 at a maximum spacing of 900mm horizontally and 450mm vertically with a minimum embedment of 50mm in the mortar joint unless noted otherwise. Where cavity width is >90mm ties to be placed 450mm vertically and horizontally. Additional ties to be provided at the sides of all openings so that there is at least one tie at 300mm c/c maximum
- Wall ties shall not slop inwards
- Brickwork restraints to be in accordance with BS5628 PT 1 at 1200mm c/c restraints to brickwork and 1200mm c/c for vertical straps.
- Joints to masonry to be a minimum of 6m centers for blockwork and with a minimum distance of 3m from the end of any wall in accordance with BS5628 and a maximum of 12m centers for brickwork.
- At brick/block junctions, brickwork is to be block bonded into blockwork unless noted otherwise.
- Where blocks are laid flat they are to be solid concrete blocks.
- Lintel Bearings to be in accordance with manufacturers recommendations.

Concrete

- All Materials and workmanship to be in accordance with BS8110 parts 1 & 2 – The structural use of concrete
- Concrete quality to be 35N/mm2 at 28 Days unless noted otherwise, Max aggregate to be 20mm, Min Cement content 330kg/m3, max water to cement ratio 0.6
- Reinforcement to be placed in accordance with BS8110
- Concrete cubes to be taken at 7 & 28 Days to obtain required crushing strengths
- Concrete quality for mass concrete foundations in non aggressive soils to be 25N/mm2
- No reinforcement to be cut displaced or omitted without prior written agreement of the engineer.
- Cover to reinforcement to be in accordance with BS8110 Part 1 tables 3.3 & 3.4
- Ground Slab to be blinded into 50mm of lean mix prior to reinforcement being placed in position, blinding concrete mix to be 1/10 to all reinforcement bases except for water resisting structures.
- If no soil investigation and been carried out then sulphate – resisting cement should be used within the ground.
- For below ground structures provide waterproof concrete installed and detailed to specialist specifications.

IF IN DOUBT THEN
CALL LIME TREE
DESIGNS
ON 07528 770 701

General Notes:

- The General Contractor is responsible for the verification of all dimensions on site and shall inform the contract administrator of any discrepancies.
- Do not scale from this drawing. Use figure dimension only.
- Existing foundations, lintels and wall to be exposed if required by Building Control for assessment and upgrading if found inadequate.
- It is the home owners responsibility to obtain party wall, line of junction or notice of adjacent excavation agreements.

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22.01.19	4m Extn	A
07.02.19	Preliminary Drawings	Prelims
Date	Description	Rev



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Project 3 Hemdean Rise, Caversham
Ground Floor Rear Extension

Client

Sayer

Title

Building Regulations

Scale

n/a

Drawn by

SK

Checked by

ASE

Job No.

Drawing

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