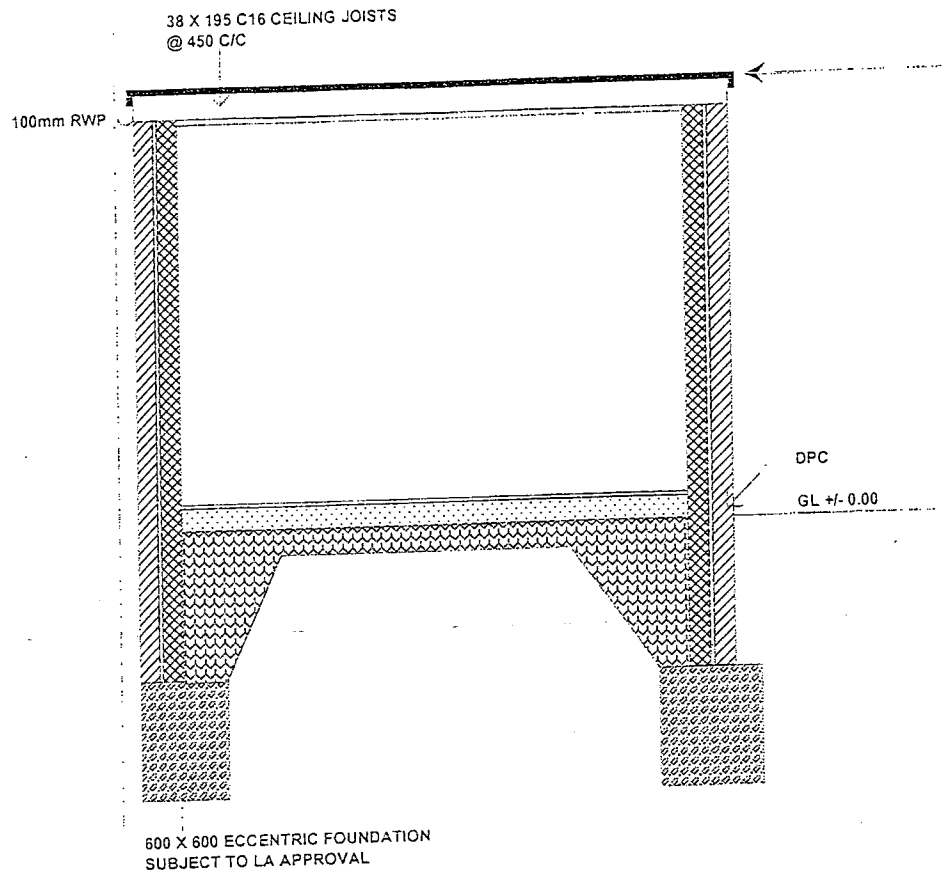


EXTENION TO BE SET BACK 100mm
FROM SIDE BOUNDARY TO ALLOW
FOR GUTTERING

SECTION AA
(1:50)

CAVITY WALL CONSTRUCTION:
285mm cavity walling to comprise of an outer leaf walling to comprise of an outer leaf of facing brickwork to match existing, an inner leaf of 100mm thick Thermalite Turbo blockwork or similar, 85mm Drytherm or similar full fill to cavity providing minimum U value of 0.3 W/m2K.
Stainless steel vertical twist type wall ties to BS 1243: 1978 every 700mm horizontally and 450mm vertically and ties within 150mm of openings to be at 225mm crs vertically.
All masonary below ground level externally and DPC level internally to be either classB engineering bricks or load bearing solid type A blocks. All new cavities to be continous with existing Thermabate or similar insulated vertical to all reveals. Horizontally DPC located a min. 150mm above ground level.
Blockwork walls finished in 13mm thick plasterboard fixed with adhesive with a 3mm thick skim coat finish. All joints taped and sealed.

FLAT ROOF CONSTRUCTION:
ROOF CONSTRUCTION TO COMPRISE OF 19mm EXTERIOR GRADE PLYWOOD SECURED TO 220 X 50mm ROOF JOISTS LAID AT 450 CENTRES USING SUFFICIENT FASTENERS TO BS6399-2, THE STRUCTURAL DECK TO PROVIDE A FINISHED FALL OF 1:40. VAPOUR CONTROLLED LAYER 0.25mm POLYTHYLENE SHEETING. THERMAL INSULATION 100mm CLOSED CELL POLYISOCYANURATE FOAM CORE SECURED TO STRUCTURAL DECK. RIGID BOARDS TO BS EN ISO9002. POLYMERIC SINGLE WATERPROOFING MEMBRANE (EPDM) TO BS EN ISO9002 AND BS EN ISO14001. 35mm KNAUF POLYFOAM LINER BOARD TO BE FIXED TO THE UNDERSIDE OF THE JOISTS AND FINISHED WITH A COAT OF PLASTER. WHERE THE NEW ROOF ABUTS THE PROPERTY FINISH WITH LEAD FLASHING.

FOUNDATIONS:
depth to suit sub-soil and actual ground levels. Min. 1000mm below ground level, or at invert of any adjacent drains, which ever is the greater. 4:2:1 mix. Building Control Inspector to advice regarding suitable depth. (UNLESS STATED OTHERWISE ON PLAN)

ANCHOR STRAPS:
30 x 5mm galvanised steel straps to be fixed at 1800mm centres along 100mm x 50mm wall plate and tied down wall minimum 450mm, also to first floor joists is applicable, to span 1200mm over joists if applicable.

GUTTER AND FASIA: 225 x 25mm fasia and 6mm thick exterior quality ply soffit to roof projection with 25mm gap along the junction with brick walls for roof ventilation .

LATERAL SUPPORT AT ROOF LEVEL:
Strap at highest point that will provide a secure connection. Straps at not more than 2metre c/c.

BRICKWORK ABUTMENTS: Provide standard 'TRUELINE.' Crocodile or similar stainless steel 22g grade 3045 to BS 1449, sliding anchor type system to bond walls, applied continuously

MECHANICAL VENTILATION: Mechanical Ventilation to kitchen to be 60 l/s or 30 l/s via cooker hood ducted to outside air operated intermittently. Ventaxia mechanical vent to shower room to be 15 l/s ducted to outside air intermittently. With connection to light switch with 15 min over run.

NEW RADIATORS:
All new radiators should be fitter with thermostatic Valves. Part 1.1 approved document

LINTELS:
Galvanised steel combined lintels (IG or similar approved) with min end bearings of 150mm to all openings.

HEAT PRODUCING APPLIANCE:
The exisitjng gas fired heating system to be extended into the new extension using zone controls; timing controls; and boiler control interlocks (room slats or radiators with thermostatic valves) or provide new heating system. Boiler to be wall hung with balanced flue. System to be controlled by zone controls. SEDBUCK valvue 86%,80% if oil.

ELECTRICAL:
ALL ELECTRICAL WORK REQUIRED TO MEET THE REQUIREMENTS OF PART P (ELECTRICAL SAFETY) MUST 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, AND THIS WILL REQUIRE AN APPROPRIATE BS7671 ELECTRICAL INSTALLATION CERTIFICATE BEING PROVIDED. LOW ENERGY LIGHTING TO BE FITTED WHERE POSSIBLE.

SMOKE DETECTION: B1 MEANS OF ESCAPE
Alarms should be installed in accordance with BS 5839-6:2004. All smoke alarms should have a standby power supply. Where a dwelling house is extended smoke alarms should be provided in the circulation spaces.

LOW ENERGY LIGHTING UNITS:
Provide lighting fittings (including lamp, control gear and an appropriate housing, reflector, shade or diffuser or other device for controlling the output light) that only take lamps having a luminus efficacy greater than 40 lumens per circuit watt. To meet this standard use fluorescent and compact lighting lamps to fully comply with approved document Part L1. Provide one per 25 metre squared of dwelling floor area or part thereof; or one per four lighting fittings (25%).

PROJECT:
SINGLE STOREY EXTENSION TO REAR OF HOUSE

2 WOODLANDS DRIVE
GROBY
LEICESTERSHIRE
LE6 0BQ

DRAWING:
SECTION AND NOTES

SCALE: 1:100
DATE: MAY 2009
DRG NO. RPDC/M/09/010
CLIENT: MR AND MRS CRAPP

R P DESIGN CONSULTANTS
Architectural and Structural Services
33 LAUNDE ROAD, OADBY LEICESTER. LE2 4HH
TEL: 0116 220 9328 / 07811088948
EMAIL: rpdesign@hotmail.co.uk

COLD BRIDGING PREVENTION:
Openings in cavity walls to be closed with cavity trays of YEOVIL TYPE D damp proof course with intergral insulation, installed in accordance with the manufacturers details as the works proceeds.
All cavity trays to compiy with BS 5628 - 3:2001

GROUND FLOOR CONSTRUCTION:

100mm thick concrete floor slab float finish on a seperating layer of building paper to BS 1521: 1972 (1994 on
80mm Kingspan Thermalfloor T70 insulation or similar to achieve minimum U value of 00.22W/M2K turned up at all edges on 1200g visqueen dpm on minimum 200mm thick well compacted clean stone hardcore with 50mm minimum clean sand blinding. All new dpc's to be minimum 150mm above ground level and to overlap into dpm. Provide air bricks at minimum 1800mm centres ducted through to ventilate existing floor void if any existing air bricks are blocked by new extension.

VENTILATION:
All areas to be provided with ventilation via a combination of opening lights, background ventilation and mechanical extraction. The following specifications are the minimum requirements and must be provided for each applicable room type.
Habitable rooms to have opening lights equal to 1/20th floor area and at least 8000 mm2 background ventilation. In addition to any other requirements.
Kitchen to have an opening light (no size restriction), 4000mm2 background ventilation and mechanical extraction via a cooker hood giving at least 30 l/s rate of extraction.
Utility rooms to be similar as above.
Bathroom and en-suite to have opening lights (where practical), 4000mm2 background ventilation and 15 l/s rate of mechanical extract ventilation.
Where rooms are provided with mechanical extraction and no opening lights, the extraction system should be controlled via the light switch. (min 15 min overrun) and the base of the door raised 10mm to provide an air inlet.

ROOF VENTILATION:
Products used to provide ventilation at eaves, ridge and abutment with walls are to be suitable for the roof covering and pitch used, all ventilation openings in the roof to be fitted with fly screens.
Roof to be provided with ventilation along eaves equal to a 25mm wide continuous air gap, ventilation to be provided at the ridge equal to a 10mm wide continuous air gap, insulation to be kept 50mm clear of sarking felt to maintain ventilation.

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SANITRY PIPEWORK:
All plumbing in accordance with BS EN 12056 - 2:2000 code of practice for sanitary pipework and the requirements of the building regulations. Rodding points to be provided to give access to any lengths of discharge pipes which cannot be reached by removing traps or appliances with integral traps.
"Wash basin to have 32dia anti-syphon traps and 75min depth of seal.
"Sinks , baths to have 40 dia anti-syphon traps and 75 min depth of seal.
"Wc's to have 150 dia anti-syphon traps and 50 min depth of seal.
SVP's to terminate not less than 900 above the nearest opening an be fitted with a cage. All svp's to be ventilated and not less than 100 dia. All connections to svp's to be separated and staggered by 110 for connections less than 65 dia.. The bend at foot of any svp to be no less THAN 200 RADIUS.

FOUL AND STORM DRAINAGE:
All new below ground drainage to be formed using flexibly jointed pipes, laid to falls with a gradient of at least 1:40 in all locations. All joints to remain watertight under working and test conditions.
Nothing in the pipes, joints or fittings should project into the pipe and cause an obstruction. Changes of direction or gradient are to be minimised and keep as easy as possible. All pipes to be laid to an even gradient and any necessary change to be combined with an access point (suitable for the invert depth of the pipe).
Access points to be provided at the head of each drain run, any bend or change in gradient and at a change in pipe size. Access points can be formed from either of the following:
Proprietary pre-formed sections, suitable for their intended positioned and depth, installed and back filled in accordance with makers instructions and recommendations.
Constructed from class B semi-engineering brickwork built off 200 thick concrete slabs with half round channels set in concrete. Channels and branches to be benched up to the top of the outgoing pipe at a gradient of 1:12 and to be rounded at the channel with a radius of 25.
Chambers where the branch angle is more than 45 deg should use a three quarter section channel/branch.
Access points to be sized and construction to suit the invert depth of pipes, depths less than 0.6m deep to be 150 min diameter chamber, less than 1.0m deep to be inspection chamber with 450 x 450 internal opening to cover. Chambers deeper than 1.0 (but less than 2.7m) to be manholes with 1200 x 750 internal opening, 600 x 600 cover and be fitted with metal step irons.
After construction and testing, pipes and chambers are to be backfilled and protected from damage, the following specifications are to be used where possible:
Flexible pipes beneath foot paths or gardens (deeper than 0.6m) and tarmac areas (deeper than 0.9m) to be laid in trenches 100 deeper than drain invert, filled level with crown pipe with granular material (100mm , 100 thick layer of granular material (less than 40dia) Laid above pipe crown, 200 thick layer of selected fill free from stones over 40 dia, lumps of clay over 100 dia. And any other timber, frozen material or vegetable matter and back filled with earth.
Flexible pipes beneath foot paths or gardens (less back filled with earth.
Any drains I buildings to be encased in concrete, 100 min cover to all sides, movement joints of thick compressible board to be provided at every flexible joint. Pipes penetrating walls to be protected at opening 100 x 150 RC lintels over 50 clear space to all sides of pipe. Mask opening on both side with ridged material to prevent entry of fill or vermin.
After laying, including ay necessary concrete or other hunching, the drainage system must be capable of wind standing an air test for a period of 5 minutes with a loss of head at the monometer of 25 for 100 gauges and 12 for 50 gauges.

Internal SVP's to be boxed in using 50 x 50 SC3 framing faced with two layers 9.5 foil backed plaster board and 5 plaster skim, provide screw on access panels as required for rodding etc. fill voids around pipe with material wool insulation to reduce noise.

BELOW GROUND DRAINAGE:
All drainage to connect to existing service. Where drains pass through walls form opening with Spanlite concrete lintels or similar leaving a minimum 50mm clear gap around drainage pipe. Provide cement fibre collors to both sides of opening.

ABOVE GROUND DRAINAGE:
All drainage to connect to existing service.
Gutters - 100mm PVCu half round
Rainwater pipes - 65mm diameter PVCu
Soil and vent pipes - 100mm PVCu

DEVELOPMENT SERVICES
12 JUN 20
RECEIVED

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