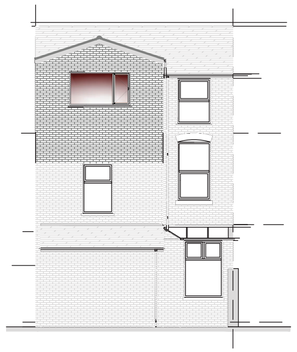


EXISTING REAR ELEVATION



PROPOSED REAR ELEVATION

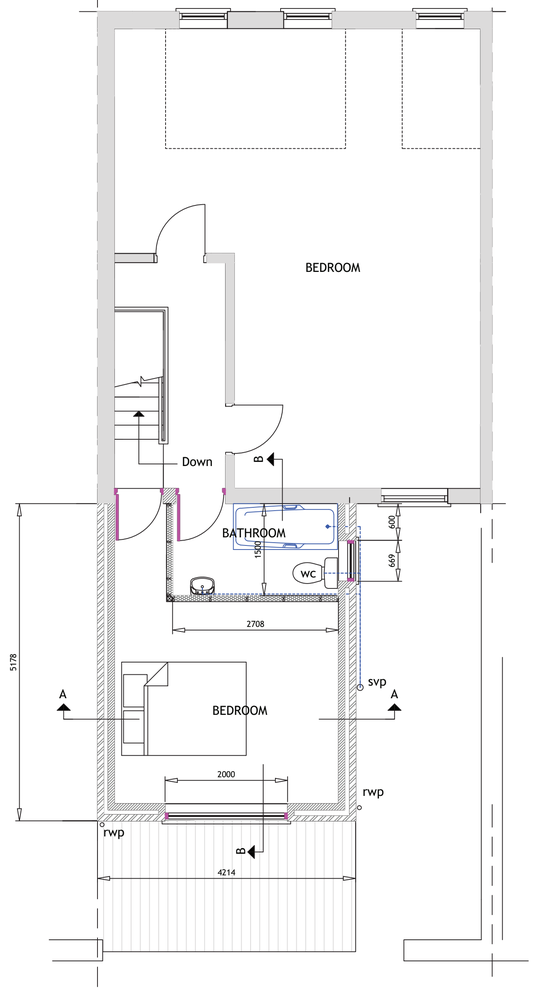


PROPOSED SIDE ELEVATION

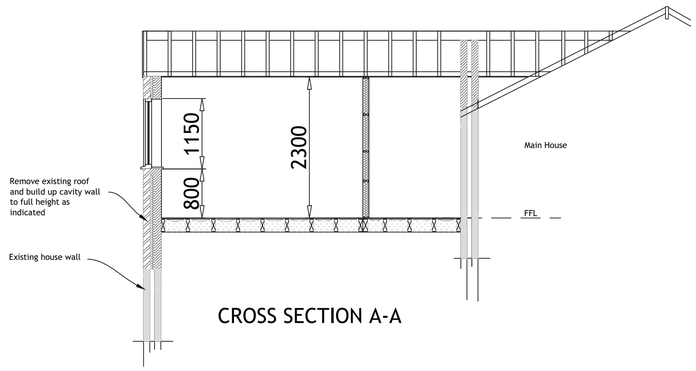


EXISTING SIDE ELEVATION

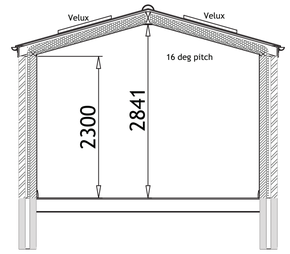
EXISTING GROUND FLOOR PLAN



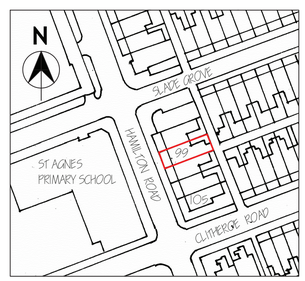
PROPOSED GROUND FLOOR PLAN



CROSS SECTION A-A



CROSS SECTION B-B



BLOCK PLAN. SCALE 1:1250

New Vaulted Roof (Dining Room) 17.5°Pitch

50 x 150mm softwood rafters at 400mm centres birds-mouthed over 100 x 75mm softwood wall plate bedded to top of internal cavity skin wall and held down with 30 x 5mm x 1.2m long galvanised steel straps bent at right angles to give min 75mm fixing to the top of the wall plate.
Lateral and vertical restraint straps are to be provided to roof members in accordance with BS 5628 from the roof to adjacent parallel walls at maximum 2m centres using 30 x 5mm galvanised steel straps turned down 150mm minimum over blockwork and fixed over solid blocking to a minimum of three rafters.
Roof tiles are to be Redland Regent (grey) low pitched concrete tiles and to be fixed in accordance with manufacturers instructions and to BS 5534 on 38 x 25mm preservative treated softwood battens on Kingspan "Nilvent" breathable membrane.
New vaulted roof to be insulated between the rafters with 130mm Kingspan K7 insulation.The roof will be plated on the underside with 12.5mm thk Douglas Fir ply nailed with 4mm dia x 75mm long nails at 75mm ctrs to the underside of the rafters.The roof will be finished internally with Kingspan K18 dry lining board comprising of 25mm insulation and 12.5mm plasterboard. A 50mm air gap is to be maintained from eaves level to ridge. Separate but linking quilt is to be laid over the softwood wall plate and wedged into the cavity to avoid cold bridging and close the cavity.

First Floor Construction:

22mm thick moisture resistant flooring type C4 chipboard to BS 5669. Ensure throughout edges of boards supported on joists or noggins with 10mm expansion gap at room perimeters between chipboard and walls. Boards to be securely fixed through to 50 x 195mm softwood floor joists at 400mm centres.
Underside of floor joists to be lined with 12.5mm thick plasterboard to be taped and have 3mm thick plaster skim finish. 100mm thick rockwool or similar approved to be laid between joists (40 RW DB).
Lateral restraint straps 35 x 6mm galvanised steel to be provided at 2m maximum centres, to be taken over 3 no. joists minimum on solid noggins and turned down into cavity a minimum of 75mm.
Double joists, bolted together with M10 bolts at 600mm centres, to be provided under partitions.
Provide one row of solid noggins at centre span for joist spans between 2.5 and 4.5m and two rows at one-third span positions for spans over 4.5m.

Ventilation:

All habitable rooms to have rapid ventilation via windows/doors of an openable area of at least 1/20th of the floor area, part of the ventilation opening must be 1.75m above floor level.

Bathroom

Bathroom to incorporate a mechanical extract fan to extract 15 litres per second, located in the ceiling or wall, which will be operated intermittently, linked to room lighting. Switching to be by means of light switch with isolator switch at high level external to room.

External Cavity Wall Brickwork:

Outer skin to comprise 102mm thick brickwork to match existing with a 90mm cavity and 100mm thick thermalite shield blockwork inner skin.
Top of the walls to be closed with 6mm Superlux or similar.
Cavity to be closed at window, door junctions and at eaves level with blockwork or propriety cavity closure. Skins to be tied together with stainless steel wall ties spaced at 700mm centres horizontally and 450mm vertically and at 225mm centres at window and door reveals. Provide additional ties within 225mm of side openings at no more than 300mm centres.
Provide polythene lapped and continuous cavity trays with stop ends, above all lintels and over short piers between closely spaced openings. Provide open perpends or pvcu proprietary perpends at 300mm centres, minimum 2 number per openings. Bond new brickwork to existing walls with galvanized steel masonry connectors and ties rawbolted to existing walls.
41mm thick Celotex CG5000 insulation, or similar approved, cavity wall insulation to achieve a 'u' value of 0.28w/m2k. Fix bats securely with tightly fitted joints, ensuring that all edges are not damaged and that top edges are covered with a temporary timber batten to ensure that they remain free from mortar droppings and other debris.
The cavity is to be closed at openings using proprietary cavity closure 'thermabate' or similar approved installed in accordance with manufacturers instructions.
Walls to be finished internally with 12.5mm thk plasterboard and a 3mm thick skim plaster floated smooth.

Lintels Above Openings:

External walls: Catnic or similar approved lintels are to be used above all window and door openings unless otherwise stated with cavity trays above and weep holes every 4 th joint.
Internal walls: Catnic or similar approved lintels to be used above all openings unless otherwise stated.
All lintels to be securely built in to masonry walls and be of the appropriate length to ensure a minimum 150mm bearing at each end.

Internal Walls - Non Load Bearing Studwork:

75 x 50mm softwood framing comprising sole and head plates, uprights at 400mm centres and noggins staggered at mid height.
Walls to be lined each side with 12.5mm plasterboard, taped, and skimmed with a 3mm thick finishing plaster floated smooth and flush.
All studwork walls constructed on suspended timber floors to be supported on double joists bolted together with M10 bolts @ 600mm centres or noggins.
For studwork partitions to bedrooms and rooms containing wc's studwork to be lined with 12.5mm thick plasterboard (minimum mass 10kg/m2) and void to include a layer of 25mm insulation quilt. All gaps to be well sealed.

Rainwater Goods:

125mm wide pvcu semi circular section gutters laid to falls to discharge into 75mm round rainwater downpipes.

Plumbing Installation:

Complete installation to be subject to and capable of withstanding testing in accordance with BS 5572 : 1978. Above ground foul drainage pipework shall be pvcu to BS 4514.
Pipework must be designed in accordance with BS 5572 and installed to ensure that appliances drain efficiently without causing crossflow, backfall, leakage or blockage. No air from the drainage system shall enter the building. Provide adequate support to lengths of pipework and at junctions and change in direction. No branch connection to be within 450mm above foot of soil pipe. Minimum pipe sizes for sanitary plumbing to be:

Wc's, soil pipes:	100mm dia nom. size
Common pipe wastes:	50mm dia nom. size
Bath, sink:	50mm dia nom. size
Hand basin:	32mm dia nom. size
Shower:	32mm dia nom. size
Overflow:	19mm dia nom. size

All fittings to have 75mm deep seal traps. Provide waste pipes for washing machine and dishwasher where applicable. All waste pipes shall be laid to falls (25mm per metre run). All plumbing shall be installed in accordance with manufacturer's instructions.

The maximum length of waste pipes shall be as follows:
32mm pipe 1.7m maximum length
40mm pipe 3m maximum length
50mm pipe 4m maximum length
100mm pipe 6m maximum length

Soil and ventilating stacks to terminate minimum 900mm above any window head within 3m horizontally.

Windows

Windows are to provide minimum opening lights equal to 1/20 (5%) of the floor area of the room served and provide, minimum background ventilation via controlled trickle ventilators to achieve 4000 sq mm in the kitchen and bathroom windows and 8000 sq mm to all other habitable rooms. Part of the ventilation opening must be 1.75m above floor level.

The windows are to be glazed with 24mm (4:16:4) sealed double glazed (low-e: emissivity of 0.05) units (Argon filled) with a maximum 'u' value of 1.6 w/m2k, or a window energy rating of Band D or better. All glass shall be in accordance with BS 6262:1978. Obscure glazing is to be provided to all bathrooms and cloakrooms. All windows and doors are to be weather stripped.

Safety glazing in accordance with BS 6206:1981 shall be fitted in the following critical locations:

(1) All glazed doors
(2) All full height sidelights
(3) Any window within 300mm from a door opening up to a height of 1500mm
(4) Any window between finished floor level and 800mm above that level.
An escape window to be incorporated within the new bedroom window to a min size of 0.33m2 and with a free width of 450mm

Electrical Installation:

All electrical installation to be in full accordance with BS 7671 and with the latest edition of the IEE wiring regulations and should be carried out in accordance with current installation techniques applicable to the material and equipment being used.
Note that all cables which are covered or surrounded with thermal insulation to be de-rated in accordance with appendix 'A' of BRE 'thermal insulation: avoiding risks' 2002 edition.
All down-lighters in ceiling voids to be either boxed in with 12.5mm plasterboard or fitted with an intumescent cover to maintain half hour fire resistance.
Fixed internal lighting is to be in accordance with approved document L1B. Fixed energy efficient light fittings, that only take lamps having a luminous efficacy greater than 40 lumens per circuit-watt, are to be provided in numbers not less than the greater of 1 per 25m2 dwelling floor area (excluding garages) or part thereof, or 1 per four fixed light fittings. A light fitting may contain one or more lamps.
Switches and socket outlets to be provided for lighting and other equipment in habitable rooms at appropriate heights between 450mm and 1200mm from finished floor level.
All electrical work covered by part P (electrical safety) must be designed, installed, inspected and tested by a person competent to do so and who is registered with a Part P certification scheme or the installation supervised by an electrician qualified to at leasrt City & Guilds 2391 (17th Edition).
In both cases a completion certificate to BS7671 must be forwarded to the Local authority within 30 days of installation.

Space Heating (extensions):

Existing central heating system to be extended into new areas.All work on the heating boiler to be carried out by a registered Gas Safe engineer.All new radiators to be fitted with thermostatic valves.

Existing Structure:
Existing foundations to be exposed together with any existing lintels as directed by the building control inspector on site to assess their suitability for additional loading. Any additional work that may be necessary is to be carried out in compliance with the building inspectors recommendations.

Timber Treatment:
All softwood timbers to be adequately treated to prevent infestation. All structural timbers, external frames, window and softwood cladding shall be treated against fungal attack. All structural timber to be marked DRY or KD and to have the stress grade mark.

Fire Resistance:
All elements of structure to have a minimum of half hour fire resistance.

Materials:
All materials are to be used and installed in accordance with the relevant manufacturers instructions and recommendations. The quality of any material shall not be lower than that defined in relevant british standard, or that an appropriate independent body has satisfactorily assessed the material.

PROPOSED 2ND FLOOR REAR EXTENSION AT:
99,HAMILTON ROAD.
LONGSIGHT
MANCHESTER.M13 0AE

Drawing No :- 340/HR/LONGSIGHT

Scale :- 1:50,1:100 | Revision :-

Date: 14th January 2014

DP DESIGN SERVICES