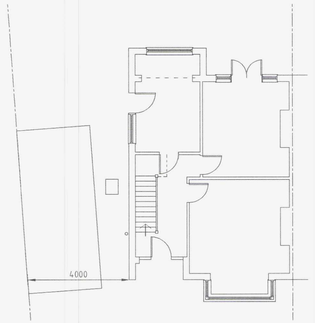
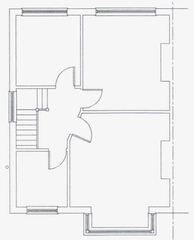
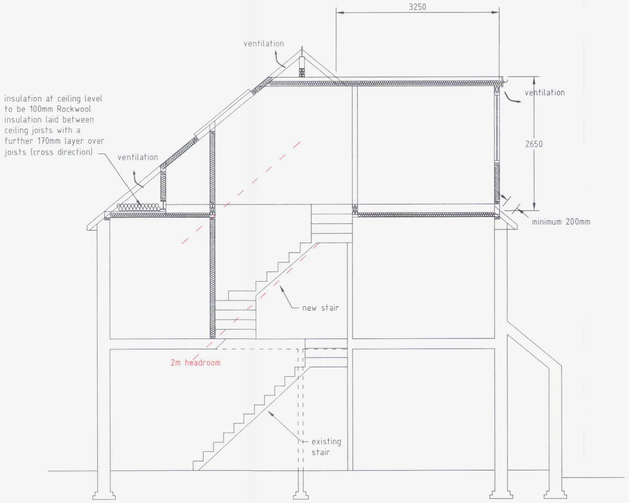


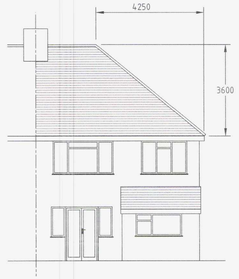
EXISTING GROUND FLOOR
1:100



EXISTING FIRST FLOOR
1:100



SECTION
1:50



EXISTING REAR ELEVATION
1:100



PROPOSED REAR ELEVATION
1:100

VOLUME CALCULATION
Hip to Gable
3.60 x 4.25 x 8.07/6 = 20.58m³

Dormer
3.25 x 2.65 x 6.25/2 = 26.91m³

Total
20.58 + 26.91 = **47.49 m³**
(less than 50m³ OK)

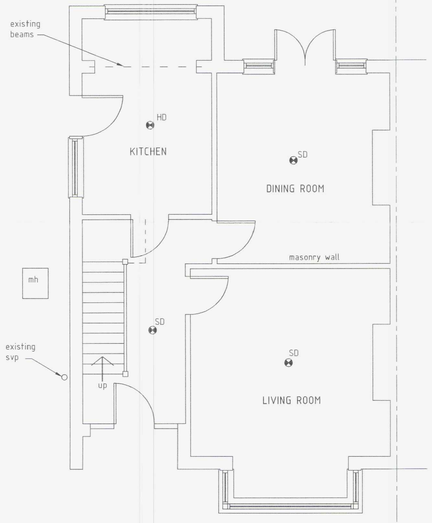
NOTE:
If it is proposed to install downlighters the matter should be discussed with Building Control to ensure correct installation and completion certificate being issued.

ABOVE GROUND DRAINAGE
All new above ground drainage and plumbing to comply with BS EN 12056-2:2000 for sanitary pipework. All drainage to be in accordance with part H of the Building Regulations. Wastes to have 75mm deep seal traps and rodding eyes to be provided at changes of direction.

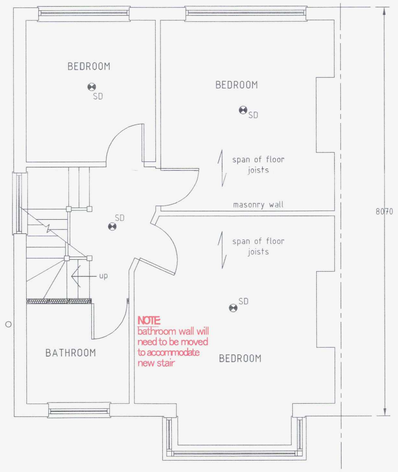
Size of wastes pipes and max length of branch connections (if max length is exceeded then anti vacuum traps to be used)
Wash basin – 1.7m for 32mm pipe 4m for 40mm pipe
Bath/shower - 3m for 40mm pipe 4m for 50mm pipe
WC – 6m for 100mm pipe for single WC
All branch pipes to connect to existing 110mm soil and vent pipe terminating min 900mm above any openings within 3m.

ROOF LIGHTS
Min U-value of 1.6 W/m²K.
Roof-Lights to be double glazed with 16mm argon gap and soft low-E glass. Window Energy Rating to be Band C or better. Roof lights to be fitted in accordance with manufactures instructions with rafters doubled up to sides and suitable flashings etc.

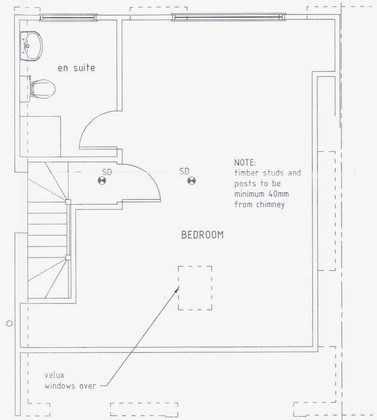
NEW WINDOWS
New windows to be double glazed with 16mm argon gap and soft coat low-E glass. Window Energy Rating to be Band C or better and to achieve U-value of 1.6 W/m²K.



PROPOSED GROUND FLOOR
1:50



PROPOSED FIRST FLOOR
1:50



PROPOSED SECOND FLOOR
1:50

UPGRADING PARTY WALL (warm adjoining space)
The existing walls must be checked for stability and be free from defects as required by the Building Control Officer. Provide a scratch coat render to existing wall. Apply plasterboard with mass of 10kg/m2 or greater to the exposed face of the wall to ensure adequate sound insulation in accordance with Approved Document E.

UPGRADE OF PITCHED ROOF
To achieve U-value 0.18 W/m²K
Existing roof structure to be assessed by a structural engineer and any alterations to be carried out in strict accordance with structural engineer's details and calculations which must be approved by building control before works commence on site. The existing roof condition must be checked and be free from defects.
Roof insulation to be 50mm Celotex GA4000 infilled between rafters and 70mm under rafters.
Provide a cavity of 25mm by fixing battens between plasterboard and under rafter insulation (recommended where insulation under rafters exceeds 50mm).
Maintain a 50mm air gap above insulation to ventilate roof. Provide openning at eaves level at least equal to continuous strip 25mm wide and opening at ridge equal to continuous strip 5mm wide to promote ventilation or provide equivalent high and low level tile vents in accordance with manufactures details. Fix 12.5mm foil backed plasterboard (joints staggered) and 5mm skim coat of finishing plaster to the underside of all ceilings using galvanized plasterboard nails.

NEW FLOOR
New second floor – Joists to be 50mm minimum from chimney breasts. (joist size to structural engineer's details and calculations) Provide min 20mm t and g chipboard or timber board flooring. In areas such as kitchens, utility rooms and bathrooms flooring to be moisture resistant grade in accordance with BS EN 312:2010). Identification marking must be laid upper most to allow easy identification. To upgrade to half hour fire resistance and provide adequate sound insulation lay minimum 150mm Rockwool insulating material or equivalent on chicken wire between joists and extended to eaves. Chicken wire to be fixed to the joists with nails or staples these should penetrate the joists side to a minimum depth of 20mm, in accordance with BRE-Digest 208 1988. Joists spans over 2.5m to be strutted at mid span use 38 x 38mm herringbone strutting or 38mm solid strutting (at least 2/3 of joist depth).

INTERNAL STUD PARTITIONS
100mm x 50mm softwood treated timbers studs at 400mm cts with 50 x 100mm head and sole plates and solid intermediate horizontal noggins at 1/3 height or 450mm c/cs. Provide min 10kg/m³ density acoustic soundproof quilt tightly packed (eg. 100mm Rockwool or Isowool mineral fibre sound insulation) in all voids the full depth of the stud. Partitions built off doubled up joists where partitions run parallel or provide noggins where at right angles. Walls faced throughout with 12.5mm plaster board with skim plaster finish. Taped and jointed complete with beads and stops.

NEW STAIRCASE
Dimensions to be checked and measured on site prior to fabrication of stairs. Timber stairs to comply with BS585 and with Part K of the Building Regulations. Max rise 220mm, min going 220mm. Two risers plus one going should be between 550 and 700mm. Tapered treads to have going in centre of tread at least the same as the going on the straight. Min 50mm going of tapered treads measured at narrow end. Pitch not to exceed 42 degrees. The width and length of every landing should be at least as great as the smallest width of the flight. Doors which swing across a landing at the bottom of a flight should leave a clear space of at least 400mm across the full width of the flight. Min 2.0m headroom measured vertically above pitch line of stairs and landings. Handrail on staircase to be 900mm above the pitchline, handrail to be at least one side if stairs are less than 1m wide and on both sides if they are wider. Ensure a clear width between handrails of minimum 600mm. Balustrading designed to be unclimbable and should contain no space through which a 100mm sphere could pass. Allow for all structure as designed by a Structural Engineer.

ELECTRICAL WORKS
All electrical work required to meet the requirements of Part P (electrical safety) must be designed, installed, inspected and tested by a competent person registered under a competent person self certification scheme such as BRE certification Ltd, BSI, NICEIC Certification Services or Zurich Ltd. An appropriate BS7671 Electrical Installation Certificate is to be issued for the work by a person competent to do so. A copy of a certificate will be given to the Council.

INTERNAL LIGHTING
Install low energy light fittings that only take lamps having a luminous efficiency greater than 45 lumens per circuit watt and a total output greater than 400 lamp lumens. Not less than three energy efficient light fittings per four of all the light fittings in the main dwelling spaces to comply with Part L of the current Building Regulations.

HEATING
Extend all heating and hot water services from existing and provide new TVRs to radiators. Heating system to be designed, installed, tested and fully certified by a GAS SAFE registered specialist. All work to be in accordance with the Local Water Authorities by laws, Gas safety requirements and IEEE regulations.

MEANS OF ESCAPE – SDs in all rooms and retaining existing doors (LABC guidance note). The following 3 conditions should All be met:
a) Provide smoke detectors at every storey level, at half landing levels adjacent to habitable rooms and in all habitable rooms. An additional heat detector is also required in the kitchen. Smoke detection to be mains operated linked smoke alarm detection system to BS 5446 – 1:2000 mains powered with battery back up.
b) Provide an egress window at first floor level with an unobstructed openable area of 450mm high x 450mm wide, minimum 0.33m sq, the bottom of the openable area should be not more than 1100mm above the floor. The window should enable the person to reach a place free from danger from fire.
c) Provide a protected escape route requiring doors to be min standard of traditional timber panel type at least 32mm thick, with steel hinges, not warped and fitting well into its frame with no visible defects particularly in the panels, (hardboard or other lightweight flush doors are not acceptable). Walls throughout stair enclosure and frames around doors must be checked and be free from defects as required by the Building Control Officer. Any glazing in doors to be half hour fire resisting and glazing in the walls forming the escape route enclosure to have 30 minutes fire resistance and be at least 1.1m above the floor level or stair pitch line.

SMOKE DETECTION
Mains operated linked smoke alarm detection system to BS EN 14604 and BS5839-6:2004 to at least a Grade D category LD3 standard to be mains powered with battery back up to be placed on each storey with an additional interlinked heat detector at ceiling level in kitchens if requried by BCO. Smoke alarms should be sited so that there is a smoke alarm in the circulation space on all levels of storeys and within 7.5m of the door to every habitable room. If ceiling mounted they should be 300mm from the walls and light fittings. Where the kitchen area is not separated from the stairway or circulation space by a door, there should be an interlinked heat detector in the kitchen.

BACKGROUND AND PURGE VENTILATION
Background ventilation – Controllable background ventilation via trickle vents to BS EN 13141-3 within the window frame to be provided to new habitable rooms at a rate of min 5000mm²; and to kitchens, bathrooms, WCs and utility rooms at a rate of 2500mm²
Purge ventilation – New windows/rooflights to have openable area in excess of 1/20th of the floor area, if the window opens more than 30° or 1/10th of the floor area if the window opens less than 30°
Internal doors should be provided with a 10mm gap below the door to aid air circulation. Ventilation provision in accordance with the Domestic Ventilation Compliance Guide.

EXTRACT TO BATHROOM
Bathroom to have mechanical vent ducted to external air to provide min 15 litres / sec extraction. Vent to be connected to light switch and to have 15 minute over run if no window in room. Internal doors should be provided with a 10mm gap below the door to aid air circulation. Ventilation provision in accordance with the Domestic Ventilation Compliance Guide. Intermittent extract fans to BS EN 13141-4. All fixed mechanical ventilation systems, where they can be tested and adjusted, shall be commissioned and a commissioning notice given to the Building Control Body.

RAINWATER DRAINAGE
New rainwater goods to be new 110mm upvc half round gutters taken to and connected into 68mm dia upvc downpipes

PLANNING NOTE
A loft conversion for your house is considered to be permitted development and not requiring an application for planning permission, subject to the following limits and conditions:

A volume allowance of 50 cubic metres additional roof space for detached and semi-detached houses
No extension beyond the plane of the existing roof slope of the principal elevation that fronts the highway
No extension to be higher than the highest part of the roof
Materials to be similar in appearance to the existing house
No verandas, balconies or raised platforms
Side-facing windows to be obscure-glazed; any opening to be 1.7m above the floor
Roof extensions not to be permitted development in designated areas
Roof extensions, apart from hip to gable ones, to be set back, as far as practicable, at least 20cm from the eaves

PARTY WALL ACT
The owner should they need to do so under the requirements of the Party Wall Act 1996 has a duty to serve a Party Structure Notice on any adjoining owner if the building work involves works on or to an existing Party Wall including:
- Support of beam
- Insertion of DPC through wall
- Raising of wall or cutting of projections
- Demolition and rebuilding
- Underpinning
- Insertion of lead flashings

A Party wall agreement is to be in place prior to start of works on site.

MATERIALS AND WORKMANSHIP
All works are to be carried out in a workmanlike manner. All materials and workmanship must comply with Regulation 7 of the Building Regulations, all relevant British Standards, European Standards, Agreement Certificates, Product Certification of Schemes (Kite Marks) etc. Products conforming to a European technical standard or harmonised European product should have a CE marking.

EXISTING STRUCTURE
Existing structure including foundations, floor, beams, walls, roof and lintels are to be exposed and checked for adequacy prior to commencement of work.

BEAMS AND STRUCTURE
Engineer's Structural calculations and details are to be provided for all beams, roof, lintels, joists, bearings, padstones and any other load bearing elements before works commence on site. New steel beams to be encased in 12.5mm Gyproc FireLine board with staggered joints, Gyproc FireCase or painted in Nullifire S or similar intumescent paint to provide 1/2 hour fire resistance as agreed with Building Control. All fire protection to be installed as detailed by specialist manufacturer.

HIP TO GABLE
Existing hipped roof to be raised to gable end using rafters to match existing in terms of size and spacings.

DORMER AND GABLE CONSTRUCTION
To achieve minimum U Value of 0.28W/m²K
Structure to engineer's details and calculations. Tiles hung vertically on 25 x 38mm preservative treated battens (vertical counter battens to be provided to ensure vented and drained cavity if required) fixed to breathable membrane (having a vapour resistance of not more than 0.6 MNs/g) and 12mm thick W.B.P. external quality plywood sheathing (or other approved). Ply fixed to treated timber frame studs constructed using: 100mm x 50mm head and sole plates and vertical studs (with noggins) at 400mm centres or to structural engineer's details and calculations. Insulation between and over studs; 60mm Celotex GA4000 between and 37.5mm Celotex PL4000 with vcl over studs. Provide a vapour control layer fixed to internal face of insulation and finish with 3mm skim coat of finishing plaster.
All junctions to have water tight construction, seal all perimeter joints with tape internally and with silicon sealant externally. Dormer walls built off existing masonry walls to have galvanised mild steel straps placed at 900 centres. Dormer cheeks and gables within 1m of the boundary to be lined externally with 12.5mm Supalux and 12.5mm Gyproc FireLine board internally to achieve 1/2 hour fire resistance from both sides.

DORMER FLAT ROOF
To achieve U value of 0.18 W/m²K
To Structural Engineer's details. Ventilated flat roof construction comprising; 12.5mm spa solar reflective chippings to achieve aa designated fire rating for surface spread of flame bedded in bitumen on three layer felt to BS 6229:2003 on 22mm exterior grade plywood, laid on firrings to give a 1:40 fall fixed to joists. Cross ventilation to be provided on opposing sides by a proprietary eaves ventilation strip equivalent to 25mm continuous with fly proof screen. Flat roof insulation is to be continuous with the wall insulation but stopped back to allow a 50mm air gap above the insulation for ventilation. Insulation to be 120mm Celotex XR4120 between joists and 40mm PL4000 Celotex under joists.
Ceilings to be 12.5mm plasterboard over vapour barrier with skim plaster finish.
Provide restraint to flat roof by fixing using of 30 x 5 x 1000mm ms galvanised lateral restraint straps at maximum 2000mm centres fixed to 100 x 50mm wall plates and anchored to wall. Workmanship to comply to BS 8000-6.

STUD ASHLAR/DWARF WALL
To achieve minimum U Value of 0.28W/m²K
Construct stud wall using 100mm x 50mm head and sole plates and vertical studs (with noggins) at 400mm centres or to structural engineer's details and calculations. Insulation between and over studs; 60mm Celotex GA4000 between plus 37.5mm Celotex PL4000 insulated plasterboard with VCL.
Finish with 3mm skim coat of finishing plaster. All junctions to have water tight construction, seal all perimeter joints with tape internally and with silicon sealant externally.

SCALE BARS (metres)
1 2 3 4 5 6 7 8 9 10
1:100
0 1 2 3 4 5
1:50

DATE | AMENDMENT

PB PLANS

partner LABC

Drawn: Phil Brigly BSc (Hons) MBEng m: 07966 539180 e: ptplans@yahoo.co.uk

ADDRESS:
57 THE CRESCENT
SOUTHWICK

ADUR & WORTHING PLANNING SERVICES
PLAN | AWDM/1234/14
DATE VALID | 29 AUG 2014

PROJECT:
LOFT CONVERSION

SCALE: 1:50, 1:100 DATE: August 2014
DRAWING No: PBP0159/01 DRAWING SIZE: A1 594x841mm