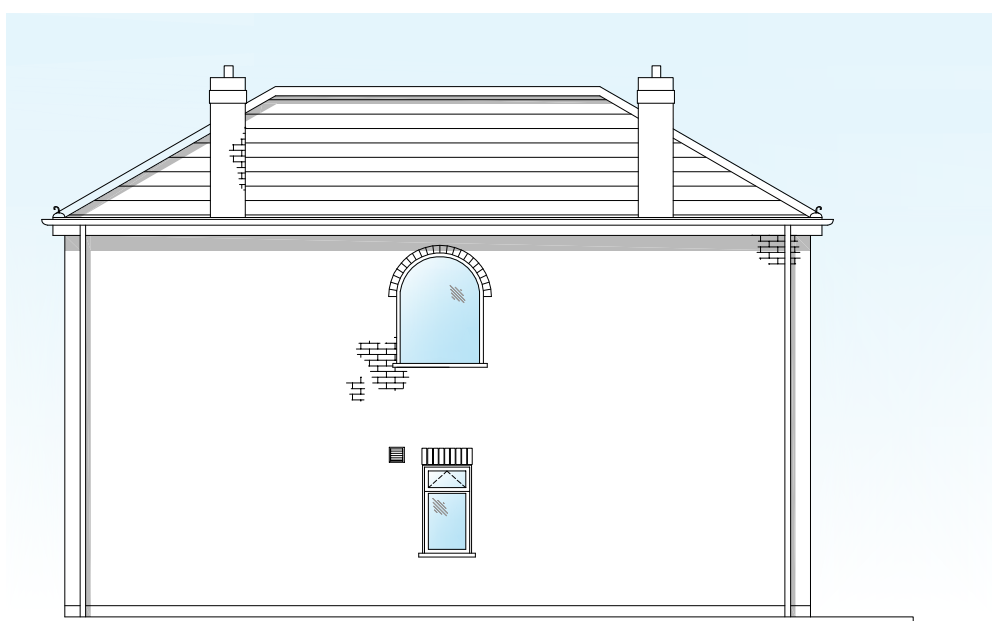
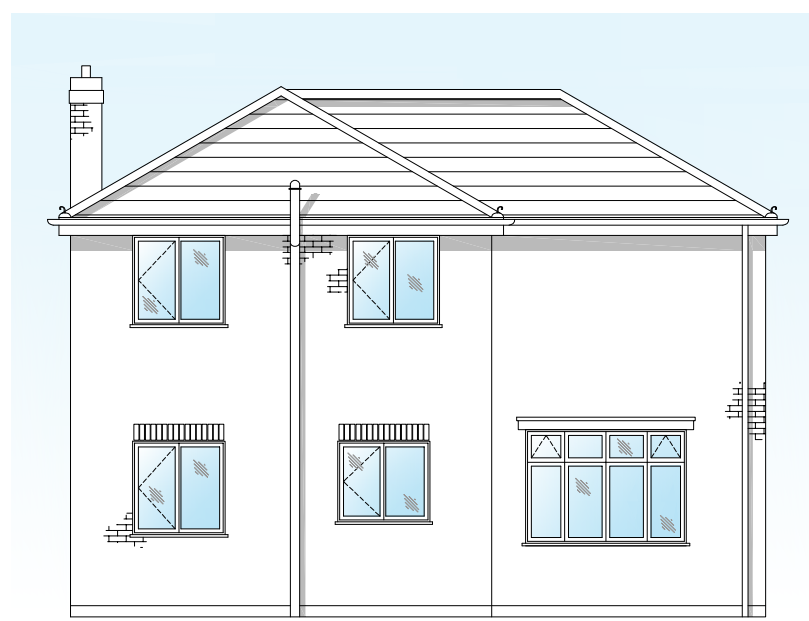
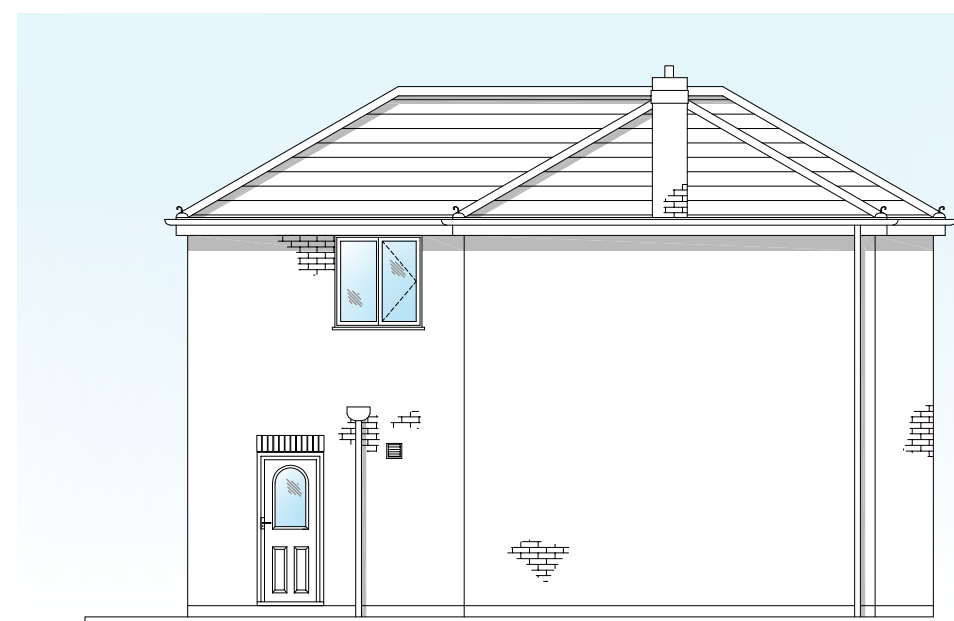




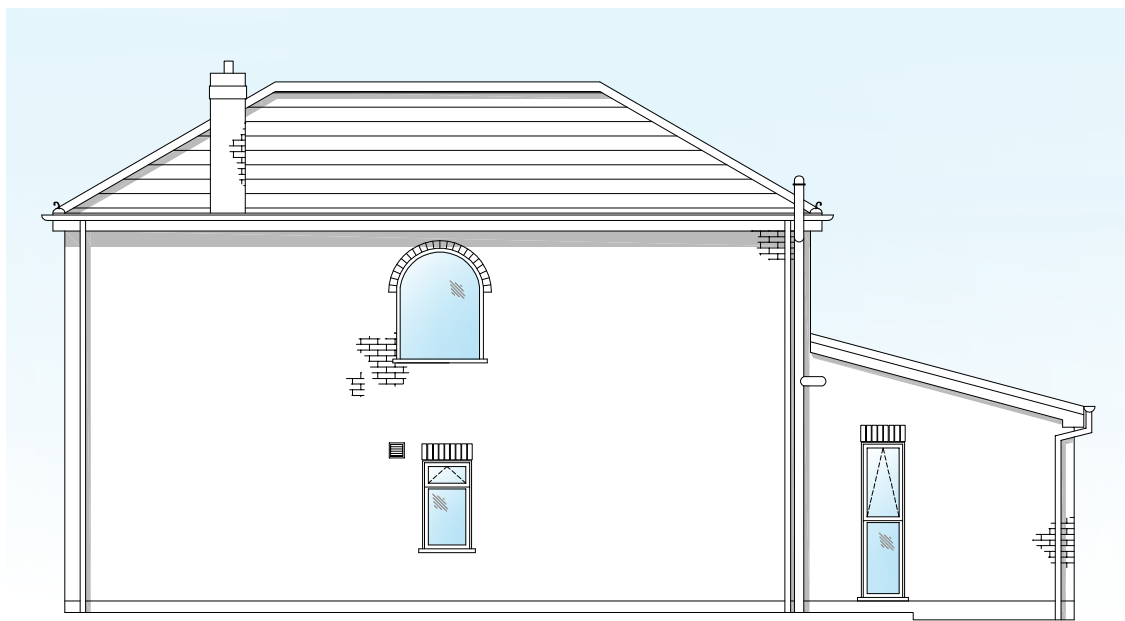
EXISTING SIDE ELEVATION
scale 1:100



EXISTING REAR ELEVATION
scale 1:100



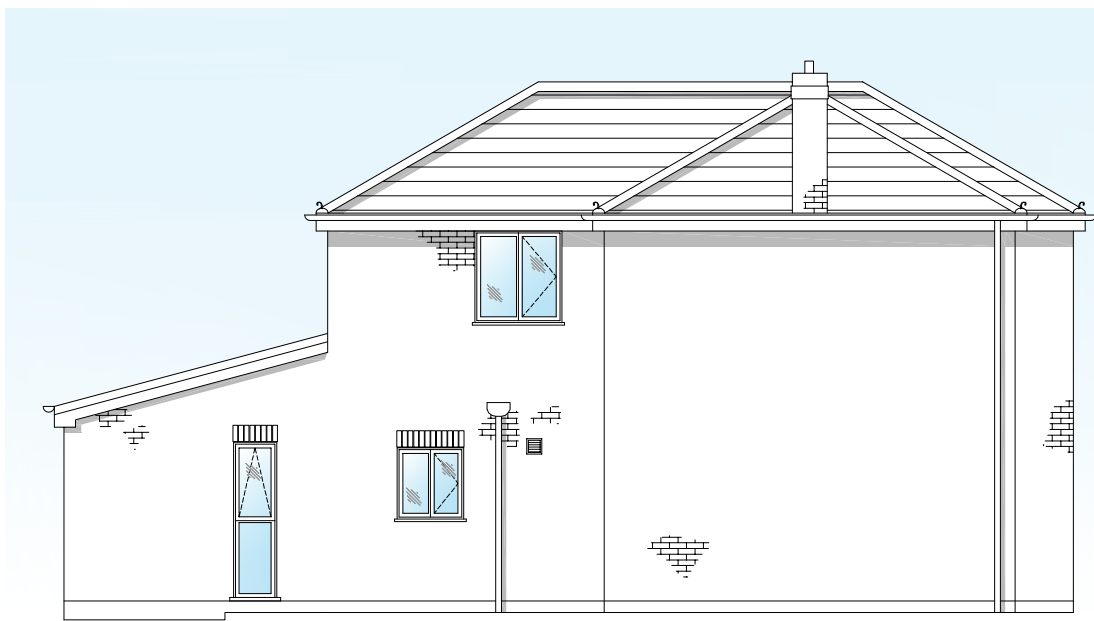
EXISTING OPP' SIDE ELEVATION
scale 1:100



PROPOSED SIDE ELEVATION
scale 1:100



PROPOSED REAR ELEVATION
scale 1:100



PROPOSED OPP' SIDE ELEVATION
scale 1:100

Double 44x195 s.w trimmings around skylight
Flashing skirt required to skylight
Double up rafters either side of skylight.

Install 44x195 C16 rafters at 600mm ctrs. to be secured top & bottom using truss clips
Approved reinforced breathable roofing felt (Tyvek Supro) to BS 747:1961 draped between rafters with 150mm min. laps secured with clout nails, install 120mm deep Recticel Eurothane GP between rafters leaving min 30mm gap for drape of felt.
Provide a further 50mm thick layer of Recticel Eurothane GP under rafters (to achieve 'u' values of 0.15 W/m²K), tape joints to create vapour control layer and air leakage barrier to underside of rafters, finish underside with 12.5mm plaster and skim.
Please Note: Vaulted roof - VCL or insulation should not be penetrated or cut to facilitate the installation of downlights. Consider installing surface mounted downlights/slights or slim surface downlights

WALL CONSTRUCTION:

Cavity wall comprising of: 103mm facing b.wk. to match existing, 100mm cavity filled with 50mm thickness Recticel Eurowall Plus cavity wall insulation board (to achieve 'u' values of 0.18 W/m²K), stainless steel wall ties (5 No. per m² & at staggered ctrs.-double up wall ties around all opening reveals); 100mm Thermatite Turbo concrete block inner skin; dense conc. foundation blocks or common b.wk. below g.l. with fine conc. cavity fill terminating 225mm below dpc; Hiltol pitch polymer dpc. min 150mm above g.l. for both skins; Lap & seal inner skin dpc to floor dpm. 100 x 75mm wall plates tied to inner skin with 38 x 5mm galv. steel straps spanning 600mm of wall & at 2m ctrs. Galv. steel lintels by Keystone Lintels Ltd. With cavity tray dpc's over & external weep holes

New brickwork to be bonded to old using wall ties or similar approved method. Intersecting walls to create continuous cavities.

All openings in external cavity wall to have vertical dpc's; cavity wall will be closed around all openings & at plate level with special PVCu insulated cavity closures by Thermatite or similar & approved to prevent cold bridging; ensure cavity wall insulation board terminates 150mm below finished floor level; ensure that no mortar snots or other debris fall between cavity board to bridge skins of wall. Finish internally with 12.5mm plaster and skim. Ensure cavity wall insulation abuts roof insulation to reduce cold bridging

600mm x 200 mm concrete strip foundations, min 1m deep or 150mm below invert level of drains which ever is the greater or to suit exposed sub-soil conditions.

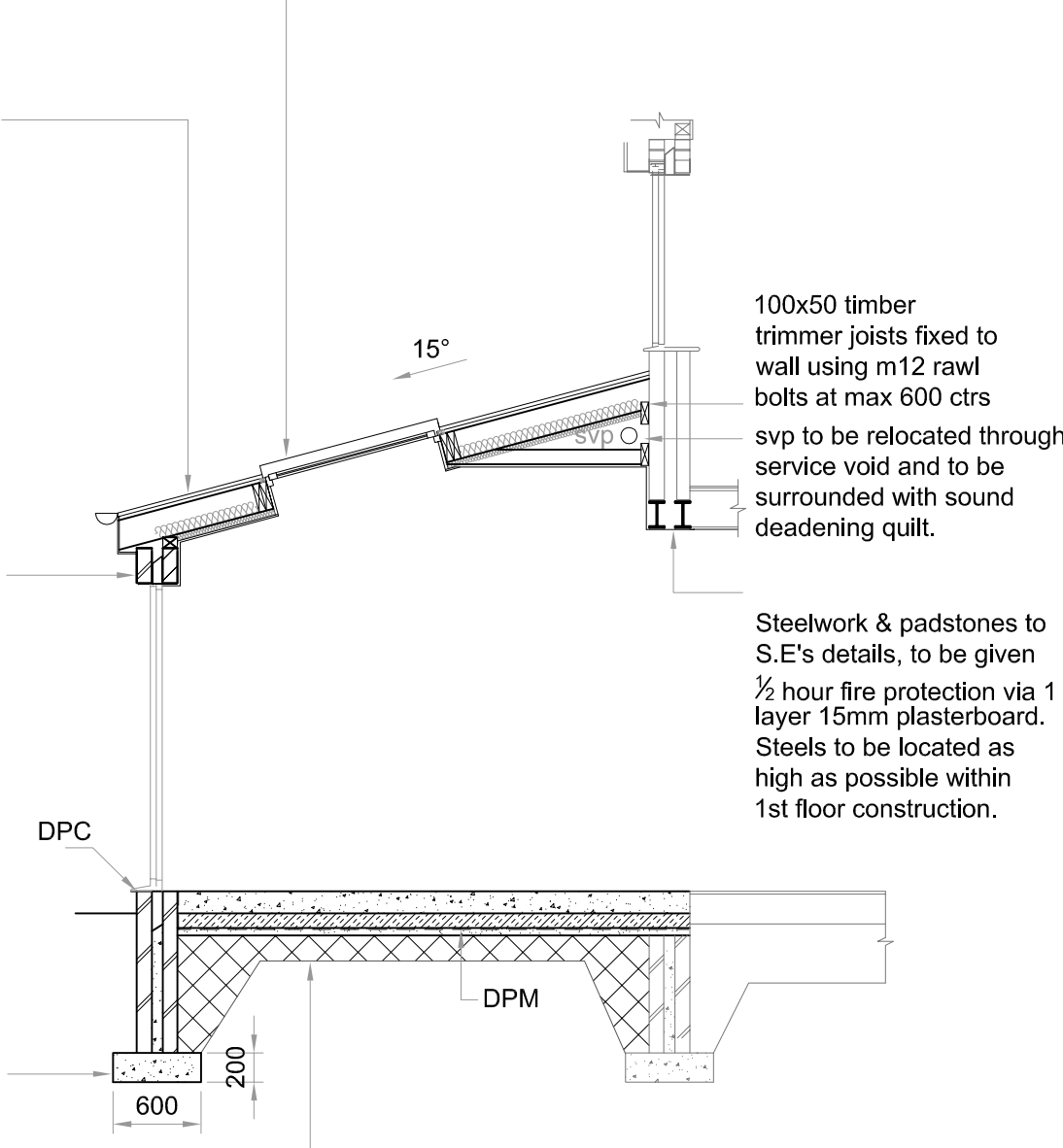
GROUND FLOOR CONSTRUCTION

Laid level with existing using tiles or asphalt finish on 150mm thickness concrete on polythene separation layer on 100mm thickness Recticel Eurothane GP insulation (to achieve 'u' values of 0.18 W/m²K) on, 1200 gauge Visqueen damp proof membrane on 50mm sandblinding, finished fully level & smooth; 150mm layers of clean & sulphate free consolidated hard-core to a maximum depth of 600mm.

All new hard-core must be clean & free of all wood, vegetation etc. Second-hand hard-core shall not be permitted.

NOTE 1:- Should new floor cover existing air bricks for sub-floor ventilation, then the existing air bricks are to be ducted to new air bricks on new external wall to maintain cross ventilation.

NOTE 2:- Provide perimeter insulation to exposed walls by installing 20mm Kingspan Thermafloor TF70 zero ODP perimeter insulation upstand insulation strips for the depth of the screed at the abutment of the screed to wall junctions.



SECTION A-A
scale 1:50

KEY

Foul water & Surface water drains f.w & s.w

Rain water pipe r.w.p

Back inlet gully b.i.g

Soil vent pipe s.v.p

Soil stack s.s

Manhole MH

Inspection chamber i.c

Mechanical extractor fans to be ducted to outside air, capable of 15 ltrs/sec flow rate bathrooms; 30 ltrs/sec flow rate utility rooms; 6ltrs/sec flow rate w.c.; with 15 mins overrun. Leave 10mm gap below door. Only install an e/f if appliance in the same room is a sealed unit

Self contained mains operated interlinked smoke alarms fixed to each floor level in main circulation areas.

Structural Engineer S.E

Timber stud wall, provide sound deadening quilt to bedrooms finished with 15mm plasterboard & skim

Joist span direction

Blockwork built on suitable foundations

Facing brickwork

1. For construction purposes, do not scale the drawings.

2. Figured dimensions only are to be taken from the drawings. All dimensions & angles are to be checked on site prior to any work. If in doubt ask.

3. The drawings are metric drawings & all dimensions are in millimetres (unless otherwise stated).

4. Report any discrepancies to Pro-TECH immediately.

5. All drawings are to be read in conjunction with other related information &/or relevant Consultants drawings where applicable.

6. This Specification & the design drawings are copyright & must not be copied without the written consent of Pro-Tech.

7. **Electric:** Lights and sockets to clients specifications and I.E.T.Regs. All electrical work required to meet the requirements of Approved Document Part P (Electrical Safety) and must be designed, installed, inspected and tested by a person competent to do so. Prior to completion, the Building Control Consultant needs to be satisfied that Part P has been complied with. This may require an appropriate BS7671 electrical installation certificate to be issued for the work by a person competent to do so. 75% of all new light fittings to be energy efficient.

8. **Timber:** All timber to be stress graded and stamped, kiln dried (KD).

9. **Windows/Ventilation:** New windows to achieve minimum 'u' values of 1.4 W/m²K with minimum 20mm gap between panes in timber or PVCu sealed units and have maximum total area 25% of total floor area. Ventilation provided by opening lights of 1/20th minimum floor area and minimum 8000mm² trickle vent in window head. Lintels over windows/doors to be Keystone type requiring 150mm end bearing unless noted otherwise and have half hour fire protection using 2 No. layers of 12.5mm plasterboard and plaster skim finish. Keystone lintels filled, full length, with polystyrene insulation. Draught proof stripping to fitted to all opening windows and any loft hatch. All glazing in critical locations on internal and external walls must conform to BS EN 12150, protection against impact, i.e glazing below 800mm and up to 1500mm in doors extending 300mm horizontally each side.

10. **Roof:** Tiles to be Sandtoft 20-20 with 100mm headlap or a similar approved tile suitable for a 15° pitch and to match existing as close as possible on 50mm x 25mm treated soft wood battens, fixed with wire nails. Approved reinforced breathable roofing felt (Tyvek Supro) to BS 747:1961 draped between rafters with 150mm min. laps secured with clout nails, on timber rafters fitted to 100mm x 75mm timber wall plates using pressed steel brackets. Wall plates fixed to walls at 1500mm centres using 30mm x 5mm mild steel straps spanning 600mm of wall, mild steel straps to gable wall to be fixed across first 3 rafters at max 2000mm ctrs. All ridge and hip tiles are to be mechanically fixed to the roof. Fascia boards to match with existing. All flashings to have a minimum 150mm upstand using code 4 lead flashing. Provide lead flashing where new roof abuts walls (stepped if required). Provide cavity trays where roof abuts wall.

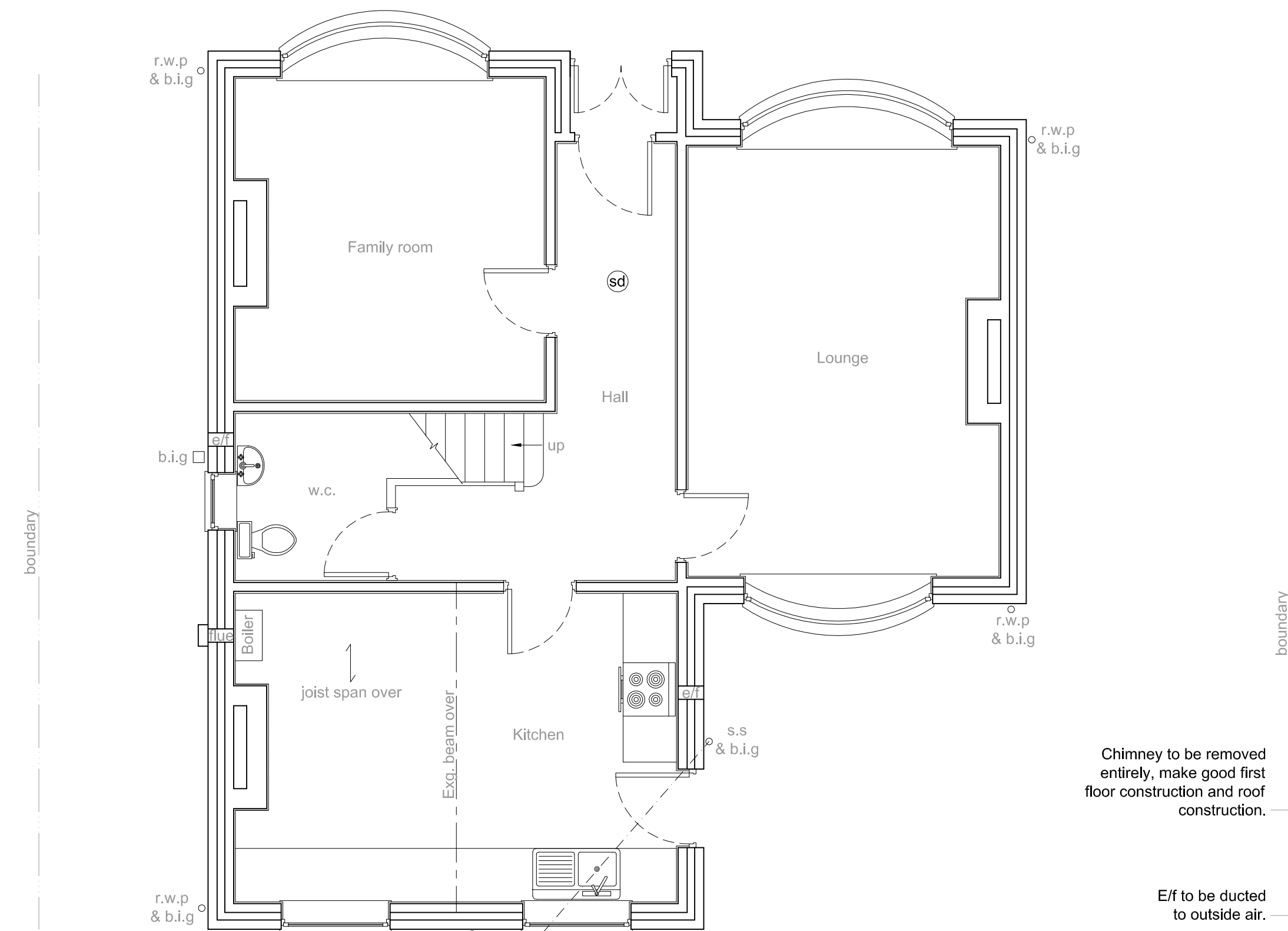
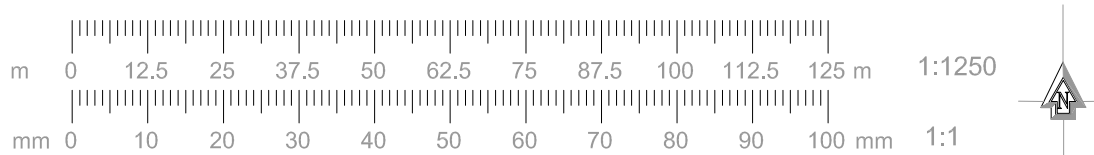
11. **Drainage:** 115mm PVC guttering to 64mm dia. PVC downspouts as shown to B.I.G's to be connected to existing drainage to be agreed by building control officer. Drains beneath proposed building to be incased in 200mm concrete, with flexible joints incorporated in new concrete to suit ground conditions and to the satisfaction of the Building Control Officer. Walls to bridge drains using reinforced concrete lintels leaving a 50mm clear gap below filled with approved compressible sealant, masked over at both sides of wall with rigid none degradable sheet material. Sanitary ware to be fitted with 75mm deep seal traps with rodable access to be connected to soil stacks or B.I.G via 40mm dia p.v.c piping. To prevent cross flow, connections to SVP must not be directly opposite. Any bath is to be limited to 48°C via an inline blending valve which is to be compatible with hot and cold sources.

12. **Kitchen Ventilation**
The requirement will be satisfied if there is both:
(i) Mechanical extract ventilation for rapid ventilation, rated capable of extracting at a rate not less than 60 litres per second (or incorporated within a cooker hood and capable of extracting at a rate of 30 litres per second), which may be operated intermittently, for instance during cooking;
and
(ii) Background ventilation, either;
(a) by a controllable and secure ventilation opening (or openings) having a total area not less than 4000sq. mm, located so that to avoid drafts, eg. a trickle ventilator, or
(b) by the mechanical ventilation being in addition, capable of operating continuously at a nominally one air-change per hour.

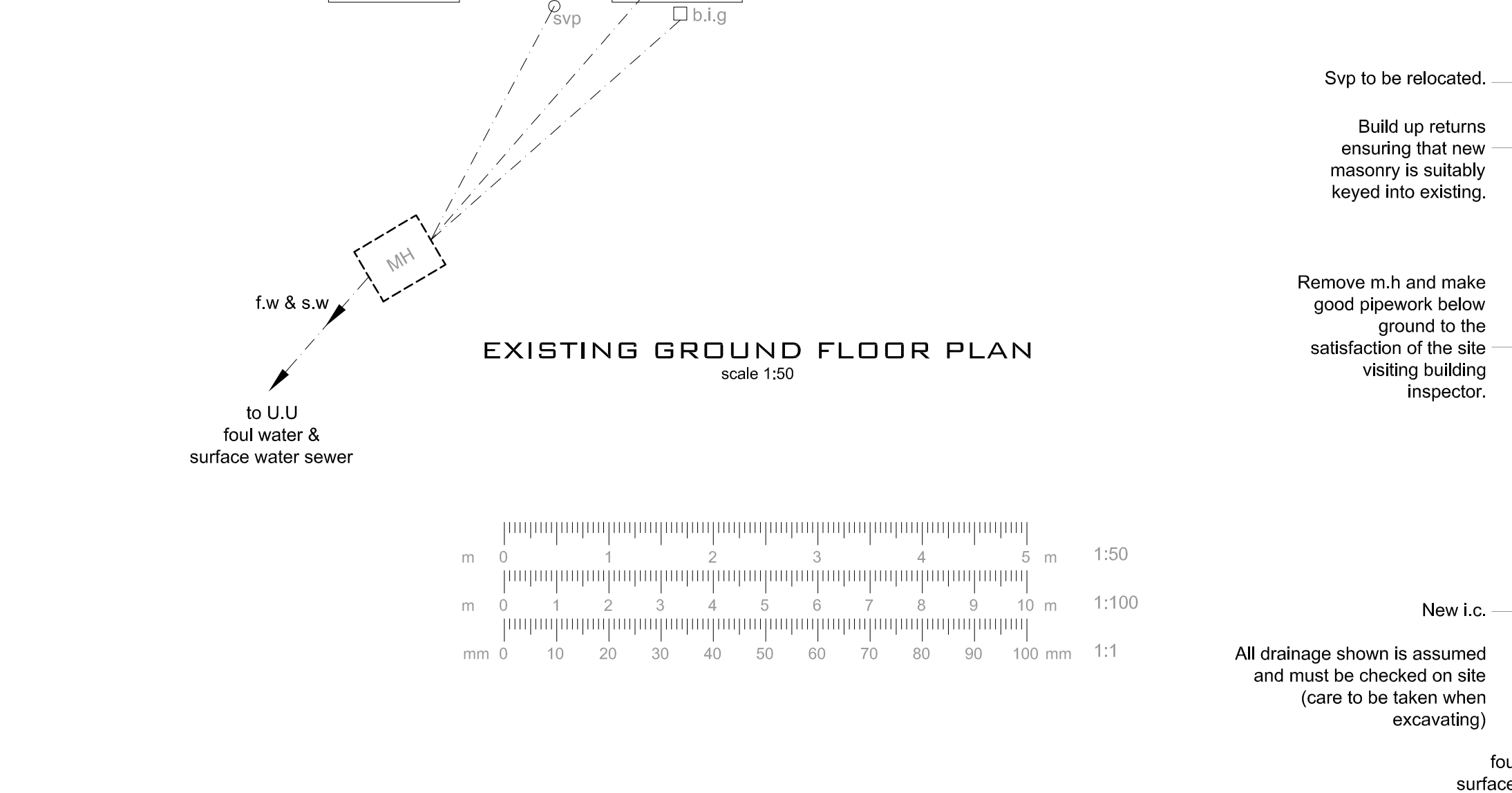
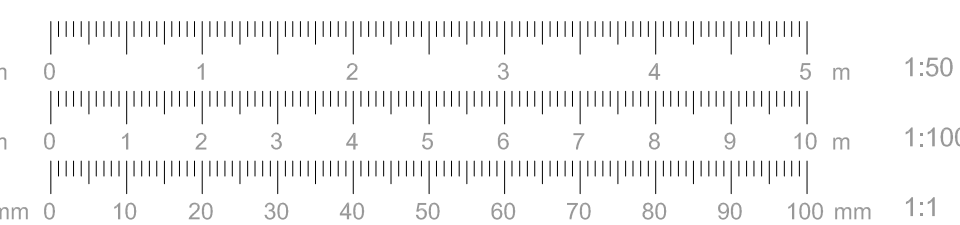
Heating:
New rooms to be heated using rads fitted with thermostatic radiator valves. Fed from exp. boiler
Any alterations to heating /hot water system to be carried out by Gas Safe registered plumber. Any new boiler to be condensing boiler with balanced flue and full controls should be incorporated.



LOCATION PLAN
scale 1:1250



EXISTING GROUND FLOOR PLAN
scale 1:50



PROPOSED GROUND FLOOR PLAN
scale 1:50

All drainage shown is assumed and must be checked on site (care to be taken when excavating)