

**PROPOSED SIDE ELEVATION**  
SCALE 1:100

**PROPOSED REAR ELEVATION**  
SCALE 1:100

**PROPOSED SIDE ELEVATION**  
SCALE 1:100

**PROPOSED FRONT ELEVATION**  
SCALE 1:100

**FOUNDATION DEPTH PLAN**  
SCALE 1:100

NOTE:

FOUNDATION DEPTHS ESTIMATED AND TO BE CONFIRMED ON SITE BASED ON SITE CONDITIONS BY BUILDING INSPECTOR. PROVISIONAL DEPTHS AS SECTIONS UNLESS NOTED OTHERWISE ON PLAN. TREE SPECIES TO BE CONSIDERED AND NOTED ANY WORK COMMENCES. FOOTINGS TO BE 600MM BELOW LOWEST ROOT ACTIVITY AND BELOW ANY ADJACENT DRAIN. 75 CLAYMASTER TO BE PROVIDED TO FOUNDATION DEPTHS EXCEEDING 1.5M DEPTHS. FOUNDRY TO ORIGIN GROUND LEVEL NOT TO TOP OF BUILT UP GROUND.

**IMPORTANT NOTE: DEEP EXCAVATIONS ARE DANGEROUS. TRENCHES TO BE DUG BY MECHANICAL DIGGER UNLESS NOT POSSIBLE. NO PERSON TO ENTER A TRENCH UNLESS ADEQUATE EARTHWORK SUPPORT IS CONSTRUCTED. NO PERSON TO ENTER A TRENCH WITHOUT SUPERVISION.**

#### FOUNDATIONS

Concrete deep strip 30 N/mm<sup>2</sup> strength sulphate resisting cement. Depth & width provisionally as plan but final depth & width to be agreed on site with building inspector. Drains running through foundations or under new walls to have 150 RC lintel over with 50 clearance. Foundations exceeding 1500 deep to have 75 claymaster to inside face kept 500 from bottom of excavation.

#### GROUND FLOOR - BEAM & BLOCK TO REAR EXTENSION

50 lean mix concrete oversite on lapped 1200 gauge DPM. Top of oversite to be above external ground level to all sides of extension. 225 void, 155mm 100 concrete beams by Milbank Concrete or similar approved. Beams spaced as shown on plan. Medium density concrete 440x215 block infill. Grout joints with 4:1 sand cement worked well into joints. 1200 gauge DPM, 100 Celotex GA4000 insulation slab with staggered & taped joints. 75 screed finish, 500 gauge polythene separating layer between insulation & screed. Plastic airbricks at 1800 cts to perimeter of extension to ventilate void.

#### GROUND FLOOR - GROUND BEARING CONCRETE SLAB TO UTILITY ROOM

Min 150 rammed hardcore blinded with 50 sand 1200 PVC DPM lapped to DPC. 100 concrete, 100 Celotex GA4000 insulation slab with staggered & taped joints. 75 screed, 500 gauge polythene separating layer between insulation & screed. All existing air vents ducted through 100 dia PVC pipe under DPC. Strip of insulation to perimeter of screed.

#### EXTERNAL CAVITY WALLS WITH FACING BRICK OUTER SKIN

Cavity wall of 100 Celcon Standard lightweight block (K=0.15 W/m2K) inner skin, 102 facing brick outer skin to match existing outer skin. 1:16 mortar mix. Class B eng brick with sulphate resisting cement below DPC. 100 cavity with 90 Kingspan Kooltherm K106 phenolic insulation. Dryline internally with 12.5 plasterboard dot & dabbed to wall with 3 skim. Wall to achieve U-value of 0.18W/m2K. Fill cavity with weak mix concrete to 225mm below DPC. Stainless wall ties (275 long) 750 horiz, 450 vert & 300 at reveals. Join to existing building with furfix movement joint. Provide thermalite expansion joint to external leaf on spans in excess of 6m. DPC to BS743 lapped to existing. Close cavity reveals with Thermabate insulated cavity closers. Lintels as shown on drawing.

#### INTERNAL BLOCKWORK PARTITION

100 Celcon Standard lightweight block (K=0.15 W/m2K), 1:16 mortar mix. Class B eng brick with sulphate resisting cement below DPC. Bond into new external walls. Join to existing building with furfix movement joint. DPC to BS743 lapped to existing.

#### STEELWORK

Beams to be clad with 12.5 fireline plasterboard + skim to provide 30 min fire rating. Alternatively steelwork to be painted with intumescent paint by suitably trained person to approval of building inspector on site.

#### FLAT ROOF (WARM DECK CONSTRUCTION)

175x50 C16 joists at 400 cts on steel joist hangers. 5x30 MS anchor straps at 2000 max cts. 1 in 40 firrings. 12 WBP ply. Bond vapour control layer to ply (Alutrix 600 or similar). Fully bond 100mm Celotex GA4000 to VCL. 50 Celotex GA4000 between joists. 18 OSB, GRP roof covering all to manufacturers detail. Ceiling 9 plasterboard + skim. Roof to achieve U-value of 0.15W/m2K. Roof covering to achieve AA, AB or AC surface spread of flame rating.

#### ROOFLIGHTS - FLAT ROOFS

Install with manufacturers upstand/flashing kit and all to manufacturers instructions. Doubled up joists and trimmers around opening to be bolted together with M12 bolts @ 600cts.

#### VENTILATION

Windows/doors to match existing & provide vent of min 1/20 floor area & built in adjustable 800mm<sup>2</sup> min vent. Open plan kitchen diners to have 3x800mm<sup>2</sup> vents. Install power vent to kitchen to achieve 30 litres/sec if over a cooker or 60 litres/sec if elsewhere. Utility room to achieve 30 litres/sec. Vent to be ducted at ceiling level to outside air.

#### DRAINS

Clay 100 dia pipe laid in 150 pea shingle to fall min 1 in 40. Inspection chambers 150 concrete base. Osma preformed IC all to manufacturers spec (only on private non shared drains). Drains shown on drawings are estimated and are to be confirmed on site before any work commences.

#### SURFACE WATER

112 dia PVC gutters, 68 dia PVC downpipes. Surface water downpipes connected into existing surface water drain. If not possible construct soakaway minimum 5 metres from any building. Volume of 1 cubic metre per 16.5 square metres of roof area served. Fill with hardcore. If clay found use crate system soakaway.

#### ABUTMENTS

All exterior abutments to have code 4 lead min 150 flashing let into brickwork or blockwork.

#### WINDOWS & DOORS

Double glazed with 16 air gap and soft low E coating. Built in 8000mm<sup>2</sup> adjustable vent. Windows & doors to achieve U value of 1.4 w/m2K. All glass below 800mm, glass in doors or within 300mm of a door to be toughened safety glass.

#### ABOVE GROUND DRAINAGE AND PLUMBING

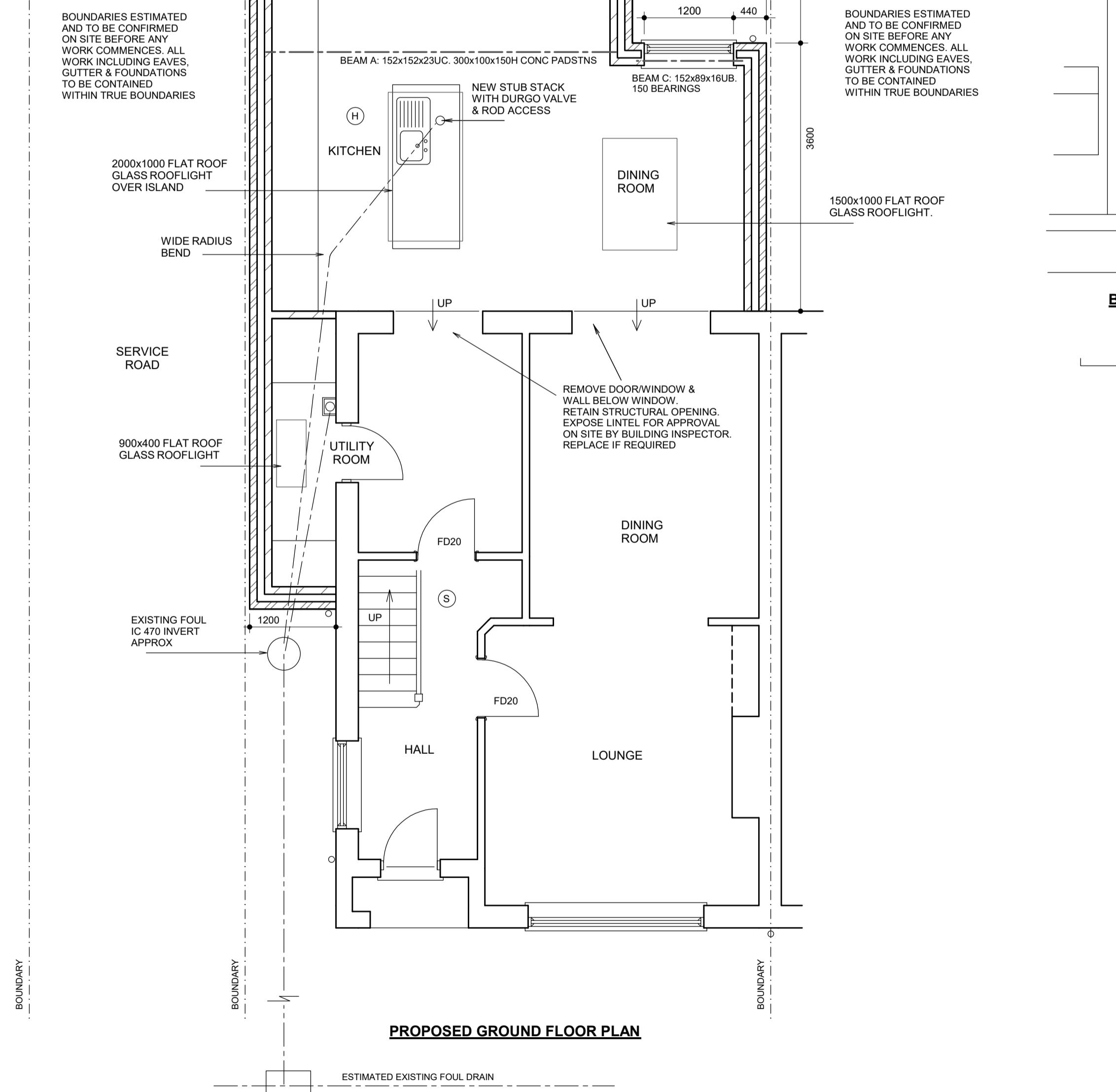
Sink to have 40 dia waste with 75 D/S traps & rodding access at bends. Plumbing to comply with British Standards. Air admittance valves (Duro) to be installed above level of highest fitting that it serves. Wholesome water (ie water provided by statutory water supplier via a compliant water supply installation) to be provided to all taps.

#### ELECTRICAL WORK

All electrical work required to meet the requirements of Part P (Electrical Safety). Must be designed, installed, inspected & tested by a person competent to do so. Prior to completion the council should be satisfied the 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. New light fittings to have LED bulbs. Electrical switches and sockets to be installed between 450mm and 1200mm from floor level where practical.

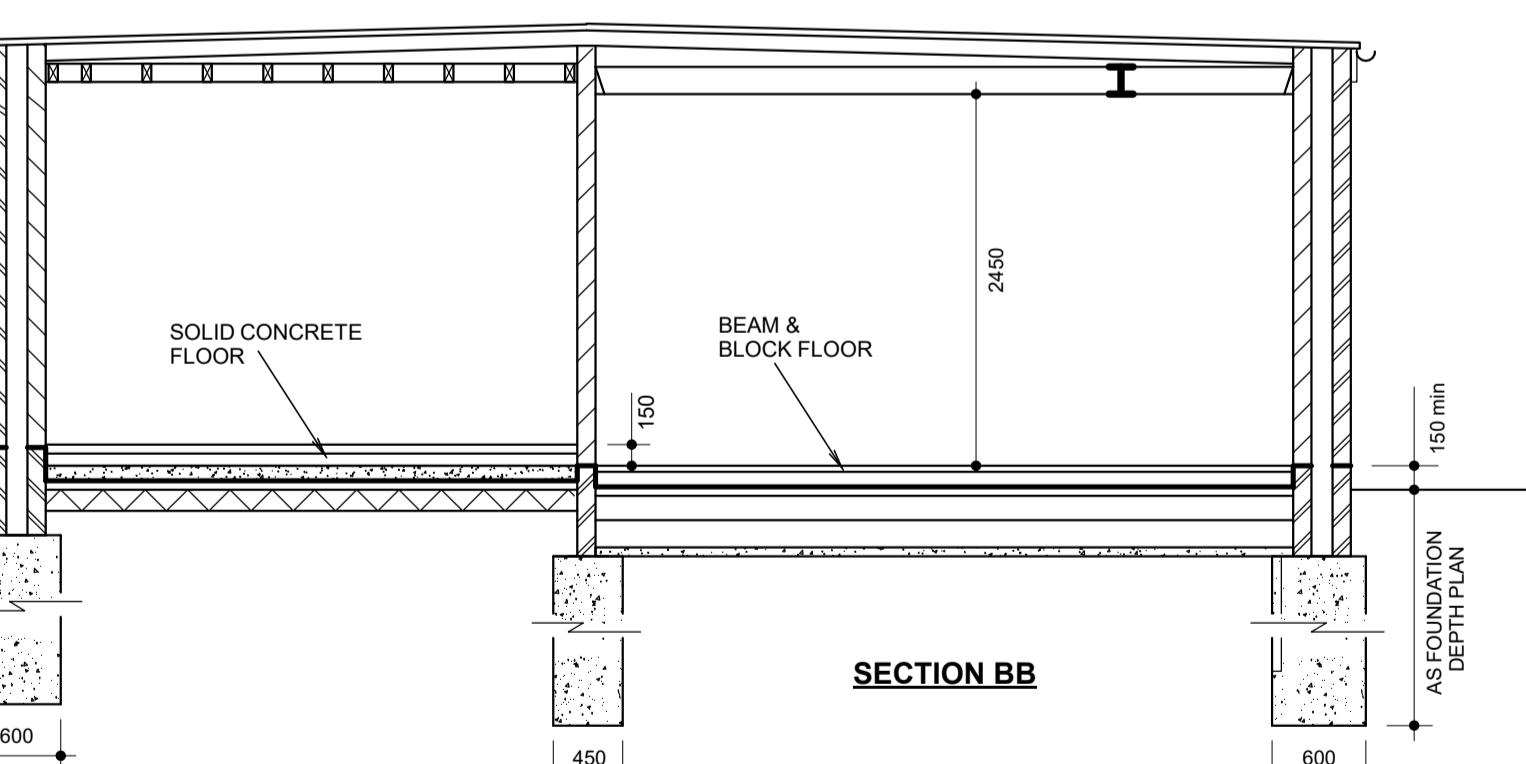
#### HEATING

New radiators to be fitted with thermostatic valves. Work to gas pipework, boilers & appliances to be carried out, tested and certified by Gas Safe registered person.

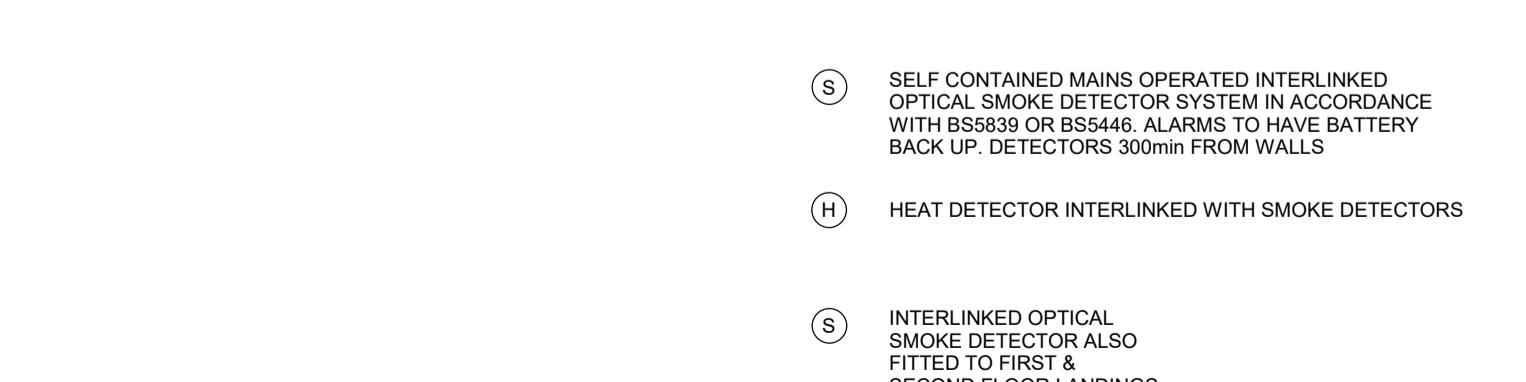


**BLOCK PLAN**  
SCALE 1:500

20m



**SECTION AA**



**SECTION BB**

(S) SELF CONTAINED MAINS OPERATED INTERLINKED OPTICAL SMOKE DETECTOR SYSTEM IN ACCORDANCE WITH BS5839 OR BS5446. ALARMS TO HAVE BATTERY BACK UP. DETECTORS 300mm FROM WALLS

(H) HEAT DETECTOR INTERLINKED WITH SMOKE DETECTORS

(S) INTERLINKED OPTICAL SMOKE DETECTOR ALSO FITTED TO FIRST & SECOND FLOOR LANDINGS

DUE TO SURVEY LIMITATIONS EXISTING JOIST SPANS ASSUMED UNTIL CONFIRMED ON SITE. ALL WALLS & PARTITIONS TO BE CONSIDERED LOADBEARING UNTIL CONFIRMED ON SITE. ALL NEW WORK TO COMPLY WITH CURRENT BUILDING REGULATIONS. ALL NEW WORK TO BE CONSIDERED LOADBEARING UNTIL CONFIRMED ON SITE. ALL EXISTING WORK TO BE CONSIDERED LOADBEARING UNTIL CONFIRMED ON SITE. IF STRUCTURAL ENGINEERS DESIGN RELATING TO STRUCTURAL ELEMENTS CONTRADICTS THIS DRAWING, THE ENGINEERS DESIGN IS TO BE FOLLOWED. THIS DRAWING IS FOR PLANNING & BUILDING REGULATION APPLICATION PURPOSES ONLY. BUILDCRITTER TO APPOINT COM CONSULTANT TO ENSURE WORK IS IN ACCORDANCE WITH PLANNING & BUILDING REGULATIONS. SINCE WE HAVE NO ACCESS TO THE DEEDS OF THE PROPERTY IT IS THE RESPONSIBILITY OF THE CLIENT TO ENSURE THAT THE WORKS DO NOT CONTRAVENE ANY RESTRICTIVE COVENANTS CONTAINED IN THE DEEDS