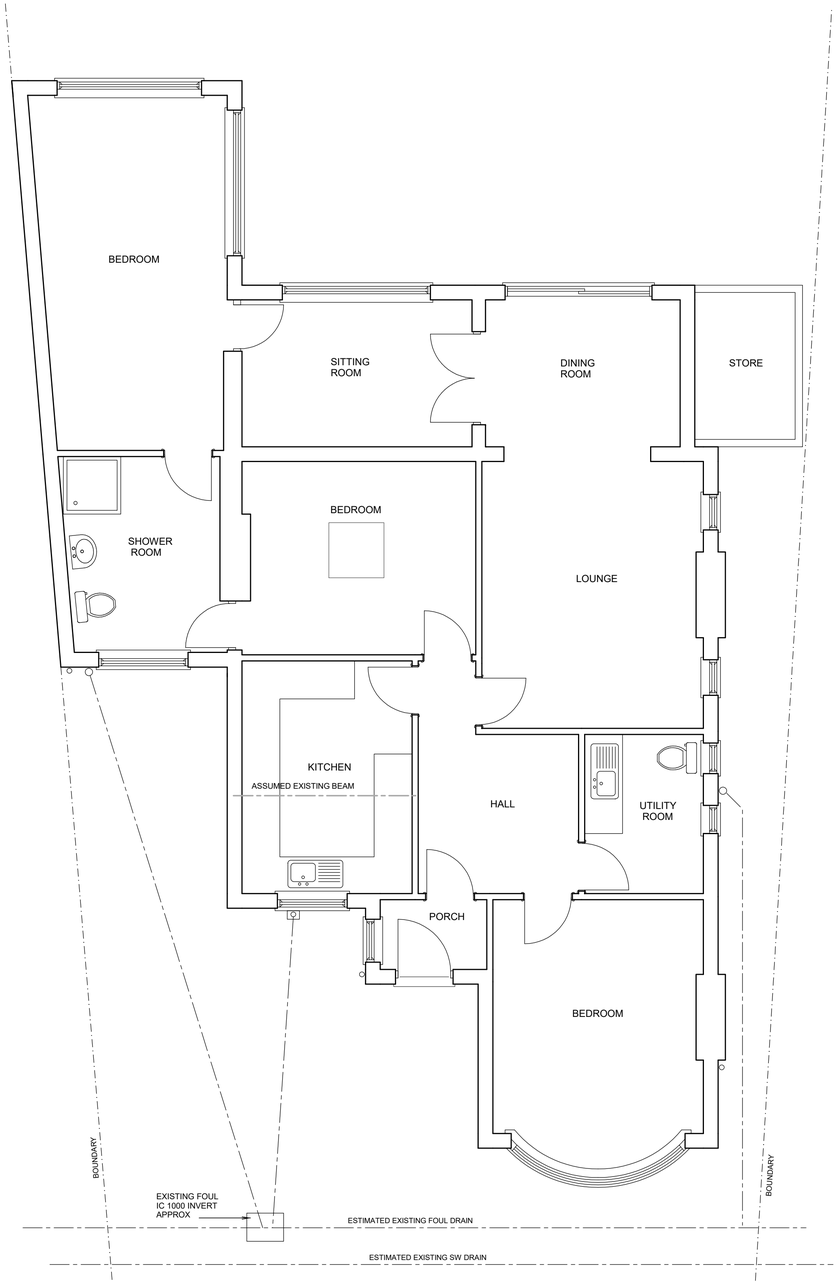
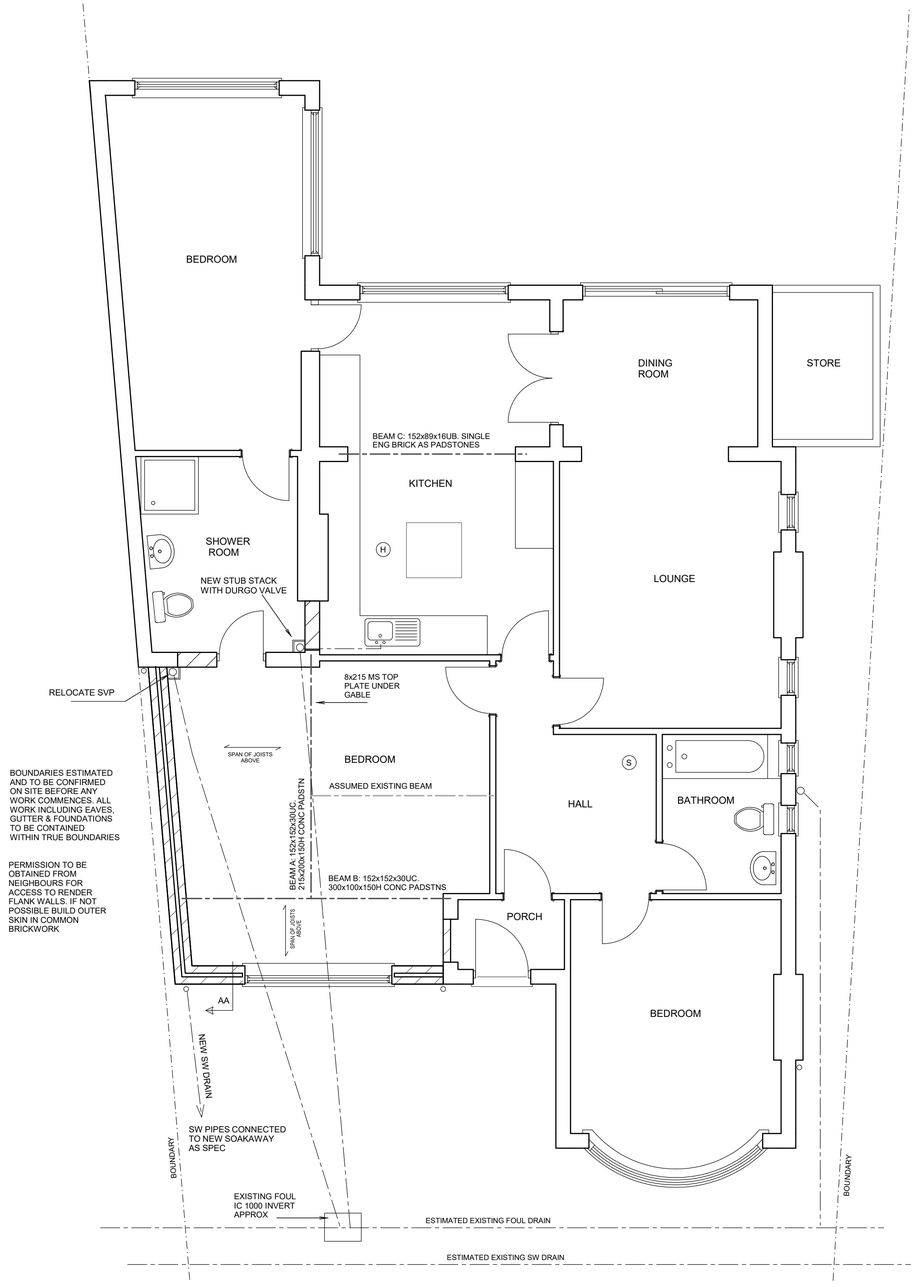



**EXISTING GROUND FLOOR PLAN**




**PROPOSED GROUND FLOOR PLAN**

10.00 METRES @ 1:100

5.00 METRES @ 1:50

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

(H) HEAT DETECTOR INTERLINKED WITH SMOKE DETECTORS

## GENERAL SPECIFICATION
**(unless noted otherwise on drawings or engineer's design)**

### FOUNDATIONS

Concrete deep strip 30 N/mm$^2$ 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. Foundations dug next to neighbouring structures to be constructed in 'hit & miss' sequence. Excavate alternate bays not exceeding 1m long. Fill with concrete and dig next bay after concrete has fully set. Connect pins with M16 MS dowels. Any eccentrically loaded foundation to be 600mm wide with the outer face of wall 60 from foundation edge.

### GROUND FLOOR – GROUND BEARING CONCRETE SLAB

Min 150 rammed hardcore blinded with 50 sand 1200 PVC DPM lapped to DPC. 100 concrete. 80 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

Cavity wall of 100 Celcon Standard lightweight block (K=0.15 W/m2K) inner skin. 100 Celcon Standard lightweight block OR 102 facing brick outer skin to match existing outer skin (refer to plan). 1:1:6 mortar mix. Class B eng brick with sulphate resisting cement below DPC. 95 cavity with 85 Knauf DriTherm-32 full fill insulation to achieve U-value of 0.28W/m2K. Fill cavity with weak mix concrete to 225mm below DPC. Stainless wall ties 750 horiz, 450 vert, & 300 at reveals. Join to existing building with furfix movement joint. DPC to BS743 lapped to existing. Close cavity reveals with Thermabate insulated cavity closers. Render outer skim blockwork to match existing 2 x 10 coat 1:1:6 mix + waterproof additive BS5262 to blockwork. Stainless steel bell drip at DPC level. Lightweight Gypsum plaster internally - 11 Thistle Bonding Coat + 3 Thistle multi finish skim. Catnic CG90/100 lintels. 150 min bearings.

### 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.

### PITCHED FRONT ROOF

100x50 C16 rafters at 400 cts Spiked & B-mouthed to wall plate. 150x50 header beam supported on vertical 100x50 uprights @ 800cts. Clad upstand with 18 WBP ply dressed in felt. Tyvek breathable membrane. 19x38 battens. 5x30 MS anchor straps at 1200 max cts screw fixed at three points to both roof structure and wall. Roof tiles to match existing. Pitch to match existing. 270 fibreglass quilt laid between joists & over joists. Ventilation not required. 9 plasterbd + 3 skim to underside of joists. New hip & ridge tiles to be bedded on mortar in addition to a mechanical fixing

### FLAT ROOF (WARM DECK CONSTRUCTION)

150x50 C16 joists at 400 cts on steel joist hangers. 5x30 MS anchor straps at 2000 max cts. 18 WBP plywood firred to fall min 1 in 40. 1 layer felt vapour control layer (VCL) in accordance with BS6229 fully bonded to ply decking. Fully bond 120mm Kingspan TR24 insulation to VCL. Loose lay venting layer directly onto insulation. Torch on underlay sheet over venting layer. Torch on mineral surface cap sheet to underlay. Finish with bitumen bedded stone chippings covering the whole surface to a depth of 12.5mm. Ceiling 9 plasterboard + skim. Roof to achieve U-value of 0.18W/m2K.

### VENTILATION

Windows/doors to match existing & provide vent of min 1/20 floor area & built in adjustable 8000mm$^2$ min vent. Install power vent to kitchen to achieve 30 litres/sec if over a cooker or 60 litres/sec if elsewhere. Bath/shower room to achieve 15 litres/sec and be connected to light switch with 15 min overrun. 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. Alternatively use Osma preformed IC all to manufactures 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 to soakaway minimum 5 metres from any building. Volume of 1 cubic metre per 16.5 square metres of roof area served. Fill with hardcore.

### 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$^2$ adjustable vent. Windows to achieve U value of 1.6 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, bath & shower to have 40 dia waste. Basin with 32 dia waste. All with 75 D/S traps & rodding access at bends. WC with 110 dia waste. Plumbing to comply with British Standards. Air admittance valves (Durgo) to be installed above level of highest fitting that it serves. SVPs to vent 900 above any openable window within 3m. Wholesome water (ie water provided by statutory water supplier via a compliant water supply installation) to be provided to all taps. Baths & shower taps to be thermostatically controlled to ensure water does not exceed 48 deg C

### 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

Flue to be 600 min from boundary and 300 min from any openings. 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.

**26 MARLBOROUGH AVENUE RUISLIP MIDDX HA4 7NR**

**SINGLE STOREY EXTENSION**



**SCALE 1:50 / 1:100 @ A1**

**JUNE 2021**

**JAMES RUSH ASSOCIATES LTD**

54 JOINERS LANE CHALFONT ST PETER
BUCKINGHAMSHIRE SL9 0AT TEL: 01923 775 761
EMAIL: jameswrush@hotmail.com

**DRG No. 2245.1**

BOUNDARIES ESTIMATED AND TO BE CONFIRMED ON SITE. ALL NEW WORKS TO BE CONTAINED WITHIN TRUE BOUNDARIES UNLESS STATED OTHERWISE ON PLAN

ALL NEW WORK TO COMPLY WITH CURRENT BUILDING REGULATIONS

DIMENSIONS IN MILLIMETRES AND TO BE CONFIRMED ON SITE

ALL STEEL DIMENSIONS TO BE CONFIRMED ON SITE AND NOT BE TAKEN FROM STRUCTURAL CALCULATIONS

ALL DRAINS & TREES ARE ESTIMATED AND ARE TO BE CHECKED & CONFIRMED ON SITE BEFORE ANY WORK COMMENCES

CLIENT TO SERVE PARTY WALL ACT NOTICE BEFORE WORK COMMENCES

ALL WORK TO BE CARRIED OUT & SUPERVISED BY COMPETENT OPERATIVES

DUE TO SURVEY LIMITATIONS EXISTING JOIST SPANS ASSUMED UNTIL CONFIRMED ON SITE. ALL WALLS & PARTITIONS TO BE CONSIDERED LOADBEARING UNTIL OPENED UP ON SITE AND CHECKED BY COMPETENT PERSON TO CONFIRM OTHERWISE. MUST BE CONFIRMED BEFORE ANY WORK COMMENCES

IF STRUCTURAL ENGINEERS DESIGN RELATING TO STRUCTURAL ELEMENTS CONTRADICTS ARCHITECTURAL DRAWINGS/SPEC - ENGINEERS DESIGN PREVAILS

THIS DRAWING IS FOR PLANNING & BUILDING REGULATION APPLICATION PURPOSES ONLY. BUILDER/CLIENT TO APPOINT CDM CONSULTANT TO ENSURE WORKS COMPLY WITH CDM REGULATIONS BEFORE WORK COMMENCES

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