

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

**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 2x 140(h) x 100(w) PCC lintels over with 50 clearance (unless larger beam shown on drawings or engineers design). 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 – SUSPENDED TIMBER CONSTRUCTION**

50 lean mix concrete oversite on lapped 1200 gauge DPM. Top of oversite to be above external ground level. 150 void (increase void to 300 if high shrink soil). 200x50 C16 joists at 400 cts on steel joist hangers. 18mm moisture resistant T&G particle board. 150 Celotex XR4000 insulation slab between joists held in position with chicken wire screwed to joists. DPC to be below floor joists. Plastic airbricks at 1800 cts to perimeter of extension to ventilate void. Floor to achieve U-value of 0.18W/m<sup>2</sup>K.

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

Cavity wall of 100 Celcon Standard lightweight block (K=0.15 W/m<sup>2</sup>K) inner skin. 102 facing brick outer skin to match existing outer skin. 1:1:6 mortar mix. Class B eng brick with sulphate resisting cement below DPC. 150 cavity with 150 Knauf DriTherm-32 full fill insulation. Dryline internally with 12.5 plasterboard dot & dabbed to wall with 3 skim. Wall to achieve U-value of 0.18W/m<sup>2</sup>K. 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 furlex movement joint. DPC to BS743 lapped to existing. Close cavity reveals with Thermabate insulated cavity closers. Openings to have Caticn CG150/100. 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.

**INTERNAL PARTITIONS**

75x50 stud. 1981x762 doorways. Lay DPC under sole plates where on concrete ground floor. Double up joists under partition bolting together with M12 bolts @ 600cts if on timber floor. All partitions to contain 75 acoustic quilt. Clad partitions with 12.5 soundblock + 3 skim each side.

**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 firings. 12 WBP ply. Bond vapour control layer to ply (Alutrix 600 or similar). Fully bond 150mm Celotex GA4000 to VCL. 18 OSB. Loose lay venting layer. 3 layer felt to BS747 hot bonded to OSB decking. Ceiling 9 plasterboard + skim. Roof to achieve U-value of 0.15W/m<sup>2</sup>K. 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. Triple 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 8000mm<sup>2</sup> min vent. Open plan kitchen diners to have 3x8000mm<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. WC 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**

Osma 100 dia pipe laid in 150 pea shingle to fall min 1 in 40. 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. If clay found use grate 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/m<sup>2</sup>K. All glass below 800mm, glass in doors or within 300mm of a door to be toughened safety glass.

**ABOVE GROUND DRAINAGE AND PLUMBING**

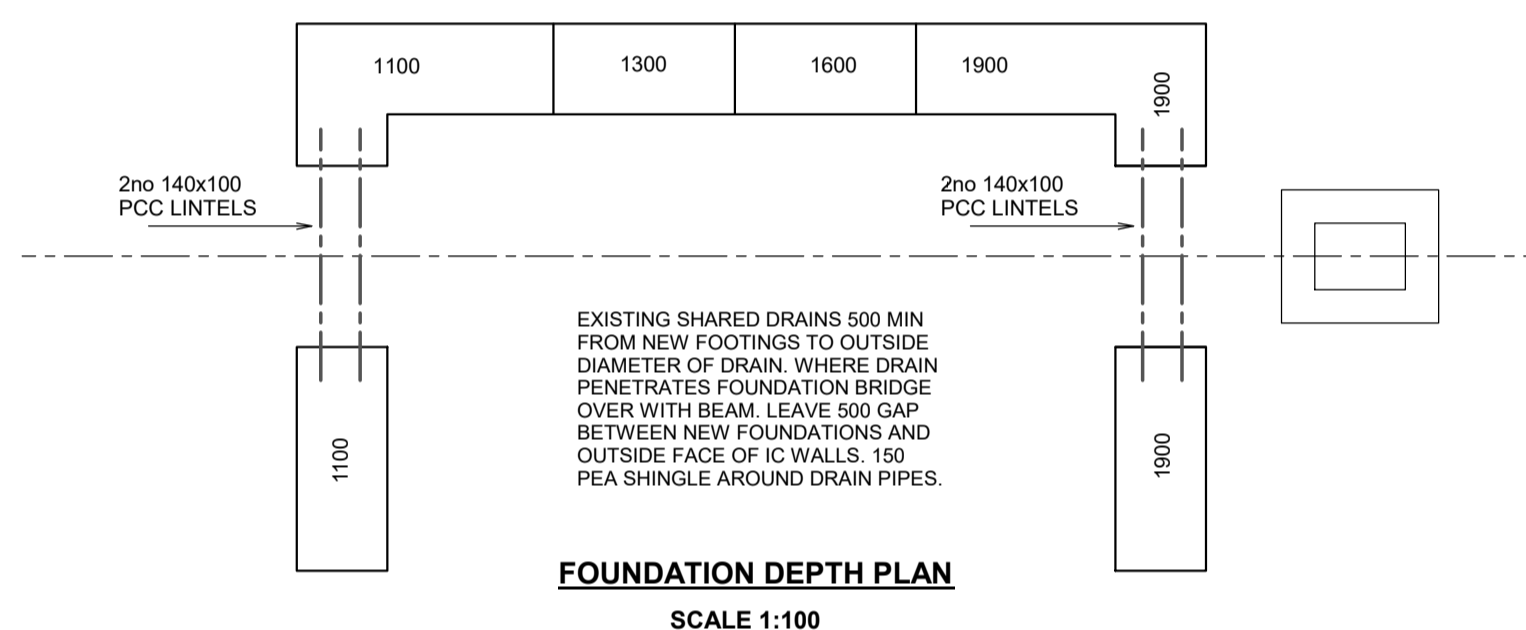
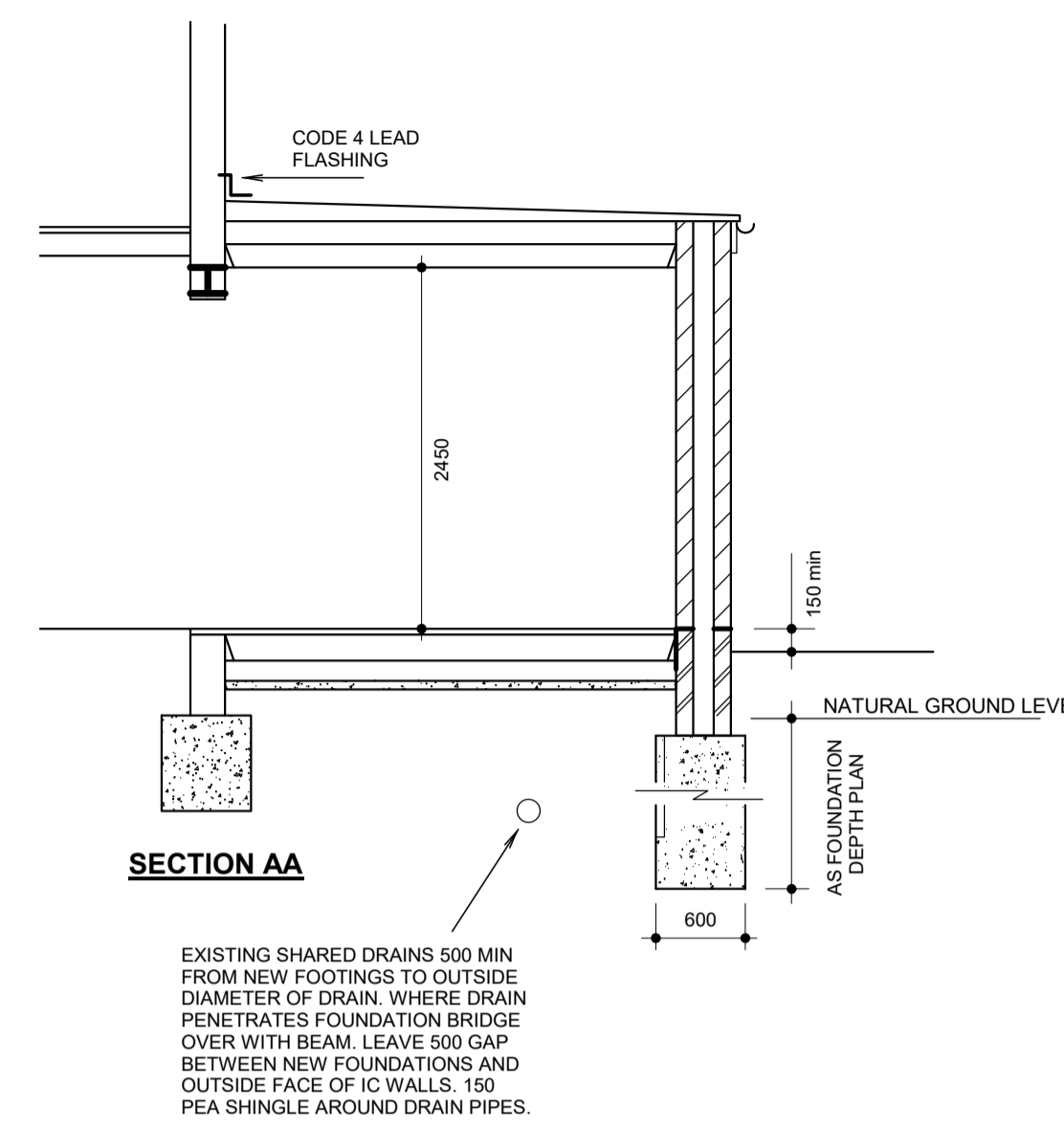
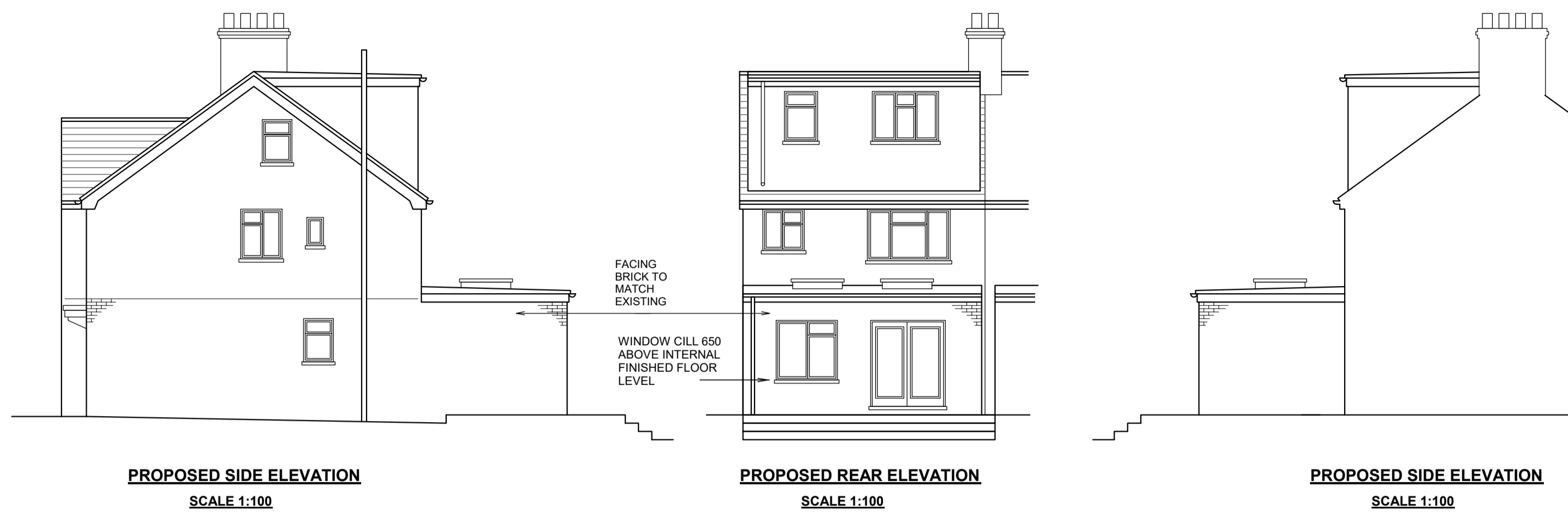
Sink to have 40 dia waste. Basin with 32 dia waste. All with 75 D/S traps & rodding access at bends. WC with 110 dia waste. Plumbing to comply with British Standards. Air admittance valves (Durgo) to be installed above level of highest fitting that it serves. Wholesome water (ie water provided by statutory 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**

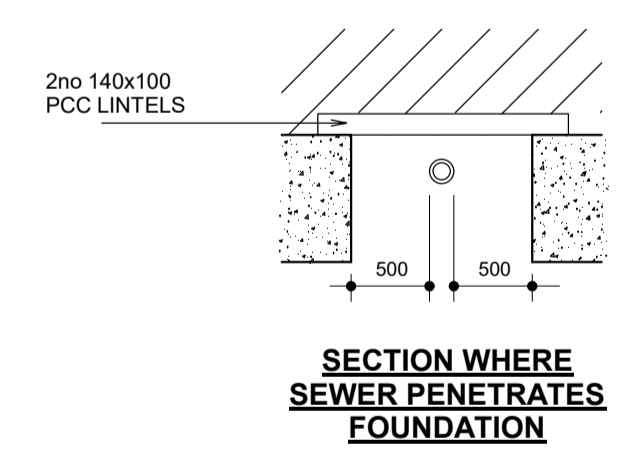
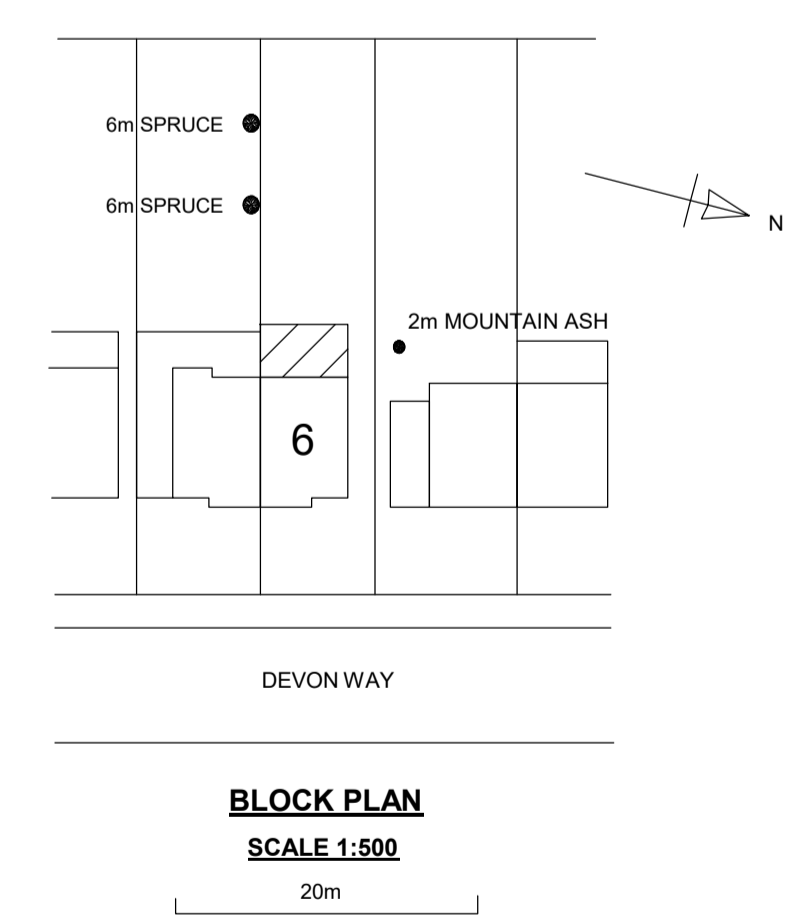
If replaced any new boiler to be of condensing type and have minimum SEDUK rating of 92%. Flue to be 600 min from boundary and 300 min from any openings. New radiators to be fitted with thermostatic valves. Work to gas pipework, boilers & appliances to be carried out, tested and certified by Gas Safe registered person.



**FOUNDATION DEPTH PLAN**  
SCALE 1:100

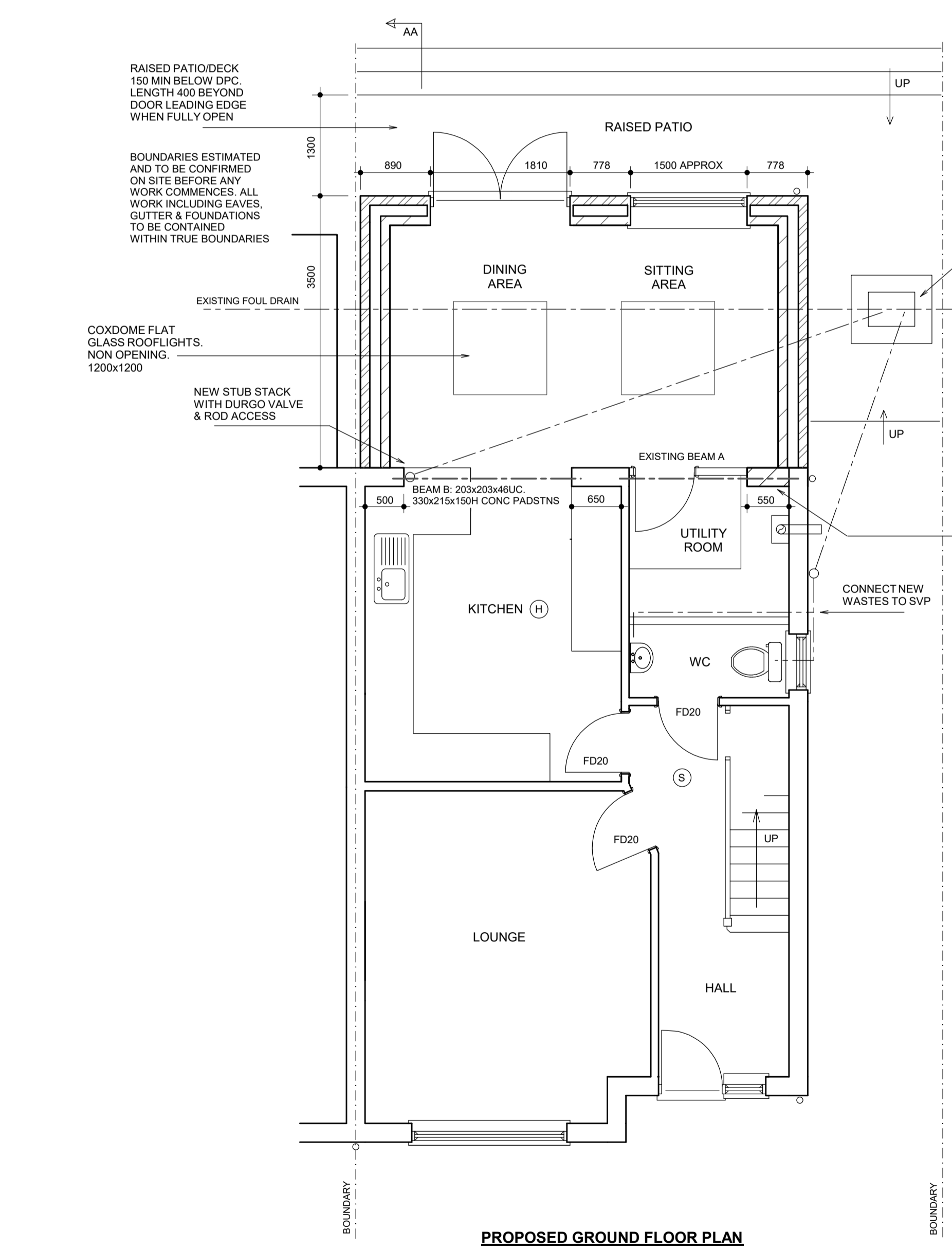
NOTE:  
FOUNDATION DEPTHS ESTIMATED AND TO BE CONFIRMED ON SITE BASED ON SITE CONDITIONS BY BUILDING INSPECTOR. PROVISIONAL DEPTHS AS SECTIONS UNLESS NOTED OTHERWISE ON PLAN. TREE SPECIES TO BE CONFIRMED ON SITE BEFORE ANY WORK COMMENCES. FOOTINGS TO BE 600 BELOW LOWEST ROOT ACTIVITY AND BELOW ANY ADJACENT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

**IMPORTANT NOTE: DEEP EXCAVATIONS ARE DANGEROUS. TRENCHES TO BE DUG BY MECHANICAL DIGGER. NO PERSON TO ENTER A TRENCH UNLESS ADEQUATE EARTHWORK SUPPORT IS CONSTRUCTED. NO PERSON TO ENTER A TRENCH WITHOUT SUPERVISION.**



- (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

ALL FIRE DOORS TO BE FITTED WITH INTUMESCENT STRIPS TO DOOR OR FRAME. 3no 100mm STEEL BUTT HINGES WITH MELTING POINT IN EXCESS OF 800 DEG C



BUILD NEW 215x550 PIER IN BLOCKWORK. FULLY BOND INTO WALL OF EXISTING HOUSE. DRY PACK TO UNDERSIDE OF BEAM. NEW 450 WIDE FOUNDATION SAME DEPTHS AS EXTENSION FOUNDATION

**PROPOSED GROUND FLOOR PLAN**