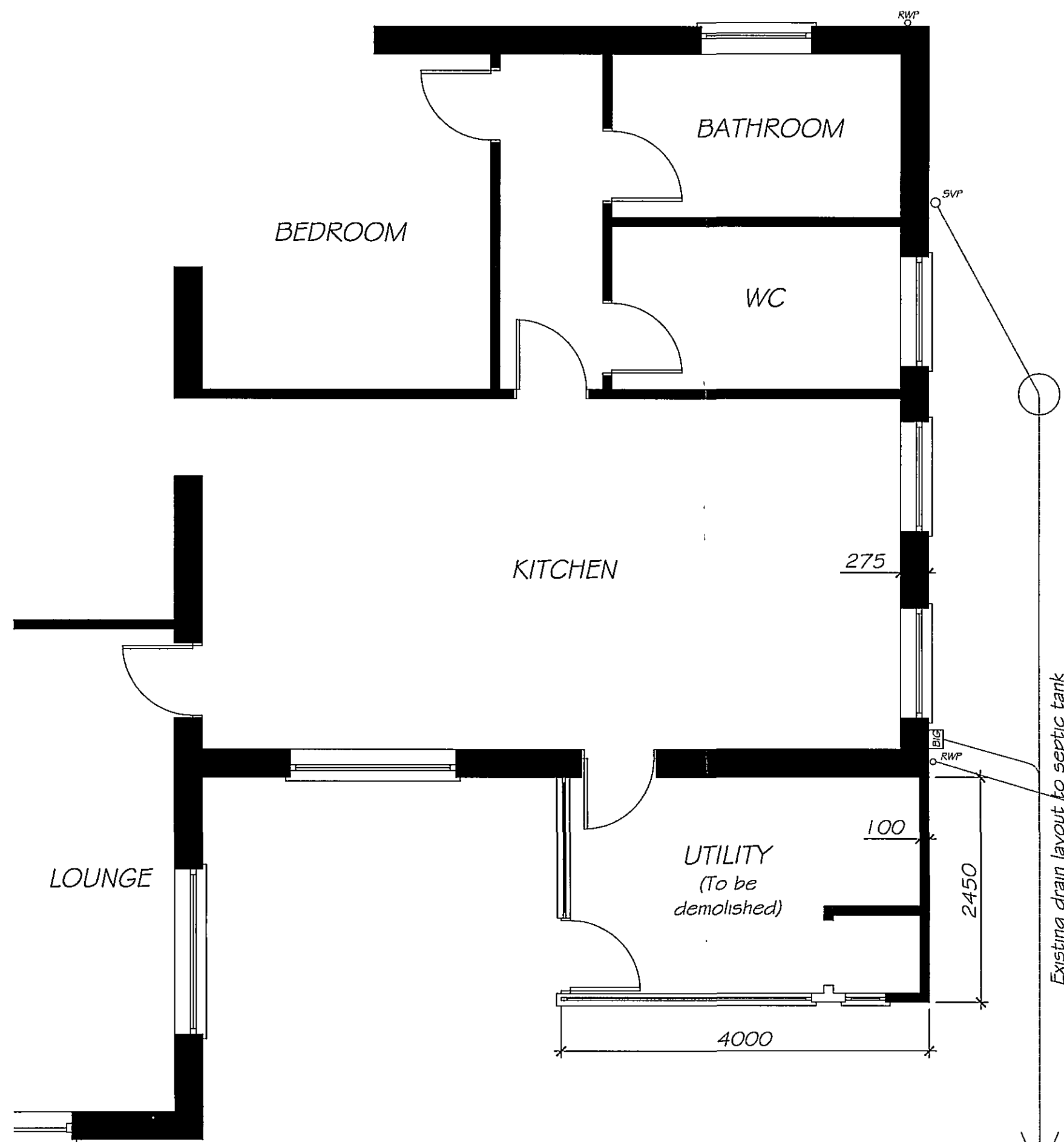




EXISTING GROUND FLOOR PLAN 1:50

Foundations (Strip)

Foundations to consist of 650 wide x 250 thick beneath cavity walling, Gen 1 concrete strip foundations at a min. of 750mm below ground level (1 metre deep in clay soils) or as directed by local authority inspector. Foundations to be reinforced with 2 no. Layers of A252 mesh reinforcement fabric in top and bottom of foundations.

Below DFC Walls

Incorporate 7N/mm² class A concrete blocks or a brand name foundation Trench blocks below ground level. Provide splash courses of quality engineering bricks min 150mm above GL & a lean mix concrete fill to cavity min 225mm clear cavity below DFC.

Drainage (Underground)

1 no. new inspection chamber breaking into existing pipe run to be Osmdrain or similar approved product 450mm dia with 110mm inlets and a light duty (Grade C) cover. 110mm Osma short drain pipe run to be bedded and surrounded with 100mm granular pea shingle and back filled using as dug material, laid to appropriate fall to achieve connection between new BIG and new I.C. (All underground drainage to BS 8301.)

Ground Floor Construction

75mm sand & cement screed on 100mm concrete floor slab on 100mm Knauf Polyfoam floorboard standard insulating sheets staggered & taped (or similar equivalent) & 25mm rigid perimeter insulation on 1200g Visqueen polythene damp proof membrane dressed up & linked in with all DFCs in external walls on 25mm compacted sand bedding on min 150mm and a max 600mm of consolidated hardcore. (Max 0.022W/m²K Part L1B 2006 @ PIA (P10.23) (A1 1.90)=0.25(0.90) ref: Knauf Technical)

External Walls

Cavity wall 300mm overall consisting of 3.5N/mm² Plasmor fibrolite blocks to external & internal leaf (or similar block having equivalent thermal conductivity) and a 100mm cavity fully filled using Knauf dntherm standard cavity slab (including gable walling) ensuring wall insulation extends 150mm below perimeter insulation of the floor to prevent thermal bridging. All cavities to be sealed at highest point. Cavity stronghold stainless steel wall connectors to BS 5628 used to connect new walling to existing walling. Incorporate DPC and cold bridging at all unbonded reveals with Thermabate cavity closers in accordance with manufacturers specifications. Provide DPCs to all walling, at a minimum of 150mm above finished ground level and cavity trays over lintels. Provide stainless steel double triangle Stalfix HK14 225mm wall ties 6 no. per m² (450mm ctrs vertically & 900mm ctrs horizontally & 300mm ctrs at reveals) to BS 5. 1243All external walling to receive a two coat 20mm render of 1:1.6 ratio (cement/lime/sand) ensuring render will not bridge dpc course. Paint exterior using Sandtex exterior covering. All internal walls to receive 13mm lightweight plaster and skim (Max 0.30W/m²K Part L1B 2006, Actual 0.27W/m²K using Dntherm standard cavity slabs ref: Knauf technical)

Lintels

IGL1/5 or Catnic CG lintels to be provided over all openings and incorporate integral expanded polystyrene infill to internal steel face maximising thermal efficiency & minimising cold bridging. All lintels to be fitted in accordance with manufacturers instructions, with a min. end bearing of 150mm. Cavity trays to be provided over all lintels.

Roof Construction

All measurements and exact pitch to be checked by truss supplier or main contractor before trusses are supplied. Roof truss manufacturers to provide design details & calculations of trusses including prefabricated diminishing trusses at new roof intersection to L.A. prior to installation on site. Truss rafters at 600mm ctrs on 100mmx75mm wall plate, strapped to wall with 30mmx5mm galvanised mild steel straps 1000mm long once bent over at 2m ctrs and fixed back to wall. Truss fixed to wall plate with galvanised truss clip or tooth nailed. 30mmx30mm straps 1500mm long at 2m ctrs laid over 3 no ceiling joists & up rake of rafters at gables, all with solid packed noggin. 100mmx25mm longitudinal & diagonal bracing fixed throughout to BS 5262. Concrete interlocking tiles (to match existing) at approx 40° pitch lapped at 75mm on 30mmx25mm treated tile batten over reinforced felt underlay to BS 747 IF. Valleys constructed using GRP valley troughs. Provide over face 10mm cross ventilation air gap preventing insect penetration using manthorpe continuous ventilators & ventilator trays to ensure airflow is maintained were loft & cavity wall insulation meet. Tie new roof into old, stripping back old to gain adequate solid fixing & overlaps. Insulate roof space with min 250mm Crown fibreglass blanket insulation, consisting of one layer 100mm thick laid between bottom chords of truss and one layer 150mm thick laid at right angles over bottom chord of truss. Ensure roof insulation joins cavity wall insulation to prevent thermal bridging. (0.16W/sq.m.K.).

Windows & Doors

All windows & doors to be white UPVC to match existing. Manufactured to BS 5. 7412 draught proofed & fitted with sealed double glazed units to BS 5. 5713, With low E coating and 16mm argon filled gap. Fit all doors and windows to overlap the insulated cavity closures by 30mm to meet min thermal resistance. Flange resistance Flange is applied to all perimeters external and internal to minimise air leakage. All glass lower than 1500mm above floor level in doors & side panels to within 300mm each side of door & windows lower than 800mm from floor level to be break safety, laminated or toughened glass to BS 5. 6206. Controlled fittings to meet following standards for new extensions Part L1B 2006:-

Windows 1.8 W/m²K or energy band D
Doors with more than 50% of internal surface area glazed 2.2 W/m²K
Other doors 3.0 W/m²K

Facia & Soffits

White UPVC fascia and soffits fitted to match existing.

Surface Water Drains/Rain Water Goods

Surface water drainage to be 110 dia Osmdrain or similar discharging into adjacent Drain (Dyke) to the eastern elevation of property at a 1:70 fall between RWDP & outlet and surround with 100mm thick pea shingle. Gutters 110mm dia min fall 1:600 fixed at 1m spacing, down pipes 63mm dia fixed at 2m spacing and sealed at ground level.

Ceilings

All new ceilings to consist of 12.5mm Gyproc plasterboard staggering all joints, taped filled and skimmed, with all unrestrained edges supported with noggin.

Construction methods

All work to conform with Building Regulations 2002 and subsequent amendments. All materials and workmanship to current British Standards, Codes of Practice and building inspectors satisfaction.

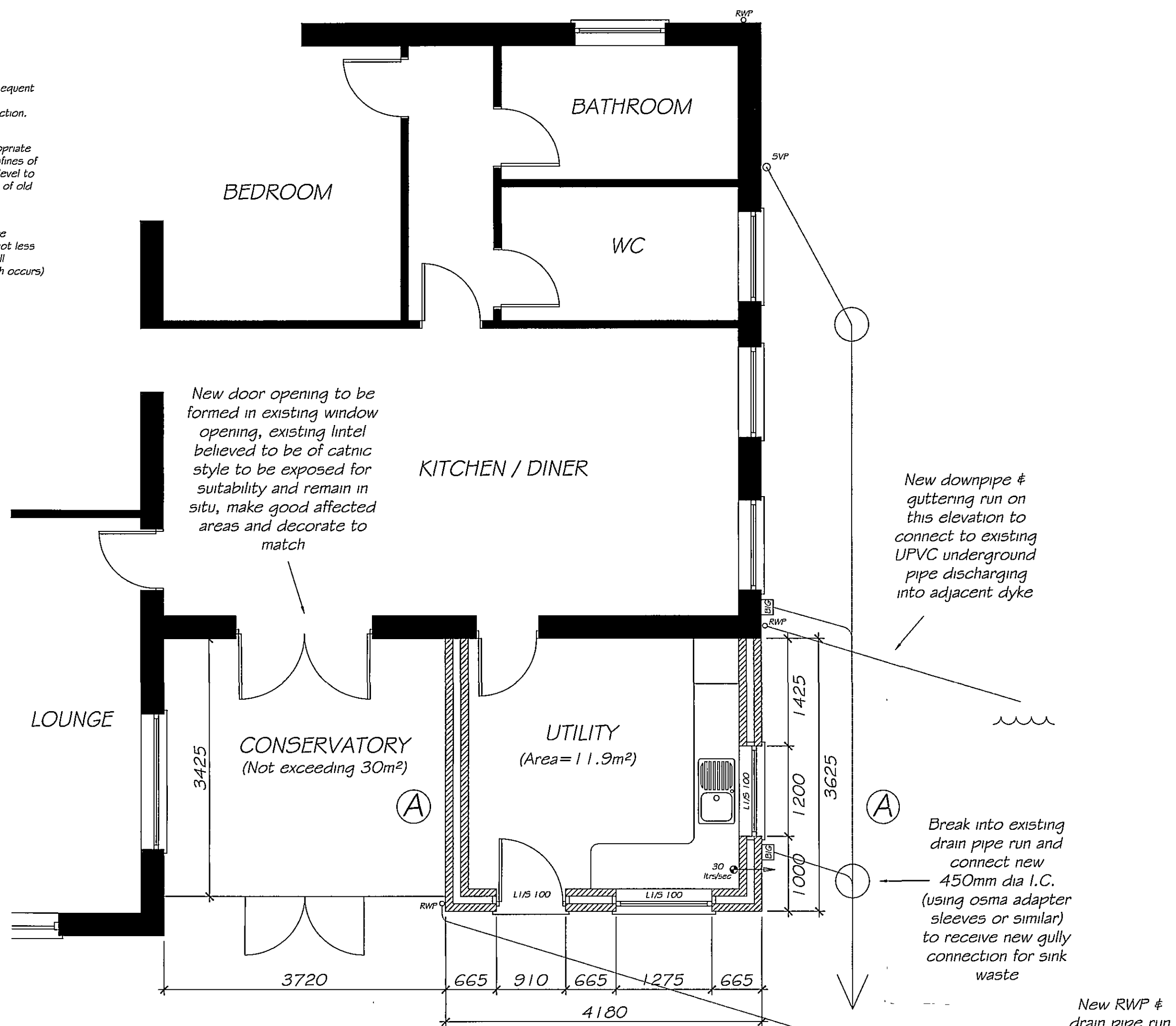
Demolish Existing Structure

Carefully take down utility room and cart debris away in appropriate manner. Foundations for above structure falling within the confines of new extension to remain in situ and taken down to a suitable level to accommodate floors of new structure etc. Remove any areas of old footings completely where new foundations are required.

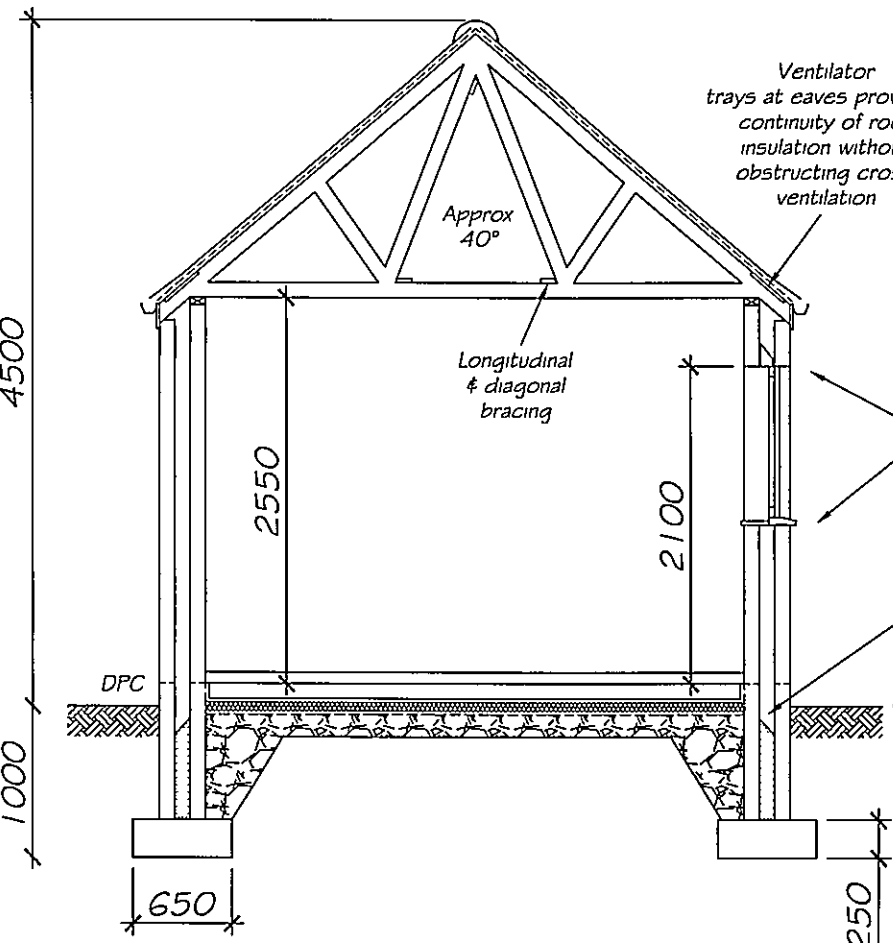
Existing House Details

Expose as necessary existing foundations and lintels to ensure adequacy to carry extra loadings. Existing strip foundations not less than 1m deep with 275mm rendered block & block cavity wall construction. Lintels remaining in situ (ie. where break-through occurs) should be checked when fully exposed for suitability.

Note For Main Contractor
Please be aware variable head & cill heights to existing dwelling on east and south elevations please determine preferences to new works before work commences.
Section AA for construction reference only



PROPOSED GROUND FLOOR PLAN 1:50



SECTION AA 1:50

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Extractor Fans

Mechanical extractors fitted to:-
Utility room to have an extraction rate of 30 litres/second.

Purge Ventilation

Purge ventilation (opening of windows) offering min of 1/20th of floor area opening at 30° or more and 1/10th of floor area opening at less than 30°.

Background Ventilation

All windows to be fitted with trickle vents, head vents or secondary locking position providing:-
Kitchen / Utility 4000mm².

Air Transfer Between Rooms

To ensure good transfer of air throughout dwelling provide 10mm undercut to internal doors affected by works

Central Heating

Radiators fitted into new extension to be linked into existing system and fitted with thermostatic control valves. Any pipe work running beneath ground floor screed or outside the confines of the insulated building to be fully lagged with insulation sleeve. Heating engineer to provide a suitable commissioning certificate upon completion of work, which is passed on to local authority building control.

Drainage (Internal waste pipes)

FVC wastes with 75mm deep seal traps, 40mm dia to sinks, washing machine & dishwasher all accessible for cleaning and maintenance.

Smoke Alarms (Recommendation)

Provide mains connected Smoke detector(s) on a separate fused circuit at the distribution board to BS 5446 part 1. Inter-connect so one detection operates all. Min of one for small bungalow two for larger dwellings to cover following requirements, within 7000mm of living room & kitchen and within 3000mm of all bedroom doors. Corridors exceeding 15m long to have more than one alarm fitted.

Energy efficient lighting (Internal)

Provide separately controlled internal fixed lighting outlet(s) in areas affected by works comprising of either basic lighting outlets or complete luminaires that only take lamps having a luminous efficiency greater than 40 lumens per arc-watt (ie fluorescent tubes & compact fluorescent lamps) to a high usage location. Min requirement is the greater of:-
One energy efficient light fitting per 25m² of floor area or one per four light fittings.

Electrics

Any additional electrics for lighting and sockets etc. to be spurred off existing fuse board, lighting circuit and ring main respectively to be carried out in accordance with latest Part P regulations, tested and commissioned in accordance with BS 7671 using a registered competent person, self certified, & passed on to Local Authority building control.

NOTES

Read this drawing in conjunction with attached construction notes

All construction details shall be adhered to and only specified materials are to be used

NOTE THE FOLLOWING:-

Finished floor levels
Lintel head heights
Ceiling heights
Roof Pitches, Falls etc
Should be CHECKED and VERIFIED by main contractor as work proceeds

Do not scale from this drawing

REV	DESCRIPTION	DATE

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Client Mr & Mrs A Dowers 44 Woad lane, Long Sutton, PE12 9EW.		

Drawing Title Single Storey Extension And Conservatory		
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Drawn M. Bonner		
Date March 07	Scale 1:50 @ A1	Revision
Drawing number FD-D-PE129EW		