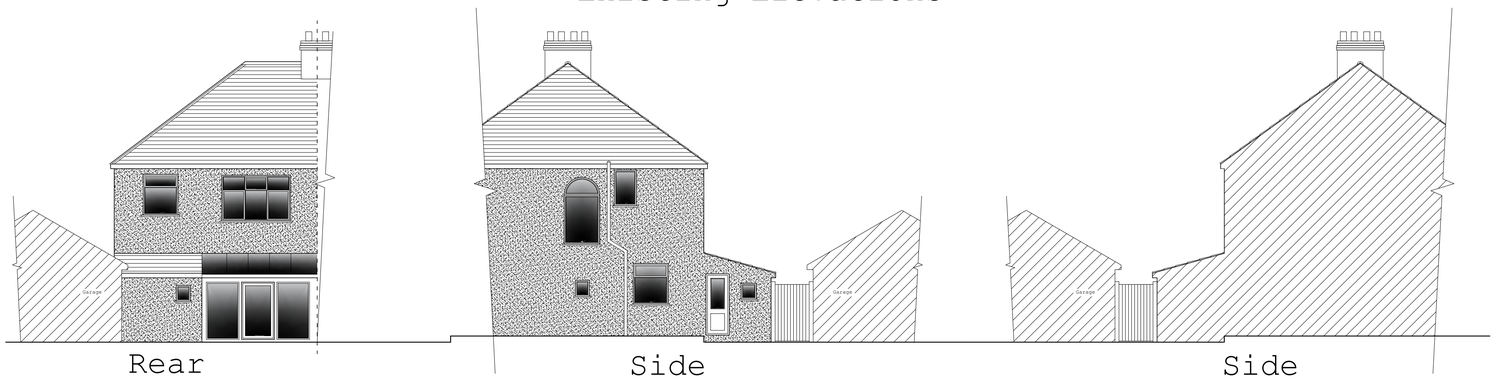
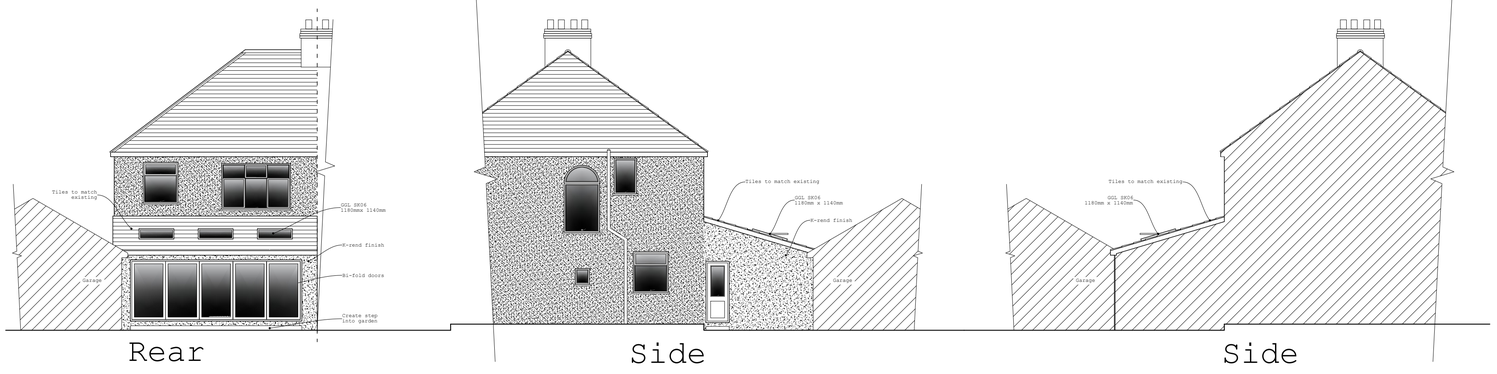
Existing Elevations

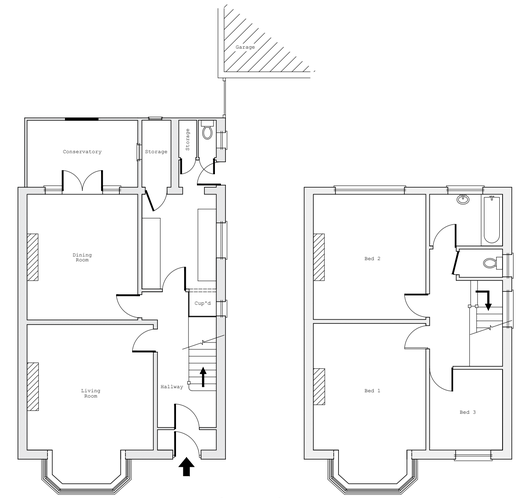


Rear Side Side

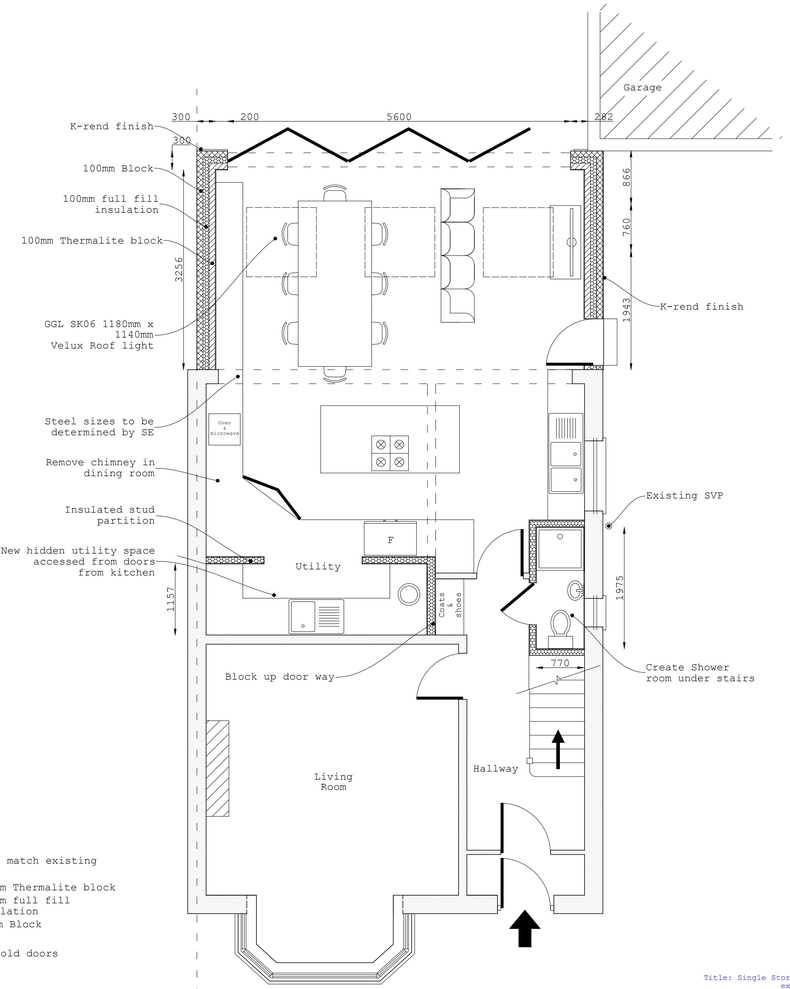
Proposed Elevations



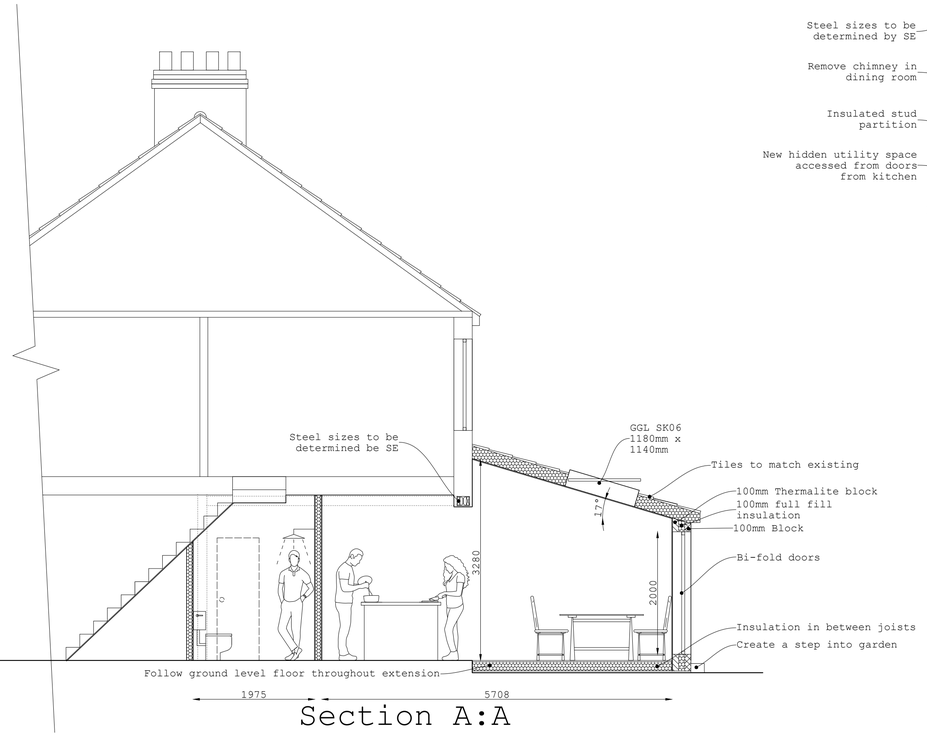
Rear Side Side



Existing Floor Plans



Proposed Ground Floor Plan



Section A:A

1. Foundations

Depth according to ground conditions in load bearing sub-soil & Local Authority approval,

Contractor to dig trial hole before work commences to establish existing foundation type size & depth. 100mm ground bearing raft concrete slab on 1200 guage damp proof membrane on sand blinding on well consolidated hardcore (min 150mm when compacted) note 30mm of insulation turned up walls around the perimeter of floor.

2.Ground Floor

Floor to continue through from existing floor level, timber frame with full fill insulation until step down. 65mm min sand & cement pumped screed on vapour barrier, on 80mm Celotex insulation board or equal approved.

3.Wall Construction

300mm external wall o/a to be:100mm outer skin of dense block work matching existing,100mm cavity with pumped insulation 100mm thermalite inner skin with 13mm gypsom render and skim.

Both skins of cavity wall to be tied together with 250mm long stainless steel vertical twist wall ties conforming to BS1243:1978. Ties to be spaced 450mm horizontally and 450mm vertically, and 225mm vertically with 225mm from sides of openingd and unbonded jambs.

DPC's to be minimum of 150 above finished ground level.DPC's heavy duty polythene to BS743

DPC trays over all opening and dpcs to vertical jambs of openings and under cills. Propriety insulated cavity closers to openings.

Cavity trays to rise minimum 140mm across cavity.

9mm Supalux or equal, 12.5 plasterboard, 25mm mortar or plaster to close top of walls.

4.Lintels

Lintels over openings in 300mm cavity wall with walling over to be IG L1/S 100 (or similar approved).

Provide a separate flexible damp proof membrane over the profile of lintels also.

5.Window & Doors

Windows to have max U value 1.6 & be double glazed using E glass. External doors max U value 1.6.

Double glazed aluminum framed bi-fold doors to max U value 1.6, e glass.

Glazing: all glazing in windows less than 800mm above floor level or 1500mm for doors & side panels within 300mm of doors, shall comprise toughened or laminated glass or annealed of suitable thickness for its area or by providing a protective screen, (fully complying with Approved Document Part K)

5a.Draught Seals

Provide draught stripping in the frames of openable windows and doors, ensure boxing for concealed services is sealed at floor and ceiling levels, & seal piped services where they penetrate or project into hollow construction or voids.

6.Roof

Joist sizes to be determined by a structural engineer. Joists at 400mm c/c with 12.5mm plasterboard and skim finish under, to form ceiling, fix 18mm osb then 1000guage vapour control barrier then install 100mm celotex to form a warm roof. Breathable felt with roofing batten and tiles to match existing

7.U Values

Elemental method used, Gr floor 0.21, walls 0.25,
Flat roof 0.17 Flat ceiling 0.15 Sloping ceiling 0.15

8.Roof Insulation

Provide 100mm Celotex rigid insulation between (or similarly approved) rafters with 50mm air gap with Actis H control insulation blanket (or similarly approved) stapled over rafters, battened and plasterboard.

9.Flashings

Where lead flashings are required allow to install in strict accordance with the lead association's detail. All lead work to receive minimum of two coats of patination oil upon completion of dressing. Patination oil to be applied in strict accordance with manufacturers instructions.

10.Straps

Holding down straps to be Catnic mild steel vertical straps 30mm wide x 2.5mm thick & extend min 1000mm down wall. straps to be fixed using min 4 screws with at least one screw located with 150mm of bottoms of strap. straps located 800mm centres.

Lateral straps to be catnic mild steel straps 30mm wide x 5mm thick, fixed to min 3 timber rafters running parallel to wall at max 2000mm centres, with 2 screws per timber. Screws to be no10x50mm plated wood screws or 4mm dia. x75mm corrosion resistant nails.

Provide solid noggin & blocking between the timber members (& between the last timber & the wall) where lateral restraint straps are located.

11.Heating & Plumbing

Allow to extend existing system to all new areas.
Radiator/thermostat/ heating to be agreed with client. All work to be undertaken by qualified plumber. All work to be tested & commissioned on completion & all guarantees, warrantees, instruction books are to be given to the client. The installer or contractor should show & explain the workings of the system to the client at the time of handover.

12.Ventilation

Mechanical extract ventilation to WC for rapid ventilation, windows to have controllable and secure trickle ventilation.

13.Electrical Work

All electrical work required to meet the requirement of part P (Electrical safety)must be designed, installed & tested by a person competent to do so. Electrical installation certificate to BS 7671 required prior to issuing Building Regulation completion certificate.

13a.Power Requirements

All electrical work is required to meet the requirements of part P (electrical safety) to be designed, installed, inspected and tested by a competent person to do so. An appropriate BS 7671 electrical installation certificate to be issued for the work.

14.Lighting

All new internal light fittings to be energy efficient light fittings that only accept lamps having a luminous efficacy of greater than 40 lumens per circuit watt (ie compact fluorescent lamps).

15.Drainage

110mm diameter upvc pipework conforming BS4514:1983 & BS4660:1973, laid strictly in accordance with the manufacturers recommendations.

Inspection chambers modity existing.

All foul water drains shall be laid to a minimum fall 1in60.

All below ground drainage to conform to BS 8301:1985.

Where drain pass through the external walls, the walls to be supported on non-composite reinforced concrete lintels & 50mm space left all around the pipes. Both sides of the opening are to be masked with rigid sheet material to prevent vermin entry,& the void around the pipes to be filled with compressible sealant to prevent gas ingress.

Stub stacks to have air admittance valves terminating 1000mm above floor level.

Concrete surround to gullies.

Concrete support to beds at foot of s.v.p.s I.C.s within buildings to have recessed double seal/bolt down covers & frames conforming to BS 497:1976.

Gullies: back inlet type- waste to discharge below grating level.

38mm diameter upvc wastes, sinks, at
32mm ditto to basins
75mm deep seal traps to fittings, access to be provided at right angle bends excluding 3m in length

waste pipes over 1750mm in length to have anti syphonage devices

All above ground drainage to conform to BS 5572:1978

16.Protection of Pipes

Where pipes have less than the minimum recommended cover (450mm under footpaths and 900mm under driveways), then protection should be provided by a reinforced concrete cover slab with a flexible filler & at least 75mm of granular material between the top of the pipe and the underside of the flexible filler below the slabs.

Where drains pass through external walls, the walls to be supported on non-composite reinforced concrete lintels & 50mm space left around the pipes. Both sides of the opening are to be masked with rigid sheet material to prevent vermin entry, & the void around the pipes to be filled with compressible sealant to prevent gas ingress.

Scale Bar 1:100

0 5 10

Scale Bar 1:50

0 1 2 3 4 5

Title: Single Storey rear extension
Client: Mr & Mrs Box
Address: 122 Badminton Road, Bristol, BS16 6ND
Date: March 2024
Scale: 1:50,1:100 A1
Local Authority: Bristol

Technical Drawings
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