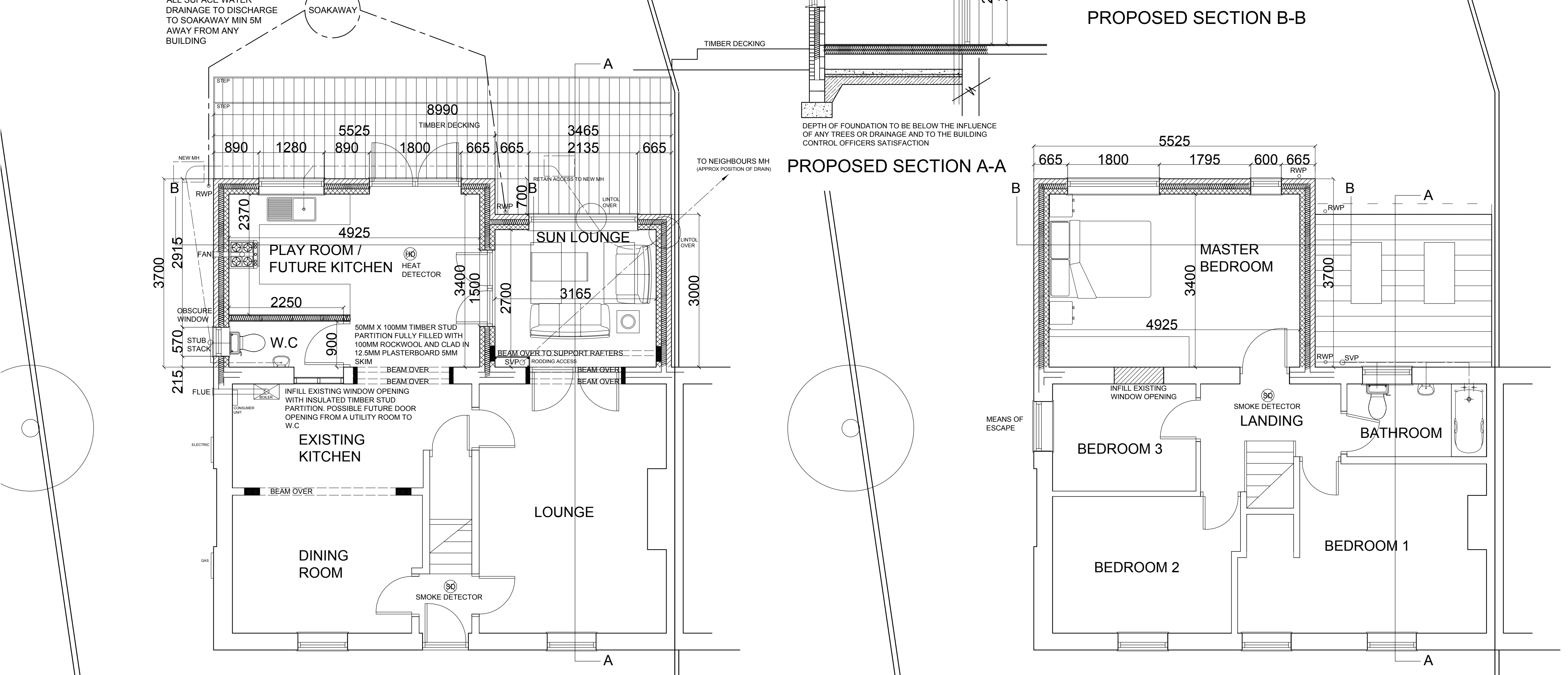
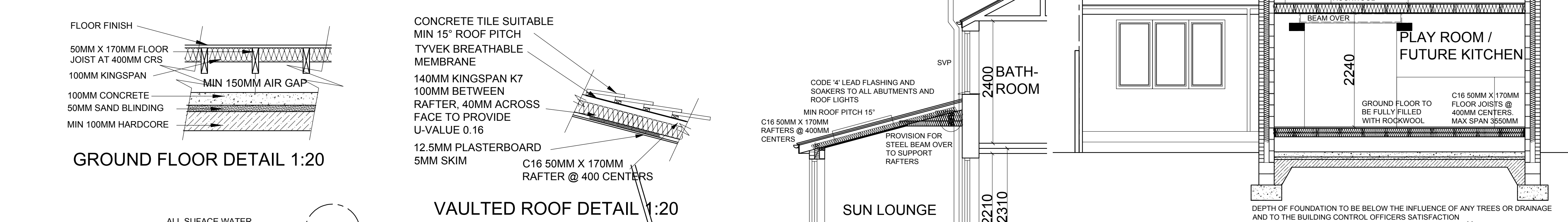
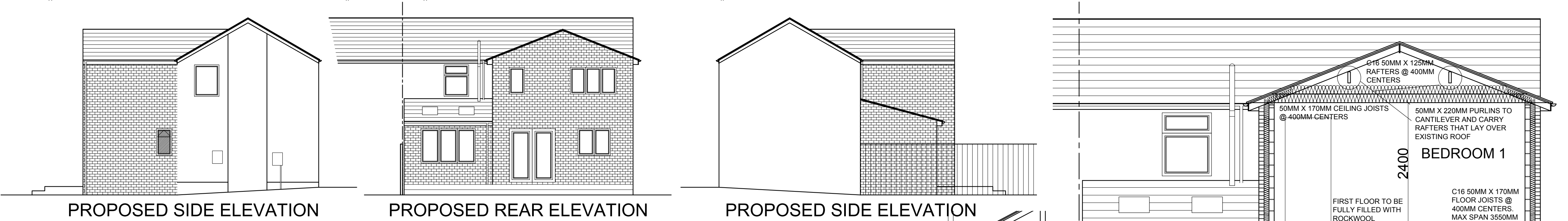
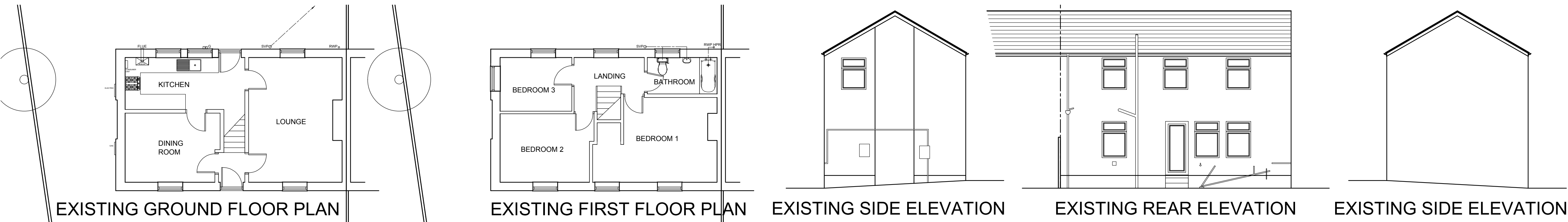




The existing dwelling is thought to be of non traditional steel frame construction evident from the roof construction floor construction and the spacing of windows likely to be between supporting framework. Structural engineer to design the supports to the structure between existing and proposed All existing foundations and lintols affected by proposal shall be exposed by developer for inspection by the Building Control Officer and are to be to his complete satisfaction or altered to be so. All boundaries to be confirmed by client and overall dimensions agreed with builder on site.

Foundations. 1:2.4 concrete strip foundation 600mm wide x 225mm thick reinforced with 2 layers of A193 mesh 50mm cover to all faces. All foundations to be taken at least 900mm deep in clay below the invert level of any drains within 1m and beyond the influence of any tree roots in accordance with NHBC guidance whichever is deepest all to the complete satisfaction of the District Building Surveyor. Full cavity wall width 7 Newton block to ground level. All drains to be lintolled over where walls cross

Walls to comprise 100mm brickwork to match existing 100mm cavity fully filled with rockwool batts. 100mm plasmor stratilite blockwork 5 stainless steel wall ties m² and every block to reveal. Reveals to have same u value as walls, which will be 0.28wm²c or warmer IGHD insulated lintols to all openings with 150mm end bearing. 2000g DPC to each masonry leaf at least 150mm above ground level and to heads cills and jambs of all openings. Cavity to extend 225mm past DPC. Bond existing to proposed with furrif profiles and maintain cavity. All internal finishes to be plaster in 2 coats. Internal walls to be 50mm x 75mm stud partitions fully insulated between with fibreglass wool for sound insulation and clad either side with 12.5mm plasterboard 5mm skim Builder to ensure that the dpc in the existing wall is at or within the thickness of the floor and is not by passed by any proposed construction or that a dpc is injected into the existing wall to link with the proposed

Ground Floor To be level with the existing kitchen floor comprising 18mm tongue and groove chipboard type 2 or 2 for wet areas fixed in accordance with manufacturers details on 50mm x 170mm floor joists at 400mm centres insulated between with 100mm of Kingspan. Joists to span front to back secured in hangers onto a 50mm x 170mm wall plate bolted to the existing wall at 750mm centres with 12.5mm bolts. Ensure that there is a full depth 2000g dpc between the wall plate and the existing wall Alternatively joist ends to be wrapped in 2000g DPC into existing wall. Ensure a 150mm air space from bottom of joist and top of oversite concrete. 100mm oversite concrete laid at or above ground level on at least 100mm of compacted stone. Ventilate sub floor with 215mm x 150mm air grates liners tray DPC over commencing 450mm from each corner and at 1.8m centres thereafter. Double joists under all parallel partitions.

First Floor 18mm tongue and groove chipboard type 2 or 3 for wet areas on 50mm x 170 mm joists at 400mm centres insulated between with 100mm of fibreglass for sound insulation and underdrawn with 12.5mm plasterboard 5mm skim. One row of 50mm wide full depth strutting mid span. Double joist under all parallel partitions. Floor to be laid level with existing determined through new bedroom opening.

Lateral Restraint 30mm x 5mm x 1.2m long mild steel galvanized lateral restraint straps to be secured over 3 structural timbers at right angles to walls and 50mm wide full depth noggings. Straps to be at 1.8m centres commencing 600mm from the apex over the first uncut block to floors ceilings and verges. Secure the wall plate down the blockwork using 30mm x 5mm x 1200mm long galvanized mild steel straps at least 2 to each section of wall between and adjacent the windows

Pitched Roof Marley modern concrete interlocking tiles suitable for minimum 18 degree pitch smooth face 100mm headlap laid in accordance with manufacturers instruction on 25mm x 50mm tanalized battens and 1 layer of fully breathable felt such as Tyvek that is allowed to sag 25mm between the rafters. Existing roof construction other than tiles to remain insitu with the new roof laid over on 50 mm x 225 mm lay and valley boards. Lay board to be secured to ridge and supported above wall plate to support lay over rafters Fibreglass valley. Traditional roof to be covering as above on 50mm x 125 mm rafters at 400mm centres supported mid span on a 50 mm x 225mm purlin The purlins are insitu to support the lay over rafters and relieve the roof load from the existing roof structure. Birds mouth rafters over 100mm x 50 mm wall plates secured to the blockwork. 50 mm x 200 mm ridge board. Upvc fascia and soffits dry verge fixed as manufacturers instructions. Support the purlins into the gable and on blockwork or timber props built above the line of the existing external wall cantilever purlin until it meets the existing roof in order to support the lay over rafters. Triangulate the rafters. To 50mm x 170 mm ceiling joists at 400mm centres that span front to back secured to the existing wall plate and built into the new gable. Where the ceiling joists run at right angles to the rafters fasten 50mm x 50mm timbers to each rafter foot and back across 3 ceiling joists. 12.5 mm plasterboard 5mm skim ceiling. Insulate at ceiling level with 150mm of fibreglass laid between the ceiling joists and 150mm across.

Single Storey Lean to Roof Note that one of the factors that will determine the minimum roof pitch at 15 degrees is the installation of velux roof lights. Redland Regent smooth face tile 100mm head lap can be laid at 12.5° laid in accordance with manufactures instruction or Marley modern smooth face 100mm headlap 17.5° minimum on 25mm x 50mm tile battens and 1 layer of Tyvek breathable felt. 50mm x 170 mm rafters at 400mm centres birds mouthed over a 100mm x 50mm wall plate secured onto the blockwork and doubled up adjacent each velux and window trimmer. Rafters supported onto a 50mm x 150mm wall plate at abutment level which is to be bolted into the masonry at 600mm centres with 9.5mm bolts Insulate sloping ceilings with 140mm of kingspan fitted between the bottom of the rafters or 125mm between the bottom of the rafters and 25mm underneath the rafters. 12.5mm plasterboard 5mm skim ceiling. Code 4 lead flashings and soakers Tray DPC to all abutments with felt turned from under the battens to be trapped behind the 150mm lead up stands Upvc fascia and soffits. Dry verge to boundary. When necessary to achieve the minimum tile pitch trim the roof construction around the window and form code 4 lead aprons and upstands on 18mm WBP plywood to fall 1 in 80 and provide a collared ceiling using 50mm x 100mm joists at 400mm centres insulated as described and underdrawn with 12.5mm plasterboard 5mm skim Code 4 lead flashing apron and upstands tray dpc to abutment all Lead coated in Patination oil.

Alternative Flat roof covering to be in accordance with clients instruction eg fibre glass by specialist installer or 12.5mm limestone chippings bed in bitumen on 3 layers of built up felt utilizing 3G felt base layer partially bonded with vertical up stands and outlets as described on Kingspan Thermo Roof TR31 incorporating a 6mm WBP plywood upper surface and a foil underlaid 60mm thick insulation with a further 100mm kingspan insulation between the joists to the underside of the covering all on firrings to fall at least 1:80 no part of the firring to be less than 50mm in depth or width on 50mm x 170mm joists at 400mm centres all underdrawn with 12.5mm plasterboard. Turn the flat roof covering 450mm up the existing roof on a 12.5mm plywood layboard Secure every third flat roof joist down the wall using 30mm x 5mm x 1200mm long galvanized mild steel straps.

Windows Double glazed UPVC windows with K or Low E glass and units that have a 16mm spacer between Argon filled panes minimum u value to be 1.6wm²c. All glazing in critical locations to be safety glass to BS6206® and stamped accordingly. Critical locations are doors, windows, adjacent doors and any glass with 800mm of the floor. Opening lights to new bedroom to be suitable for means of escape minimum 450mm wide x 750mm high sited between 800mm and 1100mm from the floor opening lights to be 1/20th of the floor area and 8000mm trickle vents. Provide mechanical extract to kitchen new ensuite and ground floor wc discharging at a rate of 30 l/sec cooker hood or 60 l/sec elsewhere and 15l/sec bathroom and 6 l/sec to external air respectively. Ensuite fan to be operated on light switch with 15 minute run on and 15mm undercut to door.

Drains There is a chamber at the front of the property which could not be accessed at the time of survey. Builder to investigate depth, direction of flow and pipe diameter in chamber prior to commencement of work and inform client of any circumstances requiring action that affect the build. Discharge the kitchen sink waste to a gully that connects to a new 450m mm diameter Osma plastic inspection branch. Discharge the new soil and vent pipe to the chamber with through connection to stack and gully connection onto branch. Connect the new drainage to the existing system with a series of slow bends onto a swept oblique connection. Alternatively and subject to agreement with the Building Control Officer discharge the en suite wastes to the new 100mm soil and vent pipe secured to the extension wall turning on a slow bend with access cap on the bend to connect with the existing soil stack under the floor. Lay a new foul drain in 100mm osma plastic pipe laid to fall 1 in 60 bed and surround in pea gravel from the proposed wc under the stair to the existing soil and vent pipe discharging the sink waste through an adapter at floor level onto a branch pipe. Make good structural floor and floor finish. All drains to be lintolled over where wall cross. Provide rocker pipes either side of the wall and a 50mm space between masonry and pipe with flexible seal. All wastes to be 38mm with 75mm deep seal anti vacuum traps. No connection S & VP within 200mm of WC connection. SVP to extend 900mm above any opening light within 50mm and discharge to existing P/W system. All underground drainage to be 100mm Osma plastic pipe bed and surround in gravel to fall 1:40. All gutters to be minimum 100mm half round or as existing with 63mm fall pipes. Rain water to discharge to and in order of priority A) watercourse B) soak away subject to percolation test C) existing on site system. All to the satisfaction of the District Building Surveyor. Builder to check the fall of the gutter from the adjoining house and allow for additional rainwater down pipes where necessary. Soakaway design dependant upon ground conditions min 1m³ in capacity below the inlet filled with broken rubble and protected from ingress of fines with 1200g polythene laid under the topsoil above the rubble. All disused drains to be sealed

Alterations The dwelling is believed to be a non traditional steel frame building suggested by the steel roof trusses at approximately 1200 mm centres covered in T and G boarded sarking. The trusses could be supported on steel framing to foundation level spaced between the windows. Structural support to the framework, first floor, and roof across the opening between existing and proposed shall be in accordance with engineers details. Investigate the gable wall construction to insert a window under a suitable IGHD insulated lintol in Bedroom 3. Window to have means of escape opening light sized and size all as above

Provide structural steelwork in accordance with engineers details to access the new extension at ground and first floor. Steel to be encased in 12.5mm plasterboard and provide full half hour fire resistance. The existing boiler is adjacent the window discharging on the rear elevation Restle the boiler to discharge through the gable wall. A gas safe engineer shall be appointed to confirm whether the flue discharge is compliant or advise as to resting or appliance or flue and flue for compliant discharge all in accordance with current regulations and manufacturers instructions and in accordance with table to diagram 34 of Approved Document J of the Building regulations. New external steps to have maximum rise 220mm minimum going 220mm maximum pitch 42 degrees with handrail 900mm above the pitch line and vertical spindle guarding at 100mm centres All new pipe work to be insulated with foam equal in thickness to outside diameter of pipe. Make good all plaster finishes. All construction to be robust all new light fittings are to be energy efficient All electrical work is to be in accordance with part P of the Building Regulations and the current edition of the IEE regulations with level of provision agreed with client prior to commencement. The installation shall be designed installed and tested by a competent person being a member of the competant persons scheme and shall issue a completion certificate in accordance with BS 7671.

Provide a mains wired smoke detection and alarm system with smoke detectors on the ceiling of the hallway and first floor landing all interconnected wired on the lighting circuit with battery backup

All heating/plumbing work to be carried out by a suitable qualified gas safe engineer. The appointed installer shall check the system suitable for additional capacity and confirm any design requirements with client prior to commencement. All hot water pipes to be insulated with foam equivalent to outside diameter of pipe. Radiators to have thermostatic valves. All decoration and joinery items and fittings to be agreed with the client and builder prior to commencement of work.

These notes and all drawings are to be checked and verified by the contractor prior to commencing work on site. Workmanship and materials are to comply with the Building Regulations, British Standards and all codes of practice etc. All materials shall be fixed, applied or mixed in accordance with all manufacturers instructions and specification. All materials shall be suitable for the purpose that they are used for. The contractor shall take into account everything necessary for the proper execution of the works and to the satisfaction of the Local Authorities Building Inspector, whether or not indicated on the drawings or in the specification. These plans and details have been prepared for the purposes of obtaining Town Planning and Building Regulations approval only. Builder to check and to clarify all levels, dimensions, drainage, construction and specification prior to any work on site and to bring to the clients attention any variations perceived omissions or deviations for written confirmation before being carried out on site. All dimensions are approximate and are to be confirmed on site, before project commences. All lines and levels, invert depths etc of all drainage are only approximate and must be confirmed and verified by the builder at beginning of the contract.

When appropriate it is the owners responsibility to serve notice on the adjoining/adjacent neighbours for the proposed works under the Party Wall Act 1996. The explanatory booklet can be obtained free of charge from ODPM free literature PO Box 236 West Yorkshire LS23 7NB. Email odpm@woven.press.net.

Construction (Design & Management) Regulations 1994 – Applicable to all projects except work to a persons own house other than that carried out by the developer.

The client shall be advised that all projects lasting for more than 30 days or include more than 4 people engaged on the construction on site at any one time shall be subject to the above regulations. The client shall take all reasonable steps to ensure that the appointed contractors have the competence and adequate resources sufficient to manage the construction work and comply with the above regulations. If the project is subject to the above regulations the client shall appoint a planning supervisor and ensure that notice is served on the health and safety executive at tender acceptance stage using form 10.

PROJECT

PROPOSED SINGLE AND TWO STOREY REAR EXTENSION AT 151 HUDDERSFIELD ROAD BARNSELY

DRAWING

EXISTING AND PROPOSED PLANS

SCALE

1:50/100