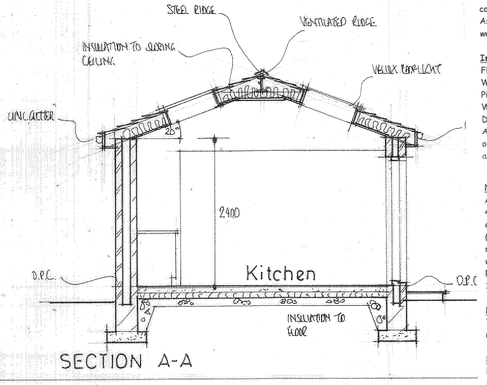



**Flashings**
Min 150mm Code 5 upstand flashings to be provided where roof abut walls (dressed min 225mm over tiles). Proprietary cavity trays, stop ends and weepholes to be installed above roof flashings, where lower roof abut walls. To sloping abutments provide Code 4 soakers and roof abut walls. To sloping abutments provide Code 4 soakers and stepped flashings with stepped cavity tray over. All lead work to comply with the guidance set out by the Lead Development Association. Chases should be less than 1/6th of the thickness of the wall or leaf.

**Insulation Standards Details**
Floor U value 0.18W/m2K
Wall U value 0.18W/m2K
Pitched roof insulation at ceiling level U value 0.15W/m2K
Window U value 0.14W/m2K
Doors U value 0.14W/m2K
All insulation specified is fully compliant with Building Regulations, any other insulation that may be used as an alternative must be fully approved by BUILDING CONTROL prior to installation on site.

**Non-loadbearing Studded Walls.**
All non-loading partitions to comprise of 75x50 mm softwood studs@ 450 mm centres, and 75 mm softwood noggins @900 mm centres, with continuous header and sole plates, and with 15 mm Gyproc Wallboard (minimum mass per unit area 10Kg/m2) and 15 mm Gyproc moisture resistant board to bathroom, ensuite and WC, joints sealed complete with skim finish to both sides. All stud partitions to have 60 mm thick Rockwool Flexi insulation quilt between studs (minimum density 10Kg/m3).

**Heating**
To be supplied by balanced repostioned gas boiler condensing type, radiators and cylinder min Sedbuck efficiency rating of 88%

**Heating**
Extend all heating and hot water services from existing and provide new thermostatic valves to radiators. Heating system is to be designed, installed, tested and fully certified by a GAS SAFE registered specialist. All work to be in accordance with the Local Water Authority by laws, gas safety requirements and IEE Regulations.

**Invert level**
Foundations to be below invert level of any drains passing through new extension foundations

**Reposition Existing Manholes**
150 mm concrete base, 215 mm eng brick. Bench up in concrete to form channels. Medium duty cover and frame. Reconnect existing S&VP and gully into re positioned manhole, make good on completion.

**Windows and Doors,(replacement or for new extensions)**
New window and doors to be PVCu and bifold doors to be black powder coated aluminium, Pilkington glass, K glass range with 16 mm Argon filled air gap optitherm 4mm Opyifloat, soft low e coating u value to be 1.4W/m2K to windows and doors and 1.77W/m2K to bifolds with fully draught stripped open able light equivalent to minimum 1/20 floor area for purge ventilation and including minimum 5000 mm 2 trickle vents per habitable rooms and 2500 mm 2 for non habitable rooms (kitchen, bathroom, en-suite) for background ventilation in accordance with Part F 2010 Edition System1 Table 5.2a and based on 277m2 floor area-total equivalent ventilator area 194000m2.
Frames to be lapped minimum 30 mm across cavity closer in accordance with Part L1A section 5.9 and Accredited Construction details under section 5.12 to limit thermal bridging. Details to be inspected on site in accordance with checklist to maintain quality assurance.
Any glazing within 800 mm of floor level, and within 1500 mm of floor level where within 300 mm from a door and all glazing to bifold doors to be safety glass to comply withBS6206. Windows to all first floor bedrooms to incorporate unobstructed clear opening of 0.33 m2 and at least 750 mm high and 450 mm wide, with bottom of open-able area no more than 1100 mm above floor level.

**Velux windows**
Provide and fit in roof all as per manufacturers instructions new velux windows Ref No GHL M08 double rafters and trimmers to be fitted either side. Location and size as indicated. Insert all soakers and flashings and a u value to be 1.4W/m2K.

**Safety glazing**
All glass below 800 mm from ground floor level or ground level to be laminated glass to BS 6206 class b,

**Drains**
100 mm drains min fall 1:40 all to comply with BS en 295

**Drain Testing**
The whole of the drainage system shall be tested when laid and again on completion to the satisfaction of the approved inspector.

**Drainage**
Any drains new or existing that pass through external walls, insert concrete lintels over (allow 50mm clearance between drain and underside of lintels) Drains that run under a building to have min 100mm of granular or other flexible filling provided round the pipe if depth of drain below the surface exceeds 600mm. Where pipes have less than 600mm cover the pipes should, where necessary, be protected from damage by a reinforced concrete cover slab with a flexible filler and min 75mm granular material between the top of the pipe and the underside of the flexible filler below the slab. On sites where excessive subsidence is present additional flexible joints to be provided or other solutions such as suspended drainage where the pipe is adjacent to structures or where soil conditions change in the course of the pipe run. Where the crown of the pipe is within 300mm of the underside of the slab, special protection is to be provided in accordance with Part H of Building Regulations
Below ground drainage to be approved 100mm plastic or clay drainage system laid at minimum 1 in 40 falls - bedded and installed in accordance with manufacturer's recommendations
Proprietary inspection chambers to be provided as indicated and as necessary to provide rodding access to drainage runs. Sizes to suit depth - as recommended by manufacturer
All gullies to be back inlet and roddable - wastes to discharge below grating but above water line

**Drainage bedding and backfilling**
New drains to be bedded on min. 100mm deep granular bed. Provide granular sidefill 150mm wide to each side of drainage pipes up to crown of pipes and then provide min. 100mm deep granular fill over top of drains for at least 100mm over crown of pipes. Provide 'as dug' backfill from this level up to ground level, free of stones in excess of 40mm. Granular material to be 10mm single size pea gravel to BS 882. New drainage to comply with protection from settlement paragraphs 2.23 - 2.26 and bedding and backfilling paragraphs 2.41 - 2.45.

**Gutters**
Provide 100 mm upvc gutters fixed to fascia boards. Provide 25 mm cellular extrusion soffits with continuous upvc soffit ventilators to vent roof space to BS 5250

**Fixings**
Strap down new roof and ceiling with 1000 x 5 x 38 mm mild steel straps at 2 centres fixed across two rafters/joists with 3.35x50 wire nails at rafter and ceiling tie level

**Ventilation**
To be achieved at eaves with continuous 25 mm gap with fly mesh inserted to give through ventilation passage to BS 5250

**Fascia**
19 mm exterior grade plywood fascia/barge and soffit to new extension

**Continuous Ventilated Ridge**
Provide new continuous ventilated ridge to be mechanically fixed and bedded in sand/cement mortar, or dry fixed system in accordance with BS 5534 2014

**Soil and vent pipe altered**
100 mm diameter upvc with airtight rodding access above floor level and sealed into Hepworth 'Hepseal' drain connector at floor level. Stack taken up and terminated 450 mm above springing level with pvc bird cage (900 mm above any opening lights)

**Kitchen sink**
To have 75 mm deep seal trap into 42 mm diameter upvc waste into back inlet gully to kitchen and utility room

**Ground Floor Construction (u value 0.18W/m2K)**
Levelling screed finish on 150mm concrete slab bed on a separating layer of building paper to BS 1521:1972 on 80mm thick Kingspan 'Kooltherm' K103 floorboard insulation on Visqueen 1200 d.p.m. on 20mm sand blinding on min. 150mm well consolidated hardcore.
Provide 25mm 'Kooltherm' insulation to external perimeter edges of slab. Visqueen d.p.m. to be turned up around perimeter edges of slab and tucked in under horizontal dpc of inner leaf.

**Dpc**
External leaf min 150 mm above ground level with internal dpc at slab or floor level

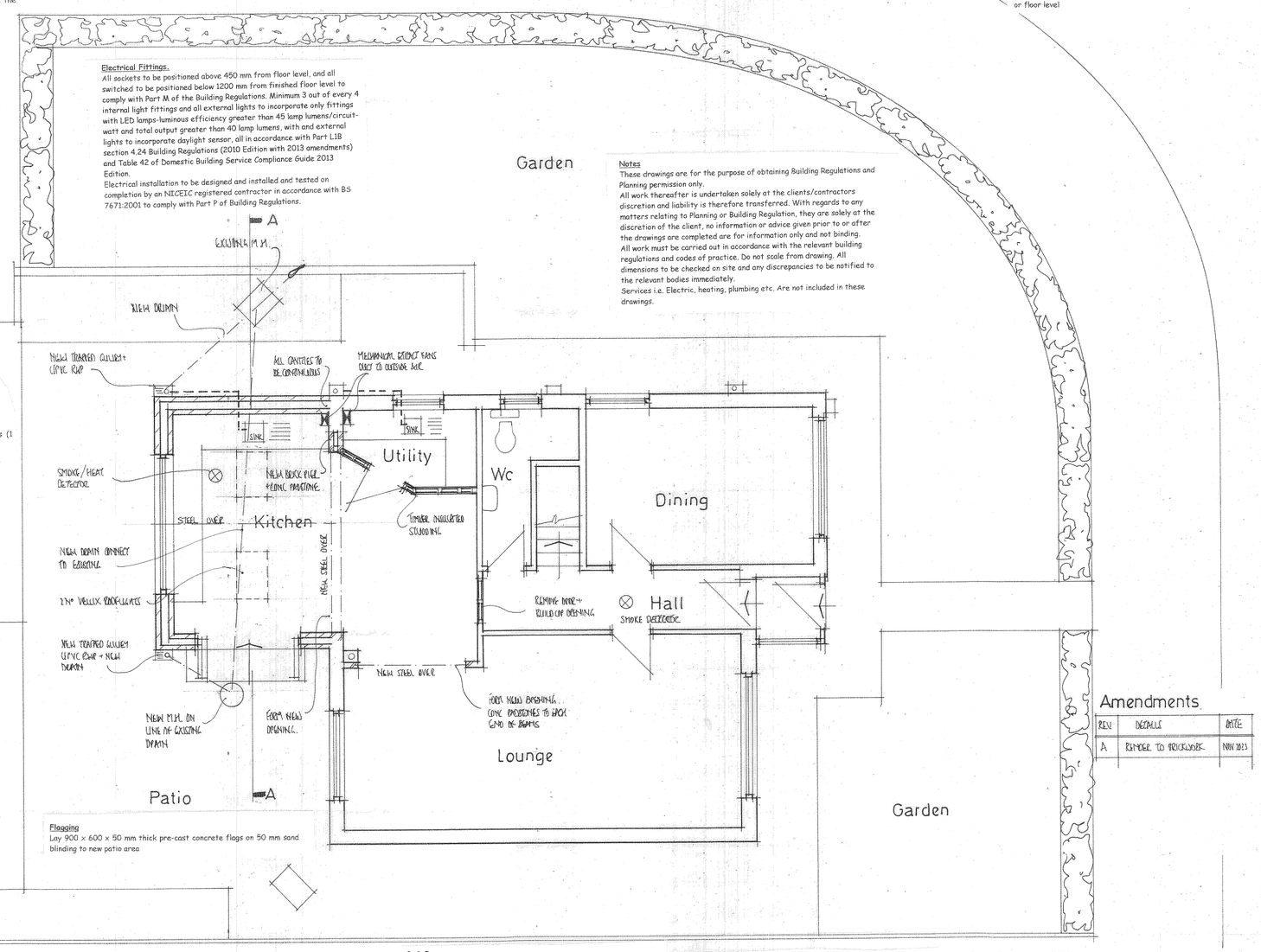
**Smoke alarms and heat detectors.**
Fire Safety Approved Doc B
Where new habitable rooms are provided above ground level, a fire detection system shall be installed. Provide a mains linked smoke alarm in the circulation space on all levels in accordance with Paragraph 1.10 to1.18. Also provide 1 no smoke detector to ground floor.
There will be a compatible interlinked heat detector or heat alarm in the kitchen, in addition to whatever smoke alarms are needed in the circulation space.

**Electrical Fittings.**
All sockets to be positioned above 450 mm from floor level, and all switched to be positioned below 1200 mm from finished floor level to comply with Part M of the Building Regulations. Minimum 3 out of every 4 internal light fittings and all external lights to incorporate only fittings with LED lamps-luminous efficiency greater than 45 lamp lumens/circuit-watt and total output greater than 40 lamp lumens, with and external lights to incorporate daylight sensor, all in accordance with Part L1B section 4.24 Building Regulations (2010 Edition with 2013 amendments) and Table 42 of Domestic Building Service Compliance Guide 2013 Edition.
Electrical installation to be designed and installed and tested on completion by an NICEIC registered contractor in accordance with BS 7671:2001 to comply with Part P of Building Regulations.

**Radiators**
Provide and fit thermostatic control valves to radiators.

**Timber**
All new timber to be tanalized and stress graded 4
BS:4471 Part 1 (1978) Dimensions for softwood
BS:5268: Part 5 Preservatives Treatment for Structural Timber

**Skirting**
120 x20 mm half round skirting primed and painted three coats (1 gloss) to new extension




**Notes**
These drawings are for the purpose of obtaining Building Regulations and Planning permission only.
All work thereafter is undertaken solely at the clients/contractors discretion and liability is therefore transferred. With regards to any matters relating to Planning or Building Regulation, they are solely at the discretion of the client, no information or advice given prior to or after the drawings are completed are for information only and not binding.
All work must be carried out in accordance with the relevant building regulations and codes of practice. Do not scale from drawing. All dimensions to be checked on site and any discrepancies to be notified to the relevant bodies immediately.
Services i.e. Electric, heating, plumbing etc. Are not included in these drawings.

**Flagging**
Lay 900 x 600 x 50 mm thick pre-cast concrete flags on 50 mm sand blinding to new patio area

## Amendments

| REV | DETAILS | DATE |
|---|---|---|
| A | REMOVE TO BRICKWORK. | NOV 2023 |

**Demolish**
Carefully take down existing building existing conservatory and prepare site for new building works.

**Unsuitable Material**
Vegetable matter such as turf and roots should be removed from the ground to be covered by the building at least to a depth to prevent later growth. The effects of rots close to the building also need to be assessed. Where mature trees are present on sites with shrinkable clay the potential damage arising from ground heave to services and floor slabs and over site concrete should be assessed. Reference should be made to BRE Digest 29822. Where soil and vegetation type would require significant quantities of soil to be removed. Reference should be made to BRE Digest 24123 and 24224, and to the FBE (Foundation for the Built Environment) Report 125

**Traditional Strip Foundations**
Provide 750 x 200 C35 grade r.c. strip foundations with 1 layer of A193 mesh in bottom laid min. 900 below ground level all in accordance with Approved Doc 'A'.Foundations to be laid below level of all the drains under extension. The foundation design is dependant upon the actual site conditions uncovered once foundation excavation works have commenced on site. The foundation design is to be agreed with the Local Authority Building Control Officer or from the advice and calculations of a Structural Engineer if the Building Control Officer deems it necessary.
Concrete mixes to be in accordance with BS 8000 - 2.1
All existing foundations and structure that is to take new structural loading to be exposed for Building Control to determine its suitability. Strengthen and underpin existing as necessary to carry new loads.
Where new foundations arise in vicinity of old foundations, existing should be fully grubbed up and new foundations laid at least the same depth. Foundations to be taken down to the invert level of any drain passing within 1 metre. RC lintels to be provided over drains passing through walls. Walls below ground level to be filled with concrete cavity filling to 225mm below lowest dpc level. There should not be:
a. non-engineered fill (as described in BRE Digest 427) or wide variation in ground conditions within the loaded area, nor
b. weaker or more compressible ground of such a depth below the foundation as could impair the stability of the structure

**Steelwork**
Steelwork as noted on plan to comply with BS449, BS5950. Steel beams to bear onto concrete pad stones min 300mm x 250mm x 150 mm deep. Where only100mm seating is possible (i.e. no pier provided) steel to sit at minimum 450mm long x 100mm wide x 150mm deep concrete spreader padstones. Piers and walls under steel to be made good and rebuilt if formation of openings has weakened structure or structural engineer has specified a rebuild
Steel beams e.g. r.s.j's, u.b's etc to be cooled in zinc primer prior to building in and to be spaced and bolted together via M12 bolts and spacers of 1000mm c/s (unless specified by structural engineer). Fully encased in 2 layers of 12.5mm plasterboard and skim support on 50x50mm cradle to give half hour fire resistance (web flanges packed with mineral woo reduce cold bridging)
Lintels over openings to be proprietary insulated. Steel lintels e.g. Catnic or I.G. etc - lintel type to be suitable for loading configuration and spans. Install d.p.c. cavity tray over with stop ends and weep holes at 900mm c/s - min 2 per cavity tray. Where 100mm cavity is specified ensure correct lintel is used to deal with wider cavity. All lintels to be encased in plasterboard to give half hour fire resistance
Internal door openings (max 1200mm opening size) to have 150mm x 100mm reinforced concrete lintels over or proprietary steel lintels of approval manufacture - min 150mm end bearing
New concrete lintels over new opening to BS5977 Part 2 1986 (150mm x 225mm) deep where shown
Cavities to heads of wall to be closed with mineral wool quilt and dressed over wall plate to prevent cold bridging
Check with the manufacturer regarding the chosen insulation's suitability for building exposure and for partial fills systems - the minimum acceptable residual cavity (50mm required)
D.p.c's to outer leaf to be min 150mm above ground level and at slab/floor level to inner leaf
Chases:
Vertical chases should not be deeper than 1/3 of the wall thickness or, cavity walls, 1/3 of the thickness of the leaf
Horizontal chases should not be deeper than 1/6 of the thickness o the leaf of the wall
Chases should not be so positioned as to not impair the stability of the wall, particular where hollow blocks are used
New Internal Blockwork Walls (if applicable) to provide Buttressing to gable walls and to be fully banded at junction to inner leaf of external wall and to be taken down to a suitable bearing stratum on concrete foundation to be agreed with Building Control
Thermabate Insulated half hour fire rated dpc's to be provided to all cavity closer around all openings to prevent cold bridging
12.5mm plasterboard and skim to new walls of extension. All plasterboard used to have a min density of 10kg/m2. All existing plasterwork where disturbed to be made good.
Contractor to check indicated walls are non load-bearing prior to removal. If found to be load-bearing seek structural engineer's advice as to additional support required.

**Existing Structure**
The existing structure including foundations, beams, walls and lintels carrying new and altered loads are to be exposed and checked for adequacy to support new imposed 'dead' and 'live' loading conditions prior to commencement of work and as required by the Local Authority Building Control Officer.

**Cavities**
To be continuous with existing closed at eaves with Superlux

**Cavity fill**
Weak concrete mix. Fill in cavity to be 225 mm below DPC level

**Cavity closer**
Insert Isofoam XCC insulated cavity closer to all new openings all as document l 2013. Width and fixing to suit opening

**Overlap**
Dpc and dpm to perimeter to overlap by 50 mm

**New openings**
To have vertical and horizontal DPC's close reveals with thermabate insulation

**Flashing**
Insert no.4 lead apron flashing min up-stand 150 mm insert cavity trays over.

**Basement tanking details**

**Lead flashing**
Provide no. 4 lead apron flashing from directly under cavity trays (min 50 mm) dressed down min 200 mm over slates min up-stand from roof 150 mm. Provide weep holes every 9th perpend

**New Roof Construction**
Pitched roof with interlocking tiles to match existing (Marley Double Roman) with min headlap of 75mm on 50x38mm sw battens on 1 layers Tyvek Supro felt on 150x50mm C16 sw rafters @ 400mm cts. Rafters fixed to wall-plate with framing anchor or truss clip. Fix 12.5mm foil backed plasterboard and skim to underside of 125x50mm C16 sw ceiling joists @ 400mm cts, Vaulted ceiling with small flat ceiling under ridge to achieve through ventilation cross braced with 125x50 mm ceiling joists.

**Roof insulation between an under rafters (U value 0.15W/m2K)**
Rafters overlaid with Tyvec SUPRO breather membrane with joints lapped and taped and roof to be finally covered with Concrete tiles (600 mm x 300 mm x 9 mm at 55 mm headlap), laid on 50 mm x 25 mm tanalised softwood battens. Provide 100mm thick Kingspan Thermopitch TP10 between 70mm Thermopitch TP10 under 12.5 plasterbd. Leaving min. 50mm ventilated void to u/side of existing roof battens, to give a 'U' value of min. 0.15W/ m.sq. K. Provide 3mm plaster skim Finish to ceiling.

**Brickwork good building practice**
All new brickwork to be bonded to existing and cavities to be maintained - alternatively use proprietary bolted starter anchor system together with inserted insulation V.d.p.c. (installed in accordance with manufacturers recommendations)
All return corners to be min 665mm unless otherwise indicated
Proprietary stainless steel DD140 wall ties to be provided to cavity walls at maximum 450mm vertical centres and 750mm horizontal centres - staggered across wall elevation. 225mm max vertical centres at reveals. Ties to be long enough to have 50mm minimum embedment into wall. Proprietary insulation clips to be provided to suit cavity insulation system.

**Damp Proofing**
Horizontal dpcs to be provided to wall min 150mm above finished ground level (stepped where necessary). A minimum of 4 courses of engineering brick is to be provided below dpc level to prevent spalling damage
D.P.M's to lap both new and existing dpc's
Where a former external wall becomes internal as a result of the extension - check condition of existing H.D.P.C's and clean out existing cavities. Where defective - insert injection dpc. Limelite cement based water proof rendering to be used to finish off walls (not gypsum based plaster).
Any air bricks covered by proposal to be duct-ed via 100mm dia ducts to new external walls and insert telescopic air bricks sleeved with cavity trays over to connect to outside air
Provide cavity trays in brickwork over solid brickwork, junction of cavity and solid brickwork and over solid piers to avoid cavity bridging
Where cavity wall adjoins cavity brickwork, provide extra vertical wall ties 225mm vertical centres and insulated vertical dpc to cavity bridging
Code 4 level valleys on preservative treated valley boards
Min 150mm Code 4 up stand flashing to be provided where roofs abut walls (dressed min 225mm over tiles). Proprietary cavity trays, stop ends and weep holes to be installed above roof flashing's, where lower roofs abut walls
To sloping abutments provide Code 4 soakers and stepped flashing's. ALL LEAD WORK TO COMPLY WITH THE GUIDANCE SET OUT BY THE LEAD DEVELOPMENT ASSOCIATION

**Cavity tray**
Provide cavity trays of Yeovil limited 'e' straight cavity tray with no. 4 lead apron flashing over roof, min up-stand 75 mm dressed down 200 mm over roof tiles. Flashing to be taken min 35 mm under cavity trays lead wedged and painted up. Provide weep holes

**New opening**
Break open existing walls at ground floor level from floor to ceiling to form new opening as shown and provide and insert R.S.J.'s as indicated on plan, over supported both ends concrete padstones. Make good brickwork, plaster, floor and ceiling. Include for all necessary temporary support during execution of the works. See structural engineer's details and calculations. Upon exposing brickwork if any discrepancies appear regarding steelwork notify architect for reassessment. Note any changes or costs incurred are solely the responsibility of the client. Assumptions on existing construction have been made with the limited information obtained during survey.

**Steel Beams and Brick Piers**
The design has required the use of a number of steel beams and brick piers as designed by a Structural Engineer.
The method of carrying out the safe and secure temporary support, needling and propping of the existing building structure whilst this building work is being undertaken is the sole responsibility of the builder who is to ensure that NO settlement or disturbance/cracking of the fabric of the building takes place during the construction process.

1:100 Scale Bar 1:50

PROJECT
PROPOSED SINGLE STOREY KITCHEN EXTENSION.
DRAWING TITLE
PROPOSED LAYOUT AND SECTION.
CLIENT
MR. & MRS LAWLOR.
ADDRESS
3, DERWENT DRIVE, LITTLEBOROUGH, ROCHDALE.
SCALE
SCALE 1:50@A1
DATE
SEPT 2023.
DRAWING No
FO 09235853/3. A

# GROUND FLOOR PLAN

**Controlled Services**
The local authority may request confirmation that any controlled services including heating and hot water systems have been commissioned in accordance with a procedure approved by the secretary of state.

**R.S.J.'s**
Encase new RSJ with 2 layers of 12.5 mm plasterboard and skim with staggered joints to give 1-hour fire protection.

**Kitchen Ventaxia**
Mechanical ventilation to Kitchen to give 3 air changes per hour connected to light switch into 150 mm upvc pipe to outside with cowl fixed all to regulation F1 2010 60 litres/second

**Background ventilation**
All new habitable rooms to have background ventilation not less than 8000 sq mm kitchen and en-suites to have 4000 sq mm. Insert permanent trickle vents to heads of all windows to rooms affected. Al to regulation F1 2010

**Utility Extract Ventilation**
Mechanical extract ventilation to give min extract rate of not less than 30 litres per second and to have a 15 minute over-run. Extract fan to be ducted to external air, via 100mm dia flexible duct to terminate on outside wall at fitted grille.