

Demolish

Carefully take down existing shed, reposition in garden area and prepare site for new building works.

Foundations

Concrete strip foundations minimum depth 900mm, 750mm wide by min 225mm deep and to project 200mm min either side of supported wall. Provide bottom of strip footing from finished ground level and to a depth to prevent damage by any tree roots - actual depth to be agreed on site with Building Control when site ground conditions are determined. Although strip foundations have been shown on the drawing these may suit conditions to the satisfaction of Building Control once trial hole has been dug - Alternative Foundations to be designed by Structural Engineer - Assessment of Water Table level/Ground Water conditions and foundation drainage to be carried out especially where sloping ground conditions occur. Specialist advice to be taken prior to commencement of work. 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

Cavity Walls Brick/Block full fill (U value 0.18W/m2K)

External wall construction: 102mm matching red brick compressive strength of 5N/mm2. 150mm full fill cavity with 150mm Dritherm 32 Ultimate, installed in strict accordance with the manufacturers instructions. 100mm inner blockwork Plasmor Fibolite - 0.18 W/m2K (7N/mm2) internally finished with 12.5mm plasterboard on dabs with min 10mm airspace. External wall achieved U' value of 0.188W/m2K. Blockwork used below dpc level to comply with BS 6073, to be sulphate resistant and have compressive strength not less than 7N/mm2. Density exceeding 1500kg/m2. Stainless steel wall ties to be used to new cavity walls - refer to general notes for spacing. Walls should be properly bonded and solidly put together with mortar.

DPC's

Cavity wall and internal block work walls to incorporate PVC type dpc at ground floor finished level minimum 150 mm off external ground level. Polypropylene cavity trays to be installed in cavity walls above openings, single storey roofs, complete with weep-holes @ maximum 1000 mm centres to BS 5628 Part 3.

New opening

Break open existing walls at ground floor level from floor to ceiling to form new opening as shown and provide and/or lay 900 x 600 mm 50 mm thick concrete paving slabs, allow for fixings to posts when installing glass panels with brushed steel handrail.

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

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 double triangle wall/vertical twist 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. Wall ties to comply with BS 1234:1978.

All lintels to have 150mm end bearing and all timbers to have 100mm min end bearing. Steelwork as noted on plan to comply with BS4449, BS5950. Steel beams to ear onto concrete pad stones min 300mm x 250mm x 150 mm deep. Where only 100mm 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.g's, u.b's etc to be coated 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 wool reduce cold bridging).

Lintels over openings to be proprietary insulated. Steel lintels e.g. Cornic or I.S. 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. 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.

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, heading 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.

Patio area

Provide new foundations as before described, over site concrete, take walls up to beam and patio floor, screen or lay 900 x 600 mm 50 mm thick concrete paving slabs, allow for fixings to posts when installing glass panels with brushed steel handrail.

Timber ground floor

ex. 25mm thick s.w. t & g floor boards on 150x50 treated s.w. floor joists at max. 600mm centres (joist direction shown on plan), built into walls. Wrap ends of joists in d.p.c. where built into existing walls. Provide 150 x 50 treated s.w. herringbone strutting between joists at mid span. Provide 150mm thick Kingspan Kooltherm TP10 floorboard laid between all floor joists supported on 25 x 25 treated timber battens fixed to floor joists, to give min. U' value of 0.18. Provide 100mm oversite concrete (top of concrete to be above external ground level) leaving min. 150mm air gap between top of concrete and underside of floor joists. Insert 225 x 150 mm airbricks with cavity tray over, every 2m to perimeter external walls

Cavity closer

Insert Isoform XCC insulated cavity closer to all new openings all as document 1 2013. Width and fixing to suit opening

Flat roof Vented

To be 3 layers of felt top layer 350 ht finish. 10 mm limestone chippings bottom based on 19 mm exterior grade plywood decking with sw firings to give fall of 1:60 or Firestone rubber EPDM roofing (or similar) fully adhered with roller applied bonding adhesive in accordance with manufacturer's instructions. Provide 150 x 50 mm sw flat roof joists at max 450 mm centres, trim out with double joists around any roof openings.

Insulation to vented flat roof

Provide 100mm thick Kingspan Thermopitch TP10 between joists+70mm Thermopitch TP10 under+12.5 plasterbd. 50mm air gap between top of insulation and top of joists to give a U' value of 0.15W/m2K.

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

Guardrail to patio

Guarding to balcony to be BS 6399 part 1 with toughened glass panels 1100 mm above patio.

Gutters and fascia

100 mm upvc gutter connected to existing falls to outlet. Fixed to 19 mm exterior grade plywood fascia boards. Provide 12 mm exterior grade plywood soffits fixed directly to underside rafters with continuous upvc soffit ventilators to vent roof space to BS 5250.

Heating

To be supplied by balanced flue gas boiler condensing type, radiators and cylinder min Seabuck 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.

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

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 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.

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. All gullies to be back inlet and roddable - wastes to discharge below grating but above water line

Existing manhole

Connect new drainage system into existing manhole. Bench up in concrete to form channel

Windows and Doors.(replacement or for new extensions)

New window and patio doors to be PVCu and bifold doors to be powder coated aluminium, Pilkington glass. K glass range with 16 mm Argon filled air gap optitherm 4mm (Optifloat, 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 mm2 trickle vents per habitable rooms and 2500 mm2 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 with BS6206. 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.

Condition Notes

1. The drawings relating to the proposed project are for the purpose of obtaining Planning and Building Regulations approval only.
2. All work thereafter is undertaken solely at the Clients/ Contractors discretion and liability is therefore transferred.
3. In order to prepare these drawings, certain assumptions have been made which have to be verified both before and during the course of the works. Should at any time the existing construction be exposed which does not agree with these drawings or dimensions vary, then the engineer should be informed immediately and suitable actions taken.
4. All work must be carried out in accordance with the relevant building regulations and codes of practice.
5. Do not scale from drawings. Work only from figured dimensions. All dimensions to be checked on site and any discrepancies to be notified to the relevant bodies immediately.
6. The drawings relating to the proposed project must be read in conjunction with and checked against any structural engineer's or specialist drawings and details provided.
7. The Contractor is to notify Building Control at the appropriate stages of construction - necessary for them to determine the works statutory compliance.
8. Before work commences - ensure all Planning and/or Building Regulations Conditions have been resolved to the satisfaction of the Local Authority.

800 Internal doors

800 door set comprising 1981x726x44 solid core flush doors painted three coats - set in softwood frame 13 mm rebated and with ex. 50x25 sw architraves. Doors fitted with 1.5 pairs 100 mm bolts and 1 set lever handles. Style and type of paneled door to client's choice.

Lead work and flashings and any valleys.

Use Code 5 lead and laid according to lead development association. Flashing to be provided to all jambs and below window openings with welded up stands. Joints to be lapped min 150 mm and lead to be dressed 200 mm under tiles.

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

Lighting

Provide 75% of new primary light fitting units to new extension to be of type, which will only take high efficiency lamps Provide min one third of primary lights to have a luminous efficiency greater than 40 lumens per circuit watt. The amount/type of light fittings and electrical wall sockets is to be agreed with the owner before work commences on site.

Electrical Contractor (Competent Person)

All the wiring and electrical work will be designed, installed, inspected and tested in accordance with the requirements of BS 7671, the TEE 18" edition wiring guidance and Building Regulations Part P (electrical safety) by a competent person registered with an electrical self certification body authorised by the Secretary of State, AND The competent person is to send to the approved inspector a 'self certification certificate' within 30 days of the completion of the electrical works. The Client is to be provided with a copy of the 'self certification certificate' and a BS 7671 electrical installation test certificate.

Notes

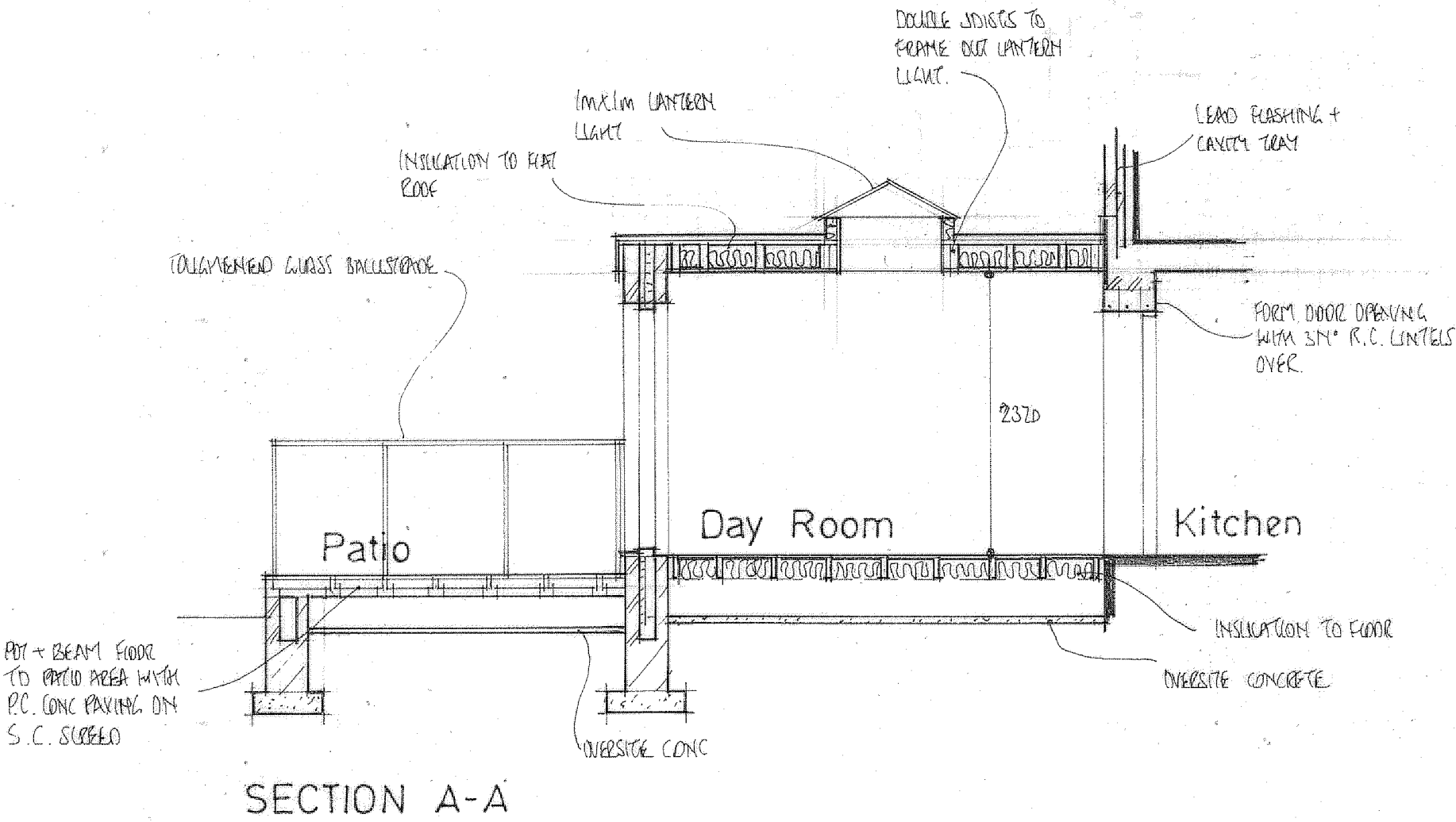
These drawings are for the purpose of obtaining Building Regulations and Planning permission only. All work thereafter is undertaken solely at the clients/contractors discretion and liability is therefore transferred. With regards to any matters relating to Planning or Building Regulation, they are solely 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.

Party Wall Act

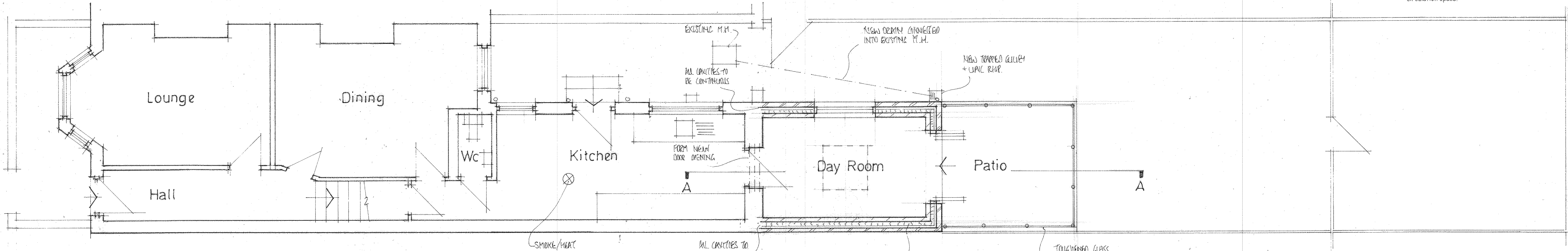
Any works falling within the Party Wall Act 1996. The client to serve written notice on the owners of adjacent properties affected of the intention to build within 2 months of commencement date. Written permission to be obtained. Further information about the Act can be found in the explanatory booklet available to download from: https://www.gov.uk/party-wall-etc-act-1996-guidance.

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 L10 to L18. 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.

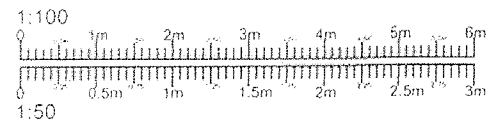


SECTION A-A



GROUND FLOOR PLAN

PROJECT
PROPOSED SINGLE STOREY
REAR EXTENSION.
DRAWING TITLE
PROPOSED LAYOUT
AND SECTION.
CLIENT
MR. A. WHITBY.
ADDRESS
10 EGERTON STREET,
MANCHESTER. M25 1FS.
SCALE
SCALE 1:50@A1
DATE
DEC 2022.
DRAWING No
FO 12225801/2.



Scale Bar