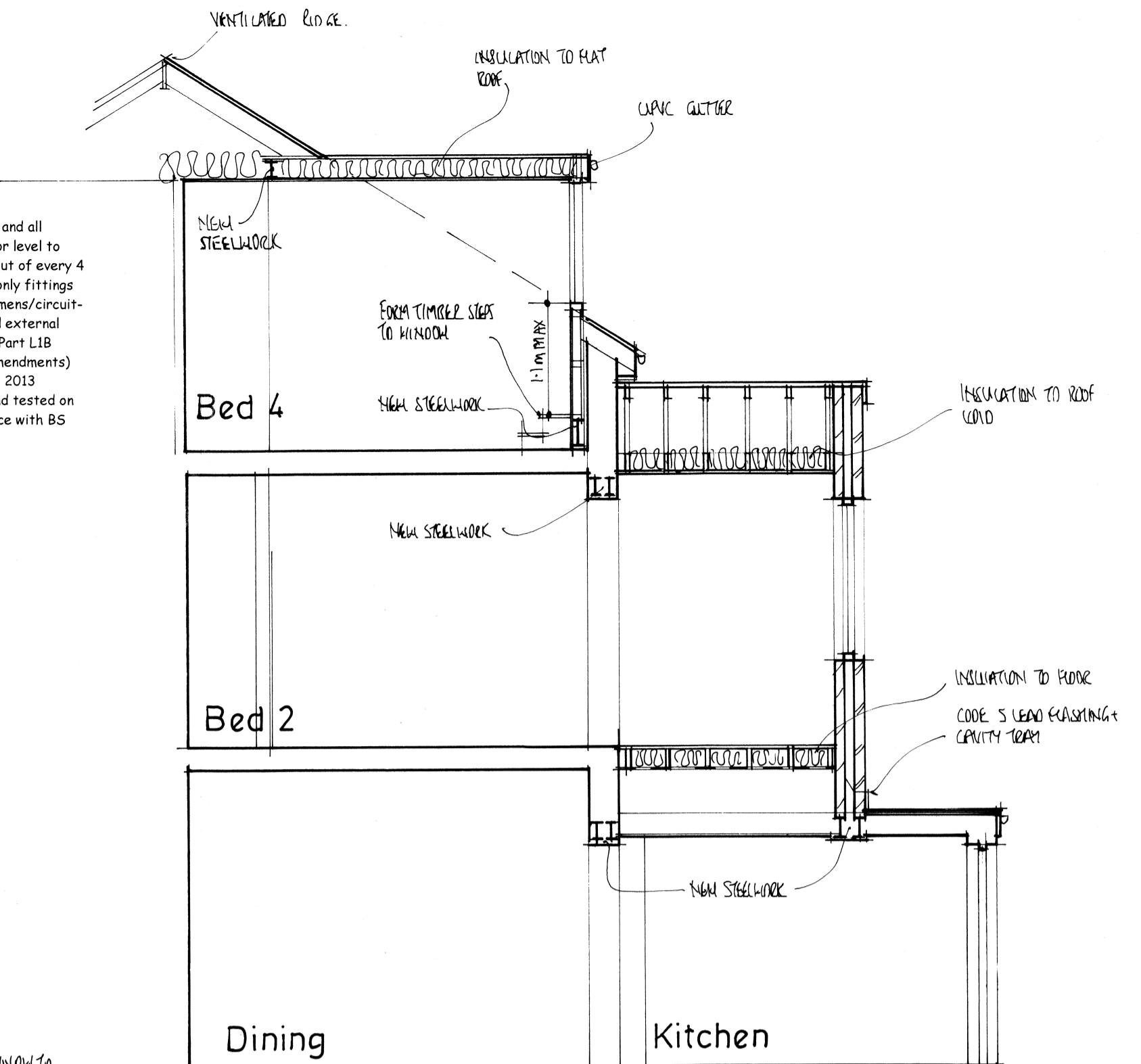


Lighting
Provide 75% of new primary light fitting units to new extension to be of type, which will only take high efficiency lamps Provide min one third of primary lights to have a luminous efficiency greater than 40 lumens per circuit watt. The amount/type of light fittings and electrical wall sockets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

Roof construction
Marley grey concrete wall hung tiles class 'B' fire resistant cladding plain horizontally fixed to 38 x 19 treated s/w vertical battens at a gauge to suit on breathable sarking felt membrane on plywood sheathing, 125 x 50 treated s/w framing at 400 centres with noggin at 600 vertical centres. Provide 38 x 19 treated s/w counter-battens with no.4 lead fixed to counter-batten and dressed to window frame. At abutments with gable wall provide no.3 lead soakers (felt to overlap) and dressed down min. 200 mm over roof 100 mm thick 125 mm thick KINGSPAN insulation between studding and vapour barrier to warm side of insulation giving a u value of 0.28 insert 100 x 100 mm s/w corner posts and each side of any windows, insert 150 x 100 lintel over any opening in dormer.

Dormer cheeks to adjoining boundaries.
Insert 6 mm thick supalux for boundary dormer cheeks fixed to the outside of the dormer framework in addition to 12.5 mm plasterboard to inside face of framework.

Electrical Fittings.
All sockets to be positioned below 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 external lights to incorporate daylight sensor, all in accordance with Part L1B section 4.24 Building Regulations (2010 Edition with 2013 amendments) and Table 4.2 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.



SECTION A-A

Existing Building
All existing foundations and structure that is to take new structural loading is 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.

Steelwork R.S.J.'s
Steel beams e.g. r.s.j.'s, ub'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 100mm c/c (unless specified by structural engineer). Fully encased in 2 layers of 12.5mm plasterboard and skim support on 50 x 50mm cradle to give half hour fire resistance (web flanges packed with mineral wool to reduce cold bridging). Lintels over openings to be proprietary insulated. Steel lintels e.g. Galvic or I.B. etc - lintel type to be suitable for loading configuration and spans. Lintel d.p.c. cavity tray over with step ends and weep holes at 900mm c/c - 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.

Cavity walls (Kingspan K108)
Cavity walls to be 300 mm overall construction to comprise of 100 mm outer skin of blockwork finished with K render white. (re-render remaining near elevation and existing ground floor structure to match, with inner skin of 100 mm Thermolite Shield blockwork. Both skins laid on 1:6 mortar mix with plasticizer and bonded together with Ancon Sharfix RT2 cavity wall ties, suitable for cavities up to 100 mm wide, staggered in alternate rows and spaced 750 mm horizontally and 450 mm vertically. All cavities closed at eaves, door and windows openings with Thermabate or similar insulated cavity closers. 100 mm cavity partially infilled with 50 mm Kingspan Kooltherm K108 Cavity Board with blockwork lined internally with 12.5 mm plasterboard on dabs to provide a maximum 'U' value of 0.28W/m2K. Plasterboard returned into all window and door openings and with continuous band of adhesive around all openings at base and heads of wall and at external corners, in accordance with Accredited Construction Details with details checked on site to maintain quality assurance. All new internal solid walls to comprise of 100 mm skins of dense concrete blockwork (TKN) with 12.5 mm Gyproc Wallboard on dabs with skim finish.

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

New opening
Break open existing walls at first floor level from floor to ceiling to form new opening as shown and provide and insert 2 number 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, reading 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.

Piers
Extend existing wall in kitchen area to form new pier to carry new steel work all in seconds engineering brickwork to form new pier, size 440 wide and 215 thick, tied back to existing wall. Use stainless steel cavity wall ties plugged and screwed to wall, 2 per course, every 3 courses. Provide horizontal DPC at min 150 mm above ground level. Provide 2 no. 215 x 215 x 150 mm deep concrete padstones at top of pier to take new R.S.J.'s. Extend existing concrete foundation so as to be 300 mm wider all round than new pier x 300 mm deep with a layer of a193 mesh in bottom, all in accordance with approved document 'a'

First Floor Extension and Loft Floors (if required upgrading)
22 mm moisture resistant tongue and groove chipboard flooring (minimum mass per unit area 15kg/m2), on 75 x 200 mm C16 treated softwood joists at 400 mm centres, to first and second floor levels of house, joists doubled up and spiked together beneath all first floor partitions. Joists built into external walls and packed as necessary. Lateral restraint provided by 30 mm x 5 mm galvanized mild steel straps at maximum 2000 mm centres, in accordance with Building Regulations, Galvic Herringbone joist struts at mid span between 2.5 m and 4.5 m and one third span greater than 4.5 m. Floor void between joists to incorporate minimum 100 mm of Rockwool Flexi quilt (minimum density 10kg/m3). Joists to be underlaid with 12.5 mm Gyproc Wallboard TEN complete with skim finish to form ceiling.

Restraint straps
Insert 30 x 5 mm lateral restraint straps between the external walls and floor joists.

Floor joist insulation
Provide min. 200mm thick mineral wool absorbent material with a density of at least 10kg/m3 to all new floor areas supported on netting slung between joists.

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

Ceilings
To be 150 x 50 mm s/w ceiling joists of 400 mm centres under drawn with 12.7 mm foil-backed plasterboard and skim finish.

Roof void insulation
To be 100 mm thick rock wool laid between joists and cross-laid with 200 mm Rock wool to give total thickness of 300 mm and a U value of 0.16W/m2K.

New Extension Pitched Roof Construction
Pitched roof approximately 30 degrees with blue slate roof coverings with min headlap of 150mm on 50 x 38mm s/w battens on layer Tyvek Supro felt on 100 x 50mm C16 s/w rafters @ 400mm c/c. Rafters fixed to wall plate with framing anchor or truss clip. 12.5mm foil backed plasterboard and skim to underside of 150 x 50mm C16 s/w ceiling joists at 400mm c/c.

Flat roof to dormer
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 s/w firings to give fall of 1:60. Provide 200 x 75 mm s/w flat roof joists at max 400 mm centres, trim out with double joists around any roof openings.

Insulation to flat roof
Provide 150mm thick Kingspan Kooltherm K7 insulation between roof joists leaving min 50mm air gap between top of insulation and top of joists. Provide 32.5mm Kingspan Kooltherm K18 insulated plasterboard ceilings with skim finish to underside of flat roof joists to give a U value of 0.18W/m2K.

Lead work and flashings and any valleys.
Use Code B lead and laid according to lead development association. Flashing to be provided to all gables and below window openings with welded up stands. Joints to be lapped min 150 mm and lead to be dressed 200 mm under tiles.

- Condition Notes**
- The drawings relating to the proposed project are for the purpose of obtaining Planning and Building Regulations approval only. All work thereafter is undertaken solely at the Clients/ Contractors discretion and liability is therefore transferred.
 - 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.
 - All work must be carried out in accordance with the relevant building regulations and codes of practice.
 - 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.
 - 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.
 - The Contractor is to notify Building Control at the appropriate stages of construction - necessary for them to determine the works statutory compliance.
 - Before work commences - ensure all Planning and/or Building Regulations Conditions have been resolved to the satisfaction of the Local Authority.

Insulation to sloping ceiling.
Fit 75 mm Celotex XR 3000 between existing/new rafter maintain 50 mm clear vent space above insulation under draw the new rafters with WEB dynamics thinulsex insulation as manufacturers instructions and finish with 50 x 38 cross battens. Fix to battens 12.5 mm foil backed plasterboard and skim finish to achieve U value of 0.18W/m2K.

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

Ventilation
Mechanical ventilation to WC/bathroom by Xpelair DX100 wall mounted extractor or DX100 ceiling mounted extractor. Extractors capable of min 15 L/S extraction and to incorporate minimum 15 min over run timer. Similarly mechanical ventilation to Utility by Xpelair SL150 wall mounted extractor (min 30 L/S). Mechanical ventilation incorporating in the cooker hood in the Kitchen (min 30 L/S) ducted to external wall.

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. All to regulation FI 2010

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 IEE 18th 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.

Flat roof construction to single storey building
Warm Roof with U Value of 0.17W/m2K. Firestore rubber EPDM roofing (or similar) fully adhered with roller applied bonding adhesive in accordance with manufacturer's instructions on 125mm thick Kingspan 'Thermafoam' TR27 LDC/FM insulation board (boards laid break bonded) fully bonded down in hot bitumen and laid in accordance with manufacturer's instructions on one continuous vapour control layer of bitumen roofing felt Type 3B partially bonded to deck, all laps sealed with bitumen on 20mm thick exterior grade plywood decking on 125 to 45mm x 50mm wide treated timber firring strips giving min. 1:60 gradient laid across roof joists with falls to gutter supported on 200 x 50 treated s/w. Flat roof joists at max 450mm centres spanning front to rear supported on new 100 x 75 treated s/w. wallplate on new wall. Joists to be built into existing wall at other end. Provide 300 x 25 thick Thermafoam TR27 insulation upstand against existing 2No existing external walls, set on top of decking. Roof fall to be dressed up insulation upstands with the new No 4 lead apron flashings dressed down over the top. Finish underside of new roof internally with 12.5mm plasterboard with 3mm skim finish.

Fixings
Strip 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

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

New tiles
New hip tiles to be bedded in sand/cement mortar. Provide new as necessary to match existing. Provide hip trims at base of hips bedded in sand/cement mortar and nailed to hips

Soil and vent pipe
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

Lead collar
Min up-stand 150 mm to new s & v

Sanitary fittings to bathroom
W.C. To have dual flushing action to NWWA regulations and to have 25 mm overflow direct to external air. Connect with 'p' trap and 100 mm diameter upvc soil branch pipe to new 100 mm diameter upvc s & v. Lavatory basin to have 75 mm deep seal anti vac trap and 38 mm diameter upvc waste connected to 50 mm diameter combined upvc waste connected to s & v. Bath to have 75 mm deep seal anti vac trap and 42 mm diameter upvc waste connected to 50 mm diameter combined upvc waste as lavatory basin. Connect all fittings to new hot and cold system

Non-loadbearing Walls.
All non-loading partitions to comprise of 75x50 mm softwood studs @ 450 mm centres, and 75 mm softwood noggin @ 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, en-suite 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).

Smoke alarms and heat detectors.
Fire Safety Approved Dec 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 to 1.18. 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.

Sanitary fittings to new WC
W.C. To have dual flushing action to NWWA regulations and to have 25 mm overflow direct to external air. Connect with 'p' trap to 100 mm diameter upvc soil branch pipe connected to new 100 mm diameter upvc s & v. Lavatory basin to have 75 mm deep seal trap and 38 mm diameter upvc waste connected to 50 mm diameter combined upvc waste connected to new 100 mm diameter upvc s & v. Connect all fittings to new hot and cold system All sanitary pipe work to be carried out in accordance with BS 5572:1978.

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 fittings to vent roof space to BS 5250.

Heating
To be supplied by balanced flue gas boiler condensing type, radiators and cylinder min Sedbuk 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

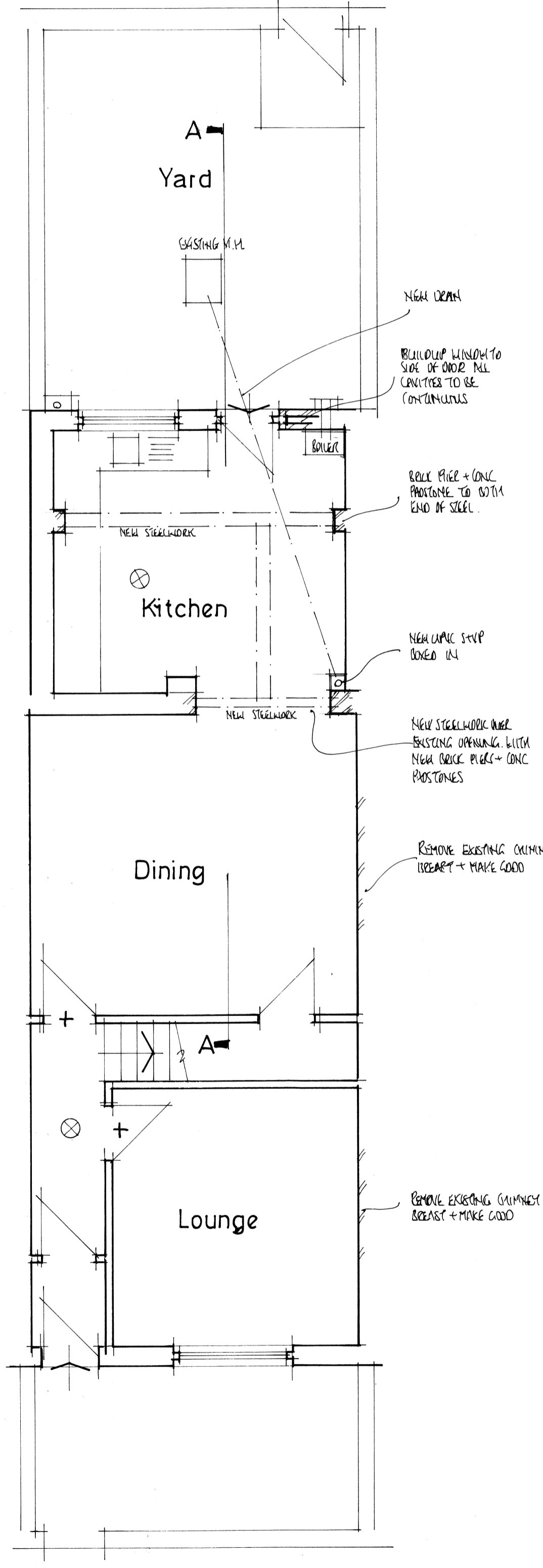
S & v
New 100 mm diameter s.g.w. Drain from s & v rest bend at min fall 1:40 connected to new inspection chamber, provide rodding access to SAVP. Extend SAVP 900 mm past any opening window within 3 metres.

Windows (New or replacement)
To be white upvc double glazed opening light to equal 1/20th of floor area of room affected double glazing with 16 mm Argon filled air gap optitherm glass and soft low e coating u value to be 1.6W/m2K Built in trickle vents 2500 mm2 equivalent area to shower room and kitchen areas and 5000 mm2 to bedroom areas. Glazing will conform to BS 6206:1981 in respect of Kite marked safety glass.

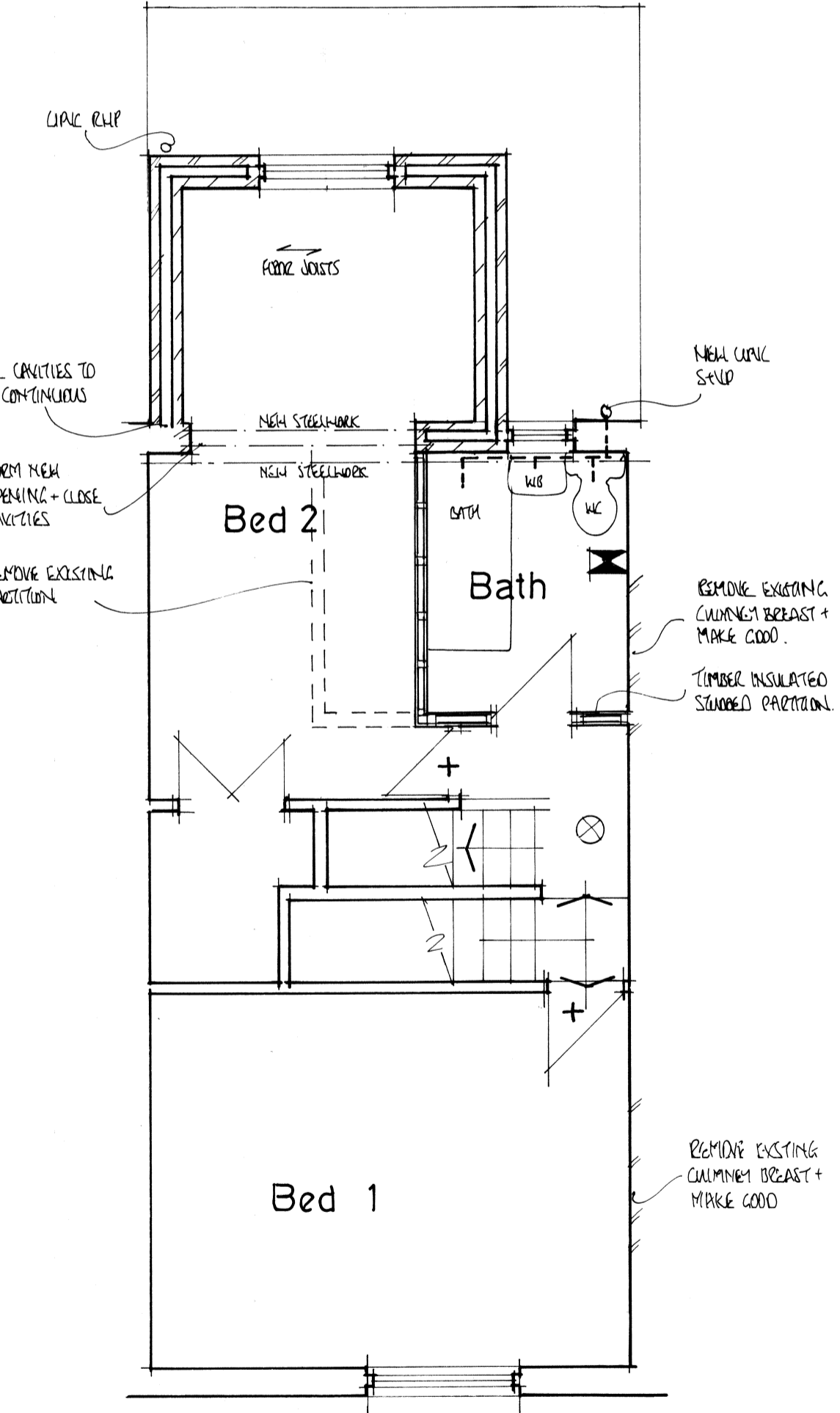
Escape windows
Opening lights suitable for rescue / means of escape are required to be min 0.33 sq m with min dimension of 450 mm wide x 740 mm high max 1100 mm above floor level (clear opening when in the open position).

Fire doors
All doors marked * to be 1/2 hour fire doors FD30 Self closing 12 mm rebates with intumescent smoke seal strips inserted as per Document B2006 edition.

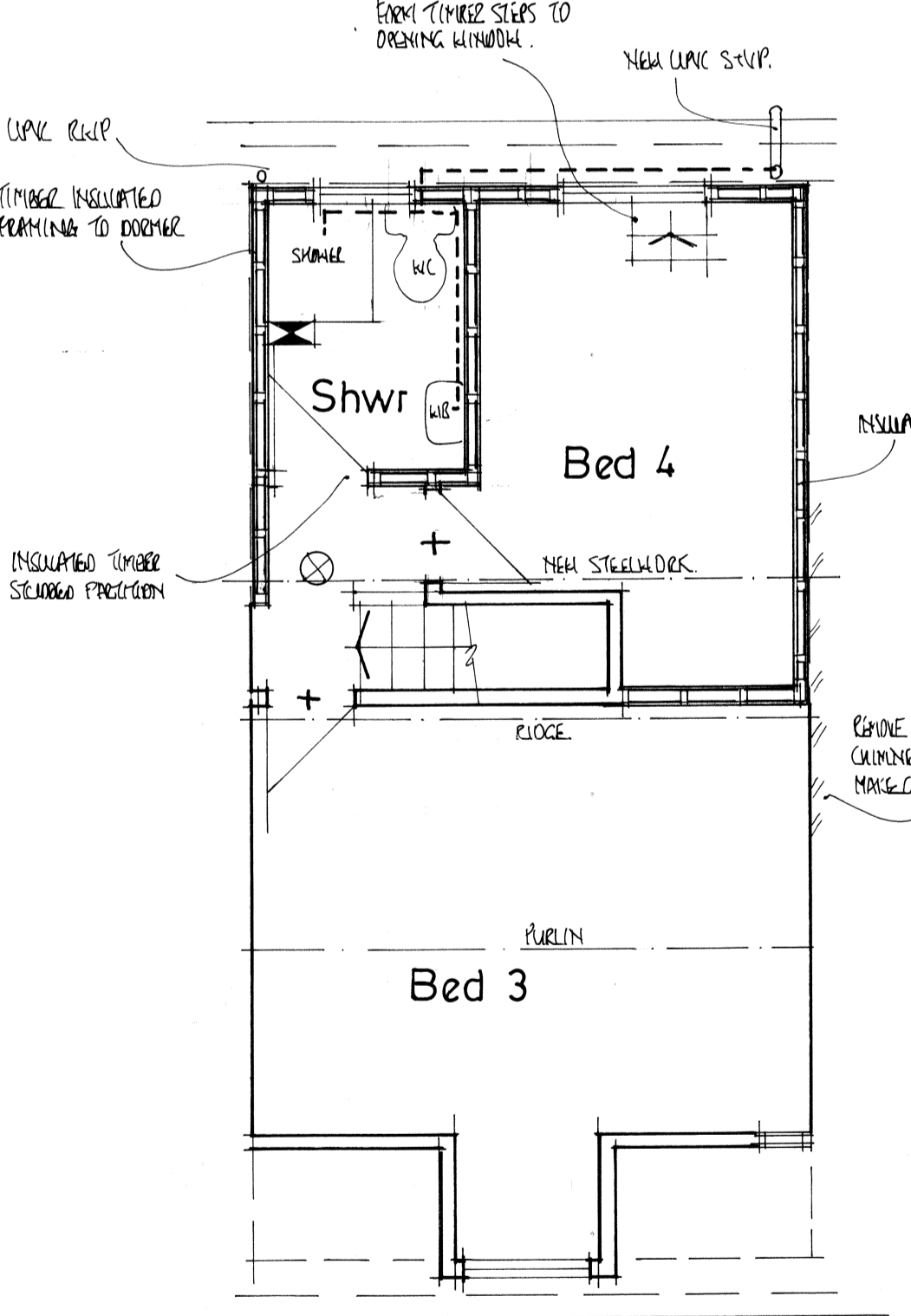
800 Internal doors
800 door set comprising 1981x726x44 solid core flush doors painted three coats , set in softwood frame 13 mm rebated and with ex. 50x25 s/w architraves. Doors fitted with 1.5 pairs 100 mm bolts and 1 set lever handles. Style and type of paneled door to client's choice.



GROUND FLOOR PLAN



FIRST FLOOR PLAN

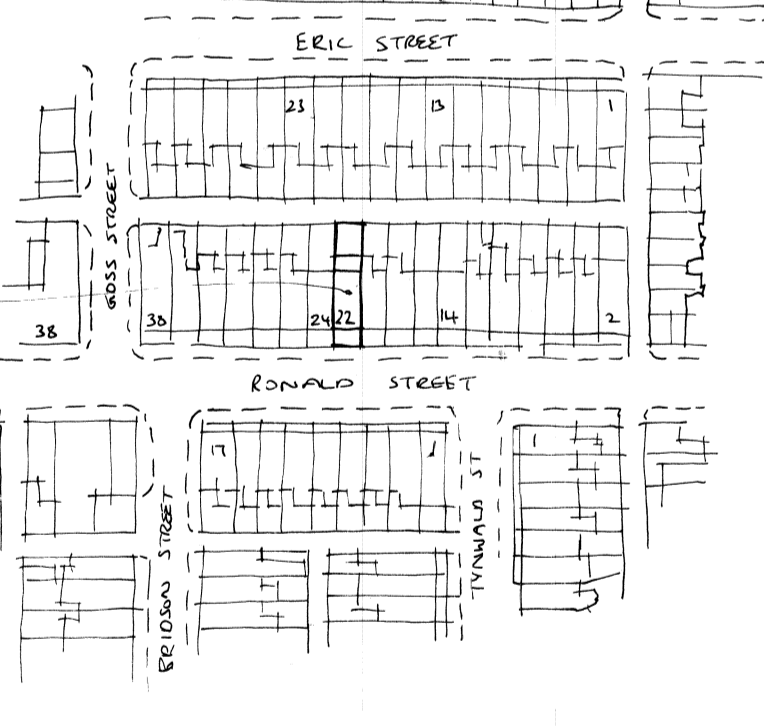


SECOND FLOOR PLAN

- Key**
- Mechanical Extract Fan Duct to Outside Air
 - Heat/Smoke Detector
 - 100mm R.S.J.

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 one 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-act-1996-guidance>.



LOCATION PLAN SCALE 1:1250

PROJECT
PROPOSED SECOND FLOOR REAR EXTENSION AND REAR DORMER.
DRAWING TITLE
PROPOSED LAYOUTS, SECTION AND LOCATION PLAN.
CLIENT
MR. A. MAHMOOD.
ADDRESS
22, RONALD STREET, CLARKSFIELD, OLDHAM.
SCALE DATE
SCALE 1:50@A1 OCT 2020.
SCALE 1:1250@A1
DRAWING No
ADL 10205612/2.