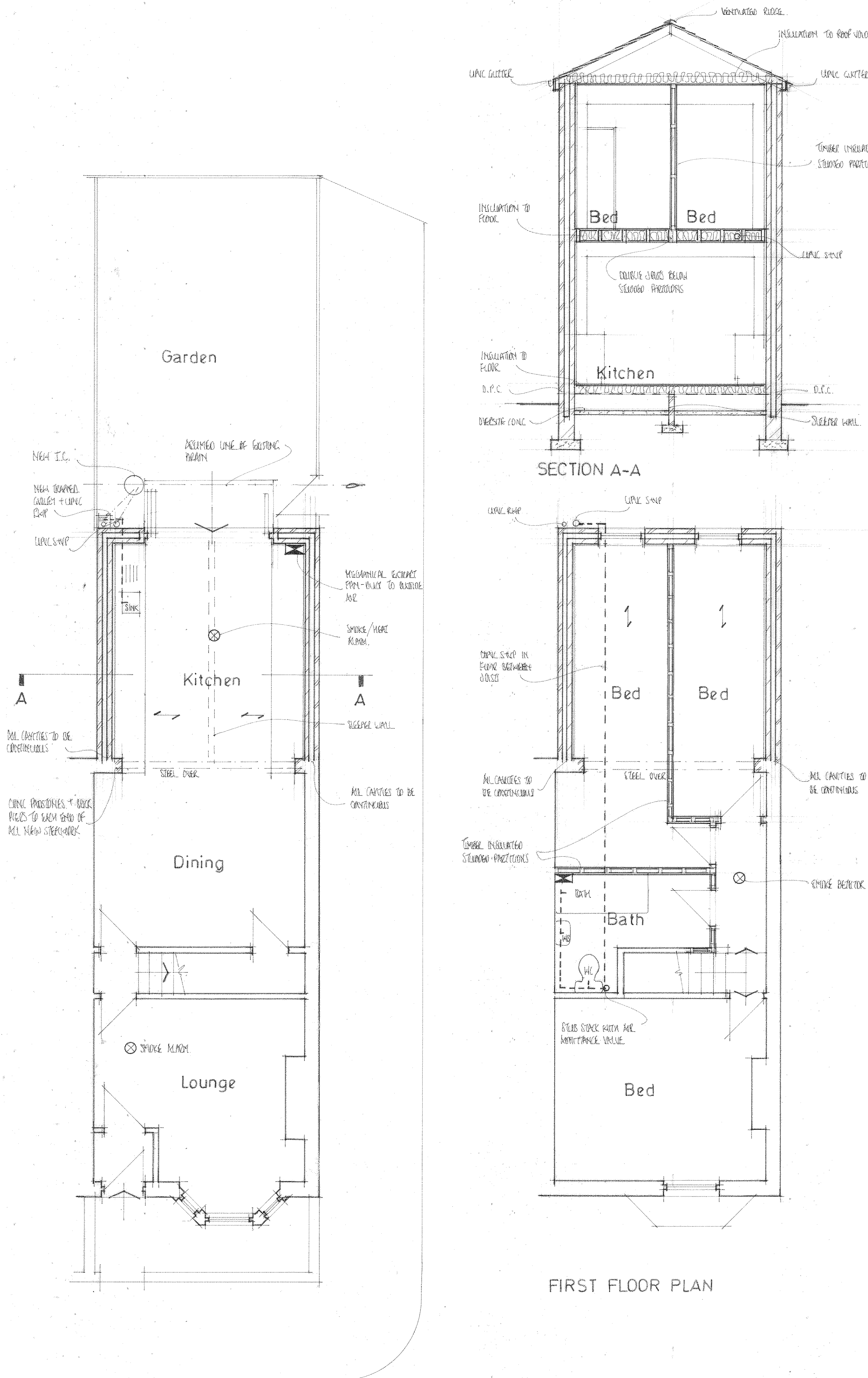




Demolish
Carefully take down existing building and prepare site for new building works.

Foundations
Foundations to cavity walls to be constructed of concrete common brickwork up to 150 mm below ground level with Class B engineering brickwork from 6L to DPC level externally and concrete block work internally. Walls built off 700 x 200 (C20 mix-20N/mm²) concrete strip foundations, at min depth of 1000mm, to suit local ground conditions. If the ground is found to clay the footings are to be in accordance with NHBC guide 'Building Near Trees' and to be in accordance with BS 8004, BS 5837 and to satisfaction of the Local Building Authority Inspector. Precast concrete lintels to be laid over all openings for drainage and service runs with minimum 150 mm end bearing onto adjacent brickwork.

Concrete mases 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.
Internal walls and timber floor sleeper walls to be taken down to a suitable bearing stratum to be agreed with Building Control

Super Structure 150 cavity full fill (U value 0.18W/m²K)
New external walls - Facing brickwork/stonework to extend min 2 courses below ground level. New facing brickwork to match existing with 150mm cavity, fully filled with 150mm Orththerm 32 Ultimate. Installed in strict accordance with the manufacturers instructions
Inner blockwork to be - 0.15W/m²K (4N/mm²) -
Internally finish with 12.5mm plasterboard on dabs with minimum 10mm airspace

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.

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.

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

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.

First Floor
22 mm moisture resistant tongue and groove chipboard flooring (minimum mass per unit area 15kg/m²), on 72 x 220 mm C16 tanzalized 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. Catnic 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 Rookwool Flexi quilt (minimum density 10kg/m³). Joists to be underlined with 12.5 mm Gyproc Wallboard TEN complete with skim finish to form ceiling.

Timber ground floor
ex. 25mm thick s.w. t & g floor boards on 50x125 @ 450 centres treated s.w. floor joists (joist direction shown on plan), built into walls. Wrap ends of joists in d.p.c. where built into existing walls.
Provide 125 x 50 treated s.w. herringbone strutting between joists at mid span. Provide 100mm thick Kingspan Koolltherm TF70 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

Timber floor
Direction on plan 225 x 50 mm @ 450 mm centres. 25 mm t & g boarding. Insert herringbone joist struts, all structural timber to be used in the floor to be in compliance of Regulations A1 and A2 of Schedule 1 of the Building Regulations and BS 5268 Part 2:991. Insert Kingspan Thermafloor TF70 140mm thick to give a U value of 0.18W/m²K. under drawn with 12.7 mm foil-backed plasterboard and skim finish

Roof Access Hatches
To be insulated and draught sealed to same standard as roof. Water pipes and tanks in lifts to be fully insulated to prevent freezing. Where roof structures abut external walls - ensure all residual gaps/edges are insulated

Roof void Insulation (U value 0.15W/m²K)
To be 2 layers, 150mm thick Rockwool laid between joists and cross-laid with 150mm Rockwool to give total thickness of 300 mm and a U value of 0.15W/m²K

Pitch roof Blue slate
Natural blue slate pitch 26 degrees all to match existing nailed to 38x25 mm sw tanzalized timber battens at gauge to suit. Use aluminum alloy nails to BS 1202 part 3 on type 1.f. Reinforced bitumen felt to BS 747:1977 on 50 x 125 mm @ 450 centres treated timber rafters at max 400 mm centres supported on wall plate and pole-plate. Sand cement verge

Steelwork
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.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 wool reduce cold bridging)

Lintels over openings to be proprietary insulated. Steel lintels e.g. Catnic or T.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 closed 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 of the leaf of the wall
Chases should not be so positioned as to impair the stability of the wall, particularly where hollow blocks are used

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.

Damp Proofing
Horizontal d.p.c.s 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 ducted 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

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

Valley roof
19 mm exterior grade plywood 300 mm either side. Insert no.4 lead in valley over felt 300 mm either side. Form saddle in lead

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

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

Hip tiles
New hip tiles to be bedded in sand/cement mortar. Provide new as necessary to match existing. Provide hip irons 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

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

Sanitary fittings to new bathroom
W.C. To have dual flushing act to N/WWA 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 & vp. 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 & vp. Shower to have 75 mm deep seal onli vac trap and 50 mm diameter upvc waste connected to 50 mm diameter combined upvc waste as lavatory basin. Bath to have 75 mm deep seal onli vac trap and 42 mm diameter upvc waste connected to new 100 mm diameter upvc s & vp. 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 soffit ventilators to vent roof space to BS 5250.

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.

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

Radiators
Provide and fit thermostatic control valves to radiators.

Timber
All new timber to be tanzalized 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

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 structures 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

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

Obsolete drainage
Take up obsolete drains from kitchen seal off all junctions and corresponding connections

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).

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 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.

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 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.

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

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.

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.

Windows and Doors.
New windows and doors to be PVCu and bifold doors to be powder coated aluminum, Pilkington glass, K glass range with 16 mm Argon filled air gap spiththerm 4mm Opyfloat, 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, ensuite) for background ventilation in accordance with Part F 2010 Edition System Table 9.2a 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 BS6626. 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.
All work thereafter is undertaken solely at the Clients' Contractors discretion and liability is therefore transferred.
2. 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.
3. All work must be carried out in accordance with the relevant building regulations and codes of practice.
4. 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.
5. 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.
6. The Contractor is to notify Building Control at the appropriate stages of construction - necessary for them to determine the works statutory compliance.
7. Before work commences - ensure all Planning and/or Building Regulations Conditions have been resolved to the satisfaction of the Local Authority.

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.

Ventilation
Mechanical ventilation to 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.

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 ensuite to have 4000 sq mm. Insert permanent trickle vents to heads of all windows to rooms affected. All to regulation F1 2010

Ceilings
To be 125x50 mm sw ceiling joists at 450 mm centres under drawn with 12.7 mm foil-backed plasterboard and skim finish

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 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.

PROJECT
EN-LARGE EXISTING KITCHEN AND CONSTRUCT NEW FIRST FLOOR EXTENSION.
DRAWING TITLE
PROPOSED LAYOUTS AND SECTION.
CLIENT
MISS K. BRODERICK.
ADDRESS
20, WOODHOUSE STREET, GORTON, MANCHESTER.
SCALE DATE
SCALE 1:50@A1 OCT 2022.
DRAWING No
FO 10225792/2.

