

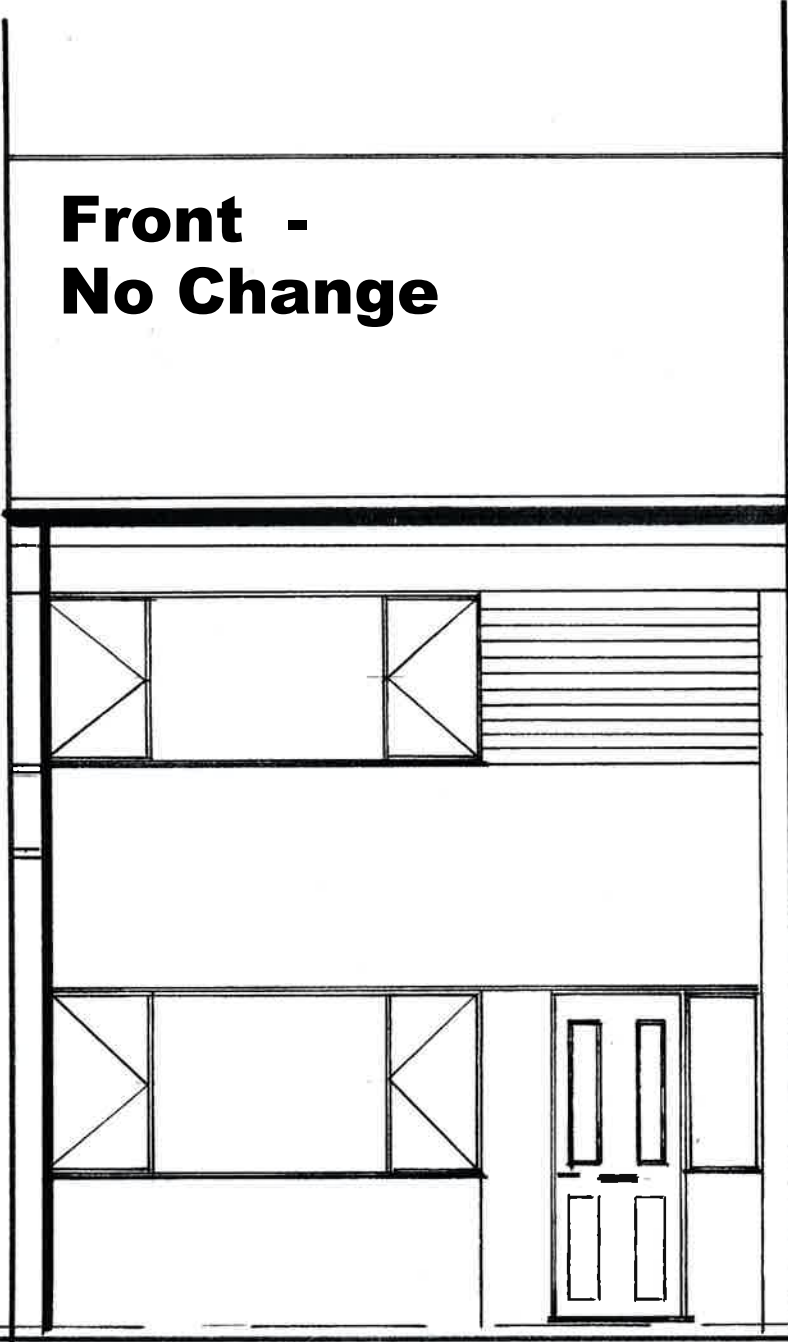
Condron Design Consultants Ltd
79 Ash Drive Wardley
condrondesignconsultants@outlook.com
07734669651
Building Regulation Drawing

PROPOSED FRONT AND REAR ELEVATIONS

24 Tinsley Close
Manchester M40 7AU
Single Storey Rear Extension and
Associated Internal Alterations
1:50@A3-MCPRBR01
Dimensions to be checked on site by
contractor

RAINWATER DRAINAGE
New rainwater goods to be new
110mm UPVC half round gutters
taken and connected into 68mm
dia UPVC downpipes.
See Drainage Layout Plan

Front - No Change



SCALE BAR
1000mm

SAFETY GLAZING
All glazing in critical locations to be toughened
or laminated safety glass to BS 6206, BS EN
14179 or BS EN ISO 12543-1 and Part K
(Part N in Wales) of the current Building
Regulations, i.e. within 1500mm above floor
level in doors and side panels within 300mm
of door opening and within 800mm above floor
level in windows.

NEW AND REPLACEMENT WINDOWS
New and replacement windows to be double glazed with 16mm argon gap and soft coat low-E glass.
Window Energy Rating to be Band C or better and to achieve U-value of 1.6 W/m²K. The door and
window openings should be limited to 25% of the extension floor area plus the area of any existing
openings covered by the extension.

NEW AND REPLACEMENT DOORS
New and replacement doors to achieve a U-Value of 1.80W/m²K. Glazed areas to be double glazed w
ith 16mm argon gap and soft low-E glass. Glass to be toughened or laminated safety glass to BS 6206,
BS EN 14179 or BS EN ISO 12543-1 and Part K (Part N in Wales) of the current Building Regulations.

Rear Elevation



Code 5 Lead Flashing
Tiles to Match
Existing - Suggest
Marley Mendip

83mm
913mm
600mm
249mm
150mm

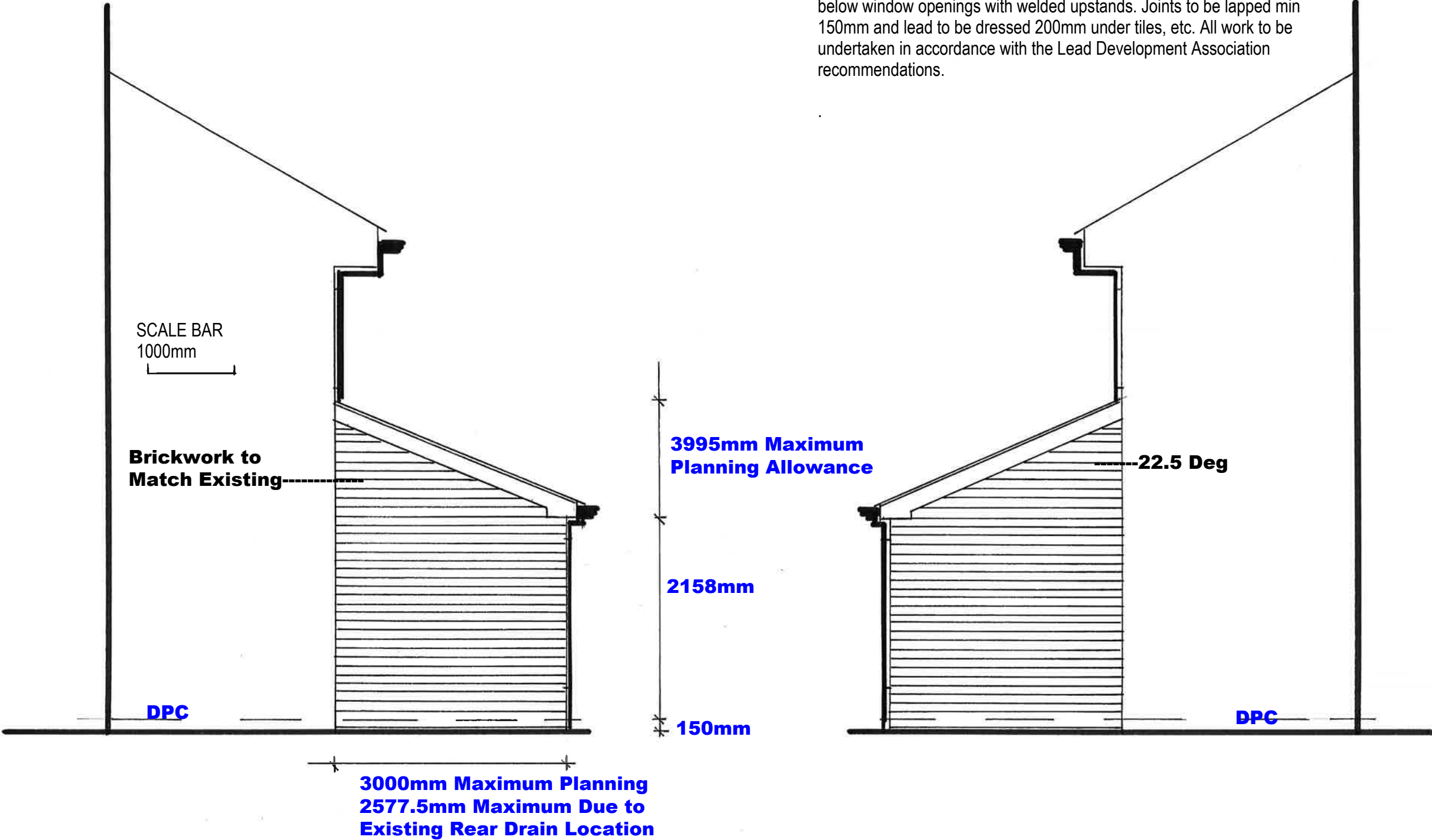
150
2075mm
83
1242mm Max

200 1002.5 1247.5 665 910 665
550 409 409 550 - BOXES
4490mm

PROPOSED SIDE ELEVATIONS

24 Tinsley Close
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Single Storey Rear Extension and
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1:50@A3-MCPRBR02
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LEAD WORK AND FLASHINGS
All lead flashings, any valleys or soakers to be Code 5 lead and laid according to Lead Development Association. Flashings to be provided to all jambs and below window openings with welded upstands. Joints to be lapped min 150mm and lead to be dressed 200mm under tiles, etc. All work to be undertaken in accordance with the Lead Development Association recommendations.

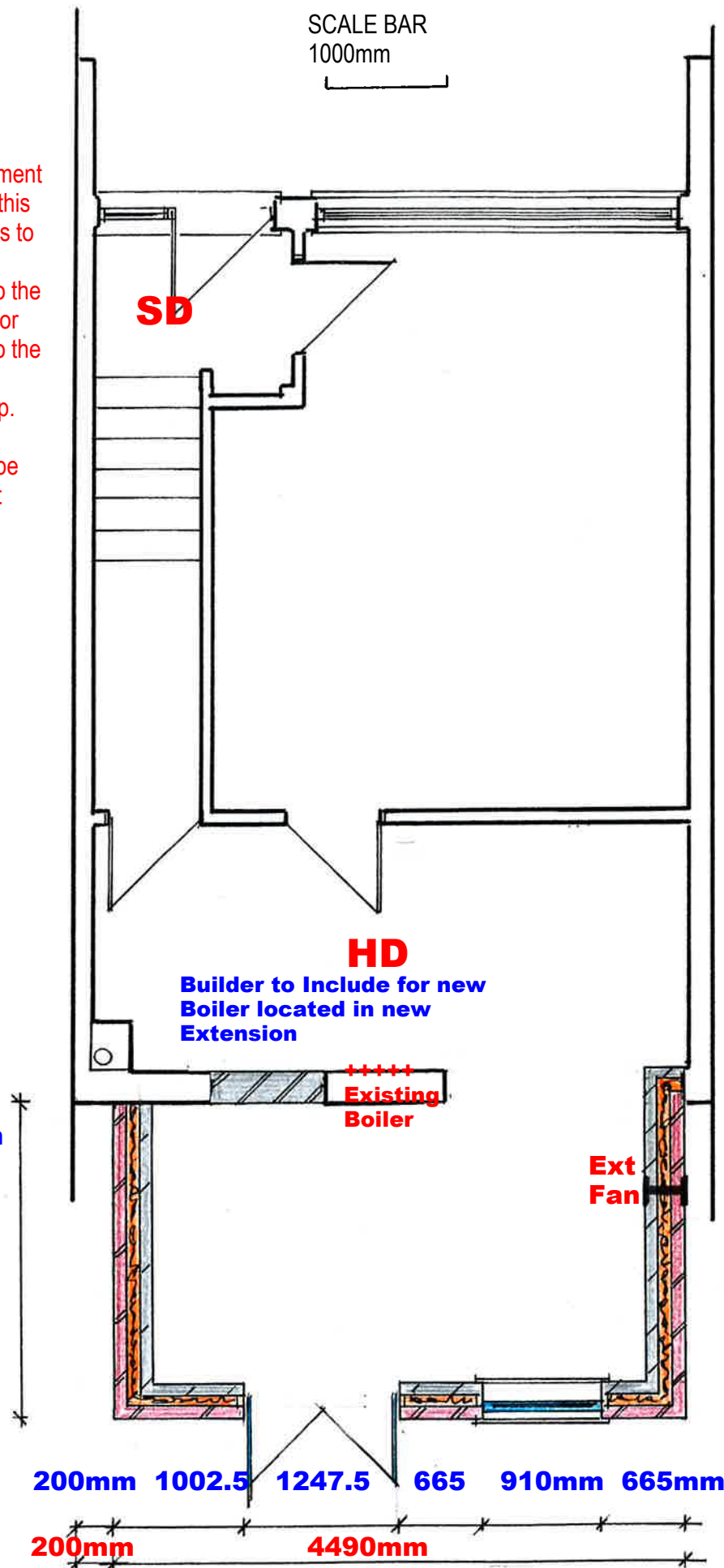


PROPOSED GROUND FLOOR LAYOUT

24 Tinsley Close
Manchester M40 7AU
Single Storey Rear Extension and
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1:50@A3-MCPRBR03
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SMOKE DETECTION
Smoke Detection not a requirement of the Building Regulations for this project but a recommendation is to upgrade during the works- Mains wired smoke detection to the Ground Floor Hall and First Floor Landing with a Heat Detector to the Kitchen - All Mains Wired and Interlinked with Battery Back Up.

If ceiling mounted they should be 300mm from the walls and light fittings.



Full Fill Cavity Wall

To achieve minimum U Value of 0.28W/m²K

New cavity wall to comprise of 105mm facing brick to match existing. Full fill cavity with 100mm Dritherm32 cavity insulation as manufacturer's details. Inner leaf to be 100mm block K value 1.13, e.g. (Armstrong dense, Masterblock Monacrete 100s). Internal finish to be 12.5mm plasterboard on dabs. Walls to be built with 1:1:6 cement mortar.

DPC

Provide horizontal strip polymer (hyload) damp proof course to both internal and external skins minimum 150mm above external ground level. New DPC to be made continuous with existing DPCs and with floor DPM. Vertical DPC to be installed at all reveals where cavity is closed.

WALL TIES

All walls constructed using stainless steel vertical twist type retaining wall ties built in at 750mm ctrs horizontally, 450mm vertically and 225mm ctrs at reveals and corners in staggered rows. Wall ties to be suitable for cavity width and in accordance with BS EN 845

CAVITIES

Provide cavity trays over openings. All cavities to be closed at eaves and around openings using Thermabate or similar non combustible insulated cavity closers. Provide vertical DPCs around openings and abutments. All cavity trays must have 150mm upstands and suitable cavity weep holes (min 2) at max 900mm centres.

EXISTING TO NEW WALL

Cavities in new wall to be made continuous with existing where possible to ensure continuous weather break. If a continuous cavity cannot be achieved, where new walls abuts the existing walls provide a movement joint with vertical DPC. All tied into existing construction with suitable proprietary stainless steel profiles.

BACKGROUND AND PURGE VENTILATION

Background ventilation - Controllable background ventilation via trickle vents to BS EN 13141-3 within the window frame to be provided to new habitable rooms at a rate of min 5000mm²; and to kitchens, bathrooms, WCs and utility rooms at a rate of 2500mm²

Purge ventilation - New Windows/rooflights to have openable area in excess of 1/20th of their floor area, if the window opens more than 30° or 1/10th of their floor area if the window opens less than 30°

Internal doors should be provided with a 10mm gap below the door to aid air circulation.

Ventilation provision in accordance with the Domestic Ventilation Compliance Guide.

EXTRACT TO KITCHEN

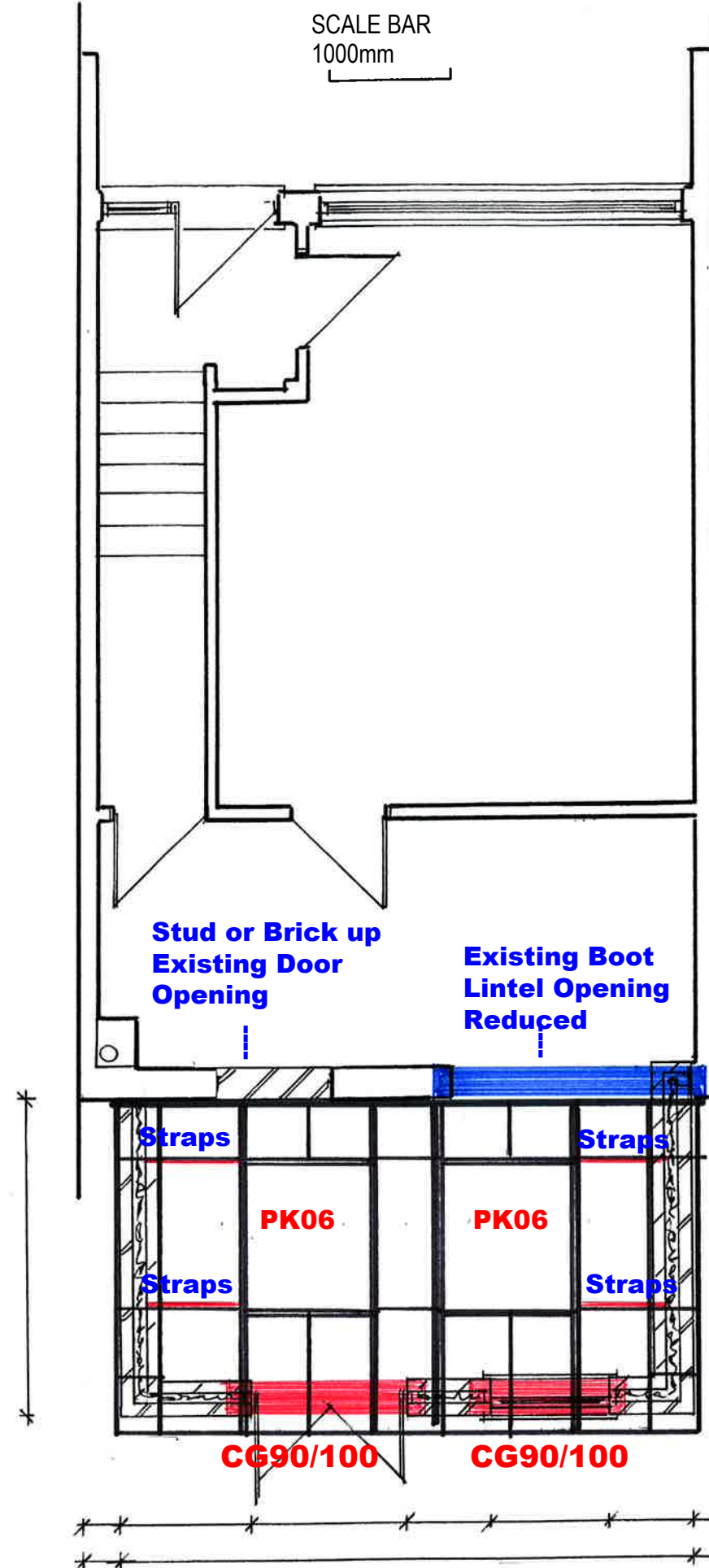
Kitchen to have mechanical ventilation with an extract rating of 60l/sec or 30l/sec if adjacent to hob to external air, sealed to prevent entry of moisture.

Internal doors should be provided with a 10mm gap below the door to aid air circulation. Ventilation provision in accordance with the Domestic Ventilation Compliance Guide. Intermittent extract fans to BS EN 13141-4. Cooker hoods to BS EN 13141-3. All fixed mechanical ventilation systems, where they can be tested and adjusted, shall be commissioned and a commissioning notice given to the Building Control Body.

Note - Final Kitchen Layout and New Boiler Location to be Confirmed Prior to Work Commencing so that External Gulley Location can be Agreed.

PROPOSED ROOF AND LINTOL PLAN

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Manchester M40 7AU
Single Storey Rear Extension and
Associated Internal Alterations
1:50@A3-MCPRBR04
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LINTELS

LINTELS OVER NEW REAR DOOR AND WINDOWS -

For other structural openings provide CATNIC CG90/100 proprietary insulated steel lintels suitable for spans and loadings in compliance with Approved Document A and lintel manufactures standard tables.

Stop ends, DPC trays and weep holes to be provided above all externally located lintels.

Lintel widths are to be equal to wall thickness.

Lintels to have a minimum bearing of 150mm on each end.

Any existing lintels carrying additional loads are to be exposed for inspection at commencement of work on site.

STRAPPING FOR PITCHED ROOF

Gable walls should be strapped to roofs at 2m centres. All external walls running parallel to roof rafters to be restrained at roof level using 1000mm x 30mm x 5mm galvanised mild steel horizontal straps or other approved to BSEN 845-1 built into walls at max 2000mm centres and to be taken across minimum 3 rafters and screw fixed. Provide solid noggins between rafters at strap positions. All wall plates to be 100 x 50mm fixed to inner skin of cavity wall using 30mm x 5mm x 1000mm galvanized metal straps or other approved to BSEN 845-1 at maximum 2m centres.

UNVENTED PITCHED ROOF - ROOF TILES TO MATCH EXISTING AND BE SUITABLE FOR THE PITCH

Pitch 22.5 - 25° (imposed load max 0.75 kN/m² - dead load max 0.75 kN/m²)

To achieve U-value 0.18 W/m²K

Timber roof structures to be designed by an Engineer in accordance with NHBC Technical Requirement R5 Structural Design. Calculations to be based on BS EN 1995-1-1.

Roofing tiles to match existing on 25 x 50mm tanalised sw treated battens on breathable sarking felt to relevant BBA Certificate. Supported on 47 x 150mm grade C16 rafters at max 400mm centres max span 3.47m.

Rafters supported on 100 x 75mm treated sw wall plates. Allow min 20mm air space to allow for drape of breathable felt. Insulation to be 125mm Xtratherm Thin-R between and 25mm Xtratherm under. Fix 12.5mm foil backed plasterboard (joints staggered) and 5mm skim coat of finishing plaster to the underside of all ceilings using galvanized plasterboard nails. 100mm x 75mm wall plate strapped down to walls.

All straps to be 1000 x 30 x 5mm galvanized straps or other approved to BSEN 845-1 at 2m centres.

ROOF LIGHTS

To Clients Requirements - Suggest VELUX PK06 940mm by 1180mm

Min U-value of 1.6 W/m²K.

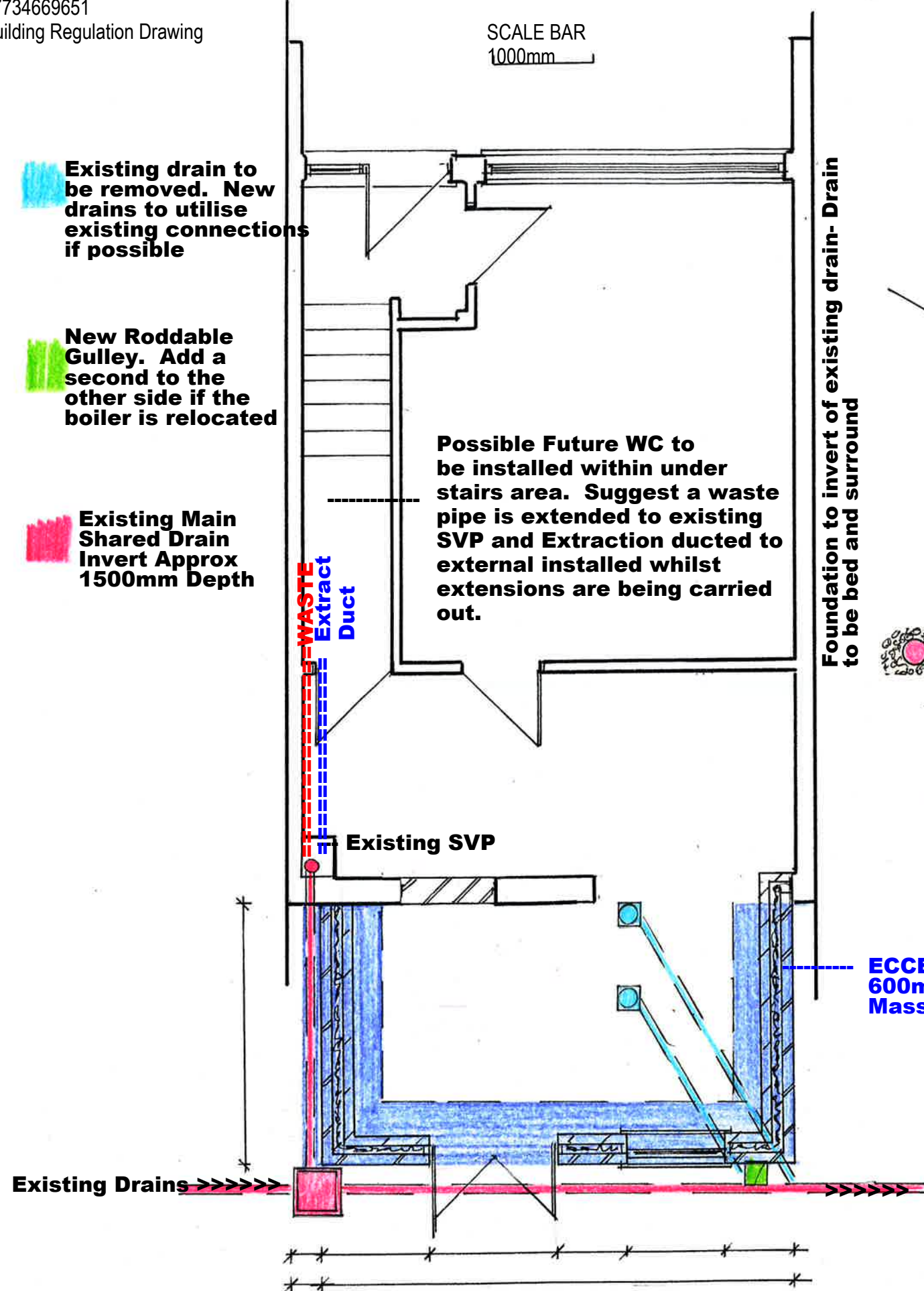
Roof-lights to be double glazed with 16mm argon gap and soft low-E glass. Window Energy Rating to be Band C or better.

Roof lights to be fitted in accordance with manufacturer's instructions with rafters doubled up to sides and suitable flashings etc.

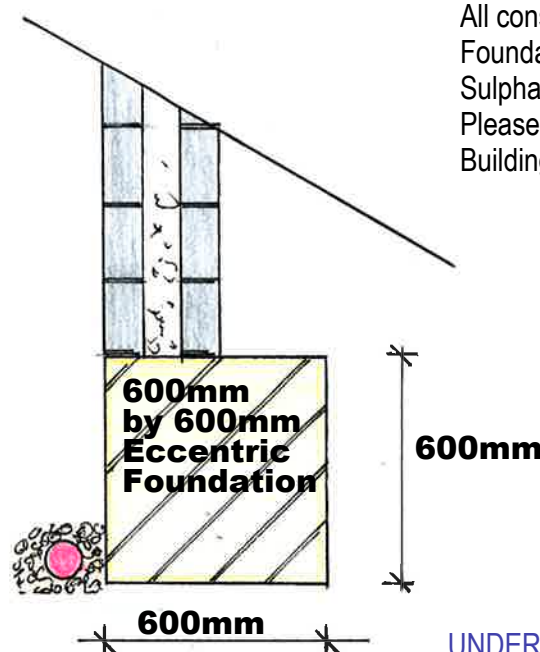
RAFTERS - 47 x 150mm grade C16 rafters at max 400mm centres

DOUBLE RAFTERS to Sides - Top - Bottom of Velux

VELUX PK06 940mm by 1180mm



Please note that should any adverse soil conditions be found or any major tree roots in excavations, the Building Control Officer is to be contacted and the advice of a structural engineer should be sought.



Underground drainage to consist of 100mm diameter UPVC proprietary pipe work to give a 1:40 fall. Surround pipes in 100mm pea shingle. Provide 600mm suitable cover (900mm under drives). Shallow pipes to be covered with 100mm reinforced concrete slab over compressible material. Provide rodding access at all changes of direction and junctions. All below ground drainage to comply with BS EN 1401-1.

Supply hot and cold water to all fittings as appropriate.

SECTION 1:20@A3

24 Tinsley Close
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Single Storey Rear Extension and
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1:20@A3-MCPRBR06
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Roof Tiles to Match Existing - Suggest
MARLEY MENDIP

**Code 5 Lead Flashing with
100mm Upstand**

**200mm by 75mm
C24 Poleplate
450mm C/C**

22.5 Deg

**25mm by 50mm Treated
Battens**

Existing Floor

**Existing
Reinforced
Boot Lintel**

EXISTING STRUCTURE

Existing structure including foundations, beams, walls and lintels carrying new and altered loads are to be exposed and checked for adequacy prior to commencement of work and as required by the Building Control Officer. Assumed Existing Cast Insitu Reinforced Boot Lintel - Opening not increase just kitchen window removed and wall below removed. 200mm by 75mm C24 pole plate to be sat onto the new side walls and bolted to exiting rear elevation to spread new additional roof loads over existing opening.

SOLID FLOOR INSULATION OVER SLAB

To meet min U value required of 0.22 W/m²K
Solid ground floor to consist of 150mm consolidated well-rammed hardcore. Blinded with 50mm sand blinding. Provide 100mm ST2 or Gen2 ground bearing slab concrete mix to conform to BS 8500-2 over a 1200 gauge polythene DPM. DPM to be lapped in with DPC in walls. Floor to be insulated over slab and DPM with min 90mm Xtratherm Thin-R. 25mm insulation to continue around floor perimeters to avoid thermal bridging. A VCL should be laid over the insulation boards and turned up 100mm at room perimeters behind the skirting, all joints to be lapped 150mm and sealed. Finish with 65mm sand/cement finishing screed with light mesh reinforcement. Where drain runs pass under new floor, provide A142 mesh 1.0m wide and min 50mm concrete cover over length of drain.

**Glazing Calculation ADL
Proposed Floor Area
10m² - 25% of = 2.5m²**

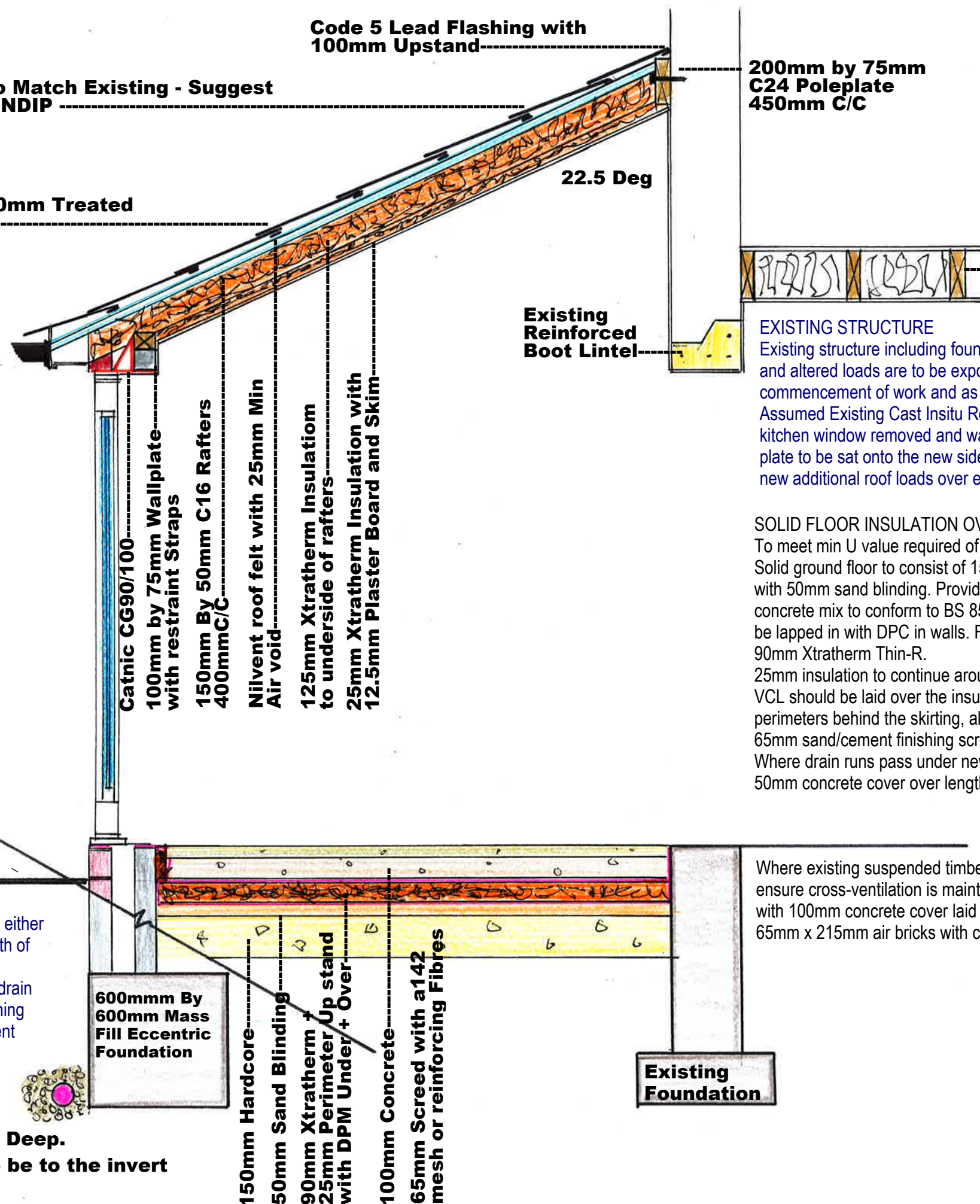
**Existing Glazing Covered / Removed
Door 2.0m² - Window 2.3 + 2.5m² Allowance
Allowable Glazing = 6.8m²**

**Proposed Glazing
Door 2.4m² + Window 0.81m²
+ Roof Lights 1.2 * 2 = 5.61m²
Therefore OK**

PIPEWORK THROUGH WALLS

Where new pipework passes through external walls form rocker joints either side wall face of max length 600mm with flexible joints with short length of pipe bedded in wall. Alternatively provide 75mm deep pre-cast concrete plank lintels over drain to form opening in wall to give 50mm space all round pipe: mask opening both sides with rigid sheet material and compressible sealant to prevent entry of fill or vermin.

**Existing Shared Drain
approximately 1500mm Deep.
Any new foundations to be to the invert
of the drain.**



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BUILDING REGULATIONS NOTES

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BUILDING REGULATIONS NOTES

CDM REGULATIONS 2015

The client must abide by the Construction Design and Management Regulations 2015.

The client must appoint a contractor, if more than one contractor is to be involved, the client will need to appoint (in writing) a principal designer (to plan, manage and coordinate the planning and design work) and a principal contractor (to plan, manage and coordinate the construction and ensure there are arrangements in place for managing and organising the project).

Domestic clients

The domestic client is to appoint a principal designer and a principal contractor when there is more than one contractor, if not your duties will automatically transferred to the contractor or principal contractor.

The designer can take on the duties, provided there is a written agreement between you and the designer to do so.

The Health and Safety Executive is to be notified as soon as possible before construction work starts if the works:

(a) Last longer than 30 working days and has more than 20 workers working simultaneously at any point in the project.

Or:

(b) Exceeds 500 person days.

PARTY WALL ACT

The owner, should they need to do so under the requirements of the Party Wall Act 1996, has a duty to serve a Party Structure Notice on any adjoining owner if building work on, to or near an existing Party Wall involves any of the following:

- Support of beam
- Insertion of DPC through wall
- Raising a wall or cutting off projections
- Demolition and rebuilding
- Underpinning
- Insertion of lead flashings
- Excavations within 3 metres of an existing structure where the new foundations will go deeper than adjoining foundations, or within 6 metres of an existing structure where the new foundations are within a 45 degree line of the adjoining foundations.

A Party Wall Agreement is to be in place prior to start of works on site.

THERMAL BRIDGING

Care shall be taken to limit the occurrence of thermal bridging in the insulation layers caused by gaps within the thermal element, (i.e. around windows and door openings). Reasonable provision shall also be made to ensure the extension is constructed to minimise unwanted air leakage through the new building fabric.

MATERIALS AND WORKMANSHIP

All works are to be carried out in a workmanlike manner. All materials and workmanship must comply with Regulation 7 of the Building Regulations, all relevant British Standards, European Standards, Agreement Certificates, Product Certification of Schemes (Kite Marks) etc. Products conforming to a European technical standard or harmonised European product should have a CE marking.

BASIC RADON PROTECTION - IF DEEMED REQUIRED BY INSPECTING BCO DUE TO LOCAL GROUND CONDITIONS

Provide a 1200g (300 um) radon membrane under floor slab lapped 300mm double welted and taped with gas proof tape at joints and service entry points. Carry membrane over cavity and provide suitable cavity tray and weep holes.

SITE PREPARATION

Ground to be prepared for new works by removing all unsuitable material, vegetable matter and tree or shrub roots to a suitable depth to prevent future growth. Seal up, cap off, disconnect and remove existing redundant services as necessary. Reasonable precautions must also be taken to avoid danger to health and safety caused by contaminants and ground gases e.g. landfill gases, radon, vapours etc. on or in the ground covered, or to be covered by the building.

INTERNAL STUD PARTITIONS

100mm x 50mm softwood treated timbers studs at 400mm ctrs with 50 x 100mm head and sole plates and solid intermediate horizontal noggins at 1/3 height or 450mm. Provide min 10kg/m³ density acoustic soundproof quilt tightly packed (eg. 100mm Rockwool or Isowool mineral fibre sound insulation) in all voids the full depth of the stud. Partitions built off doubled up joists where partitions run parallel or provide noggins where at right angles, or built off DPC on thickened concrete slab if solid ground floor. Walls faced throughout with 12.5mm plaster board with skim plaster finish. Taped and jointed complete with beads and stops.

ELECTRICAL

All electrical work required to meet the requirements of Part P (electrical safety) must be designed, installed, inspected and tested by a competent person registered under a competent person self certification scheme such as BRE certification Ltd, BSI, NICEIC Certification Services or Zurich Ltd. An appropriate BS7671 Electrical Installation Certificate is to be issued for the work by a person competent to do so. A copy of a certificate will be given to Building Control on completion.

INTERNAL LIGHTING

Final Lighting layout to Clients Requirements

Install low energy light fittings that only take lamps having a luminous efficiency greater than 45 lumens per circuit watt and a total output greater than 400 lamp lumens. Not less than three energy efficient light fittings per four of all the light fittings in the main dwelling spaces to comply with Part L of the current Building Regulations and the Domestic Building Services Compliance Guide.

HEATING

Extend all heating and hot water services from existing and provide new TRVs to radiators. Heating system to be designed, installed, tested and fully certified by a GAS SAFE registered specialist. All work to be in accordance with the Local Water Authorities bye laws, the Gas Safety (Installation and Use) Regulations 1998 and IEE Regulations.

NEW GAS BOILER

New boiler location to clients requirements - Builder to ensure adequate drainage for the condensation pipe.

Heating and hot water will be supplied via a wall mounted condensing vertical balanced flue pressurised boiler with a min SEDBUK rating of 90%. No combustible materials within 50mm of the flue. System to be fitted with thermostatic radiator valves and all necessary zone controls and boiler control interlocks. The system will be installed, commissioned and tested by a "competent person" and a certificate issued that the installation complies with the requirements of PART L. All work to be in accordance with the Local Water Authorities bye laws, the Gas Safety (Installation and Use) Regulations 1998 and IEE Regulations.

EXTRACT TO W/C -

Note for future possible WC installation - Ensure that provision is made for mechanical ventilation to be ducted to external from possible WC sited within under stair store area.

W/C to have mechanical ventilation ducted to external air with an extract rating of 15l/s operated via the light switch. Vent to have a 15min overrun if no window in room. Internal doors should be provided with a 10mm gap below the door to aid air circulation.

Ventilation provision in accordance with the Domestic Ventilation Compliance Guide. Intermittent extract fans to BS EN 13141-4. All fixed mechanical ventilation systems, where they can be tested and adjusted, shall be commissioned and a commissioning notice given to the Building Control Body.

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BLANK - NO NOTES MISSING

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