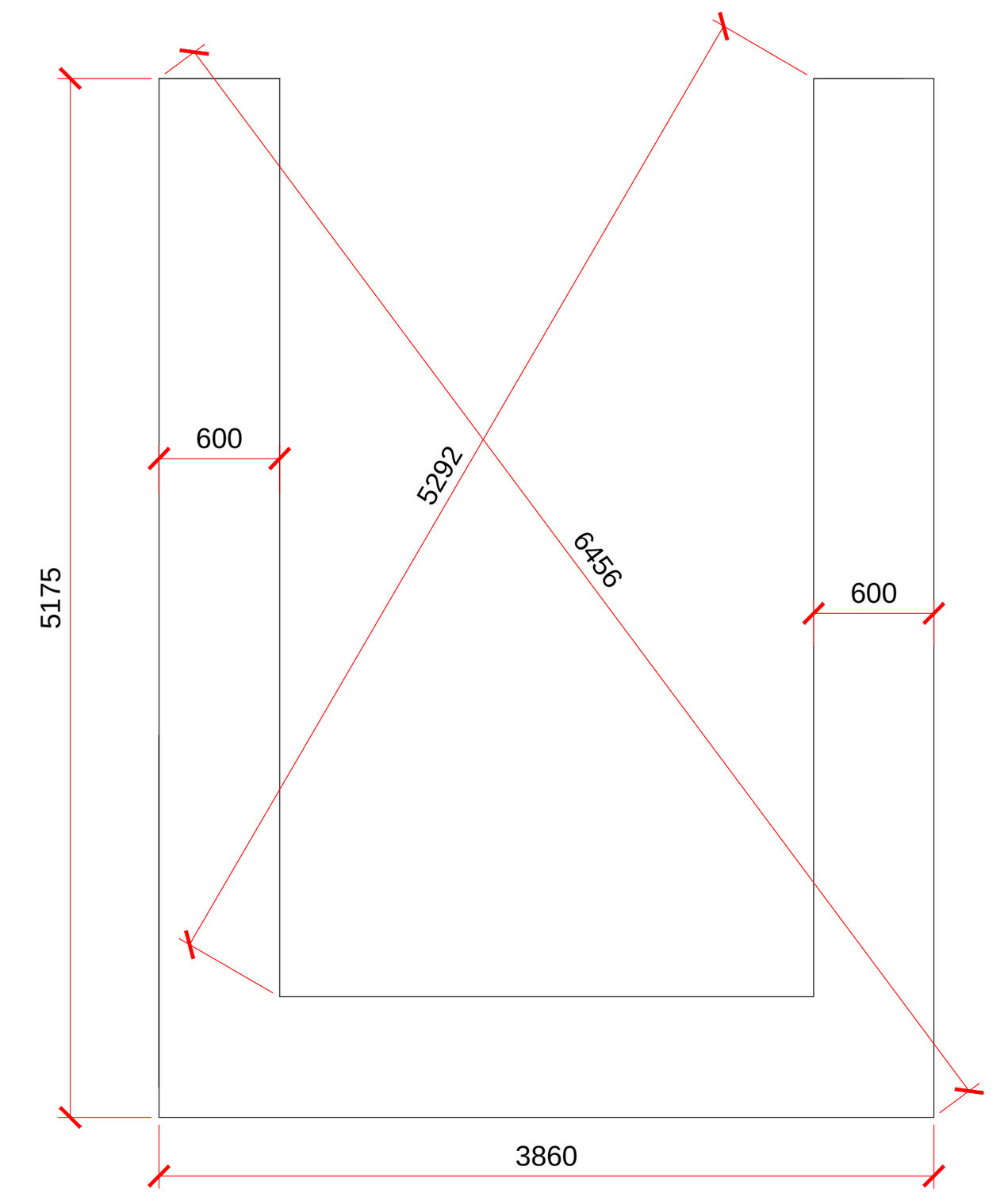




FOUNDATION DETAILS

General Notes some maynot be applicable for all projects.

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 andground gases e.g. landfill gases, radon, vapours etc on or in the ground covered, or to be covered by the building.

Structure

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 Project Structural Engineer or Building Control Surveyor.

New Structure

Beams, Lintels and Fire Protection

Supply and install new structural elements such as new beams, roof structure, floor structure, bearings, and padstones in accordance with the Structural Engineer's calculations and details. New steel beams to be encased in 30 minutes fire resisting construction with staggered joints **Openings and Wall Returns**

An opening or recess greater than 0.1mļ shall be at least 665mm from the supported wall (measured externally).

Foundations

600mm x 750mm trench fill foundations grade of ST2. All foundations to be a minimum of 1000mm below ground level, exact depth to agreed on site with Building Control Surveyor to suit site conditions. All constructed in accordance with the Building Regulations 2010 A1/2 and BS 8004:1986 Code of Practice for Foundations. Ensure foundations are constructed below invert level of any adjacent drains. Sulphate resistant cement to be used if required. Please note that should any adverse soil conditions or difference in soil type be found or any trees in the vicinity of excavations, the Building Control Surveyor is to be contacted and the advice of a structural engineer may need to be sought.

Ground Floors

Solid Floor - Insulation Over Slab

Solid ground floor to consist of 150mm consolidated well compacted hardcore. 1200mm gauge polythene DPM. 100mm concrete. DPM to be lapped in with DPC in walls.

External Walls

Walls Below Ground

All new walls to have Class A blockwork below ground level or alternatively semi engineering brickwork in 1:4 masonry cement or equal approved specification. Cavities below ground level to be filled with lean mix concrete maximum 225mm below damp proof course. Or provide lean mix backfill at base of cavity wall (150mm below damp course) laid to fall to weep holes.

Cavity Wall

To meet minimum U value required of 0.28 W/m2K, Provide horizontal strip polymer (hyload) damp proof course to both leafs minimum 150mm above external ground level. New DPC to be made continuous with existing DPCȇs and with floor DPM. Vertical DPC to be installed at all reveals where cavity is closed. 102.5mm thick brickwork outer leaf. Cavity width to suit insulation manufacturer's specification. All walls constructed with stainless steel vertical twist type retaining wall ties built in at 750mm centres horizontally, 450mm vertically and 225mm centres at reveals and corners in staggered rows. Wall ties to be suitable for cavity width and in accordance with BS 1243. Inner leaf to be insulated blockwork to achieve the u-value with the chosen insulation. Provide cavity trays over openings. All cavities to be closed at eaves and around openings using proprietary cavity closers. Provide vertical DPCȇs around openings and abutments. All cavity trays must have 150mm upstands and suitable cavity weep holes (min 2) at max 900mm centres. 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. 12.5mm standard plasterboard dry lining on plaster dabs with lightweight plasterboard to finish.

Attaching New Wall to Existing 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.

Thermal Bridging and Air Leakage

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.

Roofs

Roof.

Ultra Roof by Altra Frame. **To meet minimum u-value of 0.18w/m2K at rafter level or 0.16w/m2K at ceiling level.**

Internal Works

Electrics

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. 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 the B. Inspector.

Internal Lighting

Install low energy light fittings. 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.

Windows & Doors

Roof Lights

Min U-value of 1.6 W/mļK.

Roof-lights to be double glazed with16mm 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 openings to be trimmed in accordance with Trada Euro code 5 span tables 3rd Edition.

Safety Glazing

All glazing in critical locations to be toughened or laminated safety glass to BS 6206 and Approved Document N 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.

Window U-Values

Window Energy Rating to be Band C or better and to achieve U-value of 1.6 W/mļK. 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.

Door U-Values

New and replacement doors to achieve a U-Value of 1.8 W/mļK. Glass to be toughened or laminated safety glass to BS 6206 and Approved Document N of the current Building Regulations.

Drainage

Rainwater Drainage

New rainwater goods to be new 110mm UPVC half round gutters taken and connected into 68mm diameter UPVC downpipes. Rainwater taken to existing storm water system or new soakaway, situated a minimum distance of 5.0m away from any building, via 110mm dia UPVC pipes surrounded in 150mm granular fill. Soakaway to be min of 1 cubic metre capacity (or to depth to Local Authorities approval) with suitable granular fill with geotextile surround to prevent migration of fines. If necessary carry out a porosity test to determine design and depth of soakaway or taken to alternative outfall.

Foul Drainage

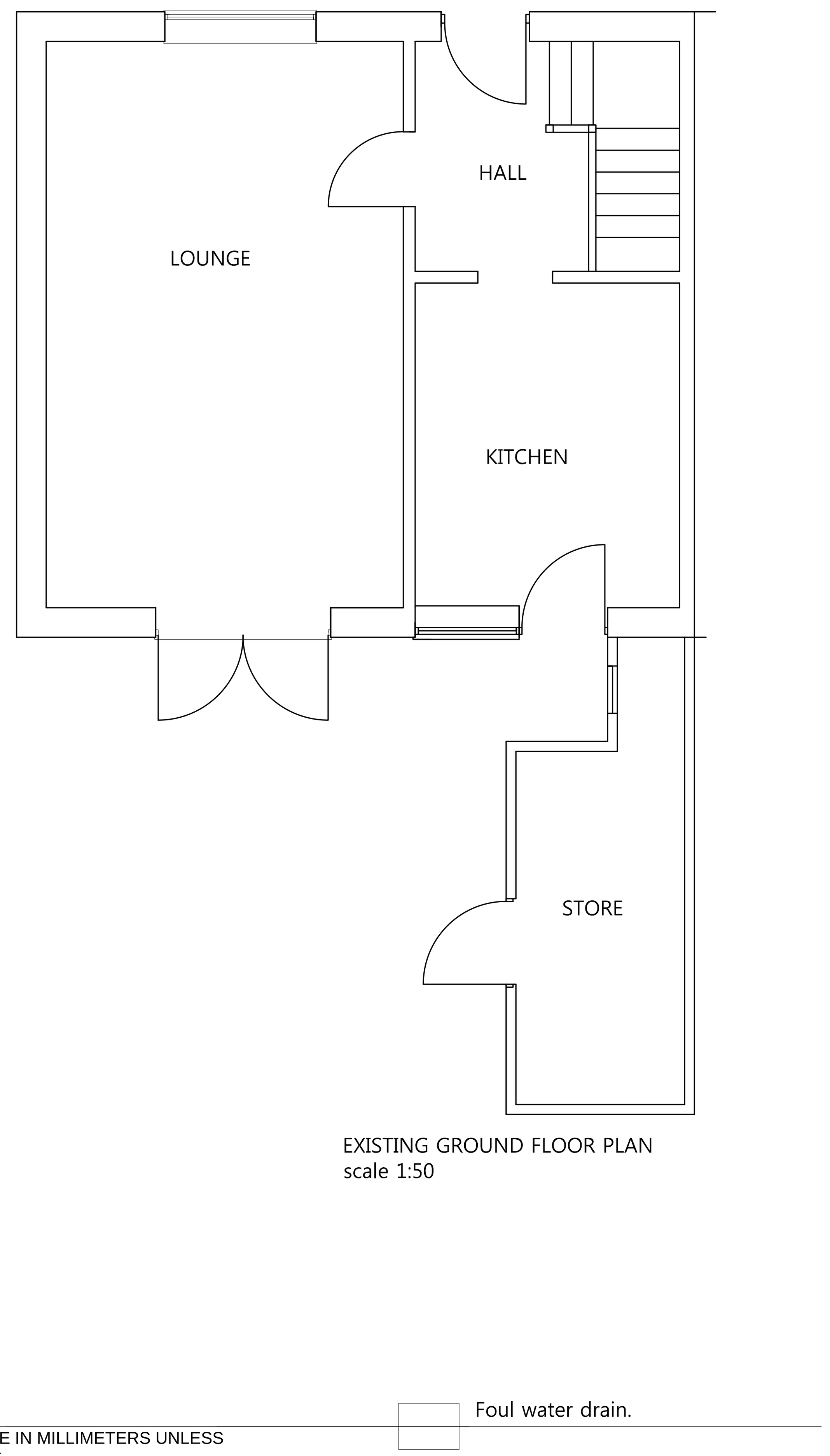
Underground Drainage

Underground drainage to consist of 100mm diameter UPVC proprietary pipe work to give a 1:40 fall. Surround pipes in 400mm pea shingle (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 BS7158 and BS801.

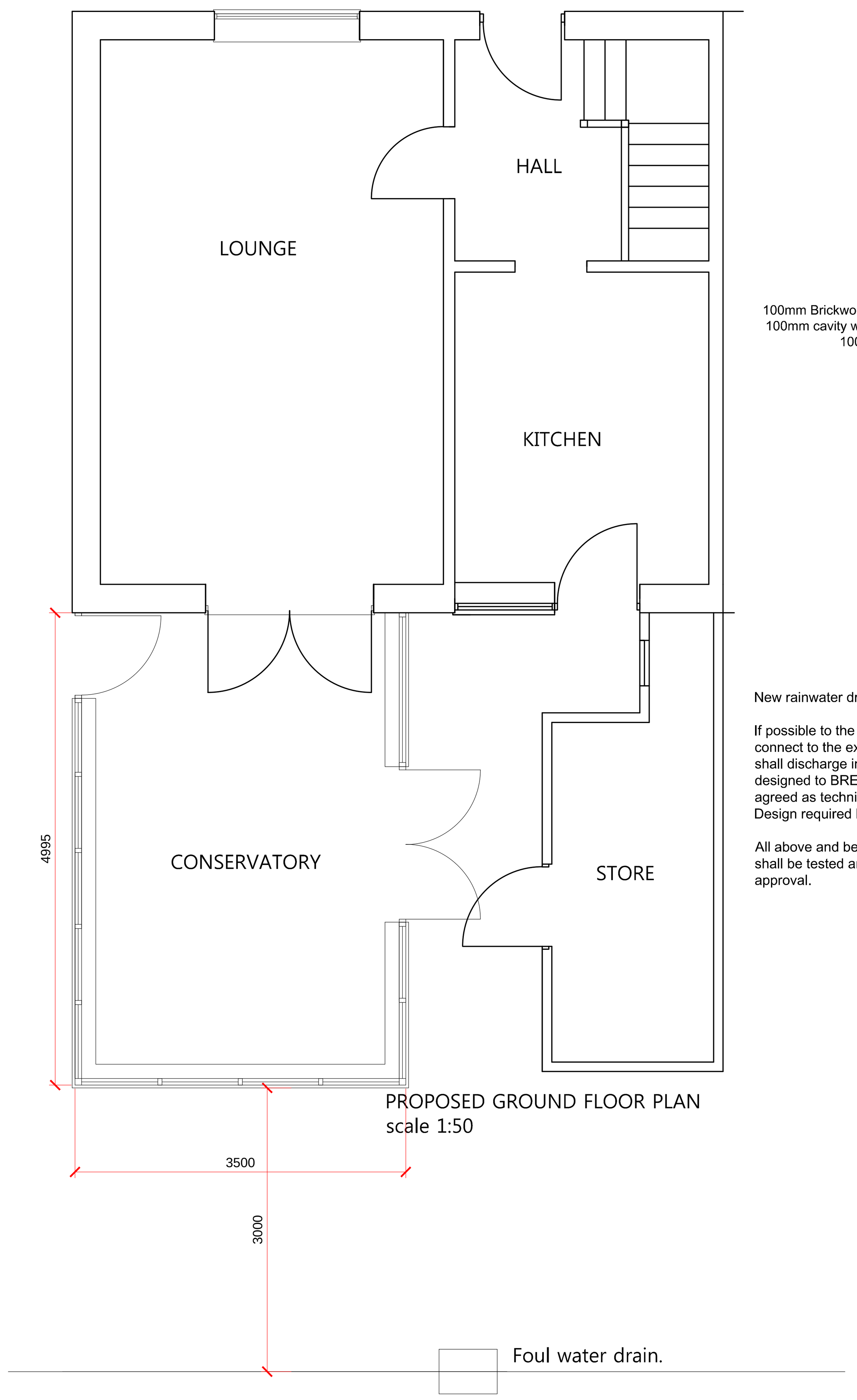
Inspection Chambers

Inspection chambers/manholes to be provided at all changes of level, direction, connections and every 45m in straight runs. Inspection chambers to have bolt down double sealed covers internally and be adequate for vehicle loads in driveways.

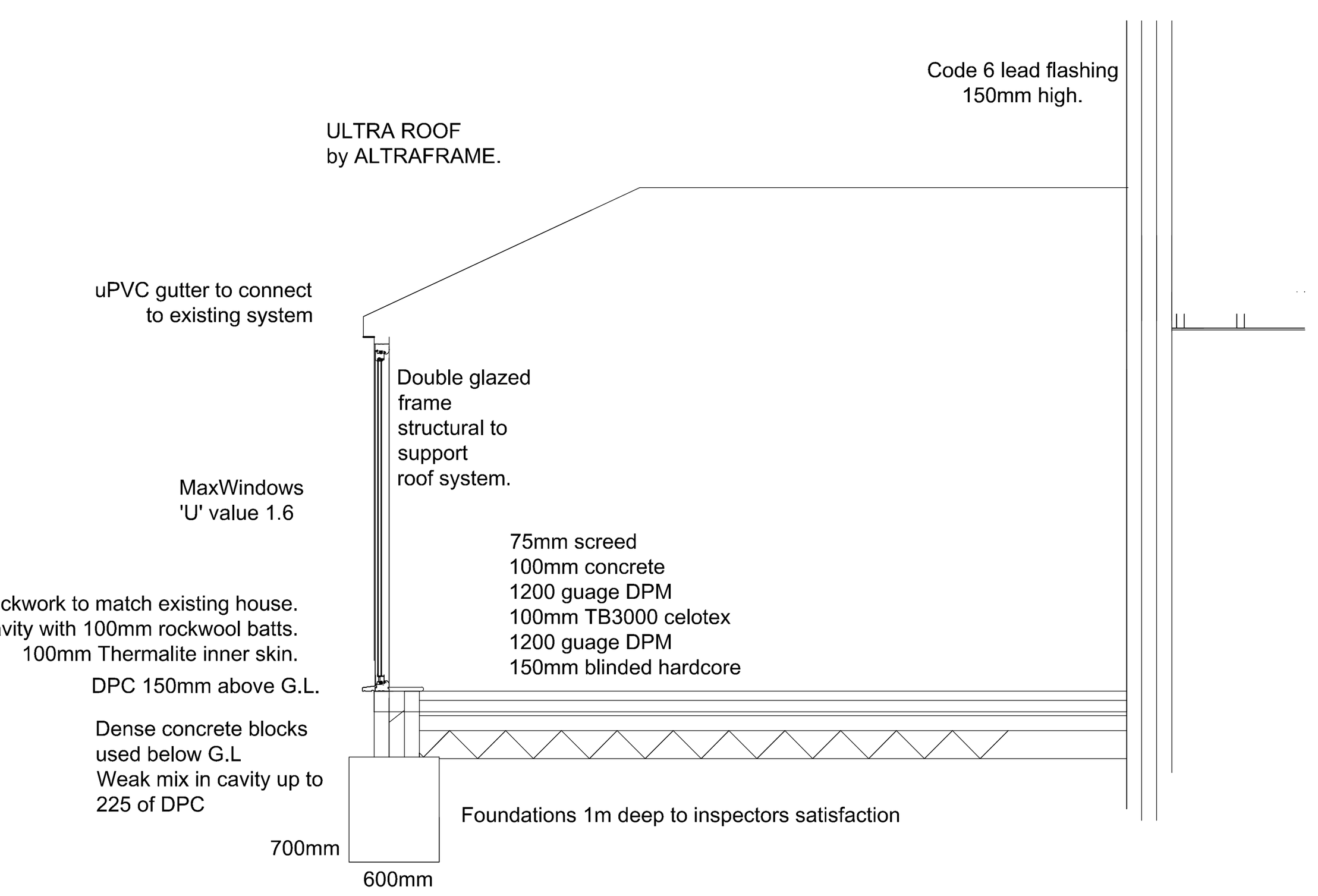
All windows and stairs must be measured and designed on site by specialist supplier. All woodwork to be agreed with client before supplying and fixing. All measurements checked on site and discussed with Phil Rand if any problems have been found.



EXISTING GROUND FLOOR PLAN
scale 1:50



PROPOSED GROUND FLOOR PLAN
scale 1:50

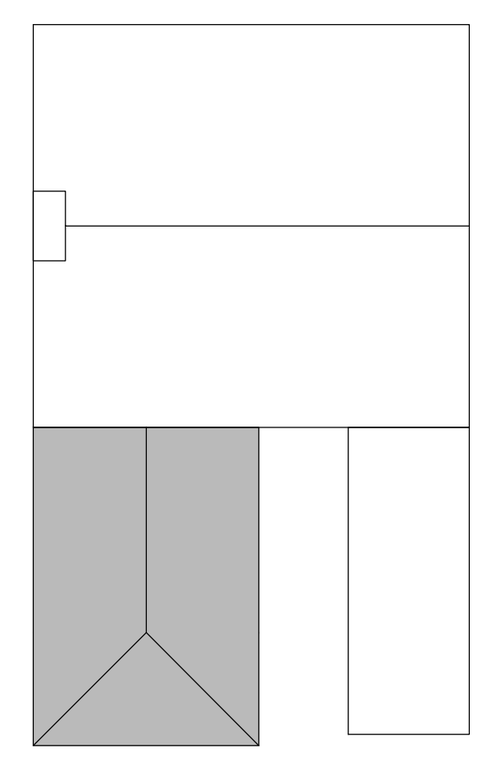


SECTION THROUGH EXTENSION

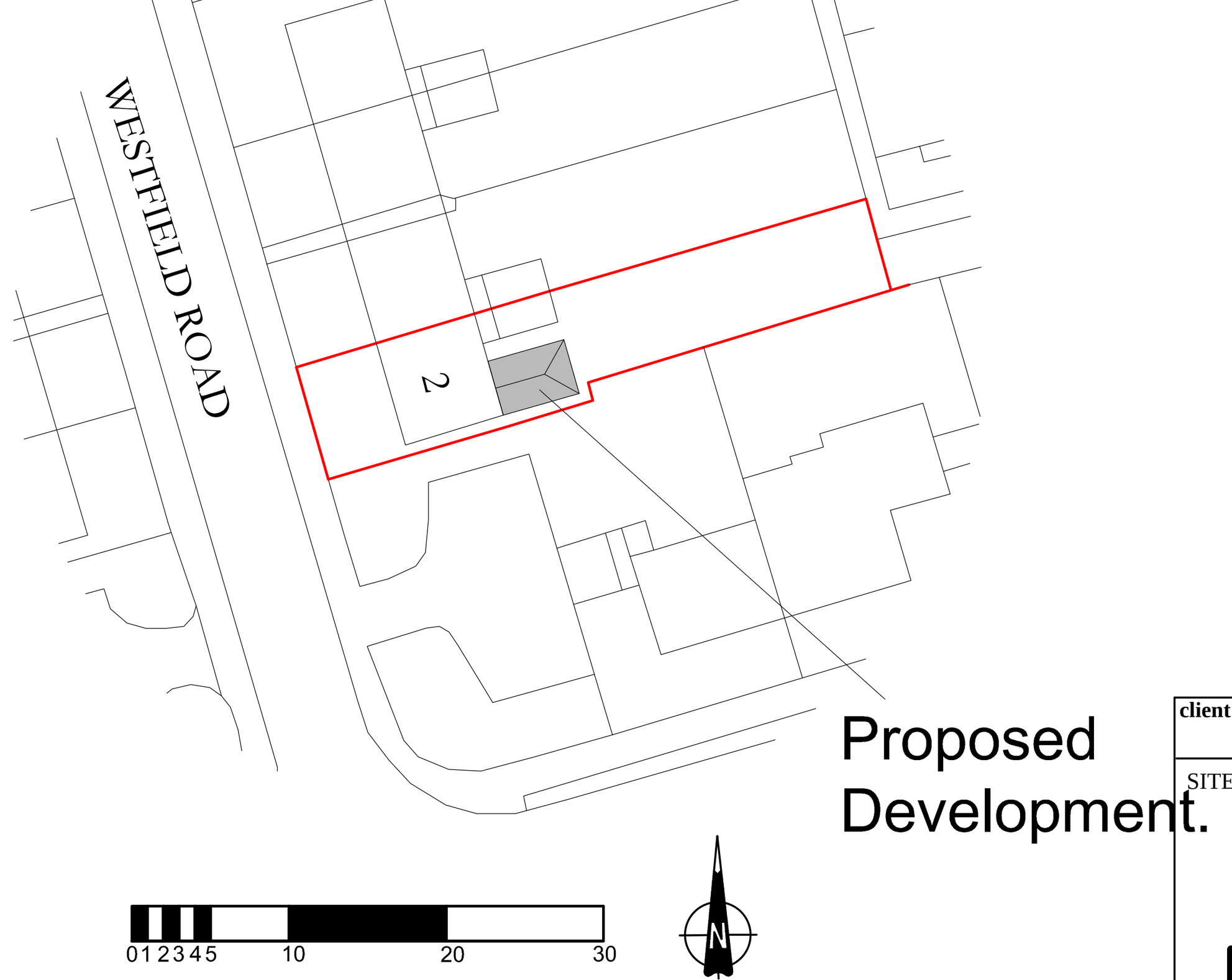
New rainwater drainage

If possible to the Inspectors satisfaction connect to the existing SW drainage or shall discharge into a soakaway designed to BRE digest 365, unless agreed as technically not feasible, Design required before construction.

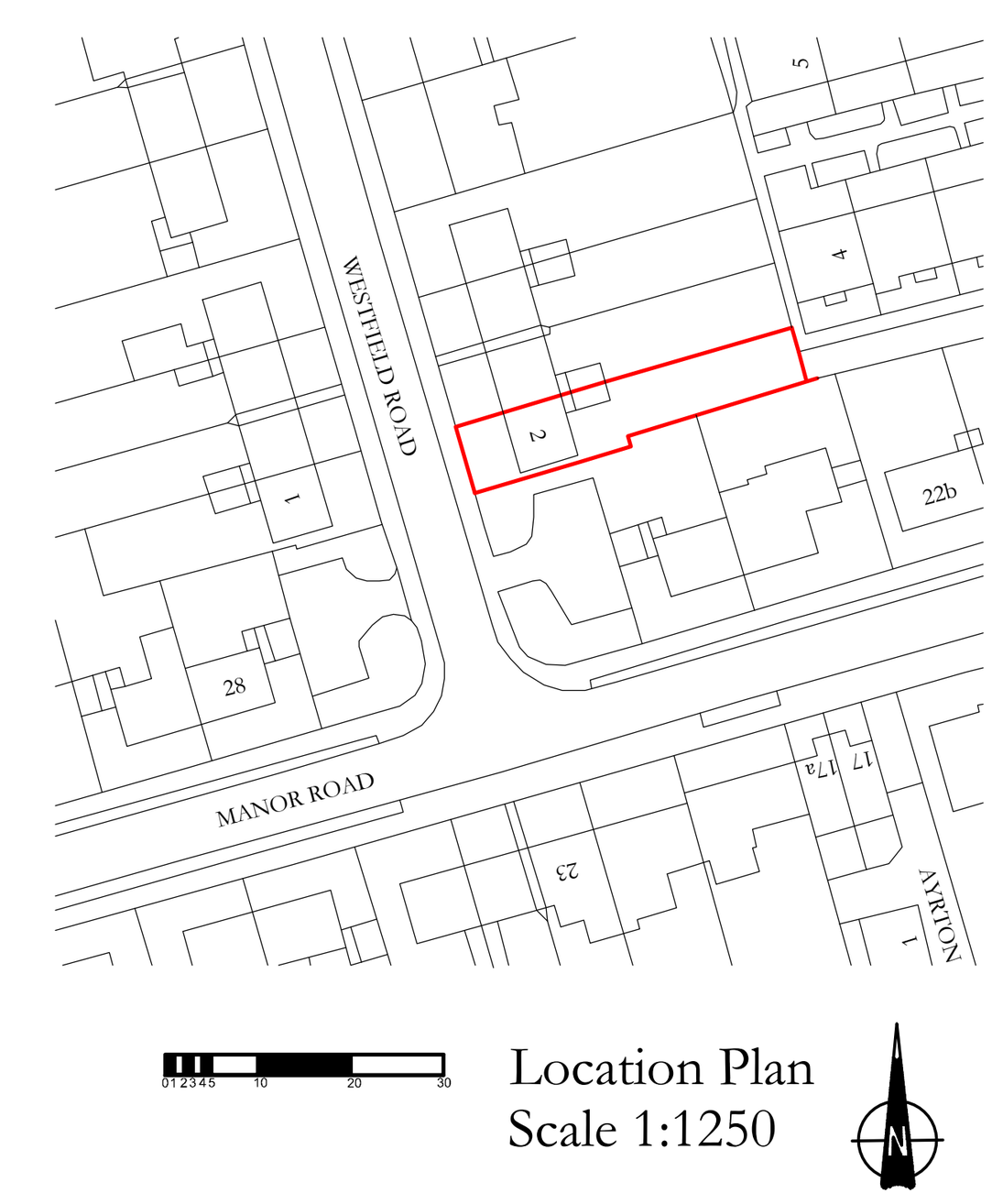
All above and below ground drainage shall be tested and results issued for approval.



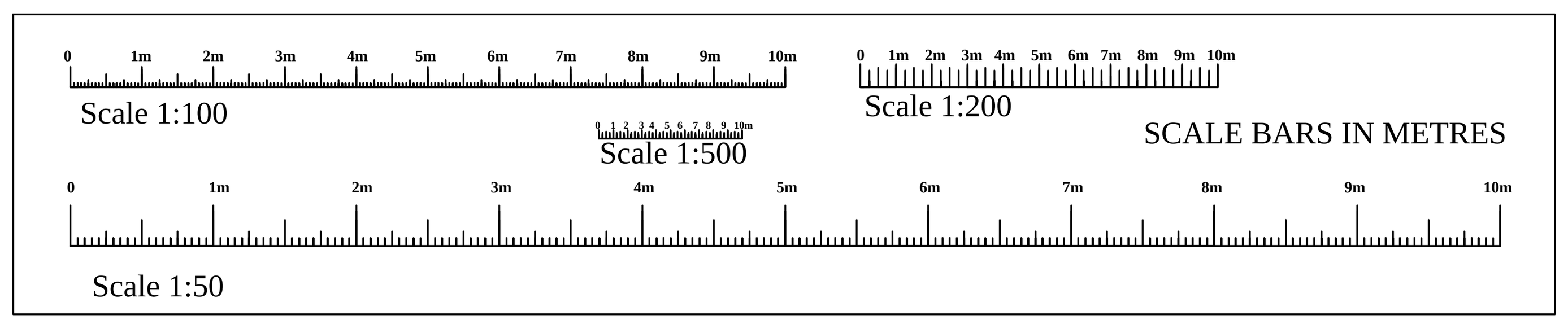
Roof plan
Scale 1:200



Block Plan Scale 1:500



Location Plan
Scale 1:1250



SCALE BARS IN METRES

NOTES

1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS STATED OTHERWISE
2. ALL DIMENSIONS TO BE CHECKED ON SITE BY THE CONTRACTOR PRIOR TO PREPARATION OF SHOP DRAWINGS, ORDERING MATERIALS OR COMMENCING WORKS.
3. THIS DRAWING HAS BEEN PREPARED SOLELY FOR THE PURPOSES OF OBTAINING EITHER PLANNING CONSENT OR BUILDING APPROVAL.

client	Mr Chapman
SITE ADDRESS	2 Westfield Road Trowbridge BA14 9JG
PROJECT	Proposed Single storey rear Extension.

RAND PLANNING CONSULTANCY LTD

Phil Rand
Cherry Tree House
Clardon lane
Purton.
Wiltshire
SN5 4HN
TEL 01793 771128

Drawn by **Phil Rand**	Drawing No **01**
Scales **1:500 1:100 1:50**	Date **12th June 2023**