

BRIEF SUMMARY:

Proposed works to include:
 The complete renovation of the existing house over all three floors and alterations/updates to the existing basement.
 The re-roofing and renovation/modernisation of the single-storey range of outbuildings including the conversion of these buildings to incorporate them within the overall residential use of the main house.
 The creation of a new two-storey extension to the East gable end of the existing property including a single-storey hidden structure which involves the partial rebuilding of an existing store garden wall.

LISTED BUILDING WORKS:

A series of works to the internal and external aspects of the existing listed building are to be carried out as part of this renovation/modernisation work. This includes such aspects as partial replacement of existing floor boards in where found to be defective and replacement of skirting board elements where it is found to be inadequate or defective.
Critical note: the works within the listed building must be carried out in accordance with the listed building approval and the conditions attached to it. A separate schedule of works was prepared and submitted as part of the listed building application, only the works outlined within this schedule have permission to be undertaken. A copy of this schedule of works is to be provided by the client directly to the working contractor on site, the client is to be responsible that the building contractor follows the wording of the specification and doesn't deviate from the works approved.

ELECTRICAL:

All new electrical work to be designed, installed, inspected and tested in accordance with BS 7671 (I.E.E. wiring regulation 17th edition). The works are to be undertaken by an installer registered under a suitable electrical self-certification scheme or alternatively by a suitably qualified person with a certificate of compliance produced by that person to building within the overall residential use of the main house.

All wiring to the existing house is to be carefully stripped out and removed. Full new wiring throughout the existing house and into the proposed extension to be installed.

New to install a temporary building connection to the new supply allowing the works to be undertaken and ultimately allow to provide and install new consumer unit/fuse board to take the loadings as shown on the electrical layout plan within a location to be agreed on site.

Smoke detector installation:

Supply and fit smoke heat detectors in appropriate locations as shown. These are to be mains powered with primary battery back up and to be interconnected. All to conform to BS 5446: part 1. Installation to comply with building regulation B1, Section 1, Paragraphs 1.8 - 1.15.

All inter-connected and conforming to I.E.E. Wiring Regulations.

Internal lighting:
 Reasonable provision must be made for the installation of energy efficient lighting, preferably in those areas where the lighting is expected to have most use.
 To achieve this it recommends the installation of 4x number light fittings, which will only take lamps having a luminous efficacy greater than 40 lumens per circuit-watt.

Recess ceiling lighting:
 In locations where recess ceiling lights are proposed within the external roof structure (i.e. flat roof or sloping ceilings), only low voltage LED lighting can be installed. This allows for minimal trimming of rigid board insulation.

External lighting (fixed to building):
 This includes lighting in porches, but not in garages or carports. All external lighting should automatically extinguish when there is enough day light (or when there are not needed at night) and have sockets that can only be used with lamps having a luminous efficacy greater than 40 lumens per circuit-watt.

VENTILATION:

Mechanical extract:
 The following mechanical extract ventilation is to be provided and fitted in accordance with manufacturer's instruction.

To bathroom and ensuite:
 A separate mechanical extract ventilator is to be installed within each individual room, connected through either the roof in the case of the first floor or the external wall in the case of the ground floor rooms and fitted with a suitable external grille within walls or external ducting to the roof. At penetration point of the roof provide suitable flashing kit.
 New extract vent to be 'Expirair - simply silent 100mm extractor fans with humidistat'.
 To be capable of operating at not less than 15 litres per second which may be operated intermittently with 15 minute overrun.
 A separate overrun switch is to be installed centrally above each individual door leading into either the bathroom, ensuite or shower, which can override the extract fan.

To kitchen:
 A mechanical extract ventilator is to be installed within the proposed kitchen incorporated in a cooker hood located over the top of the new ACA, the details of this kitchen extract are to be discussed and agreed and installed by the kitchen manufacturer/supplier. The building contractor's electrician is to allow wire to the appropriate point and make the final connection through the external surface, be that either the roof or the external wall. The kitchen installer is to supply and install the mechanical extract vent kit.
 The building regulations requirement for the above noted mechanical extract ventilation is a minimum of 30 litre of air per second to be extracted.

To boot room:
 A separate mechanical extract ventilator is to be installed within each individual room, connected through either the roof in the case of the first floor or the external wall in the case of the ground floor rooms and fitted with a suitable external grille within walls or external ducting to the roof. At penetration point of the roof provide suitable flashing kit.
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 To be capable of operating at not less than 15 litres per second which may be operated intermittently with 15 minute overrun.
 A separate overrun switch is to be installed centrally above each individual door leading into either the bathroom, ensuite or shower, which can override the extract fan.

Natural background ventilation:
 Background ventilation is to be as follows:
 Kitchen 400mm sq.
 En-suite 400mm sq.
 It is noted that all other rooms within this property are existing and the building is listed so no changes to be incorporated to the existing window styles to allow any further background ventilation. The majority of existing windows are traditional sash windows.

EXTERNAL PATIO:
 External patio area to be constructed as follows:
 Patio surface to be 25mm thick Indian mist sandstone (or similar) laid on 100mm concrete base laid with a surface fall of 1:80, falling away from the buildings laid on 150mm sand blinding, well compacted hardcore.
 Finished floor level of proposed patio to be just 20mm lower than the finished floor within the proposed extension and thus provide and external floor that is virtually level with the internal floor. Due to this a double damp proof course is to be installed within the new wall constructions as noted elsewhere.

Due to this finish floor levels of the courtyard a specialist below ground slot drain is to be installed using 'ACO HEX brick slot' black UPVC drainage system. This system is designed to be installed as part of a brick paving system, however it is to be installed in this location in connection with the stone patio paving slabs. The system is installed with a channel below ground set into a concrete base with a single slot acting as the drainage element visible within the paving.
 Include at junction points to install inspection chambers and include specialist drainage connection points for rainwater pipes to connect into this below ground drainage system. All of the above to be connected into below ground foul drain runs as noted separately.

HEATING:

New heating system:
 Supply and install a new boiler in the approximate location shown on the ground floor plan with new flue running through the re-fitted roof, fitted with a suitable flashing kit at junction with roof and terminated at a minimum of 600mm above the nearest ridge.
 Final choice of new boiler to be decided on site as a discussion with the building contractor, client and agreed with the building inspector in writing prior to installation.

New system to conform with the following performance specification:
 Areas with differing heating needs (such as separate sleeping and living areas) shall have individual temperature control, by use of room thermostats or individual radiators with separate room controls.
 Separate timing controls should be provided for space heating and hot water (except for combination boilers and solid fuel appliances). The system design must allow for the provision of only space heating, only water heating, or both when required.

Boiler controls must include provision to prevent the boiler operating when neither the space heating system nor the hot water system requires heat.
 Replace existing hot water storage vessel with new, it should have a minimum 50mm factory applied coating of pu-foam or the equivalent.
 Pipes and ducts should also be insulated, particularly where they run through unheated areas or outside. Hot pipework connecting to boilers and the hot water storage vessels (including the vent pipe), should be insulated for at least 1m from the point where they connect. Location to be as shown.

The heating and hot water system needs to be fully commissioned to ensure they are operating at max efficiency, and all controls work as intended. The person who carries out the commissioning must provide a certificate confirming that it has been carried out properly to both the client and building control.
 Hot water system to be part of an vented system and as such to be fitted with a vent pipe discharging into either the level of the water in a cold system, with a 19mm pipe.
 To be fitted with a thermostat.
 To be fitted with a safety device to prevent the stored water at any time exceeding 100°C. This can be fitted to either the heat source or storage vessel and includes a non self-resetting energy cut out.
 To be fitted with pressure relief valve with a discharge pipe terminating to the external air where it will cause no damage to persons or to the building in any way.
 Proper instructions to the owners should be provided to inform them of how to operate the system efficiently, what routine maintenance is required and the benefits of conserving fuel and power.

Boiler installation:
 Installation/commissioning certificates plus all operating and maintenance manuals to be provided for the boilers and oil tanks.
 Part T checklist and identification plate to be provided upon completion.

Underfloor heating and radiators:
 Ground floor of proposed extension to be heated by underfloor heating, pipe work to be designed by specialist with pipes being installed within the screed level.
 First floor and second floor to be heated by conventional radiators, locations of which to be agreed with building contractor on site. Installation of pipework in relation to the heating system to be in accordance with the listed building approval to avoid cutting the existing floorboards and floor joists as much as possible during the installation.

In addition to radiators, heated thermostatically controlled towel rails are to be installed within the first-floor bathroom and new first floor ensuite.
 Proper instructions to the owners should be provided to inform them of how to operate the system efficiently, what routine maintenance is required and the benefits of conserving fuel and power.

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GROUND FLOOR:

Floor construction to the ground floor area to be as follows:
 Finished floor levels to match that of existing house.
 70mm screed - with underfloor heating pipework to be laid within screed on 500g polythene separating layer on 100mm Celotex (last F R3000) insulation board on 100mm overbrick concrete slab on 1200g chm (radon proof) lapped up walls on under pc on sand blinding on minimum 150mm clean dry, well consolidated hardcore, in maximum 150mm compacted layers.
 Radon ramps to be installed as described elsewhere.

RADON SUMPS:

Install a radon sump in the location as shown, construction to be 600x600x500mm sump constructed using bricks laid in honeycomb bond with 100mm overbrick concrete slab on 100mm overbrick concrete slab on 100mm paving slab over supported by reinforced concrete lateral abut at mid span.
 100mm dia pvc-pipe run out from the brick sump and vented to external air and fitted with suitable filter.
 Radon barrier formed with 1200g dpc as noted in sections and on floor construction note.

FOUNDATIONS:

New concrete trench filled foundations to be provided to the new walls forming the proposed extension. These foundations are to be a minimum depth of 1m below ground level and 800mm wide.
 For the purposes of pricing, the above noted depth is to be a minimum depth of the foundation to be increased to 800mm to ensure adequate protection of the foundations either side of the overall wall build-up.
 Following inspection of foundation trenches, the building inspector may require additional foundation depth.

NEW STONE WALLS:

Where new stone walls are noted to be constructed, these are all to comply with the following overall specification:
 Before any work starts on proposed walls a sample wall panel is to be constructed (in a safe location) on site with an area no less than 1m square. This sample panel is to show an example of the proposed stone along with the coursing and pointing to be used throughout.
 This sample panel must be inspected and approved by the planning officer/conservation officer before work on the walls starts.
Critical note: stonework coursing to be agreed with listed building officer prior to any new wall construction being undertaken.
 The contractor must ensure that this sample panel is retained on site until work is complete.

New stone walls to be constructed as follows:
 Below ground level frost resistant concrete blockwork to be used. Dpc to each level a minimum of 150mm above adjacent ground level. Dpc not to be concealed with mortar.
 External walls above dpc:
 Construction in 100mm natural stone, to the external leaf. All laid and coursed to match style to be approved by planning officer.
 Provide an 100mm cavity with 100mm full fill insulation within cavity.
 Internal leaf of 100mm concrete block.
 Any cavity element below damp proof course to be backfilled with lean mix concrete.
 Internal finish to the traditional sand cement render with plaster finish.

Cathic bw4200 type 4 stainless steel wire ties at 900mm horizontally and 450mm vertically staggered centres and doubled up at all openings. Ties to BS 1243, blocks to BS 6073.
 Top of cavities and around all openings to be closed with approved thermal cavity closer, astos dpc to all vertical cavity closings. Cavity tie provided above any beam/rafter supporting an external cavity wall.

RE-BUILDING GARDEN WALLS:

Where it is noted that the existing garden walls are to be replaced with new structures, these are to be carried out as follows:
 Carefully remove the existing stonework that forms the current two garden wall areas to the north and west sides of the single-storey kitchen extension, leaving the remaining elements of the garden retaining wall unchanged.
 A new foundation is to be installed under this proposed location as noted under the foundation heading, this foundation is to be 800mm wide due to the overall wider/thicker construction of this rebuilt garden wall.

New stone walls to be constructed as follows:
 Below ground level frost resistant concrete blockwork to be used. Dpc to each level a minimum of 150mm above adjacent ground level. Dpc not to be concealed with mortar.
 External walls above dpc:
 The external skin of this proposed wall is to be constructed using the original stonework which is to be carefully sorted and re-laid as part of the new wall, this is to be coursed to carefully match the existing remaining garden wall with a straight joint between the proposed extension and the garden wall.
 Provide an 100mm cavity with 100mm full fill insulation within cavity.
 Internal leaf of 100mm concrete block laid flat due to higher ground levels on the garden side in comparison to the proposed finished floor level.

Any cavity element below damp proof course to be backfilled with lean mix concrete.
 Internal finish to the traditional sand cement render with plaster finish.
 This rebuilt section a garden wall is to have the original stone capping installed at the height to match the existing remaining garden wall, any damaged or defective pieces of stone capping are to be carefully sourced and replaced using as best like-for-like materials.

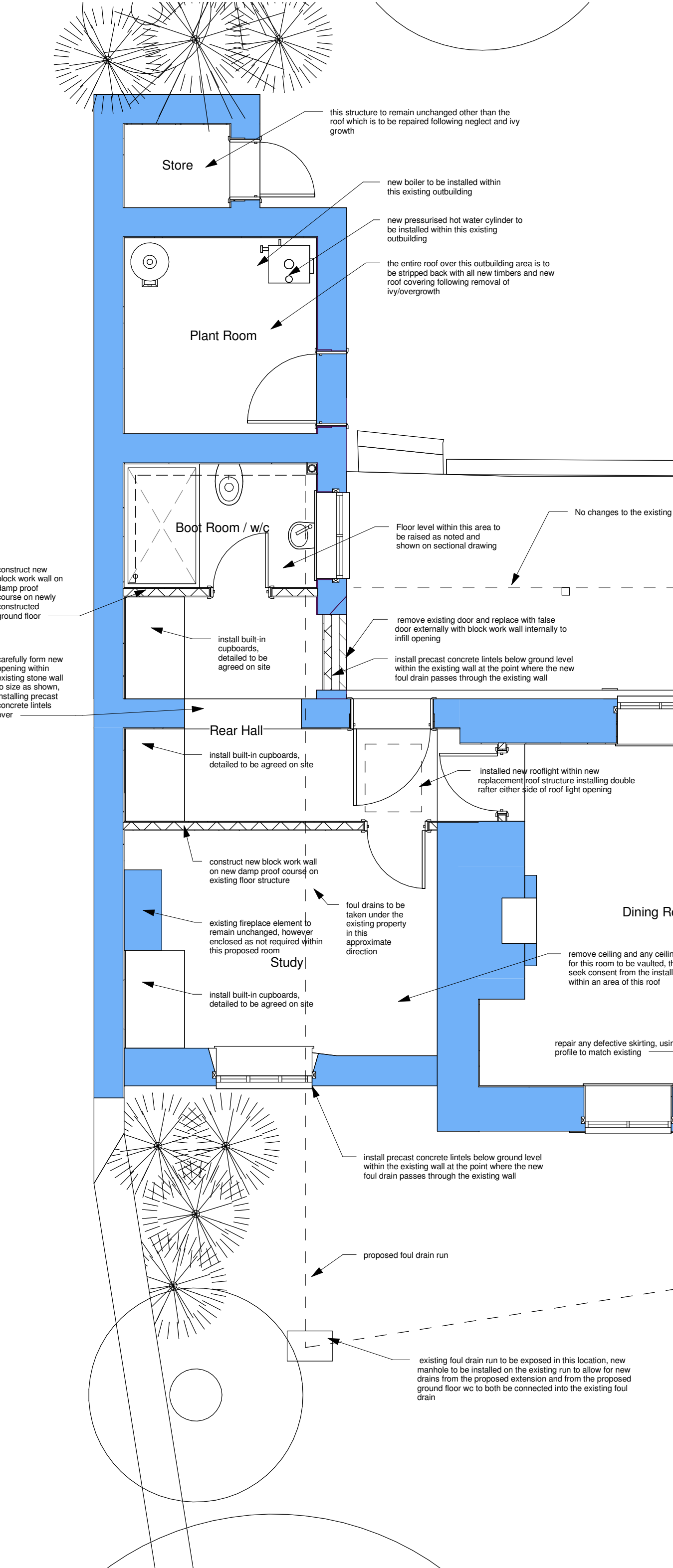
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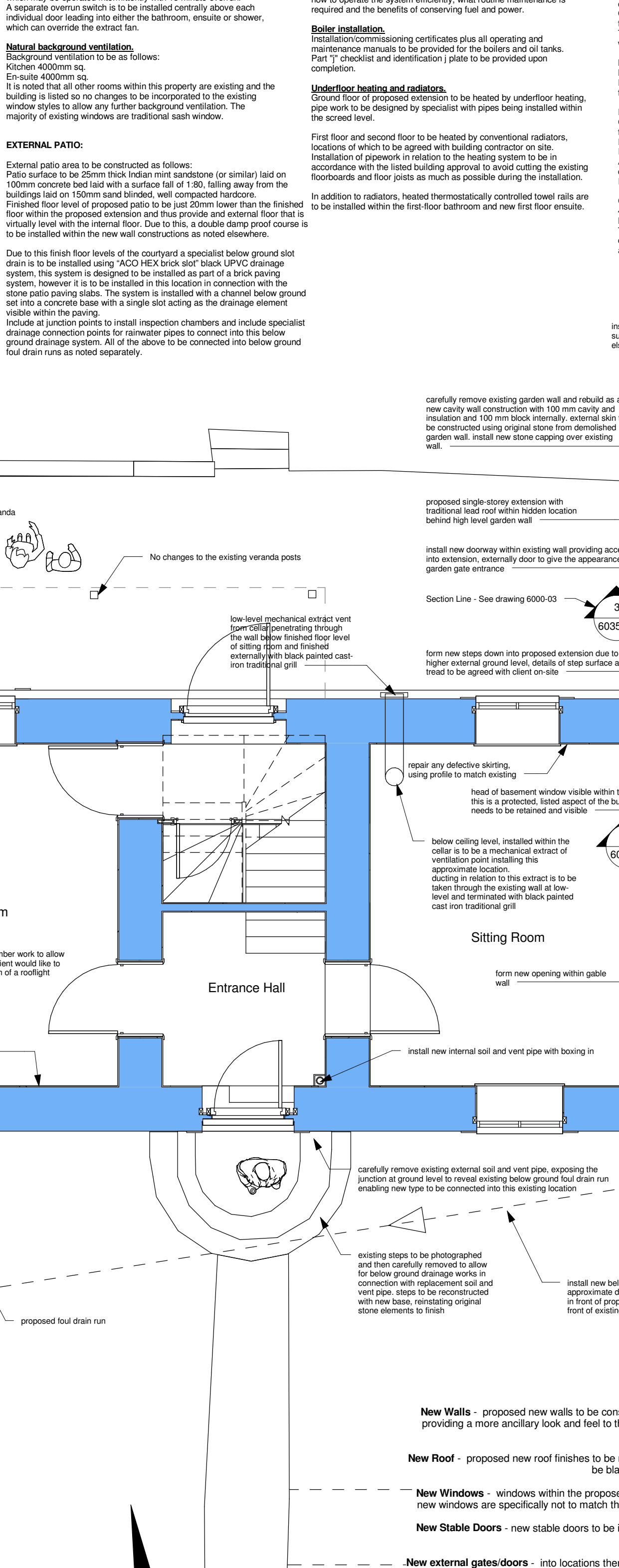
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STEELWORK:

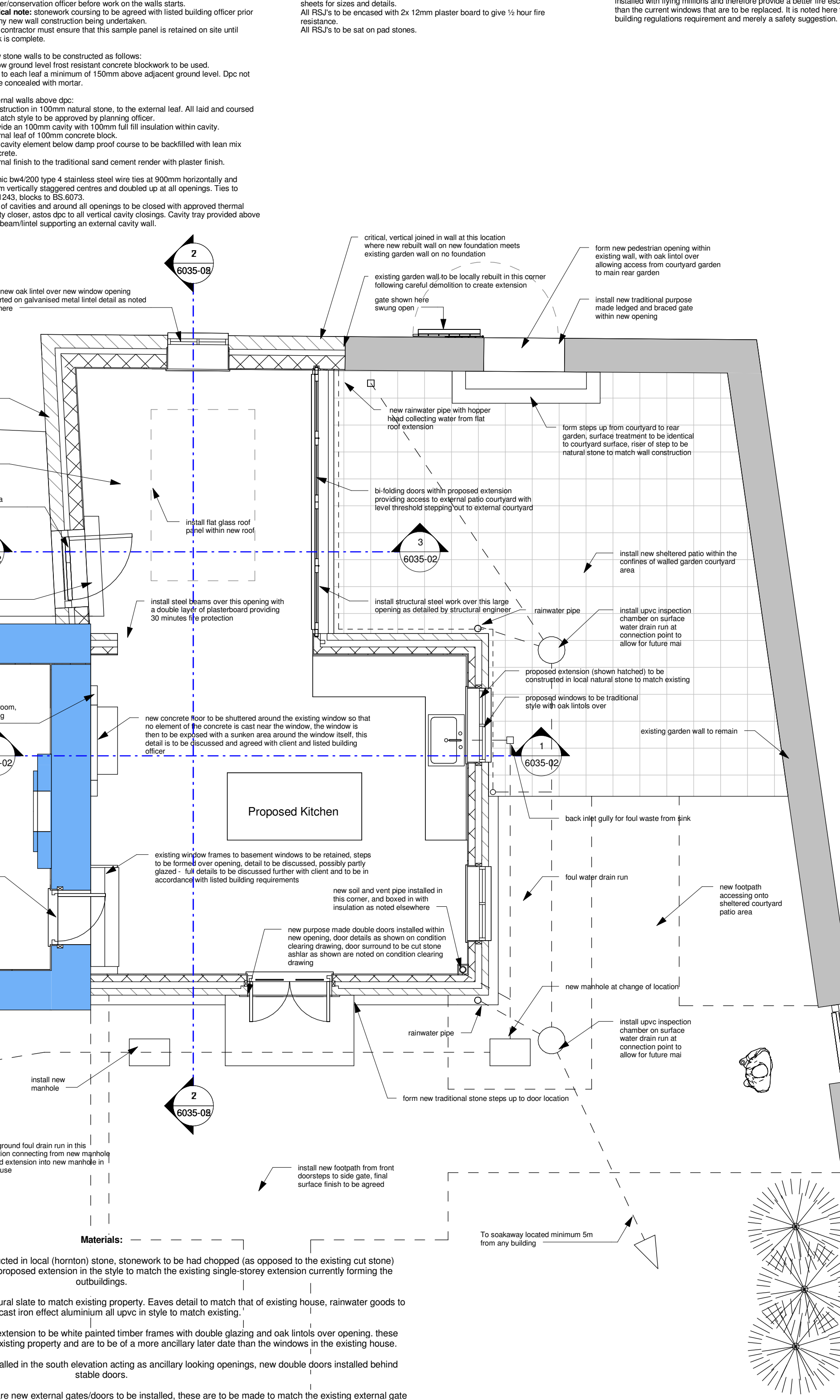
All RSJs to be calculated by structural engineer, see separate calculation sheets for sizes and details.
 All RSJs to be encased with 12mm plaster board to give 1/2 hour fire rating.
 All RSJs to be sat on pad stones.



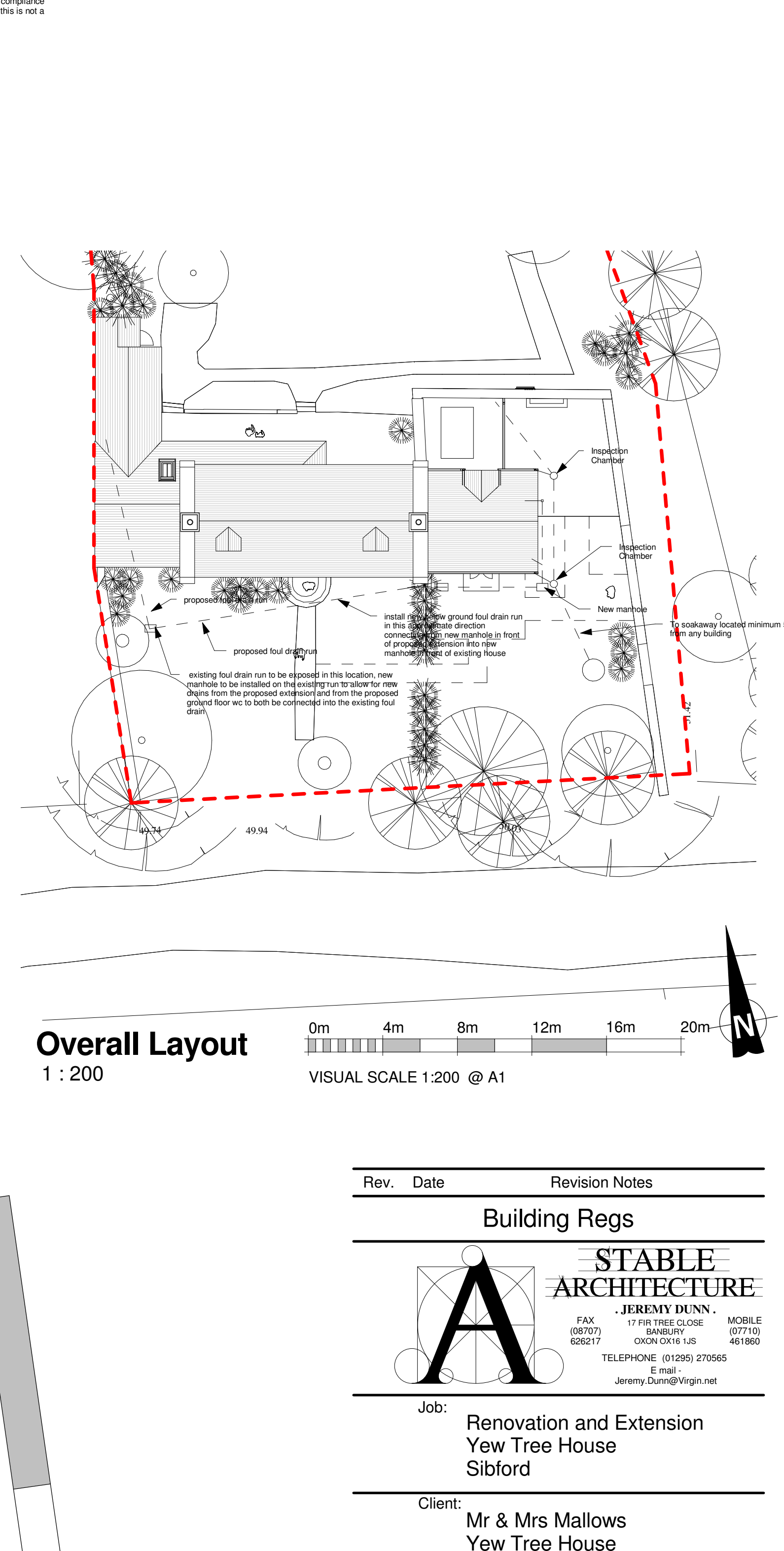
Ground Floor Plan
 1 : 50
 VISUAL SCALE 1:50 @ A1



Section Line - See drawing 6035-03
 1 : 200
 VISUAL SCALE 1:200 @ A1



Overall Layout
 1 : 200
 VISUAL SCALE 1:200 @ A1



Overall Layout
 1 : 200
 VISUAL SCALE 1:200 @ A1

Rev.	Date	Revision Notes

Building Regs

STABLE ARCHITECTURE

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Client: **Mr & Mrs Mallows Yew Tree House Sibford**

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