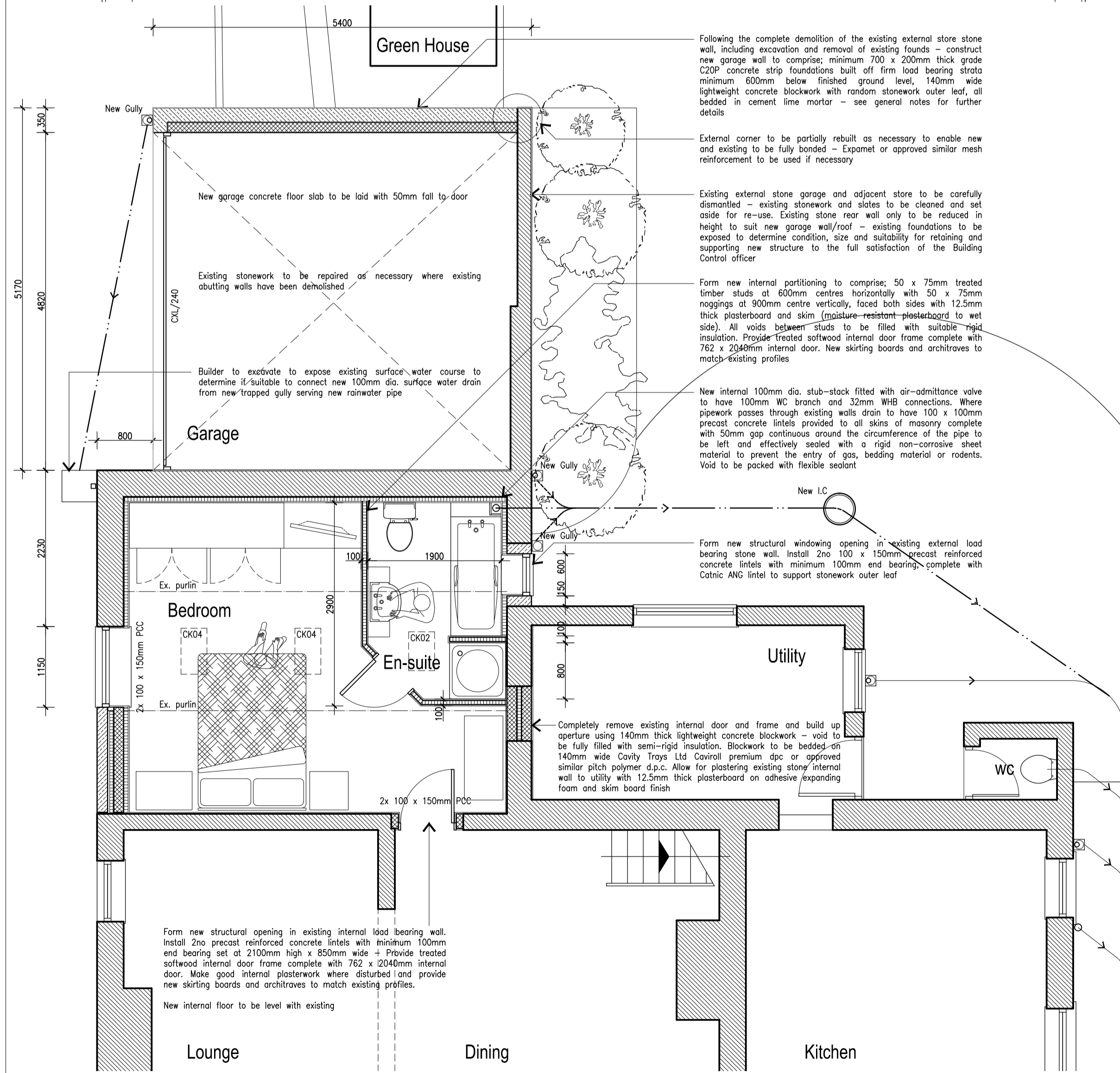
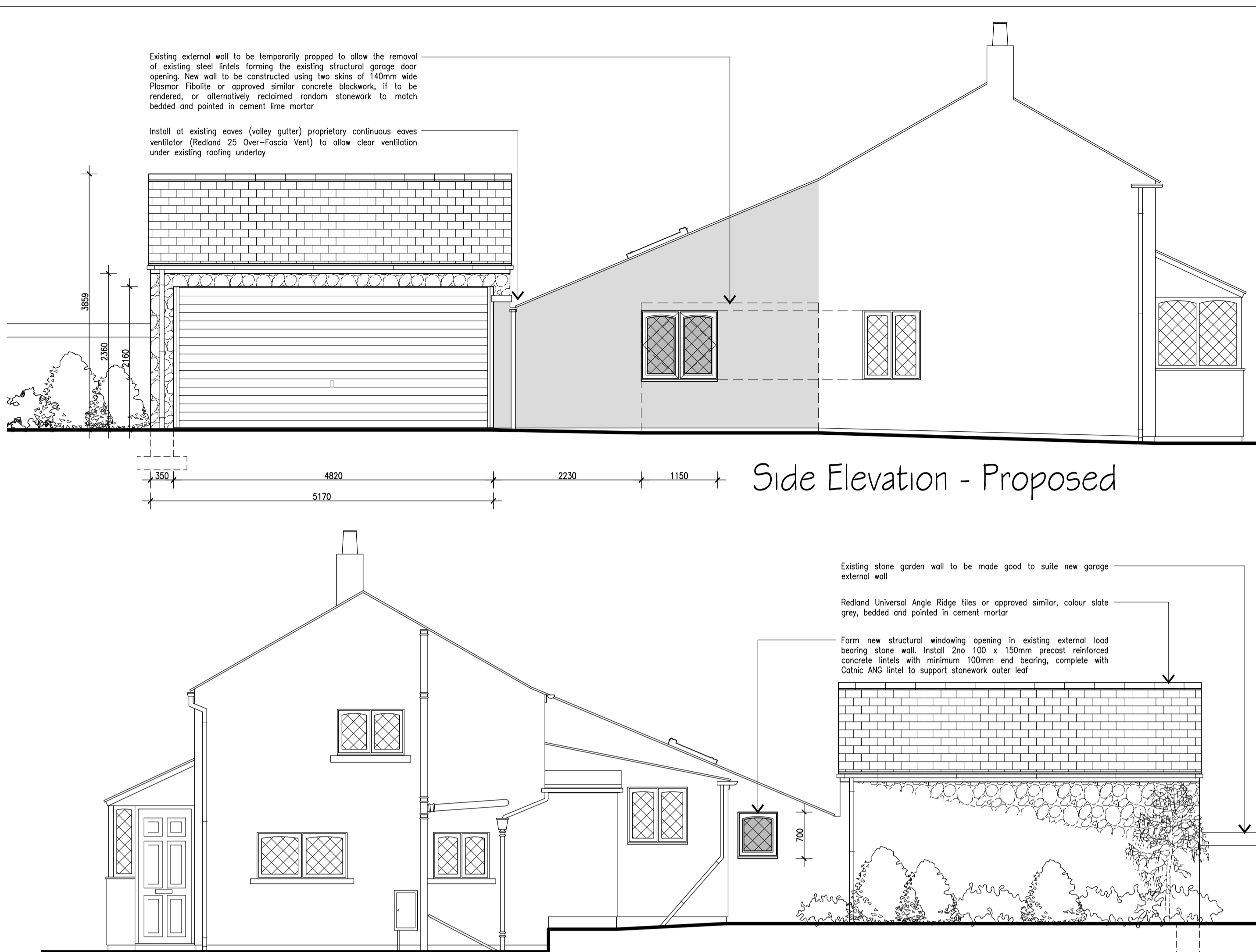


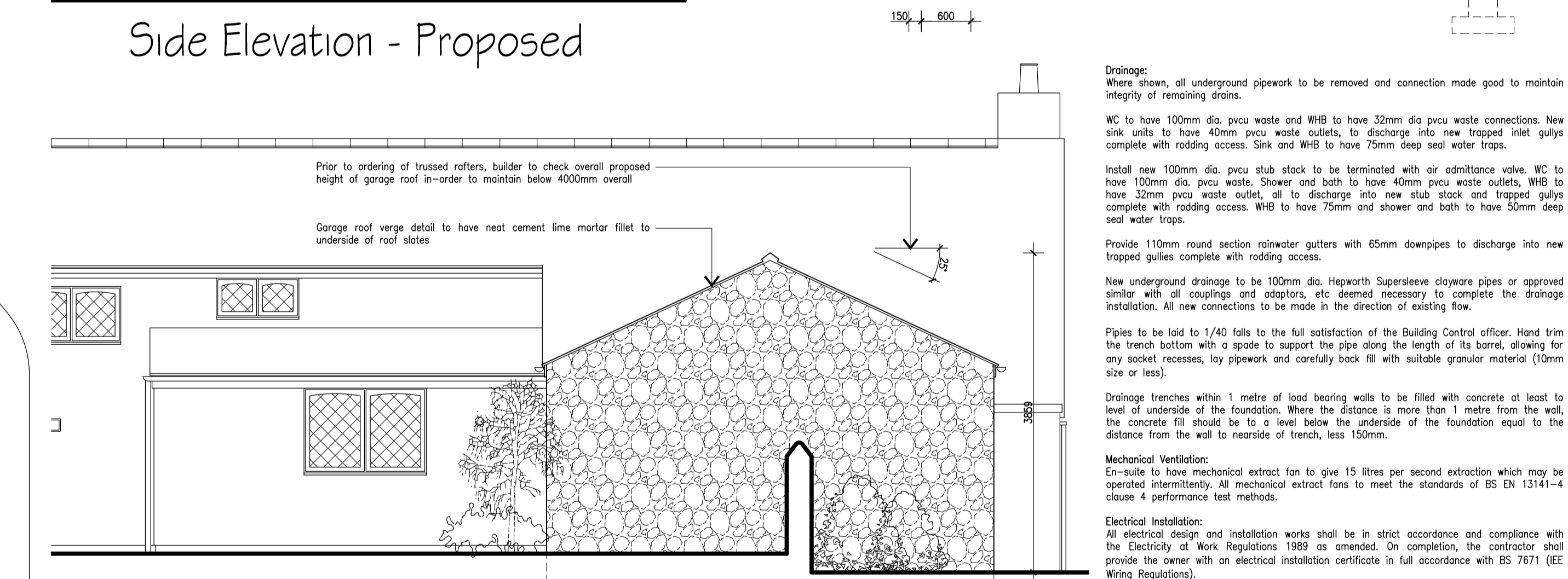
Roof Structure



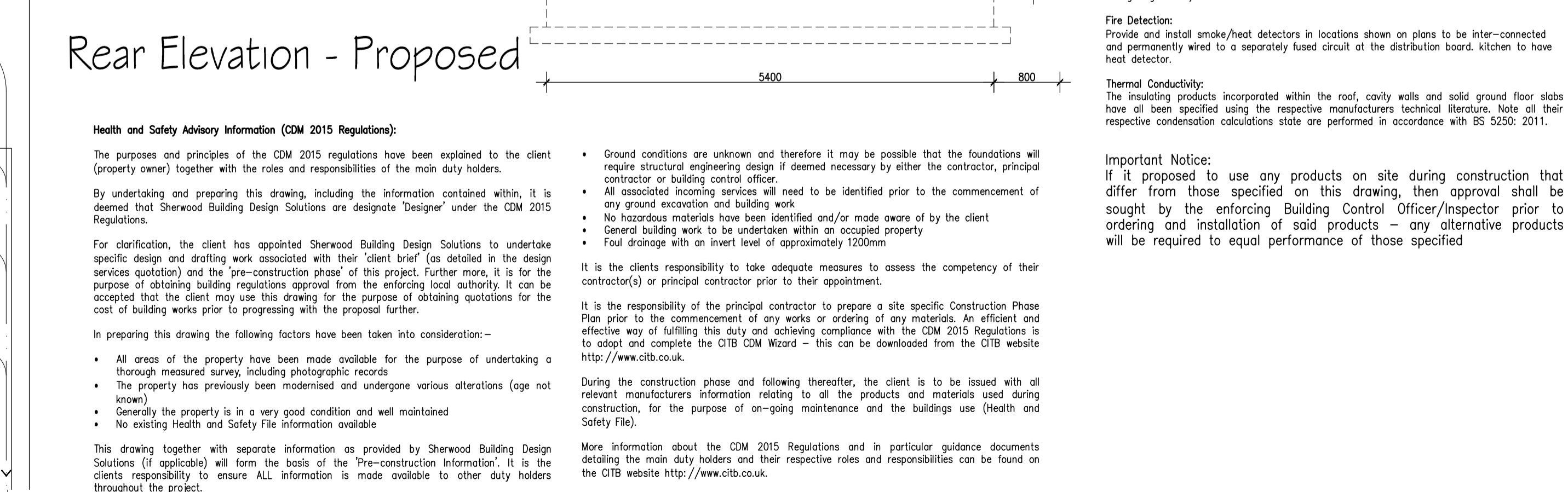
Ground Floor



Side Elevation - Proposed



Side Elevation - Proposed



Rear Elevation - Proposed

General:
All work is to be carried out in accordance with local authority requirements, British Standards, Codes of Practice and manufacturers recommendations.
All dimensions and levels to be checked on site prior to the commencement of work or the ordering of any materials or component parts.
All structural timber is to be of spec. treated. All timber is softwood and is to be tanalised or primed for paint before fixing.

Roof:
Garage roof to be natural slate (partially reclaimed from existing roofs) on 25 x 38 battens on lyeek Supra breathable membrane with minimum 200mm overtopps taped using lyeek acrylic tapes on trussed rafters at 600mm centres. Trusses to be designed, fixed and braced in strict accordance with BS: 5268 Part 3. Trusses to be supported and fixed on ex 75 x 100mm wallplate.
Swish Building Products 'Ogee' or similar profiled fascia and barge boards to match existing to be white pvcu fixed to ends of rafters complete with white pvcu soffit board.
Wallplate to be fixed to internal blockwork with 900 x 30 x 2.5mm galvanised steel straps at 1800mm centres to end three rafters where they run parallel with new gable blockwork supported with 75 x 50mm bearers fixed between rafters.
Roof - Existing Garage Conversion
Provide and fix ex 35 x 50mm treated battens to underside of existing 50 x 75mm rafters in-order to allow 50mm clear ventilation space to be maintained between insulation and underside of existing bitumen based roofing underfelt. Install 60mm thick Celotex FRS600 insulation or approved similar between rafters (fixed flush with underside of battens) complete with additional 69.5mm thick Celotex G55060 insulated vapourcheck plasterboard and skim to the underside - all to achieve 0.17W/m2K U-Value.
Install at existing eaves (valley gutter) proprietary continuous eaves ventilator (Redland 25 Over-Fascia Vent) to allow clear ventilation under existing roofing underfelt. Balder to establish whether it is practical to provide through ventilation into the existing main house roof space where the existing garage roof abuts with the house wall at high level.
Masonry:
Dry-lining to existing garage comprise: ex 25 x 47mm treated timber vertical battens at 600mm centres mechanically fixed to inside face of existing stonework, complete with DPC fixed between over boarded with 25mm thick Kingspan Kooltherm F18 insulated plasterboard and British Gypsum board finish skid to finish - all to achieve 0.25W/m2K U-Value (0.30W/m2K U-Value max.)
Insulated plasterboards to be continuous around perimeter of external walls and not to be interrupted where new internal partitions abut.
Where existing structural garage door opening is to be built up, construction to comprise: Polymer external render on 140mm wide Plasnor Fibrolite or approved similar lightweight concrete blockwork (K-Value = 0.24 W/m2K), laid in stretcher bond in 10mm sand/cement mortar, 100mm cavity partially filled with 50mm thick Celotex C20500 cavity wall insulation or approved similar rigid insulation with stainless steel cavity wall ties complete with insulation retainers at 900mm centres horizontally and 450mm centres vertically with additional ties around openings, 140mm thick lightweight blockwork as above (K-Value = 0.24 W/m2K) laid in stretcher bond with 10mm thick sand/cement mortar. Internal dry-lining to be continuous as specified above.
Use Expamet or approved similar stainless steel stop end and weathering beads.
Provide and fix Expamet Unistarter stainless steel track and tie system fixing plates ref: UWSS or approved similar where new brickwork/blockwork abuts existing.
All cavities are to be continuous and closed at door and window openings with 'Cavity Traps' type H2 Cavityseal or approved similar. Cavities to be closed at eaves using fibrous board bedded in cement mortar.
Provide preformed Catic steel lintels over all new openings, reference numbers shown on plan with minimum 150mm end bearing. Provide cavity trays Ltd preformed type C cavity trays complete with stop ends dressed over lintels to new external brick openings. All voids in lintel profile to be packed with flexible insulation material.
Provide and install to both sides 140mm wide Cavity Traps Ltd Covall premium dpc or approved similar pitch polymer d.p.c at 150mm above finished ground level.
Sub-structure brickwork to comprise: two skins of concrete common bricks or approved trench concrete blockwork, 100mm cavity with ties as above filled to within 225mm of d.p.c with lean mix concrete chamfered to external tie.
Ground Floor:
Existing garage floor to be completely broken up and removed. Floor to comprise: 65mm thick sand/cement screed on 1000 gauge polythene separation layer on 70mm thick Celotex FRS700 insulated slabs on 1200 gauge viquesun d.p.m with all joints taped and dressed up blockwork and tucked under d.p.c on 150mm thick grade C20P concrete floor slab with B283 steel mesh reinforcement (50mm min top cover) all to achieve 0.22W/m2K U-Value. 150mm thick hardcore compacted in layers and blinded with sand.
Provide Celotex or approved similar perimeter insulation where floor slab abuts new and existing masonry.
Garage Floor:
150mm thick grade C20P reinforced concrete floor slab with trowelled finish with B283 steel mesh reinforcement (50mm min top cover) on 1200 gauge viquesun d.p.m with all joints taped and dressed up blockwork at abutment with external wall on 300mm thick hardcore compacted in layers and blinded with sand.
Foundations:
To be 700 x 200mm thick grade C20P concrete strip foundations built off firm load bearing strata minimum 600mm below finished ground level to the complete satisfaction of the building control officer.
Depth to correspond with invert levels of all drains within 1000mm range (which ever is greater).
Existing foundations to existing external walls to be exposed to establish their size and suitability to the complete satisfaction of the local authority building control officer.
Windows and Doors:
Provide and fix double glazed hardwood casement window frames. Casements to give 1/20th room floor area openable ventilation, fitted with approved and controllable trickle ventilator to give 2500mm2 free air. 28mm thick double glazing units internally bedded to comprise: 7.4mm thick glass inside, incorporating Pilkington Qplus 4 glass and standard 6.4mm thick glass on outside, all glazing to new doors and windows with cill level less than 800mm to have toughened safety glass in accordance with BS 6206.
Garage door to be Hendersons or approved similar steel sectional door - exact dimensions and fixings vary depending on manufacturer and type.

Drainage:
Where shown, all underground pipework to be removed and connection made good to maintain integrity of remaining drains.
WC to have 100mm dia. pvcu waste and WHB to have 32mm dia pvcu waste connections. New sink units to have 40mm pvcu waste outlets, to discharge into new trapped inlet gully complete with rodding access. Sink and WHB to have 75mm deep seal water traps.
Install new 100mm dia. pvcu stub stack to be terminated with air admittance valve. WC to have 100mm dia. pvcu waste. Shower and bath to have 40mm pvcu waste outlets, WHB to have 32mm pvcu waste outlet, all to discharge into new stub stack and trapped gully complete with rodding access. WHB to have 75mm and shower and bath to have 50mm deep seal water traps.
Provide 110mm round section rainwater gutters with 65mm downpipes to discharge into new trapped gully complete with rodding access.
New underground drainage to be 100mm dia. Hepworth Supersewte clayware pipes or approved similar with all couplings and adaptors, etc deemed necessary to complete the drainage installation. All new connections to be made in the direction of existing flow.
Pipes to be laid to 1/40 falls to the full satisfaction of the Building Control officer. Hand trim the trench bottom with a spade to support the pipe along the length of its bore, allowing for any socket recesses, lay pipework and carefully back fill with suitable granular material (10mm size or less).
Drainage trenches within 1 metre of load bearing walls to be filled with concrete at least to level of underside of the foundation. Where the distance is more than 1 metre from the wall, the concrete fill should be to a level below the underside of the foundation equal to the distance from the wall to nearest of trench, less 150mm.
Mechanical Ventilation:
En-suite to have mechanical extract fan to give 15 litres per second extraction which may be operated intermittently. All mechanical extract fans to meet the standards of BS EN 13141-4 clause 4 performance test methods.
Electrical Installation:
All electrical design and installation works shall be in strict accordance and compliance with the Electricity at Work Regulations as amended. On completion, the contractor shall provide the owner with an electrical installation certificate in full accordance with BS 7671 (EE Wiring Regulations).
Fire Detection:
Provide and install smoke/heat detectors in locations shown on plans to be inter-connected and permanently wired to a separately fused circuit at the distribution board, kitchen to have heat detector.
Thermal Conductivity:
The insulating products incorporated within the roof, cavity walls and solid ground floor slabs have all been specified using the respective manufacturers technical literature. Note all their respective condensation calculations state are performed in accordance with BS 5250: 2011.

Important Notice:
If it is proposed to use any products on site during construction that differ from those specified on this drawing, then approval shall be sought by the enforcing Building Control Officer/inspector prior to ordering and installation of said products - any alternative products will be required to equal performance of those specified.

Health and Safety Advisory Information (CDM 2015 Regulations):
The purposes and principles of the CDM 2015 regulations have been explained to the client (property owner) together with the roles and responsibilities of the main duty holders.
By undertaking and preparing this drawing, including the information contained within, it is deemed that Sherwood Building Design Solutions are designated 'Designer' under the CDM 2015 Regulations.
For clarification, the client has appointed Sherwood Building Design Solutions to undertake specific design and drafting work associated with their 'client brief' (as detailed in the design services quotation) and the 'pre-construction phase' of this project. Further more, it is for the purpose of obtaining building regulations approval from the enforcing local authority. It can be accepted that the client may use this drawing for the purpose of obtaining quotations for the cost of building works prior to progressing with the proposal further.
In preparing this drawing the following factors have been taken into consideration:-
• All areas of the property have been made available for the purpose of undertaking a thorough measured survey, including photographic records
• The property has previously been modernised and undergone various alterations (age not known)
• Generally the property is in a very good condition and well maintained
• No existing Health and Safety File information available
This drawing together with separate information as provided by Sherwood Building Design Solutions (if applicable) will form the basis of the 'Pre-construction Information'. It is the clients responsibility to ensure ALL information is made available to other duty holders throughout the project.
No major and/or significant risks have been identified as part of this design that a competent contractor would not be capable of managing and undertaking. However, as a precautionary note, the following items will require careful consideration by the appointed contractor(s) or principal contractor:-
• Ground conditions are unknown and therefore it may be possible that the foundations will require structural engineering design if deemed necessary by either the contractor, principal contractor or building control officer.
• All associated incoming services will need to be identified prior to the commencement of any ground excavation and building work.
• No hazardous materials have been identified and/or made aware of by the client
• General building work to be undertaken within an occupied property
• Foul drainage with an invert level of approximately 1200mm
It is the clients responsibility to take adequate measures to assess the competency of their contractor(s) or principal contractor prior to their appointment.
It is the responsibility of the principal contractor to prepare a site specific Construction Phase Plan prior to the commencement of any works or ordering of any materials. An efficient and effective way of fulfilling this duty is achieved compliance with the CDM 2015 Regulations is to adopt and complete the CIB CDM Wizard - this can be downloaded from the CIB website <http://www.cib.co.uk>.
During the construction phase and following thereafter, the client is to be issued with all relevant manufacturers information relating to all the products and materials used during construction, for the purpose of on-going maintenance and the buildings use (Health and Safety File).
More information about the CDM 2015 Regulations and in particular guidance documents detailing the main duty holders and their respective roles and responsibilities can be found on the CIB website <http://www.cib.co.uk>.

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Do not scale from this drawing. Original sheet size A1.

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Status: **Building Regulations**

Client:

Project: **Proposed Garage Conversion and New Attached Double Garage**

Title: **Proposed Layout**

Scale: 1/50 @ A1 Date: May 2015 Drawn: Rob Sherwood

Drawing Number: **2015-09-02** Revision: