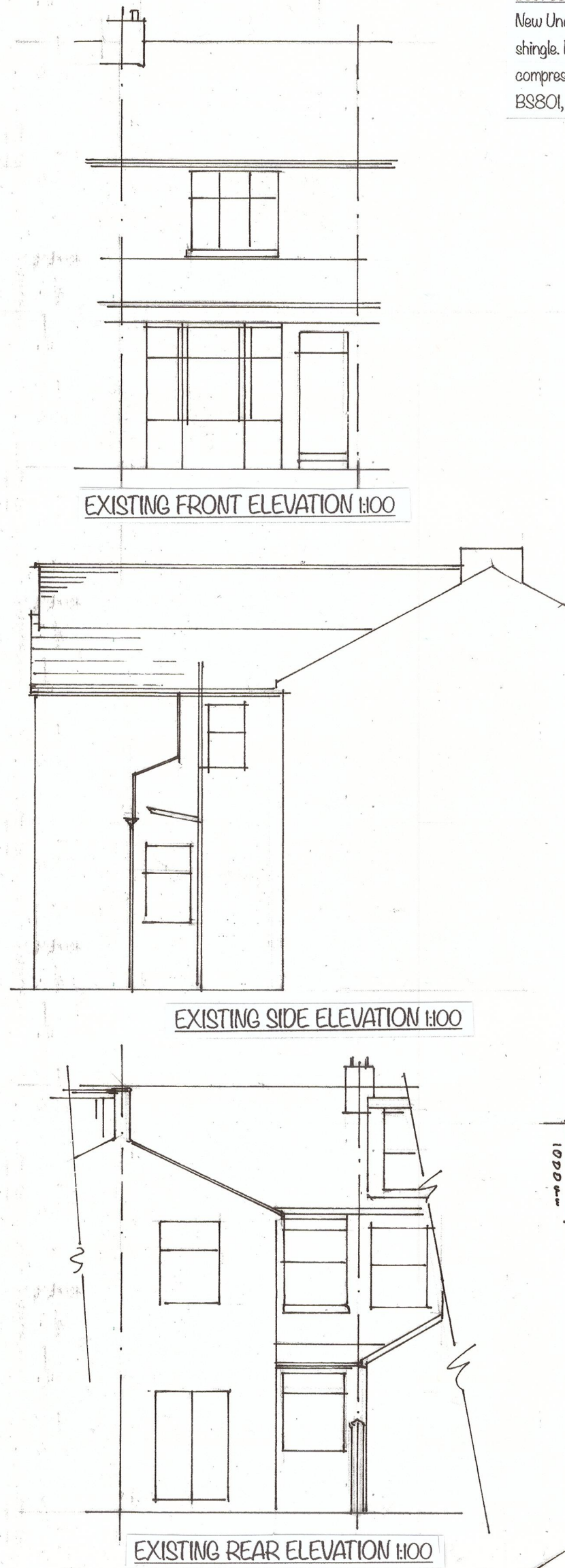
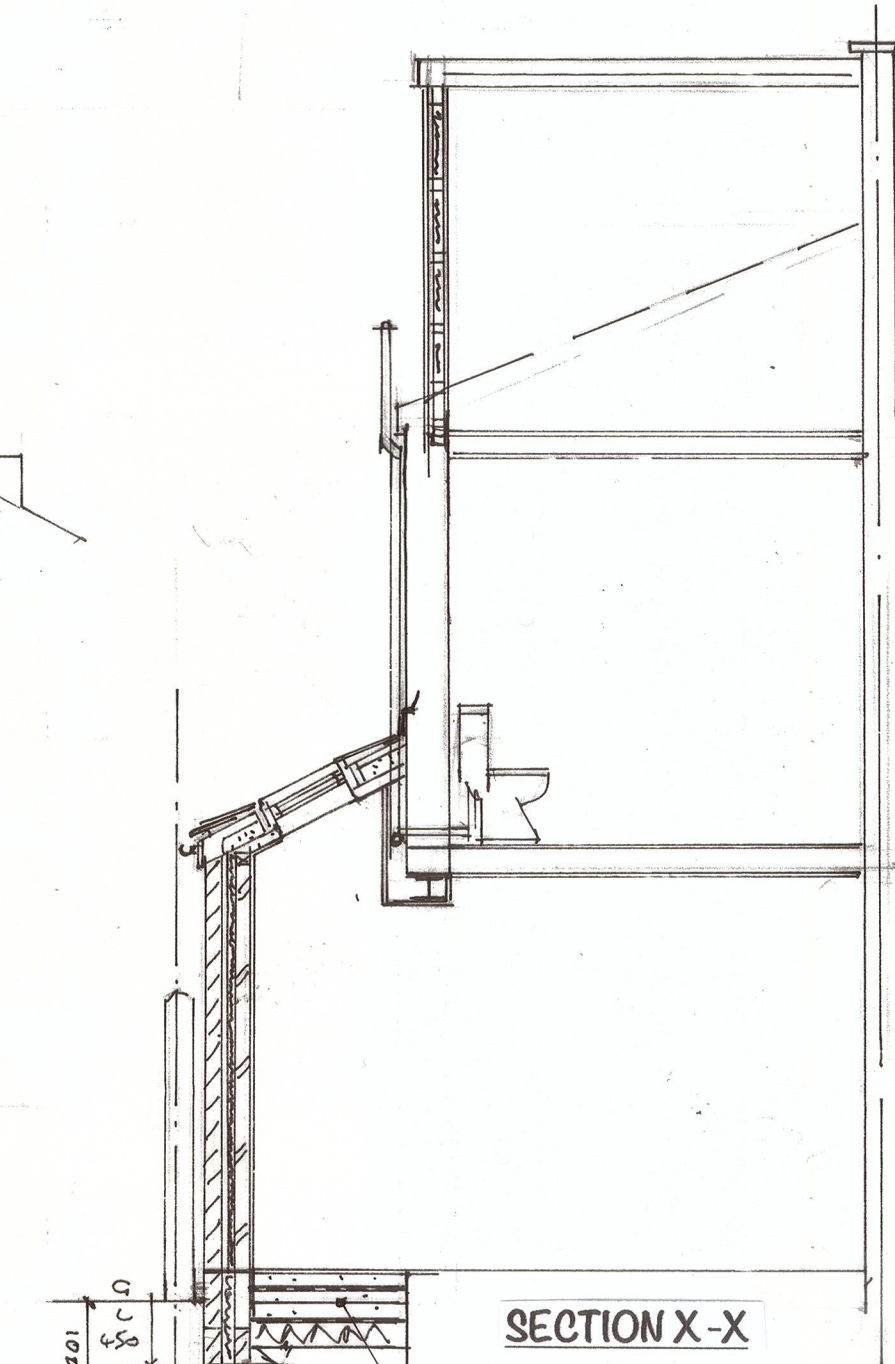




UNDERGROUND FOUL DRAINAGE (Builder is to do on site investigation to locate existing property main drains & decide on best course of action to join new Rain water & foul water pipes)

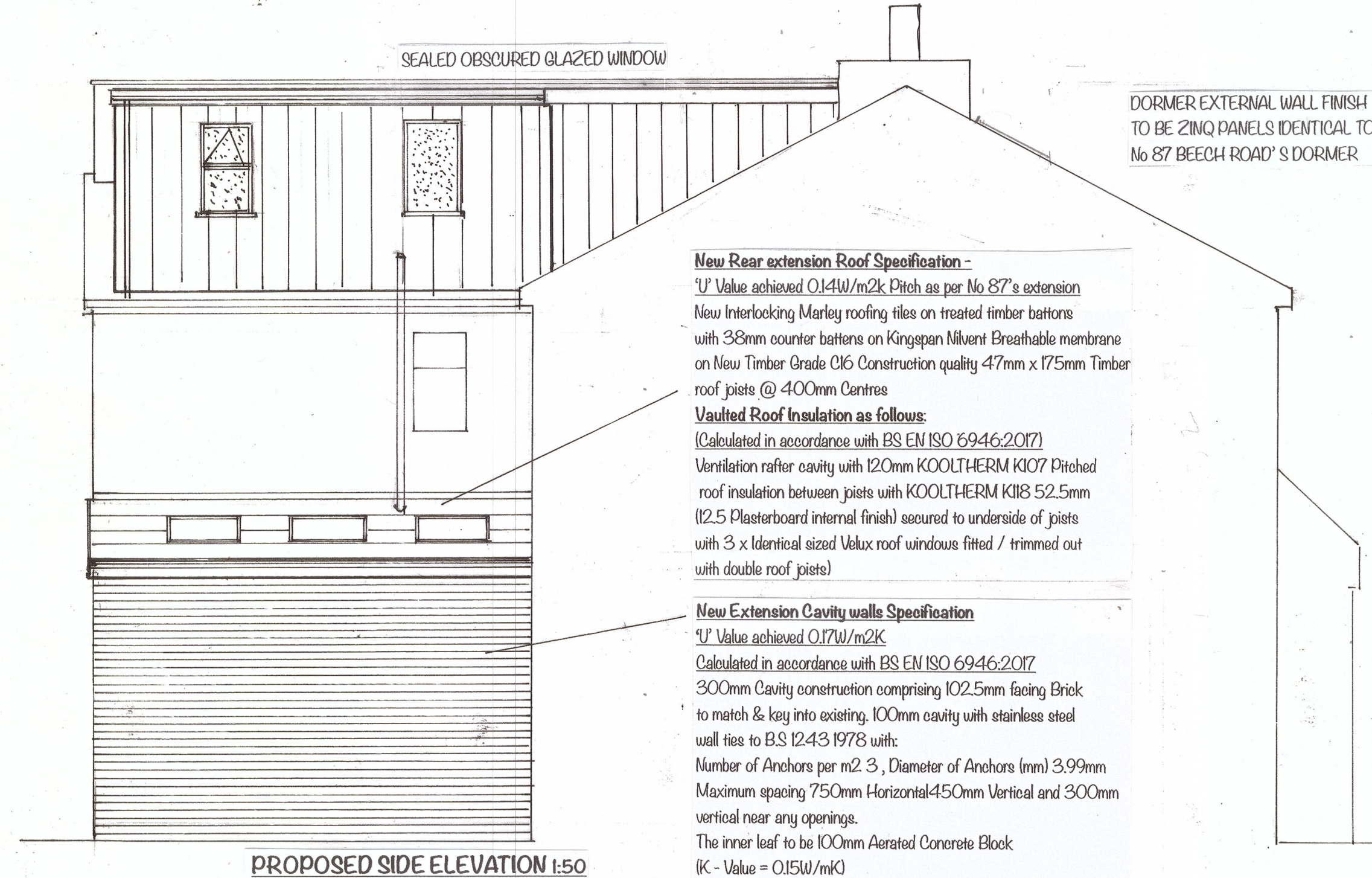
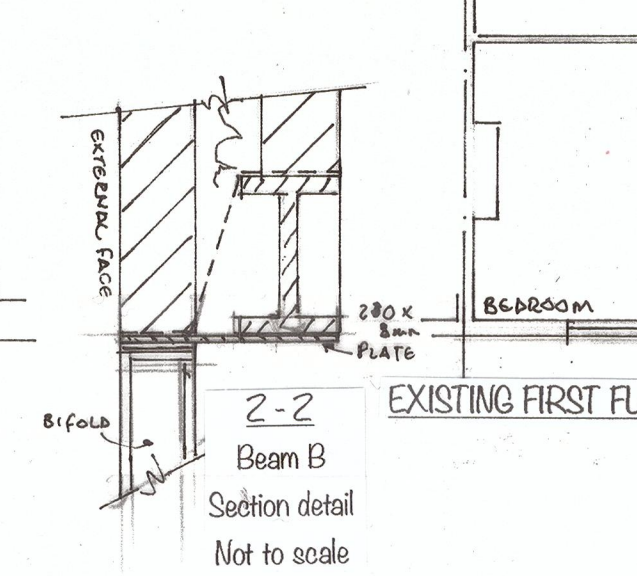
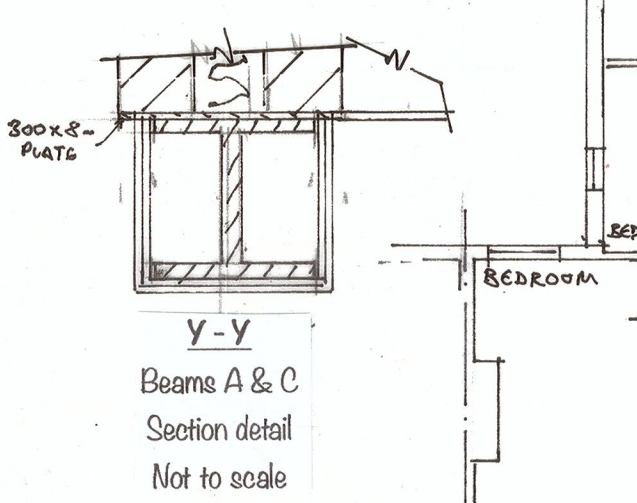
New Underground drainage to consist of 100mm diameter UPVC proprietary pipe work to give a 1:40 fall. Surround pipes in 100mm pea shingle. Provide 600mm suitable cover (900mm under drives). Shallow pipes to be covered with 100mm reinforced concrete slab over compressible material. Provide rodding access at all changes of direction and junctions. All below ground drainage to comply with BS7583 and BS804. Builder is to liaise with the Building Inspector on any on site queries concerning the drainage for the extensions.



New Extension Ground floor Specification (Floor to be level with existing house floor)
'U' Value achieved 0.18 W/m2K Calculated in accordance with BS EN ISO 6946:2017
Inside surface down - 100mm Sand cement screed with 0.5mm Polythene separation layer beneath then 75mm Kingspan Kooltherm K103 Insulation with 150mm Concrete 12:4:2000kg/m3 laid on either Visqueen Ultimate Geosol 0.9mm DPM (Gas protection to BS8102:2009 CIRIA C748 & BS 8485:2015) DPM if stipulated by Building control Or standard 1200g DPM on 150mm sand blinded consolidated stone hardcore.
NOTE: Due to No prior Knowledge on ground soil conditions the foundations are shown at a minimum depth required. Builder to confirm exact depth on site with Building control. If Mini piles are a requirement to support below the concrete foundation beam the builder is to provide Piling design & details to the Building Inspector for prior approval before works commence. Builder is to liaise with Building control on any questions / queries on the required foundations.

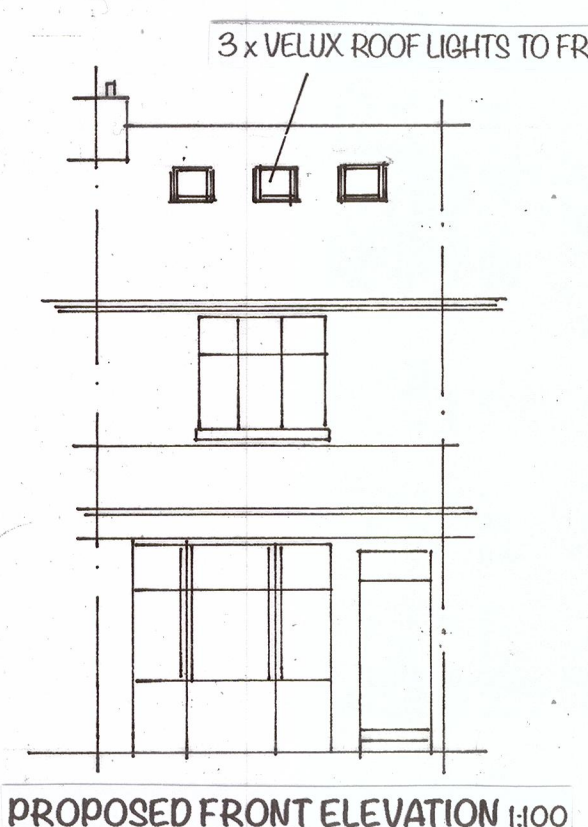
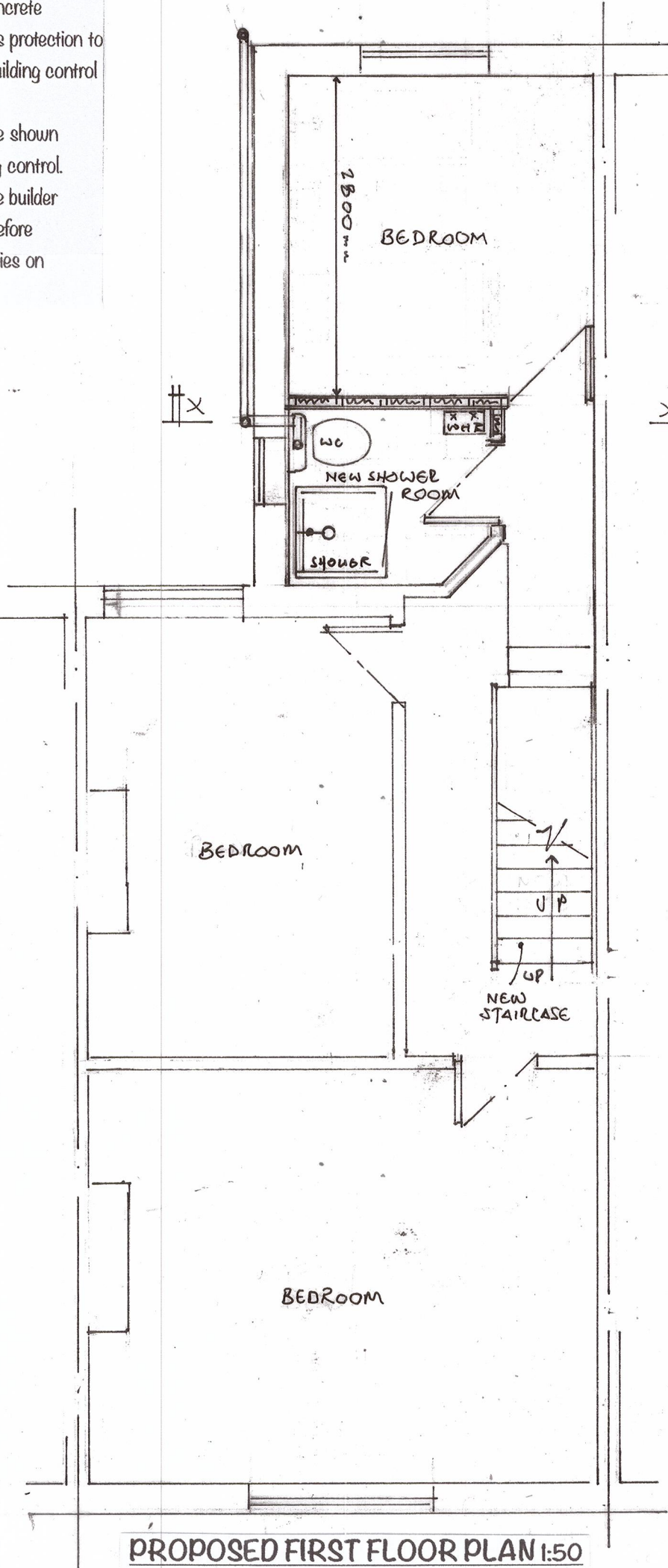
Beam A
203 x 203 x 30 UB Grade 43
Clear span 4.675m (Actual length 4.725m)
with a 300mm x 8mm M.S. Plate welded centrally to top Surface.
Bearing and over rear bi-fold door beam (B) Secured to 1000mm x 100mm I48 strength concrete padstone with hi-quality Class A engineering brickwork 125N/mm Compressive strength construction down to door beam Opposite end to be plate bolted / welded to Beam C

Beam C
203 x 203 x 60 UB Grade 43
Clear span 4.000m (Actual length 4.300m)
with a 300mm x 8mm M.S. Plate welded centrally to top Surface. Bearing ends of beam are both supported via the 152 x 152 x 23 UC Column.

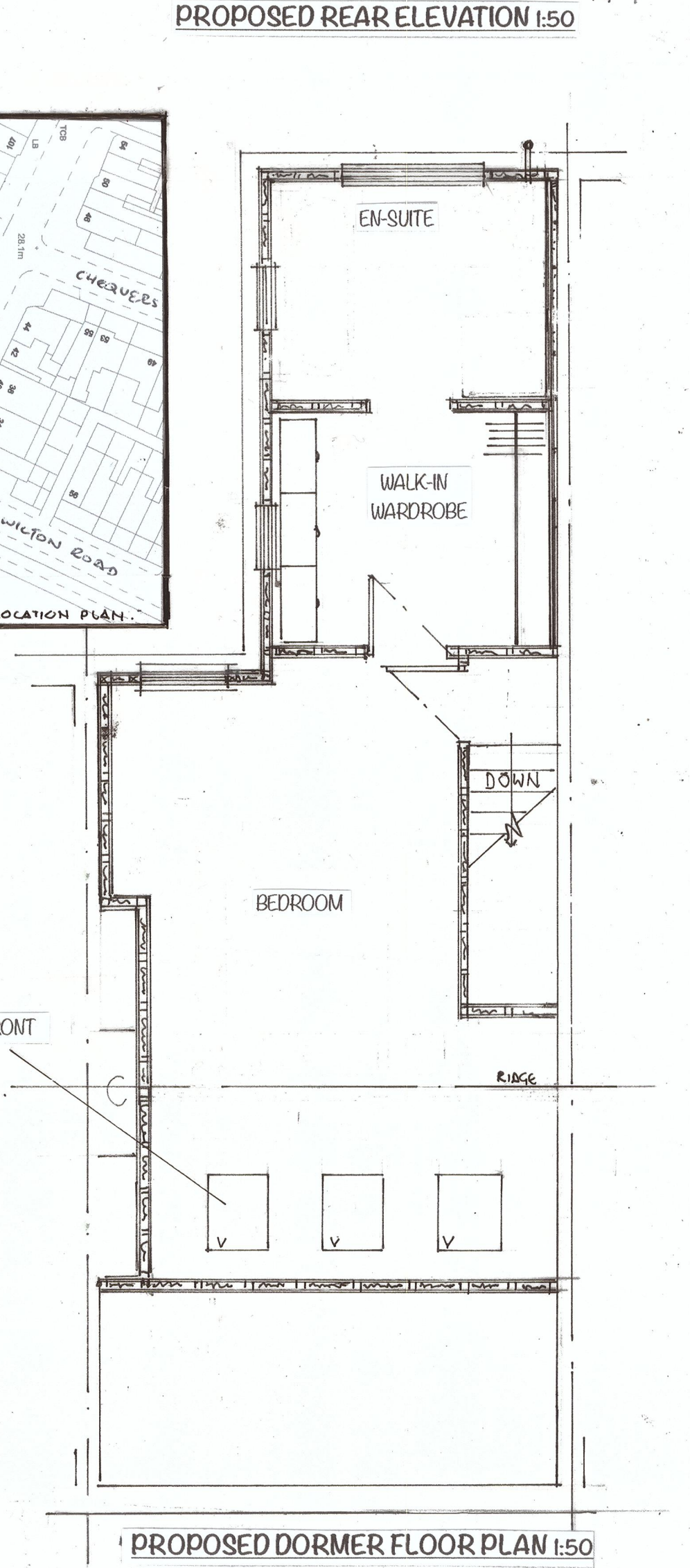
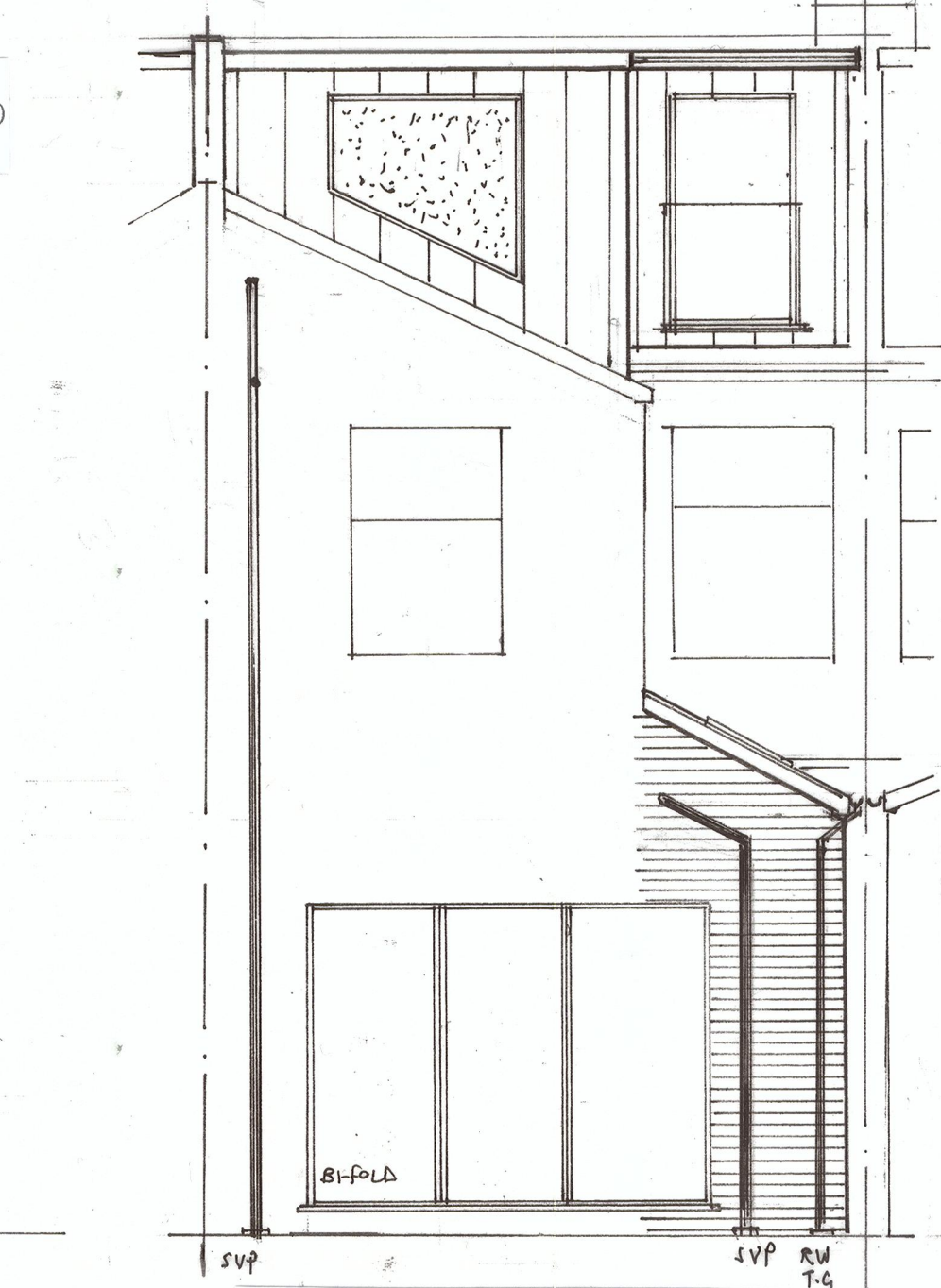


New Rear extension Roof Specification -
'U' Value achieved 0.14 W/m2K Pitch as per No 87's extension
New Interlocking Marley roofing tiles on treated timber battens with 38mm counter battens on Kingspan Nivent Breathable membrane on New Timber Grade C16 Construction quality 47mm x 175mm Timber roof joists @ 400mm Centres
Vaulted Roof Insulation as follows:
(Calculated in accordance with BS EN ISO 6946:2017)
Ventilation rafter cavity with 120mm KOOLTHERM K107 Pitched roof insulation between joists with KOOLTHERM K108 52.5mm (12.5 Plasterboard internal finish) secured to underside of joists with 3 x Identical sized Velux roof windows fitted / trimmed out with double roof joists

New Extension Cavity walls Specification
'U' Value achieved 0.17 W/m2K
Calculated in accordance with BS EN ISO 6946:2017
300mm Cavity construction comprising 102.5mm facing Brick to match & lay into existing, 100mm cavity with stainless steel wall tie to BS 1243 1978 with:
Number of Anchors per m2 3, Diameter of Anchors (mm) 3.99mm Maximum spacing 750mm Horizontal 450mm Vertical and 300mm vertical near any openings.
The inner leaf to be 100mm Aerated Concrete Block (K - Value = 0.15 W/mK)
Cavity Insulation to be 90mm Kingspan K106 Insulation with a minimum of 10mm airspace. The cavity must be clear of mortar. Inside to plasterboard & skim



Drainage: Kitchen, Bathroom, D/S W/C
All new above ground drainage and plumbing to comply with BS 5572:1978 (Sanitary pipework)
All new drainage to be in accordance with Part 4 of this building regulations. Wastes to have 75mm deep anti-vac bottle traps & rodding eyes to be provided at changes to direction. Sizes of waste pipes and max length of branch connections. If max length is exceeded then anti-vacuum traps to be used)
Wash Basin- 17m for 32mm pipes, 4m for 40mm pipes Bath/Shower- 3m for 40mm pipes, 4m for 50mm pipes, W/C - 6m for 100mm pipes for single W/C
All branch pipes to connect to 110mm soil & vent pipe terminating min 900mm above any opening within 3m Or to a 110mm upvc soil pipe with accessible internal air admittance valve complying with BS EN 12580, placed at a height so that outlet is above the trap of the highest fitting.
Waste pipes not to connect on to SVP within 200mm of the W/C Connection provide hot and cold water to all fittings as appropriate.



- NOTES (WHERE APPLICABLE)**
- HOME OWNER / CLIENT & BUILDER MUST READ
 - ONLY THE PLAN APPROVED BY BUILDING CONTROL TO BE USED FOR CONSTRUCTION PURPOSES.
 - ALL DIMENSIONS ARE TO BE SITE CHECKED BY BUILDER DO NOT SCALE DRAWING
 - ANY NEW BRICKWORK IS TO MATCH & KEY INTO EXISTING.
 - WINDOWS & DOORS TO BE DOUBLE GLAZED WITH 20mm GAP BETWEEN PAGES FILLED WITH ARGON GAS WITH INNER PANE HAVING LOW E COATING TO ACHIEVE U VALUE OF 1.4 W/m2K INNER PANELS CONTROLLABLE TUCKLE VENTS OF 8000mm2 TO HABITABLE ROOMS AND KITCHEN WITH 4.000mm2. ELSEWHERE VENTS SET 700mm FROM FLOOR LEVEL AND 500mm FROM ANY EXTRACT FAN. NEW INTERNAL DOORS TO HABITABLE ROOMS TO BE MIN 20 MINUTE FIRE RESISTANT STANDARD.
 - ALL NEW BEAMS & LINTELS TO HAVE A MIN BEARING OF 150mm, TRUSS MEMBERS MUST HAVE A 100mm MIN BEARING.
 - ROOF & FIRST FLOOR MUST BE TIED DOWN TO WALLS WITH MS GALVANISED STRAPS OF 50mm x 5mm AT 1500mm CENTRES.
 - NEW ROOF SPACE TO BE VENTILATED TO BS 5260, BACKGROUND VENTILATION 8000mm2 EQUIVALENT AREA TO BE PROVIDED TO HABITABLE ROOMS.
 - NEW FOUNDATIONS / WALLS ARE TO CONFORM TO BUILDING REGULATION 1 & 2 / APPROVED DOCUMENT A.
 - THE FOUNDATION DIMENSIONS SHOWN ARE MINIMUM ONLY AND ARE GIVEN WITHOUT ANY ADVANCE KNOWLEDGE OF 'ON SITE' SOIL CONDITIONS. IF THE EXISTING FOUNDATIONS ARE TO TAKE ANY ADDITIONAL LOADS THEY SHOULD BE EXPOSED AND PASSED BY THE LA OR PRIVATE BUILDING CONTROL INSPECTOR ON SITE. IF PILES ARE REQUIRED THE BUILDER IS TO PROVIDE PLAN / PAPERWORK OF EXACT DETAILS TO BUILDING CONTROL. JR HESLOP WILL NOT BE INVOLVED IN THE DESIGN OF THE PILES.
 - ANY UNDER-SITE DRAINAGE MUST BE EXPOSED & ENCASED IN 150mm CONCRETE.
 - NEW WALL CAVITIES MUST BE INSULATED AS PER SPECIFICATION OR WITH 150mm APPROVED INSULATION TO ACHIEVE THE 'U' VALUE FOR WALLS.
 - NEW STEELWORK MUST HAVE A MINIMUM FIRE RESISTANCE OF 30 MINUTES.
 - ALL WALL CAVITIES ARE TO BE CONTINUOUS.
 - ALL CAVITY BARRIERS TO E2/3/4 APPENDIX G2.
 - RE LINTELS BUILT INTO WALLS OVER DRAINS.
 - FOUNDATIONS WITHIN 1000mm OF DRAINS TO BE TAKEN DOWN TO DRAIN INVERT LEVEL.
 - CAVITY CLOSURES TO HAVE VERTICAL & HORIZONTAL DIPS INSULATED TYPE.
 - ALL NEW LAMING IS TO COMPLY WITH BS 5572.
 - ALL MATERIALS USED IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS.
 - NEW DRAINAGE Laid TO SELF DRAINING FALLS WITH ROOFING ACCESS.
 - NEW INSULATION TO BE INSTALLED AS PER 'ROBUST DETAILS' ISSUED BY DEFRA.
 - LIGHTING MUST BE LOW ENERGY LIGHT FITTINGS WITH A MINIMUM LUMINOUS EFFICIENCY OF 75 LIGHT SOURCE LUMENS PER CIRCUIT-WATT.
 - MAINS OPERATED INTERLINKED SMOKE DETECTORS TO BS 5446-2 DOMESTIC & BS5446-2:2000 & BS5446-2:2003 COMMERCIAL DETECTORS INTERLINKED WITH BATTERY SHOWN.
 - THE CLIENT / HOME OWNER MUST INFORM THEIR NEIGHBOURS OF WORK TO BE CARRIED OUT ON OR NEAR TO BOUNDARY AS REQUIRED BY THE PARTY WALL ACT IN WRITING 2 MONTHS BEFORE WORKS BEGIN. THE CLIENT/HOMEOWNER IS RESPONSIBLE FOR CORRECT LOCATION / ACCURACY OF THE BOUNDARY SHOWN. THE BUILDER MUST BE AWARE OF THE REQUIREMENTS OF THE PARTY WALL ACT AND MUST STUDY THE BOOKLET AVAILABLE FROM THE LOCAL AUTHORITY BEFORE COMMENCING THE PROJECT.
 - ELECTRICAL WORKS BY "COMPETENT PERSON SCHEME" MEMBER.**
THE CLIENT / HOMEOWNER MUST SATISFY THEMSELVES THAT THE ELECTRICIAN (WEATHER EMPLOYED VIA THEMSELVES OR BUILDING CONTRACTOR) IS QUALIFIED TO CARRY OUT ALL OF THE PARTS OF THE PROPOSED ELECTRICAL WORKS & TEST THE WORKS IN ACCORDANCE WITH BS 7671 THE IEE 18th EDITION WIRING GUIDANCE AND ARE FULLY AUTHORISED TO ISSUE RELEVANT CERTIFICATES AS REQUIRED BY PART P OF THE BUILDING REGULATIONS EFFECTIVE 11/05. ALL ELECTRICAL WORKS MUST MEET THE REQUIREMENTS OF PART P ELECTRICAL SAFETY 1 AND WILL BE DESIGNED, INSTALLED, INSPECTED, TESTED BY A PERSON COMPETENT & QUALIFIED TO DO SO AND A SELF CERTIFICATION CERTIFICATE BE SUBMITTED / ISSUED TO THE LOCAL AUTHORITY BY THE COMPETENT PERSON WITH 30 DAYS OF COMPLETION OF THE ELECTRICAL WORKS. THE CLIENT / HOMEOWNER MUST ALSO RECEIVE A COPY OF THE SELF CERTIFIED CERTIFICATE & A BS 7671 ELECTRICAL INSTALLATION TEST CERTIFICATE.
 - ELECTRICAL WORKS BY "NON-COMPETENT PERSON SCHEME" MEMBER**
ALL WIRING & ELECTRICAL WORKS MUST BE DESIGNED, INSTALLED, INSPECTED & TESTED IN ACCORDANCE WITH THE REQUIREMENTS OF BS 7671 THE IEE 18th EDITION WIRING REGULATIONS & PART P ELECTRICAL SAFETY. ON COMPLETION OF THE WORKS A COPY OF THE INSTALLERS TEST CERTIFICATE COMPLIANT WITH BS 7671 IS TO BE PROVIDED TO THE CLIENT / HOMEOWNER & LOCAL AUTHORITY AND PRIOR TO ANY COVERING OF THE WIRING & CABLES OF THE INSTALLATION BE INSPECTED BY A INDEPENDENT "COMPETENT PERSON" AND ON COMPLETION OF THIS INSPECTION IN ADDITION TO THE ABOVE STATED CERTIFICATE AN ADDITIONAL "COMPETENT PERSONS" ELECTRICAL INSTALLATION CERTIFICATE COMPLIANT WITH BS 7671 IS TO BE PROVIDED TO THE HOMEOWNER / CLIENT & LOCAL AUTHORITY. A "COMPETENT PERSON" MEANS A MEMBER OF ODR P ELECTRICAL COMPETENT PERSON SCHEME.
 - MECHANICAL VENTILATION TO BE FITTED AS FOLLOWS: BATHROOMS TO HAVE 15LTR/SECOND AIR CHANGE, KITCHENS AND OTHER AREAS TO HAVE A MIN OF 60LTR/SEC AIR CHANGE DUCTED TO EXTERNAL AIR. FANS TO HAVE A 15 minute OVER RUN TIME IN ADDITION THE WINDOWS TO THESE AREAS TO HAVE CONTROLLABLE VENTS OF MIN 25000mm2.
 - ANY WORKS CARRIED OUT ON THE GAS APPLIANCES OR CENTRAL HEATING SYSTEM MUST ONLY BE DONE SO BY A GAS SAFE REGISTERED CONTRACTOR.
 - GAS FITTING HEATING SYSTEMS REQUIRE 92% MINIMUM EFFICIENCY GAS BOILERS FITTED IN EXISTING DWELLINGS REQUIRE ONE OF THE FOLLOWING: FLUE GAS HEAT RECOVERY / WEATHER COMPENSATION / LOAD COMPENSATION SMART THERMOSTAT WITH AUTOMATION & OPTIMISATION. IN ANY CASE THE REGISTERED INSTALLER MUST BE FAMILIAR WITH CURRENT APPROVED DOCUMENT L1.
 - THERE MAY BE FEES DUE TO PAY TO THE LA OR PRIVATE BUILDING CONTROL BEFORE THE BUILDING INSPECTOR ISSUES / SIGNS OFF THE PROJECT, THE HOMEOWNER/CLIENT SHOULD CHECK WITH THEIR BUILDING CONTRACTOR.
 - THE BUILDER MUST TAKE REASONABLE MEASURES TO PREVENT AIR LEAKAGE FROM THE PROPERTY & AIR GAPS AROUND DOOR & WINDOW FRAMES TO BE SEALED. FLOORS MUST BE AIRTIGHT AND ANY HOLES IN THE EXTERNAL WALLS FOR DRAINAGE ECT TO BE FULLY SEALED, ALL INSULATION TO BE CONTINUOUS WITHOUT AIR GAPS.
 - POLYWOODS MUST MEET A MINIMUM STANDARD OF EN 13986 UNTIL THE TRADA TEST STANDARD HAS BEEN ESTABLISHED.
 - THE DESIGNER (JR HESLOP) IS NOT RESPONSIBLE FOR ANY VOIDS / DRAINS OR OTHER UNDERGROUND OBSTRUCTIONS FOUND NEAR OR UNDER THE BUILD SITE.
 - A PROPER SUPPLY OF AIR IS TO BE PROVIDED TO THE KITCHEN IN ORDER THAT THE COOKING APPLIANCES CAN FUNCTION EFFICIENTLY WITHOUT CAUSING DISCOMFORT.
 - A CONTINUOUS SUPPLY OF HOT WATER TO BE PROVIDED TO THE KITCHEN THAT DOES NOT EXCEED THAT LAID DOWN.
 - ALL NEW STEELWORK IS TO BE 90 minute FIRE PROOF IE 2 x 10mm PLASTERBOARD LAYERS AND SKIM ON 50mm x 50mm TIMBER HOUSING @ 400mm CENTRES.
 - THE CLIENT MUST BE SURE THAT THE SIZES OF THE ROOMS SHOWN ARE SATISFACTORY.
 - IF THE PROPOSED ROOF IS TO BE OF A GANGED TRUSS SYSTEM THE BUILDER MUST OBTAIN APPROVAL FROM BUILDING CONTROL FOR THE DESIGN / TRUSS CALCULATION BEFORE WORK COMMENCES.
 - THIS PLAN IS PROVIDED FOR BUILDING REGULATION SUBMISSION / APPROVAL AND IF REQUIRED PLANNING PERMISSION AND DOES NOT TAKE INTO ACCOUNT ANY FAULTS IN THE EXISTING STRUCTURE OF THE PROPERTY.
 - AMENDMENTS TO THE PLAN AFTER PLANNING PERMISSION HAS BEEN ACHIEVED MAY REQUIRE A NEW APPLICATION. IF CLIENT HAS INSTRUCTED DESIGNER (JR HESLOP) THAT PLANNING IS NOT REQUIRED DUE TO ADVICE FROM A 3RD PARTY JR HESLOP IS FREE FROM ANY OBLIGATIONS THAT MAY ARISE IF AN ISSUE FROM PLANNING DEPARTMENT HAPPENS DURING CONSTRUCTION.
 - IT IS THE RESPONSIBILITY OF THE BUILDING CONTRACTOR TO OBTAIN A COMPLETION CERTIFICATE FROM THE PRIVATE OR LA BUILDING CONTROL DEPARTMENTS ONCE THE FINAL CHECK HAS BEEN COMPLETED AND THE PROJECT IS SIGNED OFF BY THE BUILDING INSPECTOR.
 - IF REQUIRED THE HOMEOWNER / CLIENT MUST INFORM THE LEASEHOLDER OF THE PROPOSED WORKS / PROJECT THAT IS TO BE CARRIED OUT ON THE PROPERTY BEFORE WORKS COMMENCE.
 - IF THE HOME OWNER / CLIENT OR BUILDER COMMENCES ANY WORK WITHOUT FULL PLANS APPROVAL IN PLACE THEY DO SO AT THEIR OWN RISK AND THE DESIGNER (JR HESLOP) WILL NOT ACCEPT ANY LIABILITY FOR ANY PERSONAL INJURY SUFFERED / ALTERATIONS, COSTS, DELAYS OR LEGAL PROCEEDINGS RESULTING FROM THIS.
 - AS ASKED THE DESIGNER (JR HESLOP) WILL VISIT & MEASURE THE PROPERTY THEN DESIGN THE PROJECT TO THE CLIENTS WISHES. COMPLETE RELEVANT APPLICATION FORMS HOUSE AS BEST ON FEES AND PREPARE APPLICATION PACKS READY FOR SUBMISSION BUT WILL NOT TAKE PART IN ANY BUILDING WORKS.

PROPOSED REAR SINGLE STOREY EXTENSION & REAR DORMER + internal Modifications
for
Mr Ben Holt
No 89, Beech Road
Chorlton
M21 9FD
Drawn by
JR Heslop
jrheslop@bt.com
Scale 1:50 & 1:100 @ A1 Paper size