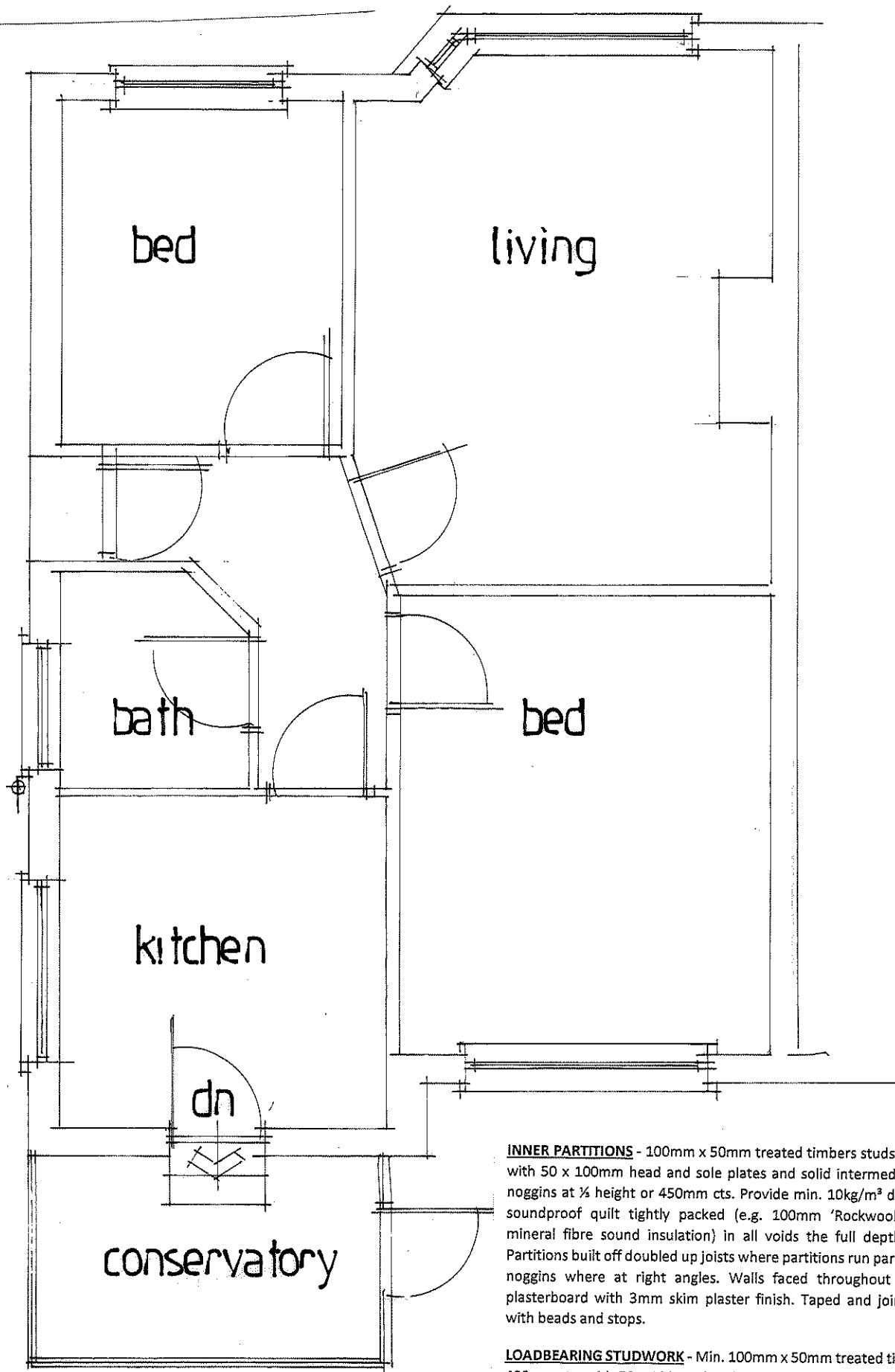


EXISTING PARTY WALL - The existing walls must be checked for stability and be free from defects as required by the Building Control Officer. Provide a scratch coat render to existing wall. Insulate wall on the warm side using 72.5mm 'Xtratherm Thin-R XT77L' insulated plasterboard with 3mm skim plaster finish. Plasterboard to be bonded, using dot and dab method, to the existing construction with proprietary adhesive at 300mm centres vertically/horizontally and in accordance with manufacturer's instructions. Tape joints and seal perimeter edges with mastic, to provide a vapour control layer (VCL). All work in accordance with BS 8212 (Code of practice for dry lining).

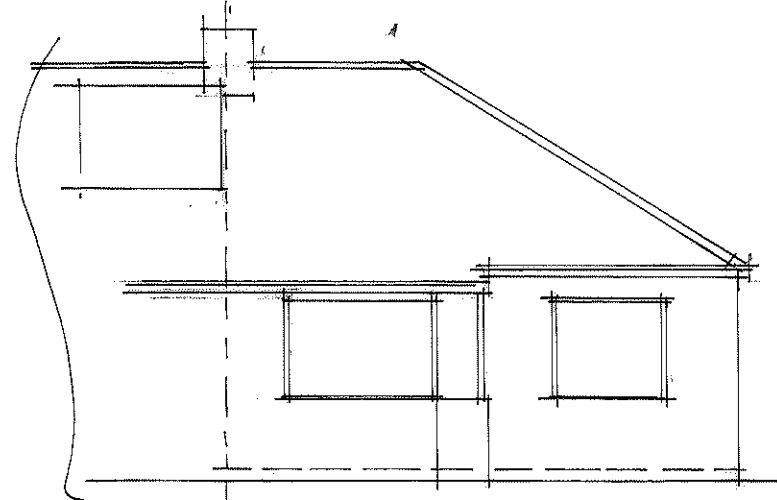


existing ground floor

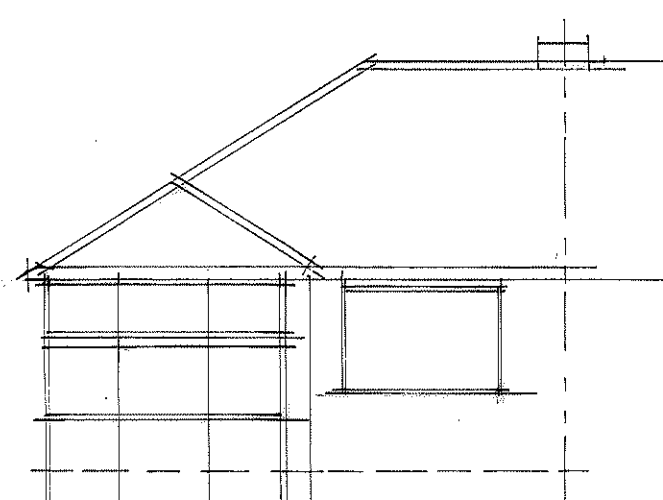
ASHLAR WALLS - Construct stud wall using 100mm x 50mm head and sole plates and vertical studs (with noggin) at 400mm cts. Insulation to be 90mm 'Celotex GA4000' between studs with 50mm 'Celotex GA4000' over. Provide VCL and 12.5mm plasterboard over internal face of insulation. Finish with 3mm skim coat of finishing plaster. All junctions to have watertight construction, seal all perimeter joints with tape internally and with silicon sealant externally. TO ACHIEVE A U-VALUE OF 0.18W/m²K.

INNER PARTITIONS - 100mm x 50mm treated timbers studs at 400mm cts. with 50 x 100mm head and sole plates and solid intermediate horizontal noggins at 1/4 height or 450mm cts. Provide min. 10kg/m³ density acoustic soundproof quilt tightly packed (e.g. 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. Walls faced throughout with 12.5mm plasterboard with 3mm skim plaster finish. Taped and jointed complete with beads and stops.

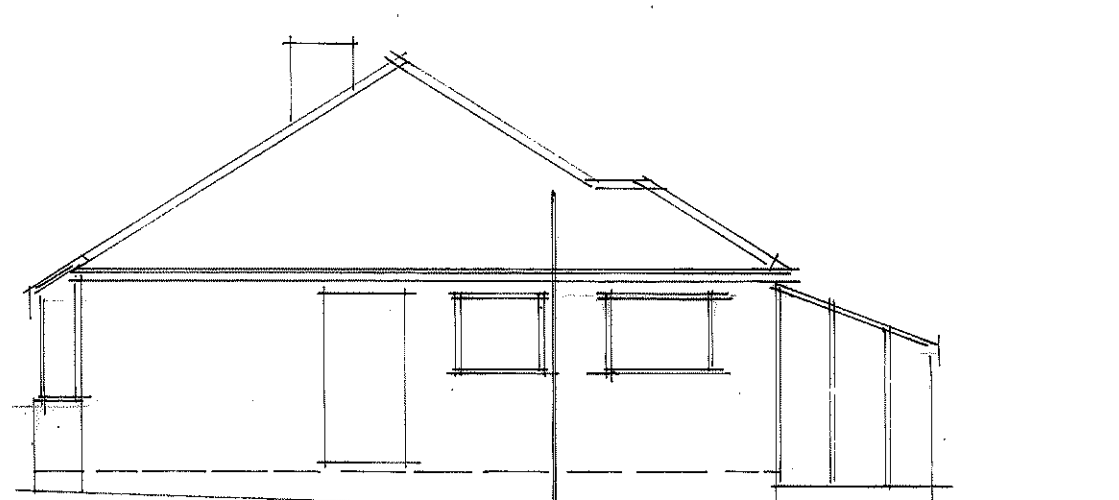
LOADBEARING STUDWORK - Min. 100mm x 50mm treated timbers studs at 400mm cts. with 50 x 100mm head and sole plates and solid intermediate horizontal noggins at 1/4 height or 450mm cts. Provide min. 10kg/m³ density acoustic soundproof quilt tightly packed (e.g. 100mm 'Rockwool' or 'Isowool' mineral fibre 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. One side of wall to be faced with 12.5mm plasterboard and one side to be 12mm Plywood glued and screwed to studs both with 3mm skim plaster finish. Taped and jointed complete with beads and stops. Provide cross strapping with 1000mm x 30mm x 5mm, galvanized M.S. straps or other approved in compliance with BS EN 845-1 at max 2.0m cts.



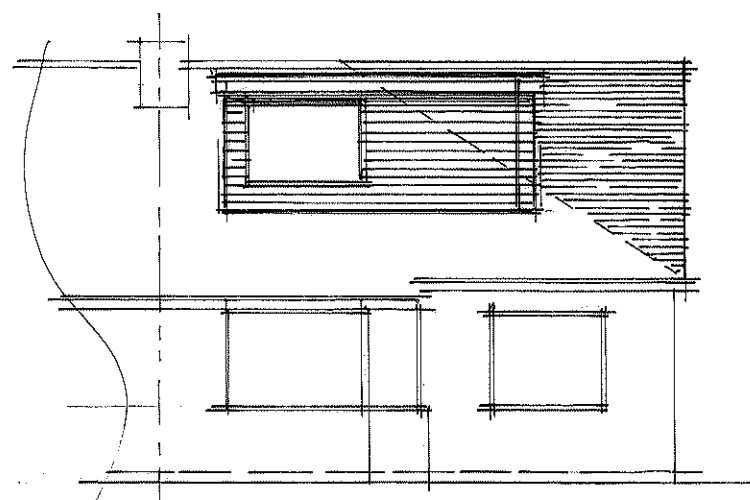
existing front



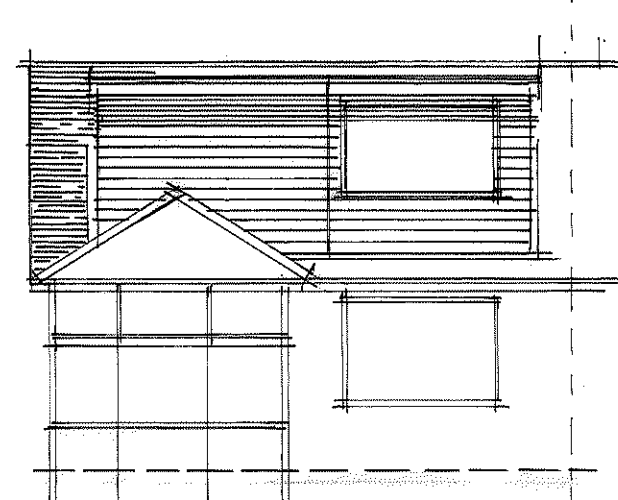
existing rear



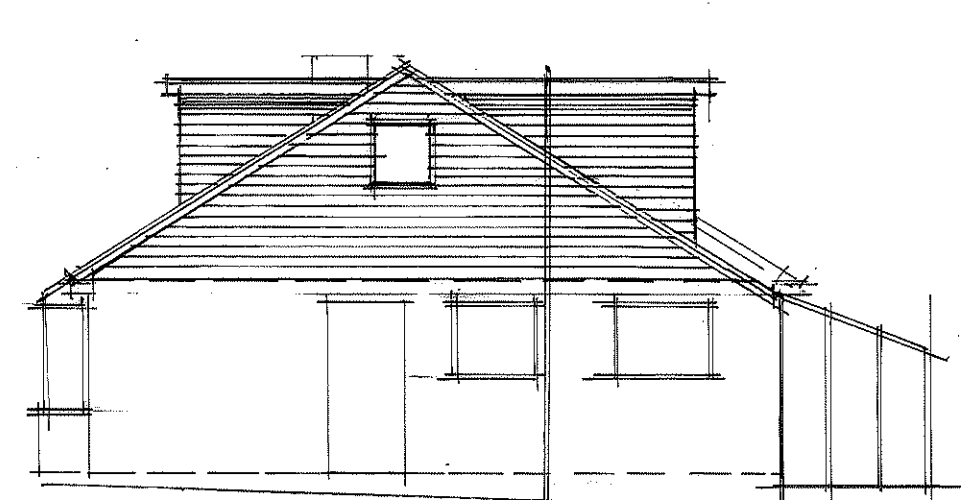
existing side



proposed front



proposed rear



proposed side

DORMER FLAT ROOF (WARM) - Flat roof to be single ply membrane roofing providing AA fire rating for surface spread of flame with a current BBA or WIMLAS Certificate and laid to specialist specification. Single ply membrane to be fixed to 18mm exterior quality plywood (if required by manufacturer) over 150mm Ecotherm Eco-torch insulation. Insulation bonded to 18mm external quality plywood decking or similar approved on frings to min. 1 in 80 fall on treated 200x50mm, C24 joists at 400mm cts. Underside of joists to have 12.5mm foil backed plasterboard and 5mm skim. Provide restraint to flat roof by fixing of 30x5x1000mm M.S. galvanized lateral restraint straps at max. 2000mm cts fixed to 100x50mm wall plates and anchored to wall. TO ACHIEVE A U-VALUE OF 0.15W/m²K.

CONVERSION OF EXISTING ROOFSPACE - Existing roof condition must be checked and be free from defects as required by the Building Control Officer any defective coverings or felt to be replaced in accordance with manufacturer's details. Either plant on or fit new 150mm x 50mm rafters alongside existing to achieve minimum 150mm depth. 100mm 'Xtratherm ECO360 MA' insulation between rafters and 50mm under rafters. Fix 12.5mm plasterboard (joints staggered) over VCL. Finish with 3mm skim coat of finishing plaster to the underside of all ceilings. Maintain a 50mm air gap above insulation to ventilate roof. Provide opening at eaves level at least equal to continuous strip 25mm wide and opening at ridge equal to continuous strip 5mm wide to promote ventilation or provide equivalent high and low-level tile vents in accordance with manufacturer's details. TO ACHIEVE A U-VALUE OF 0.16W/m²K.

MECHANICAL EXTRACT - Provide mechanical extract ventilation to WC/bathroom/shower room ducted to external air capable of extracting at a rate of not less than 15 l/sec. Vent to be connected to light switch and to have 15 minutes over run if no window in the 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. Intermitent 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.

PLUMBING - All to 'BS EN 2056' plus approved doc H 38mm dia. wastes from the shower or bath, 32mm dia. waste from wash hand basin, all with rodding access on changes of direction and with deep seal traps. Run to existing soil and vent pipe.

GABLE WALL (DORMER) - Build up as dormer walls. Tie to roof joists with 1m x 32 x 5mm M.S. galvanised straps at 1.2m centres. Fit cavity tray at the horizontal junction with existing gable wall if not insulated. TO ACHIEVE A U-VALUE OF 0.18W/m²K.

proposed ground floor

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Principle Contractor is to ensure all materials and workmanship comply with Regulation 7 of the Building Regulations whether or not specifically stated on these drawings. It is the Principle Contractors' duty to ensure all works on site are approved by an appointed Building Control body.

Principle Contractor is to ensure dimensions are taken on site before procurement of any materials/work proceeding. Structural members are not to be ordered scaling from this drawing.

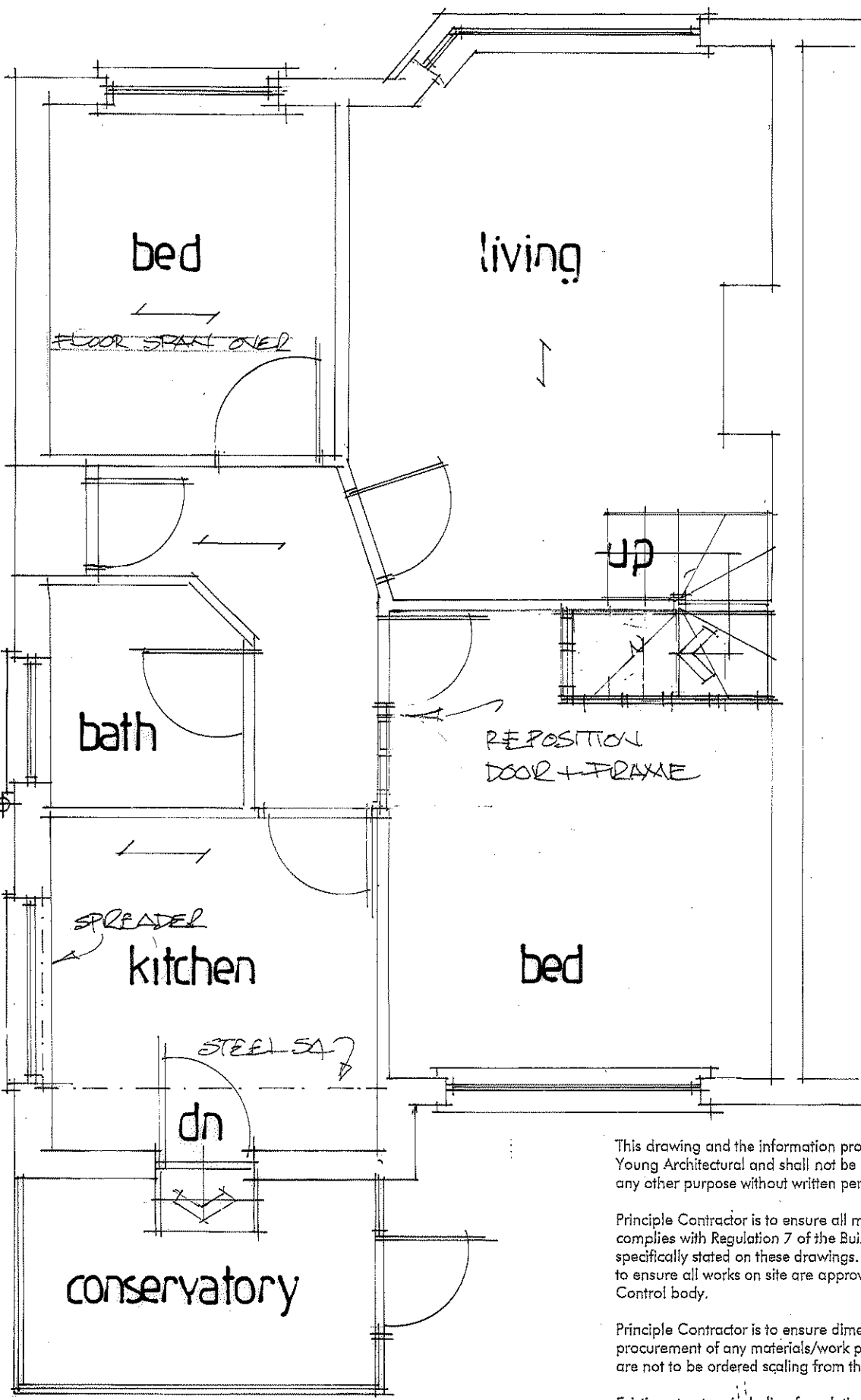
Existing structure including foundations, beams, walls and lintels carrying new and altered loads are to be exposed and checked by Principle Contractor before commencing the works for adequacy prior to commencement of work and as required by the Building Control Officer. Any discrepancies please contact Thorns Young.

Principle Contractor to ensure full compliance with the amended CDM Regulations (2015) if the project requires.

This drawing, unless noted, does not represent compliance with the Party Wall Act 1996 and if required, all agreements are to be in place before works commence.

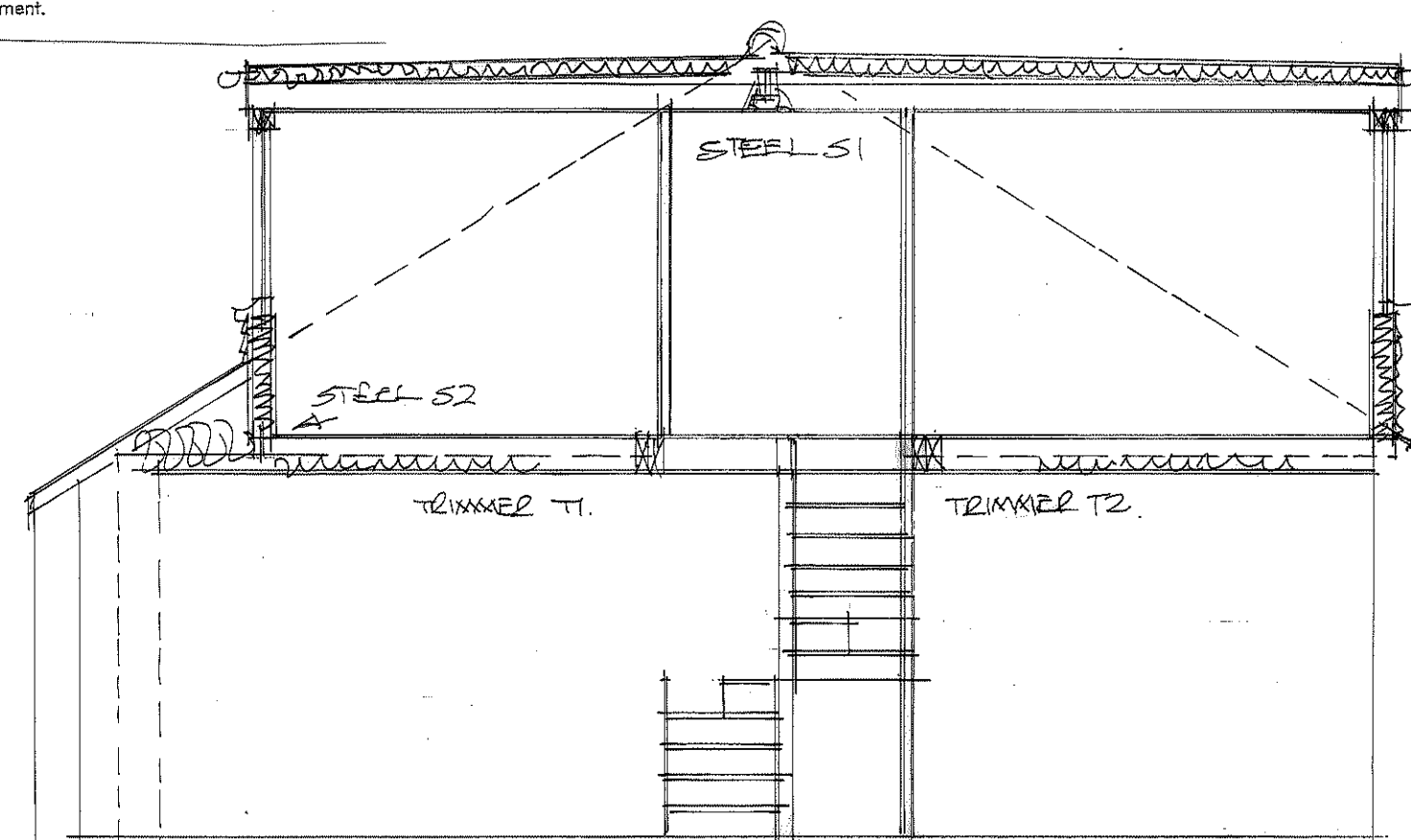
It is the Principle Contractors' responsibility to ensure Planning/Building Control approvals are in place prior to works commencing. Should works commence prior to relevant approvals Thorns Young Architectural accept no responsibility.

Do not scale from this drawing except for the purpose of Local Authority Planning department.



proposed loft

NEW STAIRCASE - Stairs to comply with BS5585 and with Part K of the Building Regulations. Max. rise 220mm, min. going 220mm. Two risers plus one going should be between 550 and 700mm. Tapered treads to have going in centre of tread at least the same as the going on the straight. Min. 50mm going of tapered treads measured at narrow end. Min. clear width 800mm. Pitch not to exceed 42 degrees. The width and length of every landing should be at least as great as the smallest width of the flight. Doors which swing across a landing at the bottom of a flight should leave a clear space of at least 400mm across the full width of the flight. Min. 2.0m headroom measured vertically above pitch line of stairs and landings. However, if there is not enough space to achieve this height the headroom will be satisfactory if the height measured at the centre of the stair width is 1.9m reducing to 1.8m at one side of the stair. Handrail on staircase to be 900mm above the pitch line, handrail to be at least one side if stairs are less than 1m wide and on both sides if they are wider. Ensure a clear width between handrails of min. 600mm. Balustrading designed to be unclimbable and should contain no space through which a 100mm sphere could pass. Any wall or door glazing in the stair enclosure will be upgraded to achieve half-hour fire resistance. ALL DIMENSIONS AND CLEARANCES TO BE CHECKED AND MEASURED ON SITE PRIOR TO FABRICATION OF STAIRS.



section a-a

NEW AND REPLACEMENT DOORS/WINDOWS - Glazed areas to be double glazed with 16-20mm 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 12543-1:2011 and Part K of the current Building Regulations. 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. Insulated plasterboard to be used in reveals to abut jambs and to be considered within reveal soffits. Fully insulated and continuous cavity doors to be used around reveals. Windows and door frames to be taped to surrounding openings using air sealing tape. Windows to be fitted with trickle vents to provide min 8000mm³ background ventilation in accordance with Approved Document F. Local authority may insist on a SAP calculation to prove areas with large amount of glazing. This will involve extra fee if required. TO ACHIEVE A U-VALUE OF 1.4W/m²K.

SAFETY GLAZING - All glazing in critical locations to be toughened or laminated safety glass to BS 6206, BS EN 14179 or BS EN ISO 12543-1:2011 and Part K of the current building regulations. E.g. 1.5m above floor level in doors and side panels within 300mm of door opening and within 800mm above floor level in windows.

EXTEND EXISTING SVP - Into new bathroom and terminate with 'Durgo auto-vent' or, if no other vent pipe on the drain run, extend SVP up and within roof slope to terminate to air min. 900mm above window heads.

ELECTRICAL WORKS - 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, BS, 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 the Council.

INTERNAL LIGHTING - Install low energy light fittings that only take lamps having a luminous efficiency better than 80 lumens per circuit watt. All fixed to have lighting capacity (lm) 185 x total floor area, to comply with Part L of the current Building Regulations and the Domestic Building Services Compliance Guide. Any recessed ceiling lights to be 30-minute fire resisting.

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 by laws, Gas safety requirements and IEEE regulations.

FLOOR IN ROOF SPACE - Ensure first floor achieves modified half-hour fire resistance. Min. 20mm floor grade T&G chipboard, 2.3 grade in bathrooms on 200x50mm joists at 400mm cts. Joists to be doubled under and parallel to partitions over. Joists spans over 2.5m to be struttled at mid span use 38 x 38mm herringbone strutting of 38mm solid strutting (at least 1/2 of joist depth). 12.5mm foil backed plasterboard with 3mm skim plaster finish. Remaining roof spaces to be floored as the main area when joists extend out to outer walls. Provide lateral restraint where joists run parallel to walls. Floors are to be strapped to walls with 1000mm x 30mm x 5mm galvanised mild steel straps or other approved in compliance with BS EN 845-1 at max 2.0m cts, straps to be taken across min. 30m joists. Straps to be built into walls. Provide 38mm wide x 1/2 depth solid noggins between joists at strap positions. 'Simpson strong-tie' or similar galvanised joist hanger connection to steelwork where applicable. Purpose made M.S. shoe/hanger where fitch beams join to steelwork or other fitch beams. To upgrade to half hour fire resistance and provide adequate sound insulation lay min. 150mm 'Rockwool' insulating material or equivalent on chicken wire between joists and extended to eaves. Chicken wire to be fixed to the joists with nails or staples these should penetrate the joists side to a min. depth of 20mm, in accordance with BRE-Digest 208 1988. Joists to be 50mm min. from chimney breasts.

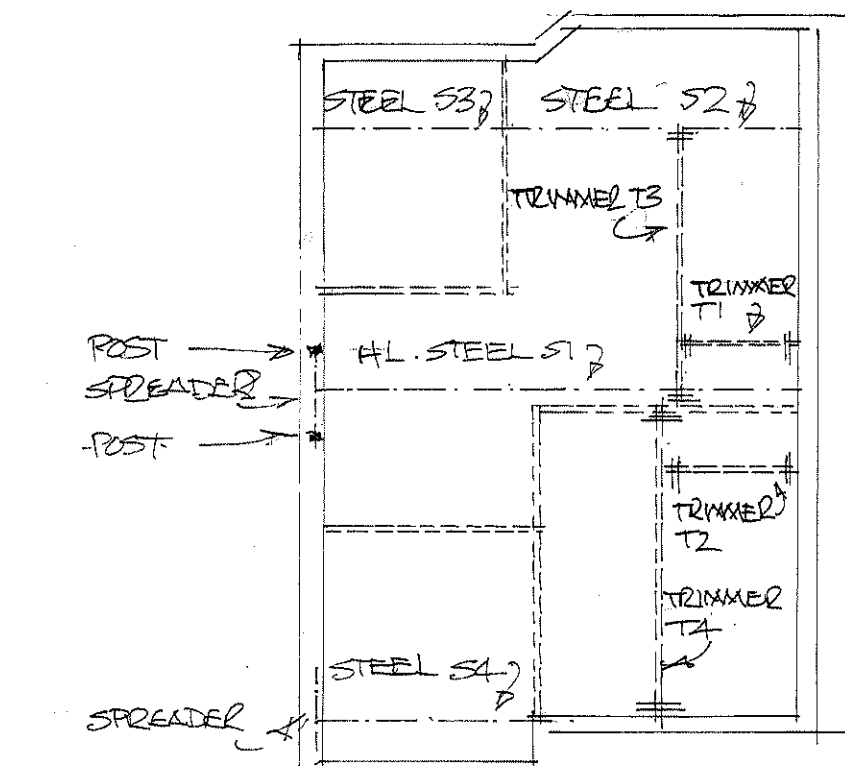
PITCHED ROOF (INSULATION AT RAFTER LEVEL) - Roofing tiles to match existing on 25 x 38mm treated battens on breathable sarking felt to relevant BBA Certificate. Supported on 150 mm x 50 mm grade C24 rafters at max. 400 cts. Rafters supported on 100 x 50mm treated wall plates. Allow min. 20mm air space to allow for draze of breathable felt. Insulation to be 130mm 'Celotex XRA4000' between rafters and 50mm 'Celotex GA4000' under. Fix 12.5mm foil backed plasterboard (joints staggered) to the underside of all ceilings using galvanised plasterboard nails. Finish with 5mm skim coat of finishing plaster. Joists tied to rafters (if raised collar roof consult structural engineer). 100mm x 50mm wall plate strapped down to walls. Joists and rafters to be strapped to walls and gable walls, straps built into cavity, across at least 3 timbers with noggins. All straps to be 1000 x 30 x 5mm galvanised straps or other approved to BS EN 845-1 at 2m cts. TO ACHIEVE A U-VALUE OF 0.15W/m²K.

STEELWORK AND TIMBERS - Supply and install new structural elements such as new beams, roof structure, floor structure, bearings, and padstones in accordance with the attached structural calculations and details. Minimum bearing 100mm on concrete padstones, prestressed concrete lintels or metal bearings loaded to be encased in 12.5mm 'Gyproc FireLine' board with staggered joints, 'Gyproc FireCase' or painted in 'Nullifire S' or similar intumescent paint to provide 1/2-hour fire resistance as agreed with Building Control at floor levels. All fire protection to be installed as detailed by specialist manufacturer.

LENGTHS OF STEELS TO BE SITE MEASURED TO INCLUDE BEARINGS. FABRICATION DETAILS TO BE PROVIDED IF REQUIRED BY BUILDING CONTROL.

DORMER HYBRID FLAT ROOF (SuperFOIL) - 12.5mm solar reflective chippings to achieve AA designated fire rating for surface spread of flame with a current BBA or WIMLAS Certificate and bedded in bitumen on three layer felt to BS 6229 laid on 18mm exterior quality plywood over 50mm 'Celotex TR4000' insulation bonded to 18mm external quality plywood decking or similar approved on frings to min. 1 in 80 fall over 'SuperFOIL SFO' to manufacturers specification between frings and treated 200x50mm C24 joists at 400mm cts. Underside of joists to have 12.5mm foil backed plasterboard and 3mm skim. Provide restraint to flat roof by fixing of 30x5x1000mm M.S. galvanized lateral restraint straps at max. 2000mm cts fixed to 100x50mm wall plates and anchored to wall. TO ACHIEVE A U-VALUE OF 0.15W/m²K.

0 1 2 3 4 5 scale 1:50. m.
0 2 4 6 8 10 scale 1:100. m.



structural layout n.t.s

A	Date	Revision
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THORNS YOUNG ARCHITECTURAL		
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Portsmouth 232 London Road North End PO2 9JQ Tel: (02392) 672 883		
Client	MR. L. PAFETT.	
Job Title	55 LINDA GROVE WATERLOOVILLE	
Drawing Title	PROPOSED LOFT CONVERSION WITH GABLE BUILD UP AND FRONT AND REAR DORMERS.	
Scale	1:50 + 1:100	
Date	JUNE 21	Drawn by CMC
Drg. No.	8119:24	Rev. 4