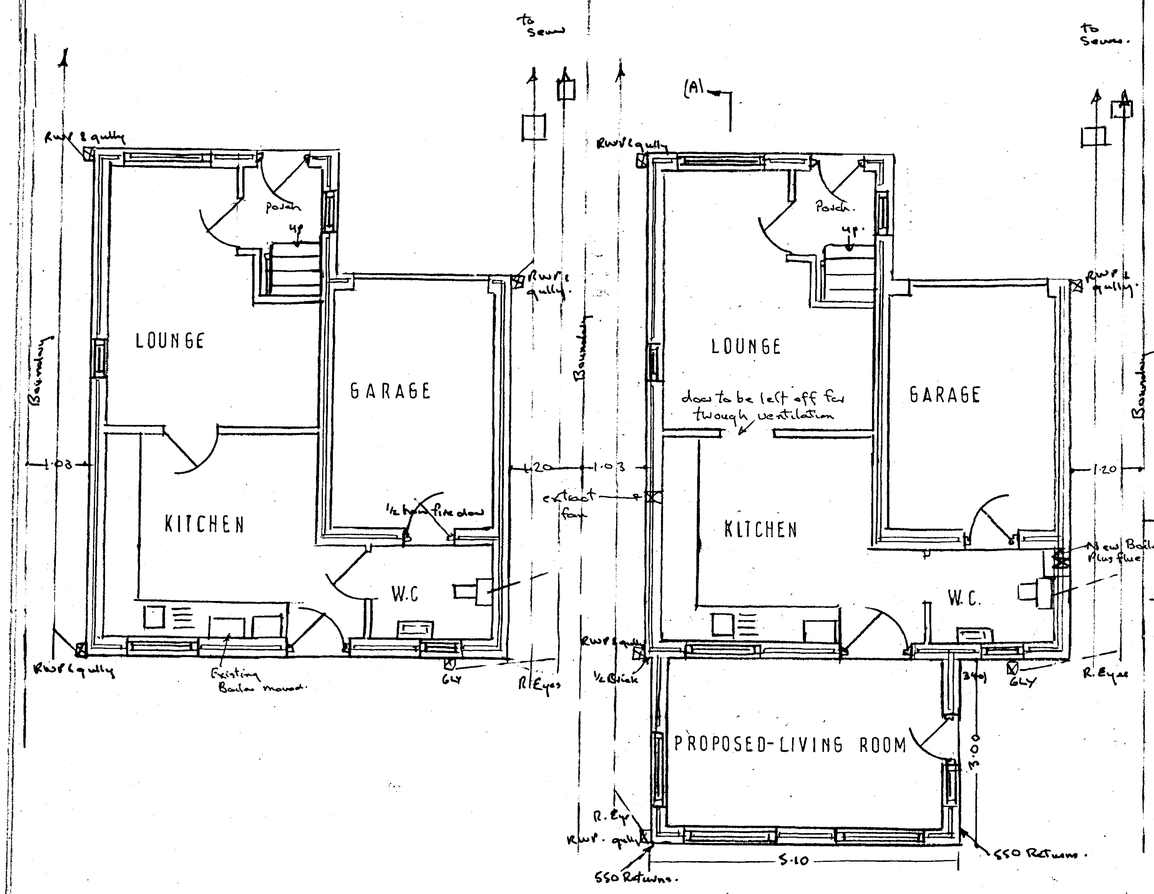
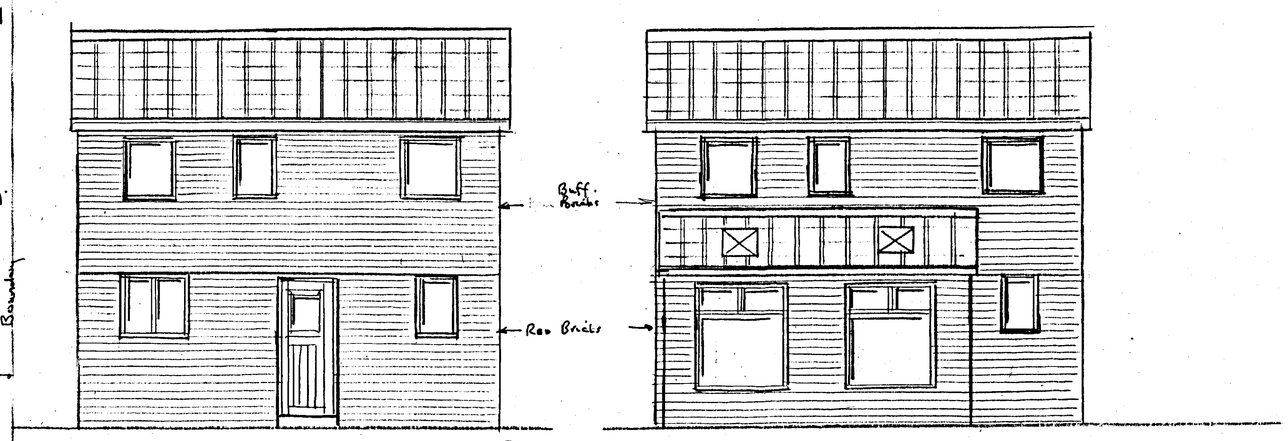


EXISTING - GROUND FLOOR PLAN.

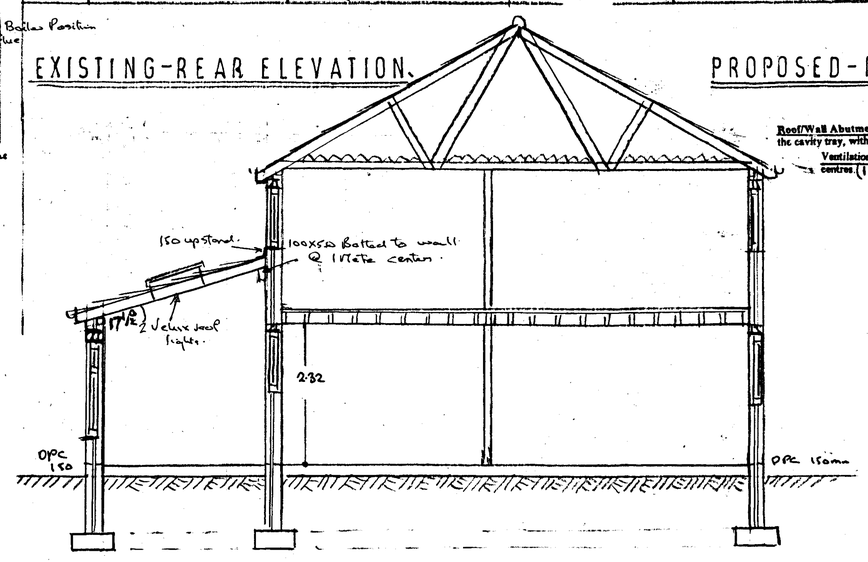
PROPOSED-GROUND FLOOR PLAN.

SCALE:-1·50

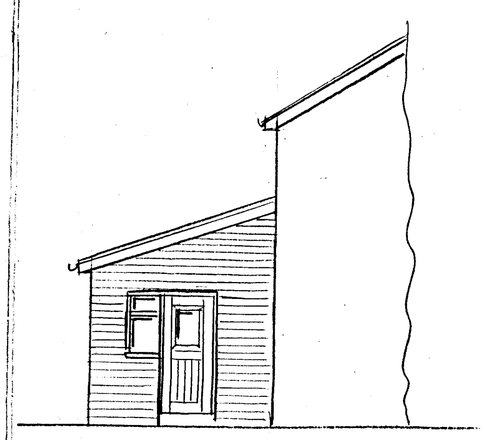


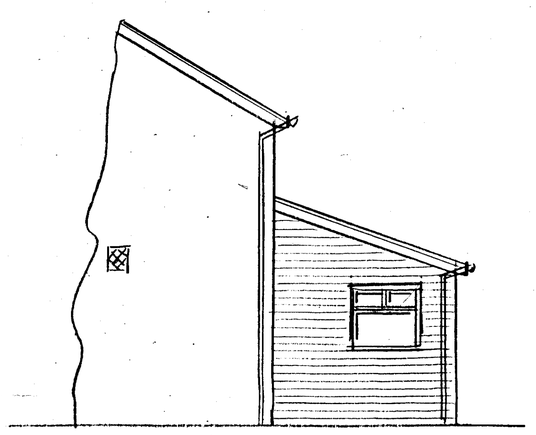
EXISTING-REAR ELEVATION.

PROPOSED-REAR ELEVATION.



PROPOSED-SECTION A-A





PROPOSED - SIDE - ELEVATIONS

Specification

Specification for Drains: Drains to be in 100mm PVC to 1 in 40 gradient laid on stone bed, where passing under walls use suitable RC concrete lintel. Drains under extension to be exposed and surrounded with concrete.

Redundant Drains: Should be sealed with concrete. Existing channels within any existing manholes should be replaced with a full pipe.

Specification required for manholes i.e.: manholes to be of the concrete sectional type i.e. 'briercrete' or similar with joists bedded in one third cement/sand mortar, on a 150 concrete bed and with medium duty cover.

Manholes required at changes of direction: one outside kitchen extension, and one within garage. The latter to have double sealed cover (bolted) with brass screws and furrules.

Manholes within Building: To have double sealed cover (bolted) with brass screws and ferrules. **Please encase the SVP** for 30 mins fire resistance where it passes through the garage/or provide an in tumescent collar at the point where it passes into the house.

New soil and vent stacks to be 100mm diameter with rodding points at each elbow and at ground level. Stack to be terminated NLT 900mm above any opening light, and fitted with a vent cowl.

No connection is to be made to a soil stack within 200mm below the centre line of the panarm connection.

If soil and vent pipe inaccessible rodding eye required at base of stack, ½ hour fire projection where passing through floor. Also lead sleeve (4lb) required where passing through the roof.

Rainwater gutters to be 110mm half round or profiled to match existing with 75mm diameter rainwater down pipes or other to match existing.

Rainwater pipe to discharge over a trapped gully.

Draught proofing and sealing measures to be provided in accordance with Approved Document L 1:24 to 1:26.

Patio doors to be double glazed with vented frame to 10,000mm² and with minimum dimension of 10mm.

Closeable Trickle Vents required as background ventilation, located where they will not cause drafts with a minimum aperture of 8mm, vented to the external air.

All Mechanical Vents are to be ducted to free air

Traps: To have 3" deep seal anti vac traps in PVC. (Sink, Bath and Shower) 40 mm diameter trap and 75 mm seal as above (Washbasin, Bidet) 32 mm diameter trap with 75 mm seal as above.

Waste Pipes: To be in 1½" PVC. Waste pipes on ground floor from new waste fittings should discharge over a back inlet gully.

A Cavity Tray is required above U beams, weep holes also required at vertical joints.
Roof Wall Abutments Use a Cavity tray linked to a code 4 lead flashing, with 6" upstand lunked to the cavity tray, with DPC inserted into existing wall.
Roof/Pitched/Flat Intersections to have felt and roof decking taken up the pitched roof a min of 450mm, behind the external roof tiles.
Valley to have a minimum of 175mm x 38mm layboards and valley boards, plus code 4 leading flashing, lead in valley gutter should be lapped over tilt fillets at each side. Double valleys to be notched and jointed together.
Any differences in roof levels Use code 4 lead flashings, to extend to underside of higher roof covering and returned under roof.

Approved Document P 'Electrical Safety'

Specification that the work will comply with BD7671 and the 16th edition wiring regulations. This must include the provision of appropriate circuits protected by suitable safety devices.

All electrical work required to meet the requirements of Part P (Electrical Safety) must be designed, installed, inspected and tested by a person competent to do so.

Prior to completion the Council must be satisfied that either:
A An electrical installation certificate issued under the Competent Person Scheme has been issued; or
B Appropriate certificates and forms defined in BS 7671 have been submitted that confirm that the work has been inspected and tested by a competent person. A competent person will have sound knowledge and experience relevant to the nature of the work undertaken and to the technical standards set down in BS 7671, be fully versed in the inspection and testing procedures contained in the regulations and employ adequate testing equipment.

A competent person may be a member of NICEIC or ECA. In addition, in the case of 'minor works' (see part P for definition) an electrician qualified to at least City & Guilds 2391 is considered to be a competent person.

In the case of option B the person carrying out the work must arrange for a competent person to inspect the electrical installation at pre-plaster stage and inspect and test prior to the installation being live.

The requirements of Part P only apply to electrical installations that are intended to operate at low (for example less than 1000v) or at extra-low voltage are:

- In new dwellings or flats;
- Extensions or alterations to existing dwellings;
- In buildings normally exempt under the building regulations, such as conservatories, sheds, detached garages and greenhouses.

Accessible Switches and Socket Outlets in the Dwelling
A way of satisfying the requirements would be to provide switches and socket outlets for lighting and other equipment in habitable rooms at appropriate heights between 450mm and 1200mm from finished floor level.

The ancillary accommodation requires a suitable number of self-contained and interlinked smoke alarms complying with BS 5466 Part 1. The smoke alarms may be wholly mains operated on a separately fused circuit or wired to the lighting circuit and provided with a rechargeable battery back-up.

The installation must satisfy requirements of Paragraphs 1.8 to 1.15 of the approved document in support of Regulation B.1. Manufacturers instructions on operation be handed to client on completion.

Smoke alarms should be provided at ground and first floor level within 7m of risk areas at

Interlinked hard wire smoke detection with battery back up system shall be included to circulation spaces only and a rate of rise heat detector device [interlinked] shall be included to the kitchen to accord with Approved Document B1. Note* smoke detectors are not recommended to kitchens as these would create false alarms. However, optical detectors tend to be less affected by low levels of invisible smoke that often causes false alarms.

Smoke alarm systems must have a standby power supply such as a battery.

Where new habitable rooms are created above ground level or at ground level without a final exit from the room, a smoke alarm system should be installed in the circulation spaces.

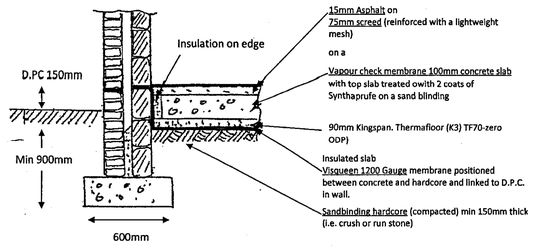
If smoke alarms are connected to a local lighting circuit there should be a means of isolating the power to the alarms without isolating the lighting.

Basic information should be given to occupants on the use of equipment and its maintenance. They should also be made aware that unauthorised alterations may leave them liable to prosecution.

Specification

Ground Floor

Requires to be of insulated construction



Cavity wall closured and windows and door jambs Cavities closed at reveals using thermal break dam course e.g. "Damcore", "Thermabate" or similar

To give U=0.2 Wm²/K

The cavity closures (dcp's) should be insulated to avoid cold bridging. Perimeter floor insulation should be used to avoid cold bridging. Insulation in walls and insulated blockwork should extend down below level with base of floor insulation. (i.e. min 150 below 6/level) Insulated slab joints to be taped. The clear cavity should be at leasr 225mm below the lowest dpc. The proposal does not effect any existing ducted ventilation under floors.

Foundations: To 600mm x 200mm deep concrete strip foundations in 21 Newton concrete in 1:2½:5 mix (C10P) taken minimum 900mm below ground level to suitable subsoil, or depth of invert of drains, whichever is the greatest. All foundations work or underpinning should comply with BS 8004.

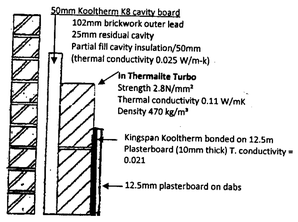
Internal Walls: To same depth as above but 450mm x 150mm deep concrete using dense crete blocks (7.0 Newtons).

External Walls: To be in 103mm facing bricks to match existing in cement mortar to designation 3. 75mm cavity partially filled on inside lead with 50mm Kooltherm K8 board. 100 Lightweight insulation block, Thermalite Shield 2000. Finish internally using insulated dry lining board and skim on dabs using Kooltherm K17 15mm thick with 12.5mm plasterboard bonded on to it and skim.

Ties to have mix horizontal spacing of 900mm and maximum vertical spacing of 450mm with wall ties not more than 300mm vertically within 225mm from sides of opening with unbonded jambs. (Use stainless steel wall ties). A DD140-2 Type 4 made from austenitic stainless steel. Finish with 16mm lightweight plaster.

Using Table A9:

From column C, row 3 of the table, the base thickness of the insulation layer is 79mm.



The base thickness may be reduced by taking account of the other materials as follows:

From Table A10:	
Brickwork outer leaf	Column C, Row 2 = 3mm
Cavity	Column C, Row 1 = 5mm
Lightweight plaster	Column C, Row 4 = 2mm
And from Table A11:	
Concrete blockwork	Column C, Row 5 = 11mm
Total reduction	21mm

The minimum thickness of the insulation layer required to achieve a U-value of 0.3 W/m2K (including) U for the wall ties) is therefore:

Base thickness less total reduction i.e.
79mm = 5mm

With 50mm Kingspan in the cavity it then required a further 8mm of insulation i/e/ use 10mm Kooltherm bonded onto 12.5 plasterboard and skim.

Ground Floor Insulation
(to u=0.20wm²⁰K) Thermal conductivity of 0.021.
Interpolation of Table A14 in Building Regulation L1.
Perimeter of slab = 37m
Area of slab = 45m²
Result = 0.820

Rounded off to 90mm thickness of Kingspan Thermafloor T.F. –Zero rated O.D.P.

SPECIFICATION FOR ROOF CONSTRUCTION WITH NO CEILING AND INCORPORATING VELUX ROOF LIGHTS.

Use 125 x 50 mm Rafters fixed to 100 x 50 wall Plates bolted to the wall at max 1, Metre centers . Rafters to be notched at both ends on to the wallplates. . Roof to be of Marley Modern Tiles at 17½ pitch fixed in accordance with manufacturers instructions and specifications and laid on 50mm x25mm battens on reinforced sarking felt(to BSS. 747) felt below battens.
Insulation to sloping ceilings(to U value of 0.22Wm⁻²⁰C) fixed to underside of rafters using THERMAPITCH T.P. 10 120mm thick.For stability, fix 6mm Plywood to underside of joists, and finish with 12.5 mm Plasterboard and skim. But maintain a min 50mm airspace behind.)
Fix GEDDSVALE vented tiles above and below new VELUX roof lights (Type G,P,L) with patent flashings(clear rooflight opening of 850mm high x 500mm wide.)
Fix tripple rafters on each side of the Velux including top and bottom.
The windows to have a min 16mm gap double glazed, in D.G. units with glass having a soft low E coating, ie; Pilkington "K" glass, or similar.

Lateral Restraint Tie walls to first floor Joists and flat roof Joists, using joist straps (read as appropriate). Tie walls to both roof, rafter, ceiling and chamber levels and up gable, including screwing wallplate to wall, on all perimeters where walls run parallel to those timbers, using min 30mm x 533 mild stell galvanised ties and max 2, metr including refernce to diagram 18, (lateral support a: roof level flat and sloping).

Catnic Lintols for cavities between 70mm and 85mm use CN3 over all openings in cavity walls, up to a max of 2.7span or use CN4 up to a max of 4.8 metres as appropriate (all with 150mm end bearings).

Closed Eaves (75mm cavity) Use Catnic Couger C.U.B 70-100 Insulated Lintols insulated for spans between 900mm and 3 metres with 150mm end bearings.

Catnics To be insulated in voids and have 13mm plasterboard and skim, or in Garage, finish with 16mm neat plaster.

Opening Lights to be 1/20th of floor area, with part of opening at least 1.75m above floor level, also to existing extended rooms. All windows to be double glazed.
Escape windows to inner rooms to be a minimum 850 x 500mm. If on first floor, escape windows to be provided with access for ladder externally, and max 1.5 metres from eaves to bottom of opening.
Escape windows to each bedroom will have a clear opening area of at least 0.33m with a minimum width and height of at least 450mm. The lower edge of the opening must be between 800mm and 1.1m above floor level unless windows are adequately guarded.
Safety glass to large windows, where indicated, including fully glazed doors. Any glazing in "critical locations" as defined in approved document "N" to B.S.6206, as indicated.
Glazing less than 800mm height above floor level to be in toughened glass or laminated glass to B.S.6206 1981. Doors and Side panels (within 300mm of doors) Glazing less than 1500mm height above floor level to be in toughened glass or laminated glass to B.S.6206 1981.

Note windows and (hall glazed) external doors are required to be double glazed with glazing units having a 16mm air gap and a low emissivity coating (such as pilkington K glass)

Confirm opening lights in lounge will be equal to 1/20 the combined floor area of the dining room/lounge.

Heating Extension of pipes from existing boiler within existing adjoining Building also additional heating from manufacturers boilers from product fittings.

If a new boiler is to be installed it should be of condensing type and have a minimum SEDBUK rating of 86%.

If not, the adequacy of the existing boiler should be checked to determine that it is capable of handling the proposed increased loads. Service pipes to be insulated and boiler control interlocks together with zone timing and temperature controls are required. In addition, the heating and hot water system should be commissioned so that at completion the system and their controls are left in working order and can operate efficiently. A copy of the Corgi Certificate should be given to the Local Authority on completion

Confirm the existing heating system will be altered and extended as necessary to the standards set out in The Domestic Heating Compliance Guide.

Any new radiators should have TRV's a "CORGI" registered plumber will install the heating system.

If an open flued appliance is present a flue spillage test should be carried out to ensure the mechanical extractors do not effect the safe operation of the appliance.

At least one of the new rooms created must have energy efficient lighting (fluorescent tube or compact fluorescent fittings) luminous efficacy greater than 40 lumens per circuit w

The boiler flue should be a minimum 600mm from the boundary or 300mm if the boiler is a fanned draught balanced flue.

Roof/Wall Abutments: Use a cavity tray linked to a 4lb lead flashing with 6" upstand linked to the cavity tray, with DPC inserted into existing wall.

Ventilation required at higher point of roof for cross ventilation – suggest Ubink univent tiles centres (1 METRE)

PROPOSED-LIVING ROOM EXTENSION. AT 7. KYLE MORE WAY. BESWICK. MANCHESTER. (M11/3LH) FOR RITA HO. (077-89-263-282)