Removals
Demolish the existing garage and utility room , grub up any existing slabs and store for possible re-use. .
Provide all necessary scaffolding, Acros, planking and skips to enable all works to be undertaken carefully and safely.

New Foundations
New foundations to be minimum 1000mm below ground level to the bottom or to Building Control Officers recommendations, trench filled mass concrete.

New External Walls
New cavity walls to front elevation to consist of 102mm facing bricks to match existing as near as possible
,150mm clear cavity filled with 150mm "Dritherm32 Ultimate insulation and 100mm thick "Celcon Solar"" insulation blocks and finish internally with 12.5mm plasterboard and skim finish. All to achieve a U value of 0.18Wm2k. New walls to side and rear elevations to consist of "Monocouche" or sand/cement render on 100m thick 5kn concrete blocks , 150mm insulated cavity and 100mm thick "Thermalite Shield"blocks and finished internally with 2 coat plaster .

New DPC's
New Hyload DPC's to external wall to be a minimum of 150mm above ground level , provide 2 course Class A blue brick splash course to outer s

New Lintels
Provide standard IG L1/S100 or similar galvanised steel lintels , sized to suit openings complete with 150mm end bearing and flexible damp proof cavity trays and provide weep wholes over each lintel at 450mm centres. Allow for new reinforced concrete pad stones under each end.

New Cavity Closures
Close all cavities in external walls with propriety BBA insulated cavity closures , cavity trays and weep holes as required All windows and door frames to be set back to overlap the cavity closures by at least 30mm.

Existing Walls
Existing external walls where they become internal to receive either 2 coat plaster finish .

New Solid Floor
New 50mm thick sand/cement screed on new 100mm thick concrete slab complete with 1 layer of A12 anti crack reinforcement on 1200 gauge polythene damp proof membrane taken up walls and tucked into mortar joint ,on 100mm thick "CelotexGA4000" dense flooring grade polyurethane rigid insulation slabs on 1200 gauge DPM on 25mm sand blinding on 150mm well consolidated quarry waste provide 25mm thick perimeter insulated up-stand in between slab and walls, all to give a U value of 0.22W/m2k Any existing sub-floor ventilation to be maintained by use of 100mm dia. upvc ducts set in new floor and terminating in new external wall in 225mm x 225mm air bricks.

New Pitched Roofs
New roofs to consist of new tiles / slates to clients and Local Authority approval on 50 mm x 38mm treated timber laths to BS 5534 part 1 fixed with galvanised steel nails on "Tyvek" or similar vapour permeable membrane on new pre-fabricated treated timber trusses by specialist contractor to main roof and securely fixed to new 100mm x 75mm treated timber wall plate securely fixed to top of existing wall with 5mm 30mm galvanised steel straps fitted at 2000mm centres. To all pitched roofs lay new 150mm thick "Rockwool" roll insulation between new ceiling joists and 150mm thick "Rockwool"insulation on top of joists to give a combined thickness of 300mm finish to ceiling with 12.5mm foil backed plasterboard with plaster skim coat finish. All to give a U value of 0.15W/m2k. Eaves ventilation to be top of fascia type vents complete with insect proof mesh .

New Flat Roof (Warm Deck)
New flat roof to consist of 1 layer of LT25 (torch on) bituminous waterproof membrane or similar approved material on 15mm waterproof marine plywood decking 150mm "Celotex XR 4000 rigid insulation slabs or similar approved material on vapour control barrier on 15mm marine plywood decking on treated timber tilting fillets cut to suit pitch of roof on new 215mm deep prefabricated TJI joists by specialist contractor and set at their recommended centres (400 to 450centres) and supported on galvanised steel joist hangers. Provide mid span cross bracing. Finish to underside ceiling with 15mm "Gypsum" fireline boards with plaster skim coat finish. All to give a U value of 0.15W/m2K

New Rainwater Goods
Provide and fix new rainwater goods including gutters and downpipes in colour to clients approval.

Existing Bi - Fold Doors
Existing Bi- fold doors to be re-used in new location and double glazed in 24mm sealed units with Pilkington K glass 4mm Optifloat glass and 16mm Argon gas filled cavity and inner pane of K glass A complete with permanent trickle ventilation .All windows to achieve a U-Value of 1.4W/m2k. All doors to be fitted with toughened or laminated 24mm sealed units with low E glass double glazed panels, all windows to be glazed in 24mm sealed units with low E glass and 16mm Argon filled cavity and to befitted with permanent trickle ventilation.

New Electrics
All new electrical installation to be designed, installed, tested , inspected and certified to satisfy Approved Document P (electrical safety). Inspection and testing to be carried out by a person competent to do so. Electrician to provide on completion the appropriate Electrical Installation Certificate. All sockets, switches etc. to comply with Document M diagram 29. Provide and fix new fixed lighting that will take lamps having a luminous efficacy greater than 40 lumens per circuit watt (e.g. fluorescent tubes Osram lamp holder 2000). All lighting and power point positions to be agreed with the client prior to installation.

New Heating
Specialist contractor to extend the existing hot water heating system to the new areas (positions of radiators to be agreed with the client prior to work commencing. Provide and install new boiler to be equipped with spare capacity and all radiators to be sized to suit room sizes. Contractor to provide all necessary certificates on completion of all works. Position of boiler to be agreed with the client.

New Plumbing
All new plumbing installation to be in accordance with BS 5572 and BS 7600. The plumbing installation shall be carried out by a skilled and qualified operative.

New Above Ground Drainage
All new 38mm dia. Upvc waste pipes to be fitted to any sinks and basins, complete with 75mm deep seal traps connected to new "Durgo Valve" connected into existing underground drainage system.

New Below Ground Drainage
Investigations to be carried out to determine if the existing sewer that may pass under the new extension is to be exposed to full length new connections made and then surrounded all round in 100mm pea gravel. Allow for all necessary bridging over where new foundation pass over sewer.
New underground drainage system to consist of new 100mm dia, upvc pipework including all necessary bends, inspection chambers and back inlet gullies etc. and all pipes to be surrounded in 100mm of pea gravel and to be connected into existing main on site . New rainwater downpipes to be connected into existing system or to a soak-away to Building Inspectors approval.

New existing Foul Drain and Inspection Chamber
Excavate to expose the existing foul drain that will pass under the new extension , remove the existing earthenware drainage pipes complete and replace with new 100mm dia.UPVC pipework from new Inspection Chamber until it reaches the boundary. All new pipework to be bedded on and surrounded in 100mm of pea gravel and back filled as required.
Remove the existing Inspection Chamber complete including replacing the existing half round pipe with new UPVC. Excavate for and install new pre-fabricated circular Inspection Chamber on required concrete base. Allow for bridging over the drain where passing through the new walls as per detail , including concrete lintels and leaving 50mm gap around the pipe for movement, gap to be filled with compressible durable material and mask both sides of wall with rigid durable sheeting .

New Steelwork
New structural steel beams to be installed to support existing first floor wall to be calculated and designed by a Structural Engineer. All steelwork to be encased in 2 layers if 12.5mm plasterboard with skim coat finish to give 60mins. Fire protection, and to have min. 100mm end bearing on 3 course blue brick pad stones.

New Ventilation
New kitchen area to be fitted with mechanical extraction / ventilation fan to achieve 30 litres/second with a 15 mins. overrun to be operated via passive movement detector. Mechanical ventilation to bathroom and New WC ventilation to achieve 15 litres/sec. with 15mins. overrun. Trickle vents to all windows to be approx. 1.7m above floor level in all habitable rooms, natural ventilation to all habitable rooms to be equal to 1/20th of total floor area of each room , provided by opening windows . All doors to have 10mm gap under to allow for fresh air inlet. Background ventilation equal to 5000mm2 should be provided to all rooms, and all habitable rooms should have purge ventilation in the form of openable windows at least 1/20th the size of the room being ventilated.

New Fascias and Soffits
new fascias and soffits to be in upvc colour to clients choice.

New Rainwater Goods
All new UPVC rainwater goods to clients choice in design and colour.

New Flashings
All new flashings between roof and walls to be carried out in Code 4 lead or equal alternative material and to be dressed up brickwork 150mm and tucked into mortar joint and repointed.

New Internal Partitions
New internal partitions are non load bearing and to be constructed from 100mm x 50mm timber studding faced both sides with 15mm "Gyproc" soundboards with plaster skim coat finish. All cavities between studding to be filled with minimum 100mm dense mineral wool batts having a minimum density of 40kg/m2 and finished to floor with 100mm painted softwood skirting to match existing.

New First Floor Floor
New 25mm flooring grade anti -squeak chipboard on new pre fabricated engineered TJI joists 450mm centres sized to suit span and loading , supported on galvanised steel joist hangers fixed to manufacturers instructions. All spaces between joists to be filled with 200mm uncompressed glass wool quilt insulation to provide both sound and thermal insulation. Joists to be doubled up under new partitions where spanning parallel to joists. Finish to underside with 15mm thick pre-insulated "Gyproc" fire/sound boards with plaster skim coat finish.

New Windows and Doors
All new windows and doors to be UPVC colour and style to clients choice, glazed in double glazed sealed units consisting of Pilkington K glass 4mm Optifloat glass outer pane 16mm Argon gas filed cavity and K glass A inner pane complete with permanent trickle ventilation and all to give a U value of 1.4W/m2K

New Loft Access
Provide and fix new fully insulated hinged loft access hatch complete with pull down aluminium loft ladder.

New Mono-Pitched Roof (Minimum 15 degs)
New roof tiles to match existing on 50 x38mm treated timber laths on "Tyvex" vapour permeable membrane on 170mm x 50mm C24 rafters set at 600mm centres and fixed to new 100mm x 75mm treated timber wall plate securely anchored to top of wall with galvanised steel straps at appropriate centres. Between rafters lay 150mm thick "Celotex" or similar rigid sheet insulation, leaving a 50mm wide air gap for ventilation and finish to ceiling with 20mm pre-insulated plasterboard with skim coat finish. Provide eaves ventilation via top of fascia type vents complete with insect proof mesh.

Inspection Chamber
Existing inspection chamber to be removed complete and seal off connection . Provide and install new Inspection chamber in new position including all new drainage pipes to connect up with existing sewer.

New Access Stairs
New access stairs from ground to first floor to be constructed from timber (to clients choice) and to be 900mm wide overall the strings and to consist of 14no. equal risers @ 195mm, 11No. Equal treads @ 250mm and 2no. 900Mm x 900mm landings.
.All treads to have minimum 25mm overhang no gaps in excess of 100mm and to be non-slip.
Stairs and perimeter of landing area to be complete with all necessary handrails and balustrades set at 900mm high above the string line and 1000 to 1100mm high on landings and to be constructed to comply with the latest edition of the Building Regulations.

General
All works to be carried out to the latest edition / amendments of the Building Regulations and to the Building Control Officers requirements. Use only the best quality materials available at the time of installation and installed to the manufacturers recommendations and all relevant Codes of Practise and British Standards etc.
All dimensions to be checked on site prior to commencement of works, any discrepancy's to be reported.
DO NOT SCALE FROM THIS DRAWING FOR CONSTRUCTION.
ALL DIMENSIONS AND ANGLES TO BE CHECKED ON SITE PRIOR TO MANUFACTURE

d h design
architectural and interior design
14 Piers Road, Glenfield,
Leicester, LE3 8BN
Tel: 0116 2877367, Mobile: 07917102660
Email: davewharding@yahoo.co.uk

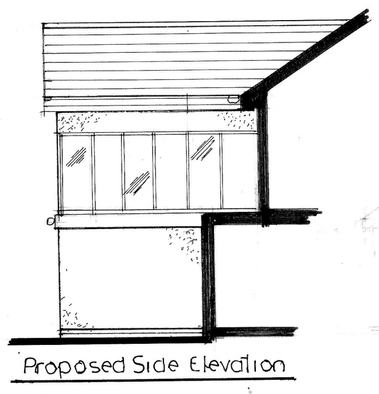
Client
Mr S MacLeod

Job Title/Address
Proposed 2 storey side and rear and single storey rear extension
At : 39 Groby Road
Ratby
Leicestershire LE6 0LJ
Existing and Proposed Plans , Elevations and Section

Scale	Date	Drawn
1 : 100	April 2023	D Harding
Job No.	Drawing No. SM / 2023 / 1	Revision

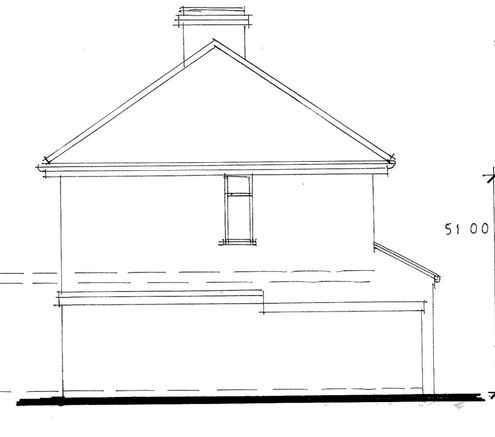
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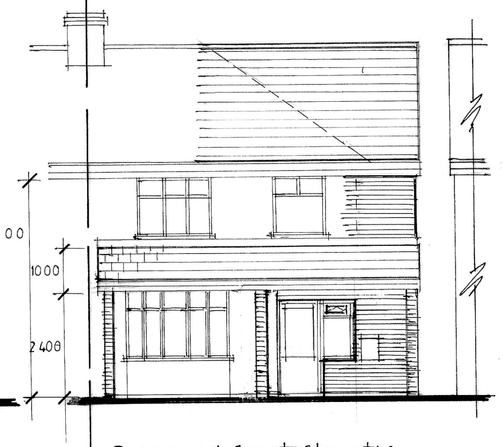
Contractors must check all dimensions on site. Only figured Dimensions are to be worked from. Discrepancies to be reported immediately to the designer before proceeding.




Existing Front Elevation

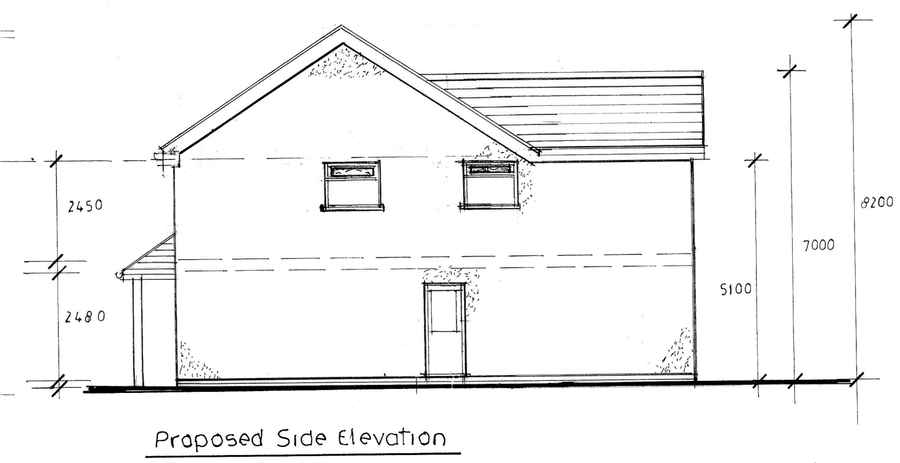

Existing Rear Elevation


Existing Side Elevation

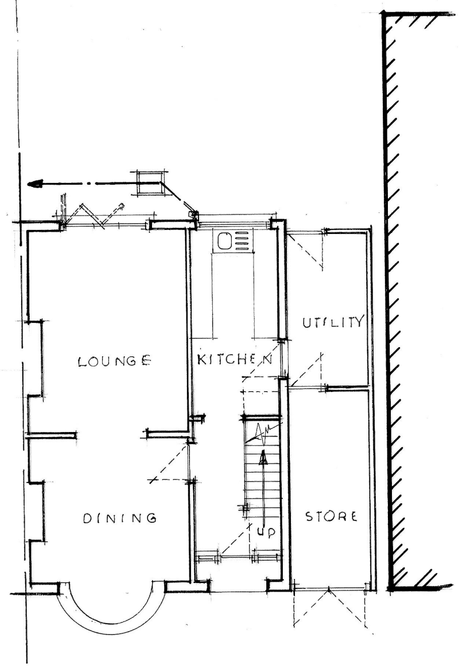


Proposed front Elevation

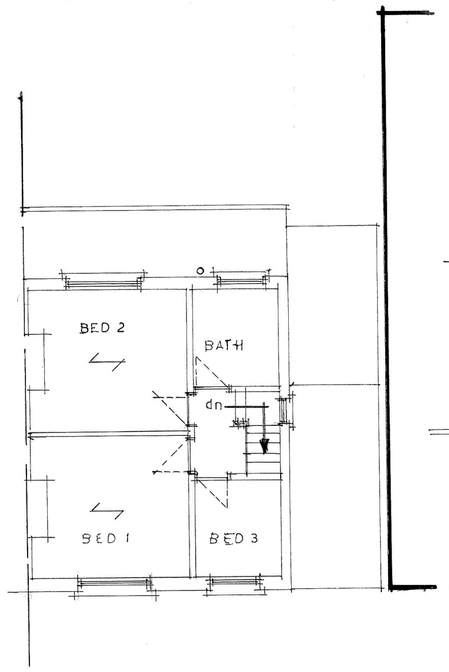

Proposed Rear Elevation



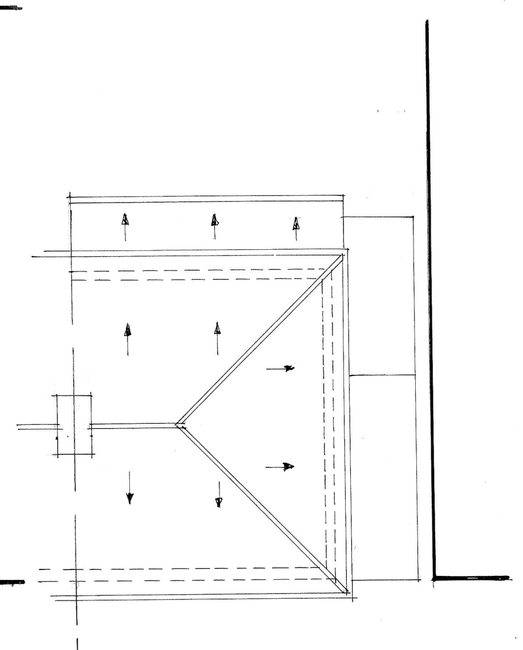
Proposed Side Elevation

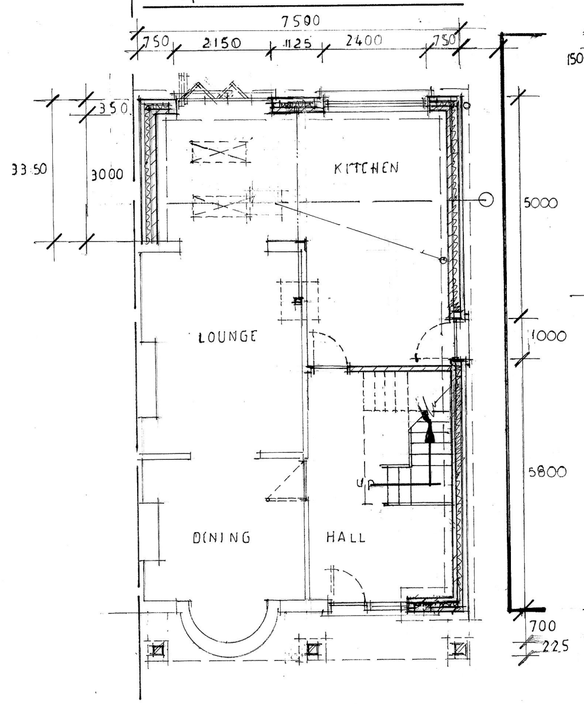


Existing Ground Floor Plan

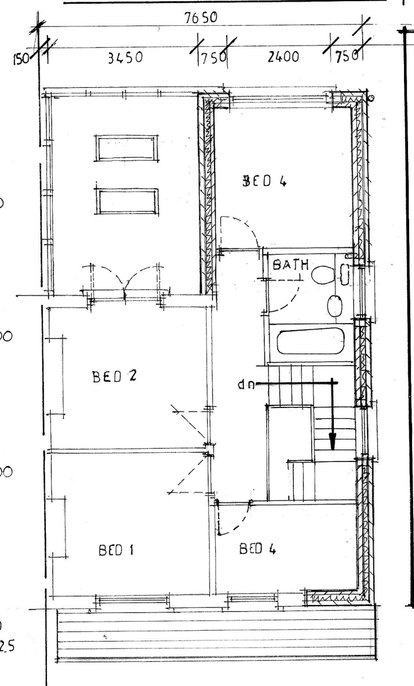


Existing First Floor Plan

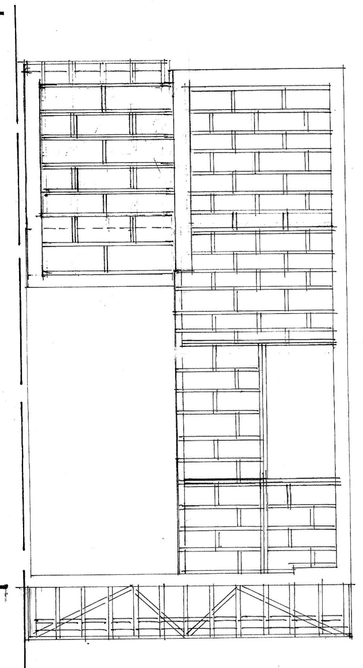

Existing Roof Plan

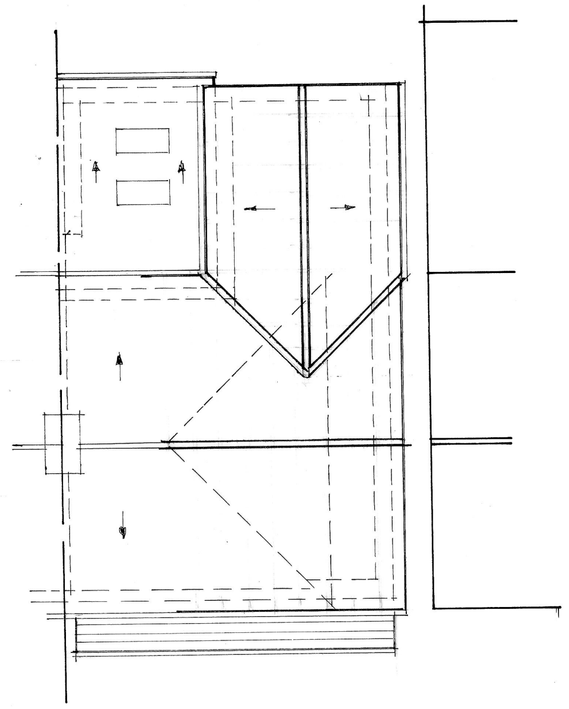


Proposed Ground Floor Plan



Proposed First Floor Plan


Proposed Floor Roof Timbers


Proposed Roof Plan