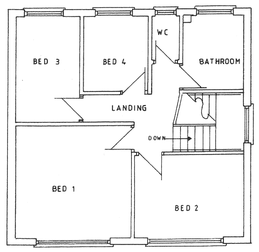
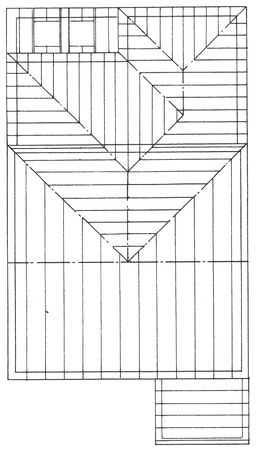


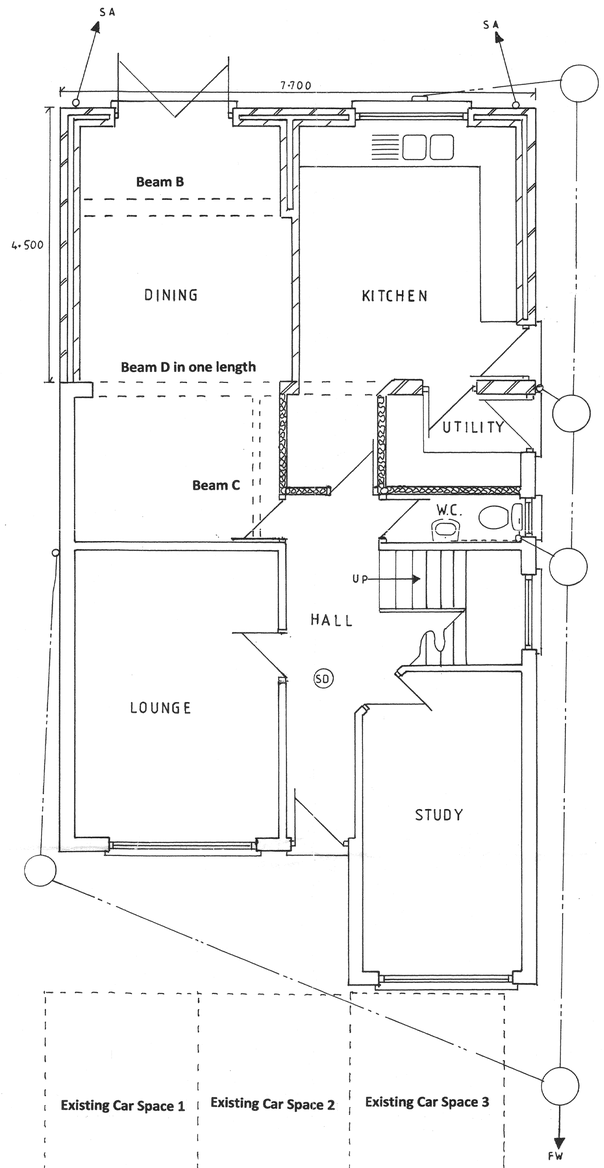
EXISTING GROUND FLOOR PLAN



EXISTING FIRST FLOOR PLAN



PROPOSED ROOF PLAN



PROPOSED GROUND FLOOR PLAN

FOUNDATIONS
All down min. 1M to load bearing strata and taken down below invert levels of any drains. Nom 600 * 600mm reinforced with 2 layers A193 mesh. All to L.A. Building Control approval and to comply with NHBC Guidance notes building near to trees section 4. All existing foundations to be fully checked and exposed to check for suitability to carry the new loads.

DAMP PROOF COURSE
All external and internal walls, windows heads, jambs, cills and around external doorframes etc. Place a ruberoid hyload to BS.743 or equal. External walls to have 2 course A engineering bricks. Min.150 mm above external ground level.

GROUND FLOOR (less than 600mm infill)
50mm sand cement screed on Min.100mm concrete, 1200g polythene membrane returned up to the walls and lapped and sealed with dpc to give Radon protection, above and below 100mm celotex insulation with 25 mm celetex insulation to perimeter of concrete floor to prevent cold bridging, connected at all points to the D.P.C. Sand blinded compacted hardcore. All to give a minimum u value not exceeding 0.22w/m k. Allow ducting existing sub floor void as required with suitable ducting material to suit the existing vents.

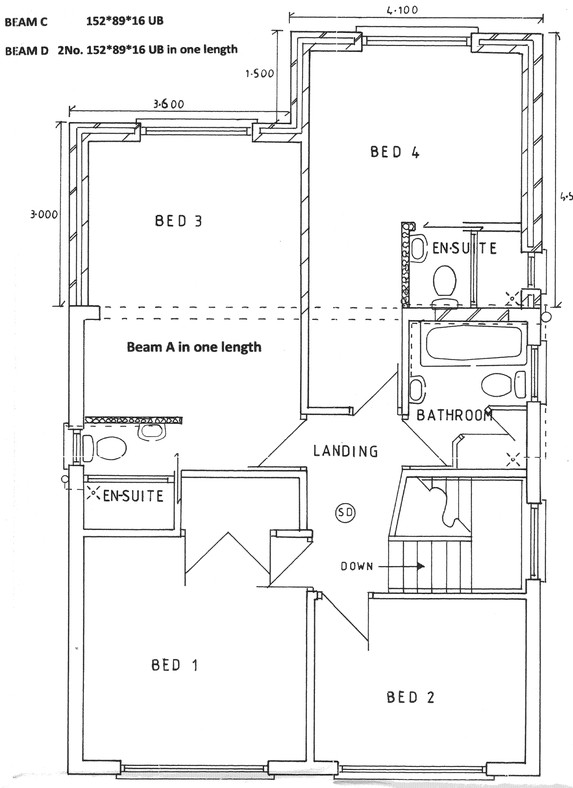
STRUCTURAL DESIGN DETAILS

BEAM A 178*102*19 UB in one length

BEAM B 2No. 178*102*19 UB

BEAM C 152*89*16 UB

BEAM D 2No. 152*89*16 UB in one length



PROPOSED FIRST FLOOR PLAN

EXTERNAL WALL CONSTRUCTION
Brickwork to match with existing, to clients satisfaction and to be approved by the Local Authority Planning Department, Cavity brickwork to be 100mm cavity Brickwork, New cavity Brickwork with a 100mm dritherm filled cavity insulation batts and 100 mm 2.8N/mm thermolite turbo block inner skin to give a U value not exceeding 0.28w/m k . Cavity closed at top to form smoke and fire break. Walls tied to roof at 1.8m centres with 28 * 5mm m.s. straps. All openings to have catnic type lintels or equal with min.150 mm bearing on 2 course engineering bricks insulated to 1.2w/m k. Stainless steel wall ties at max 750mm horizontal centres, 450mm vertical centres, max.300 mm centres in reveals. Allow for all new brickwork to be fully bonded to existing building by catnic profiles or similar.

EXTERNAL DOORS AND WINDOWS
Rebated and weathered moulded sections, double-glazed to match existing with 16 mm air gap argon filled and a soft low-E coating to give a u value not exceeding 1.6 w/msqk. min.1/20th Floor area opening lights, 2 * 8000 mm trickle vents to be provided to new rooms. Min.750 * 450 mm fire escape windows one per room. Cill height to be a maximum 1100 mm and minimum 800 mm off of finished floor level and to open without the use of a key. Laminated or toughened to BS6206.

FIRST FLOOR
22mm T & G floor boarding on 200 * 50 mm C24 floor joists at 400 mm centres to span shortest distance on plan. Install 2no joists beneath stud walls 38 * 50 mm herringbone strutting at centre span. Fit 100 mm rockwool sound deadening quilt between floors to achieve a sound reduction of 45Db. Use approved joist hangers to follow robust details. Timber solid strutting to the floor joists will be provided at a minimum 1/3rd of the span of the floor joist. Lateral restraint will be provided to the walls at first floor level by steel straps 28 * 5mm Min. 1.2m long fully built into the blockwork and fixed over a minimum 3 no. floor joists at 1.8m centres. .

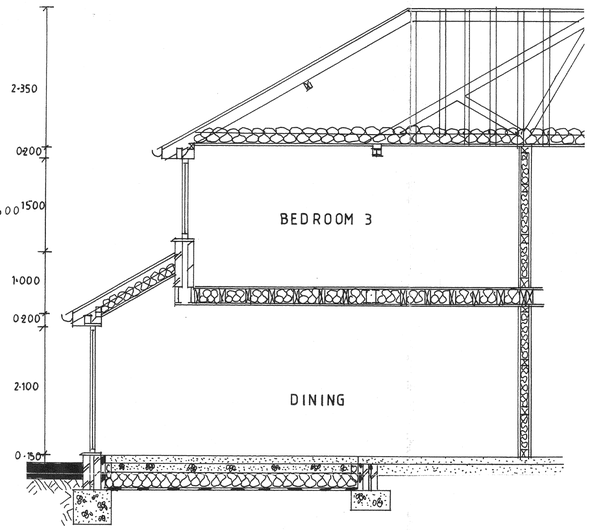
LINTELS
All openings to have catnic type lintels or equal with min.150 mm bearing on 2 course engineering bricks insulated to 1.2w/m k.

RAINWATER GOODS AND GUTTERING
Nom.100mm half round p.v.c. Guttering and 63mm down pipes taken into trapped back inlet gullies to soak away size and capacity all designed in accordance with B.S.E.N.752-4 or BRE. Digest 365. Min. 5m away from any building, or to existing surface water connection. Full porosity test carried out and approved prior to installation.

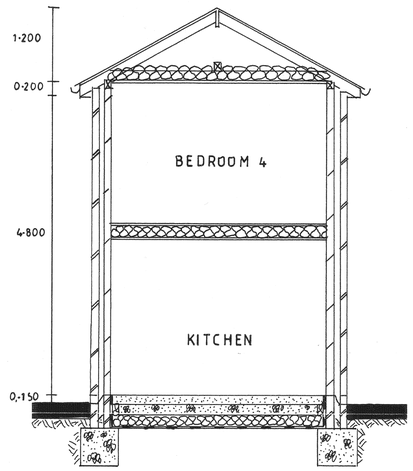
INTERNAL DOORS
All doors to match existing. All to the clients specification.

VENTILATION
En-Suite Bathroom's and Bathroom to have rapid mechanical ventilation of 30 l/s wired to lights to windowless areas. Kitchen to have rapid mechanical ventilation of 60 l/s. Utility room to have mechanical extract ventilation of 30 l/s.

SMOKE DETECTION
Mains wired with battery back-up smoke detection system installed to BS5546 part 1: within 7m (horizontally) of kitchen or living room and within 3m of bedroom doors. Located minimum 300mm from any wall or light and not over heaters. All fully interlinked. Position as floor plans.



SECTION A-A



SECTION B-B

PITCHED ROOF EXTENSION (Main Roof)
Tiles to match existing profile and colour to match existing close as possible and all approved by the Local Authority Planning Department, laid to manufacturer's instructions on 38 * 25 mm tile battens on 1 layer tyvec breathable roofing sarking felt or similar on 150 * 50 mm Rafters at 400mm centres C24. 225 *75mm C24 Purlin at mid span fully proped of the existing wallplate at 1.8m centres. 200 * 50 mm Ceiling Joists at 400 mm centres C24. 100 * 75 mm s/w wall plate anchored to walls at 1.8 m centres with 30 * 5 mm galvanised m.s. Straps at 1.2 m centres to gables. Roof void to be vented by leaving 25 mm gap between fascia board and walls and the breathable roofing felt. Flat ceiling to be Min. 300 mm fibreglass insulation with 150 mm laid between ceiling joists and a further 150 mm laid over the top to give 300 mm thickness overall to attain a U value not exceeding 0.16w/m k. 12.5 mm plasterboard and skim all to achieve a u value not exceeding 0.16 w/msq k. All timber to be sc 4 grade. Min. 150 mm code 4 lead valley and flashing to roof abutment with existing building.

PITCHED MONO PITCHED LEAN TO ROOF EXTENSION
Tiles to match existing, colour to match existing close as possible and all approved by the Local Authority Planning Department, laid to manufacturer's instructions on 38 * 25 mm tile battens on 1 layer tyvec breathable roofing sarking felt or similar on 150 * 50 mm Rafters at 400mm centres C24.Allow to double up Rafters either side of Velux rooflights. 100 * 75 mm s/w wall plate anchored to walls at 1.8 m centres with 30 * 5 mm galvanised m.s. Straps at 1.2 m centres to gables. Roof void to be vented by leaving 25 mm gap between fascia board and walls and the breathable roofing felt. Sloping ceiling to be insulated with 100mm celotex between the rafters and a further 50 mm celotex across the face 12.5 mm plasterboard and skim all to achieve a u value not exceeding 0.16 w/msq k. All timber to be sc.4 grade. Min. 150 mm code 4 lead valley and flashing to roof abutment with existing building.

DRAINAGE BELOW GROUND
100 mm vitrified clay pipes supersleeve by hepworth or equal flexibly jointed bedded and surrounded in 100mm pea gravel laid to falls as shown on the drawings. Generally 1 in 40 foul drains dependant on invert level of the existing foul drains or manhole. To discharge to existing foul water mains sewer located in the road. All works to be carried out by a competent person under to inspection service of Severn Trent water plc. Where drains pass beneath the building encase them in 100 mm concrete But maintain flexibility at all drains. Sleeve all openings where drains pass through foundations giving at least 50 mm clearance all round. Note actual drainage layout may differ form that shown on drawings.

MANHOLES
As appropriate. Manholes to be formed or altered with 225 mm thick walls of class B engineering bricks or precast concrete sectional rings to B.B. 3921 over 150 mm thick concrete base. If situated internally install a medium duty double sealed tray type sealed down cover. All sized to BS. 8301 1985

ABOVE GROUND DRAINAGE
100 mm dia. S.V.P. to terminate, min.900 mm above any window. Fitted with a durable cage and access plate for cleaning. Waste pipes, bath, sinks and wash hand basins 38 mm dia. All fitted with 75mm deep seals traps. No waste pipes over 4 m in length. No notches to be taken out of existing timbers without structural compensation. All internal pipe work to B.S.5572

INTERNAL PARTITIONS AND INTERNAL WALLS
100 * 50 mm s/w studs at 450mm centres on 50 * 100 mm sole plate, with noggins at 400mm centres vertically filled with sound deadening quilt to give a 45Db sound reduction with 1 layer of 12.5 mm plasterboard and skim all to achieve 30 min. Fire resistance.

JOINERY
All internal and external joinery to be carried out to the client's satisfaction.

STEELWORK
New beams to be as per structural engineers calculations enclosed bolted together with bolts and separators. Min.150mm bearing on concrete padstones. All steel beams to be encased in 2 layers 12.5mm plasterboard to achieve 30 Min. fire resistance.

BOUNDARY
No part of the building shall be constructed above or below ground over the boundary. All works to comply with party wall act. 1996.

HEATING CONTROLS
All new radiators to be fitted with T.R.V.s. If the existing boiler is to be fully replaced with new boiler installed in accordance with Approved Document J and Part L1 as amended (Condensing Boilers)

DEMOLTION, MATERIALS AND WORKMANSHIP.
Protecting the buildings from dust and damage. Maintain and security of building at all times. All materials, goods and workmanship to appropriate B.S. Contractor to verify all dimensions on site and agree all details to clients satisfaction before commencement of works. All finishes to be made good and all debris removed from site. Position and number power points, lighting points, wall lights and switches to be decided by client. All works to comply fully with building regulations.

SERVICE INSTALLATIONS
Electrical system all to I.E.E. Regulations. Extend existing heating system. Plumbing installation to comply with Severn Trent PLC. Water Regulations. All works associated with gas installations to be undertaken by a suitably qualified engineer, in accordance with the gas safety regulations. All exposed pipes and ducts will be fully insulated. Works to controlled services will be in accordance with the Domestic Heating Compliance Guide.

LIGHTING
100 % of lighting to have a luminous efficacy greater than 40 lumens per circuit-watt. (Not gls tungsten lamps with Bayonet cap or Edison screw base.)

ELECTRICAL WORK
All electrical work required meeting the requirements of part P (Electrical Safety) must be designed, installed, inspected and tested by a competent person. Then either prior to completion the council must be satisfied that an electrical installation certificate issued under a competent person scheme will be issued or an appropriate electrical installation certificate has been issued for the work and been signed by a person competent to do so.

EXTRA WORKS
The client and contractor must determine the total extent of the works prior to works commencing.

PROPOSED TWO STOREY REAR EXTENSION

39B LOCKTON AVENUE HEANOR DERBYSHIRE DE75 7EQ

SCALE; 1:100, 1:50

FLOOR PLANS & SECTIONS