

SPECIFICATION

ELECTRICAL WORK
All new and existing installation to be in accordance with current IEE regulations and layout as agreed with the client.
All light switches and socket outlets to be set within a zone of between 450mm and 1500mm above floor level.
Energy efficient light fittings having a luminous efficacy rating greater than 40 lumens per circuit-watt as indicated on plan.

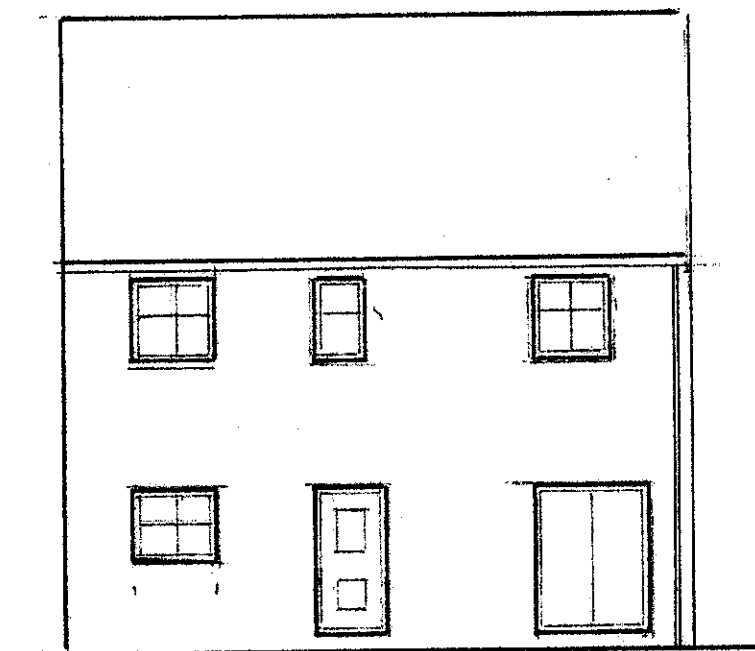
NOTE All new work where applicable to be designed, installed, inspected and tested by a competent person registered with an Electrical Competent Person Scheme authorised by the ODPM. Upon completion the installer will issue a BS 7671 certificate to the house holder and Building Control Authority, a copy of the Competent Persons certificate to be given to the householder. Under the Competent Persons scheme a certificate must be sent to the Local Authority.
Mains connected smoke alarm conforming to BS 5839-6:2004 at least Grade D LD3 standard to be installed in stair enclosure at ground & 1st floor levels.

DOMESTIC HEATING
To comply with the requirements of document TS 2006

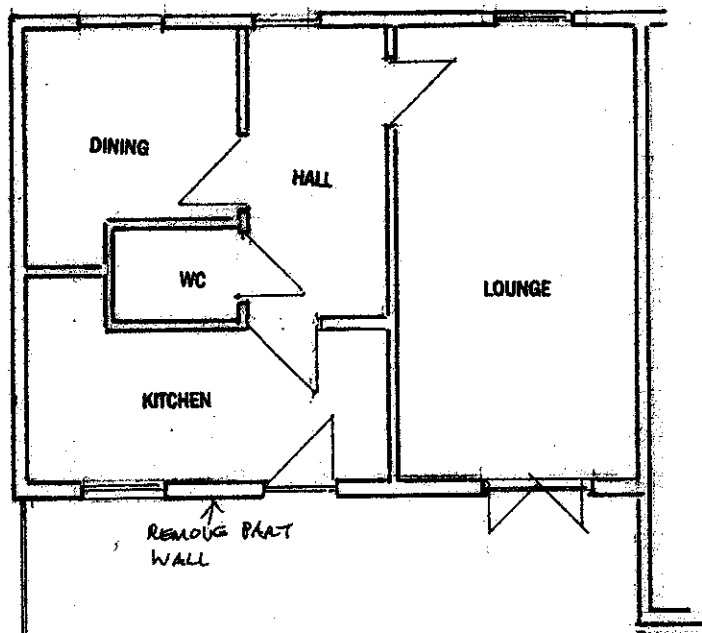
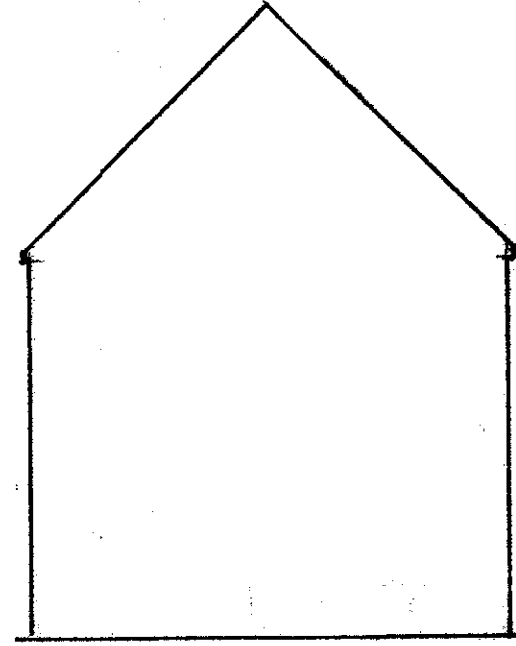
HEATING CONTROLS
Heating system to incorporate a timing device in order to control the periods when the heating system operates. The boiler should switch off when no heat is required. Systems controlled by a room thermostat should fire only when a space heating or cylinder thermostat is calling for heat. Systems controlled by thermostatic radiator valves should be fitted with flow control. Or other device to prevent unnecessary boiler cycling. Boiler to be high efficiency condensing type SEDBUK rating band B.

HOT WATER STORAGE SYSTEM CONTROLS
The storage system to be provided with a thermostat which shuts off the supply of heat when the storage temperature is Reached, or a timer which enables the supply of heat to be shut off for the periods when water heating is not required.

PIPE INSULATION
All pipe work not within a habitable room or space (ie in roof space, garage, under floor etc) shall be insulated with a material having a thermal conductivity not exceeding 0.045 W/mk and a thickness equal to the outside dia. of the pipe up to a max. 40mm.
Hot water pipes connected to hot water storage vessels shall be insulated for at least 1000mm from their points of connection or up to a point where they become concealed, the material to have thermal conductivity as above and be a minimum thickness of 15mm.

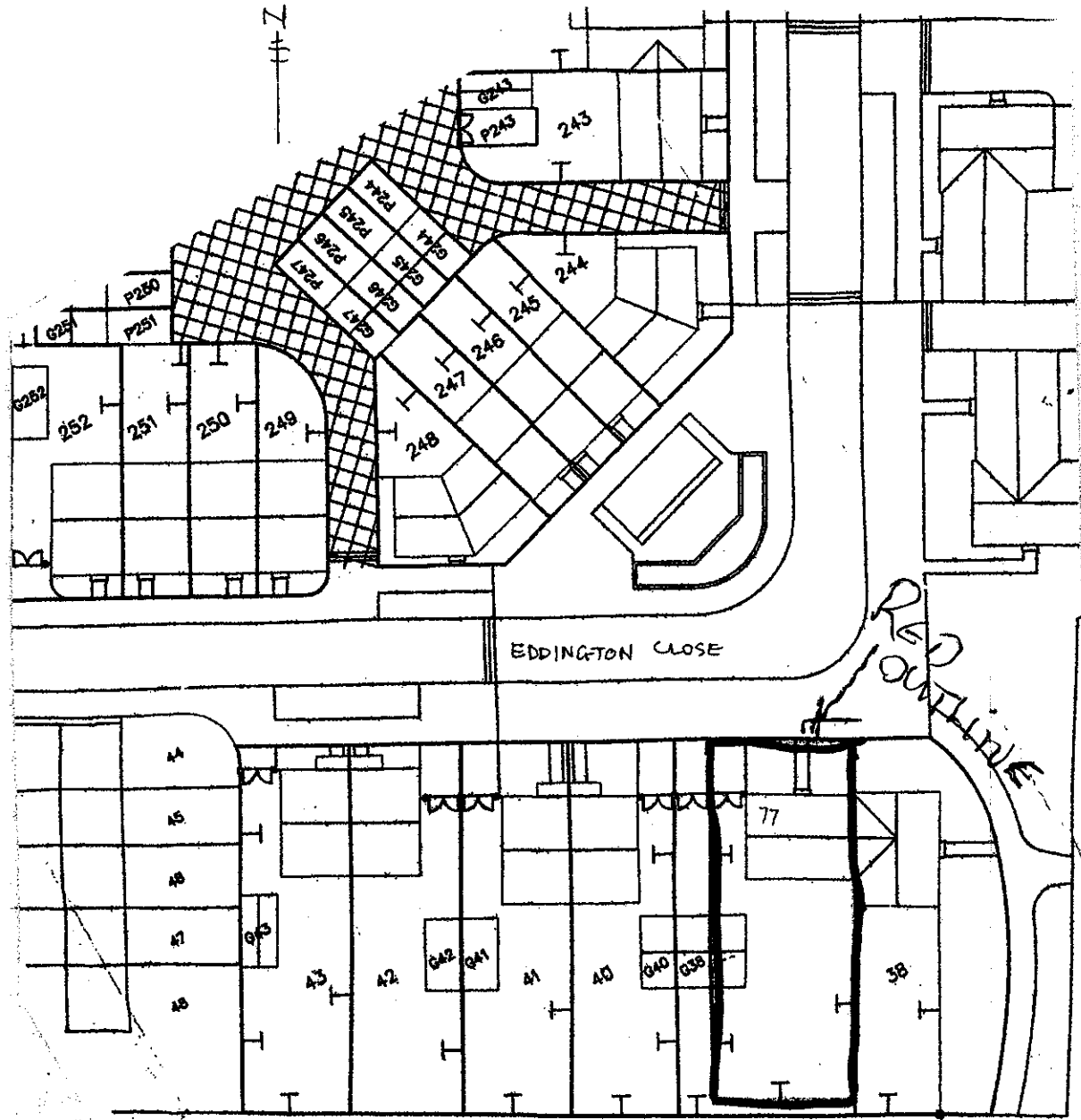


EXISTING REAR & SIDE ELEVATIONS 1:100

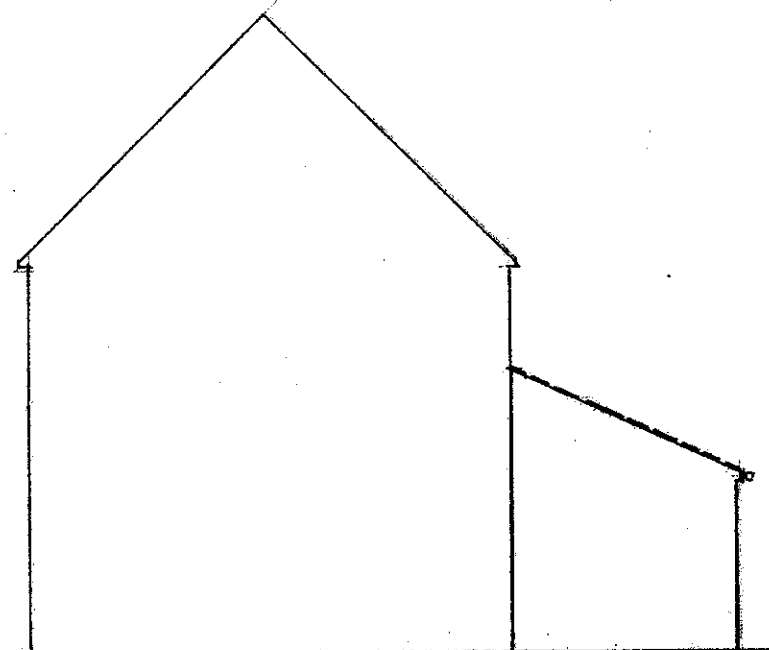


EXISTING GROUND FLOOR PLAN 1:100

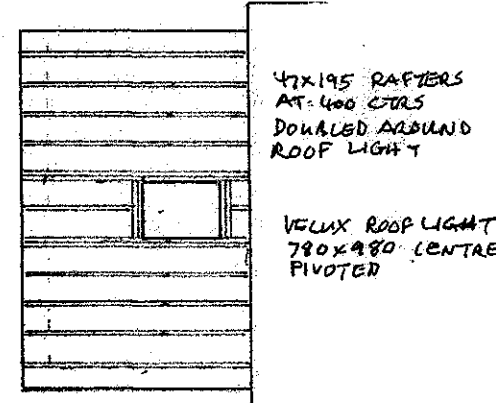
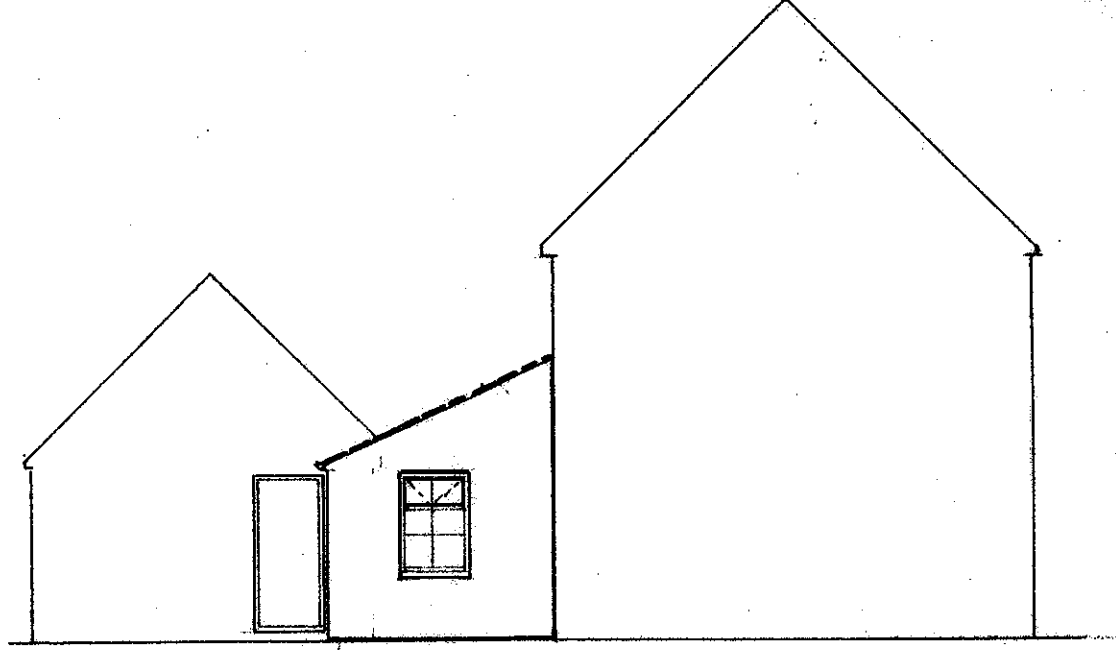
SCALE 1:100



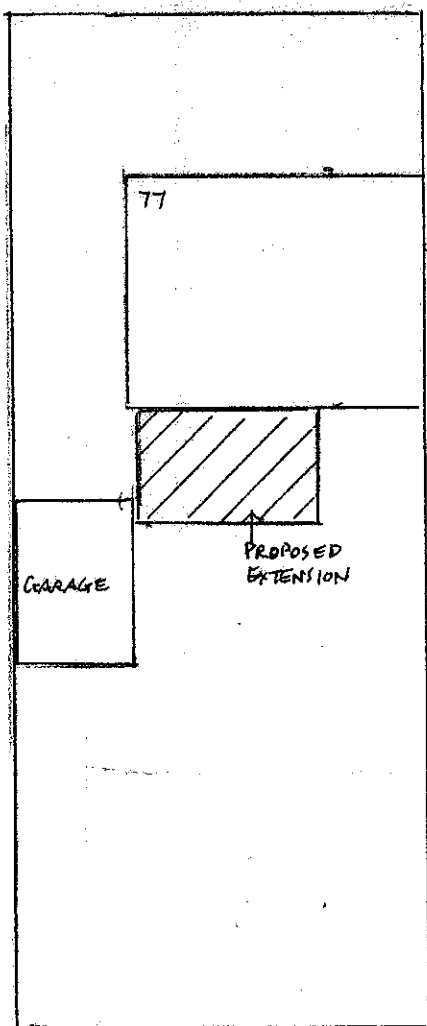
LOCATION PLAN 1:500



PROPOSED REAR & SIDE ELEVATIONS 1:100



ROOF PLAN 1:100



SITE PLAN 1:200

ROOF
All timbers to be Strength Class C 16 47x195 mm at 400 centres
Tiles to match existing and be suitable for roof pitch on 38mm x 19mm tanalised timber battens over Du Pont Tyvek Supro Universal underlay supported at eaves by proprietary eaves carrier.
50mm x 100mm wall plates to be secured to external wall by means of 1200mm x 30mm x 6mm galvanised steel straps at 2000 ctrs
Rafters to be strapped to external gable wall ends with 1200mm x 30mm x 6mm galvanised steel straps at maximum 2000mm centres. Ensure straps are fixed to 3 no. members with solid noggins and packers between.
Lean-to roof rafters to be birds mouthed over 50mm x 100mm wall plate which is raw bolted to wall with anchors at 450mm ctrs.
Rafters to be doubled around roof light & bolted using 12 dia. Dog toothed connectors & 450 ctrs.
Pitched roof with insulation at rafter level U value 0.18W/m K comprising 125mm Kingspan Kooltherm K7 insulation between rafters & Kooltherm K18 insulated dry lining board beneath comprising 12.5mm plasterboard & 25mm insulation
Code 4 lead flashing max. 1500 length at abutment with 150 upstand.

Provide 30minute fire resistance to steel beams using 2 layers of 12.5mm plasterboard minimum
450mm wide fixed breaking joint along soffit of beam within floor void or use intumescent paint applied as manufacturers recommendations.

EXTERNAL WALL
290mm insulated cavity wall construction comprising 110mm face brick to match existing where possible, 90mm cavity filled with Crown Dritherm 37 insulation, inner leaf 110 Calcon block finished internally with 12.5mm plasterboard on dabs. Stainless steel wall ties placed 750mm horizontally, 450mm vertically and staggered, ties to be doubled up at reveals at every block course. Ties to be minimum 225mm long.
Wall to achieve a U value of 0.28 W/m² K
Cavities to be closed at reveals etc. with an insulated cavity closer Thermobate or similar to avoid cold bridging.
Lintols to be the 1/2 range or similar approved with cavity tray above.
Internal lintols to be Spanlight or similar.
At roof abutments a cavity tray to be built in as work proceeds and positioned 150mm above tile level and to accommodate the upstand lead flashing. Where a stepped tray is required lead rollers should be incorporated.

SUSPENDED BEAM & BLOCK FLOOR
To be provided by specialist supplier is Camex Floors achieving U value 0.22W/m K
70mm Kingspan Kooltherm K3 insulation, 1200g poly dpm finished with 75mm reinforced screed. Minimum 75mm ventilated void cranked ventilators at max 3 metre centres. Having open area of 600 mm per metre run of wall.
Sub soil to be treated with weed killer with no organic material beneath the floor.
Ensure soil is free draining
Existing air vents to be maintained clear to allow cross flow of air

INSULATION
To avoid filtration of cold air ensure that all insulation materials are continuous and that all joints are taped where appropriate

RAINWATER GOODS
110 mm Upvc deep flow half round gutter connected to 65mm dia down pipe and then to beneath ground drainage.

SECTION X-X 1:25

FOUNDATIONS
450mm wide deep strip concrete foundations 1000mm minimum below adjacent ground level or as specified by the Structural Engineer or Local authority. Also beneath Party walls and internal load bearing walls in accordance with BS8004 and BS8103:part 1: 1986.
Foundation depth to be increased in accordance with NHER Practice Notes 4.2 in respect of trees and to a 45° shear plane of invert level of adjacent drains.
Facing brickwork to be taken a minimum of 3 courses below ground level. Inner skin below dpc to be 100 concrete block or brickwork and cavities filled with lean mix concrete fill to within 225mm of dpc.
Concrete relieving lintols to be built in above any drain run or service duct.

WINDOWS AND DOORS
Double glazed Upvc or timber framed with Window Energy Rating of band C or better by specialist supplier 2 skins of 6mm clear glass with minimum 16mm argon filled cavity, low E coating to surface. All windows to be draft sealed and sealed at enclosing walls with gun applied mastic and should not overlap the cavity closers by less than 30mm.
Glazing in critical locations to be toughened Class B safety glass as BS 6206.
Clazing to bedrooms and toilets to be obscure type.
All windows fitted with trickle ventilators 8000mm to habitable rooms and 4000mm elsewhere.
Ventilating casements and fanlights as shown on elevations. Opening windows to provide ventilation = 5% of floor area
of habitable rooms with some part at least 1700mm above floor level.
Windows in 1st floor habitable rooms to have opening casements at least 450 wide and 450mm high and not more than 1050mm above floor level and be available for emergency egress, having an unobstructed opening that is at least 0.33m²
Windows to achieve minimum U value of 1.6 W/m K Doors with 50% glass minimum U value 1.8 W/m K

SCALE 1:50

SURFACE WATER DRAINAGE
100 dia. Upvc drains laid 150 on a 100mm bed & surround of shingle & connected where possible to existing system
New soak ways to be sited a minimum of 5000mm from any building or highway, excavated 1 metre cubic capacity below entry level of drain invert and filled with clean hardcore or reject stone. Cover with 1200g polythene sheet and 100mm reinforced concrete capping and topsoil & in accordance with BRE Digest 365

PROPOSED GROUND FLOOR PLAN 1:50

PROJECT
PROPOSED SINGLE STOREY REAR EXTENSION at
77 EDDINGTON CLOSE, WELWYN GARDEN CITY AL7 4SX

DRAWING
ELEVATIONS, PLANS and DETAILS

SCALE as indicated DATE MARCH 2011 DRAWING NO. RW/WH/1

NOTES
DRAWING PAPER SIZE A1

1. All work to be constructed in accordance with current Building Regulations and allied legislation.
2. The contractor must check all dimensions and roof pitches prior to commencement of work and any discrepancies reported.
3. The contractor is responsible for obtaining approval of materials from the Local Authority Planning Dept. where appropriate.
4. The contractor must also notify the Local Authority Building Control for all statutory inspections.
5. Where necessary extend existing hot and cold water supplies to suit new layout.
6. Where required extend central heating to suit new layout.
7. Lighting and power socket positions to be agreed with the client.

PLANNING DEPARTMENT
OFFICE COPY

14 MAY 2011

2011/0769