Roof construction:
Flowgrade tiles bedded to built up high performance roof covering to min. BS 747 standard on 18mm thick external quality plywood with T and G joints on battens double layer 150 x 38 insulation and 18mm thick external quality plywood decking with all joints and perimeter supported on timbers to fall min 69 on 75 x 10 joists (see d) at 400mm ctrs supported on new wall and on joist hangers on existing wall

Average 'U' value = 0.250 w/m²k.

Install insulation packing between underside of roof insulation and top of wall insulation.

Install min. 50 x 225 timber above existing lounge French doors to support roof verge. This timber to extend approx. 350mm each side of opening and to be bolted to wall at max. 600mm ctrs.

Install 50x5mm mild steel straps between roof structure and perimeter walls at average 1.800 ctrs. straps to extend over 3 no. rafters where at right angles supported by noggings.

Install brick dental course below fascia board.

Ceiling:
Install 9.5mm thick plasterboard ceiling with Artex finish and perimeter supported.

Install 112mm dia. h.r. upvc gutter with 68mm dia. downpipe connected to 110mm dia. PVC drain bedded on 100mm pea gravel to fall to new soakpit min. 1 metre cube at least 3.000 from building.

All structural timber to be grade SC3 and marked dry or kiln dry.

Cavity walls:
103mm thick approx. re-claimed facing brickwork to match existing, 65mm cavity and 100mm thermalite standard blockwork with internal finish of dense plaster.
Install 65mm thick Rockwool cavity insulation installed to manufacturers recommendations.
Average 'U' value = 0.27 w/m²k.
Damp proof insulated d.p.c. to reveals with flanges lapping by min. 15mm. Cavity wall ties installed at 900mm ctrs horizontally 450mm ctrs vertically and at 225mm ctrs within 225mm of reveals.
Seal top of cavity.
Engineering brickwork below d.p.c. to be class 'A'
Install thread d.p.c. to walls min. 150mm above ground level (external skin).
100mm thick thermalite standard block internal walls.
New walls to be bonded to existing with Furfix wall extension profiles.

Ground floor:
65mm thick lightly reinforced sand/cement screed on 500 gauge polythene separating membrane on 50mm thick 50 grade expanded polystyrene insulation on 100mm thick reinforced concrete slab on 500 gauge polythene d.p.m. on min. 150mm hardcore well consolidated and blinded.

Foundations:
700mm wide grade ST1 concrete trench fill foundation min. 750mm deep (1.000 in shrinkable soil) depth to be agreed on site with L.A. building inspector. Care to be taken with foundations adjacent to existing garden wall. Foundation to internal walls to be 450mm wide.

Windows/external doors:
UPVC window and door frames with 6no. sliding sash frames to living room and side entrance frame to W.C. Install new French doors from landing onto balcony.
All windows to be double glazed and to have safety glass to 800 above and to 1.500 above floor level.
All openings to be draught sealed.
Install trickle vents to provide 5000 mm² background ventilation to living room and bedroom 1 and utility room.
Windows to living room to provide min. 1/20th of floor area as ventilation to room.

Approx. window sizes:
W.C. 450 x 450 obscure
Landing 1000 x 1200 (to be confirmed).
French doors Approx. 1.600 wide x 2.100 high (to be confirmed)

Balustrade:
Install wrought iron balustrade min. 1100 high with vertical balusters with max. 99mm gaps.
Balustrade to resist a horizontal force to comply with B.S. 6399 Part 1: 1996.

SECTION A-A

REAR ELEVATION

Extend existing floor void vents (void below lounge) with 2no. 110mm dia. UPVC pipes to each vent terminating at external wall with penscope vent and 65x10 plastic air vents below d.p.c. Vent ducts to be re-located if required.

SIDE ELEVATION

Lintels:
Install I.G. ref: LI/650 steel lintels to external openings with cavity tray d.p.c. above openings in galvanised steel finished with lintels to all openings. Install 2 internal 100 steel lintels to W.C. door. Install 115 box lintel 200 with arch former over French doors.

Heating and hot water:
Extend existing heating and hot water services into extension.
Install new wall mounted gas fired balanced flue boiler in utility to replace existing boiler in kitchen.
Boiler to be fitted with timing controls and boiler control interlock.
Install suitable guard to radiator affected.
New radiators to be fitted with thermostatic valves.
Hot water pipes to be insulated with Armaflex or similar insulation of thicknesses to match pipe outside diameter.

Mechanical ventilation:
Install extract fan in utility to extract at a rate of 30 litres per second.

Drainage below ground:
To be 110mm dia. UPVC bedded and surrounded in 100mm pea gravel to fall at approx. 1 in 40 to connect to existing inspection chamber and septic tank.
Drain to be protected where it passes through wall with pre-stressed concrete slab lintel with min. 50mm clearance around pipe and protection from vermin entry.
Any drain within 600mm of ground level to be protected by paving slabs laid above pea gravel surround.

Above ground drainage:
40mm dia. PVC overflow waste from washing machine and 32mm dia. from wash basin all fitting to have 75mm deep seal traps and to connect to 110mm UPVC soil stack within vented duct and fitted with air admittance valve above flood level. Install rodding point at base of stack.

Engineering brick on edge coping and 2 courses of plain tiles

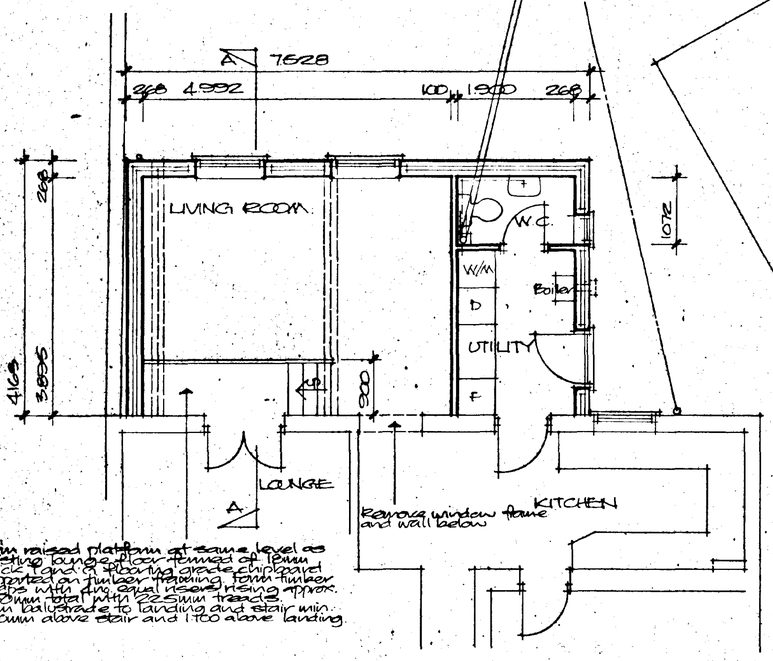
Cavity tray d.p.c. combined with top of upstand to flat roof finish. Wall insulation up to this level.

Cavity tray d.p.c. combined with code 4 lead flashing to top of garden wall.

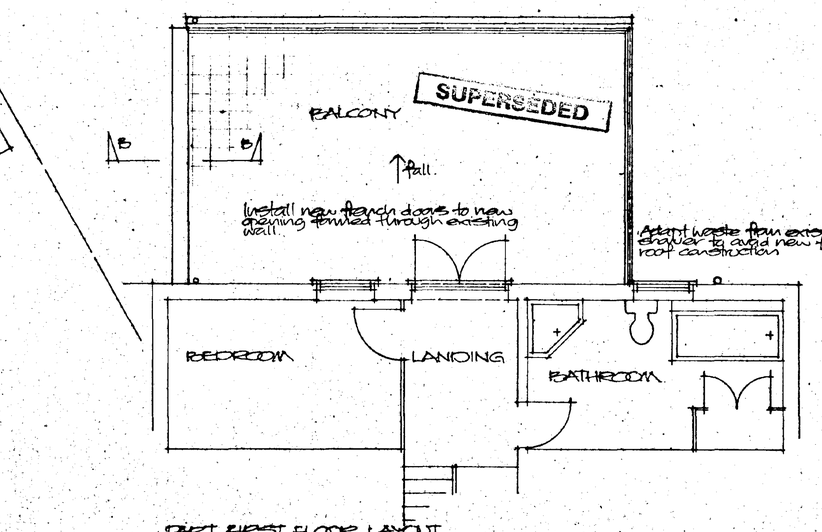
Install code 4 lead flashing between new wall and over top of garden wall.

SIDE ELEVATION

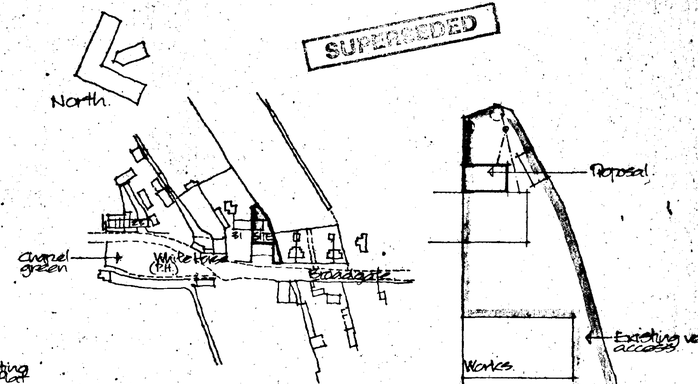
Install shallow brick arches to all openings.



Form raised platform at same level as existing lounge floor formed of 18mm thick T and G flooring grade chipboard supported on timber framing. Form timber steps with 175 (224) risers rising approx. 650mm total with 225mm treads. Form balustrade to landing and stair min. 900mm above stair and 1100 above landing.



PART FIRST FLOOR LAYOUT.



LOCATION PLAN Scale 1:2500

BLOCK PLAN Scale 1:500

Do not scale off this drawing
All site dimensions to be checked before work commences.

SHDC
Planning & Development
07 AUG 2002
Ref. 0918/02

Project
PROPOSED EXTENSION TO HOUSE 38 BROADGATE, WHAPLODE DROVE.

ALAN HORNSBY
ARCHITECTURAL SERVICES
'Little Acre'
Peak Hill, Cowbit,
Spalding, Lincs. PE12 6AW
Tel. Holbeach (01406) 380591

Client
MR. & MRS F. MARTINO

Scale 1:50
Date Jan. 02

Drg. no.
02/01/01A

Summit DS(UK) 0086

Roof construction:
Flowerdale tiles bedded to built up high performance roof covering to min. BS 747 specification on 18mm thick external quality plywood with T and G joints on rafters double layer of 38 x 200 insulation at 16mm thick external quality plywood decking with all joints and perimeter supported on timbers to fall 1 in 60 on 75 x 47 to joists (SC 4) at 400mm ctrs supported on new wall and on joist hangers on existing wall

Average 'U' value = 0.250 w/m²K.

Install insulation packing between underside of roof insulation and top of wall insulation.

Install min. 50 x 225 timber above existing lounge French doors to support flat roof joists. Fully timber to extend approx. 350mm each side of opening and to be bolted to wall at max. 600mm ctrs.

Install 50x5mm mild steel straps between roof structure and perimeter walls at average 1.800 ctrs. straps to extend over 3 no. timbers where at right angles supported by noggings.

Install brick dental course below fascia board

Ceiling:
Install 9.5mm thick plasterboard ceiling with 'Artex' finish and perimeter supported.

Install 112mm dia. h.r. UPVC gutter with 68mm dia downpipe connected to 110mm dia. UPVC drain bedded on 100mm pea gravel to fall to new soakpit min. inside size at least 3.000 from building.

All structural timber to be grade SC3 and marked dry or kiln dry.

Cavity walls:
103mm thick approx. reclaimed facing brickwork to match existing, 65mm cavity and 100mm thermalite standard blockwork with internal finish of dense plaster
Install 65mm thick fibreglass batt cavity insulation installed to manufacturers recommendations
Average 'U' value = 0.45 w/m²K
Dampcourse insulated d.p.c. to reveals with frames lapping by min. 15mm
Cavity wall ties installed at 900mm ctrs horizontally 450mm ctrs vertically and at 225mm ctrs within 225mm of reveals.
Wall insulation to be continuous with roof insulation
Concrete blockwork below d.p.c. to be class A
Install thin coat render to walls with 150mm above ground level (external skin).
100mm thick thermalite standard block internal walls.
New walls to be bonded to existing with Furpix wall extension profiles.

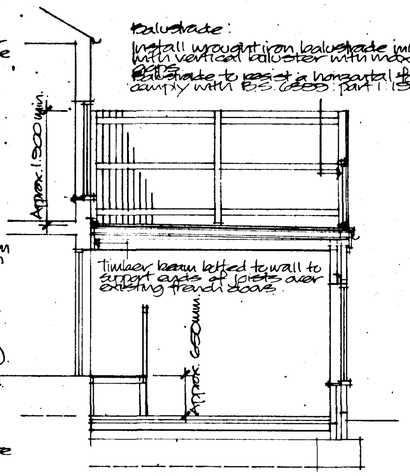
Ground floor:
65mm thick lightly reinforced sand/cement screed on 500 gauge polythene separating membrane 50mm thick expanded polystyrene insulation on 100mm thick concrete slab on 1200 gauge polythene d.p.m. on min. 150mm hardcore wall consolidated and blinded.

Foundations:
700mm wide grade 5:1:6 concrete trenchfill foundation min. 750mm deep (1.00 in shrinkable soil). Depth to be agreed on site with B.C. building inspector. Cavity to be taken up internally adjacent to existing garden wall. Foundation to internal walls to be 450mm wide.

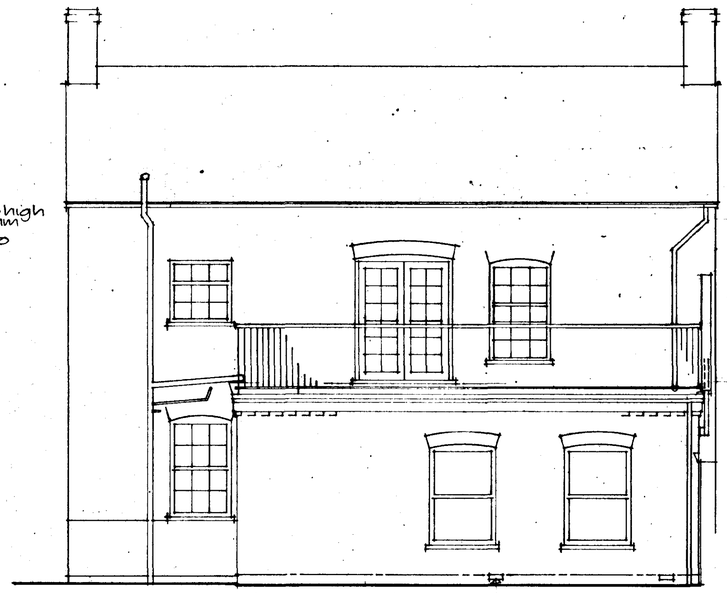
Windows/external doors:
UPVC window and door frames with 2 no. sliding sash frames to living room and side hung casement frame to W.C. Install new French doors from landing onto balcony.
All living rooms to be provided to have safety glass to all doors and to all glazing within 800mm of floor level
All openings to be draught sealed
Install trickle vents to provide 5000mm² background ventilation to living room and 4000mm² to W.C. and utility
Windows to living room to provide min. 1/20th of floor area as ventilation
All glazing to achieve min. 2.0 w/m²K. (16mm gap + Low'E' glass)

Approx window sizes:
Living room (2 no.) 1085 x 1650 sliding
W.C. 600 x 1000 to be confirmed.
Entrance French doors 1800 x 2100 to be confirmed.
Approx. Roof light 1400 x 2120 (to be confirmed)

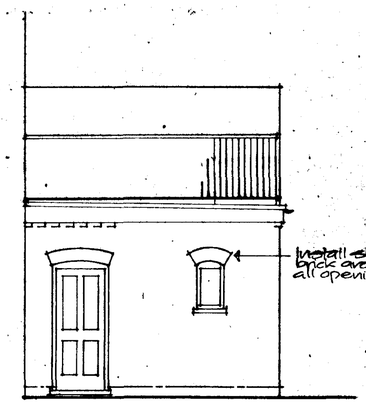
Balustrade:
Install wrought iron balustrade min. 1100 high with vertical balusters with max. 99mm gaps. Balustrade to resist a horizontal force to comply with B.S. 6399: part 1: 1996.



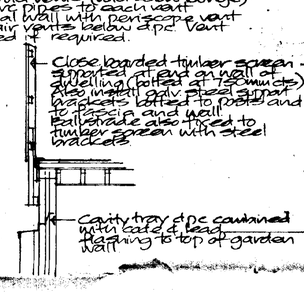
SECTION A-A


REAR ELEVATION

Extend existing floor void vaults (void below lounge) with 2 no 110mm dia. UPVC pipes to each vault terminating at external wall with terminal vent and obscured plastic air vaults below d.p.c. Vault ducts to be re-located if required.



SIDE ELEVATION



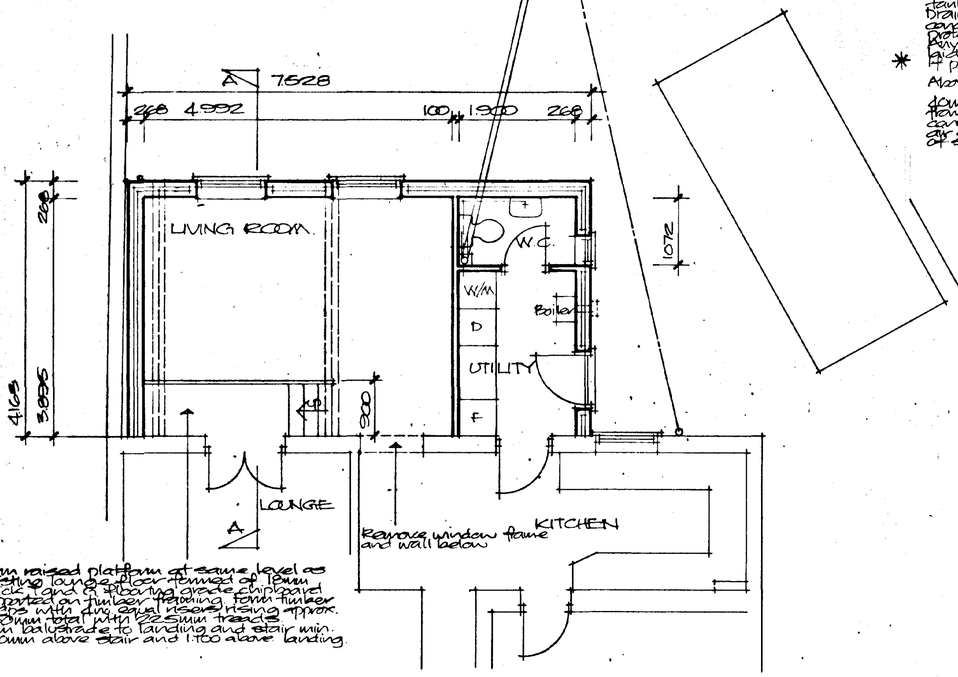
SIDE ELEVATION

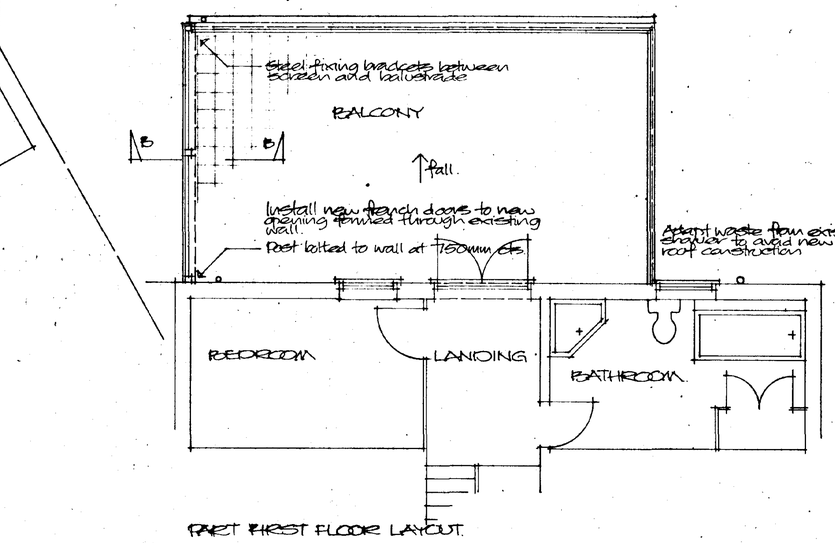
Lintels:
Install I.G. ref. LI/S50 steel lintels to external openings with cavity tray d.p.c above openings in gable. Install arch formers with lintels to all openings. Install 2 no internal 100 steel lintels to W.C. door. Install 1 no. box lintel 200 with arch former over French doors.

Heating and hot water:
Extend existing heating and hot water services into extension.
Install new wall mounted gas fired balanced flue boiler in utility to replace existing boiler in kitchen
Boiler to be fitted with frosting controls and boiler control interlock.
Install suitable guard to flue outlet
New radiators to be fitted with thermostatic valves
Hot water pipes to be insulated with Armaflex or similar insulation of thickness to match pipe diameter.
Building Regulations Commissioning certificate to be supplied for hot water heating system
Mechanical ventilation
Install extract fan in utility to extract at a rate of 30 litres per second.

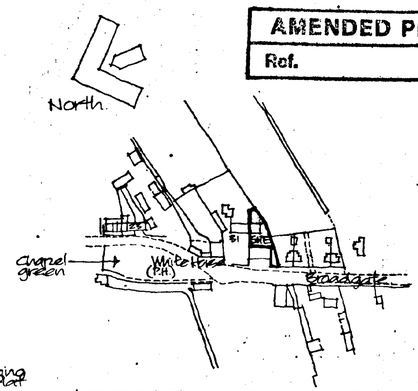
Drainage below ground:
To be 110mm dia. UPVC bedded and surrounded in 100mm pea gravel to fall at approx. 1 in 40 to connect to existing inspection chamber and septic tank.
Drain to be protected where it passes through wall with prestressed concrete sills to lintel with min. 50mm clearance around pipe and protection from vermin entry.
Any drain within 600mm of ground level to be protected by paving slabs and above pea gravel surround
At provide provide gas seal around pipe where it passes through wall.

Above ground drainage:
40mm dia. polypropylene waste from washing machine and 32mm dia. from wash basin all fitting to have 75mm deep seal traps and to connect to 110mm UPVC soil stack (within vented duct and fitted with air admittance valve above flood level) Install rodding point at base of stack

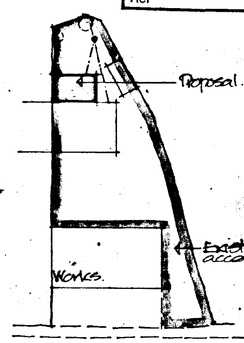




PART FIRST FLOOR LAYOUT



LOCATION PLAN Scale 1:2500



BLOCK PLAN Scale 1:500

Do not scale off this drawing
All site dimensions to be checked before work commences.

AMENDED PLAN
Ref.

SHDC
Planning & Development
24 SEP 2002
Ref

DETERMINED PLAN

Project
PROPOSED EXTENSION TO HOUSE
38 BROADGATE, WHAPLODE DROVE.

ALAN HORNSBY
ARCHITECTURAL SERVICES
'Little Acre'
Peak Hill, Cowbit,
Spalding, Lincs. PE12 6AW
Tel. Holbeach (01406) 380591

Client
MR. & MRS F. MARTINO

Scale 1:50
Date Jan. 02

Drg. no.
02/01/01C

Summit DS(UK) 0098