Roof construction: (section A-A)

Install plain tiles to match existing installed to manufacturers recommendations on 25x38 fully treated battens on Proctor Roofshield or similar breathable sarking with eaves carrier on 47x100 rafters at 400mm max. cts.
Install min. 47x122 ceiling joists at max. 400mm cts. and 50x100 wall plates.
Install 63x195 hip rafters.
Install 63x220 ceiling beam where indicated with 2no. 47x100 struts to underside of top of hip rafters supported off ceiling beam.
Install 63x195 purlin where indicated bolted to tops of rafters. Purlin to support joists to section of flat roof.
Section of flat roof formed of code 5 lead on 18mm exterior grade plywood decking on firings to fall to outlet to discharge through roof space and into gutter below tiles. Lead roof finish to be dressed into existing wall and to be taken up under ridge tiles. Flat roof joists bolted to tops of rafters.
Flat roof timbers and ends of ceiling joists to be supported on min. 47x100 timbers bolted to existing walls at max. 600mm cts.
Eaves to be constructed to be similar to existing but with approx. 200mm projection. No eaves vents required.
Refer to roof structure layout and section for further details.
Install code 4 lead flashings between new roof and existing wall.
Roof pitch to be min 35 degrees. Pitch not to be below roof tile recommended minimum.

Roof construction: (section B-B)

Install plain tiles to match existing installed to manufacturers recommendations on 25x38 fully treated battens on Proctor Roofshield or similar breathable sarking with eaves carrier on fully treated T&G boarding on 47x100 rafters at 400mm max. cts.
Install min. 47x100 ceiling joists at max. 400mm cts.
Install 63x195 hip rafters.
Install 25x175 layboard below ends of rafters below valley gutter location.
Install preformed fibreglass valley gutters.
Structural timber and underside of boarding to be exposed.
This section of roof structure supported on timber flitch beams. (refer to structural calculations)
Eaves to be constructed with approx. 200mm projection and exposed treated rafter ends with approx. ex 25x100 (to be confirmed)fully treated fascia board.
Refer to roof structure layout and section for further details.
Install code 4 lead flashings between new roof and existing wall.
Roof pitch to be min 35 degrees. Pitch not to be below roof tile recommended minimum.

Lintels:

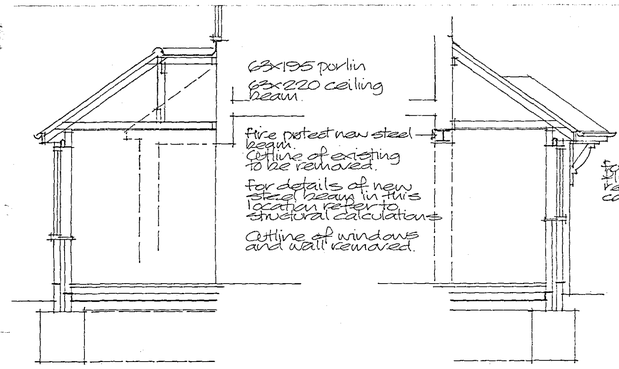
Install IG type L1/S75 steel lintel to openings up to 1200mm clear span. The two larger window openings to have type L1/HD75 lintels. Install IG type internal 100 steel lintel to pantry door.

Floor construction:

Approx. 50mm thick sand/cement screed on 100mm thick grade Gen3 concrete slab on 100mm thick SD grade expanded polystyrene insulation on 1200 guage polythene DPM on min. 150mm hardcore well consolidated and blinded.

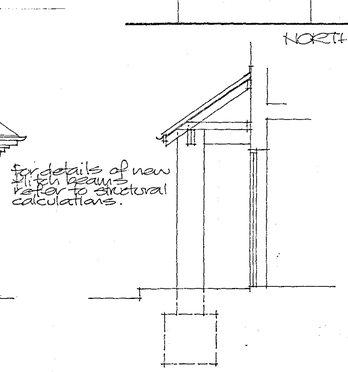
Mechanical ventilation:

Install extract fan to kitchen located in cooker hood to extract at a rate of 30 litres per second.

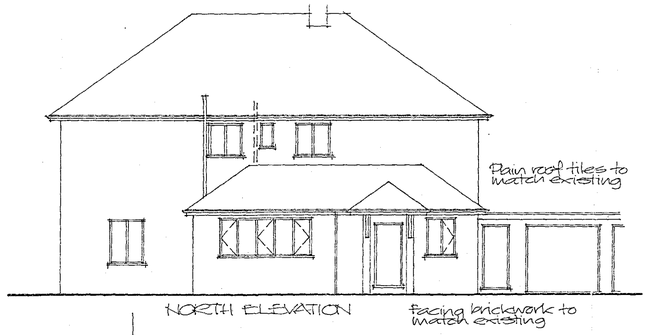


SECTION A-A

SECTION C-C

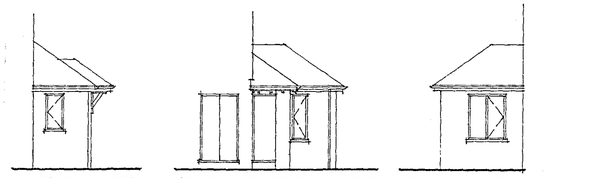


SECTION B-B



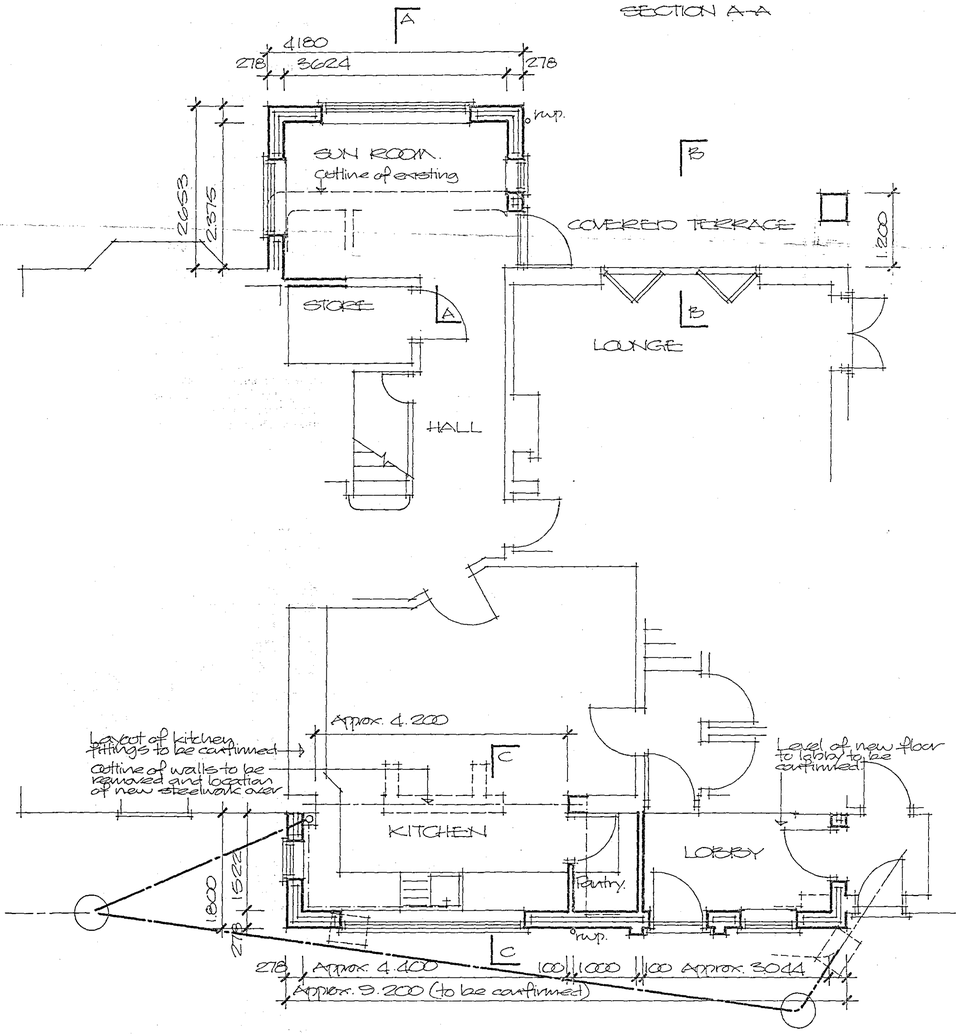
NORTH ELEVATION

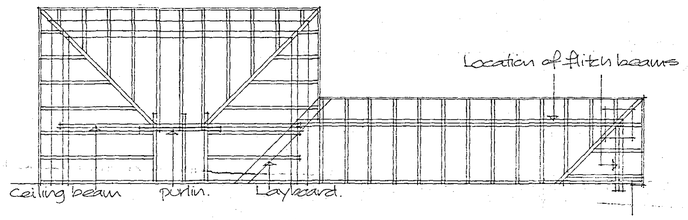

SOUTH ELEVATION


PART EAST ELEVATION

PART WEST ELEVATION

PART EAST ELEVATION





Roof construction: (section C-C)

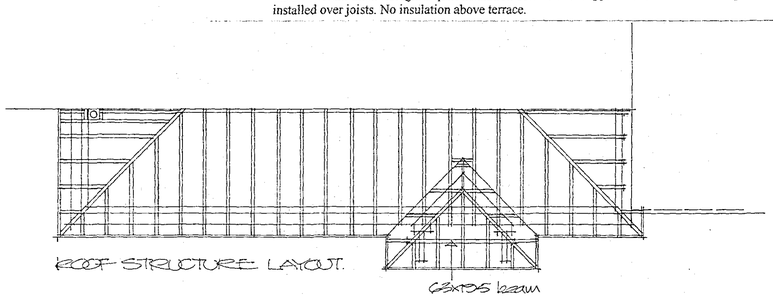
Install plain tiles to match existing installed to manufacturers recommendations on 25x38 fully treated battens on Proctor Roofshield or similar breathable sarking with eaves carrier on 47x100 rafters at 400mm max. cts.
Install min. 47x100 ceiling joists at max. 400mm cts. and 50x100 wall plates.
Install 63x195 hip rafters.
Install approx 63x195 timber beam supported by brackets to support roof structure to projecting roof over entrance.
Install 25x175 layboards below ends of rafters below valley gutter locations.
Install preformed fibreglass valley gutters.
Eaves to be constructed to be similar to existing but with approx. 200mm projection. No eaves vents required.
Refer to roof structure layout and section for further details.
Install code 4 lead flashings between new roof and existing wall.
Roof pitch to be min 35 degrees. Pitch not to be below roof tile recommended minimum.

Install 30x5mm mild steel straps at average 1800mm cts. between roof structure and external walls. Straps to extend over 3no. timbers where at right angles supported on noggings.

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

Roof insulation:

Install 100mm thick fibreglass quilt insulation between ceiling joists with 150mm thick quilt installed over joists. No insulation above terrace.


ROOF STRUCTURE LAYOUT.

GENTOS beam

Ceilings:

Formed of 9.5mm thick plasterboard with Artex or skim finish with perimeter supported. Exposed ceiling above terrace formed of T&G V jointed treated timber. (to be confirmed).

Gutters and downpipes:

Install upvc gutters and downpipes similar to existing with new downpipes connected to new soakpits min. 1 metre cube at least 5 metres from building. Drains to be 110mm dia. UPVC bedded on 100mm peagravel to fall to soakpits. Refer to site layout.

Cavity walls:

Constructed of 103mm facing brick, 75mm cavity and 100mm Celcon or Thermalite standard blockwork with dense plaster or 12.5mm plasterboard and skim on dabs internal finish. Install Dritherm cavity insulation batts to manufacturers recommendations.
Average "U" value = 0.33W/M2K.
Install Damcor insulated DPC to reveals with frames lapping by min. 15mm.
Install wall ties at 900mm cts. horizontally, 450mm cts. vertically and at 225mm cts. within 225mm of reveals.
Install Hyload DPC min 150mm above ground level with DPM lapping inner wall DPC.
Concrete blockwork used below DPC level to be class A.
New walls to be fully bonded to existing or bonded with Furfix wall extension profiles.
Facing brick pier to be 440x440.
Internal 100ram wall to be as inner skin of cavity wall.

Foundations:

Install 700mm wide (450mm wide to internal wall) grade Gen3 concrete trenchfill foundations min. 750mm deep (1.000m deep in shrinkable soil). Depth to be agreed on site with LA building inspector. Foundation to pier to be 850x850 by depth to be confirmed.

Windows and doors:

New window and door frames to be glazed with sealed units with min. 16mm gaps and incorporating Low E coating to give min "U" value of 2.0 W/M2K. All glass to doors and any glass within 800mm of floor to be safety glass to BS6206. All openings to be draught sealed. Install trickle vents to provide min. 8000mm2 background ventilation to kitchen and sun room.
Structural opening sizes shown are to be confirmed on site.
Replace existing lounge window with new folding timber framed / glazed doors (design to be confirmed). Re-use existing front door re-located to lobby entrance if suitable and if up to latest standards.

Drains:

Install 50mm dia. polypropylene waste to kitchen sink with 75mm deep seal trap connected to new 110mm dia. UPVC soil and vent stack within duct with rodding point at base. Top of vent to terminate at least 900mm above first floor window head level. Re-connect existing bathroom drainage through roof void to new soil and vent stack, confirm on site if air admittance valves required on existing waste pipes.
New drains below ground to be 110mm dia. UPVC bedded and surrounded in 100mm peagravel to fall at approx. 1 in 60 to connect to existing drainage. New inspection chambers to be preformed polypropylene type. Drain passing through wall to be protected by prestressed concrete slab lintel with min. 50mm clearance and protection from vermin entry and gas sealed. Drains within 600mm of ground level to be protected by reinforced concrete slab laid above compressible layer over peagravel surround. Seal off any redundant drain runs.

Heating:

Extend existing central heating into extension with thermostatic valves fitted to new radiators. New hot water pipes to be insulated with Armaflex or similar of thickness to match pipe outside diameter.

Lighting:

Install compact fluorescent low energy light fitting or fluorescent tube light fittings to at least one new room.

PROPOSED EXTENSIONS TO HOUSE.
RED HOUSE FARM, GEDNEY MARSH.
FOR W B WRIGHT & SONS LTD.

BROADGATE BUILDERS LTD
The Race Ground
Spalding Lincs

SHDC
Planning & Development
16 JUN 2004
Ref: 0795/04

DETERMINED PLAN

Scales 1:50 & 1:100
May 2004