Do not scale off this drawing

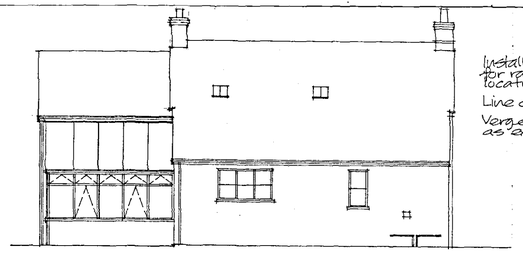
All site dimensions to be checked before work commences.



EAST ELEVATION



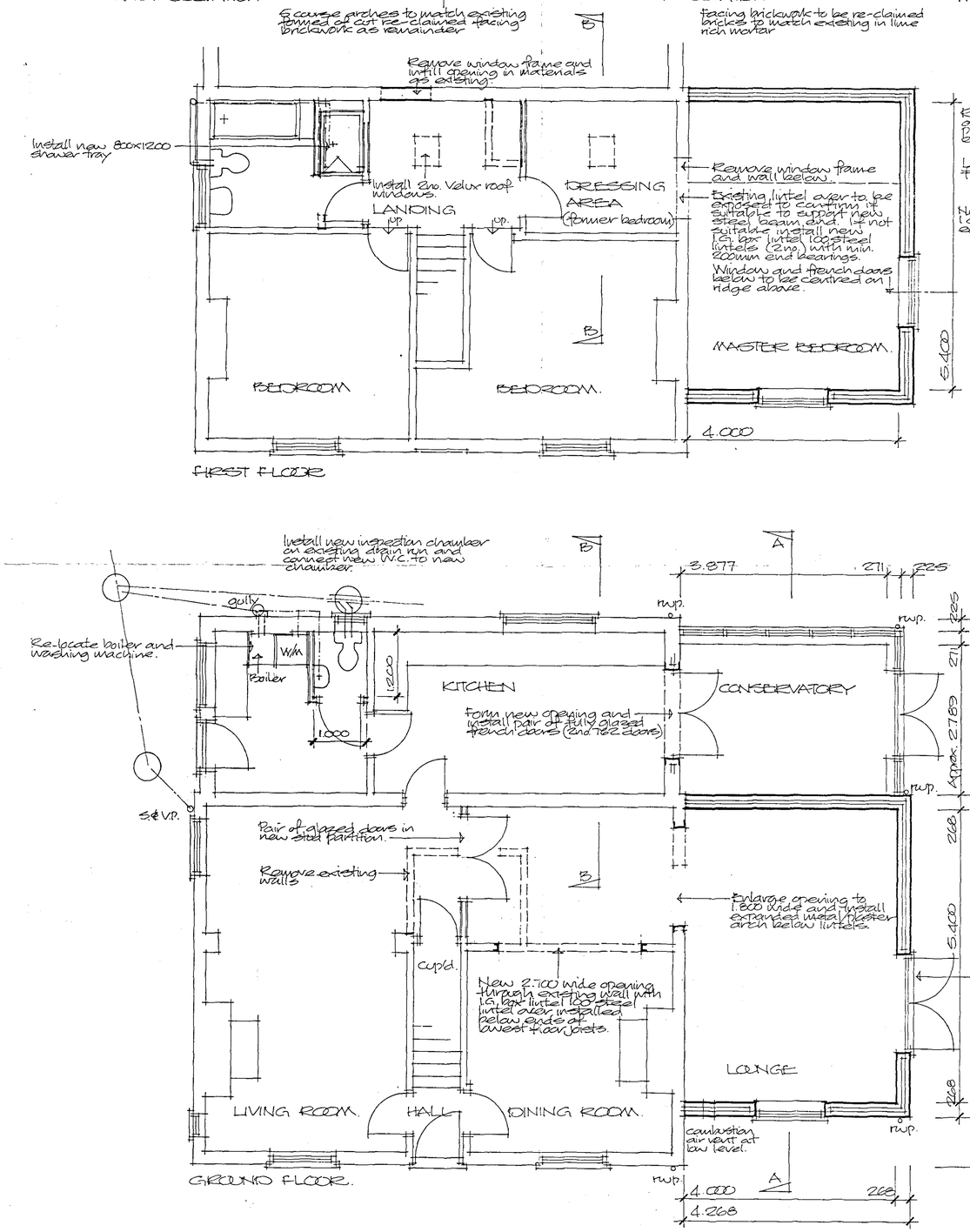
NORTH ELEVATION



WEST ELEVATION



SOUTH ELEVATION



SECTION B-B

ROOF STRUCTURE LAYOUT.

Roof construction:
Install natural slate roof finish at same pitch as existing (approx. 26 degrees). Provide break in western roof slope of the two storey extension, detail to be agreed with Planning authority. (Planning consent condition 4). Slates to be of similar size and colour to existing on existing roof. Slates are to be installed to manufacturers recommendations. Re-claimed good quality slates may be an alternative.
Slates are to be installed on 25x50 fully treated battens on Proctor Roofshield or similar breathable sarking with eaves carrier on built up timber roof structures formed of:
Main roof :
50x100 rafters at 400mm cts.
50x147 ceiling joists at 400mm cts.
32x150 ridge
25x100 collars at ridge
min. 50x100 wall plates
50x100 hangers adjacent to steel purlin
Install 203x102x23 steel purlin where indicated with 450x2 course engineering brick padstone bearing at each end.
Eaves and verge construction to be formed to match existing. (Details to be agreed with planners). No roof void vents are required as breathable sarking to be used.
All structural timber to be grade SC3 marked dry or kiln dry.
Install 30x5mm mild steel straps at average 1800mm cts. Between roof structure and external walls. Straps to be installed at ceiling level and at slope of roof. Straps at gable to extend over 3 timbers and to be supported by noggings.
Install code 4 lead flashings/stepped flashings at junction of new roof and existing house wall and around chimney stack.

Lower roof over kitchen etc. :
Formed of slates, battens and sarking as above on new 47x150 rafters at 400mm cts. New rafters to be strapped to existing roof structure at top and bottom. Existing roof structure to be retained together with ceilings.

Gutters, rainwater downpipes and stormwater drains:
Install approx. 112mm dia. half round UPVC gutters with approx. 68mm dia. downpipes, all similar to existing. Downpipes to be connected to new soakpits with 110mm dia. UPVC drains bedded on 100mm peagravel to fall to soakpits min. 1 metre cube at least 5 metres from building. Location of soakpits will be agreed on site with LA building inspector.

Ceilings:
New ground floor ceilings to be formed of 15 mm thick plasterboard with skim finish. New first floor ceilings to be formed of 9.5mm thick plasterboard with skim finish. Perimeter of all new ceilings to be supported.

Roof insulation:
Install 100mm thick fibreglass quilt insulation between ceiling ties and 150mm thick quilt over ties to flat areas of ceilings. New sloping ceilings to be insulated with
Install 90mm thick Celotex tuff-Rtm Zero GA3000Z to sloping ceiling section of roof between rafters with battens fixed to sides of rafters to keep underside of insulation level with underside of rafters. Install 50x50 battens below rafters to create gap above insulation. Install 40mm thick continuous Celotex tuff-Rtm Zero GA3000Z below rafters with taped joints. Insulation to be installed to manufacturers recommendations.

Suspended timber floor:
Formed of 18mm thick moisture resistant T&G flooring grade chipboard on 50x195 joists at 400mm cts. with solid or herringbone strutting at mid span. Joists supported on 38x195 timbers bolted to existing wall at max. 600mm cts. and built into new wall. Install min.100mm thick fibreglass quilt sound deadening between floor joists.
Install 30x5mm mild steel straps between floor structure and external walls at average 1800mm cts. Straps to extend over 3no. timbers where at right angles supported by noggings.

Cavity walls:
Constructed of approx 103mm thick re-claimed facing bricks to match existing incl.size (sample to be supplied and agreed with Local Authority Flanners), 75mm thick insulated cavity and 100mm thick insulating concrete block (650 kg/m3-0.16 W/m2K) with dense plaster internal finish. Cavity insulation to be 75mm thick Dritherm cavity insulation batts installed to manufacturers recommendations. Average "U" value = 0.33W/m2K .
Install TDI(UK)Ltd Weathercor or similar insulated cavity closer with frames lapping by min. 30mm.
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.*
Any concrete blockwork below DPC level to be class A.
New walls bonded to existing with Furfix wall extension profiles.
Incorporate shallow brick arches above new openings to match existing. New face brickwork to incorporate snapped headers to give the appearance of Flemish bond brickwork. Face brickwork to be built in lime rich mortar.
Walls to conservatory formed of two skins of face brickwork with 75mm insulated cavity.

Ground floor:
Constructed of approx. 50mm thick sand/cement screed on 100mm thick grade Gen3 concrete slab with 25mm thick expanded polystyrene insulation to perimeter on 100mm thick SD grade expanded polystyrene insulation on 1200 guage polythene DPM lapped over wall DPC on min. 150mm thick hardcore well consolidated and blinded.

Foundations:
Install 700mm wide trenchfill grade Gen3 concrete foundations min. 750mm deep (1.000 in shrinkable soil). Depth of foundations to be agreed on site with LA building inspector.

Heating and hot water:
Extend existing central heating and water services into proposal with thermostatic valves fitted to new radiators and all new hot water and unprotected cold water pipes insulated with Armaflex or *similar of thickness to match pipe outside diameter.*

Lintels:
Install IG type L1/S75 steel lintels to all new external openings except lounge and kitchen French doors which is to be type L1/HD75, install arch formers to all openings. Install IG box lintel 100 steel lintels (2no. to 1 brick thick walls) to new internal openings. Install cavity tray DPC to all lintels not protected by eaves.

Windows:
All new window frames to be timber of *sliding sash design similar to existing windows to front elevation* except small casement window to WC (detailed drawings of window and door frames to be supplied by manufacturer to planners). Sliding sash frames to have design as existing including glazing bead size and shape and main frame/sub frame size and shape, windows to be fitted with traditional sash cords and weights. Sliding sash windows to be single glazed, new glazed single and double doors and casement window to be glazed with sealed *units with minimum* 16mm gaps between glass and to incorporate Low E coating to provide "U" value of 2.0 W/m2K. All glass to doors and within 800mm of floor level to be safety glass to BS 6206. All opening lights to be draught sealed. Install trickle vents to new bedroom and lounge to provide 8000mm2 background ventilation and provide 4000mm2 to WC window. At least 5% floor area ventilation to be provided to new bedroom and lounge. Window frames to be set back from face of brickwork similar to existing.
Sliding sash window frames to be of similar size to existing.
Bedroom window to be suitable as fire escape with min. clear opening width of 450mm and min. opening area of 0.33m2.
Install 2no. Velux ref. GVA conservation type rooflights to existing roof. Timber trimming to rooflights to be determined on site.

Drainage:
Remove WC, wash basin and shower tray from existing ground floor shower room and seal off/remove existing drainage. New 40mm dia. waste with 50mm deep cleanable trap from new shower tray in enlarged bathroom connected to existing UPVC soil and vent stack . New ground floor wash basin connected to existing back inlet gully with 32mm dia. polypropylene waste (50mm combined waste) and 75mm deep seal trap. New WC connected to new polypropylene inspection chamber on existing drain run with 110mm dia. UPVC drain bedded and surrounded in 100mm peagravel.

Stud partitions:
Formed of 50x75 studs at 400mm cts. With 50x75 sole and head plates and noggings at 1200mm cts. with cladding to both sides of 12.5mm plasterboard and skim and fibreglass quilt packing installed between studs.

Lighting:
Install to at least one room, compact fluorescent or fluorescent tube type low energy light fittings.

Part P – Electrical installations:
All electrical work required to meet the
Requirements of part P (electrical safety) must be designed, installed and tested by a person competent to do so. Prior to completion of the works the council must be satisfied that either:
1. An electrical installation certificate issued under a competent persons scheme has been issued, or
2. An appropriate electrical installation certificate has been issued for the work, and that it has been signed by a person competent to do so.

Conservatory:
New timber framed conservatory to have multi skin polycarbonate roof supported by timber bearers all to be supplied by specialist supplier/installer. Conservatory to be glazed with sealed *units with minimum* 16mm gaps between glass and to incorporate Low E coating to provide "U" value of 2.0 W/m2K. All glass to doors, attached windows and glass within 800mm of floor level to be safety glass to BS 6206.

SHDC
PLANNING & DEVELOPMENT
17 FEB 2006
Ref. 0235/06

Project
PROPOSED EXTENSION AND ALTERATIONS TO HOUSE
MALLARD HOUSE FARM, MALLARD HORN, RONINGTON.

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

DETERMINED
PLAN

Client
MR & MRS A.C.TWELL

Scale 1:50/1:100
Date Dec.01

Drg. no. 01/75/01/KB C

Survey 05/01/2006