ROOF CONSTRUCTION (MAIN ROOF TO SINGLE STOREY EXTENSION)
195X47mm rafters spaced at 400mm centres. Double rafters to sides of rooflights. Planum clay interlocking low pitch roof tiles to manufacturer's recommendations on 50x25mm sw treated battens on untearable breathable felt to BS 747 on rafters. Minimum roof slope 10 degrees. Allow 50mm air gap and fit 100mm KS TP10 rigid insulation in between and 62.5mm KS Kooltherm K18 to underside. All fixed to 100x75mm wallplate strapped to wall at 2m centres max.using 30x5 MS straps. Provide crawl boards . Continuous fly-screen ventilation gap to full length of eaves 12.5mm Gyproc duplex plasterboard fixed to underside of trusses .100 x 25mm S/W bracing as follows;-
Diagonal bracing from ridge to wallplate.
Bracing to ceiling and internal tie members.
Provide lateral restraint at ceiling tie and roof level with 30 x 5mm
M/S straps @ 2.0m centres.
Ex: 178 x 25mm S/W to fascia board.
6mm external quality plywood to soffits.
'U' value of roof not to exceed 0.20W/m2C
ALL STRUCTURAL TIMBERS SUBJECT TO LABC APPROVAL

FLASHINGS
At roof/wall abutments provide code 4 lead flashings, treated with patination oil. 150mm min. cover, 150mm min. laps, 25mm into existing brickwork joint with lead joint wedges and clips (bottom edge) at max 500mm centres and pointed with caulking compound. Max sheet length 1500mm. Valley gutter to chimney/back gutter to be code 5 lead.

GLAZING - Double
All glazing to external doors and windows to be 24mm thick factory sealed double glazed units with 16mm air gap & low 'E' coating.. Glazing within 1500 mm of floor level in doors and adjacent glazed frames within 300 mm horizontally of a door opening to be glazed in laminated safety glass complying with BS 6206 (inner and outer panes). Also windows and glazed frames within 800 mm of floor level to be glazed with laminated safety glass.

EMERGENCY EGRESS WINDOWS
At least one window per habitable room on the upper stories of each unit requires an egress window with an unobstructed opening of at least 0.33m. sq., 450mm high and 450mm wide with a maximum height of 1100mm from finished floor level to the bottom of the openable area . Windows for this purpose to be fitted with manufacturers escape hinges to ensure minimum width dimension is met.

DOORS
All habitable room doors to be min 30 minute fir resistance. Door between garage and internal accommodation to be FD30 and self closing.

INTERNAL TIMBER PARTITIONS

75 x 50mm softwood studding at 400mm centres with 75 x 50mm head, sole plates and noggins. Fit double cripple studs each side of door openings. Provide support noggins at 600mm maximum centres beneath partitions parallel to joist span. Stud centres to coincide with joist centres where partition is at 90 degrees to joist span. Line both sides with 12.5mm Gyproc plasterboard and finish with 5mm skim coat of gypsum board plaster. Provide 75mm Crown wool or similar insulation between studs. Face of studs to bathrooms to be lined with 12.5mm Gyproc duplex moisture resistant board. All structural softwood to be SC3 tanalised and include grading mark 'DRY' or 'KD'

PLASTER
All internal surfaces of ceilings and walls to be plastered and comply with the Building Regulations.

VELUX ROOFLIGHTS (TO BE CONFIRMED WITH CLIENT)
Lean-to roof- Velux EAW UK10 6000 insulated kerb rooflights for low pitch roofs (size to be confirmed with client).
Main roof - Velux GGL mk06 2070 (size to be confirmed with client)

STRAPS & ANCHORS
Fix straps and anchors in the following locations:-

Bat galvanised steel wallplate straps to secure plate to wall at 1.2m centres.

Bat M305 galvanised steel straps at 1.2m centres anchoring ceiling ties & rafters to gable end walls.

Bat M305 galvanised steel straps at 1.2m centres anchoring floor joists to walls.

Fix noggings between timbers to which straps are fitted. The nogging being 50mm wide and a depth matching the adjoining member. Straps to pass over not less than 3 members .

CEILING LININGS
Line underside of ceiling joists and those members exposed to roof voids with 12.5mm Gyproc duplex board and finish with 5mm skim coat of Gypsum board plaster.

Ceiling joists and rafters to sloping ceilings to receive Tyvek SD 2 air leakage barrier prior to lining with plasterboard.

SOIL AND VENT PIPES
100mm dia UPVC soil and vent pipes connected to F.W. drain and vented minimum one meter above uppermost window level (within 3 metres) through open stack with wire protection cage. Encase pipe in one layer of 12.5mm Gyproc plasterboard nailed to 38 x 38mm tanalised softwood battens and finish with 5mm Gypsum board plaster. Form access panels in duct at connections. Fill voids around pipe with Crown wool plugging or similar approved.

SOIL PIPES
100mm dia UPVC soil pipes connected to F.W. drain and terminated above highest fitting with air admittance valve. Encase pipe in one layer of 12.5mm Gyproc plasterboard nailed to 38 x 38mm tanalised softwood battens and finish with 5mm Gypsum board plaster. Form access panels in duct at connections. Fill voids around pipe with Crown wool plugging or similar approved.

RAINWATER GOODS
Gutters to be UPVC half round profile to match existing, with matching fittings and 68mm downpipes. Position as shown on plan, and elevations.

WASTES
Fit deep seal traps to all sanitary ware and sinks and connect into new gulleys/soil pipes as indicated. Provide 38mm dia waste with anti-syphonage trap where waste runs exceed 1.7 metres. Fit rodding eyes at elbows and tees.

Waste sizes:-

Basin 32 dia
Sink 38 dia
Shower 38 dia
Bath 38 dia
Washing Machine 38 dia
WC 100 dia

The entire internal drainage system to be Osma UPVC or similar approved, fitted in accordance with their recommendations. Horizontal runs to be laid to a minimum fall of 1 in 60.

LIMITING INFILTRATION

All doors and windows including rooflights to be fitted with manufacturers draft seals. Where service pipes penetrate floors or walls seal around pipes etc. with a suitable flexible sealant.