DO NOT SCALE FROM DRAWINGS, ALL DIMENSIONS TO BE CHECKED ON SITE.

GENERAL

All works to be carried out in accordance with all current Building Regulations under the provisions of the Building Act 1984.

SUBSTRUCTURE

Foundations are to be of mass concrete and of continuous strip configuration.

Strip foundations are to be minimum 600 x 300mm deep. Underside of foundation to be minimum 1000mm below finished ground level. Final depth and detail of foundations to be subject to site conditions and approval of Local Authority Building Inspector. Underside of foundation to be taken below invert level of any adjacent drainage runs.

Walls below D.P.C. to be of dense concrete blockwork and cavity to be filled with weak mix concrete up to ground level, different skin thicknesses to depend on skin thickness above D.P.C; weepholes are to be provided to vertical joints in blockwork at maximum 900mm centres at ground level above cavity fill.

Where services or drainage runs pass through internal or external walls below D.P.C; level the masonry is to be supported on a precast concrete lintel to give a minimum clearance of 50 mm around pipe or service. Openings of duct around pipe or service to be masked with a rigid sheet material.

GROUND FLOOR CONSTRUCTION.

To be 150mm of well consolidated selected hardcore blinded with 25mm layer of sand; 1200gauge polythene damp proof membrane with all joints lapped 150mm minimum and taped; 120mm thick rigid insulation slab (Celotex XR4000) or similar approved to achieve a 'U' value of 0.15Wm²/°K; 500 gauge separating layer/dpm laid over insulation; 100mm concrete slab (1:2:4:) mix. 50mm thick sand/cement screed (1:3) mix with trowelled finish.

<u>NB;</u> Insulation to be returned up against walls.

Damp proof membrane to be taken up side of slab against inner skin of the external wall and lapped under the horizontal damp proof course.

DAMP PROOF COURSE.

All damp proof courses to comply with BS743. Finished ground levels to be minimum 150mm below D.P.C; at external walls.

EXTERNAL WALLS CONSTRUCTION.

To be blockwork outer skin with 100mm cavity; partially filled with 85mm Celotex CW4000 insulation, internal skin of 100mm 'Thermalite' insulation block dry lined with insulated plasterboard Celotex (25mm insulation and 12.7mm plasterboard), with 5mm plaster finish. Provide stainless steel wall ties 750mm centres horizontally and 450mm centres vertically staggered. Provide additional ties around all openings and at top

edge of blockwork to gable walls. Construction to obtain U Value of 0.18Wm²/°K

Provide galvanised steel lintels over all openings (to be "I.G. Lintels Ltd) minimum end bearing of 150mm.

Stop ends to be formed either side of lintel by means of extending and folding flexible d.p.c; alternatively proprietary plastic stop ends can be installed. Proprietary weep hole

vents installed to perpendicular joints as required.

All openings to be provide with vertical and horizontal insulated cavity closers at jambs and cills with a cavity tray D.P.C over all lintels.

Provide $100mm \ x \ 75mm$ treated softwood wallplate to top of internal skin fixed with galvanised mild steel straps $30 \ x \ 5 \ x \ 1200mm$ long fixed around wallplates and down internal face of blockwork at 2000mm centres.

Top of cavity to be closed with proprietary fire closers

New construction to be joined to existing by means of 'Furfix' profiles or similar approved in conjunction with vertical disc cut d.p.c. to continue cavity.

ROOF CONSTRUCTION (Single Storey)

To be interlocking concrete tile (To match existing); on 25 x 38mm treated softwood battens nailed to each rafter with 65 x 3.5mm galvanised nails to BS 1202. Roof pitch to be as drawing.

Battens to be minimum 1200mm long and butt jointed with joints located centrally over face of rafters, no more than 4no joints to any rafter. Rafters and ceiling joists to be installed at 400mm centres

Tyvec breathable roofing felt laid with minimum 150mm horizontal and vertical laps, carried well into gutters and fully supported at eaves with continuous tilting fillet so no troughs are formed.

150mm Celotex XR4000 insulation to be laid between ceiling joists, with a further 50mm GA4000 insulation to underside of joists give total insulation thickness of 160mm, 25mm batten to be fixed to underside of insulation to form an air gap between the insulation and plasterboard, all to achieve a 'U' value of 0.13Wm²/°K. A 50mm airgap is to be maintained over roof insulation and at eaves and a continuous 50 mm airgap is to be maintained behind or above fascia to allow ventilation to roof void in conjunction with high level roof vents. Wallplates to be restrained by means of galvanised steel straps at maximum of 2m centres.

Rafters to be doubled up where roof windows installed

BELOW GROUND DRAINAGE.

All below ground drainage to be designed and installed to BS EN752-1,2,3,4,5,6 & 7 $\,$

Manholes to be constructed in 215mm class 'B' engineering brickwork on a 150mm thick A142 mesh reinforced concrete base.

Brick arches to be formed over inlet and outlet. "Osma" 3/4 channel with concrete backing. Sand cement benching with 1 in 6 gradient falling to channel.

Drainage runs generally to be constructed in 100mm diameter "Osma" pipework systems. Drain runs to be formed with minimum fall of 1 in 40.

Where a drain trench passes within 1000mm of a building the trench is to be filled with concrete to surround pipe up to the lowest level of the foundation or where the trench is further than 1000mm from the building the trench is to be filled with concrete to surround pipe to a level below the lowest level for the foundation equal to the distance from the building less 150mm.

ABOVE GROUND DRAINAGE.

All above ground drainage to be designed and installed to BSEN 12056/2:2000

Foul drainage above ground is to be formed in proprietary U.P.V.C; push fit system (eg "Osma").

100mm diameter soil and vent pipe to be provided at

100mm diameter soil and vent pipe to be provided location shown on drawing. Wash hand basins to

discharge via 32mm diameter waste. Bath and sink to discharge via 38mm diameter waste, all fittings to be provided with proprietary U.P.V.C; 75mm deep seal bottle traps. All wastes to be provided in U.P.V.C.

Surface water drainage above ground is to be formed in a proprietary U.P.V.C; system. 100mm Squareline or Ogee section guttering with brackets screwed to fascia discharging into 68mm diameter rainwater pipes and to manhole via back inlet gulley.

All new gullies have rodding access.

EXTERNAL JOINERY

U.P.V.C.double glazed doors and frames.
Windows to be double glazed U.P.V.C.

N.B. Windows to have minimum U value of 1.4Wm²/°K.
Glazing to have 16mm air gap and soft low 'E'coating.
Where glazing to windows is within 850mm above floor level safety glazing to BS6206 is to be installed
Where glazing to doors and side panels is within 1500mm above floor level safety glazing to BS6206 is to be installed.

Where windows installed at least one opening to each habitable room to provide a secondary means of escape aperture of 850mm high x 500mm wide Internal cill height to be minimum 800mm and max 1100mm from internal floor level

VENTILATION.

Mechanical ventilation to be provide to Bathroom/Ensuite or w.c. (if seperate) at a rate of not less than 15 litres per second plus background ventilation.

Mechanical ventilation to be provide to Kitchen or utility room at a rate of not less than 60 litres per second plus background ventilation.

Windows to incorporate rapid ventilation by means of openable area a minimum of one twentieth of floor area of room being served.