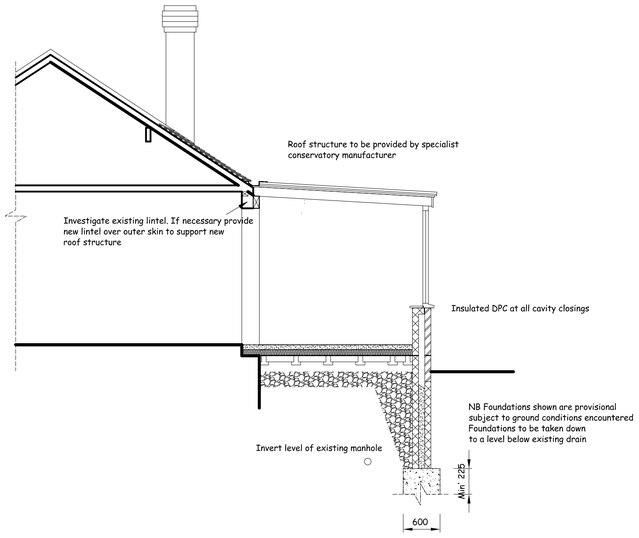
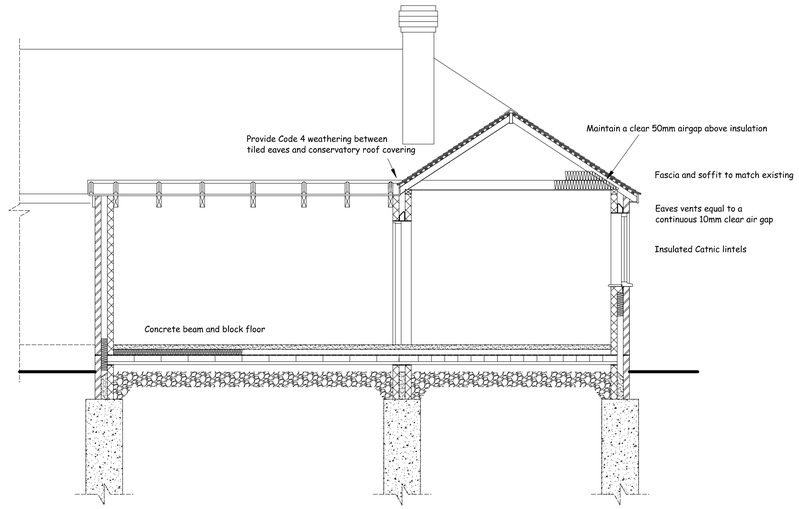




SECTION B/B



SECTION A/A

Foundations
Subject to ground conditions encountered, but minimum 600 x 225 mm C25P strip foundation at a minimum depth of 1.00 m below adjacent ground level and taken down to a level beneath the invert level of existing drainage. Foundation to be provisionally reinforced with two layers of B503 mesh. Two skins of 100mm th 7n/mm2 concrete brickwork/blockwork in cavity wall. Weak mix concrete cavity fill below ground level. 2000 gauge visqueen DPC. Facing bricks taken down at least two courses below ground level. Superstructure cavity insulation taken down to top of concrete cavity fill to ensure overlap with floor insulation.

Ground floor construction
To comprise Tarmac Topfloor or equal beam and block suspended floor. Beams to be 150 DBT Derby and Chichester at the centres and layouts determined by reference to manufacturers data sheets. Beams infilled with medium density (1500 Kg/m sq) concrete blocks. All installation details to conform to manufacturers specifications. Beams to rest on 100 mm wide 2000 gauge visqueen DPC. Floor to be overlaid with 1200 gauge visqueen DPM, 100 mm thick polyurethane insulation and 75 mm thick sand/cement fibre reinforced screed. The void beneath the beams – minimum 125 mm, to be ventilated via airbricks and cavity liners (telescopic where necessary) at maximum 3 m centres providing a clear 1500 mm sq opening per metre length of external wall.

External Walls
300 mm th cavity wall comprising 100 mm th external skin of facing bricks, 100 mm overall width cavity formed with 4 no stainless steel vertical twist wall ties per M2, minimum length 225mm conforming to the requirements of DD140 part 2 type 1 (masonry - heavy duty) and filled with Dritherm or equal cavity insulation. 100mm th inner skin of lightweight aircrete blockwork, achieving a U value of 0.30 W/M sq degree C. Insulated DPC around all openings and insulated Catnic lintels above openings. New walls fully bonded to existing - brickwork bonded to existing by cutting out pockets in existing and toothing in new, blockwork tied to existing with Blue-bird or similar stainless steel ties.

Roof Construction
Plain tiles with matching ridge, valley and tile and halves on 38 x 25mm treated laths on type Tyvec or equal breathable felt. 100 x 75 mm wallplates bedded in mortar and strapped down at maximum 2.0m centres. Rafters to be 100 x 50 mm SC3 grade treated timbers at 400mm centres. Ceiling joists/collars to be 150 x 50 mm SC3 nailed to rafter feet and wallplate.
Ridge boards and valley lay boards to be 32mm th. Incorporate 100 x 50 mm noggins between rafters either side of valleys to support lath ends. Fix galvanized restraint straps to last three rafters running parallel with gable walls, straps to be fixed over three rafters, built into block work and turned down cavity, straps to be at maximum 2m centres. Fix treated softwood facia boards and WBP plywood soffits to match existing.
Incorporate soffit vents equal to a continuous 10mm clear air gap. Incorporate 300 mm thick fibreglass roof insulation above the flat ceiling finish comprising a 150mm thick layer laid between the ceiling joists and a 150mm thick layer laid perpendicular above the joists achieving a U value of 0.16 W/M2 degree C.
Maintain a clear 50mm air gap above insulation.

Conservatory Roof
Construction of conservatory roof to be determined – Structure and glazing to be designed and installed by specialist contractor

Drainage
Excavate to investigate existing drainage. Break out existing manhole, Relay drainage from existing bathroom and S&VP to new manhole position outside proposed extension. New drainage to comprise 100 mm Supersleve pipework laid on pea gravel bed at 1 in 60 falls and back filled with selected excavated material. Drains beneath extension to be encased in concrete. New manholes constructed with 215 mm semi-engineering bricks complete with all appropriate channels benched in cement mortar Single seal galvanised covers and frames. 100 x 63 mm PCC lintels to be built into foundation walls above drains where drains pass through. All RWPs and waste pipes to discharge over trapped gullies.
Investigate existing surface water drainage. New RWP's to be either connected into existing surface water drains or into new soakaways positioned at least 5m from any buildings

Windows
UPVC windows, double glazed with argon filled sealed units incorporating "K" glass with 20mm "warm edge technology" perimeter spacers. Windows to be fully draught proofed and sealed around with silicone mastic internally and externally to achieve a U value of 1.8W/M sq degree C. Windows to incorporate trickle vents equal to 8000 mm sq and have opening casements no less than 1/20th of floor area. All new glazing to doors and windows in critical locations to be Class C of BS 6206 1981.

Services
Extend existing central heating system to provide radiators in all new areas. the calculated heat output of each radiator shall be such as to maintain an internal temperature of 23 degree C when the external temperature is -3.0 degree C . Zone heating control to be provided by thermostatic radiator valves to each radiator.
Electrical work:- The design, installation, inspection and testing of the electrical installation will be carried out in accordance with BS7671:2001. Prior to the issue of a Completion Certificate under the provisions of the Building Regulations the Local Authority must be provided with either:- 1) A copy of an Electrical Installation Certificate, issued under the "Competent Persons Scheme" or alternately, 2) A copy of an Electrical Installation Certificate issued in accordance with BS 7671:2001. by a suitably qualified and competent person.
100mm half round UPVC gutters with 63mm diameter rain water pipes. All external waste and rain water pipes to discharge over trapped drainage gullies.

Internal Finishes
9.5 mm th foil- backed plasterboard and skim to ceilings.
Internal block walls to be finished with 2 coats of Carlite plaster. Superior floor finishes to clients choice on 75 mm th fibre reinforced sand/cement floor screed. All internal joinery e.g. skirtings, architraves, door types, ironmongery etc to match existing.

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CLIENT

Mr and Mrs M Pledger

PROJECT

Proposed Extension to Enlarge Sitting Room and Form Conservatory

at

17 Barleycroft
Cheadle
ST10 1NA

DRAWING NUMBER 10/319/3

Sections

SCALES 1/50 @ A1