Remove part of existing roof structure to make way for raised room-in-roof type roof as shown.

Demolish existing conservatory to make way for proposed kitchen extension as shown.

Demolish existing garage to make way for proposed extension as shown.

Existing oil tank to be relocated to suit proposed extensions.

Ensure all works are in accordance with East Midlands Electricity's requirements in respect of adjacent overhead cables.

Existing foul drains to be diverted around proposed extension as shown. Check inverts of existing foul drains are adequate to suit new drainage connection. If not suitable, relay foul drains from existing septic tank to appropriate depths and gradients.

Remove existing internal walls as shown.

Form new internal walls in positions shown.

Remove existing bathroom window and reduce opening as shown to suit smaller window.

Remove existing French door to lounge and brick up opening.

Enlarge opening from existing kitchen into new flat roof extension as shown. Support over with IG L1/S lintel.

Build on new extension in the manner shown.

Ensure new ground floors (except garage) are level with existing.

Ground floor ceiling to be level with existing.

Roof pitch of new first floor extension to be 45°.

Provide parapet wall to side wall of flat roof extension as shown.

To flat roof over kitchen provide 170mm x 50mm SC3 grade joists @ 400mm centres.

To flat roof over workshop provide 125mm x 50mm SC3 grade joists @ 400mm centres.

To flat roofs provide 80mm Celotex Double-R RG2080 insulation to roof space with required ventilation space to allow cross ventilation to main roof.

At junction of existing pitched roof and new raised room-in-roof type roof gable end to be clad with either suitable vertical tile hanging on 38mm x 19mm battens or 6mm plywood face on 1 no. layer d.p.c. underlay all fixed to gable end roof truss. Internally provide suitable timber spacers as necessary to install 125mm Celotex Double-R insulation with black breather paper. Finish internally with 12.5mm Gyproc Duplex plasterboard ad skim finish.

To garage workshop ceiling/floor space below first floor area provide ½ hour fire resisting ceiling and 80mm Celotex Double-R insulation to floor space.

External materials to match those of existing bungalow.

First floor to be flooring grade moisture resistant decking on trusses.

Roof trusses to be room-in-the roof type.

Make good to all disturbed and affected areas.

Dormer Wall Construction
3mm skim finish on Gyproc Duplex plasterboard on 50 x 125mm vertical studs @ 400mm c/c built off doubled-up rafters as stated. Black breather paper, 6mm plywood face, 1 no. layer d.p.c. underlay. 38 x 19mm battens, vertical hung tiles (manufacturer same as roof tiles). Provide 125mm Celotex 'Double R' insulation in between studs. All timber SC3 grade. Provide 4 lbs. lead flashing to dormer cheeks and dress up wall min. 150mm.

Dormer Roof Construction
Tiles, battens and underlay as for main house roof on 25 x 200mm ridge, 38 x 100mm rafters and ceiling ties. Provide 25 x 100mm longitudinal binder plus 25 x 100mm diagonal rafter binder. At roof intersection provide 32 x 175mm valley lay boards plus suitable reducing rafters. Support rafters on 50 x 125mm header/wallplate. Provide 38 x 100mm noggins from last rafter over gable wall to take bargeboards @ 400mm c/c. Provide restraint straps as main roof. Provide 300mm fibreglass insulation plus ventilation as main. All timber SC3 grade.

Porch Roof Construction
Tiles, battens and underlay as for main house roof on 50 x 150mm rafters, 50 x 150mm ceiling ties and 50 x 100mm wall struts. Rafters and ceiling ties to be built into outside wall 100mm or supported on mild steel hangers. Rafters to be supported on 100 x 200mm beam in turn built into wall 100mm and on 200 x 200mm vertical post all as shown on roof layout plan. All timber SC3 grade.

Private Stairs
Stairwell formed by timber trimmers and load bearing walls (see plan). Provide timber balustrading to open side of stairs 900mm above pitch line and 1000mm high to stairwell opening to act as guarding and to be capable of resisting a horizontal force of 0.36 KN/m. Balustrading to be vertical type, not horizontal or ranch style. No parts of stairs to have any gaps greater than 99mm. Provide timber handrail to top of balustrading or independently 900mm above pitch line. Ensure minimum headroom above pitch line is 2000mm. Total rise: See plan. Maximum rise: 220mm. Minimum going: 220mm.. Maximum pitch: 42°. Read in conjunction with Approved Document K.

Roof/Wall Abutments
Provide Code 4 lead flashings and lap over roof covering. Dress up wall a minimum of 150mm (stepped on pitched abutments) and provide d.p.c. cavity tray to make completely watertight.

Flat Roof Comstruction (Cold Roof)
12.7mm white spar chippings bedded on bitumen on 3no. layers built up felt (first layer asbestos based) on 12mm external grade plywood decking on 50mm to 0mm timber firrings securely spiked to treated timber joists (size stated on drawings). Provide 30 x 5mm mild steel anchor and lateral restraint straps to joists fixed to walls at maximum 1200mm c/c. Extend joists past wall and provide suitably sized fascia board, complete with soffit board. Provide proprietary ventilation to soffit to offfer equal to a 25mm continuous gap along eaves. Lay between joists proprietary 150mm thick insulation maintaining a 50mm air gap between insulation and plywood. Form all necessary felt drips including tilting fillets and keep felt drips clear of fascia boarding. If flat roof intersects with pitched roof ensure flat roof felt laps under felt of pitched roof by a minimum of 600mm.

New/Old Walling
Where new walling meets old provide proprietary flexible wall starters.

Roof Ventilation
At eaves provide proprietary ventilation equivalent to a 10mm continuous gap along eaves.

Roof Ventilation to Sloping Ceiling
At eaves provide proprietary ventilation equivalent to a 25mm continuous gap along eaves. At ridge provide proprietary ventilation equivalent to a 5mm continuous gap.

Valleys
Use proprietary fibreglass valleys or provide Code 4 lead to valleys to make completely watertight.

Kitchen Ventilation
Provide proprietary mechanical extract ventilation unit capable of extracting 60 lt/sec. Alternatively provide proprietary cooker hood capable of extracting 30 lt/sec.

Bathroom/En-suite Ventilation
Provide proprietary mechanical extract ventilation unit capable of extracting 15 lt/sec. System to offer intermittent operation.

Hot Water Storage
Provide system approved by BBA and installed by BBA approved installer. System to be vented and insulated in accordance with BS5615 1985. Provide thermostatic control.

Heating System
Provide room thermostat or thermostatic radiator valves or similar approved to control the output from the heating system.

Insulated Pipes and Ducts
All pipes, which do not contribute to the heating of the building, will be insulated to BS5422 1977.

Safety Glazing
Provide safety glass to BS6206 to all windows to a minimum height of 800mm above floor level plus doors to a minimum height of 1500mm above floor level. Side screens to be same as doors if within 300mm of doors.

Smoke Detection
Provide mains operated self-contained smoke alarms to BS5446 Part 1 in accordance with Approved Document B1.

Rainwater Goods
PVC rainwater goods 110mm half round gutters and 68mm diameter downpipes.

Wall Construction
275mm cavity walls to consist of:
100mm face brickwork (see site plan for details), 75mm cavity to be filled with Crown Dritherm full fill insulation in accordance with BBA Certificate No. 86/1678 or similar approved, 100mm internal skin of Celcon standard blocks or similar approved to give 0.35 U/value. Cavity walls tied together using galvanised iron or plastic twist ties spaced 900mm horizontally and 450mm vertically to BS1243, 1978. Internal blockwork walls to receive 10mm sand/cement render and skim finish. Robust details in accordance with TS0, 2001.

Habitable Room Trickle Ventilation
Provide proprietary trickle ventilators to head of windows giving a total opening area of not less than 8000mm²

Kitchen/Utility/Bathroom/WC Trickle Ventilation
Provide proprietary trickle ventilators to head of window giving a total opening area of not less than 4000mm²

Utility Ventilation
Provide proprietary mechanical extract ventilation unit capable of extracting 30 lt./sec. System to offer intermittent operation.

Roof Insulation
To roof spaces provide proprietary 300mm thick fibreglass insulation laid as 100mm between joists and 200mm across joists or equivalent to give 0.25 U/value. Ensure a gap of 50mm between roof underfelt and quilt at all times.

Roof Insulation to Sloping Ceiling
To sloping ceiling provide 96mm Celotex insulation. Ensure a gap of 50mm between roof underfelt and insulation at all times.

Surface Water Drainage
To be proprietary 110mm diameter p.v.c. pipes flexible joined to fall 1:70 bedded in 100mm pea gravel. Pipes to discharge into 1200mm diameter soakaways sited 5000mm away from buildings.

Protection to Underground Pipes
Where pipes are not under road and have less than 600mm cover concrete paving slabs should be laid as bridging above the pipes on minimum 75mm pea gravel. If flexible pipes are under a road and have less than 900mm cover reinforced concrete bridging should be used instead of paving slabs. Provide compressible material below slab/concrete.

Roof Construction
Concrete interlocking roof tiles (see site plan for details) on 38 x 25mm softwood treated timber battens on underfelt to BS747 (Type 1F) lapped 150mm horizontally and 100mm vertically. Prefabricated roof trusses at 600mm c/c and pitch as stated in accordance with BS5268, 1985. Provide 25 x 100mm timber bracing and fix in accordance with truss manufacturers instructions. All trusses and gable ladders (if any) to be strapped to 50 x 100mm timber wallplate, the gable wall at verges and ceiling level with 30 x 5mm mild steel anchor and lateral restraint straps to span minimum 3 no. trusses at a maximum of 1200mm c/c. At strap positions provide pack and noggins to trusses. Main contractor to supply local authority building control with roof truss calculations 28 days prior to erection on site. Provide concrete padstones at compound truss supports where required by roof design. Water storage tanks to be installed in accordance with Technical Bulletin No. 4I.T.P.A. with timber support members to span 4 no. trusses.

Ceilings
To all insulated roof ceilings provide 12.5mm Gyproc Duplex plasterboard or similar and either 5mm skim or Artex finish. To remaining ceilings provide 12.5mm Gyproc plasterboard or similar with finishes as above.

Garage Floor Construction
100mm concrete oversite on 1200 gauge polythene d.p.m. on minimum 150mm, maximum 600mm well blinded and compacted hardcore. If garage is integral to house finished floor level to be 100mm below that of house. Wall d.p.c. to lap floor d.p.m. by a minimum of 50mm.

Ground Floor Construction
65mm sand/cement screed on proprietary 100 mm thick Jablite floor insulation or 60mm Celotex with perimeter insulation to screed on 1200 gauge polythene d.p.m. on 100mm concrete oversite on minimum 150mm, maximum 600mm well blinded and compacted hardcore. Wall d.p.c. to lap floor d.p.m. by a minimum of 50mm.

Garage Cavity Walls
275mm cavity walls of 100mm facing bricks, 75mm cavity and 100mm internal block skin. Insulation to inner wall to achieve 0.25 u/value

Sub-structure Walling
100 mm Class A dense concrete blocks. Bitumen felt d.p.c. to external walls 150mm above ground level. Weak mix infill to base of cavities to terminate 225mm below lowest d.p.c. level.

Lintels
All coded lintels as stated in Schedule or marked on plan to be by I.G. To be installed in strict accordance with manufacturers instructions. Form d.p.c. cavity tray above all lintels. To all exposed lintels i.e. not sheltered from overhanging eaves, etc. to have proprietary weepholes to joints of brickwork at approximately 450mm c/c. To be confirmed on site with Building Control Surveyor

Opening at eaves level to be L1/E lintels by I.G. or similar approved.

Foundations
As indicated on plan provide concrete strip foundations. To cavity walls provide 700mm wide x 225mm thick and to 100mm walls provide 450mm wide x 225mm thick, unless noted otherwise. To non-load bearing internal walls thicken out ground floor oversite concrete to 450mm wide x 200mm thick. Widen foundations at chimney breast accordingly and make 300mm thick. Foundations to be taken down to an approved firm base, subject to local authority specifications. Concrete to be ST3 grade unless noted otherwise. Proximity of existing and proposed trees are to be taken into account in accordance with N.H.B.C. chapter 4 when determining foundation depth.

I.G. Type L1/S75 lintels to cavity walls and I.G. type internal lintels to 100mm internal walls unless stated otherwise. . To be confirmed on site with Building Control Surveyor.

All windows to give minimum 1/20th of floor area as ventilation and to be double-glazed.

Glazing
All windows and doors to be double-glazed with minimum 16mm spacing and to use Pilkington 'K' glass or similar approved, efficiency of 0.05.

Oil Tank
To be sited a minimum 1800mm from any building and a minimum 760mm from any boundary. Tanks to be bunded to give 110% capacity of the largest tank they contain or the tank should be double skinned

Inspection Chamber Construction
Proprietary polypropylene inspection chambers bedded on 150mm concrete. Form protective 255mm thick concrete collar around head of inspection chamber with 300mm projection from cover. Covers to be Grade C light duty unless inspection chambers are in driveways where Grade B medium duty covers are to be used.

First Floor Walling
Provide 50 x 75mm timber vertical studs at 400mm c/c to be constructed of 50 x 75mm timber head and sole plates. Provide 12.5mm Gyproc plasterboard and skim finish to both sides. Provide to airspace proprietary acoustic insulation (optional). Timber stud partitions running parallel to joist direction to be built off 2 no. floor joists fixed together. Provide 1 no. joist either end of stud partition joist beam to fix flooring.

Roof Intersections
If compound truss used; where main trusses fix to compound truss provide proprietary truss connectors. Provide 32 x 175mm valley lay boards and fix reducing trusses over to complete roof intersection. Fix in accordance with roof truss manufacturers instructions.

Fascia and Bargeboards
To be 25 x 75mm PSE with 6 mm groove to accept 6mm thick exterior grade plywood soffit.

Header Tank Support
Water tank in roof space to be supported on bearers to spread the load to BS5268 Part 3 1985.

Foul Water Drainage
Underground drainage to be proprietary 110mm diameter p.v.c. pipes flexible jointed to fall 1:70 bedded in 100mm pea gravel. Under building drains to be encased in 150mm pea gravel with lintel over pipes at wall abutments. Where drain passes through wall, provide suitable protection to prevent gas ingress to building. 110mm diameter soil and vent pipe to extend 900mm above window head and to terminate in balloon finial. Soil and vent pipe to be fitted with access plate at base. Provide suitably sized wastes from all appliances (in accordance with Approved Document H) complete with minimum 75mm deep sealed traps and rodding eye access points at every direction change. All above ground drainage to BS5582 and all underground drainage to BS8301. Provide seal plates both sides of pipe entry to avoid vermin entry.

Internal Lighting
Provide energy efficient lights that only take lamps having a luminous efficiency greater than *40 lumens per circuit watt. Examples of lamps* are fluorescent tubes and compact fluorescent lamps (note GILS tungsten lamps with bayonet cap or Edison screw bases).

Method of determining number of locations:

Number of Rooms	Recommended min number of locations
1-3	1
4-6	2
7-9	3
10-12	4

Note – Hall stairs and landing count as one room (but may contain more than one fitting).

Excludes garages, lofts and outhouses.

Brickwork below d.p.c. to be F.L. quality

All soakaways to be minimum 1m deep.

All external lintels to be insulated type.

All external joinery to be fully draught proofed.

Loft hatch to be draught sealed and latched shut.

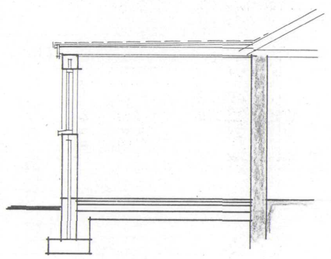
Insulation in roof space to meet with insulation in external cavity walls to prevent cold bridging.

To all domestic floors to external perimeter walls provide 25mm thick insulation dressed up walls to prevent cold bridging.

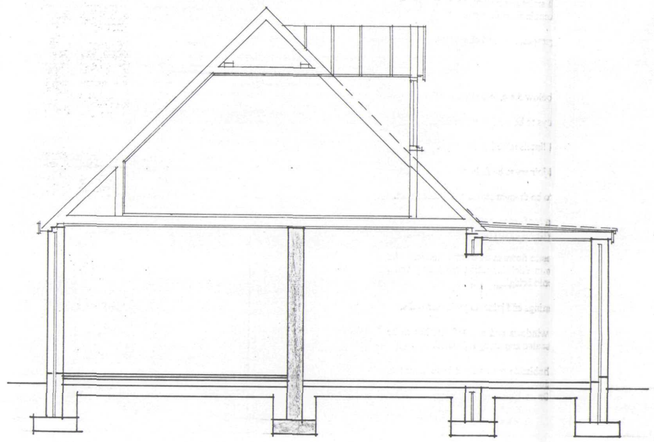
Seal all openings and joints to perimeter walls.

All doors, windows and any loft hatches to be effectively sealed and draught proofed.

First floor habitable rooms shall have means of escape windows with openings of at least 450mm wide x 450mm high and a minimum area of 0.33m²

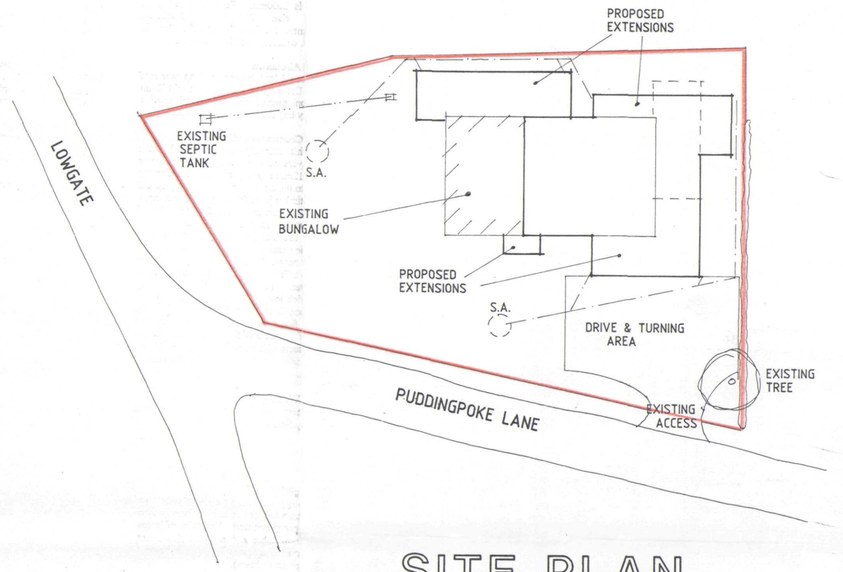


SECTION A - A



SECTION B - B

THIS DRG. TO BE READ IN CONJUNCTION WITH SD03-070/1, SD03-070/2, SD03-070/3



SITE PLAN

DETERMINED PLAN

SHDC PLANNING & DEVELOPMENT 02 OCT 2003 Ref. 1196/03

Status DESIGN
CONSULTANTS IN ARCHITECTURE & PLANNING

PROPOSED EXTENSION TO 66 PUDDINGPOKE LANE, LUTTON FOR

MR. A. CLAXTON.

SECTIONS / SITE PLAN

1:50 1:200	SD03-070/4
SEPT-03	B.GILHAM.

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