DRIVEWAY

75mm of 19mmdown washed gravel on 150mm blinded and consolidated hardcore base. 50x150mm concrete edging kerbs bedded on and backed with weak mix concrete.

SURFACE WATER DRAINAGE

Rainwater down-pipes discharging to UPVC underground drains via rest bend. Drains to discharge into soakaway minimum 5.000 m from dwelling and to be constructed to a size determined by a soak away test.

112 mm half round PVCU gutters with 68 mm diameter rainwater downpipes fixed all as manufacturers recommendations

DRAINAGE

Inspection chamber construction to be Osma or similar installed in accordance with makers instruction with the maximum depth being 1.000 metres for I.C. and 600 mm. for access points.

All underground pipes to be 100 mm. diameter pVCU underground quality bedded and surrounded with 100 mm. pea gravel and installed in strict accordance with the manufacturers instructions. Drains laid under paved areas where possible. Where less than 900 mm. cover in vehicular areas and 450 mm. cover in garden areas, provide 150 mm. thick concrete raft over gravel, 150 mm. under, then trench each side. Where drains pass through wall, provide 65 x 100 mm. pre-stressed concrete lintel.

LANDSCAPING

Landscaping shall be carried out to the satisfaction of the Local Authority and shall comprise of the following as marked on the plan :-

A - FIELD MAPLE

B - MOUNTAIN ASH

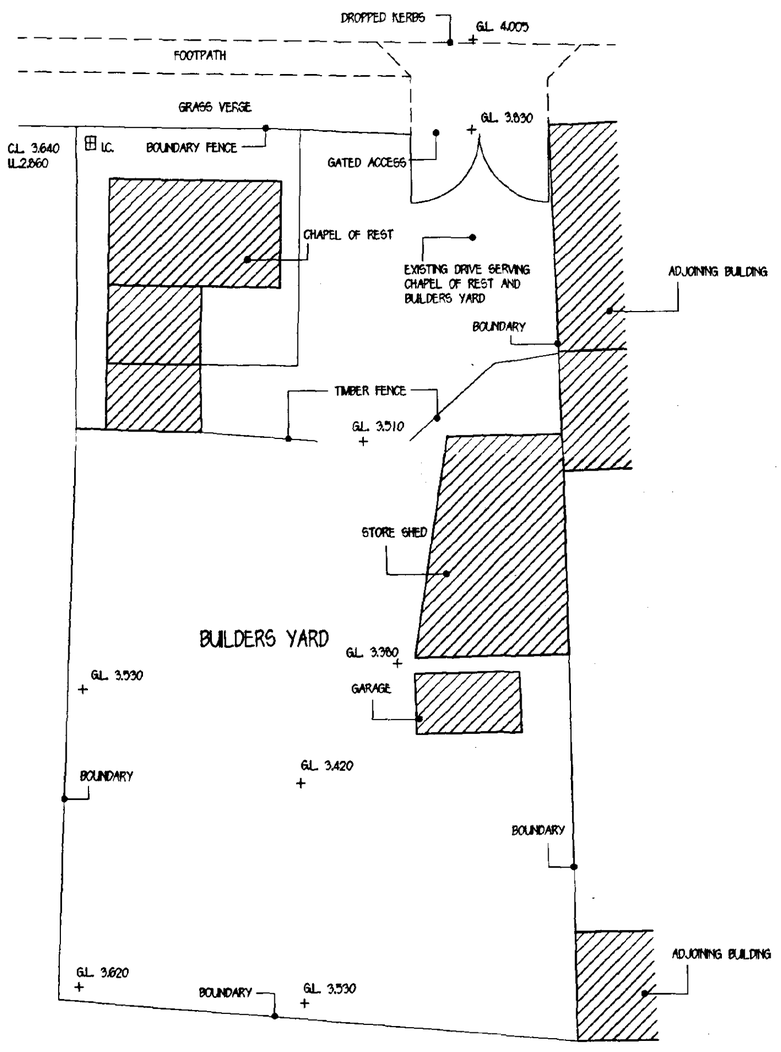
All trees are to be planted as standards and to be staked.

all trees which die within the first ten years are to be replaced with the same species. All other shrubs shown are low growing ground cover shrubs.

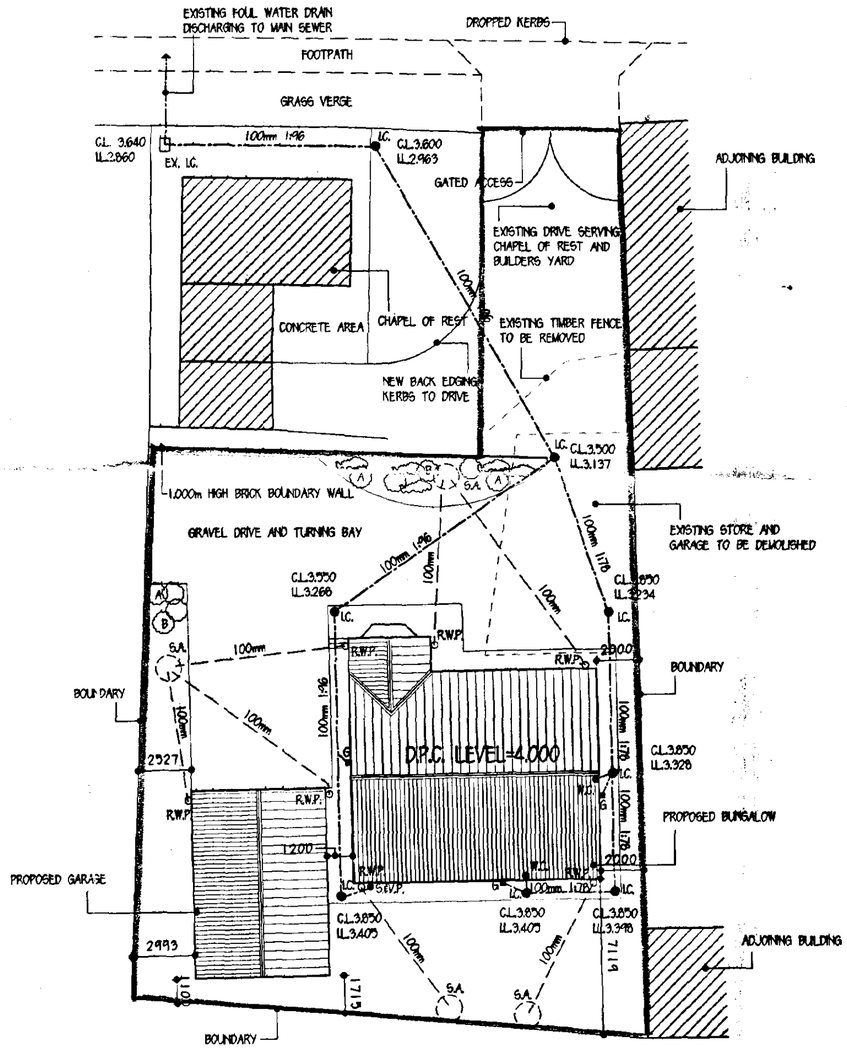
FOOTPATHS

To all area shown form footpaths of 75mm thick concrete on 100mm blinded and consolidated hardcore. Form expansion joints with Flexelle at maximum of 3.000m centres. Leave 225mm gap between bungalow wall and footpath and fill with 19mm washed gravel.

ALL LEVELS RELATE TO BM OF 4.250m ON WALL OF No. 137 BRIDGE ROAD.



BLOCK PLAN AS EXISTING



BLOCK PLAN AS PROPOSED

SOUTH HOLLAND DC
HOUSING & PLANNING
0 9 APR 1998
Ref: 0384/98.

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Amendments

DETERMINED PLAN

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Client

MR. S. COUSINS

Job

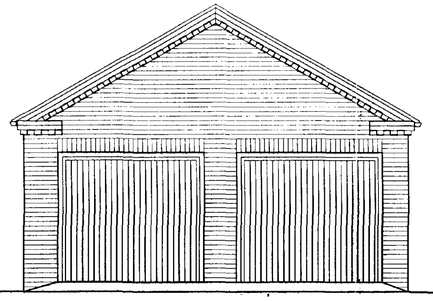
BUNGALOW & GARAGE AT 127, BRIDGE ROAD, SUTTON BRIDGE.

Drawing

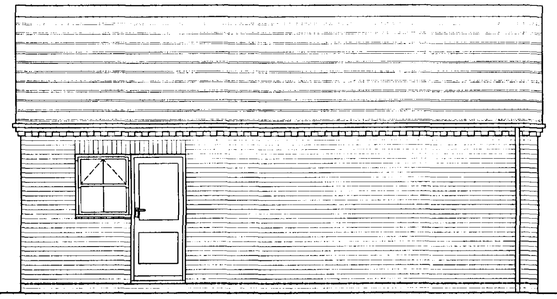
BLOCK PLAN.

Scale 1:200 Date APR'98

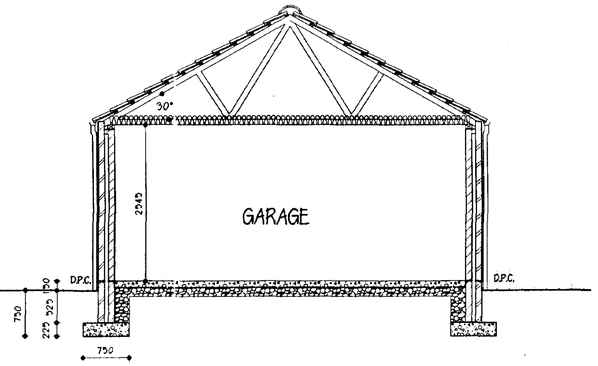
No. LDA/042/3 Ref.



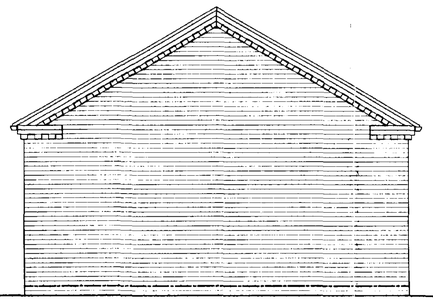
NORTH EAST ELEVATION



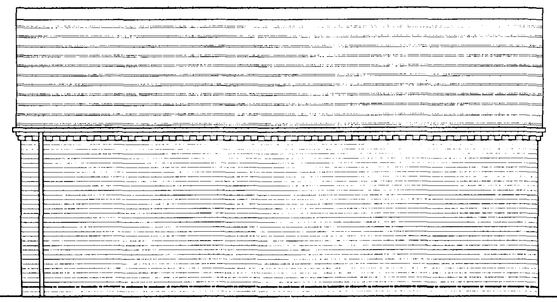
SOUTH EAST ELEVATION



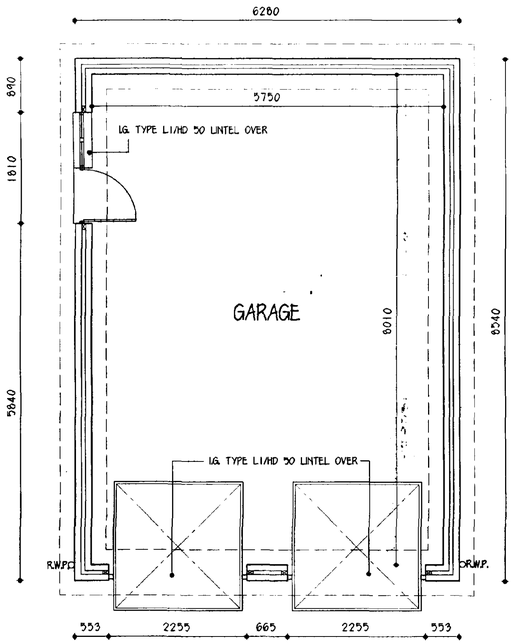
SECTION THRO'



SOUTH WEST ELEVATION



NORTH WEST ELEVATION



FLOOR PLAN

ROOF CONSTRUCTION

REDLAND MINI STONEWOLD OR REDLAND GROVEBURY CONCRETE INTER-LOCKING TILES TO BS 473 PART 2 : 1971, ON 25 X 38 MM SOFTWOOD TREATED BATTENS, ON UNDER-FELT TO BS 747 (TYPE 1F), IN ALL CASES TO BE LAPPED VERTICALLY AND HORIZONTALLY. TILES TO BE LAID WITH MINIMUM HEAD-LAP OF 75 MM AND TO BE FIXED IN ACCORDANCE WITH REGARD TO WIND SPEED, ROOF PITCH, AND EXPOSURE CATEGORY AS DETAILED IN CP3 CHAPTER V : PART 2 : 1972.

REDLAND UNIVERSAL ANGLE RIDGES OR HALF ROUND RIDGE, BEDDED ONTO MAIN ROOF TILES IN SHARP SAND MORTAR (1:3), BUTT JOINT BEDDING SUPPORTED AND THINNED USING TILE SLIPS. RIDGE TO HAVE MINIMUM 75 MM HEAD-LAP.

SPECIALIST MADE PRE-FABRICATED ROOF TRUSSES TO COMPLY WITH BS 5268 PART 3 : 1985. TRUSS CALCULATIONS TO BE SUBMITTED TO LOCAL AUTHORITY, MINIMUM TWENTY-EIGHT DAYS PRIOR TO ERECTION. TRUSSES TO BE MINI. TYPE AT 600 MM CENTRES, TO A PITCH AS SHOWN ON DRAWING. WHERE SPAN OF TRUSSES RAFTER EXCEEDS 5,000 METRES, PROVIDE ADDITIONAL BRACING WITHIN PLAN OF THE WEB IN ACCORDANCE WITH THE TRUSS PLATE ASSOCIATION TECHNICAL BULLETIN SHEET 4. AT ROOF INTERSECTIONS, INSTALL DWINISHING TRUSSES AT 600 MM CENTRES.

CONNECT ALL TRUSSES TOGETHER WITH 38 X 100 MM NODE BINDER TOGETHER WITH 2 NO. 38 X 100 MM CEILING BINDERS. WHERE SPAN OF TRUSSED RAFTER EXCEEDS 5,000 METRES, PROVIDE ADDITIONAL BRACING WITHIN PLANE OF THE WEB IN ACCORDANCE WITH THE TRUSS PLATE ASSOCIATION TECHNICAL BULLETIN SHEET 4. ALL STRUCTURAL TIMBER TO BE MINIMUM SC3 GRADE.

ALL TRUSSES TO BE STRAPPED TO GABLE WALL AT TOP AND BOTTOM BY 30 X 5 MM GALVANISED METAL STRAPS AT MAXIMUM 2,000 METRES CENTRES. PROVIDE SOLID STRUTTING BENEATH STRAPS. STRAPS TO BE FIXED TO MINIMUM OF 3 NO. TRUSSES.

65 X 100 MM TREATED SOFTWOOD TIMBER WALL PLATE BEDDED TO INNER SKIN OF BLOCKWORK WITH SAND AND CEMENT (3:1) MORTAR.

WALL PLATE TO BE STRAPPED TO WALL WITH 30 X 5 MM GALVANISED METAL STRAPS AT MAXIMUM 1,500 METRES CENTRES. STRAPS TO BE PLUGGED AND SCREWED TO BLOCKWORK, MINIMUM LENGTH OF STRAP TO BE 1,200 METRES TO FACE OF BLOCKWORK.

PLUGS AND SCREW 18 MM EXTERIOR GRADE PLY BOARDING TO TOP OF BRICKWORK. NAIL UPVC FASCIA GRILLE UNIT TO PLY COMPLETE WITH UPVC EAVES VENTILATION TRAY.

TIMBER SUPPORTS ARE TO BE PROVIDED BENEATH WATER STORAGE TANKS OVER 4 NO. CEILING JOISTS TO TRUSS.

12.7 MM GYPROC OR SIMILAR PLASTERBOARD WITH 3 MM SKIMMING, INCLUDING GARAGE. PROVIDE MINIMUM 38 X 38 MM NOGGINS TO ALL PLASTERBOARD EDGES. ALL JOINTS TO BE TAPED AND FILLED.

PROVIDE ACCESS TRAP TO ROOF SPACE SITED BETWEEN ROOF TRUSS AND MINIMUM 600 MM LONG. OPENING TO BE LINED WITH 25 X 25 MM PLANTED STOPS. ACCESS DOOR TO BE 18 MM MDF BOARD.

GROUND FLOOR CONSTRUCTION

FORM FLOOR TO GARAGE OF 100MM CONCRETE GEN4 MIX ON 300 MICRON DAMP-PROOF MEMBRANE LAPPED MINIMUM OF 100 MM ONTO EXTERNAL WALL DPC ON 150MM BLINDED AND CONSOLIDATE HARD-CORE. RAMP TO GARAGE OF SAME CONSTRUCTION WITH MAXIMUM RISE OF 1:12.

FOUNDATIONS

UNDER 280MM CAVITY WALLS PROVIDE 225 X 750MM CONCRETE STRIP FOUNDATIONS, GEN4 MIX TO B.S. 5328 : 1990. ALL FOUNDATIONS TAKEN DOWN TO LOAD BEARING STRATA. SHOULD SHRINKABLE SOIL CONDITIONS BE FOUND ON SITE, THEN FOUNDATIONS SHALL BE TAKEN DOWN TO A DEPTH OF 1.000 METRE BELOW GROUND LEVEL.

SURFACE WATER DRAINAGE

RAINWATER DOWN-PIPES DISCHARGING TO UPVC UNDERGROUND DRAINS VIA REST BEND. DRAINS TO DISCHARGE INTO SOAKAWAY MINIMUM 5,000M FROM DWELLING AND TO BE CONSTRUCTED TO A SIZE DETERMINED BY A SOAKAWAY TEST.
100MM DIA. UPVC RAIN WATER DRAIN WITH FLEXIBLE JOINTS BEDDED ON AND SURROUNDED WITH A MINIMUM OF 150MM PEA GRAVEL PRIOR TO BACK FILLING.
112MM HALF ROUND PVCU GUTTERS WITH 68MM DIAMETER RAINWATER DOWNPIPES.

WALLING

280MM CAVITY WALLING TO CONSIST OF FACE BRICKWORK TO BS 1974 FOR CLAY BRICKS 62MM CAVITY 100MM LIGHTWEIGHT 3.5 METRE BLOCK. EXTERNAL WALLS TO HAVE MINIMUM U VALVE OF 0.45 W/M2 DEG. C.

BUILD INTO CAVITY OF EXTERNAL WALLS AS WORK PROCEEDS. ROCKWOOL CAVITY WALL BATTS OR SIMILAR INSTALLED AS PER MANUFACTURERS INSTRUCTION.

CAVITY WALLS TIED TOGETHER USING STAINLESS STEEL TIE IRONS SET 900MM HORIZONTALLY, 450MM VERTICALLY AND 225MM CENTRES AT ALL UN-BONDED CLOSURES OF CAVITY.

CLOSE CAVITY'S WITH THERMABRIDGE OR SIMILAR CAVITY CLOSER.

100MM HYLOAD OR SIMILAR 1ITCH POLYMER DPC TO BOTH SKINS OF CAVITY WALL

DPC TO BE A MINIMUM OF 1" 2MM ABOVE FINISHED GROUND LEVEL.

100MM DENSE CONCRETE BLOCKS TO BS 6073 PART 1 : 1981, WITH WEAK MIX CONCRETE INFILL TO BASE OF CAVITY NO CLOSER THAN 225MM TO DPC. ALL BRICKWORK BELOW DPC TO BE FL QUALITY.

ALL INTERNAL SKINS OF CAVITY WALLS TO RECEIVE 12 MM S/C OR HARD-WALL RENDER WITH 3 MM SKIMMING. ALLOW FOR 3 MM SKIMMING TO ALL PLASTERBOARD SURFACES.

ALL LINTELS TO BE STEEL LINTELS AS MANUFACTURED BY LG AND TO BE INSTALLED IN ACCORDANCE WITH MAKERS INSTRUCTIONS. ALL LINTELS TO HAVE MINIMUM END BEARINGS OF 150 MM AND AT ALL EXTERNAL POSITIONS TO HAVE CAVITY TRAY DPC. ALL EXTERNAL LINTELS TO HAVE STOP ENDS WITH WEEP HOLES.

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Amendments

SOUTH HOLLAND DISTRICT COUNCIL HOUSING & PLANNING
09 APR 1998
Ref. 0384/98
DETERMINED PLAN
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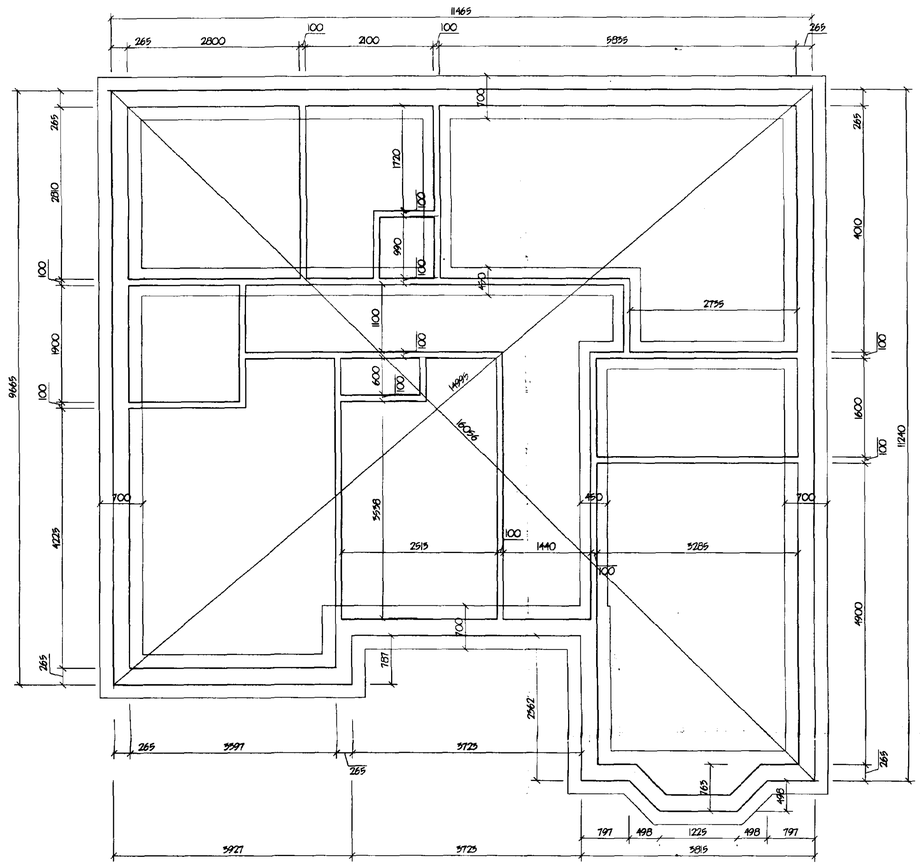
Client
MR. S. COUSINS.

Job
BUNGALOW & GARAGE AT 127, BRIDGE ROAD, SUTTON BRIDGE.

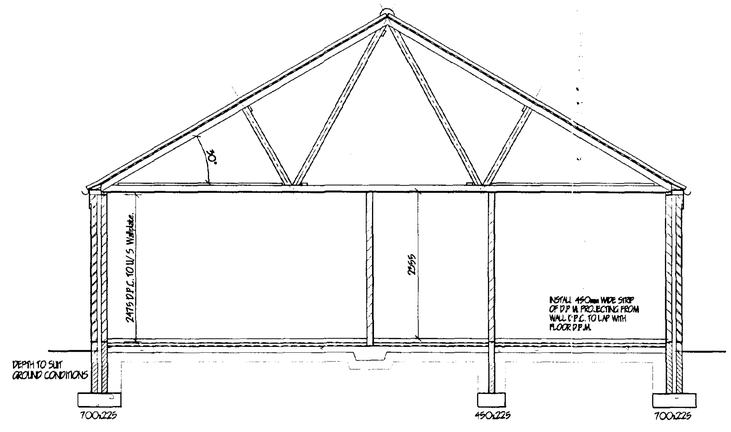
Drawing
PLAN, ELEVATIONS & SECTION OF DOUBLE GARAGE.

Scale 1:50 Date APR'98

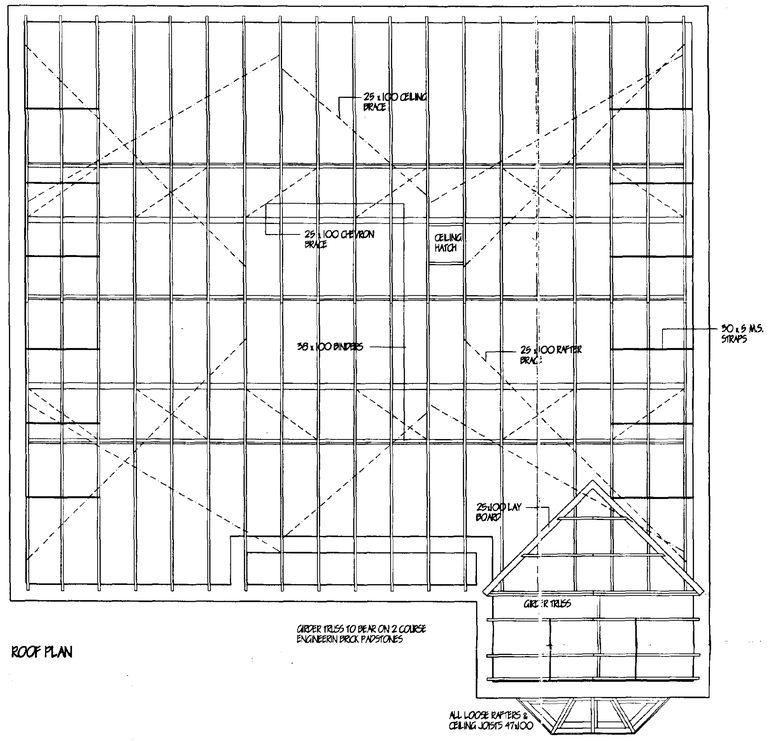
No. LDA/042/4 Ref.



FOUNDATION PLAN



SECTION



ROOF PLAN

PITCHED ROOF CONSTRUCTION.
Interlocking concrete roof tiles to conform to B.S. 473 part 2 1971, on 25 x 38 softwood treated battens on underfelt to B.S. 747 (type 1F) and in all cases to be lapped by 150mm both vertically and horizontally. Tiles to be laid with min. headlap of 75mm and to be fixed in accordance with regard to wind speed, roof pitch and exposure category as detailed in CP3 chapter V part 2 1972. Twinplate specialist made prefabricated roof trusses to comply with B.S. 5268 part 3 1985. TRUSS CALCS TO BE SUBMITTED TO L/A. MIN. 28 DAYS PRIOR TO ERECTION. Trusses to be at 600c/c to a pitch of 30 deg. 38 x 100 ridge node binder 38 x 100 ceiling binders: All trusses to be scrapped to wall plate by 30 x 5 galvanised metal straps acting as anchor and lateral restraint straps at max. 1.5m c/c. Note: provide solid bridging beneath straps: 50 x 100 wall plate bedded on sand and cement. 25 x 175 Fascia boards: 6mm ext. grade plywood soffit complete with 10mm wide continuous air gap and fly proof screen: All structural timber to be min.SC3 grade. Where span of trussed rafter exceeds 5.0m provide additional bracing within the plane of the webs in accordance with Truss Plate Assoc. tech. bulletin sheet 4: Timber supports are to be provided beneath water storage tanks over 454lr ceiling joists. At roof intersections provide 25 x 100 lay boards and diminishing trusses at 600 c/c: Install code 4 lead valley liner. Close cavity at plate level.

BAY ROOF CONSTRUCTION.
As main roof construction yet with 90 x 100 head plates over windows: All rafters & ceiling joists to be 47 X 100 SC3 grade timber at max 600 c/c. 150 glassfibre insulation quilt.

CEILINGS.
200mm glassfibre insulation total thickness. 100mm between rafters & 100mm over Joists. 12.7mm Gyproc "Ablpeh" plasterboard 5mm skim finish: Provide min. 50 x 50 margins to all plasterboard edges. All joints to be taped and filled: Provide access trap to roof space: opening to be lined with 25 x 25 planted stops: Access panel to be 12mm ply with layer of 12.7mm Fireline board fixed to face. Draught seal all round

WALLING.
265 cavity wallings to consist of face brickwork to B.S. 3921:1974 for clay bricks and B.S. 187:1978 for calcium silicate bricks: 65 cavity: build into cavity Rockwool cavity wall batts insulation boarding in accord. with makers instructions and agreements cert: No.135/10697. 100mm Tarmac Hemelite solid insulation blocks or similar: Cavity walls tied together using galvanised iron twist ties set 900 horizontally and 450 vertically to B.S. 1243:1978 wall ties positioned at 300 vertical centres at all unbonded closures of cavity: Close cavities with "Thermabate" or similar preformed closer and provide bitumen felt DPC to C.P. 121: Essential walls to have max. "U" value of 0.45 W/m2 deg. C.: Internal walls of 100mm Tarmac Hemelite solid insulation blocks and to receive 10mm S/C render and 3mm skim

SUB STRUCTURE WALLING.
100mm dense concrete blocks to B.S. 6073 pt.1 1981: DPC to external wall positioned in accordance with CP 102 min. 150 above finished ground level. Weak mix concrete infill to base of cavity to closer than 225 to DPC. All brickwork below DPC to be F.L. quality.

GROUND FLOOR CONSTRUCTION.
Strip all vegetable soil and lay floor as follows: 70mm sand and cement screed with chicken wire reinforcement or 300g polythene D.P.M. on 50mm Polystyrene insulation board, on 1200g polythene D.P.M. lapped continuous with D.P.C. by min. 100mm on 100 concrete oversite: Concrete mix GEN4 to B.S. 5328: pt1 1991: 150 blinded and consolidated hardcore:
Alternative: Floor construction as above but 19mm T&G. Flooring grade chipboard on 50mm Polystyrene insulation board laid on oversite in lieu of screed and insulation board. Ensure 12mm expansion gap to perimeter of boarding. Use moisture resistant chipboard to kitchen and bathroom.

FOUNDATIONS.
Under walls as shown provide strip concrete foundations as follows: Under 265 cavity walls provide 225 x 700 and under 100 walls provide 225 x 450 all GEN3 mix to B.S. 5328: pt1 1991. All foundations taken down to bear on load bearing strata min. depth of 600 to top of foundations: should shrinkable soil conditions be found on site then foundations shall be taken down to a depth of 1 metre below ground level. Where internal walls are taken up off floor then thicken out slab to 225 x 450 or if considered necessary, be taken down to 225 x 450 foundation.

FOUL DRAINAGE
Inspection chamber construction to be "Osma" or similar and installed in accordance with makers' instructions with the internal diameter related to the depth in accordance with B.S. 8301:1985. Foul drainage pipes to be 100mm dia. UPVC, to B.S. 4660:1985 flexibly jointed and laid to makers' instructions to a fall of 1:70 bed and surround with 100mm pea gravel: Where pipes pass under floors encase in 150mm pea gravel. Where pipes pass under drives surround in 150mm concrete with flexel joints to correspond with joints in pipework. Provide 65 x 100 prestressed concrete lintel bridging where pipes pass through walls, allow 90mm gap around pipe, opening masked both sides of wall with ridged sheet material. Soil and vent pipes to be 100mm int. dia. PVC to B.S. 4514: 1983 and to extend 900mm above window head terminating with PVC bellcor. Waste pipes to be 40mm dia. PVC to B.S. 5943: 1979 complete with rodding eyes at every change of direction: Bath, basins and sink to have 75 deep seal traps: Shower to be raised on 150mm plinth with access plate to anti-siphon trap and 50mm waste.

SURFACE WATER DRAINAGE.
115 dia. half round rainwater gutters to 65 dia. rainwater pipes 82.4 dia. underground pipes flexibly joined to a fall of 1:70 pipes bedded and surrounded in pea gravel and discharge to 1.2m dia. soakaway in n. 9.0m from dwellins.

GLAZING.
Double glaze property throughout (minimum 6mm air gap to all units). All glazing between F.F.L. and 800mm high and between F.F.L. and 1900mm high in doors and side lights to be safety glass to B.S. 6206. All windows/doors to be draught sealed.

VENTILATION.
All windows to have opening lights to give the equivalent of 1/20th the floor area. Provide background ventilation to habitable rooms min. 8000mm sq permanent free air ventilation per room. To all other rooms provide min 4000 sq. All following rooms to 1 ave in addition to above Wall / Window mounted mechanical extractor fan. Kitchen to extract min. 60 litres per second. Utility room to extract min. 30 litres per second. Bathrooms / En-suites to extract min. 15 litres per second which may be operated intermittently. W.C. to extract min. 6 litres per second.

HOT WATER AND SPACE HEATING.
Provide wall mounted gas fired boiler with fan assisted balanced flue: Fit durable wire guard to flue externally. Provide suitable thermostat to dwelling or fit thermostatic valves to all radiators. Hot water storage system to be vented and all hot water storage to lts and pipes to be insulated to B.R. LL part 5.
Hot water system to be thermostatically controlled and fitted with suitable timer. Heating system to have suitable timer control.
Install adequate drinking water supply.
Provide hot & cold water to all basins, sinks, baths & showers.

SMOKE DETECTORS.
Provide mains operated self-contained smoke alarms to B.S. 5446: pt1. in positions shown on plan.

LINTELS.
All lintels to be manufactured by Messrs. I.G. or similar and to be installed in accordance with makers' instructions, and to have min. end bearing of 150mm and at external positions to have cavity tray, D.P.C. to CP. 121: Internal lintels to be I.G. 100 Box type.
Install sloperole to all cavity trays. "provide Perp-end weep holes to all external lintels

LIMITATIONS.
This drawing is limited in the amount of information contained and does not purport to contain a full specification of the works. It is solely for the purpose of obtaining Building Regulation approval.
The drawing must not be used as a contract document alone.
All dimensions shall be taken from site from actual work. Under no circumstances shall measurements be scaled from this drawing for construction or ordering purposes.
All given dimensions shall be checked by the Builder / Contractor and will be his responsibility from commencement of site works.
The works will not be supervised or inspected on site by L.D.A. or any representative thereof. It is the client or their appointed agents responsibility to control workmanship, substitution of materials, adherance to specification, variations to contract etc.

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STANDARDS.
All materials to be new unless otherwise stated and all components and materials etc. to be used fixed and installed etc. in strict accordance with manufacturers instruction and relevant Code of Practice.
Materials shall conform to appropriate British Standard Specification or BBA Certificate or European Code equivalent.

HEALTH & SAFETY.
The Employer / Client shall ensure that the selected contractor is conversant with and adopts all measures necessary to achieve compliance with Health & Safety legislation for Building Sites and Work Places.
The Employer / Client is advised that, should the works need to comply with the Construction Design and Management Regulations an independent Planning Supervisor will be required.

SCOPE OF THE WORKS.
The works shall comprise of all that is shown on the drawing and details. Work that may not be specifically shown but may be reasonably inferred as necessary to carry out the works shall be deemed to be included.

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Amendments

SOUTH HOLLAND HOUSING & PLAN
09 APR 1998

DETERMINED PLAN ref: 0334/98

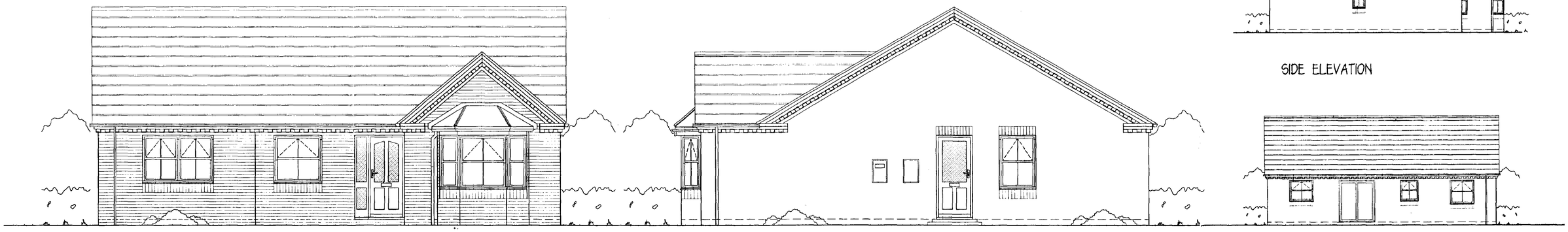
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Client
MR S. COUSINS.

Job
BUNGALOW & GARAGE AT 127, BRIDGE ROAD, SUTTON BRIDGE.

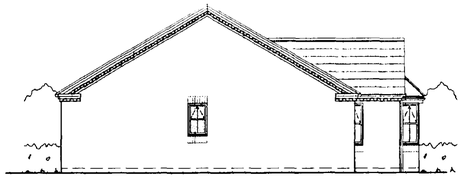
Drawing
DETAIL PLANS SECTION

Scale 1:50
Date APRIL '98
No. LDA/042/2
Ref.#



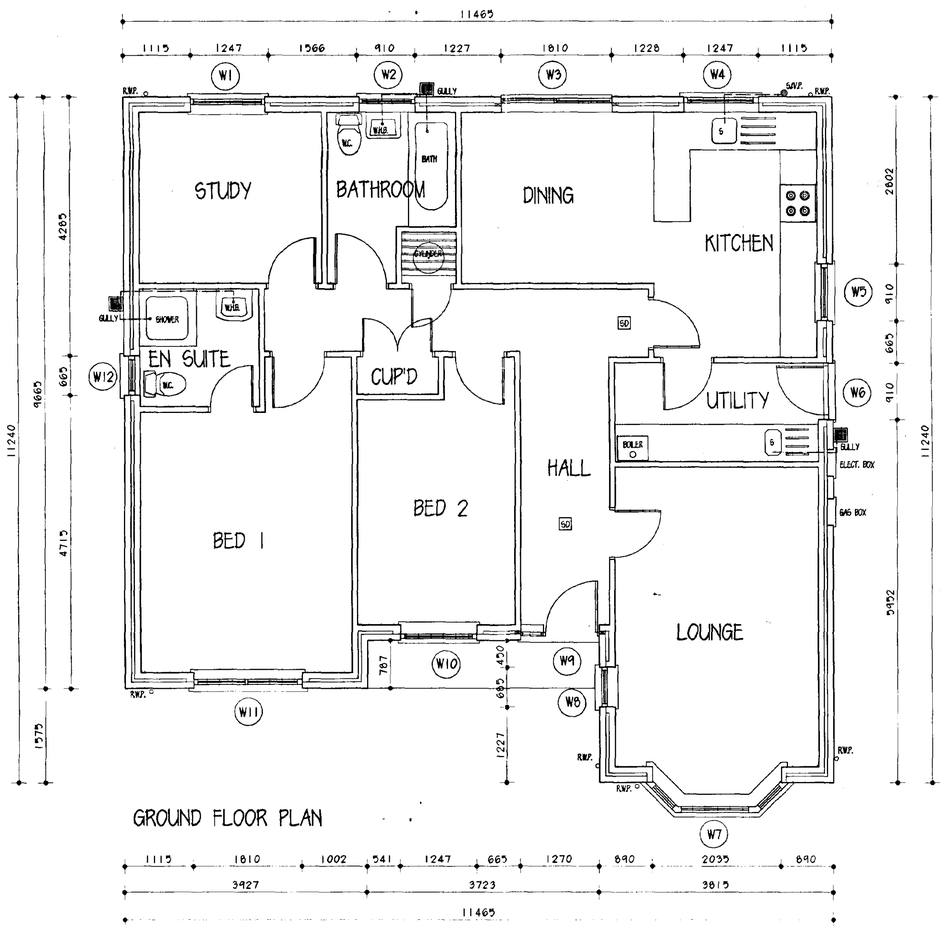
FRONT ELEVATION

SIDE ELEVATION



SIDE ELEVATION

REAR ELEVATION



GROUND FLOOR PLAN

GENERAL NOTES.

THE BUILDING OWNER IS ADVISED TO TAKE ALL REASONABLE PRECAUTIONS IN FUTURE TREE AND SHRUB PLANTING, TO SAFEGUARD THE FOUNDATIONS OF THE BUILDING. BUILDINGS AND FOUNDATIONS ARE PARTICULARLEY VULNERABLE TO DAMAGE WHERE CLAY SUB-SOIL CONDITIONS EXIST AND ADVICE SHOULD BE OBTAINED.

APPLICANTS ARE ADVISED TO CARRY OUT TRIAL HOLE INVESTIGATIONS TO ESTABLISH THE ADEQUACY OF THE UNDERGROUND STRATA TO ENSURE THERE IS NOT WIDE GROUND OF A NOE VARIATION IN THE TYPE OF SUB-SOIL WITHIN THE LOADED AREA OR WEAKER TYPES OF SOIL AT SUCH A DEPTH BELOW THE STRATA ON WHICH THE FOUDATION RESTS THAT COULD IMPAIR THE STABILITY OF THE STRUCTURE.

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Amendments

DETERMINED PLAN

SOUTH HOLLAND DC
HOUSING & PLANNING
09 APR 1998
Ref: 0384/98

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Client
MR. S. COUSINS.

Job
BUNGALOW & GARAGE AT 127, BRIDGE ROAD, SUTTON BRIDGE.

Drawing
FLOOR PLAN, ELEVATIONS.

Scale 1:50 1:100
Date APR'98

No. LDA/042/1
Ref.