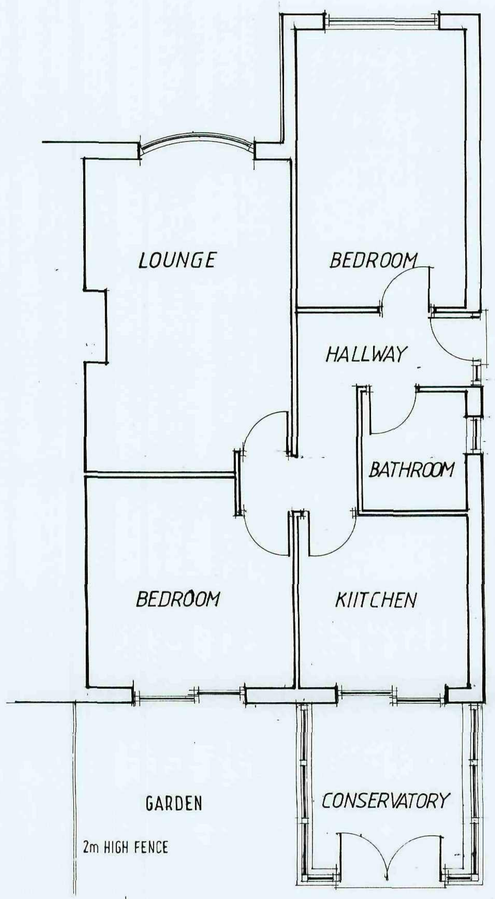
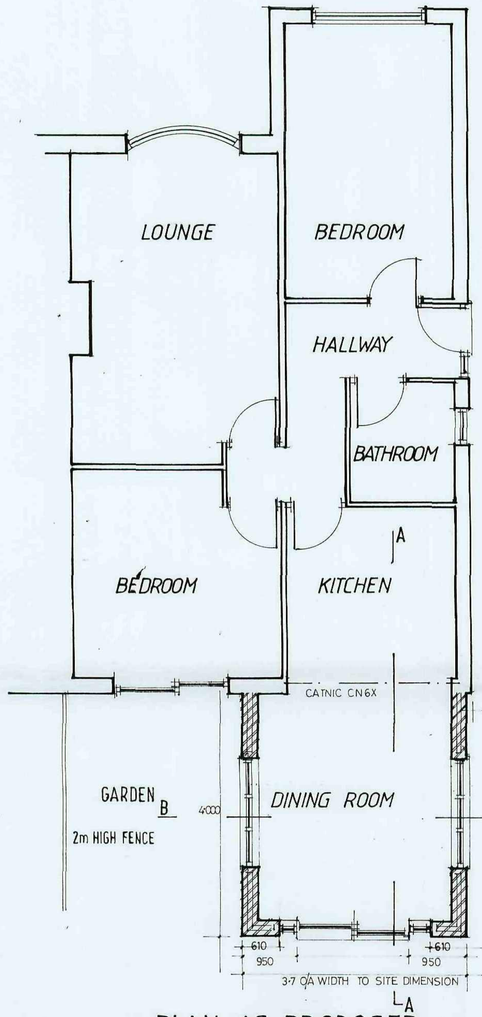



PLAN AS EXISTING

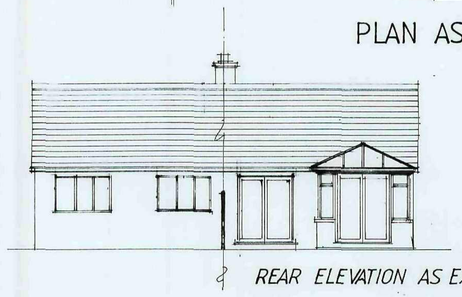
FRONT GARDEN



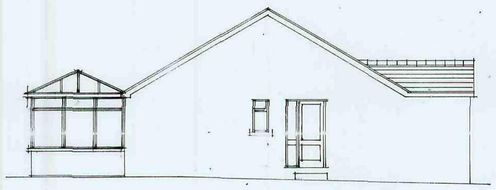

DRIVEWAY

PLAN AS PROPOSED

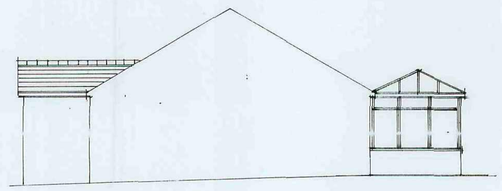
REAR GARDEN



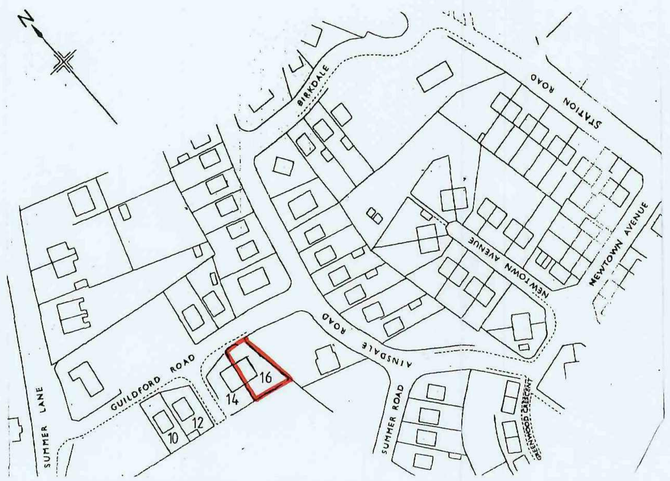
REAR ELEVATION AS EXISTING



SIDE ELEVATION AS EXISTING



SIDE ELEVATION AS EXISTING




LOCATION PLAN 1:1250

CALCULATIONS FOR SIZE OF PURLINS
SPAN 3·7m

LOADING - ROOF $3.7 \times 1.75\ kN/m^2 \times 1m = 6.475\ kN$.
SELF WEIGHT $3.7 \times 0.3\ kN/m^2 = 1.11\ kN$.
TOTAL LOAD W = 7.585 kN

$M = W/8 = 7.585 \times 3.7 = 3.5\ kNm$

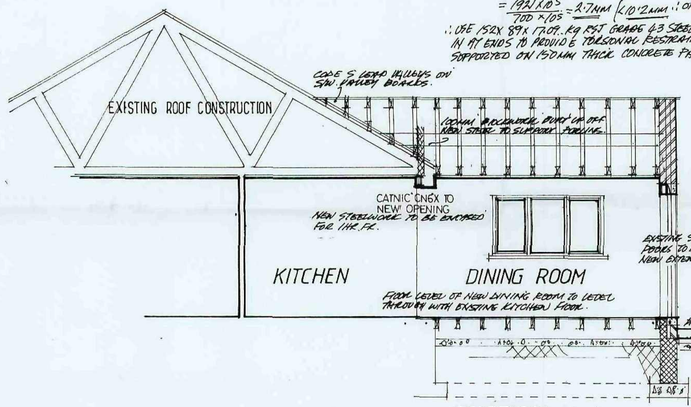
$L_{eff} = \frac{3.7 \times 10^3}{1.197 \times 0} = 145$ $P_f = 16.4$ $P_{BC} = .99\ N/mm^2$

$Z\ MIN = \frac{M}{P_{BC}} = \frac{3.5 \times 10^3 \times 10^3}{.99 \times 10^6} = 35.3cm^3$ (115.6cm³ :: OK

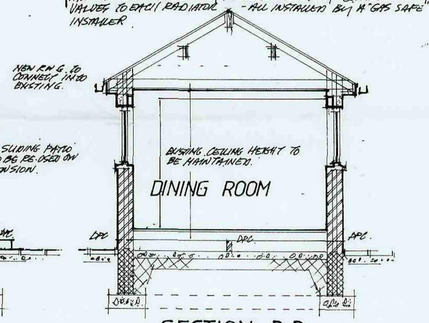
$d = \sqrt[3]{\frac{W/3}{E2}} = \sqrt[3]{\frac{5 \times 7.585 \times 10^3 \times 3.7^3 \times 10^{15}}{384 \times 207 \times 10^9 \times 8824 \times 10^6}}$

$= \frac{1921.810^3}{700 \times 10^3} = 2.7mm$ < 10·2mm :: OK

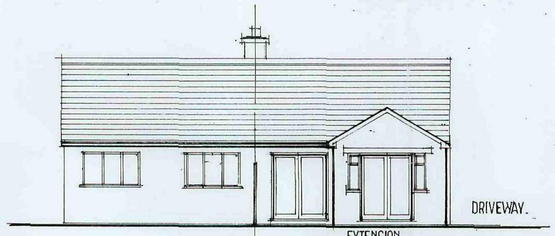
:: USE 152X 89X 17.09. Kg RSJ GRADE 43 STEEL BOLTED IN AT ENDS TO PROVIDE TORSIONAL RESTRAINT AND SUPPORTED ON 150MM THICK CONCRETE PADSTONES.



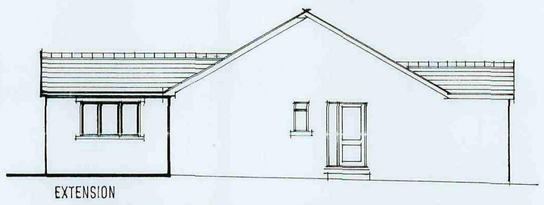

SECTION A-A



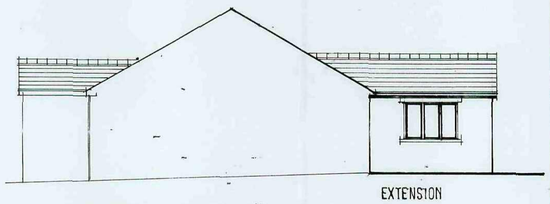

SECTION - B B




REAR ELEVATION PROPOSED.




SIDE ELEVATION PROPOSED




SIDE ELEVATION PROPOSED.

## WALL CONSTRUCTION

103 MM FACING BRICKWORK TO MATCH EXISTING AND TO BE COURSE BONDED TO EXISTING, AND EXISTING CAVITIES TO BE MAIN JOINED.
100MM CAVITY WITH 50MM KINGSPAN THERMAWALL TD 50. ZERO ODP CAVITY INSULATION, AND 100MM INTERNAL BLOCK WORK WITH 50MM KINGSPAN THERMAWALL TD 52 ZERO ODP. INSULATED PLASTERBOARD AND SKIM FINISH, ALL TO ACHIEVE MAX 'U' VALUE OF 0·27 W/M²K OR BETTER.
DOUBLE TWIST STAINLESS STEEL WALL TIES, 5 PER M² AND EVERY COURSE OF REVEALS. - 750MM HORIZONTALLY AND 450MM VERTICALLY.
DPC'S TO ALL JAMBS, CILLS AND LINTELS - VERTICAL DPC'S TO ALL OPENINGS.
225 X 150MM TERRA COTTA AIR BRICKS @ 900MM CTS AND 450MM FROM CORNERS.
AIR BRICKS TO BE BOXED THROUGH WITH TRAY DPC'S.
DPC TO BE MIN 150MM ABOVE EXTERNAL GROUND LEVEL.
THERMALITE TRENCHBLOCKS BELOW GROUND LEVEL.
600 X 225 CONCRETE STRIP FOUNDATIONS, THESE TO BE BELOW INVERT LEVEL OF ANY ADJACENT DRAIN AND TO SITE CONDITIONS.
STANDARD CATNIC COUSAR INSULATED STEEL LINTELS WITH STONE CUTTER LINTELS.

## ROOF CONSTRUCTION

NEW VENTILATED RIDGE TILES AND CONTINUOUS EAVES VENTILATED ROOF TILES TO MATCH EXISTING ON SOFTWOOD TANALISED ROOFING BATTENS TO SUIT ON BITUMINOUS ROOFING FELT LAPPED INTO GUTTERS ON 100 X 50 SAW BATTENS @ 400MM CTS ON 100 X 50 SAW CEILING JOISTS @ 400MM CTS - ON STEEL PURLINS (SEE CALC'S) - 100 X 75 SAW WALLPLATE FASTENED DOWN WITH M.S. FASTENERS. - LATERAL RESTRAINT TIES @ 1M CTS SPANNING MIN 3 NO RAFTERS / JOISTS.
MIN 270MM INSULATION TO ROOF - ABLE TO ACHIEVE MAX 'U' VALUE OF 0·16 W/M²K OR BETTER.
PLASTERBOARD AND SKIM FINISH.

## FLOOR CONSTRUCTION

225MM SOLFFORCE JOISTS AND GROOVED TONGUED CHIPBOARD ON 150 X 50 S.W. FLOOR JOISTS @ 400MM CENTRES. - 100MM THICK RIGID INSULATION OF 10KN/M² INTERMEDIATE JOISTS - ALL TO ACHIEVE MAX 'U' VALUE OF 0·22W/M²K
100MM OVERSITE CONCRETE - MIN 150MM GAP BETWEEN DAMPCOURSE ON FOOL JOISTS AND TOP OF OVERSITE CONCRETE.

## GENERAL

MINIMUM AREA OF HABITABLE ROOMS TO BE MIN 1/10TH FLOOR AREA WITH IDENTIFIED OPENINGS MIN 1/20 FLOOR AREA - TRICKLE VENTILATION TO WINDOWS.
ALL TIMBER USED TO BE MIN STRESS GRADE SC4.
ALL GLAZING TO COMPLY WITH NEW APPROVED DOCUMENT PART 'L' USING PILKINGTONS 'K' GLASS WITH LOW E SOFT COATING + 16MM CAVITY.
ALL GLAZING TO BE SAFETY GLAZING TO BS 6206.
ALL ELECTRICAL WORK TO COMPLY WITH APPROVED DOCUMENT 'P' AND INSTALLED BY A COMPETENT DOMESTIC INSTALLER AND A COMPLETION CERTIFICATE TO BE PROVIDED UPON COMPLETION - EXISTING HEATING INSTALLATION TO BE EXTENDED INTO THE EXTENSION WITH THERMOSTATICALLY CONTROLLED VALVES TO EACH RADIATOR - ALL INSTALLED BY A "GAS SAFE" INSTALLER.

**NOTE**
**This drawing is for obtaining Planning permission and Building Regulations Approval only. The successful Building contractor is to carry out a Site Survey, including levels, before commencing works.**
**The builder is responsible for ensuring that all works to be carried out are to the requirements of the Building Regulations and the relevant current codes of practice to the satisfaction of the District Building Surveyor.**

PROPOSED DINING ROOM TO REAR ELEVATION AT
16 GUILDFORD ROAD.
ROYSTON.
S71 4HU.

SCALE 1:50 1:100
DATE SEPT 2010
DRAWN HARRIS

2010 : 39

Millé design
R. Harris F.C.S.D.
M.E. Harris B.A.hons
design & construction
Architectural planning
building & interiors
tel. & fax:
0114 2886929

RECEIVED
11 OCT 2010
PLANNING SERVICE