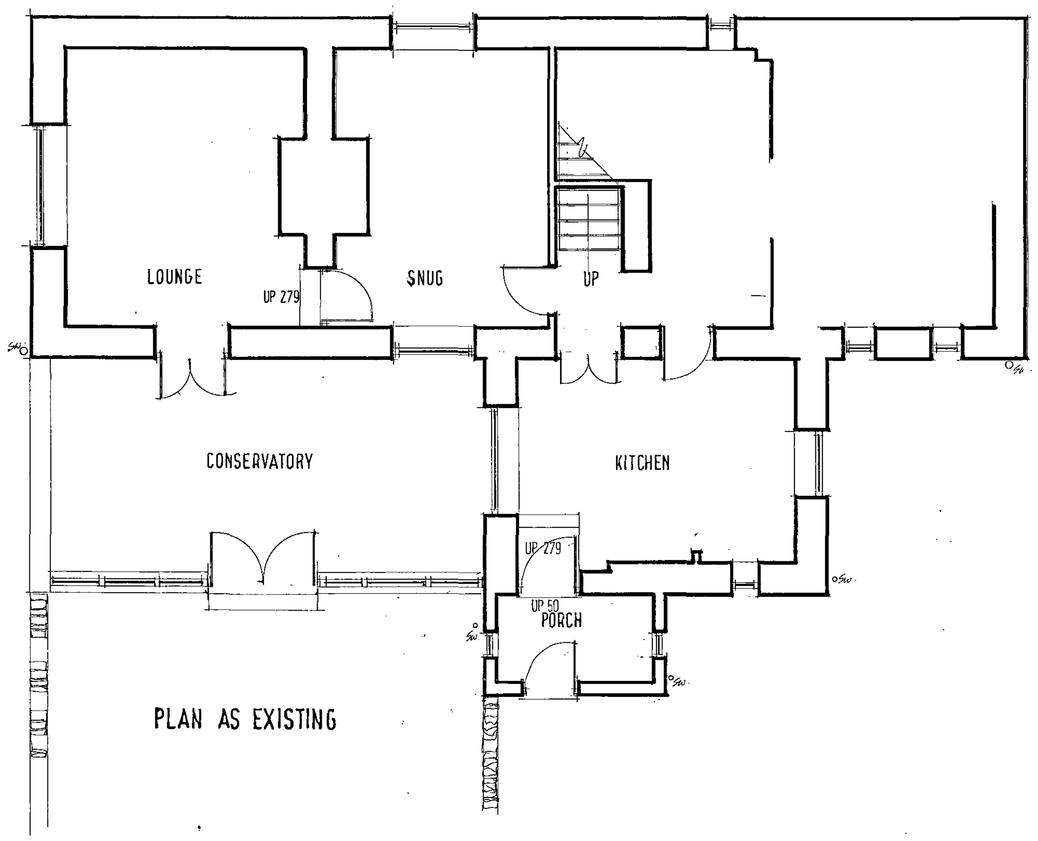
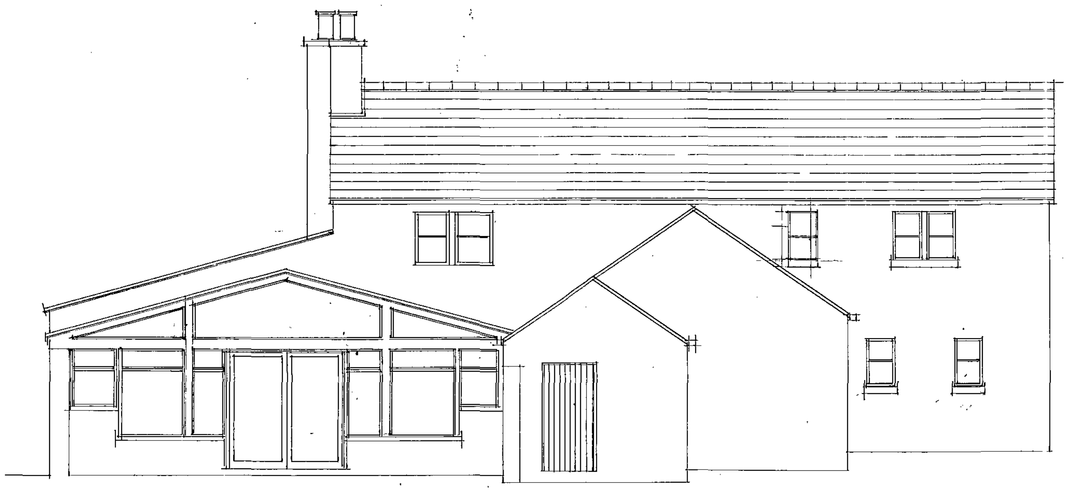
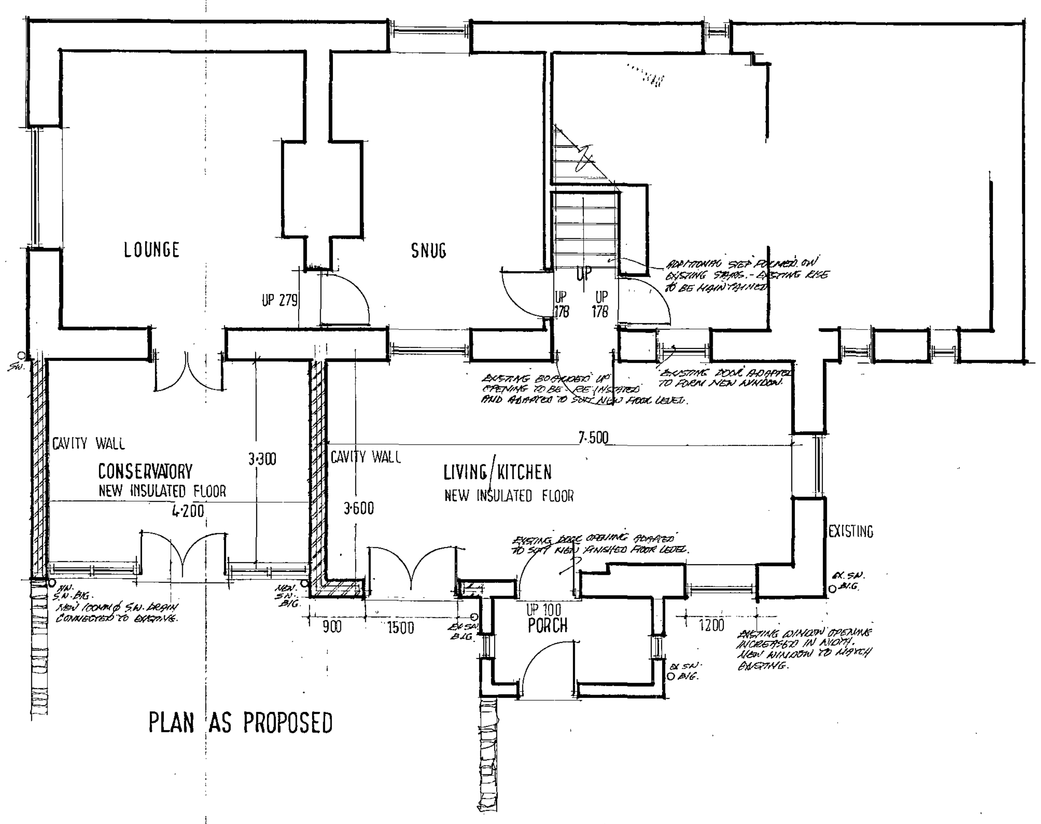


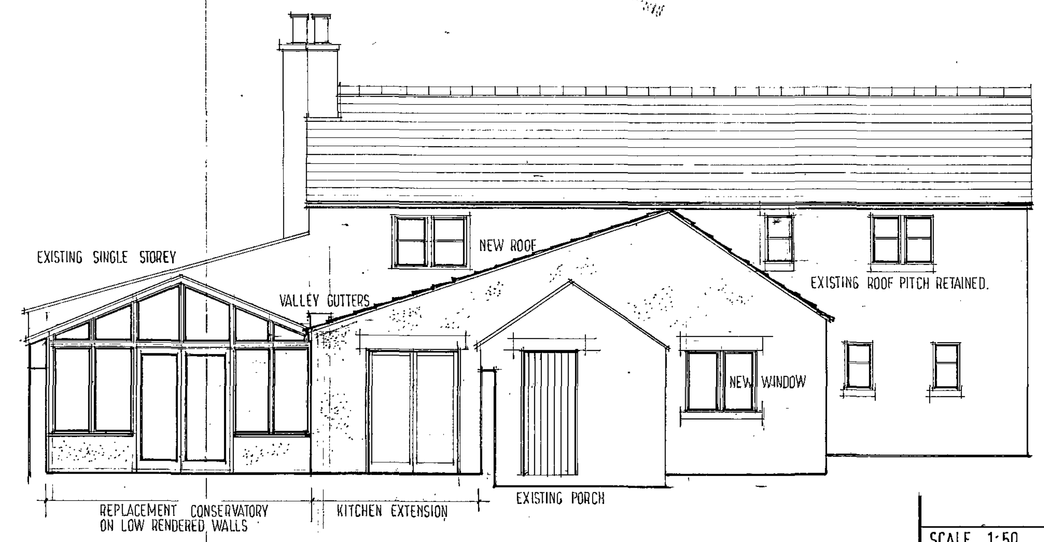
PLAN AS EXISTING



ELEVATION AS EXISTING



PLAN AS PROPOSED



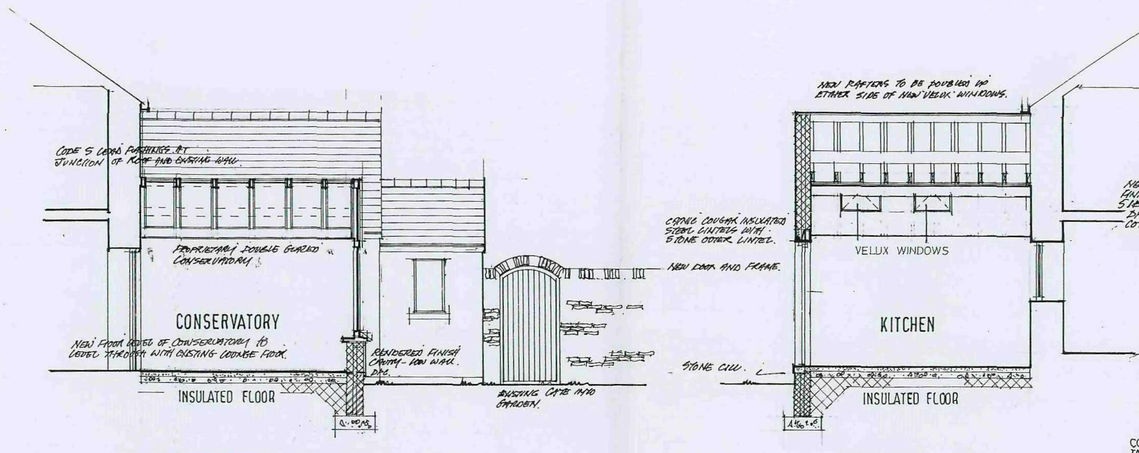
ELEVATION AS PROPOSED.

CATSHAW GREEN COTTAGE
CATSHAW LANE
MILLHOUSE GREEN
PENISTONE

SCALE 1:50
DATE AUG 2010
DRAWN. HARRIS

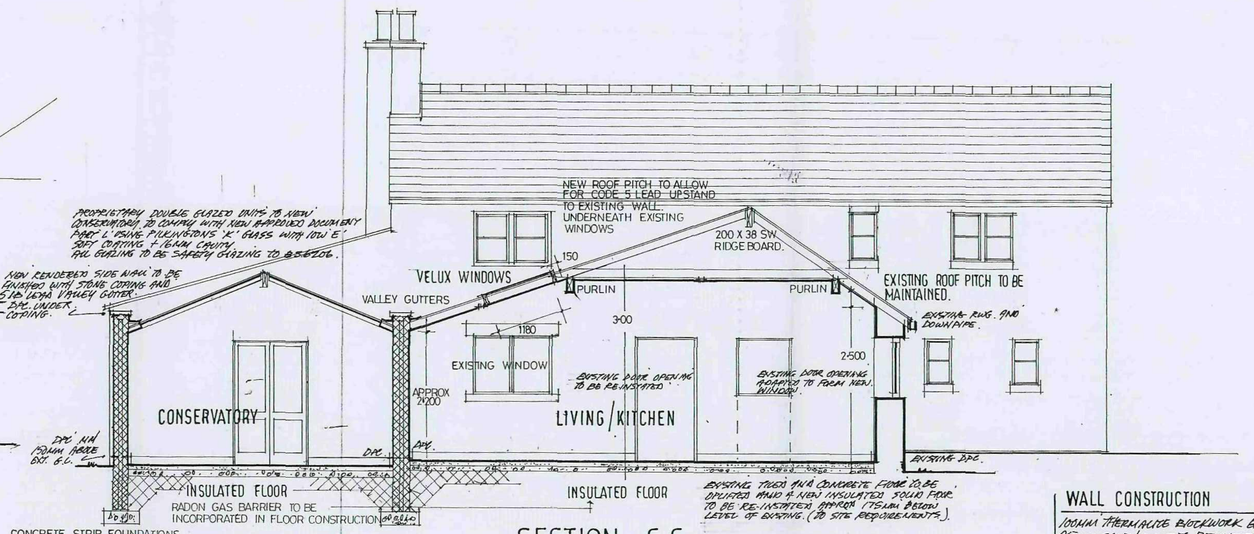
2010:34:01

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



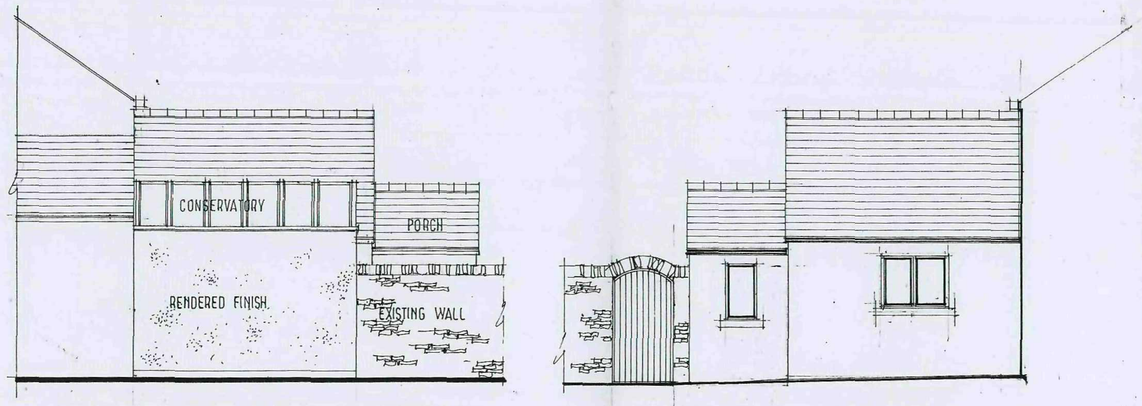
SECTION A A

SECTION B B



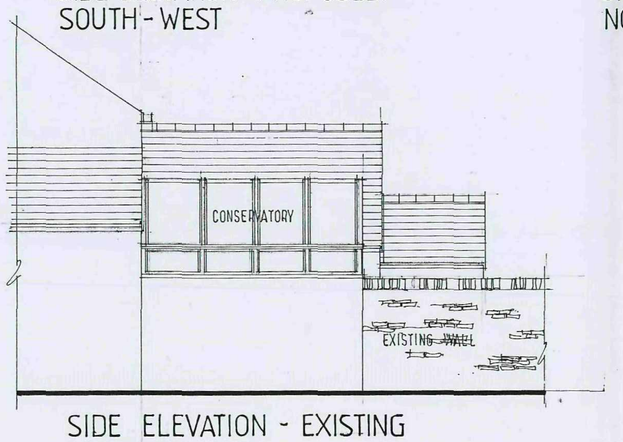
SECTION C C

CONCRETE STRIP FOUNDATIONS TAKEN BELOW INVERT LEVEL OF ANY ADJACENT DRAINS AND TO SATISFACTION OF BUILDING INSPECTOR

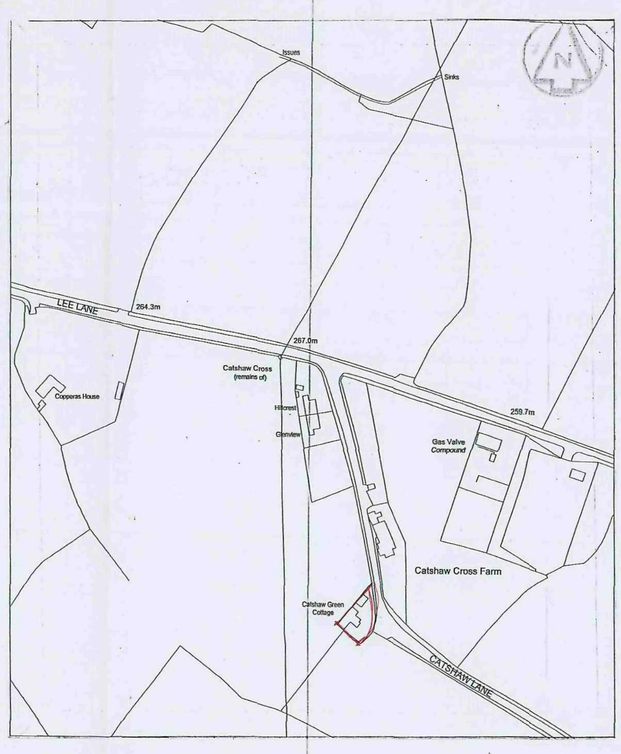


SIDE ELEVATION - PROPOSED. SOUTH - WEST

SIDE ELEVATION NORTH - EAST NO CHANGE



SIDE ELEVATION - EXISTING SOUTH - WEST



LOCATION PLAN 1:1250

GENERAL

RAL TIMBER USED TO BE MINIMUM STRESS GRADE S.C.4.
MINIMUM AREA OF HABITABLE ROOMS TO BE MIN 1/10TH FLOOR AREA - WITH VENTILATED OPENINGS MIN 1/20TH FLOOR AREA.
TRICKLE VENTILATION TO WINDOWS.
MECHANICAL VENTILATION TO KITCHEN AREA TO ACHIEVE MIN 60 LITRES PER SECOND.
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 B.S. 6206.
ESCAPE WINDOWS TO FIRST FLOOR BEDROOM WINDOW MIN 850 X 550MM CLEAR OPENING.
SMOKE ALARMS / DETECTORS TO BE PROVIDED TO KITCHEN, HALLWAY AND FIRST FLOOR LANDING.
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 EXTENSION WITH THERMOSTATICALLY CONTROLLED VALVES TO EACH RADIATOR. - ALL TO BE INSTALLED BY A 'GAS SAFE' REGISTERED INSTALLER.

CALCULATION FOR SIZE OF STEEL PURLINS

SPAN 3.6m

LOADING: ROOF 3.6M X 1.75 KN/M² = 3N = 18.9 KN/M²
SELF WEIGHT 3.6 X 0.3 KN/M² = 1.08 "
TOTAL LOAD W = 19.98 KN/M

$M = \frac{W/8}{8} = \frac{19.98 \times 3.6}{8} = 8.99$ KNM

TRY 203 X 102 X 25.33 KG RSJ:

$I_{xx} = \frac{3.6 \times 10^3}{2.25 \times 10} = 160$ $b/t = 19.5$ $P_{BS} = 113$ N/MM²

$Z_{REQ'D} = \frac{M}{P_{BS}} = \frac{8.99 \times 10^6 \times 10^2}{113 \times 10^7} = 79.5 cm^3 (< 225.8 cm^3 : OK)$

deflection $\delta = \frac{5}{384} \frac{WL^3}{EI} = \frac{5 \times 19.98 \times 10^3 \times 3.6^3 \times 10^9}{384 \times 207 \times 10^9 \times 2294 \times 10^4}$

$= \frac{4660 \times 10^6}{1823 \times 10^5} = 2.5 mm \left(< \frac{10.00}{360} mm : OK\right)$

∴ USE 203 X 102 X 25.33 KG. R.S.T. GRADE 43 STEEL BUILT IN AT ENDS TO PROVIDE TORSIONAL RESTRAINT AND SUPPORTED ON 250MM THICK CONCRETE PADSTONES.
NEW STEELWORK TO BE ENCASED FOR 1 HR. F.R. - 2 X LAYERS 12.5MM GYPROC FIRELINE BOARD WITH METAL STRAPPING & BOARD JOINTS - SOFFIT AND SIDES.

WALL CONSTRUCTION

100MM THERMALITE BLOCKWORK EXTERNAL LEAF WITH 25MM SAND / CEMENT RENDERED EXTERNAL FINISH. (MAKE TO MATCH EXISTING.
100MM CAVITY WITH 50MM KINGSPAN THERMAWALL TW 50 DDP. CAVITY INSULATION WITH 100MM THERMALITE INTERNAL BLOCKWORK WITH 40MM INSULATED PLASTERBOARD AND SKIM FINISH.
ALL TO ACHIEVE MAX 'U' VALUE OF 0.27 W/M²K.
STAINLESS STEEL DOUBLE TWIST WALL TIES 5 PER M² AND EVERY COURSE OF REVEALS - 300MM HORIZONTALLY AND 450MM VERTICALLY.
DPC'S TO ALL JAMBS, CILLS AND LINTELS - VERTICAL DPC'S TO ALL OPENINGS.
DPC'S MIN 150MM ABOVE EXTERNAL GROUND LEVEL.
THERMALITE TRENCHBLOCKS BELOW GROUND LEVEL.
610 X 225 MM CONCRETE STRIP FOUNDATIONS TAKEN BELOW INVERT LEVEL OF ANY ADJACENT DRAIN, AND TO THE SATISFACTION OF THE LOCAL BUILDING INSPECTOR.

ROOF CONSTRUCTION

EXISTING RECONSTITUTED STONE SLATES RE-USED WITH NEW VENTILATED RIDGE TILES ON 50 X 25MM TANALISED ROOFING BATTENS TO SUIT ON 38 X 38 X 1MM COUNTER BATTENS ON KINGSPAN 'VULIBUT' BREATHABLE SARKING MEMBRANE ON 150 X 50 X 5MM RAFTERS @ 400MM CENTRES AND 200 X 50 - 3MM CEILING JOISTS @ 400 MM C/S.
NEW TIMBER PURLINS SPAN 3.6M.
CALCULATIONS BY STRUCTURAL ENGINEER
100 X 75 - 5MM ANGLE PLATE ANCHORED DOWN WITH MILD STEEL ANCHORS.
50 X 5MM MILD STEEL LATERAL RESTRAINT TIES SPANNING NO 3 1/4" RAFTERS / JOISTS @ 1M. COURSES.
2.7MM MINERAL FIBRE INSULATION TO FLAT CEILING - AND 100MM KINGSPAN ROOFTHERM K7 RIGID INSULATION BETWEEN RAFTERS AND 50MM KINGSPAN ROOFTHERM K18 INSULATION PLASTERBOARDED TO FACE OF RAFTERS (TO SLOPING CEILING).
ALL TO ACHIEVE MAX 'U' VALUE OF 0.16 W/M²K TOT.

FLOOR CONSTRUCTION

100MM THICK KINGSPAN THERMAFLOOR T.F. TB ZERO ODP 19MM CHIPBOARD, FITTED RIGID FOAM INSULATION ON LEVELLING SCREED ON 100MM CONCRETE SLAB ON 1200 GUAGE DPM OVER 150MM HARDCORE.
ALL TO ACHIEVE MAX 'U' VALUE OF 0.20 W/M²K TOT.
RADON GAS BARRIER TO BE INCORPORATED WITHIN GROUND FLOOR CONSTRUCTION).

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.

Typical Design Details

Unventilated – Insulation Between & Under Rafters (Recommended for New Build or Re-roofing)

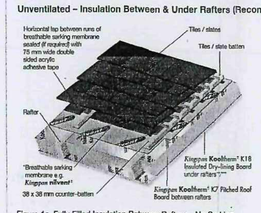


Figure 1a Fully Filled Insulation Between Rafters – No Sarking Board

RECEIVED
7 SEP 2010
CORPORATE SERVICES

PROPOSED KITCHEN EXTENSION AND NEW CONSERVATORY AT
CATSHAW GREEN COTTAGE
CATSHAW LANE
MILLHOUSE GREEN
PENISTONE

SCALE 1:50
DATE AUG 2010
DRAWN HARRIS
2010 : 34 : 02

Millé design
C S d R. Harris F.C.S.D. M. E. Harris B.A.hons design & construction
Architectural planning, building & interiors
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