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.

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.

Boiler
Provide balanced flue type oil fired combi-boiler of required rating in position indicated on drawing to be either a wall hung type or free standing on 125mm high concrete hearth above oversite. Boiler to have protective guard cover and to be minimum 600mm from any opening into the building. Read in conjunction with Approved Document J1/2/3. At completion of works commissioning of heating system to be provided to the local authority Building Control by a competent Oftec registered person. Boiler to have a Sedbuk rating of 86%

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

Electrical Work
All electrical work required to meet the requirements of Part P (electrical safety) must be designed, installed, inspected and tested by a person competent to do so. Prior to completion of the works the council must be satisfied that either:-
a) an electrical installation certificate issued under a competent person's scheme has been issued
or
b) an appropriate electrical installation certificate has been issued for the work, and that it has been signed by a person competent to do so.

Stud Walls between Habitable Rooms
To have 15mm plasterboard finish to both sides of 50mm x 100mm studs with 100mm fibreglass between to reduce sound transmission

Purge ventilation to windows
For a hinged or pivot window that opens 30° or more the height and width should be at least 1/20th of the floor area of the room.
For a hinged or pivot window that opens less than 30° the height and width should be at least 1/10th of the floor area.

Background Ventilation
Background ventilation is to be provided by trickle ventilators to the tops of windows. Use trickle vents offering 8000mm² per window head. Ventilation for whole extension to be 150,000mm²

Existing single-storey barn to be converted to single dwelling, as shown.

Existing two-storey barn to remain as is, but to be used as garages, etc.

Lean-to canopy attached to two-storey barn to be re-roofed and to have vertical cladding, as shown.

To barn conversion existing floors to be levelled up, as necessary, and treated with 2 no. coats of Synthaprufe waterproofer along with 100mm Celotex insulation and 19mm flooring grade moisture resistant decking.

Provide injected d.p.c. to existing walls, as necessary.

All existing roof timbers, etc., to be treated for woodworm, etc., as necessary. Any defective timbers to be replaced, as necessary.

Existing external walls to be dry-lined internally or insulation sprayed on to give similar insulation value.

Re-roof using Welsh slates on 38 x 25mm softwood treated timber battens on underfelt to BS 747 (Type 1F) lapped 150mm horizontally and 100mm vertically on either existing roof timbers or, where found to be defective, provide new raised tie or similar roof trusses. 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.

Where there is a ceiling provide proprietary 300mm thick fibreglass insulation laid as 100mm between joists and 200mm across joists, or equivalent. Where there is not a ceiling provide to ceiling slope 50mm Celotex insulation between rafters and 75mm Celotex insulation below rafters. Ensure a gap of 50mm between roof underfelt and insulation at all times.

Provide new black gutter and rainwater down pipes fixed to walls with rise and fall brackets.

Provide new internal walls, where shown, either 100mm studwork or 100mm blockwork off thickened out slab to Building Inspector's approval.

Raise door heights, as necessary, to suit raised floor; support over with I.G. Box 200 lintels, or similar approved.

Form new openings to create internal doors, external doors/windows, etc.; support over with I/G/ Box 200 lintels, or similar approved.

Remove wall, where shown, to create bathroom. Check that the wall is not load bearing; if it is support over with I.G. Box 200 lintel, or similar approved.

Where there are existing clear panels in exiting roof replace with Velux roof lights, where shown; position of which to miss principle rafters and purlins, etc. Where there is a ceiling form ducting through from roof lights down to ceiling.

Provide replacement painted timber windows to existing openings or new/modified openings, as shown.

Block up openings, where shown.

Renew or repair existing roof valley with 4lb lead to make completely watertight.

Existing external walls to have whitewash/white render removed, where possible. Replace any defective bricks with second-hand bricks to match existing.

To bedroom 4 - remove external door and brickwork in reveal; replace with new purpose-made timber screen.

To lounge - to arch opening remove brickwork to reveal and provide new purpose-made timber screen.

To lounge - remove existing sliding door and form new brick arch to existing opening to match adjacent opening. Provide purpose-made timber screen with French doors.

To new entrance area - provide purpose-made timber screens, as shown.

To kitchen - replace door with purpose-made timber screen, as shown.

To study - remove existing doors and brick up openings to sill level and provide purpose-made timber screen, as shown.

Make good to all disturbed and affected areas.

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.

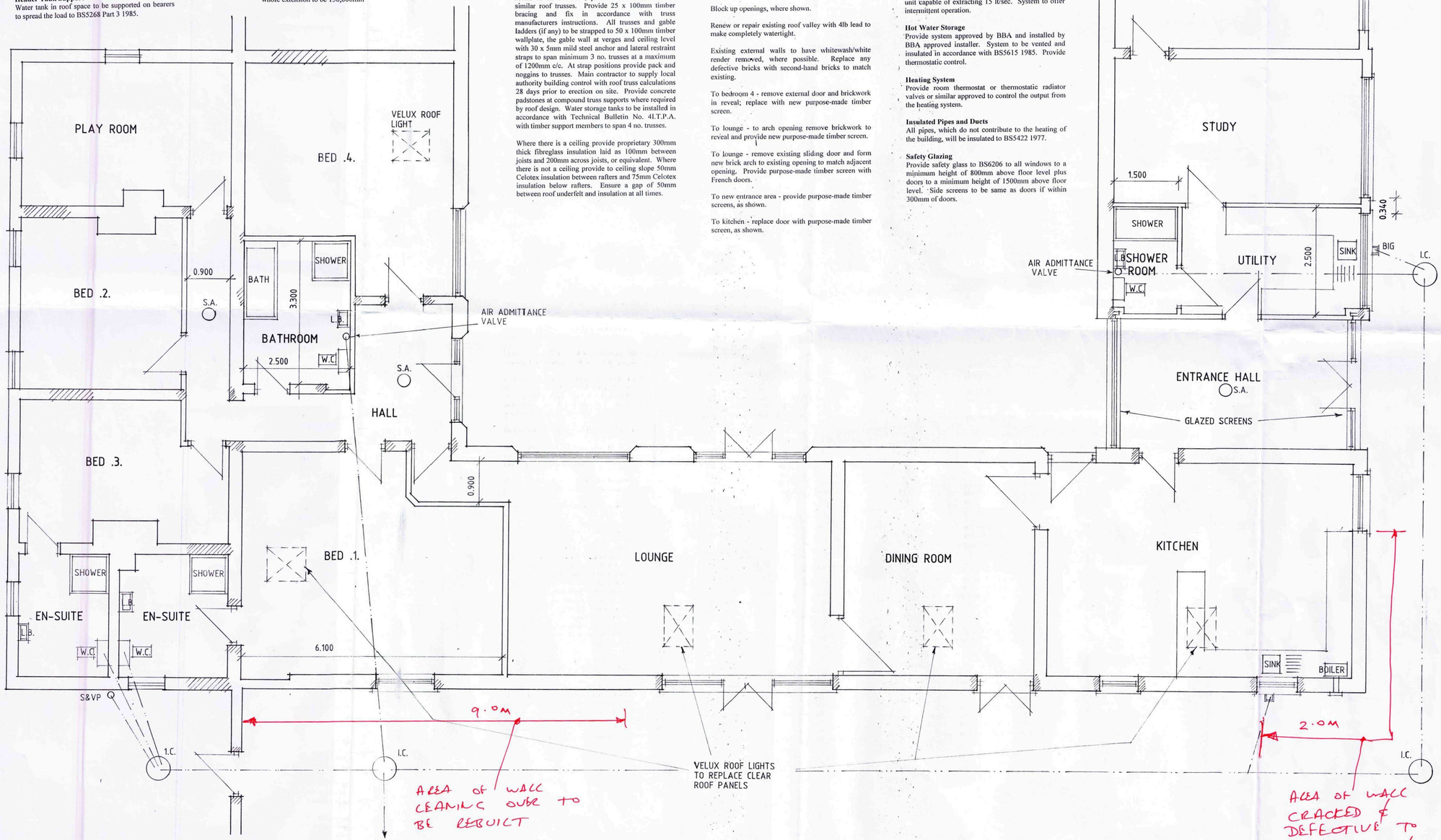
Bathroom/En-suite Ventilation
Provide proprietary mechanical extract ventilation unit capable of extracting 15 lt/sec. System to offer intermittent operation.

Hot Water Storage
Provide system approved by BBA and installed by BBA approved installer. System to be vented and installed 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.



FLOOR PLAN

Smoke Detection
Provide mains operated self-contained smoke alarms to BS5839 Part 6, 2006 in accordance with Approved Document B1.

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

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 0.16 U/value. Ensure a gap of 50mm between roof underfelt and quilt at all times.

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.

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.

Ceilings
To all insulated roof ceilings provide 12.5mm Gyproc Duplex plasterboard of 10kg/m³ or similar and either 5mm skim or Artex finish. To remaining ceilings provide 12.5mm Gyproc plasterboard or similar with finishes as above.

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.

SCANNED

SHDC
Planning & Development
24 DEC 2010
Ref: 1065-10

A - IMF. ADDED - 22.6.10

Status DESIGN
CONSULTANTS IN ARCHITECTURE & PLANNING

PROPOSED CONVERSION OF BARNS TO SINGLE DWELLING AT THE LONG SUTTON COLD STORE, GEDNEY ROAD, LONG SUTTON FOR

MR. R. COOK & MISS. T. BROWN.

PLAN AS PROPOSED

1:50	SD10-023/1
JUNE-10	B.GILHAM.

2 Edinburgh Walk, Holbeach,
Spalding, Lincs. PE12 7AP.
Tel: 01406 424343 Fax: 01406 490702