BARN ON LAWRENCE'S BROW, ST MARTINS

- STATEMENT OF SUSTAINABLE DESIGN
- SITE WASTE MANAGEMENT PLAN
- EVALUATION OF BUILDING NEEDS





STATEMENT OF SUSTAINABLE DESIGN;

The building was erected in 1937, made from concrete shuttering, varying in thickness, but approximately 18-20cm.

This basic fabric has not been changed at all externally, apart from repairs to cracks and holes in the shuttered concrete.

Internally the building base has been tanked out and 4x2 inch floor beams installed to take the plywood flooring. There is spun-wool insulation under the flooring, between the joists.

The walls have a breathable membrane and again are studded out, with spun wool insulation in between the studwork. The walls have been boarded with fireproof sterling board, and painted.

The ceiling joists had to replaced, as were rotten at both ends. (Some original timbers have been utilised in the conversion as visible decoration.) Spun wool insulation is packed between the beams and sterling board fixed between the half-revealed beams, visibly the internal ceiling looks exactly as it did, when found upon occupation, 27 years ago.

The corrugated roofing has been replaced, with mostly metal roofing panels except one clear roofing panel, to allow natural light inside the building.

Three solar panels are mounted on the roof, to provide all electricity for the building and ancillary shower shed. (see photo's)

The barge boards, under the roof sheets have individual nesting compartments, with varying sized holes for different bird species, 14 in total. So far this season they have provided homes for 2 sparrow broods, one wren brood and a successfully fledged family of 5 swallow chicks, in the deliberately open-ended barge boards.



The concrete building is supplied with water harvested from its roof, which is collected and stored in two 2,000 litre sealed tanks. The water for the main building is drawn from the main tanks by a boat style bilge pump, requiring no electric pump. The water from both the sink in the main building, and the shower/hand wash basin in the shower shed, go to two independent and dedicated soak-away submerged gravel pits, considerably away from both buildings.

Natural light for the main building is via a one metre ceiling panel, and a like-for like replacement double window and clear glass door, at the front (North side).

As well as electrical supply, the main building has a wi-fi modem which allows connection to the internet, for research and study purposes. This wi-fi extends to the whole agricultural perimeter, marked in blue on the site plan.

The shower shed, (Marked next to the main building, in red on the plan) is an off-the-shelf wooden 8x6 shed. (190cm H, 180cmW, 240cmL) see photo.

It is mounted on a 15cm concrete reinforced slab.





The shed also has benefit of under floor wool insulation, an electric light supplied by the main roof panels, a solar shower, by way of a roof mounted shower bag, a hand wash water basin, with the water being drawn from the main tanks by boat style bilge pumps. The waste water from these go to a submerged soak-away gravel pit.

There is a double north facing window in the shower shed, for natural light.

There is generous decking, for relaxation, in front of the main building, with a decking "Pier" linking to the shower shed.

SITE WASTE MANAGEMENT:

The main house contains colour coded bins for separation of general recyclables, composting and glass. There are also duplicated colour coded and labelled bins housed on the decking, in front of the main building. There is a written pamphlet, within the building, detailing waste management procedure.

The route of the weekly waste management contractor on St Martins, to collect household waste and recycling, is directly along the track touching the Northern boundary of the holding, as seen on the plan. The waste and recycling along this route is collected weekly by the operative.

All compostable waste, collected in the "Green" marked bins, is deposited via dedicated compost bays within the field marked "A" on the plan.

The toilet is a compost toilet system. This uses sawdust as a medium, and is emptied, on demand, into a dedicated compost bay. In two years hence, the inert compost will be used, on this field site, for feeding the 160 native trees and hedge plants, currently being planted.

EVALUATING THE NEED FOR THIS BUILDING;

The use of this under-utilised building is vital for the support and development of this agricultural business. It is a good example how agriculture and tourism can come together to benefit the inhabitants, economy and landscape of the community here.

The building will provide a base for study, employment, recreation and development, in all aspects of agriculture, and related agricultural experimentation, trial and business development.

The field marked "A" on the site plan is approximately 75% utilised for agricultural production.

The intention is to fully develop the fields marked "B" and "C" on the site plan. To enable this, some extra agricultural help and assistance is vitally needed, with the required extra accommodation to house these additional workers. Without this extra help, and related accommodation, the future agricultural development of fields marked "B" and "C" will not happen, and there will be no increase in economic benefit, from this land, for St Martins.

Added to this, a planned agricultural spin-off business, starting this coming Autumn, also necessitates a vital need for seasonal accommodation, for those helping in this new project.

Currently on St Martins, with virtually 100% of available extra accommodation now converted to holiday accommodation, there is zero spare accommodation for seasonal agricultural workers.