# Site Waste Management Plan (SWMP)

This small development proposal with its own on site management for waste will not contribute a significant burden on the normal kerbside waste and recycling collections.

This SWMP document will detail the approaches taken for recycling, food and black waste composting, including the use of a solar powered shredder for wood, cardboard and paper that may then be used as dry soak in the toilet and food composting bins. Whilst all single use containers and plastic containers will be minimised, glass objects will make use of the island recycling collection from time to time.

As stated, the intention is to maximise recycling of waste on site whilst, at the same time, minimising the use of resources and negating, wherever possible, anything that may increase the carbon footprint. All end of life white goods will be shipped to the mainland for recycling independent of the existing island arrangements for such disposal.

## 1 **Construction and Waste**

Construction waste will be minimal as the shepherd's hut is pre-engineered and delivered to the site in kit form. There will be some pallets and timber off cuts that will be recycled and repurposed on the island. Any materials that may be detrimental to the island environment or waste process will be separately returned to the mainland for efficient disposal. Items for return will likely include polystyrene packing and plastic materials that invariably come as protective wrapping and packing surrounding white goods and related items.

There are no chemicals deployed in the building or running of the huts. The external finishes will be 'ProTec Eco Shield' that are safe for animal and environmental uses and endorsed by the Royal Society for the Protection of Birds (RSPB) as safe to use.

During the building phase a 4HP electric timber shredder will be deployed for reducing timber offcuts to composting materials and will be retained on site for on-going use, particularly in shredding cardboard for use as a drying agent in the compostable toilet and the black waste and food waste composting bins.

During the construction phase there will be a small amount of shallow excavation for the wheel foundation bases and trench for the DC Solar cable. The soil/sand will be backfilled and any useful topsoil retained for use in the vegetable/flower raised beds

## 2 Day to Day Habitation and Waste

The Council's Local Plan is clear in its ambition to encourage actions that deal directly with the 'Climate Crisis.' Only direct and meaningful actions will contribute towards the ambitious targets set for 2020-2050. Therefore, the ambition to reduce carbon emissions, water use and waste as part of this 'off grid' project is important. In addition, the use of regenerative solar power and rainwater harvesting are key parts of the waste management plan.

By harvesting water and recycling it through two 'Grey Water' stages before deployment to the hydroponic garden and raised flower beds the amount of water not entering the conventional septic tank system will be significantly reduced. The use of a waterless composting toilet will also reduce the waste passing through the huts as the 'dry' human waste will be repurposed via composting for plant and tree food via an annual mulch.

Low voltage long life LED lights will provide the illumination to the huts significantly reducing the wastage associated with other forms of light bulbs.

Food waste will be composted on site in 'hot' compost bins. Dry soak material will be provided by use of the electric wood shredder that will shred small branches and all the site cardboard that arrives as packing boxes and food containers.

Glass and recyclable plastic food containers are the materials that will most likely add to the kerbside collection by the island service, but the quantity is not expected to be significant from the two huts and will add to the current volume of glass leaving the island for processing and recycling.

To further assist in the reduction of cardboard and unnecessary additional packaging, visitors' food orders from the local store will be collected on a weekly basis using the electric quad bike and trailer to keep to a minimum the flow of potential waste to the site.

Human (Black) waste will be collected via a composting toilet solution. This enables the collection and separation of solid and fluid waste and its non-chemical treatment on site. The waste will be deposited in a waterless toilet receptacle that separates fluids from solids. Waste will be treated in a 'hot' composting bin using shredded cardboard as the dry soak agent. After a period of 6-9 months the waste is reduced to a composting mulch for use on the flowerbeds and around tree bases in the wooded area. In the event of technical failure there is an unused septic tank on the Apple Tree Land that has more than adequate capacity for the period of any exigency arising.

## 3 Local Recycling Procedures and Export of Waste as Required

The site will be run as far as possible on low consumption, low waste principles. As stated in 2 above there will be some requirement for recycling collections locally of glass and plastic from time to time. However, whenever there is a large, or abnormal, amount of waste for whatever reason, that it would be unreasonable to expect the local service to collect we will make separate arrangements to remove the waste from the island to the mainland for processing there.

The aim of the waste management strategy is to reduce waste to the minimum acceptable levels and to demonstrate that small changes in lifestyle and waste management attitudes can have a significant impact on climate change and reducing carbon footprints. The use of regenerative power sources, water harvesting and the existence of a plan for waste management are a small step towards achieving the councils' aims and objectives contained in the Local Plan and also a demonstrable commitment towards making a difference.