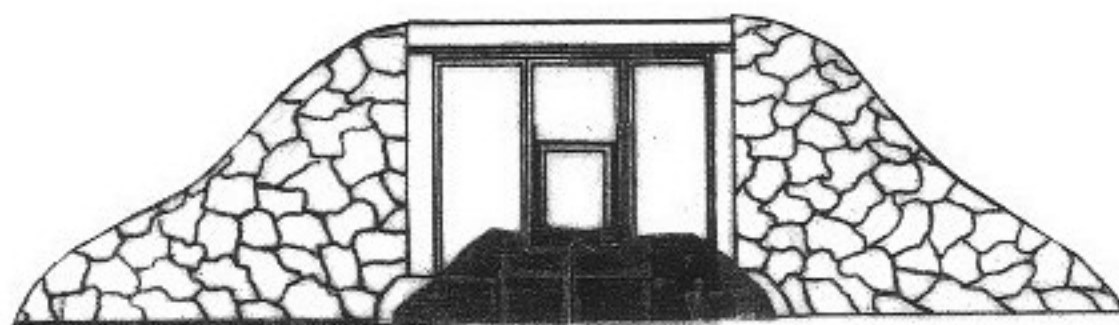
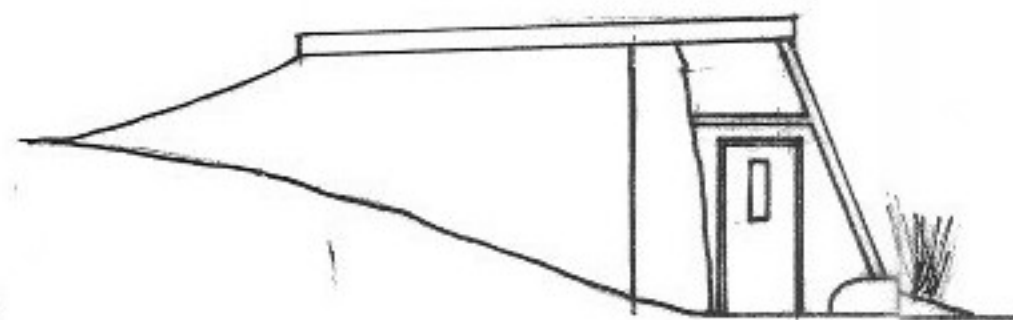


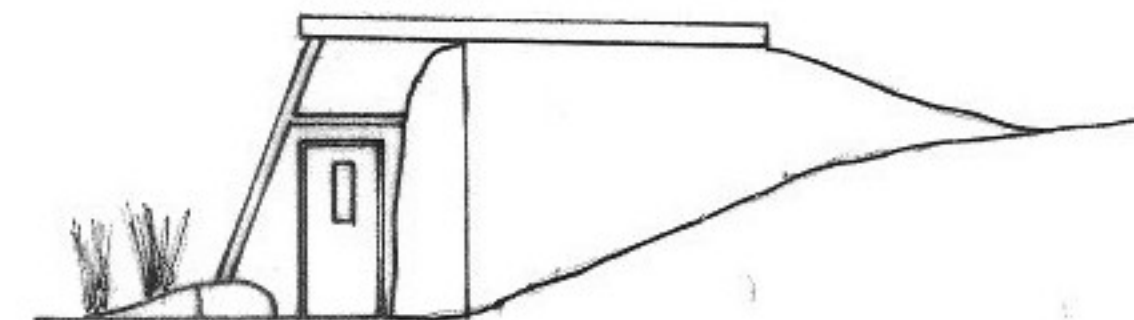
Floor Plan



South Elevation



West Elevation



East Elevation

Earthbuilds - Inspired Earthships

Earthships are cutting edge 'green' buildings, constructed using waste car tyres and other recycled materials. They use the planets natural systems to provide all utilities - using the sun's energy and rain to provide heat, power and water. They are buildings that heat and cool themselves, harvest their own water and use plants to treat their sewage. Earthships enjoy the weather, regardless of season. If it's raining they catch free water, if it's windy they generate free power and if it's sunny they are capturing free heat and electricity. Apart from using all the resources immediately around them they also employ extensive energy efficiency and water conservation measures, ensuring that the rainwater and renewable energy they harvest goes as far as possible.

The five core elements are:

Use of low impact materials in construction - using local, recycled, waste, natural and renewable materials

Passive solar design - enjoying the sun's free energy for space heating

Renewable energy - zero fossil fuel consumption for day-to-day running with on-site generation of power for electricity and water heating

Rainwater harvesting - free water from the skies with no mains connection and subsequent groundwater depletion

Using plants to treat waste water - no sewage infrastructure with on-site 'waste water' treatment using plants and natural processes

Low impact materials

Earthbuilds use lots of low impact materials. Low impact means waste, recycled, reclaimed, timber from a sustainably managed source or local materials sourced from within 35 miles. There are other materials used in the project, but they were used because they had a particular property or quality, for example the high performance double glazing.

The basic building block of the earthship walls are used car tyres. The UK throws away over 48 million of these annually and they are now banned from landfill. The technique is simple and together with a 1m of rammed earth behind them they create thick walls of thermal mass. Finally the tyres are rendered over with mud, adobe or lime render. Another waste material used in the earthship are glass bottles, which are cut up and taped together to form glass bricks. The glass bricks are then laid in courses in cement to form a wall, which are finally rendered over and look like stained glass.