POD CONSTRUCTION 2009

PROBLEM ADDRESSED
The disposal of end-of-life materials from a wide range of sectors is creating an ever-increasing burden upon existing landfill sites across the UK. Many such products could be reused with little or zero remanufacturing requirements, if the facilities were in place to allow for this. In Cornwall existing landfill sites have already reached capacity levels and waste will soon be shipped out of the region for remote disposal at huge economic and carbon cost if production of waste is not dramatically reduced within the region. A fundamental method of reducing waste generation is through the innovative reuse of materials and resources for new products and building components. The challenge set was to utilise waste materials available in the locality of the Eden Project (as identified previously through the ‘harvest mapping’ Workshop) to create a small workshop ‘pod’ which could be used by the Eden Project and ASF-UK for future workshops, raising awareness of the possibilities for reusing local waste materials in construction.

GOAL ACHIEVED
Using the materials identified during the ‘harvest mapping’ workshop, a simple design was developed for a small enclosure with workshop bench. The design drew on the expertise of Eden volunteers and management as well as inputs from consultant Césare Peeren of 2012 Architects, Bill Flinn and engineer Peter Beresford. Final details were developed on-site during two building workshops and remained flexible to the fluctuations in material availability, ability to transport the materials and other challenges including time and weather. During the first workshop (which took place during the 2009 Summer School over six days) the focus remained on collecting and documenting materials, development of the final design details and the prefabrication of the main elements. These were constructed off-site in the Eden Project workshop. Prior to the final workshop, drawings were revised and circulated specifying the exact quantity and nature of the joints. This could certainly have been made clearer to all volunteers giving greater time for discussion and briefings. The final three day workshop focused on the assembly of the main elements and completion of all final details from foundations to roof.

METHODOLOGY OF WORK
The pod was completed in a total of nine days using non-professional volunteers and serves as a showcase for the potential of reusing materials for viable building components. A broad variety of skills were learnt by all including but not exclusively; scheduling, procurement methods for waste materials and a multiplicity of construction skills using tyres, scaffold poles, reused road signs and reclaimed timber.

FUTURE PERSPECTIVE
It is hoped the pod will be used for future workshops as well as a promotional and educational tool to demonstrate the methods and potential of reuse in construction. The pod will also mark the first in a line of enclosures that will be developed in future skills training workshops, with vulnerable and marginalised groups seeking to learn alternative construction skills.