Design Review Report

Bunkers Hill, Rhossili

**DCFW Ref: N102**

Meeting of 16<sup>th</sup> March 2016
Declarations of Interest

Panel members, observers and other relevant parties are required to declare in advance any interests they may have in relation to the Design Review Agenda items. Any such declarations are recorded here and in DCFW’s central records.

Review Status
Meeting date
16th March 2016
Issue date
24th March 2016
Scheme location
Rhossili, Gower
Scheme description
Residential
Scheme reference number
N102
Planning status
Pre-application

Declarations of Interest

None declared.

Consultations to Date

Consultation with the local planning authority has taken place.

The Proposals

The proposal is to build a new single storey house to suit the current and future needs of the retired clients who currently live in an adjacent property, and therefore should be suited to senior mobility challenged persons.

The steeply sloping site is currently unused scrub and is accessed via a gate off an existing lane. A public footpath runs along the north edge of the site. There is a scattering of houses in the landscape surrounding the site. The site affords views over the Gower landscape to the east and south.

The architect is aiming to provide a good quality house which minimises impact on the landscape and is highly sustainable and energy efficient. The submitted material states that the aim is to reach Passivhaus standard and Code Level 5.

Main Points in Detail

The following points summarise key issues from the review, and should inform work ahead of making any planning application:

Response to site and landscape
The landscape of the Gower is special and one of the main attractions of the area. Whilst DCFW is not against being able to see new interventions in the landscape in
principle, this site demands exceptional design quality which improves or adds value to the landscape.

The siting of the house within the site seems sensible, with the footprint following the natural contours and enabling views over the landscape. The layout of rooms makes the most of views, with the main habitable rooms at the front. However, the cellular plan means that the hallway and corridor would receive no natural light. A freer more open plan could prove to be beneficial.

It is reassuring that there are plans to use the material cut from the ground elsewhere on the site, although no details of this were provided. Removing large amounts of material would be costly.

As it is drawn in the presentation material submitted for review, the proposal does not appear to significantly block views from neighbouring properties due to being sunk into the hillside. However, once more accurate details of structure and construction dimensions are known, accurate scale section drawings will be useful to check the influence on views from surrounding properties, gardens and footpaths.

In the presentation material, the proposal is described as an earth sheltered building. Although it is sunk into the hillside, the external cut-out at the back of the house would make it appear as a separate element in the landscape and the traditional benefits of earth sheltering would be lost.

**Concept and communication**

For this to be a project of exceptionally good design quality, it should have a strong and confident architectural concept which drives and guides the project.

The concept presented at the review is not yet clear enough in either explanation or execution. The proposal is neither an object in the landscape next to a lane like the other houses around it, nor is it truly expressed as a discreet earth shelter or fragmented wall in the landscape.

The landscape design should also be reconciled with the overall design concept and it may be useful to simplify the house plan in response to the concept.

The language used in written and verbal descriptions and the architectural language used in drawings must effectively communicate the design concept. Models and diagrams are a useful way to do this and words should be chosen carefully. Good design always has a clear story to tell.

The concept should be taken through all stages of design, from form and layout through to detail design. Issues should not be ignored just because they cannot be seen easily. For example, consideration should be given to the way the ends of the house relate to the landscape, even though the ends cannot be seen easily in the views looking onto the site.

**Sustainability and Energy Strategy**

The ambition to provide a highly sustainable and energy efficient home is commendable. However, the details of how this will be achieved are not yet clear. It is important that
Sustainability and energy strategies are incorporated at an early stage in the design process as they will have an impact on the form, scale, fenestration and appearance of the building and landscape.

PassivHaus and Code Level 5 are two quite different approaches and may not be compatible or logical to use together. PassivHaus principles must inform design decisions from the outset and cannot be ‘added on’ at a later stage. It is likely that it will be difficult to achieve PassivHaus with the proposed building form which has a large surface area to volume ratio. Thicker walls and roof than those shown in the current drawings may be required to achieve sufficient insulation levels. A qualified PassivHaus consultant would provide useful knowledge and skills and would be able to use the PassivHaus Planning Package software, which is essential to achieving PassivHaus accreditation. Careful specification of construction details and monitoring on site will also be necessary.

In order to achieve the desire levels of sustainability an environmental/energy consultant would be a useful addition to the design team, prior to a planning application being made. Environmental modelling and testing should be carried out to refine the energy strategy and ensure targets will be met.

A green roof is proposed and it will be important to quickly determine what type of green roof would best suit the project objectives. For example, if the main aim is to blend in with the landscape, a sedum roof will probably not be the best option. Different types of green roof have different structural requirements and it is important to understand how the roof structure and build up of layers will affect the overall height of the proposal. This will also be important in determining the precise nature of the roof edge/fascia which, if not handled carefully, has the potential to appear overly bulky.

The cut out in the landscape behind the building means it does not have the insulation benefits of traditional ‘earth sheltered’ construction.

The integration of any renewable energy technologies is important. If the impacts of these are not considered at this stage they could compromise overall quality. There is no obvious place for solar panels in the proposal, for example. Ground testing would be required to determine whether a ground source heat pump would be appropriate.

**Detail Design**

Detail design will be especially important to the quality achieved in this project. The Commission suggests that it is important to consider key details at this stage, prior to a planning application, to show how the building will really look. Roof edges, window details and surrounds and stone coursing will all be important parts of this project.

A greater level of detail and accuracy than that presented at this review will be required to make a convincing planning application.

Due to the sensitive nature of the site landscape design details will also be crucial. For example, the length of ramps needed should be accurately shown to demonstrate their impact on the site.
Further Review
The Design Commission always welcomes the opportunity to review schemes again as designs progress. It may be useful for another review of this scheme to take place prior to any planning application being made.

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A Welsh language copy of this report is available upon request.

Attendees

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<tr>
<td>Architect/Planning Consultant:</td>
<td>Anthony Sanger, Architect</td>
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<td>Client/developer:</td>
<td>Mr &amp; Mrs Dorman, client</td>
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<td>Local Authority:</td>
<td>The LPA was invited but did not send a representative</td>
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<td>Chair</td>
<td>Jamie Brewster</td>
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<td>Lead Panellist</td>
<td>Amanda Spence, Design Advisor, DCFW</td>
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<td>Mike Gwyther-Jones</td>
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