** This report relates only to the version of the scheme seen at Design Review on May 19th 2010. **

Addroddiad Adolygu Dylunio
Design Review Report

Review Status: **Confidential** [made public on December 14th 2010]

Meeting date:	19th May 2010
Issue Date:	2nd June 2010
Scheme Location:	Ael y Bryn, Bwlch
Scheme Description:	Residential
Planning Status:	Pre-application

Part1: Presentation

This scheme was previously reviewed by DCFW in February 2009.

The Local Planning Authority stated that the proposed use was acceptable according to planning policy. The site is in a prominent location and the scheme will not detract from the quality and character of the surrounding area. Some screening from the road has been incorporated into the scheme, but planning officers have concerns about the overall width of the building which they consider could result in loss of privacy and overlooking of the existing property on the site. There are also concerns about the transport implications of construction and earth removal from the site. The commitment to CSH level 4 is supported, but the sustainability of the proposed materials is questioned.

Acting on the recommendations of the previous review, the design team has sought specialist help on the structure and sustainability strategy and has achieved a BREEAM pre-assessment score of 68% which indicates that Code Level 4 will be achieved. The strategy includes a mechanical ventilation system with heat recovery, ground source heat pump and solar water heating. The construction system is polystyrene formwork with a reinforced concrete core, delivering a U value of 0.15 W/m^{2}K, and is A+ rated. The access and parking arrangements have been revised and improved.

Summary of key points arising from discussion, to be read in conjunction with Part 2 of this report.

The Panel welcomed the way in which the team had responded to the recommendations made in the previous Design Review report. We think this is a good design response to the brief and the site, but there are still major concerns to be resolved. In summary:

- The solution to potential problems of overlooking has to be clearly demonstrated. A site section is essential to assess the relationship between the new proposal and the existing house and should have been provided with the review material.
- A truncated version of the wide arch with a similar reduction in the length of the balcony could be made equally elegant and would result in less visual impact and less potential overlooking. An alternative would be to set back the 'wings' from the main facade.
- There would be benefits in exploring a shallower floor plan and increasing daylight penetration into the proposed dwelling.
- A soil investigation should be commissioned as soon as possible to confirm or otherwise the feasibility of earth sheltered construction on this site.
- The continuing commitment to Code 4 is welcomed and we urge the team and the Local Authority to guard against any reduction in environmental performance.

Part 2: Discussion and Panel Response in Full

The team explained that the design concept had developed from the desire to build an exemplar sustainable dwelling, using the benefits of earth sheltering, and responding to the design guides developed by the National Parks. They have tried to retain the simplicity and elegance of the concept and have revised the front elevation to be symmetrical.

With regard to issues of overlooking, the team considers that these can be overcome with sensitive landscaping. The house is not meant to be completely hidden and they think that sufficient screening has been provided. The client who currently lives in the existing house on site stated that he was convinced that there would be no problem with overlooking from the new dwelling. However, this needs to be demonstrated by accurate plans and sections, and cannot be taken on trust.

The Panel thought that the shell structure with its 33m radius had driven the design and that this was now causing problems. We suggested that the width of the curve could be reduced and the corners could be lost, while still retaining the elegance and symmetry of the facade. This would also reduce the length of the balcony and the impact on the existing dwelling, and the team agreed to consider this. The main entrance could then be directly off the parking area to the east. A reduction in the reuse of excavated material on site would be an acceptable compromise in order to get the design right.

The plan depth is too deep to allow daylight penetration into the rear of the dwelling. While the upper floor living space will benefit from sunpipes, the lower rear floorplan will have no natural light. We think the advantages of a shallower floor plan and a redistribution of internal spaces should be explored, and noted that this was the approach adopted for the Future Systems house in Pembrokeshire (a precedent cited by the design team). A glazed roof lantern above the stairwell would also help to improve daylight penetration.

The Panel established that no soil investigation has been carried out although the designer's experience of other local developments suggest that it will be suitable for excavation. We thought that this was a risky approach and strongly recommended that geotechnical investigations be undertaken to confirm the feasibility of the proposed construction before any more expenditure is made or the project is progressed further.

The exact amount of material to be removed from site has not been calculated, but arrangements have been made for disposal at an agricultural site less than 0.5 mile away from this site. The Panel regretted the lack of a site section, which would have helped to assess the extent of excavation necessary, as well as the dwelling's relationship to the road and the existing house.

The Panel thought the balcony should appear as unobtrusive as possible, with glazing rather than balusters and a minimal structure. We were assured that solar shading blinds would be used on the sliding doors, and tinted glass would be avoided.

The Panel welcomed the continuing commitment to achieve Code Level 4, while noting that the claimed thermal mass benefits of the structural system were compromised by the insulation layer on each side.

The Design Commission for Wales Design Review Panel and staff welcome further consultation and will be happy to provide further feedback on this report and/or where appropriate, to receive further presentations. Thank you for consulting the Commission and please keep in touch with us about the progress of your project.

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

Appendix 1: Attendees

Asiant/Client/Datblygwr: Agent/Client/Developer	Mr Mike Doggett
Pensaer/Architect:	Powell Design Ltd [Geoff Powell]
Consultants:	Ian Roberts Consultancy [Ian Roberts]
AwdurdodCynllunio/ Planning Authority	Brecon Beacons National Park Authority [Lloyd Jones]
Y Panel Adlygu Dylunio: Design review panel: John Punter [Chair] Cindy Harris [Officer] Kedrick Davies	 Toby Adam Christopher Jones Phil Roberts David Harvey
Lead Panellist:	David Harvey
Sylwedyddion/Observers:	n/a