

## Addroddiad Adolygu Dylunio Design Review Report

**Review Status: Confidential** 

Meeting date: 23rd June 2010 Issue Date: 7th July 2010

Scheme Location: St Cyres school, Penarth

Scheme Description: Education
Planning Status: Pre-application

#### **Part1: Presentation**

The project is for a new learning campus which brings together a new building for St Cyres comprehensive school with two special schools, into one integrated but zoned development. This scheme was previously seen at Design Review in December 2009 at feasibility stage. Issues raised at that time focussed on the need for extensive consultation, exploration of co-location, parking impact, and support for the BREEAM Excellent target.

Since then consultations with the various users have greatly influenced the development of a masterplan for the site, with the aim of maximising shared learning opportunities. This team is already working together on the new school for Cowbridge and benefitting from the lessons learned there.

The landscape design has progressed including a traffic management plan which separates vehicles from pedestrians. The main pedestrian access will be from the south, and vehicles will enter the site from the north west. An existing access from the east will be used for services and deliveries. All heavily serviced areas of the building have been located on the lower ground floor, close to the central plant room. The team is confident that they will achieve the BREEAM Excellent target.

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

The Panel welcomed the opportunity for a further review of this complex and exciting scheme, along with the recent extensive consultation. However, we think that major issues remain to be resolved. In summary:

- It is not evident that the building layout has been informed by a thorough exploration and development of a pedagogical vision.
- We have concerns about the flexibility of the internal plan. Further evidence is needed to demonstrate that this will work in practice, to reinforce the pedagogical vision. If breakout spaces are an important part of the pedagogical approach, they should be a more obvious and accessible part of the plan.
- We are not convinced by the circulation strategy and again, ease of movement and avoidance of pinch points needs to be demonstrated. The central dining hall is located at the furthest point within each school, with potentially congested access route to it.
- The 'social heart' of the secondary school building appears to be compromised by lack of space and movement flows.
- The environmental strategy appears to be fundamentally flawed due to the
  predominant east/west orientation and alternative site layouts should be explored or
  revisited. It is important to get this right at the early design stage rather than
  compensating with additional energy-consuming technologies during detailed
  design or once the building is in use.
- The landscape strategy needs further development and strengthening, and the layout and location of the parking should be reconsidered.
- We are not convinced that the right level of integration between the different schools has been achieved, or that the layout allows for a greater degree of integration if required. In this context, the size of the dining hall should be reviewed, and its access to outdoor space.
- The architectural treatment should be simplified and the palette of materials reduced.
- The relationship of the service yard with an outdoor area above, was not clear.

### Part 2: Discussion and Panel Response in Full

The Panel was reassured that the necessary consultation had taken place and informed the design process, although no details of this were presented and the nature of its impact was not immediately apparent. There was a lack of clarity in some aspects of the material presented – eg missing section lines.

The Panel noted that the internal layout was a traditional one, based on classrooms either side of corridors, and we thought that the potential for breakout spaces had not been sufficiently exploited. While we understood that flexible spaces could be created by removing some partitions, we nevertheless considered that more permanent and generous breakout spaces would provide a better opportunity for full integration into the learning experience. It was confirmed that the SEN wing would need smaller, contained spaces. In general, it is important that the layout should be informed/driven by a thorough exploration of the pedagogical vision.

The internal circulation layout is based around long central corridors, which means a long route for the outer classroom users to access the central areas. We would like to see a flow movement diagram to demonstrate that this layout works well and that pinch points are avoided. The central meeting space, claimed to be the 'social heart' of the building, is a

very restricted space, dominated by a staicase and needing to accommodate large movement flows.

We questioned the assertion in the document, that an east/west orientation for the building was 'inevitable', and noted the virtual impossibility of providing adequate solar shading in this situation. Given the real risk of overheating with this orientation, we thought that more effort should be spent on developing alternative layouts, as shown in the concept studies, while ensuring that the building continues to respond to the site and its constraints. It would be regrettable if additional mechanical ventilation was needed to offset the disadvantage of an east/west orientation, and we advised that predicted electricity use be included in the thermal modelling exercise which is underway.

The Panel questioned whether adequate daylighting levels could be provided in teaching spaces given the orientation issues above, and we had serious concerns about the number of internal teaching spaces without direct access to external windows.

The Panel thought that the landscape infrastructure was weak, and we urged the team to retain and strengthen the small intimate external spaces shown on the landscape plan, which would have an important pedagogical function. The visuals do not accurately show the influence on public space of the high sports fencing that is required to some multi-use areas.

The parking layout and location is still not optimal, and we were not convinced by the 'green roundabout' as a sensible use of outdoor space. We were concerned about the long runs of parking spaces without trees or soft landscaping to break them up, or provide shading. We were encouraged to hear of plans for staff car sharing and rationalisation of private car journeys. The traffic impact assessment means that there will be some improvements to Sully Road, but not traffic lights at the junction with the main site entrance. The team was satisfied that existing traffic problems will not be made worse by this scheme.

The physical integration of the separate schools appears to be more tenuous than originally thought, and we were informed that this was one result of the consultation with users, although the building allows for greater inclusivity in the future. At present, opportunities for integration are limited to the central dining room, and we wondered whether this was therefore a large enough space. However, further discussion revealed that even this degree of integration will be limited by a separate dining room on the SEN side, and staggered meal times. While we appreciate the issues associated with eating in the special school, it will be important to create appropriate opportunities for future integration.

The architectural treatment of the elevations appears heavy and in danger of losing the simplicity of the plan. We think they should be kept as simple as possible and the complicated palette of materials on offer should be reduced to a minimum, for ease of construction and maintenance as well as design quality.

With regard to the very large entrance canopy, we thought this could also present problems of detailing and maintenance and wondered whether this suited the needs of SEN pupils. We were informed that the size reflects the large numbers of pupils being dropped off, and that direct access is provided into ASD classrooms from the north west.

The team stated there are no additional WAG requirements for renewable energy, over and above BREEAM Excellent. We were told that a CHP system is being considered for the base heating load, and biomass will be looked at. We thought this study should include the potential for tri-generation to maximise efficiency and cost effectiveness. Solar water heating is also under consideration [although the roofs are poorly oriented for this] and heat will be recovered from ICT rooms as a source of preheat. The Panel suggested that a wider study of adjacent sites and uses be undertaken to facilitate a district heating solution, as advised in TAN 22.

Community integration is an important part of this proposal. The sports hall, drama and music spaces will be accessible for out of hours use, as well as classrooms for adult education. The existing swimming pool building will be retained for refurbishment as a youth club and for other uses such us University of the Third Age.

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: Vale of Glamorgan Council [Jane Wade]

Agent/Client/Developer Ashgrove School [Chris Britten]

Pensaer/Architect: HLM Architects [Phil Grant, Gareth Woodfin]

Consultants: Arup [Anne Sharp]

AwdurdodCynllunio/ Davis Langdon [Ron McLean]

Planning Authority

Y Panel Adlygu Dylunio: Design review panel:

Alan Francis [Chair] Toby Adam
Cindy Harris [Officer] Simon Hartley
Wendy Richards Jonathan Hines
Ed Colgan Roger Ayton

Lead Panellist: Jonathan Hines

Sylwedyddion/Observers: n/a