



DESIGN  
COMMISSION  
FOR WALES  
COMISIWN  
DYLUNIO  
CYMRU

# Design Review in Wales

The experience of the  
Design Commission for Wales'  
Design Review Panel  
**2007 — 2011**



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**one**

**an overview  
of trends in  
design review  
2007–2011**

Design Review in Wales 2007-11 is the third of the Design Commission for Wales' overviews of its Design Review Service. It refers to some 311 reviews undertaken in the period September 2007 – December 2011, highlighting eighteen detailed case studies from which to draw the most significant lessons.

As with the two earlier publications this document provides an analysis of the overall trends, and synthesizes the findings of individual reviews, in order to assess their implications for Design Review as a process, both for the Commission as an advisory body, and the effectiveness of the design dimension of the planning process in Wales.

DCFw's Design Review process provides a valuable window into the challenges and opportunities, successes and failures of development and planning processes in Wales, and their capacity to deliver well-designed development. The process aims to raise the aspirations of developers, designers and planners regarding the principles of sustainability, social inclusion, and design quality, in line with the objects and strategic aims of the Commission.

In this publication we seek to distil the cumulative experience of DCFw's Design Review Service in Wales during the period 2007-11, and disseminate this to key decision makers, the design and development community, planning authorities and the wider public.

We summarize the lessons of the reviews of this period and compare them with the outcomes of the 2005 and 2007 reviews. We set DCFw's Design Review Service in a UK context, and within the Welsh context of ongoing developments in planning policy and practice and DCFw's previous experience of, and adjustments to, design review.

A statistical overview of the review experience from September 2007 until the end of 2011 compares the annual summary statistics by numbers of schemes, development type, status and location and the assessment made of their design quality.

The main body of this publication explores in detail some of the more important reviews conducted between September 2007 and December 2011 by development type. It draws conclusions on each type, comparing the findings with those of the 2005 and 2007 publications and highlights the key issues over the whole period 2003-2011.

Finally we explain the ways in which we are attempting to refine and develop our Design Review Service, responding to both our past experience and our anticipation of the future needs of service users.

Full details of the national Design Review Service delivered by the Commission can be found in the two earlier *Design Review in Wales* publications and via the website at [dcfw.org](http://dcfw.org) for current practice.

User guidance can be found in the *Guide to the Design Review Service* publication also available via the Commission's website.

## Overview of the findings on the Design Review Service: 2003–05

In the overview of the period 2003–2005 we found that the establishment of a national Design Review service had been a great success for the Commission. It brought significant additional expertise not only into the Design Review service, but also into the mainstream of Commission work on procurement, sustainable development, research, training and outreach functions. In terms of helping the Commission to develop a corpus of expertise and a community of design advocates, Design Review far exceeded expectations. In assessing its impact on actual developments we found mixed results, and that then, as now, improving design was a complex challenge.

The inventory of schemes brought to the Panel showed good contact with developers, designers and local authorities in South East Wales where development was concentrated. Positive collaborations were developing with Gwynedd, Flintshire and Wrexham but elsewhere in north, west and mid Wales the use of the Panel was more sporadic and uneven.

Evaluation of the utility of the Commission's advice to developers and designers was achieved through a survey in July 2005, and this revealed very high levels of satisfaction with the service (Roberts: 2005). Designers and developers were surveyed regarding their experience of Review prior to July 2005 and evidence was sought of actual changes made to designs and schemes. A 34 per cent response was received with 84 per cent of respondents stating high levels of satisfaction with the Design Review experience, and only 6 per cent unsatisfied or very unsatisfied.

It proved much more difficult to obtain meaningful answers to the question of impact on the presented schemes, given the time lag of several years as schemes were approved and constructed, and the difficulty of separating Panel inputs from the wider consultation, planning and design processes. The 2005 survey, based on responses from developers and designers, suggested that two thirds (65 per cent) of schemes had been modified as a result of review, while changes were still being considered in a quarter (24 per cent) of the cases. The Commission became aware that the influence of a Review can be subtle and indirect, and that capturing this in monitoring exercises is very difficult.

Despite the survey findings it was clear that many of the Panel's recommendations were not acted upon, the principal reason being that of late consultation, too close proximity to the submission, or to the decision on a planning application.

The survey also revealed developer sensitivities to the additional expense of design revisions, despite the Panel paying close attention to questions of relative construction costs and values, quantities of floorspace, ease of management and/or disposal, and consumer preferences. These issues continue to exercise both Panelists and the Commission.



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## 1.3

### The ten critical issues as revealed in the 2005 Review

The ten most critical design issues which the Commission identified in its 2005 findings were:

- The failure to present applications properly, to show schemes in their wider context, to include appropriate drawings (sections are seldom shown even on steeply sloping sites) and illustrative material, and supporting design statements. Material submitted for review is too often insufficient for proper evaluation, yet it forms the basis of planning applications.
- The absence of any thorough analysis of context and site, and use of these studies to inform the design process.
- The failure to use landscape architects early enough in the design process, to understand the difference between landscape as a design opportunity/ constraint and landscaping as a design element, and to adequately protect biodiversity and natural heritage.
- The use of standard solutions, or parts of previously used designs, when a bespoke approach is required. This is a particular problem with volume house building.
- The need for a rethink of highway standards and practices, and a more design-aware approach to housing layout and especially parking standards.
- The need for a positive and proactive approach to residential intensification that can provide good living environments for new residents, while adequately protecting amenities for the community.
- The resistance to mixed use development which continues to prejudice the development of sustainable communities, and the successful integration of individual developments into town and local centres.
- The proper use of strategies and masterplans. The wider use of masterplans in urban regeneration and suburban extensions is to be welcomed, but only if they provide a higher degree of certainty as to the physical form of development, and ensure the incorporation of sound urban design and landscape planning principles. The process of masterplanning must be rooted in community participation, and must include appropriate implementation procedures.
- The promotion of development in unsustainable locations. Just because development is promoted on brownfield sites (many of which have been fully remediated and are now ostensibly greenfield) does not make it sustainable: accessibility and public transport provision are critical.
- A widespread failure to pursue sustainable construction objectives and improved levels of Eco-Home (subsequently Code for Sustainable Homes) and BREEAM ratings.

## 1.4

### Additional issues revealed in the 2007 Review

At the end of our examination of the period 2005-2007 we drew essentially the same ten conclusions, but we also identified another set of seven issues which were consistently undermining the quality of design. These were:

- The failure to seriously pursue sustainable construction/low carbon objectives, except in Welsh Government projects for new government offices and primary care centres.
- The failure to include significant proportions of affordable housing in medium to large scale housing schemes, and to ensure that in their layout and design they are fully and seamlessly integrated.
- The failure to develop new forms of denser housing that can support suburban intensification and diversification on the one hand, and be more street oriented but have quality external private and communal spaces, on the other.
- The failure to properly locate and design tall buildings so they have a positive impact upon the streetscape and skyline, and upon regeneration initiatives.
- The cutting of corners on design and procurement methods in order to reduce costs and increase speed, but at the expense of design refinement and quality.
- The frequent absence of pro-active planning identifying sustainable design objectives on key sites, and pursuing improvements in design in line with the expectations in national policy (PPW; TAN 12).
- The tokenism of public art strategies which are rarely integral to the design process.

## 1.5

### Actions taken to address persistent design failings, post 2007

Drawing on its in-house expertise the Commission targeted most of these issues through its research, guidance and training programmes. These aim to develop design literacy and sustainable construction skills within Local Planning Authorities, the development industry and amongst the Planning Inspectorate. The Commission also acted upon the need for a deeper and more long-lasting involvement with major projects, but elected not to pursue the enabling model adopted by CABE in England.

The Commission played a part in the group which researched the Planning Officers' Society of Wales' national *Design Guide for Residential Development, POSW 2004* and *Design Guide for Householder Development, POSW 2005* and recommended their adoption and absorption into local planning practice. They conducted training programmes in nine Local Planning Authorities which explored design briefing and other mechanisms for proactive planning on design matters. Activities to promote design briefing are ongoing.

The Commission pursued matters of the effectiveness of design policy at national and local levels, using the introduction of the new Local Development Plan system

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to provide strategic comment on draft policies, and contributed to a nation-wide training programme accordingly. At the national level it contributed to the formulation of revised design policies for TAN 12 in 2008/09.

The Commission played a significant role in the introduction by Welsh Government's Planning Division of Design and Access Statements, which require clear and concise statements articulating the rationale of design approach, and which can then be properly tested in the planning process. It published and widely disseminated a useful guide *Design and Access Statements in Wales: Why, What, How* and delivered the national training programme associated with the introduction of the legislation and requirements.

The Commission welcomed the re-think of highway standards and practices, and the publication and immediate adoption in Wales and England of the *Manual for Streets, DfT 2007* and its follow up *Manual for Streets II, DfT, 2011*. It played a key role in its launch in Wales, alongside the RTPI and a wider consortium, and led a national training programme, Sustainable Transport: Quality Places, in 2011.

The Commission has consistently argued for a committed approach to sustainable design and construction. With the 2007 Ministerial statement committing Welsh Government to the aspiration for net zero carbon buildings (in energy use terms) from 2011. Reaffirmed by the Minister for Sustainability, Environment and Housing, there was a new urgency to see dramatic improvements in energy efficiency and the provision of low carbon systems for energy generation and distribution.

The requirement for all local authorities to define their housing needs, and the proportion of affordable housing they expect the homebuilders to provide in each scheme, provided greater impetus to the Commission's pursuit of social inclusion as a design goal. We consistently advocated the provision of appropriate levels of social housing in residential schemes, and their seamless integration through design to ensure their success in use. This is a design challenge requiring positive collaborations between homebuilders, social housing providers, and local authority departments. Home and neighbourhood quality remain priorities for the Commission.

The question of the appropriate location of tall buildings was addressed in the publication of a guidance note *10 Points for a Tall Buildings* by the Commission updated in 2010.

In procurement the failure to invest in complete design teams, with landscape, mechanical and electrical engineering/sustainability skills, early in the design process remains damaging. The ever increasing influence of contractor-led teams, and the pressures of competitive fee bids, have proved equally damaging to the achievement of well designed, sustainable solutions. The Commission continues to draw attention to these issues.

The lack of sophisticated strategies for the inclusion of professional artists in the design of development, and the absence of consistent best practice, were compounded with changes to national advocacy organizations in 2010. How best the skills and work of professional artists can be secured to add value to projects and enhance cultural value and distinctiveness has become less clear.

Of increasing concern to the Commission over time has been the role of planning in securing good design quality, and specifically that of Local Planning Authorities in setting out in their local plans their aspirations for good quality, and their translation into effective development management. DCFW's research into the design dimension of development control identified serious shortcomings in terms of plan content, planning policies, supplementary planning guidance, design and

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negotiation skills and understanding of design matters in Wales, as well as serious delays in Local Development Plan production and adoption. Examples drawn from the experience of Design Review and from DCFW's strategic overview of Local Development Plan progress were used to inform the Commission's submission to the Independent Advisory Group (IAG), formed to examine the planning system in Wales in October 2011.

In 2010, to help lay people more easily engage in design issues in their own localities, the Commission published an accessible guide to the principles of urban design for residential development entitled *No Place like Home*. This set out a series of basic urban design principles and explained the terminology and concepts used in design discussions. It encouraged people to keep themselves informed about developments in the locality, and the preparation and content of Local Development Plans and Supplementary Planning Guidance. The Commission also published *Good Design in Local Development Plans* and *Good Design in Local Development Orders* in 2012 as accessible guides for the public.

Finally, on the DCFW website, the Commission has published details of more than 50 projects which exhibit the qualities of good design. The majority are from Wales, some are English and a few are European. They include a number of follow-up studies of schemes which have been to Design Review, and these aim to identify the evolution of schemes from presentation at Review to built project, and to trace changes and/or positive or negative outcomes. This resource continues to grow and be made publicly available.

All of the above represent attempts to interpret policy and demonstrate how it is possible for designers, developers, local groups and Local Planning Authorities to achieve design quality.

In the context of our 2005 and 2007 findings from Design Review, and the identification of the persistent barriers to achieving good quality and promoting good design, the Commission and the Panel remain mindful of the revised and strengthened *Planning Policy Wales Technical Advice Note 12: Design (TAN12)* updated in 2009.

It states that:

*'...design which is inappropriate in its context, or which fails to take opportunities available for improving the character and quality of an area and the way it functions, should not be accepted.'* TAN 12: Design, Para.2.6, Page 6, 2009

Wales' design policy is explicit and contained within its *National Planning Policy, Planning Policy Wales (PPW)* and through *Technical Advice Note 12: Design (TAN 12 2009 updated)* and other TANs, as well as the *Manual for Streets Volumes 1 and 2*. It is important to note that the Welsh Government is *'strongly committed to achieving the delivery of good design in the built and natural environment'*, that good design is an inclusive and collaborative process, and that *'developments that do not address the objectives of good design should not be accepted'* (PPW; TAN 12: Design Para 6.7, Page 62, 2009).

It is this Government advice and commitment that underpins the Commission's Wales-wide Design Review Service.



## The Design Review Service since 2009

To a large extent DCFW's Design Review process is being constantly refined and adjusted to ensure responsiveness and flexibility. In addition, in 2009 the Commission initiated and carried out its own formal review of the service, comparing it to wider practice, assessing its effectiveness as a heavily resourced major service area, and finding ways to maximise the value of the service.

The review addressed a perception amongst some Local Planning Authorities that it was difficult to secure a timely slot at review, given an eight week application period. The review revealed that there were no cases where a request for a review had been rejected on these or any other grounds.

Consideration was also given to how the Design Review Service might be made more accessible and be used more regularly to engage with Local Planning Authorities on matters of design quality.

The Commission has always carried out regional reviews throughout Wales. However, the intention to increase peripatetic activity emerged along with the suggestion that more frequent informal 'open' sessions would be useful for officers and elected Members. Both approaches were tested so that in addition to the existing geographical spread of reviews in North, Mid and West Wales, 'Open' sessions, which loosely adopted the form of 'surgeries', were tested with the Vale of Glamorgan Council (2009), Powys, Wrexham, Gwynedd and Flintshire (2010).

This pilot exercise found that the availability of schemes was insufficient to warrant an additional localised service. The larger scale regional reviews therefore remain at the core of the national service and are increasingly flexible.

Location and venues are an important factor in the success of such sessions. A Review meeting usually requires a presenting team of a minimum of six people to attend, in addition to one or two local authority representatives, and five Panellists, a Panel chair and two staff. The ability to accommodate these 16-20 people, with access to audio visual equipment, space to receive and examine drawings and scale models, and assurance of confidentiality are all problematic. The limitations of suitably equipped venues at low or no additional cost has been overcome in some instances through the use of Local Authority or Government buildings in a hosting arrangement. The pattern and timing of development is also an influence, and can mean that a review held in Cardiff may see three or four projects from north Wales, while a North Wales review may receive presentations on schemes from Carmarthenshire or Newport. The Commission therefore considers travel and human resources, as well as the nature and location of schemes, when planning reviews, carrying out site visits and offering time slots for the day itself.

Even then the success of 'open' sessions depend upon the availability of Members (who often failed to attend) or the success of authorities in ensuring officer attendance. The most successful open sessions were achieved in the Vale of Glamorgan and Gwynedd where officers have been particularly proactive.

The swift response, (Sections 2.7- 2.11) 'desk-top' reviews involving a member of staff, a Chair, and one Panellist continued through 2009 with the Head of Design Review reviewing drawings and scheme information. This is not a substitute for a full review and is increasingly discouraged as the quality of information available is an insufficient basis for an informed view in all but a very few (often returning) projects.

Another improvement that was sought was more and better quality feedback on the

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user experience of reviews, and to this end an electronic survey, issued immediately after review and again at three months post-review, was tried. A serious attempt was made to monitor the impact of Design Review on development control decisions, and the changes to the design (the 'value-added') as a result of the review.

Other practical and technical changes made to the Design Review process include changes to timing, the format and clarity of reports and the role of lead Panellists. Review sessions since 2010 accommodate an additional pre-briefing session of fifteen minutes to allow the Panel to focus on the key issues driving the design of the scheme. A lead Panellist takes responsibility for studying the submitted drawings/plans/Design & Access Statements/planning history and context, as well as visiting the site, identifying the key design issues, and providing a report on key issues. This report is circulated to the Panel in advance of the review, along with other papers such as local authority comments and agendas.

The lead Panellist briefs the Panel immediately before the review on the day, allowing the Chair to more effectively plan the emphasis of questioning and dialogue.

A second change made in May 2011 has been to reduce the number of schemes considered in a day from five to four (in 2007 the number had been reduced from six to five). Large scale or otherwise significant schemes are also provided with an extended time slot, in some cases up to half a day, most often for Nationally Significant Infrastructure Projects (NSIPs). These changes have made time for the lead Panellist's briefing, to clarify the Chair's summary, and to finalise the key points to be included in the Design Review Report, all helping to improve the quality of the advice the Panel offer.

A new, updated guide to the Design Review Service was introduced in 2011 with more specific requirements for the pre-review materials. The Commission more carefully prioritises which projects it feels would benefit from Review. Schemes too far advanced, or in the late stages of the planning application process, are not usually reviewed unless there is a strategic or other compelling reason that they should be.

The Welsh Government *Practice Guide: Realising the Potential of Pre-Application Discussions* (May 2012) has helped DCFW communicate the importance of early consultation, when most value is gained from the Review process.

Design Review Reports on schemes which are in the public domain are placed on the DCFW website so that there is an easily accessible public record of the comment and advice of the Commission. Where a project has been afforded a confidential consultation at Review, the report is not made public until the scheme is promoted or otherwise enters the public domain, via the media or the planning application process. The reports now provide an impressive and complete archive (of schemes which reached the public domain) stretching back to 2003 for professionals and public to interrogate. ([dcfw.org/designreview](http://dcfw.org/designreview))

Increasingly DCFW draws on the lessons learned through Design Review to communicate key messages and address barriers to the achievement of good design quality, via all its communication platforms: website, social media, print media. More detail on changes in communication and knowledge sharing is covered in Section 3.5.

## The throughput of schemes: numbers, value, type and land use

The number of schemes reviewed by the Design Review Panel since 2004 increased steadily to a peak in 2006 of 66 per annum, but has remained just below that level since. However, it fell significantly to 52 in 2011, a reflection of a deepening recession and DCFW's own action to reduce the number of schemes it accommodates in a day from 6 to 4 (**Figure 1**).

The estimated capital value of schemes reviewed, where teams have been willing to provide accurate information or where that information has been publicly available, also suggested a sharp fall from ca.£950bn in 2009 to ca.£650bn in 2011. These estimates are easily distorted by a few very large schemes: for example, the 2010 schemes had a net value of ca £1.850bn of which £600bn was the Ministry of Defence project at St Athan.

In the deepest recession years of 2009-2011 the proportion of schemes returning for further review advice increased significantly from about 6 per cent in 2007 to 21-22 per cent in 2010-11 (**Figure 2**), largely due to less urgency to obtain a planning permission and the challenging investment context.

The relative proportions of public schemes (broadly those in the public domain and/or the planning application process) and those which are confidential (pre-planning) were relatively even in the early years of Design Review, but from 2007-11 the proportion of confidential schemes has been much greater, peaking at 84 per cent of all reviews in 2008 and remaining at 69-71 per cent of all reviews since (**Figure 3**).

Several factors are at play here: the emphasis placed by DCFW on the importance of early consultation; the economic crisis where far fewer schemes are proceeding to final design and a planning application (waiting until there are genuine prospects of development); the collapse in residential development (which was below peak even before the recession); and greater restrictions on public spending.

The type of schemes reviewed, in terms of land use (**Figure 4**), remains diverse with residential schemes making up close to half of schemes (most masterplanned schemes are predominantly residential) and civic/community, retail, leisure and education each constituting about 8 per cent of schemes reviewed.

Otherwise the pattern is diverse, though one might draw attention to the importance of the six reviews for the St Athan Ministry of Defence project over 2008-9, and note the almost complete absence of healthcare projects as compared with their dominance in 2007 (36 per cent). The latter reflects the tailing off of the public investment in the health estate in Wales, as well as significant reorganisation of the health service in Wales, impacting upon Trusts and Local Health Boards. The smaller proportion of commercial and mixed use projects is clearly attributable to the ongoing recession.

figure 1

Annual number of developments reviewed 2007-2011



NB in 2011 there were no design reviews in December due to the recession.

figure 2

Returning versus new developments reviewed 2007-2011

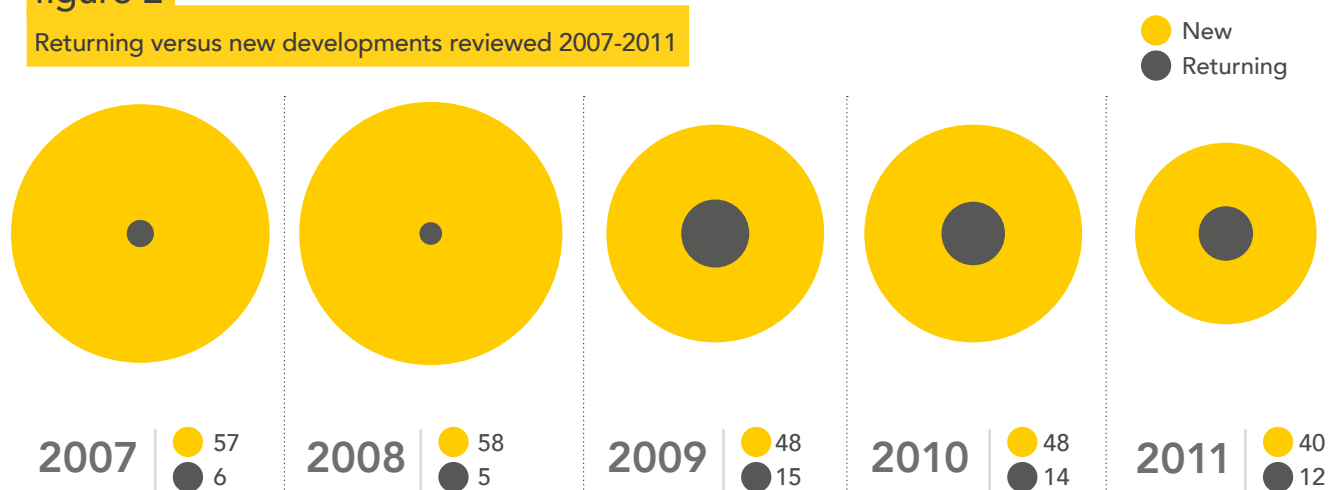


figure 3

Status of developments reviewed: planning applications (public) versus pre-applications (confidential) 2007-11

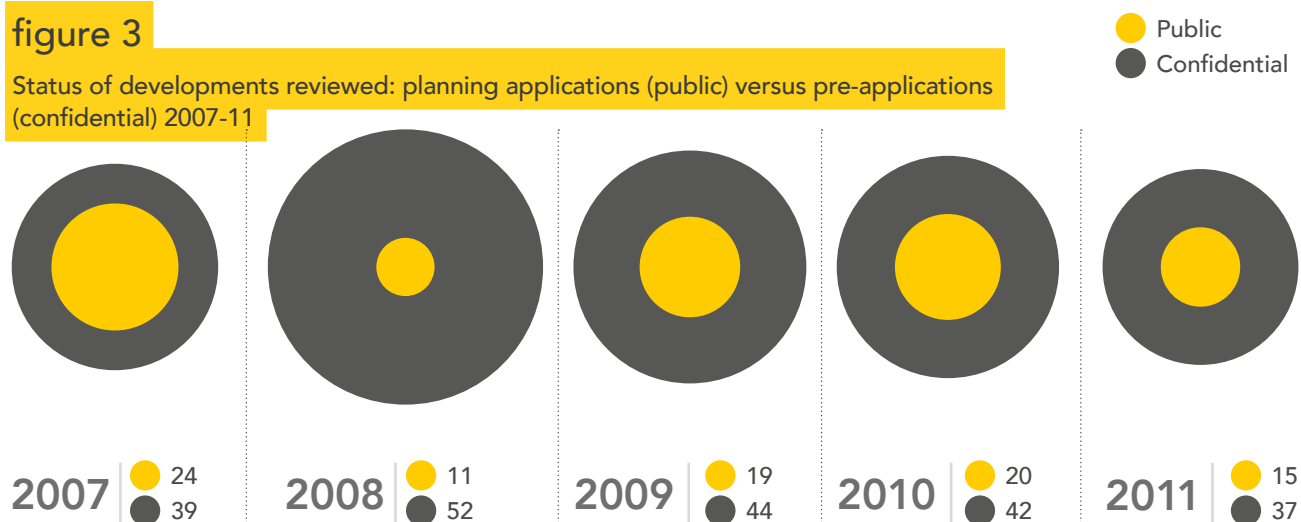




figure 4

Annual number of design reviews by development type 2007-11

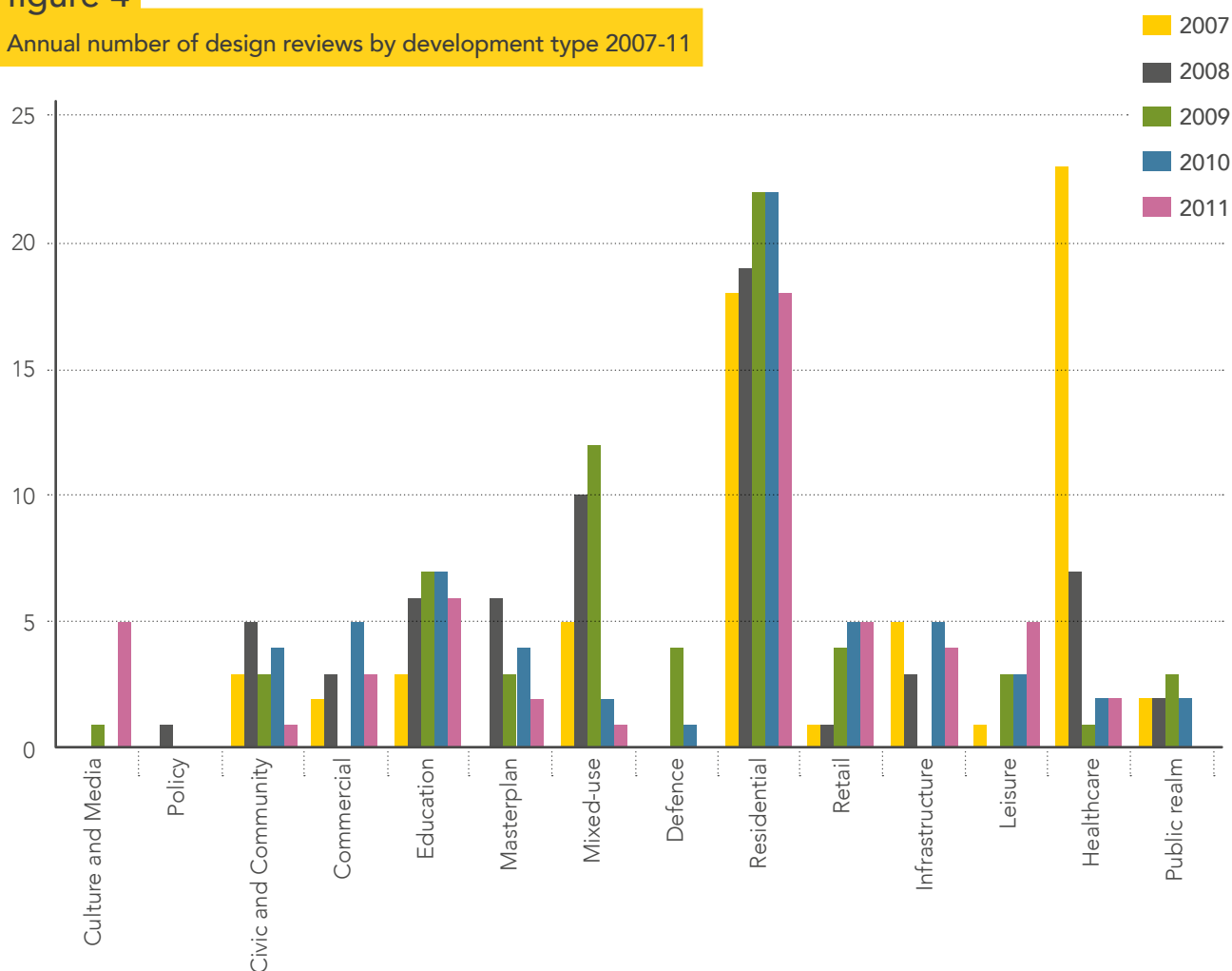
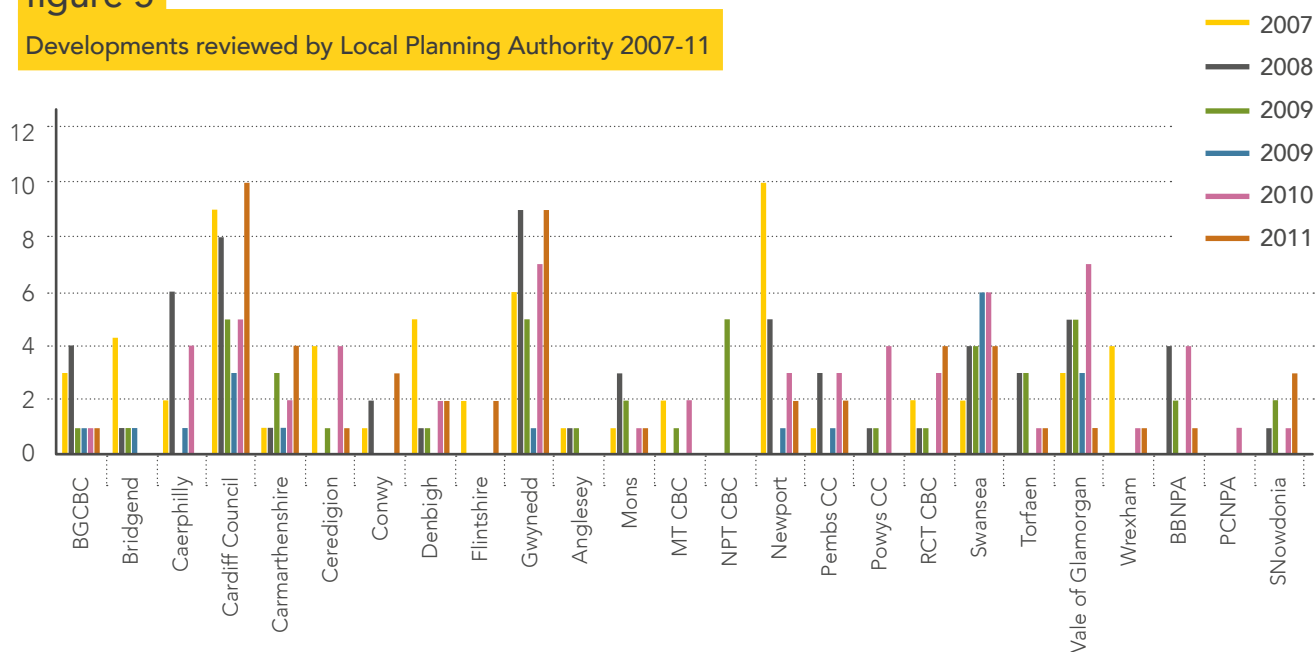


figure 5

Developments reviewed by Local Planning Authority 2007-11



## 1.8

### The review cases by Local Planning Authority

The number of reviews per Local Authority shows that the Design Review Service has established a presence in all Local Planning Authorities in Wales (**Figure 5**).

As might be expected Cardiff makes particularly good use of the Design Review Service on their doorstep, while Gwynedd brings a much larger proportion of its planning applications to the Panel than any other local planning authority. Newport, Swansea, and the Vale of Glamorgan also make very good use of the Design Review Service as do most of the Valley authorities, and most of those in West Wales.

The Commission has made strenuous efforts to engage with all Local Planning Authorities in Wales through Design Review, but also through the work of DCFW's training on design awareness, the use of policy tools, and other support for Local Planning Authorities.

## 1.9

### The quality rating of reviewed schemes

Subtle changes were made in this period to the overall categorisation of schemes in relation to assessing quality. In 2006 four categories, Acceptable, requiring Major or Minor change, or Unacceptable, were introduced. In November 2009 these four categories were changed to remove the notion of 'acceptability' since this does not reflect the Commission's remit and scope. Five categories were then introduced including, Exemplary, Very good, Good, Poor and Unsatisfactory, with the middle categories being qualified by major or minor reservations/concerns/recommendations. A new category of Preliminary was introduced for schemes which had not been fully developed.

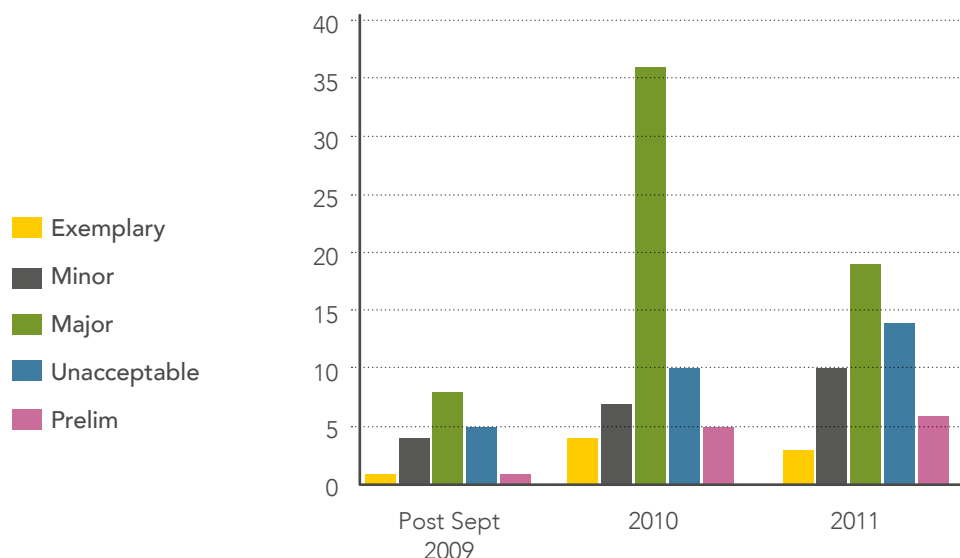
In 2011 the rating system was simplified back to four criteria of Potential Exemplar, Minor Issues to be resolved, Major Issues to be resolved, and Unsatisfactory. Looking at the ratings over the period 2007-2011 (**Figure 6**) what can be detected is a small but significant increase in the absolute number and proportion of schemes requiring major changes in design from 37 to 40 per cent, peaking at 58 per cent in 2010 before reducing to previous levels in 2011; a significant decline in the number and proportion of schemes requiring minor changes (from 33 to 19 per cent); and a relatively steady proportion of unsatisfactory schemes (27-35 per cent with 2008 as a high anomaly). Potential exemplar schemes were only recorded from 2009 to 2011 and only some three schemes annually (ca4-6 per cent) seem to reach this quality level.

The overall trend suggests a slight but significant reduction in the quality of schemes reviewed by the Panel during the recession, though such trends are easily distorted. The Commission acknowledges that the challenge of poor design is as great as ever. However, qualitative assessment of the ratings/categories shows that several schemes requiring major revision were also those that were reviewed at very early stages of design development.

In 2012 quality categorisation was removed altogether. The 'rating' system had been used internally and was intended to assist the Commission in assessing trends. However, the Commission was never entirely comfortable with it, and it proved too crude to be of use in monitoring.

figure 6

Assessed quality of development schemes reviewed 2009-11



## 1.10

### Monitoring the utility and effectiveness of Design Review

There are two distinct requirements of the monitoring process for Design Review. The first is to establish whether the process has been conducted in a professional way so that those bringing the scheme to review feel they have been treated with respect, that the review has been rigorous and incisive, and that the advice provided is clear and constructive. Immediate service user surveys 2010-2011 show that 93 per cent of users were satisfied with the service and 77 per cent said the review met their expectations. 62 per cent of participants said they were likely to return for future consultation.

Surveys at three months after the review revealed that 77 per cent of participants agreed that the Review was useful and constructive. 76 per cent said that the Design Review Report identified key design issues and helped to resolve them, and 47 per cent used the report to promote a particular design solution. 71 per cent felt that engaging with Design Review would influence the progress of the project for the better.

User surveys at three months, specific to local planning officers, revealed that 44 per cent felt that the Design Review Report was useful in helping to determine the application, with 34 per cent of officers agreeing strongly that where an application was determined the report was given significant weight in the process. Of schemes referred to Local Planning Committees, 75 per cent of respondents said the views of the Panel were reported in full or in summary, and 63 per cent said that the views of the Panel were influential or partly influential. Here there is some evidence that the utility of Design Review reports to development managers could be significantly improved by writing them in ways in which their conclusions can be directly incorporated into officers' reports. The utility and clarity of reports is a priority and they continue to be refined.

Overall, the monitoring of the utility of Design Review is a very difficult and time consuming task that requires a great deal of chasing by Commission staff to achieve

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responses. The results are broadly indicative rather than conclusive, a reflection of the complexities of the design control process, the multiplicity of actors involved, and the negotiations undertaken on both the development and planning sides.

## 1.11

### Conclusions

The Commission has been constantly reviewing and refining its Design Review process over the period 2007-11. It took on board the findings of the 2005 and the 2007 overviews both in terms of the process and content of reviews. In terms of process it has moved from 6 to 4 reviews in a day providing more time to brief the Panel, and more time to consider the key issues to be emphasised in the written report.

In terms of the content of its advice the Commission has issued a wide range of advisory documents itself, and contributed to the efforts of others to improve the range of design guidance available to Local Planning Authorities (notably Welsh Government's TAN 12), while simultaneously contributing to a wide range of dissemination and training programmes using these documents. It has established direct relationships with individual Local Planning Authorities through its Review Service and its wider programmes of training, awareness raising and the more 'open' sessions.

Despite the sharp downturn in planning applications since 2008 the Design Review Service maintained its throughput of reviews with only a small downturn in 2011. A halving of reviews in the first half of 2012 pointed to a need to re-think the role of Design Review and this was anticipated at corporate level in the consultation work carried out in 2011, to inform the Commission's Corporate Strategy 2012-13.

The quality rating of schemes has fallen slightly, emphasising that in a recession the challenge to design quality remains as strong as ever. Where responses are obtained, immediate satisfaction with reviews remains at a very high level: this falls to a still high level after three months (77% approval) but by then less than half of planning officers (44%) that responded think that the report is useful in determining applications. This is a disappointing figure and is somewhat distorted by the response rate at three months which is lower than immediately after review. Nonetheless, two thirds of all schemes are modified as a result of Design Review.

Attention now shifts towards a discussion of the most significant of the schemes reviewed in the 2007-2011 period. It is important to note that review findings represent comment on the scheme at a specific point in time, when it was presented to the Commission, a variable stage in the evolution of the project. For this reason the Commission continues to seek monitoring processes which will allow meaningful follow up analysis. Due to the complexity of the development process and the number of actors, this remains a key challenge.



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**two**

**the projects  
reviewed**

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## 2.1

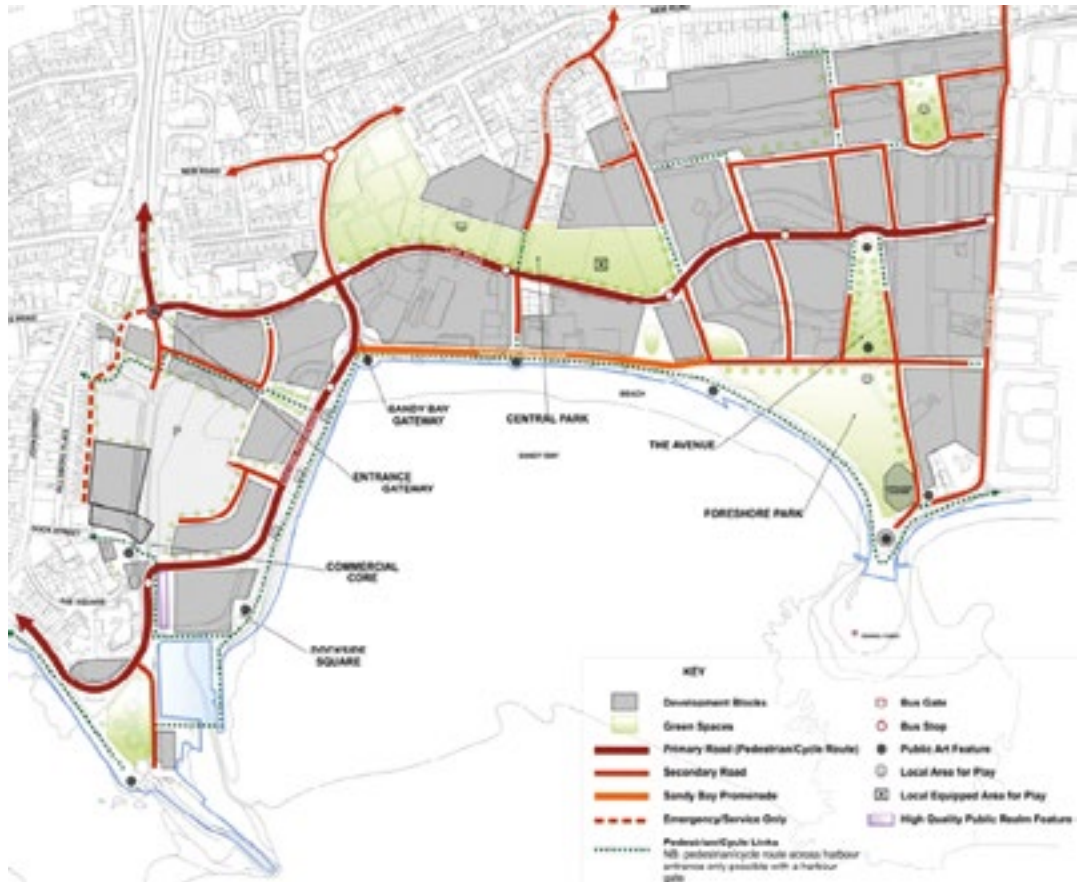
### Introduction

The projects reviewed here are ordered by type, based on their land use and/or locational characteristics. Each type is introduced with a short overview of the design and development issues pertinent to that form of development, and concludes with a summary of the lessons learned. Eighteen case studies are the subject of more detailed analysis drawing on a range of material to amplify lessons of value to future practice.

The conclusions in Section 2.15 reflect on the overall lessons learned, and potential means of improving the promotion of design quality, social inclusion and sustainability that are central to the Commission's remit.

**Plate 1:**

Seven Bays development framework, Porthcawl. This major residential expansion east of the town centre is focused around Sandy Bay. The Coney Beach Amusement Park would be replaced with a new mixed use tourism/leisure centre, hotel and residential accommodation.



## 2.2

## Regeneration and Development Frameworks

In the period 2007-11 there were fewer major regeneration schemes being brought forward as the financial crisis deepened, public expenditure began to be reduced, and the Welsh Government commenced a review of its overall regeneration strategy. The Commission reviewed seven schemes of which the St Athan Ministry of Defence (MoD) project was by far the largest and Porth Teigr in Cardiff Bay the best at the time. Other large scale regeneration projects are discussed in **Section 3.2** because they are entirely residential.

### —Review experience

The Seven Bays regeneration project for Porthcawl (**Plate 1**) updated Supplementary Planning Guidance (SPG) originated by the LPA in 2004. It included an indoor leisure facility, a food store and 1,350 residential units. The Commission highlighted the need for a more focused vision statement, and more specific development and sustainability objectives. Supportive of the gridded layout, and the strong layout and street enclosure provided adjacent to the town centre, the Panel were concerned about the poor disposition of associated green space. They sought an expanded central park to provide a focus for the new residential/hotel area. The Commission was not convinced about the economic viability of the plans and the scale of development proposed, even in the peak market of 2007.



**Plate 2:**  
West Parade, Rhyl. The masterplan for West Rhyl proposed extensive demolition of terraced housing and a new park and public spaces but the Panel questioned these features and sought a stronger conservation ethos.



**Plate 3:**  
Pontypridd regeneration strategy. The strategy protects Angharad Park with its soon to be restored lido, identifies a number of small sites for redevelopment, and defines other regeneration initiatives in and around the town centre.

The Llandudno Junction regeneration framework was another welcome piece of Supplementary Planning Guidance to support the new Local Development Plan (LDP). It was intended to re-connect disparate parts of the town and take advantage of the newly completed Welsh Government building in order to encourage further commercial development close to the railway station. Up to seven key development sites were identified and development briefs were to be produced for each. While recognizing this was the right way to proceed the Panel did not find the strategy sufficiently robust, and considered it lacked proper consideration of its context, clear urban design principles, a low carbon strategy, and adequate implementation devices.

The West Rhyl Regeneration Framework was a masterplan in progress tackling a very deprived area of 12 streets of late 19th century terraced housing. The Panel felt that the proposed demolitions were too extensive and questioned the new park and public space when the area was so close to the sea front. They wanted to see both the wider vision into which this project could be fitted and a detailed conservation area appraisal. A subsequent meeting with the project manager helped to reinforce these points. Subsequently the Commission facilitated a workshop on a strategic vision for Rhyl and made significant design inputs into the West Rhyl Regeneration project (**Plate 2**). DCFW's input is ongoing.

The regeneration scheme for Milford Haven aimed to better connect the marina with the town centre and strengthen the waterfront, and the Panel supported these objectives. However, rather than a 'single grand solution', the Panel recommended a series of small scale interventions which would knit the public realm back together. They welcomed the pedestrianisation of Hamilton Terrace, but dismissed the idea of an 'iconic tower' as unfeasible and inappropriate.

In Pontypridd the regeneration strategy had been updated with the prospect of European Funding, and would become a piece of Supplementary Planning Guidance implemented through design/development briefs. Earlier development ambitions for a department store and associated retail and offices in Angharad Walk (DRW 2005-

The positive element of all these schemes was that both Welsh national and local governments were supporting the development of masterplanning and development briefing in their regeneration programmes, and as adjuncts to major site allocations in Local Development Plans.

07: 63) had been scaled down and the proposed multi-storey car park in Angharad Park removed. More thought had been given to conserving the town's character, refurbishing the more attractive buildings, infilling where desirable, and seeking temporary uses to improve the vitality of the town. Twenty nine individual projects were identified with an immediate focus on seven 'early wins' (**Plate 3**). The extended pedestrianisation, traffic calming and general improvements to the public realm have been notable improvements. The Panel welcomed this more sensitive and realistic approach, but sought a more consistent rationale and clearer priorities.

The Brackla 'masterplan' in Bridgend was a much smaller scale project, though particularly significant as a designated Welsh Government Carbon Pathfinder project, with high energy efficiency standards and a combined heat and power plant to serve the whole estate. The Panel applauded the general approach taken by the LPA but felt that the 'masterplan' was really a development brief, requiring more refinement to prescribe the desired form of development in relation to its context, to consider meanwhile and temporary uses, and to safeguard viable existing uses through the regeneration process. The sustainability aspirations were considered disappointing given its Pathfinder status, with green infrastructure and public transport provision needing much more attention.

#### —Lessons learned

The positive element of all these schemes was that both Welsh national and local governments were supporting the development of masterplanning and development briefing in their regeneration programmes, and as adjuncts to major site allocations in Local Development Plans. They were being recognised as valuable devices for raising the quality of sustainable place making. The basic problem was that the economic tide was running against large scale regeneration, even in the most advantageous locations like Porth Teigr (**Case Study 1**), so that the provisions and requirements of each masterplan and brief were being tested to destruction, and ambitious promoters were having to countenance much more mundane development proposals.

Nonetheless, most of these regeneration/development frameworks needed to provide more complete analyses of the local context, and to use these as a basis for strategic design thinking. The strategic framework could then be developed into three dimensional urban forms, and backed by key urban design principles and clear priorities for development and enhancement. These would guide a variety of local, regional or national developers, and provide design opportunities that would make an immediate positive impact on the locality. These comments also apply to the St Athan MOD project (**Case Study 3**).





# PORTH TEIGR MIXED USE REGENERATION, CARDIFF BAY

The Porth Teigr masterplan modified to accommodate the BBC TV Studios to the south east (right) of the spine road. The public realm is much tighter than the rest of the Bay and will be lined with active uses wherever feasible.

The Porth Teigr scheme (formerly known as the Roath Basin project) contrasted sharply with the other regeneration frameworks, demonstrating what a masterplan should be in terms of setting a long term framework for the design of a large scale, mixed use project. ►



The block structure around the Bute Dry Dock was tightened up and development around the dock edge was to be colonnaded, while around the Bay itself there were more large scale apartment blocks where previously there had been a more informal layout of lower density family accommodation.

The scheme presented was a substantial revision of that reviewed in 2004 (DRW 2003-5: 28), creating a finer grain of development and a grid of streets at right angles to the Basin, with a more tightly enclosed and active uses at ground floor along the waterfront walkway. A Technium was proposed at the eastern end of the site alongside two large residential blocks where the intention was to get numerous individual designers/apartment developers to work alongside one another to a broadly common envelope. A single spine road provided vehicle access but would be traffic calmed and boulevarded. The car parking standard of 1:1.5 was still under discussion, but the scheme was making a contribution to public transport (buses) from the outset, and a car pool would follow.

The block structure around the Bute Dry Dock was tightened up and development around the dock edge was to be colonnaded, while around the Bay itself there were more large scale apartment blocks where previously there had been a

more informal layout of lower density family accommodation. The Bay shore suggested a beach and a marina with supporting commercial units.

Generally the Panel welcomed the changes to the masterplan, and particularly the adoption of the Manual for Streets approach to the layout and street design. Some concerns centered on whether the colonnaded frontages to the buildings on the Basin would intensify the overshadowing of the largely northern aspects, but assurances were offered that the design team were seeking to ameliorate the microclimate as far as possible.

The Panel were supportive of the idea, informed by Dutch and other European precedents, of different developers and designers producing housing blocks with different unit sizes and layouts alongside each other, in order to create more choice of residential units and more architectural diversity.

The Commission welcomed the developer's commitment to delivering Code for Sustainable Homes (CSH) Level 4 for the housing,

and the intention to improve on this if energy from waste schemes were progressed nearby. The masterplan won the Royal Town Planning Institute Wales Planning Award in 2011 for its 'commitment to excellence at all stages' and 'consistently high standard of stakeholder engagement, master-planning, architectural quality, urban design and sustainability'. The RTPI Judges acknowledged its importance in providing a 'model for future similar developments across Wales'. The plan is now accompanied by a design code produced at the request of the Local Planning Authority. This has yet to be approved, and is very general in nature to allow flexibility in a difficult development climate.

Subsequent developments at Porth Teigr and amendments to the masterplan are discussed in Section 2.6. Instead of being a residential-led scheme, as originally conceived, the scheme is now commercially-led, but alongside the development of the BBC Television studios comes the prospect of the possible relocation of the BBC Wales Headquarters buildings.

# ST ATHAN MOD FIGHTER TRAINING AND MAINTENANCE ACADEMY, VALE OF GLAMORGAN.

The St Athan project was the largest development proposal to come to the Commission, and clearly one of the largest development proposals ever in Wales. As part of the Defence Training Review the Ministry of Defence was seeking bids to establish new training facilities in the UK, and a development consortium, in association with the Welsh Assembly Government, proposed a Fighter Pilot Training Academy and Aerospace Centre of Excellence at St Athan, a former RAF base three miles west of Cardiff International Airport. ►

**St Athan MoD establishment:** this early version of the masterplan shows the new hangars for the fighter academy (centre), the REME museum and communal facilities east of the mall, and an early version of the layout of the residential accommodation to the east. The Picketston Sports Centre is to the north (top).



## Obviously a major defence project poses significant challenges for the local planning and Design Review processes.

The project was designed to house 6,700 military and 2,500 civilian personnel, required some 387,000sqm of floor space, and was projected to generate over £58 million within the local economy annually. The Local Planning Authority adopted a Development Brief for the site in 2006. There were initial commitments to develop all buildings to BREEAM Excellent standards, and to achieve high quality design, which were welcomed by the Panel.

Subsequently the Panel conducted six reviews of various components of the project between February 2009 and February 2010, when the project was halted due to the withdrawal of UK Central Government funding. The Panel accepted that strict military guidelines governed the layout and adjacencies within the security fence, and that they would focus on the 'public' aspects of the scheme that were outside.

There were particular concerns about the main entrance to the facility, the Northern Approach Road and its development corridor. The Panel criticised its over-scaled entrance from the B4265, the lack of pedestrian connectivity between the housing areas, the limited access on to the approach road, the narrowness and location of an 'ecological corridor', and the lack of any design guidance on the implementation of the scheme. They were similarly critical of the main entrance to the secure facility at the

eastern end of the approach road. Here a vast roundabout encircled the to-be-restored St. Brise Parish Church, bordered by a new multi faith centre and Ghurkha Temple to the west, and a tri-service memorial wall and a Royal Electrical and Mechanical Engineers' Museum to the east. The Panel felt that the latter merited a bespoke design team. Clearly security concerns were a major constraint, but the Panel felt that these facilities required more aspirational place making.

By contrast the Picketston Sports Centre to the north of the site was much better designed as a simple, aluminium-clad, 'big box' on a masonry plinth. It had a central glazed street that connected to various sports halls and associated accommodation and the whole complex would be accessible to the wider community.

The sheer scale and number of projects proposed, and the lack of resolution of so many design details, were a major concern for the Panel. They felt there was a lack of overall coordination in the scheme which would lead to poorly integrated development. The timetable for the requisite planning permissions was such that the Panel were seeing schemes that already had planning permissions, and where significant design revisions were unlikely.

While the biomass district heating system offered the prospect of a low carbon energy supply for the

whole scheme, and pointed the way towards good sustainability ratings for the buildings themselves, there was no adequate landscape, public realm or sustainability strategy to tie the components of the project together. Each review proved inconclusive and overall there was no systematic design development.

Obviously a major defence project poses significant challenges for the local planning and Design Review processes. The scale of the project and the desired speed of approvals, combined with the operational requirements within the base itself which are exempt from planning control, do not lend themselves to an open and collaborative design approach.

It was the Commission's impression that there was little adjustment of the scheme once the initial design decisions had been taken, despite evident flaws. A complete lack of clarity on procurement and team structures for delivery were never addressed, and may well have led to an expensive scheme of insufficient quality, either for its own purposes, or in terms of the contribution it would make to the sustainability of the locality.

This project was cancelled following a UK Government public expenditure decision and its very considerable economic potential lost to South East Wales.



## Residential development: Large scale suburban development

In all some twenty schemes of between 85 and 1850 units were reviewed in a period when house building in Wales slowed significantly. Five were considered unacceptable and thirteen required major revisions, while only one was regarded as requiring only minor changes. On the remaining scheme at South Sebastopol, Torfaen, adjacent to the Brecon & Monmouthshire Canal, the Panel considered that the proposals had the potential to be acceptable providing their recommendations were followed. In mid 2011 this scheme was refused permission against the planning officers' recommendations, and a planning appeal would be heard early in 2013.

The design quality of these schemes exhibit a familiar series of flaws in failing to adequately respond to the context, to connect with adjacent settlements, to treat on-site assets with care, to protect biodiversity, and to follow the principles of Manual for Streets. In general there was insufficient detail in the masterplanning, and the plans lacked character area definitions, design codes, or any further guidance to ensure quality. Local Planning Authorities also had frequently failed to provide any Supplementary Planning Guidance (SPG) toward this end.

In the housing boom prior to 2008 these omissions were inexcusable, but as the financial crisis deepened, mortgage availability declined, and property prices fell so the industry's reluctance to commit to particular standards and mixes of house type understandably increased. Developers and house builders increasingly sought to minimise design expectations and commitments. Even more reliance was placed on middle range standard house types, and layouts became less bespoke. Sustainability strategies were particularly undermined, with no commitment beyond the statutory minimum, and landscaping was rarely adequately considered.

### — Review experience

Some 11 major schemes were considered by the Panel. The three in Rhondda Cynon Taff and one in Torfaen raise a number of issues about Local Development Plan housing allocations and subsequent control of the quality of development. Four smaller schemes in North Wales raise similar questions of design briefing and response to context as ways of improving place making. The two case studies detail the Panel's sustained involvement in the Barry Waterfront project, and explore the strengths and weaknesses of the only Code 5 sustainable housing project in Wales, developed in Old Town Dock (Mariner's Quay) in Newport.

Local Planning Authorities faced major challenges with masterplans for major residential developments because Local Development Plan allocations had not taken adequate account of site constraints. Rhondda Cynon Taff (RCT) is one local authority which did well to progress its Local Development Plan through to adoption, and showed commitment to quality design by making good use of the Design Review Panel for major housing schemes at an early stage. In this period they brought three major residential schemes to Design Review, and in two cases there were immediate problems with site and ground conditions on brownfield sites.

On the Aberdare Hospital site an allocation of up to 600 dwellings on a 10.7 hectares of land close to the town centre looked dubious once the extent of old mine workings was established, and given a significant area of parkland and protected trees on the site. The Panel observed that only a very sophisticated site planning and design exercise would produce an adequate response to topography, landscape and heritage,



and that the proposed housing allocation could not be satisfactorily achieved.

On the former Cwm Coking Works site in Beddau the Local Planning Authority brought in the latest developer's 'illustrative masterplan' for review. Again the allocation of 825 houses was questioned because of the site constraints (particularly retained cooling towers). The illustrative masterplan was considered insufficiently detailed and poorly developed as regards street hierarchy, block structure, disposition of green space and location for school and community facilities.

At Park Llanilid, west of Pontyclun, where up to 2100 new homes are allocated on a reclaimed brownfield site, the developers' masterplan was similarly vague on block structure, house types, parking, public realm and green infrastructure, with no clear specification of character areas except for the village centre (**Plate 4**). The Local Planning Authority subsequently significantly increased the required level of information that would accompany such an outline application in future.

Viewed in the round, here were proposals for up to 3,500 houses where there were significant problems with the indicative allocations in the plan, an absence of development briefs or other forms of supplementary planning guidance, and developers who were (in two cases) very reluctant to commit themselves to serious masterplanning, let alone commit to higher levels of energy efficiency and overall sustainability aspirations.

It was a similar story on the site of the former Llanwern Steelworks in Newport where the first phases of this 4,000 home development failed to discharge the relevant planning conditions, and to avoid the delivery of a standard product. The Panel was critical of the lack of vision and ambition for this crucial project, despite the existence of a competent, if schematic, masterplan (DRW 2005-7: 26). They made the case for a more detailed public realm strategy, clearly integrated with the landscape and

**Plate 5:**

Denbigh Hospital masterplan. The Panel were pleased with the conversion of the hospital to residential use, but they sought a layout that responded better to the existing buildings, to solar orientation, and to the Manual for Streets guidance.



drainage system. The Panel particularly regretted the move away from the open watercourses shown in the original masterplan that would link with the adjacent field ditches, and the absence of a commitment to meet CSH Level 4, especially given the time scale for development.

Similar shortcomings were apparent on a site on the edge of Welshpool in Powys, but here the design problem was a poor landscape strategy, the adoption of a cut and fill approach to development, and the lack of a sustainable drainage strategy. The Panel thought that the proposed density was at the root of many of the urban design problems, and that reducing it was vital to significant improvements.

In Flintshire, in separate schemes seeking to extend the village envelopes of Penyfford and Penmynydd, house builders failed to respond well to both context and site, and to use the landscape assets and solar orientation to good effect. In the former, housing turned its back on a central green space; in the latter the site analysis did not adequately influence the layout, and although a pond was retained the green space was poorly integrated into the layout. Neither scheme exploited the opportunities provided by *Manual for Streets* to design an attractive, safe road hierarchy and streets with a differentiated character. In Penmynydd the lack of bespoke house designs, despite the switch to 4-5 bed houses, further undermined local distinctiveness. Subsequently the Penyfford scheme was greatly improved to meet many of the Panel's criticisms.

Also in North Wales the Acrefair site, eight miles south west of Wrexham, was scheduled for 200 units of housing on the 11 acre, former industrial site, and a development brief had been prepared. The existing social club and green space provided for workers would be gifted to the development which was a promising start, but the brief did not offer any clear design principles. The masterplan was described as 'emerging', yet the site and context analysis were very weak, failing to reveal historical connections and current 'desire' lines, and to arrive at a development and movement framework that would underpin the layout.

A much more promising scheme was anticipated with the redevelopment of the grounds of Denbigh Hospital. This would conserve and convert the Grade II and II\* listed buildings, enabled by a restoration fund. Outline planning consent had been obtained with some demolition to be allowed, but a site-wide masterplan was required for a residential scheme. The Panel reviewed the masterplan (**Plate 5**) which





**Plate 6:**  
Cwrt y Gollen, Crickhowell. A more compact layout with a less formal grid, a more intricate mix of housing, a stronger potential for shared space, and more landscaping and trees were offered, but were not enough to overcome local objections.

protected most trees, woodland and the parkland to the south east. It created good vistas terminating in significant buildings, and maintained a formal layout close to the hospital. However, the Panel felt the plan comprised a conventional housing estate of pastiche designs with no consideration of solar orientation. They recommended a revised masterplan layout and form that responded better to the existing buildings, which followed *Manual for Streets* advice, and which addressed the sustainability agenda, particularly through provision of a Combined Heat and Power system and sustainable drainage measures. The Panel would have preferred to see the affordable housing provided on- rather than off-site, and were concerned that this scheme should not become a gated community.

Finally, the Panel conducted two reviews of a scheme at Cwrt y Gollen at Crickhowell on former Ministry of Defence barracks allocated for mixed use in the Brecon Beacons National Park LDP. The initial plans showed development of some 200 dwellings and employment space, laid out as courtyards, and separated by a green wedge of parkland. The original intention to develop at a higher, more sustainable, density regrettably had been shelved in the face of local opposition, and the scheme now achieved only 28 dwelling units per hectare. A church, museum, gymnasium and cricket pavilion had been retained for community use. Most existing trees were to be protected and the scheme included 20 per cent affordable and 10 per cent Lifetime Homes.

The Panel was critical of the strongly gridded, urban layout in this parkland setting, and sought a more informal and varied, yet more compact, grouping of buildings that would be cheaper to service. They also thought that there should be a greater commitment to sustainability, and a greater consistency of architectural language. They thought that the edges of the site needed to create a more gradual transition into the surrounding countryside.

These criticisms contributed to a much better scheme with a good sustainability strategy promising CSH 4 and BREEAM Excellence and a biomass district heating system (**Plate 6**).

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The estate owners were committed to forming a partnership with the house builders to deliver a quality scheme, and a management company would be set up to manage the open parkland setting. The Panel sought more connectivity between this development and the village of Glangrwyney, reassurance about the future management of the parkland, and raised concerns about issues of boundary treatments, public and private spaces and on-street parking.

Nonetheless, they thought that the scheme had the potential to be an exemplar project, so they were very disappointed to see it subsequently refused planning permission and lost on appeal. Instances of where competent, sustainable design is rejected in the face of local opposition are sources of the greatest concern and disappointment to the panel.

### —Lessons learned

The overall trend in major housing schemes viewed by the Panel throughout 2007-11 is bleak, with developers using the recession to defend an unwillingness to engage in serious masterplanning. The reluctance to retain the necessary design skills to produce detailed layouts is defended on two grounds. First, on grounds of cost, which is of course a very small proportion of overall development costs. But second, on the basis that the site will be partitioned up into multiple sites to be sold to various volume housebuilders, and any constraints imposed by a pre-existing masterplan will inhibit the speed of land disposals and reduce land values. Many developers and volume house builders are failing to take advantage of the creativity in housing layouts now offered by the *Manual for Streets*, and to back this up with design codes or sub area guidance and investment in good landscape. The quality of residential design appears to be declining sharply in the recession.

A large part of the problem is the gap that exists between housing allocations in the new generation of Local Development Plans, and the existence of more detailed, site specific design guidance to set out what the local authority wants to see on the site. This gap needs to be filled with well-founded, clear development briefs prepared by local planners, and backed up by a list of requirements that specify the precision of masterplanning and design detail required in planning applications for these sites. These requirements need to be emphasized in national design advice and referred to in LDP policies.

The problems encountered by Rhondda Cynon Taf in this regard have been described above. To their credit the Local Planning Authority has used Design Review to bolster their efforts to raise design quality, and now they have started to prepare ambitious development briefs for a number of other allocated sites.

The Commission subsequently worked with the RCT Planning Department to assist them with their design briefing methods, commenting on successive drafts. They sought to help find ways of producing effective briefs more quickly by focusing on the key contextual design considerations. Proactive use of design policy and guidance is urgently required if design quality is to improve in Wales, and nowhere is this more pressing than in the residential sector.

The Commission has long been of the view that Wales needs an exemplar project to demonstrate what constitutes a sustainable urban residential extension, and to show what constitutes a compact, public transport served, socially mixed and affordable community with significant employment space and high grade green infrastructure.

The disappointment with the quality of development at Llandarcy (DRW 2007:25) and the demise of Ely Bridge (now known as The Mill) low carbon project (DRW 2005: 34-35) were intensified by the failure of the 2011 Cardiff Local Development Plan to offer

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A key component of any sustainable neighbourhood is more energy efficient housing, and clearly here the recession is exacerbating the house building industry's reluctance to go beyond the statutory minimum in this regard.

any significant urban extension and supply of family housing for the next decade.

The Commission facilitated a series of meetings with senior members and officers in Cardiff to discuss the situation, and devised and delivered an expert presentation and workshop in 2011 to explore how a well designed and ecologically sensitive sustainable neighbourhood might be developed in the future.

The Panel continued to shadow the design and delivery team working on revived plans for The Mill with the Welsh Government, while Cardiff Council have engaged in wider consultation on major suburban expansion plans in a reformulated LDP, which is also adopting sound masterplanning principles.

A key component of any sustainable neighbourhood is more energy efficient housing, and clearly here the recession is exacerbating the house building industry's reluctance to go beyond the statutory minimum in this regard. The example of Mariner's Quay in Newport (**Case Study 3**) highlights the way that the Code for Sustainable Homes might be considered to constrain housing designers in certain key ways as they seek to raise energy performance, and follow good urban design practices (waste storage and bin locations are a good example of a prosaic, but potentially problematic design constraint imposed by the Code). Later phases of the scheme will be keenly observed.

Finally the Barry Waterfront scheme (**Case Study 4**) offers an interesting experiment in developing a more mass-produced and standardised form of row housing that fits better into the urban environment of the more industrial Welsh towns, and perhaps can be produced more economically.

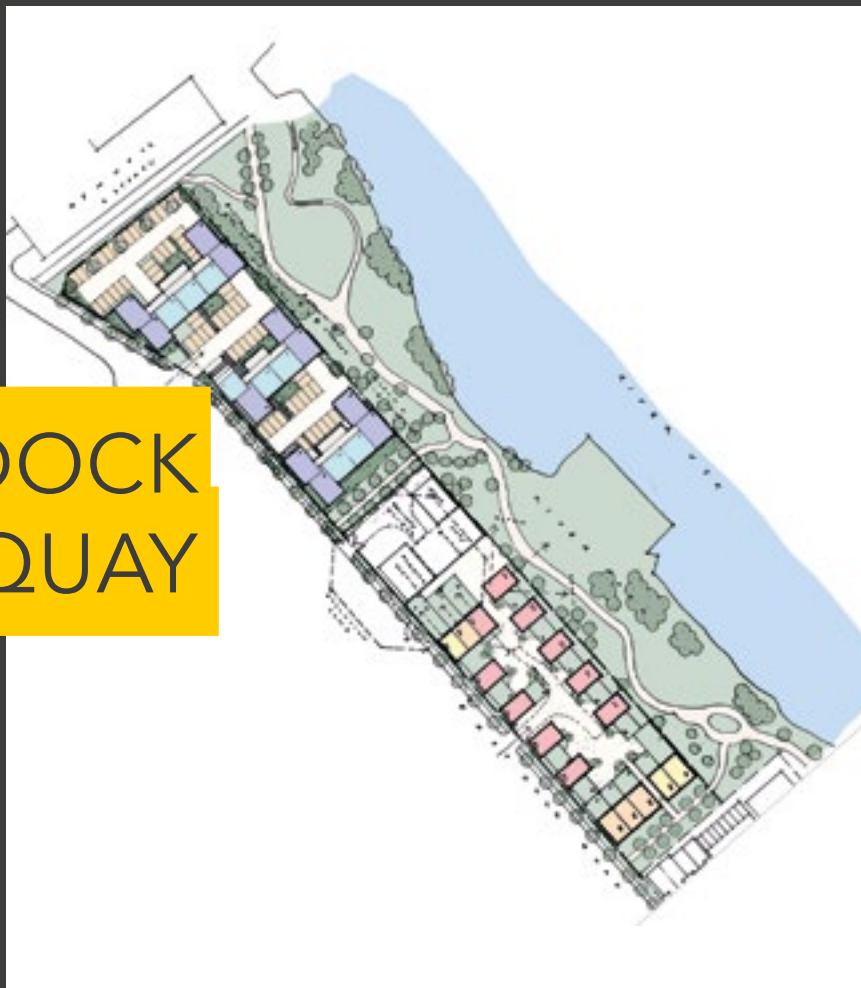
Housing in Wales has followed English models in its reliance on detached dwellings and building variety, even at the lower ends of the market. When it is executed in a range of different house types and finishes, to maximise its 'market appeal' and minimise the developers' risk, it results in a 'faux-village' style that is anti-urban and 'anyplace'. The Barry project will be an interesting test of whether the terrace, with its advantages of energy efficiency and economy of construction and land take, can be reworked to provide more affordable, and arguably more communal, housing options (**see also Case Study 5**).

**Mariner's Quay, Old Town Dock, Newport.**

The revised masterplan grouped all the affordable accommodation in large blocks to the north. The family housing has many innovative design features and creates an attractive streetscape with first floor terraces that provide river views, and attractive sun lounges that overlook the shared space and footpaths.

## OLD TOWN DOCK /MARINER'S QUAY

At Old Town Dock, Newport, the Panel were deeply disappointed by the detailed plans for 104 affordable housing units in a partnership between a Registered Social Landlord, the Council and Newport Unlimited.



Three apartment blocks were located on the northern part of the site with more traditional family housing to the south at Alexander Gate. For the Panel the plans were a missed opportunity to implement an approved masterplan. Contrary to that plan all the affordable housing was grouped onto a single site, and the quality of external community spaces and extent of surface parking was considered unacceptable by the Panel. Overshadowing was an issue, and the design of the three blocks did not respond to the locality, with the layout failing to provide access to the riverside park or take full advantage of river views. The Panel felt that the fenestration and elevational treatment required further development.

However, the scheme was a very important experiment, underwritten by Welsh Government, in designing affordable housing to CSH level 5, and this took priority over the concerns of the Panel. The Design Review Report caused some difficulty for the design team who were understandably preoccupied with meeting the Code,

a key element of which was the requirement to produce on site all the energy used in the scheme, except that for the appliances. The design team considered this to be a major constraint on producing a genuinely sustainable solution, and they explained this in a subsequent presentation to Panellists at their 2011 training day. This was set up to better inform the Panel on the pursuit of higher Code levels.

The completed scheme still manages to be one of the more imaginative housing projects completed in Wales, and the family housing is particularly innovative and well designed even if the ground floor bedrooms result in windows with permanently drawn blinds fronting the public realm. Outdoor first floor terraces and sun lounges on the bay windows at the first floor level allow better views particularly out on to the river and tenants enjoy the sociability that the layout provides. (Forster, W. 2012, P18)

Transparency around cost analysis and design/delivery approaches has been difficult on

this scheme due to its scale, and an assessment of the value of the pilot to the affordable sector has been difficult to evaluate. The process in its original form has not been replicated and remains a single test project the learning from which has not to our knowledge been successfully and usefully captured.

The relative virtues of the Code for Sustainable Homes, as against Passivhaus, as mechanisms to achieve good design and sustainable solutions were debated by sustainability experts on the Panel. They agreed that while the CSH approach measured, and thereby encouraged, improvements in sustainability, it could also reduce design to a tick-box exercise, and discourage more creative design thinking. Passivhaus, on the other hand, focused on designing buildings that were air tight and well-insulated, and therefore used less energy, which was the more logical starting point. It created more scope for quality design and was less bureaucratic. Panellists broadly agreed with this view.





Barry Waterfront. The layout plans and the housing typology were deliberately constrained to fit the town's character and to ensure affordability. The main spine road is shown on the left leading to the island. Pedestrian connections to the rail station (far right) remain unresolved.

# BARRY WATERFRONT

The Western Docks in Barry were the subject of a Welsh Development Agency (WDA)/ Associated British Ports (ABP) masterplan prepared in 1996. The plan was deeply flawed, and the development of the north side of the dock hugely disappointing despite the use of design briefs. ►

Barry Waterfront to the west presented an opportunity for the Welsh Government as landowner, the Vale of Glamorgan as Local Planning Authority, and a consortium of three house builders, to achieve an exemplary scheme.

An initial design workshop with DCFW, the architects and the development consortium explored the fundamental design issues at stake, and the first review of the emerging masterplan and the LPA brief, in May 2008, raised concerns about the lack of an overall strategic planning framework, and the question of the movement strategy to link the site back into the town centre. The extension of the new link road to Barry Island, which had severed the residential community on the north side of the Dock, was a major concern and the Panel argued for its redesign into a neighbourhood high street. It also urged a reallocation of public spaces.

By December 2008 the Consortium had purchased virtually the whole site, and the LPA had produced a 'development principles' document to indicate their thinking. The Panel wanted to see this extended to clarify the planning obligations required. It was clear that the funding of the new link road to open up the site would be dependent upon a new supermarket that would anchor the neighbourhood centre, and that this would create political difficulties

(the north side of the dock already had a new supermarket). The Panel welcomed the new connectivity, the pattern of streets and blocks, and the way the supermarket fronted a major pedestrian route across the site. However, there was concern that the housing layout was not ideal for solar orientation and energy efficiency, and that the disposition of public space needed improvement. Furthermore, economic conditions were deteriorating and posing significant challenges to project viability.

The site layout was considered convincing, but concerns remained about the possible 'monotony' of the limited housing typology and the insufficient mix to allow affordability. A key concern was whether the district centre could create a vibrant hub of mixed uses and active public realm. The linear park was supported, but the Panel wanted to see this linked westwards across the railway to Barry Harbour.

By March 2010 attention was refocused on the design of the access/spine road. The junctions required by the Highways Department were oversized, compromising the urban character of the scheme. A Manual for Streets approach was not being implemented. The Panel continued to highlight the lack of resolution of the direct pedestrian link northwards to the Barry Town rail station. They also wanted the energy commitments

converted into CSH levels above the statutory minimum. They urged revision of the parameter plans to show building heights and house types, and the tertiary 'play' streets converted into something more akin to a Home Zone. Nevertheless, the Panel's general view was that this was a sound masterplan, even though there remained a number of unresolved design issues.

Having followed the master planning process from inception to outline planning permission and to a signed Section 106 agreement, through six separate reviews, the Panel's role as broker and critical friend was a rewarding experience for all concerned. All parties had to alter their aspirations of what was achievable in a deepening recession, but the Panel felt that the scheme offered the prospect of a large new piece of town that would be a good place to live, would offer excellent amenities and accessibility, and reinforce Barry's 'sense of place'. This experience helped to shape the Commission's preference for Design Review to maintain contact with major development schemes over their gestation in order to ensure good design. Phase one will include the supermarket and 500 homes, 15 per cent of which will be affordable. No start had been made on site as of mid 2013.

The extension of the new link road to Barry Island, which had severed the residential community on the north side of the Dock, was a major concern and the Panel argued for its redesign into a neighbourhood high street. It also urged a reallocation of public spaces.

Earlier publications have discussed the promotion of a series of very tall residential buildings in the cities of South Wales, but only Ferrara Quay in Swansea has been completed (not without challenge), while the rest have either been abandoned (City Spires, Newport), dramatically scaled back (Bay Pointe, Cardiff Bay), or completely re-conceived at a reduced scale and for different uses (Wood Street, Cardiff) in a bid to make them viable development propositions. While more modest schemes of 12-24 storeys have been completed in Newport (along the west bank of the Usk) and in Cardiff (south side of the city centre and in the Bay) the most ambitious schemes with towers around 30 storeys (always bidding to be 'the tallest in Wales') have proved to be unfundable. These projects led the Commission to produce a *Ten Points for Tall Buildings* design note in 2010.

However, these projects have had no shortage of imitators following in their wake, and the precedents created by extant planning permissions have encouraged a variety of property owners and developers to try their luck with similarly ambitious proposals. The best example of this is the Bayscape Hotel and residential complex on the banks of the Ely River (see Case Study 10) which was following the precedent established by the original Bay Pointe scheme which proposed three double towers between 30 and 41 storeys (DRW 2005-7: 38). The latter scheme was re-incarnated as a mainly townhouse scheme with street oriented apartments in 2012, with an 18 and a 24 storey tower. The fate of the majority of high density residential schemes approved between 2004 and 2008 is that they have almost all been simply abandoned, leaving a massive hole in projected housing supply (especially in Cardiff where there were over 8,000 units in unimplemented consents in 2009). Very few have been reconceived as office or hotel projects, and most of the sites stand vacant awaiting a drastic reappraisal of their value and development viability.

#### —Review experience

Three examples from Cardiff are explored and one each from Swansea and Newport, but none have yet commenced construction. The Wood Street residential tower and apartment hotel scheme returned to the Panel in 2007 for its third redesign and fourth review. The design of the 32 storey residential tower remained unchanged but the Panel were not convinced that its architectural quality could be delivered by a design and build procurement route.

The adjacent 22 storey block facing on to Station Square was now redesigned as a 105 room, long-stay hotel at the lower level with residential above, and it was the design of this block that was the focus of most Panel criticism. They argued that its monolithic shape and bulk, its clumsy resolution and less-ordered fenestration, and its largely blank northern elevation undermined the elegance of the adjacent tower. The Panel were disappointed that the environmental performance of the scheme was targeted only at BREEAM Very Good given its location and prominence. Subsequently this project has been redesigned as two hotels of 12-14 storeys, but neither have commenced construction.

Another ambitious scheme for a high rise tower returned to the Panel located on top of the Capitol shopping centre, also in central Cardiff. An 18-20 storey twin tower proposal had been reviewed in 2006 (DRW 2005-7: 61) and the Panel had asked for an environmental impact analysis on the height and modelling of the tiered towers proposed (DRW 2005-2007: 61). Twin towers could not be accommodated structurally on the site, and so a single elliptical tower was now proposed on the south east corner opposite Queen Street Station with 164 units including a 6 per cent, separately accessed, affordable component.



**Plate 7:**

Adam Street car park and residential, Cardiff. This multi-storey car park for shoppers (St Davids) was topped by two squat commercial buildings and two 23 storey towers on Pellett Street. There were no active frontages at street level.



Two levels of car parking had been added to the roof of the shopping centre, and a winter garden was provided on a cantilevered roof. The LPA had major concerns about the additional car parking, the lack of consistent façade improvement to the retail podium, the low provision of affordable housing (30 per cent was the policy target), and the lack of improvement to the public realm.

The Panel supported these concerns but was mainly preoccupied with the design of the tower. They wanted to see it re-designed to reduce the impact on the adjacent apartment building to the south, with a base that was as elegant as the glazed shaft of the tower, and with appropriate wind studies and amelioration measures to reduce its microclimatic impact.

The Adam Street scheme (**Plate 7**), opposite the new University of Glamorgan Atrium Building in Central Cardiff, had been part of the original St David's retail scheme, providing a multi-storey overflow car park for John Lewis with residential or hotel above.

The first phase of the scheme was for two towers of 22 and 24 storeys on the North West and South East corners of the site, and the outline consent was being exceeded by at least 10 per cent. The LPA were concerned that the towers be better differentiated, and that the inactive and blank frontages, especially on Adam Street, be given over to active uses.

The Panel found the architectural approach 'fundamentally unsuccessful', and argued that there did not need to be a consistency of materials across the scheme, and that the elevations would benefit from more vertical emphasis. They echoed the criticisms made by the LPA of the lack of active uses at street level, and the design of Pellet



**Plate 8:**  
Alexandra Road, Swansea. Very high density hotel/student accommodation opposite Swansea Station lacked active ground floor frontages and attractive public spaces. There was no study of the impact of tall buildings on key views.

Street was also a concern, with its need for a disabled access link to an important railway footbridge to the Bay. The Panel was critical of the convoluted access to the accommodation at the podium level, and of the single access to the car parking. There were concerns about the low sustainability ratings that were being sought overall. Regrettably there was no mention of the retention of the historic Vulcan public house which was missing from all plans despite its increased popularity (The Vulcan has subsequently been dismantled and transferred into the collection of St Fagans National History Museum where it is to be reconstructed).

The Alexandra Road scheme in Swansea (**Plate 8**) was a combination of 153 bed hotel and student accommodation, with the latter contained in a 23 storey tower opposite the main railway station in Swansea. It was welcomed as a catalyst for regeneration at a 'gateway' at the northern end of the city centre, and met the LPA's criteria in terms of its scale and mix of uses. They welcomed its bold design, but noted that policy dictated that any tall building had to be exceptionally well designed. The project has not been progressed.

The Panel was disturbed by the lack of contextual or visual impact analysis that had been conducted, and felt that the disposition of active uses and service uses was not well handled, and that there was too much dead frontage at street level. They felt the tower was over-dominant and oppressive in relation to the public space outside the station, and that it should house the hotel rather than student accommodation. Overall they considered the scheme needed a much stronger urban design concept, and much more ambitious architecture, though they were pleased to see a commitment to BREEAM Excellence.

Finally there were proposals for three high rise residential towers rising to 23 storeys located around a new Rodney Parade stadium, home to Newport Dragons Rugby Club. The applicants, and their design development team, declined to attend this review which explored the enabling development that would fund a new enlarged stadium. Therefore the scheme was presented by the Local Authority. The planning

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application was lacking many essential details as regards visual impact analysis, contextual analysis, microclimatic effects, match day traffic movement studies, and detailed drawings were not available.

The scheme included commercial office space, a convenience store, a community centre, two restaurants, sports club and squash courts, training barn and 500 car parking spaces. The Panel thought that the whole scheme was a gross overdevelopment of the site, and would be detrimental to the new housing being built along the riverside and to the adjacent conservation area to the north. Sustainability standards were below the required minimum, and the improvements offered to the stadium were minimal in capacity and viewing-position terms.

The Panel considered the whole scheme unacceptable and that it demonstrated a 'fundamental disregard for the principles of urban design'. The Commission took the unprecedented step of writing to the Council urging them to reject the planning application, but the scheme was approved. A new stand and conference centre have been built, and much of the stadium refurbished, but the additional development has not proceeded.

The Panel also reviewed the Cardiff City Council Tall Buildings Policy in 2008. This borrowed heavily from the recently updated CABE/English Heritage policy document, but this seemed an entirely sensible approach. However, the document took a very wide definition of tall buildings as any building over eight storeys in the city centre, and the Panel commented that 12 storeys might be a more appropriate threshold here and in the Bay.

The guidance rightly emphasised that the impact of tall buildings on the street "should be the crucial consideration and should enhance the pedestrian experience" with active frontages and underground car parking and full assessment and amelioration of microclimatic effects (wind speeds and shading studies should be required). The requirements for sustainable development should be specific (BREEAM Excellent as a minimum), and include early consideration of the mechanical and engineering strategy. They echoed CABE's starting position that any tall building should achieve the highest standards in terms of design quality and sustainability.

### —Lessons learned

The preoccupation with tall apartment buildings in this period, by a number of developers, has proved to be short-lived and beyond a few particular locations (such as the lower Ely River above Cogan Spur) the damage done to the townscape and amenity of Welsh cities has been limited. Inevitably it will return when the economy revives, but when it does the major cities at least will have the necessary policies in place to insist that they are well-located and designed. But will policy prevail over developer and Council development aspirations?

The four examples of high rise residential design discussed above would all fail the Cardiff tall buildings policy, which demonstrates the value of having such supplementary design guidance to drive up design standards. The detailed design issues raised on the Capitol Centre and Adam Street towers are indicative of a worrying level of design illiteracy on what ought to be particularly well-designed buildings.

More worrying still is that schemes like the Newport Rodney Parade example do gain outline permission despite a complete lack of urban design assessment, and without any real consideration of what they might provide in terms of residential amenity. Using high density residential development to cross-subsidise other forms of development generally produces poor living environments, and design guidance needs to be specific about locational requirements, residential amenity, private or

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Why tall buildings should be allowed to have multi-storey car parking above ground is a particular mystery as there is nothing more destructive of urban quality.

communal open space, a mix of unit sizes or neighbourhood facilities, and the quality of public realm.

Why tall buildings should be allowed to have multi-storey car parking above ground is a particular mystery as there is nothing more destructive of urban quality. The collapse of the apartment market has certainly saved the South Wales cities from a rash of poor quality towers, but it remains to be seen whether local authorities will be prepared to implement their own policies for tall buildings when the market fully revives?

## 2.5

### Small scale residential development

The Panel undertook more than 50 reviews of minor residential development and these constitute 17 per cent of all reviews, a far higher percentage than in earlier years, and a reflection of the recession reducing the number of larger schemes brought forward for review.

It could be argued that a national design body should not really concern itself with such minutiae, but these are all cases where Local Planning Authorities or developers felt design advice would be useful. It is important to remember that the Commission is charged to 'give due regard to promoting excellence in day to day developments', and that such schemes make up a very large proportion of the workload of development managers in local authorities, particularly in the more rural parts of Wales.

To allow a more structured discussion of these small scale schemes they are grouped into specific categories of urban infill (9 cases), suburban (6 cases), conservation (18 cases) and village (6 cases) contexts, concluding with a discussion of single houses in open countryside (8 cases) which are often in designated landscapes where design excellence is a prerequisite for a planning approval.

#### —Review experience

##### Urban infill

Most urban infill projects were considered unacceptable with a few adjudged to be requiring major improvements. This is an indication both of the design challenge and often the lack of care and attention which is paid by would-be (usually small) developers to the task. They include a number of medium rise apartment buildings in prominent locations like the seafronts of Rhyl or Porthcawl, or on important arterials like Station Road in Bangor. The issues of scale, massing and architectural refinement loom large, but so too do issues of internal layout, aspect and general liveability of the units provided.

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While the Local Planning Authority supported the scheme the Panel thought that the contemporary approach to design lacked conviction and was unsympathetic to the site and context, while the promised commitment to Eco-Homes Excellent had nowhere been demonstrated.

On West Parade in Rhyl a 7-8 storey block was proposed with a penthouse set back on the top level, and housing some 67, one to three bedroom apartments. Some undercroft parking was provided because the building was raised above the flood level, but this produced car park grilles on the half basement on the front façade. While the Local Planning Authority supported the scheme the Panel thought that the contemporary approach to design lacked conviction and was unsympathetic to the site and context, while the promised commitment to Eco-Homes Excellent had nowhere been demonstrated.

In Station Road in Bangor the Local Planning Authority were largely satisfied with the proposed apartment block and the 17 affordable housing units that it would yield. However, again the Panel felt it was an overdevelopment of the site, and they were particularly concerned at the single aspect and north-facing affordable accommodation, while the southern apartments were both too deep and narrow. They could find no reference to local character in the elevations, and there was no ambition in the Eco-Home rating sought.

A much more sophisticated design approach was taken in Station Road, Penarth where a previous scheme had sought a nine storey, and subsequently a five and a half storey, scheme adjacent to the railway station. New architects produced a smaller scheme with a four/five storey apartment block with a central atrium and a commercial space on the ground floor. Public consultation indicated that local amenity groups were still concerned about all aspects of the design, but the Panel supported the scale, architectural treatment and active ground floor use. They wanted the entrance moved to the front of the building, with vehicular access to the rear, and evidence of a convincing sustainability strategy. This was another instance where amenity groups were much harder to satisfy than the Panel.

Some major improvements were made to an important project in Risca on a key corner site. It was initially interpreted as a 'gateway' and 'landmark' building in the first application to justify up to four storeys of apartment development in an essentially two storey Valleys town.

The collapse of the apartment market then resulted in a much more contextual scheme with 38 two storey family units, and an 80 unit care home on an adjacent site. The Panel sought a masterplan covering both sites, and supported the aspiration to treat the street as a home-zone, refuting the need for a roundabout, but arguing that





**Plate 9:** Dickie's Boatyard, Bangor. The final masterplan for the residential development resolved the problems of highway access, parking and traffic reasonably successfully.

a landscape architect was needed to improve the proposals for the public realm.

Around Dickie's Boatyard in Bangor a masterplan was being prepared for some 70 two bedroom, energy efficient (CSH 4) terraced houses, fitted into a number of vacant and underused sites in the area, in order to create a much stronger residential community close to the waterfront. However, the scheme was undermined by the Highways Department's refusal to allow access from Beach Road, which in the Panel's view would yield traffic management and access benefits all across the site.

The Panel suggested that the provision of a roundabout on the south west corner was unnecessary, and argued that the proposed home-zone would work much better without through traffic. They also commented that the housing design could be more varied to respond better to the different house types in the area. This was an occasion when a much more enlightened approach was required to residential road design as advocated in *Manual for Streets*. The final plan made a number of adjustments to improve the layout (**Plate 9**).

### Suburban Infill

Fewer suburban infill schemes were brought to the Panel but the design challenges were equally significant and commonplace. A corner site at Cae Garnedd, close to the main hospital in Bangor, came to the Panel three times, each time changing the composition of units, but not reducing the floor space and resolving the massing issues, and all failing to ensure adequate amenity either within the building or in the outdoor spaces.

The iterations moved from a mix of apartments and town houses to an extra-care

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home, and then back to a conventional apartment solution. The Panel thought that the uniform three storey development was an overdevelopment of the site, and that there was no coherence between roof forms, elevations and materials. The Panel was critical of the inclusion of single aspect, north-facing apartments in the final scheme.

Around Piercefield Lane in Aberystwyth a suburban infill scheme was subverted by an insistence on 23 metre privacy distances between neighbouring houses, and by an unusual highway requirement for an emergency through-route across the site, closed off by collapsible bollards. A conventional suburban layout was proposed for 79 dwellings of varied size and cost on a steeply sloping green field site, and required a sympathetic response to the existing landscape. The Panel found no such response, and were critical of the abovementioned highway constraints being placed on the site, and the failure to implement the traffic calming ideas in the Manual for Streets. They felt a more compact layout with more landscaping would yield much more usable public and private green space, and they were critical of the use of standard house plans.

Linkside Drive was a challenging site on the hill overlooking Langland Bay on the very edge of the Gower Area of Outstanding Natural Beauty. Here the developer was struggling to find an acceptable design and layout that would capture the spectacular sea views without significantly impacting on the tree line on the crest of the cliff, and not blocking the views of the houses behind. Nature conservation concerns complicated the site planning, but these were resolved by no-build zones.

At the second review the Panel were still seeking adequate photomontages to show the landscape impact from key viewpoints and detailed site plans and sections to define the building footprints and the proposed landscaping. They also wanted to see the sustainability strategy that would deliver the ambitious CSH levels. On a high amenity site like this, on the edge of a protected landscape, only really sensitive site planning and design would be good enough.

Though more of a minor suburban extension than a piece of suburban infill, the Waunarlwydd Terrace (**Case Study 5**) was a most important design review raising issues of wider significance.

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**Waunarlwydd, Swansea.**

The one-sided street plan protruding into open country accommodated 11 Housing Association, energy-efficient, terraced houses and was simplicity itself. A tree-lined home zone and right angled parking out front, and mature trees to the rear boundary, allowed it to merge into the open country.

# WAUNARLWYDD, SWANSEA



The one potential exemplar suburban scheme seen by the Panel was a terrace of 11 social housing units commissioned by a Housing Association, a model of well designed, economical and sustainable terrace housing. Unfortunately one third of the site extended beyond the settlement boundary in the Swansea Unitary Development Plan, and so it would be a challenge to gain planning permission, while any truncation of the scheme would make it uneconomic.

The Panel found the scheme design ingenious and an effective way of resolving privacy and view intrusion issues for neighbours, while protecting the trees to the east. They thought the architecture 'well-conceived and refined...with clean lines', and the choice of materials contributed to this. They welcomed the hard and soft landscaping, and the privacy this provided, while the parking layout was simple and effective, all contributing to a well-ordered home zone. They were especially pleased to see the aspiration to achieve CSH 4 on this affordable housing project, but thought that the fabric performance would need to be

very good to achieve this. They had some reservations about the space standards in the second bedroom and recommended an increase in ceiling heights to improve internal amenity, and to accord with the Lifetime Homes standard (though this would mean a change in the ground floor layout).

Despite being able to demonstrate very limited impacts on the surrounding countryside the scheme was not given planning permission, due in no small measure to the opposition of local residents. For the Panel this was exactly the kind of housing scheme that is sorely needed in Wales. It demonstrated the utility of the terrace as basis for compact,

affordable and energy efficient housing, and showed what design quality can be achieved internally and externally, in both private and public realms, with a committed client and skilled architect. Regrettably the scheme was finally refused planning permission after sustained local opposition. An appeal against the refusal was dismissed in October 2013 on the grounds that the scheme would ...'erode and be detrimental' to the green wedge, would not be sympathetic to its surroundings and '... unacceptably harmful to the character and appearance of the area.' (PINS Appeal Ref APP/B6855/A/13/2200010)

**Plate 10:**

Village infill, Lawrenny. The panel thought that the plans for the village extension were well-conceived and deserved serious consideration, but were concerned that the village square would become a parking lot.

**Housing in villages and open countryside**

Surprisingly there were very few village-infill projects reviewed over the period 2007-2011, but there were two schemes that won particular plaudits from the Panel. The first was a proposal for 30 houses and 6 work units to replace a group of agricultural buildings on the outskirts of Lawrenny, close to the Cleddau River.

This project was explained as an attempt to create a more sustainable village, with a greater critical mass of residences and more employment opportunities. A parallel aim was to deliver a high sustainability rating of CSH 5 on the housing units, and the scheme included a biomass community heating system and community allotments (Plate 10).

The new buildings would have walled gardens and would be grouped around a central square, but the Panel were not entirely convinced that this would act as a social focus for the community, and were concerned that it would be dominated by cars. However, they fully supported the overall concept and its high design aspirations, and they made a number of suggestions as to how the high sustainability rating might be more easily achieved. Regrettably the scheme was not granted planning permission, not least because of the negative response of existing villagers.

In Llantwit Major an exemplar scheme was a single dwelling for a disabled villager. It demonstrated total commitment to build a house that would be completely in character with the older part of this dispersed village. The design process began with an analysis of the sun path working towards a CSH 6 rating with an optimal solar orientation. The form of the building was 'L' shaped to create a south facing courtyard garden, and a stone boundary wall onto the adjacent lane would be used to front a two storey wing with a gable end. Most of the Blue Lias stone that would be used for the house could be reclaimed from the site. Great care was also taken to reduce any overlooking of adjacent properties, and the owner also offered to covenant adjacent land so that there would be no further development on the site, thereby maintaining the open aspects of this part of the village.



**Plate 11:**

**Bryn House, Three Cliffs, Gower.** The original plans protected the trees and hedgerow to the rear and reused stone from the site to clad the new house, but emerging plans illustrated a much larger house and a less sensitive scheme.

Single houses in the countryside pose particular challenges to Local Planning Authorities due to the antipathy they arouse locally as a result of their potential impact on valued landscapes. They are frequently brought to the Panel by architects or clients who are seeking large contemporary houses, and who find very strong landscape protection policies problematic. Two of these projects were the subject of multiple reviews as the Panel sought to refine a conceptual design in the first case, and to rescue a good design in the second.

The Panel undertook three reviews of an earth-sheltered house known as Ael Y Bryn in the hamlet of Bwlch, Powys, set back above a bend in the A470 and within the Brecon Beacons National Park. In this case they coached the client and designer towards an ambitious energy strategy and a workable form that could be properly accessed, and appropriately landscaped, so that it protected the privacy of adjacent owners. The original design revealed a building cut deeply into the grassy hillside, with a low arched upper storey behind a balcony running the length of the house above a glazed ground floor, all set behind a wild hedge. In discussions this upper storey was shortened to reduce its visual impact, and to blend it more successfully into the hillside, with the roof profile made more slender with the timber cladding removed. A CSH pre-assessment revealed the potential to achieve a Level 4 rating. The project has recently returned to the Panel with new architects, but with a higher impact, if more refined, design.

Much more problematic were four reviews of very large contemporary (replacement) house above Three Cliffs Bay in the Gower Area of Outstanding Natural Beauty (AONB). Here the Local Planning Authority sought Panel assistance to ensure that a contemporary design did not intrude into a spectacular protected landscape.

The original scheme was very carefully designed to fit on the site of an original building, to preserve the existing landscape and tree cover, and to re-use stone from the original building, all of these reinforcing the commitment to a sustainable design (CSH 4 target). However, the approved plans were not adhered to and all these qualities were lost leading to a stop notice being imposed by the LPA.

New architects were retained to ensure that the re-design stayed faithful to the original conception, but by the third review the Panel were presented with plans for a building that was 20 per cent larger than the original approval, and which raised questions about the internal layout and poor detailing. A fourth review was deemed necessary as the LPA sought to reassure itself that the scheme met the 'replacement dwelling' policy requirement that it be a building of 'exceptional design quality' (Plate 11).



**Plate 12:**

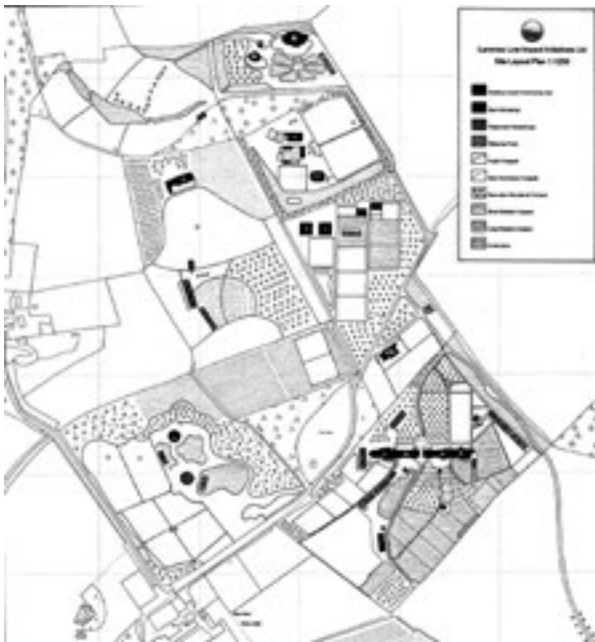
Stormy Castle, west Gower. The architect explained both his sensitive choice of a mix of modern materials and local stone, and his approach to an energy efficient building in this exposed location, through a series of watercolours.

The Panel still had major reservations about many of the elevation details, the accuracy of the photomontages showing the impact on key views in the AONB, and the lack of a planting strategy. They were somewhat reassured by the fact that the client was now actively engaged in managing the project, but there were still a great many design issues left unresolved. Their view was that planning conditions could not ensure a satisfactory resolution of a project which had failed to conform to previously approved plans.

A good example of a very modern, innovative design that responded very carefully to the character of the landscape was the plan for a replacement house at Stormy Castle on the north west corner of the Gower. Arguably the best presented design the Panel have seen, using watercolours and hand sketches (**Plate 12**), the architect explained why the choice of modern materials like weathering steel and fair-faced concrete, together with local stone, was entirely appropriate in this exposed location. The scheme was designed to meet CSH 4 with three linked finger-like pavilions surmounted by an 'energy pavilion' accommodating solar Panels. The project was granted planning consent in 2010 and is under construction with completion due in September 2013. At the time of writing the project is just 5 marks short of CSH Level 5, which the design team is confident of achieving, and construction is underway.

The Panel also reviewed a number of other one-off housing designs of real quality but in suburban settings. Particularly distinguished and elegant modern designs were prepared for four houses in Picket Mead in West Swansea and Colts Hill in Mumbles. Here the Panel suggested minor adjustments to ensure that privacy and overlooking and view impacts were minimised. They gave similar advice on a range of new houses in other villages and suburbs as far apart as Llanbedrog in Gwynedd and Llangyndir and Talgarth in south Powys, each time pursuing high sustainability ratings and minimal impact upon their surroundings. All these were positive experiences and outcomes.





**Plate 13:**

**Lammas Eco-Village:** This consisted of nine, well-located smallholdings that could be 75 per cent self-sufficient, and a community hub building. Only the latter would be architect-designed.

**Plate 14:**

**Ford Farm, Langstone, Newport.** Eleven new residential units were proposed with five more within the listed farmhouse cluster (centre right). The Panel argued for a more formal relationship between new buildings and farmhouse and a detailed landscape strategy.

The Panel also commented on a quite different approach to sustainable rural construction, the Lammas Eco Village (**Plate 13**). This was a low impact development of nine smallholdings, each with a house and outbuildings. These would be 75 per cent self-sufficient in food and energy and self-built, clustered around a community hub building which was to be professionally designed. Each house would cost in the region of £60,000. A previous planning application had been refused but a new application sought to overcome the objections under Pembrokeshire Council's rural exceptions policy, and to meet the planners' desire for a distinctive vernacular design. The Panel thought the project was inspirational and a potential exemplar, but they wanted to avoid the scheme being used as a precedent for less environmentally-principled schemes.

The Panel agreed that a comprehensive Section 106 agreement would be necessary to ensure successful implementation and control of the project, but they also thought a more detailed design strategy was required. They urged the group to seek continuing professional support to assist with the environmental services, and to learn from other pioneering schemes. They thought an element of standardisation in the design and construction would ease development and reduce costs. They welcomed the commitment to local community involvement and thought this should be expanded with housing for local people included in the project.

### Conservation Area cases

Many examples of small scale residential development were brought to the Panel because they were located in conservation areas, or involved listed buildings, and were thus required to 'preserve or enhance' the character of the locality and/or protect the integrity of the listed buildings. This was another type of development that was characterised by a high proportion of 'unacceptable /unsupported' (50 per cent) or 'major changes required' (40 per cent) ratings from the Panel.

Two schemes were reviewed where only minor changes were recommended. At Ford Farm, Langstone (outside Newport) a Grade II farm house listed as 'at risk' was the focus of a proposal for 16 residential units, eleven of them new. Eight of these were grouped informally around the farmhouse, and three more contemporary houses were located in a more elevated position nearby (**Plate 14**). The Panel sought a more formal

**Plate 15:**

**Market Place, Llandeilo.**  
The restoration of the Victorian market hall would be funded by a modest residential infill scheme which would create a small civic space to the rear of the hall, and relate well to North Street's terraces. The Panel questioned whether the design details and materials were appropriate.



approach to the layout and the hierarchy of spaces alongside a simpler approach to the massing and architecture of the new houses. A detailed landscape strategy would help to screen the three more contemporary houses, and protect all the important trees. The Panel were pleased that there were plans for a biomass boiler to serve the whole site.

At Buckley's Brewery in Llanelli, the third phase of its conversion into a courtyard housing scheme was brought to the Panel. This was for 12 one bedroom flats, eight new build and four in a refurbished block. The Panel thought that the apparent bulk of the new building should be reduced by setting back the top storey and using different materials, and that this would improve the composition of the buildings and the wider views of the project. They also sought to ameliorate the daylight in the single aspect, deep plan apartments. The Panel welcomed improvements to the riverside walkway and suggested that the courtyard should be turned into an attractive, usable space and the parking minimised.

In Llandeilo the proposed restoration of the old provisions market, for which no new use was immediately forthcoming, required the development of a terrace of housing to create the necessary funds. The 13 terraced social housing units would complete the terrace of North Bank, parking and amenity space would be provided to the rear, and the houses would create a small public square with the market. Again the question was asked as to whether the scheme really preserved or enhanced the setting of the market, and whether the design, scale and materials were appropriate (**Plate 15**). The Panel's view was that an earlier scheme was more sensitive to the locality and should be revisited.

At Priory Farm in Monkton, overlooking Pembroke Castle, and adjacent to the Conservation Area and the listed Monkton Priory Church and farmhouse, a group of 25 houses was reviewed as part of a low density subdivision of 110 dwellings. This took the form of a very suburban layout of plots for self builders with generous parking allocations. The Panel thought that there was a lack of contextual analysis



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and a lack of vision for this phase of the project, and they felt that there would be very little control that could be exercised over the individual houses and their relationship to their plot. A better landscape scheme was required along with appropriate management conditions.

Finally mention should be made of three schemes promoted by a Housing Association between the Strand and Castle/High Streets opposite the Castle in Swansea. This took on more of the character of a design workshop and led to a very productive discussion about design constraints and opportunities within the Conservation Area at large between the panel, the presenting team and the LPA. It opened up new perspectives on design priorities and alternatives for this very important and challenging historic area which is badly in need of quality regeneration.

At the first presentation of the Castle Gardens scheme for a Housing Association the Panel commended the quality of the urban analysis, but they were not convinced that its conclusions had been followed through in what were very bold designs and cladding materials. The Panel felt that the resultant forms were too complex to be successfully delivered on a social housing scheme like this.

Two schemes were presented and at the second attempt one of these, a tight courtyard scheme, succeeded in convincing the Panel that it could be a successful design solution, subject to further reductions in numbers of units and parking spaces.

The Panel accepted the height, scale and quantum of development and the mix of uses, and copper cladding as an appropriate finish, but they did wonder if other finishes might be used to reflect the different uses in the project. They were keen to see the adoption of CSH 4 and BREEAM Excellent targets in the scheme, and sought assurance that the design team would be retained to ensure design quality through the detailed design and construction phases. The scheme subsequently returned to the Panel with a greatly improved and appropriately diverse design: it was supported by the Panel and construction is now well advanced. (See also Case Study 7)

### —Lessons learned

It is clear that in all these cases the context, and how the development responds to it, is the critical factor determining the success of the project. In the urban and suburban infill cases it is a question of the scale of the development that is frequently at issue because intensification of use is the economic driver, and is often socially desirable from a planning perspective. The judgment about appropriate scale is greatly constrained by local residents' frequent opposition to any intensification, but that opposition can be defused by clear planning policies which make the case for suburban intensification, and good architectural and urban design which can protect valued townscapes and amenity and improve the public realm.

The cases cited above also emphasise the importance of simultaneously scrutinising internal layouts and ensuring good access to light, ventilation and aspect, as well as ensuring the adequacy of parking or encouraging the provision of car-free housing. Manual for Streets design approaches also open up possibilities for better design of the public realm by reducing the scale of highways works and promoting more traffic calming.

In village environments, Conservation Areas, designated landscapes and open countryside new housing design will inevitably be scrutinised in detail, and its visual impact particularly closely assessed. The case studies indicate that a healthy scepticism about photomontages and artists' impressions and the like is a necessary adjunct to Design Review, but they also show the value of well-presented applications and concise Design and Access statements that can explain how each

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design issue has been resolved. The Lammas Eco Village is a testament to the barriers to innovation that need to be overcome to help develop more sustainable rural communities, and to counter the relentless gentrification of the countryside. Lawrenny's village live-work units were another approach to the same issue, but they met significant local opposition and were not approved by the LPA.

Finally it must be reiterated that Wales desperately needs good models of urban and suburban intensification, and the Waunarlwydd example (**Case Study 5**) has a much wider application to larger scale residential development. (see conclusions to Section 2.3)

## 2.6

### Office Buildings and other commercial projects

Office buildings have become rare even in the major cities, and during the recession their construction requires a substantial pre-let. The three major office examples are all from Cardiff as might be expected, and there are two commercial developments in Porth Teigr which qualify under general business uses.

#### —Review experience

The first office scheme was a reworking of the Callaghan Square master plan in Central Cardiff. It had consent for 200,000 square feet of office space on the south side of the square. The original master-planned scheme dates back to the 1990s and the days of the Cardiff Bay Development Corporation and the plans for Lloyd George Avenue, but typical densities of central area floor space have increased dramatically over the period. A new scheme of five office blocks was mooted with a tall tower as the centre piece aligned with views north up St Mary Street, and with active frontages on the ground floor wherever feasible.

The Local Planning Authority were keen to progress the scheme, and even suggested building in the square itself to make it a more pedestrian friendly space. The Panel were not convinced that the layout and massing diagram would deliver the necessary enclosure and continuity in the scheme, noting that the creation of a café culture would be especially difficult on north facing facades and shaded pavements. They did support the idea of new catering kiosks in the square to promote more active use, but they questioned the tall tower and its location, and the alignment of the pedestrian desire lines linking to the Bay. They applauded the aspirations for BREEAM Excellence in each of the office blocks.

Office buildings have become rare even in the major cities, and during the recession their construction requires a substantial pre-let.



**Plate 16:**

Development Brief, Callaghan Square, Cardiff.

This development brief was a step forward for the Local Planning Authority and it proposed new highway arrangements and a better enclosure of both the streets and square.

The Panel reviewed the scheme again eighteen months later. By then it had been re-thought as a planning brief with rather wider ambitions as regards an altered road layout and the widening of the east-west carriageway under the Bay rail link (Plate 16). The brief suggested that the northern carriageway of Tresilian Way be closed to vehicular traffic to allow the square to be joined to No 1 Callaghan Square (Eversheds). The main east west route (Tresilian Way to Tyndall Street) would no longer be split but would run along the south side of the square aligned with the widened span of the rail bridge, with offices enclosing it on the south side, built in part on the land originally reserved for a Light Rail System to link with the Bay.

All of this was supported by the Panel, but they felt that the brief lacked a vision for the square, that the massing of the southern blocks was too disparate, and that pedestrian and cycle movements had not been adequately considered. However, the preparation of a brief as a planning tool was warmly welcomed even though it was only a 'consultation brief'. Its significance as a key piece of area-specific supplementary planning guidance to support the (subsequently aborted) Cardiff Local Development Plan was not lost on the Panel, but the brief had not been through a consultative process and then adopted as policy.

The decision of the BBC to move their television production studios (for Casualty, Doctor Who and Pobl y Cwm) to Porth Teigr posed a threat to the integrity of the masterplan (see section 3.1), while giving the commercial development prospects of the scheme a much needed boost. The site selected was on the south side of the spine road on the southern edge of the scheme, backing on to empty, but still operational, dockland. The masterplan was amended to accommodate this change from residential to commercial uses. The main design challenge with the studios was that the long southern façade would present onto the spine road and the new office/creative quarter.

The studios themselves were very bulky, large scale, purpose-built production units with specific stage-sets that had to be invisible to the outside world. Most of the

**Plate 17:**

The Digital Media Centre (left) and the BBC Television Studios (right), Porth Teigr, Cardiff. These were both very innovative designs that the Panel encouraged, supporting even bolder expression in the studio facade but some simplification of the DMC scheme.



street facade would not be active frontage, so the intention was to create a screen that would give the street some visual interest. An architectural practice with a reputation for postmodern, playful facades was retained for the task. They presented a layered timber screen that was 'theatrical' and would interact with the saw tooth roofs of the warehouses behind (**Plate 17a**).

The Panel encouraged more height and theatricality, and more symbolic variation to emphasise the 'film studio' use, and to create a focal point for the streets running back from the water's edge. It also supported the idea of a living/landscaped wall to screen the assembly/loading yards at the southern end of the site.

The completed scheme has attracted a good deal of architectural comment both locally and nationally because of its pure facadism, and critics have played the game of interpreting the various televisual and architectural references in the 'mannerist, baroque and sci-fi retro' facade (R. Moore *The Observer Review*, 25 March 2012 p40; see also P. Hannay, *Touchstone*, 19 September 2012 p28-9). The studios themselves achieved a BREEAM Outstanding rating.

For its part the Digital Media Centre in Porth Teigr (now renamed the Creative Industries Centre) was the first commercial building proposed alongside the new BBC TV Roath Lock Studios, and provoked considerable architectural debate within the Panel and with the LPA. Its complex original design was for a solid heavyweight brick structure, interspersed with full height glazing, with a communal roof terrace and a serrated roof line that could provide northern light to the studios below, and good positioning for solar panels. The entrance was marked by a crane-like structure drooping from the roof. The Panel welcomed the ambition to achieve a BREEAM Outstanding building, but did not think the layout of the upper floors was sufficiently developed. They thought that more work needed to be done to define the building's relationship with both the waterfront and the street.

By the time of the second review the design had been reconceived as a series of stacked containers/crates clad in larch boards (**Plate 17b**), particularly expressed in

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the end elevations. The Panel questioned the weathering performance of larch in this location. The long facades along Timber Street would be largely clad in brown brindled brick. Protruding pods would signify the main entrance and house a café and meeting room. The layout of the upper floors would remain flexible, while A3 uses would be accommodated on the ground floor of the building. The LPA were more comfortable with this design which was less adventurous than the first scheme.

The Panel had specific concerns about the design, form and location of the main entrance to the Digital Media Centre and felt that the logic of the design and the internal planning were somewhat contorted and obtuse. They felt that the pods should be treated as more autonomous units. They were keen to see the sustainability aspirations for the building raised to BREEAM Outstanding, and they advised against large signage on the building. A start on construction was made in mid 2012 under a design and build contract, with the original architects retained in a supervisory role.

### — Lessons learned

The lesson learned from these reviews is that even in Cardiff it is going to be very difficult to initiate speculative office development in the current economic climate, and that developers need to establish significant pre-lets, preferably from blue-chip tenants, before a scheme can be financed. In these circumstances the quality, and indeed the vitality, of the location becomes an important consideration.

The case of the Admiral building (**Case Study 6**) is instructive in terms of a re-assertion of the benefits of a proper city centre location, especially for younger employees. A benefit in this case is that the building is custom built and an act of architectural patronage, so the design quality is much higher. Better still, the Admiral workforce want to feel engaged with the city so transparency and active frontages are considered a positive asset, as are the low running costs associated with a highly sustainable, energy efficient building.

The difficulties of attracting potential tenants to Callaghan Square is that while the public space is attractive it is largely deserted, surrounded by traffic, and does not have any active uses close by. So the development brief to develop a corporate approach to resolve these issues and to manage future development is especially welcome. Such briefs and design frameworks were promised for this and other areas in the city centre in the failed LDP, but this is the only one delivered, though a Council Green Paper has now provided a comprehensive masterplan for the area south of Central Station.

The Commission has worked with the City Council on the Central Station commercial development scheme through a confidential design workshop, to offer further advice on how economic development and quality urban design might be secured elsewhere in the city centre.

The lesson to be drawn from the two buildings in Porth Teigr is that one of the key roles of the Panel is to stand up for innovative design which may disturb some sections of opinion, and which may unnerve Planning Committees and prove too risky for development control officers to support. In such circumstances the Panel must be assured about the rationale of the design, the skill of the designer, and the appropriateness of the context. In the case of the Cultural Industries Centre and the BBC TV Studios this was the case.





#### Admiral Headquarters, Cardiff.

This artist's impression of the southern façade illustrates the building's height when compared to the multiplex cinema/shopping centre and multi-storey car park to the west (left), but the transparency of the ground floor will enliven the public realm. This façade will be stone faced and have integral photovoltaics in the glazing.

# ADMIRAL HEADQUARTERS, MARY ANN STREET, CARDIFF

The Admiral Headquarters building was attracted to the temporary square on the east side of the St David's Shopping Centre in the centre of Cardiff. ►

The brief was to produce a high quality sustainable building that would house a young and highly interactive workforce, and provide a series of busy lobbies and ground floor catering uses to contribute to a lively public realm.

The site had a lapsed permission for an eight storey housing block with ground floor retail as part of the adjacent retail scheme. The brief was to produce a high quality sustainable building that would house a young and highly interactive workforce, and provide a series of busy lobbies and ground floor catering uses to contribute to a lively public realm. What had begun as an eight storey building had reached 12 storeys when the Panel first saw the scheme, and this was a key design question that was tested against the City's Tall Buildings Policy with a series of photomontages. Arguably the bigger issue was the impact on the conservation area to the north and on surrounding streets, and the Panel observed that the office building considerably exceeded the height of the adjacent shopping centre's multi-

storey car park, and was in danger of creating a canyon effect on Mary Ann Street.

The Panel did not object to the building height because they had great confidence in the design team and their ability to deliver an exemplar scheme in architectural and sustainability terms.

The building's massing, fenestration and transparency were all commended, as was the energy strategy and the commitment to BREEAM Excellence. Furthermore, the colonnade on the ground floor, the transparency of the entrances, lobbies and retail units, and a potential high quality public realm were all positive features of the scheme. However, the quantum of underground parking (120 spaces) was considered environmentally damaging for a city centre location.

At a second review the architects discussed a range of refinements to the elevations, the photovoltaics, and the colour of the stone, window frames and glass. The Panel were keen to improve the public realm between the office building and the shopping centre/multiplex cinema and to reduce the impact of the shopping centre's car park access lanes. They advised against the use of arbitrary coloured banding in the paving materials and preferred the variation in paving to emphasise the pedestrian desire lines.

They wanted to improve the positioning of pedestrian crossings on both Bridge Street and David Street to better fit pedestrian movement. Overall the Panel felt confident that this would become the most sophisticated and environmentally benign modern commercial building in the city.

As with office development major mixed use schemes have not been common in Welsh towns and cities over the period 2007-2011. Cardiff had four such projects, each rather different in character, three of them located in the city centre and the fourth a new neighbourhood centre. Swansea's example was a Conservation Area scheme of real quality with a major social housing component, while Bridgend's Post Office scheme was similarly ingenious, but less sympathetic to its context.

#### —Review experience

The Capital Quarter, just south of the GWR main line, south east of Cardiff city centre, had received an internal review in May 2006, and consent for a high density apartment/office/hotel complex in mid 2007, at the height of the residential apartment boom. When this market collapsed the site was purchased by a local developer in January 2008, and he changed the composition of the scheme omitting the apartment towers, and replacing them with more offices. Two hotels, student accommodation, a multi-storey car park and a residential care home had been added as the developer sought a pragmatic mix of uses that might be viable components of a major development during a recession.

The layout followed a campus arrangement around two courtyards with an important north-south pedestrian cycle link bridging the railway and linking to Adam Street and the city centre. The commercial buildings would be designed to achieve BREEAM Excellence. The Panel accepted the need for flexibility in the consented uses in the scheme, but they did not consider the quality of the urban design to be very high, and some aspects were unacceptable. The development framework lacked a convincing urban design, public realm and landscape strategy, and the orientation and juxtaposition of student accommodation and an extra care home for the elderly was problematic.

There was a considerable amount of 'lost space' in the scheme, and the roads and pedestrian links were not well integrated. The main north-south pedestrian/cycle link needed more active frontages to give it vitality and safety, and better designed links with the bridge and crossing of Tyndall Street to link south to the Bay. The garden squares needed more careful design and microclimatic testing to ensure public use. Overall there was too much detail for an outline application, and not enough for a full permission, but the scheme was given planning permission. A large office building has been completed.

The Westgate Plaza proposal was a preliminary exploration of the development potential of land to the east of Millennium Stadium and either side of Westgate Street in Cardiff city centre. There are significant constraints because of conservation designations on Westgate Street itself, which now serves as the western arm of the city's central 'bus box', and because of access points to the stadium, including a requirement for a 26.5 metre wide pedestrian access into the Stadium itself. There is also a desire for a pedestrian concourse running around the perimeter of the stadium, the constraint of underground cables to the central telephone exchange, and the provision of underground car parking and servicing at the lower ground level, all of which greatly complicate any urban design ambitions.

The Panel welcomed a high quality presentation and the idea of a development brief with clear design principles to link both public and private sector ambitions, and to create a new civic space from the stadium ramp across Westgate Street into Quay Street. This could be fronted by various catering and entertainment uses that would work well under both every day conditions and Stadium event days. The settings of

**Plate 18:**

Marcol Court, Bridge Street, Cardiff. This bold mixed use scheme on the crossroads with Churchill Way did not convince the Panel, who stated their preference for a perimeter block treatment and more architectural refinement.



**Plate 19:**

Retail and student residences, Bangor FC redevelopment. This second scheme brought surface car parking into the heart of the block and placed student residences above the retail, but failed to achieve any semblance of place-making in the town.



the listed Cardiff and County Club and the WRU Headquarters could be significantly improved, but tall buildings could be accommodated close to the stadium providing that they took account of the short and long term views of the stadium masts. This was an important early opportunity to shape a complex major piece of redevelopment for the better.

The Marcol Court scheme (**Plate 18**) took the largest and longest vacant site in Cardiff city centre behind the Motorpoint Arena and proposed a complex residential/mixed use scheme. This was based around an 18 storey residential tower on David Street, residential blocks of eight storeys on Churchill Way, and six storeys of office and hotel uses above ground floor retail and A3 uses on Bridge Street. The Panel stated their preference for a perimeter block approach, rather than discrete buildings, to create a more unified streetscape, a central amenity space, and better daylighting and aspect for all residents. However, they acknowledged the need for flexible combinations and placement of uses to allow development to proceed in phases.

The Panel had major concerns about the bland elevations, their lack of differentiation of building base, shaft and top, and their weak corners. A blank wall on the tower facing the conservation area was a particular concern, as were the north facing single aspect flats. The limited parking provision, all of it underground, was welcomed. There were concerns about the quality of the public realm, but some pavement widening was promised, and the Panel pressed for an integrated public art strategy. The Panel sought a BREEAM excellent rating on the commercial building and CSH level 4 on the residential.

The Bangor City Football Club site in central Bangor had been the subject of a successful planning application for an ASDA supermarket in 2004 (DRW 2003-5: 66). This had never been implemented, and the developers now proposed a mixed use development with 30 per cent retail, some leisure (bowling alley and restaurant) and the rest student accommodation (**Plate 19**).

The proposals placed the retail facing the car park, in an 'L' shaped block at ground



They argued that the scheme ought to be conceived as a new urban quarter, and developed with a finer grain at a more human scale, and with more local character.

level that would constitute a podium for the student accommodation, and provide a pedestrian link back into the High Street to the south. Four storeys of student accommodation were accommodated on the podium in two U shaped blocks that faced south west to catch the afternoon and evening sun. Because the site is set low in the valley the student accommodation achieves a similar height, if not scale, to the buildings on High Street.

The LPA supported the scheme but the Panel felt that its scale and massing, based as it was on a retail park on the ground floor, was not acceptable on this site. They argued that the scheme ought to be conceived as a new urban quarter, and developed with a finer grain at a more human scale, and with more local character. They were critical of the internal layout of the student accommodation, and did not think the pedestrian routes were safe enough. The scheme was approved.

The Post-House scheme in the central Conservation Area in Bridgend was very inventive. It utilized two existing buildings on opposite sides of the block, one of which is locally listed, to create a pedestrian through-block link and to accommodate three small office blocks and a restaurant around a central atrium. It aimed to produce a BREEAM Excellent building, but it sought to demolish the locally listed Old Post Office façade, echoing it behind a new glazed façade. The Panel were impressed by the developer's commitment and ambition, but they were concerned about the demolition of a very familiar façade, and the insertion of a larger scale 'city' building into the old town. They wanted to reduce its height and remodel its roofline, but considered it was still too big for the site. They reluctantly concluded that the building was unacceptable in its context, but they expressed a wish that all small developers show the same design ambition and flair.

Finally, the Loudon Square Neighbourhood Centre is located in the heart of Butetown, Cardiff and serves an ethnically diverse and deprived community. A partnership between the Council, the local Health Trust and a Community Housing Association was put together to provide a mix of 59 apartments and town houses above, or adjacent to, a Health Clinic and 11 retail/office units. The scheme would replace a very run-down centre on Bute Street.

Regrettably the Panel saw this scheme too late to influence its design which was



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considered to be poorly integrated and executed, with weak elevational treatment and poor massing. The Panel were disappointed at the failure to create a high quality green space in the internal courtyard, and felt that the minimal car parking still compromised the quality of the public realm. They supported the commitment to CSH 4 in the residential, but could not see how this would be achieved. Nonetheless, the completed scheme does provide much improved commercial and community facilities, and gives the area a significant uplift.

### — Lessons learned

The lessons learned on the mixed use projects have much resonance with those drawn from the reviews of commercial development, not least because several of the schemes are located in central Cardiff. The first lesson is drawn from the likely failure of the Capital Quarter to deliver a coherent new urban quarter because of the lack of a brief from the Local Planning Authority. The precedent of a very generous planning permission for a series of commercial and residential buildings created significant scale issues. The new landowner went for a series of uses that might be recession-proof but which, without more attention to their collective urban design, would not deliver any place making qualities. The Bangor FC redevelopment project was another site requiring a good design brief to help reduce the risk for the developer, and to make a series of design decisions that would improve the 'fit' of a mixed use scheme on this key site, and simultaneously increase its commercial viability.

The Swansea Urban Village (**Case Study 7**) was an excellent example of the value (to Panel, presenters and Local Planning Authority) of a strategic design review session devoted to several projects in close proximity. It demonstrated the value of social housing developers who put social inclusion at the top of their development agenda, and are keen to create shared, convivial spaces. It was also an example of how a single, well-located, tall apartment building could accommodate the bulk of the housing units to allow the rest of the scheme to create good spaces and deliver a fine grained conservation solution.

The case of the Post-House contrasts with the Porth Teigr schemes described in the previous section. It reveals that it is difficult to support design innovation when it is employed, in part at least, to circumvent a strong planning constraint. Such a strategy is always a challenge to all concerned, and of course occasionally creates something truly exceptional.

Finally, on a more prosaic note, the contrasting value of a review conducted early in the development of a scheme (Westgate Plaza), and one conducted very late in the planning process (Loudon Square), emphasises that it is in everyone's interest to facilitate an early review.



# SWANSEA URBAN VILLAGE

Swansea Urban Village and Printworks. This artist's impression, a view from the south east, shows the sensitivity of the proposal to the grain of the High Street Conservation Area (top), and the creation of a series of potentially sociable spaces within the scheme. Large scale buildings for social housing are accommodated using the steep slope down to The Strand. The Printworks conversion (left) has not proceeded.

Swansea Urban Village was an imaginative and well conceived scheme in a Conservation Area.

Something of a misnomer considering its small site, the scheme fronts onto High Street with rebuilt commercial premises reflecting the existing variations of form, and is centered on two small courtyards, one a focus for a creative cluster of small workshops, the other for residents' use.

To the rear of the site on the Strand, nine metres below the level of the High Street, a 12 storey apartment building above three levels of car parking will house 75 affordable, two bedroom social housing units. Kings Lane, on its southern flank, will be

restored as an historic pedestrian route and closed to traffic. The Panel supported the scheme but felt the High Street elevations needed a common architectural language, while the roof forms across the scheme needed more cohesion. They did think that the type of housing should be reviewed in the light of the current social mix in the area, and the height of the residential tower reduced with a more considered massing and more elegant form. However, the scheme is being built largely as presented and the towers and Wind Street frontages are complete.

An adjacent related project, the Swansea Print Workshops, was one of the most sophisticated design projects the Panel has seen. Located in a 19th century stone warehouse on King's Lane the project would have been a major addition to the adjacent urban village, and the architect was keen to retain all elements of the historic fabric

in the building as a 'palimpsest', and then to integrate new interior spaces on several levels linked by an open steel staircase. She sought to use the roof terrace over a new commercial unit on the Strand as its external space. An asymmetric roof reflected the slight kink in the building floor plan, and salvaged floor boards would have been used to clad the upper floor. The historic character of King's Lane would have been enhanced by the restoration, and animated by the new entrance into the Print Workshop. The Panel wanted to encourage the achievement of BREEAM excellence through the deployment of additional insulation, air tightness and perhaps a CHP system in the wider scheme. All in all this was a potential exemplar project, and a very bold piece of conservation. Regrettably the restoration has not been funded.

## Retail-led schemes and supermarkets

As with offices and mixed use schemes there were few large scale retail projects over the period as the consumer boom came to an end, and debt-fuelled levels of household expenditure became unsustainable. Major projects were brought to the Panel for Newport and Llantrisant, the former a complete reworking of a scheme that was reviewed favourably in 2005 (DRW 2003-05: 54-55), the latter a kind of feasibility study for the new Llantrisant town centre. Both of these merit individual case studies (**Case Studies 8 & 9**). Other schemes reviewed include Bargoed's new town centre extension and the redevelopment of the Cambrian Centre in Newport.

New supermarkets seemed immune to the property recession at least until 2011 when the major supermarkets realised a downturn in consumer expenditure would be prolonged and smaller convenience stores offered a better return on investment. Nine schemes were reviewed over the period including the Abergavenny Cattle Market which itself was reviewed a further six times to add to the five times it was reviewed previously (See DRW 2003-5: 67). Reference is also made to small scale retail schemes of significance in St David's and Llanmadoc.

### —Review experience

The redevelopment of the Cambrian Centre in Newport had been mooted for a number of years, and the Panel had reviewed the City Spires scheme in 2004 (see DRW 2005-7: 70) which had proposed a 30 storey apartment tower, hotel, double height shops and an office block. Now in a development recession the Panel were viewing a scheme for a small bus station facing the main railway station with a supermarket above, with shops retained on two levels along Cambrian Way, and a mundane office block on the north east corner with Queensway.

The LPA were comfortable with the outline application, but the Panel were very concerned that the pedestrian routes through and around the bus station were convoluted, illegible, potentially congested and unattractive. There were no active supporting uses provided to make the bus station feel safe and convenient to use. The whole scheme seemed to be an extraordinarily retrograde step in terms of pedestrian convenience and accessibility into town. The Panel urged the LPA to take a more proactive approach to development on this site by preparing a development/design brief. A leisure and office scheme is now being implemented on this site and the offices are almost complete.

A retail scheme in Bargoed on a new plateau reclaimed from a coal mine had been discussed with the Panel since 2005 (See DRW 2003-5: 27) It was seen as critical to the regeneration of the town and contained a new supermarket, a number of smaller stores, a cinema, a 500 space car park and some residential. The Panel reviewed the brief for bids and it was then asked to review the winning scheme. The Panel felt that the layout was poor and car-dominated and the various uses poorly integrated.

**Plate 20:**

**Retail Plateau, Bargoed.**  
The final scheme provided small shops to front the supermarket on the main street, and used 3-4 storey residential to complete the southern terrace to line the car park access. A multiplex cinema and a freestanding 'landmark' restaurant would complete the development.



The scheme was seen again at pre-application stage two years later. There had been some improvements with smaller retail units on the High Street, but still no supermarket presence. Some elevational details and the choice of materials were unresolved. The new road layout at the entrance to the car park had created an awkward site for the residential and an isolated 'landmark' site for a drive-in pub, and it needed traffic calming. The supermarket with its two levels of car parking, and a new row of shops and entrance to the supermarket fronting on to widened pavements on Hanbury Road will open in December 2013. (**Plate 20**).

Three supermarkets were reviewed in Cwmbran in 2008, all competing for planning permissions for sites on the north eastern edge of the town centre, and all arguing that their scheme would help reinforce and extend the existing town centre. The problem in all these cases was the pedestrian access, and the need to cross busy roads and negotiate the topography en route to town centre or to the railway station.

Without an overall masterplan for the expansion of the 1960s town centre the Panel felt they could not support any of the schemes. They were unable to unravel a satisfactory approach to the eastern extension of the town centre, and much more urban design work needed to be done by the Local Planning Authority to provide a development framework.

The Machynlleth supermarket was seen twice, and was a particularly emotive scheme to many protesters because of its size and range of goods compared with the retail offer in the town centre (it constituted a 75 per cent increase in the town's retail floorspace). By the second review the size of the store and the car parking had been reduced by 25 per cent. The Panel argued that the store was still too big for the town, and that a more modern, higher quality and BREEAM Excellent design would be more sympathetic to the location. The Panel felt that the conservation status of Heol





**Plate 21:**  
Supermarket, Bird's Lane, Cowbridge. The Panel felt that the supermarket could be better laid out to enhance the river bank and produce an asset for the town, and sought a more contemporary architecture.

y Doll demanded a 'conserve and enhance approach to urban design' and that the development should do more to re-enclose the street, with additional infill housing (only four units were proposed). Pedestrian access was only marginally improved and was still a worry for the Panel.

Abergavenny Cattle Market with its prospective supermarket and outline consent has been the most reviewed project in the history of the Commission, and by common consent has gone backwards in design terms. It featured in the 2005 review (DRW 2003-5: 67) where it emerged as a promising, if inevitably controversial, scheme and was reviewed twice more by the end of 2007. Over the last five years the scheme has come to the Panel on no less than six occasions. In the first instance a limited competition had delivered two potential schemes, and the winner was reviewed by the Panel. They were disappointed at the lack of mixed use, but welcomed a stand-alone library and a more sustainable supermarket building.

By mid 2009 another scheme with a 'tokenistic' residential component of six flats on Lion Street had been added, but this was the only improvement. A new design was reviewed in mid 2010, regarded as pastiche and outdated by the Panel, and they particularly objected to the proposal to clad the western elevation of the supermarket with public art. There was still no improvement in the sustainability rating of the building.

A planning permission for a supermarket and new library was finally granted, and in January 2012 the Welsh Government agreed to repeal a 150 year old law requiring the local authority to maintain a market in Abergavenny town centre, thereby clearing the way for a new development on the site.

In Bird's Lane Cowbridge, a supermarket and an additional row of small retail units of one or two storeys, were proposed on the site of a former garden centre within the town centre Conservation Area, with a number of listed buildings nearby. The supermarket was kept low and designed in a contemporary idiom with a fully glazed north frontage and stone and rendered elevations (**Plate 21**).



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The river bank could then become a public open space, and the design of the retail could be more contemporary, but still sympathetic to the character of Cowbridge, while the supermarket should have more daylighting and achieve a BREEAM Excellent rating.

A public consultation at the time revealed a generally positive response from residents, but the LPA were keen to protect both the river bank as a public amenity and local views. The Panel felt a more rigorous analysis of the context was required, and could be used to develop a better landscape and public realm strategy. The river bank could then become a public open space, and the design of the retail could be more contemporary, but still sympathetic to the character of Cowbridge, while the supermarket should have more daylighting and achieve a BREEAM Excellent rating. The scheme has been successfully completed, and is discreet and well connected into the town's pedestrian network, but the river bank is largely fronted by the wall of the service yard and as yet not fully screened by landscape.

The Panel felt that the architectural treatment of a proposed Aldi supermarket in Park Avenue in the centre of Aberystwyth, with hotel accommodation above, was inadequate. The storefront did not respond to the locality, and did not turn the corner adequately. More active frontage was sought; more building mass on the south east corner, and a sustainability strategy was sought for the store itself. The Panel and the LPA used the policies in the Aberystwyth masterplan (see DRW 2005-7: 17-19) to assess the scheme and found it wanting.

Two new small shop schemes were brought to the Panel. In the main High Street of St David's, a scheme to replace an existing two storey commercial property with a three storey, mixed use building provoked much debate. The proposal was for a ground floor restaurant and two floors of retail, with a small spa to the rear. Narrow side alleys were provided to access the rear and limited car parking. The LPA had major reservations about scale, mass and siting. The Panel commended the client and architect for their commitment to an imaginative scheme, but felt the proposal did not respond adequately to the domestic character of the Conservation Area. What was proposed was very much a new landmark building with its roofline resembling upturned boats, and they questioned the use of such overt nautical references in this historic street of traditional buildings.

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Finally the Llanmadoc Community Shop in the village on the western end of the Gower Peninsula will be the only shop in the village, and will house a not-for-profit cooperative which has been operating for a number of years in a converted barn. The proposal was for a less than 100 square metre rectangular building of one and a half storeys, part rendered and part timber-clad, with timber brises-soleils to the rear that act as security shutters when closed, while the roof would be Welsh slate with photovoltaic panels. This was a simple, elegant and potential exemplar project, and the Panel wanted to see the architect retained to deliver the desired design quality. The Commission is very keen to support such local initiatives which reinforce community integration and self-reliance.

### —Lessons learned

The lessons learned from these retail schemes are very individual and disparate, and arguably specific to a recessionary period. Two schemes in Newport, where the decline in central area retailing has been particularly acute, showed different responses to the recession. The King's Walk scheme (**Case Study 8**) was much less ambitious than the scheme proposed in 2004, but it retained a clear logic and good connectivity with the city centre. It's covered, but unenclosed, single level mall with double height stores, and its strong catering/entertainment offer at its southern end, both reinforced its commercial viability.

By contrast, the proposed refurbishment of the Cambrian Centre, with its integrated but cramped bus station and new supermarket above, as presented to the Panel at the time, should never have reached the stage of a serious proposal. The Llantrisant Town Centre scheme (**Case Study 9**) was a major design challenge, and the promoted solution had been unable to resolve the problem of a site accessible by arterial roads, but inaccessible by foot from the north and east. It was clearly a case where the Panel needed to engage in a sequence of more informal design workshops to help the design team resolve the problem of pedestrian connectivity, the transitions between high street, open mall and extended supermarket, and the huge parking demands. The same should have happened in Bargoed, but the scheme was already largely determined before the first review in 2004. In cases like Cwmbran it was obviously incumbent on the Local Planning Authority to produce a development framework for retail expansion around the centre, but this is not always possible when schemes are already competing with sites in close proximity.

Overall, while the Panel was able to ameliorate some of the worst effects of supermarket design on small towns, it was never able to assist the production of a scheme that might actually enhance a locality. The Cowbridge supermarket is by and large well integrated into a very tight site, but the failure to get a quality scheme in Abergavenny is especially disappointing, especially when the first scheme mooted in 2003 was probably the best of the 12 or so schemes subsequently presented.

It remains something of a mystery why, in almost all the cases the Panel has encountered, the supermarket development has not made the necessary compromises that would have speeded up the development process, and ensured a more positive end result for the locality. Machynlleth was a case in point; Cowbridge and Aberystwyth by contrast had already gone some way towards meeting planning requirements.



# KING'S WALK, NEWPORT

## King's Walk Retail Mall, Newport.

The 2011 plan was simpler with a single level open mall lined with double height shops, and a department store anchor to the north (right) adjacent to the bus station. Cafes (on two levels) and a multiplex cinema provide vitality for Usk Plaza on the key pedestrian route across town via the Usk Footbridge.

This revised retail scheme for Newport (see DRW 2003-5: 54-55) provides a desperately needed new investment in Newport's city centre which has lost several key stores recently.

It creates a number of large size units which the city centre has been short of in the past. The original scheme in 2005 provided a covered mall with a residential tower, a department store and two large retail units integrated well with a remodeled bus station. The new scheme omits the residential tower, but keeps a similar circulation of two covered, but open ended, streets each with two storey shop units. This connects down to the bus station at the northern end, and strengthens the key east west link from the Usk Bridge,

up steps and through a reconfigured John Frost Square, to Charles Street.

A group of nine restaurants/bars around the entrance from Kingsway Boulevard look out over the footbridge and the river to the new University Business School. Car parking is placed under the shopping, and is accessed from Kingsway Boulevard.

The Panel recognized the economic importance of this scheme to Newport at this time, and considered the functionality of the layout and servicing to be

commendable, though it does leave a considerable length of dead frontage car parking onto Kingsway Boulevard. The Panel thought the architectural treatment generally needed more refinement, while the Department Store on Upper Dock Street needed calmer elevations.

The scheme was consented but a new application was lodged and approved in 2011, and an anchor tenant signed up.



#### Town Centre, Llantrisant.

The masterplan reveals the compromises necessary to create a 'town centre' with two multi-storey and one decked car park emphasising its drive-in character. Pedestrian links are problematic from the western half of the site, and the one sided village street with undetermined uses to the west looks problematic.

# LLANTRISANT TOWN CENTRE

The proposal for a new town centre at Llantrisant was first seen at Design Review in 2010, but only informal comments were made and no report was issued. The Panel were concerned that the site was isolated by the heavily trafficked arterial road network. It was seen at a pre-application stage in November 2010 and given a full review.

The site was formerly an industrial plant at the 'T' junction of the A473 Bridgend to Pontypridd Road and the A4222 south to Cowbridge. It has a large school and playing fields to the south, a housing estate to the north and the wetland of Pant Marsh (a Special Landscape Area) to the east. If intelligently developed it could provide a new town centre for Pontyclun to the south, Talbot Green to the north, and Llantrisant to the east, the latter dominated by disconnected out-of-town shopping centres.

The masterplan was prepared as part of a joint venture between a developer and Welsh Government, and shows two large format stores (a supermarket and a local Department store) at the eastern end, with extensive surface and some additional decked car parking. A major pedestrian route leads between the

two stores into a central retail square where it connects with a north-south cross street, and then on westwards through an 'Entertainment Quarter' to link with a traffic calmed and more traditional 'High Street' on Cowbridge Road. Immediately to the west of Cowbridge Road there is an old railway station which may one day be reopened to light rail traffic (as per the Rhondda Cynon Taff Local Development Plan). The site has two multi-storey car parks, one accessed from the north and one from the south. The contradiction is that while the site is well connected to the regional road network for car users, the shopping centre would be very poorly connected to adjacent residential areas for pedestrians and cyclists.

The Panel were concerned that the designs did not make enough effort to provide safe and attractive

pedestrian routes into the scheme from surrounding estates, planned residential developments, and the local secondary school. Furthermore, only the pedestrian streets to the west connected beyond the site, and most development turned its back on its context except in the south west corner where there was more of a mix of uses, and some residential. The Panel felt that the scheme had too much of the feel and form of an out of town shopping centre, and that it needed to be redesigned with more residential development, and more evening uses, to give it a chance to work as a focus for the adjacent settlements. On the positive side there was a commitment to achieving BREEAM excellence using a centralised Combined Heat and Power system.





**Plate 22:**

Ty Glan Menai Hote, near Caernarfon. Following two positive reviews the external appearance was simplified, the stone plinth emphasised, a simpler roof line adopted and clad in local slate, and BREEAM Excellence achieved.

## 2.9

## Leisure, hotels and tourism

This section explores a range of tourist-oriented facilities that were brought to the Panel, including hotels of different scales in very different locations, and a number of quite small visitor centres for a range of tourist attractions. With the former the bigger the scheme the more iconic its aspirations, and the worse the response to context: by contrast the latter tend to be quite responsive to site and locale.

### — Review experience

#### Hotels

If supermarkets are one form of development which has continued to be promoted through the recession hotels are certainly another, with Cardiff in particular the focus of a number of significant schemes. There were also a number of rural hotels which were seen by the Panel. Perhaps the one they helped improve the most was the smallest. Ty Glan Menai located right on the bank of the Menai Straits west of Caernarfon was seen twice (**Plate 22**).

At the second review the Panel were able to confirm that the project would not intrude on views from the west, east or north, and to commend the implementation of many of the changes they had previously suggested, including the simplification of the external façade, a greater emphasis placed upon the stone plinth, a simpler roof treatment with a natural slate finish, and more solar-responsive fenestration. They thought that further refinements could be made (particularly to the rather clumsy oak brise soleil), and they wanted the scheme to reach BREEAM Excellent suggesting that a BREEAM assessor would help the designer achieve this.

By contrast the White House Hotel developers in Abersoch were determined to make a statement with their proposed expansion. A 35 bed spa hotel had gone through Design Review in 2006 and been approved, but the loss of a Tourism grant rendered the project uneconomic, so a new application was being prepared for a 61 room spa hotel in 2011. The new proposal managed to stay within the height limit of the approved scheme, but the necessary extension back into the site was overpowering in this setting of large detached houses. To make matters worse the site was tightly constrained by the boundaries of two adjacent houses. The erection of four storeys of hotel, literally on their property boundaries, was never going to be acceptable.



**Plate 23:**

Gatehouse Hotel, Tenby.  
The reconstructed 'Regency' hotel would retain the character of South Parade if well detailed, while the new residential and café uses on White Lion Street, and the creation of shared space, would help regenerate the area.



Furthermore, the Panel felt that the form of the building was too complex and contrived, and did not actually improve the quantum and scope of sea views as intended. They argued for a scheme that would be more sensitive to the suburban landscape and its mature trees, and one that could achieve a high sustainability rating. This scheme has not been built and further iterations are expected to return to DCFW review.

The Pier Pavilion at Llandudno was a hotel scheme that failed to demonstrate any site or contextual analysis, despite the best efforts of the local conservation officer to offer constructive guidance. The massing and fenestration of the block in terms of its relationship to the Grand Hotel and other seafront properties was problematic, and there was nothing to suggest that the scheme was responding to the character of Llandudno. The Panel recommended a complete reappraisal of the design approach to this 200 bedroom scheme.

By contrast the former Royal Gatehouse Hotel scheme in Tenby, where the Regency hotel had been destroyed by fire, was a model of sensitivity (**Plate 23**). A replica approach was agreed to the replacement of the terraced hotel on South Parade overlooking the sea, but the developers wanted to take a more contemporary approach to an apartment building filling the gap between the hotel and the small cinema which was to be restored to public use. The Panel had a number of detailed comments to make about how the replica approach could be refined, and they asked for a simpler approach to the link building but with a more legible entrance.

The Panel also paid close attention to the public realm on White Lion Street and sought its pedestrianisation. They were keen to see that the new square outside the cinema and hotel reception was made as vibrant as possible and supported the lighting, choice of colour finishes, and materials if they were carefully coordinated, and the signage made more recessive. As usual they sought a higher energy rating than was being achieved. Overall this was considered a potentially very good mixed use project which would upgrade the townscape of two of Tenby's more important streets.



**Plate 24:**

St Davids Hotel, Harlech. This greatly expanded hotel on the A 496 coast road captured sea views westwards but would have severely damaged the setting of Harlech Castle above. There was no convincing landscape or biodiversity strategy, and insufficient design detail.

Proposals for a franchised restaurant and hotel on the Triangle site in the Innovation Quarter on Barry Waterfront attempted to respond to the preserved Pump House nearby. The Panel felt that the architect had done his best with the site and the client brief and welcomed a commitment to a BREEAM excellent building. But they argued that the net result was a weak street frontage, and effectively a suburban building with no references to its dockland location. They felt a more continuous street presence should be created with a formal composition and elevational treatment, while the stair towers on the hotel should be reduced in deference to the Pump House chimney.

A second full review of St David's Hotel in Harlech was carried out in late 2008, nearly two years after the first scheme was reviewed. The Panel had commented twice on revised schemes in the interim. The scheme had increased in size to 130 bedrooms and 76 apartments, but it had also taken in the student residence tower, a familiar if rather anomalous local landmark (**Plate 24**). In places the scheme was lower than the existing hotel, but in others it was 10 metres higher. Given the prominence of the site below Harlech Castle, the impact of the proposed hotel extension on the views from the golf course and coast below, and the lack of any response to the local context, the Panel judged the scheme as unacceptable. The lack of detailed drawings, visual impact analysis, landscape strategy and biodiversity studies all added to their concerns about the impact of such a development on a World Heritage site.

### **Tourist facilities**

This is inevitably a rather diverse set of schemes, varying from particular attractions, through visitor centres and on to themed restaurants and the like. Quite the most controversial was the proposal for a 40 metre observation tower, topped with a bronze sculpture of a Welsh dragon, designed as a true representation of the emblem on the Welsh flag. This was to be located as a 'gateway' to Wales on the A5 near Chirk and was certainly one of the most potentially contentious schemes that the Panel had ever reviewed.

Located on a former colliery site already housing a McDonald's restaurant, the lower

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plateau would be used for car parking, and the upper level would be partially cleared of trees to accommodate a visitor centre encircling the base of the tower. The Panel were impressed with the passion and commitment shown by the client and his team to the project, its sustainability aspirations and its charitable aims. They were told that it would generate employment locally, that the landscaped park would be a good stop-over point for tourists using the A5 trunk road, and that the profits would go to charity. But they were deeply sceptical about the 'iconic' nature of the project, its appropriateness as a cultural statement in contemporary Wales, its wider impact on a designated landscape of quality, and many of the details of the design and artistic commission. They could not support the scheme.

Among the smaller schemes seen was the Dan Yr Ogof exhibition centre first reviewed in 2005. The Panel welcomed the revised brief in 2009 but could not support the scheme because of the lack of geotechnical investigations, investigation of non-earth sheltered alternatives on the same site, and the lack of knowledge and experience of the design team.

Bettws y Coed's replacement public conveniences were the subject of a design competition, and the winning scheme produced the desired design quality with a green roof and canopy flowing over two small buildings. The Panel thought this was a potential exemplar project, but suggested a metal rather than a green roof, and a timber rather than a steel frame. They suggested water efficiency should be the starting point for an environmental strategy.

A new visitor/resource centre with café and children's play area was required at Cyfartha Castle in Merthyr Tydfil, and the Panel supported the project, but suggested a number of refinements to the brief to clarify the proposed uses and users of the building. They felt the building should be firmly located in the landscape rather than 'floating' above the slope, while the siting of the proposed viewing stations in the grounds should minimize the need for tree felling and extensive pruning. The commitment to BREEAM Excellent should determine design details such as the extent of glazing. The Panel would have preferred to see these plans in the context of the design strategy for the park as a whole.

The commitment to BREEAM Excellent should determine design details such as the extent of glazing.

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**Plate 25:**

Visitor Centre Extension, Plas y Brenin. The new, eco-minimalist extension makes no attempt to compete with the original building which it is connected by a bridge. Its great assets are internal light and spectacular views.



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An extension to the existing circular Coed y Brenin Visitor Centre in Snowdonia posed significant design challenges. A building with a cranked orthogonal footprint, with a bridge link back to the existing building at first floor level, was selected (**Plate 25**), designed to be simple and elegant, sheltered to the north but opening out to the south to maximise views and daylight. Solid timber panels of low grade Welsh softwood were selected as the main cladding and the 'eco-minimalist' design will achieve BREEAM Excellent. The Panel were delighted with the scheme.

The new Lifeboat station at St David's for the Tamar Class lifeboats will be located in a small cove at St Justinian's, and a triangular plan had to be used because the new station could not be fitted to the cliff. A pronounced curve was developed for the barrel shaped copper roof, and the rake of the slipway expressed in the side of the building. The building was accessed by a stair tower from above. The Panel suggested minor modifications applauding the innovative use of green technologies, and recommended the addition of photovoltaics to seek a BREEAM Excellent rating.

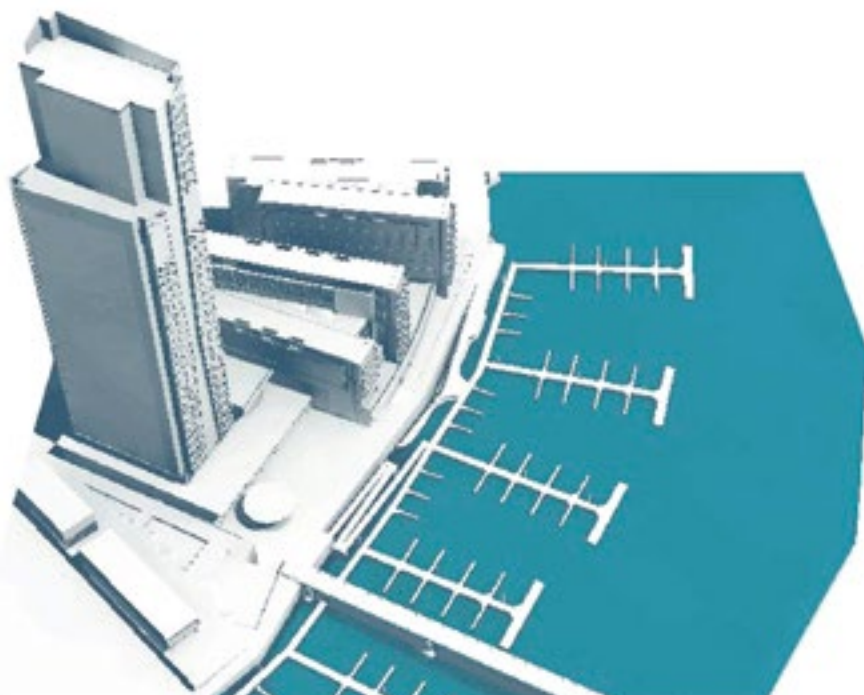
By contrast the Panel supported the location of the new Lifeboat station at the pier head in Mumbles but not its design. They considered a more simple and robust industrial typology should be developed, based on a symmetrical form with door and window openings, rationalized so that the glazed wall gave a dramatic view of the boat with minimum obstruction. The Panel welcomed the introduction of low and zero carbon technologies into the design.

Finally, mention should be made of a major holiday apartment and holiday lodge scheme to upgrade accommodation and the landscape setting at Pistyll in the LLŷn Peninsula AONB. Drawing on two extant permissions the proposals sought to deliver a contemporary scheme with an undulating grass roof for 30 holiday apartments,









**Bayscape Hotel and leisure complex, Cardiff Bay.** This axonometric illustrates the dominance of the 31 storey hotel tower, and the three, nine storey apartment blocks to the east, but it shows a generous pedestrian space along the waterfront, albeit one dominated by a large marina.

## BAYSCAPE HOTEL AND LEISURE COMPLEX

The Panel were not convinced that this was an appropriate location for such a tall tower, but they were supportive of the mixed use podium and promenade along the Ely River.

At this early stage the Panel contented themselves with warnings about the commercial viability of such a project in this rather marginal location, an insistence on high energy ratings, expressions of concern about the microclimate created at the foot of the tower, and warnings that the promise of high quality materials and finishes would need to be protected in view of the proposed design and build procurement process.

A detailed application was presented when the developers had secured an agreement with a hotel operator and a main contractor. The tower had increased slightly in height (to ensure its status as the tallest building in Cardiff) and by 10 metres in width, the latter making it far bulkier. The planners and the Panel were concerned that the slenderness of the tower be maintained and that it be elegantly modelled. More space had been created for retail and catering units on the ground floor, and the design of the plaza had improved the microclimate and accommodated the ramp for the new footbridge across the River Ely.

The developer had now committed to BREEAM Excellent for the hotel and to CSH 4 for the apartments, and proposed a Combined Heat and Power system to serve the development which might be extended to serve other adjacent sites. Green roofs were promised

for the residential blocks. Other improvements were the increased levels of mixed use, and active frontages with retail units that were intended to support the use of the marinas and the maintenance of boats. The parallel nine storey blocks linked by an atrium on the eastern edge of the site promised some new ideas in apartment design, but the provision of the larger units would be primarily targeted at boat owners.

The Panel were keen to see shadow and microclimatic studies, and landscape plans for the public realm, as well as accurate modelling of the impact of the tower on key views, but these were never presented. Nor did they ever see the 20 per cent affordable housing which was promised on an adjacent site north of Watkiss Way. Design Review can never ensure the delivery of the quality of details that are promised, and which are so important in a very large and conspicuous scheme.

An outline application for the comprehensive redevelopment of the Mumbles Headland and foreshore for residential, hotel and leisure uses was presented to the Panel.

All development was within the settlement boundary but also in the Gower AONB, and the development would cross-subsidise the renovation of the pier with its new lifeboat station. Several different versions of the development had been developed, and two public consultation events had helped reduce the scale and profile of the development, and protect the distinctive silhouette of the headland seen from the east.

The Panel felt that assessing an outline application was a major risk, and everything would depend on the conditions that the LPA placed on an approval. They had major objections to the scheme arguing that the development was too big for the site and would impact negatively on a number of key views. The headland

building was so significant the Panel felt it should be the subject of a design competition and its use should be made clear from the outset. The Panel felt the designs did not respond to the character analysis of Mumbles, and that this was a missed opportunity to enhance its local distinctiveness. The dead frontages at street level on the residential accommodation were also a major flaw. In addition, the sustainability aspirations of the scheme were modest and they did not conform to the objectives set out in the development framework.

The scheme was granted outline planning permission, with a full application for the headland building pending, but the Panel felt that a full planning application should have been required from the outset.

# MUMBLES HEADLAND

Mumbles Headland, Swansea. An artists' impression which raises more questions than it resolves, especially in the absence of detailed plans. The impact on the headland, which is within the Gower Area of Outstanding Natural Beauty, needed much more careful scrutiny.





**Plate 27:**

Magistrates Court, George Street, Newport. The Panel felt that this building turned its back on the main pedestrian approach from the town centre while its facades and car park offered nothing positive to the adjacent spaces.

## 2.10

### Public, civic and cultural

Six public buildings were reviewed by the Panel, three of these were cultural buildings of national significance, two were part of redevelopment of the St Fagans National History Museum, and the other a new concert hall and theatre for Wales' national conservatoire, the Royal Welsh College of Music and Drama (RWCMD).

#### —Review experience

The Glamorgan Record Office (see DRW 2005-7 p67) had been moved to a far less central and much cheaper site in Leckwith adjacent to the new Cardiff City football stadium. The Panel regretted this decision as it downgraded the importance of the collection, and made it less accessible to the public. The actual approach to the proposed building was inauspicious in the extreme down a narrow lane lined with security fences and industrial/retail sheds. The building design did not reflect any civic pride or quality and now built, it is surrounded by roads and vehicle parking on all sides. The Panel expressed their regret that the efforts of the client to secure a quality building remained completely unfulfilled.

Monmouthshire County Borough Council wanted new premises and selected a site on the Coleg Gwent campus in Usk. A two storey, 25,000 square metre building will be built on the site of four demolished blocks, leaving the landscape undisturbed. A contemporary approach to the design to complement existing buildings was being taken, and this was welcomed. The Panel thought only minor changes needed to be made to the scheme through simplification of the detailing, and checking that the proposed glazing did not lead to overheating.

Newport Magistrates Court, within the George Street development site was considered by the Panel to be fundamentally flawed in terms of its building form, location on the site, and its car parking strategy (**Plate 27**). The building entrance was considered to be in the wrong place on the prominent and legible south east corner

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of the site, when most users would approach the Court from the North West. The building appeared to turn its back on the city centre. A more linear form, identified as an early option, would have given the building more street presence and shielded the car park from view. Random fenestration and parapet openings in the façade needed to be justified, and the relocation of the parking from the ground floor of the building to an adjacent area of the site severely compromised the setting of the building. The Panel were uncertain whether the design and build approach would maintain adequate control over the detailing of the building, or whether a BREEAM Excellent rating could be achieved on such a deep plan building.

While these reviews were dispiriting, those of two other public projects were much more positive experiences. The new RWCMD (**Case Study 12**) auditoria and rehearsal spaces are educational buildings, and serve their functions well, being carefully grafted on to the existing college facilities. But this is also a very public, cultural facility with its theatre and concert hall, and entrance foyer also used for performance and well attended jazz evenings and functions.

Early involvement in the National Museum of Wales' Creu Hanes, St Fagans National History Museum redevelopment project (**Case Study 13**) provided an opportunity to develop a more engaged and prolonged involvement from briefing stages through to the design of the scheme itself. A special Panel was constituted to ensure a group of experts with the necessary experience of cultural, landscape, architectural and sustainability skills were available. The process aimed to provide essential client assistance as well as design team peer review for a nationally significant cultural project.

#### — Lessons learned

The most important lesson learned from these projects has been the utility of the process of establishing early and sustained engagement of a consistent pool of Panelists, able to build a relationship with both client and design teams. The idea and ambition for such an approach had been evolving at DCFW on major regeneration schemes, and the St Fagans reviews were a significant step forward.

The Commission is of the view that earlier and more sustained engagement with major projects of regional and national importance is the preferred model for future dialogue. Greater continuity is possible, programming of reviews can be closely fitted to the client and design team's progress, and the strengthening of the client's capabilities is a vital outcome. Mutual trust can be built up, and the review process can be more empathetic and focused on the key design issues as they evolve. Both RWCMD and the Creu Hanes: Making History at St Fagans projects had curatorial dimensions to them that were key concerns for design teams, and which required sophisticated approaches to sustainability, architecture and landscape design.





# RWCMD

The RWCMD occupies an important site on the west side of North Road in Cardiff, part embedded in the Grade I listed Bute Park, but having to respond to the busy traffic artery and the adjacent conservation area context of the neo classical buildings of Cathays Park.

Royal Welsh College of Music and Drama, Cardiff.

The original artist's drawing gave an accurate image of the proposed building. The cladding of the concert hall (right) in dark timber (which will weather to silver) helps to provide a more sympathetic response to the woodland park to the north.

The brief was to create a new 450 seat concert hall, a new courtyard theatre, and a series of rehearsal spaces while refurbishing the existing theatre on the site, and linking to the 1960s building to the south. A limited competition had led to the selection of a design team, and the design process had proceeded from the inside out into a linear block. To the north is the new concert hall, theatre and cafe separated by a glazed foyer that acts as an important social space for the college. The foyer is in effect a full height atrium that provides a dramatic entrance from North Road on one side, and a spectacular view through the trees to Bute Park on the other. A wide balcony is provided at ground level for summer use overlooking the Dock Feeder Canal, and actually within the park.

The street frontage is a full height curved Portland stone wall, with an extended, curved profile metal roof that sits two metres above

the top of the wall. This begins as a narrow point at the southern end over a new student entrance, and widens to cloak the concert hall to the north. The concert hall is clad in a timber cage that is banded by virtue of five lengths of timber vertically aligned, but slanted at slightly different angles. This element is particularly empathetic to the woodland edge to the park. The environmental strategy was centered on using the thermal mass of the building, and 'stack effect' natural ventilation, alongside active systems such as a ground source heat pump, to support the existing boilers and solar water heating to deliver a BREEAM Excellent building.

The Panel were impressed by the presentation and regarded the scheme as a potential exemplar from the outset. Their concern was to ensure the delivery of a quality building, and they questioned the procurement route that would be adopted. They advised the team to adopt a partnership

approach where the contractor could be involved at an early stage. They were concerned that the materiality achieved was of a civic and not a commercial quality, and they thought that the curved timber façade would pose particular challenges, as would the possibility of differential weathering given the two metre gap between roof and wall. They also expressed the view that the public access to the park should not be overshadowed by the concert hall and kept as open and welcoming as possible.

Finally the Panel expressed concern at the tightness of the development programme in terms of delivery of a quality building. Fortunately great care was taken through client commitment, design and procurement excellence, to deliver a first class conservatoire and musical venue, as well as an exceptional new city interior and a striking new city landmark that can be enjoyed by everyone.



St Fagans National History Museum. Plan showing four locations under consideration for the new building and their correlation with heritage layers.



# CREU HANES: MAKING HISTORY AT ST FAGANS NATIONAL HISTORY MUSEUM

The redevelopment of St Fagans National History Museum marks an important departure from conventional reviews for the Design Commission because it provides for a more engaged and sustained review process with a bespoke Panel working with both client and design team.

The Commission conducted several early informal client meetings to achieve mutual trust and to establish a programme for engagement designed to allow sustained involvement with the project until RIBA Stage D and the submission of planning applications. The Commission was able to assist third party communication and strategically engage with Cadw and the Local Planning Authority.

At an early meeting it was agreed to structure the discussion around four key design issues of landscape, sustainability, the new

building and the refurbishment of the existing, recently Grade II listed, main building. An overview was maintained on implications for planning, procurement and delivery.

St Fagans has a unique collection as an open air museum in a parkland setting with historic buildings and farmhouses, agricultural machinery, textiles, ceramics, visual art and literature, which help communicate the stories of Wales to almost a million visitors annually. St Fagans is immensely popular, and the ambition of this project was to build

on that popularity whilst achieving the necessary transformation for future success.

Two plans were being developed for the landscape, the first as part of the Heritage Lottery Fund bid for the project, and the second a guide for landscape development of the parkland over the next decade. Great care was taken throughout to avoid separating the curatorial vision for the collections from the design and buildings project.

A spine route aligned with the new building was intended to



draw visitors to the southern part of the site. New buildings and outdoor exhibits would be located in glades in the woodland, leaving the nodes and rides clear. In terms of sustainability the targets were BREEAM Excellent for the new building, and Very Good for the existing building where modifications would be restricted by its listing, and elements of its condition were at that time unknown. A sustainable drainage system would also be pursued.

The Panel had reservations about the siting of the new building but understood the restrictions imposed by the Grade I listed parkland. However, its relocation further north improved its relationship with the village centre and the main approaches to the same. The single storey building would integrate indoor and outdoor spaces and functions, with a loggia over the entrance. As regards the existing building it was confirmed that Cadw would allow the enclosure of the former courtyard, but wanted the West Concourse left unaltered. The Panel had significant concerns over the adequacy of the budget to meet all the project requirements, and did not feel that the access to the galleries in the existing building had been optimized.

As the scheme progressed the Panel felt that the spine corridor on the landscape plan required more detailed development to respond better to the existing topography and vegetation. The locations for more car

and bus parking had been identified, but there was no budget for these elements, and the Panel felt the whole arrival experience for visitors needed to be addressed, the proposed tree-lined route to the main entrance being inadequate. As regards the existing building the early proposals for an elevated courtyard ramp to accommodate circulation were revised in favour of a more flexible 'milling space', and four lifts were proposed to replace the internal ramps, and to increase accessibility to the galleries and parkland.

For the new building the idea of a free-form shelter had been developed to simplify the internal layout and make the functions more legible. The Panel welcomed the plans to use an exposed timber structure and a green roof. The building's immediate relationship with the landscape needed development, as did the new landscaping for the existing building. There were concerns that the floating roof over the transparent shell was compromised by the internal partitions. There was some apprehension about the internal exhibition design and insufficient information was available regarding the curatorial ambition. Finally there was a concern that the site-wide sustainability strategy was lagging behind both the building and landscape designs.

The budgetary concerns presented a major challenge for the landscape plan and its strategic vision, and the Panel felt interpretation of

its historic importance needed to be strengthened. More detailed landscape analysis was required to choose between the two options presented, and the BREEAM assessment lacked detail. The architecture of the new building's entrance needed to be more legible and better related to the external amphitheatre space, and its construction method defined. The Panel recommended a more defined separation between new and old, and a reconsideration of the juxtaposition of the columns supporting the roof was agreed. No site-wide sustainability strategy was presented in detail, but both the buildings were heading for a BREEAM excellent rating.

The engagement with the Commission lasted a year and involved five formal reviews, two additional smaller scale meetings and intermittent client support up to RIBA Stage D and up to the submission of planning applications in March 2012, along with the extensive HLF bid documents. The project has been granted planning consent and its successful bid secured the largest HLF award in Wales to date (£11.5m) bringing the project value to almost £26m.

The Panel was able to support the client in creating the conditions necessary for the successful integration of two architectural teams, landscape and exhibition designers, and curatorial specialists.

For the new building the idea of a free-form shelter had been developed to simplify the internal layout and make the functions more legible. The Panel welcomed the plans to use an exposed timber structure and a green roof.

In 2005-7 the review of Primary Care Centres constituted about 10 per cent of all reviews conducted. This resulted from the Commission's input into the Welsh Health Estates programme for better quality buildings, and the unprecedented scale of public investment in the health estate in Wales. The Welsh Government's ambition for quality sustainable design was demonstrated in its *Designed for Life Policy and Strategy*, and by the issue of Circular 61, which required all Primary Care Centres receiving Welsh government funding to undergo successful Design Review before formal approval of business cases would be granted.

Whilst the Commission welcomed the level of commitment it was uneasy about the time scales for review, and uncomfortable with the expectation for 'approval' through Review. The length of time some Health Boards were taking to devise their estates strategies and identify sites was considerable, and some projects had already been in or close to the planning system for several years. In late 2008, following media coverage of a project which had been many years in gestation, the then Health Department withdrew the requirement for Design Review under the Circular 61.

Since then far fewer schemes have been brought to the Commission and the Government have relied solely on the NHS/WHs Environmental Assessments (NEAT) to assess sustainability requiring an Excellent rating and the NHS recognised AEDET process used to assess design.

Obviously this was a major disappointment for the Commission and the Design Review Panel who felt that they had an important role to play in ensuring that these facilities were optimally located at the heart of their communities, were highly accessible to their often less-mobile users, were well designed to enhance their communities, and met the high Welsh Government requirements for sustainability.

#### —Review experience

The Panel reviewed eight Primary Care Centres in late 2007 and through 2008 with only Pencoed in Bridgend not requiring major revisions (Case Study 16). Major revisions were sought on three other schemes. At Amlwch, Anglesey the site was well-chosen close to the village centre, but the Panel argued that the building should be set forward in order to have more civic presence. There were a number of issues with the design itself because the building had adopted two architectural styles, over-complicating the massing and elevations, and creating problems with the junction of the public and private parts of the building. There were problems too with the lack of relationship between the internal plan and the external fenestration of the building. The sustainability aspirations were commended and a more extensive green roof was recommended.

Benllech Primary Care Centre, also on Anglesey, had the advantage of an accessible site in the centre of the village, in this case adjacent to the public library. However, the plan to provide a common entrance to both failed to provide enough space and enough sense of arrival for the Centre, and the plan of the building did not produce a very efficient layout. The Panel advocated a simpler massing and form, and a more efficient circulation system with better external access.

In Dinas Powys the Health Board had evaluated 35 alternative sites and had chosen the most central site. Unfortunately this was the only green site in the village. The Panel commended the sustainability strategy and high NEAT rating and were impressed with the building layout, but they sought calmer, simpler and more coherent elevations. There were concerns too about the high parking standards

**Plate 28:**

**Primary Care Centre, Abersychan.**

This Primary Care Centre was placed on a centrally located but very constricted site. In this sense it could constitute an achievement, but the Panel felt a more contextual response would improve the scheme.



(three spaces per consulting room) and its impact on the site and village as a whole.

At Abersychan, Torfaen an island site (where the existing surgery is located), surrounded by roads had been selected, but this was complicated by a culvert splitting the site, and a high retaining wall on three sides rising to 5.5 metres. The Panel recognised the major design challenge posed by the site, but felt that the scheme needed to achieve a better contextual response to the locality with a simpler form and elevations, and to achieve external access to the building at the first floor level where most of the consulting rooms would be (**Plate 28**).

At Gelligaer, Caerphilly, a redundant school site on a prominent corner in the village had been chosen for a new primary care centre. It was opposite a pharmacy, adjacent to a new public space and only 500 metres from the existing surgery, so it seemed an ideal site. However, the Panel felt that the site was somewhat too small for the project, and that the building would have to be reconfigured and built to three storeys to fit. They felt that the building ought to be relocated to the western edge of the site and turn the corner to the north west, thereby creating a more positive relationship with the public realm, and relocating the vehicular entrance. The roof form should be revised to optimise the performance of solar Panels as part of an improved energy strategy.

Two other PCCs were considered unacceptable. Both Trecenydd near Nantgarw (Caerphilly) and Trellech, Monmouthshire were located on sites considered to be unsuitable. Trecenydd was considered the best of 12 sites assessed, but the Panel found it to be a barren and completely car-dominated site on a busy roundabout. The building plan did not respond to the site analysis in sustainability or in townscape terms, and the resort to large signage to create a legible building was regarded as defeatist. While the internal arrangement was good, the Panel felt that the extensive Computer Aided Design imagery was delivering a building that was unconvincing in architectural and sustainability terms.

At Trellech the site chosen from four alternatives was on the very edge of a village, and located at the end of a quiet residential cul-de-sac partially outside the



**Plate 29:**

Hospital, Mynydd Mawr, Llanelli. The Panel supported the site planning but wanted more landscaping, more study of energy-efficient solutions, a better integration of the neo-vernacular housing and more modern designs of the Care Home in the project.



settlement boundary. The Panel wanted a more central site to be selected close to the Community Centre.

Trellech was the last primary care centre that the Panel saw in this period. Shortly after the review it was decided by the Minister of Health that it was no longer a requirement that DCFW be consulted on each scheme. In fact the Panel's approval was never an actual requirement, but its reviews were always able to point out fundamental locational, sustainability and design flaws which needed to be addressed if these key pieces of public infrastructure were to make their full contribution to more sustainable settlements, and meet the goals of the Wales Spatial Plan.

Review experience with larger hospitals and care homes was generally more positive. A second review of a new Mental Health Unit, on the south west corner of the Grade II listed Whitchurch Hospital site in North Cardiff, recommended only minor revisions, mainly relating to reductions in the extent and impermeability of the parking surfaces.

The Panel advocated red brick finishes responding to the Victorian buildings that define the context, but the designers presented a distinctive palette that sought to achieve a lightness and delicacy to the new building. While the plan had lost some of its strong radial layout and clarity of organisation the Panel found that the 'basic design approach to be clear, strong and well considered and appreciated the sensitive landscape treatment'. They argued for a far stronger package of sustainability measures including a community heating system, sustainable drainage and fuller restoration of the original parkland setting.

At Llanfrehfa Grange in Torfaen a new Critical Care Unit was proposed, and the Panel were pleased to receive a 'clear and convincing' presentation at an early stage. Their comments included taking the roof plant off the top of the building, and stacking it elsewhere to reduce the building heights and allow light into the corridors, and enhancing the idea of an 'internal central street', with a better landscape plan to create a 'convivial public space'. BREEAM Excellent was suggested as an achievable sustainability target.

Major changes were suggested to the Mynydd Mawr Care Home, Tumble, Llanelli adjacent to the existing hospital. A 94 bed home with 15 bungalows for the elderly and 8 homes for key workers was proposed (**Plate 29**). The Panel were complimentary regarding the basic concept and the site planning, but wanted further modelling to





**Plate 30:**

Bryn Seoint,  
Caernarfon.

A new Alzheimer's Care Unit was proposed for this former hospital site. Landscape, pedestrian access and excessive car parking concerns could be obviated but the question was whether the internal layout, and rooms facing the internal courtyards, would provide a therapeutic environment.

optimise microclimate and solar access. They supported the serious commitment to high sustainability standards, and wanted to explore how the neo-vernacular housing designs would be integrated with the more modern forms of the Care Home, and how a landscape architect could improve its amenity. Both the above mentioned schemes indicate that a 'major changes' verdict can still indicate a scheme developing in the right direction.

The first phase of the re-planning of Morriston Hospital, Swansea was not reviewed until a planning application had been lodged. The scheme created new access routes and rationalized car parking, creating a new 'face' for the hospital, but the Panel could not support the application. They thought that the main entrance was not sufficiently legible, that the North West corner of the new building was not well resolved, and that a new outdoor space was inappropriate in this location. A more coherent architectural approach was required to the building, while a landscape architect's input was required to improve the re-design of the spaces and access roads.

Bryn Seoint Care Home, Caernarfon was the first scheme the Panel had seen for a care home for people suffering from Alzheimer's and other forms of dementia related illness. It was located on the site of a now demolished hospital, so there were no major planning issues. However, the Panel wanted to ensure the most was made of the very attractive grounds and walled garden, and provision made for a safe footpath access, and both were achieved.

The Panel were concerned that the square layout of the three storey building with four internal courtyards meant that many rooms would be unable to take advantage of the fine landscape setting, and that the courtyards themselves would offer little or no amenity (**Plate 30**) They felt that the layout did not follow current best practice guidance on dementia care, and offered very little in terms of a therapeutic environment.



**Plate 31:**

Elderly Care Home, Llan Ffestiniog, Gwynedd. Insertion of this unit into the hamlet posed major design challenges to protect adjacent residential amenity. The solution, approved at appeal, was to reduce its size and accommodate additional units in a roadside annex.



**Plate 32:**

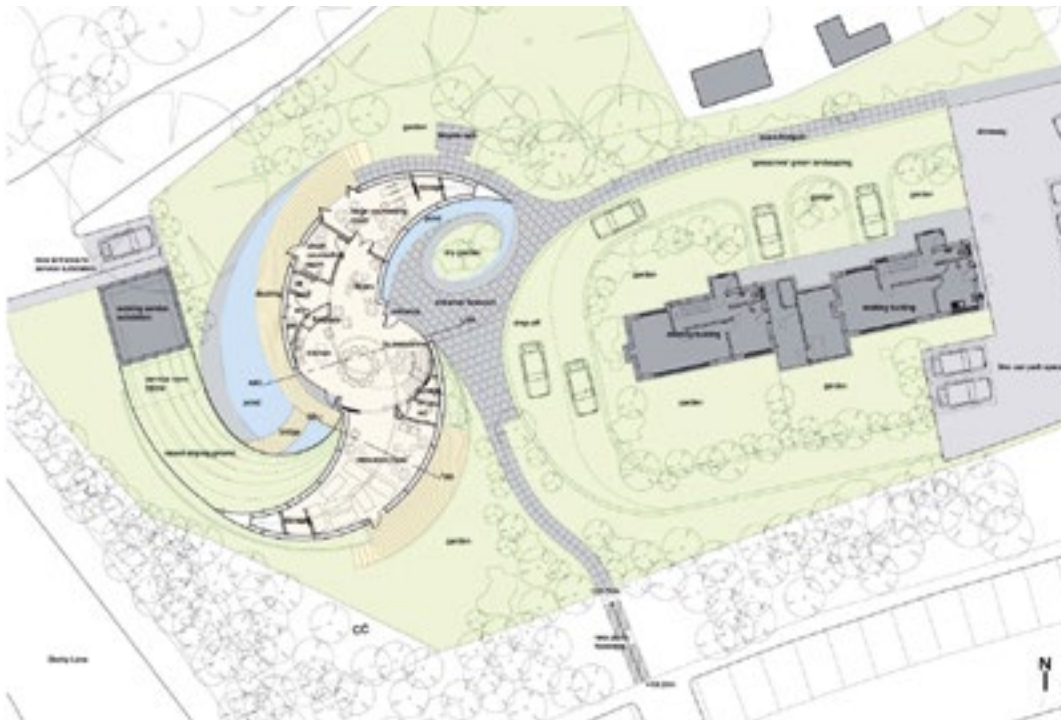
Care Home, Old Theatre Royal site, Barry. This bold design echoed the old theatre by adopting a 1950s 'Odeon style' façade on the corner, internally illuminated by an atrium. Half the flats were north facing albeit overlooking a park, while the overshadowing of the residential complex to the east was also an issue.

Unfortunately the client was not present at the review so an informed debate about the internal design was limited. Subsequently the planning officer noted that *'it is likely that the Planning Committee will place more emphasis on the need for such care rather than the design of the development'*. For the Panel the concern was that the quality of care might be impaired by the quality of the interior environment.

The Llan Ffestiniog Extra Care Home was a major project, and a vital local resource for the hamlet on the edge of the Snowdonia National Park. It came to the Panel twice as they tried to resolve the problems of a very tight backland/edge of village envelope site, and relationships with residential properties and a listed chapel and hall to the north east (**Plate 31**).

The client explored the idea of purchasing more agricultural land to resolve these issues, but would have been forced to acquire much more land than was necessary. They chose to further reduce the size of the scheme to 32 units. This allowed a wider setback from the lane to the rear of the residences, and improved the setting of the listed building, obviating the objections of local residents, and leaving only some minor resolutions of building detail to be achieved. The scheme promised a BREEAM Excellent facility. The scheme was refused planning permission in the wake of a local campaign against the scheme, but a subsequent appeal saw it approved in 2012.

The Theatre Royal site in Barry was the location of an innovative and imaginative design for a 42 unit Extra Care Home. The intention was to build a new landmark five storey building on the site, with a central atrium allowing access to all units, and creating a sociable space complemented by a rooftop restaurant for residents (**Plate 32**).



**Plate 33:** Maggie's Centre, Swansea. The panel were delighted with the siting, landscaping, external and interior design of this cancer-care project.

The massing and glazing of the western end of the building made reference to the former theatre/cinema still on the site, and swept around the steep corner creating retail/catering units on the ground floor on Holton Rd. The new building would provide a much improved frontage to the park to the north and improve its surveillance. No car parking would be provided on site, and a BREEAM Excellent rating was the target.

It was a refreshingly bold solution on what had long been a contentious site, and the Panel were broadly supportive. However, they recommended major changes to improve the single aspect, north-facing flats, to reduce the prospective solar gain on the south side, and to reduce the impact of the project on the residential development to the west. They argued for a calming of the architectural treatment, and a coherent approach to all four elevations. Good quality bricks and crisp detailing would help create a positive landmark on this key corner.

Maggie's South West Wales Centre, a specialist cancer facility, was given a site in the North West corner of Singleton Hospital close to existing facilities but with a fine view of Mumbles Headland. An early design concept by the late Kisho Kurokawa was being implemented by executive architects, and the Panel were excited by the prospect and pleased to have an early, confidential opportunity to see the scheme (**Plate 33**).

They supported the design concept of a circular building with a curved wing sweeping down towards the ground, and thought it responded well to the site. The scheme achieved unprecedented public support, and has been realised to a very high standard, attracting international attention (See [dcfw.org/case-studies](http://dcfw.org/case-studies)). The interiors are also of exceptional quality creating a very sociable and therapeutic environment.

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### —Lessons learned

The Primary Care Centres were generally an improvement of those seen prior to September 2007, and the list of design failings (DRW 2005-7: 87-88) was much shorter in the eight schemes seen. Site selection could still be flawed (Nantgarw and Trellech), and site constraints problematic (Abersychan and Gelligaer). The simplification of the design and resolution of internal and external designs was still an issue on some schemes (Amlwch and Benllech), as was a lack of civic presence (Amlwch, Trellech and Nantgawr). But in every case, except the latter two, the Panel felt they could make simple improvements.

Looking at primary care centres in the round there are three key issues which negatively affect projects. There is a fundamental misunderstanding of third party developer processes and funding issues; there is a consequent exploitation of health professionals; and there is an absence of a unified approach to sustainability, and to the securing the benefits for the public purse, patients and wider community use.

With regard to larger hospitals there were exemplary schemes like Maggie's Centre to demonstrate the value of architectural patronage of the highest level and the development of an effectively communicated shared vision. Other imaginative schemes came through at Mynydd Mawr and Whitchurch.

In Barry and Llan Ffestiniog the buildings impinged on adjacent residential amenities and could not be fitted satisfactorily onto their selected sites despite otherwise competent design. Internal layout and quality of environment, especially aspect and daylighting, were major concerns at Bryn Seoint, but these issues were not taken up by the Local Planning Authority.

The Primary Care Centres were generally an improvement of those seen prior to September 2007, and the list of design failings was much shorter in the eight schemes seen.





# PENCOED PRIMARY CARE CENTRE, BRIDGEND

## Pencoed Primary Care Centre, Bridgend.

This was regarded as one of the best located and landscaped Primary Care Centres, and the Panel were delighted that their advice was heeded on materials, landscape and sustainability strategy.

The Panel first saw this scheme in September 2006 and then again at the end of 2007. It was located close to the town centre on the newly built Hendre Relief Road, and would probably be shared with Town Council Offices in the future.

The Panel's previous recommendations had driven a re-design of the scheme, and they were pleased to note the improvements in site planning, access and landscaping with the reinstatement of the wetland on the site, and the partial de-culverting of the stream that crosses it. The existing footpath had been retained to run around the curved front wall of the building, and the materials chosen were local stone and render. The Local Planning Authority were favourably disposed towards the scheme, especially its strong civic presence, but it was still at the pre-application stage.

The Panel welcomed the use of a solar thermal system and sustainable drainage, but strongly urged the installation of a biomass boiler to reduce carbon emissions. They sought improvements to internal daylighting in the corridors, and refinements to

the design of the atrium reception space. They thought there was still work to be done to simplify the two wings of the building to make them more compatible, and to resolve the relationships between internal plan and external form. They also thought that the elevational treatment should be re-evaluated in terms of costs (particularly the extensive stone walling) and quality and that landscape architects should be brought on board to develop the landscape, water features, access routes and public space. But their recommendations were essentially minor refinements to what the Panel considered to be a good scheme. Regrettably the built scheme has suffered from vandalism because of the footpath access across the rear of the building and the lack of surveillance when the centre is closed.



**Plate 34:**

**Ebbw Vale Environmental Resource Centre.**  
The architects used a range of sustainability features to achieve this 'highly commended' scheme including local Spruce and an innovative construction system.



## 2.12

### Education: Primary, Secondary, Tertiary and Universities

Education buildings can be divided into four categories: primary schools, secondary schools, tertiary colleges and university buildings. A major positive factor when reviewing these schemes is that they all have to reach the BREEAM Excellent mark because they are Welsh Government funded, and thus they have all given serious consideration to all aspects of sustainability.

#### —Review experience

One educational building does not fit the above mentioned categories. The Ebbw Vale Environmental Resource Centre was conceived as a small education building on The Works site. It was located in an area remarkable for its biodiversity and part-managed by the Gwent Wildlife Trust. The architects had adapted a construction system developed for affordable rural housing, and proposed to use local spruce as the main construction material (**Plate 34**).

The Panel commended the high standards for carbon reduction and energy efficiency, and sought the same for water use and waste disposal. They welcomed the use of local renewable materials, and thought that the number of different window types could be reduced, and the north and south elevations varied more to respond to the solar conditions. They recommended an artist be commissioned to help with the development of the cladding system. A major concern was the proposed siting of a new road and the way this would impact negatively on this potentially exemplary building. Subsequently the project was 'Highly Commended' at the national Eisteddfod in 2011.

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### Primary Schools

Both the primary schools the Panel reviewed were potential exemplar projects. Ysgol Bro Dysynni in Gwynedd is discussed as a case study (**Case Study 14**). Cwm Ifor in Caerphilly was a pilot project for the Wales 21st Century Schools programme, and an architectural team was working in partnership with the Local Authority's in-house team to develop designs up to RIBA Stage C. Extensive consultations took place with the whole school and the wider community, and an educationalist was engaged to challenge a conventional pedagogical approach to design.

The Panel questioned the location of the building on the site, its linear orientation with long north-south facades, and its symmetrical and deep plan. In each case the rationale given was clear and credible, and the Panel were reassured by the design team's experience. The Panel questioned why the building did not respond to longer views to the south west and south east, and it was explained that the pedagogical vision of skills-based learning placed a premium on interaction with the immediate landscape around the school. The Panel were very pleased to see the landscape and the stream used as an educational resource, and the design team were also commended on the intelligent sustainability strategy which would achieve BREEAM Excellence.

The Blaenavon Community Campus was an interesting hybrid scheme bringing together a nursery and primary school, community leisure facilities and other services with a Primary Care centre. Five possible sites had been explored and the preference was for the site of the now demolished Blaenavon Recreation Centre. An outline planning application was proposed, but the Panel felt that it needed to be detailed and include energy, movement and landscape strategies.

The Panel emphasised that the links with the town centre would need to be improved and the internal street calmed as a sociable hub for the project. Building form and layout also needed to be re-thought.

The Panel questioned why the building did not respond to longer views to the south west and south east, and it was explained that the pedagogical vision of skills-based learning placed a premium on interaction with the immediate landscape around the school.



# YSGOL BRO DYSYNNI, GWYNEDD

## Ysgol Bro Dysynni, Llanegryn.

This primary school on the edge of a village (top) was carefully sited and landscaped and set low in the landscape to protect views to the mountains. The panel supported a simple slate roof, a timber frame and a less steep green roof and all these suggestions were taken on board.

This is a new school replacing four existing schools, and located on a greenfield site on the edge of Llanegryn in the Dysynni valley, south of Towyn, in Gwynedd.

Twelve sites had been considered and this was considered the only viable one. The impact of the new school on views from the A493 across to the south western flanks of Cader Idris was a particular concern. Extensive consultation had taken place on the design, despite the opposition to related school closures, and the school hall and ancillary spaces were intended to provide an important community resource. The Panel agreed with the decision to site the school as close to the village as possible, and did not

think the school buildings would have a significant impact on the landscape, especially given the proposed native species landscaping, and the retention of the hedgerow on the access road. External lighting would need to be kept low level to ensure it did not intrude more than necessary at night.

The Panel supported the design approach, the school layout and the plans for the grounds. They offered critical comments on a number of important details arguing that the main hall should not be reduced in

height, but rather its shape simplified and clad in slate; that the green roof should be less steep; that a timber frame for the building could be locally sourced (and would be better than a steel one); and that the posts supporting the external canopy would be better executed in timber to be more child friendly. They were delighted to see these recommendations acted upon after the review.

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## Secondary Schools

Of the eight secondary schools reviewed, five were unsupported/unsatisfactory, two were considered to require major changes and two minor changes. Cowbridge School is selected as the Case Study (**CS16**) because it was the subject of a follow-up study to assess the implementation of Design Review recommendations and these offer extra insight into the review process.

Ysgol Gogarth, a Special Educational Needs School in Llandudno, was to replace a large part of the existing school on the site. The Panel considered that a significant amount of necessary information had not been presented to them, and that a clear educational and architectural vision had not been developed. The architectural approach was weak and the built form too complicated, the design did not appear to have been informed by a context analysis, and there was no landscape or sustainability strategy.

Subsequently the Design Research Unit at the Welsh School of Architecture became involved in the project and ran six design workshops to develop the design. By the second review this was seeking to exploit the qualities of the site and to use 'seaside moderne' architecture to create a distinctive form. The Panel urged a Passivhaus approach and argued that the built form and footprint should be kept as simple as possible. Good progress was made with developing the design, but there was concern that the planning application was premature, and that the procurement method would not deliver the required design quality.

Hartridge School, Newport was also adjudged to be unsatisfactory because it needed to be planned alongside an adjacent residential scheme, and the indications were that this was not happening. The Panel questioned the connectivity between the school and its community, the access road alignment, the curved forms of the buildings and the absence of a landscape strategy.

St Cyres School, Penarth had the same design team as Cowbridge School, but here they were required to provide a replacement for three different schools. A very early review of this scheme focused on issues of site capacity, site analysis, landscape strategy and the approach to sustainability with the extent and impact of car parking provoking concern.

At St Teilo's School, Llanerdyn, Cardiff there were similar concerns that the design was squeezing too much floorspace onto a restricted area in the centre of the site, in order to avoid any objections from surrounding residents. Three different design options had been explored, and a linear 'internal street' solution had been adopted, but a very tight timetable was hindering design development. The Panel felt that the length and narrowness of the 'street' would prevent it from operating as a social space and that it might well overheat. They sought a strong landscape strategy to improve the building's relationship to its setting.

At Ysgol Dyfryn, Llandeilo the Panel were very concerned about the location of the school and how 'safer routes' and access would be achieved. An exhaustive search had yielded 16 possible sites but the one selected was some 900 metres south west of the town in the Tywi Valley Special Landscape Area. It seemed that any pupil who might want to walk or cycle to school would be at risk on the connecting A483 primary route. The idea of a traditional farmstead approach to the design was questioned given the scale of the buildings required, and the Panel sought significant refinement of their proposed form and layout. Also required was a landscape strategy that could ameliorate the impact of the school, and that of the car parking, on this designated landscape. No view analyses had been presented.

There were two school designs where only minor revisions were proposed to their





**Plate 35:** Archbishop McGrath Catholic School. This major award-winning project handled the sloping site well though the Panel felt that it could respond better to the context. There were concerns that the internal circulation system might prove congested but it has proved to be very flexible and sociable.

design. One was Archbishop McGrath School, Bridgend which was replacing a village school in Tondy. The sloping site posed significant design challenges and opportunities. The Panel thought the scale of the building was right, but the form, massing and roofscape needed to respond better to the context (**Plate 35**).

There were some concerns about pinch points in the internal circulation and the central staircase, but the robust and durable external materials were welcomed. The architects were the recipients of the Eisteddfod Gold Medal for Architecture in 2012 for this building, and a subsequent visit revealed the quality and functionality of the internal layout and circulation, and the successful integration of a sports hall and external recreation facilities that are available for community use out of school hours.

The second example was Eastern High School, Llanrumney, Cardiff which would replace two schools, and house a youth and community services hub. Three options had been tested all with a north-south orientation. The Panel preferred the pavilion option as likely to ensure a better relationship with the context and the public realm, and between the two buildings. The Panel considered the environmental strategy and the design strategy to be well integrated, but they wanted to see a landscape architect brought in immediately to coordinate the spaces. Again there were concerns that the design process was being rushed, and that this would impact negatively on the overall design quality.



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The key problems with the secondary schools programme, as evidenced by the reviews, appeared to be an often flawed site selection process and a rushed design programme.

#### —Lessons learned

The key problems with the secondary schools programme, as evidenced by the reviews, appeared to be an often flawed site selection process and a rushed design programme. The problems with site selection need further investigation because while it is reported as rigorous, new schools are proposed that are relatively remote (Ysgol Dyffryn), or too cramped by virtue of concerns of adjacent residential amenity (St Cyres and St Teilo's).

Landscape strategies were largely absent and were certainly not scheme drivers as they should have been, and the Panel sensed that there were inadequate funds available to retain the necessary skills, or to fund improvements. The high percentage of unsatisfactory proposals speaks for itself, and the contrast with the two primary schools reviewed could not be greater.

The Commission engaged an independent professional to examine several schemes, post-review including Cowbridge School (**Case Study 16**). The assessment highlighted an interesting point that may or may not have wider applicability. It was noted that the built scheme would appear to reflect a contractor-led team, more committed to developing a replicable template for use in this and following schemes, than one focused on developing a bespoke, site and client-specific response. This limited the taking of cues from the best of contemporary examples, and maximising the potential of the site for the lasting benefit of all users, noting that 'in this regard it is an opportunity lost.'

# COWBRIDGE SCHOOL

At Cowbridge School, where a 60 per cent new build and 40 per cent refurbishment was planned, the Panel were concerned that the design strategy did not reflect the site analysis, was inadequately explained, and would be difficult for the client to understand.

They were concerned that it would result in an excessively compact and inflexible set of spaces that were difficult for Panel and client to understand, and which would fail to respond to the potential of the site and its excellent views. They were confused by the plans for the layout of the learning clusters and felt these would not be adaptable.

Similarly they were disappointed with the pedestrian connections into and across the site, and their lack of relationship to the landscape layout. There were concerns that the new buildings were too close to each other, and that they needed to be better spaced to allow them to breathe and to create better spaces and aspects. There were concerns that the cut and

fill approach to the site had created a less than ideal relationship with the surrounding landscape.

The scheme was subsequently visited by an independent assessor to appraise the impact of the Design Review and the quality of the completed scheme, part of the Commission's determination to learn the lessons of Design Review. His report noted that little response had been made to the main concerns in the Design Review Report, and that the excessive compactness that the Panel had pointed out had been exacerbated by a reduction in the atria spaces and corridor spaces that were too narrow.

The circulation spaces were inward looking and disorienting instead of taking advantage of

extensive countryside views. Pedestrian connections to the site had not been improved, and the western spaces where the students were intended to congregate at break times were characterless and under-used. The lack of connection and weather protection between the blocks was a concern, and value engineering had been applied to the project to create funds for furniture at the expense of the quality of building fabric. The community use of the school facilities has proved very successful, and there are high levels of satisfaction with the new facilities, though a lack of storage had necessitated the purchase of multiple sea containers to house sports equipment and these add to the utilitarian character of the spaces adjacent to the playing fields.

Cowbridge School, Vale of Glamorgan. This enlarged school on the edge of the town and north of the A48 was arguably excessively compact in its layout, and this restricted views and the potential of external spaces. The circulation spaces were constricted, disorienting and inward looking, but post-occupancy studies report high levels of satisfaction with the new facilities



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### Tertiary Colleges

There were 11 Learning Centres reviewed and three of the designs were unsupported, four required major changes and there was one potential exemplar in Ebbw Vale.

Coleg Morgannwg proposed a new building at Nantgarw as part of its rationalisation. The Panel were not enamoured with the site chosen which they considered to be barren and dominated by roads. The design developed the idea of an internal curved street linking two lines of teaching and administrative accommodation. The Panel were prepared to support the scheme if the access road was repositioned, the car parking impact reduced, the external spaces improved, and a landscape strategy developed to improve the quality of the public realm, the pedestrian routes and the boundaries of the scheme.

At the Cambrian Centre at Coleg Harlech a leisure/education complex was proposed with associated conference, business, and teaching and student facilities. The Panel were broadly supportive, but they wanted the lower blocks and the link block improved to relate better to the listed buildings. They thought the layout of the accommodation block was inefficient, and that the green roof should be redesigned to accommodate solar panels.

The Ebbw Vale Learning Centre (now Learning Zone) was a key component of the Ebbw Vale masterplan for The Works regeneration project and it provided the key physical link between the redevelopment and the existing town. Located on the north east of the site it would form the southern boundary of a new pedestrian route across the valley linking the town and the heritage asset of the office headquarters of the former steel works. The design concept was of a 'welcoming and non-threatening environment for students' and the main entrance was a large, four storey, north facing atrium opening on to a new public square on the new cross route. The college consisted of a long north-south block of accommodation stepping down from four to two storeys, and forming the west side of a new street, while short wings of accommodation to the west created three roof terraces and courtyards enclosed by the re-landscaped valley side.

The Panel were pleased with the site-wide energy strategy and district heating system, and thought that there was every prospect that the atrium would interact well with the proposed square. They had three major concerns with the design. First, the internal circulation system was rather tortuous, illegible and needed simplifying, perhaps with a physical link at the end of the western blocks. Second, they felt that the eastern elevations were rather monolithic and unresponsive to the pedestrian, and to the diversity of internal uses. Third, they would have liked to have had time to explore the landscaping strategy and the character and details of the semi-public courtyards on the west side of the building. But overall they approved of the design, especially its internal atria, the external roof terraces, and the way the building would animate the public realm in this key location.

The Panel recently visited this key regeneration project, met the architect to discuss the revisions made to the scheme post review, and saw the construction nearing completion. This was a very valuable learning exercise, and something the Panel aims to do more frequently.

The Barry Learning Centre for 14-19 year olds in hairdressing, beauty and construction was located in the new Innovation Quarter adjacent to Barry Waterfront. The Panel felt the proposal was an unacceptable response to the site and a further deviation from the original masterplan. The site layout, building footprint and internal plan were all seriously flawed, the connectivity with its immediate surroundings and with the rest of town were problematic, and there was no landscape strategy. They felt a new masterplan should be brought forward for the Triangle site, and a new road

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## The Swansea University Science Campus was one of the most interesting and ambitious projects seen by the Panel.

built around the north eastern perimeter to improve connections with the site and the waterfront project.

### Universities

The Universities provide examples of greatly contrasting design and development ambitions from the 'town and gown' linking project of Bangor, to the seaside urban village/science campus of Swansea, and the more prosaic expansion of Cardiff University into the Maindy railway sidings. The Pontio scheme in Bangor (**Case Study 17**) displays huge civic design ambition and commitment to providing an asset for the townspeople and students to jointly use and enjoy. The Swansea University Science Campus (Case Study 18) was one of the most interesting and ambitious projects seen by the Panel.

By contrast the plans for the Maindy Campus on the northern edge of Cardiff University were much more modest. They were presented at the outline planning application stage so there was less opportunity for significant design changes. The eastern edge of the scheme was sympathetic to the Edwardian housing estate to the east, with a boulevarded street fronted by two story pavilion buildings. Behind these buildings a pedestrian route and a series of potentially attractive squares were aligned north-south, separating them from a long block of six storey offices and laboratories, themselves linked with a north-south atrium, but backing on to the busy Valley Rail line which creates a barrier to east-west movement.

The Panel wondered whether this linear block with its multi level circulation and attached footbridge that crossed the railway was sufficiently flexible for staged completion. The Panel were concerned that there was no evidence based movement strategy to help plan the layout overall, or to select the location of the footbridge. They would have liked to have seen the character and quality of the public realm better defined and its microclimate considered. They welcomed the commitment to BREEAM Excellence for the project and pointed out that the long west facing façade would require strong shading, as well as more visual quality.

The University of Wales, Newport campus building was more of an urban landmark. The client had obtained an excellent site on the banks of the Usk just downstream of the new footbridge. The design took advantage of the fine views across and along the river, and was permeable to the public on the ground floor where lecture halls, technical rooms and a riverside cafe were located, with a restaurant and library above. The latter had four storey high ceiling sections between the teaching and research accommodation at either end and on the west side.

The Usk Way elevations were relatively simple, the lower levels glazed and the upper levels divided into three types of accommodation, and defined by horizontal metal bands of cladding. They were partially screened by a row of trees on Usk Way. The riverside elevations were more complex, largely glazed with a brick base for the lecture halls, and the three storey sections at either end in brick and glass



**Plate 36:** Newport Business School, University of Wales College is an award-winning landmark building cantilevered over the Usk River promenade and overlooking its iconic footbridge. It provides a very lively internal environment for study.

cantilevered out over the walkway. The sinuous third and fourth floors of the central administrative section protrude slightly over the river walkway, and clad in a bright yellow wood they catch the eye, and are topped with a sky garden/terrace and a potentially spectacular board room.

The long curving roof is cut back over the terrace so it reads like a split pediment from the opposite bank (**Plate 36**). A BREEAM Excellent rating was sought with high levels of insulation and airtightness, and the heating system was under review, though the Panel pressed for a single district heating system to serve this and two buildings planned on adjacent sites. The Panel thought the main entrance and lobby should be made more legible and pedestrianised, with lay-bys on Usk Way for drop-off/pick-up points. They applauded the cycle provision, the green transport plan and the low level of parking provision. Road crossings needed to be aligned with the main pedestrian desire lines, and the southern edge of the scheme should be planned so that a quality space could be created between this and the new building to the south. The completed scheme has created a very lively working environment and an impressive landmark with 'the assertive poise of a blue chip HQ' (Adams 2011: 12). The scheme won a 2011 RIBA Award.

#### — Lessons learned

The University of Wales Newport building and the RWCMD in Cardiff (**Case Study 12**) are both extremely confident statements that give their respective institutions a new visibility and prominence in their respective cities, while providing students with new and exciting learning and socializing environments. Both the Bangor and Swansea projects, extended and new campuses respectively, are exceptional in their civic ambition, and their completion is eagerly awaited.

The Panel had doubts about the procurement route and the tightness of the development programme for the RWCMD scheme, but the quality achieved has been gratifyingly high. They have some of the same concerns about the Pontio scheme confirmed by the detailed plans for the first phase seen recently. Perhaps the lesson of all four schemes lies in the retention of first rate architectural practices in order to ensure design quality.





## PONTIO: BANGOR UNIVERSITY STUDENT UNION AND ARTS COMPLEX

**Pontio Project, Bangor University.** This artist's impression drawn from a new plaza on Deiniol Road, shows the way that the new buildings and multi-purpose theatres create new internal and external pedestrian routes up to the Arts Building and the rest of the campus, making full use of the park.

Bangor University had begun to develop plans for a new Arts Building and a Student Union in 2008, and brought a feasibility study to the Panel late in that year.

The University were clear in their aim of linking town and gown, both through building uses and configuration. In their first scheme they concentrated on a new student union with a large theatre in a building at the foot of the hill. This took the form of a colonnaded podium with the theatre contained in a cylindrical slate-clad dome above, fronting on to a large civic space spanning Deiniol Road.

By 2010 the University were developing a much more ambitious scheme to produce a new pedestrian circuit linking the historic Memorial Arch on Deiniol Road, at the west end of the city centre, with the Arts Building on top of the hill. The aim was to provide a new arts complex, but with a very high quality external public and internal semi-public realm, with active frontages to maximise views, use the steeply sloping College Park, and create a new piece of townscape worthy of the town.

The drawings had been completed to Design Stage C, but the Panel's concerns were the tightness of the planning and development timetable as against the complexity of the project. They requested a number of studies be completed of the external pedestrian links to the project, a serial vision of the pedestrian experience through the scheme, and the development of landscape and public art strategies. The pedestrian connections across Deiniol Road, and the design of the public plaza outside the main theatre, were a particular concern. The Panel were delighted with the commitment of the University to BREEAM Excellence, which has been a hallmark of the other projects that the Panel have reviewed over the decade.

At the second review a couple of months later a planning application had been submitted and many of the design issues had been addressed. A more active frontage had been

provided to the Deiniol Road plaza, and the choice of the stone finishes and render colour had been resolved. The Panel still wanted more active frontages on Deiniol Road, especially around the Theatre, clearer definition of the entrance to the internal route through the scheme, and a careful positioning of the pedestrian crossing to emphasize/facilitate this pedestrian desire line. They were pleased to hear that landscape consultants had been appointed to remodel College Park, and they emphasized the need for an integrated approach to the building and landscape projects to make the most of the opportunities for attractive spill-out spaces and access to the park. The Panel welcomed the desire to create actively used roof terraces, and stated their preference for a green roof strategy across the rest of the scheme. Overall they were concerned that the monumentality of the scheme did not become intimidating.

**Swansea University Science Campus.**

The new Science Campus masterplan displayed many characteristics of an urban village with quadrangled residences to the west (right) and academic/research buildings to the east. The principal internal streets and a seafront plaza are lined with student facilities, shops and cafes/bars on the ground floor with parking kept to the northern edge.



# SWANSEA UNIVERSITY SCIENCE CAMPUS, FABIAN WAY, NEATH PORT TALBOT

Swansea University's proposal for a new Science Campus on the eastern edge of the city was another particularly interesting project, with a world-class architect commissioned to produce an outline scheme which had been submitted to Neath Port Talbot LPA for consideration.



Its location in a green wedge in their LDP was a major issue, but there had already been four positive public consultation meetings on the scheme. A brownfield site right behind the beach, and fronting on to Fabian Way, provided a very fine site for this ambitious project which would be linked to the main Singleton campus on the other side of the city by a shuttle bus. The site would be raised to 7 metres AOD to meet the flood risk requirements, meet remediation standards, and be screened from Fabian Way by a landscaped buffer behind which the car parking would be located. The development was significantly set back from the Crymlyn Burrows Site of Special Scientific Interest

(SSSI) to the east by the provision of a generous green space.

A looped access road would provide vehicle access into the site with all parking kept to the north close to Fabian Way, while a secondary grid of streets, mainly oriented at right angles to the beach, would define individual blocks with enclosed semi-private courtyards. The Panel admired many aspects of the scheme, particularly the pedestrian dominated layout, the public promenade behind the beach, and the green space created to the east. However, they were not convinced by the layout of the finger blocks behind the beach, and felt that more work should be done to ensure a beneficial microclimate on the site.

The Panel questioned the isolation of the new campus from the old, but they recognised that the University had conducted a thorough search for suitable alternatives sites, and the gift of this site was critical. They felt that plans for the movement connections to development sites to the west towards Swansea Docks should be resolved forthwith perhaps through a planning brief. They questioned the way

the project screened itself from Fabian Way, and argued that consideration should be given to allowing some key buildings to signal the existence of the campus behind the landscaped buffer. Similarly, consideration had to be given to the safety of footpaths to the bus stops and pedestrian crossings on Fabian Way, and a building presence would help this. The Panel also sought commitment to more ambitious sustainability standards and a site-wide energy strategy.

The plan was described as 'a set of parameter drawings which can be used to establish key fixes to set constraints for the form of development'. The Panel recommended that a series of architects be employed to complete sections of the scheme, all under the control of a detailed masterplan. A recent review has suggested that the scheme will not deliver the intricacy or the mixed use character to the extent promised. In addition, proposals for the Swansea Bay Tidal Lagoon will require reconsideration of connections from the west and the nature of public and private/campus spaces.

**Roads**

The Panel examined five major road schemes as part of its reviews of major trunk road projects for the Welsh Government Highways section. These included two sections of the A470 in the middle section of the Wye Valley, a particularly sensitive landscape: the most elevated section of the Heads of the Valley Road (A465) between Brynmawr and Tredegar (reviewed twice): the proposals for the M4 relief road from Magor to Castleton by-passing Newport to the south (also reviewed twice, but then shelved as a project): and a new section of the A477 from St Clears to Red Roses in Carmarthenshire.

Both sections of the A470 between Cwmbach and Newbridge on Wye, and Erwood to Glanwye passed through a very high quality landscape, and the highway engineers wanted to minimise the deviations from the existing route to reduce the impact on adjacent settlements and the wider landscape. They sought to minimise the extent of cut and fill, and to provide sustainable drainage that eliminated the impact on the water quality of adjacent streams. In both cases the design of the road was a 7.3 metre single carriageway with a one metre hard strip, and 2.5 metres of soft verge on either side, to provide some possibility of one way operation in the event of a blockage.

On the tortuous Cwmbach to Newbridge section the Panel felt that a predominantly engineering solution had been found that would minimise the amount of cut and fill, but they wanted to see more variation in the elevation of the road to reduce the height of the embankments. The design team had to follow guidelines that required 30 per cent of the route to be suitable for overtaking, but they were looking to better balance the earthworks overall on this section. The replacement bridge at Cwmbach, a notorious bottleneck, attracted positive comment for its slender, elegant elevations and weathered steel finish, but the Panel felt that a larger cantilever on the edge of the deck would improve the design.

At Porth Ithon and Red House the Panel felt that the bridge designs could be improved with a lighter touch. They had doubts about the wisdom of a 'gateway' feature to be developed at the Newbridge link. On the Erwood to Glanwye section the Panel were pleased by the decision to reduce the design speed of the road from 100kmph to 85kmph to follow the existing alignment more closely. They were reassured that, through close consultations with the residents of Abernant, the best alignment had been found. They recommended that throughout the length of these improvements the finishes be kept as naturalistic as possible, with tensioned wire safety barriers to reduce visual intrusion.

The A465 Heads of the Valleys road poses much larger scale design issues in terms of accommodating a new dual carriageway in an upland and valley landscape that is urbanised over significant sections. The Brynmawr to Tredegar section has a number of challenges, and the proposal was to retain the existing alignment of the road north of Ebbw Vale and in the Garn Lydan valley north of Brynmawr, but to link them with a 4.7 km section of new road that crosses the Garn Lydan summit.

The Panel were reassured on a number of points, but they felt that the emphasis on design quality and minimizing environmental impact had not yet transferred from the masterplan to the design details. They had four major concerns. The Rassau West junction now had four roundabouts and some very deep cuttings, and the Panel felt that this was excessive in both its landscape impact and its engineering complexity. At the Carno Reservoir they accepted the case for a major embankment across the valley to avoid moving electricity pylons, but they thought that further landscaping modifications were required. They felt that the Garn Lydan summit and



**Plate 37:**

**Heads of Valleys Road, Ebbw Vale to Brynmawr section.** The summit section of the newly aligned A 465 makes minimal provision for lay-bys south of the reservoir, but the embankment across Cwm Carno (left) and its retaining walls were considered acceptable.



proposed view point/rest area should create a much stronger sense of arrival. Finally, they sought design refinements of a number of bridges and of secondary elements, especially on the new summit section of the road. In addition the Panel sought the creation of a 'well-mannered family of structures and contractor involvement in the process of minimizing the impact of construction overall'.

A second review saw some significant amendments in line with the Panel's recommendations with the removal of one roundabout and a reduced length of rock cutting at Rassau, and the alignment of bridge abutments parallel with the road on the Garn Lydan over-bridge (**Plate 37**). The new rest area at the summit had taken the form of an extended lay-by so this was disappointing, as was the lack of improvement to the Carno and Llangyndir over-bridges. Overall the Panel were content with the drainage, slope grading, and mitigation of visual and noise impacts, but they felt that there was a general lack of design ambition, especially in the bridges and design details.

The new M4 relief road south of Newport would be a major design challenge. This scheme was seen twice before it was shelved on the grounds of costs, environmental impacts and sustainable movement implications. The final preferred route had been established in 2006, and the first review concentrated on outlining the major design challenges (hydrological, biodiversity and landscape) of crossing the Gwent Levels, a new River Usk crossing, and the more rolling landscapes at Magor in the east and Castleton in the west. A good presentation laid out the major issues very clearly, but the Panel thought that there was a lack of an overall aspirational concept that could deliver sustainability, excitement, surprise and quality art. Much more three dimensional contextual analysis was required.

The Panel requested an international design competition for the Usk Crossing and the appointment of a Design Champion to ensure high overall standards of design. They also argued that, rather than preparing a family of design structures for the scheme, the approach should be to respond to the local context in each case. Five months later a second review provided much more three dimensional analysis of the route design, and three possible versions of the Usk Bridge were presented with cost estimates.

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Five character areas had been identified along the route with a low two metre embankment across both stretches of the Levels, and substantial cuttings through the eastern and western sections. The Panel repeated their suggestion for an overall design champion, an international competition for the Usk Bridge, the adoption of a CEEQUAL rating target of Excellent, and a careful integration of landscape, public art and environmental strategies to deliver an exemplar project.

The St Clears to Red Roses A477 trunk road improvement scheme was a design for a new 8.7 km section of road, and it adopted the same standards as those previously reviewed for the realignment of the A470. The design team sought the Panel's views on the design in four specific locations. The Panel prefaced their response with the comment that there was the potential for a very good scheme. They thought that the 'family of structures' approach should be modified to respond to the different terrains encountered, arguing that the bridges in the river valleys should be treated differently from those elsewhere, while still being simple and elegant in form. They thought the concrete structure of the Afon Hydfron bridge should be cleanly expressed with the landscape swept back to expose the abutments.

Regarding the junction between the escarpment and the flood plain they argued that the high embankment should have reduced gradients, and as much land returned to agriculture as possible. The bridges over the deep cuts both needed different forms to avoid obtrusive tall pillars and ensure better integration with the geometric form of the cut. The Panel welcomed the general approach towards landscape restoration, habitat enhancement and sustainable drainage, and the conversion of the by-passed stretch of the original road to a cycle and pedestrian 'safe route'.

## **Bridges**

The Panel saw five bridge schemes: two were bascule foot bridges, two were replacement rail bridges and one of them also had to accommodate a road bridge, and one was a new road bridge over the Menai that had to compete with the historic Britannia Bridge. Fortunately the Panel have two experienced bridge designers that they can use for such reviews, one an engineer and one an architect, so they can offer genuine expertise, not only on architectural design and engineering, but also on procurement. This proved invaluable.

The two bascule footbridges were at opposite ends of the country in Cardiff and Rhyl, and both crossed municipal boundaries so there were two planning authorities to contend with in both locations. The Pont y Werin bridge across the mouth of the River Ely in Cardiff Bay would provide a valuable missing link for pedestrians and cyclists around Cardiff Bay, and a key link for Bay residents to the rail station at Cogan. The 140 metre bridge had to be navigable for sail boats and have an 8 metre clearance. A tilting bascule bridge with a 'signature' opening mechanism in the middle had been designed to resemble a marine hook. The Panel felt that the bridge was appropriately located but not elegantly designed, and they urged the client to launch a design and build competition using the existing scheme as a constraints diagram.

They considered that the truss structure for the bridge would be better inverted, with the trusses under the deck. They were informed that this would elongate and reduce the gradient of the bridge to 1:33, but this was considered an advantage over the design which was 1 in 20 which would be very demanding for wheel chair users over such a distance.

The second bridge in Foryd Harbour, Rhyl was the result of a design competition for an 'iconic' landmark structure. It was a lifting bridge utilising a 50 metre fibre-reinforced plastic mast in the centre of the waterway. However, the Panel considered



**Plate 38:**

Foryd Pedestrian Bridge, Rhyl Harbour. The panel felt that the bridge looked inelegant when open and sought to improve the proportions by reducing the height of the central pier, while increasing the length of the opening deck.



it looked inelegant and bulky when opened (**Plate 38**). They sought to make the central pier as low as possible to reduce its bulk so it had a better relationship with the mast, and to increase the length of the raised deck to produce better proportions when opened. They were concerned about the design of the balustrade and the use of hardwood, and argued that all the materials and procurement routes should be fully justified.

Pont Briwet in Gwynedd across the mouth of the Cynfal Estuary is a rail and road bridge that has to be replaced because of the state of the timbers which will not accommodate Heavy Goods Vehicles or emergency vehicles. The site is a Special Area of Conservation close to an SSSI and 15 different options were explored. The client wanted to develop a concept design before issuing tender documents, and had settled on a concrete structure to reduce the pilings in the river. The Panel wanted more strategic design input to justify the construction method and materials, and the retention of a bridge architect to provide this to Stage D of the RIBA process, rather than Stage C as proposed. A more holistic design study would incorporate the approach roads, the toll house, a possible interpretation centre and car park, alterations to the adjacent railway station and the rescue and reuse of the historic timbers from the bridge.

This review led to the same clients bringing the Loughor Viaduct to the Panel where again a timber bridge need to be replaced, this time to accommodate double line working on the Swansea-Carmarthen main line. Again the context was environmentally sensitive with Burry Inlet the site of Special Area of Conservation (SAC), SSSI and Ramsar designations. The plan was to salvage three of the timber trestles and to retain them in situ, and to dismantle three more for display nearby. The bridge would be rebuilt in concrete with two pillars in the river supporting wide, structural 'crosshead' beams to support the rail bed. These could be erected quickly in order that the rail line was not closed for more than 200 hours.

The Panel felt that this was an inelegant solution driven largely by site and construction constraints, and that there was an urgent need for a bridge architect to create something more refined. They welcomed the plan to salvage three of the

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timber trestles but were concerned that any in situ display was carefully located and accessed. Again they felt that a landscape architect should assist with the design.

A new bridge over the Menai Straits alongside the Britannia Bridge is necessary to reduce daily congestion. The consultants suggested a new cable stayed bridge, with a slender deck alongside the existing bridge on its western side. This was considered to have the least visual impact on the existing structure and the least environmental impact overall.

The Panel enquired about alternative crossing points further away to protect views of the existing structure, but most of the land was in National Trust hands and was environmentally sensitive. The cost of moving adjacent electricity pylons to give the new and old bridges more space was also prohibitive.

The Panel agreed that a new bridge was the best solution, and that the proposed design would have less impact on the existing bridge than other design approaches. They urged that an international competition be held to attract a highly qualified and experienced design team with a track record in innovative bridge building.

### Public realm

A major piece of design guidance was commissioned for the Heads of the Valleys area to guide public realm improvements by the five local authorities, and their partner organizations, in the 11 towns concerned. It drew on a range of national and local advice, and the newly published *Manual for Streets II* to facilitate the delivery of safe, attractive, vibrant and distinctive town centres and major streets.

The Panel endorsed its principles of pedestrian priority, low traffic speeds and 'de-cluttering' of the public realm, but was concerned about how much it would influence actual improvement schemes and private developers. It urged adoption of the guidance by each of the Local Planning Authorities, and training to support a coordinated and consistent approach to delivery.

The Panel suggested the appointment of a Design Champion at Corporate Director Level to drive implementation. They emphasized that individual town character should be protected within this consistent approach to enhancement, and also the importance of joint purchasing and stockholding of preferred materials to ensure high levels of quality maintenance and repair. Strict control of utility companies' requirements to reinstate quality surfaces was identified as a particular concern. They urged the development of an exemplar project to set the required standard.

The Panel endorsed its principles of pedestrian priority, low traffic speeds and 'de-cluttering' of the public realm, but was concerned about how much it would influence actual improvement schemes and private developers.



**Plate 39:**

High Street public realm, Bargoed. The floorscape was alternate bands of sawn and riven pennant flagstones with granite channels. The Panel much preferred the trees to be sunk in the ground, and omitted where this was not feasible.

The Panel subsequently reviewed the improvement plans for Bargoed's High Street (**Plate 39**). These aimed to create an uncluttered and pedestrian friendly public realm as part of the regeneration of the town, seeking to ensure that investment in new retail space in the southern part of the town centre did not undermine the High Street's attractiveness as a retail destination.

The plans were for one way vehicular traffic creating space to widen the pavements on either side. Pavements would be 3.5 metres wide, with a 25mm curb to a meandering road way to create movement flexibility, and a sense of shared space. These plans were endorsed by local access groups. Granite sets would form the pavement and road surfaces, and the street furniture would be traditional (more contemporary on the new retail plateau) with bollards helping to define the roadway. Trees would be included in planters because of the existence of basements under many pavements, but the Panel thought that selective planting in the ground would be a better approach. The Panel recommended that the street lights should be placed on the facades of buildings to further reduce clutter. They had some concern that the amount of detail and variation in materials and furniture might be too much, and they urged a limited palette of easily replaced materials and CEEQUAL testing of their choice and sourcing.

The Panel's main concern was that the public realm improvement area had been drawn too narrowly, and that what was required was a much broader movement strategy that looked at all the links into and out of the town centre, and how these might more fully integrate the retail plateau and parking areas with the High Street (**see Plate 20**). There were particular concerns about the improvement of the steep steps and lanes up to the High Street, and about the need for more tree planting to soften the edges of the car parks. The Panel thought that Hanbury Square at the south end of town should be pedestrianised, with the paved roadway omitted to deliver a 'square' on the east side and this has been implemented.

North Dock 'boulevard' in Llanelli was a joint venture between Carmarthenshire and Welsh Government, and part of the implementation of the Llanelli Waterside

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masterplan. The Panel felt that the proposals for connecting the beach, the Millennium Coast Park and the North Dock could be exciting and innovative, but to proceed without re-evaluating the original masterplan would be a serious mistake. There was no obvious generator of movement, and the project appeared to be disconnected from the town centre, other routes and movement generators.

The Panel advised against proceeding with public realm works without any indication of how these would relate to future building thresholds and profiles. They were also concerned about the microclimate on this very exposed coast, and were not convinced that the designs presented would do anything to provide any additional shelter.

St Mary Street in Cardiff City Centre is the city's finest street and a Conservation Area. It had been the subject of prolonged debate about its traffic calming and eventual pedestrianisation. A temporary road closure provided useful feedback about servicing and access, and the design team developed a range of options to resolve the problems. The intention was to retain the street as a bus route, and with over 200 buses an hour this obviously dictated the extent of pedestrian priority that could be delivered. The Panel thought that it was critical that a landscape architect was involved in the project immediately, along with a public art consultant. They favoured a simple traditional choice of street furniture, and similar treatment of the floorscape to ensure that the design was flexible and adaptable over time. They urged a creative lighting strategy to make the scheme distinctive.

In the event the Council opted to remove the buses from High Street/St Mary Street, and only a central section remains accessible to taxis. If the townscape is compromised by the proliferation of banner poles and 'hanging basket trees', and a surfeit of bollards on High Street, the environmental quality of the street as a whole has been immeasurably improved by the removal of traffic, the introduction of time-limited servicing, and quality paving as befits a Conservation Area.

Gateways are one of the more contentious concepts in contemporary urban design: 'gateways to what?' is often a relevant question, and it is necessary to establish their real contribution to the legibility of urban areas. The Newport Gateways project for the Ryder Cup seemed to be more about improving 'first impressions' of the city. The involvement of the Tourism and Marketing department emphasized that what was happening here was a 'branding' of the city rather than a design initiative, especially when they expressed concerns that plans for the Abernant roundabout and for Grove Park were too low key.

The Panel's view was that this was a largely short term cosmetic exercise, and landscaping schemes should be designed not for immediate and temporary effect, but for long term amelioration for the benefit of the local community. They felt that some of the locations chosen were the wrong ones, and that an overall vision for environmental enhancement of the city should be developed for all arrival points, not just those for car drivers.

### —Lessons learned

The trunk road schemes continue to display the value of a 'reverse engineering' approach which minimizes the deviations from existing road lines and the extent of cut and fill, and treats the landscape and biodiversity as serious constraints. Driving these road improvements one appreciates their visual simplicity and landscape fit.

As was noted in the 2007 review (DRW 2005-7: 104) the Heads of the Valleys project takes a different approach attempting to exploit the route as a tourist resource and a way of reading the landscape. Certainly the new designs for the Brynmawr to Tredegar section are a major improvement on the Abergavenny to Hirwaun section,

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but the Panel felt that there was a general lack of design ambition, especially in the bridges, design details and the summit rest area.

On bridge design the Panel are always of the view that the most important of these, including the footbridges, should be put out to design competition once a clear brief has been established, because that is the best way to secure design quality.

On the issue of public realm design the Panel finds itself remarkably under-employed, and it is some time since they were shown any new public spaces or significant pedestrianisation or traffic calming schemes. The Panel adopts a very simple approach to pedestrian or shared space design minimizing clutter with regard to street furniture, and reducing the variation in, and adopting a limited palette of, easily replaced materials with CEEQUAL testing of their choice and sourcing.

## 2.14

### Energy from Waste

Three major energy from waste projects were reviewed. These have developed in the wake of the EU tax on waste disposal by landfill, and as a result local authorities have begun to seek out sites in partnership with each other in a bid to create a win-win situation in terms of waste disposal and green energy generation.

#### —Review experience

Trident Park in the industrial zone east of Cardiff Bay was the site of the first energy from waste scheme that the Panel had seen. It would serve five local authorities and process 400,000 tons of waste annually, but unfortunately it would not be served by rail freight. The site was surrounded by industrial and storage sheds, but the scale of the building would dwarf its surroundings, and the 80 metre chimney stack would be particularly prominent. The developer contacted a wide range of organisations who might wish to use the low grade heat as an energy supply, and Porth Teigr was seen as a potential user. Visual impact studies were promised from 21 viewpoints, but it was established that the water table would prevent the building being sunk into the ground.

The Panel endorsed the design approach to reduce the apparent bulk of the building and site its chimney independently, and they explored the different materials that would be used to clad the building including waste slate, blue/green translucent polycarbonates, and a Kalzip standing seam roof. They sought a clearer relationship between the external façade treatment and the internal processes, and argued that the transparent elements on the north and south elevations should reflect their different orientations. The Panel were also keen to see all the visual analyses, traffic impact studies and sustainability appraisals for the scheme. They thought the visitor centre should be relocated nearer the entrance to the plant. The project is nearing completion.

The Brig y Cwm energy from waste scheme at Cwmbargoed near Merthyr was a major installation generating some 67 megawatts of electricity and a new challenge for the Panel and Local Authorities as one of few projects to test the Infrastructure Planning Commission (IPC) process for Nationally Significant Infrastructure Projects (NSIPs).

Its three large buildings house power station, transformer and air cooled condensers and totaled more than 23,000 square metres. Over 300 sites had been investigated across South Wales, and this site close to the Ffos y Fran land reclamation had the advantage of rail access.

The Panel were primarily concerned with the efficiency of the unit (Welsh





**Plate 40:**

Project Green: energy from waste plant, Llanwern. This view looking north to the steelworks (which will use much of the waste heat) illustrates both the efforts to soften the visual impact of the roof viewed from the Gwent levels, and the visitor centre (middle right).

Government aspires to 60% and the EU 65% efficiency targets) and were keen to see the use of waste heat in nearby industrial, commercial and domestic properties. The Panel felt that the building required to be sunk further into the ground, or to have more sculpted landforms around it to reduce its visual impact. It was understood that a Trust Fund would be established for the community to provide additional benefits to the locality beyond employment.

By the second review the design team had worked on the visual impact of the building and simplified the roof form, and they were experimenting with materials and colours to further reduce its visual impact. Lowering the ground for the building by 12 metres had proved to be too expensive, but there had been a response from a potential user of waste heat to co-locate close-by.

Project Green in Llanwern was a similar scheme being explored as a partnership between five adjacent local authorities to solve their waste problems. As a 23 megawatt generating station it was below the threshold required for IPC approval. It was to be located on Llanwern Steelworks east of Newport, and its waste heat could be used directly by the Tata steelworks immediately to the north. There were particular environmental and landscape sensitivities as the plant would be located adjacent to the Gwent levels, and the design team were already looking at the creation of buffer zones and a visitor centre overlooking the reens.

The Panel welcomed the existence of an end user for the waste heat, and wanted to explore whether district heating could be supplied to the 4,000 homes planned for the Llanwern community. They also welcomed a commercial use for most of the waste ash product as an aggregate replacement. They questioned the eastern elevational treatment as well as the polycarbonate cladding, but were reassured by the architect as to its rationale and utility respectively. Nonetheless, the impact on the protected landscape and new developments planned in the vicinity would be enormous, and would need extensive amelioration (**Plate 40**).

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### —Lessons learned

Much has to be learned about these facilities and the regulatory processes by which they are governed. Their scale is a key issue as they tend to be exceptionally large scale structures with a very high landscape impact. The transmission of waste to the plant is a major consideration with rail being the preferred means of delivery on sustainability grounds, but the public are very concerned about the emissions from the chimney and their impact upon air quality down-wind, though the Environment Agency require continuous monitoring of the concentration of all pollutants and adhere to European Union standards.

## 2.15

### Summary of conclusions

In these conclusions we seek an overall perspective on the performance of the Commission's Design Review Service over the period. We wish to draw together the conclusions reached on the design achievements and shortcomings of the two previous reviews in 2005 and 2007, and the interpretation of the summary statistics for the number, type, quality ratings and user assessments of the value of the reviews conducted up until the end of 2011. There is a need to integrate our findings so as to continue to inform future activity.

The economic crisis and recession clearly dominates design and development thinking in this period, and has undermined the progress the Commission was making to get developers and local planning authorities to recognize the importance of urban design to environmental quality. Economic recovery is a priority, but sacrificing longstanding commitments to environmental sensitivity and sustainability, social inclusion, and quality place-making will impair recovery in the long term.

The recession has not only slowed the pace of development, and reduced its quality, but also reduced the number of schemes being brought to review. This has led to a far less regular series of Design Review sessions, and caused the Commission to think more about more sustained involvement in the design evolution of important projects.

On the positive side, having less reviews to conduct has allowed the Panel more time to brief themselves, to conduct the review, to write better reports, and compare practice with other review bodies elsewhere in the UK. The St Fagans experience has proved the value of a bespoke Panel with the capacity for sustained involvement in the genesis of a development project of national and regional importance. However, the recession has reduced the deployment of Supplementary Planning Guidance conceived as mechanisms of quality assurance.

Drawing on previous reports completed by the Commission in 2005 and 2007 we can reflect first on the positive achievements of the last four years. In particular we should draw attention to the improved quality of pre-planning presentations, and in the actual planning applications that we have reviewed.

The use of Design and Access Statements has forced developers/designers to take more account of their site and context, the policy framework, and the principles of good design enshrined in both local policy and national guidance. However, the panel often comments on the excessive length, long-windedness and 'tick box' approach to many such statements, and it would urge more focus on the key design drivers. Nonetheless there is a general recognition that overall they have helped to ensure a better response to site and context, to local distinctiveness and to place-making. So this is one general innovation which has helped to get design off on the right foot, even if it does not guarantee a successful solution. Design and Access Statements

# There are extensive introductions of shared space in Welsh town and city centres that are reclaiming streets for public use.

have too frequently become over long post rationalization documents compiled by planning consultants, and their future use is uncertain.

A second piece of guidance which has been especially useful is the *Manual for Streets Volumes I & II*. This gives back to designers the power to shape places through better designed streets that prioritise pedestrian use through notions of traffic calming and shared space. The design freedom and scope for imagination which these documents provide is not universally admired by highway engineers, and in some highway divisions of local authorities there is widespread resistance to its design-led, rather than standards based, risk-averse approach. But here again some progress is being made towards improved housing layouts and more pedestrian-friendly streets that are keys to more civilized settlements. There are extensive introductions of shared space in Welsh town and city centres that are reclaiming streets for public use.

A third area of major progress has been the design of trunk roads and their accommodation in the rural landscape, a responsibility of the highway engineers in Welsh Government. The Panel saw major improvements in the design of new stretches of the A465 Heads of the Valleys Road following on from the acute failures of design and landscape sensitivity east of Merthyr. Improvements made in North Wales on the redesign of the A470 pre-2007 have been followed through in the re-design of sections between Llyswen and Builth Wells, and the design of the new section of the A477 west of St Clears.

More attention needs to be given to the design of major road improvements and new roads in urban areas at the local level. Their townscape fit and landscaping can be significantly improved, vehicle speeds reduced, and better provision made for pedestrians and cyclists. Major bridges should usually be the subject of a design competition with a clear brief and target price.

A fourth area of substantial progress has been the Welsh Government funded programmes for new regional offices, primary care centres, and primary, secondary and tertiary education buildings. These have all demanded BREEAM Excellent buildings, and the programme has been critically important to the progression of the low carbon construction agenda in Wales. It has begun to inform private development especially in cases of custom building, or cases where operating costs are factored in to the design.

Welsh Government has supported the only Code for Sustainable Homes Level 5 project in Wales, and in a social housing scheme to boot, and this has proved to be an illuminating experience, (though one which questions the relative virtues of the Code with its elaborate point system, versus the Passivhaus method which seeks first and foremost to reduce energy inputs by raising levels of insulation and air-tightness). The Panel continues to try to persuade all developers and clients of the virtues of

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energy efficiency and carbon reduction, but this has become increasingly difficult as the recession has been prolonged. The Admiral HQ in Cardiff provides an exemplar demonstrating that the combination of high sustainability and design aspirations are good for business, good for attracting the best staff, and good for the vitality and cleanliness of the urban environment.

A fifth area where significant progress has been made is in the contribution which universities are making to both the civic design of their host towns and cities and to their cultural offer. The examples offered by Bangor, Newport, Swansea (Science campus) and the Royal College of Welsh Music and Drama are all of immense local importance in terms of creating cultural venues and public amenities where town and gown can coexist and interact, and where urban vitality might be significantly enhanced alongside student sociability. Student residences rarely offer a similarly positive contribution to civic design, but they have a role to play in providing decent, affordable, communal accommodation and reinforcing the 18 hour city centre economy.

Finally it should be noted that the recession has played a positive role in slowing a rash of over-development driven especially by the buy-to-let apartment market. The latter has distorted urban housing markets and seduced some Councils into ignoring the need for family housing, or indeed for any houses with private or communal gardens.

Similarly it has put paid to notions of 30 plus storey apartment towers in city centres, or on urban waterfronts, and provided a welcome dose of realism about development potential generally in Wales. Commercial buildings have also seemingly eschewed the pursuit of very tall buildings as symbols of prestige and a means of detachment from urban realities. The quantum of available development sites suggests that such high building is unnecessary, even if it might be profitable were a significant pre-let possible.

Tall buildings have their place in urban design especially where they can facilitate regeneration, intensification, and help pay for major improvements in the public realm, be it public parks and waterfronts, new urban squares or amenities, or improved transport interchanges. But tall buildings must always be especially well designed, must make a positive contribution to the streets in which they are located, and must achieve the highest levels of energy efficiency, as Commission advice indicates.

The disappearance of the Wales International Business Park (DRW 2007) has given a signal that city centre development in locations that are highly accessible by public transport are the more sustainable option. The electrification of the Great Western mainline and the Valley Lines will consolidate that view especially in the cities of south east Wales. Journeys to work by public transport and by walking and cycling have to continue to be promoted to reduce the amount of car commuting and CO2 emissions, to reduce the eco-footprint of towns and cities, and to ensure mobility for all sections of the community.

Turning now to matters where the Design Commission still struggles to significantly influence the design of development for the better, the whole issue of large and medium scale suburban development remains deeply problematic. These schemes are now supposedly plan-led, and have been allocated in the new generation of Local Development Plans. So there is clarity about their designation, and a broad indication given of the numbers of dwellings that might be accommodated.

*TAN 12:Design* gives copious guidance on housing design and layout, and then notes that LPAs may wish to prepare supplementary planning guidance to state 'the authority's vision, local context, design process, design quality expectation, the characteristics of the area and any relevant sustainable building standards' (WG 2009: 44-45).

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PPW goes on to describe the kinds of area specific guidance that might be used including urban design frameworks or strategies dealing with an area 'three-dimensionally', neighbourhood or district design guides, action plans, or design codes. It also advocates site specific guidance in the form of development or planning briefs to explain how development plan policies should be applied to the site (WG 2009: 59-62). It does not mention the importance of masterplans or development frameworks to ensure design quality and development certainty for public bodies and private developers respectively.

This omission in Welsh advice is in marked contrast to England and Scotland where there has been a great deal of serious research into the role of masterplanning (CABE 2003: EP 2007: Scottish Government 2010) and to a lesser extent design coding (Baxter Associates 2005: DCLG 2006). However, Wales has many examples of quality masterplans previously reviewed; Ebbw Vale and Penarth Heights come to mind but only Ely Bridge or Barry Waterfront have been significant in the last five years.

There has been a major retreat from masterplanning by residential developers during the recession, an unwillingness to invest in resolving design detailed issues, and more importantly, an unwillingness to imposed fixed design concepts on house builders when subsequent phases of the scheme are sold off for development in case it might reduce the number of bidders. The 'grand designs' that accompany the outline application have little reality when it comes to a detailed application, and in a recession house builders are even more cost-conscious.

These problems have arisen everywhere in the last five years, but especially in areas of major housing growth in the Cardiff and Newport city regions where major allocations of housing land are being prepared for development without adequate guidance or precision. The result is a 'dumbing down' of layout and design quality, minimal investment in landscaping and sustainable drainage, and no commitment to raise CSH levels above the minimum legal level. This issue is of the greatest concern to the Commission, and it is critically important that LPAs act now to resolve this issue as the housing market revives.

A second key issue with residential development is the drive for residential intensification. This has proved a vexed issue for the Panel torn between often vociferous localized public opposition and the constraints of the existing context, and small developers with limited access to good designers.

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The 'grand designs' that accompany the outline application have little reality when it comes to a detailed application, and in a recession house builders are even more cost-conscious.



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The Panel recognizes that intensification of housing is one of the keys to more sustainable settlements and the diversification of the housing stock that is necessary to adapt to changing household composition and demographic change within neighbourhoods. A similar set of concerns relate to village infill, and the tensions between the quality of place, the availability of employment, the supply of affordable housing, and the critical mass of people necessary to support public and commercial services, the thresholds of which are steadily increasing. The battles over individual houses in open countryside are inevitably keenly fought, especially when the approved plans or the policy frameworks are ignored. Perhaps the success of the Lamas Eco-Village will encourage others to seek a communal living off the land and prompt local authorities to consider more ways in which rural employment can be maintained.

These concerns are closely linked with a third issue, the question of large scale suburban development, and the lack of development of sustainable urban extensions in Wales. The latter have been a major focus in England and the subject of considerable research and discussion (TCPA 2005; CABE/BioRegional 2009), and there have been a number of notable successes in Harlow, Northampton and, closer to Wales, in Portishead. The recent decision of Cardiff Council to go for major suburban extensions to accommodate future housing needs, a decision taken to ensure production of a viable Local Development Plan, brings this issue to the fore, and the Commission was active in promoting this idea to Councillors and planners in seminars and workshops in 2011-2012. The Cardiff Preferred Strategy (2013) for their belated Local Development Plan will include some 10 design principles that will guide the production of masterplanning frameworks of large sites.

The challenge is to create more compact suburbs, with a number of denser nodes around accessible service centres that are primarily served by public transport, alongside more generally walkable/cyclable residential areas where residents do not have to use the car for all local trips to services, schools or community facilities. There are parallel challenges to create stronger sub centres with commercial and community services and significant employment opportunities so that less people commute and there are more local jobs. At the same time there is a need to protect existing quality landscapes, areas of biodiversity and important local ecology/hydrology to ensure quality living environments. Then there is the question of the form, tenure and affordability of housing, and its energy/resource efficiency which are critical to the overall success of these new communities, and to the objective of increasing social inclusion.

A fourth area of concern is commercial office development which has almost ceased in the towns and cities of Wales (and indeed much of England outside Greater London). No speculative scheme will proceed unless it has a major pre-let, and potential occupants are extremely sensitive to the latest financial news, producing very trying times for central area renewal. What has appeared in their place are a set of mixed use schemes which combine office, residential, sometimes student accommodation, hotel and perhaps retail and catering uses. The uses seem to be transferable across sites, the densities are often high, and there are major doubts about the quality and coherence of the urban design, the liveability of the residential, and overall development viability. It is very much a recession response as developers seek to hedge their bets with diverse investors and tenants, but it is correspondingly a major potential blight on the commercial core.

A fifth area of concern is the viability of larger scale regeneration frameworks in the current economic climate. Most of these were felt to be over-ambitious when reviewed by the Panel, even before the financial crash. Positive mention should be made of the Pontypridd scheme with its 29 separate schemes, but the identification of five 'early wins' that would offer start-up possibilities. Discussion of temporary uses for large vacant sites is something that might be pursued more vigorously.

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Finally, mention must be made of procurement constraints, a major concern in 2007 on both primary care centres, and on new secondary schools. Issues of procurement and its effect on design quality were raised in 2007, and have continued to preoccupy the Panel, even if they are rarely bottomed out. In a follow-up to a secondary school review an architectural expert noted that the built scheme 'appeared to reflect a contractor-led team more committed to developing a repeatable template than on maximizing the potential of the site for the lasting benefit of all users'. This is a constant concern.

So, in sum, from an overview of more than 300 individual reviews, and despite the recession, there are some positive signs that good design is being pursued more seriously in Wales than ever before, and that developers are more receptive to the expert input of the Design Review Panel.

However, there are still alarming failures in the design of suburban development, both large and medium scale, and clearly good design has everywhere been tempered by a dual concern to cut design and development costs, and to maintain a flexibility of response for house builders and commercial developers. The pressure is on to start building housing again, while at the same time prioritizing affordability while producing compact, mixed use and tenure sustainable suburbs. The cumulative impact of poor design quality in housing and its direct impact on quality of life and public value is a major concern for the Commission.

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**three**

**conclusions:  
the future of  
Design Review**

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In this concluding section we explore the changing nature of Design Review across the UK to set a wider context for the Commission's deliberations.

## 3.1

### The current UK Context for Design Review

The current context for Design Review across the UK is a fragmented one, with numerous changes resulting in the loss of a largely co-ordinated network that is actively promoting the economic, social, environmental and cultural value of good design practices.

The model for Design Review services in England has changed significantly in recent years with the introduction of a greater number of regional and local Panels, originally linked to Regional Development Agencies (RDAs) and to CABE. Since the implementation of the spending review in England in 2011, the merging or removal of some public bodies, and changes in regeneration funding and strategies means the picture is now much more uneven and unstable. In England the equivalent, though much larger body, CABE (Commission for Architecture and the Built Environment), was disbanded in 2011, and its Design Review and planning assistance programmes incorporated into the Design Council. The Design Review service formerly delivered by CABE, or by Panels it funded or otherwise supported, is no longer in place in its original form.

The National Planning Policy Framework (NPPF, England only) endorses good design and the principle of third party Design Review, though paradoxically its funding is now much reduced. Who will pay for Design Review services remains very much a moot point, especially outside the wealthy development community in Greater London. CABE and the Regional Panels are increasingly seeking payment for services from developers and designers and fees for review vary across England.

Broadly speaking these changes mean that third party expert review services in England, previously underwritten by Government and available free of charge to most users, appears to have undergone a shift to an essentially commercial service, delivered by numerous bodies of differing status. Whilst some review services will be carried out by DC CABE (Design Council CABE), and by the six Regional Panels which constitute the main network in England, others will be provided by a variety of bodies of differing status, across England, most with their administration costs funded by either single or multiple local authorities. They will continue to rely on local design professionals who will give their advice for free. The continuation of this practice will undoubtedly come under further pressure in the current political and economic context.

In Scotland in 2009, the Scottish Government were assisted by the Design Commission for Wales in reshaping the structure and Design Review services of their equivalent body A+DS (Architecture and Design Scotland), under the implementation of the recommendations of Barraclough Review.

Design Review in Scotland, delivered by A&DS for significant schemes, remains a free service for users, though it is now encompassed in their Design Forum services. The 'forum' approach comprises various levels of service, one of which is a formal peer review

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akin to the recognised Design Review model. The other two are scoping and strategic engagement processes, including workshops and brokerage with statutory agencies and key stakeholders. Design Review services in Scotland are also delivered by local Panels, with whom A&DS has a clear and positive relationship, ensuring a co-ordinated service throughout Scotland. The A&DS Forum/Panel members are unpaid and the forum accommodates fewer schemes than previously came through A+DS Review.

The position in Northern Ireland with NIMAG (Northern Ireland Ministerial Advisory Group) is that Design Review continues as it was established, based on the CABE/ DCFW model, but with paid Panellists. NIMAG is part of the Department for Culture. Ireland does not have a Commission such as DCFW. However it does have strong policy in place.

The Design Commission for Wales is the only provider of expert, multi-disciplinary, multi-professional third party Design Review services in Wales. The service remains free of charge for users. Its Panellists, appointed by competitive interview, remain unpaid for their expert services. The Commission has evaluated and refined its services consistently since 2009 and supplements its service with confidential consultations, local authority training, and a range of other client/decision-maker support services and initiatives.

Regular meetings between the senior staff of the major design bodies for England, Scotland, Wales and Northern Ireland have provided the opportunity for sharing experiences. The Design Commission for Wales has been a key contributor in the discussion and exchange of knowledge in these discussions, and its Chief Executive was retained in 2009 as a consultant to the Scottish Government on the implementation of the Barraclough Review recommendations in relation to A+DS. DCFW has invested the learning from its own and collective experience to propose new patterns of provision in Wales. It has no plans at this point, to charge for its services, but it does have clear ideas for their refinement.

## 3.2

### Refining the Commission's Services

In 2009 the Commission reviewed all its services including Design Review, as detailed in this publication. In its corporate planning since 2010 the Commission has been working to realign its human and financial resources in order to create more flexible and responsive services. The changes were informed by six years of experience of the dynamics of the policy, practice, delivery and development context in Wales.

The intention has been to create a more strategic approach based on a front-loaded service which seeks and offers flexible early engagement alongside a more selective approach to Design Review, prioritizing the projects where its expertise is best deployed. This requires greater research and assessment when schemes are registered and a determination to refuse to accommodate those that are too far advanced or too close to a planning submission.

The Commission's strategy also examined its approach to training and professional development and plans to include seminars and events, half and full day workshops for LPAs, and greater use of online platforms to disseminate information and comment. In an effort to work strategically with LPAs DCFW aims to intervene earlier in issues that can influence and optimize opportunities for good design quality.

These plans have been articulated thus, in successive Corporate Strategies since 2009:



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The Commission will:

- Make changes to our Design Review service in order to achieve a ‘front-loaded’ service, better designed for early specialist engagement and able to add greater value.
- Complement a more strategic Design Review service by delivering an enhanced bespoke engagement and professional development service.
- Devise and deliver a wider events and seminar programme to support design innovation and improvement.
- Update and enhance our communication platforms and strategies including our website and via social media.

Thirdly, the Commission is anticipating the legislative timetable of the Welsh Government and its capacity to provide evidence, comment and material input into key processes around planning, housing, transport, heritage and sustainable development. The Design Commission has charted a course to contribute to these processes and aims to help shape their outcomes.

### 3.3

## A more strategic Design Review service

A more strategic Design Review service was anticipated in 2007/8 and was viewed as necessary to increase the utility of Design Review to the development and planning communities, and its effectiveness as a design tool. The demand for Design Review will increase as soon as the development industry revives, so a responsive review service needs to be maintained, but it should evolve to be more selective in terms of the schemes it reviews so it can devote more time and resources to those schemes of greatest importance. The temporary lull in Design Reviews creates the space to develop and incorporate two recent innovations.

The key proposal is to develop and extend engagement which offers early and sustained input into the design of key projects. Through this approach the Commission is able to offer a more bespoke service which is proving to be more resource efficient and more flexible. The characteristics of this approach are:

- Panelists at each meeting have been reduced to a maximum of 6 people including in panel Chair and a DCFW staff member who records and drafts reports.
- The Chief Executive attends all meetings to ensure continuity and quality of service as well as to maintain a corporate overview.
- Specially selected Panels are engaged to provide a high level of policy or project-specific advice, a continuity of Panelists, and client support in some cases from the inception of the project through to determination, particularly on NSIPs and major projects.
- The staff team and one or two Panelists offer full days to LPAs where the focus is on local development planning, economic development or local policy matters, which have the greatest potential to facilitate better design outcomes.

## The future planning and wider regulatory context and its implications for Design Review

This publication is at press in early 2014 and two full operational years have elapsed since the last design review reported in this monitoring report was conducted. The context is little different from that which has prevailed throughout most of the period 2007-2013 but there are now unmistakable signs of an upturn in demand for design review. The rapid downturn in development continued to the point in mid 2012 when there were a very limited number of schemes being brought before the Commission. Talk of a return to slow growth in the UK economy is not yet translating into a significant flurry of development activity even in the most prosperous parts of Wales but the Commission is experiencing significantly greater demand.

In the wider context in Wales, there is a constructive approach being taken towards the reform of planning practice as the Welsh Government progresses with consultations and White Papers on several areas and draft Parliamentary Bills on Housing, Environment and Sustainability, Active Travel, Heritage and Planning are prepared.

An Independent Advisory Group (IAG) has reported on how to ensure that the planning system delivers sustainable development for the people of Wales. To condense and simplify its recommendations it has suggested that there is a need to prepare a national development framework; to introduce strategic planning working across all government departments; to improve the review processes and soundness of Local Development Plans (LDPs) and to increase the use of Supplementary Planning Guidance to support the same. It also seeks to develop national infrastructure policies and planning processes; to establish a Planning Advisory and Improvement Service (PAIS) to improve service and performance of those involved in the system; to enhance the role of town and community councils in order to encourage better public understanding of, and participation in, the planning system; to create a unified application and consent procedure; to establish annual performance reports to improve the quality of planning; to allow more flexible use of Section 106 agreements; to improve the efficiency and effectiveness of planning committees and to improve pre-application discussion and negotiations.

These are all sensible recommendations that could improve the quality of Welsh planning and its capacity to 'regulate the management of the development and use of land in a way that contributes to the achievement of sustainable development' (the IAG's working definition of the purpose of planning). The assumption is that the current system can be made to work more efficiently and effectively if these reforms are implemented. But the slow speed of plan production and their full adoption is a continuing concern with only eleven planning authorities (at 2013) having adopted plans and only three more submitted and under examination (excluding one national park), leaving the major cities exposed.

Research has been conducted on Planning Committees, Design and Access Statements, and the barriers to delivery of housing, three matters which have long been of concern to the Design Commission for Wales and Design Review Service. Design and Access Statements are certainly valuable as a means of ensuring that designers closely examine site, context, policy and guidance and explain all their design decisions, but the statements are often poorly employed.

The Commission is very concerned about the failure to kick start housing production when there are so many projects with permissions, and it understands the pressure that will be put on the provision of affordable housing, energy efficient homes, transport

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and green infrastructure and community facilities when new permissions are sought.

It is in this context that the Commission works and during 2013/14 it has implemented the following changes and embedded them in practice:

- The Design Review Service has been refined to achieve a more strategic, front-loaded, value adding service. Design Review meetings now take place on a six-weekly basis allowing greater flexibility.
- The Service has been strengthened with early, pre-review, investigative meetings which can be accommodated as a result of increased flexibility in the new calendar.
- Greater continuity of engagement, over longer periods is being achieved. Significant projects such as transport infrastructure and cultural projects have been key beneficiaries.
- Better pre-application discussions with the Commission is in evidence.
- A strategic longer term approach is being taken and through Design Days and more informal workshops it is possible for the Commission to broker relationships and highlight opportunities in a timely manner.
- Longer term engagement with LPAs is deepening the understanding of the value of good design in the planning process and the capacity to secure it through policy both national and local, and in more systematic practice.
- Specialist skills have been secured for medium and large scale energy projects and for Nationally Significant Infrastructure Projects (NSIPS) moving through the relatively new PINS process.
- Individual panels are smaller in number for each review making better use of our experts.
- Administration of the service has been simplified. Schemes and enquiries are formally registered so that all relevant information is assessed before a decision is made as to what level of service is required e.g formal review, workshop, strategic days or long term support.
- DCFW's 10 year archive has been re-catalogued for ease of data retrieval.
- All Design Review materials are gathered and circulated electronically and the nature and volume of materials requested has been refined and reduced.
- Specialist seminars are now a permanent feature of DCFW activity.
- The Commission has completely renewed its brand, website and communication tools increasing opportunities across platforms for showcasing talented designers and enhancing the way case studies and information is disseminated and promoted.
- The Commission relocated to the Grade II Listed Cambrian Buildings in Mount Stuart Square, Cardiff, a key move that allows events and seminars and a studio environment more conducive to its remit and messages.
- New appointments to the staff team and Panel will be completed in April 2014.

At the time of publication, June 2014 the Design Commission for Wales is

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experiencing high demand for its services. It is closely involved in planning reform and the wider legislative context in Wales. The Commission is committed to a refined and more public facing service approach and aims to maximize opportunities within the reform context to strengthen the commitment to design quality and the means of achieving it.

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# appendix

## one



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## List of Panellists and Terms of Service

Panellists are appointed by competitive interview.  
All are unremunerated. Five Commissioners also occasionally serve on the Design Review Panel.  
Two of these are co-chairs.

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### Alan Francis

Architect, Gaunt Francis Architects  
*Appointed to the Panel 2003 – current and co-chair of the Design Review Panel*  
*DCFW Chair of the Board of Directors (Commissioners) 2005 - 2015*

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### Ewan Jones

Architect, Grimshaw  
*DCFW Commissioner 2011 – current*  
*Appointed to the Panel 2005 – current, co-chair of the Panel, 2009 – current*

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### Mark Hallett

Architect/Developer, Igloo Regeneration  
*Appointed to the Panel 2007 – current*  
*DCFW Commissioner 2009 – current*

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### Professor John Punter

Professor of Urban Design at Cardiff University, School of City & Regional Planning  
*Founding Chair of the Design Review Panel, 2003 – current*  
*Co-Chair of Design Review Panel 2003–2011, DCFW Commissioner 2002–2012*

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### Wendy Richards

Landscape Architect and Urban Designer – The Urbanists  
*DCFW Development Director 2007 – 2013*  
*Appointed to the Panel 2004, Co-Chair Design Review 2007 – 2013*  
*Former Commissioner, resigned 2007*

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### Professor Richard Parnaby

Architect, Head of School of Planning & Architecture, University of the West of England  
*Appointed to the Panel 2003 – current*  
*(Former and founding Chairman of DCFW 2002 – 2005)*

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### Gerard Ryan

Architect, Nicholas Hare Architects  
*Appointed to the Panel 2005*  
*DCFW Commissioner 2005 – 2015*

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### Jonathan Adams

Architect, Lead designer, Capita Percy Thomas  
*Appointed 2003 – Current*

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### Roger Ayton

Planning Consultant RPS, Origin 3  
*Appointed to the Panel 2006 – Current*

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### Ashley Bateson

Building Services & Sustainability expert, Hoare Lea + Partners  
*Appointed 2006 – Current*

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### Mike Biddulph

Senior Lecturer in Urban Design, School of City and Regional Planning, Cardiff University  
*Appointed 2004 – 2007*

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### Simon Carne

Architect & Urban Designer  
*Appointed 2008 – Current*

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### Kedrick Davies

Planner & Urban Designer, Director, CDN Planning Ltd; founder Biofutures  
*Appointed 2005 – Current*

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### Michael Griffiths

Architect, Latitude Architects  
*Appointed 2006 – Current*

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### Simon Hartley

Building Services, Faber Maunsell and Aecom  
*Appointed 2009 – 2012*

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**David Harvey**

Conservation Specialist

*Appointed 2008 – 2013*

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**Jonathan Hines**

Architect, Architype

*Appointed 2006 – Current*

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**Christopher Jones**

Architect, Boyes Rees

*Appointed 2009 – Current*

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**Richard Keogh**

Architect/Developer, Crest Nicholson

*Appointed 2010 – 2012*

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**Martin Knight**

Bridge/Structures Architect, Knight Architects

*Appointed 2006 – Current*

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**Kieren Morgan**

Architect, HASSELL

*Appointed 2004 – 2014*

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**Andrew Linfoot**

Landscape Architect, CH2M Hill

*Appointed 2010 – Current*

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**Elfed Roberts**

Architect, Developer, Urban Designer,  
Grŵp Gwalia

*Appointed 2005 – Current*

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**Phil Roberts**

Architect/Developer, Former Chief Executive  
Tai Cartrefi; Deputy CEO of Grŵp Gwalia,  
former CEO Warm Wales

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**Ben Sibert**

Senior Bridge and Structures Engineer, Arup

*Appointed 2003 – Current*

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**Ann-Marie Smale**

Architect, Powell Dobson Architects

*Appointed 2004 – 2012*

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**Steve Smith**

Urban designer, City and County  
of Swansea Council

*Appointed 2007 – Current*

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**Lynne Sullivan OBE**

Architect, Sustainability expert,  
Sustainable by Design

*Appointed 2008 – Current*

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**Howard Wainwright**

Architect, Powell Dobson Architects

*Appointed 2003 – 2012*

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**Angela Williams**

Architect

*Appointed 2011 – Current*

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Staff:

**Cindy Harris**

Head of Design Review 2003 – 2012 (Retired)

*Author, former house builder, expert in  
sustainable design and construction*

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**Susan Jones**

Resource and Finance Manager 2003 –

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**Carole-Anne Davies**

Chief Executive 2003 –

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# appendix

## two

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## Conflicts of Interest

The Chairman and other Commissioners are required to declare any personal or business interests that may conflict with their responsibilities as Commissioners. Design Review Panellists are also required to do so.

DCFw maintains a register of interests appropriate to the Commission's activities. The register lists direct or indirect interests, which members of the public might reasonably think could influence their judgment. Commissioners and Design Review Panel members are required to update their register of interests as changes occur. DCFw's register of interests is open to the public.

In addition to the public record of interests Commissioners and Design Review Panel members must ensure that:

- Open declarations of any conflict of interest arising in the time between annual declarations are recorded in DCFw's register. This means they must be declared immediately they arise;
- Invitations or intentions to join other organisations in whatever capacity are declared as soon as they occur;
- Declarations must be made regarding any direct or indirect relationship with any company, individual, agent or other party involved in presenting a project to design review. Involvement in, or the knowledge of prospective involvement in, the same site/project for an alternative client will also constitute such a relationship. In the event that such a relationship, direct or indirect exists, the Panel member **must** step out of the review meeting;
- In the event that there is a public perception of such a relationship, that cannot be robustly defended in the public context against accusations of benefit or foul play and shown to be a false accusation, the Panel member or Commissioner **must** step out of the review meeting;
- Information gained by Panellists in the course of their service should not be used for personal or political purposes, nor should Panel members or Commissioners seek to use the opportunity of service to promote the private interests of connected persons, firms, businesses or other organisations.

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appendix

three

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## List of Abbreviations

**ACW**

Arts Council for Wales

**A&DS**

Architecture and Design Scotland

**BCSC**

British Council of Shopping Centres

**BREEAM**

Building Research Establishment  
Environmental Assessment Method

**CAAC**

Conservation Area Advisory Committee

**CABE**

Commission for Architecture and the Built  
Environment (now DC CABE)

**CEEQUAL**

The Civil Engineering Environmental Quality  
Assessment & Award Scheme (Covering  
Infrastructure, Landscaping and Public realm)

**CCW**

Countryside Council for Wales

**DCFW**

Design Commission for Wales

**DMRB**

Design Manual for Roads and Bridges

**NPRF**

National Retail Planning Forum

**NPPF**

National Planning Policy Framework (England  
only)

**LPA**

Local Planning Authority

**MFS**

Manual for Streets

**NSIP**

Nationally Significant Infrastructure Project

**OJEU**

Official Journal of the European Union

**POSW**

Planning Officers Society of Wales

**PPG**

Planning Policy Guidance (England)

**PPW**

Planning Policy Wales

**Ramsar**

Intergovernmental Convention on Wetlands  
Treaty, adopted in the city of Ramsar, Iran,  
1971, in force 1975.

**RSAW**

Royal Society of Architects in Wales

**RTPI Cymru**

Royal Town Planning Institute Wales

**SAC**

Special Area of Conservation

**SSSI**

Site of Special Scientific Interest

**TAN**

Technical Advice Note

**WG**

Welsh Government

**WISP**

Wales Investment Strategic Partnership

**WLGA**

Welsh Local Government Association

**WSA**

Welsh School of Architecture

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# appendix

## four

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## References and further reading

DCFW 2006, Design Review in Wales: The Experience of the Design Commission for Wales' Design Review Panel 2003 -2005. ISBN: 0-9552657-0-3 / 978-0-9552657-0-3

DCFW, 2007 updated 2009, 2012, 2014, *A Guide to Design Review*

DCFW, 2007, updated 2009, 2012, 2014, *Design Review Panel: A guide for members*

DCFW, 2007 – current, *Ten Points for Primary Care*

DCFW, 2007, updated 2009 *Design and Access Statements in Wales: Why, What and How*

DCFW 2008, Design Review in Wales: The Experience of the Design Commission for Wales' Design Review Panel 2005 -2007. ISBN: 978-0-9552657-1-6

DCFW and Alan Baxter Associates, 2010, *No Place Like Home*

DCFW, 2011, updated 2014, *Ten Points for Tall Buildings*

DCFW, 2012 - current *Design Quality in Local Development Orders*

DCFW, 2012, updated 2014 *Good Design and the Local Development Plan Process*

DCFW and Arup, 2012, *Designing Wind Farms in Wales*

Welsh Government (WG), *Planning Policy Wales, 2008/9*

Welsh Government *Technical Advice Note 12: Design, 2002 and 2009*

Welsh Government Report of the Independent Advisory Group on Planning 2012/13 *Manual for Streets I & II*, Department for Transport (2007) London, Department for Transport /Department for Communities and Local Government

All DCFW documents are regularly updated and available to download at [dcfw.org](http://dcfw.org)

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