

Design Review in Wales

The experience of the Design Commission for Wales' Design Review Panel 2012 — 2015

ISBN: 978-0-9552657-4-7

Design Review in Wales

The experience of the Design Commission for Wales' Design Review Panel 2012 — 2015

Contents

1	An overview of		2.10	Conservation/conversion of historic buildings		3.6	Colleges and schools: recipes for success?	104
	trends in Desigr Review 2012-15			and conservation area schemes	64	3.7	Small developments and conservation cases	104
1.1	Introduction	07	2.11	University buildings colleg and colleges, including student residences	ges 70	3.8	Infrastructure projects and win-win projects	105
1.2	The changes made to the Design Review process	07	2.12	Secondary schools	74	3.9	Implementing a more strategic Design	
1.3	The through-put of Design Review schemes	09	2.13	Primary and Special Educational Needs (SEN) schools	79		Review Service	105
			2.14	Healthcare buildings	84			
2	The Projects		2.15	Major road infrastructure	88		Appendices	
_	The Projects reviewed		2.16	Public realm	89			
2.1	Introduction	14	2.17	Energy infrastructure and generation	92		Appendix 1: List of Panellists and Terms of Service	108
2.2	Large Scale Regeneration Projects	15	2.18	Preliminary conclusions	96		Appendix 2: Conflicts of interest	111
2.3	Small Scale Regeneration: The Vibrant and Viable		3	Conclusions			Appendix 3: List of Abbreviations	113
	Places Regeneration Framework	17					Appendix 4: References and	
2.4	Residential Development: Large Scale Suburban		3.1	Critical issues revisited and reformulated	99		further reading	115
	Housing	20	3.2	Local Development Plans			Acknowledgements	112
2.5	Residential: Large Scale Urban Housing	31		and the new sustainable urban extensions	101		Acknowledgements	116
2.6	Residential: Villages and Countryside	44	3.3	Urban housing: densities and the return to street- oriented housing	102			
2.7	Major Commercial Development	48	3.4	Commercial development and the value of				
2.8	Leisure and tourism projects	53	2.5	local patronage	103			
2.9	Small public buildings and community centres	62	3.5	Vibrant and viable places and small scale regeneration projects	104			

List of Plates

1	Northern Gateway, Deeside, Flintshire	15	15	New house, Penmaen, Gower	46	32	Ysgol Arbennig Meirion Dwyfor Special	
2	New community, Churchlands North		16 17	Residential, Llanbedr Hall Land reclamation and	47		Educational Needs School Penrhyndeudraeth	, 83
3	East Cardiff: New community,	21	18	resort, East Pit, Brynaman Visitor centre, Harlech	55	33	Mental Health Unit, Glanrhyd Hospital,	
	Gwernybwlau, Junction 33/M4	22		Castle, Gwynedd	57	34	Bridgend Hope Primary Care	85
4	Residential, Tir Brychiad,		19	Welsh National Sailing Academy, Pwllheli	58		Centre, Flintshire	86
5	South Sebastopol Design Coding, Llanwern Village	26 27	20	Llandudno Lifeboat Station	60	35 36	Maggie's Centre, Cardiff A465 Clydach Gorge pedestrian/cycle bridge	88
6	Residential, Hillside School Site, Blaenavon	28	21	Wales International Convention Centre, Celtic Manor, Newport	61	37	Barry Island public realm, Vale of Glamorgan	90
7	Residential, Llandaff Cardiff (former BBC		22 23	Library, Merthyr Tydfil Splott Community	63	38	North Wales Residual Waste Treatment Plant	92
8	Cymru Wales site) Residential, Former	29	24	Centre, Cardiff Marine Building, Penarth,	64	39	Kelsterton Converter Station, Deeside	94
9	Pirelli Site, Newport Residential, Bay Pointe,	31	24	Vale of Glamorgan	65			
7	Cardiff	34	25 26	Buckley's Wharf, Llanelli Retirement Home, Swan	66			
10	Affordable housing, Cardiff International			Meadow, Abergavenny Hotel, North Parade, Rhyl	67			
11	Sports Village Residential, Castle Lane Swansea	35	27 28	Bay Science Innovation Campus, Swansea	68			
12	Residential, Dickie's Boatyard, Bangor	39	29	University University of Wales Trinity	70			
13	Estate Regeneration, Pwllgwenlly, Newport	40	30	St.David, SA1 Swansea Ysgol Maes yr Yrfau Schoo				
14	Housing, Harbour Hotel site, Abersoch	44	31	Cefneithen, Cross Hands Pontprennau Primary School, Cardiff	77			

List of Case Study Illustrations

CS1	
Milford Haven Dock Masterplan	16
CS2	
Plas Dŵr, New Community,	
North West Cardiff	24
CS3	
Pantlasau Farm, Swansea	25
CS4	
Dumballs Road/Taff	
Embankment, Cardiff	33
CS5	
Porth Teigr, Residential, Cardiff	36
CS6	
Old Town Dock, Newport	43
CS7	
Central Square, Cardiff	49

CS8 Cardiff International Sports Village 54 CS9 Pantglas Hall & Park, Llandeilo 56 CS10 Brecknock Library & Cultural hub 69 Cardiff & Vale College, Cardiff 73 CS12 Rhyl High School 76 Tidal Lagoon Swansea Bay, Swansea 95

List of Figures

1	Annual number of Reviews 1 January 2013 – 31 March 2015	10
2	Comparison of Schemes 1 January 2013 – 31 March 2015	10
3	Status at time of consultation with DCFW – Public or Confidential	10
4	Annual number by development type 2012 – 15	11
5	Use of Service by Local Planning Authority 2012-15	11
6	Critical issues defined in previous Design Review volumes	99

An overview of trends in Design Review 2012–2015

1.1 Introduction

Design Review in Wales 2012-15 is the fourth of the Design Commission for Wales' overviews of its Design Review Service. It refers to 136 reviews undertaken in the period January 2012 to March 2015, illustrating 38 schemes and selecting a further 13 case studies, from which to draw the most significant lessons.

As with the three earlier publications this document provides an analysis of the overall trends, and synthesizes the findings of individual reviews. It assesses their implications for Design Review as a process, both for the Commission as an advisory body, and for the design/development professions and the national and local regulatory bodies, in order to explore 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 fourth publication we seek to distil the cumulative experience of DCFW's Design Review Service in Wales during the period 2012-15, and disseminate this to key decision makers, the design and development community, planning authorities and the wider public.

The changes made to the Design Review process

This review period is in part characterised by the impact of objectives identified by the Commission in its corporate plans of 2012/13 and 2013/14, progressively implemented in 2014. These included the commitment to focus on major development schemes; to review these as early as possible in their design and development processes, and to sustain that involvement up to and at times including, the submission of planning applications. Longer periods of engagement were identified as particularly important on schemes of significant scale.

In this period the Commission prioritised consultation on fewer projects of greater scale or significance. At the same time it was subject to the wider impact of reduced development activity and planning application numbers. This means that some categories of development which have been examined in the previous three DCFW design review volumes may not be represented in this one. However, regeneration, housing and education are afforded significant attention.

The Commission's own priorities have also resulted in a reduction in the number and type of projects it reviews, and in moving from six schemes each review day to accepting only four. This move is combined with earlier, longer term and more strategic engagement, avoiding situations of late stage arbitration. It has also reduced the number of reviews of smaller schemes most of which it considers should be within the skill and scope of Local Planning Authorities. For specific projects whole or half day meetings take place, several times over several months.

At the same time the Commission has reduced the number of people on each Panel to usually three or four, in addition to a Chair, and one or both of the staff Design

Advisors. The earlier stage consultation, and the acceptance of still fluid design materials, allows more time to prepare and has assisted the Commission's sustained engagement on major projects.

This sustained engagement has been most successful with the Commission's involvement in St Fagans National History Museum project, the development of Central Square in Cardiff, large scale road and energy infrastructure, such as the Tidal Lagoon Swansea Bay and the Pwllgwenlly housing regeneration project.

The Commission has discarded the system for rating the quality of development schemes which was largely unhelpful to the designers, developers and local planning authorities. Furthermore, it no longer attempts to monitor the effectiveness of design review by means of on-line surveys because of the staff time required, and the difficulty of securing meaningful responses. Instead it relies upon sustained engagement with design teams and local authorities to allow regular and immediate feedback. Demand for the service remains a key inidcator.

The lessons of the reviews of this period are summarized and compared with the outcomes of the three previous review publications. 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.

The Design Commission for Wales continues to share knowledge and experience with colleagues around the UK. The wider context has changed significantly and those changes have been documented in earlier volumes.

At present the wider UK context is one where versions of Design Review are being or have already been calibrated in response to devolved Government and other national and local conditions and policy. Whilst each is distinct, there remain common elements. None of the UK bodies are statutory. DCFW in Wales and A+DS remain government funded bodies, whilst CABE has charitable status and now attracts fees for particular services. The Northern Ireland Ministerial Advisory group continues to operate its Design Review service with the secretariat support of the Department of Culture, Arts and Leisure Northern Ireland along similar lines to the DCFW programme.

CABE is now part of the Design Council's Built Environment department, has developed a Design Review approach that attracts a fee appropriate to the nature of the client and the project or support required. Its BEE's (Built Environment Experts) play a role similar to that of DCFW's panellists but are now paid and are fewer in number.

In Scotland A+DS continues to pursue the Design Forum approach for longer term commitment to collaboration on significant projects. A series of workshops and means of reporting provides for interactive engagement, identifying critical success factors and continuing to the point of submissions for planning consent.

The senior personnel and teams of each body meet at least twice a year and are in regular contact, learning from one another's experiences and maintaining common understanding whilst respecting operational boundaries and each devolved policy and governance context.

1.3 The through-put of design review schemes

An overview of the review experience from January 2012 until the end of March 2015 compares the annual summary statistics by numbers of schemes, development type, status and local authority area.

In the calendar year 2012 a total of 37 projects were reviewed, 26 of which were new and 11 of which were part of long term programmes. This pattern was repeated in 2013 with 10 of 36 being subject to long term input. In 2014 between January and December 49 schemes were brought forward with 16 in long term processes and between 1 January and 31 March 2015, a further 13 schemes were reviewed with three engaging in extended consultation.

In this period the Commission prioritised consultation on fewer projects but on those of greater scale or significance. At the same time, it was subject to the wider impact of reduced development activity and lower numbers of planning applications. Some categories of development which have been examined in the previous three DCFW design review volumes, notably major retail development, supermarkets and mixed use city centre schemes, are not be represented in this volume, while education and regeneration have taken over from health in terms of publicly funded projects Figures 1-5 provide summary statistics of the reviews conducted, the status of developments reviewed, the numbers by development type and local authority,

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 for current practice. User guidance can be found in the *Consulting the Commission through the Design Review Service* and is available to download via the Commission's website.

Fig. 1 Annual number of Reviews
1 January 2013-31 March 2015



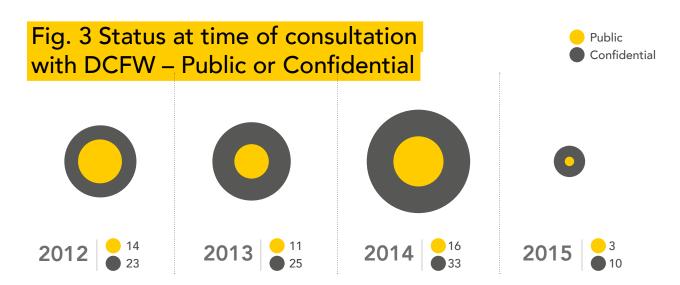






NB Jan-March 2015 period only.

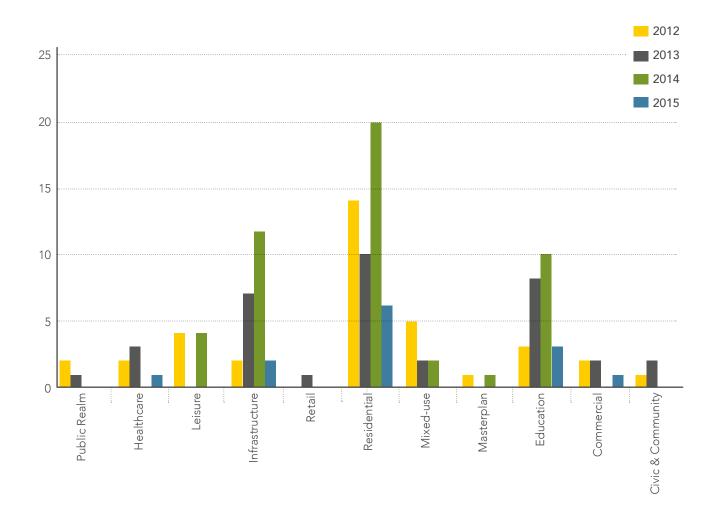




NB Confidential Status is only awarded in the very earliest stages, and on a scheme by scheme basis

Fig.4 Annual number by development type

	2012	2013	2014	2015
Public realm	2	1		(Jan to 31 March only)
Healthcare	2	3		1
Leisure	4		4	
Infrastructure	2	7	12	2
Retail		1		
Residential	14	10	20	6
Mixed use	5	2	2	
Masterplan	1		1	
Education	3	8	10	3
Commercial	2	2		1
Civic and community	1	2		



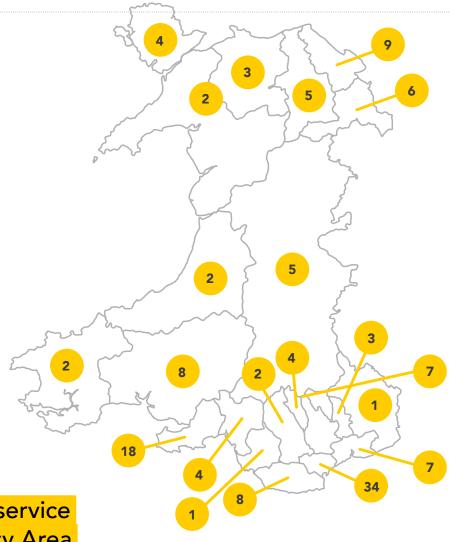


Fig.5 Us	e of the service
by Local	Authority Area

	2012	2013	2014	2015	
Anglesey			2	2	
Brecon Beacons NPA	3	3	1		
Bridgend	1				
Cardiff	6	7	20	1	
Carmarthenshire	2	3	3		
Ceredigion	2				
Conwy	1	2			
Denbigh	1	3		1	
Flintshire	3	4	1	1	
Gwynedd	2	2	2		
Monmouthshire	1				
Merthyr Tydfil	1	1		2	
Neath Port Talbot	3			1	
Newport	1	2	2	2	
Pembrokeshire	1		1		
Powys			5		
Rhondda Cynon Taf	1		1		
Snowdonia NPA	2				NB Full meetin
Swansea	2	6	8	2	reviews only.
Torfaen		2	1		Excludes writte
Vale of Glamorgan	4	1	2	1	consultation

The projects reviewed

2.1 Introduction

The projects reviewed between 1 January 2013 and 31 March 2015 are discussed by type beginning with large scale regeneration, and smaller scale regeneration projects. These are followed by residential projects beginning with larger scale suburban projects, by urban housing projects, and by houses in villages and the countryside. Major commercial schemes are discussed next, followed by tourism and leisure buildings and then small public buildings and conservation of historic buildings. Education buildings are broken down into sections on university and college buildings, secondary schools, primary schools and special educational needs schools. Health buildings, major road schemes, public realm projects follow. Energy generation and flood control projects complete the inventory.

Each of these sections has a 'lessons learned' conclusion and these are drawn together in a brief conclusion which reflects on the nature of the reviews conducted, the state of the market and the development industry, and the changed nature of the design review service. Key observations and conclusions are summarised in more detail and reflected on in Section 3 which draws together the main observations.



PLATE 1— NORTHERN GATEWAY, DEESIDE, FLINTSHIRE.

The Northern Gateway plan presented was only the riverside section of the redevelopment, and contained minimal design principles using an existing access off Welsh Road. The eventual build-out revealed the lack of a landscape strategy, and only a minimal green strip to screen the residential.

Large Scale Regeneration Projects

The pattern of regeneration activity in Wales during this period, and the projects upon which the Commission was consulted has been diffuse. Only two large scale regeneration projects were reviewed, and these contrast with the emerging Vibrant and Viable Places (VVP) regeneration fund projects.

Milford Haven Port Authority's regeneration of Milford Haven Dock has been selected as a Case Study (see Case Study 1). The Northern Gateway project in Flintshire is part of the Deeside Regional Enterprise Zone. The Panel was asked to review an outline application covering the southern part of the site, but were only provided with the Masterplan Framework document and the Design & Access Statement (DAS), not the Environmental Statement or other supporting information. The northern part of the site had already been granted outline consent.

The Commission observed the lack of overall vision for the project responding to the unique qualities of the site and context, along with a lack of the thorough analysis required to underpin a design framework. Listed buildings were acknowledged but detailed landscape and ecology information relating to the River Dee was not presented, though flooding was addressed. The potential of a site-wide sustainable transport strategy and energy strategy did not appear to have been explored.

There was concern that there was no coherent design framework for the large employment buildings planned, no assessment of their landscape impact, and no landscape strategy to improve the quality of the built environment. As for the residential community there was little information on the so-called 'heart' of the project, or on wider development and design intentions (Plate 1).

Subsequently the revised masterplan framework was commented upon by DCFW, but the same questions were asked about the unique characteristics of the site and the vision for development, the involvement of the Garden City community, the development of sustainable transport and energy strategies, and a comprehensive landscape assessment and strategy. Sub-area masterplans should be developed to provide more guidance for future development, but it was far from clear that the masterplan framework was an adequate basis on which to proceed.

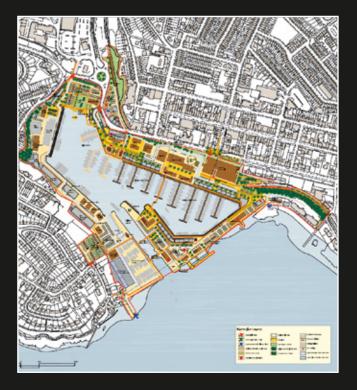
A second large scale regeneration project was for Milford Haven Dock (Case Study 1), taking the form of an indicative masterplan. The Milford Haven Regeneration Strategy was first reviewed in 2008 (DCFW 2007-11: 26) and this provided the context for the review of the masterplan.

CASE STUDY 1:

MILFORD HAVEN DOCK MASTERPLAN

The Milford Dock Masterplan which is vital to the extension and enhancement of the town centre and the town's wider regeneration was seen at an early stage in 2008 and again in 2012 following two stakeholder workshops, a public exhibition and a 'drop-in' session. Connectivity with the town centre and the impact of a proposed new food store on other shops were being explored further. Phase 1 would relocate the boat storage yard to the edge of the Haven (DCFW preferred the north east side of the Dock) and a new lock gate and footbridge would facilitate pedestrian access around the dock. The dry dock would be relocated to Pembroke Dock. The Panel thought that the detailed design of the project should start with a public realm and landscape strategy, and that the siting of the residential units around the Dock needed to be more coherent.

A strong architectural vision was required for the project and some detailed design guidance was promised to set parameters for building heights and massing. The Commission also sought more guidance on landscape and public realm issues and clear commitments to



sustainability standards. Concerns were raised at the bulk of the multi-storey car park over the food store and its visual impacts. The proposal for a lift to link the green space in front of Hamilton Terrace with the dock below also needed to be reconsidered. The improvement of the green space itself was a design and landscape challenge while the Panel also emphasised the need for de-trunking and calming of traffic along this stretch of road.

When subsequently reviewed in 2014 the Panel again urged the development of more design guidance, perhaps a simple Design Code to shape the proposed development. This should be based on a Conservation Area appraisal that would help set the parameters for the scheme, and define appropriate materials and landscape. A proposal to dismantle and move one of the listed structures in order to improve access on to the dock was included, but the Panel wondered if this was practical given its condition; the relocation was also problematic. The proposal for retirement homes on reclaimed land at the shallower north end of the dock was also questioned, and the Panel felt a more ecologically and historically sensitive project was required here. Similarly the plans for family housing on Mackerel Quay would demand extensive rock excavation and the public realm here needed more consideration and more shelter from the elements.

Plans for the multi-storey car park had been removed and the design and form of the supermarket was being explored in some detail. The re-routing of the Wales Coastal Path through the Dock would be a boon to the project and a new footbridge across the harbour entrance was considered essential to the success of the regeneration effort.

The idea of a tall 'landmark' commercial building in the scheme had reappeared but its successful design would pose a significant challenge. The Commission offered further assistance to the client Milford Haven Port Authority and the design team in relation to the potential for a design competition for this element.

 MILFORD HAVEN DOCK
 The Panel felt that the revised masterplan was an improvement on that previously presented, but needed a stronger conservation perspective and design guidelines to 'preserve and enhance' the character of the Dock and its listed buildings. The removal of the multi-storey car park (north east corner) was welcomed, as were improvements to the north access to the Docks, but the appropriateness of the retirement housing in this location was questioned

Lessons learned

In both these cases the masterplanning left a lot to be desired, but in the Milford Haven case there was clearly a process of refinement taking place, though the Panel urged a Conservation Character Assessment to support these changes and further design guidelines. The introduction of a 'landmark' building required further testing. In the case of Northern Gateway the vision of what form developments might take across the site in the future ensured a minimal level of coordination, but it provided little promise of a sense of place or any discernible environmental quality overall.

2.3 Small scale Regeneration: The Vibrant and Viable Places Regeneration Framework

The Welsh Government review of regeneration practice and subsequent consultation period in 2013, led to the establishment of the Vibrant & Viable Places Regeneration Framework fund (VVP). The funds would be made available to Local Authorities for regeneration schemes, via a competitive bidding process, with the aim of allocating funds for approved schemes to be delivered between 2014 and 2017. Town centres, coastal communities and areas of deprivation were specifically targeted for assistance. Housing, health, education and addressing poverty were all key aims. Detailed background, bid processes and assessment reports can be found via the Welsh Government website http://gov.wales/topics/housing-and-regeneration/regeneration/vibrant-and-viable-places/?lang=en

A total of 22 applications for funds were made, requesting c£250m of grant assistance at stage one for Strategic Outline Programmes (SOPs) worth over £1bn in their entirety. We understand that based on stage one assessment, 11 authorities were invited to submit second stage bids. The maximum funding available per Authority was £15m and at a second stage, awards were made to the following Local Authorities in a decision announced on 31 January 2014:

Isle of Anglesey Holyhead	100%	£7.490m
Merthyr Tydfil Merthyr Tydfil	100%	£12.873m
Newport Central	100%	£14.988m
Conwy Colwyn Bay	90%	£12.022m
Neath Port Talbot, Port Talbot	90%	£9.643m
Wrexham Wrexham/Caia Park/Hightown	90%	£10.594m
Swansea city centre	60%	£8.394m
Torfaen Pontypool	60%	£8.203m
Bridgend	40%	£5.978m
Flintshire Deeside	40%	£6.024m
Rhondda Cynon Taf Pontypridd	40%	£5.980m

Three authorities received the maximum amount for which they had submitted bids and among the funding conditions was the requirement to consult with the Design Commission for Wales. Several VVP projects include a mix of partnership and other funding sources which enhance the awards made. Each one also comprises a mix of internal refurbishment, upgrading of housing stock and/or retail/high street frontage treatments and in some cases new build and highways.

The Commission wished to avoid a tick box approach and a default to late stage design reviews so they invited the authorities to outline their whole proposals, and subsequently to identify those elements that would warrant and benefit from further DCFW input.

Several authorities found it necessary to reconfigure their proposals due to the percentage of WP funds awarded, meaning that many have been reduced in scope and extended in timescale. Some authorities met with the Commission at too late a stage, and opportunities for refinement have been lost. Others have responded positively to the process and key projects have returned for successive review or workshop meetings.

The Commission has been consulted upon schemes so far in Newport, Merthyr, Cardiff, Holyhead, Neath Port Talbot, Flintshire, Swansea, Rhondda Cynon Taf, Gwynedd and Bridgend. Other schemes have been registered and continue to consult with DCFW.

The first scheme seen was Griffin Island, a triangular Victorian block on the main High Street in Newport. The proposal was the conversion of the upper floors of the Grade II listed buildings at 27-33 High Street, and adjoining properties on Griffin and Skinner Street, back into residential use to create 26 below-market rental apartments. The Panel warmly welcomed the scheme but noted that the conversion could have been accompanied by refurbishment of the ground floors and shop fronts to these buildings under such funding as the Townscape Heritage Initiative to increase the positive impact of the scheme. They also pointed out that the clutter of electronic equipment, including CCTV cameras, might be reduced to good effect.

The second scheme was Merthyr Bus Station which it was proposed to move from the north to the south side of the main shopping centre onto a new site produced by demolition of a health clinic and a police station. The proposal was for a 14 bay bus station, with four layover spaces, with entry from Avenue de Clichy and exit via Swan Street. The new bus station would include ticket office, toilets, cafe and staff accommodation. The design team presented various options but had opted for the preferred solution in consultation with the main bus operator. The Commission had concerns that the proposed layout involved buses reversing out of the bays, and this was considered to be inefficient, potentially dangerous and an outdated practice.

The pedestrian connections to the new bus station were also examined, and the Commission thought they ought to be informed by a wider view of pedestrian movement around the town. As proposed those approaching the bus station from the south would have to cross the bus turning area while those approaching from the shopping centre would have to negotiate a change of level, a narrow link beside the chapel, and cross a service yard. A third concern was the access from the other side of the river and the location of the proposed pedestrian bridge in relation to the proposed bus station. There was also the possibility of including disabled parking in the scheme, as well as widening the perimeter of the site, in order to improve the layout. The Commission recalled the ambitions of the town centre masterplan that new development in this location should address the river and exploit its potential amenities.

There was clearly much more negotiation, planning and design to be undertaken and the Panel emphasised that the critical factor was to provide a facility that would be a high quality gateway to the town centre, and one that was legible and safe and well connected to the main pedestrian routes and key destinations in the town. Subsequently the Panel reviewed other elements of Merthyr's proposed VVP programme which was comprised of 22 projects focused mainly on restoring derelict buildings in the northern quarter of the town centre.

A second review focused on the refurbishment of the listed former Labour Exchange that is currently derelict. Behind the restored facade of the Labour Exchange the

Council proposed to build 12 apartments, and a further 12 houses on adjacent land, but the scheme was close to a planning application so the Panel's comments were unlikely to have much influence on the design. The Panel felt that the terraced house typology fitted with the context, but the details of the 'traditional architecture' style were of concern, especially the use of quoin details, which were considered to be too grand for the nature of the development. The Panel urged the simplification of the detailing wherever possible including porches, chimneys and materials. They wanted the chimneys to be part of a ventilation system rather than purely decorative. They were keen to see the communal spaces given more natural daylight and reconfigured to provide more comfort for the tenants. As for the facade retention the Panel felt that the new build was in danger of overpowering the historic facade, particularly the new gable which was intrusive and had no functional purpose. Further engagement is planned.

The Bridgend scheme that came to the Commission involved the demolition of a multi-storey car park and its replacement by a 240 space car park and some 28 apartments integrated with some commercial space provided by a Housing Association. The Panel were disappointed with the failure of the Council to take advantage of an early meeting. However, they were encouraged by the comprehensive approach to the town centre taken by the Council including a Townscape Heritage Initiative and proposals for an Arts Centre and Indoor Market.

However, the Panel felt that the re-development scheme before them was focused more on car parking requirements than the provision of residential accommodation and improvements to the environment of the town, and that the impact of the car park on the riverside would be detrimental when compared to the alternative of a residential frontage. They criticised the setback of the development from the footpath which produced a large unused site which would not help the success of the commercial unit. There were also questions about the bulk of the apartment building, and the need to break down its scale and grain to be more sympathetic to the locality. The Panel were informed that there was no time to incorporate their comments!

The Grangetown Cardiff the VVP scheme was also seen too late for the Commission's view to be adequately considered and demonstrated ill-considered conditions of funding requirements for such a wide range of projects. In particular this project had been unsuccessful in the first bid, reassessed in a subsequent process against challenging timescales for expenditure and referred to DCFW far too late.

Three elements were being progressed. The first was a commercial improvements programme which offered a 90 per cent grant for shop improvements and uptake was proving very positive. The second was improvements to the district centre which focused on the main intersection of Penarth and Clare Roads, and these provided a pedestrian crossing on all-red signals and the removal of some of the pedestrian barriers on the kerbs. However there had been no overall approach to improving the sense of place or the quality of the environment for pedestrians. The third scheme was the provision of a community hub using the existing library and these proposals had gained planning permission and were already out to tender. The completed scheme is an improvement but lacks the quality of a sound movement and public realm project that would be durable in the long term.

The Commission provided an exploratory workshop discussion for a Neath Port Talbot VVP project which was focused on the public realm/transport interchange around the old Police Station, and the conversion of the same into three ground floor commercial units and 30 one bedroom apartments. This went into considerable detail in terms of ensuring that the conversion was as sensitive as possible and was complemented by public realm improvements.

In Holyhead the VVP scheme was conceived in conjunction with a Townscape

Heritage Initiative and its focus was the Grade II listed Market Hall which had been empty since 1999 and become dilapidated. The intention was to convert the building to house the town library, in turn redeveloping the existing library site. The Panel considered that the Market Hall proposals were proceeding in the right direction, and that both internal and external spaces were being properly considered for a variety of uses. The Panel's attention was drawn to four other projects in the town that would benefit from design review and these would be programmed into the Panel's 2015-16 review programme.

Overall, reflecting on the Design Commission's contribution to the Vibrant and Viable Places initiative, very often the schemes were coming to the Design Review Panel far too late in the design/development process for their comments to be any use. Yet the Commission's wider experience with Welsh development, and the contribution that good design can make to its sustainability, longevity and commercial viability, should be invaluable to each regeneration framework. DCFW's concern for the vitality of town centres, and their overall enhancement, are clearly essential ingredients to vibrant and viable places, and a key consideration in linking environmental improvement to economic prosperity and community wellbeing. The potential value of the Commission's contribution is under utilised.

2.4 Residential development: Large Scale Suburban Housing

A number of major suburban housing schemes have been designed in more detail and consulted upon through the Commission. These include three large schemes on the edge of Cardiff, and one each on the edge of Cwmbran, Swansea and Blaenavon. A second phase of the Barry Waterfront scheme and the Design Code for Llanwern were also reviewed, along with a more speculative scheme for the small town of Talgarth. Two of these schemes have been selected as Case Studies, one in Cardiff and one in Swansea.

The failure of the 2011 draft Cardiff Local Development Plan with its 'brownfield only' strategy and lack of suburban (family) housing provision, and its re-working for a subsequent 2014/15 examination, to accommodate extensive green field development and some 41,000 homes, stimulated a number of volume builder, large scale suburban housing schemes coming to the Commission in mid 2014. The new Deposit Draft Local Development Plan was to be supported by a so-called Masterplanning Framework and a set of principles to be applied to sites with more than 500 homes. Eight sites (ca 14,000 units) were provided with basic parameters indicating the extent of development, broad land use allocations, transport links and principal access roads. A set of 10 general master planning principles accompanied these, embracing matters of density, movement, connectivity, sustainable design, greenspace and landscape. This marked a change in the provision of planning/ design guidance simultaneous with the refinement of a statutory plan in Wales and was in principle welcomed by the Commission. Its detail, robustness and utility however remain the subject of concern.

In this context, the first scheme upon which the Commission was consulted was in North East Cardiff, the initial 1,200 homes of a 4,500 unit outline application for land north and east of Lisvane, and named as Churchlands. This outline application had a long planning history and had been extensively discussed with the Local Planning Authority but was not brought to DCFW until February and May 2014.



PLATE 2— NEW COMMUNITY, CHURCHLANDS NORTH EAST CARDIFF.

The masterplan reveals the emphasis on the preservation of woodland, hedgerows and the Nant Glandulas stream on the eastern boundary. The spine road is given an indicative built form, but the residential areas behind only a generalised layout. Anticipated development to the east suggests this will become a very busy spine road.

The scheme had an average density of 42 du/ha indicating a welcome compactness, but no information was provided on the level of affordable housing. The first review focused on general matters of urban structure, road layout, the aim of an LDP-related 50/50 modal split of public and private transport use, green infrastructure provision and adoption (Plate 2).

A key concern was the relationship of this initial phase of development with the wider masterplan for Pontprennau, and this remained opaque. At the second meeting key issues were the design of the major road network (parking capacity) and the location of the neighbourhood centre closer to the course of the Nant Glandulas stream. The narrow width and capacity of the main roads were major concerns, while the residential road layout (linked cul de sacs) and the differentiation of neighbourhood character (housing typologies) needed to be developed further. The relationship and shape of the neighbourhood centre in relation to the river valley was also discussed. The nature and location of school provision needed urgent resolution by the Council along with the infrastructure matters. The subsequent refusal notice from the Council confirmed these shortcomings, and provided the Commission with a very useful insight into the fastidious application of the Council's masterplanning principles and infrastructure requirements (see section 3.2).

The site of the formerly proposed Wales International Business Park (see DRW 2005-7: 76-77) at Junction 33 of the M4 has been designated as a largely residential project in the revised Cardiff LDP, but some of its key elements remain. An outline application for ca 1,500 homes was submitted to develop the site. The proposed new community will take the local name of Gwernybwlau, and be designed as 'a new sustainable community linked to the heart of Cardiff by high quality public transport'. It is important to note that this statement, and the residential proposals here and at other sites, all respond to a proposed, much anticipated but still uncertain South Wales Metro transport project that featured in the Cardiff Capital Region Report of February 2015.



PLATE 3— NEW COMMUNITY, GWERNYBWLAU, JUNCTION 33/M4.

The masterplan shows a set of residential communities separated by woodland and green corridors. Business areas front much of the M4, and a large park and ride car park is located close to Junction 33. A potential Metro line has been reserved as a green corridor leading north from the Junction 33 but the masterplan responds to road, not transit, access.

The residential area occupies nearly 44 ha of the site and is promoted as a 'garden suburb' with a density of 44 du/ha focused on a primary school and an affordable housing provision of 30 per cent in the LDP (Plate 3). The rest of the undulating site (ca 32ha) will be retained as open space, mainly extensive woodlands and valleys; 5.5ha will be developed as a business park and 2.6ha as park and ride, both the latter accessed from Junction 33 off the M4. The residential access is proposed off Llantrisant Road and will present a major difficulty for most residents, and place further pressure on this key arterial route.

A major unresolved issue was the nature of the neighbourhood centre and whether this should include a significant portion of the business space, the new primary school, be adjacent to the transport hub, and have a higher density residential content. The Commission welcomed the emphasis given to walking, cycling and public transport, but clearly there were difficulties of phasing transport infrastructure and housing. The Commission sought a 'fabric first' approach to sustainable construction with careful siting and orientation of buildings to further energy efficiency. They also sought greater variation of densities and housing typologies to provide more differentiation of residential character. They cautioned against pastiche of local village character and thought that a variety of road cross-sections could be developed to create more diversity of public realm and landscape.

At a second review two months later the nature of the Character Areas had been further explored and developed, and variations in density suggested, but these had not yet been translated into a revised masterplan. It was felt that there should be more diversity in the housing through more sophisticated procurement processes. The vision of 'three communities-one place' and the connections with the villages of Creigau and Pentyrch remained unresolved. The internal spinal connection between business park, park and ride, village centre and Llantrisant Road and the woodland to the west, needed more careful design thinking, as did the proposed management of the green space.

A particular concern was the design of the neighbourhood centre, and the anticipated connections and footfall that might support commercial and community uses. The Commission welcomed the decision to locate the primary school and the community space in the centre, but were unsure about how the built forms might support ground floor commercial uses and the centre's vitality and commercial success. The proposals for small business uses/workshops in the main employment area could further support the village centre, but it was not clear how these would be integrated and connected.

Overshadowing this and other proposals was the lack of certainty over the provision of a Metro, first of all its alignment, but also its form of transport and its detailed design requirements. Heavy rail, tram and dedicated bus lines all remain possibilities. Similar uncertainty also surrounds the design of Llantrisant Road, though its redesign and increased capacity will be essential whatever form of public transport is developed.

The same uncertainties as bedevilled the Gwernybwlau (J33) project were evident in the largest development site in north west Cardiff (Case Study 2), a proposal for a sustainable urban extension with ca 7,000 dwellings and employment for 3,000 people (formerly known as Waterhall).

This is a partnership between a major volume housebuilder and a local land owning trust that envisages 5,000 homes built over the decade to 2026 at densities between 25 and 60du/ha. The level of affordable housing provision is to be determined through 'viability assessment' but the LDP requirement is 30 per cent. An early application would be made for 900 homes as the first phase of a planning application for the entire site.

Alongside the residential component the plan envisages the provision of 4.5ha of employment land, and a District Centre with 8,500 m² of retail uses and a library, health/sports club, community hall, pub, offices and healthcare facilities. A local centre will also be provided with some 3,000 m² of retail and community, health and pub uses, as well as three primary and one secondary, schools. The project includes a comprehensive network of walking and cycling routes including commuter cycling routes into town. The promise was also made that 'prior to the tram/train becoming operational, bus networks will be enhanced to provide an exemplar level of public transport service'. The scheme envisions the build-out of the 7,000 homes over the decade 2016-2026.

Overshadowing this and other proposals was the lack of certainty over the provision of a Metro, first of all its alignment, but also its form of transport and its detailed design requirements.

CASE STUDY 2:

PLAS DŴR, NEW COMMUNITY, NORTH WEST CARDIFF



 NEW COMMUNITY, PLAS DŴR, NORTH WEST CARDIFF
 The masterplan shows how the development connects to adjacent settlements, but the through routes are less clear and the main Llantrisant Road (A) is rather ignored. A green corridor is reserved across the centre of the site for the Metro and much of the woodland is carefully preserved, but sustainable surface drainage is less evident. The influence of the topography will be a challenge especially to the commercial centre.



The first review of Plas Dŵr, a settlement of c7000 homes on land to the north of Cardiff between Fairwater and the M4 sought evidence that the design team had taken a city-wide strategic perspective to shape the development, and that a shared vision was being developed with the Council. English precedents like Newhall and Portishead were referred to by DCFW as precedents for a planning and development management process which had delivered a large project with high quality design a decade ago.

The transport strategy should develop both strategic connections with the wider city and connect the local centres to each neighbourhood, providing opportunities for higher density development in more accessible locations. The Portishead example demonstrated the importance of close working between developer, consultant team and the LPA, but also emphasised the importance of creating 'time for design'. A 'visioning' masterplan can provide the framework for a series of 1:500 sub-area masterplans where detailed designs can be developed with an LPA project team.

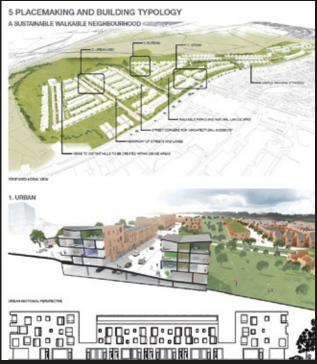
It was noted that the topography and green infrastructure provided a significant challenge to an efficient transport network, while at the same time offering a fine network of green spaces, some very attractive housing sites, and many significant design challenges. The hydrology and sustainable drainage aspects were less well developed and needed more attention.

In the second review the focus was on movement and the connections with the wider city. The Local Authority's proposals for Llantrisant Road were an area of major uncertainty as was the timing of the proposed Metro, but it was becoming clear that the movement corridor for the latter would have to be flexible to accommodate a range of proposals. This is a potential problem that could severely undermine design quality and the function of stations, traffic circulation and centre vitality. There was recognition that the topography through the centre of the site to the north of the movement corridor is a challenge to both road and cycle networks and to housing design and layout.

The design of the neighbourhood centres and their 'squares' was felt to be too similar, while the relationship of the edges of adjacent development to the central green spaces needed more attention. The Panel particularly wanted commitments to sustainability targets to be clearly stated. Finally the Panel promoted a staged process of project design where the LPA, the wider community (and potential residents) and the Commission could engage with the design/development team to ensure design quality and sustainability were being achieved. This was particularly important given the fact that the initial housebuilder will likely only deliver about half of the projected housing.

CASE STUDY 3:

PANTLASAU FARM, SWANSEA





NEW COMMUNITY, PANTLASAU FARM, SWANSEA
 The compactness of the development is balanced by

The compactness of the development is balanced by generous public spaces. The varied typologies of two and three storey townhouses and four storey apartments are well-integrated, but the overall quality of environment would depend on the architecture and build quality, and the design and management of the public realm.

The Commission considered that this innovative project 'presented an opportunity for a transformational scheme that could raise design quality in the city'. They commended the Trust's vision of a landscape-led approach to a dense, walkable, compact neighbourhood, with a mix of 3-4 storey houses. They were concerned that the scheme might not be commercially viable, it being very different from the conventional suburbia now being developed country-wide (and evident in this volume). In addition the commercial area would need to attract business from the wider area (particularly perhaps the DVLA offices across the main road) and the proposed double fronted retail units were considered unworkable.

Parking provision would be a design challenge at these densities, and local authority highways departments would need to approve the tight road layout.

Parking provision would be a design challenge at these densities, and local authority highways departments would need to approve the tight road layout. Similarly the landscape ambitions to blur public and private space, and to avoid secure fencing, might challenge accepted wisdom on safety and security and would need to be vigorously defended and well executed. Any affordable housing that was included would require buy-in from one of the more adventurous social housing providers. That said, the Commission welcomed the challenge to conventional practice and the desire to achieve a well designed, sustainable development.

The Panel suggested a 'project development board' to establish a partnership between landowners, developers, and the local authority, and a design code/guidance to support their design ambitions. They were keen to see the plans progress.



PLATE 4— RESIDENTIAL, TIR BRYCHIAD, SOUTH SEBASTOPOL.

The Panel felt the plans for the first phase of this major development were disappointing and standard volume builder design output. They urged the designers to take control of the details of the landscaping and the changes of level to deliver the potential of the green infrastructure.

The Panel also reviewed a masterplan for Pantlasau Farm (Case Study 3), potentially one of the candidate sites in the pre-deposit Swansea LDP, previously designated as within a green wedge in the existing UDP. The detailed masterplan could be seen as somewhat premature in the circumstances, but was commended for its design ambition. The greenfield site is located on the northern edge of Swansea, just north of the A48, south of the M4 and, opposite the DVLA offices and the northern edge of the village of Morriston. A 21.6 hectare site was identified of which 15 ha would be developed at a density of 40-60 du/ha, significantly denser than the norm, particularly in a city-edge location. The remainder would be retained as parkland, although an additional site could accommodate 250 homes using the same design principles.

The South Sebastopol scheme was for 1,200 homes on undulating, well-wooded farmland sloping down from Mynydd Twyn-glas and across the Monmouthshire and Brecon Canal to the A4051. It was situated north of Cwmbran within Torfaen. It was reviewed by the Panel in 2010 and was refused by the Planning Committee despite an officer's recommendation to approve (see DRW 2007-11 p.32). A new outline application was developed and a framework masterplan for the entrance to the scheme was submitted that would be detailed through a series of development briefs as development proceeded. The Panel welcomed the design team's intention to develop a 'controlled randomness' in the layout to reflect a settlement evolving over time, but considered that this could be best achieved through small clusters of individually designed homes, and not through standard volume builder procurement methods.

The first development brief for the entrance to the site, Tir Brychiad, was the subject of the review and the Panel felt that some of the intentions of the framework masterplan had already been lost or compromised by proposals for a more homogeneous development (Plate 4). The loop access road with two access points had been dispensed with, and the walking and cycling priorities were not evident. Parking strategies were also vague and needed to be carefully designed as per Manual for Streets I & II, and the promised emphasis on green spaces linked to woodland needed to be designed as a network, and delivered with conviction and a clear management regime. Similarly the designers were urged to take control of the details of landscaping and level changes, and not to leave these details to the building team to resolve. Clear requirements for a commitment to sustainable buildings were also needed.



PLATE 5— DESIGN CODING, LLANWERN VILLAGE.

The coding plan divided the site into 16 parcels each with a maximum number of dwellings, an affordable component, a generalised mix of house types, and primary and secondary materials. The Panel observed a general lack of design ambition, and worried that the main roads might have contrasting house types facing each other.

Newport Council requested that DCFW review the Design Code for Llanwern Urban Village. This had resulted from a condition of approval of an outline planning application for an urban extension of 1,100 homes on the north eastern outskirts of the town. The development proposals had been favourably reviewed by DCFW in 2007 (DRW 2005-7:27). The LPA no longer had a specialist design officer and wished to ensure that the 237 page document would be useful to them in the coordination and control of the different development phases (Plate 5).

The Commission did not feel that the Design Code would be useful in the form presented because the 'testing plan' showed a lack of attention to the complex and attractive topography of the site. They thought the parcelling of the land was not sufficiently responsive to topography and should not be dictated by the road pattern; rather the major roads themselves should be coded in terms of form and landscape to ensure a continuity of character and legibility. Furthermore, the plan illustrated what might be regarded as a standard developer vernacular, and demonstrated a lack of design ambition. It lacked details of building character in the most important locations while limiting opportunities elsewhere. The Commission was keen to review the first phases of development to ensure that the considerable potential of each part of the site was realised.

The Commission reviewed proposals for the redevelopment of Talgarth Hospital, which had been vacant for a decade and was now derelict. The chapel and main administration building were to be restored for community use, but the proposals were to demolish the derelict hospital and build 70-80 new homes, and 80 apartments for retirement and elderly care, all to CSH Level 4 standard, as well as some B1 employment spaces and livework units. Given that the site was within the Talgarth Conservation Area and the Brecon Beacons National Park the design and planning challenge was immense. The Panel welcomed the robust defence of the proposal offered by the planning team but thought that the Design & Access Statement could have been strengthened if it had better exploited the distinctive character of the site, and sought successful precedents in Wales as reference points for their design. The generous green spaces and rural edge to the development were welcomed, but the location of the new village core was problematic, and its integration into the village high street was preferred.

Another significant development on a sensitive settlement edge, this time within a World Heritage Site, was the redevelopment of Hillside School in Blaenavon, and its replacement with ca 60 dwellings. The school was a familiar, well-liked building but its demolition was imminent, and the community had been consulted. The western end



of the site adjoins the King Street Conservation Area with its stepped, narrow, slate-roofed, stone and render terraces that characterise the historic town. The first review acknowledged the complexities of the site, the context and form of the development and the challenges of parking, access, open space provision and security. It also considered some details of design that were proving controversial such as windows, thresholds and other responses to extant quality standards.

At a second review the Commission followed the points of concern raised by the LPA. They welcomed the appointment of a landscape architect to improve the green spaces on the site, and thought that the gardens of the apartments should be extended to the fence lines of existing apartments for security reasons (Plate 6). The boundary treatments had been rationalised to be brick walls with railings, the dark grey brick on the housing had been replaced with red brick, and the door canopies removed. All this was considered an improvement. The visibility of rear parking also had been enhanced at the expense of some loss of privacy in the rear gardens. The Panel felt that the open space on the site required some feature/public art or play equipment for children, but this needed to be carefully sited to avoid disturbance to the Special Needs housing. Discussions were ongoing about the desirability of windows on the gable ends of the terraces and the consistency of front door positions to keep the rhythm of the terraced streetscape on Upper Hill Street (Plate 6a). The importance of slate roofs had been acknowledged and this might be reclaimed from the demolished school for cost effectiveness.

A much larger scale suburban housing project was the first stage of a 600 home development on the south eastern edge of Abergele, Conwy. The Commission saw a proposal for 92 homes that would open up access to the site from the south, and would be based on a cul-de-sac layout with a majority of 4 bedroom homes as well as 20 three-bed and 16 two-bed properties. Existing hedgerows around the site would be retained and an open space provided in the south east of the site. Ten percent affordable housing would be required, and in this project the nine homes were all grouped together and of the same house type.

The LPA had prepared a concise development brief for the whole site, but had yet to finalise a number of issues including highways and transport. So while they were aware that this first phase of development would set the standard for the whole project they were unable to provide the necessary guidance that might help deliver it. That said, the Commission largely agreed with the principles of the objectives set in their development brief. This proposal also came at a time when DCFW was closely engaged with the Local Authority on its LDP delivery and its officer and member training. The staff team at the Commission therefore knew the site and the wider context well.





PLATE 7—
RESIDENTIAL, LLANDAFF
CARDIFF (FORMER BBC
CYMRU WALES SITE).

The planning application and supporting drawings did not provide convincing evidence that the first phase would meet the stated development objectives, nor did it make clear what were commitments rather than aspirations. As for the transport and movement strategy it was vital that the LPA set the criteria for road, public transport, cycle/footpath and infrastructure connections to ensure that the whole site was properly connected internally and externally. The proposed use of elongated cul-de-sacs provided far less connectivity than a grid of routes, and drawn cross-sections through each of the road types would provide some assurance as to their capacity and design quality. The landscape and ecology also needed to be conserved as far as possible, and turned into visual and environmental amenity assets for the community. Finally the composition of house types and sizes should demonstrably respond to the housing need in the area. The Commission wondered whether the proportion of four bedroom homes could be justified on this basis. In June 2015 the Abergele South East Development Plan was consulted upon and in its written comment, the Commission again welcomed its broad objectives but raised concerns about the level of detail underpinning design principles and among other items, the dominance of highway layout and the lack of connectivity.

Phase 1 of West Pond on Barry Waterfront was the third phase of the Barry Waterfront project (see DRW 2003-5: 30) being developed by a consortium of three of the largest volume housebuilders. It was to deliver 475 housing units at an average density of 50 du/ha, but with only 15 per cent affordable housing. A supermarket and a linear park would be delivered simultaneously with this project.

The architects for the scheme developed standard house types in order to provide a coherent architectural approach across this phase of development. The Panel thought that this was a well thought-through interpretation of the original masterplan, and a consistent approach to the street layout and elevations of the housing. They sought further development of the 'creating places' approach within the different character areas, and a simplification of the material palette and elevation details. However, they were disappointed by some of the standards adopted, notably the internal space standards and the CSH Level 3 aspiration. Also disappointing was the absence of any children's play facilities and the lack of any district heating or renewable energy provision, though roofs were well-oriented for retro-fitting solar panels.

The BBC site in Llandaff will be redeveloped for housing when BBC Wales move into new premises in Central Square in 2018. The proposals include 350-375 residential units in a mix of apartments, terraced and detached houses, with 20 per cent of these to be affordable homes. The design team and developer's ambitions for a bespoke, high quality architecture in a dense suburban form were shared by the Commission. The designs were amended in the initial negotiation process with the Local Planning Authority, and the layout has evolved in response to testing of a 3-D computer model which resolved a number of problems (Plate 7). However, the Panel considered that further work was needed to refine street

views, ensure the proper connection of footpaths across the site and to the Taff Trail, and to test the proportions of the square and its spatial qualities, as well as building heights and shadowing on the crescent.

The Panel thought the frontage onto Llantrisant Road would benefit from further testing of the height, consistency and enclosure of the built form on both sides of the road through street sections and photomontages. Trees to be retained have been identified and will require Preservation Orders and the setting of the Lodge (not part of the application) must also be protected. Materials, a landscape strategy and street design are the next elements to be resolved. The housebuilders are committed to the Building for Life 12 standards which DCFW endorses, and will hopefully seek an overall 'excellent' rating in this respect. Sustainability principles also need to be resolved at the next stage of design development which should culminate in a design framework that will contain the key principles to guide the detailed design.

The Commission felt that the scheme had the potential to become an exemplar of suburban intensification and they would prefer to see it again at the detailed design stage.

Lessons learned

The nine major suburban extensions reviewed all show some encouraging signs of Councils beginning to get to grips with issues of housing need, planners seeking to exert some co-ordination of wider suburban development alongside significant environmental protection and provision of green infrastructure, and developers seeking to demonstrate their commitment to good design and layout of housing, more diverse housing types, and more attractive places to live. The Cardiff Local Development Plan Masterplanning Framework for its seven major residential development sites, however generalised the schematic frameworks might be, has been a useful piece of design guidance and should be key Supplementary Planning Guidance (SPG) adopted with the Plan later this year. However, the preparation of the LDP itself has been a very belated political response to housing needs and economic imperatives.

Looming large over the Cardiff plans are the questions related to the line and form of the proposed regional Metro, and the provision of arterial routes for traffic and public transport, to say nothing of schools or other public facilities. The integration of transport interchanges, employment uses, public services and denser forms of housing will be very demanding design exercises, but uncertainties about fundamentals of this infrastructure are very disconcerting for both developers and planning authorities.

Furthermore, the funding of infrastructure is problematic, and the Community Infrastructure Levy (CIL), only becomes operational once the Local Development Plan is approved. So none of the housing schemes seen have so far been subject to the CIL process and even if they had, full transparency around financial provisions made for various elements of infrastructure may not be available to the Commission, even though they would be seeking a significant influence over both the form and the content of the development.



PLATE 8— RESIDENTIAL, FORMER PIRELLI SITE NEWPORT.

The masterplan was a re-creation of a Garden Village Suburb in the tradition of Rhiwbina, but set in the very dense Victorian urban fabric of inner east Newport. This was the fourth iteration of a competition-winning scheme increasing the units from 200 to 236 dwellings with seven different housetypes.

With regard to the planning and design of the housing itself the Pantlassau Farm development alone displays an imaginative and environmentally positive approach to the design of denser housing. It might also help to make family housing more affordable, whilst providing a compact layout that can capture the value of the best natural features of the site and provide more open space for residents to enjoy. In a more traditional way the Hillside Estate in Blaenavon is a rare example of the kind of social and morphological sensitivity that ought to be the norm for the South Wales valleys and beyond.

The first phase of South Sebastopol disappointed the Panel with its standard layout and house types, as did the Llanwern Design Code, but both have positive elements that need to be reinforced by the pursuit of local distinctiveness and a careful response to site conditions. Both depend on a constructive critique and further improvement through the local planning process. The Commission is aware that it may need to play a greater role in this support as local authorities lose experienced staff from planning departments in response to budgetary measures.

Meanwhile the Abergele example reminds all Local Authorities of the need to be in step with the development industry in preparing and adopting supplementary planning guidance that sets out the key parameters of large scale residential development so that the first phases of development do not prejudice the function and environmental quality of the whole scheme.

2.5 Residential: Large Scale Urban Housing

Seven urban schemes were considered varying from 40 homes in the Porth Teigr example in Cardiff Bay, to some 1,200 in the case of the Taff Embankment, in Butetown, Cardiff. The Taff Embankment and Porth Teigr cases in Cardiff, and the Old Town Dock in Newport have been selected as three contrasting case studies. The former Pirelli site in East Newport, between the main GWR rail line and Corporation Road, had been the subject of several planning applications that had aroused local resident opposition. The site had been acquired by Welsh Government for development by a social landlord and, following a design competition won by a well-respected urban design consultancy, a detailed masterplan had been prepared for 236 homes on the 6.5ha site (Plate 8). The master planners set out a vision of an exemplar but very compact 'garden suburb', and the Commission was encouraged by the ambition of the proposal, though they wondered whether the application of garden village principles to this neighbourhood of Victorian terraced houses was

appropriate and could be delivered to the necessary quality. The Panel welcomed the mixed tenure commitment and flexible models of tenancy and ownership, the commitment to 60 per cent affordable housing, and the overall ambition for quality development on the site. They felt that, first and foremost, the project should repair the urban fabric in the area and connect well with the wider neighbourhood. They were less convinced by the adherence to 'garden city principles' and Arts and Crafts elevations.

There were concerns that the sustainability aspirations were low and that better solar orientation could be achieved along with district heating to improve the housing to CSH Level 4. There were concerns too about the parking arrangements, and especially the security of the side and rear courtyards, and the lack of differentiation of public and private space. The Commission expressed concern whether the Arts and Crafts architecture, material quality and detail would be deliverable with modern construction methods and skills, and standard house-types and components. The breakdown of the street pattern on the eastern side of the site also needed improvement. Otherwise, the ambition and aspirations of the client were welcomed along with the quality of the design materials presented. The scheme subsequently achieved planning consent and is known as the Loftus Garden Village.

A much higher density housing scheme was the Dumballs Road/Taff Embankment scheme (Case Study 4) located about 400 metres south of Cardiff Central Station. This mixed use, high density housing scheme was first reviewed by DCFW in 2006 (DRW 2005-7: 37) when it achieved a generous outline planning permission. However, the ownership of the land had not been consolidated and the project made little progress in the ensuing recession. It was revived in 2014, the site having now been included in the Central Cardiff Enterprise Zone with its range of financial incentives.

It had also been included in the *Rebuilding Momentum* Regeneration Study and consultation document prepared by AECOM for the City Council's Economic Development Department, and its Cardiff Core Area South Masterplan Framework had suggested a stronger grid of streets across the north of the Bay area, and more east west connections between the Taff Embankment and Butetown. The developer was now seeking detailed consent for a residential development of 91 townhouses and 567 apartments in five blocks on the south eastern edge of the site, but was also developing a masterplan for the whole project with as much residential again, a primary school and significant commercial uses.

The Commission expressed concern whether the Arts and Crafts architecture, material quality and detailwould be deliverable with modern construction methods and skills, and standard house-types and components. 99

CASE STUDY 4:

DUMBALLS ROAD/TAFF EMBANKMENT, CARDIFF



RESIDENTIAL AND COMMERCIAL , TAGE EMPANISMENT CARDIES

TAFF EMBANKMENT, CARDIFF
The taller buildings are placed on the waterfront and in the northwest and south east corners. The perimeter blocks have public access into the interiors and the 3-4 storey town houses have patio gardens and rear parking. The primary school would be located on the triangular site (left white) at the centre of the scheme and social housing located primarily in the south east corner.

The Commission was broadly supportive of the new plans but it had a number of reservations and wanted to see further development of the masterplan, along with the detailed design of the residential buildings which were the subject of the outline application.

It focused first on the missed opportunities to better connect the site with the city centre and the Bay. Trade Street in the north could not be connected to the site under consideration, but longer term plans ought to be made to connect into the back of Central Station through this historic street, and then southwards through to the park to be provided between the current project and Century Wharf. Similarly there should be connections across the southern edge of the site into Canal Park and on through Butetown, and from the middle of the site across Dumballs Road to Butetown to follow the grid pattern advocated by the Cardiff Core Area South Masterplan Framework. Dumballs Road should be enclosed with appropriately-scaled buildings, with active ground floor frontages where possible.

The Panel felt that the Taff Embankment had been improved for both pedestrian and cyclists and the privacy of ground floor apartments had been safeguarded. The position of the footbridge across the Taff had been improved for links to Grangetown, but its design and material quality were not guaranteed. There was a considerable amount of open space proposed in the plan but how the spaces related to adjacent land uses, buildings and pedestrian desire lines, and how much use of what kind they might attract, had not been thought through. Insufficient attention had been afforded maintenance and management strategies.

The provision of an urban primary school was

particularly welcomed as a focus for the project and for families in the community. However, the design of the school, its access, servicing, entrance, security, external assembly and play space, and overall relationship with the public realm, posed significant design challenges as well as opportunities. The Commission suggested an exploration of precedents, and that it was vital that the Local Authority's Schools design team was approached at an early stage.

As for the residential components the Panel were aware that the designs were still evolving and being refined so a detailed critique was inappropriate (even though a detailed application would be lodged shortly for five of the southern blocks). The perimeter blocks provoked some discussion because they were not fully enclosed, and the townhouse properties were double-fronted with gardens to the rear and right angle parking beyond linked to a through service road. The larger scale of the corner apartment blocks, the blank walls above the roofs, and the consequent over-shadowing were questioned. Likewise the scale and massing of the Embankment blocks were considered monolithic and required improvement to generate some relationship and rhythm rather than a series of very large stand-alone objects. The affordable housing blocks on the south east corner, fronting on to Dumballs Road, were innovative, but concerns were expressed about the number of north facing apartments and the inefficient circulation, and the hard landscape dominated by surface car parking.

No time was left to explore the targets for sustainability levels, the possibility of district heating from an energy centre, or the possibility of a sustainable drainage system and greening programme as planned for Grangetown (as part of the Greener Grangetown project).



• PLATE 9— RESIDENTIAL, BAY POINTE, CARDIFF.

The site plan had predominantly town houses (6 types) on the side streets and 6-7 storey apartment blocks on the corners. The waterfront town houses were four storeys with the three upper floors glazed for views, and the two towers were 22 storeys.





The Bay Pointe residential scheme was similar to the Taff Embankment/Dumballs Road project in that it too had fallen foul of the recession and had to be re-conceived and re-designed. Unlike the Taff Embankment scheme, it was greatly reduced in density and form as it evolved as part of a new version of the Cardiff International Sports Village (see Case Study 11). By 2009 the panel were reviewing a scheme of 460 du/ ha on the peninsula with three pairs of 30 storey-plus conjoined towers, and criticising the quantum of development and its disposition (DR 2005-7: 38). The new application reduced the density by three quarters and is set at 105 du/ha or some 560 units.

The accommodation takes the form of two 24 storey towers on the Bay adjacent to the Sports Village hotel, and street/waterfront-oriented townhouses across the rest of the site. The street grid provides four view corridors across the peninsula with an east west spine road to the yacht club and a wider green avenue north-south providing car access to the residential streets (Plate 9). The stated aim is to provide 'a calm, rhythmic and measured architecture using brick, zinc and glass as the only facade materials'.

The Panel were anxious that more information be provided on the design of the public realm, and that a landscape architect be appointed immediately. They wanted to see an alternative parking strategy reducing the number of integral garages within the townhouses and in gated rear courts. The width of the waterfront walkway should be no less than 5 metres, and balustrading should be unobtrusive. Tree planting on the waterfront was questioned, and the Panel argued that the height of the upstand to give more privacy to the flats should be no more than 0.5 metres. The waterfront housing ought to include one or two commercial properties to offer different services to residents and visitors than those available in the Sports Village. More design work was needed on the way the apartment buildings turned the corner of each street.

There were no objections to the two tall apartment towers although the Panel considered that the relationship of the more north westerly tower with the hotel tower might be problematic (Case Study 8), and that the ground floor interfaces between the two buildings needed careful thought. Finally the Panel welcomed the commitment to achieve Code Level 4 for all dwellings with a fabric-first approach. A district heating and distribution system would also be provided. The proposed contracting out of the housing to housing developers posed questions about how the design and build quality might be controlled.



The affordable housing component of the Sports Village was placed on two 'leftover' sites well away from the Bay Pointe private housing. The smaller block was at the side of Morrison's supermarket on a curve in the access road where 63 units, mainly 2 bed apartments, were placed in two 'L' shaped 8 storey blocks with little or no amenity space. A second site, alongside a pumping station, and backing on to the Cogan Spur flyover (with parking underneath) was to be developed with four six-storey blocks to provide an additional 153 units. The Panel commented that 'in neither case do the designs presented anticipate a pleasant place for people to live'. A block has recently commenced construction that will provide 95 2-bed homes at £250 a month less than market rents in the area, developed by a subsidiary of a local housing association. 'Affordable' provision must be clearly defined nowadays as the level of social housing provision and the rental as a percentage of household incomes (previously 30 per cent) are no longer standardised. The location of the housing and its lack of amenity space is telling in terms of the current attitudes of many developers and decision makers towards the provision of 'affordable' housing.

Leaving aside the affordable housing, overall the Bay Pointe town-housing provides an interesting comparison with the much smaller project at Porth Teigr, on the opposite side of the Bay (Case Study 5). Both mark a return to a much more human scale of development, and the prospect of some neighbourhood interaction, but the Porth Teigr scheme goes for a largely pedestrianised public realm and under-croft parking where Bay Pointe opts for street oriented development. (Plate 10).

'Affordable' provision must be clearly defined nowadays as the level of social housing provision and the rental as a percentage of household incomes (previously 30 per cent) are no longer standardised. CASE STUDY 5:

PORTH TEIGR RESIDENTIAL, **CARDIFF BAY**

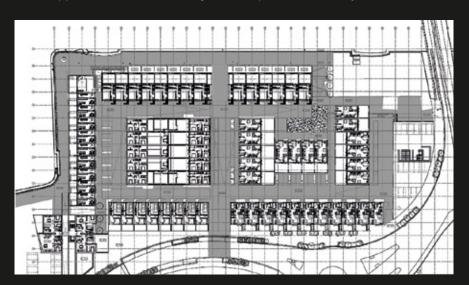
The first housing development at Porth Teigr at the eastern end of Roath Basin was originally conceived as medium rise apartments in the 2004 masterplan (DRW 2003-5: 28), then as a higher density scheme in 2007 (DRW 2007-11: 29), but by 2013 was being designed as a compact townhouse scheme. Early research suggested a density of 60-85 du/ha, a project of some 100 units, a Code Level 4 sustainability rating and a 25 per cent affordable component in two bed apartments.

The Commission received very early presentations of the scheme twice in mid 2013 as it was prepared for a detailed planning application and maintained input up to late 2014. The rectangular dock-side site had already been remediated. It had waterfront on its north and west sides with a swing bridge at the eastern end that takes the main access road to Porth Teigr around the eastern and southern boundaries of the project. An eight storey apartment block was planned adjacent to the bridge fronting the access road and would house the affordable elements, but would be designed after the town housing was completed.

An immediate complication was the anticipated level of flood protection required on the site which was being increased from 7 metres to perhaps as much as 10 metres, while the developers were working on 8.5 metres and were designing habitable rooms at street level. An immediate design change was the removal of under-croft parking. There were also uncertainties about the energy supply and the approach to sustainable design with the possible availability

of heat from a local waste incineration plant nearing completion, but a fabric-first approach had been adopted.

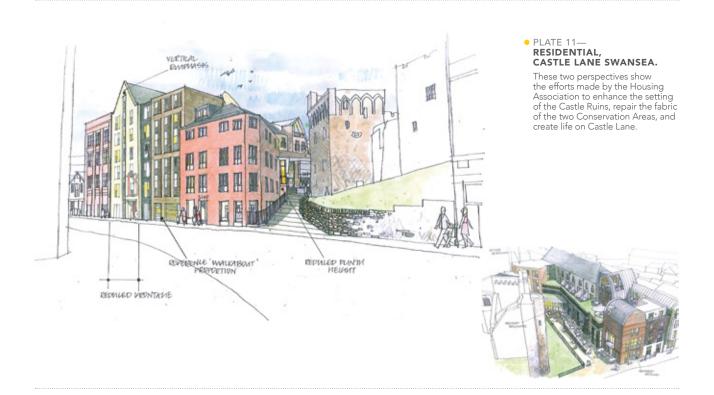
At a preliminary meeting the Commission reviewed the site planning and built form proposed. While they were confident that an acceptable scheme could be delivered they expressed concern at whether the compactness of the development, and the uniformity of elevational treatment, could yield quality living spaces and an attractive public realm. In subsequent reviews the Commission were able to give the scheme their full support. The perimeter of the site was anchored by a four storey apartment block on the corner of Roath Basin, and three and four storey townhouses enclosed the site sheltering the two storey town houses in the interior of the scheme. Car parking was placed underground leaving a traffic free public realm, and creating the opportunity for a series of diverse and intimate public spaces (a copse, an orchard and a wildflower area) and an urbane waterfront. The housing would achieve CSH Level 3-4 and the developers were seeking to achieve a diamond rating under the Building for Life assessment.



36

"While they were confident that an acceptable scheme could be delivered they expressed concern at whether the compactness of the development, and the uniformity of elevational treatment, could yield quality living spaces and an attractive public realm."

• RESIDENTIAL, PORTH TEIGR, CARDIFF
The site plan reveals the compact, urbane nature of the development with seven types of terraced townhouses of 3-4 storeys and two medium rise (affordable) apartment blocks close to the bridge. The car parking is a varied mix of integral garages, small communal courtyards, and file/parallel parking in the communal areas.



Three residential schemes in Swansea High Street came to the Commission. They were part of a concerted regeneration programme led by a social housing provider to revitalise the area between the Castle and the Railway Station, The first scheme was another phase of the Urban Village project on the High Street (see DRW 2007-11: 66) consisting of 4 retail units and 44 residential units, a mixture of refurbishments and new build that respected the existing burgage plots and were commensurate in height with the existing streetscape. The Commission thought that the information provided in advance was not as detailed or as accurate as it ought to be, but some fluidity at this stage was accepted. The Panel sought massing and viability studies for the residential block, studies of daylight and sunlight, and more contributions to activity at street level on The Strand.

At a second review in November 2014 the attention switched away from the High Street to The Strand, the eastern boundary of the site, and once a busy wharf on the then tidal Tawe. The Panel were generally supportive of the proposals, but they questioned the detailed fenestration of the reconstructed facade of the Bush Hotel (demolished in 2013 because it was unsound: a reconstruction was agreed with Cadw). They thought that the design of the residential block on the Strand had been improved and provided the potential for more sunlight in the courtyard space behind, but they were disconcerted by the lack of sun-path modelling and view analysis, and by the lack of information on the details of the elevations. There were cost pressures and funding constraints that were hampering progress, but the Panel emphasised the benefits of quality and value in the long term. They were still seeking more activity at street level on The Strand to improve its attractiveness to the pedestrian, and an integrated energy and sustainability strategy that could achieve better than minimum standards.

The second scheme was the Castle Lane housing project on the south side of the ruins of Swansea Castle which was reviewed in 2011 (DRW 2007-11: 55) and was subsequently put out to competition. The winning architects prepared a scheme which rebuilt a robust urban form and an attractive street scene on Wind Street and The Strand, and connected the two with a series of intricate housing schemes climbing up Castle Lane and overlooking the castle ruins (Plate 11). The response to the historic context, the contextual street frontages and the activation of Castle

Lane delighted the Panel who made some further suggestions about testing daylight levels and sun paths, roof-line adjustments, but also considered that the sustainability strategy needed major revisions. A key factor in the project is that it delivers a complex mix of uses and a very high proportion of affordable dwellings (86 per cent) on a very narrow and complex site, all through an exceptionally good piece of urban design worthy of a national award. The Castle Quarter as it is now known was delivered to high quality standards and opened in 2015.

The third scheme reviewed on the High Street was at the corner with Alexandra Road and opposite the Rail Station on the High Street. This project was reviewed unfavourably in an earlier incarnation (DRW 2007-11:43) but it returned to the Commission at the end of 2014. The only information available to the panel was a Design & Access Statement that was described as a feasibility study at the early concept stage. The scheme was for 706 student rooms in three blocks of six, nine and sixteen stories with ground floor commercial uses in a conventional living room for every six bedrooms, and common rooms on the top floors.

The site analysis showed a depth of analysis which was not reflected in the concept presented, and which lacked any environmental/energy performance aspirations or targets. In addition the facade details were not developed. There was a decent view analysis, but no overlooking or daylight considerations had yet been taken into account, and no alternative layouts or massing appeared to have been investigated. There was also a lack of analysis of the public realm and how the building contributed to a sense of place at this important gateway into the city. There was no clarity about the provision of commercial units on the High Street/Alexandra frontages and whether the width of the pavement and the pedestrian crossings would be adequate for greatly increased pedestrian traffic. There were also no indications as to the parking requirements. The Commission wanted to see these matters considered in any subsequent planning application.

A pre application review of housing proposals for Vetch Field, formerly the Swansea City FC Stadium west of the city centre, was carried out in March 2015 at the request of the housing association. A 2007 masterplan adopted by the City Council exists for the site and this emphasises housing provision, a community centre and sensitivity to the existing community. The housing association is demolishing its existing facility on the site and is preparing an application for 30 sheltered apartments to be preceded by a public consultation exercise.

The Panel wondered whether an adjacent vacant site could be incorporated into the proposals to improve the landscape strategy. They were also concerned that most of the flats faced north and they wanted to ensure that the disposition of living space maximised natural light.

The Commission supported the design approach but they wanted more complete elevational and cross-sectional drawings to communicate the massing and scale in detail, and to ensure elegant detailing. The east wing and its junction with the timber-clad stair block was considered overcomplicated, and a general simplification and refinement would save money for the design of social spaces in the scheme. The latter could be improved by adjustments to the circulation and better visual connection to the outdoor spaces in the scheme. The use of brick was endorsed and the importance of thermal modelling was stressed to minimise energy use. The panel appreciated the opportunity to make these suggestions prior to the finalisation of the design.

The original masterplan for Dickie's Boatyard in Bangor was reviewed in 2008 (DRW 2007-2011: 47) and this scheme was the second phase of this development for 42 dwellings (with 25 per cent affordable) at a density of 43 du/ha. The vacant site is on a peninsula facing out into the Menai Straits so is a very prominent site demanding very high quality design (Plate 12). DCFW had already received correspondence



indicating local opposition to the design of the development, and it was immediately clear that the presented scheme failed to respond to the unique opportunities the site presented. The waterfront car park was the first and arguably the most basic failing, apparently intended to preserve the views of the sea from Phase One. The implications of the approach taken at Phase One had been already been alluded to in consultations with the Commission.

The Panel was unclear about the design concept and rationale for this scheme and considered that it lacked any grasp of basic urban design principles, any landscape or visual assessment, had no sustainability strategy and failed to achieve easy connectivity with the rest of the town. Monolithic blocks of seven storey development were particularly intrusive in an area of 2-3 storey development and lacked any modelling or differentiation of massing, while the apartment blocks were fronted with retail units that looked difficult to service, and which were set back from the waterfront in the landscaping for the apartments. The coastal path was fronted by townhouse gardens at the north end of the site and by a service road on the southern side of the peninsula. In between, the apartment and retail units completed a suburban treatment of the walkway that was most unsatisfactory. In sum this was one of the most negative reviews any scheme had received, on one of the very best urban sites in the country.

Two schemes on the south side of Newport city centre conclude the cases of urban housing brought to the Commission. The first of these is Old Town Dock, completing a very ambitious and experimental urban design project to develop the western side of the Usk and the Old Town Dock with energy-efficient housing (Case Study 6). The second is an estate regeneration scheme about 600 yards to the west, the first time such a municipal housing project has been brought to the Commission. This was the Newport City Homes Pillgwenlly regeneration project, just west of Commercial Road. Here, on a 1975 Radburn-style Council estate, the impermeable layout of the Francis Street/Coulson Close area, the prevalence of ground level underpasses beneath housing blocks and long stretches of garage frontages has helped foster criminal activity and deepen social deprivation in recent years. The estate contains a mixture of two, three and four storey flats increasing in density towards the south, and garages are scattered throughout the estate creating dead frontages.

The proposed remodelling will focus on improving both vehicular and pedestrian movement through the estate, creating a mix of open spaces that are overlooked and well landscaped, and removing housing underpasses. The demolition will be minimal, but densities will be increased from 22 to 27du/ha, and there will be refurbishment of the internal and external facades and some window replacement, along with thermal upgrading to improve energy efficiency. Some buildings will be



PLATE 13— ESTATE REGENERATION, PWLLGWENLLY, NEWPORT.

The masterplan proposes a net increase of 17 flats, nine of these replacing garages. Two new houses would be built and one demolished. Pedestrian permeability, legibility and security are improved with the demolition of the units that bridge the walkways, and a community square replaces the Basketball Court on the east side.

re-clad to improve way-finding on the estate. A separate project will upgrade the housing to Welsh Housing Quality Standard levels.

A critical question at the outset was whether light-touch physical improvements or more dramatic changes were required on the estate. It was clear that engagement with residents was of vital importance, and that communication of design objectives through the use of a clear set of urban design drawings was necessary. These would show the improvements that would be made and why they were important. There were discussions of whether new uses could be brought into the estate to encourage better connections with the rest of the city and house a wider range of activities, or whether new multi-purpose facilities should be developed with active community management. It would be important for DCFW to maintain input into the project and to find ways of supporting estate improvement efforts.

By the second review early in 2015 a public consultation exercise had been completed with 70 per cent of the local residents and Newport City Homes were intending to test the different design solutions during the implementation phases to ensure that they met resident approval. Landscape design would be a major part of the regeneration and the Panel wanted to see more detail on this, and on the proposed uses for the new open spaces provided (Plate 13). They agreed that the positioning of any public seating should be considered at a later stage, and that a lighting strategy should also be carefully considered.

As for the new build and the over-cladding proposed the Panel emphasised the importance of good materials and simple detailing on both, with close attention paid to rainwater goods and window specifications to ensure quality finishes. They were keen that the involvement of, and consultation with, the community were continued right through the project and an attempt should be made to measure the improvement in the estate environment and the quality of housing. The Commission complimented the housing agency and the design team on the quality of presentation and their commitment to design improvements.

During a presentation made at a Design Commission for Wales event, Learning from Design Review, held on 16th July 2015, the client's project manager set out his reflections on the value of the process in five key points as follows:

- Garnering the experience of panel
- That difficult often uncomfortable questions are asked
- Saving of over £1million on project cost through rationalised design
- Balanced against increasing costs for pre-application advice
- The value of DCFW's reputation.

Lessons Learned

The Commission saw a very wide range of urban residential development in some ten significant housing developments almost equally split between private developers and housing associations. From both sectors there were true exemplar projects at least at the design stage, and almost all the projects demonstrate significant steps forward in terms of housing design quality, amenity, urbanity and social inclusion in Wales.

The recession has helped to put an end to the boom in the provision of small flats in high rises that was threatening to build out large sections of Cardiff Bay, and was sustained by socially regressive buy-to-let and buy-to-leave housing purchases that have driven out owner occupiers.

The about turn of developers at Bay Pointe has been particularly welcome, and the shift away from predominantly high rise towers towards a mix of street-oriented town house and medium rise apartment blocks promises some positive neighbourhood form, while still allowing a couple of more slender towers to achieve a higher density. The question remains as to what extent Bay Pointe will become a resort community rather than a viable city neighbourhood.

There is an interesting comparison between the ethical developers approach towards community design in Porth Teigr and the more market driven housing in Bay Pointe. In Porth Teigr the provision of affordable housing is well-integrated with the private housing, while on the CISV peninsula the small flats are placed far away from the market housing and on sites where, in the Commission's view, it would be difficult to create genuine liveability. These flats have recently been advertised as 'affordable' and ideal for young professionals, but this emphasises that what might have been expected to be social housing a few years ago (with rents set at 30 per cent of household income) has now become something much more ambiguous and much more expensive.

In England in 2012 the National Planning Policy Framework quietly redefined affordable to be 'up to 80 per cent of market rent', and to include forms of assisted ownership through various mortgage arrangements for part-purchase of the property. The Welsh situation remains opaque but the old certainties have been replaced with new flexibilities and definitely much higher rents for young people whose earning power has not increased at the same level.

The Design Commission has the explicit task of the 'promotion of social inclusion' alongside sustainable design practices written into its strategic aims, and is committed to ensuring that it is performing this role in design review in the same way as it has tirelessly promoted higher standards of energy efficiency. An example was provided

Comparison between the ethical developer's approach towards community design in Porth Teigr and the more market driven housing in Bay Pointe.

by the proposal for a 'garden village' in east Newport on the Pirelli site which came from a social housing provider, with a commitment to 60 per cent affordable housing and mixed tenure, and flexible models of tenancy and ownership. This is now being marketed as Loftus Garden Village by Lovell Homes at competitive prices of £129,000 to £170,000 for 2-4 bedroom homes.

The social housing providers have certainly pointed the way towards wider urban regeneration and higher design quality in both Swansea and Newport. In the former the regeneration of the High Street and the Strand are proceeding apace and repopulating the eastern edge of the city centre with affordable housing, and the new social housing around Castle Gardens is a model of conservation sensitivity, and design ingenuity. The same is true of Newport south of the city centre on the banks of the Usk (DRW 2012-14:38) and now through Old Town Dock (Case Study 6) where there is more design innovation and mixed use, emphasis on energy efficiency and more attention to landscape.

Dumballs Road in Cardiff is a reworking of a very high density scheme previously reviewed by the Commission and with a number of significant improvements in terms of street quality, but at the expense of undercroft rather than surface parking. There is more town housing, a significant provision of social housing, and the promise of a primary school which, if sufficiently well designed, urbane and integrated, should help attract more families and a wider demographic to the new neighbourhood. The commercial component is yet to be determined. However the design of the larger scale apartment blocks continues to give cause for concern.

There is more town housing, a significant provision of social housing, and the promise of a primary school which, if sufficiently well designed, urbane and integrated, should help attract more families and a wider demographic to the new neighbourhood. 99

CASE STUDY 6:

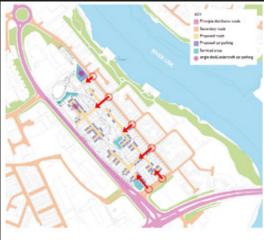
OLD TOWN DOCK, NEWPORT

Redevelopment of Old Town Dock in Newport was now at its penultimate stage. A mix of apartments and housing, offices, community centre and health centre on the western edge of the original dock was proposed. The Panel welcomed the ambition of the Joint Venture developers for a wide mix of uses and housing on the site at 2-5 storeys. These included some 209 apartments and 85 houses with a wide range of tenures, and serviced by a convenience store, health and community centres (all three positioned on the central spine of parkland), and a 9-10 storey office building on the north-eastern corner to demarcate the site from longer views from the city centre and elsewhere. The aspiration for energy efficiency is to reach CSH level 4 and make use of a new CHP/Energy Centre at Mariner's Quay.

The Commission expressed their general support for the proposals but had three principal reservations. First they felt that the Old Town Dock Wall was insufficiently exploited as a feature of the north-south landscaped space of the site. The developers conceded that they had not explored the condition of the wall below ground, but felt it was probably incomplete, and they had aligned building blocks to define the edge of the Old Dock instead. Second they felt that the height of the landmark buildings like the offices needed further detailed consideration, even though they had been earmarked for more 'architectural flair'. Thirdly, and most importantly, the cellular layout of the residential produced a number of dead-end streets, did not conform to the advice in Manual for Streets, and would produce poorly landscaped parking areas that were not well over-looked. The Commission wanted to ensure that the linear space was lined with as much active frontage as possible and well provided with street furniture and landscape. Other more minor issues included a preference for landscaping the verges of Usk Way rather than providing a landscaped central reservation.

Nonetheless, there was much to admire in the Old Town Dock scheme, and few schemes have been as well designed and as convincingly illustrated as a 'sustainable suburb' with a good mix of uses and tenures, quality landscaping with public and semi-public spaces, good surveillance and safety, and sustainable drainage and cycle and bus routes. It clearly responded well to the housing that preceded it along the River Usk and would provide a large element of affordable housing. However, those Panelists who also reviewed the Pwllgwenlly scheme, might have been struck by the failure of some of these same design ideas, albeit in a less contemporary form and under more deprived social conditions, and would feel justified in seeking more permeability in the new layout.





 RESIDENTIAL, OLD TOWN DOCK REDEVELOPMENT, NEWPORT N11
 The Panel's reservations about the surveillance of parking areas and quality of landscape were not as

evident from the plans as the cellular site layout and the extended cul de sacs that were a problem area on the 1975 Pwllgwenly Estate nearby.





PLATE 14— HOUSING, HARBOUR HOTEL SITE, ABERSOCH.

The final solution to this development was two terraces, each of six town houses in a neo-vernacular form, with integral garages and small patio gardens but good sea views; and three affordable homes on the opposite side of the cul de sac. The separate driveway for the town houses was rather odd and seemed to emphasise social distinctions.

2.6 Residential: Villages and Countryside

The Commission has always seen a significant number of very small residential schemes and one-off houses in rural areas, often in designated landscapes. As the Commission prioritises long term input on significant schemes, capabilities and capacity in design assessment in local authorities will need to be developed to handle the issues these schemes raise.

What has been reviewed in this category in the last three years is a couple of new houses in the countryside, two small village extensions/infill, two barn conversions and one redevelopment of a 19th century country house. Only one example of small-medium scale residential development came to the Commission in contrast to previous years. This was a project for 15 houses on the site of the former Harbour Hotel in Abersoch within an Area of Outstanding National Beauty (AONB), at preplanning. The density was 25 du/ha and the affordable housing requirement was 15 per cent. The site, then occupied by the much extended, four storey Harbour Hotel and by a second dwelling, was a shoulder of sloping land above a steep vegetated slope down to the River Soch, so in reality only half the site was developable.

The houses were proposed in five blocks of three dwellings, and one block would be affordable. Most were three storey buildings with the upper storey mainly within the roof, and organised in a courtyard form, while the affordable housing was two storeys. The elevational treatment responded to the local context and the materials were rendered walls beneath slate roofs. The site was well treed with numerous shrubs and these would be retained as far as possible and complemented by additional planting.

The Commission acknowledged the challenge of the site but had concerns about the massing of the scheme, and felt that the buildings would do better to follow the site's contours. They felt that the housing would not be adequate for families with minimal garden space and a small communal courtyard. They preferred a contemporary approach to design, responding to the topography and sustainability concerns, rather than a loose vernacular form. They thought that a landscape architect would improve the aspect and sensitivity of the scheme.

Further advice was provided by a subsequent desk-top review and the two options were presented as a response. The first improved the affordable housing and the way it addressed the access road, but the retaining wall at the rear was felt to be too severe and compromised the public space which was already car-dominated. The second option was simpler and a small public space was provided with a view of the sea (Plate 14). The Panel Chair made several suggestions for further improvement.

These included treating the access road at the lower levels as a shared space without kerbs and pavements, allowing visitor parking to be more easily accommodated and connecting the end of the road to a pathway down to the river. With regard to the architecture the Chair argued for a simplification and less fussiness, especially in the roof design, so that the houses read as paired villas with more space between them.

A proposed development of four houses on Hermitage Field in the village of Reynoldston Conservation Area in the heart of the Gower AONB came to the Commission well in advance of any planning application or pre-application discussion, but after approval for three houses. The Commission appreciated the contemporary approach to the Gower vernacular, and the succinct and diagrammatic quality of the emerging draft Design & Access Statement. They recommended further drawings to illustrate the relationships with neighbouring buildings, the siting rationale, the impact on views from adjacent properties, and the justification of the choice of materials. An energy strategy with clear objectives should be formulated at an early stage, and the burying of electricity cables should be considered.

A field adjacent to the Vicarage in the village of Llandysul in Ceredigion was the site for a development proposal for six split-level homes on a steeply sloping site, with potential access from the bottom of the slope off a one way village street. One house would be placed on top of the slope adjacent to the Vicarage, but the remaining five would be placed on a platform excavated across the site in front of a retaining wall. The buildings would be three storeys with a ground floor fronting the road with integral garage, utility and fourth bedroom, while the first floor would house the entrance and living space and 3-4 bedrooms on the upper floor.

The Commission sought a detailed site analysis and careful response to topography and context. Landscape expertise would be needed at an early stage and generic concept drawings needed to be replaced by bespoke designs with modifications in plan and section. More sensitivity to the site and consideration of the impacts on adjacent housing should be considered, along with the possibilities of communal space and landscape/ecological enhancement. The Commission welcomed a commitment to high environmental ratings for the homes. Subsequently two options were presented for discussion with 6 and 7 units using semi-detached forms with a terrace in the second option. However the Panel had numerous doubts about roof-scapes, the rigidity of the layout, daylight within the houses, site access, landscape management plan and the means of achieving Code Level 4 energy ratings.

Ael y Bryn, a modern earth-sheltered dwelling in a hamlet adjacent to a major road through the Brecon Beacons Park, had been reviewed five times since 2009 and was still seeking planning permission. The Commission had tried to improve the design and offered much advice to this end, but the project is controversial and not unobtrusive, and the details of the sustainability assessment are often incomplete. The National Park Planning Authority again asked the Panel for its comments on the latest planning application in October 2013 and their view was that much essential information was missing, inconsistent, or unconvincing, particularly on aspects of ventilation, heating and day-lighting. Ultimately, the scheme was consented, though the Commission remains concerned as to whether the client will be well served and whether lessons can be learned from the extended planning process.

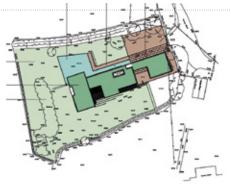








PLATE 15— NEW HOUSE, PENMAEN.

The house replaces a stucco bungalow with a large hedge on two sides. The contemporary design utilises local stone with timber, render and steel and places the living rooms on the upper floor to maximise the sea views. The view from above shows how it sits in the AONB landscape.

Another single house in the countryside, this time on the Gower coast overlooking Oxwich Bay, proposed a two storey, 'upside down' house with bedrooms on the ground floor and living accommodation on the first floor (Plate 15). It would be a 300 square metre replacement for an inter-war bungalow and garage on the site. The LPA considered it to be 'a well-designed, contemporary building in line with the adopted Gower Design Guide', but were concerned at its conspicuousness in the landscape, and the reflectivity and night-time illumination provided by the completely glazed southern elevation. The Commission was concerned with the potential solar gain and the absence of a fully-developed environmental strategy. They questioned the insulation on all elements of the building, and the scale of the mechanical ventilation/heat recovery system. The intention to harvest rainwater and fit solar panels was welcomed, but these were not shown on the drawings and they would impact significantly on the purity of the design. They were also dubious about the proposed reflecting pool and its maintenance, management and attraction for insects.

A proposal for a single house and workshop designed on One Planet Development principles, as outlined in TAN 6 Planning for Sustainable Rural Communities, was made for a site within a green wedge in the Vale of Glamorgan's Local Development Plan and accessed by an unmade track. The Panel advised the applicant to obtain professional planning advice on interpretations of TAN 6 and its Practice Guidance. They emphasised that an exceptional quality of design and architecture would be required in such a location and any visual impact minimised. The self-sufficiency in energy should be fully tested through environmental modelling.

The Commission felt that the building might be more compact and simple in form and that a passive energy strategy would offer the best solution. In addition the sourcing of building materials should be fully defined as the intention was to use recycled materials as far as possible.

An extension of a Barn conversion in the 'Golden Valley' north of Sugarloaf Mountain in the Brecon Beacons National Park provided an insight into what might be expected as the previous generation of barn conversions matures, and owners seek to upgrade and extend their properties. This was a proposal for a garden room as a single storey extension to a courtyard form, but within a landscaped garden. The Commission considered it to be a well designed project. They sought more detailed information about the design, but considered there were only minor issues to be resolved.





PLATE 16— RESIDENTIAL, LLANBEDR HALL.

The new plans for 12 townhouses in the grounds of the Hall were considered an urban form in a rural setting and quite inappropriate.

An original barn conversion, this time two attached rubble stone farm buildings in a disused quarry on the outskirts of Rhydwin in Ynys Mon, was brought to the Commission following a refusal of planning permission. The proposal was to extend these barns into an earth-sheltered structure in the hollow of the quarry, and create a two bedroom dwelling. The amount of extension was a key consideration in the refusal and it was considered not to 'respect the character, scale and setting of the existing building'. The Commission considered that the proposed extension was subservient by being built into the hillside and being earth sheltered, both of which reduce its visual impact. They thought that any further material submitted to the LPA should clearly illustrate how the design responds to planning policy and guidance, and include a well argued Design & Access Statement with accurate photomontages of key views, photo examples of materials, and a computer generated model that replicated the detailed topography and the building form.

Llanbedr Hall, located north of the village of Llanbedr Dyffryn Clwyd on the lower slopes of the Clwydian Hills, has been converted into a hotel and latterly a restaurant with flats above. It had a planning consent for conversion into 20 flats but was considered beyond renovation. A previous planning application for demolition of the hall and construction of nine detached houses was refused. A new application for 12 'apartments' in a new four-storey building, with rendered walls and a Welsh slate roof, on the site of the Hall resembled a terrace of townhouses (Plate 16), and there would be one additional unit in a conversion of the existing greenhouse. Part of the existing hall would house a Biomass District Heating System. There would be comprehensive improvements to the gardens and the woodlands.

The Commission thought the accommodation was inappropriate and that any housing should be a response to the site and appropriate to the Area of Outstanding Natural Beauty. Dispersed, low impact dwellings that respected existing views and landscape, optimised solar access, achieved at least CSH Code Level 4, and incorporated a landscape management plan would be far more appropriate than what was proposed. The conversion of the greenhouse could be incorporated into this strategy. The Commission understands that to date no development progress has been made on this site.

Lessons Learned

It is very hard to draw conclusions from these diverse examples but they reflect the levels of control that operate in the countryside across rural Wales, perhaps rightly so in designated landscapes. The referral of these cases often reflects the need for LPA's to get an expert view on the appropriateness of a design and its impact upon the landscape. These cases benefit from a significant investment in design sensitivity and landscaping to stand any chance of approval.

2.7 Major Commercial Developments

Major commercial developments have reduced in number over the last seven years as the recession stifles both investment and demand. Exceptions include the proposed Enterprise Zone in Central Cardiff, which has offered incentives to developers and potential employers to invest in new space since 2012. Central Square, Cardiff is effectively a new business quarter in front of Central Station and is arguably the key city centre site and premier public transport hub.

When Ian Nairn, the leading urban critic of the 1960s, visited Cardiff in 1964 he used T.S Eliot's phrase of 'shabby equipment always deteriorating' to describe the scene that confronted the visitor/commuter emerging from Cardiff Central Station, and he lamented 'so much human achievement and so little visual achievement'. A full half century later Central Square is perhaps finally getting the development and design attention it deserves (Case Study 7).

Central Square, Cardiff is effectively a new business quarter in front of Central Station and is arguably the key city centre site and premier public transport hub.

CASE STUDY 7:

CENTRAL SQUARE, CARDIFF



A One Central Square Offices

Central Square, effectively the station forecourt, former bus station and commercial area directly in front of Cardiff Central Station, has been the only significant office development that the Commission has reviewed in the last three years. In terms of floorspace and commercial value it is the biggest project the Commission has examined over its 12 year life, and for the Capital City, one of the longest running sagas of missed redevelopment opportunities.

Most importantly to the Design Commission it has been a large scale project where the developer has entered into an exemplary consultation process committing to a programme of long term engagement and to high standards of design. The developer has previously sought the Commission's assistance on Callaghan Square phase two and Cardiff & Vale College on Dumballs Road (see Case Study 12).

The Commission was approached early on by the developer and was given unprecedented access to the design process and its multiple iterations.

A long term programme was agreed where reviews

have been successive and continuous, up to the formal submission of a planning application, the original deadline for which was 6 September 2014.

The Commission's records hold six reports on meetings in the period January to September 2014, but there have been many more exchanges between the Chairman, Chief Executive and the developer to accompany these reports. This overview draws on these formal reports as the record of the design review process for the Central Square project.

In January 2014 an intention to build an office building of some 17,300 square metres on the site of a longstanding, high-rise residential/hotel proposal north west of Central Station (DRW 2005-7: 33; DRW 2007-11: 41) was registered with the Commission. This building was to be built on a stepped podium that would line the south side of the main pedestrian walkway/station access between the Station and the Millennium Plaza/Stadium entrance, but would take the office users above the match-day crowds. It was an 8 storey, linear but cranked office building with

CASE STUDY 7: CENTRAL SQUARE, CARDIFF

two storeys of car parking underneath, and it was clad in modular precast stone, with structural glazing and ceramic 'rainscreen...to produce an aesthetic that reflects a civic approach to the architectural language of the building'. A similar palette of materials was promised for the rest of Central Square on the site of the demolished bus station acquired by the developer.

In early February the new office building was considered in detail. Presenters and the Panel regarded the design of this building as setting the standard for the forthcoming masterplan, so there was intense interest in the design details. The procurement route would be design and build with contractors tendering on planning drawings plus a performance specification. It was strongly recommended that all of the building envelope and public realm/landscape design were designed and specified in detail. A working model was available to focus the questioning and discussion.

A BREEAM Excellent building was the target and the building envelope would have low 'U' values while the glazing's 'G' values would be crucial, and low-energy technologies would be used for mechanical and electrical equipment. There was discussion of the coating/tinting of the glass and how this would affect the overall aesthetic and views in and out of the building. The Commission recommended that the client/designers visit buildings with the preferred glazing, and that large samples be erected on site.

There was a close examination of the plinth and steps which would be important in daily movement, and particularly during major event days, in channelling pedestrian movement, and giving the office entrances a necessary detachment from the street. The Panel thought that the form of the upper floors could be improved by simplification of the elevations and making the glazing appear the same height as the stone cladding, and removal of the escape stair that bisected the northern facade was also suggested. The western, end elevation of the building, particularly at street level, needed more consideration to respond to both the river and the views down Wood Street. Extending the podium perimeter over the access ramp would reinforce the building's relationship with the street.

In February a workshop report was produced to record discussions on a wider masterplan that incorporated

the bus station and all the land south of Wood Street as far as the Central Station Booking Hall. It was also announced that BBC Wales would occupy a new headquarters building directly opposite the Station as the centrepiece of the project. This announcement followed a lengthy competitive process wherein the BBC shortlisted and considered developer-led bids for three other sites in the city for its relocation.

A leading international architectural practice was retained by the developer to design the flagship BBC Headquarters building but also to masterplan the whole project and the public realm. The Panel welcomed the ambition shown by the masterplan as it expanded its reach towards the stadium and the back of St Mary's Street. The scheme is required to meet many objectives, and there was much discussion of wider pedestrian movement and key connections with the city centre. Special conditions/ restrictions and large crowd management requirements prevail on major event days for international sport, popular and classical music concerts, and extensive queuing capacity is required for rail passengers. Discussions considered how Wood Street might be treated, and what uses might be located on its north side. The square itself was taking shape and the street connections that might shape the locations of two or three additional commercial buildings were being explored. Even Marland House and its multi-storey car park were being considered as a major new commercial development over a new bus station, though this land had not at that time been acquired, and was not part of the planning application.

In July a second design workshop explored the design of the public realm. The analysis of pedestrian movement and Stadium exit to Central Station were being intensively scrutinised, whilst options for the bus station were being rehearsed. Network Rail was considering whether they would provide a pedestrian link under or over the station, and where they might make taxi provision. It was assumed that car parking provision for the station would be made on the south side of the railway. The re-shaping of Wood Street was being considered and what forms of public transport movement might be accommodated. Would a shared surface be an option and how would building frontages interact with the street, especially at



B Early masterplan



C Building outlines and land uses

CASE STUDY 7: CENTRAL SQUARE, CARDIFF

ground floor level? The design and the role of each street was being determined and the environmental conditions assessed. With this went decisions on pedestrian crossings and traffic calming, and a discussion of pinch points where buses and pedestrians might be in conflict. The nature of the square north of Wood Street was discussed and the residential/hotel building forms and massing and questions of appropriate heights and forms were discussed in general to be more closely determined at the next meeting.

The character of Station Square was being explored and how building edges might respond to the square, and what landscaping and paving might be appropriate. The early artist's impressions still exerted a strong hold on the imagination, especially the strong grid expressed in the paving of Central Square. There were discussions about the positioning of tree planting and seating, and explorations of the links between the bus station and the rail station and whether a covered/enclosed link would be feasible/desirable.

Crucially the BBC building, that would occupy the key building in Central Square, would be a bespoke headquarters design emphasising transparency and visible internal activity, and would play a strongly interactive role with Central Square. All four facades were being considered

North-South, East-West grid

Middirial aidiance of the NS.5 & Evi (dr)
grid can be seen on medium mage of
Confirm the Middirial mage of
All the sense time, the regions which may
grade the sense time, the regions with mark
the comer's form Convertigement
to the sam of only face.

The Comer's form Convertigement
the time of the time of the convertigement
that the same of the convertigement
that the same of the convertigement
that the convertigement
that the convertigement
that convertigement
that convertigement of any waste of
the same that the convertigement
that convertigement of any waste of
the same that the convertigement
that convertigement of any waste of
the same that the convertigement
that convertigement of any waste of
the same that the convertigement of any waste of
the same that the convertigement of any waste of
the same that the convertigement of any waste of
the same that the convertigement of any waste of
the same that the convertigement of the the convertigement of
the same that the convertigement of the the convertigement
that the convertigement of the convertigement
that convertigement of any waste of
the same that the convertigement of the convertigement
that the convertigement of any waste of
the same that the convertigement of any waste of
the convertigement of any waste of
the convertigement of the convertigement
that the convertigement of the convertigement
that the convertige



D Analysis of massing and comfort of public realm

in detail along with how the character of the adjacent streets might respond, with retail frontages incorporated on the east side, and a public route through the building from Wood Street to Central Square. With the requirement for transparency the interior was regarded as important an urban design issue as the exterior.

In August the Commission met at the architect's offices in London with local authority planners and managers for another workshop, this time working around the model, to consider alternatives in terms of urban forms, massing, land use and density. This included developing concepts about the block north of Wood Street which would be primarily residential arranged around two connected squares.

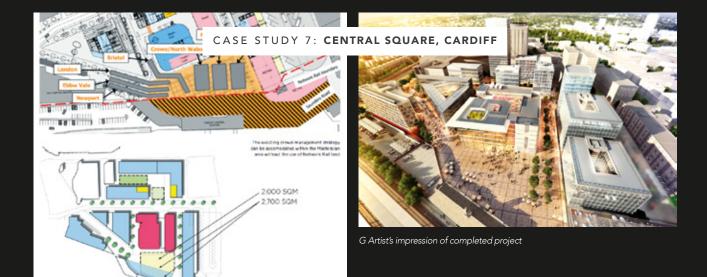
In September the Commission hosted another review, this time examining a detailed analysis of pedestrian flow to and from the Station on a large event day at the Stadium. This flow of people, and their containment in specified queues to gain access to particular platforms, consumes almost all the space in the current public realm for an hour or more after an event, and the design team were future-proofing their proposals to ensure their designs could accommodate this peak travel event.

The City Council's expertise in event management was drawn upon to seek alternative ways of coping with these events, and ways of designing the city's bus routes to avoid re-routing on large event days. This is a key consideration in the design of the bus station on the east of the site, and particularly its access and egress. However, the relationship between a redesigned rail station (post-electrification) and a new bus station would not be detailed in the hybrid planning application for Central Square. The square itself was also being tested for its capacity to hold different types of events as part of the BBC broadcasting and Council event requirements.

Taxi routes and ranks remained to be resolved, perhaps on the south side of the Station, though the use



E Artist's Impression of BBC south elevation



F Event day queues and Network Rail ownership

of Fish Quay behind the new office building emerged as a possibility. The design of streets was considered in more detail along with rain canopies, cycle routes and storage, trees and landscape, lighting and servicing requirements. There was significant discussion about the detailed design of the BBC building and the retail component and its servicing were explored.

At the final design review in September the design team were working towards a hybrid planning application for the first phase of the project embracing Central Square, Millennium Way, the BBC building and the underground car parking for all the offices. This would be an outline application for the masterplan, but a detailed application for the public realm and the BBC building.

The management of the event day crowds had been ameliorated by the creation of more space on the north east corner of Millennium Way, and the plans had been tested for their robustness given a possible extension of the Station forward into the Square on Network Rail owned land. But the task now was to complete a high quality design of the public realm for daily use. The suggested establishment of a company to manage the public realm of Central Square was viewed as a positive move.

The placement of two rows of trees on the east side of the square was debated, along with seating placement, and the potential conflict with the main pedestrian desire line discussed. This was an issue to be explored with all landscape decisions. There was significant discussion of the eastern end of Wood Street and how pedestrian flows would be accommodated, and what constraints might be imposed on bus movements to ensure public safety. The configuration of the north east corner of Marland Street was debated and it was pointed out that the continuity of retail frontages in this area and east on Wood Street could be problematic. The possible pedestrianisation of Havelock Street was also mentioned, but the main focus was the design of the public realm of Wood Street. Here there were a number of imponderables about buses, trams, taxis and pedestrian safety, trees and landscape, but also concerns that there would be difficulties creating a street of real quality. There would be a steady flow of vehicles in and out of the private car parks under the BBC and adjacent

offices, and a long ramped access would take up much of Central Street creating a length of dead frontage that might be obviated by a green wall.

Further questions remained about the redevelopment of the bus station, Network Rail properties and ownerships in the vicinity and the possibilities of closing private car access on Saunders Road on the south east corner of the site. Network Rail published several impressions of what they might do on the north side of the station. At no stage in the Commission meetings was there substantive discussion of what might happen on the south side of the station, though City Council officers were well-informed as to what was being discussed. The complexities of the north side were sufficient, and if these were not resolved there would be another decade of inactivity on this key site.

What transpired was that a local developer had taken the bold decision to take on all the complexities of the north side of the station, to acquire the land and the capacity to shape it, to retain the best architectural and urban design advice, and to create a forum where the developer, designers, planners, city managers and the Design Commission could build consensus and quality into a complex design process. Capturing BBC Wales as the prime tenant was one reward for these efforts, and would of itself give a massive commercial boost to the project. But from a design perspective the key factor was that the developer wanted to set new standards for commercial design quality in the city, and was committed to a collaborative, expert process to ensure that the quality of the public realm would boost the commercial viability, prosperity and social vitality of the city centre. This would in turn set the standards for the conservation and re-design of Central Station to follow.

The Commission maintained largely the same small group of panellists and chair throughout the Central Square project. At the time of writing, May 2015, subsequent phases of plots on Central Square are the subject of consultation with the Commission, again at the earliest stages, and again in a programme with a dedicated Commission team, which will extend to the summer and early autumn 2015 planning submission timetable.

Lessons Learned

The Commission regards the Central Square process as among the best opportunities it has secured to influence the design and development content of a major piece of commercial development, and a great opportunity to consolidate its model of a more strategic front-loaded service with greater continuity of engagement. It has given the Commission the satisfaction of participating in the design process for what is arguably the most important redevelopment project in the city, if not the country, but it has also provided a unique learning opportunity for the Commission, the City planners and transport experts, in working with a committed developer, excellent design team and specialist consultants to explore all the complexities of the site, in the present and for the future.

The Commission added expertise for an increasingly stretched local authority team on their most important scheme. The developer also used the Commission's timetable to keep the design team up to speed as well as to test the assumptions and solutions presented in a peer review process. The use of scale models allowed more rapid testing and iteration in single meetings, meaning key design issues could be addressed more quickly, given the planning submission timescale.

The first project started on site in autumn 2014; planning consent was achieved for the masterplan and more recently, on 29th April 2015, for the BBC Wales Headquarters. Undoubtedly the combination of development ambition and recognition of the value of the Commission's expertise have played key roles in shaping the project. The Commission's early recognition of the opportunity and the complex factors at play enabled the trust based relationship with the developer to be strengthened to the benefit of a project crucial to the future success of the capital city. The vital element however is design patronage. Developer and client commitment to design excellence is the decisive factor and a key characteristic of every successful, high quality scheme.

2.8 Leisure and tourism projects

The Cardiff International Sports Village has been a project of the City Council administration since the inception of Cardiff Bay in the 1980s and they had acquired the land from the Cardiff Bay Development Corporation (CBDC) in 2000. The Commission reviewed the initial rather sketchy plans for the Sports Village in 2005 (DRW 2003-5: 77-78) but only the 'Olympic' Pool, white water rafting centre, supermarket and a retail warehouse have been approved and completed. The residential elements went through various transformations in the meantime (see DRW 2003-5: 77-78; DRW 2005-7: 38 and this volume), but new developers had taken over the project and were negotiating with the Council.

The Commission reviewed some residential elements (affordable housing) of the CISV in 2012 and commented on the lack of an updated masterplan which made rational assessment of individual elements impossible. A month later the new developers for the scheme presented a new masterplan which was a significant re-working of the scheme which had been reviewed in 2004, and which had been granted outline planning permission in May 2013.

CASE STUDY 8:

CARDIFF INTERNATIONAL SPORTS VILLAGE

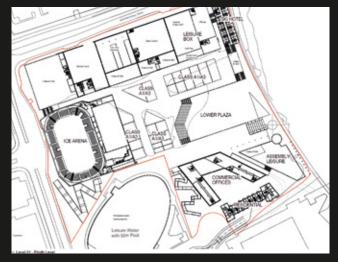
The local authority welcomed the comprehensive approach of a new developer, the new mix of uses, and the treatment of the public realm, but had serious concerns about the amount of car parking and the mix of retail proposed, as well as the microclimatic impact of the three tall towers proposed. An outline application would include a detailed application for the ice rink and both were imminent.

The Commission recognised the ambitions driving the proposal, but had major reservations about the viability of the project, its phasing, and the unresolved nature of many of the elements of the site plan. There were a number of major problems with the design of the public realm caused by the raised plinth across much of the site, which would allow ground level servicing underneath and improve views for the public out across the Bay. The relationship of this plinth with the extant 'Olympic' Pool, which had been built at ground level, was the first problem and negotiations between the new developers and the pool owners had broken down. The legibility of the main access ramp to the plinth was problematic and the difference in levels was causing numerous problems of access and pedestrian movement across the site.

The quality of the public realm along the waterfront was of crucial importance but the Commission felt it was unnecessarily restricted in the north where it was overhung by the 'ski-tube' and a 'ski hotel'. Access to the plinth from the walkway was also problematic and the whole public realm had not been examined to maximise sunlight and shelter.

The content of the Sports Village had changed significantly. The most dramatic change was that the former 'Snow Dome' was now a tubular structure housing an indoor ski slope, but placed on top of a 6-14 multi-storey car park on the northern part of the site. A new ice rink/300 seat arena for professional ice hockey and other events was under construction on the western edge of the complex, but a public rink adjacent had been replaced with A3 uses. Three residential and hotel towers of 23, 27 and 32 storeys were located on the Bay adjacent to a new marina.

The Commission also commented on the lack of a proper model, and of information on sustainability targets or an energy strategy, despite the inclusion of an ice rink. They thought that the claim to achieve a





 CARDIFF INTERNATIONAL SPORTS VILLAGE
 The plan reveals some of the difficulties of servicing and pedestrian circulation with the concentration of sports, leisure and retail facilities on this Bay-front site, and the compromising of the waterfront walkway. The proposed pier and marina are not shown while the sections reveal the bulk of the car park and leisure block and the height of the southern hotel.

'timeless' architecture was not justified and that the use of materials like metal cladding, ETFE and metal cladding were very much 'of their time'. They would not engage with architectural issues until the fundamental issues of site layout and access were resolved. Subsequently the Commission has not been presented with any further details of the Sports Village, but they have been consulted on the associated residential schemes (see 2.3 Residential: Large Scale Urban Housing).



PLATE 17— LAND RECLAMATION AND RESORT, EAST PIT, BRYNAMAN.

The landscape plan shows how the entire pit would be reclaimed as a rural landscape, and a new 'village' of lodges built around the shore of the eastern lake.

There were three other tourist/leisure projects that were extremely ambitious, but they were oriented towards the countryside and focused on opportunities in South West Wales. Two separate proposals for recreational and tourist facilities to be developed on former, or soon to be closed, open cast coal pits came to the panel in May 2012, and these were both on sites sold by Celtic Energy Ltd to a regeneration company along with two other South Wales pits.

East Pit was a long established, open cast coal mine just beyond the south western edge of the Brecon Beacons National Park and south east of Brynaman. The 300 hectare pit would be mined for its remaining coal, and then restored to a natural landscape. A holiday village would be built around an artificial lake with a development platform to accommodate 120 holiday lodges and a 120 bed hotel. (Plate 17) The Commission thought that the overall financial appraisal and viability of the project required greater testing. The landscape restoration on an area highly visible from the National Park required further development to understand the options as to its future character and use, and the connections to nearby communities needed to be established at an early stage. They felt that an early planning application was premature and unrealistic.

The Commission saw the East Pit proposals a second time in October 2012 and reported back on two public meetings that had been conducted in the area. The LPA expressed concerns about the delivery of the project. There was discussion of a landscape restoration strategy and the remoulding of land forms to reflect the flat top mountains of the Brecon Beacons and Black Mountains, and there would be two outfalls from the new lake to connect with existing streams. (Plate 17) The Commission wanted to see much more contextual analysis and details of constraints and opportunities before being drawn into discussion of building elevations or largely irrelevant precedents. The low carbon strategy was ambitious and would require much further work, as would the proposal for a Land Trust and the whole legacy project.

The Company had also acquired the Margam pit, and here again there was a lack of the necessary context analysis. The rationale for a 'proposed village regeneration' scheme on a new development platform had not been explained and the potential for, and financial implications of, a 'zero carbon community' had not been explored. The application for continued coal extraction at the site had been refused, and any new plans would have to respond to the reasons given for that decision.

CASE STUDY 9:

PANTGLAS HALL AND PARK, LLANDEILO



A third major leisure development in the grounds of Pantglas Hall in unspoilt, but quite remote, rolling countryside north west of Llandeilo was reviewed by the Commission. This was formerly a minor country estate, but all that remains of the original house is a Grade 2 Italianate tower, the rest having been demolished in the 1970s. However, the gardens and ornamental lakes remain with a Grade II listed bridge, in a small but beautiful secluded valley. A stables complex now forms part of the leisure resort with some log cabins just outside the boundary of the Hall grounds.

There was an existing consent for 89 residential holiday homes pepper-potted over the grounds of Pantglas Hall, but this permission expired in March 2013. The planning application sought a 100 bed hotel with conference facilities and restaurant in a rebuild of the Hall. A 220 space car park partly sunk below ground, and 80 three bedroom 200m² holiday homes facing the Hall across the valley were also included. These homes are large detached houses set into the hillside, and five different types are proposed. The Commission was informed that the target market was Chinese clients.

The Panel were critical of the scheme as not conforming to local and national policies for high quality

• HOTEL AND HOLIDAY HOMES, PANTGLAS HALL AND PARK, LLANDEILO

The site plan shows the rather strange 'suburban' housing layout, while the section reveals the pastiche restoration of the original hall around the remaining tower, and the variety of house types and styles of the large houses that would be built on the rather exposed slope, mainly beyond the park.

design and sustainable development. Whilst the proposal to rebuild the Hall as a hotel was sound, the design and its relationship with the tower was not well resolved and was degenerating into pastiche.

However, the 80 new and very large dwellings in an 'international style' were completely inappropriate in the park setting, and the scale and location of the multi-storey car park was problematic. The proposal for a site-wide biomass heating system was impractical, and there was no evidence of how the project was taking 'a leading stance on sustainability' as claimed. The Commission was aware of the importance of tourism to the local economy but insisted that any proposed development should respond sensitively to the outstanding opportunity offered by the site and the landscape setting.



PLATE 18— VISITOR CENTRE, HARLECH CASTLE.

Excellent visualisations helped to reassure the panel as to the sensitivity of the design to the historic context, but the car park remained an unwanted intrusion.





Otherwise leisure and tourism projects were a very mixed bag of schemes, but they included the final reviews of the St. Fagans National History Museum, the subject of a major case study in a previous review (DRW 2007-11: 85-6) and was another long term commitment for both client and Commission.

Two reviews took place early in 2012, the last in a total of eight meetings. The first of these last two concentrated on four key areas of concern – landscape, sustainability, the main building and the new building. As regards landscape there were concerns about the adequacy of the budget to complete the necessary works. There was a need to review the public points of arrival and the facilities provided, and for a clearer definition of tree protection areas. On sustainability there were concerns that while the new buildings would meet the highest standards the site-wide strategy might not. The design of the main building had been improved, but there were refinements to be made to the roof plan and the high level walkway in the courtyard. The Panel felt that the design of the new building had been compromised and required a fundamental re-evaluation.

The final review in March 2012 produced a report that summarised the various considerations that had shaped the discussions around landscape, sustainability, the refurbishment of the main building and the new building. It also revealed how DCFW had worked closely with both the LPA and Cadw to resolve matters of historic building and landscape conservation.

The refurbishment and extension of the Harlech Castle Hotel was part of a proposal to improve the setting of the castle and improve visitor facilities. The upper floors would be converted into apartments, but the ground floor would enhance arrival facilities and improve visitor flow, while landscape improvements would be made to the car park, and a new pedestrian bridge link to the castle would improve circulation. The Castle Gatehouse would also house an interpretation centre. (Plate 18)

The Commission regretted the retention of the car park in its current position as it spoilt the setting of the castle. They thought that transport and circulation issues ought to be thoroughly investigated and options for improvement should be evaluated and costed. The legibility of the circulation was compromised by the proposed layout, and the entrance should be moved to the centre of the building not tucked away on the side. The link bridge should be designed as an integral part of the whole project, and the new extension to Ffordd pen Llech should be reduced in height. Designers and contractors should be working together to achieve a high quality result and a target of BREEAM Excellent would focus the team.



PLATE 19— NATIONAL SAILING ACADEMY, PWLLHELI.

The Panel endorsed the design concept but sought some refinements and removal of extraneous clutter. They still had concerns about the functionality of the building as regards boat inspections at competition time.

There were three proposals to create single new tourist leisure buildings in country or coastal locations. Gethin Bike Park was located in Gethin Woods to the west of Abercanaid near Merthyr Tydfil, and was unusual in being a private venture. The proposals for a visitor centre were very sketchy, but the project would include a bike shop, cafe, information point, offices, workshops and stores. An open plan design was contemplated with external decking serving the cafe and the shop. Security was a major consideration because the site is isolated and the stock valuable. Good links to the site from the Taff Trail and the Valley Line station of Abercanaid were feasible, and Sustrans were seeking to improve this link which was a boost to the project.

The Commission was very supportive of the project but wanted a number of fundamental revisions to the design to fulfil the original brief. They wanted a more site-responsive design, and one that minimised energy demand and used opportunities for renewables. They wanted the desired visitor experience to inform the building's layout and orientation, and a simplification of the project down to its fundamental components to save money. There were a number of dysfunctional elements in the plan which needed to be eliminated. The engagement of a landscape architect was urgently required to make the most of the project and to decide the nature and form of car parking and the like.

The Welsh National Sailing Centre in Pwllheli aimed to be an international standard facility and the proposal is in accordance with local planning policy. The LPA sought a multi-purpose building of the highest quality in the existing marina which reflected its maritime location. The Commission had reviewed the project several years before when funding could not be found. They felt that the basic design concept, which had changed little from the original project, was good and they welcomed the aspiration for BREEAM excellence, but they had serious concerns about the functionality of the plan. (Plate 19) The clarity and simplicity of the original concept should be retained and refined, and extraneous detail and clutter omitted, especially on the roof. There was little evidence that the exposed site and its sometimes severe weather had affected the design. The central internal space should be tested against all foreseeable uses, and the single access to the hall would seem to invite congestion when scrutineering was in progress. A wide route through the building from car park to slipway for sail boats should be considered. Landscape measures should be taken to reinforce pedestrian routes across the site and soften the large areas of hard standing.

Another small leisure facility was the Cwm Idwal Warden's Centre. The brief was developed by the Countryside Council for Wales, the National Trust and the Snowdonia National Park Authority to build a new visitor's centre. The local planning committee had raised questions about the canopy design and parking issues, and the revised planning application had been referred to the Design Commission for comment. The Panel considered that the building's form and footprint was costly and would not deliver corresponding benefits. They felt the new canopy needed to be tested for wind and weather conditions, and additional shelter should be provided. The inflexible layout of the internal spaces should also be re-considered to reduce the number of entrances and improve connections and energy efficiency. The glazing should also be reviewed and a tight and well-insulated building envelope should be assured.

The Wylfa Newydd Magnox Power Station will have a visitor centre and will be something of a tourist attraction. It is a Nationally Significant Infrastructure Project (NSIP) and will be determined by the Planning Inspectorate (PINS) via a Development Consent Order (DCO). The 'Gateway Complex' will consist of three buildings, car parking, an amenity space and landscaping at the entrance to the new Wylfa Magnox Power Station. These will house new premises for the Alternative Emergency Control Centre, a District Survey Laboratory, a Sports and Social Clubhouse and include a Visitor Centre, and the latter will be the main point of public interaction with the nuclear power station. The Commission appreciated the importance that was being attached to providing a centre of exemplary design quality, though that quality was not evident at review. They also sought detailed plans for the relocation of the Wales Coastal Path around the site.

The review was based on illustrative material and not on design drawings, but the operators wanted the Centre to be innovative, transparent, and modern yet sensitive to its location to become part of the landscape. BREEAM Excellent was the target. A business case for the building which would determine its visitor load was in preparation, and relevant precedents would be examined. The Sports and Social Club would be a pavilion design but subservient to the Visitor Centre, while the other buildings would have integral security fencing and landscaping to reduce any negative visual aspects. A more detailed review of the Gateway Complex would follow when detailed design work had been completed.

The Commission remains in consultation with Horizon Nuclear and the LPA as the project evolves and proceeds through the parallel process of the PINS NSIP route and the more familiar Town & Country Planning route. The long term legacy for Ynys Môn is a primary concern for the Commission.

The review was based on illustrative material and not on design drawings, but the operators wanted the Centre to be innovative, transparent, and modern yet sensitive to its location to become part of the landscape. 99

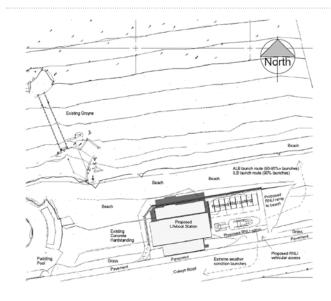


PLATE 20— LLANDUDNO LIFEBOAT STATION.

The Panel felt that the choice of materials and the elevations of the Lifeboat Station did not reduce the intrusion of the Lifeboat Station onto the promenade, though its functionality was incontrovertible.



A Lifeboat Station is not exactly a tourism and leisure project but it is an important associated use for all coastal settlements and resorts. The Llandudno Lifeboat Station required a replacement building and a previous attempt in the 1990s to gain a planning permission on a different site had failed despite officers' recommendations to approve an application. An unsuccessful appeal followed. A site options appraisal in 2010 had identified 18 possible sites, and the one selected was considered to have very little impact on conservation or urban design considerations. It was located at the far end of the beach and promenade, just beyond the children's paddling pool. (Plate 20)

The site is part beach and part hard-standing, and provides the direct access to the sea required to minimise lifeboat response times. Because of the need to house the new generation of the all-weather Shannon Class Lifeboat and Inshore D Class life rafts on rigs for immediate launching the boathouse is much larger than previous versions, and requires a building that is 25x20x7.5 metres high with an apron in front of the building that is 50 by 22.5 metres wide. Parking spaces are also required for the crew. So its impact is much greater than might be imagined, especially as Llandudno has no large buildings anywhere on the seafront. The Lifeboat Station's efficiency has already been somewhat compromised by the positioning of the Station which aligns the building parallel with the promenade, requiring the lifeboat to be turned 90 degrees on the apron to be launched.

The Panel were disappointed by the seeming unwillingness of the local authority to promote the scheme on this site, but agreed that the building would have to be of exceptional quality. There were debates as to whether the photomontages presented underestimated the impact of the scheme. The Commission came to the conclusion that the current proposal was largely functional, but they wanted to see a building that was elegantly detailed in high quality materials and that would make a positive contribution to the seafront landscape.

The White House Hotel in Abersoch returned to the Commission for reconsideration. Two proposals had been reviewed previously, the first in 2006 for 35 rooms (which was subsequently approved) and the second in 2011 for 61 rooms (DRW 2007-11: 74-5: subsequently refused). What was now proposed was a 42 bedroom hotel and 18 apartments. The site borders the Llŷn Peninsula Area of Outstanding Natural Beauty to the east and has a number of Tree Preservation Orders on it, but is surrounded by residential buildings set between mature trees, and is only some 600 metres from the village centre. The new hotel/apartments would be a single five storey block, twice the height of the former, now derelict, hotel on the site, but it would be set into the



slope of the site. Building bulk, height and visual impact were the immediate design issues, but the LPA also sought some 30 per cent affordable housing in the project and there was no mention of this in the plans. There was no landscape proposal presented and the proximity to, and impact upon, a neighbouring residence was clearly problematic. The Panel took the view that a better designed scheme which addressed these issues would benefit the town.

They made various suggestions for improvement. These included variation in the roof form to reduce the visual impact, sinking the spa and the swimming pool further into the slope, and creating a single entrance to hotel and pool to reduce the bulk of the building. They also suggested separating the apartment block from the hotel to reduce the bulk, and concentrating the parking in a single location. Overall their concerns were the same as they had been in 2011, and they felt that the improvements made to the scheme since then were marginal and not significant.

In November the Panel were sent new plans that reduced the impact on the adjacent property and asked to comment, but they felt that the hotel's impact on the adjacent house was still too overbearing.

Outline planning permission had already been granted for a major Convention Centre in the Celtic Manor complex on the edge of Newport, and regrettably the detailed designs came to the Commission at a very late stage. The Panel criticised the car reliance that the Convention Centre would promote, and the lack of direct rail connections which would, logically, accompany such proposals. They sought more information on the arrival sequence for those attending conventions. They thought that the relationship of the convention centre to the hotel and leisure facilities required more consideration to ensure that they were fully integrated.

However, the design of the whole scheme was remarkably compact, particularly given the very steep nature of the site, its tree cover and varied topography. However, its very close proximity to the M4 and its visual impact, required much more visualisation, photomontages and discussion (Plate 21).

The Panel sought studies of the visual impact of the building and its integration with existing buildings that climb the hillside adjacent to Junction 28 on the M4 east of Newport. Despite the lack of public transport access the Panel felt that the building should still seek the highest possible sustainability (BREEAM) rating. Their major criticism was the design of the glazed canopy over the entrance but they praised the sustainable water management that was integrated with the landscaping proposals, the natural ventilation in the car park and the good daylighting in the exhibition space.

Lessons Learned

Lessons from leisure and tourism projects are few and far between mainly because the projects are so diverse. The three most ambitious projects were high risk ventures where the established market remained unproven. East Pit has to pay for massive land reclamation over 300 hectares, while Pantglas's remote luxury housing estate may have little to offer the Chinese tourist. Many have suggested that the Cardiff International Sports Village has similarly misplaced ambitions, but new developers are pressing ahead with the combination of indoor ski slope and ice rink and linked to an existing Olympic pool and white water rafting facility, and made a significant start on the accompanying housing. The latter was a case where the review ended in considerable acrimony as the Commission questioned the quality of the public realm. The Panel would not discuss the architecture until urban design fundamentals were resolved. This is not a situation that the Commission wishes to see repeated, and they recognised the ambition of the developers even as they questioned the detailed design process. By contrast the experience with the St Fagans project was the highlight of 2007-11 and one of the key experiences leading to the sustained engagement of a bespoke team for major projects.

A new Visitor Centre for Harlech Castle was another major design challenge but one where a largely successful outcome was achieved to improvements to visitor arrival and facilities, although the Panel maintained their objections to the location of the car parking.

At Wylfa the design has not got beyond basic illustrative concepts. The project remains a challenge for the LPA and the Commission and may yet see a split approach emerge between the NSIP and more usual planning processes.

The Cwm Idwal Warden's Hut and the Welsh National Sailing Academy both suffered from circulation problems, as did the Gethin Bike Centre and all three needed more focus on a better energy strategy. Finally the Llandudno Lifeboat Station simply required a more elegant design, more sympathetic materials and a greater partnership approach from the local authority.

2.9 Small Public Buildings and Community Centres

The Commission's commitment to smaller 'everyday' projects is reflected in these smaller public buildings including public libraries, community facilities and a community centre/leisure centre.

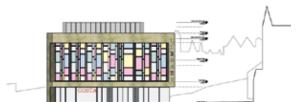
The Pentyrch Bowls Club community contacted the Commission to seek advice on how to build a new club house to replace a set of cabins on the site. They wanted it to house a small function room as well as a kitchen, changing room, and toilets. They sought an environmentally sustainable timber frame building and would fund the project with a bid to the Aggregates Levy fund given the proximity of aggregate quarries nearby. They wanted the Panel to guide them as to how they might procure such a building.

The Commission advised that they ought to demonstrate the community need for such a facility, and show that they have considered the wider site and its access, possible building location, services and lighting. They should justify the chosen site, its size, orientation and access. A clear sustainability strategy would have to be developed for the building and specialist advice should be sought. The Commission recommended a 'fabric first' approach to ensure that the building envelope performs well and reduces energy needs. Other technologies should be appropriate to the scale and use of the

PLATE 22— LIBRARY, MERTHYR TYDFIL.

The Panel were not convinced by the form of the building in relation to the new 'square'. They thought that the internal layout, and the relegation of the library to the second and third floors, would compromise the building's utility.





building. The Commission advised that a professional architect with the appropriate expertise should be engaged to design and test a range of alternatives. The group acted on the advice to the benefit of the project, but have not yet achieved their funding.

In Merthyr Tydfil a public library was proposed on the site of the former Castle Cinema and within the Town Centre Conservation Area with frontages to both High Street and Castle Yard. A proposal was made to build right to the property boundaries and erect a three storey building that would allow a fourth storey to be added should the need arise. The main entrance would open out on to a new pedestrian square in front of the Red House, the old town hall, now being converted into an arts venue. (Plate 22) The design would take a contemporary approach using light coloured natural stone on the frontage with extensive multi-coloured glazing on both the front and back of the building, and would achieve full disabled access and a BREEAM Excellent rating. The building would house the library, a cafe, an exhibition space and possibly a bookstore to reinforce the regeneration of the town centre.

The Commission thought that the building needed a more defined brief, a clearer vision from the 'client' and a more flexible solution. There was no indication of how the development responded to the townscape character of the area, especially the town hall, or any study of the various views that might be obtained of the building. The ground floor at the front of the building gave priority to the retail use at the expense of the library, and its entrance was through the shop and up stairs which was not considered to be satisfactory. The Panel agreed that a new building was required, but given the fluidity of the scheme they felt that their input would be more useful once the details had been confirmed.

A community centre for the suburb of Splott in south Cardiff, located in Splott Park, was to be funded by the City Council as part of a wider regeneration project to improve amenities in the area. The proposal was to remove the existing swimming pool, a bowls club and one green, and to replace them with a new building housing a 25 metre swimming pool, two sports halls, a library, community centre, and function rooms, all supported by a nursery and a crèche. This would allow closure of both pool and the Star Centre to save money and bring the facilities within closer reach of residents of neighbouring Tremorfa. Public consultation on the proposals was largely favourable except from the bowls club.



PLATE 23— SPLOTT COMMUNITY CENTRE, CARDIFF.

The plan was certainly very efficient, and the combination of facilities would promote heavy use. But the Panel felt that the deep plan, reception area layout, and long corridors would compromise the quality of the experience.

The Panel would have preferred to see the project earlier in its gestation, and felt that the proposals had been compromised by numerous changes of the brief and restrictive site constraints. The site and its boundaries required more justification, but the aim now was to improve the project wherever possible, perhaps beginning with a landscape architect to ensure the project related better to the park setting. (Plate 23)

The Commission thought that the reception space should be re-considered to improve surveillance, security and arrival. While the plan was very efficient the deep central space, and congested internal space planning, led to the creation of long corridors and poor way-finding. The security fence around the centre was not appropriate for a public building in a parkland setting, and other means of security should be introduced. The relationship to the Bowls Club was unsatisfactory, the access was tortuous for club members, and there was no surveillance.

The elevations were potentially elegant but the roof form was unrefined and overpowering. Finally, the Panel felt that the building should be brought forward to the edge of pavement to give it a better civic presence and to create a more flexible space around the building.

Lessons learned

These projects were compromised by late review of the proposals, and by their restrictive sites. The Merthyr Library lacked a clear brief and there was no contextual analysis to justify its response to this key position in an historic context. In the case of the Splott Community Hub the site was too constricted to house all the facilities required, and the result was a very congested circulation system. The facility would undoubtedly be very well used.

2.10 Conservation/Conversion of historic buildings and Conservation Area Schemes

Conservation is an issue in a large number of schemes coming to the Commission but the following are examples where conservation is the dominant design concern.

The Marine Buildings at the Penarth end of the Cardiff Bay Barrage are important 19th century historic remnants in a key position on a popular recreational trail around the Bay. Originally five, three storey terraced houses in a neo classical style they are





PLATE 24— MARINE BUILDING, PENARTH.

The restoration of the 19th century terrace was welcomed but the design of the new extension facing the Bristol Channel while not rejected required refinement.

Grade II listed, but are in a very dilapidated condition where facade retention will be the only practical solution.

The proposal was to convert them into a 55 room hotel while preserving the main east and the northern elevations, and the existing footprint of the building would be widened at the rear to accommodate hotel rooms both sides of a central corridor. Also proposed was a new four storey extension with a glass link to the main building on the seaward end. Car parking for 73 cars will be provided behind the building on two levels at and below ground level but hidden from view by the Penarth Headland Cliffs.

The Commission welcomed the proposal and considered it largely well-considered. Its comment focused on the projection and design of the proposed extension, its mansard roof, the lower section of the glazed link and the lean-to roof, and the blank wall of the original terrace. (Plate 24) They wanted each of these reconsidered. The Panel had no objection to a modern design for the extension if it was sensitively done. They also sought a landscape architect to design the public space and (minimal) car parking in front of the building, and to review the planting as well as the treatment of the cliff behind the hotel. They wanted a commitment to a higher BREEAM rating than the Very Good proposed, and to be assured that there was a sufficient budget to deliver the project as a whole.

The Grade II 1880s Hydraulic Pump House for Barry Docks had been restored by the Local Authority. The building is brick-built and retains its ironwork roof trusses and most of its original window frames and two cranes. It sits within the Barry Docks Innovation Quarter so there are many options open for re-use, but the building is complex and not easy to convert. The current proposal is for a mixed use development, with a gym and restaurant/cafe bar at ground level, and 15 one-bedroom live-work units above. Renewable energy options will be explored in the next phase of design and a public space will be created within the car park that is in front of the building.

The Commission felt the mix of uses proposed for the building was appropriate. Their main concern was the new glazed circulation drum which conflicted with the existing chimney and the piazza, and created awkward dead spaces around it. The Panel suggested that the vertical circulation could be better resolved by the use of an internal corner within the building. The Panel also felt that the location and proportion of the new windows were inappropriate, and that these should be re-planned. Otherwise the Panel recommended the retention of an M&E engineer to resolve servicing to the A3 units and their air outlets, and improvements to pedestrian access, lighting and landscaping outside.

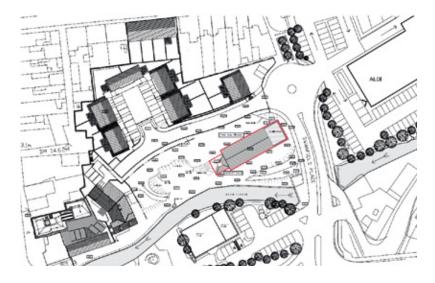


PLATE 25— BUCKLEY'S WHARF, LLANELLI.

The site plan illustrates the setting of the Malthouse and the additional new-build units. The Malthouse has had fire damage repaired, and new matching windows and rooflights inserted to give good daylight to all apartments.



In Llanelli the refurbishment of the Grade II Buckley's Malting Building for 8 or 12 two bedroom apartments (depending on the commercial floorspace to be accommodated) was reviewed. The Commission had reviewed the outline proposals in 2004 for Phases 1 and 2 which had been implemented, and the 2010 consent for 12 apartments in the Granary Building (DRW 2007-11: 54).

The latter conversion was now being reformulated and 6 new townhouses were proposed on adjacent brownfield land. (Plate 25) Regeneration funding via the Vibrant & Viable Places (VVP) regeneration framework would be needed to allow the project to be completed, and all the new housing units would be marketed on the Low Cost Home Ownership model for local people, with the Housing Association retaining 30% of the equity. The riverside public realm would also be improved.

The Commission supported the aims of this scheme and underlined the importance of bringing the listed building back into active use, providing low-cost ownership housing, and improving public access to the riverside. They welcomed roof lights in the roof of the warehouse and considered that wider window openings would also enhance the apartments, notwithstanding the listed building status. They were concerned about day-lighting in the lower level of the north side of the townhouses, and their northern elevations and garage doors needed improvement and landscaping. The width of the riverside walk was still not fully resolved, and nor was the design of the steps and balustrade, and these needed to be agreed to complete an important enhancement of Llanelli town centre. The Commission was generally supportive of this project overall but it did not achieve the crucial VVP funding .

Cwrt Henry is a Grade II* 18th century house with medieval origins, located in the Dulas Twoy Valley in Carmarthenshire, that its owner and occupant wanted to alter and extend to improve its function and energy efficiency as a family home. The major changes proposed were the re-introduction of a new conservatory in the same position, and to the same design, as the previous 1830s Regency porch. Also planned was the relocation of the existing kitchen back into the main house, and the relocation of a fireplace and a Welsh dresser. Late 19th and 20th century additions at the rear of the house would be demolished and replaced by a courtyard and a service flat. There would also be the insertion of roof windows into the internal slopes of the roof to allow more use of the attics. The Commission accepted all these changes providing they were executed with appropriate craftsmanship, but they felt that the new rear extension was overly formal and ornate, and they were keen that its roof was not hipped but perhaps gabled.

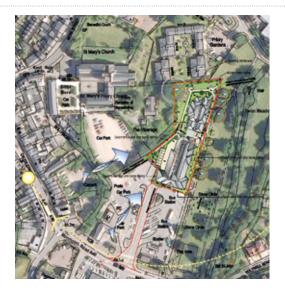


PLATE 26— RETIREMENT HOME, SWAN MEADOW, ABERGAVENNY.

The edge of town centre site was considered to be over-development although the retirement home benefited from adjacent public and private space, mature trees and river views from the eastern elevations. It was approached through the bus station and a car park which was also problematic.

An interesting conservation case arose with a proposal for a new house on the edge, but outside of, the Conservation Area in Newton, Swansea. A traditional design had previously been rejected by the LPA. The Commission knew that a Conservation Area Appraisal was to be conducted and all matters of detailed policy and boundaries reviewed, but proceeded with their assessment. The plot itself was complex in shape and steeply sloping, and the LPA were keen to preserve views across it for surrounding residents, though this is not necessarily a Conservation Area consideration. The Panel were encouraged by the design approach taken and the use of green roof, stone walls and timber, but they wanted the Design & Access Statement to explain the design rationale and evolution, and respond to the wider conservation concerns. The proposed terracing of the site and the positioning of the house were an appropriate solution, but the Panel wanted to ensure that the upper storey of the house could be seen from the street to confirm the site's residential occupation. The boundary treatment of the site also needed attention, as did an external staircase on the house itself.

The development of a retirement complex of 45 apartments on former industrial land within a Conservation Area in the centre of Abergavenny came to the Commission at a very late stage, too late for the major re-design that was necessary. The location of retirement homes a short walk from the town centre and adjacent to the Swan Meadow park was ideal, but the site itself was very constrained and the density of the scheme (at 100 du/ha) was too ambitious (Plate 26), notwithstanding the proximity of Swan Meadow. What seemed to have happened was that an attempt to respond to the local vernacular of short frontage, two and three storey terraced houses, and to protect views of the church from the park, had resulted in a split, two and three storey building. This produced a cramped internal layout with a number of odd-shaped rooms and an extremely awkward entrance in the corner of the building. The attempt to disguise the bulk of the building by varying roof heights, projecting bays, adding random balconies, and cladding in a mix of render and brick was not considered successful. The Commission argued that the building was simply too big for the site





PLATE 27— HOTEL, NORTH PARADE, RHYL, DENBIGHSHIRE.

The architects had designed four previous versions but added a fifth for the DCFW presentation with a black curved canopy with full height glazing at the back of pavement. Above was a two storey red brick facade with irregular pairs of bay windows to provide some rhythm and modelling to the seafront facade.

and the external amenity space inadequate. A necessary sewer diversion and an affordable housing requirement further threatened the viability of the project.

A corner site on West Parade on Rhyl sea front had been derelict for some time, and the buildings on the site demolished following a decision by Welsh Government. The site was on the defining north east corner of a Conservation Area, and the proposal was for a 64 bedroom budget hotel. Parking issues were resolved by the availability of public parking in a municipal car park across the road from the hotel, while three disabled and three standard parking places would be accommodated at the rear of the building. The building height respected the form of the demolished 'Honey Club' and accorded with the eaves and ridge heights of adjoining buildings. The intended operators have a set of functional requirements for the hotel, and a retail unit was included fronting on to West Parade. (Plate 27).

The Commission felt that the proposed building was trying too hard to respond to historic buildings which no longer existed on the site, and that a well-designed modern building would better reflect Rhyl's commercially viable sea front and its future. The local authority had retained the services of a Heritage Adviser to help resolve the matter of elevations, and she had provided a list of ten issues to be addressed. A key issue was the choice of facade materials since the Conservation Area was characterised by red brick buildings, while the vast majority of buildings on the sea front had been rendered. The Panel preferred a modern, well-detailed brick building, but they wanted the corner strengthened and suggested that the articulation of the entrance might help this.

The Commission felt that the proposed building was trying too hard to respond to historic buildings which no longer existed on the site, and that a well-designed modern building would better reflect Rhyl's commercially viable sea front and its future.

CASE STUDY 10:

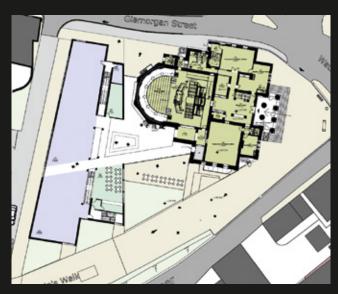
BRECKNOCK LIBRARY AND CULTURAL HUB

This project proposed to refurbish and extend the Grade II* Listed museum in the centre of Brecon, and construct a new library and cultural hub. The existing Police Station, a Grade II listed building, and County Court buildings were proposed for demolition and a fully-glazed atrium would connect the museum with the new library that would also house community spaces. This would allow the Assize Courts to be viewed as originally intended. The existing forecourt would be re-paved and re-furnished with new lighting, the listed railings restored, and the existing car park improved. Existing services in the Museum would be up-graded to achieve a BREEAM Very Good rating. A platform lift using a retractable step system will improve inclusion and accessibility into the building.

The brief had been through several iterations and had recently been considerably simplified to good effect, but there were significant issues associated with the demolitions and the changes to be made to a listed wall, and further consultations with Cadw were recommended. Simplicity and elegance were the watchwords for a successful modern insertion into the historic fabric. A clear strategy for movement and the public realm was vital and urgent, as were decisions as to which of the five entrances to the buildings would be used. The limited connectivity between the new library and the museum due to a listed wall and the small museum entrance needed to be resolved. The principal uses of the public spaces also needed to be determined, as did the energy strategy and day-lighting for the buildings themselves.

The Design Commission welcomed another opportunity to review the scheme a month later and, although the project had been further simplified, they still had a number of concerns. The future of the listed wall still needed to be resolved and, while the circulation strategy had been improved with a reduction in the number of entrances, the vertical circulation still needed to be determined. The connecting hub could be better resolved, and the library layout needed more thought as did environmental strategies, materials and architectural treatment.

The connecting hub could be better resolved and the library layout needed more thought



 LIBRARY AND CULTURAL HUB, BRECON
 The ground floor plan shows the refurbished museum and forecourt and a much simpler design linking through the atrium to the new museum on two levels. The panel still felt many key issues were unresolved.



 PLATE 28—
 BAY SCIENCE INNOVATION CAMPUS, SWANSEA UNIVERSITY.

The residences new plan had lost some of the clarity and design quality of that previously reviewed, and the cycle stores undermined the quality of the residential amenity spaces.

Lessons learned

These conservation cases were nearly all successful resolutions. The exceptions include the Swan Meadow retirement home which was simply too big, and too much of an architectural pastiche, for its narrow site, leaving no opportunities for landscaping or amenity space. The second exception was the West Rhyl Parade hotel where the attempt to design 'in context' produced an exceptionally bland elevation rather at odds with the rendered finishes of many of the other frontages on Marine Parade. The Panel concluded that a modern building, perhaps even the original hotel design, would be preferable, though perhaps a conservation alternative had to be attempted in order to demonstrate this.

Two conversions were somewhat controversial. The Pump House in Barry had a glazed, circulation drum that competed with the original chimney, and the modern extension to the Marine Buildings in Penarth was bound to arouse some opposition. In the latter case the Commission had no objections to a modern extension though they suggested a number of refinements which were executed. The success of the modern extension rests less on its carefully considered architectural details, and more on filling an empty site, hiding a blank elevation, and creating a new landmark that provides a new aspect across the Bristol Channel and a visible destination on the coastal path from Penarth to Cardiff Bay.

2.11 University Buildings Colleges and colleges, including student residences

A range of university and college buildings were brought to the Panel including two new university campuses in Swansea, a new Cardiff & Vale tertiary college, and new student residences in Bangor. The stand out project was the Cardiff & Vale College with its exceptional internal organisation and layout and its bold architectural expression. (Case Study 11)

Swansea University's Science and Innovation Campus (actually located in Neath Port Talbot) was positively reviewed in 2010 (DRW 2007-11: 106) and was reviewed again by the panel in 2012. It had been given an outline planning approval subject to successful resolution of Section 106 matters which were almost concluded. There was now a second entrance from Fabian Way and vehicular movement had been confined to the northern part of the site along with a temporary car park for 500 cars. The 'Smart' R&D building was located close to the main entrance leaving the student accommodation on a residential street with active ground floor uses closer to the sea. Some 1,950 student rooms were planned in the first phase of development. The main academic buildings were grouped around the main public space of Gwalia Hall.

The Commission was disappointed at the changes made to the masterplan (Plate 28), particularly the move away from perimeter blocks with entrances directly

onto the street in the residences, and the addition of narrow landscaped strips signified a weaker urban grain and less emphasis on street activity. The public realm and landscape issues had not been adequately addressed and more detailed information was needed to form a convincing planning application. There was a lack of visualisations to convey street views, and a lack of discussion of the main desire lines and pedestrian movement, and there was no drawing that clearly illustrated entrances and active uses at street level. Cycle storage in the residential courtyards was unsightly. While there was variation in the facade materials and detailing the great majority of windows were identical producing a dull streetscape.

The Commission argued that academic buildings around Gwalia Square required a more contextual response and had an awkward relationship with each other, while the 'Smart' building was poorly positioned. The appointment of a second architectural practice seemed to have led to a more disparate scheme. The Panel was also disappointed to learn that, with the exception of the Innovation Hub, the new buildings would only reach the statutory minimum in terms of energy standards, and that there was no guarantee of a District Heating System. However, a sustainable drainage strategy would be implemented.

The estate manager at University of Wales Trinity St. David's (UWTSD) met with the Commission's Chief Executive prior to their competitive appointment process to secure architectural services. Immediately after appointment in late 2014, they and the architects for the UWTSD masterplan consulted the Commission. They were revising a masterplan first prepared in 2010, adding an Environmental Statement and consulting the Commission in the lead up to public exhibition and consultation. A site had been selected within the SA1 Regeneration Area in Swansea to the east but there was also the possibility of using the long vacant sites closer to the city centre on the west side of the Sail Bridge and the River Tawe.

The Commission made a range of preliminary comments upon the emerging masterplan focusing upon the importance of a detailed analysis of the site and its context, and the identification of any heritage features that might be drawn on. The existing guidelines for the public realm should be revisited and up-dated. Flexibility should be a key element of building design in the early stages and security would be an important consideration. An early decision should be made as to whether the new buildings would be street-oriented, or whether they would be more collegiate in form with their main entrances off enclosed courtyards. Other issues discussed were the possibility of interim/temporary uses of some of the sites, the value of attracting compatible but non-university buildings/developments onto the campus, and serious engagement with adjacent residents as to their views on acceptable forms of development, A key decision remained whether to focus on the two key sites within SA1 or whether to seek to use the site on the west side of the Sail Bridge much closer to the city centre.

A key decision remained whether to focus on the two key sites within SA1 or whether to seek to use the site on the west side of the Sail Bridge much closer to the city centre.



PLATE 29—
 UNIVERSITY OF WALES TRINITY ST.DAVID, SA1 SWANSEA.

Having established a process of long term engagement, the University returned in November 2014 to update DCFW on progress and state that the preferred development area was emerging as two sites on the western edge of SA1. How these two sites would be connected emerged as the key design question and the extent to which the university would be able to influence the connecting routes and the intervening pattern and form of development was the major imponderable. The whole conception of the public realm and the landscape strategy of the campus needed to be considered in the context of the heritage, character and qualities of the sites and the delivery mechanism established, and the question of how this could influence the intervening streets and walkways explored. A block structure should be developed that is of an appropriate scale and with flexible and adaptable floor plates that can be adjusted to changing needs. Public consultation with adjacent communities should also be commenced to determine their preferences and concerns.

Plans for a 500 unit student residence for Bangor University were focused on a former teacher training college on an elevated site in the south of the city. The site was wooded and isolated, but it was within walking distance of the city centre and the campus. Two of the existing buildings would be converted and five new blocks added, all connected by a split level 'street'

The design of the project was well-advanced and the opportunity for the review to influence the design process was limited. The Panel welcomed the provision of a model which greatly aided informed discussion of the project. They were interested in how the designers had reached their preferred design and what other options had been tested. They felt that some taller buildings would have increased the space available at ground level, while the double-banked corridor layout did not provide the right balance of attractive private, social and community areas. The Commission felt that for 'the street' to become a bustling, social place there needed to be a high level of activity along its length and a 'destination' at the far end; the architects and landscape architects should work together to achieve this. Elevations and roofscapes should be refined, and the amount of render used on the mainly brick clad building reduced because of the risk of staining in this wooded environment.

CASE STUDY 11:

CARDIFF & VALE COLLEGE, CARDIFF





CARDIFF AND VALE COLLEGE, CARDIFF

The architects produced a very complex but very exciting design that will do much to create a lively street out of Dumballs Road. The model views and ground floor plan reveal the imaginative design that will create a vital heart for the building and the scope for extension.

Cardiff & Vale College was formed through a merger of Barry College and Coleg Glan Hafren for tertiary education and is to be relocated in a purpose-built premises on a site within the Enterprise Zone in Central Cardiff. A site was selected on Dumballs Road at Canal Terrace, some 400 metres south of Central Station, and a Welsh Government grant will cover half the cost of the project.

The building is complex in all respects as is evident from the drawings. It is wedge-shaped in section rising from 3 storeys in the south to six storeys in the north, but with a semi-circular, yet angular, plan that wraps around a lower core building that fronts on to Dumballs Road. This creates a triangular atrium at the heart of the building that is elongated towards the northern and southern pedestrian entrances. This atrium is animated on the ground floor by retail, beauty salon, gym and student services and overlooked by bridges and balconies on upper floors.

While the outer, taller building contains the various teaching departments and their accommodation, the inner building that fronts Dumballs Road houses student services, the general teaching media space, and the learning resources centre. The latter is a building that steps up from three storeys in the south to five storeys in the north, and provides three generous, south facing terraces that can be accessed internally, with the top terrace used by the restaurant. The frontage on to Dumballs Road will be recessed behind trees and a landscape strip, but will

provide an active frontage over 100 metres long, something that Dumballs Road has lacked throughout its existence.

It is a sophisticated and well organised building which develops further the ideas that underpinned the same architect's building for the University of Newport (DRW 2007-11: 104). It will achieve BREEAM Excellence with 50 per cent natural ventilation and a large photovoltaic array on the roof.

The Commission broadly welcomed the project and the improvements it would bring to Dumballs Road, but they had strong criticisms of the building's orientation and its treatment of Canal Street and Canal Park. These emanated from the apparent failure to respond to the importance of the creation of a grid of east-west streets in this part of the Bay as set out in the Council's masterplan for the area.

The Commission felt that Canal Street had been poorly treated with the college building splayed back from the corner and the service access to the building, the crèche drop off and the car park entrance all located on the street. The only building frontages were single storey and, although there would be a highly glazed beauty salon on the corner, the street would be a largely a dead end service zone with a very poor entrance to a neglected park. The College itself hardly related to the Park, though it would do so when, and if, it was extended, and the design had already planned for this. The architects made several changes resulting from the review meetings and the building openedin May 2015.

Lessons learned

There are no obvious lessons from these five cases, but the Design & Access Statement for the Cardiff & Vale College was one of the very best presentations received by the Commission and explained in full detail all the design elements. The strengths of such D&ASs will be drawn upon by the Commission in its continued work in relation to the Wales Planning Act and related secondary legislation. The UWTSD team continue to consult with the Commission on their design code and its guardianship into 2016.

2.12 **Secondary Schools**

In this period the Commission reviewed six secondary schools, four in North Wales, two in Carmarthenshire and one in Cardiff. These were products of the 21st Century Schools Programme, with half the cost funded by Welsh Government and half by the Local Authority.

The North Wales schools would be procured under a North Wales Contractor's Framework by a design and build mini-competition based on a fixed price, achieve BREEAM Excellent, and be open from September 2016. Rhyl High School was the exemplar project. (Case Study 12)

The existing High School in Holywell, Flintshire had to remain open during construction, but would include a single storey primary school, a two storey administration and shared services hub, a three storey high school, and a double height sports hall with changing facilities. The site was a large one on a north facing slope with a drop of 40 metres over its 600 metre length. Key stakeholders and end users had been consulted on the design process and public consultation was imminent.

The Commission was supportive of the scheme in principle, but thought the building should be moved further south to reduce the distance between the school gates and the main entrance, and reduce the visual dominance of the car parking and boundary fences. They did not regard the elliptical form as cost effective and considered it to be potentially less functional and efficient, and there was no logical explanation or sound justification offered for this design choice.

There were significant areas of flat roofs, but it was not clear as to whether these external spaces could be accessed or used as external teaching/leisure environments. There were also concerns that a single lift and staircase were insufficient to meet circulation needs, and that access to the Sports Hall and changing facilities adequately segregated pupils and public. There was much discussion of the adequacy and ventilation of the central atrium space and its circulation capacity. The Commission also wanted pedestrian and cycle routes to be given more consideration. Overall the Panel felt that the design was too complex, and it became evident in the discussion that the design team had produced something similar for another school, and that the Holywell scheme was not a response to the specific context.

Coleg Cambria in Deeside, Flintshire will be a post-16 education centre located on surplus land (a playing field) between the existing college and Connah's Quay High School. The scheme comprises a 6800m² extension to house a new sixth form centre for 700 students rising to perhaps 1000 in the future. The brief includes drop-off and parking for 26 coaches, a testament to the size of the catchment area.

The Commission had informed the LPA of its reluctance to review the proposals so close to the submission of a planning application, when education and planning priorities were not coordinated and opportunities to add value through design

quality were lost. However, at the request of the Local Planning Authority the Commission relented. The Panel drew attention to deficiencies in transport and parking, site permeability and external works all of which were matters still being worked on. The Panel emphasised the importance of a masterplan for the whole campus to ensure an efficient layout, and this should incorporate the short and long term requirements for the whole campus as well as the relationship with the High School and sports facilities. Pedestrian and vehicular entrances and routes through the site were critical, and transport planning was particularly important given the amount of coach travel. The Panel felt that the traffic strategy was unclear and the pedestrian routes were unconvincing. The design of the new college should respond to the movement patterns rather than vice versa.

Despite the timescales the external space and landscape design were undeveloped and external amenity and breakout facilities had not been provided for the new college. Parking also needed the attention of a landscape architect to make the most of the green setting. Materials and detailing needed more thought and there was a danger that the choice of metal screen cladding would produce a monolithic building. The new College was on target to achieve BREEAM Excellent, but the Panel felt that the day-lighting strategy for the lower floors, borrowing daylight from the atrium, should be re-assessed along with potential overheating of the glazed entrance. In the future the college may be connected to a district heating system.

Ysgol Dyffrn Tywi is a new secondary school for 1,200 pupils west of LLandeilo and was the first of the new schools seen by the Panel in December 2011 (DRW 2007-11 p.98). It returned to the Commission in September 2012. The Panel appreciated the way in which their previous comments had been listened to and acted upon, and the changes that had been made to the design details. In particular they welcomed the attention given to the landscape context and the transition from an informal rural setting to a more formal site plan for the school, but they wondered whether the latter was more of an urban than a rural solution. They were still concerned about longer distance views of the roof-scape when seen from certain vantage points in the Tywi valley, and they wanted to see this modelled. DCFW noted that the dark grey and earth brown bricks that had been chosen for the school were intended to reduce the visual impact of the buildings on the landscape, but they wondered if these might be too dark on wet and cloudy days.

The Commission was pleased to see a sustainable drainage system and a new footpath link from the north, but they questioned the separation of student and staff entrances, and thought that more work should be done on the design details of the main entrance to increase its civic quality. Subsequently Carmarthenshire County Council asked the Commission to comment on the landscape strategy when full details were submitted in January 2014.

CASE STUDY 12:

RHYL HIGH SCHOOL



In Denbighshire Rhyl High School was to be replaced on the same site by a new 11-16 years secondary school of three storeys for 1,200 pupils. The leisure centre would remain on site but might be refurbished or replaced in the future, and would be linked to the new school by an atrium. Both buildings will continue to use an existing biomass heating system.

The new school is placed in the centre of the site with the playing fields acting as a buffer between the three storey school and the surrounding low density housing. This results in a smaller footprint than the original school, but the floor plan uses an atrium to provide the link between the teaching accommodation and the support services. The school will also provide facilities for the wider community out of school hours.

A good deal of consultation and involvement had taken place with the school and the community. The Commission took the view that what had emerged was a well researched and detailed proposal that will significantly improve the teaching environment and act as the 'beating heart' of the community. Considerable attention had been devoted to the design of the external spaces and the Panel suggested that there might be more opportunities to be explored on the western side of the building, but they commended the long distance views obtained of the Clwydian Hills to the east. They also felt that the approach to the building could be improved by better landscaping, but they commended the integration and improvement of the public footpath that runs through the site. They thought issues of security and surveillance needed further investigation but they applauded the school's relationship to the footpath.





RHYL HIGH SCHOOL
The design of Rhyl High School stood out from other schools projects by virtue of the quality of its site planning and design and its positive relationship to the community. The small footprint and three storey form maximise green space and help create a very imposing and refined community landmark.



 PLATE 30—
 YSGOL MAES YR YRFAU SCHOOL, CEFNEITHEN, CROSS HANDS, CARMARTHENSHIRE.

The land swap enabled the provision of a new bus parking facility and all weather sports pitch. The Panel welcomed the adaptation and extensions of the existing buildings and the pursuit of BREEAM Excellence but were concerned about elements of the deep plan approach.

Location Plan

Another secondary school in Carmarthenshire was the Ysgol Gyfun Maes yr Yrfa in the village of Cefneithen near Cross Hands. The Commission was asked to review the second of a three phase enlargement. Phase 1 had over-clad and over-roofed a 1960s teaching block, and Phase 2 would be a new two-storey specialist block for Art/D&T and Science. A developer has agreed a land swap with the local authority to give the school site a more regular shape and to improve access to the school. (Plate 29) The Panel welcomed the conservative approach to extending the school, retaining buildings where possible, and integrating new buildings sympathetically, but they were concerned that the budget for the new extension was insufficient.

The Panel thought the new building was simple but elegantly detailed, and they accepted the arguments for a more permeable exterior to the building with a number of separate entrances which would create central spaces for practical and group activities and private study. However, the deep plan of the building meant that the central areas, even with light wells, would receive very little daylight. In addition, the use of passive ventilation and the stack effect was unlikely to be effective, and the unit might require a mechanical ventilation system with heat recovery. It was unclear how the external cladding of clear and opaque panels would deliver daylight to the building, and some external shading might be required on the east and west elevations. This could be combined with a canopy around the building to provide weather protection for pupils.

The Commission questioned the need for two lifts in the building and felt that the design could be simplified and costs reduced. They welcomed the overall commitment to achieve BREEAM Excellent on the new building, and suggested that the design team give some consideration to additional CHP technology that could also export heat to the third extension. They were keen to see more investment in landscaping to replace perimeter fencing and to soften the area around the new entrance.

The Holyhead School scheme seeks to consolidate three schools on the site of a Grade II Listed Edwardian School with a dilapidated extension. The extension will be demolished and the old school renovated for nursery and reception classes. The scheme reviewed was a speculative design and lacked a thorough brief, but such a brief is now evolving and fortunately the client and design team are receptive to fresh thinking. Unfortunately the programme/timetable for delivering the project is impossibly constrained and needs to be reconsidered.

Among the matters to be reconsidered are a main entrance for pedestrians only, with car borne children accommodated nearby, and access and circulation developed accordingly; survey information is needed to develop a logical circulation plan for the site. Entrances should respect neighbouring residential areas.

The Commission wanted to see a strong vision developed for the quality of the interior spaces, with plenty of daylight, good views and positive interior-exterior connections through a spatial organisation that is clearly related to the teaching and learning approach. The old school spaces should be reconsidered in terms of their possible uses by different school groups. The new build should respect the old and not be treated separately, and an overall landscape strategy should be developed to ensure that the spaces complement the teaching accommodation. Sustainability and energy efficiency are essential to the project and good passive design will contribute to a comfortable and inspiring teaching environment.

Cardiff Council were extending or replacing three schools. Fitzalan High School in Leckwith, Cardiff was reviewed in June 2014. The proposals were to improve the science facilities in the school and to consolidate them in one location. A single storey courtyard approach had been selected, and a variety of laboratory plan forms had been developed with pitched and flat roofs, but the Commission felt a simpler plan layout and more consistent units would be a better approach and more flexible in use. A key decision was whether the circulation was an indoor corridor or a sheltered external cloister around the courtyard. As yet the building elevations had been given little consideration, but the fenestration would be very important to the interior environmental conditions. The environmental strategy should invest in the building fabric and passive solar gains in the first instance.

Eastern High School in Cardiff would be a replacement of the Llanrumney and Rumney schools initially on Rumney recreation ground and adjacent to the existing leisure centre. Three options had been developed and were reviewed in 2011; an extensive 2-3 storey pavilion layout with three teaching blocks linked to the main core; a four storey street option with single sided classrooms either side; or a compact five storey atrium option with five storey 'L' shaped blocks attached to it. The Commission preferred the pavilion design which offered greater compliance to the brief and a reduced townscape and public realm impact, and a better relationship with the leisure building.

Subsequently the site was changed to the Coleg Glan Hafren site in Trowbridge some 600 yards away and the scheme reviewed in November 2014 at an early stage in its design development. The College would continue to operate with its 500 post-16 pupils, but the new school would share the site. The panel considered that the building and landscape were well considered, but there was little in the presentation on how the building responded to its context, save for the fact that its setting-back had reduced its dominance over the properties across the street. The Commission wanted to see the identity of the building as a whole, and each of its components, developed as the design process continues. The asserted financial constraints and minimum standards for circulation spaces in particular of Building Bulletin 103 (BB103), to which the team adhered, meant that the spaciousness of the shared/public spaces and all external spaces would be under pressure.

Lessons learned

The schemes that came to the Commission often came too late to allow the Panel to influence the final design and add value. More importantly the majority of them were procured under design and build, contractor led competitions which, when poorly handled, are not recipes for design quality. In the case of Holywell this was something of a repeat exercise for the designers, but the Commission felt it was too complex a design. In the case of Coleg Cambria the consultation was too late to be useful, but the Commission felt that the scheme had failed to plan for access, parking, bus transport and both pedestrian and vehicle movement. By contrast Rhyl High School had used the same process but the results were almost entirely positive, both externally and internally, and the building was a striking addition to the community and the adjacent leisure centre. Perhaps the level of consultation was the key to success here.

Both the Carmarthenshire cases were also largely successful, one an entirely new school, though located well out of town, and the other an extension of both site and school that had lessened the design challenge.

The adherence to the Building Bulletins, to the extent that their minimum standards are treated as maximum, is a practice which causes concern and which compounds the poorly designed procurement processes. As a result public value, in the second most important public sector estate, after healthcare, is significantly reduced.

2.13 Primary and Special Educational Needs (SEN) Schools

The Commission reviewed six primary schools in Cardiff as part of a special initiative to support the Council's education team and in-house architects who were facing a major increase in their workload.

The first of these was a two-form entry school in Pontprennau, situated adjacent to the Community Centre on the northern edge of the suburb and on a key link road. The site was below the minimum preferred area and it was proposed that playing fields be provided off-site, while the new school would utilise the Community Centre's facility as a hall and a canteen. The site itself is conspicuous and steeply sloping with good views over the surrounding housing, and a south facing but exposed aspect. The school would be designed to meet BREEAM Excellent standards. It was a design and build contract procured by the SEWSCAP framework.



PLATE 31— PONTPRENNAU PRIMARY SCHOOL, CARDIFF.

The panel had achieved significant modifications to the design but the tightness of the site limited possibilities. Its siting continued to prejudice the safety of access without a drop-off facility or assurance as to the location of a pedestrian crossing.

The school came to the Commission at an early stage and three 'options' were provided for review. One was a deep plan scheme adjacent to the Community Centre; the second was a series of three blocks that climbed up the steep slope, and the third comprised two blocks linked to the community centre by a central transverse passageway and was more of a Passivhaus solution.

The Commission felt that a new design which combined features from the first and third schemes was the best way to proceed, but it would need to relate better to the extant centre, and allow each distinct component of the school to function without disruption from the others. There were a number of key considerations including the key access points, the management of solar gain into the classrooms, and the efficiency of circulation and adequacy of corridor space. The use of the community centre as a hall would place the heart of the school in the wrong place, and the design team had rejected the idea of building a separate hall. A 'free flowing irregularly spaced' landscape strategy was also being considered, but the Panel wanted to see any existing landscape/ecological features protected to enhance the learning environment. Staff parking would have to be shared with the community centre. Its relocation was discussed along with the issue of the 'drop-off' point for pupils as walking access would be encouraged rather than car travel, and a site at the back of the school seemed to be favoured for this.

At a second review three months later the Commission welcomed the appointment of a landscape architect, and the improved landscape design on the north side of the site, but they regretted the decision to enclose the site with high fencing. They wanted a more landscaped solution around the main entrance. Access to the site remained problematic, and there was no drop-off facility provided and the Panel wanted the location of the pedestrian crossings reviewed with the highway department. (Plate 31)

A major concern was the south facing classrooms and their solar gain, and there was a need to refine the way the school joined the community centre, and the covered play area which should be made more attractive and sheltered. However, the community, parents and the pupils were unlikely to be well-served by this solution of shared facilities on a small site on a busy road without a vehicle drop off area.

Adamsdown School was an extension/alteration project to create a two-form entry school. Three options were being considered including demolition and new build, and a freestanding or a wing extension, and a site specific brief was required to make the most of the site. The design team expressed that they felt some pressure from Welsh Government to consider a 'template' school, and the timetable was a tight one. By the second review consultations had been completed with staff and community and Building Bulletin 99 (BB99) standards had been adhered to, but the Panel felt that the scheme lacked any aspiration and vision. There was no evidence of the site specific brief the Commission recommended, and a landscape strategy was urgently needed alongside a movement study.

The Commission was concerned at the amount of fencing and other security measures, and took the view that out of hours uses for the community should be a way forward to ensure the site was more secure. It was not clear how the building would meet the BREEAM Excellent standards prescribed. The Panel recommended a passive design approach.

Baden Powell Primary School in Tremorfa was also an extension and refurbishment project, but this time a three form entry was sought. The building was a Victorian style 1930s building, surrounding a courtyard in the middle of the site with recreational grounds opposite. Three options were under consideration: demolition and new build of a T-shaped two storey school, extending the existing school with a new building in the courtyard, or adding deep plan pavilions to the rear. Again the Commission wanted to see a brief that was site specific, and which articulated the considerations they wanted to see covered, but this time there was no second review. A change in personnel and a review of the school's estate needs placed the process on hold.

Gabalfa Primary School and Ysgol Glan Ceubal who share a site was the fourth school reviewed, and the brief this time was to expand the capacity of both schools in separate buildings. Again BREEAM Excellent was the aspiration, and statutory consultation was in progress. Again the Commission repeated the same advice and argued for the employment of a landscape architect to make the most of the site.

The current plans produced for the local authority 'internal design assessment' were largely logistical and an architectural vision and brief ought to be developed, with the two schools being appropriately differentiated in character/identity.

A final review examined a smaller expansion of the Ysgol Y Wern Primary School in Llanishen to add another half form entry. The school site was unusually generous, and the 12.5 acres accommodated sports pitches easily, and there were no space constraints. The existing buildings were single and two storey and largely linear, but much extended. On this occasion the design team presented a draft plan that added a new building to create a new courtyard, in the process demolishing a number of prefabricated classrooms. The Commission felt that a small classroom building in the courtyard should also be demolished to improve the new space's quality and utility, and they recommended that the existing corridors around the courtyard be given glazed walls. Again the Panel sought a professional landscape strategy to accompany the building design, and this should be informed by an arrival, entrance and circulation strategy. The wider refurbishment should focus on energy efficient, passive design.

Another primary school in Llanishen, the Rydypenau Primary School built in the 1930s, required a new nursery extension, the first of three building projects to meet the deficiencies of provision currently being experienced at the school. Consultation had taken place and a movement study completed, but it was not clear if the conclusions of the movement study matched the aspirations of the users. This

was why a strategic masterplan would be useful, particularly so when three major additions are to be made to the school over the next few years. The design of the tall open space of the new nursery was compromised by the need to accommodate ancillary spaces like toilets, cloakrooms and storage, and these all had false ceilings producing a dead volume in the roof. The Commission thought that the design should provide a scale of space appropriate to the age of children using it. Large volumes could be intimidating and needed appropriately scaled furniture and noise control, and these requirements had to be written into the specification.

There is also the matter of ventilation and daylighting to be considered, and the school is already dealing with problems caused by changes in access corridors and the partial infilling of courtyard space. The new proposal creates a deep plan space which will require a different ventilation strategy, and the external canopy should be tested for daylight reductions, and these assessments should be included in the tender documentation.

Two special educational needs schools were reviewed, both in North Wales. Ysgol Y Gogarth School had been reviewed in 2011 and had resulted in the engagement of the Welsh School of Architecture to advise on environmental aspects of the scheme. A second review in November 2011 was received more favourably, but there were concerns that insufficient time for design would be allocated. The scheme was seen again in early 2012 and the design team had been working on a 'seaside modern' aesthetic. They were seeking to develop a compact plan maximising daylight and natural ventilation and retaining views out to sunny sheltered areas of the site.

Again the Commission emphasised the need for more time for design, and they felt the planning application was premature given the unresolved nature of the proposals. The internal spaces, elevations and landscape scheme all required more work, and alternatives to the high boundary fence should be developed. The Panel recommended the Passivhaus standard as a way of achieving excellent building performance, but were concerned that the procurement method, and an unsupervised handover to a contractor, would not protect the design quality in the scheme.

Ysgol Arbennig Meirion Dwyfor, located in the Snowdonia Business Park in Penrhyndeudraeth, was to be designed for about 100 pupils from the ages of 3-19 years with learning or physical disabilities together with 60-70 staff. The Business Park site had good landscape and its slope provided views of the mountains to the north. The school would have a very large catchment area across north-west Wales. The Local Education Authority had consulted with staff, parents and young people on their space needs and a specific requirement was for respite accommodation for overnight or extended accommodation. Full disabled access would be required and full flexibility of design, and two options should be prepared for 85 and 100 pupils. A traditional procurement method would be used with direct control by the client and architect.

The Commission thought that the design should provide a scale of space appropriate to the age of children using it. 99



PLATE 32—
 YSGOL ARBENNIG
 MEIRION DWYFOR
 SPECIAL EDUCATIONAL
 NEEDS SCHOOL,
 PENRHYNDEUDRAETH.

The landcape was one of the outstanding features of this project with all manner of amenities, equipment, art and sensory experiences for all ages and capabilities of pupils.

The Commission was encouraged by the way the design was progressing and the integration of building and landscape design (Plate 32) The boundary treatments and fencing needed to be secure but aesthetically pleasing, and better landscaping would soften the car parking. The respite facility needed to have its own identity and be homely, and enough space needed to be allocated for the biomass boiler and associated deliveries. The roof 'pop-ups' made a positive contribution to the roofline of the main building, and helped express the concept that each building is a 'house' for a small number of children. Retaining the quality in design and resisting overzealous value engineering were critical for this project.

Finally a new primary/nursery school, Ysgol y Llanau, in Anglesey, a replacement for three existing schools, came to the Commission a month before the planning application. However, the Panel felt it required a comprehensive site analysis and a re-thinking of the design if it was to enhance its edge of village location, and not harm the setting of a Grade II* Listed Church. The panel were pleased to hear that the architects were intending to use a Modcell straw bale construction system, but they were not convinced that this was informing the design of the building or its broader sustainability strategy. The Panel thought that the siting of the building should be reconsidered, along with its internal layout, energy and ventilation strategy.

Lessons learned

The Commission reviewed some seven schools on six sites to help provide assistance to the Cardiff Council's Architect's office with a sudden increase in their workload. Most times three options were prepared and the Panel were consulted upon the merits of each. In this respect they were able to exert significant influence on design decisions. Only the first of these was a new school, the rest were all extensions of existing schools, but it also had the smallest and most problematic site which proved to be a major constraint on what could be achieved.

Generally in the Commission's experience to date, the procurement of schools in Wales has been characterised by the absence of clear briefs and truncated timescales, resulting in fractured estate planning and management and the absence of communication between education, planning and highways departments. Flawed strategic and outline business case processes designed to account for public expenditure and justify proposals appeared to lack robustness in financial planning. Several schemes it seems were approved at the outline business case stage when key elements cannot yet be tested or their cost implications fully understood.

This quality of experience and value should be echoed and captured in all learning environments, especially those invested in through the public purse.

A lack of site analysis, and sufficient time for design processes and public consultation further compound the difficulties. Interpretation of Building Bulletins which set minimum space standards add further constraints, and insufficient understanding of genuine Passivhaus design approaches and procurement can lead to inappropriate design outcomes in an over complex approach to achieving energy and building performance.

The Commission repeatedly needed to address strategic issues and to remind teams of the importance of a site specific brief that responded to the consultation with the school and wider community. The design teams also needed capacity and skill to respond to end user needs without having to meet an undeliverable wish-list, and this was key to a good design process. Landscape design was almost always ignored, there was little masterplanning of the site, and security was often dealt with by intimidating and obtrusive fencing.

The Commission was more impressed with the two examples they saw of Special Educational Needs (SEN) schools in North Wales, particularly Ysgol Arbennig Meirion Dwyfor in Penrhyndeudraeth which had very specific requirements and a traditional procurement route, with an architect in control, and where interior layout and external landscape worked together to produce an intricate and stimulating experience for all users. This quality of experience and value should be echoed and captured in all learning environments, especially those invested in through the public purse.

2.14 **Healthcare buildings**

Four health buildings were reviewed over the last three years demonstrating the tailing off of a period of major investment since 2005 under the Welsh Government's 'Designed for Life' Strategy. They included a health centre in Buckley, Wrexham; a primary care centre in Hope, Flintshire, a mental health facility in Bridgend, and a new Maggie's Centre in Cardiff.

The Buckley Health centre was seen late in the design process, and thus the review was less useful then it might have been. A long and difficult gestation was explained to the Commission who felt that the current proposal failed to take advantage of the site and the semi-rural context. The Commission and the wider community, were concerned about the loss of semi-mature trees on the eastern boundary and felt that the waiting area did not exploit potential views out into the landscape, while the seating arrangements were somewhat characterless and impersonal. The Panel thought that a centralised reception area would be beneficial, and that the palette of materials could be simplified. The successful integration of solar panels on shallow pitched roof would be a challenge. The project would be required to meet a BREEAM Very Good rating with an Excellent for energy.

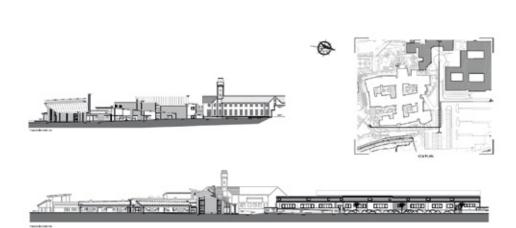


PLATE 33— MENTAL HEALTH UNIT, GLANRHYD HOSPITAL, BRIDGEND.

The unit followed the courtyard form of other units in the hospital forming part of a compact facility within the listed grounds. The Panel thought the layout and landscape were fine but the interior layout lacked clarity and spatial interest.

The Glanrhyd Hospital in Bridgend came to the panel at a late stage and without a Design & Access Statement. The project was to add a low security mental health facility to its grounds, replacing outmoded accommodation in Swansea and elsewhere. The grounds are included in the Cadw and ICOMOS Register of Parks and Gardens in Wales and have a Grade II designation. The development team had consulted with the Local Planning Authority who supported the scheme and appreciated the constraints on development, but had concerns about the external appearance of the new building and its relationship with existing buildings. (Plate 33)

The Commission noted that the design team wanted to avoid a conventional institutional hospital building, but were not sure that they had achieved this objective. They did feel that the landscape proposal was thoughtful and well developed, including the treatment of the enclosed courtyards. While the variation of the circulation spaces with frequent punctuations and rest areas contributed to a 'non-institutional character', it did not create more spatial interest, and the plan lacked clarity. The roof form was unnecessarily complex and unlikely to add value to the patient experience. Meanwhile sections through the building suggested suspended ceilings throughout and a lack of variation in volumes, and it was the same with the choice of a single basic proprietary cladding system. The Panel felt that some positive use should be made of the rare Quarella sandstone that would be available from the demolition of a large part of the existing Victorian Hospital.

The landscape proposal dealt sympathetically with the listed hospital grounds removing 16 mature trees in poor condition, but some 60 new trees will be replanted over a wider area. All communal areas of the new hospital were able to take advantage of views into the grounds.

All communal areas of the new hospital were able to take advantage of views into the grounds. 99



 PLATE 34—
 HOPE PRIMARY CARE CENTRE, FLINTSHIRE.

The site plan reveals a very functional arrangement but one which needed more sensitivity to the landscape and more generous landscaping.

The Hope Primary Care Resource Centre in Flintshire again came to the Commission late, and the Panel were concerned that their opportunity to add value to the scheme had been missed. The Care Centre would be located between the villages of Hope and Caergwrie, bringing together a general practice surgery and a local health clinic. The site was on the southern edge of Hope on the main A550 road, on agricultural land, but shielded from the road by a high hedge, while the slope of the site offered extensive views over the road to the Afon Alun valley. (Plate 34) The north end of the building would be cut down into the land to reduce the visual impact of the two storey building. Car parking was generous and would be located in front of the Care Centre to the south.

The Commission did not consider that attempting to hide the building was the right approach, but the LPA explained that this was to maintain the view of Wat's Dyke, and reduce the new building's impact on two farm buildings. Nonetheless the Panel regarded it as an important local facility and thought it should be brought forward closer to the road with the car parking located behind. Currently views from the waiting room were mainly of the car park, rather than of the countryside beyond, and this was a missed opportunity. In fact the whole landscape strategy was undeveloped.

The Maggie's, planned for a site in the Velindre Hospital grounds in north Cardiff, made use of the greener and more wooded western side of the grounds that was formerly the site of a scheme for a mental health facility granted permission in 2009.

The site chosen is a woodland edge, and the Maggie's brief and ethos is always the same – to provide a building within the grounds of an existing hospital that will act as a drop-in centre for anyone affected by cancer, and to provide a welcoming and familiar domestic environment with a fireplace and a kitchen at the heart which are immediately visible from the entrance (Maggie's South West Wales, Swansea was reviewed in DRW 2007-2011: 92).



PLATE 35— MAGGIE'S CENTRE, CARDIFF.

The photomontages convey the tranquil, natural setting of the Centre, and the central courtyard around which the accommodation is grouped, the use of Pennant Stone on the walls, and the use of copper clad roof lights on the upper levels.

The proposal was for a 400m² building, mainly single storey, with a Pennant Sandstone perimeter wall and copper rooflights. (Plate 35) The Commission appreciated the very thorough presentation from the architect, and the close working relationship between the client and design team, and were very supportive of the proposals and of the accompanying landscape strategy. They were pleased to hear that the architect would visit the quarry to select appropriate stone. The Commission had some concerns about inclusive accessibility both upstairs and on gravel paths in the garden, but they felt that this project would make a very valuable contribution to both the health estate and to the wider community.

Finally a private Hydrotherapy and Wellbeing Centre was proposed for a gap site in a residential street, Woodlands Road, Barry. The LPA wanted to see a reduction in the proposed car parking down to 33 spaces, and some improvement of the blank elevation on Ty Newydd Road. The Commission welcomed the proposal for a building with a low environmental impact, but wanted to see evidence that the proposals were viable within the client's budget, and recommended the appointment of an M&E engineer to maximise the provision of renewable energy. A strong landscape strategy was also required along with significant improvements to the Ty Newydd elevations. The Panel suggested the sale of land on the north side of the plot with an outline residential permission in order to generate sufficient funds to ensure that a well-designed, sustainable hydrotherapy centre could be delivered. The review meeting assisted the excellent client in better understanding the design possibilities and what should be expected from their design team and the planning service.

Lessons learned

The schemes reviewed represent the tail end of a major investment in primary care and health centres across Wales since 2005. Only the Maggie's Centre responds really well to its site and has some uniqueness given its function. The remainder are at best functional and at worst rather confusing places. A failure of project briefs and the achievement of coherence in building types that must accommodate conflicting demands is apparent. The use of the Commission's design review service as a late stage arbitration process does all parties a disservice and fails to capture value through design quality.



PLATE 36— A465 CLYDACH GORGE PEDESTRIAN/CYCLE BRIDGE.

The carriageways are to be split to reduce the landscape impact and a new pedestrian/cyclist bridge (designed by one of the Panel in his professional role) provides both important recreational connectivity and a 'gateway'landmark for motorists.

2.15 Major Road Infrastructure

The Commission has been consulted on most recent trunk road infrastructure projects which are usually very large scale, and carry significant enquiry processes and delivery timescales. The Commission's input is long term, usually with a specialist environmental science, infrastructure, civil engineering, landscape and structures architecture panel.

In this period two major road schemes were reviewed. This included four meetings for the challenging Gilwern to Brynmawr section of the Heads of the Valleys Road (A465) through the Clydach Gorge, which has a multiplicity of protective environmental designations.

Public exhibitions/consultations had taken place in November 2011 with environmental groups, and in May 2012 DCFW hosted a first meeting with the design team. The Panel emphasised historical, visual and ecological landscape considerations, public art and creative input, and a family of bridge designs and associated structures, while the design team gave assurance that they were aiming to deliver an exemplar project. A subsequent presentation in January 2013 reiterated these points and led to an accompanied site visit with members of the Commission and the design and contractor team. A further review was carried out in April 2013.

The design team explained their intention to maximise a naturalistic approach to the design with exposed rock inclines and green embankments, and a minimising of the extent of man-made interventions. The team intended to make use of a set of precast panels to represent the different geological levels along the 275 metre ascent to Brynmawr, but the Panel wanted to understand how these would be displayed on the verges. In particular, the Panel did not want overhanging parapets on the retaining walls. The section adjoining the Brecon canal at Gilwern needed special care with planting, landscaping and bridge design to minimise the intrusion of the road. (Plate 36)

Lighting of the carriageway was of special concern and the question of whether all sections of the road should be lit or just the junctions was raised. Some sections would not be lit to protect bats, and there were was the National Park's achievement of an International Dark Sky Reserve to consider. It was agreed that the 'gateway

bridge' should have architectural lighting, particularly to ensure that pedestrians and motorists could see the bollards along the pathway. It was acknowledged that the design was principally driven by the experience of road users, rather than by views of the road from the wide range of possible viewpoints, which would make the design task nigh on impossible.

The question of skills and resources available to teams working on such projects became apparent when DCFW had to remove a renowned structures architect from this particular panel, as the client and delivery team wished to appoint him to the project. This is the first time DCFW expertise has been used in this way and we understand that it improved the design quality of structures, resulted in financial savings and added significant value to the scheme.

The other major road design that was reviewed was the A483/A489 Newtown By-Pass which will pass through agricultural land in the Severn Valley. The preferred route for this was announced in 2010 following an extensive study of the various options for traffic relief. A public exhibition of the proposals was held in July 2013, and three reviews were held in January, March and October 2014, including one on-site in Newtown.

The second review focused on the bridge structures and sought improvements in their design. The Commission felt that some parts of the road did not respect the natural topography and their visual impact could be ameliorated. By the third review the bridge over the Dolfor Valley had been much improved along with its landscape relationship, but some further refinements were suggested. Noise barriers at Mochdre could also be improved. Formalised tree planting at the entrance to Newtown was welcomed as opposed to the construction of a 'gateway feature', and the lowering of the road through the Brimmon Valley, and its verge treatment, had reduced its impact upon the landscape. The de-trunking of the main road through the town would lead to benefits for pedestrians and cyclists and allow improvements to be made to the public realm.

Lessons learned

Both trunk road improvement schemes continue the tradition of a careful adaptation of modest road improvements to the landscape through which they pass, with the Gilfach Gorge scheme being distinguished by its emphasis upon a naturalistic response to road design with green embankments and exposed rock cuttings. Here these were complemented by split carriageways which enhance the landscape experience, and a potentially spectacular foot/cycle bridge to provide a landmark for drivers and a viewing platform for those on foot/cycle. Refined design quality has been an aspect of such schemes, requiring creative engineering and a collaboration with specialist structures architects.

2.16 Public Realm

Four public realm reviews were completed, mainly small scale interventions. However Case Study 7 (Central Square, Cardiff) is a much larger and more complex public realm design undertaking at the heart of the Capital City that sets new standards for public realm design and the response of adjacent buildings to provide shelter interest and vitality.

The Aberystwth Town Clock Square project was to be one of the Strategic Regeneration Area projects 2010-2015 funded by the Welsh Assembly Government with a modest budget of £2.3m. The partnership with the local authority and various



other local bodies had sought a range of improvements in the town. The Town Clock Square was one that could deliver pedestrian improvements and a high quality public space if the constraints of trunk road status of two of the streets did not subvert such improvements. The aim was to de-clutter the space by removing a low wall and the BT telephone booths, and to re-pave the space with a simple pattern of diagonal banding using granite or slate strips embedded in buff coloured aggregate. A desktop review recommended an extension for the paving across the trunk road to unify the space. The mounting of lighting on building walls was welcomed, along with the availability of grants for facade improvements to widen the impact of the scheme. Timber screening behind the corner seating was not supported. Unfortunately Welsh Government funding was withdrawn from the scheme. and it did not proceed.

The Barry Island Public Realm proposals were reviewed in February 2013 prior to public consultation. These were funded by the Welsh Assembly Government under the Barry Regeneration Area programme, and brought to the Commission by the Local Authority. The Commission felt that a Strategic Development Framework for the Island was necessary to look at adjacent developments and other development timetables. They wanted to see a site specific framework for Nells Point to link to the conceptual work being done on the eastern Promenade, and an associated events programme. The Panel wanted to see a short and long term programme of improvements, car and coach parking interim arrangements, arrival and movement strategies for visitors, and to understand how other innovations were being implemented and managed. The Eastern Promenade is the main focus of investment and includes public realm improvements but also listed building consents and other planning applications. (Plate 37) The Panel welcomed the proposal for Beach Huts along the promenade and thought that they would add colour and vitality and prove popular with visitors, but they thought that the Nells Point proposals needed more development.

At Porth Teigr in Cardiff Bay proposals were made to create a small, but significant, space at the outer dock crossing over the now disused lock gate from Roath Basin into the Bay. The developers of Porth Teigr advocate design review and all their development proposals are subject to third party review. The proposal lacked any contextual analysis, or discussion of how it related to the wider public realm strategy, which was surprising, but the site had been fully explored and its microclimate analysed. A palette of materials consistent with that established around the adjacent

the pre-existing colonnade.

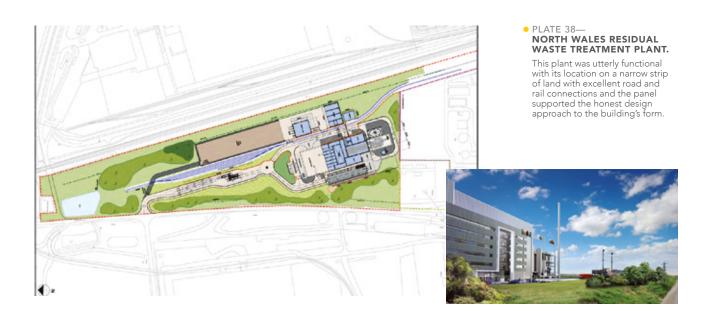
television studios would be used and could be easily maintained. The balustrades were a visually lighter type than previously used and this was approved. The Commission welcomed the engagement of a professional artist, to achieve a creative intervention for the space which was envisaged as more than the usual object-based addition. We understand that this was not positively received by the LPA.

An important side issue came up in discussion with a question about the provision of access to a Bay beach in this location, and the recently installed security fence that prevented any access. The development manager reported that discussions were underway with the Harbour Authority to open up this area to public access. This would be a most welcome step forward, and perhaps the start of real public engagement with the water of the Bay.

Lessons learned

Good public realm requires excellent design and material quality along with careful partnership management where ownership and/or access are contested or shared. These are four very different schemes, but Central Square provides the standard to which others should aspire.

Good public realm requires excellent design and material quality along with careful partnership management where ownership and/or access are contested or shared.



2.17 Energy infrastructure and generation

The Commission was consulted on three Energy from Waste schemes, the first of which was at Deeside Industrial Park, a brownfield site, close to the River which had a number of protected sites for nature conservation.

The 10 hectare brownfield site was large enough to process 180,000 tonnes of (black bag) residual waste annually, enough to serve all five of the local authorities in North Wales. They had formed the North Wales Residual Waste Treatment Partnership, part-funded by Welsh Government as part of its zero waste to landfill policy. The plant would have the capacity to generate 15 MW of electricity and 40 MW of heat (prospective users were being approached), and the ash could be recycled as an aggregate product. Access to the site is direct from the A548 dual carriageway which is well linked to the strategic road network, but most of the waste will be delivered by rail which is also linked to the site. The scheme is currently in the final bidding stage of the procurement process.

The Commission supported the location of the plant and its ambitions to be BREEAM Excellent. (Plate 38) They also supported the evolution of the basic form of the plant from a shell to a set of interlocking cubes which better suited the location. The chimney stack would be kept slim and grey in colour. In this case the Commission considered that there were no significant design concerns to resolve.

The Hirwaun power project was privately funded and located on the local industrial estate and a 299 MW gas-fired generating station was planned. The site is allocated in the Local Development Plan as part of a larger strategic waste management site. Statutory consultations were completed in 2013, and this was a Nationally Significant Infrastructure Project (NSIP).

The Commission felt that the siting and arrangement of the different elements of the power station had been well planned and had minimised the impact on views across the site. The attention given to the landscape strategy was encouraging, and existing trees screened the power station from the road. Opportunities for advance planting should be pursued, and the existing concrete slab on the site should be reduced in size to reduce its impact on longer distance views, and create opportunities for new planting. The Panel were encouraged that architects had been retained to improve the design of the project and select an appropriate cladding material and colour.

Abergelli Power Station was identical to the Hirwaun model and another NSIP, but it was located on urban fringe farmland near to Junction 46 of the M4, a kilometre south of Felindre. There were already significant utilities infrastructure and solar farms in the vicinity, and gas pipelines and electricity pylons cross close to the site, while the farm itself was rather run down and used for horse breeding and training. The site was relatively well-screened from surrounding areas, and the electricity sub-station and the gas plant which are the drivers of the project are not visible. The built form would be a gas turbine and a 40 metre high chimney stack, and up to five turbines would be built with some additional stacks as required. The Commission does not necessarily subscribe to the view that such infrastructure installations should be camouflaged, but they supported a simple colour scheme with a dark base and lighter flues as logical. Opportunities existed to improve the quality of the landscape within the site, and a wider site management plan would be positive and could beneficially coordinate the various energy and agricultural enterprises into the 'farm of the future'.

The Kelsterton Converter Station was located adjacent to an electricity station on the site of the former Connah's Quay Power Station (now demolished) on the River Dee in Flintshire. It was part of the Western Link project that will connect Scottish offshore wind farms to the National Grid, and would require an 8,261 m² building on a 17 hectare site. It had been refused permission earlier in the year on the grounds of the impact on visual amenity and noise generation, but there were a number of major industrial buildings, power stations and major road and rail links in the locality.

The Panel were encouraged that architects had been retained to improve the design of the project and select an appropriate cladding material and colour.

Part VALUE HALES (Fig 121) Shaft Rest Faling Simulation Find Tom Find Tom

PLATE 39— KELSTERTON CONVERTER STATION, DEESIDE.

The final choice of materials was not the Panel's preference but it was the green roofs that impacted most on the wider landscape, and these performed well in the more distant views

The Commission was informed that at least six potential sites had been assessed and this brownfield site was the best for technical and feasibility reasons because there was an existing power-line overhead. The building was still aligned with the river, road and railway but the revisions to the scheme had lowered the building significantly with the lowest elevation facing the town. Efforts had been made to reduce the visual impact with a copper roof that would weather to a green finish. (Plate 39)

The Panel doubted that the acoustic wall with its Trespa Panel fins would enhance the project and rather thought the colourful jigsaw facade would draw attention to the wall. Overall they felt that of the two options presented the more obtrusive solution had been selected.

Lessons learned

The key lesson to be learned from NSIPs and Energy from Waste and other large scale energy projects is perhaps to express their necessary forms and volumes but to spend time addressing the wider landscape design issues, exploring the materials, colour scheme and weathering to maximise the positive benefits such installations can bring to the landscape. The Tidal Lagoon Swansea Bay (TLSB) is essentially a major turbine installation, but with potential land-side benefits for sports, leisure, tourism and fish farming. The team committed to a long term process with the Commission following a scoping meeting in 2013. In the two stage consultation process and up to the submission of the application for a Development Consent Order (DCO) the team met with the Commission four times. As a registered interested party DCFW's reports were also submitted to PINS and under a Rule 8 Letter requirement via PINS, statements of common ground and associated matters were agreed with DCFW and TLSB. A binding commitment was made by TLSB at that stage, to further post-DCO, consultation with the Commission. The project and NSIP application promoted by an entrepreneur must also address adjoining landowners St Modwen and Associated British Ports who both have an obvious interest in the immediate impacts of the scheme.

CASE STUDY 13:

TIDAL LAGOON SWANSEA BAY, SWANSEA



TIDAL ENERGY GENERATION, TIDAL LAGOON, SWANSEA
 The lack of detailed drawings of an ambitious development is always
 a worrying sign of a lack of design input, and consideration of how the
 proposals will connect/integrate with their surroundings.

The proposal offers 250MW of power over a 16 hour period daily, (enough to power 120,000 homes, and save some 206,000 tonnes of CO² annually), and the life of the project would be some 125 years.

The project requires some 11km of sea wall to enclose an area of 11.5 km² that would be ideal for a range of small boat water sports and for some forms of shellfish cultivation. The sea wall would house some 16 electricity generating turbines and their electrical transmission equipment, but connection to the national grid at Baglan would be via underground cables. The sea wall would run from the east side of the mouth of the River Tawe as far as the new Swansea University Campus, and it would be publicly accessible throughout much of its length.

Wide public consultation on the project took place 2011-2013 and formal consultation in the summer of 2013, and the first formal consultation with the Commission in

August 2013. Questions about the access to both ends of the proposed sea wall were raised. Associated land-side developments include a boating centre at the western end of the sea wall, and a visitor centre in the Turbine Hall. To the east a landward urban park is planned with new beaches, a promenade and new slipways and a board-walk beyond. The landward ecological park will create saltmarsh and grassland in front of the existing docklands, and dunes in front of the new Swansea University Campus; the eastern end of the sea wall will connect with the campus waterfront. Landscape and public realm consultants were already working on the design that would be treated as a Marine Park. The seaward park would allow deep sea fishing off the western end of the sea wall.

At a second review in November 2013 the Commission declared their support for the project as a whole. They were disappointed that public access by a western link through the port was not possible, but its replacement by a water shuttle from the city centre was welcomed. The main access to the lagoon will be by road from the Park and Ride roundabout on Fabian Way to the Western Landfall building. The Panel sought a sustainable travel plan to embrace all aspects of public access to the scheme, and were encouraged by the promise of cycle links from Baldwin's Bridge to the new University campus. Another road link with SA1 may be possible in the longer term.

The proposal for the western land-fall building was examined on two occasions, and was emerging as a simple, well-tailored, extruded building capable of being subdivided along its length. It would serve the needs of visitors, but also those engaged in boating. It would be 75 metres from the shuttle boat terminal, which would also require careful design with the fluctuation of tides and sea conditions. The Commission were shown 'exciting' designs for the turbines themselves and their related buildings but this work was not finalised. The Panel had pressed for a commitment to a public art programme, and TLSB had procured specialist consultants so that a variety of provision was forthcoming in the buildings, shelter and lighting of the project.

The off-shore building would be designed as shelter from the weather and the sea, and would take the form of a shell and be built in concrete. Its surroundings would be landscaped and tiered to provide access to rock pools and the water level. Meanwhile the eastern end of the sea wall and boardwalk would be given a more natural treatment with provision of a Site of Special Scientific Interest (SSSI) information point rather than a building.

A final project reviewed by the Commission is perhaps a forerunner of many as climate change impacts upon town and country. The Flood Risk Management Scheme for the Edwardian suburb of Roath in Cardiff was reviewed three times in 2014. This scheme deals with a short section of Roath Brook which runs from the southern end of the Roath Park Recreation Ground through to Waterloo Gardens, and thence through the industrial estate in a culvert and into the mouth of the River Rhymney.

Any scheme to alleviate flooding will have a major impact on the Brook's banks, and on the string of green spaces which add so much to the environmental quality and townscape of the area. How a balance would be struck between preserving the qualities of the Brook itself, and protecting the lower-lying houses from flooding, was the key issue.

At a second review the Commission reflected on the results of consultation and further design studies. By the third review they were arguing that a clear overall vision for the scheme was desperately needed, and that the project deserved an excellent landscape design solution. This would be best achieved by the retention of an experienced designer, while very detailed design solutions would be required along with broader place-making to create attractive and usable spaces out of the re-configured watercourses and flood storage areas. Overall conservation priorities were not being clearly identified and articulated and there was an absence of an appropriately sophisticated landscape design approach to match the necessary engineering intervention.

2.18 **Preliminary conclusions**

It is telling that whole categories of development are missing from this three year review: there were no large retail schemes or supermarkets, virtually no mixed use developments, only one major office project, and only two larger scale regeneration projects, and both of these in the nation's extremities at Milford Haven and Deeside.

The post 2007 financial crisis recession continues to plague the development industry, and economic uncertainty undermines many medium and large scale projects. The public sector has kept development alive for the past seven years but the health building programme is coming to the end of a major investment programme, and the trunk road improvement programme, one of the great successes of design review, is at a similar stage.

New school buildings remain an important component of the Commission's work with research being carried out at the time of writing, which will hopefully inform the next allocation of 21st Century Schools funding. However, the Welsh Government's Vibrant and Viable Places Regeneration Framework is producing a range of small regeneration projects that require careful review and joined—up thinking. The Enterprise Zone in Central Cardiff has spurred investment in commercial, residential and educational development and numerous moth-balled development schemes previously reviewed are being steadily completed.

The projects reviewed by the Design Commission for Wales since the beginning of 2012 provide evidence of a slow recovery in the development industry but also continuing challenges to investment in design quality and sustainability. This includes a cost consciousness that constantly challenges more socially inclusive and environmentally sensitive consideration and an emphasis on speedy decisions that sometimes are based on unresolved plans which prejudice longer term thinking.

It can also be observed that changes to the design review service implemented over the last three years have offered a more flexible service with a more streamlined approach that has been easier to administer and operate, produced better record keeping and archiving, made better use of staff in the review process itself, and freed them up for other projects and out-reach work.

The more strategic service has provided bespoke panels and regular, extra-length review sessions for schemes which warrant them, such as the St Fagans and the Central Square projects which were particularly intensive and complex. Support for the Cardiff Local Development Plan process, for the masterplanning and design guidance processes that must accompany them, and the sustained scrutiny of the major planning applications that will result, will also demand frequent involvement of a bespoke group of panellists. But the wider, smaller scale reviews will continue to offer design advice to smaller scale developers, communities and planning authorities on all manner of development types and in locations across the whole country.



3.1 Critical issues revisited and reformulated

This is the fourth monitoring report of the Design Commission for Wales Design Review service that has been completed and it reports on the last two years of review activity. Much that was stated in the previous report for the period 2007-11 remains relevant.

In previous overviews the Commission has referred to a series of critical design issues that the review process has repeatedly had to address, and which continually challenged the pursuit of the Commission's remit and objectives. Ten of the issues were identified in the first volume of Design Review in Wales in covering 2003-2005, and an additional seven issues were added in the second volume covering 2005-7. We did not explicitly reflect on these issues in the 2011-14 review, but with the new and first explicitly Welsh Planning Act having received Royal Assent in 2015, it is important to reflect on these critical issues, and to explain how the Design Commission has tailored its design review process, and other aspects of its work, to respond to them. They are reproduced here in abbreviated form as the departure point for this concluding section, to examine the current issues faced by design review, the new challenges which need to be addressed, and to assess the new way that the Commission is managing the review process. It is important to note that at the time of writing, secondary legislation which will affect the use of Design & Access Statements is being consulted upon by the Welsh Government and considered in detail by the Design Commission. We therefore consider the summary of critical design issues identified in the 2003-5 review, and the additions/refinements added in the 2007-2011 review in this light.

Fig. 6 Critical issues as previously defined

2005 ISSUES

1 Poorly presented applications

2 Lack of context/site analysis

- 3 Failure to use landscape skills
- 4 Standard not bespoke solutions
- 5 Poorly designed streets/parking
- 6 Failures with intensification
- 7 Resistance to mixed use development
- 8 Proper use of strategies/masterplans
- 9 Use of unsustainable locations (no public transport)
- 10 Failure to pursue sustainable construction

2011 ISSUES

- 1 Failure to pursue sustainable construction
- 2 Lack of affordable housing
- 3 Lack of well-designed, more compact housing
- 4 Tall building locations and design
- 5 Faster/cheaper procurement
- 6 Absence of proactive planning
- 7 Tokenism in public art
- 8 Failure to secure public value in publicly funded or assisted schemes

See DCFW DRW 2007-11 pp 11-12

Looking back at the original list of critical shortcomings it is possible to see that while these have not been eradicated, they are at least much less evident in the development proposals that are now submitted to the Design Review panel. The reasons for this are partly due to direct experience of the Design Review process itself, and the regular updating and refinement process pursued by DCFW. But they are also the result of the Welsh Government's advice in TAN 12 Design (2009) and especially perhaps the introduction of Design & Access Statements in 2007, which highlighted the quality of design analysis, and the absorption of design/planning policies in proposals and applications. The latter was particularly important to the improvement of the design dimension of planning applications. However the poor use of Design & Access Statements has rendered their future uncertain and the outcome of secondary legislation in Wales remains to be seen.

Other pieces of guidance such as Manual for Streets I & II, adopted as national policy in 2012-13 have improved street design and parking and brought a much more design-led and 'place-making' approach to highway layouts and design. The Design Commission for Wales has contributed a range of publications such as that on *Tall Buildings* (2011; updated 2014) and Wind Farms (2012). Most importantly, the *Practice Guide: Planning for Sustainable Buildings 2014*, commissioned by the Welsh Government from the Design Commission, particularly promotes the value of site analysis for design quality, layout and energy performance following July 2014 changes to the Building Regulations.

Many Local Planning Authorities have produced their own design guidance documents tailoring these to their own aspirations and experience, and have added more comprehensive and much improved policies into their Local Development Plans (e.g Swansea's new residential design guide). In addition developers themselves have become much more design conscious because it has become obvious that the market is demanding higher quality products and more sensitivity to the locality, and the best of them have recognised that good design can both speed the planning process and produce a premium in terms of property values and rental returns.

The 2011 list of critical issues is more selective and reflects conditions in the wake of the post 2007 economic crisis that is only now (mid 2015) showing signs of abating. Looking at this shorter list of common shortcomings the Commission would continue to emphasise the failure to pursue sustainable construction, although there are honourable exceptions. A second major failing has been insufficient housing, especially affordable housing, which has partly resulted from opposition to green field development reflected in some Local Development Plan allocations, but since 2008 has been due to a major downturn in overall housing production. The total number of new houses built in Wales over the last five years has been less than the figure built in any one of the five years in the run up to the recession, and this shortage will be a feature of the market for the foreseeable future. While the Welsh Government has done well to maintain a steady supply of affordable homes, ca. 2000 per annum, and at social rent levels, the current backlog of affordable housing stands at some 9,500 homes and is steadily increasing.

A third shortcoming, also identified in the 2011 list, is the failure to deliver more compact forms of family housing, and to develop more diverse typologies that can meet the demands of smaller households, young and old, and continue the traditions of street-oriented housing. The use of standard house types has persisted, as has the failure to innovate with more variation of forms that are energy efficient and built in accessible, compact, well landscaped and socially inclusive residential communities. This has become the dominant design and planning challenge. The conclusions of this 2012-15 review therefore begin with the housing issues and the examples of new sustainable urban extensions. They proceed to discuss the revival of more traditional housing typologies and the insertion of some new ones in suburban and urban housing.

Then the focus shifts to commercial office development and some larger scale leisure projects where there are both exemplary schemes which set new design standards and high risk schemes which stretch credulity.

The review then draws some conclusions from the Welsh Government's Vibrant and Viable Places Regeneration Framework schemes, and the 21st Century Schools Programme and other educational projects. The lessons to be drawn from a number of very small schemes and conservation projects are briefly reviewed and finally a number of infrastructure projects are discussed which offer diverse, but important contributions to sustainable development.

Local Development Plans and the new sustainable urban extensions

The Commission was broadly supportive of a revised Cardiff Local Development Plan, and its provisions for new communities in the north of the city, and it has had some success in urging the Planning Authority to produce much more detailed ambitions/intentions for their four proposed sustainable urban extensions and three new urban neighbourhoods.

In a number of workshops the Commission made the case for the production of the Cardiff Local Development Plan Masterplanning Framework, and this has been produced as supplementary planning guidance to accompany the plan. It is based upon some ten fundamental principles for the design of development, and includes some basic identification of constraints and opportunities, and schematic land use and infrastructure frameworks for potential development. The Commission is aware that reduced local authority budgets are having an impact on skills and capacity, however they are also stimulating fresh approaches.

In Cardiff's case the plan has helped developer confidence in proceeding with large scale masterplanning, and the Commission has reviewed schemes for three of these sites on at least two occasions, and has directly experienced the challenges facing the developers and their design teams. A recent refusal of the submission for part of the Churchlands scheme in north-east Cardiff has given a clear idea of the rigorous scrutiny that will be applied to these plans, testing their adherence to plan policies, and the 30 per cent affordable housing, public transport and school site contributions that will be required.

On the two sites in North West Cardiff more comprehensive masterplans have been prepared, but the uncertainty about the proposed South Wales Metro, its exact locations, transit type and funding timetable, is hampering the design work and raising concerns about proposed road capacities, and the provision of rapid bus networks, as well as major road improvements. These projects are another important opportunity for the strategic/sustained engagement with major schemes that the Commission has been developing over the past four years with the development teams and planning authority.

Beyond the matters of transport interchanges one item of particular interest is what forms will the larger neighbourhood centres take, and how will they combine retail, office, community and wider service functions with different housing typologies and higher density forms of housing. Will they attempt to provide wider employment opportunities and leisure facilities? The design of the core of Gwernybwlau has gone furthest to explore these issues but Plas Dŵr must be exploring the limits of innovation and potential marketability.

Other reviews have provided a wider range of design approaches in different contexts. The Pantlasau Farm proposals in Swansea were the most innovative in terms of density, typology and layout, and hopefully this site will be included in their Local Development Plan. There was a wider mix of housetypes and more compact development that in turn preserved more green space, as well as a proposal to provide local shops and services. The first phase of the South Sebastopol housing scheme in Torfaen, Tyr Brychiad, disappointed the Panel, as did the Barry Waterfront third phase of housing, because both have resorted to standard house types, reduced space standards and lowered CSH levels. The Llanwern Design Code was welcomed as a valuable experiment in design control, but criticised for its parcellation details and lack of design ambition. However, Blaenavon's

Hillside scheme demonstrated how sensitive design can add character and local distinctiveness to low cost housing. Meanwhile Abergele's first phase of a major suburban expansion proceeded without the LPA having persuaded the developer to complete a site wide plan, or the LPA having prepared a development brief. The challenges to local planning authorities and housing developers are serious on all matters of housing diversity, affordability, sustainability, infrastructure, services and accessibility. But a positive development is the adoption of Building for Life 12 as a quality standard by many of the large housebuilders, and this will help consolidate the drive for better housing design.

The deliverability of the '30 per cent affordable' set out in the Cardiff LDP is being closely monitored by the local authority and the Commission.

A similar concern also arises over the whole question of infrastructure and who will fund what in these new communities. A Community Infrastructure Levy will be developed and instituted once a local authority's LDP is approved, but these will come under extreme pressure as they have done in England, not least as the rates achievable in Wales are lower.

Urban Housing: densities and the return to street-oriented housing

Urban housing projects are also reviving in the cities, not in the high rise apartment form so common pre-recession, but with more interest in street oriented family housing. In Central Cardiff the Taff Embankment scheme has replaced a previously consented scheme (DRW 2005-7 p.37) and provides a high density urban neighbourhood close to Central Station. Its re-design has included more family housing (tall town-housing with rear access, and corner apartment blocks) and a primary school, but retaining a majority of 11-13 storey apartments on the river embankment itself.

At Bay Pointe in Cardiff Bay three 30-36 storey towers have been replaced by two 14 storey towers overlooking the Sports Village Marina. But the more significant change is the creation of a compact town housing and low rise apartment scheme now being completed on the peninisula which re-creates the possibility of family homes and neighbourhood life. The problem at Bay Pointe is that the affordable housing component has been located away from the private housing in much less attractive locations. By contrast, Porth Teigr's first housing scheme, now consented, is an exemplar of a compact and communal townhouse community with intimate spaces, also in a waterside location, but with affordable housing as an integral part of the layout.

The Commission has welcomed several examples of new town house developments in Newport. On the Pirelli site in inner city Newport the 'Loftus Garden Village' is offering a quite wide range of family house types for sale, in addition to providing 60 per cent affordable housing for rent, in a compact yet well landscaped layout. The redevelopment of Old Town Dock south of the city centre was also one of the more innovative schemes with higher energy efficiency aspirations (CSH 4), a predominance of apartments up to five storeys, mainly focused on a linear park that traced the line of the original dock and contained a cycleway. Two office buildings and a convenience store added to the mix of uses, and the project largely completes the regeneration of the Old Town Dock as a whole.

Similarly in Swansea a local Housing Association has regenerated two blocks of the city between Wind Street and the Strand using a variety of affordable house types and some intricate layouts around listed buildings. The Castle Lane project is a conservation exemplar restoring enclosure to the Castle ruins, while the 'urban village' further north has a mix of apartments over the shops on Wind Street and in two modest tower blocks connected by a series of courtyards (see also DRW 2007-11 p.66). These projects demonstrate how affordable housing, sensitively designed, can be a very powerful regeneration tool.

3.4 Commercial development and the value of local patronage

Commercial development projects have been rare throughout the recession, and the last two major office schemes in Newport and Cardiff were both pre-lets to the same insurance company. The Cardiff Central Square project has been the stellar project of 2014-15. It was a project whose complex landownerships and conflicting political objectives posed major challenges which had long defeated the Council and individual developers despite very generous permissions. The local developer who acquired the various sites north of the station clearly felt that the Design Commission could help ensure that the project met the highest design standards, and his commitment to design quality was emphasised by the retention of architectural practices of international standing.

The project was not only the largest commercial development in the city (a forthcoming eastward extension will increase the volume of floorspace by a further one third) but it was also a public realm project of the utmost complexity. The Panel shared the review experience with the councils senior development/transport managers and the whole experience provided a design education of the highest order for the Commission, and it met their aspirations.

Commercial leisure and tourism projects have have also been progressed. The Cardiff International Sports Village has been revived by new owners, and they have revamped the original proposals. The design of the project remains problematic from the perspective of the Commission because of the scale of the podium and the poor quality of the spaces it provides, while the ski-tunnel above the multi-storey car park threatens to be an eyesore. The Commission has been unable to retain a dialogue with the developers and this is not a situation they would want to see repeated.

The International Convention Centre proposal as an extension of the Celtic Manor Estate was criticised for its location remote from public transport, but it was replacing a smaller extant facility. The proposals to shoe-horn it into a tight site with complex topography and many trees, all on a motorway junction were challenging, but the proposals appeared to be well laid out and landscaped, and the architecture ambitious. Other tourist proposals in West Wales looked to be too ambitious in terms of the scale of the land reclamation required, or too remote to attract tourist business or second home purchase in the current economic climate.

Vibrant and Viable Places and small scale regeneration projects

The Vibrant and Viable Places Regeneration Framework has not on the whole stimulated proposals of real design quality and public benefit. Exceptions include workshops on the Port Talbot's Police Station, and the overall plans for Holyhead, and Bridgend have some positive general features. A number of specific interventions like the Merthyr Bus Station, and the replacement for the Bridgend multi-storey car park on the river side, have had basic urban design flaws which continue to be the subject of consultation with the Commission. The larger scale regeneration projects in Milford Haven and Deeside were contrasting in their detail and ambition, a reflection of unified ownership in the former and fragmented ownership in the latter

3.6 Colleges and Schools: recipes for success?

The Commission took the initiative in supporting the Cardiff's in house design team with reviews of six primary schools, helping to consider options, but nearly always struggling to find acceptable solutions with site constraints, funding deadlines and tight budgets. By contrast two special educational needs schools in North Wales achieved schemes which were far more locally distinctive and in the case of Ysgol Arbennig Meirion Dwyfor, beautifully landscaped.

With new and extended secondary schools in Cardiff, Carmarthenshire and North Wales there was a little more scope for design and opportunity for more innovation, some linked with extant community leisure facilities. Here Rhyl High School demonstrated what could be achieved through sustained public engagement, excellent site planning, and a bold architectural statement.

In other cases there were too many compromises to be made, and a general lack of intelligent site planning as regards pedestrian and vehicle movement and landscape, but the two Carmarthenshire examples were more encouraging. The most spectacular success was arguably the Cardiff and Vale College on Dumballs Road, Cardiff, a reworking of the type of building that proved successful for Newport Business School in 2011 (DRW 2007-11: p.104). It is BREEAM Excellent, and a building that will make learning exciting while bringing to life a long dead street west of Butetown.

3.7 Small developments and conservation cases

The Commission's work continues to include relatively minor everyday developments. If the economy was performing as it was 2000-2007 there might be much less opportunity to review these schemes, which often raise interesting design questions and reflect the norms of pan-Wales development, and which have a significant collective impact.

A number of small housing schemes raised issues of site specific landscape and townscape impact and sustainability considerations, challenging to LPA and developer alike. There was an interesting selection of other conservation cases where

designers had married old and new reasonably successfully (Marine Buildings in Penarth, Barry Pump House, Brecon Library/Museum) and some where they should simply have settled for a modern building (West Parade, Rhyl).

3.8 Infrastructure projects and 'win-win' projects

Energy from waste projects have been a welcome addition to the Commission's workload reducing landfill and producing energy locally, and they have been well located and designed with care. Three examples, and a Converter Station for offshore wind farm energy, proved successful projects. The simplicity and functionality of the Deeside Energy from Waste scheme rather trumped the very elaborate colour cladding of the Kelsterton Converter, though the latter's copper green roof was successful in the wider landscape.

Meanwhile Swansea's Tidal Lagoon will be a very valuable experiment in the generation capabilities of tidal energy, and perhaps develop into an interesting multiuse project where recreational and fish-farming opportunities might be developed as positive adjuncts.

The two latest trunk road improvement schemes were both successful with the Clydach Gorge section proving to be the best section yet of improvements to the Heads of the Valleys (A465) Road with a spectacular pedestrian/cyclist bridge and judicious carriageway separations.

3.9 Implementing a more strategic design review service

The Design Review Service remains a core service complemented by network development, training, client support and events, which represent the Commission's wider activities.

A more strategic Design Review Service implemented by the Commission in 2013 was intended to be more selective in terms of prioritising resources to achieve a more sustained approach for earlier and longer term involvement throughout the design process.

The St Fagans National History Museum reviews provided the first clear example of this new approach. The Central Square, Cardiff reviews in 2014 recorded in this volume, were the first time a private sector developer had sought a similar arrangement, and the resultant reviews were the highlight of the last two years.

Also significant in the same vein is the Commission's engagement with the improvements to the Heads of the Valleys Road between Ebbw Vale and Gilwern, and its involvement with the Planning Inspectorate's Nationally Significant Infrastructure Projects which include new Energy from Waste and Tidal Energy projects. An equally important series of reviews is emerging on the large scale suburban housing projects that are now being promoted in north east and north west Cardiff as the Cardiff Local Development Plan awaits its Inspector's Report.

The Commission's emerging role alongside the City & County of Swansea Council, a not wholly anticipated outcome of DCFW's City Futures Autumn Conference held in Swansea in 2014, is maturing to a positive working relationship. At the

time of writing the Commission has crafted an appropriate place in relation to its role in a Development Advisory Group brought together by the Leader of the Council immediately following the conference. The Commission is understandably keen to add value to the regeneration of Swansea city centre, the restructuring of Oystermouth Road, and the re-use of the largely vacated civic centre building and its environs. The challenges are immense in an area where commercial rents are low, city centre retail is suffering, and the extent of central land and property awaiting new uses is considerable. Currently bidding developers are voluntarily consulting the Commission in the dialogue phases of procurement on these schemes. This means the Commission's input is now available at the earliest possible stages to assist the Council's considerations.

Finally, the Wales Planning Act, associated consultations on Design & Access Statements, the decision not to create a new planning advisory improvement service, point perhaps toward a more mainstreamed role for the Design Commission for Wales. As these roles take shape the Commission has to consider its status and the weight of its comment; its resources and the demands being placed upon it; and how it can continue to respond to the challenges of enhancing design quality, sustainability and social inclusion that it experiences repeatedly. As ever new opportunities for the integration of the Commission's work may be on the horizon with the accompanying Environment Bill and the Future Generations Act, these two having direct interface with the ambitions of the Wales Planning Act, and to the work of the Design Commission for Wales.

Appendix

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.

Alan Francis

Gaunt Francis Architects

Appointed to the Panel 2003 – current and cochair of the Design Review Panel. DCFW Chair of the Board of Directors (Commissioners) 2005 – 31 March 2016

Ewan Jones

Grimshaw

DCFW Commissioner 2011 – current Appointed to the Panel 2005 – current, cochair of the Panel, 2009 - current

Mark Hallett

Igloo Regeneration DCFW Commissioner 2009 - current Appointed to the Panel 2007 – current

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

Wendy Richards

Review 2007 - 2013

Landscape Architect and Urban Designer

DCFW Development Director 2007 – 13

Appointed to the Panel 2004, Co-Chair Design

Former Commissioner, resigned 2007

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)

Gerard Ryan

Architect, Nicholas Hare Architects Appointed to the Panel 2005 - 2015 DCFW Commissioner 2005 – 31 March 2015

Jonathan Adams

Architect, JA Partners Appointed 2003 – Current

Roger Ayton

Planning Consultant Appointed 2006 – retired 31 March 2015

Ashley Bateson

Building Services & Sustainability, Hoare Lea & Partners

Appointed 2006 - Current

Mike Biddulph

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

Simon Carne

Architect & Urban Designer Appointed 2008 - Current

Kedrick Davies

Planner & Urban Designer, CDN Planning Ltd Appointed 2005 – Current

Michael Griffiths

Architect, Latitude Architects Appointed 2006 – Current

Simon Hartley

Aecom

Appointed 2009-2012

David Harvey

Appointed 2008 - 2013

Jonathan Hines

Architect, Architype Appointed 2006 - Current

Christopher Jones

Architect

Appointed 2009 – Current

Richard Keogh

Architect/Developer Appointed 2010 - 2012

Martin Knight

Architect, Knight Architects Appointed 2006 - Current

Kieren Morgan

Architect, HASSELL Appointed 2004 – 2014

Andrew Linfoot

Landscape Architect, CH2M Hill Appointed 2010 - Current

Elfed Roberts

Urban Designer, Gwalia Group Appointed 2005 – current

Phil Roberts

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

Ben Sibert

Senior Bridge and Structures Engineer, Arup Appointed 2003 – Current

Ann-Marie Smale

Architect, Powell Dobson Architects Appointed 2004-2012

Stephen Smith

Urban designer, City & County of Swansea Council

Appointed 2007 – Current

Lynne Sullivan OBE

Architect, Sustainability expert: Appointed 2008 - Current

Howard Wainwright

Architect

Appointed 2003 – 2012

Angela Williams

Architect:

Appointed 2011 – Current

Steven Smith

Urban Designer, Urban Narrative Appointed 2014 – current

Richard Woods

Architect

Appointed 2014 – current

Mike Gwyther Jones

Architect

Appointed 2014

Staff:

Carole-Anne Davies

Chief Executive

Sue Jones

Resource & Finance Manager

Amanda Spence

Architect, Design Advisor

Jen Heal

Planner & Urban Designer, Design Advisor



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.



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

CISV

Cardiff International Sports Village

DCFW

Design Commission for Wales

DMRB

Design Manual for Roads and Bridges

ICOMOS

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.

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



References and further reading

DCFW 2015, Design Review Essentials: One page guide

DCFW 2015, Consulting the Commission through the Design Review Service

Welsh Government Practice Guide: Planning for Sustainable Buildings, Digital ISBN 978 1 4734 1399 3; Crown copyright July 2014

DCFW, 2014, Good Design & Local Development Plans

Welsh Government Report of the Independent Advisory Group on Planning 2012/13

DCFW, 2012 - current Design Quality in Local Development Orders

DCFW and Arup, 2012, Designing Wind Farms in Wales

DCFW, 2011, updated 2014, Tall Buildings

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

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

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

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

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 where all DCFW's publications can be found.

Acknowledgements:

Researched and written by Professor John Punter with Design Commission for Wales

Edited by Carole-Anne Davies, Chief Executive, DCFW

Archive management Sue Jones, Resource & Finance Manager, DCFW

Additional support:

Amanda Spence, Design Advisor and Jen Heal, Design Advisor, DCFW.

Graphic Design: Marc Jennings, www.theundercard.co.uk

Published by Design Commission for Wales (DCFW Ltd) Autumn 2015

 $\ensuremath{\mathbb{Q}}$ Design Commission for Wales and Professor John Punter 2015

ISBN 978 - 0 - 9552657-4-7

