

# Design Review Report

Roath Brook Flood Defence,  
Cardiff

**DCFW Ref: 43**

Meeting of 20<sup>th</sup> August 2015



## Declarations of Interest

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

### Review Status

Meeting date  
Issue date  
Scheme location  
Scheme description  
Scheme reference number  
Planning status

### Public

20<sup>th</sup> August 2015  
11<sup>th</sup> September 2015  
Penylan, Cardiff  
Landscape/flood defence scheme  
43  
Pre-application, at public consultation

## Declarations of Interest

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None declared.

## Consultations to Date

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Remodelling of the historic parks to accommodate flood protection works will need to address a number of important issues which have been explored by the NRW and their design team through an ongoing programme of public and stakeholder consultation. Proposals are also available to view on NRW's website. Consultation on the Environmental Impact Assessment closes on 3rd September.

## The Proposals

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Natural Resources Wales (NRW) has identified the need for significant flood defences along Roath Brook where it runs through a string of Victorian parks in the residential areas of Roath and Penylan. The proposed scheme will incorporate significant flood defence structures within a landscape design.

Since the previous review of this scheme, the scope of works has been reduced as a result of cost/value analysis with a resultant reduced standard of flood prevention. This also means that the works would be less detrimental to this much-loved parkland.

This scheme has been reviewed three times previously by the Design Commission, on 8<sup>th</sup> May, 12<sup>th</sup> August and 30<sup>th</sup> October 2014. This report should be read in conjunction with the reports from the previous reviews.

## Main Points

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### **Project Scale**

The reappraised parameters and scaling back of the scheme have naturally led to reduced impacts of the proposal since the previous review. However, The Design Commission still has a number of concerns about the design quality which is being demonstrated. Given the timing of this review, the Commission's comments focussed on the detail of the proposal rather than overarching concepts or objectives.

While it is advantageous to reduce the scale of the flood defence interventions based on a re-calibration of the technical parameters, reassurance should be sought that local residents' properties would not be put at an unacceptable risk during flood events as a result of the reduced standard.

### **Detail Design**

The detail design in this scheme will be crucial to achieving the quality this park deserves. Demonstrating a good design at a detailed level would give confidence that the required quality can be achieved, but the material being produced by the design team is an ongoing concern.

The solutions proposed at the moment are 'engineered', but lack the attention to detail which would be expected at this stage, shortly before a planning application is to be made. We would recommend further detail design studies are carried out to look at wall and brickwork details, materials selection and a consideration of the interface between the various elements. The detail design should demonstrate that all the constraints and opportunities have been addressed and integrated, resulting in an elegant, refined solution which demonstrates confidence in the design solutions.

Working with talented and experienced artists might help the design team to find appropriate solutions. 'Artwork' should be fully integrated and built into the proposals, rather than token art 'objects' added at the end. Therefore, it is important that artists are appointed now, at the start of the detail design stage.

### **Bridges**

The family of new or replacement bridges required presents an opportunity to add value to the park, but a coordinated approach to addressing all the constraints is required for this to be achieved. Each bridge should be designed to relate to its surroundings, as well as to integrate with other flood defence structures. At the same time, the new structures should be considered as a family – each one a part of this new phase for the parks. These approaches are not being pursued by the team, and the current proposals are not achieving a standard which is fitting for this exceptional park setting.

In particular, further detail design work is needed on the Waterloo Bridge to resolve the various issues where the flood defence walls and bridge abutments meet, which should be carefully considered to produce a coordinated and elegant solution in a confident manner.

In general, there is scope for refining the design of the railings to bridges and other barriers. One option would be to work with a capable artist who is experienced in metal

work of this nature. Any artists should be involved from an early stage so that their work and ideas can be integrated with the overall scheme.

### **Street Furniture**

Well specified and well positioned street furniture can add value to a public landscape scheme such as this, but if it is poorly considered it could add clutter and detract from the beauty of the park. All street furniture, including seating, litter bins and signage (including safety signage) should be fully considered at this stage and integrated with the designs.

### **Design Opportunities**

This project presents many exciting opportunities to make positive contributions to the park which will benefit users in a variety of ways. The Design Commission continues to be concerned that these opportunities will be missed, as the team is not demonstrating a coordinated approach to identifying and maximising these opportunities. It will be useful for the team to set out such opportunities along with the overall aims of the project.

Each opportunity area should be clearly defined and have a distinct purpose or idea which is done well. If too many ideas are given to each space, they will conflict or dilute each other. For example, an event podium was suggested by the team, but the proposals show that this is also the landing point of a bridge; and it is doubtful that it would function well as a space for events with people needing to move through the space. Another area for concern is the interpretation area at the site of the historic mill if this is not well executed.

It is crucial that all opportunities are explored, thought through, tested and integrated at this stage. Care should be taken, through the procurement process, to ensure that opportunities cannot be 'value engineered' out of the scheme. It will be equally detrimental if proposals are added at a late stage and are not integrated with the scheme as a whole.

The Commission also believes that there are also numerous education opportunities, both during the design and construction stages, and which could be built in for use when the project is complete. Again, these must be integrated and coordinated at this stage.

### **Construction and Procurement**

The construction phasing and timing must be carefully planned as there will be a significant impact on park users, parking, traffic, pedestrians and local residents. It may be better to phase the works so that different sections of the park are usable at different times, but this may not be practical. There will also be wildlife and seasonal considerations which will affect programming of the works.

The procurement of the project should ensure that design quality is maintained through to delivery phases.

### **Management and Maintenance**

The designs produced at this stage must be compatible with the long term management and maintenance strategy which will be undertaken by the local council. Formal discussions should take place between the design team, NRW and the parks authority to

agree solutions. The replanting strategy should also be given careful consideration at this stage, as propagation will need to commence in advance of works on site.

### **Biodiversity Strategy**

Biodiversity improvements have been considered by the team, but a clear biodiversity strategy, developed with specialists, would strengthen the scheme.

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

## Attendees

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Agent/Client/Developer:	Tim Hopkins, NRW Heilyn Williams, NRW
Designers:	Martin Whiting, RHDHV Paul Joliffe, Nicholas Pearson Associates
Local Authority:	Ross Cannon, Cardiff Council Tim Walter, Cardiff Council
Design Review Panel:	
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Lead Panellist	Andrew Linfoot Phil Roberts Amanda Spence, Design Advisor, DCFW Mike Gwyther-Jones Carole-Anne Davies