

Design Review Report

M4 Corridor around Newport

DCFW Ref: 77

Meeting of 22nd October 2015



Declarations of Interest

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

22nd October 2015
9th November 2015
Newport
Road
77
Pre-application

Declarations of Interest

Ben Sibert and Martin Knight are DCFW panel members but were part of the presenting team at this review. Andrew Linfoot is employed by CH2MHill and Martin Knight is a sub-consultant to CH2MHill working on the A9 project.

Consultations to Date

The Design Commission for Wales has previously been consulted on this scheme through its design review service in 2007 and 2008. The scheme was then on hold for a significant period before it was reviewed again by the Commission in June 2015. This report should be read in conjunction with the report issued after the June review.

Public information exhibitions were held in September 2015 and information leaflets and animations are available from the project website.

The Proposals

The proposal is for a new section of three-lane motorway between Magor and Castleton to the south of Newport including a new crossing of the River Usk and Newport Docks.

The proposals also include reclassification of the existing motorway between Magor and Castleton as a trunk road, and a range of measures to improve quality of life for those living alongside it. Safety improvements for road users and revised access arrangements in the Caerleon area are also under investigation. In addition, a connection between the M4, M48 and B4245 is proposed, as well as promotion of cycling and walking through the provision of new or improved infrastructure.

The modified preferred route was announced by the Minister of Economy, Science and Transport in July 2014 and the design is being developed on a tight timescale with publication of Draft Statutory Orders and an Environmental Statement anticipated in spring 2016.

Main Points

The following points summarise key issues from the review, and should be considered to inform work ahead of submitting Draft Orders:

A Celebratory Project

The Commission has not questioned the 'need' for this scheme, and limits itself to considering the design opportunities and impact. We also recognise that the 'closed' language of the statutory process, whilst necessary, can be limiting; and there is a danger that some of the cultural, social and economic benefits which might arise from this scheme are missed. Design Review provides an opportunity to momentarily step outside the process and identify areas where these benefits are being overlooked or underplayed.

The scale of the project means that it will have a significant impact on the surrounding landscape and communities. Should it proceed, it will be one of the largest infrastructure projects ever to have been delivered in south east Wales in recent times, and the team should grasp the opportunity to celebrate it, and to ensure that the design quality is worthy of such celebration and that it engages both local people and those from further afield.

The design team has clearly been working hard to meet the requirements of the project, and the presentation materials demonstrate that the proposed solutions work and have been tested against project criteria. However, this scheme presents more than just an arithmetic problem. There are a number of issues and tensions which are difficult to resolve. Approaching the project from a cultural viewpoint offers one approach to resolving these tensions. If the scheme is thought of as a new 'linear park' and the Usk Bridge as a new 'cathedral', it is easier to imagine the more positive impacts that could be made.

Maximising Value of Infrastructure Investment

In order to maximise the value of this significant infrastructure project, the team will need to think beyond the statutory processes, to engage a wide variety of stakeholders, including local communities. Initiatives should be set up which encourage local people to take ownership of the scheme; naming the bridge, for example. There are many ways in which local children could be involved in and learn from the project.

Value can be added by improving and increasing walking and cycle routes, which contribute to well-being. There are also opportunities to increase tourism and local economy by providing bridge viewing or visitor facilities.

Landscape Narrative

The presenting team expressed an ambition to respond to the different landscapes along the length of the scheme. The Design Commission encourages this approach, but feels that it is not yet coming through clearly in the proposals.

It is important that there is a clear, positive narrative which explains how analysis of the landscape has informed the design of the scheme. All members of the design team should be signed up to this vision so that all aspects of the design work together in an

integrated way. It would be helpful for the team to produce a set of informal landscape character diagram drawings which tell the story of discovery and response.

Having a clear narrative to the overall scheme will help the team to respond positively with their design proposals, rather than focussing on 'avoiding, minimising, hiding and mitigating'. The Design Commission believes that a positive, creative, good quality design response in infrastructure schemes can add more value than a timid, tick-box approach.

There are a number of aspects of landscape design which would help to emphasise the different existing landscape characters for road users and for those looking onto the road from the landscape. These include, but are not limited to, the design of the embankments, planting strategies, drainage treatment, and lighting design.

In some cases, it might be of value to take away or leave things out, rather than adding new elements to the landscape. For example, the landscape character of The Levels would be emphasised by minimising planting and maximising uninterrupted horizontal views; i.e. the design approach may benefit from more simplicity.

Where the proposed road crosses the landscape of fields and reens, consideration should be given to the geometry of the field spaces which are left as a result. 'Left-over' triangles of land might not be useful or fit the field pattern. Opportunities to integrate drainage ponds and reed treatment beds into the existing pattern of fields and reens should be explored.

Where possible, footpaths and cycle paths should combine with water, such as linear drainage ponds and reens, to enrich the experience for walkers and cyclists, and protective fencing to water areas should be avoided wherever possible.

This project presents opportunities to celebrate and value industrial and post-industrial landscapes as well as 'green' landscapes. These opportunities should not be overlooked.

There may be opportunities to introduce contemporary landscape design (or even land art) as well as, or instead of, the type of planting design traditionally associated with highway environments.

Usk Bridge

The concept design for the Usk Bridge so far is elegant and well-considered. The design Commission is happy with the progress made on it since the previous review, including the proposed lighting strategy. The Commission would like to see the design for the wind breaks and other detailed aspects given careful attention and integrated with the rest of the bridge.

The scale of the new bridge, and its location, means users will, for the first time, properly understand Newport's setting. Nowhere else will such an expansive view of the city, the river estuary and sea be available. This opportunity must be fully explored, either through pedestrian or cyclist facilities, and any necessary wind barriers must ensure that views are maximised.

Opportunities should be built in to engage the public and other creative professionals in the design, build and use of the bridge.

Family of Structures

The 'family' link between the numerous structures in the scheme is not currently apparent. The proposed Usk bridge structure creates an intriguing pair with the transporter bridge, but the relationship to the other structures proposed for the scheme is not clear.

The footbridge will be the highest point on the levels, and it offers a great opportunity to provide a viewing point for pedestrians and cyclists to get a better appreciation of the wider landscape and the new road design. However, the proposed balustrades for the footbridge look weak. Different forms and solutions which are within the budget should be tested to find the best solution for the bridge. A simplified form, which relates better to the other proposed structures, or something linked to the context of the site, might provide a more successful solution.

The environments underneath the various bridges and structures should be carefully considered as these spaces will have the greatest impact on the experience of local people day-to-day.

Integrating Highway and Urban Design

The Commission would like to see exemplary integration of highway and urban design principles on this scheme. This has the potential to reinforce the economic argument for the project.

The location, layout and nature of routes into and out of Newport should be carefully considered and designed to make navigation clear.

The Usk Bridge will be visible from within the city, creating opportunities for urban design interventions which celebrate the project whilst adding value to the city.

Further Review

The Commission welcomes future opportunities to review this scheme at appropriate stages in the development of the project. Given the tight timescales involved, the next opportunity may be after Draft Orders.

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

Attendees

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