Design Review Report

A483/A489 Newtown Bypass, Powys

DCFW Ref: 27

Meeting of 14\textsuperscript{th} January 2016
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:** 14<sup>th</sup> January 2016
- **Issue date:** 25<sup>th</sup> January 2016
- **Scheme location:** Newtown, Powys
- **Scheme description:** Highways/road infrastructure
- **Scheme reference number:** 27
- **Planning status:** N/A Post Public Inquiry

### Declarations of Interest

Ben Sibert declared the following interests at previous reviews of this scheme:

The Welsh Government is Arup's client on several current schemes and future bids, including one scheme that Peris Jones is leading. Arup also bid for the Newtown Bypass with another team and were not appointed. Ben Sibert had no meaningful involvement in the bid.

TACP is sub-consultant to Arup on the A465 dualling and regularly works with Arup.

Alun Griffiths is currently Arup's client on the Circuit of Wales with their JV partner FCC. Arup and Alun Griffiths are aligned together to bid for future Welsh Government Schemes.

Attendees at the meeting confirmed that they were content to proceed following these declarations.

### Consultations to Date

A public exhibition for the proposed scheme was held in July 2013. Further public exhibitions are planned. The scheme came to DCFW Design Review in January 2014, March 2014 and October 2014 and this report should be read alongside the reports from these previous reviews. The scheme proposals have been through a Public Inquiry Process.

### The Proposals

The scheme is for a 5.6km bypass road around Newtown through predominantly agricultural land, with a build budget of approximately £50m. The new road will include eleven structures, including bridges, and culverts. Among the aims of the project is the desire to relieve significant traffic congestion in the town, making it a safer place to walk and cycle.
Following publication of Draft Orders, a Public Inquiry took place in summer 2015. The Inspector’s Report published in September 2015 referred specifically to the Design Commission’s comments, and this review sought to address these comments.

The following extracts of the Inspector’s Report: APP/T6850/15/516057 are relevant to this review:

10.57 I note that, after taking advice from The Design Commission for Wales, the appearance of all structures would embrace a consistent design. There was no criticism of this at the Inquiry although, in written evidence, the CPRW requested the “highest standards” of appearance for the structures. In view of the particularly sensitive nature of the Mochdre Bridge area and its closeness to the proposed new and dominant Mochdre Bridge I consider that the appearance and shape of that structure should be reviewed [4.40, 4.54, 6.95-6.97, 8.140-8.147].

10.150 I also note the CPRW request that the appearance of the bridges should be to the highest standards. After discussions with, and directions from the Design Commission for Wales, stone faces would be deployed on wing walls and abutments, with weathered steel beams spanning between the supports. In my view that would be in keeping with the local environment. However, I am particularly conscious of the massive superimposition that the proposed Mochdre Bridge would have on its extremely delicate surroundings [6.95-6.97, 8.146, 8.147].

10.151 In this particular circumstance, I am minded to recommend that The Welsh Government approach the Design Commission for Wales again to seek targeted guidance on the most appropriate appearance for this structure situated in this unique area. I conclude that the greatest care should be undertaken at Mochdre Bridge [4.54, 6.98, 8.147].

This Design Review consisted of a presentation of changes made since the previous review, followed by discussion relating to these and the comments in the Inspector’s Report.

Main Points in Detail

The following points summarise key issues from the review:

**Brinmon Embankment**
The additional infill at the Brinmon embankment proposed since the previous review looks sensible and would make the land more useful.

**Attenuation Ponds**
Designs for the attenuation ponds have progressed well since the previous meeting.

It will be important for any fencing to be low-key so that it does not detract from the landscape, planting and structures.
**Mochdre Bridge**

In his report the Inspector recommends that Welsh Government seek further ‘targeted advice’ from the Design Commission for Wales on the appearance of the Mochdre bridge due to the ‘massive superimposition’ it would have on its ‘extremely delicate surroundings’. (Paragraphs 10.57, 10.150 & 10.151)

The sensitivity of this structure in particular is due to the close proximity of a row of cottages which will look out onto the bridge or the embankment which leads up to it. It is therefore important to understand that a clear decision-making process was followed to demonstrate that the best solution has been found. This process was explored during this review:

- Two alternative routes which would move the proposed new road away from the cottages were considered at the Public Local Inquiry and were discounted by the Inspector as not preferred to the WG proposed scheme
- An alternative solution would be a viaduct which would be about twice the length of the proposed single span bridge
- A viaduct would allow views underneath, whereas the embankment blocks existing views
- A viaduct would require a substantial noise barrier, which would appear heavy
- Due to its length, a viaduct would have expansion joints which would create significant additional noise disturbance
- An embankment provides opportunity for planting to soften its appearance and enhance habitats for dormice.
- At a site meeting with residents and the project in the summer of 2014, the residents expressed a preference for the current proposals rather than a viaduct.

The conclusion is, therefore, that the proposed single span bridge with embankment in the best option

Given the sensitivity of this bridge, the detail design and quality of finish is particularly important. The following aspects should be carefully considered, tested and refined:

- Prevention of staining from weathered steel
- Views and experience of the inside faces of abutments, and which materials and finishes would be most appropriate
- Stone colour and coursing detail, especially around corners
- Mortar colour
- Concrete colour and finish
- The colours, tones and contrast of the different elements together, bearing in mind the likely impact of weathering
- Whether it would be appropriate to artificially encourage weathering of the stonework
- Wrapping the stone around the inside face of the abutments, stepping down to leave a strip of concrete where the steel joins the abutments.
- Junctions between different materials and elements of the structure. Simplification of junction details could improve appearance
- Overlapping the metal noise barrier with the concrete capping might visually simplify the parapet
- Pulling the start of the timber screen barriers out away from each other to avoid a junction of five or six different materials
- Pulling the stone wing wall out horizontally at the top edge, again to avoid a junction of five or six different materials

**Noise Barrier**
The decision to replace the proposed Perspex noise barrier with an unpainted metal product will suggest better quality. The detail design of the relationship between the noise barrier, safety barriers and other elements will be important.

**Bridge Abutment Detail Design**
As with the Mochdre bridge, the abutment details of the other bridges are important. Revised proposals presented at this review showed stone wrapping around the corners of the abutment from the wing walls and a profiled concrete finish to the inside faces. The merits of extending the stone finish to cover the full faces of abutments, as stated by the Inspector in 10.150, were discussed.

It will be useful to test these (and other) options using photomontage which gives as accurate representation as possible of the tones and colours of the proposed materials.

The Commission requested sight of further test photomontage images via electronic/hard copy submission as soon as possible in order to provide final written comment.

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

**Agent/Client/Developer:**  
Peris Jones, Welsh Government  
James Healey Welsh Government

**Designers/Contractors:**  
Alex Thomas, Atkins  
Peter McComiskey, TACP  
Richard Bruten, Alun Griffiths Contractors  
David Rowlands, Alun Griffiths Contractors

**Design Review Panel:**  
**Chair:** Alan Francis  
**Lead Panellist:** Ben Sibert  
Andrew Linfoot  
Ewan Jones  
Michael Gwyther-Jones  
Amanda Spence, Design Advisor, DCFW

**Observing:**  
Carole-Anne Davies, Chief Executive, DCFW