

Addroddiad Adolygu Dylunio Design Review Report

Review Status: **Confidential**

Meeting date:	19th November 2008
Issue Date:	4th December 2008
Scheme Location:	Menai Strait.
Scheme Description:	New Bridge
Planning Status:	Pre Draft Orders

Part1: Presentation

Atkins Consultants were appointed in December 2006 to investigate options for improving traffic flow over Britannia Bridge. A 12 week public consultation period began in November 2007 and showed general support for improved access and a new bridge. Various options for the bridge were considered, including widening the existing bridge. The current preferred option is a new cable stayed bridge with a slender deck to the west of the existing bridge. This has the least environmental and visual impact and the alignment to the west avoids sensitive sites and SSSIs, although it is adjacent to existing power lines.

The team are seeking DCFW's views on the following aspects:

- Form of structure
- Separation of bridges
- Overhead cables
- Landscape impact
- Design principles.

Summary of key points arising from discussion, to be read in conjunction with Part 2 of this report.

Given the demonstrated need to relieve traffic congestion in this area, this is a unique opportunity to respond to the landscape setting, sensitive environmental designations and historic structures with an innovative and elegantly designed solution. We think that a separate new bridge located to the west of the Britannia Bridge is an acceptable response to the brief and the site. Further development of this project should address the following points:

- We support the principle of a new bridge to the west of the existing bridge as this would respect the important visual connection between the two existing historic bridges .
- However, the proposed alignment should be reconsidered, with a view to seizing any opportunity to move the new bridge further west and away from the Britannia Bridge which would require the adjustment of existing overhead power cables.
- The preferred option of a cable stayed bridge is the best of the identified options. However, we strongly advise that an international competition is held to attract the best talent, creative thinking and exciting alternative design solutions. The lighting design should be an integral part of the competition.
- DCFW would welcome the opportunity to see this scheme again as the design progresses.

Part 2: Discussion and Panel Response in Full

The option presented to widen the existing Britannia Bridge would entail losing the distinctive towers. Cadw are strongly opposed to this and we agree with this assessment.

The proximity of the new bridge to the existing historic bridge is a major cause for concern. Any alignment to the east of Britannia Bridge would significantly compromise the historic relationship between the iconic Britannia Bridge and Menai Bridge and is likely to be unacceptable. The preferred alignment immediately to the west is likely to have an improved relationship with the Britannia Bridge. However, we urge the team to explore other possible alignments further west which, although likely to incur extra costs, would minimise the impact on both historic bridges. The design team explained that on either side of the Britannia Bridge, they were constrained in great part by large tracts of National Trust land and sites of environmental importance.

The option to move the existing HV electricity pylons has been considered and the power company has suggested this would cost an estimated £30m. The removal of the pylons and power cables would be an improvement to the setting of the bridges and it would be worth investigating the lifespan of the pylons and cables and when they are due for replacement for the western alignment options.

With regard to the preferred option, this design has been driven so far primarily by cost and engineering considerations. Given the unique historic context, it is important that a highly qualified and experienced architectural team, with a track record in delivering innovative bridge design, is brought into the design process and encouraged to develop alternative solutions. A limited international design competition, comprising teams of engineers, architects and lighting designers, would introduce a diversity of talent and breadth of ideas which, together with generating stakeholder support and bringing early contractor involvement, could produce an exciting and innovative design. Such a competition need not delay the procurement process and will be the best route to ensuring design excellence. It should include the lighting design which will be crucially important for the success of the scheme and a specialist designer should be engaged.

The cable-stayed option does have certain advantages including the minimum deck thickness and maximum transparency. The structure illustrated shows the shortest main span, although this could be increased by moving the towers further apart and away from the Britannia towers even though this would involve increasing their height.

The pedestrian routes should be attractive destinations in their own right and exploit the proximity to maximise views of the historic structure as well as the more distant landscape.

The team confirmed their intention to use local materials and labour wherever possible.

The team confirmed that it is unlikely that tolls will be in use on the new bridge and that no room has been allowed for a toll plaza on either side of the crossing.

The Design Commission for Wales Design Review Panel and staff welcome further consultation and will be happy to provide further feedback on this report and/or where appropriate, to receive further presentations. Thank you for consulting the Commission and please keep in touch with us about the progress of your project.

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

Appendix 1: Attendees

Asiant/Client/Datblygwr:
Agent/Client/Developer

WAG Transport Wales [Tim Dorken,
Vernon Powell, Tudor Roberts]

Pensaer/Architect:

n/a

Consultants:

Atkins [Joe Sparkman, Edward Saul,
Peter Davenport]

Awdurdod Cynllunio/
Planning Authority

Anglesey CC and Gwynedd CC

Y Panel Adlygu Dylunio:
Design review panel:
Wendy Richards [Chair]
Cindy Harris [Officer]

Elfed Roberts
Richard Parnaby
Martin Knight
Phil Roberts
Ashley Bateson

Lead Panellist:

Martin Knight

Sylwedyddion/Observers:

Mark Newey [WAG Planning Division]
Kwanphil Cho [Austin Smith Lord]