

**Status: Public**

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COMMISSION  
FOR WALES  
COMISIWN  
DYLUNIO  
CYMRU

**Design Review Report:** 15 December 2004

**Meeting Date / Material Submitted:** 3 December 2004

**Location:** River Usk, Newport

**Scheme Description:** New footbridge

**Architects / Design Team:** Nicholas Grimshaw  
[Ewan Jones]  
Atkins [Dominic Pask]

**Client:** Newport Unlimited  
[David Ward]  
Newport City Council  
[Wendy Hall]  
WDA [Sarah Jane Davies]

**Planning Authority:** Newport City Council

**Planning Status:** Full application lodged

**Design Review Panel:**  
John Punter [chair]  
Cindy Harris [officer]  
Ben Sibert

**Robert Firth**  
**Ann-Marie Smale**

## **Presentation**

The aspiration for future development in Newport, as outlined in the masterplan, is based on improved connectivity, an enhanced riverside landscape, and the creation of a high quality sustainable environment. In particular, a major aim of this development is to reconnect the city with the river, and the eastern residential communities with the town centre, radically improving east/west pedestrian routes and connections to the Rugby Ground. This proposal needs to be viewed in the context of other proposed developments and the whole regeneration of the City of Newport. The tidal nature of the river imposes its own constraints, intensified by it being a cSAC - [(candidate) Special Area of Conservation] with protected fish species.

The design strategy for the bridge is for a landmark structure, symbolising a crane as a representation of Newport's industrial and maritime history. It is considered important to avoid construction work on the river bed, to keep the construction period as short as possible, and to retain a flexible design. These design imperatives are facilitated by locating all the major structural components on the west bank. The four legged mast structure supports the bridge and allows the river to be spanned with a light touch on the east bank, where a more natural environment exists. The mast structures are offset from the line of the bridge which is aligned with Charles/Llanarth Street. The masts are white steel and reach 67 metres in height, while the bridge deck is finished in aluminium, and the cables are galvanised steel. The abutments will be precast concrete. Dampers will be fitted to control the dynamics and an innovative lighting scheme, reflecting the changes in the tidal water level, is proposed.

New public realm areas will be created at either end of the bridge - East Bank Plaza and West Bank Circus. It is intended that a direct visual and pedestrian link will be provided from the city centre to the bridge, down Llanarth Street and Charles Street, through demolition of the shopping development which currently blocks this route.

The planning application was submitted in October, with an environmental statement. It is currently out to consultation and is expected to go before the planning committee in February 2005.

### **Panel's Response**

To the suggestion that this was an unduly expensive and massive sculpture, or that its function could have been fulfilled more economically, the client responded that its iconic stature and sculptural qualities provided an important signal of regeneration for this waterfront area. The height of the development would not be out of scale with the 6-12 storey developments that were anticipated on the west bank.

Further reservations were expressed about the scale of the bridge relative to its function, both in terms of the bulk of the cross section, and the height of the 'crane' structure. The height of the mast was justified in terms of providing an optimum deflection, and the necessary proximity of the anchor point to the centre of the river. A suggestion was made to reduce the height of the rear tower, but this would increase the deflection. There has been rigorous testing of the structural and economic efficiency of the structure. Additional photomontage views of the bridge from the city proper would give a better indication of the bridge's impact and prominence than the views provided. However, its height, which is similar to the nearby Transporter Bridge, is not an issue for the local planning authority.

The bridge serves the important function of improving the accessibility of the city centre to communities on the east bank and facilitating their social inclusion. The Panel commented that how well this linkage can be made to work depends largely on the development of the new retail scheme, but they recognised that the alignment is the most logical one. The desirability of reinforcing the link and view between city and river is embedded in the masterplan and will presumably inform any future planning consent. Once constructed, the bridge will become a focal point which will lead future developments, including the retail scheme and the new university campus.

The Panel had reservations about how pedestrians would cross a four lane boulevard and a large oval traffic island to reach the bridge from the shopping area, and were not convinced by the suggestion that boulevard traffic would be slowed to 20 mph. They explored the idea that a bridge of this size might span the boulevard as well as the river, but it was recognised that surface routes were a better option than pedestrian and traffic vertical segregation. The Panel welcomed the east bank cycle and footpath connections linking to the primary school, rugby ground and main residential areas.

The materials, wide walkway and outrigger cables received general approval, but it was felt that the connections could be made more fluid, and that the grey steel components might be better in a less contrasting coloured material. In particular, the looped tops of the stays, while functionally necessary, contrast with the linear character of the bridge itself. Ease of maintenance and durability of materials were cited as possible future problems. The designers stated that maintenance access was provided inside the mast, and that the galvanised coating referred to earlier was actually an aluminium-zinc alloy with a 120 year life. The City Council plan to adopt the bridge and this was welcomed.

Security issues have been taken into account in the lighting scheme for the bridge and the provision of CCTV cameras at either end. The camber will not significantly impede visibility, from one end to the other.

The effects of the bridge on navigation of the river have been discussed with the harbour authority. In fact, the Town Bridge is the low point which determines which craft can pass upriver. The designers estimate that this proposal might affect 8-15 boats a year. Discussions with CCW concerning the effects of construction on river life and habitats is ongoing

## Summary

The Panel appreciates the quality of design work in this proposal, and has had the benefit of earlier discussions between a panellist and the designers at the competition stage. It recognises the validity of an iconic statement on a structure which will serve an important social and economic function, while allowing the community to gain a better appreciation of the city's natural environment and setting. In particular:

- We are persuaded that a footbridge is necessary in this location, and that the alignment and connection between the retail, learning and sporting centres of the city is entirely appropriate.
- The importance of enhancing land values on development sites on the east bank is acknowledged while also combating social exclusion in a community hitherto physically disconnected from the city centre.
- The connectivity between John Frost Square and the bridge should be enhanced by any future development in this area, and this requirement should be emphasised in any planning consent.
- We are concerned about the quality of the public space where the bridge meets the land on both banks. It now becomes even more important that the boulevard is treated in a way which maximises ease of pedestrian movement.
- Some reservation was expressed at the scale and height of the mast, but in general we are reassured by the technical arguments, and the advantage of a construction method which does not impinge on the river bed.

- We support the design decision to locate all the major structural support on the west bank, and maintain a very light touch on the east bank.
- We find the detailing sophisticated and proportionate.
- The lighting scheme for the bridge will be very important in how it is viewed at night and we endorse its treatment as an element of public art.

End

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