

Statws/Status:
Cyfrinachol / Confidential



Adroddiad Adolygu Dylunio: Design Review Report:	20 June 2008
Dyddiad Cyfarfod / Meeting Date:	11 June 2008
Lleoliad/Location:	Newbridge on Wye to Cwmbach
Disgrifiad o'r Cynllun Scheme Description:	New road.
Cleient/Asiant: Client/Agent:	WAG Transport Wales [Tim Dorken, Mike Gilbert]
ECl Contractor:	Alun Griffiths Ltd [David Rowlands]
Pensaer/Architect:	Jacobs [Mike James, Keith Murray, Rhodri Thomas, Ted Evans]
Cynllunio/Consultants:	Atkins
Awdurdod Cynllunio: Planning Authority:	Powys CC
Statws Cynllunio: Planning Status:	Pre-draft orders
Y Panel Adolygu Dylunio/ Design Review Panel: Alan Francis (cadeirydd/chair) Cindy Harris (swyddog/officer) Charlie Deng (swyddog/officer)	Kieren Morgan Ben Sibert Jonathan Hines Howard Wainwright

Lead Panellist:

Ben Sibert

Sylwedyddion/Observers:

**Lynne Sullivan, Design Review
Panelist**

Cyflwyniad/Presentation

This stretch of the A470, between Cwmbach and Newbridge on Wye, lies on the strategic trunk road network, and its upgrade is part of the One Wales agenda for improving north/south transport links. The preferred route was announced in 2005, and this protects the route from any planning encroachment. The team aim to start construction in 2010. The procurement process allows for early contractor involvement, and the major stakeholders [CCW, EA, Powys CC] are included in the project development.

The existing highway is a tortuous route and is affected by poor alignment, a low bridge at Cwmbach, and a traffic-light-controlled single carriageway over Pont Ithon at Newbridge. The surrounding natural environment is of high quality and includes an SAC, SSSI, and a scheduled ancient monument [Cwrt Llechryd].

A typical section was presented showing a 7.3 metre wide carriageway with a 1m hard strip and 2.5m soft verge on each side. There is no provision for any new lighting, but existing lighting will be maintained. Sustainable drainage principles have been applied and displaced land will be returned to agricultural use.

Key features have been identified along the route which require special consideration, and concept bridge designs have been developed to minimise impact on the landscape and reduce construction and maintenance activity. A 'gateway feature' is planned for the Newbridge link, which the team plan to develop with the involvement of the local community.

Ymateb y Panel/Panel's Response

The Panel accepted the justification for the upgraded highway improvements and judged that the environmental aspects of the scheme had been well covered. However, the proposed road alignment appeared to be a predominantly engineering solution, with long straight sections requiring a large amount of cut and fill. We thought that a more sensitive response to the beautiful landscape was required, and we would like to see a greater variation in the proposed geometry, using crest curves, avoiding cutting through hill tops and extending sag curves to reduce the impact of embankments.

The team confirmed that they were already exploring those options and were aiming for an overall earthworks balance, which meant in some areas a need to generate material. There was also the need to avoid the flood plain, and to meet the guideline requirement for 30% of the new road to be suitable for overtaking.

The team stated that the alignment at the Newbridge end will be refined, with an approximate 3.7% to 5% gradient. At the southern end, they are content that the alignment is optimal, especially given the additional constraints of the proximity of Cwrt Llechryd, the number of side road junctions and the steep sided valley over the Dulas Brook. A T-junction was considered here but the current arrangement was favoured, largely because the temporary works necessary to maintain access during construction, will form part of the permanent solution.

The Panel supported the slender and elegant elevation of the Cwmbach bridge, and the use of weathering steel. We suggested that a larger cantilever on the edge of the deck, equivalent to the depth of the beam, would improve the appearance even further. The team confirmed that the ground level shown under each abutment was an indicative illustration only, and the symmetry of the 3 span solution was considered important.

We would like to see the bridge of Pont Ithon treated with a lighter touch and its visual impact reduced by replacing the concrete wall piers with a two column solution. Ideally these columns would be sculpted to create some architectural interest.

The Red House bridge appeared heavy handed and visually intrusive, and we suggested a more transparent solution with greater visual connectivity underneath the bridge. This could be achieved with a 3 span solution, or by battering back the abutments and retaining the single span. In any event we thought that the heavy wing walls were not an appropriate or sensitive design solution.

The Panel suggested that an architect or specialist bridge designer be engaged to advise on all three bridges and to complement and enhance the engineering solution.

The existing Lon Las Cymru cycleway will benefit from a reduction of traffic on the existing road. This proposal allows a short section of the cycleway to be segregated from the trunk and local road network. A review of this scheme will be arranged with Sustrans. The Panel noted that the new layby provided was in a cutting and therefore did not have the advantage of good views.

The team confirmed that swales, attenuation ponds and wetlands were included as part of the sustainable drainage strategy and we stated our preference for minimal fencing round these features. Lined swales had been

considered as an option, but the team felt they had arrived at the most effective solution. They thought that the 'over the edge' drainage detail may not meet the required standards. It was confirmed that good quality rock would be recycled into pavements and the contractor pointed out that they have several depots in mid-Wales which could be used for storage or transfer between sites.

The Panel was concerned about the reference to a 'gateway feature'. While we would welcome the involvement of the community in this project, we thought it was essential to involve professional artists at an early stage. Furthermore, a single intervention might not be the best way to introduce public art, which would be better integrated with the landscape treatment throughout the whole route.

Crynodeb/Summary

The Panel was pleased to review this important road improvement scheme and thought the proposals were well justified. We think this is an acceptable response to the site and the brief but that some major revisions are necessary:

- We think that considerably more refinement is necessary in finalising the alignment to make it more sympathetic to the landscape, and reducing the amount of earthwork involved in creating cuttings and embankments.
- We question the absolute necessity of the 30% overtaking requirement and think that sensitivity to the landscape and topography should be given greater priority.
- We welcome the concept of a family of structures and the use of weathering steel. We would like to see a lighter treatment of the Red House bridge in particular, but revisions to the edge treatment and quality of detail are necessary for all the proposed structures.
- We urge the team to engage an architect or specialist bridge designer to work with the engineers to help develop these concept designs.
- We think that the early engagement of a public arts consultant is essential and we would advise against the idea of a single piece of artwork.
- We welcome the involvement of a landscape consultant and we would like to see the landscape strategy further developed to integrate with the sustainable drainage measures and the public art provision.

Diwedd/End

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

