

Ein cyf/Our ref: CAS-289846-L0K8
Eich cyf/Your ref: 25/0792

Newport City Council
Civic Centre
Newport
NP20 4UR

Dyddiad/Date: 19 November 2025

Annwyl Syr/Madam/Dear Sir/Madam,

BWRIAD/PROPOSAL: DEMOLITION OF THE OLD BASSALEG BRIDGE AND CONSTRUCTION OF A REPLACEMENT SINGLE SPAN BRIDGE STRUCTURE ACROSS THE EBBW RIVER TO FACILITATE VEHICULAR ACCESS TO FORGE MEWS FROM VIADUCT WAY

LLEOLIAD/LOCATION: Bridge Over River Ebbw, Forge Mews, Bassaleg, Newport, NP10 8NE

Thank you for consulting Cyfoeth Naturiol Cymru (CNC)/Natural Resources Wales (NRW) about the above, which we received on 07 October 2025.

We have concerns with the application as submitted because inadequate information has been provided in support of the proposal. To overcome these concerns, you should seek further information from the applicant. Further details are provided below.

We also advise that based on the information submitted to date, a condition regarding pollution prevention should be attached to any planning permission granted and the document identified below should be included in the approved plans and documents condition on the decision notice. Without the inclusion of this condition and document we would object to this planning application.

Water Environment

We have considered the Water Framework Directive (WFD) compliance assessment, *Bassaleg Bridge WFD Impact Assessment* (Document Ref: 100119581-MMD-XX-XX-RP-GM-0002, by Mott McDonald, dated September 2025) and the Bassaleg Bridge Optioneering and Design Geomorphology report, by Mott McDonald, dated August 2025 submitted in support of the application.

We consider that:

- there is a risk of deterioration in the overall status of the waterbody Ebbw R – conf Ebbw Fach R to Maes-glas (GB109056026910); and
- there is a risk the proposed development may jeopardise the attainment of good ecological potential and good surface water chemical status by the date set out in the most recent River Basin Management Plan (RBMP).

The Geomorphology report provides a comprehensive baseline appraisal of the River Ebbw and outlines the proposed bridge replacement scheme. The assessment identifies key pressures on the river system, including floodplain disconnection, historic channel modification, and ongoing bed incision. The report concludes that the proposed bridge design will result in minor and localised impacts to the geomorphology of the river.

The WFD assessment concludes that the scheme will not result in deterioration of the water body's status, citing the increased span and removal of in-channel piers as beneficial. These aspects are welcomed. However, the assessment does not adequately justify the scale of bed and bank protection proposed or consider the potential failure of the downstream weir.

The use of extensive riprap (50 m total) and blockstone (78 m total) is significant, particularly given the absence of piers and the claimed set-back of the new bridge. The rationale for this level of intervention is not clearly evidenced, and the potential impacts on sediment transport, bedform preservation, and hydromorphological function are not fully assessed.

The intrusion of the right-bank abutment into the river is acknowledged but not explained. It is unclear why this design choice was necessary, and whether alternatives were considered. The use of blockstone within the channel raises concerns about energy reflection and localised scour, and the assessment does not explore greener alternatives that may offer better ecological outcomes.

We consider that additional information is required as follows:

- **Bridge Abutment Justification**

The geomorphology report recommends that the structure should have as large an opening as feasible to minimise flow contraction and scour between abutments. Therefore we request the applicant clarifies the following:

- Justification as to why the right-bank abutment must extend into the river;
- whether a set-back design was considered and ruled out;
- the geomorphological implications of the intrusion, including effects on flow constriction and sediment movement.

- **Scour and Bed Protection Design**

In line with the geomorphology recommendation that channel bed modification should be avoided as far as possible, and that any unavoidable works should be justified and designed to preserve sediment continuity, we request that further information to justify the extent and depth of bed protection proposed is submitted including:

- rationale for the use of 25 m of riprap upstream and downstream of the bridge, particularly in the absence of in-channel piers;
- hydraulic modelling outputs demonstrating the need for such protection;
- explanation of how sediment transport and bedform dynamics will be maintained;
- consideration of alternative, greener methods of bed protection.

- **Bank Protection Alternatives**

We request that a review of alternative bank protection methods be considered to reflect the geomorphology recommendation that green engineering solutions should be considered, to include:

- assessment of greener options such as vegetated rock rolls or bioengineering;
- justification for the use of blockstone in the watercourse;
- evidence that the selected method will not exacerbate bed scour or energy reflection.

- **Weir Sensitivity Assessment**

In line with the recommendations in the the geomorphology report that the design should consider the potential implications of weir failure on bed levels and scour risk, we request an evaluation of the implications of downstream weir failure or removal on upstream hydraulics and scour risk be submitted. This should confirm whether the proposed bed protection remains effective under altered control conditions.

We would be happy to provide further advice on receipt of the above.

Construction/Demolition Environmental Management Plan

Due to potential to affect water quality during the demolition and construction phases of the development we request that the following condition be included on any permission granted:

Condition

No development or demolition shall commence until a Demolition and Construction Environmental Management Plan (DCEMP) has been submitted to and approved in writing by the Local Planning Authority. The DCEMP should include:

- Construction methods: details of materials, how waste generated will be managed;
- General Site Management: details of the construction programme including timetable, details of site clearance; details of site construction drainage, containments areas, appropriately sized buffer zones between storage areas (of spoil, oils, fuels, concrete mixing and washing areas) and the watercourse.
- Biodiversity Management: details of tree and hedgerow protection; invasive species management; species and habitats protection, avoidance and mitigation measures.
- Soil Management: details of topsoil strip, storage and amelioration for re-use.

- CEMP Masterplan: details of the extent and phasing of development; location of landscape and environmental resources; design proposals and objectives for integration and mitigation measures.
- Control of Nuisances: details of restrictions to be applied during construction including timing, duration and frequency of works; details of measures to minimise noise and vibration from piling activities, for example acoustic barriers; details of dust control measures; measures to control light spill.
- Resource Management: details of fuel and chemical storage and containment; details of waste generation and its management; details of water consumption, wastewater and energy use
- Traffic Management: details of site deliveries, plant on site, wheel wash facilities
- Pollution Prevention: demonstrate how relevant Guidelines for Pollution Prevention and best practice will be implemented, including details of emergency spill procedures and incident response plan.
- Details of the persons and bodies responsible for activities associated with the CEMP and emergency contact details.
- Landscape/ecological clerk of works to ensure construction compliance with approved plans and environmental regulations

The DCEMP shall be implemented as approved during the demolition and construction phases of the development.

Justification: A DCEMP should be submitted to ensure necessary management measures are agreed prior to commencement of development and implemented for the protection of the environment during construction and demolition.

European Protected Species (EPS)

Otter

We note from the Ecological Impact Assessment (EclA) by Mott McDonald, dated June 2025, submitted in support of the application, that a confirmed resting site for an otter is likely to be disturbed by the proposed works.

We are satisfied with the level of survey, the results and the proposed mitigation. We therefore, request that the Ecological Impact Assessment (EclA) by Mott McDonald, dated June 2025, be included in the 'approved list of plans/ documents' condition within the decision notice should consent for the project be granted.

We also advise that the works are carried out under licence. We refer you to the Chief Planning Officer's letter dated 1 March 2018 which advises Local Planning Authorities to attach an informative regarding licence requirements to all consents and notices where European Protected Species are likely to be present on site.

Please note, any changes to plans between planning consent and the licence application may affect the outcome of a licence application.

Bats

We note that the information submitted in support of the above application (Ecological Impact Assessment (EclA) by Mott McDonald), dated June 2025 has identified that bats

are unlikely to be using the application site. We therefore have no comments to make on the application as submitted in respect of bats.

Flood Risk

The 1D-2D hydraulic model used to inform the FCA is an adaptation of an existing NRW integrated catchment model (ICM) for the River Ebbw named '**EbbwLowerICM_5_V1.0_2018**', undertaken by Wallingford HydroSolutions (WHS) in 2019 (NRW, 2025g).

For the purposes of the FCA, the NRW model has been truncated, with updates made to the hydrological assessment, land digitisation using the latest Ordnance Survey (OS) MasterMap and topography using data from surveys conducted in 2024 and 2025.

For the existing hydraulic model to be suitable for informing the project and the FCA in support of this application, a number of updates have been undertaken. These are predominantly to bring the model in line with the latest data available and increase the level of detail of the modelling in areas adjacent to the site.

We have not undertaken a full assessment of the fitness for purpose of the modelling and can accept no liability for any errors or inadequacies in the model.

We have reviewed the FCA undertaken by Mott MacDonald, Reference 100119581-MMD-XX-XX-RP-FL-0002 Revision P01 dated 4th September 2025, and provide the following comments based on the information presented within it.

Acceptability Criteria

Frequency thresholds

The proposed bridge is shown to be flood free during the 1 in 100 year plus an allowance for climate change (1% +CC (25%)) flood event. However, the connecting highway infrastructure will flood during this event as it is not considered practicable to raise the highway above existing levels at these specific locations. It is also confirmed that the existing highway will flood during the baseline model conditions.

The proposed bridge complies with the requirements of Figure 5 within the TAN but it is recognised that the existing highway connections at each end will need to be tied into which have been assessed to flood during the baseline scenario.

Tolerable Conditions

The proposed bridge is shown to comply with the tolerable conditions contained within Figure 6 of the TAN during the 1 in 100 year (0.1%) +CC event. However, as per the above, the connecting highway infrastructure will flood during this event as it is not considered practicable to raise the highway above the existing levels. Therefore the tolerable conditions at the tie in points with the proposed bridge and the existing highway will be exceeded.

The proposed bridge complies with the requirements of Figure 6 within the TAN but again it is recognised that the existing highway connections at each end will need to be tied into. These have been assessed to exceed the tolerable conditions set out in Figure 6.

The tolerable conditions set out in Figure 6 of the TAN have been complied with.

Increase in flood risk elsewhere

The proposals have been assessed and generally show a reduction in flood risk especially within existing residential areas by up to 0.4metres (1% +CC 25%) locally to the site. A maximum increase of 90mm has been assessed to Forge Mews which is limited to the 0.1% +CC (25%) event only. Most of the increases will be downstream of the site within those areas along the River Ebbw corridor which are water compatible i.e. flood plain.

The FCA (Table 6.3) states '*in the long term, in most cases, the proposed development is not expected to increase flooding elsewhere, except in water-compatible areas. General reductions in flood levels are anticipated in residential areas. Therefore, the impacts are considered to be broadly consistent with the acceptability criteria outlined in TAN15*'.

The proposed bridge is expected to reduce flood risk in existing residential areas by up to **0.4 metres** during a **1% annual exceedance probability (AEP) event plus climate change allowance (25%)**. Although the development may cause a **maximum increase of 90mm** in flood levels elsewhere during a **0.1% AEP + CC (25%)** extreme event, this is considered acceptable because:

- The overall flood risk is reduced in more vulnerable residential areas.
- The increase elsewhere is relatively minor and occurs only during a very rare event.
- Therefore, the net impact is positive, improving current flood conditions in key areas.

Whilst the increase exceeds the typical 4mm tolerance applied for detriment, we do not consider this a significant matter, given the context and rarity of the event in question. Furthermore, the existing bridge structure, which is to be demolished, currently restricts flow within the River Ebbw and has a documented history of blockages due to its multi-span design. Its removal is expected to improve conveyance and reduce flood risk more broadly.

In Section 2.5.3, the removal of the Old Bassaleg Bridge has been assessed to potentially increase downstream flood risk due to the conveyance of more unrestricted flows, compared to the proposed clear span bridge which is designed to maintain flow continuity while minimising obstruction. To mitigate this potential increase in flood risk, flood defence measures, specifically a flood wall or bund, have been incorporated into the overall design proposals. These measures are intended to manage and contain any additional flow volumes and will tie into existing higher ground along Churchmead and the A467 dual carriageway embankment.

It is noted that these mitigation features are not part of the formal planning application as they are considered 'permitted development', but they remain integral to the flood risk management strategy associated with the bridge replacement.

Climate change

The peak flows for climate change have been estimated by applying a 25% increase for the central allowance and a 70% increase for the upper end allowance to the 1% and 0.1% design events.

Overtopping and/or breach assessment

Not applicable to the proposed bridge crossing above the River Ebbw even though there are NRW flood defences upstream and downstream of the proposed bridge. The defences would not have any implications on flooding to the bridge itself which is set higher than the

scheme. It will be suitably tied to these existing defences to ensure continuity of the existing standard of protection provided by the scheme.

Blockage of in-channel structures

There has been a 25% blockage assessment on the existing bridge (to be demolished after completion of the new bridge) based on advice provided by NRW in meetings prior to this planning application being submitted.

Proposed access to the site

The access off the existing highway (Viaduct Way) which connects to the proposed bridge is assessed to flood but only for the design events i.e. 1% and 0.1% +CC with the latter covering most of the access compared with the 1% +CC event. In consideration of this the proposals meet the 0.1% +CC tolerable conditions in Figure 6 of the TAN, with a few exceptions at existing tie-in points (where it is not considered practicable to raise levels).

Additional Comments

The proposed bridge along with associated works including the flood mitigation bund/wall will be subject to a Flood Risk Activity Permit (FRAP). The applicant and their consultants are aware of this requirement, and it is anticipated that FRAP applications will be submitted should planning permission be granted by the LPA.

Nationally Designated Sites

We have considered the Habitats Regulations Assessment (HRA) by Mott McDonald dated April 2025 which includes an appropriate assessment. The HRA has outlined all the potential impacts of the work and provided that the mitigation highlighted below is followed we agree with the conclusion that the development is unlikely to have an adverse effect upon the integrity of the River Usk Special Area of Conservation (SAC) or Severn Estuary Ramsar and Severn Estuary SAC.

- No work should be undertaken at night where there is a need for artificial lighting, this will minimise the effect on migratory fish as well as commuting wildlife using the river such as Otter and bats.
- The pollution prevention guidance listed in the HRA is followed and a demolition and construction environmental management plan is submitted and adhered to via condition.
- Works will not take place during the fish and eel migration/spawning periods. This leaves a small window where works can be completed, so it is considered a risk that this may not be possible. If this window is exceeded the risk of a significant effect on wildlife is increased. Therefore, we request that NRW are made aware of delays that may extend the works into these periods.

For completeness, we recommend that HRA be amended to include reference to a DCEMP.

Other Matters

The advice in this letter relates to matters which are included on our [consultation topics list](#). We do not rule out the potential for the proposed development to affect other environmental interests that are not included on this list.

We advise the applicant that, in addition to planning permission, it is their responsibility to ensure they secure all other permits/consents/licences relevant to their development. Please refer to our [website](#) for further details.

If you have any queries on the above, please do not hesitate to contact us.

Yn gywir / Yours faithfully,

Claire McCorkindale

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Croesewir gohebiaeth yn Gymraeg a byddwn yn ymateb yn Gymraeg, heb i hynny arwain at oedi./Correspondence in Welsh is welcomed, and we will respond in Welsh without it leading to a delay.