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Wrexham County Borough Council,
The Guildhall,
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LL11 1AY

ebost/email:
northplanning@cyfoethnaturiolcymru.gov.uk

20/06/2023

Dear Sir/Madam,

**BWRIAD / PROPOSAL: DYMCHWEL ANNEDD BRESENNOL A CHODI 9 ANNEDD
GYDA MYNEDIAD GWELL I'R BRIFFORDD / DEMOLITION OF EXISTING DWELLING
AND ERECTION OF 9 DWELLINGS WITH IMPROVED HIGHWAY ACCESS**

LLEOLIAD / LOCATION: TY'N Y COED, CHESTER ROAD, ROSSETT, WREXHAM

Thank you for consulting Cyfoeth Naturiol Cymru / Natural Resources Wales about the above, which we received on 15th May 2023.

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 regarding foul drainage. If this information is not provided, we would object to this planning application. Further details are provided below.

We also advise that based on the information submitted to date, a condition regarding flood risk should be attached to any planning permission granted. Without the inclusion of this condition, we would object to this planning application.

Foul Drainage and Protected Sites

We note the application site is within the catchment of the River Dee and Bala Lake Special Area of Conservation (SAC). As you are aware, on the 21st January 2021, we published an evidence package outlining phosphorus levels for all river SACs across Wales. In line with our [Planning Advice](#) (July 2022), under the Habitats Regulations, Planning Authorities must consider the phosphorus impact of proposed developments on water quality within SAC river catchments. We therefore advise you to consider whether the proposals, as submitted, would increase the volume of foul discharge from the site in planning terms.

We note from the information submitted that the development has the potential to increase the amount of phosphorus being discharged from the site. As such, we refer you to our Planning Advice and advise you to seek further information from the applicant. We note that information has already been submitted in respect of a proposed 'constructed wetland' in

land to the north of the application site in order to offset the developments connection to the mains public sewer. However, we advise you to seek further information as identified in the section titled 'What does this mean for development proposals involving connection to public wastewater treatment works' of that advice. Furthermore, we advise you to also seek additional information regarding the constructed wetland as the submitted information does not provide sufficient detail to enable an assessment to be made.

We have reviewed the submitted Phosphate Neutrality – Proof of Concept (Ref: S22-780/PNA, September 2022, Southwest Environmental Ltd) and advise that the report fails to demonstrate that phosphate neutrality can be achieved - our comments are as follows:

- Page 2 of the report references a May 2012 Environment Agency Document – within that document it states of atmospheric P deposition that “The concentrations of P from these sources are generally low ($<0.1 \text{ kg P ha}^{-1} \text{ yr}^{-1}$)”. However, this contradicts the figures then referenced in Section 7.1.2.
- To evaluate atmospheric phosphorus deposition in the UK Section 7.1.2 references Environmental Science: Processes & Impacts Accepted Manuscript, and states that the “median of 20 published studies was 0.063 g / m^2 or 0.630 kg/ha ”. However, that does not actually reflect the findings of the manuscript: if using exclusively European data, the median deposition flux for TP is actually $0.022 \text{ g / m}^2 \text{ /a}$ which is significantly lower and therefore would require a much larger wetland than currently proposed in order to meet the offset target.
- The submitted Phosphate Neutrality report concludes that the proposed wetland (0.8ha) will meet the 0.5 kg/TP/a atmospheric phosphate reduction but there is no detailed methodology to demonstrate how this reduction will be achieved, or which of the stated P removal rates was used to ascertain the reduction.
- It is assumed that the wetland will be a closed system with no discharge to either land or any adjacent watercourses, however confirmation of this would need to be submitted. Details regarding the construction method would also need to be provided - using either a sufficiently low permeability clay or synthetic liner to avoid losses to ground water.
- It is noted that the proposal is to locate the constructed wetland in land to the north of the red-line boundary. We advise that a significant proportion of land identified as 'Approx Wetland Area' to the north of the development boundary is located within an area highlighted on our Flood Map for Planning as being at risk of flooding (Flood Zone 2 -Rivers). If the wetland is to be in an area at risk of flooding it would not be able to provide certainty of offset as there would be a risk of remobilisation of the stored phosphorus during high flow events. It is also not clear whether the size of the wetland would be sufficient to buffer any high rainfall events without overspilling.
- Further information on why a rainfall rate of 1400-1600mm has been used -rainfall rate has a significant impact on the phosphorus loading in the calculator therefore it is important to evidence why this rate has been used.
- The figures used in the calculator outputs show the area of residential land is not changing from the pre-development area of 0.69ha. This value appears to relate to the overall red-line boundary and does not reflect that the site is currently 1 residence with a large garden and is proposed to increase to 9 residential dwellings. The value

used within the calculator should be reviewed to ensure that the increase to 9 dwellings is accounted for.

- The calculator uses a figure of 10 dwellings with an average occupancy of 2.3, however the submitted Flood Consequence Assessment refers to 'nine 4 bedroomed dwellings'. We note that the PAC report refers to two potential options of either 9 or 10 dwellings. Clarification on the number of dwellings and number of bedrooms in the dwellings is required as the current calculation is based on 10 dwellings and 23 occupants which does not correspond with 9 4-bedroomed dwellings. The calculator should be updated to reflect the clarified proposal.
- Consideration of the construction area in relation to resultant wetland area is needed to ensure that the wetland functional area corresponds with the area calculated to be required. Associated infrastructure such as banked sloping sides, areas between ponds etc cannot be considered to be part of the functional wetland area calculations in terms of capacity for Phosphate deposition. Clarification on the 'new land use' areas is required as currently 0.65ha is given as 'water' which is less than the 0.8ha that the neutrality report states is required to offset 0.5kg/TP/ha.

Should you conclude that the proposed development is likely to have a significant effect on the SAC, please consult us on your Appropriate Assessment under Regulation 63 of the Conservation of Habitats and Species Regulations 2017 (as amended).

Flood Risk

The planning application proposes highly vulnerable development of 9 residential units. Our Flood Risk Map confirms the site to be within Zone A of the Development Advice Map (DAM) contained in Technical Advice Note (TAN) 15: Development and Flood Risk (2004). However, the Flood Map for Planning identifies the application site to be at risk of flooding and falls into Flood Zone 2 (Rivers) and the TAN15 Defended Zone.

Section 6 of TAN15 requires the Local Planning Authority to determine whether the development at this location is justified. Therefore, we refer you to the tests set out in section 6.2 of TAN15. If you consider the proposal meets the tests set out in criteria (i) to (iii), then the final test (iv) is for the applicant to demonstrate through the submission of an Flood Consequences Assessment (FCA) that the potential consequences of flooding can be managed to an acceptable level.

We have reviewed the FCA undertaken by Nicola Sugg, dated September 2022, reference NS_0140_01 V 1.0. Our advice to you is that the FCA shows that the risks and consequences could be managed to an acceptable level, provided a planning condition is attached to any permission granted as follows:

Condition: No development shall commence until finished floor levels have been submitted to and approved in writing by the Local Planning Authority.

- Details to ensure that finished floor levels will be set at a minimum of 15.2mAOD.

The development shall be carried out and subsequently maintained in accordance with the approved details and plans.

Justification: The finished floor levels should be submitted to ensure necessary measures are agreed prior to commencement of development and implemented to reduce the risk of flooding to the development.

As it is for your Authority to determine whether the risks and consequences of flooding can be managed in accordance with TAN15, we recommend you consider consulting other professional advisors on matters such as emergency plans, procedures and measures to address structural damage that may result from flooding. Please note, we do not normally comment on or grant the adequacy of flood emergency response plans and procedures accompanying development proposals, as we do not carry out these roles during a flood. Our involvement during a flood emergency would be limited to delivering flood warnings to occupants/users.

Protected Species

We note that the bat report submitted in support of the above application (Evans, C., September 2022, Bat Activity Survey Report, Leigh Ecology Ltd) has identified that bats are not using the application site.

We concur with the avoidance and mitigation measures described in the bat report and would welcome the inclusion of the reports in the 'approved list of plans / documents' condition within the decision notice should consent for the project be granted.

Other Matters

Our comments above only relate specifically to matters included on our checklist, *Development Planning Advisory Service: Consultation Topics* (September 2018), which is published on our [website](#). We have not considered potential effects on other matters and do not rule out the potential for the proposed development to affect other interests.

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

Rachael Burke

Cynghorydd - Cynllunio Datblygu / Advisor - Development Planning
Cyfoeth Naturiol Cymru / Natural Resources Wales