

FAO Philip Forster

12/09/2019

Dear Philip,

PROPOSAL: ERECTION OF 11 NO. DWELLINGS COMPRISING 4 NO. ONE BED APARTMENTS, 2 NO. TWO BED HOUSES, 2 NO. THREE BED HOUSES AND 3 NO. FOUR BED HOUSES AND ALL ASSOCIATED CAR PARKING, LANDSCAPING AND HIGHWAY WORKS

LOCATION: Land at Gwynant, Plas Madoc, Acrefair, Wrexham

Thank you for consulting Natural Resources Wales (NRW) about the above, which was received on 29/07/2019.

We have significant concerns with the proposed development as submitted. We recommend that you should only grant planning permission if the scheme can meet the following requirement. Otherwise, we would object to this planning application.

Requirement: A revised Flood Consequences Assessment (FCA) is required to demonstrate the risks and consequences of flooding can be managed to an acceptable level.

Flood risk

The planning application proposes highly vulnerable development (residential). Our Flood Risk Map, which is updated on a quarterly basis, confirms the site to be within Zone C2 of the Development Advice Map (DAM) contained in TAN15, and within the 0.1% (1 in 1,000) annual probability event (AEP) flood outline on the NRW Flood Risk Map.

We refer you to Section 6 of TAN15 and the Chief Planning Officer [letter](#) from Welsh Government, dated 9 January 2014, which affirms that highly vulnerable development should not be permitted in Zone C2 (paragraph 6.2 of TAN15). The justification tests in paragraph 6.2 of TAN15 do not apply to highly vulnerable development in Zone C2

Notwithstanding this policy position, we have reviewed the FCA to provide you with technical advice on the acceptability of flooding consequences in accordance with Appendix 1 of TAN15, following receipt of the overriding planning reasons from your Authority on 29 July 2019.

Our advice is that the FCA fails to demonstrate that the risks and consequences of flooding can be managed to an acceptable level in line with TAN15; please see the advice below for further details.

We have reviewed the Flood Consequences Assessment (FCA) prepared by WSP (ref: 70049679/FCADS/01, dated February 2019). We note that some hydraulic modelling work has been undertaken in support of the FCA; please note that we have not reviewed the hydraulic model or model files. We provide the following comments on the FCA:

- The FCA identifies Rhosymedre Brook as the primary source of flood risk at the site. This watercourse is partially culverted and flows to the west of the proposed development site. The flood risk data within the FCA is based on hydraulic modelling work undertaken by WSP, which utilises the existing NRW model (Cefn Mawr and Acrefair Flood Risk Mapping Project, 2013). The FCA explains that there is some uncertainty relating to connectivity of culverts along the watercourse and that it has used the most conservative scenario when assessing flood risk at the site
- The FCA has considered a range of free flowing and culvert blockage scenarios, and has considered a 45% allowance for climate change, which is welcomed. The FCA identifies Site 1 and Site 2 to be at risk in the 1% AEP event with an allowance for climate change, for both free flowing and blockage scenarios. The difference in flood levels expected at the site when considering a blockage is minimal; however, this is based on a 67% blockage, and not a 95% blockage which is what we would expect the FCA to consider (in accordance with [OGN 100: Modelling blockage and breach scenarios](#)) unless sufficient evidence can be provided to justify why a 95% blockage does not need to be considered.
- The flood level derived for the 1% AEP 67% blockage event with an allowance for climate change is 119.789 m AOD for Site 1 and 119.213 for Site 2 (with no flooding of Site 3). These levels are the same as those derived for the free-flowing scenario. The FCA proposes to mitigate flood risk posed to the dwellings, by raising finished floor levels 150 mm above the expected flood level for the 1% AEP event with an allowance for climate change. This would result in the proposed dwellings being designed to be flood free for this event. However, A1.14 of TAN15 requires the entire site to be designed to be flood free in the design event, which is the 1% AEP 95% blockage event with an allowance for climate change. The current proposal would result in flooding of highly vulnerable elements of the site, including parking areas and gardens. The proposal therefore fails to comply with A1.14 of TAN15.
- Flooding of the access route is expected in the 0.1% AEP blockage event, based on the model output figures included within the FCA. The FCA does not provide any commentary on the flood depths or velocities expected in this event and therefore fails to comply with A1.15 of TAN15. We therefore strongly recommend the North Wales Council's Regional Emergency Planning Service (NWCREPS) is consulted in respect to whether it considers that safe access and egress could be provided to the site in the event of a flood.
- In respect to flood risk elsewhere, the FCA states that the site was previously used for residential development and that the footprint of the proposal is contained within

the existing boundary of the site, and no major ground works are proposed within the site boundary. This assessment will need to be revisited if the mitigation measures required to comply with A1.14 above involves land raising.

Should you grant planning permission contrary to policy, the applicant should be required to submit a revised FCA prior to determination of the application. We can advise you whether the revised FCA is in accordance with the technical criteria in Appendix 1 of TAN15. If no further information is submitted, or the revised FCA fails to demonstrate that the consequences of flooding can be acceptably managed over the lifetime of the development, then we object to this application.

Please inform us, in accordance with paragraph 11.7 of TAN15, if you are minded to grant permission for the application contrary to our advice.

Finally, as your Authority will be aware, under the Town & Country Planning (Notification) (Wales) Direction 2012 and more specifically Category I relating to Flood Risk Area Development, where the Local Planning Authority is minded to grant permission, there is now a requirement to refer applications for emergency services or highly vulnerable development within Zone C2 to Welsh Government. Therefore, if you are minded to grant permission for this application, we believe it would need to be referred to the Welsh Ministers for consideration.

Surface water drainage

We note that the application documents include a surface water drainage strategy. We would advise that Wrexham County Council, in its duty as the SuDS Approving Body (SAB) and Lead Local Flood Authority (LLFA), is consulted in order to advise on the suitability of the drainage design, including techniques available to calculate surface water rates of discharge and infiltration rates, and to ensure that off-site risks are not increased due to this development proposal, as well as in relation to recent legislative changes requiring developers to obtain drainage approval from the SuDS Approving Body (SAB). We do not provide advice in this regard.

Please do not hesitate to contact us if we can be of any further assistance to you.

Our comments above only relate specifically to matters that are listed in our 'Consultation Topics' document (September 2018) which is published on our website: <https://cdn.naturalresources.wales/media/686847/dpas-consultation-topics-august-2018-eng.pdf?mode=pad&rnd=131819256840000000>. We have not considered potential effects on other matters and do not rule out the potential for the proposed development to affect other interests, including environmental interests of local importance.

Advice for the Developer:

Pollution Prevention

During the construction phase you should take any precaution to prevent contamination of surface water drains and local watercourses. Oils and chemicals should be stored in bunded areas and spill kits should be readily available in case of accidental spillages.

For further guidance please refer to GPP 5 and PPG 6 at the following link:

<http://www.netregs.org.uk/environmental-topics/pollution-prevention-guidelines-ppgs-and-replacement-series/guidance-for-pollution-prevention-gpps-full-list/>

Waste produced during construction

Waste produced during the construction phase of your development must be dealt with appropriately and be in line with all relevant waste legislation including Duty of Care Regulations and Hazardous Waste Regulations. As part of your waste duty of care you must classify the waste produced:

- before it is collected, disposed of or recovered
- to identify the controls that apply to the movement of the waste
- to complete waste documents and records
- to identify suitably authorised waste management options
- to prevent harm to people and the environment.

Any waste removed from site will be subject to waste management controls. The links below provided information on how to classify waste and register as a waste carrier or hazardous waste producer:

<http://naturalresources.wales/waste/how-to-classify-and-assess-waste/?lang=en>

<http://naturalresources.wales/apply-for-a-permit/waste/?lang=en>

Further guidance can be found on the GOV website here:

<https://www.gov.uk/managing-your-waste-an-overview/duty-of-care>

The applicant should be advised that, in addition to planning permission, it is their responsibility to ensure that they secure all other permits/consents relevant to their development.

Yn gywir / yours sincerely,

Daniel Davies

Daniel Davies

Ymgynghorydd Cynllunio Datblygu / Development Planning Advisor

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