



**Cyfoeth
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Wales**

Ein cyf/Our ref: CAS-16016-R0G6
Eich cyf/Your ref: P/2015/0890

Llwyn Brain
Ffordd Penlan
Parc Menai
Bangor, LL57 4DE

Ebost/Email: Gareth.Thomas@cyfoethnaturiolcymru.gov.uk
Ffôn/Phone: (0300) 065 3786

Matthew Phillips
Planning Control Department
Wrexham County Borough Council
16 Lord Street
Wrexham
LL11 1LG

Date: 9th March 2016

Dear Mr Phillips,

**RESIDENTIAL DEVELOPMENT COMPRISING 80 DWELLINGS ASSOCIATED ROADS AND
OPEN SPACE
FORMER SITE OF BROTHER INDUSTRIES, CROESNEWYDD ROAD, WREXHAM**

Thank you for referring the above application, which we received on the 24th February 2016.

We have reviewed the submitted addendum to the Flood Consequences Assessment (JBA, 27 January 2016), and request that further information is provided as follows:

The applicant proposes to raise land levels on the site alongside the River Gwenfro to a minimum level of 96.3mAOD and to set property ground slabs to a minimum of 96.45mAOD. While the submitted addendum to the FCA shows that this will remove flood risk to the properties alongside the river (including the gardens), there is a consequent increase in flood risk downstream of the site. Paragraph 1.3.1 of the addendum states that in the 1% AEP plus climate change event with a blockage at the disused railway/spine road culvert, 'a peak in water levels increase of up to 20mm' was 'observed at localised points downstream'. Note that if the 0.1% AEP event is larger than the 1% AEP plus climate change event, the consequences on flood risk elsewhere should be quantified using this event, as per the requirement of A1.2 of TAN 15 Development & Flood Risk (2004).

Where hydraulic modelling has shown an increase in extent or an increase in depth*, or a change to the onset of flooding, or an impact to infrastructure within or connected hydraulically to the river channel, appropriate evidence must be provided to enable NRW to advise the Local Planning Authority on the merits and acceptability of the development proposal in comparison to any demonstrated increase in flood risk elsewhere. Given the sensitive receptors downstream (in particular the WAST development and the Wrexham Maelor Hospital), we would recommend that the applicant identify the location(s) and extent of the residual increase in flood risk elsewhere and provide detail on depth, velocity, rate of rise, speed of inundation and/or extent and the number and type of property and/or infrastructure affected.

* i.e. an increase in depth of metres to two decimal places (i.e. a change from a baseline of 100.000mAOD to 100.004mAOD would be reported as 100.00mAOD therefore no change, whereas a change from a baseline of 100.000mAOD to 100.005mAOD would be reported as

100.01mAOD therefore a positive change). Please see Section 5 of Natural Resources Wales' Good Practice Guidance, 'Producing flood risk hydraulic models and flood consequence assessments for development planning purposes', available at <https://naturalresources.wales/media/5568/gpg-101-producing-flood-risk-hydraulic-models-and-flood-consequence-assessments-for-development-planning-purpose-english.pdf> for further information.

We remind you of our other comments within our letter dated 16th December 2016.

Yn gywir / Yours' faithfully,



Mr. GARETH THOMAS
Swyddog Cyswllt Cynllunio / Planning Liaison Officer
Epost/Email: Gareth.Thomas@cyfoethnaturiolcymru.gov.uk

Deialu uniongyrchol/Direct dial: (0300) 065 3786 **Siaradwr Cymraeg / Welsh Speaker**



cc: The Planning Consultancy