

From: Irwin, Graeme [<mailto:graeme.irwin@environment-agency.gov.uk>]

Sent: 29 April 2019 09:16

To: Jenman, Rebecca

Subject: RE: 191350 - Riverside Nurseries, Whitchurch, Ross-On-Wye, Herefordshire HR9 6DF

Good morning Rebecca.

I have received a consultation on a glasshouse extension at Riverside Nurseries to accommodate a small biomass boiler. I would have no bespoke comments to offer on this one and would recommend you seek the views of your internal drainage and public protection teams respectively. I have also attached a copy of our Standing Advice for a commercial/industrial extension (less than 250m2) within Flood Zones 2/3.

Regards.

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My normal working week is Monday – Thursday.



Environment Agency Standing Advice to Local Planning Authorities on Development and Flood Risk

Minor Development (Sub-section 17 within the Flood Risk and Coastal Change Section of the NPPG), Domestic & Commercial/Industrial extensions (less than 250m² & curtilage development) within Flood Zone 3 & Flood Zone 2 (and historic)

Process: Formal EA response is 'NO COMMENT'

The following is advice for the benefit of landowner/occupier and the environment:

FRA requirements: The NPPG contains a useful checklist for FRAs at sub-section 26 of the Flood Risk and Coastal Change Section. It is suggested that applications be accompanied by a simple Flood Risk Assessment (FRA) which confirms in writing that as a minimum:

EITHER

- (1) Floor levels within the proposed development will be set no lower than existing levels AND,
- (2) Flood proofing of the proposed development has been considered by the applicant and incorporated where appropriate to 1% (1 in 100 chance each year) river flood level or 0.5% (1 in 200 chance) tidal and coastal level, including climate change allowance.

OR **preferably** that:

- (3) Floor levels within the extension will be set 600mm above the known or modelled 1% (1 in 100 chance each year) river flood level or 0.5% (1 in 200 chance each year) tidal & coastal flood level (including climate change allowance). This should be demonstrated by a plan to Ordnance Datum/GPS showing finished floor levels relative to the known or modelled flood level.

Background: For proposed extensions within Flood Zone 3/2, the main aspect of flood risk to consider is that the development itself may be at risk of flooding. The most effective means of addressing this risk is through submission of a simple FRA. This should identify the flood risks and set out the proposed measures to mitigate that risk. For most developments within Flood Zone 3/2, submission of a site plan showing floor levels related to Ordnance Datum/GPS should confirm that the site is above flood level. Where such a plan indicates otherwise or is not provided, mitigation measures would focus on controlling floor levels and incorporating flood proofing into the design of the extension.

Floor levels: From a flood risk view point, the ideal mitigation in terms of floor levels is to ensure that these are set to above the known or modelled 1%(1 in 100 chance each year) river flood level or 0.5% (1 in 200 chance each year) tidal and coastal flood level at that location. However, in the case of an extension it will often not be practical to raise floor

LPA Process Note

levels given the potential effects on other issues such as access (including that for disabled users), usability and visual amenity.

‘Flood proofing’: The Environment Agency recommends that in areas at risk of flooding, consideration be given to the incorporation into the design and construction of the development of ‘flood proofing’ measures. These include removable barriers on building apertures such as doors and air bricks and providing electrical services into the building at a high level so that plugs are located above possible flood levels. Such measures could also be considered to protect existing property.

Additional guidance, including information on kite marked flood protection products, can be found on the Environment Agency web site at <https://www.gov.uk/prepare-for-a-flood>.

Details of flood resilience and resistance techniques can be found in ‘Improving the Flood Performance of New Buildings - Flood Resilient Construction’ (DCLG 2007).
http://www.planningportal.gov.uk/uploads/br/flood_performance.pdf

Residual risks: It should be noted that if the existing building is in a 'low spot' the measures adopted above in terms of maintaining floor levels at existing levels and flood proofing will not necessarily eliminate risks during a flood event. Applicants should be asked to check ground levels if in doubt about this. Even where it is possible to ensure floor levels are set above the known or modelled 1% river and 0.5% tidal and coastal flood level, *flood risks will remain for an event that exceeds this magnitude*.

Note: Development which involves a culvert or an obstruction to flow on an Ordinary Watercourse will require consent under the Land Drainage Act 1991 and the Flood and Water Management Act 2010. In the case of an Ordinary Watercourse the responsibility for Consenting lies with the Lead Local Flood Authority (LLFA). In an internal drainage district, the consent of the Internal Drainage Board, instead of the LLFA, is required for the above works under Section 23 of the Land Drainage Act 1991. An Ordinary Watercourse is defined as any watercourse not identified as a Main River on maps held by the Environment Agency and DEFRA. For further information on Ordinary Watercourses contact the LLFA.

Flood level data to assist the FRA and Flood Management Plan (where available) may be obtained from our Area Customers & Engagement team on telephone 03708 506506; Enquiries_WestMids@environment-agency.gov.uk

As of November 2012 (Flood Map update) in Shropshire, Herefordshire, Worcestershire & Gloucestershire Area, the Flood Zone 2 outline includes historical flooding data.

Last updated: **Sept 18.**

Contact: Environment Agency, Sustainable Places Team, Shropshire Herefordshire Worcestershire & Gloucestershire Area.
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