

Ms Caroline Ford  
Cherwell District Council  
Planning & Development Services  
Bodicote House White Post Road  
Bodicote  
Banbury  
OX15 4AA

**Our ref:** WA/2021/129425/03-L01  
**Your ref:** 21/03558/OUT  
**Date:** 23 February 2023

Dear Ms Ford

**Residential development for up to 250 dwellings including affordable housing and ancillary uses including retained local wildlife site, public open space, play areas, localised land remodelling, compensatory flood storage, structural planting and access**

**Land on the north east side of, Gavray Drive, Bicester**

Thank you for re-consulting us on the above application following the submission of further details.

In response to our previous comments dated 20 July 2022, the applicant has undertaken further work on the flood risk modelling to address our previous concerns.

We have reviewed the Hydraulic Modelling Report dated 3 October 2022, reference 15114-HYD-XX-XX-RP-D-002 Issue P1, dated 03/20/2022. We have also carried out a detailed review of the hydraulic modelling referred to in this report and submitted directly to us by the applicant.

The submitted detail does not satisfactorily address our flood risk concerns. We therefore **maintain our objection** set out in our previous responses dated 19 January 2022 and 20 July 2022.

I enclose a copy of flood model review comments. The model is not currently considered fit for its intended use and we are unable to verify how the proposed development is likely to be affected by flooding in the future due to climate change and whether any mitigation is acceptable in order to ensure flood risk does not increase as a result of this development.

Our concerns relating to the sequential approach of development and the proposed flood storage mitigation have not been resolved. The applicant should refer to the

comments in our response dated 19 January 2022 in relation to the sequential approach and flood storage.

The application as submitted is contrary to the National Planning Policy Framework and Local Plan Policy ESD6 and Bicester 13.

### **Advice to applicant**

I enclose a copy of our flood model review comments.

While some issues from the previous modelling have been resolved there remain significant issues which need to be addressed before the modelling can be considered fit for purpose. The most significant issues are highlighted below. Full details of our review and the required actions are contained within the separate spreadsheet attached. All red and amber comments must be addressed and additional information submitted to us where requested.

- Inflow boundaries have not been applied correctly and the hydrological calculations need to be revisited.
- Inflows have been incorrectly applied, showing the results of the 0.1% AEP event for the 1% scenarios.
- The downstream boundary is applied incorrectly and should be moved, along with the 2D boundary.
- Changes in 1D model parameters need to be justified.
- Building representation doesn't appear to have been updated in the latest model submission.
- Model stability still needs improving to reduce oscillations in stage during model runs; hydrographs show a plateau at the beginning which needs addressing.
- With gauge data available this should be used to calibrate the model where possible or sufficient justification provided for why this is not being done.

A full review of the hydrology has now also been carried out which has highlighted improvements that need to be made to bring this up to the required standard. The main points are highlighted below with full commentary provided in the attached spreadsheet. All red and amber comments must be addressed and additional information submitted to us where requested.

- As above, despite a level gauge being present this data has not been fully optimised to help improve flow estimates in this study.
- The previous hydrology study has not been fully used to replicate and improve methods used in that study.
- No evidence has been provided to support checks of catchment boundary, geology or detailed sewer networks.
- Only one Flow estimation point has been used for the whole catchment, more points are required.

- No sensitivity testing has been carried out to assess the critical storm duration for the site.
- Catchment data has not been sufficiently used; hydrometric data should be used to improve flow estimations and reduce uncertainty in the results.

### **Advice to LPA**

If you are minded to approve this application for major development contrary to our flood risk objection, we request that you contact us to allow further discussion and/or representations from us in line with the [Town and Country Planning \(Consultation\) \(England\) Direction 2021](#).

This statutory instrument prevents you from issuing planning permission without first referring the application to the Secretary of State for Housing, Communities and Local Government (via the National Planning Casework Unit) to give them the opportunity to call-in the application for their own determination. This process must be followed unless we are able to withdraw our objection to you in writing. A failure to follow this statutory process could render any decision unlawful, and the resultant permission vulnerable to legal challenge.

Yours sincerely

**Miss Sarah Green**  
**Sustainable Places - Planning Advisor**

Direct dial 0208 474 9253

Direct e-mail [planning\\_THM@environment-agency.gov.uk](mailto:planning_THM@environment-agency.gov.uk)

Enc. Environment Agency model review comments\_V2  
Environment Agency hydrology review comments\_V1