

For the attention of Rebekah Morgan

Development Management  
Cherwell District Council  
Bodicote House  
Banbury  
OX15 4AA

**PAUL OWEN**  
ASSOCIATES  
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TECHNICAL ADVISERS

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Ref: 220029/GHB

Dear Ms Morgan,

### **Drive-Through, Bicester**

We refer to Oxfordshire County Council's comments dated 2 September 2021 on the drainage for the planning application 21/02286/F and respond as follows.

The site's previous use as allotments means that a greenfield runoff for surface water should be assumed for the existing condition. A relatively small area of the site is to be developed (approximately 0.19Ha of the 1.18Ha total being only 16% of the application site). The developed area is subject to planning requirements to restrict the surface water runoff and to control the quality of discharged surface water.

**Surface Water Quality Standards** – In response to the comments regarding water quality, as part of our further SUDs review, we have changed the design of the outfall and attenuation. The attenuation is now being provided in a detention basin (rather than underground storage) and the outfall to the ditch is via a swale. The detention basin is proposed to be located in the soft landscaping area adjacent to the developed site and the swale discharges into the existing drainage ditch at the southern corner of the site. These SUDs features provide the required mitigation for discharge to the existing ditch; the inclusion of the detention pond and swale obviate the requirement for a petrol interceptor. Section 6d of the drainage strategy addresses issues pertaining to water quality.

**Surface Water Management** – The poor soakage rate reported in the site investigation does not allow for the disposal of surface water to the ground so it is proposed to discharge the surface water to the ditch to the south east of the site, restricting the flow to the practical minimum of 5 l/s and providing attenuation storage for the critical 100 year storm with an allowance of 40% for climate change. The attenuation will in the form of a detention basin and the outflow will be discharged to the outfall in a swale through a flow control device. These SUDs features will not be lined and there will be some unquantifiable infiltration which has not been taken into account in the drainage calculations; as a result, it is expected that there will be some additional capacity in real life.

It is noted that whilst a site in Flood Zone 2 or 3 should be sequentially assessed, the site has an allocation for employment use through the Local Plan, as such, in accordance with the NPPF a sequential test is not required.

We have referred to the floodwater storage that is provided on the site. We have included a section in our drainage strategy explaining the strategy for compensating the loss of floodwater volume during a 1 in 100 year plus climate change flood event that has been agreed in principle with the Environment Agency (see section 4,c,v). The flood volume compensation storage is a separate storage system to that provided for the surface water management.

We attach the completed Pro-forma included within their comments for submission, together with the revised Drainage Strategy Rev P7 with the new site layout for re-submission.

In summary, the proposed inclusion of the SUDs features in the adjacent soft landscaping and the control of the outfall flow rate to the practical minimum is intended to meet with the SUDs requirements from Oxford County Council. The SUDs hierarchy approach has been applied in selecting the most appropriate surface water drainage solution for the site which controls discharge to the local watercourse while maintaining the required water quality control standards.

Your Faithfully

A handwritten signature in blue ink, appearing to read 'G. Bayes' with a stylized flourish at the end.

Gavin Bayes

for

Paul Owen Associates Limited