## **Edward Snook**

From:	Kimberly Corps
Sent:	28 August 2015 09:35
То:	Scanning; SBC Development Control
Cc:	Gary Palmer
Subject:	FW: LEAD LOCAL FLOOD AUTHORITY (LLFA) RESPONSE TO S/OUT/15/0753
	Lotmead Site, Eastern Villages, Swindon, Wilts Outline Planning Application for up
	to 2,600 dwellings

Good morning,

Please add the comments below from the Drainage Engineer to S/OUT/15/0753.

Many thanks,

Kim

From: Richard Bennett
Sent: 27 August 2015 18:37
To: Gary Palmer; Kimberly Corps
Cc: Claire Cornelius; Kevin Walker; Simon Masters
Subject: LEAD LOCAL FLOOD AUTHORITY (LLFA) RESPONSE TO S/OUT/15/0753 Lotmead Site, Eastern Villages, Swindon, Wilts Outline Planning Application for up to 2,600 dwellings

LEAD LOCAL FLOOD AUTHORITY (LLFA) RESPONSE TO S/OUT/15/0753 Outline Planning Application (with means of access off Wanborough Road not reserved) for the demolition and/or conversion of the existing buildings on site, and redevelopment to provide up to 2,600 dwellings, up to 1,765 sqm of community/retail uses (Use Class D1/D2/A1/A3/A4), up to 3,000 sqm of business/employment use (Use Class B1), a primary school, open space, strategic landscaping and other green infrastructure (including SUDs and areas for nature conservation), other associated road and drainage infrastructure, indicative primary access road corridors to the A420 and improvements and widening of existing route off Wanborough Road to provide pedestrian, cycle and bus access. Lotmead Site Eastern Villages Swindon Wilts

Dear Gary, Kimberly,

We have now reviewed the drainage strategy within the site FRA for the above development and we require further information to ensure the site post development will not increase flood risk elsewhere and ensure biodiversity at the site will be protected.

## **Surface Water Drainage**

The surface water drainage strategy outlined in the FRA is proposing a network of swales and positive drainage conveying water to strategic attenuation basins. The attenuation basins are located within or adjacent to Flood Zone 2. These attenuation basins once constructed have the potential to become part of the flood plain and will be compromised due to the outfalls potentially being surcharged and restricted during flood events. This could cause the basins to overflow and increase the site runoff into the Dorcan Stream and River Cole in storm events lower than the 1 in 100 year plus climate change event. Therefore we feel the current drainage strategy is insufficient to manage surface water safely on the site.

We will expect source control measures to be implemented wherever possible such as Highway swales and filter strips, permeable paving, green roofs and rainwater harvesting. The FRA mentions that some of these could be considered at detailed design stage. The imminent New Eastern Villages Drainage Strategy will require these measures to be investigated fully and incorporated wherever possible. We will expect measures such as permeable

paving, swales and filter strips, to be provided for all trafficked areas to minimise any pollutants from being discharged into the watercourses.

The implementation of source control measures wherever possible should limit the need for large attenuation basins and any required final attenuation features should be designed to be shallow and an adequate buffer provided from flood zone 2 to ensure that they and any outfalls are above the 1 in 100 year plus climate change flood outline. The attenuation features can form part of the public open space but it must be shallow and gradually sloped to ensure ease of maintenance.

Therefore we require a suitable drainage strategy to show that a drainage scheme inclusive of SuDS, can be accommodated on the site to ensure that surface water runoff will be safely managed not to increase the risk of flooding elsewhere, in accordance with Paragraph 103 of the National Planning Policy Framework (NPPF) and Policy EN6 of the adopted Local Plan 2026.

## **Ordinary Watercourses**

There are several existing watercourses that flow through the site. Watercourses and land adjacent to them are particularly valuable for wildlife and it is essential they are maintained. Policy EN4 'Biodiversity and Geodiversity' of the Swindon Local Plan 2026 (adopted March 2015), states that direct and indirect impacts on biodiversity will be avoided through the maintenance of sufficient buffers. Policy NC3(c) 'New Eastern Villages' states that biodiversity at this site will be protected, integrated and enhanced.

Therefore the Lead Local Flood Authority (LLFA) will not support any culverting or filling in of existing watercourses /ditches. Any work which will have an adverse effect on the ecology of a watercourse or will impede or restrict the flow of water, requires land drainage consent from the LLFA. The LLFA will consider necessary culverting of a watercourse such as for a strategic highway route and the applicant will need to apply for consent separately to the planning process.

All existing watercourses and ditches need to be clearly marked on the site plans to ensure they are being maintained. An adequate buffer needs to be provided to ensure biodiversity at the site will be protected, the watercourses can be easily maintained in the future and any existing surface water flow routes can be maintained through the site. The watercourses need to be included within the final maintenance management strategy for the development.

I trust the above clearly outlines our concerns and what is required to overcome them but please get back to me if you require any further clarification.

Regards,

Richard

Richard Bennett Drainage Engineer Highway Infrastructure Asset Management Swindon Borough Council Tel: 01793 466249 Mob: 07823 525345