From: NIk Antoniou <njaltd@gmail.com>
Sent: 29 October 2024 16:25:30 UTC+00:00
To: "Tamara.Dale" <Tamara.Dale@horsham.gov.uk>
Subject: DISC/24/0103 - Condition 3 - Drainage - Rosewood Barn
Attachments: drainage strat - 23_10_24.pdf, C3089_101_PL4_Drainage Strategy Sheet 1 of 2.pdf, C3089 Drainage Report_P4.pdf

Dear Tamara

I note the recent consultation received in respect of Condition 3 (Drainage) and would like to take this opportunity to respond to the comments and similarly, attach a revised report and layout for your kind attention.

"Greenfield runoff rates have been calculated for an area of 0.09ha, however the proposed impermeable area is specified as 0.012ha. Greenfield runoff rate calculations should be refined to the 0.012ha barn roof area and should be calculated using FEH rainfall data, not FSR rainfall data."

Calculations updated to suit FEH rainfall data. It should be noted that whilst the greenfield runoff calculations are on the calculations they are not relevant as the proposed scheme is the conversion of an existing barn which discharges to the stream. Existing runoff calculations confirm what the existing discharge rate is and to ensure at least a 50% betterment.

"The applicant should justify why 1l/s has been deemed the minimum achievable discharge rate. As per Section 5.4.4 of the LLFA Policy

o The applicant must provide justification as to why discharge is not set to be restricted to greenfield rate. If sufficient justification is provided, the applicant will be required to subsequently evidence brownfield runoff rate calculations as per Section 24.5 of the CIRIA SuDS Manual (C753), to evidence a minimum 50% betterment on existing runoff rate.

o Alternatively, the applicant should evidence calculations of proposed outfall flows, limited to the greenfield 100% Annual Exceedance Probability (AEP) runoff rate up to the 1% AEP + Climate Change storm events, or alternatives. Whilst updating the existing surface water model (if applicable), the applicant should change the rainfall data used, from FSR to FEH."

As above, due to the nature of the proposed site, the existing runoff calculations have been changed to an existing discharge rate. The existing discharge calculation has been carried out

using a reduced maximum rainfall rate of 35 mm/hr instead of the 75mm/hr used in the proposed calculations. This is to ensure that the proposed site is providing at least a 50% betterment. Within the drainage report included is a table to indicate what the existing discharge rate is for each storm and what % of betterment the proposed drainage network would provide with the smallest % of betterment being 58%.

"The drainage note and drainage strategy drawing indicate discharge will be restricted to 1l/s, whereas the Causeway model indicates discharge will be restricted by an orifice to 1.1l/s. There should be no discrepancies on the proposed outflow rate in the application submittals."

This has been updated to suit.

"The surface water pipes connecting Node S1 with S2 and connecting Node S3 with S5 are proposed at a slope of 1:102.1 and 1:142 respectively. In accordance with Building Regulations Part H, 100mm diameter surface water pipes should be designed with a minimum slope of 1:100. Invert levels of S1 and/or S2 are therefore required to be refined. The invert level of Node S5 should be defined now, in order to confirm pipe gradients between Node S3 and S5 are ≤1:100"

This has been revised to suit.

I trust the attached documents and comments noted provide sufficient clarity to enable you to move to discharge this condition, however, should you have any further questions or queries, please do not hesitate to contact me.

I look forward to hearing from you.

Kind regards

Nikolas Antoniou
BSc HONS DIPTP MRTPI
Chartered Town Planner
For and on behalf of NJA Town Planning Limited
01403 252231

www.njatownplanningltd.co.uk



This e-mail is for the intended addressee(s) only. The information it contains may be privileged and/or confidential. The un-authorised use, disclosure or copying of this e-mail, or any information it contains is prohibited and could, in certain circumstances be a criminal offence. If you are not the intended recipient please notify the sender immediately and delete the message from your system. NJA Town Planning Limited does not accept responsibility for any errors or problems that may arise through the use of internet communication and all risks connected with sending sensitive personal information are borne by you.