

Planning Department
Hinckley & Bosworth Borough Council
Hinckley Hub
Rugby Road
Hinckley

Lumax Reference: - LMX504/L01

Date: - 3rd December 2024

Re: Cadent Hinckley Application 24/00610/OUT

We have received a copy of the LLFA's response in regard to the above planning application Ref 24/00610/OUT at Cadent Brick Kiln Street, Hinckley.

As has been stated before, the applicant is applying for outline consent with all matters reserved. The client has elected to retain flexibility in the layout so that any future development can be tailored to the style of housing and layout which best suits the chosen development partner – these elements will be reviewed in consultation with the LPA at the correct juncture when detailed consent is applied for. The eventual layout could involve mews developments, terraced blocks, detached properties, a long straight road, a shared surface road or pedestrian area. Deliberately, no constraining decisions have been made as to the finished layout of the development. An illustrative block plan has been produced but this has only been done to demonstrate that the correct quanta of development can be achieved.

The LLFA have commented on the lack of drainage strategy provided in the report. However, this is not the case, and a drainage strategy has been provided within the report which, in our view, is sufficient in respect of the scale and outline stage of the application under consideration. Nevertheless, we have provided some clarification in this report to assist the LLFA in their review.

The LLFA have included this statement within their response.

*As per our previous response, and as whilst **the proposals appear suitable in principle**, no surface water drainage strategy plan has been submitted. This plan should include:*

- *Indicative SuDS layout including scale, level and depths*
- *Site level details (ideally contours) including indicative sewer runs with sufficient detail to show viability of the surface water proposals (i.e. can drain by gravity with suitable falls and cover).*
- *Outfall locations, with level, size and ownership details of each receptor.*

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The response therefore acknowledges that the LLFA have confirmed that the proposals appear suitable in principle. This is a critical point as approval in principle at this stage is all that the developer is seeking.

The LLFA concluded their response with the following request for further information.

Leicestershire County Council as Lead Local Flood Authority (LLFA) advises the Local Planning Authority (LPA) that the application documents as submitted are insufficient for the LLFA to provide a substantive response at this stage. In order to provide a substantive response, the following information is required:

- A surface water drainage strategy plan which includes the points noted above
- Confirmation of the proposed surface water discharge rates for each catchment (note that this must not exceed greenfield rates)

The LLFA have also stated in their response that the non-statutory technical standards for sustainable drainage systems (March 2015) contain a requirement that “all development **must** discharge at greenfield rates and volumes”. The assertion by the LLFA is factually incorrect and misrepresents the actual contents of the Non-Statutory Standards.

We have reviewed the non-statutory technical standards for Sustainable Drainage Systems which contain 14 targets S1-S14. Technical Standards S2, S3, S4 S5 and S6 relate to the control of peak flow and peak volume from development sites. The non-statutory nature of the standards is such that it is difficult to state whether these are rules that must be followed or guidelines. However, we will refer to them as rules and have outlined the rules below and how they apply to the site in question.

Peak flow control

S2 For greenfield developments, the peak runoff rate from the development to any highway drain, sewer or surface water body for the 1 in 1 year rainfall event and the 1 in 100-year rainfall event should never exceed the peak greenfield runoff rate for the same event.

S3 For developments which were previously developed, the peak runoff rate from the development to any drain, sewer or surface water body for the 1 in 1 year rainfall event and the 1 in 100 year rainfall event must be as close as reasonably practicable to the greenfield runoff rate from the development for the same rainfall event, but should never exceed the rate of discharge from the development prior to redevelopment for that event.

Rule S2 relates to **greenfield developments** and is not applicable to the previously developed site under consideration. However, it should be noted that this is the **ONLY** element of the non-statutory standards that stipulate that the runoff rate from the development **must** discharge at greenfield rates and volumes.

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Rule S3 states that for previously developed sites, rates must be as close as reasonably practicable to the greenfield runoff rate from the development for the same rainfall event but should never exceed the rate of discharge from the development prior to redevelopment for that event.

Rule S3 encourages development to attain greenfield rates if reasonably practical. In this case the applicant wishes to retain as much flexibility in the layout as possible – for sites with substantial open space and a reduced built form it may be practicable to increase storage volumes and maintain development aspirations and needs. For this development it is desirable to maintain as much flexibility as possible and space is at a premium – it is therefore not reasonably practical at this stage to reduce discharge rates further. The only absolute requirement in rule S3 is that the runoff rate from the proposed development must not exceed that of the existing development.

As a result of previous consultation with the LLFA, the drainage strategy provided with the application has set out two fully compliant approaches – the first to reduce discharge from the proposed development to 50% of the existing runoff rate – meeting the request of Severn Trent and vastly exceeding the minimum standards of Rule S3. This significantly exceeds the minimum requirements set out in point S3. However, we have also provided calculations for a restriction of the entire development to rates not exceeding the existing greenfield 1:100 and 1:1-year rates. Both approaches exceed the minimum requirements and more than comply with Rule S3

The second element of the Non-Statutory Standards relates to volume control and the rules are reproduced below.

Volume control

S4 Where reasonably practicable, for greenfield development, the runoff volume from the development to any highway drain, sewer or surface water body in the 1 in 100-year, 6 hour rainfall event should never exceed the greenfield runoff volume for the same event.

S5 Where reasonably practicable, for developments which have been previously developed, the runoff volume from the development to any highway drain, sewer or surface water body in the 1 in 100 year, 6 hour rainfall event must be constrained to a value as close as is reasonably practicable to the greenfield runoff volume for the same event, but should never exceed the runoff volume from the development site prior to redevelopment for that event.

S6 Where it is not reasonably practicable to constrain the volume of runoff to any drain, sewer or surface water body in accordance with S4 or S5 above, the runoff volume must be discharged at a rate that does not adversely affect flood risk.

Rule S4 relates to greenfield developments -it is the only element of the standards that stipulates runoff volumes must not exceed greenfield volumes.

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Rule S5 requests that volumes are retained as close as possible to the greenfield volumes but only stipulates that the volume must not exceed the pre-development volume.

In this instance the existing development was almost entirely impermeably surfaced. A detailed impermeable area analysis has shown the total impermeable area across the existing development was 4.77Ha. A review of FEH rainfall data shows that the total rainfall depth across a 6-hour 100-year event is 60.66mm – the total volume of discharge from the existing site is therefore 2,851m³. The proposed development will introduce a significant element of permeable space, and the total proposed impermeable area is estimated at 3.95Ha. The total proposed runoff volume is therefore 2,396m³. Although this analysis is simplified, it clearly demonstrates that the proposal will not increase the discharge volume and will in fact reduce the volume significantly.

Rule S6 deals with controlling the increase in volume between the pre-development and post development runoff volume. In this instance there is no increase in volume and rule S6 does not apply.

In conclusion, regarding discharge rates and volumes, we have set out a strategy that significantly exceeds the minimum requirements of the non-statutory technical standards for sustainable drainage systems. The LLFA's interpretation of the guidance implies that rule S3 and S5 do not exist and that all sites should be considered as greenfield – this is clearly not the case or rules S3 and S5 would not be required.

The LLFA have requested; a drainage strategy that includes details of Indicative SuDS layout including scale, level and depths; *site level details (ideally contours) including indicative sewer runs with sufficient detail to show viability of the surface water proposals (i.e. can drain by gravity with suitable falls and cover)* and *outfall locations, with level, size and ownership details of each receptor*. As discussed above, the application is being made in outline only and the indicative masterplan does not have sufficient detail to allow a detailed drainage layout to be constructed – there is no logical reason to draw a road on a plan where there may not be a road in the future, to show a sewer run where there may not be a sewer run in the future to serve a proposed property that may not be located at the position indicated in the future.

For the purposes of an outline application such as this, with all matters reserved, the principle of development is the important element. From a flood risk perspective the following points should be satisfied;

1. There are no overarching unmitigated flood risk issues.
2. The development will not increase flood risk elsewhere.

The Flood Risk Assessment submitted with the application has confirmed that the site is in FZ1 and at low risk from pluvial flooding – risk from other sources is also low and there are therefore no overarching flood risk issues.

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From a drainage perspective the following should be assured.

1. The development has a valid discharge point.
2. The discharge rate meets the requirement of S3 and S5 of the Non-Statutory Tech Standards
3. The development has sufficient space for any required attenuation calculated in accordance with S3 and S5.
4. The attenuation can discharge to the agreed discharge point.
5. The entirety of the development can drain to the attenuation feature.

We have reviewed the content of the Drainage Strategy as submitted and whilst we would contend that these matters are dealt with in the documentation already, we do agree that some further clarification could be beneficial.

The proposed illustrative masterplan is shown below.



As discussed, the masterplan is very deliberately illustrative. It has been provided to demonstrate the potential of the site and is not intended to be used to confirm the locations of any drainage internal roads, housing areas or landscaping zones. For the purposes of demonstrating a viable drainage solution, the area has been split into three separate catchments each intended to drain to a separate attenuation pond.

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The catchments and associated ponds are annotated as A, C and D on the insert of the masterplan. Based on the calculations included in the strategy the storage volumes required are 1012m³ (Pond A), 949m³ (Pond C) and 112m³ (Pond D). The illustrative masterplan has allowed a plan area of 1,500m² for Pond A, 1,300m² for Pond C and 200m² for Pond D. These figures are **outline** and include allowances for landscaping and access. The finished design may alter the catchment split depending on proposed development staging and layout. Nevertheless, it can be seen that the illustrative masterplan has allowed sufficient space for the ponds.

Discharge from the ponds is currently agreed with Severn Trent Water at a rate not greater than 50% of the existing rate. A connection is available through an existing surface water drain from the development at an invert level of 101.50m near Pond A. This existing surface water drain is understood to connect to a manhole in the nearby park at an invert level of 98.79. There are no existing levels on site lower than approximately 102.00m AOD and a gravity connection to this point is possible from all points of the development.

Pond A would be envisaged to have ground levels of around 102.60m and an invert of 101.60m. Pond C could be installed at a ground level of around 107.5.00m AOD and an Invert Level of around 106.50m AOD. Pond D could be installed at a ground level of around 110.60 and invert level of around 109.60m AOD. With each pond ~1m deep. There is flexibility in this and depending on final development levels shallower or deeper ponds may be accommodated.

Existing ground levels within the catchment of Pond A vary from 107m AOD to around 103m AOD and anticipated FFL'S in the catchment would be 107.150m AOD to 103.150m AOD. There is more than adequate fall for all potential plots in this area to drain to the pond. Similarly, Pond C and Pond D are at local low points within their respective catchments and all plots can drain to the local attenuation feature. Precise catchment splits and finished levels can be decided at the detailed design stage. We have provided an indicative drainage parameters plan with this email showing the locations of the proposed attenuation features and basic arrangement of catchment drainage.

The proposal meets all relative technical standards and planning requirements appropriate to this stage of application. From a drainage perspective, given the outline nature of the development, the only relevant points are whether the site can be sustainably drained – the documentation submitted together with this email demonstrates that it can. It is acknowledged that detailed design will be required in the future and as a result of this detailed design, catchment splits may change, and levels may be adjusted. However, there is no reasonable reason to suspect that an appropriate sustainable solution cannot be delivered.

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Please let me know if you require any further information or clarification.

Yours sincerely,

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