

LLFA Statement: 5/2019/3022 – Smallford Works, Smallford Lane, St Albans, Hertfordshire, AL4 0SA. Appeal Notification APP/B1930/W/20/3260479

Introduction

My name is John Rumble. I am the Head of Environmental Resource Planning at Hertfordshire County Council. I have a PGDIP in Town and Country Planning and a PGCert in Environmental Water Management. I have over 31 years' experience in Town and Country Planning, and approximately 8 years' experience in flood and water management. I am currently Vice-Chair of the Association of Sustainable Drainage Authorities (ASA).

I have been assisted in the drafting of this proof of evidence by Charlotte Kemp - SuDS and Watercourses Team Leader and Sana Shaikh – Sustainable Drainage Systems Officer:

This proof sets out the relevant policy and guidance; provides a chronology of the statutory responses the Lead Local Flood Authority (LLFA) has submitted to provide advice to the Local Planning Authority (LPA) on surface water flood risk and drainage for the site; and ends by reviewing the new information submitted in support of the appeal. Our responses are included in supporting information appended with this statement.

Sections of the NPPF

The below sections are the sections of the NPPF that the LLFA uses to look at flood risk.

Section 14 – Paragraph 163 (February 2019)

When determining any planning applications, local planning authorities should ensure that flood risk is not increased elsewhere. Where appropriate, applications should be supported by a site-specific flood risk assessment. Development should only be allowed in areas at risk of flooding where, in the light of this assessment (and sequential and exception tests, as applicable) it can be demonstrated that;

- a) Within the site, the most vulnerable development is located in areas of lowest flood risk, unless there are overriding reasons to prefer a different location;
- b) The development is appropriately flood resistant and resilient;
- c) It incorporates sustainable drainage systems, unless there is clear evidence that this would be inappropriate;
- d) Any residual risk can be safely managed; and
- e) Safe access and escape routes are included where appropriate as part of an agreed emergency plan

Section 14 – Paragraph 165 (February 2019)

Major developments should incorporate sustainable drainage systems unless there is clear evidence that this would be inappropriate. The systems used should;

- a) Take account of advice from the lead local flood authority;
- b) Have appropriate proposed minimum operational standards;
- c) Have maintenance arrangements in place to ensure an acceptable standard of operation for the lifetime of the development; and
- d) Where possible, provide multifunctional benefits.

Non-Statutory Technical Standards

The LLFA uses the Defra Sustainable Drainage Systems Non-Statutory technical standards for sustainable drainage systems, March 2015 as a basis for review. A summary table of these is included below, and I understand that a full copy will be provided to the Inquiry as a Core Document.

Non-Statutory Technical Standards		
Topic	Policy No.	Summary
Flood risk outside the development	S1	Uncontrolled surface water discharges.
Peak flow control	S2	Greenfield developments.
	S3	Previously developed sites.
Volume control	S4	Greenfield development.
	S5	Previously developed sites.
	S6	Unconstrained the discharges.
Flood risk within the development	S7	Drainage system design requirements – 1:30 year rainfall event.
	S8	Drainage system design requirements – 1:100 year rainfall event.
	S9	Exceedance routes for flows resulting from rainfall in excess of a 1 in 100 year rainfall event.
Structural integrity	S10	Designing to ensure structural integrity and reasonable levels of maintenance.
	S11	Suitability and quality of materials.
Designing for maintenance considerations	S12	Conditions where pumping can be considered.
Construction	S13	Mode of construction and communication with existing infrastructure.
	S14	Damage and rectification prior to completion.

Local Flood Risk Management Strategy 2 (LFRMS2)

The LLFA's Local Flood Risk Management Strategy 2 (LFRMS2), was approved in February 2019 and contains the LLFA's policies in relation to flood risk management, ordinary watercourses and sustainable drainage. The LFRMS2 is the policy approach of the LLFA. The full report of the Local Flood Risk Management Strategy for Hertfordshire will be made available as a Core Document.

LLFA Position

We previously provided comments to this planning application in our letters dated 04 February 2020 and 02 June 2020. This objection has been taken forward by the LPA as a reason for refusal under reason 4 on the decision notice dated 16 July 2020;

'The submitted surface water drainage assessment fails to address the discharge mechanism, the provision of greenfield run-off rates or clarification of restricted discharge via a control device. As such the application has failed to demonstrate that the proposals provide satisfactory and appropriate sustainable drainage. Further the application has not adequately demonstrated that the development would not adversely impact public water supply. As such the proposal fails to comply with the NPPF 2019'

04 February 2020

The LLFA provided our first statutory consultee response to the LPA on 04 February 2020. In this we reviewed the following information:

- Flood Risk Assessment reference 10033365-ARC-00-00-RP-DH-0001-P2 V03 dated 28 October 2019 prepared by Arcadis.
- Outline Drainage Strategy reference RMA-C1722c Issue 3 dated 28 August 2019 prepared by RMA Environmental.
- Phase 1 Geo-environmental Assessment reference 019-1714 dated July 2019 prepared by EAME Consultants.
- Proposed Illustrative Masterplan

Our main point of objection at this stage was the overall feasibility of the drainage strategy. This included the surface water discharge location and the rate at which surface water was proposed to be discharged from the site. The proposed surface water discharge location was to the Butterwick Brook which is classified as a Main River. In order for the site to discharge into the Brook it was proposed to incorporate a sewer requisition over third party land. This required permissions from third party landowners for the connection route and confirmation from the relevant water authority that they agree to the sewer requisition, which had not been provided. As the relevant permissions were not provided, this meant that the proposal did not have a feasible discharge mechanism. In addition, there was no capacity assessment of the watercourse downstream to ensure there is capacity for the proposed volumes and rates from the site therefore we were unable to determine if the proposed development would increase flood risk both on and off site. The basis for this objection point was in line with Policy 13 of LFRMS2 referring to the surface water discharge hierarchy in line with the Ciria SuDS Manual and the Non-Statutory technical standards, in addition to Policy S12 of the Non-Statutory technical standards.

Our other key point of objection was in relation to the proposed discharge rate off the site. the proposed discharge rate for the site was set at approximately 409l/s which would provide an approximate 50% betterment on the existing scenario. However, given the nature of the development and the opportunity to provide significant betterment the LLFA were of the view that this discharge rate is too high. The LLFA would expect all sites to discharge at the pre-developed greenfield run-off rate (regardless of if the site is previously developed) and where this is not possible a technical justification should be provided. This was not provided and the basis for this objection point is in line Policy S2 and S4 of the Non-Statutory Technical Standards and Policy 14 of LFRMS2.

Additional points of objection in our letter dated 04 February 2020 focused around management and treatment of surface water (Policy 21 of LFRMS2). The LLFA provide comments on planning applications in relation for flood risk. SuDS strategies should evidence a management treatment train to ensure water quality is provided. A surface water management and treatment train is critical

to the system to prevent water quality issues at the outfall to the river. This is to ensure that any quality issues related to the meeting of Water Framework Directive targets are achieved. It should also be noted that given the site's history, there is a high risk of landfill gas migration occurring across the site boundary. The applicant's assessment recommended a targeted site-wide investigation to risk assess the current on-site conditions and ensure there will not be any mobilisation of contaminants into the existing watercourse. The proposals put forward by the applicant incorporated a basin and a large below ground attenuation tank. An attenuation tank does not provide any water quality benefits

We acknowledge that the current planning application is for Outline permission. However, it is important that certain details are confirmed to ensure that the most appropriate drainage scheme can be implemented to ensure there will be no flood risk to the site and the surrounding area and to demonstrate that an appropriate scheme using the key principles of SuDS is achieved.

02 June 2020

The LLFA provided our second statutory consultee response to the LPA on 02 June 2020. In this we reviewed the following information:

- Outline Drainage Strategy reference RMA-C1722c Issue 6 dated 01 May 2020 prepared by RMA Environmental.

In this response, we acknowledged that the applicant had provided some additional supporting information, however the drainage strategy submitted raised some additional concerns. We therefore provided more detailed comments to aid the applicant in overcoming our objection. The focus of the objection letter was still based on the feasibility of the discharge location which had now been changed to an alternative location. The applicant was now proposing to discharge ditch along the eastern boundary of the site via an existing connection, however no further information relating to the ditch was provided. Therefore, the LLFA could not advise if this was a suitable discharge location or if there was sufficient capacity to accommodate flows from the site. It was noted that the applicant had been contact with the Local Highway Authority for third party permissions, however no evidence was submitted to support the scheme. Based upon the information supplied by the applicant, the LLFA are of the view that the ditch in question is a highways ditch and therefore not a suitable discharge location for the development. However, overall, it is unclear if this ditch is owned by the local highway authority and under their management. Insufficient information has been provided by the applicant to determine the ownership of this asset and its purpose.

The LLFA provided additional comments in relation to the proposed run-off rate which now had been reduced to approximately 14l/s which is the 1 in 100 year greenfield run-off rate for the site and whether the run-off rates could be restricted to Qbar (1 in 2 year greenfield run-off rate). Further comments were made in relation to the siting the proposed SuDS features and the potential structural and maintenance risk involved (Policy S10 and S12 of the Non-Statutory Technical Standards and Policy 16 of LFRMS2).

The final LLFA response letter to the planning application consultation was an objection, with additional information needed on the drainage strategy.

Surface Water Drainage Advisory Service

The LLFA offer a charged surface water drainage advisory service, where we are able to provide advice as to what is required in new development in relation surface water drainage; what the

relevant considerations are likely to be; and the information that should support a planning application. Advice is usually given in a form of a written letter and/or meeting where required.

Following the issuing of the letter dated 02 June 2020 and refusal notice issued by the LPA, a request for surface water drainage advice was received by the LLFA on 22 June 2020 by the applicant's consultant RMA Environmental. A subsequent site meeting was held 12 August 2020 with our advice letter sent to the applicant 21 August 2020. It was discussed with the applicant what information would be needed to overcome our outstanding objection to the planning application. The applicant has submitted our advice letter dated 21 August 2020 to the LPA as part of the appeal.

Additional Comments

Following the submission of the appeal, the Local Planning Authority requested comments from the LLFA via email on 09 December 2020 in relation to the comments provided by the appellant in their statement of case. The following statements from the appellant's statement of case were provided to the LLFA for comment via email;

'Drainage and Impact on Water Quality

5.41 A drainage survey of the ditch along the eastern site boundary was undertaken by Denetech on 24th September 2020. The preliminary plans showing the route of this ditch confirm that it connects to a tributary of the River Colne to the south of the North Orbital Road. The survey has therefore demonstrated that the ditch connects to an ordinary watercourse (the tributary channel) which in turn connects to a main river (the River Colne).

5.42 The existing drainage system on site is in a poor condition and it has not been possible to establish where all of the existing site drains, although the topographic survey of the site shows that the significant majority of the site slopes to the south and east, i.e. towards the eastern boundary ditch. A manhole has been identified in the verge to the south of the bus shelter on Smallford Lane which shows an inlet pipe entering from the direction of the existing access to the Smallford Works site, but no outlet pipes were visible (due to siltation).

5.43 The submitted Flood Risk Assessment proposes attenuating runoff on site and discharging at a peak rate of 14 l/s (the 100 year greenfield runoff rate) for all events up to and including the 100 year plus 40% for climate change storm. The Lead Local Flood Authority's guidance on surface water drainage requires all brownfield sites to "aim to achieve greenfield runoff rates" and it is considered, taking the large number of site constraints into account, that this requirement has been achieved.

5.44 The drainage survey has established connectivity of the eastern boundary ditch to a surface watercourse and this is considered to be a suitable discharge mechanism. A range of sustainable drainage (SuDS) techniques are possible on the site and these could utilise more above-ground SuDS features and achieve a lower discharge rate (e.g. Qbar) should that be necessary. It is noted that this is an outline application for up to 100 dwellings. What has been proposed is a technically sound solution for delivering the indicative masterplan of up to 100 dwellings. Alternative solutions may be proposed that results in the greater use of above ground SuDS, and a likely reduction in units, which may be utilised at the detailed design stage but should not be seen as a necessity'

The LLFA advised the LPA that whilst the applicant had undertaken additional works to confirm the suitability of the discharge location, we had not seen any additional information to support this, therefore we cannot comment on whether this would address our concerns. The LLFA provided the

following summary comments to the LPA via email on 15 December 2020 in relation to the comments provided;

'The LLFA's current position is an objection on flood risk grounds, with additional information needed on the feasibility of the drainage strategy. The reasons for objection as set out in our response are fundamental concerns with the proposed development in relation to surface water management and flood risk.'

The main concern at this stage is that the applicant has not provided a feasible discharge mechanism for surface water discharge. The applicant is currently proposing to discharge into a ditch within the vicinity of the site. It is currently unknown if this ditch is able to infiltrate or if there is onward connection into a watercourse and whether permission has been sought from any third parties for continued discharge into it. The LLFA are of the view that this ditch is a highway ditch and as such they would need permission to connect to a third party asset, so we need to also know whether any approach has been made to the Highway Authority. This is not watercourse so if the applicant is making the case that it is an ordinary watercourse and has downstream connection we need to see all of their evidence, including a full connectivity survey to the point of connection to the already mapped OWC or main river. Based on the information submitted with planning application, we would not regard this ditch as a feasible surface water discharge mechanism. Therefore, we are there not in a position to advise the LPA there is no risk of flooding to the development and its future occupants for the lifetime of the development and therefore not in accordance with the NPPF, Non-Statutory Technical Standards and HCC's SuDS Policies. The applicant needs to provide a feasible discharge mechanism for the surface water arising from the site in order to ensure appropriate management and mitigation of surface water flood risk and its impact on future occupants.'

Review of appeal information 19 January 2021

The applicant has submitted the following additional information to the LPA in support of the appeal:

- Smallford Works Ditch Survey Layout reference DT6939/SWDS/001 dated September 2020 prepared by Dene-Tech Services Ltd
- Letter from RMA reference RMA/LC1722 – Smallford Works Drainage Survey dated 15 January 2021 prepared by RMA
- LLFA Surface Water Drainage Advisory letter reference Preapp/2020/SADC/03 dated 21 August 2020

Following a review of the submitted information, this would not be sufficient to overcome our concerns as raised in our consultation responses. A survey layout has been provided which shows that the ditch along the eastern boundary of the application site is connected to the River Colne which addresses one of our concerns raised regarding the connectivity from the ditch to an existing ordinary watercourse or main river. However, this is just a layout drawing of the likely route of the ditch line and is not a full connectivity survey including photographic evidence, surveyed cross section to ensure capacity and a condition assessment regarding if the ditch is appropriate and adequate.

In order for the LLFA to consider this to be a suitable discharge location, the applicant needs to provide information relating the capacity and condition of the ditch as well as all the necessary third-party permissions for the connection. It should be noted that agreement from the owner of the ditch is also required for a modified connection from any surface water management system for the

site. If this is in fact a highways ditch, then that consent to connect, and discharge would need to be obtained from the Highway Authority.

The ditch along with eastern boundary of the site is currently not a mapped ordinary watercourse. For the LLFA to designate this ditch as an ordinary watercourse, we would require the full survey of the watercourse line which would include capacity and condition assessment. The LLFA would also need to notify all downstream landowners of designation and inform them of their riparian rights and responsibilities to ensure maintenance of the ditch. In the absence of an ordinary watercourse designation, the applicant needs to provide all the necessary evidence to secure connection from site, ensure there is enough capacity from the development and ensure the ditch can be maintained in perpetuity. However, we would like to clearly state how the purpose of this asset is not entirely clear. If it is just solely to serve the highway, then its function and capacity may not necessarily meet the criteria to be designated an ordinary watercourse in terms of its drainage function.

Use of pre-commencement condition

The current strategy cannot be addressed through a pre-commencement condition as the discharge location proposed requires third party permissions. Positive Conditions requiring works on land that is not controlled by the applicant, or that requires the consent or authorisation of another person or body would not meet the tests of reasonableness and enforceability as stated in Paragraph 55 of the NPPF.

If the ditch is classified as a highway ditch then this is not a suitable discharge location for the site as the purpose of the ditch is solely to drain the highway and is not sized to accommodate surface water drainage from the development. Without the permission from the relevant authorities and/or landowners and a capacity survey of the ditch, it is the LLFAs view that there is no prospect of a viable drainage strategy being approved and implemented.

I have considered whether this could be resolved through a negative, Grampian-style condition. The PPG advises that such conditions cannot be imposed where there are no prospects at all of the action in question being performed within the time-limit imposed by the permission. I have set out the relevant guidance below:

When can conditions be used relating to land not in control of the applicant?

Conditions requiring works on land that is not controlled by the applicant, or that requires the consent or authorisation of another person or body often fail the tests of reasonableness and enforceability. It may be possible to achieve a similar result using a condition worded in a negative form (a Grampian condition) – ie prohibiting development authorised by the planning permission or other aspects linked to the planning permission (eg occupation of premises) until a specified action has been taken (such as the provision of supporting infrastructure). Such conditions should not be used where there are no prospects at all of the action in question being performed within the time-limit imposed by the permission.

Paragraph: 009 Reference ID: 21a-009-20140306

Revision date: 06 03 2014

I do not consider that there is any prospect of the necessary consents from third parties being achieved for the following reasons:

In the LLFA's experience there is no prospect of a connection being agreed that permission would be granted for the development run-off to connect to the Highway drainage system. Fundamentally this is due to the lack of capacity in existing highway drainage systems and that they are in the main often inadequate to manage existing highway runoff to modern day requirements. Highways are also unlikely to accept responsibility for future maintenance arising from additional run-off from the residential development. It is for this reason that the LLFA would require consent from highways for any connection.

As part of our Surface Water Drainage Advisory Service, the applicant was advised of alternative discharge mechanisms and the information that would be required by the LLFA to secure this. An alternative discharge to Butterwick Brook located to the west of the site was discussed. In order to connect to the Butterwick Brook this would require permissions from Hertfordshire County Council as the riparian landowner. The applicant was provided with a contact for the Hertfordshire County Council Property team in order for them to progress this option. The Butterwick Brook as an alternative discharge location would address our concern regarding the provision of a feasible discharge mechanism as the brook is classified as a Main River. Main rivers are usually larger rivers and streams. They are designated as such and shown on the Main River Map. However, no further information has been provided by the applicant in pursuing this option.

Even if the necessary consents were obtained, it should be noted that with either discharge location, the drainage strategy would still need to address the issue of achieving the greenfield run-off rate (Q_{bar}) from the site. To achieve this, the proposed attenuation volume requirements would be higher than currently proposed therefore require additional space to accommodate larger SuDS features. This would require additional land take and could reduce the quantum of housing that could be delivered on the site. Both discharge locations also require adequate water quality treatment of the surface water to be discharged from the site which should be provided by an above ground SuDS management train. The current strategy is largely reliant on below ground tanks which does not provide any water quality treatment. The use of above ground features would also require additional space to be provided for SuDS. Whilst the details of the specific SuDS features can be dealt with in a pre-commencement condition, the LLFA require that the applicant is able to demonstrate that an appropriate scheme using the key principles of SuDS can be achieved and accommodated within the proposed site masterplan, and with the quantum of development sought by the outline permission.

Summary

At this point in time the information provided to the LLFA is insufficient to overcome our surface water drainage concerns for the above application. Therefore, the LLFA's current position is an objection on flood risk grounds, with additional information needed on the feasibility of the drainage strategy. The reasons for objection as set out in our response are fundamental concerns with the proposed development in relation to surface water management and flood risk.

At this stage the applicant has not provided a feasible discharge mechanism for surface water discharge. Therefore, we are not in a position to advise the LPA there is no risk of flooding to the development and its future occupants for the lifetime of the development and therefore not in accordance with the NPPF, Non-Statutory Technical Standards and HCC's SuDS Policies.

The applicant needs to provide evidence of a feasible discharge mechanism for the surface water arising from the site in order to ensure appropriate management and mitigation of surface water flood risk and its impact on future occupants.

