



BRIGHT PLAN CIVILS

Planning Inspectorate Reference: APP/W1715/W/22/3292580

15th September 2022
Appeal Ref. 3292580, Application Ref. F/20/89488
Our Ref: D1891

DRAINAGE CONSULTANT TECHNICAL NOTE - SEPTEMBER 2022

Please find our consultant statement to supplement the additional information provided in response to the Eastleigh Borough Council refusal, and consultee comments regarding surface water drainage for the proposed development at Satchell Lane, Hamble.

LOCAL PLANNING AUTHORITY COMMENTS AND CONSULTANT RESPONSES (IN RED)

Eastleigh Borough Council - Reason 5 for Refusal to Application No. F/20/89488 – 13 August 2021

*Insufficient information has been provided to the Local Planning Authority, as the competent authority, to enable it to determine that a suitable scheme for sustainable urban drainage for the proposed development would be provided which ensures that the hydrological and ecological interests of the Solent Complex are protected, as set out in the Conservation of Habitats and Species Regulations 2017. The application is therefore contrary to the requirements of Saved Policies 25.NC and 45.ES of the Eastleigh Borough Local Plan (2001-2011), Draft Policies DM6, DM8, DM10 & DM26 of the submitted Eastleigh Borough Local Plan (2016–2036) and the provisions of the National Planning Policy Framework. **The proposed surface water drainage system includes an assessment of surface water treatment and this is expanded on further below. This ensures sufficient treatment of runoff so that there is not an adverse effect on water quality from the site discharge.***

Delegated Report to Application No. F/20/89488 – 13 August 2021

Area of concern; Flooding and drainage:

- The development would cause local flooding from increased water run-off, affecting the use of Satchell Lane. **Runoff from the site will be captured by the surface water drainage system, via permeable pavement, gullies and rainwater pipes as well as level design towards sustainable drainage features. The captured runoff will be attenuated within the permeable pavement, geocellular storage tanks and ponds, and will be discharged to the surface water sewer at a maximum rate of 3.5l/s. The proposed runoff rate is equivalent to the greenfield runoff rate for the proposed hardstanding area and the calculations demonstrate the proposed system has sufficient attenuation volume – therefore the development will not cause local flooding or increased water run-off.***
- The water table is particularly high making flooding a real possibility, concern expressed for some of the existing Satchel Lane dwellings which would be sited next to the attenuation pond and at a low point in the land. **BPC do not fully understand the issue raised here, however the proposed surface water drainage features will not impact on the groundwater levels by displacement and so will not increase the groundwater flood risk to the existing dwellings.***
- Drainage and sewerage is already a constant challenge in the area and the additional housing would exacerbate these problems. **The proposed drainage scheme will require consultation with Southern Water, and as per Southern Water's response a study will be undertaken to establish any necessary reinforcements required to the public sewer network to allow connection. BPC concur with the proposed planning condition that occupancy of the development must be in accordance with an***

agreed timetable with Southern Water to allow any necessary network reinforcements, to ensure no increased sewer flood risk as a result of the development.

- Existing houses backing on to the site have suffered from the effects of poor surface water drainage resulting in underpinning works; alterations to flow patterns could cause further damage. The proposed drainage system will capture, attenuate, and discharge runoff to the sewer network as opposed to the existing situation of sheet runoff from the existing site. The development will therefore improve the surface water drainage of the site – thus providing improvement to surface water flood risk to the neighbouring houses.
- Concerns raised about the quality of surface water run-off and the impact this would have on the Hamble River, which now supports an oyster population. The proposed surface water drainage system includes an assessment of surface water treatment and this is expanded on further below. This ensures sufficient treatment of runoff so that there is not an adverse effect on water quality from the site discharge.

Ecology Officer, Holding Objection; Drainage:

- A detailed drainage strategy has been submitted with the application and indicates that surface water runoff from the application site would be managed through permeable paving, two cellular storage tanks and a storage basin. Surface water would be discharged at a rate of 3.5l/s into the public sewer network at the Halyards housing development off Satchell Lane. This is acceptable in principle since the ground investigation showed that infiltration is not feasible at the application site, and in the absence of any nearby watercourse. **No comment required.**
- The approach detailed here was established as acceptable in the previous application (O/17/80319) process although comments should be sought from and the HCC Flood & Water Team. **No comment required.**

Flood and Water, Holding Objection:

- written evidence required to demonstrate that Southern Water is willing to use their requisition powers over the private sewer or agreement provided from the third-party land owner. **As previously raised, Southern Water are obligated to approve the requisition when this is applied for under the Section 98 of the Water Industry Act (so this is not a valid point from the LPA). This is expanded on below.**
- confirmation of the actual invert levels of the proposed surface water sewer, as they are currently unknown, and they would have implications on the hydraulic calculations. **As previously raised, this is to be addressed by Southern Water during the requisition and/or S106 connection process. An initial appraisal of ground levels demonstrates a sufficient fall from the site here, and the outfall would be via a flow control manhole, so we disagree that there are any potential connection or hydraulic calculation implications here.**

Drainage Proposal

The supporting information indicates that surface water runoff from the application site would be managed through permeable paving, two cellular storage tanks and a storage basin. Additionally, surface water would be discharged at a rate of 3.5l/s into the public sewer network at the Halyards housing development off Satchell Lane. This is acceptable in principle since the ground investigation showed that infiltration is not feasible at the application site, and in the absence of any nearby watercourse. **No comment required.**

Land Ownership

The proposed surface water outfall pipe goes through land which appears to be owned by a third party, however, there is no information on the planning website which confirms that the landowners have agreed with the proposals. The agent's suggested requisition powers (under Section 98 of the Water and Industry Act)

would only work if Southern Water are willing to requisition the sewer, as otherwise the proposals could have a negative impact on the public sewerage network.

Failure to secure this agreement(s) is likely to necessitate in the need to review the drainage proposals for the application, which may have implications for the proposed quantum and layout of the proposed development.

As above and previously raised, Southern Water are obligated to approve the requisition when this is applied for under the Section 98 of the Water Industry Act (so this is not a valid point from the LPA). There is no way the proposals could have a negative impact on the public sewerage network as the process detailed in Southern Water's response, that allows for any necessary network reinforcements to be provided in accordance with occupancy timescale, will be followed.

This agreement with Southern Water (S98 Requisition) cannot be applied for until planning application is approved. We would therefore expect this to be conditioned with wording to the effect of 'commencement of construction is subject to agreement of connection to the public sewer network' to allow for this application process to commence, and it is therefore erroneous for the proposals to be objected to on these grounds.

This is expanded on below.

Conclusion

Although the information submitted by the applicant has addressed most of our concerns regarding surface water management and flood risk, we request that the aforementioned information is submitted at this stage and not through planning conditions to demonstrate that the application site has a secure outfall to discharge surface water runoff.

As above, this is erroneous as planning approval is required to allow an application for connection to the sewer network to be submitted. The applicant reserves the right to choose to connect to the sewer network via a Section 98 Requisition.

Southern Water:

Southern Water has undertaken a desktop study of the impact that the additional foul and surface water flows from the proposed development would have on the existing public sewer network. This indicates that additional flows from the development may lead to an increased risk of flooding from the sewer network.

It may be possible for some initial dwellings to connect, pending network reinforcement. Southern Water would review and advise on this following consideration of the development programme and the extent of network reinforcement required.

Southern Water would carry out detailed network modelling as part of this review which may require existing flows to be monitored. This would enable us to establish the extent of any works required. Any network reinforcement that is deemed necessary to mitigate this would be provided by Southern Water. Southern Water endeavour to provide reinforcement within 24 months of planning consent being granted (Full or Outline).

In the event that planning permission is granted, then a phased occupancy condition should be imposed to align with the delivery by Southern Water of any sewerage network reinforcement required to ensure that adequate wastewater network capacity is available to adequately drain the development. The consultation response provides advice on the management and maintenance of the SuDS system and the need for this to be secured via condition. Request further condition requiring details foul sewerage and surface waste disposal to be agreed.

Our investigations indicate that Southern Water can facilitate water supply to service the proposed development. Southern Water requires a formal application for a connection to the water supply to be made by the applicant or developer.

BPC agree with a phased occupancy condition to allow for any necessary sewer network reinforcements to be made by Southern Water within 24 months of consent of the planning application.

LPA's Statement of Case Application No. F/20/89488 – 6 May 2022

Reasons for Refusal and LPA Comments on Appellant's Grounds of Appeal; Reason for Refusal 5 – Drainage:

At the time of the application, the LPA did not have sufficient information to determine that the proposed Drainage Strategy was acceptable for the site. Specific information had been requested by the Lead Flood Authority but had not been provided. The Appellant has, however, now provided some additional comments in its Statement of Case and contends that further information could be requested by condition.

The Lead Flood Authority has reviewed the additional information provided by the Appellant and has confirmed that, in principle, the connection to the surface water sewer would be an appropriate discharge mechanism for the site (refer to Appendix 10). However, it is noted that the connection point is outside of the site boundary and reliant on 3rd party land, and there is currently no information from Southern Water to confirm costs for the works or to demonstrate that the connection would be viable and suitable for adoption. It may be possible for the Appellant to provide further information prior to the hearing to address these outstanding matters. This is addressed above and in further detail below. It is noted also that Southern Water have been consulted on these proposals and have not objected with respect to the proposed surface water discharge strategy, and that Southern Water require approval of the planning application prior to a connection or requisition application. It is also noted that it is not of concern to the LPA what the costs of this application process are and this is also not grounds for refusal of planning. The technical delivery of the connection or requisition is also to be determined through detailed design or the requisition process once planning permission is received.

The Council's Ecologist has reviewed the further drainage information provided with the Appellant's Statement of Case and has raised no further concerns regarding the Drainage Strategy from an ecological point of view (refer to Appendix 11). Noted. It is presumed that there is therefore no longer an objection based on surface water quality, however this has been expanded on below nevertheless with additional measures that should be included to ensure maximum protection against any possible discharge of pollutants as a result of the development.

On the basis of the information currently provided, the LPA maintains that insufficient information has been provided to determine that the proposed drainage system is appropriate.

Summary of Natural England Advice; water quality – surface water drainage:

The development is situated within 200m of watercourses feeding into The Solent and Southampton Water SPA & Ramsar. There is potential for poor water quality in surface drainage to negatively impact on these watercourses and the features for which the protected sites are designated (e.g. hydrocarbons, oils, grit salts and other chemical pollutants associated with traffic, garden chemicals such as enriching fertilisers or herbicides/insecticides, household detergents etc.) assessment of this risk.

The offsite discharge will be into an existing surface water sewer, Therefore it is our advice that best practice SuDS are designed in accordance with the requirements in the CIRIA SuDS Manual (C753) for this development. It is noted this provision is included within the Flood Risk Assessment and Drainage Strategy (December, 2020) but It should be noted that Step 3 under Section 26.7.1 of the SuDS manual outlines that the requirement for extra treatment should be considered in relation to discharge to environmentally protected sites. It states that 'an additional treatment component (i.e. over and above that required for standard discharges), or other equivalent protection, is required that provides environmental protection in the event of an unexpected pollution event or poor system performance'.

Therefore, in line with a precautionary approach in respect of the European site, it is advised further cleaning/filtration treatment features/steps may be required for incorporation into any surface drainage strategy. It is also advised details are provided with regards to the long-term (in perpetuity)

maintenance/replacement and funding of SuDS, and which authority will have responsibility for this, for incorporation into your authority's appropriate assessment.

Upon review of the comments raised by Natural England, BPC concur with adopting a precautionary approach and proposing additional treatment measures to the surface water runoff. These are detailed below.

BPC also concur that planning condition wording would be correct in including wording that requires a 'full maintenance and management schedule that details the management/maintenance measures required, their frequency and the appointed party responsible for the implementation of the management/maintenance measures for the lifetime of the development.'

FURTHER CONSULTANT COMMENTARY ON DRAINAGE MATTERS

Surface Water Treatment

The proposed surface water drainage system incorporates surface water treatment in accordance with the CIRIA SuDS Manual C753 regarding methods for managing pollution risks, which states that the risk posed by surface water runoff to the receiving environment depends on the pollution hazard at the site (the source), SuDS treatment techniques (the pathway), and the sensitivity of the environment (the receptor).

The simple index approach considers whether SuDS techniques are appropriate for the site. The states that for SuDS components to deliver adequate treatment, the total pollution mitigation index for each contaminant type should equal or exceed the pollution hazard index.

The SuDS Manual outlines three categories of pollution hazard identification, which vary depending on proposed land use, which are as follows:

- Total Suspended Solids (TSS).
- Metals (M).
- Hydrocarbons (H).

In accordance with C753 Table 26.2, the proposed land uses at the site are categorised as follows:

- Residential Roofs – very low/TSS=0.2/M=0.2/H=0.05
- Individual property driveways and low traffic roads – low/TSS=0.5/ M=0.4/H=0.4

In accordance with C753 Table 26.3, the values of SuDS Mitigation indices are provided for the proposed drainage strategy:

- Permeable Pavement – TSS=0.7/M=0.6/H=0.7
- Swale – TSS=0.5/M=0.6/H=0.6
- Pond – TSS=0.7/M=0.7/H=0.5

Surface water runoff from the residential roofs will receive treatment from the pond. Surface water runoff from the driveways and low traffic roads will be captured by permeable pavement or gullies, and will also receive treatment from the pond. Overland runoff will be captured by the elongated section of the pond, acting as a swale for the purposes of treatment. As the pollution hazard index does not exceed any pollution mitigation index for any contaminant type, for any proposed land use, the proposed SuDS methods will provide sufficient treatment for the proposed development.

However, due to the sensitivity of the receiving environment (as raised by Natural England), BPC recommends the following additional drainage features to ensure a multiple stage treatment-train for runoff from the site:

- Filter strip – TSS=0.4/M=0.4/H=0.5
- Permatreat Channel Drain – TSS=0.8/M=0.4/H=0.9

To expand, it is recommended that landscaping around the site between the development and the open drainage features or Third Party land is designed with grassing and planting that constitutes a filter strip in accordance with CIRIA guidance to provide additional treatment to overland runoff.

In addition, the use of gullies or channel drains with additional treatment filters allows for a first stage of treatment to road and driveway runoff captured by conventional drainage rather than permeable pavement. The treatment indices of an example product by Polypipe are provided.

Off-site connection to sewer via Third Party Land

The planning application was refused with Reason 5 including the following comment:

"...the proposed surface water outfall pipe goes through land which appears to be owned by a third party. No supporting evidence has been provided to demonstrate that the landowner's permission would be given to connect to this outfall pipe and no indication has been provided by Southern Water that they are prepared to use their requisition powers over this pipe. Without reasonable certainty that the development can connect to the existing outfall pipe, it would not be possible to ensure that surface water from the development could be drained in a satisfactory manner without impacting on water quality or causing localised surface water flooding (an issue raised within many of the objection letters). Furthermore, The Flood and Water Team have also requested that the invert level of the proposed surface water system be provided as these have implications for the hydraulic calculations, but this information has not been forthcoming from the developer."

As per the Foreman Homes Appeal Statement, as "**Southern Water are obligated to approve a requisition when applied for under Section 98 of the Water Industry Act**, this provides sufficient certainty that surface water from the proposed development can be drained ... The concerns raised in the Officer Report are therefore not a reason for refusing planning permission."

Section 98 of the Water Industry Act 1991 states:

98 Duty to comply with sewer requisition.

- (1) It shall be the duty of a sewerage undertaker (in accordance with section 101 below) to provide a public sewer to be used for the drainage for domestic purposes of premises in a particular locality in its area if-
- (a) the undertaker is required to provide the sewer by a notice served on the undertaker by one or more of the persons who under subsection (2) below are entitled to require the provision of the sewer for that locality;
 - (b) the premises in that locality the drainage of which would be by means of that sewer are—
 - (i) premises on which there are buildings; or
 - (ii) premises on which there will be buildings when proposals made by any person for the erection of any buildings are carried out;
- and
- (c) the conditions specified in section 99 below are satisfied in relation to that requirement.

As per the consultee comment from HCC Flood and Water Management Team, the officer confirmed that they were happy with connection to the surface water system as an appropriate discharge mechanism for this site. The cost of construction and method of delivery is not of concern to the planning authority.

As per the consultee comment from Southern Water, they have indicated no objection to the proposed application, only that the Developer works with Southern Water to ensure appropriate upgrades can be scheduled in time for the connection of the new development, with the following planning condition recommended: *“Occupation of the development is to be phased and implemented to align with the delivery by Southern Water of any sewerage network reinforcement required to ensure that adequate wastewater network capacity is available to adequately drain the development.”*

As per Southern Water guidance, “for some sites there is a need to cross third-party private land and you may not be given permission by the landowner for access. If this occurs you can apply for a sewer requisition through us and we will design a suitable route, enter into an agreement with yourselves and construct the new sewer main.”

In order to undertake a Sewer Requisition Application should the applicant not prefer a Third Party Agreement and S106 Connection Application, a £4911.80 application fee with Southern Water would be required, at which point they'll then provide a budget estimate. More information is available from Southern Water here; <https://www.southernwater.co.uk/regulations-services/wastewater-services/sewer-requisitions>

There is no reason for the LPA to object on the application with respect to establishing 'right to connect' off-site discharge from the site to the public sewer system as it is something that is ALWAYS dealt with upon receipt of planning permission via one of two options:

1. Third Party Agreement & S106 Connection Application
2. S98 Sewer Requisition Application.

The sewerage authority has a statutory obligation to allow these connections, but **Southern Water will not accept submission of a sewer requisition application without planning permission first**. The HCC Drainage Officer also concurred with our viewpoint in their comments, and the LPA's stance has no valid basis, therefore.

In addition, we have contacted Southern Water Planning to request that they confirm that they agree with the above, and will provide their response upon receipt.