

Our Ref: P24-0782
Your Ref: -
Direct Dial: [REDACTED]
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Date: 28 May 2025



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Raima Prasad
Lead Local Flood Authority
Growth and Environment
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Dear Raima

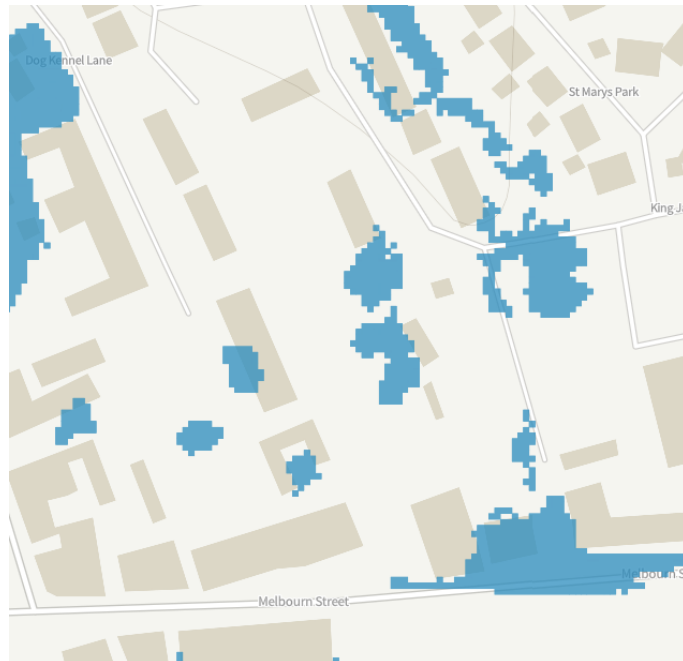
RE: 25/00104/FP – Residential development to provide nine flats with associated vehicular parking and access via existing dropped kerb from King James Way with ancillary bike and refuse store - Land to the Rear of Banyers Hotel King James Way Royston Hertfordshire SG8 7BZ

Thank you for your letter dated 13th March, to which are pleased to provide you with the following responses at this time to your defined reasons of concern associated with the above application.

1. *A sequential test is required to be conducted for the site as majority of the site is in a surface water flow path with high risk of flooding.*

As outlined in the Design Validation Report, the following proposed design solution has evolved from the previous planning approved design and Flood Risk Assessment facilitated by ENCON Associates, reference A5992, in which the report confirms the site continues to reside within Flood Zone 01, with 1 in 100 year surface water flood risks occurring to the eastern margin of the site, which has been defined in the design as landscaping.

To that end and with the provision of elevated thresholds to the apartments, positioned outside of the flood profile to mitigate the risk of flood pathways, the associated allocation of residential development within the centre of the existing development footprint, is proposed to be acceptable.



Extract from [Map – Flood map for planning – GOV.UK](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/362812/Map_-_Flood_map_for_planning_-_GOV.UK)

2. Evidence to prove that the development will not increase flood risk elsewhere is required.

As outlined in the developments original flood risk assessment, "Currently the site consists of open grassland and is classified as a greenfield development. Historic mapping shows the site has not been previously developed and so there are no records of sewerage present at the site", therefore with a design intent for controlled infiltration and storage into the existing ground, the proposed development will match the existing runoff profile for the 100 years plus climate change event and look to better exceedance management through controlled exceedance in low risk car parking areas, the overall scheme offers a betterment to the existing environment.

3. Information on safe access and egress to show how the development will be safe for its lifetime should be submitted.

As outlined in the design validation report, the defined surface water flood depths to the southern lower boundary are defined via the Environment Agency as <300mm, therefore with thresholds set above this with an uplift of 150mm to the existing central levels, thresholds and associated access and egress will be protected. Access will cross a small, localised pocket of 300mm flood water, which will be channelled along the proposed highway kerb edging and mitigate the risk to emergency vehicles etc. via the access roads wetted perimeter.

4. Infiltration tests to BRE365 standard (or equivalent) are required for the site. An infiltration rate cannot be assumed at this point, as this is a full planning application. A detailed report of the infiltration tests is required and the worst infiltration rate for the site is required to be used for design.

As outlined in the approved Flood Risk Assessment for the site, has been defined via the assessment of geotechnical data for the site and is to be validated via insitu testing in accordance with BRE365 prior to the commencement of any works. This principle has been carried through in the design validation assessment and can be conditioned by the LPA is required.

- 5. If infiltration is not viable at the site, an alternative method of surface water discharge will be required. Greenfield runoff rates would need to be calculated for the site and any new method would need to have a discharge rate limited to the greenfield runoff rate.**

As outlined in the approved Flood Risk Assessment, infiltration will be a viable source of surface water management in the area, which is known to reside of chalk. This is reinforced with no positive surface water networks in the surrounding area. The condition of insitu testing, will therefore provide the LPA with the reassurance needed prior to commencement on site.

- 6. Finished floor levels should be raised by at least 300mm above the design flood level and 150mm above the external ground levels.**

When auditing the site levels against the flood profiling, the elevation of 150mm (thresholds) will significantly exceed the 300mm flood risks associated with the lower-level floor profiles. Any greater uplifting may jeopardise the existing flood profile for the site and introduce an negative impact to third party lands.

- 7. Wherever possible, additional SuDS features should be incorporated in the drainage strategy. If they cannot be incorporated, evidence should be provided to show why they are not viable. SuDS features should incorporate the 4 pillars of sustainable drainage which are water quality, water quantity, biodiversity and amenity benefits. Permeable pavement alone could not satisfy 4 pillars of SuDS sustainability.**

As described in detail with the approved Flood Risk Assessment, Section 5.12- 5.15 the proposed development of infiltration through permeable paving through the enhanced subbase (Water quantity) provides enhancement quality through treatment (Water quality), while protecting as many of the existing trees as possible (increased biodiversity) with increased areas of paved play creating a zone for a small community to come together (increased amenity).

- 8. The Drainage strategy plan provided should be appropriately labelled with pipe numbers matching with the corresponding drainage calculations.**

Sufficient data in Appendix C of the design validation has been provided with the modelling of the porous paving source analysis to confirm the principles of surface water management are risk managed for up to and including a 1 in 100 plus 40% intensity.

- 9. Updated drainage calculations are required to include a CV value of 1 for all simulations. Simulation calculations for 3.33% AEP plus climate change allowance required to be provided**

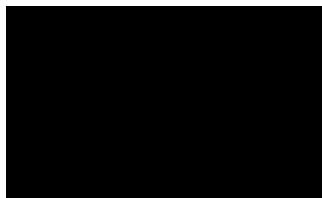
As requested, please find attached the updated permeable paving hydraulic assessment to new FEH data and revised CV values for 3.33% AEP.

I trust these clarifications appease any previous concerns for the site, needed to condition approve the proposals however if you have any questions, please do not hesitate to let the team know.

Our Ref : P24-0782
Client Name : Raima Prasad



Yours sincerely,



Barker Associates | Gareth Webber | MEng, CEng, MICE