

The LLFA has reviewed the complete drainage information submitted in support of this application, including the full drainage strategy, BRE Digest 365 infiltration testing report, hydraulic model output, Thames Water written confirmation, and revised drainage strategy drawing. This response supersedes all previous LLFA drainage comments and represents the LLFA's final position.

The proposed drainage strategy relies on full infiltration via permeable paving across all parking and access road areas, totalling approximately 600m² of the 1,146m² site. This is confirmed as the only viable drainage option following Thames Water's written confirmation that the 150mm sewer adjacent to Reading Road is a foul water sewer only and does not accept surface water connections, and that the nearest surface water sewer in Rainbow Park Road cannot be accessed without routing through third party residential land. The LLFA accepts the drainage hierarchy assessment as complete and correctly reasoned.

Infiltration testing was carried out in February and March 2025 by Southern Testing Laboratories Ltd (ref JT0618) at two trial pit locations in general accordance with BRE Digest DG365. Groundwater was encountered in trial pit TP01 at the rear of the site at 0.8m and 1.4m below ground level as slow seepages, and testing was correctly suspended at that location. In trial pit TP02 at the front parking area, three tests were carried out to 0.6m depth with groundwater not encountered. The design infiltration rate of 1.69×10^{-6} m/s has been taken from Test 3 — the most conservative of the three results which is the correct. The LLFA accepts the infiltration testing as satisfactory.

The LLFA notes that groundwater was encountered at only 0.8m bgl in TP01 at the rear of the site. For a shallow permeable paving scheme of 300–500mm sub-base depth this is manageable, as the system has been kept deliberately shallow and the hydraulic model confirms the storage invert is set at 47.9m AOD with a 0.5m depth. This is noted as an informative only and does not require a pre-commencement condition.

The brownfield runoff rate has been calculated at 11.09 l/s using the Modified Rational Method (CIRIA C753), based on the existing 100% impermeable site. The proposed restricted discharge rate is 1.0 l/s — a 91% betterment over the existing unrestricted discharge. This exceeds the LLFA's standard requirement and is accepted. The hydraulic model (Flow+ v16.0, run 19 May 2026) confirms the permeable paving storage structure performs adequately for the 1-in-100 year plus 45% climate change 600-minute critical storm, with a peak storage utilisation of 68.45m³, 19.4% freeboard remaining, no flooding recorded, and a status of OK. The half-empty time is 918 minutes, reflecting the low but consistent infiltration rate through the River Terrace Deposits. The hydraulic model is accepted as satisfactory.

The water quality and pollution prevention assessment has been updated to classify the external areas associated with the ground floor commercial restaurant and takeaway units as a medium pollution hazard, with oil and hydrocarbon interceptors incorporated upstream of the permeable paving for all commercial drainage catchments. satisfied .

Exceedance flow routes are now shown on drawing AEG4106 DR-01 A02 (rev A02, 19 May 2026), directing flows to the southwest site boundary where a 300mm high gravel board is provided to contain flows beyond the design event. Given the 19.4% freeboard in the model at the design event, the probability of exceedance flow generation is low. The LLFA accepts the exceedance routing as

illustrated. The adequacy of the gravel board specification should be confirmed at detailed design stage and is captured within the condition below.

A maintenance schedule based on CIRIA C753 is included within the drainage strategy, covering regular, occasional, remedial and monitoring tasks for the permeable paving system. This is comprehensive and appropriate for a mixed commercial and residential site.

LLFA POSITION AND RECOMMENDED CONDITION

The LLFA is satisfied that the surface water drainage strategy is technically acceptable. All five of the LLFA's original drainage concerns have been satisfactorily addressed through the revised documentation and Thames Water correspondence. The LLFA raises no objection to the grant of planning permission and supports determination, subject to the following drainage condition being attached to any consent in place of Condition 6 of the previous consent 203604. Condition 6 should not be omitted without this replacement condition being applied, as the maintenance requirement is essential for a scheme with no fallback drainage route.

Drainage condition — to replace Condition 6 of consent 203604:

No development shall commence until a detailed surface water drainage scheme, consistent with the drainage strategy (Aegaea ref AEG4106), hydraulic model (Flow+ v16.0, dated 19 May 2026) and drawing AEG4106 DR-01 A02 rev A02, has been submitted to and approved in writing by the LPA in consultation with the LLFA. The scheme shall confirm: (a) the structural specification of the 300mm gravel board boundary containment at the southwest site boundary, confirming it is capable of containing exceedance flows without failure or overtopping onto neighbouring land; (b) oil and hydrocarbon interceptor specifications for all commercial drainage catchments; and (c) the maintenance schedule from Section 3 of the drainage strategy confirmed as the approved maintenance plan for the lifetime of the development, with the responsible party identified. The development shall be carried out in accordance with the approved drainage scheme, and the drainage system shall be maintained in perpetuity in accordance with the approved maintenance schedule.

Reason: To ensure the surface water drainage system performs as designed, to prevent flooding of the site and neighbouring properties, to protect the water environment from commercial use pollution, and to ensure the permeable paving system is maintained in perpetuity.