

We would not recommend approval until the following points have been addressed;

### **Condition 13**

1. The applicant has stated "A 30% void ratio has been assumed for the volumes used for storage" and "Details for construction of these beddings has not been provided within the construction details in the technical note provided, nor could it be verified during the site visit."

We request evidence be provided to demonstrate that a suitable low fines 30% (or greater void ratio) aggregate has been used. This evidence can be provided in the form of receipts, further surveys, or any other method for confirming the product used for the sub-base was of a suitable quality.

This point has been addressed by applicant and confirmation that 30% porous sub-base used provided.

The evidence is included in the email from the 5<sup>th</sup> of October 2022, which includes attachments. Having checked this we can confirm receipts for low fines gravel have been provided.

2. The verification report notes several inaccuracies with the as-built drawings. The as-built drawings should be updated to reflect what has actually been constructed.

No verification has been provided, the applicant has cited our (Arun DC) guidance for post construction verification being acceptable. Please may we have a copy of this email, including the attachments, as we believe this may be a misunderstanding of our questions, or the guidance.

3. The applicant has stated "*Connections to the various voided sub-bases downstream of the catchpit manholes could not be verified as part of the site visit. However, the groundworks contractor has confirmed that these were installed, and quality controlled by others at the time of construction (prior to Pell Frischmann's commission). An email to this effect is included as Appendix C.*"

We request details of whoever undertook the quality control, in order to ensure this person(s) were independent of the contractor / developer. This is particularly important due to the previously identified inaccuracies in the as-built drawings information the contractor has provided.

Same as the above comment, although in addition we require evidence from somebody (named) that these connections exist, as the verification engineer has caveated that others inspected this element.

4. The bedding material and granular surround on some of the catch pits could not be confirmed and is stated as 'unknown' in the verification report. In addition, the photographs do not clearly show the quality of the installation of the inlet and outlet pipes in each catchpit, meaning it is not possible to confirm whether they are adequately sealed. Further clarification on the construction of the catch pits should be provided once construction has been completed (this can be provided as part of the final survey, point 5 below).

The email from the 5<sup>th</sup> of October 2022 should have also included an attachment showing the concrete base. Having checked this email, the concrete base photograph does not appear to have been included.

5. The client has confirmed a final survey will take place to identify any defects that will be captured and rectified ahead of final handover and signed off by Local Authority Building Control.

We require a copy of this final survey before we can sign-off this condition. This is particularly important as some of the photographs of the installed drainage showed the drainage in an unsuitable condition, and because the verification report survey / site investigation appears to have been carried out *prior* to all connections (particularly downpipes) being made.

Agree that a survey for the whole site is not required at this stage as only 2 units are part of this phase.

Therefore, part discharge of conditions (plots 2 & 3 only) is possible (assuming any outstanding comments are also addressed).

### **Condition 15 - Maintenance**

1. The maintenance manual (Feb 2022) states that “Driveways which form part of the wider infiltration system include a legal covenant to ensure these remain part of the wider drainage system in perpetuity.”

A copy of this covenant should be provided.

The Applicant has confirmed that this is not publicly available. It is acknowledged that this information cannot be provided by the applicant, but this puts ADC in difficult position. Providing the applicant is willing to accept responsibility in the event that the covenant does not prevent the removal of the SuDS, we can accept this.

2. Details of the management company are required to be provided. This must include the name and contact details for any proposed management company.

Phone number and company name have now been provided.

3. A section detailing maintenance and inspection of silt traps should be provided. This should include information on how to properly test and dispose of any silt removed from the site. This is particularly important as these appear to be designed with a granular base, which if not bonded / fixed in place, may prevent the use of vacuum trucks for removing the silt or jetting in areas where high velocity water may dislodge the granular material.

Confirm that part of this is included within the report, however, the second part of our comment has not been addressed. (see point 4 below).

4. Please include an additional line confirming that the joining aggregate should be replaced and that particular attention needs to be paid to the possible removal of this joining aggregate if vacuuming is used.

1.6 notes how grit stone should be replaced in relation to the 25 year inspection, it is important to include this information in the more frequent maintenance. The rationale behind this is that the maintenance tables state vacuuming and brushing activities are required more frequently which will remove the grit stone.

5. Product specific maintenance details should also be provided for all of the proposed SuDS (unless those specific details are identical to the Tables in C753).

Applicant has confirmed no difference from C753 tables.

6. A statement should be made to provide clarity on what will happen if the management company is unable to fulfil their responsibilities outside of the 2-year window, where the developer intends on appointing another management company, *i.e. will further reappointment be the responsibility of the residents and if so how long can it be expected before such reappointment should be made?*

We appreciate the applicant/developer taking responsibility for this in the unlikely event that this occurs.

- Advisory note only: We would recommend that a plan of the drainage system, showing each of the proposed maintenance tasks / key features requiring maintenance is included within the maintenance document for the site. We would also recommend a maintenance checklist is included.

Based on the above comments, we **do not recommend discharge of conditions 13 & 15** at this time, until the above points have been addressed and reviewed.