

This document has been provided in support of discharging planning condition 13.

The Phase 1, 3 & 4 Storage calculations (Ref: P3748) are based on a drained area of 0.71ha, a discharge rate of 71.2l/s (MH S18) and a storage volume of 114m² x 1.2m depth (i.e. 137m³) for the 1 in 100 year plus 30% storm (ref: Page 49). It is stated in the Drainage Statement that the discharge rate has been derived from the combined areas of MA1, MA3 and the future MA4 buildings.

The drainage design has changed since the previous submission. The temporary pumped feature (Marine Assembly 3) has been omitted to provide a gravity connection to the downstream network. The storage volume for the overall system is now 150.48m³ considering 95% void ratio with the use of storage attenuation crates (132m² x 1.2m deep). Amended drainage calculations have been included with the resubmission in accordance with the design changes.

Drawing DBS-AVE-00-XX-DR-C-1006 has a shaded area described as “MA1 Contributing area” but the shading has not appeared on the drawing.

Latest drainage layout indicates all contributing areas and further breaks down the impermeable areas for the new phase (Phase 4) specifying the pipe conduits the surface water flows will enter.

Existing Marine Assembly 1 impermeable area = 0.225Ha

Existing Marine Assembly 3 impermeable area = 0.210Ha

New Marine Assembly 4 impermeable area = 0.310Ha

The area used to derive the 71.2l/s discharge rate shown on Drawing DBS-AVE-00-XX-DR-C-0005 is different to the Proposed Impermeable Area shown on DBS-AVE-00-XX-DR-C-1006 (0.949ha) – this discrepancy should be explained further.

The discrepancy derives from Marine Assembly 1 area featuring twice in the key. The total impermeable areas for the purpose of calculating the existing surface water runoff rate equates to 0.727Ha. The drawing has been updated now and the final discharge rate has been amended to 70.7L/s considering a 30% reduction.

Drawing DBS-AVE-00-XX-DR-C-0005 appears to indicate that the area to be demolished is 0.292ha and partially replaced by the new MA4 building – what will happen to the remaining demolished area that is outside of the new building? Is it proposed that this area will drain unattenuated?

The latest drainage layout DBS-AVE-00-XX-DR-C-001 P05 indicates the proposals for the removal of surface water flows from the surrounding hardstanding areas. The method for removing the surface water runoff from the hardstanding areas will be with the use of linear drainage channels. All surface water runoff is attenuated and restricted at the discharge rate of 71.2L/s.