

**Technical
Note**

**HaskoningDHV UK Ltd.
Transport & Planning**

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From: Dean Johnson
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Subject: Revised Infrastructure RMA Drainage Submission

The below technical note summaries the changes in the drainage design and calculations that have been submitted as part of the revised Great Wilsey Park Phase 1 Infrastructure Reserved Matters Application.

Revised Design and Calculations

Updated Alignments

In General the design calculations and alignments have been updated to follow the alterations to the road network that have occurred through discussions with the highway officers.

Clarification of Long Term Storage Volumes

In discussion with Steven Halls we have provided demonstration that the Long Term storage discharge requirements are met by discharging at QBAR the required volumes for the for the required storm 1 in 100 (6hr) storm period. This has been demonstrated via this inclusion of the volume hydrographs for the required storm.

These demonstrate that we discharge the required volumes at the QBAR rate at the start of the storm

Inception Storage

We have now modelled the inception storage within the sections. These are also now also more clearly shown on the general arrangement plans.

Clarity on Overflow from Pond 4.1 to 4.2

In discussions with Steven Halls, he was not clear on the modelling of ponds 4.1 and 4.2. This was discussed and the it was demonstrated that 4.1 over flows into 4.2 and adequate volume is available in 4.2 for the flows.

To indicate the process further the design drawings have been updated to show the overflow route to confirm the modelling is feasible on the ground.

Seepage

The revised submission includes construction details for the pond bunds. This indicates a clay liner on the north side to prevent seepage which addresses concerns raised over seepage through the bunds.

Swales details

Details of the falls and section of the swales have been included in the submission pack as requested by Steven Halls

Area 4

The contributing areas for Area 4 have been split for each pond (4.1, 4.2 and 4.3)

Calculation details

The micro drainage simulation results were missing some of the storage reports. These have been included in the revised calculations submitted.