

RE: HTR Phase 1 - LLFA comments on the revised Drainage Management Plan

Booth, William <[REDACTED]>

Tue 15/11/2022 12:56

[REDACTED]

Good afternoon Susanna,

Thank you for your acceptance of most of the responses. In answer to your 2 follow up points:

- There are several things that we reviewed and updated in the hydraulic models that resulted in different existing and proposed figures in the tables in the updated drainage management plan. These are as follows:
 - Catchment areas were included for the existing ditches / verges that run parallel to the existing track, within the existing model (increasing the existing rate). Previously these were not included in order to be conservative but on review we felt it was more realistic to represent them.
 - A small catchment area was included at the southern extent in the existing model (increasing the existing rate). It looks like this was missed previously.
 - The existing track percentage impermeable was decreased from 90% to 80% in the existing model to be more conservative (decreasing the existing rate).
 - The value engineering exercise that replaced the combined kerb drain and outfall at the southern end with a section of ditch that combined the outfalls and made it possible to restrict outfalls more efficiently and reduce the proposed rate.

Overall we ended up increasing the existing / allowable rate, but reducing the proposed rate, which resulted in the wider difference between the values shown in the updated table. My view is this difference gives us more confidence that we are not likely to cause a detriment downstream.

- I can confirm that climate change has been applied to the additional impermeable areas in the proposed models (not the existing models). It has been applied as additional areas which have been drawn separately with a PIMP of 40%, rather than it being applied to the entire model within the simulation wizard function. I appreciate therefore it is not clearly written in the simulation results. I would be happy to share the MicroDrainage models or set up a Teams call to show on screen how we have applied climate change if necessary.

Please let me know if you require any further information.

Kind regards,
Will

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