

15 October 2018

Hamilton City Council
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Attention: Principal Planner, Planning Guidance
gillian.cockerell@hcc.govt.nz

Dear Gillian

AMBERFIELD DEVELOPMENT - FURTHER INFORMATION CLARIFICATION
HG REF: 9820-141842-01

Following provision of Harrison Grierson's report titled 'Civil Infrastructure Responses to HCC Further Information Request', dated 17 August 2018, we have received a number of additional requests for information clarification from HCC.

A summary of the requests related to Civil Infrastructure is provided below, along with our responses.

- **Item 1 – Internal Wastewater Network:** HCC have queried the number of pump stations required within the development site, and requested a review of the current arrangement with regard to potentially minimising the number of pump stations (refer to email from Gillian Cockerell dated 15/8/18).

Response: HG has undertaken an additional assessment in response to HCC's query about rationalising satellite pump stations (connecting PS1s catchment by gravity to PS4s, and connecting PS2s catchment by gravity to PS3s). The assessment has established that such connections/rationalisation may be feasible. However this isn't a certainty, and would have other implications such as increasing wastewater pipe depths in places. As such, it is proposed that the system and plans stay as they are for now, and during the detailed design stage of works, further investigation will be given to the potential to eliminate any of the currently proposed satellite pump stations (by linking adjacent gravity systems together). Should this appear to be possible, then we will advise HCC of the opportunity at the time of detailed design and discuss the advantages and disadvantages associated with each opportunity (as removing a pump station may result in the need to provide deeper wastewater lines).

Our above response is also in accordance with Item 36 of the HCC Submission on the Amberfield application (extract copied below), which suggests that this matter be subject to further consideration at Engineering Approval stage:

36. HCC seeks that the developer review its design prior to engineering approval phase, with the aim of reducing the overall number of pumpstations proposed to minimise operational costs and risk.

- **Item 2 – Western Interceptor Option for Wastewater Management:** HCC have requested additional information regarding the western interceptor wastewater management option, including details of storage, operational matters and the length of duration of the 'interim period' that the western option would be proposed for (refer to email from Gillian Cockerell, dated 30/8/18).

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Response: With the hearing now proposed to be held in late April 2019, we request additional time to assess this matter and respond to this issue, whilst also allowing discussions on the PDA to progress alongside our further assessment.



- **Item 3 – Provision of Engeo geotechnical information.** HCC have noted that they have not previously been supplied with some of Engeo's geotechnical information which was referred to in the HD Geotechnical peer review (refer to email from Gillian Cockerell dated 13/9/18).

Response: It is our understanding that the information noted as being required has now been provided directly to T&T by Engeo. We have also appended the information in question to this response.

- **Item 4 - Additional information on the stormwater proposal:** During a site walkover attended by HCC and WRC on 17th September 2018, discussions were held around the potential to relocate a number of the proposed communal stormwater basins, which are to be progressed as communal raingardens.

Response: Following the site walkover and subsequent discussions, a set of updated stormwater plans have been produced, and are appended to this response (SK291-296, SK314-315, SK351-358). The plans have been revised to reflect the discussions held on site. The plans identify; basin locations, access paths for maintenance, basin sizes, treatment areas per basin and the percentage of each catchments total area that can be treated by each basin. Revised layout plans (SK260-270) are also provided for the northern part of the 'island', reflecting both HCCs and WRCs request for the earthworks in this area to be revised to better reflect the existing landform.

- **Item 5 - Geotechnical feasibility of Road 2 construction.** HCC have requested clarification that the proposal to widen the eastern berm of Road 2 (to provide a wider planting buffer zone) is achievable (refer to email from Gillian Cockerell dated 24/9/18).

Response: Road 2 is within the 'geotechnical specific design zone' (as identified in the geotechnical reports). As such, the final design of Road 2 will be determined by the geotechnical experts at detailed design stage. The recent geotechnical peer review process (by Engeo and HD Geo) has not identified any additional complexities for the proposed Road 2 geotechnical solution. We are therefore confident that the Road 2 solution, incorporating the increased planted buffer zone, is achievable.

We trust the additional information provided above is as required, but please do not hesitate to contact us should you need any further clarification.

Yours sincerely
Harrison Grierson

Scott King
Engineering Manager

APPENDIX 1
ITEM 3 - OUTSTANDING GEOTECHNCIAL
INFORMATION





APPENDIX 2
ITEM 4 - REVISED STORMWATER PLANS