

IN THE MATTER of the Resource Management Act 1991 (“RMA” or “the Act”)

AND

IN THE MATTER of a submission by **AMBURY PROPERTIES LIMITED** in respect of the **PROPOSED WAIKATO DISTRICT PLAN** pursuant to Clause 6 of Schedule 1 of the Act seeking the rezoning of land at Ohinewai

SUMMARY STATEMENT OF TIMOTHY HARTY IN RESPECT OF WATER AND WASTEWATER IN PREPARATION FOR EXPERT CONFERENCING

1. INTRODUCTION

- 1.1 My name is Timothy Harty. I am a Project Director employed by GHD. I have been advising Ambury Properties Limited (APL) in relation to water and wastewater issues on its submission seeking a rezoning of land at Ohinewai.
- 1.2 I will be presenting expert evidence at the hearing of the Ohinewai submissions. That evidence is due in July 2020. In the meantime, this statement has been prepared in preparation for expert conferencing in relation to water and wastewater in compliance with the direction from the Hearing Panel that APL’s expert witnesses provide a summary of their opinions on the topics that are to be the subject of expert conferencing.

Key relevant planning matters

- 1.3 The key planning issue relevant to this statement relate to whether it is possible to service the area of land which is the subject of the Ohinewai Structure Plan in terms of water and wastewater in the short, medium and long term, thus enabling development in accordance with the requested rezoning to occur and in accordance with the requirements in the Proposed Waikato District Plan for urban development to connect to municipal services.

Scope of statement

- 1.4 As a basis for expert conferencing, this statement will:
- (a) Identify what I see as being the key issues for determination in relation to water and wastewater and set out my expert opinion on that issue and the reasons for my views (Section 2); and
 - (b) Set out my core conclusions (Section 3).
- 1.5 The key issues that I address in this statement are those that I understand are not agreed, based on the section 42A report and / or correspondence or discussions with further submitters.

Expert Witness Code of Conduct

- 1.6 I have read the Code of Conduct for Expert Witnesses, contained in the Environment Court Consolidated Practice Note (2014) and I agree to comply with it. I can confirm that the issues addressed in this statement are within my area of expertise and that in preparing my statement I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed.

2. KEY ISSUES RELEVANT TO WATER AND WASTEWATER AND MY OPINION ON THESE ISSUES

- 2.1 I have worked with Mr Olliver and others to identify the key issues that need to be determined in relation to water and wastewater. The purpose of this section is to set out the issue and then my expert opinion in relation to that issues, and the reasons for my opinion.

Water supply

Does connecting to the Huntly Water Treatment Plant (WTP) represent an acceptable solution to provide for water supply to the Ohinewai Structure Plan area in the short term (first 5-7 years)?

- 2.2 In my opinion, connecting to the Huntly Water Treatment Plant (WTP) is an acceptable solution for the following reasons:
- (a) Given the consented volume of water take and average and peak daily demand of the Huntly WTP, there is sufficient capacity for several years to service the APL Ohinewai Development.

- (b) In the initial stage of development, the APL Ohinewai site can be serviced via existing on-site water supply, with access to the reticulated network not being required until approximately 2022.
- (c) When overlaying the APL development requirements on the existing and projected population growth, the estimated water take would not exceed the consented Huntly WTP water take volume until approximately 2026. Further detailed discussions with Waikato District Council (WDC) and Watercare Services Limited (WSL) are in progress regarding these growth projections and the implications for staging requirements.
- (d) This option would involve APL supporting WDC in securing further water from the Waikato River to cater for proposed district growth in both Huntly and Ngaruawahia, particularly from 2026 onwards.
- (e) Conveyance infrastructure from the Huntly WTP to the Ohinewai Structure Plan area provides opportunity for renewals / upgrading of reticulation infrastructure.
- (f) Utilising of the Huntly municipal supply is an effective and efficient option for water supply servicing of the APL Ohinewai development.

Is an acceptable solution available to provide for water supply to the Ohinewai Structure Plan area in the mid-long term (7 or more years)?

- 2.3 The mid-Waikato Servicing Strategy (MWSS) is aimed to complete a long-term 50-year servicing strategy for water and wastewater supply for the mid-Waikato area, stretching from Meremere to Huntly. WSL has indicated that the MWSS is on target to be completed by June 2020 and that it will provide much greater clarity in terms of solutions for servicing the Ohinewai development.
- 2.4 Importantly, WSL has also confirmed that servicing the Ohinewai development area in the medium to long term is catered for within the MWSS.
- 2.5 Therefore, APL only needs to identify short term solutions (i.e. up to the 5-7 year period). However, on this basis, I consider that there would be an acceptable mid-long-term solution in place to service the Ohinewai Structure Plan area.

Wastewater servicing

Does connecting to the Huntly Wastewater Treatment Plant (WWTP) represent an acceptable solution to provide for wastewater servicing to the Ohinewai Structure Plan area in the short term (first 5-7 years)?

2.6 In my opinion, connecting to the Huntly WWTP) is an acceptable solution for the following reasons:

- (a) This is the most logical approach to addressing the issue of wastewater servicing, given the significant volumetric treatment capacity at the Huntly WWTP has and the challenges being faced by WDC with regard to compliance at the Huntly WWTP.
- (b) Conveyance between the APL Ohinewai development and the Huntly WWTP is approximately 5 kms (direct) or up to 8 kms if longer routes (utilising road reserves, etc.) were utilised.
- (c) The conveyance infrastructure may also provide the opportunity for future linkages to other municipal areas, such as Te Kauwhata once a MWSS long-term solution is confirmed / in place, and if it is determined that further connections are preferable.
- (d) APL will work with WSL to ensure that any short term solution is configured in such a way that it aligns with the direction set by the MWSS.
- (e) Utilising a pressure network for delivery of wastewater to the Huntly WWTP would result in an projected wastewater outflow from the Huntly WWTP of approximately 7,800m³/day (in 2029), when the APL development is overlaid on projected growth. This discharge level would therefore remain well within the consented discharge volume of the Huntly WWTP until a MWSS solution is in place.
- (f) Potential septicity issues within the conveyance infrastructure is appropriately addressed through the proposed staging of the APL development, the preferred pressure conveyance system, and the range of measures (including chemical dosing, use of smaller pipe diameters or dual pipes, and water flushing) for managing septicity during initial periods of low flow.
- (g) APL acknowledges that consent compliance challenges exist at the Huntly WWTP and has agreed to work with WSL to investigate solutions to provide improvements to discharge quality.

Is an acceptable solution available to provide for wastewater servicing to the Ohinewai Structure Plan Area in the mid-long term (7 or more years)?

2.7 In my opinion, there is an acceptable solution, to the extent that

WSL has also confirmed that servicing the Ohinewai development in the medium to long term is catered for within the MWSS. Therefore, APL needs to only look for short term interim solutions to bridge the gap until a MWSS solution is in place. I consider it appropriate, that the short-term solution is cognisant of and does not preclude likely long-term options.

Preconditions

Are there any key preconditions such as plant upgrades that need to be addressed before short term connections to the Huntly Water Treatment Plant and Wastewater Treatment Plant are implemented?

2.8 I note that, where possible, there are significant benefits for utilising existing infrastructure – offering the ability for developer contributions to improve discharge quality to the river, supporting WDC achieving compliance with resource consent conditions and providing efficiencies. APL's commitment is to undertake a development that is fully aligned with Te Ture Whaimana, the Vision and Strategy for the Waikato River.

2.9 APL would construct the pipeline from the Huntly WTP to the APL Ohinewai development, and this provides opportunities for renewals / upgrading of reticulation infrastructure. Potential retention time / age of the water could be addressed through chlorination, etc., of the water throughout the reticulation system in the development; the detail of how this will be achieved will be undertaken at a later date but I can confirm that it is technically feasible from an engineering perspective.

2.10 APL would also support WDC in securing further water from the Waikato River to cater for proposed district growth in both Huntly and Ngaruawahia, i.e. beyond the approximate mid-2026 timeframe that all water from this water take would be in use.

2.11 Feedback from WSL indicates that the higher than expected levels of growth in Ngaruawahia have required 2,000 m³ a day of Huntly WTP capacity to be assigned to support this, as the Ngaruawahia WTP is unable to be upgraded to meet demand. The exact timing of this growth and nature of the uptake of this capacity is subject to further discussions with WSL, in particular, whether Ngaruawahia growth timing would coincide with the short-term requirements of the Ohinewai development

- 2.12 At a meeting that I attended with WSL officers on 8 May 2020, WSL confirmed that they had communicated with WDC that the Huntly WWTP and WTP can technically provide servicing for the proposed staging of Ohinewai development. There are some technical challenges to be addressed in order for this to occur and these challenges need to be addressed within the next two years, or prior to any connection being made. However, I do not foresee any engineering issues that cannot be adequately addressed.
- 2.13 Discussions with WSL have also indicated that they are actively engaged with Te Kauwhata Irrigation Association (TKIA) with regard to the upcoming renewal of the irrigation consent held by TKIA. These discussions with TKIA may open up avenues to increase water allocation and take at the Huntly WTP. I note, APL have also had discussions with TKIA in regard to potential water supply arrangements.
- 2.14 Whilst Development Contributions (DCs) may need to be paid under these options, these can be discussed with WDC and a delivery pipeline and reservoir(s) (if required) can be constructed and vested in Council, offsetting that portion of cost. Capacity increase at the plant and other infrastructure investment could also be looked into to offset the required DC payments. Other funding mechanism can be investigated through discussions with the parties.
- 2.15 Given the imminent MWSS, I consider that pre-conditions should be appropriately cognisant of what the likely mid to long-term solution will be.

Staging

Can appropriate staging for water and wastewater through Huntly municipal services be delivered?

- 2.16 Taking into account the forecast growth of Huntly and Ngaruawahia¹, and adding in the staged approach of the APL Ohinewai development, the estimated water take would not exceed the consented volume until approximately mid-2026. This period effectively covers the 'interim' period before a MWSS option will be in place² or at least identified and progressed. Conservatively, a MWSS option may not be in place for 10 years. Therefore, when overlaying the APL development water requirements on the forecast growth there is a maximum shortfall of approximately 476m³/day in 2030.

¹ Based off futureproof figures.

² Based off discussions with WSL.

- 2.17 The staging of the APL development means that wastewater generation from the site up until mid-2022 would remain minimal and would be catered for by an on-site system. Following 2022, the residential component of the APL development would commence and the volumes of wastewater generated would warrant conveyance to the Huntly WWTP. This is the timeframe that a conveyance pipeline would need to be in place which APL would construct.
- 2.18 From 2023 to 2025, the initial projected wastewater flow volumes indicate that septicity may be a concern. However, this can be addressed through a range of measures, including chemical dosing, use of smaller pipe diameters or dual pipes, and water flushing.
- 2.19 The MWSS provides an opportunity to look at the mid to long term servicing solutions in consultation with WSL for both water and wastewater. WSL has confirmed that servicing of the Ohinewai Structure Plan area is included and will be accounted for in the outcomes of the MWSS. This leaves only the short term servicing matters to be confirmed through the hearings process.
- 2.20 There is also a potential that any investments in the short term serving of the Ohinewai development may support the mid to long term direction outlined in the MWSS. WSL has committed to share an early version of the MWSS in early June to initiate discussion on this topic.

3. **CONCLUSION**

- 3.1 For the reasons outlined above, and as a result of my broader analysis, there is in my professional opinion no reason why the rezoning of Ohinewai cannot be approved as proposed on the basis of water and wastewater-related issues.

Timothy Norman Harty

29 May 2020