

IN THE MATTER of the Resource Management Act 1991

AND

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

JOINT WITNESS STATEMENT OF EXPERTS IN RELATION TO STORMWATER

1. INTRODUCTION

1.1 On 16 June, 2020, expert conferencing sessions in relation to stormwater were undertaken by Pranil Wadan and Megan Blackburn. This Joint Witness Statement is a record of the outcome of these sessions.

1.2 This session was not facilitated.

1.3 In attendance as observers were:

- (a) Emily Buckingham, planner for Waikato District Council;
- (b) Stuart Penfold, planner for Ambury Properties Limited; and
- (c) Giles Boundy, planner for Waikato Tainui.

1.4 Notes were taken by Stuart Penfold.

Agenda - issues considered at conferencing

1.5 The issues identified as forming the agenda for the conferencing were:

- a) Is the stormwater management strategy for the site likely to be meet Regional Infrastructure Technical Specification (RITS) section 4.1.3 for the stormwater design, including sizing of primary and secondary networks, level of treatment and volume and peak flow requirements?

- b) Will stormwater from the development be treated to an acceptable standard?
- c) Is it envisaged that the volume and peak flow approach/requirements are likely to be met for discharges to lake environment vs natural watercourse?
- d) In the event that stormwater management devices are affected by the 10-year flood event, what are the implications on stormwater network resilience and maintenance requirements?
- e) Clarification is sought on the stormwater management flow chart tabled by Pranil Wadan on 4th June 2020, in particular:
 - (i) Clarification is sought on symbolic differences; and
 - (ii) Confirmation is sought on where rainwater re-use applies within the Ohinewai Structure Plan area.
- f) Is the likelihood and consequence of blockage and existing capacity issues of the Lumsden Road and Tahuna Road significant enough to require the drains to be specifically noted on the Ohinewai Structure Plan with associated planning provisions or can detailed design and consenting processes address this risk?
- g) Has the risk of ground consolidation from a reduction of rainfall infiltration across the site been adequately accounted for in the stormwater management strategy for the site?
- (b) If surface water soakage devices are to be utilised across the Ohinewai Structure Plan area, can they be designed to adequately treat contaminants to acceptable 'best-practice' guidelines?

1.6 There were a number of issues that were presented in the initial agenda that were able to be refined during the course of the conferencing. This approach was agreed by all the experts.

1.7 The following sections of this joint witness statement addresses each of these issues or questions, noting where agreement has been reached and, in the event of disagreement, the nature of the disagreement and the reasons for that disagreement.

2. **ISSUE ONE – STORMWATER DESIGN AND RITS SECTION 4.1.3**

Is the stormwater management strategy for the site likely to be meet Regional Infrastructure Technical Specification (RITS) section 4.1.3 for the stormwater design, including sizing of primary and secondary networks, level of treatment and volume and peak flow requirements?

2.1 On this issue, the experts are in agreement that the stormwater management for the site is likely to meet RITS section 4.1.3.

2.2 It was acknowledged that compliance with RITS is to be addressed at detailed design and via the resource consenting process.

3. **ISSUE TWO – ACCEPTABLE STORMWATER TREATMENT STRATEGY**

Will stormwater as a result of the development be treated to an acceptable standard?

3.1 On this issue, the experts are in agreement that stormwater is likely to be treated to an acceptable standard.

3.2 It was acknowledged that the stormwater management strategy is appropriate and the flowchart (refer **Appendix 1**) is a useful reference.

4. **ISSUE THREE - VOLUME AND PEAK FLOW REQUIREMENTS**

Is it envisaged that the volume and peak flow approach/requirements are likely to be met for discharges to lake environment vs natural watercourse?

4.1 On this issue, the experts reached agreement.

5. **ISSUE FOUR – STORMWATER DEVICE PERFORMANCE IN 10 YEAR ARI**

In the event that stormwater management devices are affected by the 10-year flood event, what are the implications on stormwater network resilience and maintenance requirements?

5.1 On this issue, the experts reached agreement, and the following matters noted:

(a) It is recognised that there may be areas subject to the 10-year flood event and that stormwater devices within that area can be designed appropriately (at the detailed design phase).

- (b) The location of devices and any landform improvements as a result may lead to a loss of flood volume. The implication of any loss of storage can be addressed via the flooding conferencing.

6. **ISSUE FIVE**

Clarification is sought on the stormwater management flow chart tabled by Pranil Wadan on 4th June 2020, in particular:

- (i) Clarification is sought on symbolic differences; and*
- (ii) Confirmation is sought on where rainwater re-use applies within the Ohinewai Structure Plan area.*

- 6.1 On this issue, the experts reached agreement that the stormwater flow chart is a useful tool in interpretation of the management framework outlined in the Stormwater Management Plan and that symbolic differences were cosmetic. The flowchart has been updated (**Appendix 1**).
- 6.2 It is acknowledged that the flowchart denotes the framework for stormwater management for the Ohinewai Structure Plan (OSP) area.
- 6.3 The experts agreed that while rainwater reuse is noted in the stormwater management framework as an option, it cannot be confirmed as applying to all areas of development within the OSP.
- 6.4 The provision of rainwater re-use tanks will be confirmed at detailed design and resource consent phase.
- 6.5 It is acknowledged that rainwater re-use tanks can fulfil other functions, for example water supply requirements.
- 6.6 The Waikato Tainui position is that water re-use tanks should be used across the OSP area and be included in planning provisions.

7. **ISSUE SIX**

Is the likelihood and consequence of blockage and existing capacity issues of the Lumsden Road and Tahuna Road significant enough to require the drains to be specifically noted on the Ohinewai Structure Plan with associated planning provisions or can detailed design and consenting processes address the management of capacity issues?

7.1 On this issue, the experts reached agreement that the likelihood and consequence of blockage is understood, and that flooding in a 100-year event as a result would not affect the proposed rezoning area.

7.2 The experts agreed that detailed design and consent processes can appropriately manage capacity issues of the culverts and accordingly in our view these culverts do not need to be noted on the OSP.

8. **ISSUE SEVEN**

Has the risk of ground consolidation from a reduction of rainfall infiltration across the site been adequately accounted for in the stormwater management strategy for the site?

8.1 On this issue, the experts agreed that this issue has been considered in the stormwater management strategy with input from discussions with geotechnical and groundwater specialists.

8.2 It is acknowledged that detailed design will further account for a multidisciplinary design process that accounts for geotechnical, groundwater and stormwater expertise.

9. **ISSUE EIGHT**

If surface water soakage devices are to be utilised across the Ohinewai Structure Plan area, can they be designed to adequately treat contaminants to acceptable 'best-practice' guidelines?

9.1 On this issue, the experts reached agreement. The stormwater management strategy provided for management options that include pre-treatment.

9.2 The experts agree that untreated stormwater will not be discharged directly to ground.

10. **PARTIES TO JOINT WITNESS STATEMENT**


10.1 The signatories to this Joint Witness Statement confirm that:

(a) They agree with the outcome of the expert conference as recorded in this statement;

(b) They have read Appendix 3 of the Environment Court's Practice Note 2014 and agree to comply with it; and


(c) The matters addressed in this statement are within their area of expertise.

SIGNATURES:



Pranil Wadan

Date: 18/6/2020



Megan Blackburn

18 / 6 / 2020
Date: _____

Appendix 1 – Stormwater Management Flowchart

