BEFORE THE INDEPENDENT HEARINGS PANEL
OF HAMILTON CITY COUNCIL

UNDER	the Resource Management Act 1991 ("**RMA**")
AND	
IN THE MATTER	of Private Plan Change 17 to the Hamilton City Operative District Plan ("**PC17**")

STATEMENT OF REBUTTAL EVIDENCE OF SCOTT DEAN KING ON BEHALF OF FONTERRA LIMITED

STORMWATER

20 NOVEMBER 2025

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1. INTRODUCTION

1.1 My full name is Scott Dean King.

1.2 I have been engaged by Fonterra Limited ("**Fonterra**") to provide advice on stormwater solutions for PC17. I was the author of the stormwater sections of the Infrastructure Assessment and the Technical Memo entitled "**Stormwater Management Update**" within Appendix 2 of the Supplementary Information dated August 2025, for PC17.

1.3 My qualifications and experience are set out in my Statement of Evidence for PC17 dated 7 October 2025.

Scope and structure of evidence

1.4 In this statement, I respond to matters raised in statements of evidence filed on behalf of submitters on PC17, specifically matters raised in the Statement of Evidence of Dean Morris (Engineering) on behalf of Porters Group and Empire Corporation Limited (collectively referred to within this statement as "**Porters**").

Code of conduct

1.5 I confirm that I have read the Expert Witness Code of Conduct set out in the Environment Court's Practice Note 2023. I have complied with the Code of Conduct in preparing this evidence and I agree to comply with it while giving oral evidence before the Hearings Commissioners. Except where I state that I am relying on the evidence of another person, this written evidence is within my area of expertise. I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed in this evidence.

2. RESPONSE TO EVIDENCE

2.1 In general Mr Morris' evidence appears to be supportive of the proposed stormwater management measures put forward as part of PC17, stating in the conclusion that:[1]

> …the overall PC17 servicing is sound and technically capable of supporting the proposed industrial development.

[1] Statement of Evidence of Dean John Morris on behalf of Porter Group and Empire Corporation Limited dated 30 October 2025 at [8.1].

2.2 In Section 6 of his evidence, Mr Morris states that the Porters South (Southern Triangle) land[2] (refer to Figure 1 below) ("**Southern Triangle Land**"), can be easily integrated into the downstream network proposed by PC17 but suggests that confirmation of downstream connectivity through the proposed PC17 network is necessary.[3]

Figure 1 – The location and extent of Southern Triangle Land.

2.3 As noted in the Stormwater Management Update, the concept wetland areas proposed for development of the West Block of the Plan Change Area ("**West Block**") have already been sized to allow for future developed site flows from the Southern Triangle Land.

2.4 The allowance for future developed site flows from the Southern Triangle Land was provided as part of the best practice whole of catchment design approach required for the stormwater management system.

2.5 The proposed whole of catchment approach would also require downstream connectivity to be provided for the Southern Triangle Land, addressing Mr Morris's concern.

3. EROSION MITIGATION WORKS

3.1 Since the filing of my Statement of Evidence for PC17, dated 7 October 2025, I have undertaken a further assessment of potential erosion mitigation works that would be appropriate and proportionate to be required under PC17. This assessment was also used for the informal meeting that was held several

2 Part Allot 8 Pukete PSH; Lot 1 DPS 58299.

3 Statement of Evidence of Dean John Morris on behalf of Porter Group and Empire Corporation Limited dated 30 October 2025 at [6.1]-[6.6].

weeks ago with Mr Smith (the stormwater expert for Council), Mr McGahan (the Section 42A Report author) and Mr Grala (planner for Fonterra). This meeting is described within the statement of Mr Grala.[4]

3.2 As part of this further work, I undertook a calculation of the proxy Fonterra contribution to erosion mitigation works. This was based upon the anticipated increased volume of runoff into the Te Rapa Stream from the development of the Fonterra owned land in PC17.

3.3 The calculation utilises estimated modelled Te Rapa Stream flow volume numbers quoted in Appendix G (Model Build Report - Rev D, dated 6 December 2021, by BECA) of the Draft Te Rapa Integrated Catchment Management Plan ("**ICMP**"), and accounts for the split of land ownership between Fonterra and other landowners in the Te Rapa Stream catchment for areas that have yet to be developed.

3.4 The calculation determined a Fonterra contribution of 9.3% (refer to the breakdown attached in **Attachment A** for a detailed calculation).

3.5 Taken as a percentage value of the estimated cost of the erosion protection programme for the Te Rapa Stream, set out in Appendix E (Stream and Erosion Protection Measures Memo - Rev G, dated 4 October 2023, by BECA ("**Stream and Erosion Protection Measures Memo**")) of the Draft Te Rapa ICMP, which has an estimated complete cost of $25.8m, this would equate to a Fonterra contribution of $2.4m.

3.6 As a comparative calculation I have considered the $/ha contribution rate towards erosion protection works costs levied on the recently consented Empire Corporation Limited site to the west of Onion Road, which was set at $27k/ha (a figure that is also noted in the Stream and Erosion Protection Measures Memo).

3.7 Applying the contribution rate of $27k/ha to the 71.5 ha of Fonterra owned land in the West Block (that would drain to the Te Rapa Stream on completion of development), provides a Fonterra contribution of $1.93m.

3.8 The breakdown of erosion protection works costs in the Stream and Erosion Protection Measures Memo identifies the estimated cost of providing rip rap erosion protection works for the worst-case section of the downstream reach of the Te Rapa Stream (referred to in the Stream and Erosion Protection Measures Memo as "**Area 1**") as having an estimated cost of $3.3m.

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4 Statement of Rebuttal Evidence of Nick Grala at [5.2].

3.9 Therefore, the potential value range of Fonterra's contribution to the erosion protection works would cover the majority of the cost to stabilise the worst affected area of the Te Rapa Stream (ie Area 1).

3.10 At the informal meeting, both Mr Smith and I agreed that this would be the most appropriate package of works to be required under PC17 because it was proportionate to the effect of development that will be enabled under PC17 and because it has the greatest mitigation based on this proportionality.

3.11 As such, and as noted in the rebuttal evidence of Mr Nick Grala,[5] Fonterra has proposed an amendment to the Strategic Infrastructure Table for PC17 (Rule 3.9.3.3) to include a requirement to undertake stream erosion protection works in Area 1 (being the worst case section of the Te Rapa Stream) as part of development of any stages that discharge into the Te Rapa Stream (being all stages except for Fonterra South, Meadowview East and Fonterra North).

3.12 At the meeting, Mr Smith and I also agreed that these works should be integrated and future proofed into either of the full packages that may be implemented under the Te Rapa ICMP in the future. Subsequent to the meeting I have worked with Mr Grala to refine the Infrastructure Plan requirement provision of PC17 to ensure that this package of works can be integrated and future proofed into either of the full packages that may be implemented under the Te Rapa ICMP in the future.

3.13 This will mean that, prior to undertaking such works, an updated version of the Stream and Erosion Protection Measures Memo will be completed to further refine and update the concept design level information that informed the current revision (Rev G). This will provide an up-to-date, robust set of concept design details and associated construction cost estimates for the erosion protection works.

3.14 It will also assist to confirm at that stage that undertaking the downstream erosion protection works (as recommended in the PC17 Infrastructure Assessment) is the most cost-effective solution to mitigating the potential stream erosion effects of post-development increased flows in the stream.

3.15 I note, that in the unlikely event the update of the Stream and Erosion Protection Measures Memo does not provide that confirmation, the Draft Te Rapa ICMP also provides an alternative option of constructing a large diameter

5 Statement of Rebuttal Evidence of Nick Grala at [5.7].

diversion pipe between the Te Rapa Stream and the Waikato River as an alternative method of mitigating downstream erosion in the Te Rapa Stream.

3.16 As part of my recent assessment of the erosion mitigation works options, I undertook a walkover of the downstream reaches of the Te Rapa Stream that can be accessed or viewed from public land.

3.17 During this walkover I noted that a significant section of the downstream reach of the stream (noted in the Stream and Erosion Protection Measures Memo as "**Area 3**") is in the process of having erosion protection measures and planting provided along its length.

3.18 Photographs from the walkover are attached in the **Attachment B**.

3.19 The works being undertaken along this length of stream appear to be related to a land development subdivision currently being undertaken on either side of the stream.

3.20 The length of the Area 3 works noted is approximately 325m and has been attributed an erosion works cost allocation of $3.3m in the Stream and Erosion Protection Measures Memo.

3.21 These recent works, which would reduce the remaining erosion mitigation works required (and hence reduce any estimated costs to complete), reinforce the need to provide an updated version of the Stream and Erosion Protection Measures Memo to confirm the specific erosion mitigation works required as part of development of the first stage of the West Block.

4. CONCLUSION

4.1 I can confirm that, as part of the best practice whole of catchment design approach required for the stormwater system, the concept wetland areas currently designed for the West Block have already been sized to allow for future developed site flows from the Southern Triangle Land.

4.2 Further consideration of the requirement for erosion mitigation works in the Te Rapa Stream has resulted in the inclusion in the Strategic Infrastructure Table for PC17 (Rule 3.9.3.3) of an updated Stream and Erosion Protection Measures Memo as part of the first stage of work on the West Block.

4.3 Completion of the necessary stream erosion protection works in Area 1 (being the worst-case section of the Te Rapa Stream) has also been included in the

Strategic Infrastructure Table for PC17 (Rule 3.9.3.3) as part of development of the first stage of the West Block.

4.4 A review of Fonterra's potential cost contribution to the erosion control measures has established that Fonterra’s contribution would cover the majority of the cost associated with stabilising the worst affected area of the stream (ie Area 1).

Scott King
20 November 2025

Attachment A – Volume increase in the Te Rapa Stream calculations.

Volume Increases in the Te Rapa Stream (from Beca's ICMP Model Build Report Version D)

Table 5-4: Total volume RCP 6

Location	2-year volume m^3 (ED)	2-year volume m^3 (MPD)	10-year volume m^3 (ED)	10-year volume m^3 (MPD)	100-year volume m^3 (ED)	100-year volume m^3 (MPD)
Waikato River	281,792	332,265	535,089	615,847	966,042	1,062,730
SH1	94,097	140,693	176,708	249,124	302,547	392,363

Notes:

Of key interest for stream erosion would be the 2yr volumes (ie flows from these smaller storms regularly eroding stream banks and beds).

The difference in 2yr flow volumes between now (ED = Existing Development) and future (MPD = Maximum Probable Development) **upstream of the SH1** culvert would mostly be related to the future development of the PC17 West Block, plus developed Empire Land (and other minor land owners).

The increase in volumes related to development of the remaining greenfield land upstream of the SH1 culvert can be calculated as:

- (SH1 2yr MPD Volume) 140,693m3 - (SH1 2yr ED Volume) 94,097m3 = **46,596m3**.

This volume increase, taken as an overall % of the total 2yr MPD volume **at the Waikato River** (so as to determine % contribution of the overall catchment), equates to:

- 46,596m3/332,265m3 = **14%.**

So the % contribution of extra volume into the Te Rapa stream for the critical 2yr event, related to development of the remaining greenfield land upstream of the SH1 culvert, would be **14%**. However, it is noted that the Empire Corp land (and other minor land owners) would also form a % of this contribution.

A review of the major undeveloped areas draining to the Te Rapa Stream, that are upstream of the SH1 culvert, gives the following (see plan of areas below):

- West of Onion Road = 23 Ha (owned by Empire Corp, Delegat Ltd, Proudlock Enterprise & HCC)
- Southern Triangle = 11.5 ha (owned by Empire Corp, Baznid Investments, Perrin Family Trust)
- Northern Tip = 1.9 Ha (owned by NZ Sikh Society)
- Fonterra West Block = 71.5 Ha (owned by Fonterra).

Thus, Fonterras % share of the undeveloped Te Rapa Catchment upstream of the SH1 culvert:

= 71.5 / (23 + 11.5 + 1.9 + 71.5) = **66.3 %**

As such, **Fonterras overall share of contributions to stream erosion =** 66.3% of 14 % = **9.3 %**

As detailed above, the maximum Fonterra % contribution towards erosion control measures required on the downstream reaches of the Te Rapa stream resulting from PC17 development would be **9.3%.**

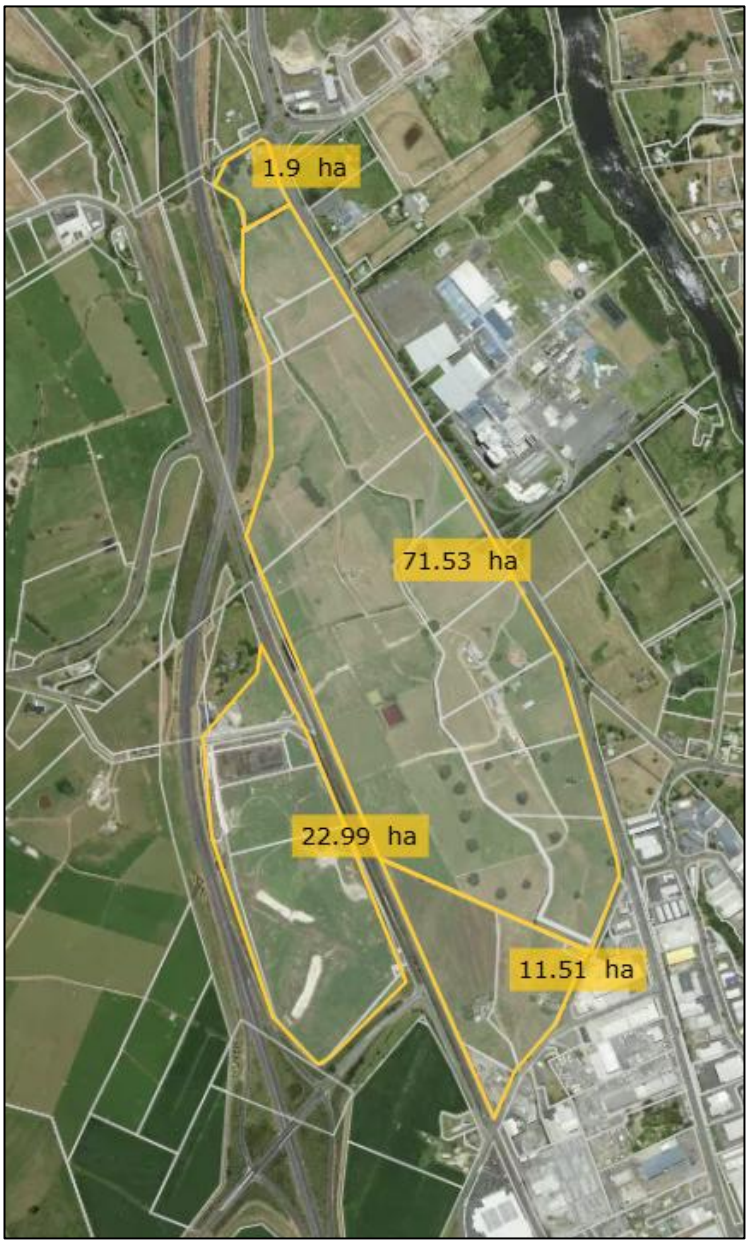

Fig: Main undeveloped land areas in the Te Rapa Catchment upstream of the SH1 culvert

Attachment B – Photos of Te Rapa Stream 7 November 2025.

Fonterra Photos

Upstream Stream Entry (Ruffell Rd)

Downstream Exit (Pipes under Sh1)

Erosion Area 2 (Upstream End – From Washer Rd)

Erosion Area 3 (Startign D/s at Washer Rd)

Area 4 (d/s end, taken from Horotiu Bridge Rd)

Area 6 (u/s of Innovation Way)