BEFORE THE HEARING PANEL APPOINTED BY KAIPARA DISTRICT COUNCIL

Under the	Resource Management Act 1991 (**RMA**)
In the matter	of Private Plan Change 85 (Mangawhai East) to the Kaipara District Plan

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SUPPLEMENTARY STATEMENT OF EVIDENCE OF CAREY HENRY DOUGLAS SENIOR

Flooding

23 January 2026

SIMPSON GRIERSON

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1. INTRODUCTION

1.1 My full name is Carey Henry Douglas Senior.

1.2 I prepared a statement of evidence dated 1 December 2025 on behalf of Kaipara District Council (**Council**) in relation to the application by Foundry Group Limited and Pro Land Matters Company (**Applicant**) for a private plan change to rezone land in Mangawhai East (**PPC85**). I refer to my qualifications and experience in my original statement of evidence and do not repeat them here.

1.3 Although this matter is not being heard by the Environment Court, I confirm that I have read and am familiar with the Code of Conduct for Expert Witnesses in the Environment Court Practice Note 2023 and I agree to comply with it.

1.4 I am authorised to make this statement on behalf of the Council.

2. SCOPE OF EVIDENCE

2.1 Since I prepared my statement of evidence, the Government has made the National Policy Statement for Natural Hazards 2025 (**NPS-NH).** I understand that the NPS-NH came into effect on 15 January 2026.

2.2 The purpose of this supplementary statement is to provide an update to my evidence-in-chief in relation to the NPS-NH and how it impacts PPC85, specifically in relation to flood risk due to impervious surfaces in the plan change area creating stormwater run-off.

2.3 I have not considered coastal flood risk (unless it has an impact on discharge of stormwater to the marine or tidal stream environment). Coastal flood risk is assessed by Mr Blackburn in his evidence on coastal inundation.

3. RAINFALL INDUCED FLOOD RISK

3.1 The NPS-NH applies to all activities managed under the RMA (except for infrastructure and primary production). I have assessed the natural hazard risk from flooding from subdivision and development within the plan change area, that would be enabled by PPC85.

3.2 While the applicant has assessed flood risk using the 1% Annual Exceedance Probability (AEP) metric, Policy 1 of the NPS-NH now requires that natural hazard risk be assessed using the Risk Matrix (Likelihood x Consequence) at Appendix 1 to the NPS-NH. Although the applicant concludes there are no significant floodplains, the site is bordered by an estuary and affected by tidal inundation. To give effect to the NPS-NH, the decision-making process must translate the identified 1% AEP (which falls into the "Unlikely" to "Possible" likelihood range depending on the precise modelling) against the potential "Consequence" to people and property. In my opinion, the provided evidence indicates that the consequence of rainfall induced flooding is likely to be minor or moderate, which translate to a low or medium risk.

3.3 I have noted previously that while no independent rain-on-grid modelling was completed, the proposed approach is considered acceptable. This aligns with NPS-NH Policy 5, which directs decision-makers to use the best available information, even if uncertain or incomplete. Furthermore, Policy 2 allows for a proportionate approach to management. Given the evidence that the site has no large upstream catchment and drains directly to the harbour without downstream risk, requiring extensive new hydraulic modelling at the plan change stage may be disproportionate to the anticipated risk level. Therefore, relying on the Northland Regional Council maps combined with the requirement for detailed modelling at the Resource Consent stage satisfies the NPS-NH requirement for proportionate risk management.

3.4 Policy 4 of the NPS-NH requires that subdivision use and development, including any associated mitigation measures, must not create or increase significant natural

hazard risk on "other sites," requiring such risks to be avoided or mitigated proportionately.

3.5 While the applicant's assessment suggests that the site largely discharges directly to the harbour, thereby minimising downstream risk, the evidence acknowledges that future "land-locked" subdivisions within the Plan Change area will rely on downstream stormwater channels to convey runoff to the coastal interface. In short, whilst the plan change area as a whole sits at the bottom of the catchment, in the event that the plan change area is developed in a staged manner, with the higher land developed first, care will need to be taken with subdivision design to ensure downstream sites within the plan change are not adversely affected by increased flood risks.

3.6 As outlined in my evidence-in-chief, the SMP requires overland flow paths to be assessed at the time of subdivision or development, to ensure there is capacity to accommodate the 1% AEP storm event post development, and that downstream impacts are not exacerbated. In my opinion, this gives effect to the matters in Policy 4 of the NPS-NH.

4. CONCLUSION

4.1 In my professional opinion, while the National Policy Statement for Natural Hazards (NPS-NH) requires formal risk classification using the Appendix 1 Risk Matrix (Likelihood x Consequence), the available evidence indicates rainfall-induced flooding consequences are likely minor to moderate, resulting in a Low or Medium risk profile.

4.2 The SMP requires overland flow paths to be assessed at the time of subdivision or development, to ensure there is capacity to accommodate the 1% AEP storm event post development, and that downstream impacts are not exacerbated. In my opinion, this gives effect to the matters in Policy 4 of the NPS-NH.

4.3 Overall, I remain of the view, as set out in my evidence-in-chief, that flood risks have been identified and suitable mitigation requirements have been proposed to

ensure that the impact of future development activity will not increase flooding to neighbouring environments.

Carey Henry Douglas Senior

23 January 2026