

**Before the Independent Hearings Panel
at Wellington City Council**

Under Schedule 1 of the Resource Management Act 1991

In the matter of Hearing submissions and further submissions on the
Proposed Wellington City District Plan – Hearing
Stream 5

**Statement of Supplementary Planning Evidence of
James Beban on behalf of Wellington City Council**

Date: 25 July 2023

INTRODUCTION

- 1 My full name James Gary Beban
- 2 I am employed as Director at Urban Edge Planning Limited.
- 3 I have read the further evidence and statements provided by submitters relevant to the Section 42A Report – Natural and Coastal Hazards.
- 4 I have prepared this statement of supplementary planning evidence in response to evidence submitted in response to the Section 42A Report (dated 30 June 2023), including the associated appendices, which can be found here: [Plans, policies and bylaws - Hearing stream 5 - Wellington City Council](#).
- 5 Specifically, I respond to the following submitters:

Argosy Property No 1 Limited [383], Fabric Property Limited [425], Oyster Management Limited [404] and Precinct Properties New Zealand Limited [139]

- a. Sam Morgan, Technical Principal, WSP (Coastal Hazards)

QUALIFICATIONS, EXPERIENCE AND CODE OF CONDUCT

- 6 Paragraphs 1.1 and 1.2 of my Evidence-in-Chief sets out my qualifications and experience as an expert in planning.
- 7 I confirm that I am continuing to abide by the Code of Conduct for Expert Witnesses set out in the Environment Court's Practice Note 2023, as applicable to this Independent Panel hearing.

SCOPE OF EVIDENCE

- 8 My statement of evidence addresses:
 - a. The expert evidence of the submitters listed above;

RESPONSES TO EXPERT EVIDENCE

Argosy Property No 1 Limited, Fabric Property Limited, Oyster Management Limited and Precinct Properties New Zealand Limited

- 11 There are two issues raised within Mr Morgan's evidence that I would like to address:
- The assigning of the High Hazard Area for the 1% Annual Exceedance Probability event for Coastal Inundation based on the current sea level; and
 - The inclusion of 1m of sea level rise in the tsunami modelling.
- 12 The Proposed District Plan takes a relatively simplified risk-based approach to the management of natural and coastal hazards through the consideration of likelihood and consequences on future development.
- 13 A hazard ranking approach as used the Proposed District Plan has been drawn from a range of national and regional direction and non-statutory guidance that exists to guide land use planning for natural hazards (for example New Zealand Coastal Policy Statement, Regional Policy Statement, Ministry for Environment Active Fault Guidelines, Tsunami Land Use Planning Guidelines version 2).
- 14 The hazard ranking sets the likelihood aspect of the risk based approach. However, due to the different temporal timeframes that different hazards occur on, there is not a standardized likelihood that can be used for all-natural hazard and coastal hazards.
- 15 For the purposes of completion, the hazard sensitivity ranking for the different activities (being Less Hazard Sensitive, Potentially Hazard Sensitive or Hazard Sensitive) forms the consequence aspect of the risk-based approach. In this regard, the District Plan is considering the risk (being the likelihood of a future natural hazard event, and the consequence from future development, when considering whether it is appropriate for an activity to be located within a natural hazard or coastal hazard overlay).
- 16 With respect to coastal inundation, I agree with Mr Morgan that the New Zealand Coastal Policy Statement does not set a return period of 1:100 years. The NZCPS however does apply to land that is potentially impacted by coastal hazards over the next 100 years (Policy 25). A 1% Annual Exceedance Probability Event equates to an approximately 63.4% chance of occurring in a given 100 year period. I consider that given this high chance of a 1% AEP event occurring in any given 100 year period, that it is appropriate to have a planning response to the land that is incorporated within

the present day coastal inundation with a 1% storm event overlay.

- 17 Policy 25 sets the following requirements for when considering land use planning responses to areas impacted by coastal hazards:
- Avoid increasing the risk of social, economic and environmental harm from coastal hazards
 - Avoid redevelopment, or change in land use, that would increase the risk of the adverse effects from coastal hazards.
 - encourage redevelopment, or change in land use, where that would reduce the risk of adverse effects from coastal hazards, including managed retreat by relocation or removal of existing structures or their abandonment in extreme circumstances, and designing for relocatability or recoverability from hazard events;
- 18 The requirements of Policy 25 are directive and essentially seeks to avoid redevelopment that increase the risk of social, economic, or environmental harm or increase the risk of adverse effects from coastal hazards. Due to this directive, for the purposes of the District Plan, the 1% AEP Coastal Inundation event was assigned a high hazard ranking in the Wellington District Plan. The hazard ranking is purely for the District Plan purposes and is intended to provide clarity to how the policy and rule approaches to different hazards have been assigned. For the purposes of completion, all high hazard rankings have an avoid framework (for example Stream Corridors and Wellington Fault Rupture Zone).
- 19 In supporting the 1% AEP Coastal Inundation event a high hazard ranking, I am mindful that the areas within this overlay will likely get more significantly impacted over time (when compared to the existing situation) as sea level rises. I would expect that in future District Plan reviews, the landward line of this overlay will migrate inwards in response to future increases in sea level rise. As a result of the hazard profile of this land within the 1% AEP Coastal Inundation highly likely increasing in time, I consider it was appropriate to give it a high hazard ranking for the purposes of the District Plan.
- 20 I agree with Mr Morgan that the District Plan does not consider future protection mechanisms. This is due to the uncertainty associated with where future protection will be located and the funding and timing of any future mitigation. It would be inappropriate for District Plan maps to take into account an unknown uncertainty. I am however of the position that if any future protection structures are constructed between now and the next District Plan review in 10 years, then any

hazard mapping should take into account the effectiveness of these protection structure, if technically possible.

- 21 In regard to the tsunami, I acknowledge that the 1% tsunami includes 1m of sea level rise within the model. It is not inconsistent for models to have a sea level rise assumption applied. For example, the Wellington Water Flood Models in the Wellington City District Plan include a 1m sea level rise assumption.
- 22 The inclusion of the 1m Sea Level Rise in the model provides a buffer in respect to when the tsunami may arrive. If it was based on the current sea level, there is the potential for there to be an underestimation in the extent of the impact, especially if the event was to not occur for several decades. This is due to sea levels being higher in several decades time, when compared to the current situation. As tsunami is a hazard that is directly impacted by sea level rise, it is appropriate that the inclusion of the 1m sea rise assumption is retained as this provides some future proofing to the model and ensures that land use practices are not established today, which could be significantly impacted by tsunami in several decades time.
- 23 I also would note that the tsunami modelling used in the Wellington City District Plan is the same as what was used in the Porirua City District Plan and the Hutt City District Plan. In this regard, there is a regionally consistent approach to the tsunami modelling in the District Plans.
- 24 Within Mr Morgan's evidence, the revised hazard tables have had the tsunami - 1:500 year scenario inundation layer removed. I am unable to find any explanation as to why this has been removed, other than that it is replaced by his suggestion of having the 1:100 year tsunami scenario with 1m of sea level rise.
- 25 From a planning perspective, I believe it is appropriate to retain the 1:500 year scenario for tsunami overlay. Wellington is located in a seismically active part of the world, and there are a number of sources for tsunami. While historically land use planning has not accounted for tsunami hazards, I remain of the view that given our seismic environment it is appropriate we commence planning for these larger events to ensure that risk to people and property as a result of future development is reduced.
- 26 While I overall do not support changing the ranking table as per the suggestion of Mr Morgan's, I do support changing the coastal hazards ranking table so that it is explicitly clear that the tsunami

hazard modelling includes 1m of sea level rise. The suggested wording for this change is below:

Coastal Hazard	Hazard Ranking
Tsunami – 1:100 year scenario inundation extent with 1m of sea level rise	High
Existing coastal inundation extent with a 1:100 year storm	
Tsunami – 1:500 year scenario inundation extent with 1m of sea level rise	Medium
Coastal inundation extent – with 1.43m sea level rise scenario and 1:100 year storm	
Tsunami 1:1000 year scenario inundation extent with 1m of sea level rise	Low



Name: James Beban

Position: Director: Urban Edge Planning