

- I would like to recognise the panel and thank you for the opportunity to speak today
- As Mr McDonnell saw fit to steer this hearing towards my submission for discussion on day 1 it would appear my submission in calling the flood mapping into question has struck a nerve.
- During my 15 minutes I will refer to e mail correspondence between myself, Torrey McDonnell and Alastair Osborne. I will also refer to Pukerua Bay Stormwater Catchment model build report.
- I wish to make it clear to the room that my submission is not based around climate change denial, I am calling the methodology of the flood mapping into question.
- The hearing panel has been forewarned of my submission on day one of the hearing, however I feel this was done to mislead the hearing panel. Mr Osborne and Mr McDonnell lead you to believe that my main concerns were the representation of the topography of Gray Street and how it related to the modelling. This was the initial concern, however during the course of my investigations I discovered and highlighted that it was the as built drainage data that was used to build the modelling that was flawed and incorrect and any reference to topography is now a moot point.
- This is evident in the e mails between myself and Mr Osborne between August and October 2022 and on the 4<sup>th</sup> of October Mr Osborne e mails Mr McDonnell, myself and other parties that the online GIS information in regards to drainage was wrong and the modelling will need updating.
- I can only assume that this updating of the modelling had a dramatic effect as the extensive flooding inundation of Pukemere Way and Gray Street was removed completely. You would have seen this in figures 10 and 11 of Mr Osborne's evidence presented to you on day one. I feel Mr Osborne and Mr McDonnell did not adequately explain this to you in the hearing on day one and hence my suspicion you were being misled my concerns were based around topography. Mr Osborne claimed on day one the new information based on the sump leads made no difference to the modelling. Yet the widespread inundation of these streets was removed.
- However, it was then seen fit to put an overland flow path on my property. Figure 11 of Mr Osborne's evidence.
- Mr Osborne states that the overland flow path is necessary in the event of network blockages or an inability to carry run off in an extreme event.

- The Pukerua Bay Stormwater Catchment model build report clearly outlines the assumptions that were applied in its development. 3.6.2 Hydraulic model assumptions clearly states that pipes are blockage and sediment free and inlets, outlets and sumps are blockage and sediment free.
- I have provided evidence via e mail to Mr Osborne and in my submission that the sumps outside my property are served by a 300mm stormwater main. And using the Hazen- Williams equation for flow, highlighted that this section of drainage has a 5.5 cubic meter per minute out fall at its termination. This is a substantial amount of capacity, and the drain has a more than adequate gradient from a drainage point of view.
- In an e mail reply to me after I highlighted this drainage information, on the 13 of September Mr Osborne states "I agree that the drainage through the stormwater network would not be impeded by flow in the downstream channel to a degree that it causes the sumps to surcharge. In our modelling, however, the sumps are surcharging because of the small diameter sump leads that have been applied".
- This is an important point to note as this is what I have proven wrong, the leads are 300mm in diameter not 100mm as was modelled.
- So given that the modelling assumptions are that drainage systems are blockage and sediment free as I have highlighted, Mr Osbornes statement I have referred to above in e mail correspondence, how do I now find an overland flow path on my property due to network blockages or runoff inability? This seems to be now steering away from past explanations and methodology.
- The questions also need to be asked that does the cul de sac in Pukemere Way have the same overland flow path methodology applied to it? Or any other street in Porirua for that matter? Has an investigation been carried out as to how much incorrect GIS drainage data has been applied to this modelling throughout the Porirua City area? The models are validated through recorded events, Mr Osborne stated this on day one of the hearing, what recorded flooding events exist in the vicinity of Gray Street and Pukemere Way?
- Porirua City Council is flippant in its responses on its flood mapping Q&A page on its web site when it comes to insurance coverage and the impact these flood hazards will have on property values. These are real concerns for rate payers and should be more considered when applying flood mapping on existing properties. Especially so, post what we have seen in the North Island recently and what will I am sure result in a change in attitudes from insurance companies in regards to coverage for house holders.