

Rep 19

General Manager
Glamorgan Spring Bay Council

22 Ryans Road
Spring Beach
10/05/2023

Dear Sir,
Please find attached a submission questioning the proposal to rezone 155
Rheban Road and the associated subdivision development application.

I can be contacted by return email or telephone on 0409342749 if any further
information is required.

Regards
Steve Wilson

A handwritten signature in black ink, appearing to be 'Steve Wilson', written over a horizontal line.

SUBMISSION OPPOSING PROPOSED REZONING AND SUBDIVISION AT 155 RHEBAN ROAD

Prepared by S.J.Wilson, 22 Ryans Road Spring Beach
maryjeanwilson@bigpond.com
08/05/2023

Introduction

This appeal relates to a proposal to rezone land at 155 Rheban Road from 'Future Urban' to 'General Residential' and for Council to approve a new 90 lot subdivision on the rezoned site. Several aspects of the application and supporting documents raise significant concerns about the suitability of the site for the proposed development and the justification for rezoning at the present time. The present submission is confined to the appellants areas of expertise with only brief additional comment to alert Council to the potential legal implications of approval. Absence of comment on other consultants reports should not be taken as approval of their methodology, or agreement with the conclusions put forward.

Two of the consultants' analyses offer only guarded support for the proposed subdivision, with caveats relating to climate change in one case and demographic issues in the other. It is of particular concern that caveats in the appended reports have been largely ignored in the proposal put to Council.

A full examination of legal issues relating to planning rules and processes are outside the scope of this submission. The prospect of litigation relating to approved development on what is clearly identified in the application as a flood prone site is, however, noted where appropriate.

Basis for appeal

1 Flood inundation consultants report.

The analyses by both Flussig and Aldanmark clearly show the site to be flood prone.

The Flussig report notes, in their introduction, that their modelling is limited by a lack of reliable data on likely rainfall events and storm surges into a future subject to climate change. They refer to the Climate Futures Tasmania study, as the most recent and complete source of data, as a basis for estimating future rainfall events. That study, completed in 2010 and based on modelling done in 2008/9 used computer models available at the time. These are now known to have been conservative, underestimating or omitting details like rainfall intensity and frequency of storm events. Such detail is essential for evaluating risk of flooding on what is known locally, and confirmed by the consultants, as a flood prone site. Critically for Council, the consultants down-play, or dismiss, the risk of future flooding, ignoring their own warning that their modelling is based on inadequate data.

The engineering notes (Aldanmark) also raise a concern about flooding, noting a need for a "hydraulic study to determine flood potential for the subject lands—-".

The significant risk of flooding for this development raises questions about the insurability of new dwellings into the medium to longer term. It is notable that recent flood events in NSW and Queensland all suggest that planning for housing development has underestimated the effects of climate change on rainfall intensity, runoff and flooding.

There is another issue with the Flood Inundation report. It is noted that the scope of the study was specified by the developer and effects on coastal erosion are not explored. With outfalls onto an open beach the effect of a 25% (their estimate) increase in peak flow onto Shelley Beach and the impact of sediment on the inshore environment should be considered. The main body of the proposal notes the issue but dismisses its significance with no reference to the flooding study or engineers report.

2 Residential capacity and demand analysis

There is no conclusive evidence to show that population has increased above the STRULS growth strategy forecast for the Orford area. The population analysis also takes no account of other approved or flagged developments in the region. Consequently the application provides no real argument for rezoning the land at 155 Rheban Road. In fact the SGS report notes (Page 20) “these rezonings **may** not need to occur for a number of years”, and “there is **possibly** an insufficient supply of land in Orford”. This conclusion aligns with the Triabunna/Orford structure plan: “Rezoning **may** not need to be done for several years”.

The graph used to estimate population in the SGS study (Fig 2 in their report) has critical deficiencies. In particular, they have chosen to include an estimated population for 2017-2019 to justify rejecting the STRULS projection, in favour of a much steeper projected rise from their last real data point (2016). The source of the extra data, the reason it was selected and the statistical analyses behind the projected increase in population in the years from 2017 onwards are all a mystery. Clarification is needed.

With the trend shown for number of dwellings in Fig 4 there are similar problems. It is apparently based on real data from 2010 to 2016, but the scale used in the graph masks year by year variability. The latter is essential to estimate the trend within the period to 2016, and extrapolation beyond is not justified on either statistical or practical grounds.

To interpret these data and projections, context is important. Prior to 2017 bank interest rates were low, and expected to stay low and building costs were relatively stable. Since 2021 however, there has been a sharp and ongoing rise in building costs with material supply chain issues, labour shortages and interest rates continue to rise.

The SGS consultants report on residential capacity and demand offers only qualified support for the subdivision proposal. Further, their methodology relating to projected population and number of dwellings should be questioned. The tentative conclusions and the change in economic conditions over the years since real data was analysed do not justify an argument that 90 new building blocks should be released.

3 Sewage Odour assessment

Although not mentioned in the proposal put to Council, the appendix written by TasWater, shows there will be odour impacts on current residents of East Shelly Beach. TasWater

plans include a new 40 cubic meter emergency storage tank for raw sewage at the East Shelly Beach Sewage Pumping Station. There has been no analysis of odour intensity or distribution from this new facility, which is a part of the proposed development.

The analysis of odour impact from the present sewage treatment plant needs some clarification. A common transient atmospheric condition, usually occurring in the evening or early morning and lasting from a few minutes to several hours, can have a marked influence on pollutant/odour distribution. If this condition, has not been included in the model its' omission would seriously affect the conclusions. Odour impacts may thus be seriously under-estimated.

Conclusions and recommendation

1. Two of the consultants' analyses offer only guarded support for the proposed subdivision, with caveats relating to demographic issues in one case and climate change in the other. These details are not included in the body of the proposal, but are clearly noted in the appendices and therefore available to Council. In both cases, these reservations suggest a cautious approach be taken by Council.
2. Given the extent of flooding in Orford and around the subject area in 2022/3, and stated exclusions in the consultants reports, it is recommended that council obtain independent opinion on the medium term insurability of new dwellings in the proposed subdivision.
3. The application presents no evidence to show that population and demand for housing has increased since 2017. If a new analysis of more recent data claims to support the proposal, a proper statistical analysis is needed to quantify the confidence (or otherwise) planning authorities should have in any projections presented.
4. Present residents of East Shelly Road have not been made aware of changes to the sewage pumping station, which may cause increased odour in their street.
5. Aspects of the modelling around the Orford sewage treatment plant odour assessment report need clarification and confirmation that the conclusions accurately reflect the model output and any limitations.
6. Given recent discussion about the legal position of local Councils after flood events interstate, it would seem prudent for Council to fully examine its legal liability.

Technical notes.

Author of this submission was a University of Tasmania Academic (now retired) with research and teaching responsibilities relevant to this submission. The following notes summarise technical difficulties with aspects of the Development Application and its' supporting (Consultants) documentation.

1. *A member of the scientific oversight committee for the Climate Futures Tasmania project and report.* At the time it was recognised that there were several unavoidable limitations on the study. Those relevant to the present proposal were: (a) The capacity to estimate rainfall intensity in high rainfall events. (b) The capacity to estimate the frequency of extreme events. (c) The current emissions trajectory exceeds that used in the model so that there is an underestimate of expected effects on all aspects of climate. The consultants report notes a general limitation but does not specify their critical importance in estimating long term flood risk and its consequences for Council.

2. *Lecturer in statistics - data analyses and interpretation.* Much of the residential capacity and demand analysis is based on too few data points to draw 'safe' conclusions. Generally, graphs should clearly show the real data points used in any statistical analysis. Fitted lines (or curves) should indicate (ie quantify) the strength of the relationship they represent and, as a general rule, should not be extrapolated outside the range of real data. The extended lines in both the population and number of dwelling graphs are, at best, speculative and should not be read as firm estimates of future trends.
3. *Published research on aspects of air movement under inversion conditions* - The study uses wind modelling to estimate plume distribution and direction, concluding that there is no risk of pollutant (odour) impact on the proposed development. The modelling detail given is not sufficient to justify such a strong conclusion. There is a transition period between an inversion profile and a normal daytime lapse profile when wind flow and vertical mixing are not consistent with either. This condition is transient and could last from a few minutes to a few hours, when pollutants are trapped under an inversion cap and move with a katabatic flow. It is not clear whether this scenario is included in the model output.

S. J. Wilson