

## Greater Geelong Amendment C375 Panel questions & Council officer responses 30.8.2018

### Panel questions – Day 1

- Extent of the BMO in Barwon Heads: what was the trigger for this BMO being delineated? What vegetation and what distance?

The BMO that applies adjacent to the coast in Barwon Heads was introduced by Amendment GC13 3 October 2017.

The BMO will have been applied by the State Government based on the BMO Mapping Methodology and Criteria set out in Planning Advisory Note 46. We haven't found any specific information from DELWP explaining the calculation of the BMO in this area, however it appears from our GIS that the BMO is based on a 150 m ember protection buffer from coastal dune vegetation.

- What would be the adverse impact of settlement boundary expansion on township character?

The *Hansen Barwon Heads Residential & Landscape Character Assessment* on page 20 discusses the town's characteristics:

Township character is different to neighbourhood character and is very important in the context of Barwon Heads. It is a broader concept that relates to the setting and regional context in which the overall township is located, rather than to the design or character features of individual or clusters of residential buildings throughout the town. Yet the character of residential areas throughout the town and the design and appearance of residential dwellings, can enhance or detract from this wider concept of township character.

Current planning policy identifies a key strategic objective related to the character of Barwon Heads:

*To protect the unique character of Barwon Heads as a small coastal village located within a sensitive environmental and significant landscape setting.*

Key contributing factors identified in current vision are:

- The surrounding landscape – this is not part of the *Residential & Landscape Character Assessment*, but which should be considered as part of broader Structure Plan update.
- The designation as a "Small Coastal Village" – the key question for this project is: what does this mean in terms of specific built form outcomes?

Barwon Heads' township character relates to things such as:

- Its coastal location near a surf beach and its location on the Barwon River.
- Its clearly defined urban edges and entries and approaches to the town.
- Its clearly defined Town Centre and 'heart' of the town.
- Its location within a rural and wetlands setting.
- Its separation from other towns.
- Its size and scale, being only a small village, with a relatively small population and with limited opportunities for substantial population growth.

- The relatively limited range of services and facilities available within the town.
- Its dual roles as the home of a permanent population, with ties back to its holiday centre and its strong tourist role.
- Natural vegetation, landscapes and building style reflective of its coastal location.

This township character is considered an important element to take forward into identifying the future neighbourhood character. Some areas may also have a greater influence on the 'township' character given their level of exposure. These include areas around key gateways, as well as the Town Centre.

The coastal setting of Barwon Heads; its clearly defined urban edges, its location in a rural and wetland setting, its size and scale; and its relatively limited range of services and facilities, would be significantly altered were the boundary expanded as proposed in submissions.

- The Part A submission refers to a 2006 to 2016 increase in population of 335. Is this correct? What is the per annum population growth over those ten years?

Paragraph 17 of Council's Part A Panel Submission indicated Barwon Heads' population increased by 335 from 3540 in 2006 to 3875 in 2016. This text was taken from the Barwon Heads Structure Plan 2017 (point 4.1, page 82).

This was an error in that it should have referred to 2011, not 2006. Table 7 shows that the population of Barwon Heads (usual residence) was:

2001:	2660
2006:	2992
2011:	3540
2016:	3875

The growth rate per annum has been (averaged) for the following periods:

2011 – 2016:	1.8%
2006 – 2016:	2.6%

- Why is it not feasible to increase the capacity of the underground drainage network? Is it for environmental, economic or engineering reasons?

Barwon Heads township is in a location that is inherently difficult to drain – it is located in a depression and is surrounded by sensitive environmental features. There is a heavy reliance on mechanical intervention (i.e. pumps), which carries increased operating costs and maintenance burden over gravity drainage. Main drainage works have high capital cost, therefore must be informed by robust background study to ensure the most effective projects are funded using the limited budget available.

Recent works have been informed by the Barwon Heads Drainage Flood Management Plan (WBM Oceanics, 2005), whose primary objectives were to *characterise existing flooding and to develop an appropriate flood management strategy to mitigate stormwater flooding in the area*. Council has been progressively undertaking works to implement the preferred mitigation scheme presented in this report:

- Upgrade Clifford Parade pump station, gravity feeder pipes and rising main - **Completed**
- New 750 mm stormwater gravity pipe along Ozone Rd from Grove Rd to Barwon River to take flow from Clifford Parade pump rising main - **Completed**
- Upgrade Heron Cr pump station, gravity feeder pipes and rising main – **Pending. Not programmed at this point in time, design evaluation yet to be completed.**
- New 825 mm stormwater pipe from corner of Hitchcock Ave and Bridge Rd to Clifford Parade pump station - **Completed**

- Infiltration pits providing 5 year ARI capacity in George St – **Completed. Design was constrained in size by existing underground assets and therefore unlikely to be 20% AEP (5 year ARI) capacity, more likely in the realm of a 1 EY (1 year ARI) rainfall event.**

The chosen mitigation scheme had a BCR of 0.48. Whilst other schemes had better results in reducing the number of above flood affected properties, the BCR was significantly lower. The scheme has been implemented in a staged manner with a total cost to date of \$4.5 million. This has, on average, accounted for 15% of Council's annual drainage capital works budget over the last 10 years. Council has completed a number of other drainage flood studies over this time in other parts of the municipality, all with mitigation schemes that now need to be implemented.

Given the significant amount of infill development that has occurred in Barwon Heads since 2005, further upgrades to main drainage would need to be informed by an updated flood study.

- Can we provide maps showing drainage patterns and flows?

Our Engineering Services have provided a map (**attached**), which attempts to show drainage patterns within Barwon Heads.

With respect to the map, they advise as follows:

- LiDAR DEM is colour ramped from low (white) to high (red)
- Flood extent is that currently designated as flood prone land for the purposes of Building Regulation 802. These have come from a variety of sources including:
  - Flood study / hydraulic modelling
  - Observation
  - Flood data transfer (DNRE, 200)

It must be noted the whole township has not been studied, and some extents have been 'squared up' to align with cadastre.

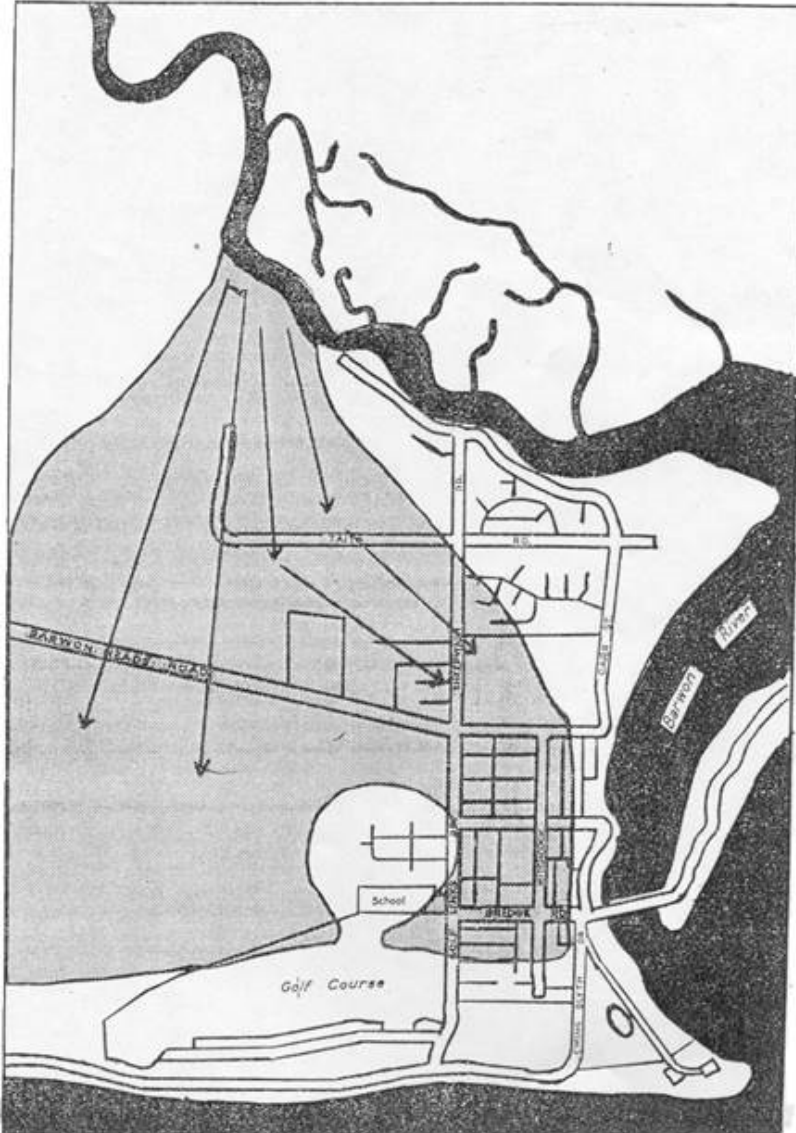
- Where not already identified as flood prone, it would be expected that water will pond in land with lower elevations (pinkish to white).

Another map has been provided which shows approximately where floodwater would go before the levee was in place:

## SOUTH BARWON DISTRICT

### b) Main areas affected (BARWON HEADS)

Shaded area is estimate of area affected in 1952 when level at McIntyre Bridge (Geelong) reached 5.48 mtrs. The water was approximately 1 to 1.5 mtrs deep in the central part of Barwon Heads and entered the town from the "sheepwash".



- How would the recent bushfire provisions (Clause 13.02) impact on a proposal to intensify residential development potential in Warrenbeen Court? Would BAL 12.5 be met?

We have not had the opportunity to carry out any specific BAL assessment for Warrenbeen Court. However, our Building Services have advised that any dwellings

closely surrounded by Coastal Moonah woodland would be highly likely to be subject to a bushfire attack level higher than BAL-12.5.

- During the hearing, please explore:
  - \* the reasons why we are directing growth to other areas (than Barwon Heads)?
  - \* the strategic justification for the current boundary?
  - \* why was the settlement boundary set where it is in 1988?

Whilst the exact reason for the boundary is unknown, Council's senior planning engineer offers the following observations:

- The alignment coincides with historic crown allotment boundaries – extract of the Connewarre Parish Plan provided.
  - The cadastral boundaries coincide generally with a low ridge which directs stormwater runoff to the east or west.
  - The boundary has effectively been in place since the 1981 Planning Scheme (or earlier). At that time, land within the current town boundary was zoned residential or future residential, with parcels to the west typically within rural zones.
- Can we provide copies of the emails referring expert evidence to our Engineering and Environment units and copies of their responses?

Provided at the hearing.

## Panel questions – Day 2

*Questions asked of Council:*

- Provide scanned copy of 2010 GTA traffic report to Panel.

Provided by email.

- Respond to Barwon Heads Alliance's proposed revised DDO 41 and DDO 42 schedules.

Drafting discussion to be held on Day 7 (Thurs 30<sup>th</sup>).

- Can a DDO specify a lower maximum height than the parent clause in the General Residential Zone?

Advice from DELWP indicates no. If there is a strategic justification for a lower height limit than the GRZ (11 m), then the land should be rezoned to NRZ.

DELWP email dated 23 August 2018 provided.

- Expand on the process that led to the Thirteenth Beach Resort approval. Noting that this land abuts the Murtnaghurt Lagoon, how was impact on the wetlands and net environmental benefit assessed/considered/achieved?

Verbal submissions at closing.

Questions not asked directly of Council, but may be worth addressing anyway:

- Does all stormwater in Barwon Heads go to discharge outlets – or does it infiltrate/evaporate?

Some of the smaller catchments in the township, particularly Colite Street, Araluen Court, Haynes Court and those south of Bridge Road, have no formal outfalls. Council has a number of infiltration pits, typically with capacity to manage runoff up to a 1 EY event. In these areas a formal LPOD is typically not available for each lot, with stormwater runoff from dwellings managed on site.

Infiltration systems are inherently unreliable, with their effectiveness dependant on:

- soil conditions
- groundwater conditions
- underlying geology
- sediment loading and cleanout frequencies

#### Panel questions – Day 5

- Panel wants to know the impacts of the proposed zone changes on the capacity of Barwon Heads [presume Housing capacity]

Council observes that:

1. The area of the proposed GRZ1 (34 ha) will be less than the current area of the RGZ3 (48 ha). This is a 29% reduction in the IHDA area. The mandatory maximum height limit will increase by 0.5m to 11m and 3 storey residential developments are achievable subject to permit. Garden area requirements will apply.
2. The balance of the town's residential land (172 ha) is proposed to be zoned NRZ6 with no minimum subdivision area specified (excluding Warrenbeen Court). The mandatory maximum height limit will remain at 9m and 2 storeys and garden area requirements will continue to apply.

Future planning permit applications in the IHDA will be assessed on their merits however the proposed IHDA planning controls will still provide for a diversity of housing types and housing growth. This is evidenced by the recent VCAT decision for 1 Flinders Parade which included the following findings (pages 20-21):

- 48 *Mr Sullivan for the Council took some time to take us through Amendment C375 to the Greater Geelong Planning Scheme, a matter to which he asks us to place some weight. Even if we were to give this planning scheme amendment some weight, despite the fact that it is yet to pass through a Planning Panel hearing, we find that the proposed amendments to this part of Barwon Heads does little to change our view that a three storey apartment building would remain an encouraged built form outcome for the review site.*
- 49 *The proposed planning scheme amendment seeks to retain the review site within the Increased Housing Diversity Area, and therefore within the influence of policy that seeks an evolution of the built form character in this neighbourhood, rather than a level*

*of respect for the existing neighbourhood character. Further, while the proposed planning scheme amendment seeks to change the zoning of the land to the General Residential Zone, it does so while increasing the desired height limit from the current 10.5 metres to a proposed 11.0 metres. It is evident that the purposes and provisions of the proposed General Residential Zone support the development of a three storey apartment building in this part of Barwon Heads.*

- 50 *To the extent that Amendment C375 would place the review site at the edge of the Increased Housing Diversity Area, we do not consider that this is an edge at which a transition in built form heights would be encouraged by the existing and proposed policy context. Policy seeks a transition at edges to neighbouring residential precincts, and if placed on an edge, the review site would transition to the existing hotel, not a residential precinct.*
- 51 *The final element of Amendment C375 is the application of Schedule 42 the Design and Development Overlay to the review site and surrounding properties. We have been provided with a copy of the proposed provisions of this schedule, including the provisions for buildings and works and the decision guidelines. We read nothing in the proposed Schedule to the Design and Development Overlay that would contrast with or mitigate against the design for the review site that is before us. While there are proposed new standards for site coverage, setbacks, landscaping and car parking, the design that is before us already complies with each of those standards. While the schedule also seeks to restrict the construction of high fencing, we consider that the existing character and site conditions support the range of solid and transparent fencing that is proposed. For these reasons we find that Amendment C375 to the Greater Geelong Planning Scheme is not a matter that would act against a development of this nature on the review site.*
- 52 *For these reasons we find that the proposed development is an appropriate response to the character of this neighbourhood, having regard to the guidance provided by the Greater Geelong Planning Scheme.*

[A copy of the decision is provided.](#)

[We note that the 2017 BHSP and Amendment C375 seek to address the development constraints within the town – namely the SBO applying to parts of the IHDA area and surrounding NRZ areas. Climate change and coastal hazard are also considered. These issues are discussed on pages 13-14 of the structure plan, with more detail provided on pages 98-102.](#)

[Further verbal submissions will be provided as part of Council's closing submissions.](#)