Lake Macquarie City Council

13 February 2018

Mr Timothy Green
Department of Planning and Environment
GPO Box 39
SYDNEY NSW 2001

Dear Sir

Subject: **Lake Macquarie Yacht Club**
Modification Application to Project Approval MP 08_0045 Mod 2
Lot 973 DP 755233, Lot 974 DP 755233, Lot 975 DP 755233
9 Ada Street, BELMONT NSW 2280

Thank you for your email, dated 23 January 2018, requesting Council to review the response to submissions regarding modifications to the above-mentioned Project Approval. A review of the submission and Noise Assessment has been made by Council, which has identified the following issues:

1. **Acid Sulfate Soils:** Council's Senior Development Engineer has reviewed the additional information and advised the applicants response is considered acceptable as it appears the existing piling will not be removed and additional support or new screw piles will be placed instead. It is noted that the original ASS Management Plan is still relevant. There are no additional engineering requirements.

2. **Climate change adaptation:** Council's Senior Sustainability Officer – Climate Change Adaptation, has reviewed the additional information and advised the existing floor level of 1.17 metres is below the current 1% AEP event (1.5m) and 5% AEP event (1.23m) and therefore at significant risk of flooding at this current point in time. Lake water levels have been shown to be increasing by around 2.5mm per year (MHL, 2015), intensifying the flooding risk.

   Council's current floor level requirement is 2.36m which is well above the existing level of 1.17m.

   The applicant's letter states:

   - *An additional trigger clause be added to the Project Approval requiring that, in the event the existing Mean Average water level of the lake increases to 0.250 AHD averaged over 3 consecutive years from the Mean Average recorded for 2016 of 0.130, OR at the expiration of 25 years, whichever comes sooner, Stage 3 of the Works shall be implemented.*

   - *The NSW Government Manly Hydraulics Laboratory Belmont Station number 211461 located on the northwest corner of the yacht club marina, be utilised as the basis for establishing the mean average lake level for the purpose of*

initiating the trigger for Stage 3. (Current data from this station has been provided as an Appendix B to this submission.)

Council Staff do not support the addition of the proposed trigger clause given that there are a range of factors other than sea level rise that impact on lake water levels including rainfall, floods, entrance conditions, barometric forcings, storm set up, climatic cycles and wind and wave effects.

Manly Hydraulic Laboratory, 2015, Water Level Trends of Lake Macquarie, Section 2.3 states that: "extreme water levels are often most important as they are associated with the most dangerous and damaging events. Extreme water levels have different behaviour and recurrence intervals than day to day and mean levels ie: different probability distributions. MHL discuss the use of generalised Extreme Value and Generalised Paretto Distributions.

An average annual water level of 0.250m at Belmont (averaged for 3 consecutive years) or 25 years (whichever comes sooner) is considered inappropriate given the current flooding risk and the limitations of using annual averages.

There are also potential limitations to using a single MHL water level station (Belmont 211461) to represent sea level rise. Manly Hydraulic Laboratory Report on Lake Water Levels 2011 advises "*the area in the region of the Lake Macquarie Gauges is known to have problems with subsidence of the land*". Sensitivity analysis of water level gauges is required and there are limitations in looking at a single site in isolation. MHL recommend we "*also consider the relative changes to maximum, minimum and median water levels as this will help distinguish between the drivers of water level change*".

It is recommended that the applicant consider a more rigorous assessment of hazards influencing stage 2A of the works to account for sea level rise and interrelated forcings – from a minimum, maximum and median risk perspective.

3. **Flooding:** Council's Senior Sustainability Officer (Natural Disaster Management) has reviewed the additional information and advised A Flood Warning and Evacuation Plan should be replicated as a floodplain management measure in Section 3 of the submission.

4. **Disabled Access:** No additional comment required.

5. **Noise:** Council's Environmental Officer has reviewed the Noise Assessment Report prepared by Spectrum Acoustics, dated January 2018, and advised the assessment has used background noise readings taken from 38 Brooks Parade Belmont. Brooks Parade is dominated by traffic noise whereas the nearest residential receivers to the club are not, and therefore the levels used in the assessment may not accurately reflect the noise conditions at the receivers.

   Assessed noise sources have been limited to musical entertainment in the marquee and poker machines in the outdoor gaming/smoking room. Predicted noise levels for these noise sources are:

a. Musical entertainment noise level of 105 dB(A). No other noise sources within the marquee have been included.

b. Poker machine noise 73 dB(A) from a total of 6 poker machines. No other noise sources within the gamin/smoking room have been included.

Considering the typical construction of marquees, the location of the marquee adjacent to the outdoor room is unlikely to provide the acoustic barrier effect determined by the acoustic consultant and therefore the use of the marquee is likely to impact on the nearest residential receivers.

Noise from the use of the terrace area outside the marquee and outdoor room and cumulative noise impact from all noise generating items and activities associated with the club has not been included in the report.

6. **Visual impact:** Council's Landscape Architect has reviewed the Visual Impact Assessment, prepared by Shaddock Architects, dated 21st December 2017, and advised the visual impacts to be sufficiently considered.

However, Council's Development Planner is concerned that the applicant has identified that the interim Stage 2A works will be in place until funds are available for Stage 3, upon an identified mean average water level, or at 25 years. The utilisation of portable amenities and a portable marquee on the lake is visually not appropriate for what could be a period of 25 years. It is therefore recommended, that Stage 3 works are to commence within a 5 year period. Any modified approval for Stage 2A should be time limited to 5 years.

7. **Social impact:** Council's Co-ordinator Community Planning has reviewed the additional information and raised the following concerns:

a. The applicant has identified that the interim Stage 2A works will be in place until funds are available for Stage 3, upon an identified mean average water level, or at 25 years. However, the utilisation of portable amenities and a portable marquee is not appropriate for what could be such a lengthy period of time (up to 25 years). It is therefore recommended, that Stage 3 works are to commence within a 5 year period. Any modified approval for Stage 2A should be time limited to 5 years;

b. Information provided in the modification application about the outdoor gaming room identified that operable louvre screen walls would be provided to the existing BBQ pavilion area to enable it to be utilised for outdoor gaming and as a smokers area, with the pavilion to be a non-enclosed public space. Plans do not indicate that the louvres are well away from patrons in the marquee, or that the smoking component of the outdoor gaming room is separated from the rest of the room and on the car park side of the enclosure. It is therefore recommended that the plans are amended to ensure that the smoking component is clearly separated (by a wall and auto doors and airlock) from the remainder of the outdoor gaming room. This is to ensure that non-smokers utilising the gaming machines (as there is no indoor gaming room) are not affected by cigarette smoke, and that no smoke is able to escape through the louvres adjacent to the portable marquee.

8. **Community Land:** No additional comment required.

9. **Food:** No additional comment required.

10. **Erosion and Sediment Control:** No additional comment required.

11. **European Heritage:** No additional comment required.

Should you require further information or wish to discuss the above issues, please contact the undersigned on 4921 0119 or by e-mail on gwilliams@lakemac.nsw.gov.au.

Yours faithfully

Georgie Williams
Senior Development Planner
Development Assessment and Compliance