16 December 2016

NSW Department of Planning and Environment
Planning Services
GPO Box 39
SYDNEY NSW 2001

Attention: Planner – Modification Assessments
Amy Robertson

Dear Amy,

Subject: Concept Approval MP_06_0309 - Modification 3 – Proposed Helipad
Trinity Point Marina, Tourism and Residential Development
Lake Macquarie City Council response to exhibition

In response to your correspondence of 16 November 2016 the following advice is provided.

The proposal is for the modification of concept approval MP06_0309 to introduce a Helipad to the Trinity Point Marina, Tourism and Residential development at Morisset Park.

The Helipad is proposed to be erected on a pontoon adjacent and connected to the approved Marina, and is proposed to service the approved Trinity Point development.

A maximum of eight (8) movements per day (i.e. 4 landings and 4 departures) and a maximum of 38 movements per week (i.e. 19 landings and 19 departures) are proposed.

The Helipad will operate from 8:00am Monday to Saturday and from 9:00am Sundays and Public Holidays, through to sunset (time seasonally variable). No night time use is proposed.

The Helipad proposal does not include refuelling or maintenance facilities.

Lake Macquarie City Council staff have reviewed the information contained within the Environmental Assessment Report, and also retained an external independent acoustic expert Renzo Tonin and Associates to undertake a peer review of the acoustic impacts of the proposal.

It is noted that this matter has yet to be formally reported to the current Council, although the applicant has provided Councillors with a comprehensive overview of the proposal.

Acoustic Impact

The *"Acoustic Assessment. Proposed Helipad. Trinity Point Development. Ref 46.4732.R7B:MSC"* dated 31 October 2016 by The Acoustic Group (the TAG Report) has been reviewed.

Council staff and Council's retained expert were consulted during the establishment of the methodology for acoustic testing, and were present when the testing was undertaken on 24 March 2016. It is confirmed that the report is consistent with the agreed methodology and on-site testing.

Council is advised by its expert that the TAG Report is generally robust and satisfactorily addresses the Secretary's Environmental Assessment Requirements issued by the Department on 6 July 2016.

The approach taken in the TAG Report in deriving acceptable noise criteria for the proposal appears to be comprehensive. Despite some editorial issues (see below), the TAG Report provides relevant and appropriate background data, assessment criteria, summary and conclusions.

In Council staff's opinion, both acoustic experts agree on the finding that the application of the Australian Noise Exposure Forecast, AS2363 and AS2021 provide the best evaluation methodology. The proposed helipad operation is able to be carried out in compliance with ANEF20.

If the development is supported by the Department, a suite of conditions is respectfully recommended to assist in mitigating acoustic impacts and regulating the operation of the helipad. These conditions are included as Appendix A to this letter and would form recommended conditions of any development consent, should the application be recommended for approval.

TAG Report - Editorial Comment

The following matters are raised for completeness only, and do not affect the conclusions or recommendations of the TAG Report:

1.0 Introduction

- The helicopter used for the on-site testing in March 2016 was a 'Firebird 288'. The TAG Report indicates it was an Airbus H125 (formerly Eurocopter AS350FB2 or Aerospatiale AS 350F). The TAG Report should clarify the helicopter used on the day of the testing.

2.0 Measurement Techniques

- Site testing measurements were carried out in accordance with AS2363-1999. The TAG Report should state that it is the 1999 version of AS2363 as there is also a 1990 version later referred to in the report.
- NATA Certificates should be appended to the TAG Report as evidence that the measuring equipment complies with clause 4.3.5 of AS2363-1999.

3.0 Measurement Results

- There is a typographical error in the paragraph following Table 1 where the reference to Appendix I should be a reference to Appendix H.
- The TAG Report at page 45 states that Locations 1 and 6 experience the highest helicopter noise levels, however according to the data in Appendix E, this appears to be incorrect.
- There appears to be an anomaly in Appendix E1 for movement 12 at Location 5 for the take off mode 2A Anti-clockwise in which the reported LAmax/SEL noise levels are 69/78. These levels appear unusually low when compared with the other values for this mode and should be checked / confirmed.

4.0 Acoustic Criteria

- The value of 55 for location 1(7) in Table 2 of the TAG Report is in error as it should be 58. This appears to make no difference to the conclusions in the TAG Report, however this should be verified by the report's author.

5.0 Acoustic Assessment

- In Appendix A of the TAG Report there is no flight path denoted as 'b'. There is only B1 and B2. Flight path 'b' refers to the flight path used for the test measurements.

- Flight path ‘C’ in Appendix A was not subject to testing and an approximate estimate only of the SEL and LAmax noise levels is required.
- There is no flight path defined in Appendix A for take offs directly to the north.
- Table 8 in the TAG Report assume all 8 movements will occur in the night-time period which is inconsistent with the ANEF modelling which assumed only 2 movements in this period. Table 8 should be split in two and the day-time modelled with 6 movements and the night-time modelled with 2 movements, if this is the most likely scenario.

Social Impact

Technical compliance with the relevant acoustic criteria is only one of a number of factors to be assessed with this type of land use. Social impacts of the proposal also form a significant part of the assessment.

The Social Impact Assessment (SIA) prepared by Key Insights Pty Ltd (October 2016) has been reviewed.

Although the SIA identifies that the helipad needs to be considered in light of the changing character of the local area and increased activation of the local space (due to the approved marina and tourist development), these impacts are localised to the immediate community. The Morisset Park and surrounding communities are predominately low density residential communities located in a natural setting.

The proposed helipad may affect the character and nature and impact on the broader community by adding to the impacts of the approved marina and tourist development.

Community opposition to the helipad is evident, however the potential benefits of the helipad will be experienced by people who may not members of the local community. These benefits may be at the expense of the local community, and consideration needs to be given as to whether the negative impacts are out-weighed by the benefits.

Of particular concern are the impacts on Brightwaters Christian College. The SIA identifies that the proposed helipad will impact upon the learning of children, particularly those with special needs, despite the school seeking to change its teaching program to accommodate the proposed helipad. The SIA identifies that further discussions and monitoring with the school will be required once the helipad is operational. However, no information is provided as to what these discussions or monitoring seek to achieve, or what potential actions can be undertaken if the helipad continues to adversely impact on the school. These discussions and investigations should occur prior to any approval of the helipad to ensure that the negative impacts can be mitigated.

The SIA also identifies that the community values of the Trinity Point Reserve are to be considered when assessing the helipad proposal. However, no information is provided in the SIA as to how or when these values are to be considered.

The SIA identifies that in order to address the potential impacts associated with a sense of place and community identity, that a community engagement strategy is to be implemented. However, no information is provided as to how this will address the impacts associated with a sense of place and community identity, and what the community engagement strategy will achieve.

The SIA should address the above issues prior to any determination of the application.

Flora and Fauna Impact

Council has reviewed The Trinity Point Helipad Overview of Potential MNES and Aquatic Ecological Impacts (MJD Environmental 28/11/2016); Aquatic Ecology Impact Report (Marine Pollution Research October 2016); and Coastal Processes and Hydrodynamics (Royal Haskoning DHV 25/10/2016).

The assessments examine potential impacts of the helipad to seagrass, benthic organisms and habitat, seagrass wrack, terrestrial species and habitat, fish and matters of national significance (MNES) under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999.* No impacts are anticipated on existing seagrass beds, benthic organisms, seagrass wrack, terrestrial vegetation, fish and MNES. There is a low risk of bird strike inherent to this activity.

Council raises no objections to the helipad from a flora and fauna impact perspective. The recommendations within the Ecological Assessment relating to the Construction Environmental Management Plan, pile and pontoon establishment, stormwater controls, water quality management and fauna clearance procedures are supported. Anti-roosting structures within the Managed Safety Zone may also help prevent bird strikes.

Strategic Planning

Lake Macquarie Local Environmental Plan 2014

Under LMLEP 2014 the site is zoned W1 Natural Waterways, within which helipads are a prohibited use.

A development application DA/1176/2014 for a helipad was lodged with Council on 30 July 2014 and is saved as a permissible use under Clause 1.8 (Savings Provisions).

However, the SEARs identify that the Modified Concept Application assess the proposal under LMLEP 2014, LMLEP 2004 and draft LMLEP 2014. The following advice is given in this regard.

The objectives of the W1 zone are to:

- protect the ecological and scenic values of natural waterways;
- prevent development that would have an adverse effect on the natural values of waterways in this zone;
- provide for sustainable fishing industries and recreational fishing; and
- provide for the recreational use of Lake Macquarie and its waterways as an important environmental, social and economic asset, including maintenance or enhancement of public navigation channels to a depth suitable for yachting and other boating activities.

It is acknowledged the proposed helipad would provide additional recreational, private use of the waterway and therefore reflect an economic asset, however this benefit would need to be considered alongside its social impacts. The environmental impacts as they relate to flora and fauna are acceptable.

The zone objectives are addressed in the Environmental Assessment which concludes that the proposal has no significant impact on the ecology, scenic values, and natural value of the waterways. Further refinement with regard to the objectives should be undertaken, specifically where the objectives relate to protection and prevention, rather than impacts.

Lake Macquarie Local Environmental Plan 2004

Under LMLEP 2004 the site is zoned 11 Lakes and Waterways. Development consent is required for a helipad in this zone.

The objectives of the 11 zone are to:

- recognise the importance of Lake Macquarie and its waterways as an environmental asset, not only to Lake Macquarie City, but to the Hunter and Central Coast Regions.
- ensure that development of the Lake and its waterways occurs in a manner that is consistent with the principles of ecologically sustainable development, and
- ensure development does not adversely affect the ecology, scenic values or navigability of the Lake or its waterways, and
- ensure that aquatic and terrestrial habitats and their interface are protected and enhanced and are not adversely affected by the recreational use of the Lake or its waterways, and
- provide for sustainable and viable economic use of the Lake and its waterways, and
- provide for sustainable water cycle management.

Similar to the W1 comments above, further refinement with regard to the objectives should be undertaken, specifically where the objectives relate to protection and enhancement rather than impacts.

Summary

The Acoustic Report accompanying the modified Concept Approval application has been reviewed and it's methodology, assessment and conclusions are supported. The Helipad is able to operate within the relevant acoustic criteria.

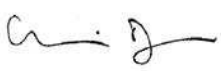
Further information should be sought with regard to the social impacts of the development, with particular reference to the benefits of the proposal weighed against the impacts of the proposal, from a social planning perspective, and it's impact on the Brightwaters Christian College and local residential community.

Further information should also be sought with regard to the proposal's consistency with both LMLEP 2014 and LMLEP 2004, in particular the relevant zone objectives.

This response does not seek to diminish any issues / concerns raised by the community and it is expected that full and proper consideration of community concerns will take place during the Department's assessment of the Concept Approval modification.

Should you require further information, please contact the undersigned on 4921 0311 or by e-mail on cbdwyer@lakemac.nsw.gov.au.

Yours faithfully



Chris Dwyer
Principal Development Planner
Development Assessment and Compliance

Appendix A – Recommended Conditions – Acoustic Mitigation and Regulation

1 Maximum Number of Flights

The number of flight movements shall not exceed the following:

(a) A maximum of eight (8) movements per day (i.e. 4 landings and 4 departures) with no more than two (2) of those movements occurring after 7:00pm (i.e. 1 landing and 1 departure); and

(b) A maximum of 38 movements per week (i.e. 19 landings and 19 departures).

This condition does not apply to movements which are associated with an emergency involving a police matter or a medical emergency.

2 Approved Flight Modes

The helipad shall operate only in one of the approved flight modes which are described in the acoustic assessment report entitled *Acoustic Assessment. Proposed Helipad. Trinity Point Development. Ref 46.4732.R7B:MSC"* dated 31 October 2016 by The Acoustic Group:

- Path A: approach from the south and departure to the south in calm winds;
- Path B1: approach from the south and departure to the south in westerly winds;
- Path B2: approach from the south and departure to the south in southerly winds; and
- Path C: approach from the north and departure to the south and then banking around and proceeding to the north in southerly winds.

Any revision to the flight modes must be submitted to Lake Macquarie City Council for approval and must be accompanied by a detailed acoustic report prepared by an appropriately qualified acoustic consultant who possesses the qualifications to render them eligible for combined membership of the Australian Acoustic Society and Institution of Engineers Australia or membership of the Australian Association of Acoustic Consultants, before the use of the revised flight mode commences.

3 Operating Hours

Operating hours of the helipad are as follows:

From 8:00am Monday to Saturday and from 9:00am Sundays and Public Holidays, to sunset (seasonably variable).

Ancillary works on the helipad such as cleaning and maintenance may be undertaken outside of these hours, but shall not interfere with the amenity of the neighbourhood by reason of noise, dust or emissions of any kind.

4 Noise Minimisation

The helipad shall be operated in accordance with the "Fly Neighbourly Guide" published by the Helicopter Association International, as amended from time to time.

Engines shall be turned off within 30 seconds of landing, except where this is not safe to do so in the pilot's estimation.

5 No refuelling, Engine Maintenance or Servicing

No refuelling, engine maintenance or servicing of any helicopter shall be undertaken on the site.

6 Noise Limits

The maximum noise levels from helicopter movements associated with the facility when measured in any 12 hour period on any day shall not exceed the following at any receptor location:

Receptor Location	LAeq,T(Hel)	LAmax(Hel)
Daytime (0700 hours to 1900 hours)		
1, 7	58	85
2	59	85
3,4,5,6	56	85
Evening (1900 hours to sunset)		
1, 7	50	80
2	50	80
3,4,5,6	50	80

The receptor locations defined in the Table above are those referred to in the *Acoustic Assessment. Proposed Helipad. Trinity Point Development. Ref 46.4732.R7B:MSC"* dated 31 October 2016 by The Acoustic Group.

Noise levels shall be measured in accordance with AS2363-1999 "Acoustics – Measurement of noise from helicopter operations' with the exception that:

(a) The modes of operation specified in Section 4.5 and Section 4.6 of the AS2363-1999 shall be as defined in the Approved Flight Modes condition of this consent; and

(b) The measurements shall be done in prevailing wind conditions with a wind speed at the microphone not exceeding 5m/sec.

Noise from helicopters shall include noise from take off and landing and any operations whilst on the helipad arising from start up, idle, power up and shutdown.

7 Noise Compliance Measurement and Verification

An appropriately qualified acoustic consultant who possesses the qualifications to render them eligible for combined membership of the Australian Acoustic Society and Institution of Engineers Australia or membership of the Australian Association of Acoustic Consultants shall be appointed and details of that appointment shall be submitted to Council before operation of the Helipad commences.

Within the first 60 days of commencement of use of the helipad, acoustic monitoring shall be undertaken in accordance with the following:

(a) The acoustic consultant shall:

(i) measure for a period of 7 continuous days when the helipad is operating at its maximum capacity and verify that the noise emanating from the helipad

complies with the noise criteria in the 'Noise Limits' condition of this consent; and

(ii) the measurements shall be performed in accordance with AS2363-1999 (Standard) with the exception that:

(a) the modes of operation specified in Section 4.5 and 4.6 of AS2363-1999 shall be as defined in the 'Approved Flight Modes' condition of this consent; and

(b) the measurements shall be done in prevailing wind conditions with a wind speed at the microphone not exceeding 5m/sec.

(iii) if necessary, make recommendations to ensure that the noise emanating from the helipad complies with the noise criteria in the 'Noise Limits' condition of this consent.

(iv) submit the report including recommendations to Council within 21 days of completing the measurements.

Note: For the purpose of this condition, the noise measurements must

(i) be taken on days when the helipad is operating at or near maximum usage capacity or an allowance is made in the noise readings to account for maximum usage capacity;

(ii) include all receptor locations identified in the Noise Limits condition of this consent;

(iii) include the whole of the operating hours for the period of measurements.

(b) If the acoustic consultant recommends that additional requirements or works be undertaken under condition (a)(iii) above, those recommendations shall be implemented to the satisfaction of both the acoustic consultant and Council within one month from the date of the acoustic consultant's report referred to in condition (a)(iv) above.

(c) if the acoustic consultant's recommendations are not implemented in accordance with this condition, the helipad shall not operate until such time as the recommendations are approved by Council and implemented.

8 Noise Monitoring Terminal

A Noise Monitoring Terminal (NMT) shall be installed at Receptor Location 1 as identified in the Noise Limits condition of this consent (or as close as practicable thereto) to measure noise levels on a continuous basis. The location of the NMT shall be approved by Council.

The NMT shall comprise the following equipment:

(a) A sound level analyser comprising a class 1 instrument having accuracy suitable for field and laboratory use. The instrument shall be weatherproof.

(b) The instrument shall be calibrated in-situ at periodic intervals not exceeding 14 days. If the calibration adjustment should deviate by more than 1dB from the last

calibration interval the instrument shall be remitted to the manufacturer for checking and service if necessary.

(c) All instrumentation shall comply with IEC 61672 (parts 1-3) *'Electroacoustics – Sound Level Meters'* and IEC 60942 *'Electroacoustics – Sound Calibrators'* and shall carry current NATA certification (or if less than 2 years old, manufacturer's certification).

(d) The LAmax,1 sec Fast and the LAeq,1sec noise levels shall be downloaded to a file server on a continuous basis including time stamp and the data shall be available ijn real time on a web server with a facility to interrogate historical data for up to 3 months.

(e) Access to the web server shal be provided to Council upon request.

(f) The LAmac,1 sec Fast and the LAeq,1 sec noise levels and time stamp and a log of flight operations (including time of take off or landing, helicopter details and flight movement details) shall be provided in excel form if requested by Council.

(g) If requested by Council acting reasonably the web server browser format shall be modified to the satisfaction of Council.

9 Complaints Handling

A sign shall be permanently and prominently displayed in a public place in close proximity to the helipad containing details including a telephone number to enable persons to lodge a complaint in respect of the operation of the helipad.

The telephone shall be manned during the hours of operation of the helipad and not revert to message service at these times.

All complaints shall be logged in a complaints register including the date, tome, complainant details (if provided), nature of the complaint and details of how the complaint was managed or resolved.

A copy of the complaints register shall be provided to Council on request.

Complaint records shall be kept for a minimum of three (3) years.

In the event that Council receives a legitimate complaint and Council acting reasonably directs the helipad operator to undertake a noise investigation, the helipad operator shall comply with the directions issued by Council.