

**S.75W Modification Application**

**North Byron Parklands**

**Modification Application in  
relation to Concept & Project  
Approval MP 09\_0028**

## North Byron Parklands • Mod 3

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In April 2012, the Planning & Assessment Commission (PAC) granted a five-year trial approval for the North Byron Parklands (Parklands) cultural event site. This approval permits a series of trial events that are to be monitored and reviewed. The PAC envisaged that event-related activities would be adjusted, where required, to fully trial the site.

Parklands' owners supported the recommendations made by the then Department of Planning and Infrastructure (DP&I) to the PAC as the recommended conditional approval aligned with regulatory best practice as applied to other outdoor event sites in NSW, Australia and similar venues globally.

Due to community concerns mainly around noise, traffic and the unknown social impacts on the local surrounds, the PAC decided to restrict its approval to a five-year trial, deleted the ability to hold small community events and set noise criteria different from most other outdoor venues. Despite the proponent/DP&I recommendations, the PAC did not set any criteria for bass music sounds (usually the more intrusive noise frequency).

Parklands is now on the way to fulfilling its ambition to be Australia's premier world class sustainable cultural events hub, bringing significant employment, economic benefit and cultural value to regional New South Wales. Only 20 months (and four events) into a five-year/15-event trial, the response from patrons, artists, and much of the local community has been extremely positive.

Pursuant to the trial approval process, four events have now occurred at Parklands (Splendour in the Grass 2013, Falls Festival 13/14, Splendour in the Grass 2014 and Falls Festival 14/15), resulting in the accumulation and assessment of a significant amount of information and experience.



Inclement weather impacted on the initial site build which resulted in several teething issues at the first event. However, continuous improvement measures implemented since have culminated in Splendour in the Grass 2014 and Falls Festival 14/15, which have been hailed as huge successes, garnering glowing accolades from media and patrons alike.

A recently commissioned economic impact assessment has concluded that for the two events held in 2014 (Falls Festival 13/14 and Splendour in the Grass 2014), economic output totalled \$93.4m, \$41.4m of which was derived from businesses and service providers in the Northern Rivers region of New South Wales, and some \$24.1m of the total economic output (25% of the total) generated in the Byron Shire. With unemployment in the Byron region at 11.4% and youth unemployment at 13%, these two events at Parklands not only bring significant economic benefit to the region but also represent a substantial employer of local people. When the third approved trial event is established, the local economic impacts will be further enhanced.

To date, event implementation improvements have been made through refinements to systems and procedures rather than by modification of the trial approval terms. However, it has been identified that a number of modifications to the existing trial approval would further improve performance at this venue.

This modification application comprises three key aspects as follows:

- to improve community amenity, set criteria to better manage lower frequency sound emissions from events held at the venue and align noise criteria with more common Statewide, national and international noise protocols for outdoor venues;
- allow small community, non-music focused events such as school cross-country runs, open-air cinema, and charity days to be held at the site; and
- adjust consent condition language to meet best practice, remove ambiguity, delete regulatory duplication and correct wording errors.

These three aspects of the modification application are explained in greater detail below.

## **1. Better manage sound emissions from events held at the venue**

In September 2010, when submitting its application, Parklands worked closely with experts in the field of event noise management, government departments and the then DP&I to postulate noise limits that were both consistent with State and national industry practice and the physical setting of the Parklands site. However, in its determination, the PAC chose to set no bass noise limits and to specify A-weighting controls using a 'background plus' regime rather than the DP&I's recommended absolute noise limits at the boundary of the receptors. A fact not considered at that time is that winter background noise levels are much lower than those in summer (due to prevailing winter meteorological conditions and less insect activity etc). Based on the experience garnered at the site and best practice, we submit that the key noise performance indicators should be the music noise levels experienced at the receptors' dwelling as that is where the impact, if any, will occur.

A large portion of complaints received by the event hotline and Department of Planning & Environment (DP&E) to date have related to noise. When looking closely at those complaints it is evident that most were concerned with the 'low end', or 'bass', frequencies. Current consent conditions do not regulate bass frequency noise, only higher frequency – or 'A-weighted' emissions. Parkland's A-weighting consent conditions, on the other hand, are prohibitively low in winter and therefore very difficult to comply with, as well as being inconsistent with best practice standards. This modification seeks to amend the over-regulation of less intrusive, high frequency noise and regulate the intrusive low end.

When setting event noise criteria the Planning & Assessment Commission (PAC) opined that *"noise control levels are to be reviewed after the first year of trial to assess their suitability and performance... "*. To facilitate the review required by the PAC and take into account the proponent's observations with respect to bass noise emissions, a number of expert Acoustic Reports have been commissioned. The set of noise criteria recommended in the accompanying expert Acoustic Report equate to those previously recommended by the Department to the PAC following its assessment of the original application.

## **2. Allowing small community events to be held at the site**

Parklands is again seeking the ability to host small-scale community events onsite, such as local school cross-country runs, open-air cinema, minor sporting events and other community events. A key requirement for community events will be that such events are not music-focused events.

The community has demonstrated a strong desire to use the Parklands cultural event facility as evidenced by the number of unsolicited requests received from a wide range of community groups and educational institutions to date.

This modification application proposes use of the site for small events. Operational parameters will limit the potential impacts of such events by setting the following requirements:

- non-music focused;
- small enough so as not to require external traffic management; and
- conformity with the applicable Parklands general management protocols and consent conditions.

## **3. Adjusting consent condition wording**

This aspect of the modification seeks to adjust various minor matters to improve the usability and robustness of the consent.

The changes proposed by this modification occur as a consequence of Parklands' faithful implementation of its Environmental Health and Safety Management System which continually reviews systems and procedures and seeks to adjust actions so as to create a continuous loop of improvement. This assessment has examined the impacts of the proposed amendments. We submit that the refinements proposed are capable of implementation in a manner which better mitigates against potential adverse impacts and is consistent with the trial nature of the approval granted by the PAC.

## COMPLIANCE AND USAGE STATEMENT

This S.75W Modification Application has been prepared and submitted under the *Environmental Planning and Assessment Act 1979* by:

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In respect of: Concept Approval 10\_0103

### Application

Proponent: Billinudgel Property Pty Ltd.  
Address: C/ - PLANNERS NORTH  
P.O. Box 538, Lennox Head NSW 2478  
Land to be developed: Lots 46, 402, 403, 404, 410 DP 755687; Lots 10, 12, 14 DP 875112; Lots 2, 12 DP 848618; Lot 101 DP 856767; Lots 30, 31 DP 880376; Lots 101, 102, 107 DP 1001878; and Lot 1 DP 1145020, Tweed Valley Way and Jones Road, Yelgun.  
Development: Cultural Events site.  
Environmental Assessment: S.75W Modification.

### Certificate

I certify that I have prepared the content of this Modification Application and to the best of my knowledge:

- it is in accordance with the Act and Regulations, and
- it is true in all material particulars and does not, by its presentation or omission of information, materially mislead.

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## 1. INTRODUCTION

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*This Section of the report identifies the nature of our instructions, relevant background information, an assessment of the trial to date and an outline as to the structure of the report.*

### 1.1 PREAMBLE

PLANNERS NORTH has been engaged by North Byron Parklands (Parklands) to provide town planning advice with respect to the preparation and lodgement of the third S.75W Modification Application concerning Concept Plan and Project Approval MP 09\_0028.

### 1.2 STRUCTURE OF THE REPORT AND ITS SCOPE

This section sets out the history of the application and the statutory context of the modification as well as details in respect to site inspection and further information. Section 1 also looks at the lessons learnt from the trial to date, describing the events completed to date and the observed impacts of the project in terms of economic, social and environmental matters. Section 2 describes the modifications proposed and their associated environmental impact and mitigation proposals where applicable. Section 3 describes in precise terms the modification sought. Section 4 describes consultation carried out with the various parties for the purposes of preparing this Modification Application. The final section is a conclusion which outlines the positive outcomes associated with the amendment of the consent in the manner proposed.

The Land Owner Authorities authorising the lodgement of the subject application are contained in **Annexure A** to this report. An Economic Impact and Benefits Report for 2014 is attached as **Annexure B**. An expert Acoustic Report in support of the application is provided in **Annexure C**.

### 1.3 HISTORY OF APPLICATION

Concept Plan Approval and Project Approval<sup>1</sup> were issued under Sections 75O and 75J of the then Environmental Planning and Assessment Act by the Planning and Assessment Commission (PAC) on 24 April 2012. The PAC issued the approvals pursuant to a delegation from the Minister for Planning and Infrastructure.

Since the original approval, two modifications have been made to the Project Approval. On 3 December 2012, minor typographical amendments were made to Conditions B4 and E18 of the Project Approval. Modification 2 was made to the Project Approval on 29 January 2013. That Consent modified a typographical error in Condition C32 relating to a miss-description of Yelgun Creek.

### 1.4 THE 4 EVENTS CONDUCTED TO DATE

The Parklands five-year trial approval, granted in April 2012 requires a series of trial cultural events to be undertaken in a manner that captures a range of datasets across key performance areas.

Parklands has been able to secure a 'home' for two annual iconic national music camping festivals for NSW - Splendour in the Grass (SITG) and the Falls Festival Byron (FFB). **Table 1.1** specifies the events that have occurred to-date in accordance with Condition B2 of the PAC approval.



**TABLE 1.1 EVENTS HELD TO DATE**

Trial	Event	Date	Patrons	Event Days
1 <sup>st</sup> Large Trial Event	Splendour in the Grass	Jul 13	25,000	4
1 <sup>st</sup> Medium Trial Event	Falls Festival Byron	Dec 13/Jan 14	15,000	4
2 <sup>nd</sup> Large Trial Event	Splendour in the Grass	Jul 14	27,500	4
2 <sup>nd</sup> Medium Trial Event	Falls Festival Byron	Dec 14/Jan 15	17,500	4

Extensive monitoring of each event has occurred so as to establish a comprehensive series of datasets examining an array of event parameters<sup>2</sup>. Reviews of the data and experience obtained from debriefs have occurred in various forums such as those of the event operators and the venue (Parklands), with key stakeholders (Byron Shire Council, NSW government agencies, neighbours, industry groups) and the Regulatory Working Group (RWG)<sup>3</sup>.



Each successive event has utilised this data, assessment feedback and findings to adjust operational procedures to improve performance. A key management framework which supports this continuous improvement process is the Parklands-initiated Environmental Health and Safety Management System.<sup>4</sup> This protocol is based on international environmental health and safety management standards.

Many key event aspects have already been improved as a result of data collection and analysis, as evidenced with traffic management<sup>5</sup>. These improvements have predominantly been made through refinements to systems and procedures rather than any modifications to the trial approval. However, it has been identified that a number of modifications to the existing trial approval would further improve performance at this venue.

The following summary table provides an overview of various event parameters and their performance and improvement status:

**TABLE 1.2 EVENT SUSTAINABILITY ASSESSMENT**

Economic Environment	Comment	Modification
- Local and regional impacts	Economic modelling within the application Environmental Assessment (EA) forecast significant local and regional economic benefits generated by the Parklands venue. An analysis of actual event operation for the first two events confirms predictions (refer Section 2.2 below) <sup>6</sup> .	No consent modification required.
Social Environment	Comment	Modification
- Offsite impacts	The offsite response team and community manager have managed offsite impacts and response requests from the local community during events <sup>7</sup> . Further refinements are in train, including requesting more presence from Council rangers <sup>8</sup> .	No consent modification required.

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Social Environment	Comment	Modification
- Community benefits	In addition to the economic benefits enjoyed by the community and the local availability of world class cultural performances, a range of community benefits has resulted in the four trial events to date. To date, the Community Grants program initiated via Parklands and the four events have resulted in over \$107,500 being distributed to local community groups <sup>9</sup> .	No consent modification required.
- Demand for community events	The application EA proposed the site be made available for small community events to occur. The DP&E assessment report recommended such small community events occur, but the PAC did not allow for such <sup>10</sup> .  A range of community organisations has requested use of Parklands for small community events <sup>11</sup> . Consultation with key stakeholders to date supports such use.	Consent modification required to allow for small community events to occur subject to certain operational parameters.
Physical Environmental	Comment	Modification
- Ecological	A significant investment in establishing ecological baseline and event monitoring continues to be undertaken <sup>12</sup> . Findings to date indicate no evidence of significant adverse impacts from the conducting of events with respect to any of the fauna groups monitored or for native vegetation. Instead, clear patterns are evident of resource abundance which is illustrated by ecological monitoring, with the permanent photo point record showing rapid recovery of grass areas following events and no noticeable disturbance of native vegetation <sup>13,14</sup> .  Ecological restoration undertaken to date <sup>15</sup> on the site is well beyond the requirements of the consent conditions <sup>16</sup> . Events include a variety of environmental education programs <sup>17</sup> .	No consent modification required (other than the refinement of wording to Condition C21).
- Traffic	Significant improvements made with fine tuning of systems and working with key stakeholders <sup>18</sup> .	No consent modification required (other than the refinement of wording to Conditions C10 and C15).
- Noise	To facilitate the noise control review proposed by the PAC, an expert Acoustic Report has been commissioned <sup>19</sup> . That report is provided in <b>Annexure C</b> . For this application, Air Noise Environment (ANE) have proposed a noise management regime consistent with other outdoor events <sup>20</sup> .	Consent modification required to introduce C-weighting limits and make the music noise best practice.
- Water cycle	Significant water cycle sustainability gains have been achieved by investing in composting toilets, water-efficient showers and greywater reuse <sup>21</sup> . Byron Council awarded Parklands an environmental award for such <sup>22</sup> .	No consent modification required (other than the refinement of wording to Conditions D9 and D10).

The following quotations provide an overview of the user and external community event experience provided by the first four trials:

**DESTINATION BYRON AND NORTH COAST DESTINATION NETWORK**

*“The economic value of the North Byron Parklands in its early stages is incredible and these figures [referring to the Economic Impact Assessment] show exactly what these world class events bring into the Byron Shire and more broadly the Northern Rivers. The engagement that the Parklands have undertaken with local residents in the creation of jobs and generation of business not only for accommodation and the visitor industry, but further afield is to be applauded. We look forward to continuing to work alongside Parklands management in achieving mutual objectives for the Destination.”*

**THE VINE**

*“The layout of the festival is working a lot better this year. Though we’re definitely getting our daily dose of exercise, there are few bottlenecks and everything is easy to find. The buses are a LOT closer to the entrance this year as well, and the brand new bowl of an Amphitheatre is the perfect size, allowing you to see the stage from all angles with great sound.”*



**GOLD COAST BULLETIN**

*“Like Woodfordia, the Woodford Folk Festival’s home on the Sunshine Coast, the environmentally friendly Parklands is being tailored to suit Splendour’s needs. Its centrepiece is a splendid, vast natural amphitheatre surrounding the main stage where OutKast thrilled fans last night... The amphitheatre and clean, green improvements made since last year, including hundreds of relocatable composting toilets and new low flow showers, have received the thumbs up from punters and campers in particular.*

*Trees planted last year — the pilot program saw punters plant 450 trees in less than 15 minutes — have grown to give the site a more mature, bedded down vibe and festivalgoers have been invited to help plant another 2,000 native shrubs and eucalypts over the weekend.*

*Plantings are being held each day as part of a joint venture between parklands, SITG and Brunswick Valley Landcare, with the program culminating tomorrow in National Tree Planting Day.*

*The site improvements have been overseen by North Byron Parklands general manager Mat Morris, a music-loving environmental scientist who has literally steered the project from the ground up. Waste-water truck movements in and out of the site and the amount of waste the festival sends to Byron Shire Council’s sewage treatment plant (STP) have been dramatically reduced thanks to 240 new state-of-the-art composting toilets and 192 low-flow, gas-fired shower stalls. Combined with six pilot composting toilets built at the site in 2013, Parklands now boasts the most composting toilets at any outdoor event in the country — 246 in total. Designed by Quicksmart Homes, the 100 per cent relocatable low-odour toilets are in keeping with Parklands’ mission to sustainably manage water cycles (freshwater and waste water).”*

**1.5 ECONOMIC IMPACTS**

In October 2014, Parklands engaged RPS Australia to undertake an economic impact assessment report<sup>23</sup>. This report, attached as **Annexure B** herewith, provides an analysis of the two multi-day festival events which occurred in 2014 at Parklands.

The Economic Impact and Benefits 2014 report has revealed that for the eight days of the year that the two events operated at Parklands in 2014 (Falls Music & Arts Festival Byron-FFB and Splendour in the Grass- SITG), the total economic output measured was \$93.4m with \$41.4m derived from businesses and service providers in the Northern Rivers<sup>24</sup>. Byron Shire accounted for \$24.1m of the total economic output or 25%<sup>25</sup>.



Most important was the level of local employment created in the Byron Shire and the Northern Rivers by FFB and SITG. The current general unemployment rate in the region is 11.4% and the youth unemployment rate

is 13.0%<sup>26</sup>. Across the two events held at Parklands in 2014, the total employment created, taking into account direct employment, supply chain and household consumption, was 583 equivalent full-time (EFT) jobs. Of these positions created, Northern Rivers residents (including 166 EFT jobs filled by Byron Shire residents) filled 255 EFT jobs<sup>27</sup>. This type of employment generation is important to the Region, given recent analysis showing the Richmond-Tweed area lost 12,000 jobs over the last 12 months<sup>28</sup>.

The total direct wages and salaries<sup>29</sup> attributed to the events held at Parklands in 2014 is summarised as follows:

- Byron Shire – \$2.9m
- Northern Rivers (including Byron Shire) – \$4.7m
- Total (including Northern Rivers and Byron Shire) – \$11m

The total wages and salaries<sup>30</sup> taking into account direct employment, supply chain and household consumption is:

- Byron Shire – \$6.0m
- Northern Rivers (including Byron Shire) – \$10.3m
- Total (including Northern Rivers and Byron Shire) – \$23.6m

The events combined generated 22,900 room night stays in Byron Shire accommodation and 6,125 room nights in other parts of Northern NSW (not including camping onsite at Parklands)<sup>31</sup>. Most of this accommodation was booked for SITG in the regions' typically quieter winter season.

As part of the community grants and other programs, the events hosted by Parklands in 2014 provided over \$85,000 in direct cash contributions to organisations including the Shara Community Gardens, Brunswick Valley Landcare, Brunswick Valley Rescue, Summer Safe Program, Crabbes Creek Film Festival, Ocean Shores Primary School and to The Training Station partnership with Mullumbimby Music Festival<sup>32</sup>. In addition, tens of thousands of dollars' worth of tickets were provided to charitable organisations and public schools to raise much needed funds through raffles and prizes<sup>33</sup>.

To date, since its inception in 2001, SITG has donated over \$400,000 to community groups in the Northern Rivers region. Since its commencement in 2013, Falls Festival Byron has donated some \$55,000 to Council and community groups<sup>34</sup>.

### 1.6 SOCIAL IMPACTS

The Planning and Assessment Commission (PAC)<sup>35</sup> concluded that the site is *"suitable for outdoor events for cultural and educational purposes. Large outdoor events should be able to be carried out without significant impacts on the community, if effective environmental management plans are implemented and performance is consistently monitored.*

Further, the PAC noted<sup>36</sup> that *"... other impacts are less quantifiable and more difficult to control offsite. These include antisocial and illegal activities including drug-taking, excessive drinking, abusive and aggressive behaviour, public urination, littering, trespass, and illegal camping. Local residents are also concerned the proposal will exacerbate a trend of houses being used for holiday letting, changing the character of the area."*

#### **Community feedback**

With respect to Community concerns about anti-social behaviour within surrounding communities the four trials conducted to date allow some analysis of actual observed patron behaviour. The following analysis, drawn from the community hotline, NSW Police, Byron/Tweed Shire Rangers, local business community and immediate neighbours<sup>37</sup> is provided:

**TABLE 1.3 SOCIAL IMPACT ASSESSMENT**

Original PAC Concern	Analysis
Antisocial behaviour	Feedback from NSW Police for trial events indicates that caseloads in local villages and townships including Byron Bay are down on normal incident rates <sup>38</sup> . Local businesses advise that patrons are generally well-behaved. However, some patron noise issues in Brunswick village at the bus stop were reported <sup>39</sup> . Events have now placed security staff at this bus stop and patrons are reminded on the bus to respect local neighbours <sup>40</sup> . Neither Council has raised antisocial behaviour from event patrons as an issue. The community hotline has not recorded any complaints about antisocial behaviour (other than the patron noise issue in Brunswick) <sup>41</sup> .
Littering	Each event is required to provide a Litter Response Team (LRT) for the duration of the event. The LRT is responsible for monitoring roadsides and bus stops associated with the event. They are in regular contact with the community hotline and respond to any reported litter issues. To date, six complaints about litter have been received and were responded to by the LRT <sup>42</sup> . The event Community Manager takes before and after photos of key surrounding locations to verify the cleanliness (or otherwise) of these locations <sup>43</sup> . Of the litter complaints made, a number of them were clearly not event patrons (e.g. Council bins located at beach entrances filled with picnic waste, etc) <sup>44</sup> .
Beach Destruction	Original community feedback in relation to the application EA voiced concerns about beach ecology being destroyed, beaches being overrun with patrons and illegal camping on beaches <sup>45</sup> . The Community Manager actively documents surrounding beaches by taking photos <sup>46</sup> . From these records and Council Rangers feedback no such impacts or illegal camping on beaches has taken place <sup>47</sup> .
Trespassing	There have been a number of reported incidents of non-patrons attempting to access events via private property <sup>48</sup> . Events are responding by liaising with police and the Council rangers as well as with neighbours further and providing increased static guards, regular security horseback and vehicular patrols and increasing signage including at the entrances to the publicly accessible Billinudgel Nature Reserve walking tracks <sup>49</sup> .
Illegal Camping	To date, there have been three reports of illegal camping. The first, which occurred in the nature reserve, was dealt with by National Parks rangers after being reported to them by the event <sup>50</sup> . The second incident was reported to be a 'teepee' set up on the beach at South Golden Beach. An investigation revealed no such structure on this beach <sup>51</sup> . The third occurred at Wooyung Road and the campers appeared to be connected with the landowner <sup>52</sup> . As per agreed procedures <sup>53</sup> , the matter was referred to the relevant Council ranger.

**Demand for small events**

The PAC concluded that *“the site is suitable for outdoor events for cultural and educational purposes. Large outdoor events should be able to be carried out without significant impacts on the community if effective environmental management plans are implemented and performance is consistently monitored.”* But in saying the above, the PAC gave no reasoning for omitting community events from its trial approval.

Since the first SITG, Parklands has been approached by various community organisations to permit their use of the site, including:

- primary school cross-country run;
- local running clubs fun run;
- youth camp involving Australian and South Pacific youth;
- local community groups' family fun day; and
- 'Movies under the Stars'.

In the case of Ocean Shores Primary School, the school wanted to use the site for the purpose of the cross-country run for a single day (currently held on public roads around the surrounding suburb).

In March 2014, Parklands lodged a DA for the school to allow for the schools cross-country run which comprises a daytime-only school sports activity<sup>54</sup> described as follows:

**Proposed Activity Date:** 2 May 2014

**Times:** Daytime only 10:00am-12:00pm

**Bump in Commences:** 1 May 2014

**Bump out Finishes:** 2 May 2014

**Maximum Number of Runners:** 200

**Maximum Number of Parents/Spectators:** 60

**Maximum Number of Staff and Volunteers:** 20

The components of the layout were to include a start/finish area with amenities, food stalls and administration. These facilities would have been located within a flat area of the site which comprises mowed grass and gravel laneways. The run routes would have been within the property and would vary according to age categories and would be supervised. The other component of the layout was the location of the car parking in proximity to the central area.

Any temporary structures would be small market stall style structures providing shelter for administration, first aid and food stalls.

Adequate toilet facilities would be provided in accordance with BCA requirements. An existing S68 Activity approval exists for the provision of toilets and showers (Byron Shire Approval 70.2013.1033.1). The facilities would comply with accessibility standards.

The number of vehicles associated with the activity were to represent fewer than eight vehicle movements for bump in and bump out. On the day of the activity, fewer than 80 staff and parents were expected to arrive in some 50 cars in the hours preceding the start of the activity. Arrival and departure of the maximum 200 runners would occur one hour before and after the event. The runners, primary school children, were proposed to arrive and depart in four buses. Indicatively, some 54 vehicles would arrive and depart over a five-hour period. The approved intersection at the site entrance is able to cater for this level of traffic without the need for traffic control. No works are required for the proposed activity.

All solid waste was to be collected, recycled and disposed of at a licensed facility. Toilet facilities were to be provided at the site and managed in accordance with the relevant s68 licence for the site.

The school proposed to implement its standard protocols for supervision and safety of the school children.

In the opinion of Parklands, the proposed school cross-country run land use was not a "place of public assembly", being the type approved under Concept Plan approval MP 09\_0028. PLANNERS NORTH, on behalf of Parklands, submitted that the application was for a "recreation area" use and that the proposed 'recreation area' use of the site for a single day is not antipathetic to Concept Plan Approval MP 09\_0028.

Council refused the Ocean Shores Primary School application<sup>55</sup> saying:

*"Pursuant to Clause 3B(2)(d) of Schedule 6A of the Environmental Planning and Assessment Act 1979, Council must not grant consent under Part 4 for a development if it is not satisfied that the development is generally consistent with the terms of the approval of the concept plan".*

From discussions with the Council officers, it is understood that that Council was favourably disposed to the Ocean Shores Primary School proposal on a merit basis, but Council believed that it could not approve the application because the use was not sanctioned by the Concept Approval.<sup>56</sup>

In Parklands' view, small non-music focused activities at the site will provide a significant social asset to the community located in the north of Byron Shire, where such facilities are lacking.

## 1.7 ENVIRONMENTAL IMPACTS

Improvements with respect to local environmental impacts have been substantial over the four events carried out to date<sup>57</sup>. In significant part, the use of generally common key event staff has accelerated the learning and refinement process.

### **Traffic**

In preparation for each event held to date, a Traffic Management Plan, incorporating Traffic Control Plans for the local road network and a Traffic Monitoring Program was prepared and forwarded to relevant regulatory agencies<sup>58</sup>.

Significant improvements to traffic management have occurred progressively over the first four events held at Parklands. For example, the camper parking and processing, which had been problematic at SITG13, was significantly altered for SITG14 producing a greatly improved result<sup>59</sup>. In addition, a number of opportunities have been identified and implemented for further car parking process improvements. With an increase in capacity from SITG13, the traffic and parking systems worked as planned and there were no traffic issues of concern onsite or offsite<sup>60</sup>.

Another improvement involved the use of live traffic counters, which provided key traffic flow rates and were used to predict peak flow times more accurately. This information has become a valuable tool for on-ground traffic management<sup>61</sup>.

Importantly, for the most recent events held at the venue (SITG14 and FFB 14/15) all traffic Key Performance Indicators (KPIs)<sup>62</sup> were met during each day of the event (the only exception being KPI 3 for a 45-minute period of time on the Monday of SITG14 when patrons were departing). Data from this most recent event has been analysed and a modification to camper egress has been developed to address this aspect<sup>63</sup>.

Key stakeholders, including the Roads and Maritime Service, Byron Shire Council and NSW Police<sup>64</sup> have provided positive feedback to both the Regulatory Working Group and event-specific debrief meetings regarding the continuous improvements demonstrated by events regarding traffic management.

### **Ecology**

In considering the proposal the PAC opined – *“Numerous submissions raised concern about potential impacts on the ecology of the site and surrounds. Particularly vulnerable areas were identified as the Marshalls Ridge wildlife corridor, the SEPP 14 wetlands and the Billinudgel Nature Reserve. Different opinions were voiced about the integrity and continuity of the wildlife corridor, and whether a viable koala population remains on the eastern side of the Highway.*

*The NSW Office of Environment and Heritage (OEH) raised a concern that the proposed event frequency, with associated noise, lighting and general disturbance, would impact on fauna behaviour and that any approval should be on a ‘trial and monitor’ basis.*

*It is clear to the Commission that it is very difficult to forecast cumulative impacts of events of this kind on the ecology of the area. Monitoring of these impacts, and accurately assessing and quantifying any cumulative effects after just one trial event as recommended by the Department, would not provide sufficient information to confirm the effectiveness of the management strategy<sup>65</sup>.*

Under the Parklands Management Program<sup>66</sup>, Event Impact Monitoring (EIM) is undertaken. This work is based upon the systematic sampling of faunal groups at ten transects (four Impact and six Control transects) before, during and after the staging of events at Parklands. The impact and control locations were determined in consultation with the Regulatory Working Group in line with the requirements of the approved

Flora and Fauna Monitoring Program<sup>67</sup>. These samples typically take place over three to five days in each month before, during and after each event, and involve timed, spatially constrained bird counts at ten transects over three consecutive days by three qualified observers, deployment of hair funnels at five transects, and deployment of Anabat bat call detectors at three locations<sup>68</sup>.

Since the purchase of Parklands in late 2006, a significant change in land use has occurred. The past predominant activities of intensive sugarcane cultivation and cattle grazing have been replaced with a program of environmental revegetation works. For example, eight patron planting days have been undertaken by SITG and FFB<sup>69</sup>.

The habitat creation and preservation aspect of the project commenced six years ago and has involved the planting of 20,000 endemic species in a manner that helps connect currently fragmented forest copses across the site<sup>70</sup>.

As part of the Vegetation Management and Biodiversity Plan, a habitat restoration plan was prepared in consultation with the RWG<sup>71</sup>. **Plan 1.1** shows details of the works program.

Flora and fauna monitoring work has been undertaken to scientifically measure whether the cultural event usage of the site has adverse ecological impacts<sup>72</sup>. Some 2,150 survey and assessment hours have been assigned to establishing baseline data both within the site and at external control points before, during and after events<sup>73</sup>.

Combined results of fauna monitoring include 13,000 records of 106 bird species and 5,700 records of approximately 20 microchiropteran bat species. Fauna species recorded include four threatened birds and nine threatened bats (eight micro-bats and the Grey-headed Flying-fox). The Osprey and Rose-crowned Fruit-dove were recorded in Parklands, and all of the nine threatened bat species were also recorded in Parklands. No evidence of significant adverse impacts from the conduct of events was evident for any of the fauna groups monitored or for native vegetation. Instead, clear patterns are evident of resource abundance influencing the number of birds, particularly large-scale blossom events, but also fruiting of Camphor Laurel. The greatest recorded abundance of micro-bats during the first Falls Festival close to event activities suggests that event processes did not adversely affect this faunal group. The predicted very short term adverse effects from events have been as anticipated<sup>74</sup>.

With respect to vegetation, across the period of time monitored to date (2013-2015), there have been no discernible or measurable impacts on, or decline in, native forest habitats. The exclusion by fencing and removal of cattle from remnant native vegetation areas have seen substantial easing of grazing pressure and damage to native vegetation, and the removal of the key source of trampling and soil compaction within forest areas. Reforestation and restoration of native forest vegetation has seen significant improvement both in terms of area and quality of native forest in selected locations. Overall, the permanent photo point record shows rapid recovery of grassed areas following events, no measurable disturbance of native forest vegetation to date, and improvement of native vegetation<sup>75</sup>.

**Noise**

In considering the noise aspects of the proposal, the PAC opined – “The concern about noise impact is not only a concern about residential amenity but also the impacts on fauna and festival-goers. Of particular concern is the recommendation to allow loud music to continue until 3am in the morning, given the frequency of these outdoor events in a rural area where the background noise is generally lower than in an urban area<sup>76</sup>.”



*In previous years the Eco Cops have played an important role in informing festival attendees about 'prize driven recycle system' or 'container deposit system'<sup>67</sup>.*



*The Green Chiefs meet campers one-on-one to discuss the importance of using environmental programs.*



*The tree planting program has been an overwhelming success with some 1,700 native trees being planted along the Jones Road corridor (north of Jones Road)<sup>75</sup>.*

*...Although the Commission agrees with the Department's view that a flexible approach to noise management is the preferred way to enable negotiation between the proponent, Council and residents to find the best practical outcomes, the Commission is not persuaded (about) the recommended noise criteria ...*

*The Department and the proponent questioned the appropriateness of using the EPA Industrial Noise Policy to benchmark the noise control levels for the subject proposal. The Commission agrees that a strict adoption of the policy is not appropriate given events will be held over ten days in a year, rather than [being] a constant source of noise. It is also noted that the Noise Guide for Local Government provides some rules of thumb in measuring noise...<sup>77</sup>. Following careful consideration of available information, the operational requirements and the existing noise environment in the locality, the Commission finds that noise controls should be imposed as follows:*

- *Between 11am and midnight, noise level measured at sensitive receivers must not exceed background +10dBA;*
- *Between midnight and 2am, noise level measured outside the bedroom window(s) at sensitive receivers must not exceed background +5dBA;*
- *All stages must be shut down at midnight;*
- *Amplified music from bars, cafés and dance floor, are permitted to remain until 2am, subject to the stricter noise limit;*
- *All amplified music must cease at 2am.*

*The Commission considers a noise level of background +10 dBA before midnight is appropriate as it has regard to the existing background noise level of the sensitive receivers and balances this with the economic and social benefits to the community as a result of these events<sup>78</sup>.*

*These noise control levels are to be reviewed after the first year of trial to assess their suitability and performance...<sup>79</sup>.*

Parklands appreciates that its immediate and nearby neighbours are potentially the most impacted by event acoustics. To that end, Parklands commenced consultation with adjoining owners even prior to purchase of the property and subsequently has worked actively with neighbours to establish agreements and institute a range of programs to offset both perceived and actual impacts. These programs include:

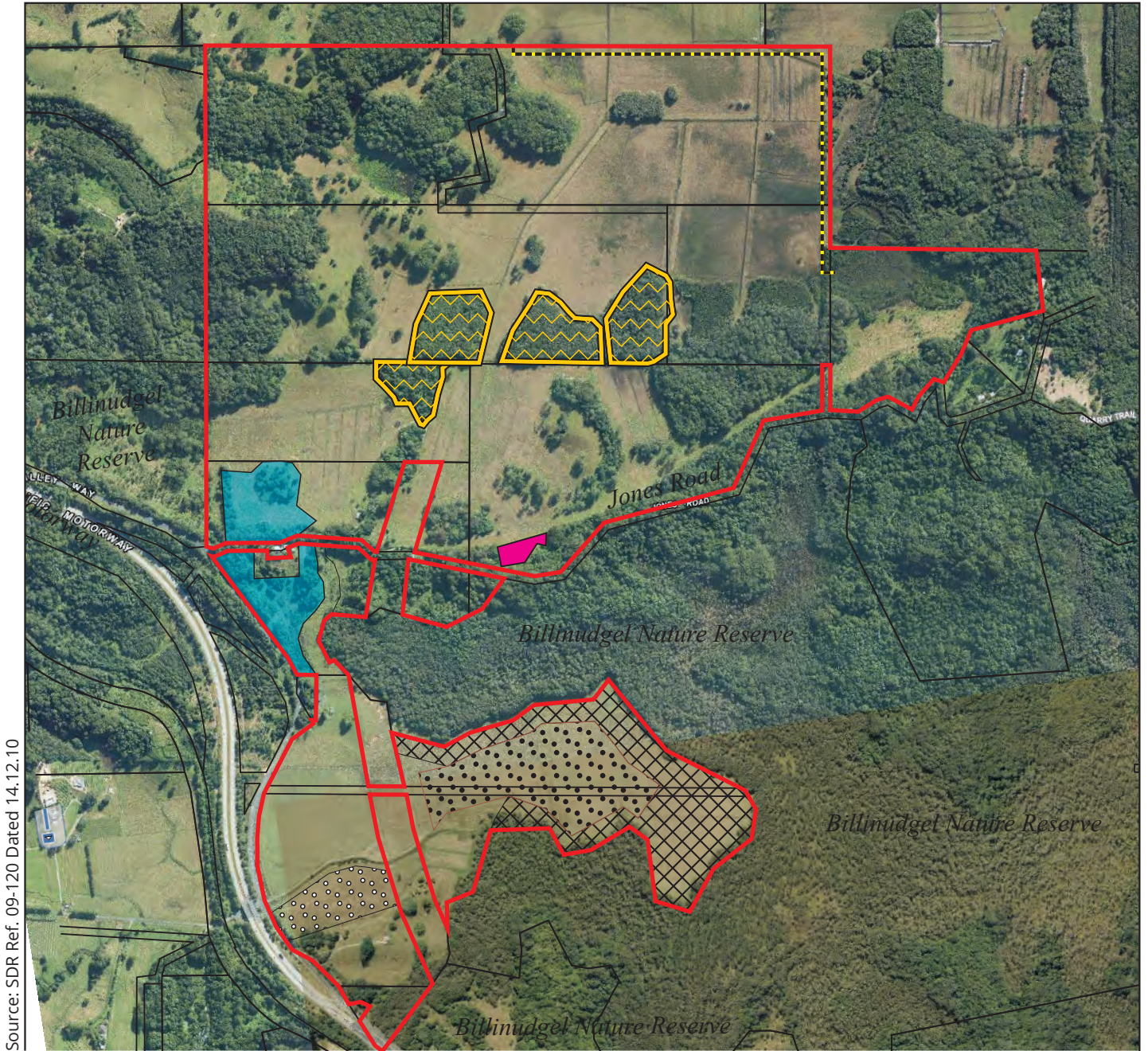
- offering impact mitigation agreements to sensitive receivers R12 and R13 and proposing attenuation works to certain dwellings<sup>80</sup>;
- arranging impact mitigation agreements with key adjacent land owners;
- the implementation of a four-week pre-event 'community manager scheme'. The community manager is the first point of contact for community enquiries and concerns. He listens and documents community issues and identifies any concerning activities within a 3 km radius of the event;
- the employment of a 'community advocate' to provide a clear and distinct voice at all planning team meetings for and on behalf of the community at large; and
- provision of complimentary tickets to nearby residents pursuant to the Community Management Procedure 001.

Illustrated in **Plan 1.2** are examples of the arrangements already in place.

To facilitate the review proposed by the PAC, an expert Acoustic Report has been commissioned<sup>81</sup>. That report is provided in **Annexure C**.

### **Water Cycle**

Significant water cycle sustainability gains have been achieved by investing in composting toilets, water-efficient showers and greywater onsite treatment/reuse<sup>82</sup>. Camping shower greywater is treated onsite, and the use of composting toilets reduces the demand for water as well as eliminating the need to transport blackwater to a licensed sewage treatment works. Water efficient showers also reduce the demand for water as well as reducing the amount of greywater<sup>83</sup>



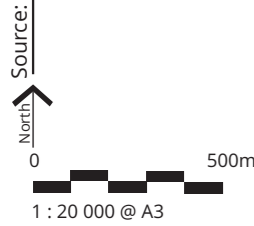
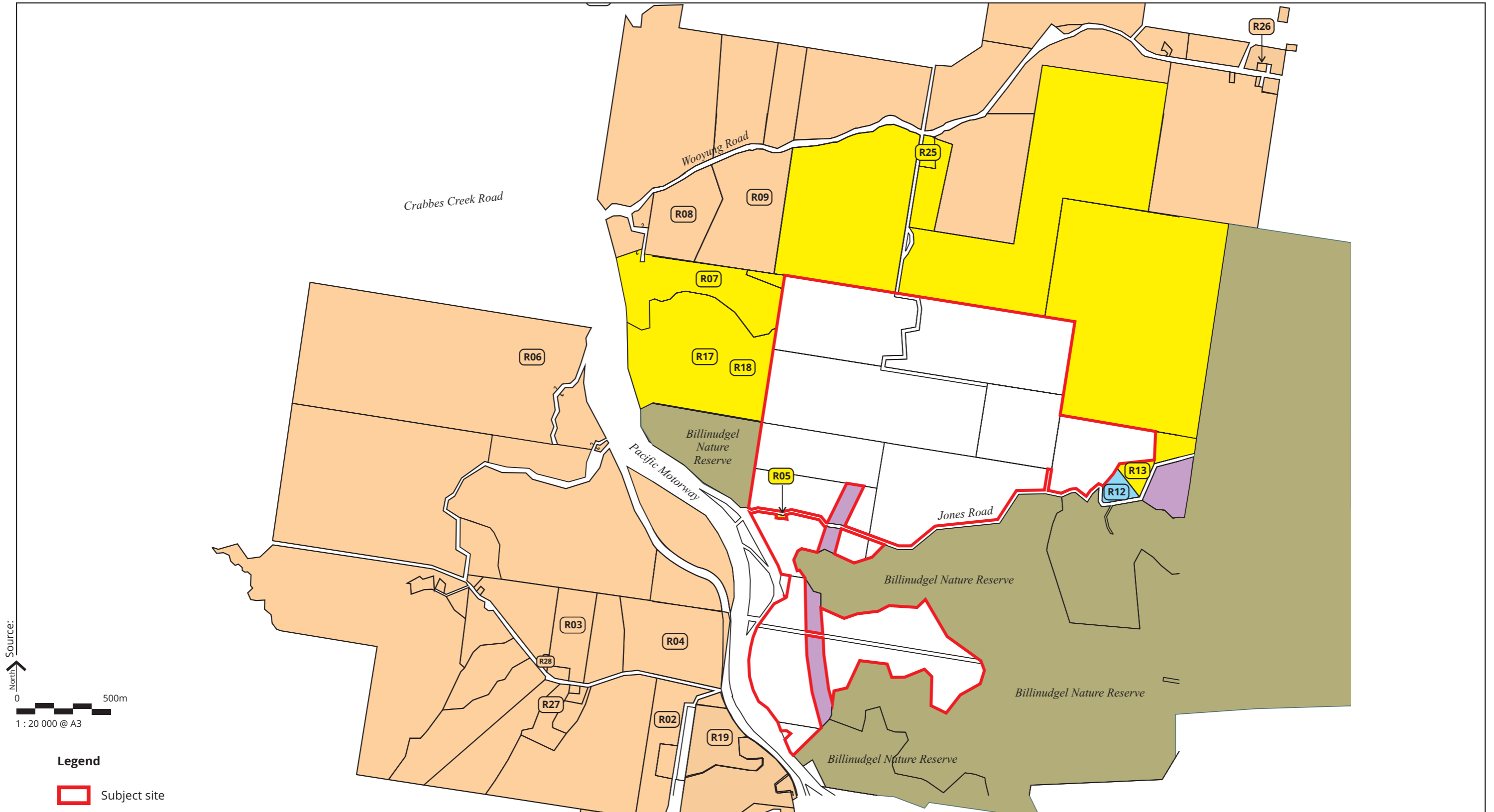
Source: SDR Ref. 09-120 Dated 14.12.10



**Legend**

- Subject site
- Fencing for vegetation corridor
- Fencing of forest blocks A, B, C & G
- Commence understorey rehabilitation of forest blocks A, B, C & G
- Commence new habitat
- Establish buffers
- Refurbish existing plantings
- No car parking use in first 5 years
- No car parking use

**Plan 1.1  
HABITAT  
RESTORATION**



**Legend**

- Subject site
- R01** Receptor reference number
- Agreement in place
- Noise attenuation works implementation
- Property supplied with complimentary tickets
- Vacant land - no dwelling entitlement

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**Plan 1.2**  
**ARRANGEMENTS**  
**WITH**  
**NEIGHBOURS**

Flow-on benefits of these initiatives, in addition to water cycle improvements, include improved patron experiences in these facilities, as well as reducing the demand on Council's sewage treatment works and reducing the trucking of water and wastewater, so improving safety and diminishing greenhouse gas emissions<sup>84</sup>.

In June 2014, Byron Council awarded Parklands a World Environment Day award in "recognition of the outstanding contribution to improving the environment and sustainability of the Byron Shire<sup>85</sup> for such water-saving initiatives.

## 1.8 NEED FOR THE MODIFICATION

Since the granting of the original Concept Plan Approval and Project Approval for the Parklands development, much has been learnt about the site<sup>86</sup> and its operational aspects via:

- the development of core infrastructure on the land;
- further liaison with key agencies;
- the completion of some nine Regulatory Working Group meetings;
- the running of four events of 25,000, 15,000, 27,500 and 17,500 patron size;
- completion of over 2,150 person hours of ecological field research, statistical analysis and reporting work; and
- post-event debriefing sessions with internal and external stakeholders (inc. NSW Police, Byron Shire Council and key government departments).

Parklands has instructed the preparation of this application having regard to the requirement of the PAC to review noise conditions after 12 months<sup>87</sup>, with the abovementioned event operational experience and approaches by various stakeholders suggesting the need for a modification of the Consent to 'fine tune' its operational aspects.

## 1.9 REPEAL OF PART 3A

The Environmental Planning and Assessment Amendment (Repeal of Part 3A) Act 2011 replaced Part 3A with an alternative system for the assessment of projects of State significance and provides appropriate 'transitional provisions' for projects already being assessed under the provisions of Part 3A.

The amended Act contains provisions for the assessment of further applications for development to which Part 3A does not continue to apply.

Clause 3C(2) of Schedule 6A of the Environmental Planning and Assessment Act stipulates that Section 75W continues to apply for the purpose of modifying Concept Approvals granted before or after the repeal of Part 3A. The subject modification is submitted in accordance with the provisions of Section 75W of the EP&A Act, 1979. Section 75W which provides:

### ***"75W Modification of Minister's approval***

*(1) In this section:*

***Minister's approval*** means an approval to carry out a project under this Part, and includes an approval of a concept plan.

***modification of approval*** means changing the terms of a Minister's approval, including:

*(a) revoking or varying a condition of the approval or imposing an additional condition of the approval, and*

*(b) changing the terms of any determination made by the Minister under Division 3 in connection with the approval.*

- (2) *The proponent may request the Minister to modify the Minister's approval for a project. The Minister's approval for a modification is not required if the project as modified will be consistent with the existing approval under this Part.*
- (3) *The request for the Minister's approval is to be lodged with the Director-General. The Director-General may notify the proponent of environmental assessment requirements with respect to the proposed modification that the proponent must comply with before the matter will be considered by the Minister.*
- (4) *The Minister may modify the approval (with or without conditions) or disapprove of the modification.*
- (5) *The proponent of a project to which section 75K applies who is dissatisfied with the determination of a request under this section with respect to the project (or with the failure of the Minister to determine the request within 40 days after it is made) may, within the time prescribed by the regulations, appeal to the Court. The Court may determine any such appeal.*
- (6) *Subsection (5) does not apply to a request to modify:*
- (a) *an approval granted by or as directed by the Court on appeal, or*
- (b) *a determination made by the Minister under Division 3 in connection with the approval of a concept plan.*
- (7) *This section does not limit the circumstances in which the Minister may modify a determination made by the Minister under Division 3 in connection with the approval of a concept plan."*

This application relies on the provisions of Section 75W (1)(a) to change the terms of the current determination.

### **1.10 SITE INSPECTION**

Should the Department wish to carry out an onsite inspection in relation to this application, please consult PLANNERS NORTH to arrange for the necessary access. To facilitate onsite inspection, PLANNERS NORTH is able to provide the Department with a GeoSpatial PDF of the layout plan suitable for field use on an Apple iOS or Android tablet, to view onsite your location, record GPS tracks, place digital marks and find specific locations on the land.

### **1.11 FURTHER INFORMATION**

Should the Minister or Department require any additional information or wish to clarify any matter raised by this modification proposal, the Department is requested to consult with Stephen Connelly of PLANNERS NORTH prior to determination of this application.

## 2. THE MODIFICATIONS SOUGHT & ASSOCIATED ENVIRONMENTAL ASSESSMENT

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*This Section defines the nature of modifications proposed in relation to both the Project Approval and Concept Approval MP09\_0028.*

### 2.1 GENERAL DESCRIPTION OF MODIFICATION

The North Byron Parklands (Parklands) five-year trial approval, granted in April 2012 requires a series of trial cultural events to be undertaken in a manner that captures a range of datasets across key performance areas.

These datasets are monitored from event to event, reviewed in detail and, where required, adjustments are made to event-related activities to improve performance.

Parklands has adopted an Environmental Health and Safety Management System, which continually reviews systems and processes and adjusts actions so as to create a continuous loop of improvement.

As intended under the trial approval process, four events have now occurred at Parklands, resulting in the accumulation and assessment of a significant magnitude of information and experience.

Many key event aspects have already been improved as a result of data collection and analysis, as evidenced with traffic management. These improvements have predominantly been made through refinements to systems and procedures rather than any modifications to the trial approval.

However, it has been identified that a number of modifications to the existing trial approval would further improve performance at this venue. The modification application comprises three key aspects as follows:

- Set criteria to better manage lower frequency sound emissions from events held at the venue and align general noise criteria with standard Statewide noise protocols for outdoor venues;
- Allow small community, non-music focused events such as school cross-country runs, open-air cinema, and charity days to be held at the site; and
- Adjusting consent condition wording to remove ambiguity, regulatory duplication and correct wording errors.

### 2.2 NOISE MANAGEMENT

The current noise limits derived from existing background levels are designed for permanent noise sources in order to control the audibility of the noise for nearby noise sensitive receptors (e.g. industry, permanent music venues such as pubs and clubs). Background plus noise limits are not appropriate for an activity that operates for 10 days or less per annum.

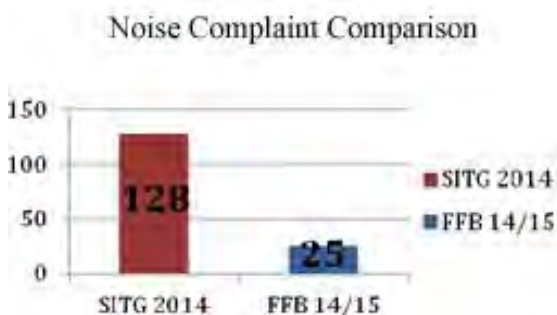
Despite SITG14's non-compliance with A-weighted noise criteria (due to the difference in summer and winter background levels), the event generated A-weighted emissions at sensitive receivers similar to those emitted by FFB 14/15 (which were in full compliance with existing noise criteria based on summer background levels)<sup>88</sup>.

At SITG14 non-compliances with the LAeq background +10 dB and background +5 dB noise limits were observed from 8:00am i.e. more than three hours prior to event entertainment commencing, due to local noise influences such as highway traffic, ocean noise, lawnmowers, etc. Put simply, SITG operating at the same music noise level as FFB, cannot comply with existing A-weighted background plus noise criteria due to significantly lower background levels in winter (up to 10 db(A) lower than in summer at many sensitive receivers).

Further, what has become evident through the experience gained from operating 4 events at Parklands and the extensive noise monitoring data collected is that the C-weighted emissions (or bass), which is currently unregulated, is impacting on some community member's amenity. This modification proposes to regulate the C-weighted emissions in a manner that will significantly improve community amenity.

In order to determine the impact of C-weighted emissions, SITG14 operated the event using elevated levels for this lower frequency (i.e. LCmax > 120 dBC). As a result of the learnings from SITG14 covering these lower frequency emissions, FFB 14/15 carefully managed C-weighted emissions, both at source and through a number of onsite attenuation initiatives.

As a result of the changes in C-weighted emissions from SITG14 to FFB 14/15, noise complaints received were significantly lower for FFB 14/15.<sup>89</sup> What we concluded from analysing complaints from these two events is that unmanaged C-weighted emissions are significantly more intrusive, and by proactively managing these at source, greater community amenity will be provided.



Parklands and the events have worked closely with their noise consultants (ANE) to develop a set of proposed noise criteria that, in addition to being consistent with industry best practice, would result in a significant reduction in the more intrusive C-weighted emissions experienced by sensitive receivers during SITG14. It is important to note that the proposed A-weighted limits would result in both events complying with this criterion, while not increasing A-weighted emissions at sensitive receivers.

The net result of the proposed noise criteria would be an overall reduction in noise emissions at sensitive receivers (not an increase), thereby markedly improving the amenity of the surrounding community and delivering a satisfactory patron experience.

### 2.2.1 PROPOSAL

Current consent conditions do not regulate bass frequency noise, only higher frequency or 'A-weighted' emissions. Parkland's A-weighting consent conditions, on the other hand, are prohibitively low in winter and therefore very difficult to comply with. Further, the A-weighted noise conditions are inconsistent with best practice. To be over-regulated at less intrusive, high frequency noise, but not at all regulated at the intrusive low end is the situation this modification seeks to amend.

The key noise management controls proposed in this modification at the sensitive receiver are:

- a. Between 11:00am and midnight, music noise levels must not exceed LAeq 65 dB(A) or 75 dB(C) Leq in the 63 Hz 1/1 octave frequency band;
- b. Between midnight and 2:00am, music noise levels must not exceed LAeq 55 dB(A) or 70 dB(C) Leq in the 63 Hz 1/1 octave frequency band;
- c. A 5 dB tolerance above the criteria listed above be provided during extreme meteorological conditions, but must be accompanied by reasonable and feasible measures to manage dB(C) in the 63 Hz 1/1 octave frequency band; and
- d. On New Year's Eve, the event noise being permitted to operate between 11:00am and 2:00am.

By setting the above specific noise criteria covering both A-weighting and bass frequencies, events held at Parklands will have a clear and practical range within which to operate in line with similar events in the

region, NSW generally, and Australian and international best practice.<sup>90</sup> The proposed noise criteria will also deliver greater amenity to the surrounding community.

### The Proposed Bass Standard

A detailed review of noise data from the past four events has determined that the low frequency content of noise emissions is a particular concern to some residents and the primary motivating factor for many complaints<sup>91</sup>. This part of the noise frequency spectrum currently has no noise limits under the existing approval.

Following the first Splendour in the Grass in July 2013, it became evident to the proponent that bass sound emissions were particularly relevant at the subject site and in consultation with the Department aspirational bass noise level targets were adopted<sup>92</sup>. Those targets provided for L<sub>max</sub> limits pre-midnight of 75 dB(C) and post-midnight 70 dB(C) in the immediate vicinity and pre-midnight 70 dB(C) and post-midnight 65 dB(C) outside the immediate vicinity.

Unattended noise monitoring data collected during the SITG14 event logged exceedances of the C-weighted aspirational targets for all receptors. These exceedances were more regularly observed during the period from 6:00pm to midnight, when headline acts were performing at the event. C-weighted noise exceedance recordings throughout the day (from both attended and unattended loggers) were also observed during times when the event was not operating amplified sounds.

For some receptors, these exceedances are expected to be related to other noise sources such as vehicle movements, highway traffic, ocean noise, etc. Observations made by ANE personnel during the event identified that in many cases, the overall L<sub>Cmax</sub> recorded was the result of extraneous noise sources. As a result, establishing limits based on the existing voluntary L<sub>Cmax</sub> reporting levels is not considered a suitable means of assessing and limiting noise emissions from the event.

In order to determine an appropriate alternative low frequency noise limit, the following information has been reviewed:

- legislated low frequency noise limits applied in jurisdictions in Australia;
- low frequency noise limits adopted for other venues and events in Australia; and
- noise monitoring data from SITG14.

Noise limits for outdoor music events are regulated by State authorities through a range of legislation, policy documents and guidance documents. In limiting noise from outdoor music events, all of the Australian regulatory instruments consider only A-weighted noise levels. While the intent of this omission is unclear, it is expected that the assumption of a typical 10 dB difference between front-of-house A-weighted and C-weighted noise levels is used as a de facto low frequency noise limit.

Despite the absence of specific low frequency noise limits provided in regulatory instruments, some approvals issued for a number of outdoor music events held in Australia have specified low frequency limits<sup>93</sup>.

The proposed bass standard is to be achieved by amending the consent to specify at Condition C16(3)(b) that between 11:00am and midnight music noise levels must not exceed 75 dB(C) Leq in the 63Hz 1/1 octave frequency band and between midnight and 2:00am, music noise levels must not exceed 70 dB(C) Leq in the 63 Hz 1/1 octave frequency band at the sensitive receiver.

The limits proposed are generally consistent with the experience gained at the site from monitoring the aspirational bass noise targets, and the regulatory limits applied in the UK<sup>94</sup> and information gathered by the consultants (ANE) concerning acceptable C-weighted noise limits for other venues in NSW and other Australian States.

### The Proposed A-Weighted Standard

To date, music levels measured are consistent with expectations and generally in line with predictions<sup>95</sup>. However, whilst they are below absolute levels often permitted for similar types of events in NSW<sup>96</sup>, SITG generally exceeds the relative 'background plus' levels prescribed by the PAC<sup>97</sup>.

During SITG14 event, non-compliances with the LAeq background +10 dB and background +5 dB noise limits were observed for the majority of the event (as a result of such low winter background levels).

The current A-weighted noise limits derived from existing background levels are designed for permanent noise sources in order to control the audibility of the noise for nearby noise sensitive receptors (e.g. industry, permanent music venues such as pubs and clubs). They are not designed for activities with intermittent noise emissions such as this venue which currently operates for less than 10 days per annum

Most importantly, non-compliances with the LAeq background +10 dB noise limits were observed from 8:00am (more than three hours prior to event entertainment commencing) due to local noise influences such as highway traffic, ocean noise, lawnmowers, etc. These occurrences demonstrate that the existing noise criteria are not workable, are not consistent with other outdoor venues in NSW, and do not address the more intrusive component of the sound spectrum, that being the lower frequencies.

For the Parklands approval, the noise levels presented in the Department's Assessment Report were not adopted and a set of noise criteria based on background noise levels were included in the final determination. The background data presented in the original Environmental Assessment was that collected in the summer months when ambient noise levels are much higher than in winter<sup>98</sup>. Accordingly, the approving authority could not have been aware that during winter, when there is very little extraneous noise (insects, wind, etc), the background noise levels can sometimes be below 30 dB(A) for locations away from roadways. This in turn can result in noise goals as low as 40 dB(A) during the daytime and evening<sup>99</sup>. As a consequence, the current noise criteria means that while the same event noise level experienced in summer may be below the recommended limits, it will exceed the limits during winter.

Existing noise limits for sensitive receivers in the area surrounding Parklands are provided in Condition B3 of the PAC Approval as follows:

- from 11:00am and midnight: background +10 dB(A).
- from midnight to 2:00am: background + 5 dB(A) when measured outside bedroom windows.

For a given receptor location, the noise limit is defined as the existing minimum repeatable noise level (defined using the LA90 descriptor which represents the noise level exceeded for 90% of the time) +10 dB(A) or 5 dB(A) for 11:00am – midnight or midnight to 2:00am respectively. Receptor noise levels during the event (measured as LAeq over a period of 10 minutes, or energy average equivalent noise level) are compared with these noise limits. That is, for a background noise level of 40 dB(A), the receptor noise limit (measured as the LAeq, 10-min noise level) would be:

- for 11:00am to 12:00am: LAeq, 10min = 40 dB(A) + 10 dB(A) = 50 dB(A); or
- for 12:00am to 2:00am: LAeq, 10min = 40 dB(A) + 5 dB(A) = 45 dB(A).

Background noise levels (derived from measured LA90 noise levels) are determined based on long term monitoring campaigns for periods representative of the event. For example, for events held during winter where insect noise is reduced, background noise levels are based on monitoring of existing background noise in the area surrounding Parklands during the winter period.

Thus, for events held at Parklands, the existing noise limits during operation of the main event stages (11:00am – 12:00am), require noise from the event to be limited to 43–48 dB(A) during winter events and 46–57 dB(A) during summer events.

A review of noise monitoring data collected throughout the SITG14 event identified that:

- non-compliances with the LAeq background +10 dB and background +5 dB noise limits were observed for the majority of the event; and
- non-compliances with the LAeq background +10 dB and background +5 dB noise limits were observed from 8:00am (more than three hours prior to event entertainment commencing) due to local noise influences.

Despite SITG14's non-compliance with A-weighted noise criteria (due to the difference in summer and winter background levels), the event generated similar A-weighted emissions at sensitive receivers as those emitted by FFB 14/15 (which were in full compliance with existing noise criteria based on summer background levels). It is important to note that the proposed A-weighted limits would result in both events complying with this criterion, while not increasing A-weighted emissions at sensitive receivers.

Further, the review identified that the existing approved background +10 dB and background +5 dB noise limits imposed on the venue by the conditions of approval do not provide a reasonable level of entertainment noise for the event. Throughout the event, front-of-house music noise levels were maintained at 102 dB(A), which has been identified as the lowest noise level able to be used for an event of this size without impacting on crowd enjoyment. Thus, compliance of events with the existing noise limits is expected to result in adverse impacts on patron experience and ultimately lead to the venue being unable to sustain its intended purpose of hosting outdoor music events.

Furthermore, review of the reasons for complaint recorded by the event complaints hotline during SITG14 indicated that low frequency noise, rather than broadband noise, was the dominant source of complaints. This is supported by subjective observations made by noise monitoring personnel at a number of complainant locations which identified broadband noise from the venue as being similar to that of the ambient environment.

Noise limits derived from existing background levels are designed for permanent noise sources in order to control the audibility of the noise for nearby noise sensitive receptors (e.g. industry, permanent music venues such as pubs and clubs).

Outdoor music events as held at Parklands, on the other hand, are occasional events which are considered to add value to the broader community, and there is an expectation that the music will potentially be audible for the defined event period, with the event defined in terms of the start and finish hours and number of days per year on which it may occur.

Overall, the noise limits currently approved for the venue are considered unworkable for outdoor entertainment events. It is therefore recommended that the noise limits for the venue be reviewed such that the venue can operate and comply with the noise limits for entertainment noise. The following section provides a review of noise limits applied at other venues in Australia and overseas with the aim of identifying an appropriate noise limit for future events.

In order to identify alternative noise limits that could be applied to control noise from events held at Parklands while achieving acceptable patron music noise levels, a review of existing noise limits applied in Australia has been undertaken. The intent of the review is to identify the reasonableness of the existing noise limits and, in the case they are determined unreasonable, identify acceptable alternative noise limits for future events held at Parklands.

In particular, the review has considered the following:

- legislated A-weighted noise limits applied in jurisdictions in Australia<sup>100</sup>; and
- A-weighted noise limits adopted for other venues and events in Australia.

Of the noise limits researched, those provided by the NSW Noise Guide for Local Government<sup>101</sup> are the most directly applicable. It is noted that these limits are not regulatory limits and are rather provided as guidance for local environmental authorities when considering approvals for outdoor music events.

The review of the limits indicates a range of measurement parameters (including LAeq, LA10 and LMax) provided by different States. Despite this, the adopted limits are similar for all jurisdictions, with receptor noise level limits of between 65 dB(A) and 75 dB(A).

**Table 2.1** provides a summary of the noise limits applied to a range of music entertainment events in Australia. Of the events summarised in **Table 2.1**, the first four (A Day on the Green events) are held at winery estates in rural residential areas similar to that surrounding Parklands. The remainder of the events summarised are held in urban areas where the existing noise climate is characterised by higher background noise levels.

**TABLE 2.1 SUMMARY OF A-WEIGHTED NOISE LIMITS FOR OUTDOOR ENTERTAINMENT EVENTS**

Event - Name, Location, Date	Locality	Noise Limits	Complaints, measured levels, treatments, comments on criteria
A Day on the Green Bimbagen Estate Winery (Pokolbin, NSW) 24 March 2014	Rural Residential, Cessnock City Council	LMax 65 dB(A)  (Note: Applied noise limits from NSW Noise Guide for Local Government (2011). Original background plus noise limits in accordance with NSW Industrial Noise Policy referenced in development approval and later amended as considered too low.)	No complaints
A Day on the Green Centennial Vineyards (Bowral, NSW) 11 November 2012	Rural Residential, Wingecarribee Shire Council	LAeq 65dB(A)	No complaints
A Day on the Green Sirromet Winery (Mt Cotton, QLD) 30 March 2014	Rural Residential, Redland City Council	LAeq 70 dB(A)  Note: Noise limits as specified in Environmental Protection Act 1994	No complaints
A Day on the Green The Hill Winery (Waurin Ponds, VIC) 16 February 2013	Rural Residential, Greater Geelong City Council	LAeq 65 dB(A) outdoors and 55 dB(A) indoors.  Note: Noise limits as specified in State Environment Protection Policy (Control of Music Noise from Public Premises) No. N-2.	No complaints
St Jerome's Laneway Festival Rozelle Hospital Grounds (Sydney, NSW) 2 February 2013	Urban City, Leichardt City Council	LMax 75 dB(A)  (Note: Applied noise limits from NSW Noise Guide for Local Government (2011).	No complaints
St Jerome's Laneway	Urban City,	LMax 65 dB(A)	3 complaints

Event - Name, Location, Date	Locality	Noise Limits	Complaints, measured levels, treatments, comments on criteria
A Day on the Green Bimbadgen Estate Winery (Pokolbin, NSW) 24 March 2014	Rural Residential, Cessnock City Council	L <sub>Amax</sub> 65 dB(A)  (Note: Applied noise limits from NSW Noise Guide for Local Government (2011). Original background plus noise limits in accordance with NSW Industrial Noise Policy referenced in development approval and later amended as considered too low.)	No complaints
A Day on the Green Centennial Vineyards (Bowral, NSW) 11 November 2012	Rural Residential, Wingecarribee Shire Council	L <sub>Aeq</sub> 65dB(A)	No complaints
Festival Rozelle Hospital Grounds (Sydney, NSW) 2 February 2014	Leichardt City Council		received: 3 were within limits and 1 over limits. Noise levels reduced when limits exceeded.
Foo Fighters Sydney Football Stadium (Moore Park, NSW) 8 December 2011	Urban City Operates under venue NMP	L <sub>Amax</sub> 80 dB(A)	1 complaint
Sydney Festival (Parramatta, NSW) 21 January 2012	Urban City, Parramatta City Council	L <sub>Amax</sub> 75 dB(A)  (Note: Applied noise limits from NSW Noise Guide for Local Government (2011).	No complaints
Field Day (Domain of the Sydney Royal Botanical Gardens)  31 December 2013 and 1 January 2014	City, South Sydney City Council	L <sub>Amax</sub> 70 dB(A)	3 complaints during event, 1 the following day
Bliss n Eso (Domain of the Sydney Royal Botanical Gardens)  16 and 17 April 2014	City, South Sydney City Council	L <sub>Amax</sub> 70 dB(A)	9 complaints relating to noise as the event was held on a business day.
Foo Fighters Metricon Stadium	Urban, Gold Coast City Council	L <sub>Aeq</sub> 70 dB(A).  Note: Noise limits as specified in	8 complaints received (6 were measured and all were well

Event - Name, Location, Date	Locality	Noise Limits	Complaints, measured levels, treatments, comments on criteria
A Day on the Green Bimbadgen Estate Winery (Pokolbin, NSW) 24 March 2014	Rural Residential, Cessnock City Council	L <sub>Max</sub> 65 dB(A)  (Note: Applied noise limits from NSW Noise Guide for Local Government (2011). Original background plus noise limits in accordance with NSW Industrial Noise Policy referenced in development approval and later amended as considered too low.)	No complaints
A Day on the Green Centennial Vineyards (Bowral, NSW) 11 November 2012	Rural Residential, Wingecarribee Shire Council	L <sub>Aeq</sub> 65dB(A)	No complaints
(Carrara, QLD) 10 December 2011		Environmental Protection Act 1994	within the noise limit)

Consideration of the information provided in **Table 2.1** indicates that noise limits for other venues similar to Parklands include L<sub>Max</sub> of 65 dB(A) (Cessnock), L<sub>Aeq</sub> of 65 dB(A) (Bowral and Waurn Ponds) and L<sub>Aeq</sub> of 70 dB(A) (Mt Cotton). Based on monitoring at these and other venues, the L<sub>Aeq</sub> 65–70 dB(A) noise limits applied to venues in Cessnock, Bowral and Waurn Ponds would equate to music levels of approximately L<sub>Max</sub> 75–85 dB(A) at the receptor. Each of these venues holds a number of events per year and typically does not receive any complaints associated with noise emissions from the venue<sup>102</sup>.

Hence, from the above, it can be concluded that L<sub>Aeq</sub> noise levels of 65–70 dB(A) are generally considered acceptable for communities affected by outdoor music events. The primary difference between events held at the other venues considered in **Table 2.1** and Parklands relates to the duration of the event.

For Parklands, events typically run over multiple days, with up to three events per year permitted under the current approval. By comparison, the other venues considered above typically hold a larger number of single-day events each year.

Our review of noise limits applied to other venues throughout Australia and those provided in legislative instruments in other States confirms that, for outdoor music events, fixed noise limits at the receiver represent the preferred approach. Given that events at Parklands are typically held over multiple days, with entertainment noise extended until 12:00am for main stages and 2:00am for bars, we submit that noise limits for events held at Parklands ought be revised to the following:

- Between 11:00m and midnight, music noise levels at sensitive receivers must not exceed L<sub>Aeq</sub> 65 dB(A).
- Between midnight and 2:00am, music noise levels at sensitive receivers must not exceed L<sub>Aeq</sub> 55 dB(A).
- During periods of adverse meteorological conditions (including periods of strong winds or temperature inversion) an additional 5 dB allowance is added to the above noise limits. In these

circumstances, the event is required to implement all reasonable and feasible acoustic controls to limit the potential impacts associated with event noise emissions.

The above changes are sought to be achieved by:

- moving the noise criteria from Condition B3 over to Condition C16; and
- consolidating at Condition C16(3) all the key noise criteria.

### The Proposed Past-Midnight Standard

For the past two years, the FFB, which operates over the new year period, has been working closely with Byron Shire Council and its Summer Safety and Cultural Activities Committee to encourage people who wish to celebrate New Year's Eve around midnight to attend the Falls Festival and thereby reduce pressures traditionally experienced by the township at this time of year. A range of measures including provision of 'locals' tickets', public transport, and a donation of \$25,000 by the Falls Festival for family-friendly activities within Byron Bay township, has resulted in a more manageable New Year's Eve experience from both a Council and a NSW Police perspective<sup>103</sup>.

With the provision of a New Year's Eve event at the FFB, in conjunction with the Council's Summer Safety and Cultural Activities Committee, being able to operate stages till 2:00am would provide a more conducive New Year's Eve experience for local, regional and interstate patrons, rather than closing stages at midnight. Such arrangements take place at a number of other events which operate on New Year's Eve<sup>104</sup>.

Parklands is seeking noise criteria specific to New Year's Eve only, that would allow stages to operate until 2:00am (rather than midnight). This change is proposed to be achieved by modification of the consent to identify the New Year's Eve noise level flexibility at Condition C16(3)(e).

### 2.2.2 IMPACT ASSESSMENT

**Plan 2.1** shows the site location and receptor locations. For the purposes of predicting impacts from amplified music during outdoor entertainment events held at Parklands, an environmental noise model of the sources and surrounding region was developed<sup>105</sup>.

The model incorporates influences of meteorology, terrain, ground type and air absorption, in addition to source characteristics to predict noise impacts at each of the identified sensitive receptors near to the venue. For the purposes of the assessment, two meteorological scenarios have been considered as follows:

#### Typical Meteorology:

- Temperature: 10°C;
- Humidity: 70%;
- Light source to receptor winds; and
- Neutral atmospheric stability.

#### Worst-case meteorology:

- Temperature: 10°C;
- Humidity: 70%;
- Wind speed: 1 ms<sup>-1</sup> (neutral meteorology) and 3 ms<sup>-1</sup> (adverse meteorology);
- F (on the Pasqual-Gilford stability scale – moderately stable meteorology).

Four wind directions were considered, to predict for direct source to receptor winds at receptors to the north, south, east and west.

**Tables 2.2 to 2.5** present predicted noise levels at sensitive receptors [LAeq or LCEq (63 Hz)] for a SITG size event, shown against actual noise levels measured at SITG14, existing limits and the limits proposed under this modification.

**Plans 2.2** and **2.3** present predicted LAeq noise contours for the periods prior to midnight (when main stages operate) and post-midnight (when only bars, cafés and dance floors operate), respectively.

Predicted A-emissions for source noise levels are based on the 95% percentile of actual LAeq (5 min) levels measured at front-of-house during SITG14. The adoption of the 95<sup>th</sup> percentile represents the upper end emissions during the headline act performances (front-of-house levels are typically managed such that they increase throughout the day).

Predicted C-emissions are based on the predicted A-emissions +10 dB. 10 dB has been identified as the optimal differential required by sound engineers in recognition of both the importance of low frequency content to the patron experience and, at the same time, consideration of the potential amenity impacts for nearby residents.

It is important to note that these predicted C-emissions would represent a significant reduction in actual C-noise levels versus those experienced during SITG14, in recognition of the patterns witnessed in complaints of elevated bass noise at SITG14. Given this, adoption of these source noise levels (when combined with the recommended low frequency noise limits) is expected to result in a significant improvement in amenity for the community.

**TABLE 2.2 PREDICTED LAEQ RECEPTOR MUSIC NOISE LEVELS – ALL STAGES, BARS, CAFÉS & DANCE FLOORS (11:00AM – 12:00AM)**

Receptor ID	Measured Noise Level SITG 2014	Typical Meteorology			Worst-Case Meteorology		
		Predicted Noise Level	Existing Limit	Proposed Noise Limit	Predicted Noise Level	Existing Limit	Proposed Noise Limit
R1	48 <sup>(3)</sup>	54	47	65	59	47	70
R2	NA <sup>(1)</sup>	58	55	65	63	55	70
R3	58 <sup>(2)</sup>	56	51	65	61	51	70
R4	55 <sup>(3)</sup>	59	55	65	64	55	70
R6	NA <sup>(1)</sup>	58	44	65	62	44	70
R7	NA <sup>(1)</sup>	57	44	65	62	44	70
R8	52 <sup>(3)</sup>	62	55	65	67	55	70
R9	60 <sup>(3)</sup>	60	48	65	66	48	70
R12	53 <sup>(2),(3)</sup>	52	45	65	56	45	70
R13	55 <sup>(2),(3)</sup>	51	43	65	55	43	70
R14	NA <sup>(1)</sup>	45	45	65	49	45	70
R15	51 <sup>(2)</sup>	47	45	65	51	45	70
R16	NA <sup>(1)</sup>	46	44	65	50	44	70
R17	55 <sup>(3)</sup>	62	44	65	67	44	70
R18	63 <sup>(3)</sup>	61	55	65	66	55	70

(1) Noise monitoring data not available for this location.  
 (2) 95<sup>th</sup> percentile of unattended noise measurements recorded between 11:00am and midnight on event days.  
 (3) Maximum measured noise level during attended noise measurements where event noise was audible.

**TABLE 2.3 PREDICTED LAEQ RECEPTOR MUSIC NOISE LEVELS – BARS, CAFES & DANCE FLOORS ONLY (12:00AM – 2:00AM)**

Receptor ID	Measured Noise Level SITG 2014	Typical Meteorology			Worst-Case Meteorology		
		Predicted Noise Level	Existing Limit	Proposed Noise Limit	Predicted Noise Level	Existing Limit	Proposed Noise Limit
R1	NA <sup>(1)</sup>	42	42	55	47	42	60
R2	NA <sup>(1)</sup>	42	50	55	47	50	60
R3	54 <sup>(2)</sup>	42	46	55	46	46	60
R4	NA <sup>(1)</sup>	44	50	55	49	50	60
R6	NA <sup>(1)</sup>	43	39	55	48	39	60
R7	NA <sup>(1)</sup>	45	39	55	49	39	60
R8	NA <sup>(1)</sup>	46	50	55	50	50	60
R9	50 <sup>(2)</sup>	44	43	55	48	43	60
R12	47 <sup>(2)</sup>	48	40	55	53	40	60
R13	50 <sup>(2)</sup>	47	38	55	51	38	60
R14	NA <sup>(1)</sup>	39	40	55	44	40	60
R15	45 <sup>(2)</sup>	40	40	55	44	40	60
R16	NA <sup>(1)</sup>	37	39	55	42	39	60
R17	NA <sup>(1)</sup>	48	39	55	53	39	60
R18	NA <sup>(1)</sup>	48	50	55	52	50	60

(1) Noise monitoring data not available for this location.

(2) 95th percentile of unattended noise measurements recorded between 11:00am and midnight on event days.

(3) Maximum measured noise level during attended noise measurements where event noise was audible.

**TABLE 2.4 PREDICTED LCEQ, 63 HZ RECEPTOR MUSIC NOISE LEVELS – ALL STAGES, BARS, CAFES & DANCE FLOORS (11:00AM-12:00AM)**

Receptor ID	Measured Noise Level SITG 2014	Typical Meteorology			Worst-Case Meteorology		
		Predicted Noise Level	Existing Limit	Proposed Noise Limit	Predicted Noise Level	Existing Limit	Proposed Noise Limit
R1	NA <sup>(1)</sup>	71 <sup>(4)</sup>	- <sup>(2)</sup>	75	73 <sup>(4)</sup>	- <sup>(2)</sup>	80
R2	NA <sup>(1)</sup>	74 <sup>(4)</sup>	- <sup>(2)</sup>	75	76 <sup>(4)</sup>	- <sup>(2)</sup>	80
R3	86 <sup>(3)</sup>	72 <sup>(4)</sup>	- <sup>(2)</sup>	75	74 <sup>(4)</sup>	- <sup>(2)</sup>	80
R4	NA <sup>(1)</sup>	74 <sup>(4)</sup>	- <sup>(2)</sup>	75	77 <sup>(4)</sup>	- <sup>(2)</sup>	80
R6	NA <sup>(1)</sup>	74 <sup>(4)</sup>	- <sup>(2)</sup>	75	76 <sup>(4)</sup>	- <sup>(2)</sup>	80
R7	NA <sup>(1)</sup>	74 <sup>(4)</sup>	- <sup>(2)</sup>	75	76 <sup>(4)</sup>	- <sup>(2)</sup>	80
R8	NA <sup>(1)</sup>	74 <sup>(4)</sup>	- <sup>(2)</sup>	75	77 <sup>(4)</sup>	- <sup>(2)</sup>	80
R9	83 <sup>(3)</sup>	74 <sup>(4)</sup>	- <sup>(2)</sup>	75	76 <sup>(4)</sup>	- <sup>(2)</sup>	80
R12	82 <sup>(3)</sup>	72 <sup>(4)</sup>	- <sup>(2)</sup>	75	74 <sup>(4)</sup>	- <sup>(2)</sup>	80
R13	76 <sup>(3)</sup>	72 <sup>(4)</sup>	- <sup>(2)</sup>	75	74 <sup>(4)</sup>	- <sup>(2)</sup>	80
R14	NA <sup>(1)</sup>	66 <sup>(4)</sup>	- <sup>(2)</sup>	75	69 <sup>(4)</sup>	- <sup>(2)</sup>	80
R15	75 <sup>(3)</sup>	68 <sup>(4)</sup>	- <sup>(2)</sup>	75	71 <sup>(4)</sup>	- <sup>(2)</sup>	80
R16	NA <sup>(1)</sup>	67 <sup>(4)</sup>	- <sup>(2)</sup>	75	69 <sup>(4)</sup>	- <sup>(2)</sup>	80
R17	NA <sup>(1)</sup>	75 <sup>(4)</sup>	- <sup>(2)</sup>	75	81 <sup>(4)</sup>	- <sup>(2)</sup>	80
R18	NA <sup>(1)</sup>	76 <sup>(4)</sup>	- <sup>(2)</sup>	75	82 <sup>(4)</sup>	- <sup>(2)</sup>	80

(1) Noise monitoring data not available for this location.  
 (2) No limit in current approval.  
 (3) Maximum measured noise level during attended noise measurements where event noise was audible.  
 (4) Predicted LCEq emissions based on corresponding predicted LAeq emissions + 10 dB.

**TABLE 2.5 PREDICTED LCEQ, 63HZ RECEPTOR MUSIC NOISE LEVELS – BARS, CAFES & DANCE FLOORS ONLY (12:00AM-2:00AM)**

Receptor ID	Measured Noise Level SITG 2014	Typical Meteorology			Worst-Case Meteorology		
		Predicted Noise Level	Existing Limit	Proposed Noise Limit	Predicted Noise Level	Existing Limit	Proposed Noise Limit
R1	NA <sup>(1)</sup>	60 <sup>(4)</sup>	- <sup>(2)</sup>	75	62 <sup>(4)</sup>	- <sup>(2)</sup>	80
R2	NA <sup>(1)</sup>	60 <sup>(4)</sup>	- <sup>(2)</sup>	75	62 <sup>(4)</sup>	- <sup>(2)</sup>	80
R3	72 <sup>(3)</sup>	60 <sup>(4)</sup>	- <sup>(2)</sup>	75	62 <sup>(4)</sup>	- <sup>(2)</sup>	80
R4	NA <sup>(1)</sup>	62 <sup>(4)</sup>	- <sup>(2)</sup>	75	65 <sup>(4)</sup>	- <sup>(2)</sup>	80
R6	NA <sup>(1)</sup>	61 <sup>(4)</sup>	- <sup>(2)</sup>	75	63 <sup>(4)</sup>	- <sup>(2)</sup>	80
R7	NA <sup>(1)</sup>	63 <sup>(4)</sup>	- <sup>(2)</sup>	75	65 <sup>(4)</sup>	- <sup>(2)</sup>	80
R8	NA <sup>(1)</sup>	63 <sup>(4)</sup>	- <sup>(2)</sup>	75	65 <sup>(4)</sup>	- <sup>(2)</sup>	80
R9	74 <sup>(3)</sup>	62 <sup>(4)</sup>	- <sup>(2)</sup>	75	65 <sup>(4)</sup>	- <sup>(2)</sup>	80
R12	70 <sup>(3)</sup>	65 <sup>(4)</sup>	- <sup>(2)</sup>	75	67 <sup>(4)</sup>	- <sup>(2)</sup>	80
R13	70 <sup>(3)</sup>	64 <sup>(4)</sup>	- <sup>(2)</sup>	75	67 <sup>(4)</sup>	- <sup>(2)</sup>	80
R14	NA <sup>(1)</sup>	57 <sup>(4)</sup>	- <sup>(2)</sup>	75	60 <sup>(4)</sup>	- <sup>(2)</sup>	80
R15	66 <sup>(3)</sup>	58 <sup>(4)</sup>	- <sup>(2)</sup>	75	60 <sup>(4)</sup>	- <sup>(2)</sup>	80
R16	NA <sup>(1)</sup>	56 <sup>(4)</sup>	- <sup>(2)</sup>	75	58 <sup>(4)</sup>	- <sup>(2)</sup>	80
R17	NA <sup>(1)</sup>	65 <sup>(4)</sup>	- <sup>(2)</sup>	75	68 <sup>(4)</sup>	- <sup>(2)</sup>	80
R18	NA <sup>(1)</sup>	67 <sup>(4)</sup>	- <sup>(2)</sup>	75	69 <sup>(4)</sup>	- <sup>(2)</sup>	80

(1) Noise monitoring data not available for this location.

(2) No limit in current approval

(3) Maximum measured noise level during attended noise measurements where event noise was audible.

(4) Predicted LCEq emissions based on corresponding predicted LAeq emissions + 10dB

The results of the predictive noise modelling indicates that from 11:00am to midnight, when the main stages are operating, non-compliances with the existing background related A-weighted noise limits are predicted for all but one receptor for typical meteorological conditions and all receptors for worst-case meteorological (temperature inversion) conditions. These conclusions are also supported by the results of the attended and unattended noise monitoring<sup>106</sup> undertaken during SITG14 which show observed exceedances of the noise limits for most receptors.

Similarly, for the period from midnight to 2:00am when only bars operate, non-compliances with the existing background related A-weighted noise limits are predicted for six receptors for typical meteorological conditions and 11 receptors for worst-case meteorological (temperature inversion) conditions. The results of unattended noise monitoring undertaken during SITG14 further support this

conclusion, with all but one receptor where unattended noise monitoring was undertaken showing observed exceedances during this period<sup>107</sup>.

Comparison of the results of the predictive noise modelling for the period when the main stages are operating and only the bars operate indicate compliance with the alternative A-weighted noise limits is able to be achieved for all receptors by up to 3 dB for both typical and worst-case meteorological (temperature inversion) conditions. It is noted that this predicted compliance is within the expected uncertainty of the modelling. Hence, it is considered likely that where front-of-house noise levels are actively managed to achieve the required 102 dB(A), compliance with the recommended noise limits is achievable.

For C-weighted noise levels, the results of the predictive modelling indicate that compliance with the recommended noise limits can be achieved for all receptors except R18. For R18, a minor exceedance with the recommended noise limits of up to 1 dB is predicted. It is noted that R18 is a vacant potential house site pad with no residential use currently constructed. Put simply, these noise limits would result in a substantial reduction in C-weighted emissions with a consequential improvement in local amenity.

## 2.3 SMALL EVENT MANAGEMENT

### 2.3.1 PROPOSAL

Parklands has always acknowledged that for limited times of the year, hosting a small number of larger music events at the site will create some short term impacts on some members of the local community. In addition to minimising these impacts, Parklands proposed in the original application to provide a range of benefits to the local community.

Apart from the popular Community Grant Fund, which provides direct funding to local community and environmental groups, another key community benefit proposed was making the venue available for small community events that are not focused around music.

This application seeks to include a new definition into the approval of 'small community events'. This event type is a 'non-music focused event with a maximum patron number of 3,000 persons'. The changes sought entail:

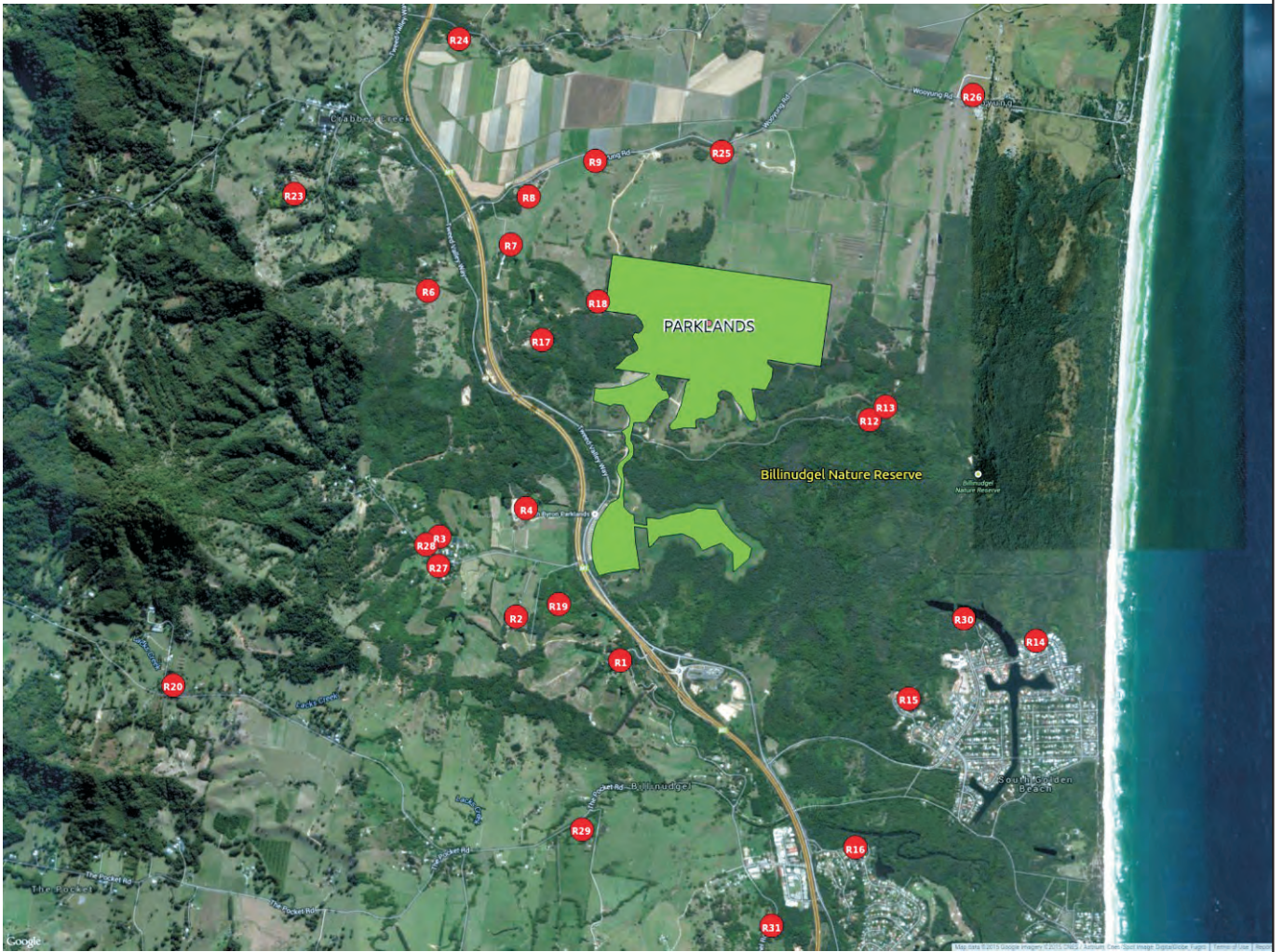
- inserting a definition in Condition B1 that provides for a small community event is a 'non-music focused event with up to 3,000 patrons';
- amending Condition B2(5) to provide that the Secretary of the Department of Planning and Environment may permit any number of small events and delegates to Parklands the authority to carry out up to five events each calendar year; and
- amending Condition C7 to ensure that all community events comply with general requirements in terms of complaint procedure, noise management planning, notification of Council, access for emergency vehicles, disabled access, dogs, bushfire management, effluent removal, rubbish removal and removal of temporary structures.

The community has demonstrated a strong desire to use the Parklands cultural event facility, as evidenced by the number of unsolicited requests received from a wide range of community groups and educational institutions to date.


This modification application proposes use of the site for small events. Operational parameters will limit the potential impacts of such events by setting the following requirements:

- non-music focused;
- small enough so as not to require external traffic management; and
- conformity with the applicable Parklands general consent conditions.

Source: Air Noise Environment "Review of Noise Limits" March 2015 Figure 1.1



**Legend**

 Subject site

**Plan 2.1**  
**SITE LOCATION**  
**AND**  
**RECEPTOR LOCATIONS**

Source: Air Noise Environment "Review of Noise Limits" March 2015 Figure 4.2

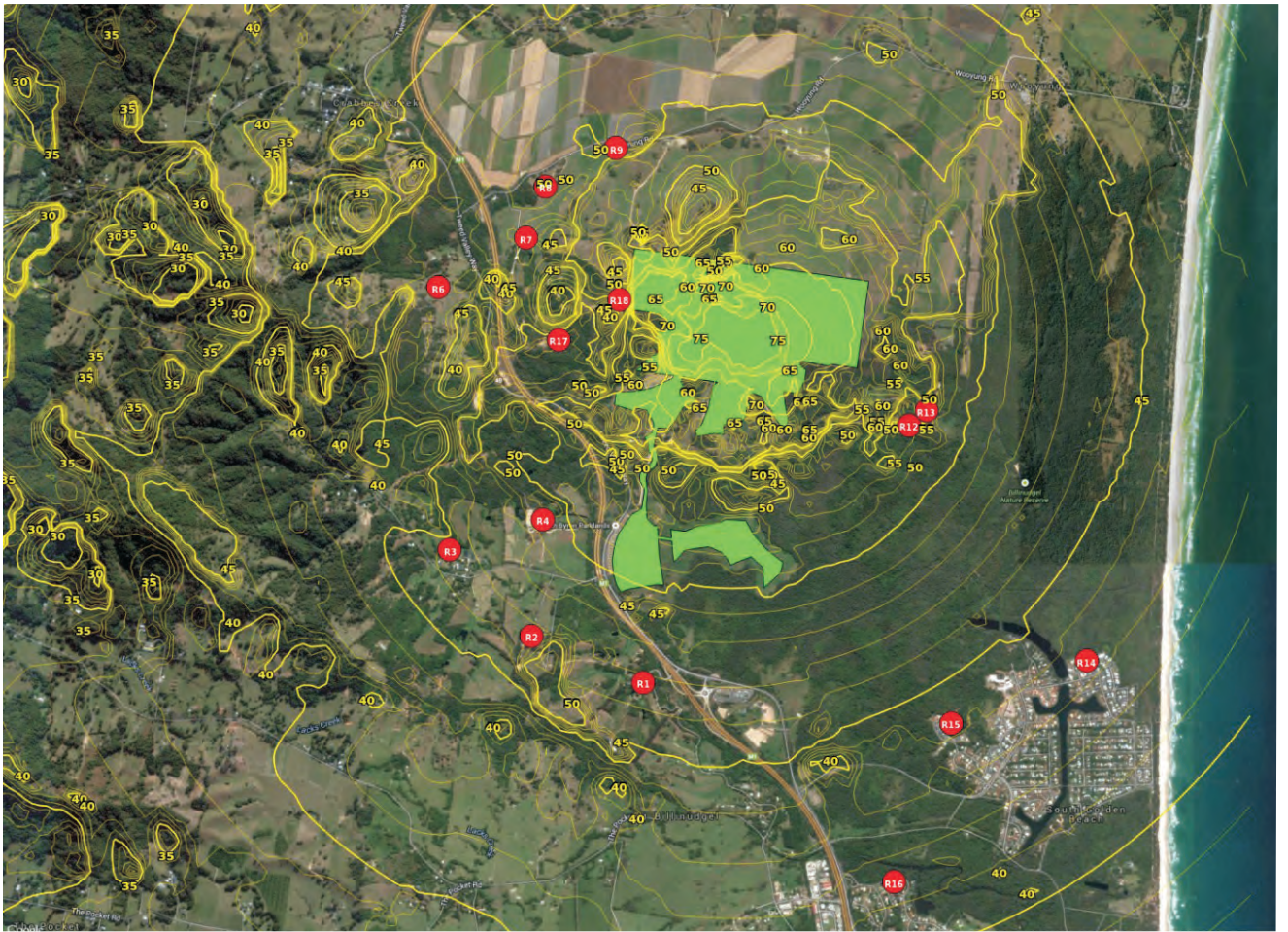


**Legend**

 Subject site

**Plan 2.2**  
**PREDICTED LAeq RECEPTOR**  
**NOISE LEVEL CONTOURS -**  
**MAIN STAGE OPERATION**  
**(11am-12am)**

Source: Air Noise Environment "Review of Noise Limits" March 2015 Figure 4.3



**Legend**

 Subject site

**Plan 2.3**  
**PREDICTED LAeq RECEPTOR NOISE**  
**LEVEL CONTOURS**  
**- BARS ONLY OPERATING**  
**(12am-2am)**

**2.3.2 IMPACT ASSESSMENT**

Having regard to the capacity of the road system in the locality, the capacity of the key intersections and functionality of Parklands’ internal road system, a small community event of 3,000 persons with say a maximum of 1,000 vehicles is unlikely to be even discernible within the road network, and unlikely to have any adverse impact on the movement of traffic within the system.

Given the expansive nature of the Parklands site, a community event for the likes of a school activity or open-air cinema will not generate any material amenity impacts for persons residing on rural properties within the vicinity. The site is a rural property during the periods when it is not utilised for events. The noise and other amenity impacts generated by a use of the site for a small community event would not overly differ from conventional agricultural use activities.

Because of the generally enclosed nature of the site, small events occurring in the north of the site will not be visible to road users or persons in the locality.

Having regard to the abovementioned considerations, we conclude that the physical impacts generated by small non-music focused community events will be minimal. However, the social benefits in turn for the local community, educational establishments, and north Byron Shire groups will be highly beneficial, allowing the infrastructure of the site to be used by a part of the community which would not ordinarily attend music-related events.

**2.3.3 MITIGATION MEASURES**

The primary mitigation measure is the requirement of any small community event to not be ‘music focused’. This will ensure that community events are not in any way associated with the music industry of any sort and the use is solely community-focused.

The second mitigation measure relates to the maximum patron limit associated with a small community event. Based on the proponent’s experience with and observation of small community events in other locations, the limit suggested is 3,000 patrons.

The third mitigation measure relates to the number of small community events that can be carried out at the site. The drafting of the modification proposal places a maximum limit on the number of small community events able to be conducted without the approval of the Secretary of the Department at just six. As a further safeguard, the Secretary can reduce this number of events if adverse reports come to the Department in relation to the operation of small community events.

Finally, all of the key Event Management Standards developed by Parklands in relation to event administration (i.e. C4 complaints; C16 noise; C35 notification; C45 emergency access; C47 disabled access; C48 dogs; C49 bushfire; C55 effluent; C56 rubbish; C57 temporary structures) are to be applied to small community events to ensure their practical operation.

**2.4 CONSENT DOCUMENTATION REFINEMENTS**

**2.4.1 PROPOSAL**

This aspect of the modification seeks to adjust various minor matters to better the usability and robustness of the consent. The changes sought, other than those changes described above with respect to noise management and small community events, entail:

Schedule 1, Part B – the insertion of additional definitions and alteration to some definitions to reflect statutory changes;

Condition A2 – correct the description of access gates;

Condition B1 – correct the typographic errors in three definitions and introduce a ‘small community event’ definition;

Condition B4 – alteration to reflect the practical capacity of the southern car



park;

Condition B5 – to improve safe working requirements associated with bump out;

Condition B6 – changes to reflect improved camper organisation;

Condition B7 – standardise the date of the annual submission of a Performance Report;

Condition 8C – an amendment to clarify the role of the NSW Fire Commissioner;

Condition C10 – edits to reflect the statutory capacity of the RMS;

Condition C15 – an amendment to clarify the role of Council in terms of speed control on local roads;

Condition C20 – refinement of the condition relating to koala management;

Condition C22 – refinement of to the conditions relating to Grassy Owl searches;

Condition C24 – an amendment to the Bushfire Emergency Plan condition to remove ambiguity in the wording;

Condition C27 – change to reflect a minor typographical error;

Condition C37 – refinement of condition relating to the erection of temporary structures;

Condition C50 – refinement of the condition relating to the location of copies of emergency evacuation plans;

Condition C57 – refinement of conditions relating to the removal of temporary structures;

Conditions D9 & D10 – improvements to reflect contemporary best practice for sullage and greywater;

Adjustment of the Statement of Commitments at Schedule 3 to reflect the provisions of the consent as approved (thereby removing many inconsistencies between the documents); and

Consequential changes to the Concept Approval to align it with the above alterations to the Project Approval.

All of the abovementioned changes are illustrated in Section 4. Notations in blue font comment on each of the abovementioned consent adjustments in more detail.

#### **2.4.2 IMPACT ASSESSMENT**

The alterations proposed have little or no impact in terms of the operation of the consent. Largely the above-described modifications are by way of corrective action or refinement. Accordingly, no adverse or material impact is thought likely as a consequence of the abovementioned changes.

### 3. CONSULTATION

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*This section describes consultation carried out with various parties to facilitate the lodgement of this Modification Application.*

- Consultation with the Department of Planning and Environment covered the three aspects of the modification – i.e. tidying up conditions, small community events and proposed improvements to the noise conditions. The Department's role in regulating the consent meant it was familiar with conditions which were ambiguous and requiring clarification. With respect to noise, the introduction of criteria to better manage the 'bottom end' was discussed as well as the Department's original assessment of the noise aspects of the proposal and its recommended approach to managing noise.
- Byron Shire Council consultation occurred with the then Executive Manager of Planning, who supported the local community being able to utilise the site and its facilities for small community events. It was suggested to allow for six small events per annum. Council supported the initiative of Parklands to seek to define lower frequency noise emissions and manage such emissions.
- Tweed Shire Council staff responded to the consultation invitation with the following comments:
  - Any proposal to better manage any potential impacts upon Tweed Shire residents is considered to be a positive move.
  - With regard to the small community events, such a proposal is supported in principle. The proposal should detail as to whether the emergency access road into Tweed Shire will be in use or whether such road is only relied upon for the larger events.
- Consultation occurred with Mr Michael Baldwin of RMS who provided comments to update and clarify traffic conditions which are contained in the amendment application.
- Preliminary consultation occurred with NSW Police and NSW Rural Fire Service where the components of the proposed amendments were outlined. No objection was raised.
- Department of Environment and Heritage (OEH) responded to the preliminary consultation stating that, generally, OEH would not have any issues in relation to the proposed modification to noise requirements, except where there are potential impacts to biodiversity. OEH stated there are no anticipated issues with the proposed low scale community uses, provided that they are limited to low key uses, that they are limited to the area approved for larger cultural events, that the number of events is limited, and that there is some monitoring of potential impacts. In relation to adjusting the consent condition wording, OEH generally agrees to the minor amendments. However, the changes to Condition 21 may need to be further clarified.

## 4. CONCLUSION

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Parklands is already well on the way to fulfilling its ambition to be Australia's world class sustainable cultural events hub, bringing significant employment, economic benefit and cultural value to regional New South Wales. Only 20 months (and four events) into a five-year/15-event trial, the response from patrons, artists, and much of the local community has been extremely positive.

Pursuant to the trial approval process, four events have now occurred at Parklands (Splendour in the Grass 2013, Falls Festival 13/14, Splendour in the Grass 2014 and Falls Festival 14/15), resulting in the accumulation and assessment of a significant amount of information and experience. Inclement weather impacted on the initial site build, which resulted in several teething issues at the first event. However, continuous improvement measures implemented since have culminated in Splendour in the Grass 2014 and Falls Festival 14/15, which have been hailed as huge successes, garnering glowing accolades from media and patrons alike.

A recently commissioned economic impact assessment has concluded that for the two events held in 2014, national economic output totalled \$93.4m, \$41.4m of which was derived from businesses and service providers in the Northern Rivers region of New South Wales, and some \$24.1m of the total economic output (25% of the total) generated in the Byron Shire. The full-time equivalent jobs created in these three regions were 583, 255 and 166 respectively.



The modification application comprises three key aspects as follows:

- setting criteria to better manage lower frequency sound emissions from events held at the venue and align noise criteria with standard Statewide noise protocols for outdoor venues;
- allowing small community, non-music focused events such as school cross-country runs, open-air cinema, and charity days to be held at the site; and
- adjusting consent condition wording to remove ambiguity, regulatory duplication and correct wording errors.

The changes proposed pursuant to Modification Application No. 3 come about as a consequence of Parklands' faithful implementation of its Environmental Health and Safety Management System, which continually reviews systems and processes and seeks to adjust actions so as to create a continuous loop of improvement.

We respectfully submit that the refinements proposed are capable of implementation in a manner which better mitigates against potential adverse impacts and is consistent with the trial nature of the approval granted by the PAC.

A handwritten signature in black ink, appearing to read 'Stephen Connelly', written over a diagonal line.

Stephen Connelly FPIA CPP

**PLANNERS NORTH**

## REFERENCES

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- EPA, 2013 *Noise Guide for Local Government*, Environment Protection Authority, May 2013
- Fitzgerald M, 2009 *Fauna Survey of North Byron Shire Parklands* prepared for Billinudgel Property Trust by Mark Fitzgerald Ecological February 2009.
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- Kooyman, 2014 Permanent Photo Point Assessment for Parklands, Photo period: 03.07.14 to 25.08.14. Dr. Robert Kooyman (ecologist / botanist), 27 August 2014
- PAC, 2012 (a) *Report concerning the determination of the Concept Plan and Stages 1 & 2 Project Application for a proposed Cultural Events Site at Tweed Valley Way and Jones Road Yelgun – Byron Local Government Area*, Planning and Assessment Commission, 24 April 2012.
- PAC, 2012 (b) *Notice of Determination Concept Plan and Stages 1 & 2 Project Application for Proposed Cultural Events Site at Tweed Valley Way and Jones' Road Yelgun, Byron Local Government Area*, Planning and Assessment Commission, 24 April 2012.
- Parklands, 2010 *Environmental Health and Management Safety Manual, North Byron Parklands: Tweed Valley Way and Jones' Road Yelgun*, North Byron Parklands, August 2010.
- Parklands, 2014 (a) *Performance Report #1 MP 09\_002 Covering Splendour in the Grass, 25-28 July 2013 and Falls Festival 30 December 2013 to 2 January 2014 operating and North Byron Parklands*. North Byron Parklands, 31 March 2014.
- Parklands, 2014(b) *Performance Report #2. North Byron Parklands*, North Byron Parklands, November 2014
- ANE, 2015 *Review of Noise Limits - North Byron Parklands Pty Ltd*. Prepared by Air Noise Environment, 17 April 2015.
- BSC, 2014 (a) *World Environment Day 2014, Green Building Award*. Byron Shire Council, 5 June 2014.
- BSC, 2014 (b) *Notice of Refusal DA 10.2014.110.1*, Byron Shire Council, 29 April 2014.
- PLANNERS NORTH, 2014 *Development Application – Recreation Area – Ocean Shores Primary School Cross Country Run at North Byron Parklands*. PLANNERS NORTH, 12 March 2014.
- RPS, 2014 *The Economic Impact and Benefits 2014*, RPS Group, October 2014.

## SPECIFIC DETAILS OF MODIFICATION SOUGHT

To give effect to the amendments described in Section 3, the following modifications to the Consent are proposed. Words proposed to be deleted are shown as ~~struck through~~ and words to be inserted are shown in **blue font**. Commentary pointing to references or additional information in relation to each of these specific amendments is located immediately following amendments proposed and is in **green font**. Adjacent to each proposed change is a comment section. That section seeks to provide more information in relation to the modification proposed. Comments relevant to noise management aspects are shown in **mustard font**. Commentary relating to the proposal for small events is shown in **red font** and other comments applicable to administrative changes are shown in **blue font**.

### A.1 PROJECT APPROVAL

#### SCHEDULE 1

<b>Application No.:</b>	MP 09_0028
<b>Proponent:</b>	Billinudgel Property Pty Ltd
<b>Approval Authority:</b>	Minister for Planning and Infrastructure
<b>Land:</b>	Lots 46, 402, 403, 404, 410 DP 755687; Lots 10, 12, 14 DP 875112; Lots 2, 12 DP 848618; Lot 101 DP 856767; Lots 30, 31 DP 880376; Lots 101, 102, 107 DP 1001878; and Lot 1 DP 1145020, Tweed Valley Way and Jones Road, Yelgun – Byron local government area.
<b>Project:</b>	<p>Cultural Events Site, comprising:</p> <ul style="list-style-type: none"> <li>• erection of temporary structures;</li> <li>• temporary camping ancillary to the events usage;</li> <li>• construction of an administration building;</li> <li>• construction of a gatehouse building;</li> <li>• temporary toilet <b>and</b> shower facilities;</li> <li>• temporary water and wastewater facilities;</li> <li>• tonstruction of an internal spine road;</li> <li>• tonstruction of a water treatment plant;</li> <li>• construction of a wastewater treatment plant;</li> <li>• upgrading of local public roads, creation of site access intersections and an underpass beneath Jones Road;</li> <li>• construction of event laneways, walkways, car parking areas, drainage improvements and associated works;</li> <li>• resource recovery centre and art installations; and,</li> <li>• progressive implementation of a vegetation management plan.</li> </ul>

#### PART A—NOTES RELATING TO THE DETERMINATION OF 09\_0028

##### Responsibility for other consents / agreements

The Proponent is solely responsible for ensuring that all additional consents and agreements are obtained from other authorities, as relevant.

## Appeals

The Proponent has the right to appeal to the Land and Environment Court in the manner set out in the Environmental Planning and Assessment Act 1979 and the Environmental Planning and Assessment Regulation 2000.

## Appeals—Third Party

A third party right to appeal to this approval in the manner set out in the Environmental Planning and Assessment Act 1979 and the Environmental Planning and Assessment Regulation 2000.

## Legal notices

Any advice or notice to the approval authority shall be served on the Director-General.

## PART B—DEFINITIONS

In this approval,

**Act** means the *Environmental Planning and Assessment Act 1979*.

**Advisory Notes** means advisory information relating to the approved development but do not form a part of this approval.

**BCA** means Building Code of Australia.

**Bump In** and **Bump out** are the periods defined in Condition B1.

**Camper arrival day and camper departure day** are defined in Condition B1.

**Complaints Register** means the complaints register established under Condition C5.

**Construction Certificate** means a construction certificate for bulk earthworks or civil works unless specified otherwise.

**Council** means Byron Shire Council.

**CPI** means Consumer Price Index.

**Department** means the Department of Planning and Infrastructure or its successors.

**Director-General** means the Director-General of the Department.

**EMC** – Emergency Management Centre is the central emergency coordination centre for emergency management for larger events.

**Environmental Assessment** means the Environmental Assessment prepared by SJ Connelly CPP Pty Ltd and dated August 2010, including all appendices.

**Event Day** means an advertised date on the face of an event entry ticket for a trial event but does not include small community event days.

**Feasible and Reasonable** Consideration of best practice taking into account the benefit of proposed measures and their technological and associated operational application in the NSW and Australian context. **Feasible** relates to the capability of a work practice or abatement measure being put into practice (or of being engineered) and whether that measure is practical to build given project constraints such as safety and maintenance requirements.

**Reasonable** relates to the application of judgement in arriving at a decision, taking into account mitigation benefits and cost of mitigation versus benefits provided, community views and nature and extent of potential improvements. These terms are further defined in OEH's *Noise Guide for Local Government 2010*.

**Large trial event** is defined in Condition B1.

**Medium trial event** is defined in Condition B1.

**Minister** means the Minister for Planning and Infrastructure.

**OEH** means Office of the Environment and Heritage.

**Patron** means anyone who holds a ticket to attend an outdoor event;

**Project** means the project as described in Condition A2 to this approval.

**PCA** means a Principal Certifying Authority and has the same meaning as Part 4A of the Act.

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**Preferred Project Report** means the Preferred Project Report prepared by SJ Connelly CPP Pty Ltd dated February 2011.

**Proponent** means Billinudgel Property Pty Ltd or any party acting upon this approval.

**Regulation** means the *Environmental Planning and Assessment Regulation 2000*.

**Regulatory Working Group and RWG** means the Group established in accordance with Condition C2.

**RFS** means Rural Fire Service.

**Secretary** means the Secretary of the Department of Planning and Environment.

**Sensitive Receiver** means a residence, education institution, health care facility and/or religious facility.

**Site** has the same meaning as the land identified in Part A of this schedule.

**Small community event** is defined in condition B1

**Comment:** The additional definitions proposed are to assist with interpretation of the Consent. The changes propose the inclusion of a definition for the Emergency Management Centre; clarification in relation to the meaning of the term "event days"; a reference to the term "small community event"; and replacement of the historical term "Director-General" with the new designation of the head of the Department of Planning and Environment – i.e. Secretary.

*End of Schedule 1*

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## SCHEDULE 2 CONDITIONS OF APPROVAL

### PART A - ADMINISTRATIVE CONDITIONS

#### **A1 Structure of Approval**

This project approval is divided into five (5) parts:

- (a) Part A – administrative conditions.
- (b) Part B – trial of outdoor events - parameters.
- (c) Part C – conditions that apply to the trial.
- (d) Part D – general health and safety conditions for events.
- (e) Part E – conditions that apply to the permanent infrastructure/site enhancement works for Stages 1 and 2.

The Administrative Conditions and Advisory Notes apply to all Parts of this project approval.

#### **A2 Staging and Project Approval**

The project is approved in two (2) stages. Project approval is granted only to carrying out of the project as generally described below:

(a) Stage 1

(1) Outdoor Event Approval

- i) A trial of outdoor events up to the end of 2017, including car parking; ancillary camping; and, erection of temporary structures and facilities within the Event Usage Area defined within Plan 1.2 – *Revised Event Area and Land Use Structure* accompanying the Preferred Project Report dated February 2011.
- ii) Car parking usage within the Car parking Area defined within Plan 1.2 – *Revised Event Area and Land Use Structure*, accompanying the Preferred Project Report dated February 2011.

(2) Infrastructure Approval

- i) Construction of the spine road;
- ii) Construction of an underpass beneath Jones Road, car parking areas, pedestrian walkways and boardwalks, shuttle bus turnaround area;
- iii) Upgrading of the western 340 m of Jones Road to a two-lane sealed road with a service entrance (Gate A S);
- iv) Construction of the intersections associated with Gates ~~A, B and C~~ B, C & D;
- v) Construction of event laneways, resource centre, hard stand areas, drain crossings, stormwater management, regrading for positive drainage and associated works;
- vi) Construction of laneways and drain crossings within car parking area; and
- vii) Construction of entry treatment and signage.

**Comment:** In the implementation of the approvals, a more refined logic has been applied to the gate lettering system. That logic has been applied to the four trial events carried out to date. This implementation approach has worked well, and the consent is sought to be formally modified to reflect the naming conventions used in site implementation planning.

(3) Vegetation Management Works Approval

- i) Implementation of natural area protective fencing; constructed wetlands; new habitat area plantings; managed parkland plantings and Yelgun Creek rehabilitation; and
- ii) Implementation of a comprehensive Vegetation Management Plan.

(b) Stage 2:

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(1) Infrastructure Approval

- i) construction and landscaping of an administration building with 175 m<sup>2</sup> of floor area;
- ii) construction and landscaping of a gatehouse building with 100 m<sup>2</sup> of floor area;
- iii) construction of a water treatment plant; and
- iv) construction of a wastewater treatment plant.

**A3 Project in Accordance with Plans**

The project is to be undertaken generally in accordance with the following drawings:

Design Drawings prepared by Design Team Ink			
Drawing No.	Revision	Name of Plan	Date
1.1		Revised Illustrative Site Plan	14.12.10
1.2		Revised Event Area and Land Use Structure	<del>14.12.10</del> 13.10.14
1.3		Revised Ecological Structure Plan	14.12.10
Architectural Drawings prepared by Design Team Ink			
Drawing No.	Revision	Name of Plan	Date
1.1		Administration Building	28.04.10
1.1		Administration Building	27.04.10
1.1		Gate House	28.04.10
1.1		Gate House	27.04.10
Engineering Drawings prepared by Design Team Ink			
Drawing No.	Revision	Name of Plan	Date
1.1		Typical Design Roads and Laneways	25.02.10
1.2		Typical Design Bus Drop-off/Loading Area	25.02.10
1.4		Typical Design Signage	25.02.10
1.5		Typical Design Boardwalks	23.07.10
Landscape Drawings prepared by Design Team Ink			
Drawing No.	Revision	Name of Plan	Date
1.7		Administration/Cultural Centre Landscape Concept	09.06.10
1.7		Gatehouse Landscape Concept	09.06.10
Engineering Drawings Prepared by Ardill Payne & Partners			
Drawing No.	Revision	Name of Plan	Date
DA01	A	Road Hierarchy Plan and General Site Layout	May 2010
DA02		Jones Road Plan and Long Section Ch0-180	May 2010
DA03	A	Jones Road Plan and Long Section Ch180-360	May 2010
DA04		Jones Road Cross Sections Ch0-340	May 2010
DA05		Jones Road Cross Sections Ch260-340	May 2010

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DA06		Tweed Valley Way Intersections	May 2010
DA07	A	Spine Road 'Drop In' Plan and Long Section Ch. 0-180	May 2010
DA08		Spine Road 'Drop In' Plan and Long Section Ch. 180-303	May 2010
DA09	C	Spine Road Plan and Long Section Ch. 0-700	May 2010
DA10	A	Spine Road Plan and Long Section Ch. 700-1400	May 2010
DA11		Spine Road Plan and Long Section Ch. 1400-2100	May 2010
DA12		Spine Road Plan and Long Section Ch. 2100-2800	May 2010
DA13		Spine Road Plan and Long Section Ch. 2800-3060	May 2010
DA14	A	Bus Turnaround and Car Parking Area	May 2010
<b>Tree Removal Plans Prepared by Ardill Payne &amp; Partners</b>			
<b>Drawing No.</b>	<b>Revision</b>	<b>Name of Plan</b>	<b>Date</b>
Plan 4.7.1		Plan 4.7.1 Tree Removal Plan	Aug 2010
Plan 4.7.2		Plan 4.7 Tree Removal Plan	Aug 2010
Plan 4.7.3		Plan 4.7.3 Tree Removal Plan	Aug 2010

**Comment:** Drawing 1.2 is amended only to provide for the change in gate naming referred to in Condition A2(a)(ii).



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### **A4 Project in Accordance with Documents**

The project is to be undertaken generally in accordance with the following documents:

- (a) *Environmental Assessment* prepared by SJ Connelly CPP Pty Ltd on behalf of Billinudgel Property Pty Ltd, dated August 2010;
- (b) *Reply to Submissions and Preferred Project Report* prepared by SJ Connelly CPP Pty Ltd on behalf of Billinudgel Property Pty Ltd, dated February 2011;
- (c) *Flood Risk Management Plan* prepared by Molino Stewart on behalf of North Byron Parklands (Billinudgel Property Pty Ltd), dated June 2011; and
- (d) *Environmental Health and Safety Management Manual* prepared by North Byron Parklands, dated August 2010.

### **A5 Inconsistency between documents**

In the event of any inconsistency between:

- (a) The conditions of this approval and the Statement of Commitments included at Schedule 3, the conditions of this approval prevail;
- (b) The conditions of this approval and the drawings/documents referred to in conditions A3 and A4, the conditions of this approval prevail; and
- (c) Any drawing/document listed in conditions A3 and A4 and any other drawing/document listed in conditions A3 and A4, the most recent document shall prevail to the extent of the inconsistency.

Notwithstanding (a) to (c) above, if there is an inconsistency between this project approval and the concept plan approval (09\_0028), the concept plan approval shall prevail to the extent of the inconsistency.

### **A6 Building Code of Australia**

- (a) All building work must be carried out in accordance with the requirements of the *Building Code of Australia* (BCA).
- (b) The temporary structures for the event must comply with the requirements of Section B, Part B1, and Section H NSW H102 of the BCA and relevant referenced Australian Standards.

### **A7 Lapsing of Approval**

The approval shall lapse 5 years after the project approval has been determined unless work the subject of this approval has physically commenced.

### **Other Approvals**

#### **A4 Approvals Under Section 68 of the Local Government Act 1993**

The proponent is required to obtain all relevant approvals as required under Section 68 of the *Local Government Act 1993* from Council.

*End of Part A*

**PART B – TRIAL OF OUTDOOR EVENTS – PARAMETERS****B1 Definitions**

In this approval:

**bump in** means the period in which temporary infrastructure is assembled prior to the commencement of an event;

**bump out** means the period in which temporary infrastructure is dismantled at the conclusion of an event;

**camper arrival day** for a trial event, means ~~the day immediately~~ **up to two days** before the first event day, being a day on which camper patrons are permitted to arrive at the site;

**camper departure day** for a trial event, means the day immediately after the last event day, being a day on which camper patrons are permitted to depart from the site;

**large trial event** is an outdoor event the first trial event for which is proposed for between ~~15,000~~ **25,000** and ~~25,000~~ **35,000** patrons;

**medium trial event** is an outdoor event the first trial for which is proposed for between ~~10,000~~ **15,000** and ~~15,000~~ **25,000** patrons;

**small trial event** is an outdoor event the first trial for which is proposed for between 10,000 to 15,000 patrons.

**Comment:** Changes to Condition B1 propose adjusting the definition of 'camper arrival day' to better accord with actual practice and correct some typographical errors in relation to event sizes.

**small community event** is a non-music focused event with up to 3,000 patrons.

**Comment:** Introduces the term 'small community event'. This small community event definition clarifies that this event type is a 'non-music' activity with a maximum patron limit of 3,000.

**B2 Trial period for outdoor events**

- 1) There shall be a trial period for outdoor events up to the end of 2017. The ~~Director-General~~ **Secretary** may approve up to 3 trial events each calendar year of the trial period, being one large trial event, one medium trial event and one small trial event. The ~~Director-General~~ **Secretary** may also approve additional small or medium events in place of a larger trial event during any calendar year so long as the number of trial events for the year does not exceed three.
- 2) The maximum number of patrons that may be approved for each large, medium or small trial event depends on the number of trials that have been held for events in that class, as set out in the Table below.

Number of trial	Large trial event	Medium trial event	Small trial event
<b>First trial</b>	Up to 25,000 patrons	Up to 15,000 patrons	Up to 10,000 patrons
<b>Second trial</b>	Up to 27,500 patrons	Up to 17,500 patrons	Up to 12,000 patrons
<b>Third trial</b>	Up to 30,000 patrons	Up to 20,000 patrons	Up to 13,000 patrons
<b>Fourth trial</b>	Up to 32,500 patrons	Up to 22,500 patrons	Up to 14,000 patrons
<b>Fifth trial</b>	Up to 35,000 patrons	Up to 25,000 patrons	Up to 15,000 patrons

- 3) The ~~Director-General~~ **Secretary** may amend any approval that has been granted for a future trial event to minimise adverse impacts after considering -
  - (a) the performance of previous trial events;
  - (b) any monitoring data about the impact of those events; and
  - (c) the management plans that will apply to the future event.
- 4) The ~~Director-General~~ **Secretary** may impose additional mitigation measures including (but not limited to) reducing the number of patrons permitted to attend the event, reducing the number of event days, imposing stricter noise limits or by amending plans of management for the event.

5) The Secretary may permit any number of small community events and may delegate to the proponent authority to carry out up to five such events each calendar year.

6) The Secretary may limit aspects of small community events following receipt of the annual performance report.

**Comment:** The Departmental assessment report for the original Application recommended use of the site for small community events. The PAC did not include small community events in their approval. However, there is a strong demand from local community and educational institutions for this type of activity, as discussed in Section 2 of this report. Use of the facility by community and educational organisations provides benefits to the wider population and especially various community groups. Byron Shire Council has indicated support for making the facility available for small community events.

### **B3 Noise restrictions**

- a) Event noise shall be managed to not exceed the noise criteria set out in the Noise Management Plan (NMP) prepared under Condition C16 and the noise criteria set out in the proponent's Environmental Health and Safety Management Manual – Standard 008.
- b) ~~After midnight, a level of 55dB(A) shall be achieved outside the bedroom windows of identified sensitive receivers.~~
- c) ~~Noise within the camping area between midnight and 8:00 am of each event day shall support peaceful rest for overnight patrons during events.~~
- 1) ~~During trial events, all stages may operate from 11:00am but must be shut down at midnight.~~
- 2) ~~Between 11:00am and midnight, noise levels at sensitive receivers must not exceed background +10dBA.~~
- 3) ~~Music from bars, cafes and the dance floor must cease at 2:00am.~~
- 4) ~~Between midnight and 2:00am, noise levels at sensitive receivers must not exceed background +55dBA when measured outside bedroom windows.~~
- 5) ~~The Regulatory Working Group may make a recommendation to the Director-General that the noise limits imposed under this condition should be increased or decreased for future events after considering the Noise Impact Report referred to in Condition C52..~~
- 6) ~~The Director-General may amend the noise limits imposed under this condition for future events after considering the advice of the Regulatory Working Group.~~

**Comment:** Noise management is now contained in Condition C16. This amendment refers the reader to this condition.

### **B4 Traffic management and car parking**

- 1) A minimum Level of Service C is to be maintained at the Yelgun interchange and along Tweed Valley Way.
- 2) Queue lengths on the link road between Tweed Valley Way and Yelgun interchange are to be limited to a maximum of 70 m.
- 3) Queue lengths on the northbound off-ramp must not extend more than 210m from the Give Way yield line.
- 4) Car parking of vehicles south of Yelgun Creek can be utilised subject to the entry and exit being located along Tweed Valley Way. The car park shall only be used under event traffic control periods. No car parking is to occur on land to the south of Yelgun Creek. Should this area be required for car parking in the future to accommodate larger events, the proponent must demonstrate that patrons can access vehicles south of the creek line in a risk free manner for events up to and including a 100-year ARI flood event for the ~~Director General's~~ Secretary's approval.
- 5) The southern car park (south of Jones Road and north of Yelgun Creek) may only be used if the event is to cater for more than ~~20~~ 10,000 patrons.

**Comment:** The amendment reflects experience of operating trial events on the site. The condition was previously self-imposed by the proponent.

### **B5 Timing and duration of trial events**

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- 1) The total event days, **not including small community events**, each calendar year must not exceed ten days.
- 2) A trial event must not exceed four event days.
- 3) The bump in period must not exceed 21 days and the bump out period must not exceed ~~7~~ **14** days.
- 4) The ~~Director-General~~ **Secretary** must consult with the Department of Roads & Maritime Services and the Council before approving the dates for any trial event.
- 5) The site must not cater for more than one event at any time.

**Comment:** The amendment reflects experience of operating trial events on the site and ensures small community events are not assessed as event days.

**Comment:** The amendment seeks to adjust the bump out period given that event staff and contractors are consistently stretching safe working requirements as a result of the current 7 day bump out timeframe. In particular, fatigue is a major factor with some event staff and contractors required to work continuously throughout the bump in, event and bump out periods. The current bump out timeframe does not also allow for potential delays caused by inclement weather.

### **B6 Campers**

- 1) The maximum number of campers permitted on the site at any time is 25,000 and is restricted to the periods during which an event is being held.
- 2) Campers may arrive at the site ~~the~~ **up to two** days before the first event day and must leave the site not later than the day immediately after the last event day.
- 3) The total camper arrival and departure days each calendar year must not exceed ~~6~~ **9** days.

**Comment:** The amendment reflects experience of operating trial events on the site and seeks to allow for better patron arrival management.

### **B7 Performance Report**

- 1) The proponent must prepare a Performance Report ~~at the conclusion of each~~ **November** year in which trial events are held, or at such other times as directed by the Director-General.

**Comment:** The amendment reflects the agreed month of the year for the lodgement of the Performance Report.

- 2) The Report must address the performance of events during that year or during such other reporting period as the ~~Director-General~~ **Secretary** determines. In particular, it must address compliance with conditions of this approval and environmental criteria detailed in the management plans relating to noise, flora and fauna, traffic, any evacuation procedure carried out, community response, and any other matter the ~~Director-General~~ **Secretary** considers relevant. The Report must also include KPI parameters outlined in Standards 001–014 in the *Environmental Health and Safety Management Manual*, prepared by North Byron Parklands and dated August 2010.
- 3) For each reporting period, the Performance Report must address, but not be limited to the following:
  - (a) an assessment of the project's performance and compliance with the terms of this approval, including any evacuation plans, monitoring and management plans and any other licences, permits or approvals, and an interpretation and discussion of these results;
  - (b) a comparison of the environmental impacts and performance of the project against the environmental impacts and performance predicted in the EA and as modified by the conditions of this approval;
  - (c) a list of all occasions in any preceding reporting period where environmental performance goals for the project have not been achieved, indicating the reason for failure to meet the goals and the action taken to prevent recurrence of that type of incident;
  - (d) identification of trends in monitoring data over the life of the project to date;
  - (e) a copy of the Complaints Register for the reporting period (exclusive of personal details), and details of how these complaints were addressed and resolved;
  - (f) a list of variations obtained to approvals applicable to the project and to the site during the preceding reporting period;

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- (g) environmental management targets and strategies for the following reporting period, taking into account identified trends in monitoring results; and
  - (h) results of consultation with the Regulatory Working Group in relation to the matters listed above.
- 4) Each Performance Report must be submitted to the ~~Director-General~~ **Secretary** by the date specified by the Director-General.
  - 5) Following its submission to the ~~Director-General~~ **Secretary**, a copy of the Performance Report shall be provided to the Council for its information and an electronic copy shall be placed on the proponent's website for public information or made available to the public on request.
  - 6) The ~~Director-General~~ **Secretary** may specify conditions that must be complied with for the management of future events having regard to the performance reports of previous events held under this approval.

*End of Part B*

**PART C - CONDITIONS THAT APPLY TO THE TRIAL****COMMUNITY CONSULTATION, REGULATORY WORKING GROUP AND ENVIRONMENTAL REPRESENTATIVE****C1 Documentation**

Subject to confidentiality, the proponent must make all documents required under this approval publicly available on request.

**C2 Regulatory Working Group – constitution and role**

The proponent must establish a Regulatory Working Group (RWG) to oversee the environmental performance of events during the trial period. The RWG must:

- (a) comprise at least one (1) representative of the proponent, Office of Environment and Heritage, Roads and Traffic Authority, NSW Police, State Emergency Services, Rural Fire Service and Council, where these parties agree to be part of the RWG, or as otherwise agreed to by the Director-General;
- (b) comprise at least two (2) representatives of the local community nominated by the Council. Community representatives are appointed on a rotational basis with a representative not exceeding two (2) years;
- (c) be chaired by a chairperson, whose appointment has been approved by the Director-General;
- (d) meet at least once prior to the first trial event to review the proposed management in relation to:
  - the Habitat Restoration Program;
  - the Marshalls Ridge wildlife corridor,
  - impacts on threatened species and endangered ecological communities;
  - monitoring protocols for preconstruction ecological surveying;
  - illegal camping;
  - litter;
  - provision of security services;
  - noise;
  - event traffic and car parking;
  - flooding;
  - bushfires; and,
  - evacuation procedures.
- (e) meet to review the proponent's performance with respect to environmental management and community relations for events held during a reporting period and where appropriate, make recommendations to the ~~Director-General~~ Secretary on measures or strategies to improve performance for future trial events;
- (f) undertake periodic inspections of the site; and,
- (g) review community concerns or complaints with respect to environmental management and community relations.

Note: The RWG is an advisory committee. The Department and other relevant agencies are responsible for ensuring that the proponent complies with this approval.

**C3 Proponent to assist Regulatory Working Group**

The proponent must, at its own expense:

- (a) ensure at least one of its representatives attend the RWG meetings;
- (b) provide the RWG with regular information on the environmental performance and management of the project;
- (c) provide meeting facilities for the RWG (if necessary);
- (d) arrange site inspections for the RWG (if necessary);
- (e) take minutes of the RWG meetings;
- (f) make these minutes publicly available;
- (g) respond to any advice or recommendations the RWG may have in relation to the environmental management or community relations;

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- (h) provide a copy of the minutes of each RWG meeting, including a response to any recommendations from the RWG, to the ~~Director-General~~ **Secretary** at the times directed by the Director-General; and
- (i) pay reasonable travel expenses for members to attend meetings.

### **C4 Complaints Procedure**

The proponent must ensure that the following are available on the Proponent's website for community complaints:

- (a) a 24-hour telephone number on which complaints about events may be registered;
- (b) a postal address to which written complaints may be sent; and
- (c) an email address to which electronic complaints may be transmitted.

The telephone number, postal address and email address must be maintained through the life of the trial and advertised in a newspaper circulating in the locality on at least one occasion prior to the commencement of each event.

### **C5 Complaints Register**

The proponent must record details of all complaints received through the means listed under Condition C4 in an up-to-date Complaints Register. The Register must record, but not necessarily be limited to:

- (a) the date and time of the complaint;
- (b) the means by which the complaint was made (e.g. telephone, mail or email);
- (c) any personal details of the complainant that were provided;
- (d) the nature of the complaint;
- (e) any action(s) taken in relation to the complaint, including any follow-up contact made;
- (f) the date and time any action was taken in response to the complaint; and,
- (g) if no action was taken in relation to the complaint, the reason(s) why no action was taken.

The register must be made available for inspection by the ~~Director-General~~ **Secretary** or Council upon request.

### **C6 Environmental Representative**

The proponent must nominate a suitably qualified and experienced Environmental Representative(s) whose appointment is to receive prior approval of the Director-General.. The Proponent must employ the Environmental Representative(s) throughout the life of the project. The Environmental Representative must be:

- (a) the primary contact point in relation to the environmental performance of the project;
- (b) responsible for implementing all environmental-based Management Plans and Monitoring Programs required under this approval;
- (c) responsible for considering and advising on matters specified in the conditions of this approval, and all other licences and approvals related to the environmental performance and impacts of the project;
- (d) responsible for receiving and responding to complaints made in accordance with condition C4 of this approval; and
- (e) given the authority and independence to require reasonable steps to be taken to avoid or minimise unintended or adverse environmental impacts, and failing the effectiveness of such steps, to recommend to the ~~Director-General~~ **Secretary** that relevant actions be ceased should an adverse impact on the environment be likely to occur.

The proponent must notify and seek the approval of the ~~Director-General~~ **Secretary** of any changes to that appointment that may occur.

### **CONDITIONS THAT APPLY PRIOR TO COMMENCEMENT OF OUTDOOR TRIAL EVENTS**

### **C7 Management Plans and Monitoring Programs**

- (1) Management plans and monitoring programs required under this approval must be finalised and approved in accordance with this approval prior to the commencement of the trial events to which they relate.

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Management plans and monitoring programs referred to in Section C of this consent are not required for small community events. However, small community events are required to comply with:

- C4 – Complaints Procedure;
- C16 – Noise Management Plan;
- C35 – Notification of Council;
- C45 – Access for emergency vehicles;
- C47 – Disabled Access;
- C48 – Dogs;
- C49 – Bushfire Management;
- C55 – Effluent Removal;
- C56 – Rubbish Removal;
- C57 – Removal of Temporary Structures.

**Comment:** The amendment clarifies that small community events do not need to prepare the management plans and monitoring programs required by larger events.

(2) Plans and programs referred to in this approval include:

- Event Management Plan;
- Transport Management Plan (*endorsed by Local Traffic Committee*);
- Traffic Control Plan (*endorsed by Local Traffic Committee and approved by Council*);
- Traffic Monitoring Program (*approved by Director-General*);
- Noise Management Plan (*approved by Director-General*);
- Acoustic Monitoring Program (*approved by Director-General*);
- Flora and Fauna Management Plan (*approved by Director-General*);
- Updated Koala Management Plan (*no further approval required*);
- Flora and Fauna Monitoring Program (*approved by Director-General*);
- Bushfire Management Plan (*endorsed by RFS and RWG and approved by the Director-General*);
- Bushfire Emergency Evacuation Plan (*reviewed by RFS and RWG and approved by Local Emergency Management Committee*);
- Flood Risk Management and Mitigation Plan prepared by Molino Stewart (*no further approval required*);  
and
- Surface Water Management Plan.

(3) The proponent must implement and comply with the management plans and monitoring programs listed above.

(4) The *Environmental Health and Safety Management Manual* prepared by North Byron Parklands and dated August 2010 must be regularly updated to include the performance criteria and requirements that apply under this approval, including criteria and requirements imposed or varied following a review of performance reports by the Director-General.

(5) A plan or monitoring program may cover or be submitted in support of more than one event if it contains sufficient detail for each event.

### **C8 Event Management Plan**

An Event Management Plan, **where it is required** for a trial event is to be prepared and submitted to the ~~Director-General~~ **Secretary** and Council at least 30 days prior to the event. The Event Management Plan is to be prepared in consultation with Council, the Office of Environment and Heritage, NSW Police, NSW Rural Fire Service, ~~NSW Fire Commissioner~~, and State Emergency Services. The Event Management Plan is to contain the following:

- (a) an Event Structure Plan prepared in a similar format to the structure plans provided in the EA illustrating the internal layout of the site for the particular event, including the location of all temporary structures; performance stages; food stalls; sanitary facilities; temporary human exclusion fencing; places of public entertainment; camping areas; car parking areas (including the number of car parks provided for the event) and emergency assembly areas;
- (b) a copy of the Bushfire and Flood Emergency Evacuation Management Plans approved under conditions C25 and C27 of this approval;

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- (c) disabled access and egress details and plans for access and egress to, within, around and out of the festival site and camping area;
- (d) location of all emergency assembly areas throughout the site;
- (e) lighting of the event and camping areas;
- (f) location of all firefighting facilities throughout the site;
- (g) location of any open fires that have received the prior approval of the Director-General, in consultation with the Rural Fire Service;
- (h) the type, number and location of toilet facilities associated with the use of each temporary structure;
- (i) details on a regular security guard surveillance service (day and night) for the site boundary with adjoining residential properties on Jones Road; and,
- (j) a copy of all other approvals relied upon to carry out an event.

**Comment:** The amendments clarify that an Event Management Plan is required for trial events and deletes the consultation requirement for the NSW Fire Commissioner as the site is not within the jurisdiction of the Commissioner.

### **C9 Transport Management Plan**

A Transport Management Plan (TMP) having regard to the *“Guide to Traffic and Transport Management for Special Events”* and the *Environmental Health and Safety Management Manual* is to be prepared for each event at least 60 days prior to the event. The TMP must be submitted to the Local Traffic Committee for endorsement and then to the ~~Director-General~~ **Secretary** and RWG prior to the commencement of each event. The TMP must include, but not be limited to:

- (a) a copy of the approved Traffic Control Plan;
- (b) management of traffic during ‘bump in’ and ‘bump out’ and event days;
- (c) details of how local traffic movements past the site will be given priority and in particular, ensuring that residents of Jones Road can access their properties;
- (d) details of how substantial queuing capacity will be provided onsite, thus avoiding queuing on Tweed Valley Way and the Yelgun interchange off-ramps;
- (e) details of how event organisers will facilitate efficient processing and inspection of event patron vehicles within the site;
- (f) details of demand management strategies to reduce car dependency for attending events, such as promoting the use of public transport by providing suitable connectivity at adjacent townships, airports and railways, promoting use of bicycles, ticket pricing incentives for carpooling, management of parking supply and the like; and
- (g) measures to address and respond to the outcomes of a Performance report required under Condition B7 including updating Plans for subsequent events.

### **C10 Traffic Control Plan**

A Traffic Control Plan (TCP) for each event must be prepared by a suitably qualified and RMS accredited Work Site Traffic Controller, at least 60 days prior to the event. The TCP must be submitted to the Local Traffic Committee for endorsement and then to Council for approval prior to commencement of each event. The TCP must address the following matters:

- (a) It must be designed in accordance with the requirements of the RMS’s Manual, Traffic Control at Work Sites Version 2, and the current Australian Standards, Manual of Uniform Traffic Control Devices Part 3, ‘Traffic Control Devices for Works on Roads’.
- (b) The regulation of traffic must be authorised under the *Roads Act 1993* and the use of traffic control devices authorised under the *Road Transport (Safety & Traffic Management) Act 1999*.
- ~~(c) Reduced speed zones approved by the RMS.~~
- ~~(d) Special Event Clearways approved by the RMS.~~

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- (e) Appropriate signage to prohibit parking in the surrounding road network and in the Yelgun rest area.
- (f) A Traffic Incident Management Plan that details a range of approved contingency measures capable of avoiding significant impacts on the level of service. The contingency plan must be fully documented and include emergency contact names and phone numbers.
- (g) Measures to address and respond to the outcomes of the Performance report required under Conditions B7, including updating Plans for subsequent events.

**Comment:** The Department of Roads and Maritime Services (RMS) advised that Council do not approve traffic control plans (only traffic management plans). RMS does not approve reduced speed zones for local roads surrounding the venue, and special event clearways instruments are not applicable in the Northern Rivers.

The TCP must be designed to achieve the following performance during bump in, bump out and event days:

- (a) All movements at the Yelgun interchange including merges and diverges need to operate at Level of Service C or better for delay;
- (b) The level of service for local traffic and through traffic on the Tweed Valley should not fall below Level of Service D;
- (c) Queue lengths on the link road between Tweed Valley Way and the Yelgun interchange must limited to a maximum of 70 m;
- (d) The end of traffic queues on the interchange ramps must not be within 210 m of the start of the ramp;
- (e) Onsite queuing is not to extend onto the Pacific Highway or the Tweed Valley Way; and
- (f) There is to be no impact on through traffic travel times of the Pacific Highway.

### **C11 Notification of Other Authorities**

A copy of the approved TMP and TCP, including an endorsed 'Responsible Organisations Contact Persons and Signatures', must be submitted to the RMS (Grafton) and the NSW Police (Byron Bay). Details of the contractor(s) and authorities who have been engaged to carry out the Traffic Control are to be provided to Council.

### **C12 Traffic Monitoring Program**

A Traffic Monitoring Program is to be prepared by a suitably qualified traffic engineer, in consultation with the Council and the RMS to measure the impact of increased traffic generation on the amenity of the area. The Program for each event is to be submitted for the approval of the ~~Director-General~~ Secretary at least 60 days prior to the commencement of the event. The Program is to be prepared having regard to the proponent's *Environmental Health and Safety Management Manual* and is to include, but not necessarily be limited to:

- (a) details of patron numbers for the event;
- (b) data collection relating to vehicle arrival and departure times, occupancy rates and directions of travel for staff, campers and day patrons;
- (c) patronage of bus services, including bus occupancy rates ,arrival and departure times and direction of bus travel
- (d) queue monitoring, background travel counts on the Pacific Highway and Tweed Valley Way and vehicle volumes on the Yelgun interchange
- (e) data on the impact of the event on the Yelgun rest area, in particular from unauthorised parking and unauthorised camping;
- (f) locations (identified on a map) at which monitoring will be undertaken;
- (g) monitoring of such other performance standards required by the Department in consultation with the RMS;
- (h) procedures and protocols for the monitoring, including frequency;
- (i) aerial photography of the site and surrounds at regular intervals before, during, and after the event; including peak traffic and parking periods must be undertaken (where possible); and,

- (j) procedures for the reporting of monitoring results to enable an assessment of the traffic performance of the event.

### **C13 Car Parking Areas**

- (1) The car parking areas are to be prepared and marked out generally in accordance with the approved plans to allow marshals to efficiently direct patrons to parking spaces. Internal circulation aisles must provide adequate space for vehicles to manoeuvre into parking spaces and for vehicles to pass.
- (2) Car parking spaces for people with disabilities must be provided at the rate of one (1) space for each 100 spaces or part thereof. Parking spaces are to be provided in accordance with AS1428. Signs and markings for the parking for people with disabilities are to be provided in accordance with AS1742.11.

### **C14 Bicycle Parking**

The provision for bicycle parking on the site shall be publicised and appropriately signposted. Any sign posting on the public roads shall be included in the Traffic Control Plan.

### **C15 Speed Changes**

A copy of the ~~RMS~~ Council's approval for any proposed temporary change of speed limits on surrounding roads must be submitted to Council.

**Comment:** Council have delegated approval for temporary change of speed limits on local and regional roads.

### **C16 Noise Management Plan**

~~(1) A background noise survey to identify the criteria for each sensitive receiver must be conducted prior to each trial event.~~

(2) A Noise Management Plan (NMP) outlining measures to manage and minimise potential noise impacts of events is to be prepared by a suitably qualified acoustic consultant. The NMP is to be prepared in consultation with Council and the RWG, and submitted to the ~~Director-General~~ Secretary for approval at least 60 days prior to any event where amplified music is a feature. The NMP is to be prepared having regard to the noise limits specified in condition B3, the proponent's *Noise Impact Assessment Report* prepared by Benbow Environmental for North Byron Parklands, dated 9 August 2010; the proponent's *Environmental Health and Safety Management Manual*; and, OEH's *Noise Guide for Local Government 2010* and is to include, but not be limited to:

1. identification of all major sources of noise emitted during the carrying out of an event;
2. identification of nearby sensitive receivers (including the adjoining Billinudgel Nature Reserve);
3. identification of appropriate noise limits/criteria for sensitive receivers (at the boundary of their property) as follows:
  - a. Between 11:00am and midnight, music noise levels must not exceed LAeq 65 dB(A) or 75 dB(C) Leq in the 63Hz 1/1 octave frequency band;
  - b. Between midnight and 2:00am, music noise levels must not exceed LAeq 55 dB(A) or 70 dB(C) Leq in the 63Hz 1/1 octave frequency band;
  - c. A 5 dB tolerance above the criteria listed in 3(a) & (b) is allowable during extreme meteorological conditions but must be accompanied by reasonable and feasible measures to manage dB(C) in the 63Hz 1/1 octave frequency band; and
  - d. On New Year's Eve the music noise levels provided in 3(a) apply between 11:00am and 2:00am.
4. identification of general and music noise limits within ~~camping areas~~ the site between midnight and 8:00am to support peaceful rest during events;
5. identification and implementation of best practice management techniques for the minimisation of noise from the site. For example, appropriate siting and orientation of performance stages and speakers, acoustic barriers, insulation/double glazing of sensitive receivers, etc;
6. procedures and limits for carrying out sound checks prior to and during events and rehearsals to ensure compliance with the relevant noise criteria, and measures to be undertaken if any non-compliance is detected;

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7. requirements for sound engineers at each stage and their ability to enact noise mitigation measures;
8. community consultation requirements;
9. procedures for responding to any noise complaints received during an event. As much as is reasonable and feasible, the proponent must arrange for noise levels emanating from the site to be monitored at the location of any complaints as soon as possible after a complaint has been received; and,
10. measures to address and respond to the outcomes of a Performance Report required under Condition B7, including updating plans for subsequent events.

Note: A NMP may cover or be submitted in support of more than one event, subject to it providing sufficient detail of each event.

### **Acoustic Monitoring Program**

Prior to the commencement of the any event where amplified noise is a feature, a qualified acoustic consultant must prepare and implement an Acoustic Monitoring Program (AMP) to monitor and assess the impact of noise generated by the event on the amenity of the area. The AMP must be prepared in consultation with the RWG and be consistent with the provisions and limits within the NMP required under Condition C16 ~~and the proponent's Environmental Health and Safety Management Manual (Standard 008).~~ The AMP shall include, but not be limited to:

- (a) locations (identified on a map) at which monitoring will be undertaken. As a minimum monitoring locations must include the most sensitive noise receivers (residential, **where no noise agreement is in place between the proponent and the receiver** and the adjoining nature reserve) as identified in the ~~the proponent's Noise Impact Assessment Report prepared by Benbow Environmental for North Parklands, dated 9 August 2010~~ **Noise Management Plan;**

**Comment:** The Acoustic Monitoring Program (AMP) should align with the requirements of the approved Noise Management Plan (NMP).

- (b) procedures and protocols in accordance with OEH's *Noise Guide for Local Government 2010* and Australian Standard AS1055 *Acoustics - Description of measurement of environmental noise* (or any subsequent versions thereof);
- (c) a program for periodic attended and unattended monitoring of noise at each of the set monitoring locations, including:
  - (1) Unattended monitoring must be undertaken at a minimum of eight monitoring locations (to be determined in consultation with the RWG) before, during and after each event;
  - (2) Attended monitoring must occur on at least one (1) occasion prior to the commencement (including during sound check) and during the operation of each event; and,
- (d) procedures for the reporting of monitoring results to enable an assessment of the noise performance of the event.

The AMP must be submitted for the approval of the ~~Director-General~~ **Secretary** at least 60 days prior to the commencement of the event, or as otherwise agreed by the Director-General.

### **C17 Noise Mitigation**

Upon receiving a written request from any of the sensitive receivers identified in the NMP ~~or the AMP~~, or the landowner of a residence where subsequent noise monitoring shows that the noise generated by activities onsite is greater than the specified noise criteria **over more than two consecutive events**; the proponent shall implement additional noise mitigation measures at the residence in consultation and agreement with the landowner. Mitigation measures may be in the form of double glazing, secondary glazing of 'weak' areas, insulation and must be reasonable and feasible.

If within three (3) months of receiving this request from the landowner, the proponent and landowner cannot agree on the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the ~~Director-General~~ **Secretary** for resolution.

**Comment:** The NMP is the Instrument that lists the sensitive receivers and accordingly the words "or the AMP" are not required in this condition. Depending on meteorological conditions, a specific residence may experience noise generated by an event above specified noise criteria on a one-off basis. The intent of this condition should be to

deal with noise emissions that repeatedly exceed specified noise criteria. This approach is a more reasonable noise mitigation measure.

### **C18 Flora and Fauna Management Plan**

A Flora and Fauna Management Plan is to be prepared by a suitably qualified ecologist(s), in order to manage the impacts to flora and fauna arising from the carrying out of events at the site. The Plan is to be prepared in consultation with the OEH, Council and the RWG having regard to the *Ecological Assessment and Response to Director-General's Environmental Assessment Requirements – prepared by Mark Fitzgerald, Ecological Consultant, June 2010* and *Environmental Health and Safety Management Manual*. The Plan is to include, but not be limited to the following:

- (a) details of a monitoring and reporting framework required under Condition C20 to monitor any ecological impacts as a result of events being carried out at the site, particularly any impacts on fauna within the site and within the adjoining Billinudgel Nature Reserve;
- (b) measures to ensure there are no significant impacts from the carrying out of events upon the functioning of the Marshall's Ridge wildlife corridor, threatened species, or endangered ecological communities within the site;
- (c) measures to protect vegetation from human intrusion/ trampling;
- (d) measures to protect adjoining *State Environmental Planning Policy No. 14 – Coastal Wetlands* and Billinudgel Nature Reserve;
- (e) measures to minimise impacts of noise and lighting from events on surrounding bushland;
- (f) contingency measures to be implemented in the event of significant impacts occurring; and
- (g) measures to address and respond to the outcomes of a Performance Report required under Condition B7, including updating Plans for subsequent events.

The Plan must be submitted for the approval of the ~~Director-General~~ Secretary at least 60 days prior to the commencement of the first event, or as otherwise agreed by the ~~Director-General~~ Secretary.

### **C19 Flora and Fauna Monitoring Program**

Prior to the commencement of the first event, a suitably qualified ecologist must prepare and implement a Flora and Fauna Monitoring Program to monitor and assess the impact of the project on flora and fauna within and adjacent the site. The Program must be prepared in consultation with the RWG. The Program shall include, but not necessarily be limited to:

- (a) identification of predictions relating to changes that may occur to fauna within and adjacent the site as a result of the operation of the project;
- (b) locations at which monitoring will be undertaken, including a map showing locations. As a minimum, monitoring locations must include areas near amplified sound and lit areas, Billinudgel Nature Reserve and Marshall's Ridge fauna corridor;
- (c) identification of the key performance indicators to be monitored at each location that would determine whether the operation of the project is having a detrimental effect on the fauna;
- (d) procedures and protocols for the sampling and analysis methodology to be undertaken for the monitoring, including sample design, statistical analyses and reporting. Procedures must be consistent with any relevant government publication and/ or Australian Standard; and
- (e) a program for periodic monitoring of the parameters at each of the monitoring locations. As a minimum, monitoring must occur on at least one occasion prior to the commencement and after the conclusion of operation of each event.

The Monitoring Program must be submitted for the approval of the ~~Director-General~~ Secretary at least 60 days prior to the commencement of the first event, or as otherwise agreed by the Director-General.

### **C20 Updated Koala Plan of Management**

The *Draft Vegetation Management and Biodiversity Plan* – submitted as Appendix M to the Ecological Assessment is to include an updated Koala Plan of Management (KPOM) if a resident population of koalas becomes established at

the site within the meaning of SEPP 44. The KPOM is to include a contemporary assessment of any existing and/or potential areas of core koala habitat within the site, and results of further koala surveying efforts. The KPOM must also address the operation of ongoing events carried out at the site and the potential impacts that this will have on areas of core koala habitat and any existing koala populations.

**Comment:** More recent koala surveys have not identified any koala population on the site and hence no need for an updated KPOM until a population returns to the site.

**C21 Human Exclusion Fencing**

Temporary human exclusion fencing closely bordering (within 10 m of) designated forest blocks (Fitzgerald 2007a, 2007c) and other native vegetation must be provided. All temporary human exclusion fencing used in these locations must be 'fauna-friendly', incorporating a minimum 250 mm continuous gap at the base of the fence or 250mm square gaps at 10 m intervals along the base of the fence.

**C22 Grassy Owl Searches**

The proponent must ensure searches for any Grassy Owl (*Tyto capensis*) species on the event site where long grasses proposed to be slashed are present are undertaken by a suitably qualified person(s) prior to any events being carried out. Search techniques are to include call-playback response methods in addition to physical site searches. Should any Grassy Owl species be found to be nesting on the site, an area of at least a 100 m radius is to be excluded from any mowing/slashing.

**Comment:** The amendment clarifies the circumstances of when a Grassy Owl search is required.

**C23 Bushfire Management Plan**

A Bushfire Management Plan must be prepared that includes the prevention, mitigation and management of the potential for peat fires, including the responsibilities of fire wardens and bonfire management procedures and controls. The plan is to be submitted to the Rural Fire Service (RFS) and RWG for consideration and endorsement. A copy of the endorsed Plan is to be submitted to the ~~Director-General~~ Secretary for final approval.

**C24 Bushfire Emergency Evacuation Plan**

~~In order to ensure appropriate bushfire safety management, a Bushfire Emergency Evacuation Plan for is to be prepared for review by the RFS and RWG, and approved by the Local Emergency Management Committee. The approved plan must be reviewed by the RFS and RWG prior to any event carried out at the site. Such a review is to include event and site management, representatives of the Police, RFS and security provider.~~

In order to ensure appropriate bushfire safety management, a Bushfire Emergency Evacuation Plan for is to be prepared for approval by the Local Emergency Management Committee and reviewed by the Rural Fire Service (RFS) and Regulatory Working Group (RWG).

**Comment:** The amendment removes the ambiguity of the previous wording.

**C25 Location of Structures**

All stages/facilities/camping areas shall be set back a minimum of 10 m from areas of unmanaged bushland with this area kept clear of obstructions at all times during events.

**C26 Flood Evacuation Plan**

Any event must be carried out in accordance with the responsibilities and management actions as outlined in the *Flood Risk Management Plan* prepared by Molino Stewart on behalf of North Byron Parklands (Billinudgel Property Pty Ltd), dated June 2011.

**C27 Minimum Ground Level – Camping/Event Area**

An area of no less than 0.75 ha must be provided for campers with children, the elderly, and less mobile patrons. This area must be located above the 1 in 100-year ARI flood level with suitable grading (i.e. no greater than 1 in 20 fall (5%)) to meet the criteria for infants, small children and frail/older people, as described in Australian Rainfall and Runoff Feb 2011, for a 100-year ARI flood event. This area must also be in reasonable proximity to, and readily accessible via the Spine Road.

**Comment:** This proposed change corrects a typographical error.

**C28 Southern Car Park Access**

In the event of a 'Red Alert - Refuge' flood evacuation procedure being carried out in accordance with the *Flood Risk Management Plan* prepared by Molino Stewart; appropriate measures to prevent patrons from accessing the southern car parking area via the Spine Road must be employed. Access is to be denied in the vicinity of the Jones Road underpass to ensure patrons are prevented from accessing vehicles.

**C29 Emergency Assembly Area – Flood Evacuation**

An emergency assembly area located on flood free land (i.e. above the Probable Maximum Flood level) is to be provided within the site as a designated emergency assembly area in the event of an onsite flood evacuation. The emergency assembly area must be sufficient in size to cater for all patrons proposed for any single event carried out at the site, and must be readily accessible via the Spine Road.

**C30 Emergency Access Road**

The proponent shall provide an all-weather two-way emergency access road from the northern property boundary to Wooyung Road. A copy of any required approvals must be submitted to the Certifying Authority prior to issue of the Occupation Certificate for the first event held at the site. Any works within a road reserve must be carried out to the satisfaction of Tweed Shire Council and the Department of Primary Industries.

**C31 Installation of Flood Monitoring Equipment**

The proponent is required to install flood monitoring equipment to monitor the site's flood behaviour. The flood monitoring equipment is to include the following:

- (a) an automatic rainfall recording station;
- (b) at least two (2) soil moisture sensors installed by a suitably qualified person; and,
- (c) stream gauges installed at an appropriate offsite location and linked to the existing EnviroMon system to monitor stream height readings of Crabbes Creek and Billinudgel Creek.

The data obtained from the flood monitoring equipment must be made available for collection remotely via telemetry, with data connections to the onsite administration office on the site and available for the ~~Director-General~~ **Secretary** and Council. A certificate from a suitably qualified engineer, with experience in flood matters, together with suitable documentation from the installer, certifying that the flood monitoring equipment has been installed correctly and at appropriate locations, must be submitted to the ~~Director-General~~ **Secretary** and Council prior to the first event. In addition, the alert matrices contained within the *Flood Risk Management Plan* prepared by Molino Stewart on behalf of North Byron Parklands (Billinudgel Property Pty Ltd), dated June 2011 are to be updated to include the appropriate stream gauge readings to determine threshold actions. The stream gauge readings are to be developed in collaboration with the Bureau of Meteorology. A copy of the updated *Flood Risk Management Plan* is to be provided to the Director-General.

**C32 Surface Water Management Plan**

A Surface Water Management Plan is to be prepared outlining measures to control and manage surface water (including erosion and sedimentation) and stormwater infrastructure associated with the carrying out of events. The Plan must include, but not necessarily be limited to:

- (a) Surface Water, Erosion and Sediment Management:
  - (1) measures to minimise the potential for erosion from the site during the carrying out of events and measures to maintain all erosion mitigating works at, or above design capacity; and,
  - (2) measures to rehabilitate erosion-affected areas and any areas the subject of excavation.
- (b) Stormwater Management:
  - (1) a detailed plan showing the design of the stormwater management system, with an emphasis on water sensitive design practices;
  - (2) demonstration that the stormwater control infrastructure will conform with, or exceed all relevant requirements and guidelines within Council's adopted engineering standards, currently *The Northern Rivers Local Government Design & Construction Manuals (Version 3) and Standard Drawings (Version 1)*; and,
  - (3) description of any procedures for planting and maintaining vegetation along stormwater channels and detention systems to minimise the potential for erosion.

**C33 Notification of Relevant Authorities**

A copy of this project approval and approved plans must be provided to Byron Bay Police, Ambulance, Rural Fire Service and State Emergency Services and the conditions of approval specifically relating to noise, traffic and crowd control are to be highlighted.

**C34 Community Notification**

Prior to the commencement of any event, the proponent must notify the community via:

- (a) a letterbox drop to all local residents and businesses directly affected by the traffic management arrangements advising the details of the event. An outline of the hours of the event, traffic management arrangements and the telephone contact details of the event coordinator are to be provided to these parties; and
- (b) a notice published in at least two local newspaper outlining traffic management arrangements and how complaints can be made through the methods outlined in Condition C4.

**C35 Notification of Council**

At least 14 days prior to the 'bump in' period of an event, the event organiser must provide Council with the time and dates of the event (and of any proposed sound tests and rehearsals) and the name and contact details of the event organiser and/ or a general liaison person who may be contacted for the duration of the event being held.

**CONDITIONS THAT APPLY TO TEMPORARY STRUCTURES****C36 Notice to be Given Prior to Commencement**

The erection of temporary structures must not commence until:

- (a) the proponent has appointed a PCA for the building works; and,
- (b) the proponent has given at least two (2) days notice to Council and the PCA outlining intentions to commence the erection of temporary structures.

Note: the Principal Certifying Authority must, no later than two (2) days before the building works commence, notify the ~~Director-General~~ Secretary and the Council of his or her appointment.

**C37 Erection of Temporary Structures**

- (a) This approval includes approval under *State Environmental Planning Policy (Temporary Structures) 2007* for temporary structures as described in the *Temporary Structures Assessment* prepared by Mark Norris and Associates, dated 14 July 2010. All temporary structures (of any use and type) cannot be used by patrons until an Occupation Certificate has been issued for the event.
- (b) Temporary structures are to be wholly within the part of the site designated as 'Event Area'. No approval is given for any temporary structures outside of this area.
- (c) The proponent must ensure that all temporary structures are positioned on a level stable surface and sufficiently weighted to ensure stability at all times.
- (d) The temporary structures are to be erected and supported in a secure manner for safety purposes. Should adverse weather conditions (such as strong winds) arise during an event, the proponent must mitigate potential safety concerns, for example, by removing the temporary structures from the public domain.
- (e) All temporary structures that cannot be readily moved and/or dismantled are to be designed so that they will remain stable during a 100-year ARI flood event. This includes measures to resist flow velocities and buoyancy forces.
- (f) All temporary structures requiring assembly/installation in the Event Area must provide original structural certification from a practising certified structural engineer to the Certifying Authority certifying that the structures can adequately support the proposed loads to comply with the Structural Provisions Part B1 including Performance Provisions BP1.1 and BP 1.2 of the *Building Code of Australia* and relevant Australian Standards.
- (g) ~~The erection of~~ Major temporary structures erection works shall only be carried out during daylight hours and shall not exceed 21 days before the commencement of an event.

**Comment:** The major temporary structure erection work involving the establishment of the main tents and buildings should of course be carried out during daylight hours. However, a significant amount of temporary structure work is able to be undertaken within a canopied structure in a safe and non-noise emitting way. This condition is proposed to be amended to allow such work to be completed outside daylight hours.

**C38 Flora and Fauna Management**

During construction of temporary structures, all trees not approved for removal within or immediately adjoining the construction footprint are to be suitably protected by way of tree guards, barriers or other measures to protect root systems, trunk and branches.

**CONDITIONS THAT APPLY DURING OUTDOOR EVENTS**

**C39 Noise Management**

- (a) Event noise shall be managed to not exceed the noise criteria set out in ~~condition B3~~, and the NMP prepared under Condition C16.
- (b) Noise within the camping area between midnight and 8:00 am of each event day shall support peaceful rest for overnight patrons during events.

**Comment:** The reference to condition B3 is not required as C16 contains all the operative noise controls.

**C40 Positioning of Event Stages and Sound Equipment**

The layout of each event, including stages, sound equipment and the like, where reasonable and feasible, must be located in a manner that is capable of meeting the noise limits developed in the Noise Management Plan:

- ~~(a) Public address speakers, event stages and speakers shall generally be directed away from sensitive receivers;~~
- ~~(b) Where possible, amplified noise is to be directed away from forested areas;~~
- ~~(c) Where speakers are mounted on poles, they are generally to be inclined downwards at a minimum angle of approximately 45 degrees from the horizontal, unless otherwise approved in the NMP; and~~
- ~~(d) Event stages and speakers shall be positioned to take advantage of any potential noise attenuation to sensitive receivers provided by the natural topography of the site.~~

**Comment:** The deleted clauses are included in the 'design measures' section of the Noise Management Plan and as such are required to be complied with as part of an event's Acoustic Monitoring Program is implemented.

**C41 Acoustic Monitoring**

- ~~(1) The proponent shall engage the services of a suitably qualified acoustic consultant to conduct noise testing before, during and after each relevant event in accordance with the requirements of the Acoustic Monitoring Plan (Condition C17). Noise testing is to comply with Australian Standard AS1055 *Acoustics – Description of measurement of environmental noise* and the OEH's *Noise Guide for Local Government 2010*.~~
- ~~(2) The proponent shall provide an event stage manager onsite at all times (in direct contact with the acoustic consultant) in case the noise level is required to be reduced. The event stage manager if so required by an authorised officer, the manager onsite, the acoustic consultant or the NSW Police Force, must have the authority to order the reduction of noise level reduced, and shall comply with any such directions.~~
- ~~(3) The qualified acoustic consultant shall be present at all times during the attended monitoring regime set out in Condition C17.~~
- ~~(4) A detailed record of the meteorological conditions prevailing at the time of noise monitoring; shall be kept and included in the noise impact report required by Condition C51.~~
- ~~(5) At any time, when the noise level exceeds the set noise criteria during monitoring, the acoustic consultant is to implement adequate noise reduction strategies to reduce the noise level. The acoustic consultant is to conduct further noise testing at the subject site immediately after the proposed noise mitigation action occurs until the noise level is reduced to the requirement set in the NMP.~~

The proponent shall implement the approved Acoustic Management Plan.

**Comment:** The amendment requires that during a trial event, the AMP is implemented.

**C42 Security Personnel**

Suitably qualified security personnel must be onsite at all times during an event and at bump in and bump out times. The proponent shall be responsible for ensuring effective crowd management is utilised at all times to prevent unsafe conditions for patrons, staff or the general public.

**C43 Monitoring of Stormwater Management System**

The stormwater drainage system shall be monitored in accordance with the approved Stormwater Monitoring Plan prior to each event to demonstrate that it satisfactorily complies with the intended design. Amendments to the system may be required to ensure compliance.

**C44 Car Parking Management**

The proponent shall ensure that vehicles parking on the site are distributed in such a way that areas least affected by potential flood waters are utilised first.

**C45 Access for Emergency Vehicles**

The proponent shall ensure that a satisfactory passage for emergency vehicles is provided to the site for all event types during the event, including bump in and bump out times.

**C46 Pedestrian Access from Day Parking Area**

- (1) The pedestrian access way from the day parking area to the event site is to be appropriately illuminated to achieve at least 0.2 lux at ground level. The pedestrian access is to be patrolled regularly by security staff to ensure that patrons do not stray from the approved thoroughfare.
- (2) The pedestrian access way from the day parking area to the event site is to be clearly signed at regular intervals providing appropriate directions, detailing the remaining distance to the event site, and outlining the need for patrons to stay within the designated area.

**C47 Disabled Access**

Disabled access to, within and from the site must be in accordance with AS1428.1 (2009), or the most recent version.

**C48 Dogs**

No dogs (with the exception of trained assistance dogs) are permitted on the site. Trained security guard dogs are allowed at all times, while under the control of an authorised person.

**C49 Bushfire Management**

- (a) A 10,000 L dedicated water supply shall be provided for each stage and camping area for fire fighting purposes;
- (b) Only open fires approved under this project approval may be carried out; and,
- (c) No open fires are permitted on days whereby a Total Fire Ban (TOBAN) has been declared.

**C50 Emergency Evacuation Plans**

Emergency evacuation plans for flooding and bushfires must be available onsite under the control of the site/event manager and copies located at the Emergency Management Centre. ~~This plan is to be located at each stage, at all exits from the site and at the site office. A copy is also to be given to all security personnel and patrons.~~

**Comment:** The amendment reflects best practice and practical management.

**CONDITIONS THAT APPLY AFTER AN OUTDOOR EVENT****Reporting****C51 Noise Impact Report**

The results of the AMP carried out for an event are to be submitted to the Department at such times as the ~~Director-General~~ Secretary directs. This report must include details demonstrating compliance with the conditions of approval relating to noise/acoustic management, a summary of any complaints or requests received and actions taken, records of noise levels and data from acoustic monitoring, and any other information relevant to the consideration of the noise impact on residents. This report shall also be attached to the Performance Report required by Condition B7.

**C52 Evidence of Attendee Numbers**

Within 28 days of the conclusion of an event, evidence must be submitted to the ~~Director General~~ Secretary to confirm that patron numbers within the event did not exceed the numbers specified within this approval.

**C53 Water Use and Wastewater Volume Data**

Water use and wastewater volume data must be collected for each event to assist with the planning of future events and the detailed design of the permanent water supply and wastewater treatment infrastructure. This data should be included in the Section 68 application to Council for the relevant infrastructure.

**Removal of Structures and Waste****C54 Traffic Management Devices**

All traffic management devices on public roads that have been established for an event are to be removed from the public roads within the time period specified within the TCP required under condition C10 of this approval.

**C55 Effluent Removal**

Within two (2) days of the conclusion of an event, all liquid waste must be measured and recorded prior to disposal by the transport contractor. Council must be supplied with a complete record of all loads delivered to Byron Shire Council's sewage treatment plants.

**C56 Rubbish Removal**

At the end of any 'bump out' period, all litter and solid waste is to have been removed from the road reserves of Jones Road and Tweed Valley Way where they adjoin the site.

**C57 Removal of Temporary Structures**

Within ~~seven~~ ten (7-10) days of the conclusion of an event, all temporary structures, lighting towers, event facilities and temporary fencing are to be removed from the site.

**Comment:** The amendment reflects experience of operating the larger trial events on the site and the practical time required for removal of such structures.

*End of Part C*

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### PART D - GENERAL HEALTH AND SAFETY CONDITIONS FOR EVENTS

For all events carried out at the site, the following fire safety conditions apply, as relevant:

#### **D1 Fire Safety Schedule**

A copy of the attached fire safety schedule shall be placed in a conspicuous location onsite and remain onsite at all times.

Essential Fire or Other Safety Measures	Design Standard	Installation Standard	Maintenance Standard
Emergency Lighting	AS 2293.1 Emergency Evacuation Lighting to Buildings	AS 2293.1	AS 2293 Emergency Evacuation Lighting in Buildings - Inspection and Maintenance
Exit Signs	AS 2293.1 Emergency Evacuation Lighting	AS 2293	AS 2293.2 Emergency Evacuation Lighting in Buildings - Inspection & Maintenance
Portable Fire Extinguishers	AS 1841.2 Portable Fire Extinguishers - water type AS 1841.3 Portable Fire Extinguishers - wet chemical type AS 1841.4 Portable Fire Extinguishers - foam type AS 1841.5 Portable Fire Extinguishers - powder type AS 1841.6 Portable Fire Extinguishers - carbon dioxide type AS 1841.7 Portable Fire Extinguishers - vaporizing liquid type	AS 2444	AS 1851.1 - Maintenance of Fire Protection Equipment - Portable Fire Extinguishers
Fire Blankets	AS 3501 Fire Blankets	AS 3501	AS 3501
Fire fighting equipment		'Fire Fighting Facilities' prepared by Mark Norris & Associates and in accordance with this approval.	'Fire Fighting Facilities' prepared by Mark Norris & Associates and in accordance with this approval.
Emergency Evacuation plan		'Emergency Evacuation and Risk Management Plan' prepared by Mark Norris & Associates and in accordance with this approval.	'Emergency Evacuation and Risk Management Plan' prepared by Mark Norris & Associates and in accordance with this approval

#### **D2 Essential Services**

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The following essential services must be provided in accordance with the requirements of the Regulation, as per the schedule:

- Portable fire extinguisher and fire blankets
- Emergency lighting
- Exit signs
- Emergency evacuation plan
- Fire fighting equipment
- Fire marshals (fire safety officers)
- Fabrics (Flammability Index)
- Access (Paths of Travel)

Once installed the essential services are to be the subject of a fire safety certificate. That certificate must be submitted to Council.

### **D3 Exits – Temporary Structures**

- (a) Exits must be so provided and arranged as to afford a ready means of egress from all parts of a temporary structure. (NSW H102.3 Location of exits).
- (b) Exit signs must be provided above all exits and in such other locations as may be required by and the Certifying Authority and NSW E4.6 and must comply with E4.5 and E4.8. (NSW H102.16 Exit signs).
- (c) Every part of an entrance or exit must provide a minimum unobstructed height or 2,000 mm. (NSW H102.5 Vertical clearances for exits).

### **D4 Electrical Services Certification**

Electrical services connected to the local supply authority's mains, to a generating plant or to a battery supply must comply with:

- (a) The requirements of the local supply authority; and
- (b) AS 3002; and
- (c) Where applicable, AS/NZS 3000; and
- (d) NSW H101.19.1 (a) and
- (e) NSW H101.19.3 (a) and
- (f) NSW H102.14 Electrical services and
- (g) A Certificate from a licensed electrician is required indicating that all electrical services have been installed in accordance with AS 3000 and AS 3002

### **D5 Lighting**

- (a) Artificial lighting must be provided to all areas required by the Certifying Authority, and must comply with NSW H101.20.1, and NSW H101.20.2. (NSW H102.15 Artificial lighting).
- (b) Emergency lighting must be provided to the areas provided with artificial lighting under NSW H102.15 and must include a sufficient number of lamps to give a minimum illumination of 0.2 lux at floor level. (NSW H12.15.1 Emergency lighting levels).
- (c) Provide adequate lighting to toilet areas and emergency exits in accordance with the Building Code of Australia.

### **D6 Fire Fighting Services**

Fire fighting services and appliances must be provided to afford adequate protection and must be located as the approving authority on the advice of the ~~Director General~~ **Secretary** of New South Wales Fire Brigades, may require. Where required by the approving authority, the fire fighting services and appliances must comply with Part E1. (NSW H102.17 Fire-fighting services).

### **D7 Portable Fire Extinguishers**

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Portable fire extinguishers of an approved type having at least the protection effectiveness of a 4.5 kg carbon dioxide type extinguisher shall be provided to locations in accordance with the Certifying Authority's requirements, this approval and the approved plans as follows:

- (a) At the rear, side and back stage area and mixing stands of all Stages
- (b) Front of house mixing areas.
- (c) VIP and administration tents.
- (d) Mobile site offices.
- (e) Relaxation and dining tents.
- (f) Bar areas.
- (g) Café and catering areas.
- (h) Any other areas determined by Council onsite.

All such fire safety measures are to be maintained for the duration of the event.

### **D8 Certification of Blinds, Curtains and Tent Fabrics**

Current certification from an accredited testing laboratory is to be provided to the Certifying Authority in order to certify the following:

- (a) That all blinds and curtains for use in temporary structures comply with Specification C1.10 - Building Code of Australia (Part NSW H102.7).
- (b) That the fabric used in the construction of the temporary structures will comply with the Flammability Index required under Part H of the Building Code of Australia (NSW H102.8).

Along with the Certification and test report required above, a table that identifies the fabric type, location on the event site, when the fabric was treated last and whether the fabric is tagged is to be submitted.

### **D9 Greywater**

The proponent must ensure that adequate facilities are provided, and maintained, for the collection, storage and proper disposal of all greywater generated during the event. ~~It is not appropriate that wastewaters are discharged to the site during this event, as this is likely to cause environmental harm.~~

No greywater can be disposed onsite unless via a Council-approved greywater system.

**Comment:** The amendment reflects current best practice management.

### **D10 Sullage Water**

The proponent must ensure that adequate facilities are provided, and maintained, for the collection, storage and proper disposal of all sullage wastewaters generated during an event. ~~It is not appropriate that wastewaters are discharged to the site during an event, as this is likely to cause public health risks and environmental harm.~~

Sullage water (from food preparation areas) can only be disposed of offsite at an approved sewage works for this type of waste water.

**D11 Comment:** The amendment reflects current best practice management.

### **D12 Solid Waste**

The proponent must provide adequate clean, vermin proof, bulk solid waste bins on the site as follows:

- (a) Bulk waste storage bins must be located so as to support the requirement for clean and healthy conditions within all food premises, but not generate offensive odours nor provide a habitat for pests and vermin;
- (b) The proponent must ensure that safe all weather access is provided for removal of bulk waste by large garbage compactor trucks on a daily basis;
- (c) The proponent is to provide sufficient staff and receptacles around the venue, and external to the venue, to ensure that no unsightly or unhealthy conditions occur during (and immediately after) the proposed event; and,

- (d) All liquid and solid wastes generated by food service premises must be adequately contained whilst on the site; and disposed of so as not to cause any nuisance or harm.

### **Potable Water and Sewage**

For all events carried out at the site, the following potable water supply and sewage management conditions apply, as relevant:

#### ***D13 Potable Water Supply***

The proponent shall provide a water management plan to Council that identifies:

- (a) the location of all static potable water storage tanks;
- (b) construction details for potable water storage tanks;
- (c) the expected number of movements of water carters, frequency of water carter movements, times of water carter movements and estimated cost of operations;
- (d) how water carter movements will occur without conflicting with other event activities;
- (e) how water carters will sanitise and distribute water to the site and around the site in a manner that will not present a contamination risk; and,
- (f) complies with the NSW Health Private Water Supply Guidelines (April 2007).

#### ***D14 Sewage and Trade Waste Disposal***

The proponent is to provide a sewage and trade waste management plan to Council that identifies:

- (a) the location of all static greywater and blackwater storage tanks
- (b) the location of all portable facilities during construction, event and post-event periods, noting that a minimum 5 m buffer be provided to separate potentially conflicting uses such as wastewater management and sensitive ecological environments, food stalls and camping sites;
- (c) the expected number of movements of mobile wastewater tankers, frequency of tanker movements, times of tanker movements and estimated cost of operations;
- (d) how mobile wastewater tanker movements will occur without conflicting with other event activities; and,
- (e) measures to be implemented to ensure that no effluent is lost from static storage and mobile wastewater tanks, and in the case of an environmental pollution event, the best practice methodologies to be implemented to clean up spills that maximise protection of the environment and human health.

#### ***D15 Sewage and Trade Waste Disposal Contractor***

- (1) The proponent must engage the services of an approved Liquid Waste Contractor with regard to sewage disposal from all site facilities. Details of the contractor are to be supplied to Water and Waste Division at least fourteen (14) days prior to the event. Liquid waste transport contractors must be EPA Licensed. The contractor must contact Council's Liquid Trade Waste Officer to ensure adequate arrangements are in place for the disposal of trade waste for the duration of the event.
- (2) Please note that liquid trade waste from food stalls will not be accepted at any Byron Shire Council sewage treatment plant.
- (3) A contingency plan is to be provided to Council's Water and Recycling Management Services should Council's sewage treatment plants not be able to receive sewage. Should the contingency plan include disposal at sewage treatment plants outside of the Byron Shire, written confirmation that waste can be accepted is required from the managing organisation.

#### ***D16 Portable Toilet Waste Management***

The approved liquid waste contractor must advise Council of the proposed sanitary portable toilet chemical to be used within the site. The contractor must provide a Material Safety Data Sheet and details of the usage of the product.

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### **D17 Temporary Toilet Facilities**

- (1) Adequate temporary toilet facilities must be provided and maintained for the patrons, operators, and staff for the duration of all proposed events.
- (2) Temporary toilet facilities shall be located to ensure no offensive odour or spillage of contaminated wastewater is likely to cause nuisance or harm to public health or the environment.

*End of Part D*



**PART E - CONDITIONS THAT APPLY TO PERMANENT INFRASTRUCTURE AND SITE ENHANCEMENT FOR STAGES 1 AND 2****CONDITIONS THAT APPLY PRIOR TO ISSUE OF CONSTRUCTION CERTIFICATE****E1 Approvals for Works within the Road Reserve**

Consent from Council must be obtained for works within the road reserve pursuant to Section 138 of the *Roads Act 1993*. Three (3) copies of engineering construction plans must accompany the application for consent for works within the road reserve. Such plans are to be in accordance with Council's adopted engineering standards, currently *The Northern Rivers Local Government Design & Construction Manuals (Version 3) and Standard Drawings (Version 1)* and are to provide for the following works:

- (a) Jones Road Underpass - The construction at no cost to Council of the Jones Road underpass in accordance with the plans approved under condition E2. Regard shall be given to any major surface or subsurface utility lines. The design must ensure that flood waters do not pass between the stormwater catchments separated by Jones Road during storm events up to and including the probable maximum flood.
- (b) Jones Road Upgrade - A two-lane sealed road upgrade for the western 340m of Jones Road where it connects to Tweed Valley Way.
- (c) Main Car Park Entry, Tweed Valley Way - Road, drainage and driveway construction on Tweed Valley Way for the main car park entry to provide an intersection generally in accordance with AUSTRROADS standards. Such works to include all necessary widening, sealing of road and driveway, and line marking. Details for the provision of a physical separation for entering and exiting traffic must be included.
- (d) Southern Car Park Entry, Tweed Valley Way - Road, drainage and driveway construction on Tweed Valley Way for the southern car park entry to provide an intersection generally in accordance with AUSTRROADS standards. Such works to include all necessary widening, sealing of road and driveway, and line marking.
- (e) Service Vehicle Entry, Jones Road - Driveway construction on Jones Road for the service vehicle exit shown at chainage 260 on plans prepared by Ardill Payne & Partners numbered DA03 Issue A. Details to be in accordance with Council's driveway standards. Re-alignment may be necessary to provide satisfactory sight distances.

**E2 Detailed Design Drawings for Underpass**

The proponent must submit detailed engineering drawings to Council for approval of the underpass facilitating vehicular and pedestrian movements under Jones Road. The design shall generally be in accordance with Council's adopted engineering standards for Structures/Bridge Design. Details must also be provided for:

- (a) Replacement plantings proposed for road reserve, using suitable locally occurring ground cover and shrub species to provide dense cover for small and medium-sized terrestrial and arboreal vertebrates;
- (b) Additional compensatory planting on the privately owned land adjacent to the tunnel;
- (c) Maintenance to ensure success of the plantings;
- (d) Fauna exclusion fencing for the edges of the cover section; and
- (e) Details of any temporary road required for the construction of the underpass must also be shown on the construction plans.

Note: The creation of any temporary road within private lands must obtain all necessary approvals in accordance with the *Roads Act 1993*.

**E3 Construction of the Spine Road and Associated Culverts**

Prior to the issue of a construction certificate for Stage 1, detailed engineering drawings are to be provided to the Certifying Authority showing the Spine Road constructed above the 1 in 100-year ARI flood level; and concrete culverts to be installed under the sealed road and pathway connecting the southern and northern sections of the site (via the Jones Road underpass). The culverts must comprise a minimum two 1.0 m x 1.5 m box culverts south of Jones Road and a minimum one 1.0m x 1.5m box culvert north of Jones Road. Details must also be provided of the 'fauna friendly' human exclusion fencing in the vicinity of the box culverts (incorporating a minimum 250 mm

continuous gap at the base of the fence or 250 mm square gaps at 10 m intervals along the base of the fence) to allow the culverts to function as fauna underpasses.

**E4 Construction the East-West Laneway – Southern Car Park**

Prior to the issue of a construction certificate for Stage 1, detailed engineering drawings are to be provided to the Certifying Authority showing an east-west laneway within the southern car parking area, constructed above the 1 in 100-year ARI flood level to provide egress opportunities. Feeder laneways are to be connected to the east-west laneway to provide a continually rising egress route.

**E5 Detailed Design Drawings for Drains**

Details of the proposed new drain to be constructed 5 m north of the northern edge of forest block "C" must be provided to the Certifying Authority to demonstrate that the drain will not result in draw-down of the water table in the adjoining forest block 'C' nor impact on sensitive biota prior to the issue of a construction certificate for Stage 1.

**Stormwater Drainage**

**E6 Stormwater Drainage Works**

Prior to issue of the first construction certificate for each stage of the project, the proponent must submit to Council, plans and specification for stormwater drainage works (new diversion drains, new open drains and filling of existing drains). The plans must be in accordance with Council's adopted engineering standards, currently *The Northern Rivers Local Government Design & Construction Manuals (Version 3) and Standard Drawings (Version 1)*.

**E7 Stormwater Monitoring Plan**

Prior to issue of the first construction certificate for each stage of the project, the proponent is to submit a Stormwater Monitoring Plan with the s68 Stormwater Application for Council's approval in order to demonstrate that the stormwater management system satisfactorily complies with the intended design.

**E8 Stormwater Management**

- (1) Permanent stormwater quality treatment shall comply with the relevant requirements of *The Northern Rivers Local Government Design & Construction Manuals (Version 3) and Standard Drawings (Version 1)*.
- (2) The stormwater and site works shall incorporate water sensitive urban design principles and where practical, integrated water cycle management.

**Construction Management**

**E9 Construction Environmental Management Plan**

Prior to the commencement of construction works for permanent infrastructure as described under condition A2A2 of this approval, a Construction Environmental Management Plan (CEMP) shall be prepared and implemented that covers these works. The CEMP shall be consistent with the *Guideline for the Preparation of Environmental Management Plans* (DIPNR, 2004). The CEMP shall include details sufficient to understand and avoid, mitigate and remedy all potential environmental impacts of the works during construction. The CEMP shall include, but not be limited to:

- (a) a description of all relevant activities to be undertaken on the site during construction (including an indicative timeline);
- (b) a description of relevant environmental management objectives for the site;
- (c) statutory and other obligations that the Proponent is required to fulfil during construction including all relevant approvals, licences and consultations;
- (d) a description of the roles and responsibilities for all relevant employees involved in construction;
- (e) hours of work;
- (f) The CEMP shall also be compiled from the documents and plans listed in conditions A4 and A5 (as relevant for construction);
- (g) A 24-hour contact telephone number shall be provided to all adjoining owners and occupants;

Note: the nominated telephone number may contain provision for a voice message service outside of normal working hours.

(h) A subset of the following management plans:

- (1) erosion and sediment control;
- (2) traffic and pedestrian management;
- (3) noise management;
- (4) construction waste management (including the proposed method and location of excess spoil from bulk earthworks);
- (5) dust management;
- (6) groundwater and acid sulphate soil management;
- (7) Aboriginal cultural heritage management; and
- (8) flora and fauna management during construction.

Note: other conditions in this approval may specify relevant objectives or requirements for or in addition to any of the matters listed directly above.

The CEMP shall be submitted for the approval of the Certifying Authority no later than one month prior to the commencement of construction, or within such period as otherwise agreed by the Certifying Authority. Notwithstanding, where construction work is to be undertaken in stages, the proponent may, subject to the agreement of the Certifying Authority, stage the submission of the CEMP consistent with the staging of activities relating to that work. The proponent shall also forward copy of the CEMP to the ~~Director-General~~ Secretary and Council for information within a week of its approval. Construction shall not commence until written approval has been received from the Certifying Authority.

#### **E10 Erosion and Sediment Control Plan**

The Erosion and Sediment Control Plan required to be submitted as part of the CEMP (condition E9) is to be prepared by a practising Chartered Civil Engineer (CPEng) (or is eligible to be) and member of Engineers Australia and have appropriate experience and competence in the related field. The plan is to be designed in accordance with the requirements of Landcom's publication, *Managing Urban Stormwater: Soils and Construction*, 2004 or its latest edition and take into consideration Council's DCP 2002 Part N and Council's adopted engineering standards, currently *The Northern Rivers Local Government Design & Construction Manuals (Version 3) and Standard Drawings (Version 1)*.

#### **E11 Construction Traffic and Pedestrian Management Plan**

The Construction Traffic and Pedestrian Management Plan required to be submitted as part of the CEMP is to be prepared by an RMS accredited person(s) and in accordance with AS1742 and RMS's publication *Traffic Control at Works Sites* Version 2. The Plan shall address, but not be limited to, the following matters:

- (a) ingress and egress of vehicles to the site and details of how construction of project infrastructure will be managed in proximity to local and regional roads;
- (b) loading and unloading, including construction zones;
- (c) predicted traffic volumes and measures to ensure traffic volume, acoustic and amenity impacts along construction vehicle routes are minimised;
- (d) types and routes including traffic routes for heavy vehicles, and any necessary route or timing restrictions for oversized loads;
- (e) pedestrian and traffic management methods (including site security);
- (f) washing facilities for trucks on the site (including a vehicle shakedown area);
- (g) hours of access to the site;
- (h) evidence that all statutory responsibilities with regard to road traffic impacts have been complied with; and

- (i) procedures to notify nearby residents of works being carried out.

**E12 Construction Noise Management Plan**

A Construction Noise Management Plan to detail measures to minimise noise emissions associated with the construction of the project shall be submitted for approval as part of the CEMP (condition E9). This plan shall be prepared in accordance with the *Interim Construction Noise Guidelines* (Department of Environment Climate Change and Water, July 2009) and shall include, but not necessarily be limited to:

- (a) identification of all major sources of noise that may be emitted as a result of the construction of the project;
- (b) identification of nearby residents and other sensitive land uses;
- (c) specification of appropriate construction noise criteria as it applies to a particular activity;
- (d) identification and implementation of best practice management techniques for minimisation of noise and vibration emissions;
- (e) procedures for the monitoring of noise emissions; and
- (f) a description of the procedures to be undertaken if any non-compliance is detected.

**E13 Acid Sulphate Soil Management Plan**

- (1) In order to ensure the protection of groundwater quality and the water quality of Crabbes and Mooball Creeks, an updated Acid Sulphate Soil Management Plan for the site shall be prepared. The updated plan shall include all areas onsite subject to earthworks where Acid Sulphate Soils or Potential Acid Sulphate Soils are likely to be intercepted;
- (2) The plan must be carried out generally in accordance with the NSW State Government's *Acid Sulphate Soils Manual* (ASSMAC 1998) by a suitably qualified person;
- (3) The plan shall be submitted to the satisfaction of the Certifying Authority prior to the issue of the relevant Construction Certificate.

**E14 Groundwater Management and Monitoring Plan**

Where interception or use of groundwater is likely, the proponent is to submit as part of the CEMP (condition E9) a detailed Groundwater Management and Monitoring Plan, supported by baseline groundwater monitoring and prepared in consultation with the NSW Office of Water.

**E15 Aboriginal Cultural Heritage**

The proponent shall ensure that management of Aboriginal Cultural Heritage is undertaken in a manner consistent with the recommendations of the *Aboriginal and European Heritage Assessment* prepared by Jacqueline Collins (Consultant Archaeologist), dated September 2010. The proponent shall ensure that the recommendations of this assessment are incorporated into the CEMP required under condition E9.

**E16 Bond to Byron Shire Council**

A bond of \$20,000 is to be paid to Council as guarantee against damage to surrounding public land and infrastructure during construction works. Evidence is to be provided to Council indicating the pre-development condition of the surrounding public land and infrastructure. Such evidence must include photographs. The proponent will be held responsible for the repair of any damage to roads, kerb and gutters, footpaths, driveway crossovers or other assets.

The bond will be held until Council is satisfied that the infrastructure is maintained/repaired to pre-development conditions and that no further work is to be carried out that may result in damage to public infrastructure.

**Flora and Fauna Management**

**E17 Ecological Restoration**

- (1) The *Draft Vegetation Management and Biodiversity Plan* – submitted as Appendix M to the Ecological Assessment shall be finalised having regard to the variation contained in the Statement of Commitments and the conditions in this approval. The final plan must be submitted to the ~~Director General~~ Secretary for

approval. The recommendations in the Plan must be implemented to the satisfaction of the ~~Director~~ ~~General~~ Secretary.

- (2) The proponent is to consult with the Regulatory Working Group as required under condition C2 in the preparation of and implementation of habitat restoration works.

#### ***E18 Permanent Human Exclusion Fencing***

Details of all permanent human exclusion fencing closely bordering (within 10 m of) designated forest blocks and other native vegetation must be provided to the Certifying Authority. Human exclusion fencing in these locations must be 'fauna-friendly', incorporating a minimum 250 mm continuous gap at the base of the fence or 250 mm square gaps at 10 m intervals along the base of the fence.

### **Flood Management**

#### ***E19 Habitable Floor Levels***

Floor levels of all permanent habitable structures must be constructed a minimum of 500 mm above the 100-year ARI flood level.

### ***CONDITIONS THAT APPLY PRIOR TO COMMENCEMENT OF WORKS***

### **Notification Requirements**

#### ***E20 Notice to be Given Prior to Commencement / Excavation***

- (1) The Principal Certifying Authority and Council shall be given at least two days' notice prior to the commencement of excavation, shoring or underpinning works for each stage of the project.
- (2) Adjoining and affected residents shall be provided with a minimum 72 hours' notice prior to the commencement of works.

#### ***E21 Contact Telephone Number***

Prior to the commencement of the works for each stage of the project, the proponent shall forward to the Department and Council a 24-hour telephone number to be operated for the duration of the construction works.

### **Structural Works**

#### ***E22 Structural Details***

Prior to the commencement of construction of each stage of the project, the proponent shall submit to the satisfaction of the Certifying Authority structural drawings of all permanent infrastructure, prepared and signed by a suitably qualified practising Structural Engineer outlining compliance with:

- (a) the relevant clauses of the BCA;
- (b) the relevant project approval;
- (c) drawings and specifications comprising the Construction Certificate; and
- (d) the relevant Australian Standards listed in the BCA (Specification A1.3).

### **Environmental Controls**

#### ***E23 Erosion and Sediment Control***

Prior to commencement of work on the site for each stage of the project, all erosion and sediment control measures are to be installed and operational including the provision of a 'shake down' area where required, to the satisfaction of the Certifying Authority.

#### ***E24 Flora and Fauna Management***

All trees within or immediately adjoining the construction footprint of the site not approved for removal are to be suitably protected by tree guards, barriers or other measures as necessary to protect the root system, trunk and branches during construction of temporary structures.

## **Services**

### ***E25 Existing Services***

The proponent shall accurately locate and identify any existing sewer main, stormwater line or other underground infrastructure within or adjacent to the site and the Certifying Authority advised of its location and depth prior to commencing works. The proponent shall ensure there is no conflict between the proposed development and existing infrastructure prior to start of any works.

## **Heritage**

### ***E26 Aboriginal Cultural Heritage Induction Training***

All personnel involved in initial ground surface disturbance activities shall undergo a Cultural Heritage induction training session before commencing any construction activities. The induction should be presented by an appropriately qualified person and provide specific information in relation to the processes to be followed should any Indigenous items be uncovered as well as the types of and identification criteria for cultural heritage material that may be uncovered. Notwithstanding the above, the induction shall be undertaken in accordance with the terms and requirements of the *Aboriginal and European Heritage Assessment* prepared by Jacqueline Collins (Consultant Archaeologist), dated September 2010.

## ***CONDITIONS THAT APPLY DURING CONSTRUCTION AND SITE ENHANCEMENT WORKS***

## **Construction Management**

### ***E27 Approved Plans Onsite***

A copy of the approved and certified plans, specifications and documents incorporating conditions of approval and certification shall be kept onsite at all times and shall be readily available for any officer of the Department, Council or PCA.

### ***E28 Site Notice***

A site notice(s) shall be prominently displayed at the boundaries of the site for the purposes of informing the public of project details including, but not limited to:

- (a) details of the Builder, PCA and Structural Engineer for all stages of the project;
- (b) the approved hours of work;
- (c) the name of the site/project manager, the responsible managing company (if any), its address and 24-hour contact phone number for any enquiries, including construction/noise complaint are to be displayed on the site notice; and
- (d) a statement that unauthorised entry to the site is not permitted.

## **Site Maintenance**

### ***E29 Erosion and Sediment Control***

All erosion and sediment control measures, as designed in accordance with the approved plans are to be effectively implemented and maintained at or above design capacity for the duration of any construction works associated with the project and until such time as all ground disturbed by the works has been stabilised and rehabilitated so that it no longer acts as a source of sediment.

### ***E30 Dust Control Measures***

All activities on the site shall be undertaken with the objective of preventing visible emissions of dust from leaving the site, including traffic-generated dust. Should such visible dust emissions occur, the proponent shall identify and implement all practicable dust mitigation measures, including cessation of relevant works, as appropriate, such that emissions of visible dust cease. Adequate measures shall be taken to prevent dust from reducing the air quality and affecting the amenity of the neighbourhood during construction activities.

## **Noise**

**E31 Construction Noise Objective**

The construction noise objective(s) is as described in the Construction Noise Management Plan required under condition E12 of this approval. Construction activities associated with the project, including the arrival and departure of vehicles delivering or removing materials from the site shall only be carried out during daylight hours, and in accordance with the noise contribution limits specified under condition E12.

**E32 Hours of Work**

The hours of construction for all stages of the project, including the delivery of materials to and from the site, shall be restricted as follows:

- (a) between 7:00am and 5:00pm, Mondays to Fridays inclusive;
- (b) between 8:00am and 1:00pm, Saturdays;
- (c) no work on Sundays and public holidays.

Works may be undertaken outside these hours where:

- (a) the delivery of materials is required outside these hours by the Police or other authorities;
- (b) it is required in an emergency to avoid the loss of life, damage to property and/or to prevent environmental harm;
- (c) the work is approved through the Construction Noise Management Plan; and
- (d) residents likely to be affected by the works are notified of the timing and duration of these works at least 48 hours prior to the commencement of the works.

**E33 Construction Vibration Management**

For all stages of the project, the proponent shall:

- (a) schedule rock breaking, rock hammering, sheet piling, pile driving and any similar activity only between the following hours unless otherwise approved in the Construction Environmental Management Plan (CEMP):
  - (1) 9.00am to 12.00pm, Monday to Friday;
  - (2) 2.00pm to 5.00pm Monday to Friday; and
  - (3) 9.00am to 12.00pm, Saturday
- (b) ensure that wherever practical, and where sensitive receivers may be affected, piling activities are completed using bored piles. If driven piles are required they must only be installed where approved in the CEMP.

**E34 Vibration Criteria**

For all stages of the project, vibration resulting from construction of the project must not exceed the evaluation criteria presented in the *Environmental Noise Management – Assessing Vibration: A Technical Guide (OEH, 2006)*.

## **Wastewater Management**

### ***E35 Wastewater Treatment Ponds***

All wastewater treatment ponds (including effluent holding ponds and effluent polishing wetlands) must be constructed above the water table or must be appropriately lined with an impermeable lining to prevent groundwater inception and potential contamination.

## **Heritage**

### ***E36 Impact of Below Ground (Sub-surface) Works – Non-Aboriginal Objects***

If any archaeological relics are uncovered during the course of the work in any stage of the project, all works shall cease immediately in that area and the OEH contacted. Works must not resume at the location without the prior written consent of that Office.

### ***E37 Impact of Below Ground (Sub-surface) Works – Aboriginal Objects***

If during the course of future works of any stage of the project, any evidence of any unexpected Aboriginal archaeological site or relic is found, all work likely to affect that site or relic must cease immediately. Temporary fencing must be erected around the site or relic and the material must be identified by an independent and appropriately qualified archaeological OEH must be informed who will advise on the most appropriate course of action to follow. Works must not resume at the location without the prior written consent of OEH.

## ***CONDITIONS THAT APPLY PRIOR TO COMPLETION OF WORKS***

### ***E38 Part 4A Certificates***

Upon completion of works approved under this approval, a Part 4A Compliance Certificate or Certificates shall be obtained under Section 109D(1)(a) of the Act for the following:

- (a) Bulk Earthworks
  - 1) Compliance Certificate
- (b) Bulk Earthworks
  - 2) Civil Works
  - 3) Compliance Certificate – Road-forming works
  - 4) Compliance Certificate – Drainage
  - 5) Compliance Certificate – Stormwater
  - 6) Compliance Certificate – Trunk Infrastructure/Services (electricity, gas, water, telecommunications and sewer) where applicable.

### ***E39 Works as Executed***

Detailed Works as Executed Plans must be provided to the Certifying Authority, identifying all works within and adjacent to any public road reserves.

### ***E40 Damage to Council or Public Authority Assets***

- (1) Any damage caused to public during construction of the project shall be repaired in accordance with Council's (or other relevant authority) requirements. The proponent shall ensure that these repairs are undertaken in a timely manner as specified by Council (or other relevant authority).
- (2) The cost of repairing any damage caused to Council or other relevant authority's assets in the vicinity of the site as a result of construction works associated with the approved project is to be met in full by the proponent.

**E41 Bushfire Management**

All permanent structures shall comply with the BCA and AS3959 – Construction of Buildings in Bushfire-Prone Areas.

**E42 Certificates for Engineering Works**

The proponent is to provide the Certifying Authority with all test certificates for civil works, together with a certificate from a suitably qualified Engineer certifying that all permanent infrastructure has been constructed in accordance with the approved plans and Council's adopted engineering standards. Structural certification must also be submitted for the Jones Road underpass and associated structural elements.

**E43 Geotechnical Report**

A certificate from a professional Engineer experienced in soil mechanics is to be provided to the Certifying Authority, certifying that:

- (a) the civil engineering works, including Jones Road underpass, all internal roads and other relevant structures are structurally adequate;
- (b) the civil engineering works will not be affected by landslip or subsidence either above or below the works; and,
- (c) adequate drainage has been provided.

**E44 Ecological Restoration**

The compensatory ecological restoration works south of Jones Road between the proposed underpass and the Tweed Valley Way/Pacific Highway must be undertaken as prescribed in Fitzgerald (2007c) except that planting of ground cover and understorey plant species should be included in the Zone 2 of Area 1 (Underpass Area) in the first year to facilitate early provision of cover habitat for small terrestrial fauna species and should include transplanted clumps of native groundcovers (ferns, herbs) removed prior to the underpass construction. Lowland subtropical rainforest plant species and moist sclerophyll plant species (*Eucalyptus pilularis*, *Eucalyptus microcorys*, *Eucalyptus siderophloia*, *Eucalyptus tereticornis*) are to be planted in areas above 10 m AHD rather than floodplain community plant species (Fitzgerald 2007c).

*End of Part E*

## SCHEDULE 3

09\_0028

## NORTH BYRON PARKLANDS CULTURAL EVENTS SITE

## TWEED VALLEY WAY AND JONES ROAD, YELGUN

## Statement of Commitments

(SOURCE: PREFERRED PROJECT REPORT)

## A. Overall Commitments

	Commitment Topic	Commitment Details	Commitment undertaken by who and when
A1	Implementing the proposal	<p>Parklands will:</p> <ul style="list-style-type: none"> <li>Carry out the Project in accordance with this the exhibited EA as amended by the Preferred Project report, including all supporting documentation and reports; and</li> <li>Adopt and implement the Parklands Environmental, Health and Safety Management Manual (Management Manual), being the primary mechanism for monitoring and measuring the environmental, health and safety performance of minor, small, moderate and major events held at Parklands.</li> </ul>	<p>Parklands - in the stages nominated within the EA.</p> <p>Parklands – establish and commence prior to works and event usage commencing; and then ongoing implementation.</p>
A2	Capped Event Usage	<p>Event usage capped at the following annual limits:</p> <p><del>— Years 1 – 5 (Commencing with the first event)</del></p> <ul style="list-style-type: none"> <li><del>• No more than a total of 10 event days per annum.</del></li> <li><del>• 3 major events with a maximum starting capacity of 60% (30,000), 50% (25,000) and 40% (20,000).</del></li> <li><del>• No more than 15% capacity increase per event annually subject to satisfying key performance indicators in the Management Manual.</del></li> <li><del>• No minor, small or moderate events.</del></li> </ul> <p>Years 6 onwards – maximum event usage as follows:</p> <ul style="list-style-type: none"> <li><del>• Major Events – no more than 12 event days per annum;</del></li> <li><del>• Moderate Events (3001 patrons to 10,000 patrons) – no more than 4 event days per annum;</del></li> <li><del>• Small Events (300 patrons to 3000 patrons) – no more than 4 event days per annum; and</del></li> </ul>	<p><del>Parklands – in years 1 to 5.</del></p> <p><del>Parklands – in years 6 onwards.</del></p>

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	Commitment Topic	Commitment Details	Commitment undertaken by who and when
		<ul style="list-style-type: none"> <li>• <del>Minor Events (less than 300 persons) – no daily limits.</del></li> </ul>	
A3	Major Event capacity requirements	<p>The largest Major event will operate at a maximum 60% of capacity until Parklands has demonstrated compliance with the Management Manual per event annually to the upper limit for that event category. Any increases in event capacity shall be limited to a 15% increase per event annually to the upper limit for that event category.</p>	Parklands – in accordance with commitment timing.
<p><b>Comment:</b> Amendments reflect the parameters of the approved 5 year trial.</p>			
A4	Monitoring and reporting of events usage	<p>On the anniversary of the first major event (and every year thereafter) <b>Each November</b> - Parklands will provide the following two reports <b>Performance Review Report</b> to the Department of Planning.</p> <p>1. A Management Manual Assessment Report that provides documentary evidence of event activities, compliance with the Management Manual (including EH&amp;S Policies and Procedures and applicable EH&amp;S Standards), findings from audit reports, non-conformances and corrective actions.</p> <p>2. A Management Manual Modification Report that documents any material changes to the management system, the reasoning behind such changes and a summary of expected improvements as a result of such changes.</p>	Parklands – annually commencing on the anniversary of the first major event.
<p><b>Comment:</b> In practice the Annual Performance Review Report covers all of the review aspects including a review of the Management Manual.</p>			
A5	Undertake an ongoing stakeholder consultation program	<p>Parklands will implement an ongoing consultation program with key stakeholders (as detailed in <i>NBP Standard 007</i>) including:</p> <ul style="list-style-type: none"> <li>• <del>Establishing a Community Liaison Committee;</del></li> <li>• Establishing a Regulatory Working Group comprising key government agencies;</li> <li>• Advising local residents prior to <del>Moderate</del> <b>large</b> and <del>Major</del> <b>medium</b> Events of important information, dates and times;</li> <li>• Operating a telephone and web-based hotline for any community member to communicate any immediate concerns</li> </ul>	<p><del>Parklands – prior to the first event.</del></p> <p>Parklands – prior to the first event.</p> <p>Parklands – prior to the first Moderate or Major event.</p> <p>Parklands – during the first major event and all major</p>

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	Commitment Topic	Commitment Details	Commitment undertaken by who and when
		<p>during <del>major</del> large events; and</p> <ul style="list-style-type: none"> <li>Operating an offsite response team for <del>Major</del> large Events to address and manage any issues.</li> </ul>	<p>events following.</p> <p>Parklands – during the first major event and all major events following.</p>
<p><b>Comment:</b> Amendment reflects that the approval combined the RWG and the proposed Community Liaison Committee.</p>			
A6	Community Grants Fund	<p>Parklands will establish a Community Grants Fund (funded by a 'community levy' on <del>major</del> large event patron tickets) for annual distribution (at the discretion of Parklands) to a range of community, social, environmental and welfare projects within the local community.</p>	<p>Parklands – for the first major event and all major events following.</p>
A7	Enhance the biodiversity values of the site and locality	<p>Parklands will:</p> <ul style="list-style-type: none"> <li>Continue to work with <del>DECCW</del> OEH and other key stakeholders to enhance the biodiversity values of the locality especially the adjoining Billinudgel Nature Reserve.</li> <li>Commence the staged implementation of the Vegetation Management and Biodiversity Plan to guide the ecological restoration of the site.</li> <li>Maximize 'down time' between larger events such that non-event days substantially dominate the annual cycle, providing time for 'normal' ecosystem processes, post-disturbance recovery and for local rehabilitation of habitats to occur.</li> <li>Implement Yelgun Creek Rehabilitation Plan as detailed within Appendix J of <b>Technical Paper E – Ecological Assessment</b></li> </ul>	<p>Parklands – at all times.</p> <p>Parklands – implementation of VMBP staged over time commencing at start of works.</p> <p>Parklands – with event programming in accordance with maximum usage limits.</p> <p>Parklands – as a priority stage of VMBP, within first two years.</p>
A8	Youth Policy	<p>Parklands will, in consultation with key stakeholders, develop and implement a Youth Policy which seeks to enrich the lives of local youth by involvement in the Parklands site and also the provision of facilities within local communities.</p>	<p>Parklands – within the first 18 months of event usage.</p>
A9	Indigenous cultural heritage	<p>1. Parklands will adopt and implement the five recommendations of <b>Technical Paper H</b>, developed in liaison with the Aboriginal stakeholders.</p>	<p>Parklands –</p> <p>Recommendation 1: Include in construction management plan and enact during works program.</p> <p>Recommendation 2:</p>

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	Commitment Topic	Commitment Details	Commitment undertaken by who and when
		<p>2. Parklands will provide the DECCW with additional Aboriginal cultural heritage management measures for each known Aboriginal site. These measures shall include:</p> <ul style="list-style-type: none"> <li>a. a program of ongoing monitoring by the local Aboriginal community, and assessment criteria for any previously unidentified Aboriginal cultural heritage values;</li> <li>b. management during maintenance activities (e.g. weed spraying, pest control, etc). as a component of any Aboriginal cultural heritage induction program; and,</li> <li>c. the specifics of any protection works (e.g., fencing, signage, located on maps, etc.).</li> </ul> <p>3. Any Aboriginal cultural heritage management measures developed in consultation with the registered local Aboriginal stakeholders and specific management during any proposed events shall be incorporated into the Management Manual.</p> <p>4. An Aboriginal Cultural Heritage Awareness component shall be included in the pre-start induction to be attended by all personnel, contractors and their employees involved in onsite disturbance/construction activities. The</p>	<p>To be included in Event Management Manual prior to event usage and enacted during event usage.</p> <p>Recommendation 3: In consultation with Aboriginal stakeholders prior to design of any signage. Recommendation 4: in consultation with Aboriginal stakeholders prior to design of Cultural Centre Recommendation 5: workers site inductions occur before works commence and recommended actions occur during works as required.</p> <p>Parklands – prior to event usage.</p> <p>Parklands – workers site inductions occur before works commence.</p> <p>Parklands – prior to any protection works commence.</p> <p>Parklands – prior to event usage.</p> <p>Parklands – workers site inductions occur before works commence.</p>

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	Commitment Topic	Commitment Details	Commitment undertaken by who and when
		<p>induction will be completed as part of any induction. The induction will highlight the overall high level of Aboriginal cultural sensitivity of the wider project area and the strict requirement for all onsite workers to confine their activities to the approved project area only. It must also include the legal obligations for Aboriginal sites, and reinforce the need to comply with these legal obligations (including penalties if breaches occur). The induction will also provide an overview of the types of Aboriginal cultural heritage materials that could occur within the project area, and of the procedures to be followed in the event of any possible finds during any stage of the development.</p> <p>5. The Aboriginal stakeholders shall be given the opportunity to review, amend, and confirm the content of the Aboriginal Cultural Heritage Awareness induction component prior to its implementation. Aboriginal stakeholder representatives shall be invited to attend and participate in all induction sessions.</p> <p>6. A register will be kept of all persons inducted for the duration of the project. The register will include dates, names and signatures of those inducted, the type of activity and location in which they will be working, name of the person who provided the induction, and whether any Aboriginal stakeholders were present during the induction.</p>	<p>Parklands – consultation with Aboriginal stakeholders prior to finalisation of induction program.</p> <p>Parklands – Aboriginal stakeholders invited to induction sessions.</p> <p>Parklands – at all times</p>
A10	Non-Indigenous cultural heritage	Parklands will adopt and implement the non-indigenous cultural heritage recommendations of Technical Paper H relating to the planted fig trees and the notched tree stumps together with worker induction including matters relating to non-indigenous cultural heritage.	<p>Parklands – all plans and works will protect sites <i>in situ</i>, workers' site inductions occur before works commence.</p> <p>Parklands – prior to opening of the Cultural Centre, background historic educational information and information specific to the study area will be included in displayed information.</p>
A11	Ecological Impact Review	As soon as practicable, having regard to seasonal considerations, after the first event	Parklands – after the first event but not beyond 1 year

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	Commitment Topic	Commitment Details	Commitment undertaken by who and when
		<p><del>but not beyond 1 year of commencement of event operations. Parklands will commission a comprehensive Ecological Impact Review shall be completed and lodged with the Department of Planning.</del></p> <p>Parklands will include any reasonable requirement/s of the Director General arising from the Department's assessment of the Ecological Impact Review into the Management Manual and implement any reasonable actions or mitigation measures contained in the report.</p>	<p><del>of commencement of event operations</del></p>
<p><b>Comment:</b> Amendments reflect the parameters of the approved 5 year trial.</p>			
A12	Mosquito Control	Any mosquito control shall be limited to the use of personal insect deterrents. Parklands will not use broad spectrum chemical control or barrier programs, to prevent potential adverse ecological impacts.	Parklands – at all times.

### B. Construction Phase Commitments

	Commitment Topic	Commitment Details	Commitment undertaken by who and when
B1	Staging of construction of the site	<p>Parklands will carry out the Project in stages having regard to the following criteria for the orderly development of the site:</p> <ul style="list-style-type: none"> <li>• The infrastructure network of roads and services and facilities which are required to be operational to accommodate the size of events authorised shall be constructed in the initial years;</li> <li>• Stages may be aggregated; and</li> <li>• Stages may proceed concurrently.</li> </ul>	Parklands - in the stages nominated within the EA.
B2	Construction in accordance with approved plans	<ul style="list-style-type: none"> <li>• All civil works are to be constructed generally in accordance with the Civil Engineering plans (Ardill Payne and Partners Project 6883) Plan Set.</li> <li>• The finished surface level of the Spine Road will be constructed so that it is above the 1% ARI flood level.</li> <li>• Gatehouse and Administration buildings to be constructed generally in accordance with the architectural plans in the Plan Set.</li> <li>• Landscaping to be constructed generally in accordance with the Plan Set landscaping plans.</li> </ul>	<p>Parklands - in the stages nominated within the EA.</p> <p>Parklands – prior to event usage commencing.</p> <p>Parklands – within the first three years of event usage.</p> <p>Parklands – implementation of landscaping staged over time commencing at start of works.</p>



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	Commitment Topic	Commitment Details	Commitment undertaken by who and when
	Management - adopt and implement	<p>construction phase mitigation measures in Table 11 of the Ecological Assessment within <b>Technical Paper E</b> including:</p> <ul style="list-style-type: none"> <li>erecting advisory signage;</li> <li>supervision of tree disturbance;</li> <li>retaining biomass onsite;</li> <li>compensatory plantings;</li> <li>fauna movement culverts provided under road if 'at grade' option utilized;</li> <li>Barrier fence retained vegetation and be commenced a program to remove weed species;</li> <li>Monitor fauna impacts; and</li> <li>Install and maintain sediment interception structures.</li> </ul>	<p>construction phase mitigation measures in Table 11 of the Ecological Assessment within <b>Technical Paper E</b> and implement in construction phase.</p>
B8	Vegetation Management and Biodiversity Plan	<p>Vegetation shall be managed in accordance with the Vegetation Management and Biodiversity Plan (Refer to <b>Technical Paper E</b>) as amended by these commitments.</p>	<p>Parklands – at all times.</p>
B9	Water Cycle Management – Water Management Plan	<p>The water cycle is to be managed in accordance with the Parklands Water Management Plan (WMP). All commitments made in the WMP will be fulfilled and all activities will be carried out on the site in accordance with relevant statutory requirements.</p>	<p>Parklands – implemented prior to, during and following construction and event usage.</p>
B10	Water Cycle Management - Sediment and Erosion Controls.	<p>1. Erosion and sedimentation control shall be undertaken in accordance with the Erosion &amp; Sediment Control Plan contained within <b>Technical Paper P</b> of the EA. All controlled discharges of water from the site during the construction phase should comply with the following criteria:</p> <ul style="list-style-type: none"> <li>pH 6.5–8.5;</li> <li>turbidity &lt;50 NTU; and</li> <li>suspended Solids &lt; 50 mg/L.</li> </ul> <p>2. Appropriate signage is to be provided throughout the proposed southern car park area to encourage reporting of any oil spills or leakages to festival management.</p>	<p>Parklands – implemented prior to, during and following construction and event usage.</p> <p>Parklands – prior to use of the car park.</p>
B11	Soil Management	<p>1. Soils shall be managed in accordance with the recommendations of the following:</p> <ul style="list-style-type: none"> <li>Erosion and Sediment Control Plan (<b>Technical Paper P</b>);</li> <li>Acid Sulfate Management Plan (<b>Technical Paper M1</b>);</li> <li>Stormwater Management Plan</li> </ul>	<p>Parklands – implemented prior to, during and following construction and event usage.</p>

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	Commitment Topic	Commitment Details	Commitment undertaken by who and when
		<b>(Technical Paper Q).</b>	
B12	Ecological Structure Plan	<ol style="list-style-type: none"> <li>1. Parklands will prepare and implement a Revised Ecological Structure Plan that adopts the DECCW recommendation that a greater proportion of the site be established as permanent habitat with greater connected ground cover and canopy. In particular, Parklands will establish:  5.9 ha of additional permanent habitat connecting the forest blocks on the north of Jones Road, thus further protecting and widening the Marshalls Ridge wildlife corridor;;  12.9 ha of permanent new habitat with constructed wetlands is provided in the southern car park providing a significant buffer to the Billinudgel Nature Reserve and SEPP 14 wetlands.</li> <li>2. Parklands will install at least two fauna friendly (1 m x 1.5 m) box culverts under the spine road both north and south of Jones road to enhance safe fauna passage during event times or other uses of the road. The inverts of these culverts must be well above groundwater level.</li> <li>3. Any human exclusion fencing at the Jones Road intersection / underpass shall also include fauna friendly design (250 mm square gaps at &lt;10 m intervals), allowing for fauna movement along the base of the fence.</li> <li>4. A habitat restoration program for the area between the SEPP 14 boundary and the BNR in the southern car park, will be developed in consultation with the Regulatory Working Group.</li> </ol>	<p>Parklands - implement the Revised Ecological Structure Plan over ten years with a minimum of 5% of the plan implemented each year.</p> <p>Parklands - implement during construction phase.</p> <p>Parklands - implement during construction phase.</p> <p>Parklands - develop plan in consultation with the Regulatory Working Group in first year and implement within stages of the Revised Ecological Structure Plan.</p>

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### C. Operational Phase Commitments

Commitment Topic	Commitment Details	Commitment undertaken by who and when
C1	<p>Event Management</p> <p>All events will be carried out in accordance with the Parklands Environmental Health and Safety Management Manual (EHSMM), including the following Parklands Standards to manage event usage:</p> <ul style="list-style-type: none"> <li>• NBP Standard 001 - Safety Management</li> <li>• NBP Standard 002 – Transport and Traffic Management</li> <li>• NBP Standard 003 – Environmental Management</li> <li>• NBP Standard 004 – Water Management</li> <li>• NBP Standard 005 – Wastewater Management</li> <li>• NBP Standard 006 – Fire Management</li> <li>• NBP Standard 007 – Offsite Management</li> <li>• NBP Standard 008 – Noise Management</li> <li>• NBP Standard 009 – Evacuation Management</li> <li>• NBP Standard 010 – First Aid Management</li> <li>• NBP Standard 011 – Camping Management</li> <li>• NBP Standard 012 – Flooding Management</li> <li>• NBP Standard 013 – Temporary Structures</li> <li>• NBP Standard 014 – Waste Management (see Annexure E)</li> <li>• <b>NBP Standard 015 – Community Management</b></li> </ul>	Parklands – at all times.
C2	<p>Certainty of effective event management</p> <p>Events shall only occur on the site if the event operator commits to complying with the applicable requirements of Parklands EHSMM, including Parklands Standards 001 to 014 <b>015</b>.</p>	Parklands – at all times for all events.
<p><b>Comment:</b> Parklands now has 15 standards as part of its EHSMM</p>		
C3	<p>Managing demand on emergency and local services</p> <p><del>For Moderate and Major Events with over 10,000 patrons, onsite medical services and police services will be provided. For Major events ambulance services will be provided by the proponent.</del></p>	<p><del>Parklands – For Moderate and Major events, onsite medical services and police services will be provided. For Major events ambulance services will be provided by the proponent.</del></p>
<p><b>Comment:</b> Amendments reflect the parameters of the approved five-year trial and that onsite medical services can replace ambulance services.</p>		
C4	<p>Managing demand</p> <p>Parklands and event operators will work with</p>	Parklands – for all event

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	Commitment Topic	Commitment Details	Commitment undertaken by who and when
	on holiday accommodation in nearby centres	local holiday accommodation organisations. Accommodation demands will be prioritised towards onsite camping. For offsite needs only holiday accommodation precincts in Byron Shire and Tweed Coast with 'regulated site management' premises will be supported.	usage.
C5	Managing demand on beach and other neighbourhood facilities and increased crowds in nearby areas	Parklands will liaise with local communities to either promote their community or redirect activities to those communities seeking tourism related business. In consultation with local communities, event literature will either be silent about a local destination (to minimise local disturbance) or specifically target the destination (to optimise local economic activity) as desired by that community.	Parklands – in consultation with local communities prior to event usage.
C6	Managing illegal camping and/or litter in nearby areas	Parklands will: <ul style="list-style-type: none"> <li>• require Major Events to enact the Offsite Response Strategy (NBP Standard 007 – Offsite Management) including a telephone and web-based hotline combined with a litter response team; and</li> <li>• manage these issues in consultation with Regulatory Working Group.</li> </ul>	Parklands – for Major Events in consultation with Regulatory Working Group.
C7	Safety Management	Parklands will adopt, implement, monitor and review NBP Standard 001 - Safety Management. In accordance with Clause 3 of the standard, event operators will conform with the following applicable Standard Parameters: <ol style="list-style-type: none"> <li>1. Develop a safety management plan covering both staff, contractors and volunteers, in addition to audience members attending the event including but not limited to: <ul style="list-style-type: none"> <li>▪ hazard identification</li> <li>▪ risk assessment</li> <li>▪ controls</li> <li>▪ monitoring</li> <li>▪ reporting</li> <li>▪ incident management;</li> </ul> </li> <li>2. Develop an Event Safety Policy that articulates the event's commitment to safe working practices and which specifies core safety goals;</li> <li>3. Undertake and document a hazards identification and risk assessment process resulting in a risk register, covering all aspects of the event including 'bump in' and 'bump out' activities;</li> <li>4. Develop and document appropriate</li> </ol>	Parklands – prior to and during event usage.

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	Commitment Topic	Commitment Details	Commitment undertaken by who and when
		<p>controls to eliminate or minimise identified risks documented in the risk register;</p> <ol style="list-style-type: none"> <li>5. Provide OH&amp;S induction training to all staff and contractors;</li> <li>6. Document and investigate all OH&amp;S incidents including injury, property damage and near misses;</li> <li>7. Immediately report any serious incidents (i.e. involving emergency services) to the General Manager, Parklands;</li> <li>8. Ensure all machinery used onsite is in safe working order with appropriate safety devices fitted and complies with appropriate Workcover requirements;</li> <li>9. Ensure all staff, contractors and volunteers wear appropriate personal protective equipment for the activity being undertaken (i.e. high visibility vests, hard hats, safety boots, etc.);</li> <li>10. Ensure any direction from Parkland's staff to remove an event staff member, contractor, volunteer or patron is complied with; and</li> <li>11. Provide emergency equipment (torches, radios and the like) in secure weatherproof containers on flood free land adjacent to the Spine Road and in the vicinity of the proposed Conference Centre.</li> </ol>	<p>Parklands – prior to event usage.</p>
C8	Transport and Traffic Management	<p>Parklands will adopt, implement, monitor and review NBP Standard 002 - Transport and Traffic Management. In accordance with Clause 3 of the standard, applicable Parklands/event operators will conform with the following Standard Parameters:</p> <p><i>Transport Management</i></p> <p>Develop a transport management plan that;</p> <ol style="list-style-type: none"> <li>1. <del>Achieves a private car occupancy rate of 2.9 people per car for 70% capacity events;</del></li> <li>2. <del>Achieves a private car occupancy rate of 3.2 people per car for 100% capacity events;</del></li> <li>3. <del>Achieves a minimum public transport mode share of 27% for 70% capacity events.</del></li> <li>4. <del>Achieves a minimum public transport mode share of 39% for 100% capacity events;</del></li> <li>5. Maximises rideshare take-up through promotion on event websites and online</li> </ol>	<p>Parklands – prior to and during event usage.</p>

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Commitment Topic	Commitment Details	Commitment undertaken by who and when
	<p>forums</p> <ol style="list-style-type: none"> <li>6. Promotion of sustainable transport options through public information and event websites;</li> <li>7. Encourages use of rideshare and sustainable modes through accommodation and transport packages and ticketing;</li> <li>8. Manages parking supply and costs to encourage ridesharing and use of sustainable transport;</li> <li>9. Supports cycling through provision of dedicated facilities and incentives such as priority camping locations; and</li> <li>10. Provide public transport connections to adjacent townships (accommodation) and key transport nodes such as Airports and railways, where applicable.</li> </ol>	
<p><b>Comment:</b> Amendments reflect the parameters of the approved five-year trial.</p>		
	<p><i>Traffic Management</i></p> <p>Develop a traffic management plan covering 'bump in, bump out' and event days that:</p> <ol style="list-style-type: none"> <li>1. Controls traffic movement past the site, and traffic and pedestrian movements onto the site;</li> <li>2. Facilitates efficient processing and inspection of event patron's vehicles within the site;</li> <li>3. Maintains a minimum Level of Service at the Yelgun Interchange of LoS <del>D</del> C and LoS D along the Tweed Valley Way;</li> <li>4. <del>Maintains a Degree of Saturation of less than 0.95 at the Yelgun Interchange;</del></li> <li>5. <del>Maintains a maximum Average Delay (s/veh.) 56 seconds at the Yelgun interchange;</del></li> <li>6. Results in a Queue Length (95% back of queue in metres) of no more than 97 m from the Give Way yield line on the southbound off-ramp and <del>247</del> 210 m from the Give Way yield line on the northbound off-ramp;</li> <li>7. Installs variable messaging signs on the Pacific Highway approaching the Yelgun Interchange warning of special event traffic and to watch for queues on the off-ramps;</li> <li>8. Provides temporary special event 40 kph speed limits to cover the link road between the Yelgun Interchange roundabout and Tweed valley Way;</li> <li>9. Monitors car occupancy, mode share and traffic impacts during event days and the</li> </ol>	

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Commitment Topic	Commitment Details	Commitment undertaken by who and when
	<p>provision of a report to the General Manager, Parklands documenting findings;</p> <p>10. Provides event site access over an appropriate timeframe prior to the event to reduce peak traffic movements</p> <p>11. Is prepared by a certified traffic control planner;</p> <p>12. Is approved by the relevant roads authority;</p> <p>13. Is prepared in accordance with Australian Standard 1742 and the RTA's Guide to Traffic Management for Events;</p> <p>14. Secures approval for temporary closure and access control of Jones Road for event days;</p> <p>15. Secures approval for access control (residents and visitors only) of Yelgun Road for event days;</p> <p>16. Provides a 'bump in' and 'bump out' schedule to the General Manager, Parklands;</p> <p>17. Uses RTA accredited traffic control contractors on public roads; and</p> <p>18. Ensures any serious traffic related incidents and/or delays are reported to the General Manager, Parklands as soon as practicable; and</p> <p>19. Requires a 'special event clearway authority' to be obtained for the relevant sized which authorises towing of illegally parked vehicles.</p> <p>Traffic impact research</p> <p>1. Planning for events shall be carried out in accordance with the publication entitled <i>Guide to Traffic Transport Management for Special Events</i> by the RTA and provide for data collection to include, but not limited to:</p> <ul style="list-style-type: none"> <li>• Numbers of staff, entertainers, support staff and set-up staff, when they arrive, vehicles involved, including type of vehicle with arrival and departure rates and direction of travel;</li> <li>• Patronage of bus services, including the number of patrons on buses, bus occupancy rates, arrival and departure rates of buses, timing of bus arrival and departure;</li> <li>• Number of campers, arrival and departure rates, vehicle occupancy, direction of travel;</li> <li>• Number of day patrons, vehicle occupancy, arrival and departure rates and direction of travel;</li> <li>• Background counts on the Pacific Highway and Tweed Valley Way;</li> </ul>	

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	Commitment Topic	Commitment Details	Commitment undertaken by who and when
		<ul style="list-style-type: none"> <li>• Number of patrons that attend by bicycle, arrival and departure rates;</li> <li>• Queuing monitoring and recording of maximum queue lengths during peak traffic periods;</li> <li>• Traffic arrival and departure and occupancy rates;</li> <li>• Pick up and set-down vehicle arrival, departure and occupancy rates.</li> </ul>	
<p><b>Comment:</b> Changes and deletions contained within points 3, 4, 5 and 6 are based on comments received by Roads and Maritime Services during consultation undertaken on 4 August 2014.</p>			
C9	Environmental Management	<p>Parklands will adopt, implement, monitor and review NBP Standard 003 - Environmental Management. In accordance with Clause 3 of the standard, Parklands/event operators will conform with the following applicable Standard Parameters:</p> <ol style="list-style-type: none"> <li>1. Event operators shall only operate within the approved event area as defined in the attached event area map;</li> <li>2. All staff and contractors are to undertake Parkland's Environmental induction prior to accessing the site. Documented records shall be maintained covering the environmental induction process;</li> <li>3. <del>No dogs will be allowed onsite;</del> <b>No dogs (with the exception of trained assistance dogs) are permitted on the site. Trained security guard dogs are allowed at all times, while under the control of an authorised person;</b></li> <li>4. <del>Implement the environmental repair works described in Commitment B12;</del></li> <li>5. All temporary drain crossings shall be managed to minimise sedimentation and potential discharge of contaminants;</li> <li>6. Implement a suitable buffer between edge of forest blocks and any event lighting wherever possible;</li> <li>7. <del>Direct all event lighting downwards, where possible;</del></li> <li>8. <del>Use low pressure sodium vapour lights which are less attractive to insects or bats, where possible;</del></li> <li>9. Any installations which rely on artificial lighting should be located in open areas away from forest blocks. <b>Individual trees</b></li> </ol>	Parklands – prior to and during event usage.

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	Commitment Topic	Commitment Details	Commitment undertaken by who and when
		<p style="color: green;">within the event area can be lit for installation purposes in a manner that is consistent with lighting principles addressed within the Flora and Fauna Management Plan;</p> <ol style="list-style-type: none"> <li>10. Minimise or avoid lighting throughout the entire night i.e. once performances cease, lighting should be reduced or eliminated to allow a dark period for fauna to use or traverse the site. Where lighting is required for safety purposes provide the minimum necessary and avoid illuminating forest habitats;</li> <li>11. No use of fireworks;</li> <li>12. Use footlights instead of overhead lights where possible;</li> <li style="color: green;">13. Overhead lighting should be shielded and directed downwards to minimise light spill where possible;</li> <li>14. All internal traffic not to exceed <del>30</del> <span style="color: green;">25</span> kph;</li> <li>15. Minimise the time that temporary fencing is erected to reduce barriers to fauna and conduct fauna search prior to securing fenced area;</li> <li>16. Experienced fauna management crew to be onsite for the duration of the event; and</li> <li>17. Environmental monitoring to be undertaken prior to, during and post all moderate and major events.</li> </ol>	
<p><b>Comment:</b> Amendments reflect knowledge and experienced gained during trial events.</p>			
C10	Water Management	<p>Parklands will adopt, implement, monitor and review NBP Standard 004 – Water Management. In accordance with Clause 3 of the standard, Parklands/event operators will conform with the following applicable Standard Parameters:</p> <ol style="list-style-type: none"> <li>1. Engage water cartage contractor(s) with the capacity to deliver quantities of potable water for the event usage and camping as follows; <ul style="list-style-type: none"> <li>▪ Events - 1 kL/1,000 persons/day</li> <li>▪ Camping (with showers) - 28kL/1,000 persons/day</li> <li>▪ Camping (with pay for use showers) – 7 kL/1,000 persons/day</li> </ul> </li> <li>2. Where possible, utilise larger capacity water cartage vehicles to reduce truck movements;</li> <li>3. Develop a potable water delivery schedule covering 'bump in, bump out' and event days</li> </ol>	Parklands – prior to and during event usage.

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	Commitment Topic	Commitment Details	Commitment undertaken by who and when
		<p>to ensure an adequate supply of potable water;</p> <ol style="list-style-type: none"> <li>4. Fill the Parkland's temporary bulk potable water storage tank(s) to a minimum 30% capacity prior to 'bump in';</li> <li>5. Fill the Parkland's temporary bulk potable water storage tank(s) to a minimum 100% capacity three days prior to the event;</li> <li>6. Have samples of bulk potable water storage tested at a NATA registered laboratory prior to use for the event; and</li> <li>7. Appoint a representative with sole responsibility for arranging water supply, delivery, testing (where applicable) and monitoring of water reserve levels.</li> </ol>	
C11	Wastewater Management	<p>Parklands will adopt, implement, monitor and review NBP Standard 005 – wastewater Management. In accordance with Clause 3 of the standard, Parklands/event operators will conform with the following applicable Standard Parameters:</p> <ol style="list-style-type: none"> <li>1. Provide suitable low flow portable toilets and shower amenities;</li> <li>2. Toilets and amenities shall be strategically placed in clusters within the event area and camping areas (if applicable). Such clustered toilets and amenities should be connected to Parkland's 10,000 L temporary sewage holding tanks;</li> <li>3. Provision of showers and toilets shall comply with BCA;</li> <li>4. All food stall areas and catering (including backstage area) shall be plumbed to a suitably sized Parkland's temporary wastewater holding tank;</li> <li>5. Engage wastewater cartage contractor(s) with the capacity to adequately service multiple 10,000 L temporary holding tanks and various sized wastewater holding tanks;</li> <li>6. Transfer of sewage and wastewater from temporary holding tanks to trucks shall be done via suction pumping with appropriate secure coupling mechanisms and emergency stop provisions to cease transfer of material if required;</li> <li>7. All sewage and wastewater temporary holding tanks shall suitably fenced and cordoned off from public access where necessary;</li> <li>8. Sewage and wastewater shall be disposed of</li> </ol>	Parklands – prior to and during event usage.

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	Commitment Topic	Commitment Details	Commitment undertaken by who and when
		<p>to a licensed sewage treatment plant facility;</p> <ol style="list-style-type: none"> <li>9. Develop a sewage and wastewater disposal schedule covering 'bump in, bump out' and event days to ensure the adequate removal of material to a licensed sewage treatment plant;</li> <li>10. Appoint a representative with sole responsibility for wastewater and sewage management and disposal.</li> <li>11. Prior to commissioning of the reticulated sewage system on the site, a comprehensive operations, monitoring and maintenance plan is to be developed for the system submitted to the Department of Planning.</li> <li>12. <del>Implement any measures necessary to ensure no overflow occurs from the effluent holding dam or wetlands and no surface runoff occurs from the irrigation area.</del></li> </ol>	<p>Parklands - prior to commissioning of the reticulated sewage system on the site.</p>
C12	Fire Management	<p>Parklands will adopt, implement, monitor and review NBP Standard 006 – Fire Management. In accordance with Clause 3 of the standard, Parklands/event operators will conform with the following applicable Standard Parameters:</p> <ol style="list-style-type: none"> <li>1. The event will comply with the requirements of Parkland's Bushfire Management Plan (BMP) and the event specific Bushfire Emergency Evacuation Plan (BEEP). The BEEP shall be prepared for review by the <i>RFS</i> and <i>RWG</i>, and approved by the <i>LEMC</i>.</li> <li>2. The objective of the plans is to ensure the coordinated response to emergencies by all agencies having responsibilities and functions in emergencies.</li> </ol> <p><b>The BEEP specifically includes:</b></p> <ol style="list-style-type: none"> <li>3. Roles and responsibilities of person's co-ordinating the event;</li> <li>4. Roles and responsibilities of persons remaining onsite following evacuation;</li> <li>5. Procedures for contacting emergency services e.g. NSW Rural Fire service District Office, NSW Fire Brigades, NSW Police Service, NSW Ambulance Service and the State Emergency Service;</li> <li>6. Training of event staff and security personnel;</li> <li>7. Police Officers to be onsite for the duration of the event;</li> <li>8. Arrangements for <i>RFS</i> personnel to be available to service the site during the event;</li> </ol>	

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Commitment Topic	Commitment Details	Commitment undertaken by who and when
	<p>9. Location of assembly areas;</p> <p>10. Location of access and egress roads;</p> <p>11. Circumstances where the site will be evacuated; and</p> <p>12. Candidate location/s where evacuated persons will be directed.</p> <p><b>Other requirements</b></p> <p>13. All stages/facilities/camping areas shall be set back a minimum of 10 m (defendable space) from areas of unmanaged bushland with this area kept clear of obstructions at all times during events;</p> <p>14. A 10,000 L dedicated water supply shall be provided for each stage and camping area for fire fighting purposes;</p> <p>15. Any open fire requires a bonfire management plan submitted to and approved by the Rural Fire Service;</p> <p>16. Emergency evacuation plans for bushfires must be available onsite under the control of the site/event manager;</p> <p>17. The following essential fire or other safety measures must be provided, including:</p> <p>18. Portable fire extinguisher and fire blankets;</p> <p>19. Emergency Lighting;</p> <p>20. Exit Signs;</p> <p>21. Emergency evacuation plan;</p> <p>22. Fire fighting equipment;</p> <p>23. Fire Marshals (fire safety officers);</p> <p>24. Fabrics (Flammability Index);</p> <p>25. Access (Paths of Travel).</p> <p>26. Once installed the essential services are to be the subject of a fire safety certificate. That certificate must be submitted to <i>Council</i>;</p> <p>27. Portable fire extinguishers of an approved type having at least the protection effectiveness of a 4.5kg carbon dioxide type extinguisher shall be provided to locations in accordance with the Certifying Authority's requirements as follows:</p> <ul style="list-style-type: none"> <li>• At the rear, side and back stage area and mixing stands of all Stages;</li> <li>• Front of house mixing areas;</li> <li>• VIP and administration tents;</li> <li>• Mobile site offices;</li> <li>• Relaxation and dining tents;</li> <li>• Bar areas;</li> <li>• Café and catering areas; and</li> </ul>	

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Commitment Topic	Commitment Details	Commitment undertaken by who and when
	<ul style="list-style-type: none"> <li>• Any other areas determined by <i>Council</i> onsite.</li> </ul> <p>28. Additional Portable Fire Extinguishers will be provided throughout the temporary camping areas under the control of the Fire and Camping Marshals;</p> <p>29. Certification confirming the adequacy of the type, size and location of portable fire extinguishers and fire blankets shall be submitted prior to the commencement of the event;</p> <p>30. All such fire safety measures are to be maintained for the duration of the event.</p> <p>31. Woodpiles, combustible material storage sheds, large quantities of garden mulch and stacked flammable building materials shall not be located within the asset protection zone;</p> <p>32. All temporary tent structures must satisfy the flammability index as nominated by the Building Code of Australia;</p> <p>33. All curtains and blinds as, stage backdrops and attached décor to be provided to all place of public entertainment stages, will satisfy the Building Code of Australia;</p> <p>34. All habitable permanent structures to be assessed as Special Fire Protection purpose;</p> <p>35. The <i>RFS</i> shall be notified a minimum of three (3) months prior to the hosting of an event; and</p> <p>36. Emergency evacuation plans for bushfire must be available onsite under the control of the site/event manager. This plan is to be located at each stage, at all exits from the site and at the site office.</p> <p><del>37. An Asset Protection Zone (APZ) of a minimum 10 metres from areas of bushland are required for all stages, facilities and camping;</del></p> <p><del>38. Rural Fire Service personnel shall be engaged for the duration of the event;</del></p> <p><del>39. Woodpiles, combustible material storage sheds, large quantities of garden mulch and stacked flammable building materials shall not be located within the APZ;</del></p> <p><del>40. A 10,000 litre dedicated fire-fighting water supply shall be provided for the duration of the event for each stage and camping area.</del></p> <p><del>41. All temporary tent structures must satisfy the flammability index as nominated by the</del></p>	

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Commitment Topic	Commitment Details	Commitment undertaken by who and when
	<p>Building Code of Australia;</p> <p><del>42.</del> All curtains and blinds, stage backdrops and attached décor to be provided to all place of public entertainment stages, will satisfy the Building Code of Australia;</p> <p><del>43.</del> Provision of portable fire extinguishers to service each temporary structure required to satisfy the Building Code of Australia provisions (i.e. not limited to but including performance stages, front of house mixing desks, VIP, artists, administration, bars, restaurants, cinemas, etc);</p> <p><del>44.</del> Additional Portable Fire Extinguishers will be provided throughout the temporary camping areas under the control of the Fire and Camping Marshals; and</p> <p><del>45.</del> Certification confirming the adequacy of the type, size and location of portable fire extinguishers and fire blankets shall be submitted prior to the commencement of the event.</p> <p><del>10.</del> Prior to each major event a bonfire management plan shall be submitted to and approved by the Rural Fire Services.</p> <p><del>11.</del> The Bushfire Management Plan will address peat fire prevention and contingencies.</p> <p><del>12.</del> The RFS will be a key governmental agency invited to attend the Regulatory Working Group as necessary.</p> <p><del>13.</del> A Bushfire Emergency Evacuation Plan shall be prepared prior to use of the site. The objective of the plan is to ensure the co-ordinated response to emergencies by all agencies having responsibilities and functions in emergencies. The draft Bushfire Emergency Evacuation Plan will be reviewed by NSW RFS. The plan shall specifically include:</p> <ul style="list-style-type: none"> <li><del>a</del> — Roles and responsibilities of person's co-ordinating the event.</li> <li><del>b</del> — Roles and responsibilities of persons remaining onsite following evacuation.</li> <li><del>c</del> — Procedures for contacting emergency services e.g. NSW Rural Fire service District Office, NSW Fire Brigades, NSW Police Service, NSW Ambulance Service and the State Emergency Service.</li> <li><del>d</del> — Training of event staff and security personnel</li> <li><del>e</del> — Number of Police Officers to be onsite</li> </ul>	

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Commitment Topic	Commitment Details	Commitment undertaken by who and when	
	<p style="text-align: center;"><del>for the duration of the event.</del></p> <p><del>f— Number of RFS personnel to be available onsite during the event and available equipment.</del></p> <p><del>g— Location of assembly areas.</del></p> <p><del>h— Location of access and egress roads.</del></p> <p><del>i— Situations where the site will be evacuated.</del></p> <p><del>j— Location/s where evacuated persons will be directed.</del></p> <p><del>14. The Emergency Evacuation Plan shall be reviewed following each major event. Such review to include event and site management, representatives of the Police, RFS and security provider.</del></p> <p><del>15. A Bushfire Management Plan shall be prepared prior to use of the site. The draft Bushfire Management Plan shall be reviewed by NSW RFS. The plan will specifically include:</del></p> <ul style="list-style-type: none"> <li><del>▪ Demonstration that North Byron Parklands has the necessary experience, resources and funds to undertake the directions contained within the BMP in perpetuity.</del></li> <li><del>▪ The range of specific management options available to the development, its prescription and its location;</del></li> <li><del>▪ The predicted timing intervals of the management options.</del></li> <li><del>▪ The range of specific management options for managing the risk of the potential for ignition of peat soils</del></li> </ul> <p><del>16. All habitable permanent structures to be assessed as Special Fire Protection purpose.</del></p> <p><del>17. All events involving the conference centre and associated accommodation and cabins be approved subject to specific reference in the Evacuation Emergency Plan.</del></p> <p><del>18. Major Events shall be notified to the RFS a minimum of three (3) months prior to such event. Small and moderate events shall be notified a minimum of 4 weeks prior to such event(s).</del></p>		
	<p><b>Comment:</b> The inserted requirements comply with the approved elements of the current Bushfire Management Plan and the Bushfire Emergency Evacuation Plans prepared and approved covering the four events held to date. Deleted requirements are those contemplated both prior to operating any events and being granted approval for the BMP and the BEEP by the relevant authority.</p>		
C13	Offsite	Parklands will adopt, implement, monitor and	Parklands – prior to,

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	<b>Commitment Topic</b>	<b>Commitment Details</b>	<b>Commitment undertaken by who and when</b>
	Management	<p>review NBP Standard 007 – Offsite Management. In accordance with Clause 3 of the standard, Parklands/event operators will conform with the following applicable Standard Parameters:</p> <ol style="list-style-type: none"> <li>1. Develop an Offsite Response Strategy that includes but is not limited to the provision of an offsite response team;</li> <li>2. Provide a dedicated community hotline for the duration of the event;</li> <li>3. Place advertisements in all local papers regarding event times, traffic considerations, road closures, community hotline details and any other relevant community information;</li> <li>4. Provide security services along Jones Road to ensure patrons or unauthorised persons are not permitted either on the road, adjacent to the road or within the vicinity of residential dwellings;</li> <li>5. Provide security services, in consultation with the Parklands Regulatory Working Group, within the immediate locality to manage any potential for unauthorised persons to enter private property or the Billinudgel Nature Reserve;</li> <li>6. Provide a litter response team for the duration of the event covering Jones Road, Tweed Valley Way, Yelgun Road and the Yelgun Interchange and adjacent to and within the Billinudgel Nature Reserve;</li> <li>7. Provide a litter response team for the duration of the event covering designated event shuttle bus stops;</li> <li>8. Provide resources to identify illegal camping and/or illegal parking within a 3 km radius of the event site. Such identified activities shall be reported to the Byron Shire Council and records of such maintained;</li> <li>9. Provide ongoing coordinated consultation with local communities and businesses through the Parkland's Community Liaison Committee; and</li> <li>10. Provide ongoing consultation with statutory authorities including but not limited to the Police, National Parks and Wildlife Services, Byron Shire Council, Roads and Traffic Authority and the Rural Fire Service through the Parklands Regulatory Working Group.</li> </ol>	during and after event usage as specified.
C14	Noise Management	Parklands will adopt, implement, monitor and review NBP Standard 008 - Noise Management.	Parklands – prior to, during and after event

# ANNEXURE

	Commitment Topic	Commitment Details	Commitment undertaken by who and when
		<p>In accordance with Clause 3 of the standard, Parklands/event operators will conform with the following Standard Parameters:</p> <ol style="list-style-type: none"> <li>1. <del>Develop a</del> <b>Comply with the requirements of the approved</b> Noise Management Plan (NMP) to manage noise prior to, during and after events.</li> <li>2. <b>Prepare and implement an Acoustic Monitoring Program (AMP) in consultation with the RWG. The AMP must be submitted to the Secretary at least 60 days prior to the commencement of the event or as otherwise agreed by the Secretary;</b></li> <li>3. <b>The AMP shall include the following:</b> <ul style="list-style-type: none"> <li>• receptors and monitoring locations;</li> <li>• sensitive ecological monitoring locations;</li> <li>• selection of monitoring locations;</li> <li>• attended noise monitoring;</li> <li>• unattended noise monitoring;</li> <li>• noise monitoring methodology;</li> <li>• event noise monitoring;</li> <li>• sound checks and rehearsals;</li> <li>• event acoustic controls; and</li> <li>• reporting.</li> </ul> </li> <li>1. <del>Hand deliver information leaflets outlining event operation times and provide a continuously manned complaints hotline number to the nearest residential receptors (details to be provided by the General Manager, Parklands);</del></li> <li>2. <del>Provide a continuously manned complaints hotline number and written records of all complaints received;</del></li> <li>3. <del>Advertise in one or more local newspapers event operating times and the complaints hotline number at least 2 weeks prior to the event;</del></li> <li>4. <del>Engage an independent noise consultant who will attend the boundary of a complainant's property to monitor noise levels. If noise levels are found to be excessive the consultant will contact the stage manager(s) via radio and/or mobile phone to request a reduction in volume;</del></li> <li>5. <del>Continuous front of house music levels shall be monitored for all main stages and shall provide sound engineers with warnings when specified noise criteria is approached;</del></li> <li>6. <del>Noise levels shall initially not exceed 102 dB(A) at all front of house mixing desks until</del></li> </ol>	usage as specified.

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Commitment Topic	Commitment Details	Commitment undertaken by who and when
	<p>sound checks confirm that compliance with the noise criteria stipulated in the Noise Management Plan for North Byron Parklands is achieved (note, the 102 dB(A) level is for main stages when measured 5 metres away from its respective speak systems. For dance areas, bars and cafes the level is 98 dB(A) when measured 5 metres away from its respective speak systems);</p> <p><del>7. Comply at all times with the noise criteria stipulated in the Noise Management Plan for North Byron Parklands;</del></p> <p><del>8. Achieve the following noise management objectives at residential receptors:</del></p> <ul style="list-style-type: none"> <li><del>• Control LAeq levels;</del></li> <li><del>• Control the bass frequencies by control of the dB(C) max levels; and</del></li> <li><del>• After midnight achieve a 55dB(A) level outside bedroom windows.</del></li> </ul> <p><del>9. Event PA's shall be designed and installed to minimise noise spillage;</del></p> <p><del>10. Event stage managers shall be allocated to each PA based music stage;</del></p> <p><del>11. Event stage managers shall be authorised to override mixing desks if sound exceeds the above level (including removal of power if the music act's own sound engineer refuses to comply with direction from stage management);</del></p> <p><del>12. Event stage managers shall comply with all directions from the independent noise consultant to ensure that recommended noise levels are being met; and</del></p> <p><del>13. A post event noise report shall be provided to the General Manager, Parklands detailing complaints, remedial action, noise levels and data from unattended noise loggers.</del></p> <p><del>B. Parklands will implement best practice mitigation measures listed within the Noise Management Strategy (Technical Paper D) in consultation with the three residents identified as potentially being exposed to elevated noise emissions (R05, R13 and R13). Parklands will undertake noise monitoring during events to confirm effectiveness of noise mitigation measures.</del></p>	<p>Parklands – prior to, during and after event usage as specified.</p>
	<p><b>Comment:</b> The inserted requirements comply with the elements of the Noise Management Plan and the Acoustic Monitoring Program listed in C16 and C17 respectively of the consent. Deleted requirements are those contemplated both prior to operating any events and being granted</p>	

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Commitment Topic	Commitment Details	Commitment undertaken by who and when
approval for the NMP and the AMP by the Department.		
C15	<p>Evacuation Management</p> <p>Parklands will adopt, implement, monitor and review NBP Standard 009 - Evacuation Management. In accordance with Clause 3 of the standard, Parklands/event operators will conform with the following applicable Standard Parameters:</p> <ol style="list-style-type: none"> <li>1. Develop an evacuation management plan covering but not limited to fire, flood, structural collapse, serious injury/serious assault, bomb threat, contamination/spills and outbreak of disease;</li> <li>2. A copy of the final evacuation management plan prepared in consultation with Byron Shire Council, District Emergency Management Officer, local Police and State Emergency Services shall be provided to these organisations;</li> <li>3. Appoint a dedicated emergency coordinator; and</li> <li>4. Designate dedicated assembly and evacuation points and include these on all maps and plans.</li> </ol>	<p>Parklands – prior to, during and after event usage as specified.</p>
C16	<p>First Aid Management</p> <p>Parklands will adopt, implement, monitor and review NBP Standard 0010 - Safety Management. In accordance with Clause 3 of the standard, Parklands/event operators will conform with the following applicable Standard Parameters:</p> <ol style="list-style-type: none"> <li>1. Develop a medical plan which details roles and responsibilities of all stakeholders should an incident occur. This plan must also include strategies to manage potential major incidents;</li> <li>2. The plan should detail the levels of care required to effectively manage situations which may arise from the different phases of the event, i.e. 'bump in', event, camping and 'bump out' and consider the recommended first aid posts and personnel (included in the Standard);</li> <li>3. The plan must ensure adequate equipment and stock is available and include strategies to access additional equipment should there be an extreme call on services;</li> <li>4. Access routes for ambulance vehicles are required, as is the ability to restrict all other traffic from the roadway should emergency ambulance movement be required;</li> <li>5. A dedicated helipad is required to ensure evacuation of critical patients;</li> </ol>	<p>Parklands – prior to, during and after event usage as specified.</p>

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	Commitment Topic	Commitment Details	Commitment undertaken by who and when
		<ol style="list-style-type: none"> <li>6. Appropriately advertise that event attendees should wear adequate footwear, drink sufficient water and be prepared for climatic conditions such as sun exposure and weather protection;</li> <li>7. Contract experienced health care providers to establish and run the medical facilities to reduce the impact on local health services;</li> <li>8. Consult with relevant hospitals, ambulance service and health department prior to the event;</li> <li>9. Designate medical service points and include these on all maps and plans; and</li> <li>10. Provision of onsite ambulance services, where appropriate.</li> </ol>	
C17	Camping Management	<p>Parklands will adopt, implement, monitor and review NBP Standard 0011 – Camping Management. In accordance with Clause 3 of the standard, Parklands/event operators will conform with the following applicable Standard Parameters:</p> <ol style="list-style-type: none"> <li>1. Develop a camping management plan in accordance with the project application approved camping prescriptions covering but not limited to camping layout, toilets and shower amenities, camp marshal and fire marshal locations, potable water suppliers, wastewater storage tanks, fire fighting water tanks and fire extinguishers;</li> <li>2. Vehicle speed limits in camp grounds shall be limited to 25 kph;</li> <li>3. All camping areas are to be provided with camp marshals for the purposes of monitoring and maintaining camper safety and amenity and any fire safety provisions ancillary to the event fire fighting services.</li> <li>4. All camping areas are to be provided with fire marshals (in addition to the camping marshals who oversee the general patron camping areas). All fire marshals will be trained and competent in the use of portable fire extinguishers and emergency management procedures;</li> <li>5. An area shall be designated for disabled campers adjacent to the disabled toilet and shower amenities, and adjoining the all weather surface road providing direct access to the event site; and</li> <li>6. Appoint a dedicated camping coordinator for the duration of the event.</li> </ol>	Parklands – prior to, during and after event usage as specified.

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	Commitment Topic	Commitment Details	Commitment undertaken by who and when
C18	Flooding Management	<p>Parklands will adopt, implement, monitor and review NBP Standard 0012 - Flooding Management. In accordance with Clause 3 of the standard, Parklands/event operators will conform with the following applicable Standard Parameters:</p> <ol style="list-style-type: none"> <li>1. Develop and implement a significant rainfall event forecasting system. An automatic rainfall recording station, stream height gauging stations and soil moisture sensors must be installed onsite by a suitably qualified person. The data must be made available for collection remotely via telemetry, with data connections to the administration office on the subject site and relevant agencies. The flood monitoring equipment shall be installed as early as possible to support the preparation of the flood evacuation plan. A certificate from a suitably qualified engineer, with experience in flood matters, together with suitable documentation from the installer, certifying that the flood monitoring equipment has been installed correctly and at appropriate locations, must be submitted to the Department prior to the first event.</li> <li>2. A flood evacuation/contingency plan for the proposed development in accordance with Part K – Flood Liable Lands of Byron Shire Council Development Control Plan 2002 must be submitted to relevant agencies. The plan must clearly identify evacuation routes, ground levels of those evacuation routes, depth and time of flooding along the evacuation routes, method of evacuating the number of people and vehicles at the site, critical rainfall events for cancellation or evacuation of the event, and methods and location of flood monitoring. Development of the flood evacuation/contingency plan must be carried out in liaison with the local State Emergency Services. The plan must be assessed and updated by a suitably qualified engineer for each event utilising the data collected from the flood monitoring equipment and any previous evacuation review. A certificate from a suitably qualified engineer, with experience in flood-related matters, certifying the adequacy of the plan and that the event structures left onsite will</li> </ol>	<p>Parklands – prior to, during and after event usage as specified.</p> <p>Parklands – prior to event usage of the site.</p> <p>Parklands – prior to event usage of the site.</p>

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	Commitment Topic	Commitment Details	Commitment undertaken by who and when
		<p>not have any impact on flood levels, must be submitted to relevant agencies.</p> <ol style="list-style-type: none"> <li>3. Review Bureau of Meteorology website information prior to, during and after the event covering rainfall events, expected flood peaks, road closures, weather forecasts and emergency services;</li> <li>4. Liaise with SES local coordinator and utilise the SES text extreme weather alert notification system;</li> <li>5. Provide flood evacuation signage and fencing stored in strategic flood free areas;</li> <li>6. Maintain all drainage channels (free of obstructions);</li> <li>7. Develop a car park management plan that distributes the maximum number of vehicles to more flood free areas of the site (as a precaution regardless of imminent flood risk or not);</li> <li>8. This plan should also cover how patrons and their vehicles might be safely transported off flood affected areas of the site in the event of a flood;</li> <li>9. Ensure there is an appropriate flood evacuation plan as part of the event's overall emergency evacuation planning; and</li> <li>10. Consult with and provide flood evacuation plans to the Byron Shire Council, District Emergency Management Officer, local Police and State Emergency Services.</li> <li>11. Utilise that part of the car park not affected by a five-year ARI flood first to minimise cars parked within the flood-affected area.</li> </ol>	<p>Parklands – prior to, during and after any event.</p> <p>Parklands – prior to and during any event.</p> <p>Parklands – at all times.</p> <p>Parklands – at all times.</p> <p>Parklands – prior to event usage of the site.</p> <p>Parklands – prior to event usage of the site.</p> <p>Parklands – prior to event usage of the site.</p> <p>Parklands – at all times.</p>
C19	Temporary Structures	<p>Parklands will adopt, implement, monitor and review NBP Standard 0013 - Temporary Structures. In accordance with Clause 3 of the standard, Parklands/event operators will conform with the following applicable Standard Parameters:</p> <ol style="list-style-type: none"> <li>1. All temporary structures shall meet the requirements set out in the project application approved temporary structures prescriptions;</li> <li>2. Provision of the live and dead loads that each temporary structure is designed to meet;</li> <li>3. A list of any proposed fire safety measures to be provided for the use for each</li> </ol>	<p>Parklands – prior to each event usage on the site.</p>

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	Commitment Topic	Commitment Details	Commitment undertaken by who and when
		<p>temporary structure;</p> <ol style="list-style-type: none"> <li>4. In the case of a temporary structure proposed to be used as an entertainment venue - a statement as to how the performance requirements of Part B1 and NSW Part H102 of Volume One of the <i>Building Code of Australia</i> are to be complied with;</li> <li>5. Documentation for any accredited building product or system sought;</li> <li>6. Details on the heights of any temporary structure and their construction materials; and</li> <li>7. An occupation certificate for each temporary structure.</li> </ol>	
C20	Waste Management	<p>Parklands will adopt, implement, monitor and review BNP Standard 014 – Waste Management. In accordance with Clause 3 of the Standard, Parklands/Event Operators shall prepare and implement a management plan to control littering adjacent to and within the Billinudgel Nature Reserve and other DECCW land parcels.</p>	<p>Parklands – prior to event usage of the site.</p>
C21	Water Management	<p>Parklands will comply with all statutory requirements relating to water management. In particular:</p> <ol style="list-style-type: none"> <li>1. All groundwater licences for monitoring bores shall be obtained and associated works appropriately authorised prior to works commencing. All Form As associated with the construction of bores must be submitted to NOW at the time drilling is undertaken.</li> <li>2. For all areas on the site that require dewatering, a water licence under Part 5 of the Water Act 1912 shall be obtained prior to commencement of work. This water licence application must be accompanied by a groundwater and excavation monitoring program and acid sulphate soils contingency plan, developed to the satisfaction of NOW.</li> <li>3. Where taking surface water, all works shall be appropriately licensed. If and where the storage capacity of the constructed dams exceeds the maximum harvestable right for the property or such works are proposed to be constructed on a river, as defined under the Water Management Act 2000, then a water volume reflecting the water taken from the relevant water source will also be required to be licensed.</li> </ol>	<p>Parklands – prior to works commencing.</p> <p>Parklands – attained if required prior to commencement of work.</p> <p>Parklands – attained if required prior to taking surface water.</p> <p>Parklands – all stormwater</p>

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Commitment Topic	Commitment Details	Commitment undertaken by who and when	
	<p>4. To aid in the protection of receiving water source quality, all stormwater runoff must be adequately treated at its source and/ or diverted through the stormwater treatment process designed for the site, prior to the stormwater being discharged to surface water and groundwater sources.</p> <p>5. All wastewater treatment ponds (effluent holding ponds, effluent polishing wetlands) shall be constructed above the water table or must be appropriately lined with an impermeable liner to prevent groundwater contamination.</p>	<p>runoff will be adequately treated at its source and/ or diverted through the stormwater treatment process designed for the site, prior to the stormwater being discharged to surface water and groundwater sources.</p> <p>Parklands – All wastewater treatment ponds shall be constructed above the water table or appropriately lined with an impermeable liner prior to their use.</p>	
C22	Soil Management	<p>Parklands will prepare and implement a management plan to monitor bulk soil density to ensure the soil structure is not degraded and soil compaction is minimised.</p>	<p>Parklands – prior to event usage of the site.</p>

### A.2 CONCEPT APPROVAL

<b>Application No.:</b>	MP 09_0028
<b>Proponent:</b>	Billinudgel Property Pty Ltd
<b>Approval Authority:</b>	Minister for Planning and Infrastructure
<b>Land:</b>	Lots 46, 402, 403, 404, 410 DP 755687; Lots 10, 12, 14 DP 875112; Lots 2, 12 DP 848618; Lot 101 DP 856767; Lots 30, 31 DP 880376; Lots 101, 102, 107 DP 1001878; and Lot 1 DP 1145020, Tweed Valley Way and Jones Road, Yelgun – Byron local government area.
<b>Project:</b>	<p>Cultural Events Site, comprising:</p> <ul style="list-style-type: none"> <li>• use of the site for cultural, educational and outdoor events with ancillary camping and car parking;</li> <li>• temporary and demountable event infrastructure;</li> <li>• a spine road;</li> <li>• a water treatment plant;</li> </ul>

	<ul style="list-style-type: none"> <li>• a wastewater treatment plant;</li> <li>• a cultural centre;</li> <li>• a conference centre and associated accommodation; and,</li> <li>• a comprehensive vegetation management plan</li> </ul>
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**Comment:** In the original Concept Approval documentation, demountable event infrastructure was contemplated. With this modification, the minor typographic oversight is proposed to be corrected.

### A.3 PART A – NOTES RELATING TO THE DETERMINATION OF 09\_0028

#### 2 Responsibility for other consents/agreements

The Proponent is solely responsible for ensuring that all additional consents and agreements are obtained from other authorities, as relevant.

#### 3 Appeals

The Proponent has the right to appeal to the Land and Environment Court in the manner set out in the *Environmental Planning and Assessment Act 1979* and the *Environmental Planning and Assessment Regulation 2000*.

### PART B – DEFINITIONS

In this approval,

**Act** means the *Environmental Planning and Assessment Act 1979*.

**Advisory Notes** means advisory information relating to the approved development but do not form a part of this approval.

**BCA** means Building Code of Australia.

**Construction Certificate** means a construction certificate for bulk earthworks or civil works unless specified otherwise.

**Council** means Byron Shire Council.

**Department** means the Department of Planning and Infrastructure or its successors.

~~Director-General~~ **Secretary** means the ~~Director-General~~ **Secretary** of the Department.

**Environmental Assessment** means the Environmental Assessment prepared by SJ Connelly CPP Pty Ltd and dated August 2010, including all Appendices.

**Minister** means the Minister for Planning and Infrastructure.

**Project** means the project as described in Term A1 of this approval.

**PCA** means a Principal Certifying Authority and has the same meaning as Part 4A of the Act.

**Preferred Project Report** means the Preferred Project Report prepared by SJ Connelly CPP Pty Ltd dated February 2011.

**Proponent** means Billinudgel Property Pty Ltd or any party acting upon this approval.

**Regulation** means the *Environmental Planning and Assessment Regulation 2000*.

**Site** has the same meaning as the land identified in Schedule 1.

## **A.4 SCHEDULE 2**

### **PART A – TERMS OF APPROVAL**

#### **A1 Concept plan approval**

- 1) Concept plan approval is granted to use the site for outdoor, cultural or educational events with ancillary event camping and car parking.
- 2) The project infrastructure and works are to be developed as generally described in the following three (3) stages:

##### **Stage 1**

- (a) A spine road, shuttle bus turnaround area and ancillary event laneways;
- (b) Upgrading of Jones Road;
- (c) An underpass beneath Jones Road;
- (d) Ancillary temporary structures; and
- (e) Implementation of a comprehensive vegetation management plan.

##### **Stage 2**

- (a) An administration building;
- (b) A gatehouse building;
- (c) A water treatment facility; and
- (d) A wastewater treatment facility.

##### **Stage 3**

- (e) A cultural centre;
- (f) A conference centre for a maximum of 180 guests and accommodation for 60 guests; and
- (g) Finalisation of the vegetation management plan.

#### **A2 Project in accordance with documentation**

The proponent shall carry out the concept plan and all related future projects generally in accordance with the following documents except as modified by this approval:

*Environmental Assessment* prepared by SJ Connelly CPP Pty Ltd on behalf of North Byron Parklands, dated August 2010;

*Reply to Submissions and Preferred Project Report* prepared by SJ Connelly CPP Pty Ltd on behalf of North Byron Parklands, dated February 2011;

*Flood Risk Management Plan* prepared by Molino Stewart on behalf of North Byron Parklands (Billinudgel Property Pty Ltd), dated June 2011; and

*Environmental Health and Safety Management Manual* prepared by North Byron Parklands, dated August 2010.

#### **A3 Project in accordance with plans**

The proponent shall carry out the concept plan and all related future projects applications generally in accordance with the following plans:

Design Drawings prepared by Design Team Ink		
Drawing No.	Name of Plan	Date
Plan EA 1.2	Revised Event Area and Land Use Structure	<del>14.12.10</del> 13.10.14
Plan EA 1.3	Revised Ecological Structure Plan	14.12.10

**Comment:** The amended plan reflects the updated naming of the various entrance gates.

#### **A4 Consistency of future development**

In the event of any inconsistency between:

- this approval and the drawings/documents referred to in terms A2 and A3, this approval prevails to the extent of the inconsistency;
- any drawing/document listed in terms A2 and A3 and any other drawing/document listed in terms A2 and A3, the most recent document/ plan shall prevail to the extent of the inconsistency;
- this approval and the Statement of Commitments (at Schedule 3), this approval prevails to the extent of the inconsistency.

If there is any inconsistency between this concept plan approval and any future application/ project, this concept plan approval shall prevail to the extent of the inconsistency.

#### **A5 Lapsing of approval**

This concept plan approval shall lapse five (5) years after the date of this approval, unless works the subject of the project approval for Stage 1 have physically commenced on or before that lapse date.

### **PART B – MODIFICATIONS TO THE CONCEPT PLAN**

#### **B1 Definitions**

In this approval -

**Small community event** is a non-music focused event with up to 3,000 patrons.

**Comment:** This change seeks to bring the Concept Approval into line with the changes proposed for the project approval.

**small trial event** is an outdoor event the first trial for which is proposed for up to 10,000 patrons per day;

**medium trial event** is an outdoor event the first trial for which is proposed for between 10,000 and 15,000 patrons per day;

**large trial event** is an outdoor event the first trial event for which is proposed for between 15,000 and 25,000 patrons per day;

**patron** means anyone who holds a ticket to attend an outdoor event;

**event day** means any day that is an advertised date on the face of an entry ticket for a trial event;

**camper arrival day** for a trial event, means the day immediately before the first event day, being a day on which camper patrons are permitted to arrive at the site.

**camper departure day** for a trial event, means the day immediately after the last event day, being a day on which camper patrons are permitted to depart from the site.

**B2 Trial period for outdoor events**

- 1) Concept approval is granted for a trial period up to the end of 2017.
- 2) The ~~Director-General~~ Secretary may approve up to three trial events each calendar year, being one large trial event, one medium trial event and one small trial event. The ~~Director-General~~ Secretary may also approve additional small or medium events in place of a larger trial event during any calendar year so long as the number of trial events for the year does not exceed three.
- 3) The total event days for each calendar year must not exceed ten days. The total camper arrival and departure days each calendar year must not exceed six days.
- 4) The maximum number of patrons that may be approved for each large, medium or small trial event depends on the number of trials that have been held of events in that class, as set out in the Table below.

Number of trial	Large trial event	Medium trial event	Small trial event
<b>First trial</b>	Up to 25,000 patrons	Up to 15,000 patrons	Up to 10,000 patrons
<b>Second trial</b>	Up to 27,500 patrons	Up to 17,500 patrons	Up to 12,000 patrons
<b>Third trial</b>	Up to 30,000 patrons	Up to 20,000 patrons	Up to 13,000 patrons
<b>Fourth trial</b>	Up to 32,500 patrons	Up to 22,500 patrons	Up to 14,000 patrons
<b>Fifth trial</b>	Up to 35,000 patrons	Up to 25,000 patrons	Up to 15,000 patrons

5) The Secretary may permit any number of small community events and may delegate to the Proponent authority to carry out up to five such events each calendar year.

6) The Secretary may limit aspects of small community events following the receipt of the annual evaluation report.

**Comment:** This change seeks to bring the Concept Approval into line with proposed changes to the project approval.

**B3 Approval process for trial events**

The process for approving trial events, including the ~~Director-General's~~ Secretary's powers to limit or regulate trial events, must be set out in the project approval for the trial period.

**B4 Outdoor events after 2017**

Concept approval is given for outdoor events after 2017 for up to 35,000 patrons per event day subject to the satisfactory performance of the trial events.

The Stage 2 works must be completed prior any outdoor event after 2017.

**B5 Modifications to onsite effluent irrigation**

To ensure the protection of existing groundwater conditions and adjoining environments, no onsite effluent irrigation is to occur on land south of Jones Road. The proponent must provide suitable areas for onsite effluent irrigation on land north of Jones Road, without introducing any adverse environmental impacts.

**PART C – REQUIREMENTS FOR FUTURE APPLICATIONS**

Pursuant to sections 75P(2)(c) of the Act the following requirements apply, as relevant, with respect to future stages of the project to be assessed under Part 4 of the Act:

**C1 Outdoor events after 2017**

The performance of trial outdoor events must be addressed as part of any development application under Part 4 for outdoor events after 2017.

Any development application for outdoor events after 2017 must be accompanied by an environmental management and monitoring plan that details the management strategies, monitoring regimes and regular reporting on the following matters:

- noise
- traffic and transport
- flora and fauna
- bushfire
- flood
- surface water
- event management.

The Stage 2 works must be completed before any outdoor events are held after 2017.

### ***C2 Additional flood modelling***

The following matters are to be addressed as part of any development application for the proposed conference centre and cultural centre:

The proponent must undertake further flood modelling of the site at a localised/catchment level with the aid of a detailed hydrological and hydraulic model prior to the construction of the conference centre and/or cultural centre.

The additional flood modelling must take into consideration the existing flood behaviour of the site and climate change requirements and provide an indication of any further flood impacts anticipated as a result of the constructed conference centre and/or cultural centre.

The proponent must submit details of an appropriate drainage system designed around these proposed facilities, including incorporation of water sensitive urban design measures.

Any future drainage systems introduced must not generate any detrimental impacts on the sites existing infrastructure.

Any future drainage systems introduced must not exacerbate the sites existing flood regime, or exacerbate the impacts of flooding on any land adjoining the site.

### ***C3 Habitable floor levels***

Floor levels of all permanent habitable structures proposed as part of any future development application must be constructed a minimum of 500 mm above the 100-year ARI flood level including relevant climate change requirements applying at the time of lodgement of the development applications.

---

**ANNEXURE B**

Landowner Authority

**LAND OWNER AUTHORITY****TO WHOM IT MAY CONCERN**

This is to advise that PLANNERS NORTH abn: 56 291 496 553 has been engaged by:

Client Name: Billinudgel Property Pty Ltd.

Client Address:

Dated : ..

In respect to land described as: ... Tweed Valley Way and Jones Road, Yelgun.

No:

Locality/Suburb: ..

**Real Property Description:**

Lots 46, 402, 403, 404, 410 DP 755687; Lots 10, 12, 14 DP 875112; Lots 2, 12 DP 848618; Lot 101 DP 856767; Lots 30, 31 DP 880376; Lots 101, 102, 107 DP 1001878; and Lot 1 DP 1145020,

The owner of the abovementioned land hereby authorises PLANNERS NORTH or its agents to:

1. Inspect Records
2. Carry out searches and site inspections
3. Take Site Samples
4. Lodge applications, objections or appeals

Signed:



JESSICA DUORAY

DIRECTOR

BILLINUDGEL PROPERTY PTY LTD

22/4/15

---

**ANNEXURE C**

Economic Impacts and Benefits 2014



# North Byron Parklands

## Economic Impact and Benefits 2014

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Prepared by:

**RPS AUSTRALIA EAST PTY LTD**

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Report Number: 120495

Version / Date: 15 October 2014

Prepared for:

**NORTH BYRON PARKLANDS**

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### **Document Status**

<b>Version</b>	<b>Purpose of Document</b>	<b>Orig</b>	<b>Review</b>	<b>Review Date</b>
1.0	Client Exposure	WO	WO	29 September 2014
2.0	Final	WO	WO	15 October 2014

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## I.0 Introduction

North Byron Parklands are located at 126 Tweed Valley Way at Yelgun in the northern part of Byron Shire in NSW. The site is approximately 260 Ha in size and in 2014 hosted two multi day festivals. The festivals are:

- Splendour in the Grass (SITG) – a three day music and arts event
- Falls Festival (Falls) – a three day music and arts event

This economic assessment assumes the benefits and impacts from each event are attributed to the year in which the events are hosted.

The Parklands are currently approved to host 3 events per year with a total of 10 event days.

This report has been commissioned to assess the economic impact and benefits that can be attributed to the North Byron Parklands. This assessment will be conducted at a local level (Byron Shire), regional level (Northern Rivers) and the total impacts. These total impacts will include NSW and Queensland due to the sites proximity to South East Queensland.

## 2.0 Findings and Implications

This section provides an assessment and summary of the analysis and demand modelling including both qualitative and quantitative impacts and benefits related to the events conducted at North Byron Parklands in 2014.

	Impact
<b>Direct Expenditure</b>	<p>Total direct expenditure by festival organisers and attendees was \$40.6 million. Festival organisers spent \$15.2m on staff, goods and services while attendees spent \$25.4m (primarily on food/beverage and accommodation).</p> <p>45% of this total (or \$18.4m) was directed towards businesses and individuals located in the Northern Rivers (including Byron Shire).</p> <p>The majority (54% - \$22.2m) was directed towards businesses and individuals located outside of the Northern Rivers.</p> <p>Byron Shire accounted for 28% of the direct expenditure (\$11.5m).</p> <p>This distribution of expenditure reflects the specialised nature of the suppliers required to service a major festival and the somewhat limited business base of the local area. Many of the specialist and other service providers are located in Sydney or SE Queensland and travel specifically to service the events.</p>
<b>Economic Output</b>	<p>The total economic output is measured at \$93.4m with 44% (\$41.4m) of the total derived from business and service providers located in the Northern Rivers.</p> <p>Byron Shire accounted for 25% of the total economic output (\$24.1m).</p>
<b>Gross Value Added<sup>1</sup> (GVA)</b>	<p>The festivals held at the North Byron Parklands in 2014 were responsible for a GVA of \$44.8m. Of this, \$20.1m is attributed to the Northern Rivers (including Byron Shire).</p> <p>Byron Shire accounted for 26.3% of the GVA (\$11.8m).</p> <p>This increase in GVA for Byron Shire will increase the LGA's Gross Regional Product (GRP) by an estimated 1.31%.</p>
<b>Income</b>	<p>The total direct wages and salaries attributed to the North Byron Parklands in 2014 is summarised as follows:</p> <ul style="list-style-type: none"> <li>▪ Byron Shire – \$2.9m</li> <li>▪ Northern Rivers (inc Byron Shire) – \$4.7m</li> <li>▪ Total (inc Northern Rivers and Byron Shire ) – \$11m</li> </ul> <p>The total wages and salaries taking into account direct employment, supply chain and household consumption is:</p> <ul style="list-style-type: none"> <li>▪ Byron Shire – \$6.0m</li> <li>▪ Northern Rivers (inc Byron Shire) – \$10.3m</li> <li>▪ Total (inc Northern Rivers and Byron Shire ) – \$23.6m</li> </ul>

<sup>1</sup> Value added: value of output after deducting costs of goods and services used in the production process. Value added is the preferred measure for assessing economic impacts

	Impact
<b>Employment (Equivalent Full Time - EFT)</b>	<p>The direct employment creation attributed to the North Byron Parklands in 2014 is summarised as follows:</p> <ul style="list-style-type: none"> <li>▪ Byron Shire – 99 EFT</li> <li>▪ Northern Rivers (inc Byron Shire) – 133 EFT</li> <li>▪ Total (inc Northern Rivers and Byron Shire ) – 308 EFT</li> </ul> <p>The total employment creation taking into account direct employment, supply chain and household consumption is:</p> <ul style="list-style-type: none"> <li>▪ Byron Shire – 166 EFT</li> <li>▪ Northern Rivers (inc Byron Shire) – 255 EFT</li> <li>▪ Total (inc Northern Rivers and Byron Shire ) – 583 EFT</li> </ul> <p>The creation of 166 EFT in Byron Shire is significant as it represents 1.51% of the Byron Shire workforce. This is sizable given the North Byron Parklands hosted two events.</p>
<b>Charity</b>	<p>The events hosted by North Byron Parklands provided \$55,000 in contributions to charitable organisations.</p>
<b>Tourism Accommodation</b>	<p>The events generated 22,900 room nights in commercial accommodation in Byron Shire and 6,125 roomnights in other Nth NSW (does not include camping on-site).</p>

## Appendix I – Economic Impact Tables

The following tables<sup>2</sup> have been derived based on the information described in the previous sections. The input/output model prepared by RPS has been regionalised to reflect the individual nature of the local and regional economies.

**Table 1 Total Economic Impact (inclusive of Byron Shire and Northern Rivers)**

All	Output (\$M)	GVA (\$M)	Income (\$M)	Employment (FTE)
Direct Impact	\$41.1	\$18.4	\$11.0	308.0
Indirect Impact (Type I)	\$22.5	\$9.8	\$5.2	100.3
Sub-Total	\$63.6	\$28.1	\$16.3	408.2
Indirect Impact (Type II)	\$29.9	\$16.6	\$7.4	175.3
Total Impact	\$93.4	\$44.8	\$23.6	583.6

**Table 2 Northern Rivers Economic Impact (inclusive of Byron Shire)**

All	Output (\$M)	GVA (\$M)	Income (\$M)	Employment (FTE)
Direct Impact	\$18.5	\$8.4	\$4.7	133.0
Indirect Impact (Type I)	\$9.9	\$4.4	\$2.4	46.2
Sub-Total	\$28.4	\$12.9	\$7.1	179.2
Indirect Impact (Type II)	\$13.0	\$7.2	\$3.2	76.2
Total Impact	\$41.4	\$20.1	\$10.3	255.5

**Table 3 Byron Shire Economic Impact**

All	Output (\$M)	GVA (\$M)	Income (\$M)	Employment (FTE)
Direct Impact	\$11.5	\$5.3	\$2.9	99.3
Indirect Impact (Type I)	\$5.2	\$2.3	\$1.3	25.0
Sub-Total	\$16.7	\$7.7	\$4.2	124.3
Indirect Impact (Type II)	\$7.3	\$4.1	\$1.8	42.1
Total Impact	\$24.1	\$11.8	\$6.0	166.4

<sup>2</sup> Assumptions

Constant returns to scale and no substitution between inputs

Production within an industry is homogenous across firms in that industry (i.e., same proportion of inputs are used by every firm in a given industry)

Each industry has only one primary output

The effect of carrying out a given level of production by one firm or many is the same

The economy examined is in equilibrium at given prices and

There are no capacity constraints so that the supply of each good is perfectly elastic. Each industry can supply whatever quantity is demanded of it and there are no capital restrictions.

## Appendix 2 – Assumptions and Data Inputs

The impacts to the economic environment have been analysed based on a number of assumptions and collected data inputs. Some of this data has been provided by organisers and has been aggregated to respect commercial-in-confidence issues. These assumptions and inputs are outlined below.

Item	Data and Assumptions
Visitation	Average daily attendance <ul style="list-style-type: none"> <li>▪ Falls – 14,994</li> <li>▪ SITG – 27,475</li> </ul> Total person days of attendance <ul style="list-style-type: none"> <li>▪ Falls – 44,983</li> <li>▪ SITG – 82,424</li> <li>▪ Total – 127,407</li> </ul>
On-Site Campers	Average daily campers <ul style="list-style-type: none"> <li>▪ Falls – 13,000</li> <li>▪ SITG – 17,484</li> </ul> Total person days of on-site camping <ul style="list-style-type: none"> <li>▪ Falls – 41,600</li> <li>▪ SITG – 73,433</li> <li>▪ Total – 115,033</li> </ul>
Off Site Accommodation	Average daily off site accommodation <ul style="list-style-type: none"> <li>▪ Falls – 1,994</li> <li>▪ SITG – 9,991</li> </ul> Total off site accommodation nights (average stay 4.5 nights) <ul style="list-style-type: none"> <li>▪ Falls – 8,975</li> <li>▪ SITG – 44,958</li> <li>▪ Total – 115,033</li> </ul>
Off Site Accommodation assumptions	<ul style="list-style-type: none"> <li>▪ Proportion of nights in commercial accommodation – 85%</li> <li>▪ Average occupancy 1.5 persons per room</li> <li>▪ Average accommodation cost per night - \$120</li> <li>▪ Distribution               <ul style="list-style-type: none"> <li>» Byron Shire – 75%</li> <li>» Other NSW – 20%</li> <li>» Gold Coast – 5%</li> </ul> </li> </ul>
Food Expenditure <sup>3</sup>	<ul style="list-style-type: none"> <li>▪ Campers – proportion purchasing meals – 60%</li> <li>▪ Campers average daily meals expenditure per person - \$60</li> <li>▪ Non-Campers – proportion purchasing meals – 95%</li> <li>▪ Non-Campers average daily meals expenditure per person - \$80</li> </ul>
Beverage Expenditure <sup>4</sup>	<ul style="list-style-type: none"> <li>▪ Campers – proportion purchasing beverages – 100%</li> <li>▪ Campers average daily expenditure per person - \$80</li> <li>▪ Non-Campers – proportion purchasing beverages – 100%</li> <li>▪ Non-Campers average daily expenditure per person - \$80</li> </ul>

<sup>3</sup> Based on discussions with festival organisers and selected vendors

<sup>4</sup> Based on discussions with festival organisers and selected vendors – includes alcohol and non-alcohol beverages

Item	Data and Assumptions
Direct expenditure by the Festivals on staff, vendors, contractors and suppliers. <sup>5</sup>	Total - \$15.2m Distribution <ul style="list-style-type: none"> <li>▪ Byron Shire-39%</li> <li>▪ Other Northern NSW -22%</li> <li>▪ Other – 37%</li> </ul>
Total expenditure on commercial accommodation by attendees.	Total - \$3.67m Distribution <ul style="list-style-type: none"> <li>▪ Byron Shire-75%</li> <li>▪ Other Northern NSW -20%</li> <li>▪ Other – 5%</li> </ul>
Total expenditure on Food and Beverage by attendees.	Total - \$21.8m Distribution <ul style="list-style-type: none"> <li>▪ Byron Shire-13%</li> <li>▪ Other Northern NSW -12%</li> <li>▪ Other – 74<sup>6</sup>%</li> </ul>
Contributions to charitable organisations	SITG - \$27,500 Falls - \$27,500

<sup>5</sup> Data obtained from the financial data provided by the festivals.

<sup>6</sup> This is high as the majority of food and beverage services were sourced from outside the region.

## Appendix 3 - Glossary and Reference

### Types of Impacts Assessed

An input-output framework has been used to identify the direct and flow-on impacts, these direct and flow-on impacts to the economy have been estimated based on four key measures:

- **Output:** The total gross value of goods and services produced, measured in the price paid to the producer. Output includes any associated taxes or subsidies on its final production. Output values typically overstate the impacts as it counts all goods and services used in one stage of production as a input into later stages of production resulting in double counting.
- **Gross Value Add:** the additional value of a good or services over the cost of goods used in producing the good or service.
- **Incomes:** the level of wages and salaries paid to employees in each industry as a result of the development.
- **Employment:** the number of additional jobs created as a result of the additional expenditure, estimated as the number of jobs, expressed in terms of full-time equivalent (FTE) positions.

To measure these four indicators of the economic impact, three types of multipliers are used, these are:

- **Direct:** The construction or operational expenditure from the project under investigation. These involve the activities directly attributable to the development including operating expenditures and additional revenues. Direct impacts should only include the impacts which would not have occurred should the project not have gone ahead.
- **Indirect Type 1 Impacts (Supply Chain):** Represents the impacts arising from changes in activity for suppliers as a result of the direct stimulus. Type 1 impacts involve the impact on what the upstream supply chains do to fulfil the new increased level of spending.
- **Indirect Type 2 Impacts (household consumption induced):** Represents the household consumption induced activity arising from additional household expenditure as a result of the additional incomes received from the direct and type 1 industry impacts.

### Criticisms of Economic Impact Assessments

Economic Impact Assessments based on IO-tables and Economic Multipliers have been criticised by Government and academia. RPS recognises Economic Multipliers are based on limited assumptions that can result in multipliers being a biased estimator of the benefits or costs of a project.

Shortcomings and limitations of Multipliers for economic impact analysis include:

- **Lack of supply-side constraints:** The most significant limitation of economic impact analysis using multipliers is the implicit assumption that the economy has no supply-side constraints. That is, it is assumed that extra output can be produced in one area without taking resources away from other activities, thus overstating economic impacts. The actual impact is likely to be dependent on the extent to which the economy is operating at or near capacity.
- **Fixed prices:** Constraints on the availability of inputs, such as skilled labour, require prices to act as a rationing device. In assessments using multipliers, where factors of production are assumed to be limitless, this rationing response is assumed not to occur. Prices are assumed to be unaffected by policy and any crowding out effects are not captured.
- **Fixed ratios for intermediate inputs and production:** Economic impact analysis using multipliers implicitly assumes that there is a fixed input structure in each industry and fixed ratios for production. As such, impact analysis using multipliers can be seen to describe average effects, not marginal effects. For

example, increased demand for a product is assumed to imply an equal increase in production for that product. In reality, however, it may be more efficient to increase imports or divert some exports to local consumption rather than increasing local production by the full amount;

- **No allowance for purchasers' marginal responses to change:** Economic impact analysis using multipliers assumes that households consume goods and services in exact proportions to their initial budget shares. For example, the household budget share of some goods might increase as household income increases. This equally applies to industrial consumption of intermediate inputs and factors of production.
- **Absence of budget constraints:** Assessments of economic impacts using multipliers that consider consumption induced effects (type two multipliers) implicitly assume that household and government consumption is not subject to budget constraints.
- **Not applicable for small regions:** Multipliers that have been calculated from the national I–O table are not appropriate for use in economic impact analysis of projects in small regions. For small regions multipliers tend to be smaller than national multipliers since their inter–industry linkages are normally relatively shallow. Inter–industry linkages tend to be shallow in small regions since they usually don't have the capacity to produce the wide range of goods used for inputs and consumption, instead importing a large proportion of these goods from other regions<sup>7</sup>.

Despite this, IO tables and Economic Multipliers remain popular due to their ease of use and communication of results. RPS has undertaken a number of steps and made appropriate adjustments to the EIA methodology to address and mitigate these concerns.

Firstly, this Assessment does not rely solely on the use of Economic Multipliers to inform the recommendations for the project. The study includes analysis of the characteristics of the local economy and tourism market and demonstrates economic benefits of the project. The EIA represents one of a number of assessments, allowing the results to be appropriately contextualised.

Secondly, RPS has provided results for direct, supply chain and household consumption induced benefits. This allows for the individual rounds of benefits to the economy of the project to be identified and separated.

Thirdly, the catchment Northern NSW is a large area with a critical mass of population and business activity and a diverse economy. Adjustments have also been made to national Economic Multipliers to calculate the impacts on the Northern NSW and State economies individually, through the development of regional transaction tables.

Fourthly, RPS regards the use of Economic Multipliers as part of the EIA for the development as appropriate and measured and the results of the assessment as conservative, defensible and suitable for informing decision making.

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<sup>7</sup> ABS (2013) Australian National Accounts: Input-Output Tables, 2009-10, Cat No 5209.0.55.001, Australian Bureau of Statistics, Canberra

---

**ANNEXURE D**

Noise Impact Modelling



**Air Noise Environment**  
Environmental Monitoring and Assessment

# Review of Noise Limits - FINAL

## North Byron Parklands Pty Ltd

**April 2015**

**Issued: 17 April 2015**

**Prepared by:  
Air Noise Environment**

**ABN: 13 081 834 513**





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# DOCUMENT CONTROL SHEET

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# 1 Introduction

## 1.1 Overview

Air Noise Environment Pty Ltd were commissioned by North Byron Parklands (Parklands) to prepare an acoustic report identifying the need and scope for amended noise limits for outdoor entertainment events held at the Parklands. Specifically, the report was requested in response to recommendations provided by Air Noise Environment following the Splendour in the Grass 2014 (SITG 2014) event and is intended to provide sufficient information for the Department of Planning and Environment to consider an application for amended noise limits.

## 1.2 North Byron Parklands

North Byron Parklands is approved as an outdoor cultural event venue for a trial period of five years (to 31 December 2017), commencing with Splendour in the Grass 2013. Parklands is located in an area characterised by predominantly rural uses. Figure 1.1 below presents the location of Parklands and identified receptor locations. To the east and south-east of the site is the Billinudgel Nature Reserve, an area of ecological significance.

Events held to date at Parklands typically involve music, arts, food, markets, cinema and speaking forums. These events vary in their hours of operation. Typically, music with live bands (main music source) operate between 11 am and midnight with quieter music (bars, cafes and dance floors) operating at other times.

Key noise sources at events held at Parklands include sound amplification equipment, power generation equipment, lighting equipment and event patrons. For event stages key noise sources include front of house speaker arrays, stage monitors and crowd noise. Of these, noise from the sound amplification equipment (front of house speaker arrays and stage monitors) are the most significant in terms of noise emissions.

Other sources of noise include music amplification equipment and crowd noise at bars, cafes, dance floors and food hall areas. Key noise sources at these areas are likely to be similar to those for the event stages however noise emissions are typically significantly lower than those of the event stages.

Other ancillary noise sources involved with events at Parklands include noise from camping areas and traffic noise.

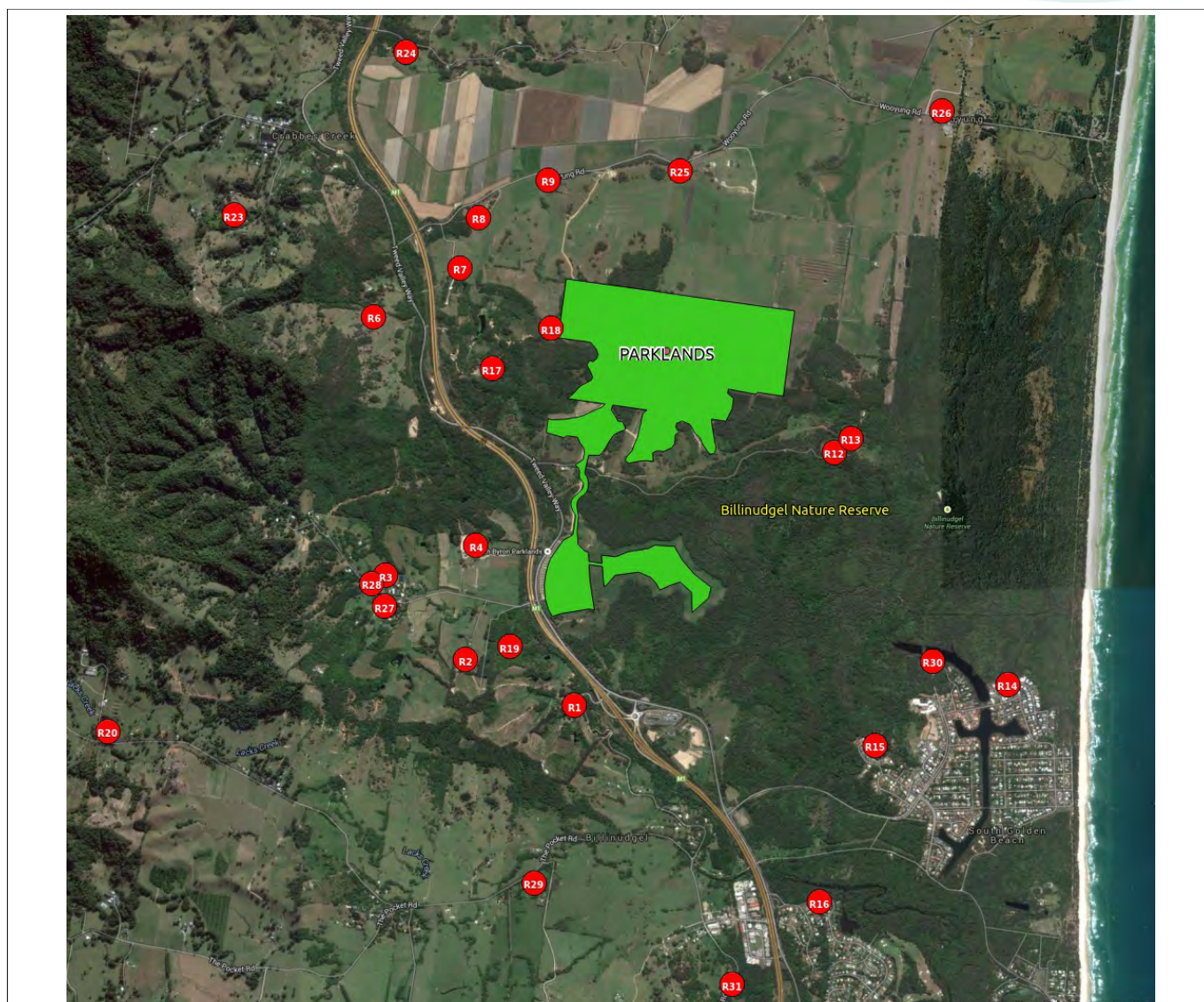


Figure 1.1: Site location and Receptor Locations

### 1.3 Noise Sensitive Receptors

Table 1.1 and Figure 1.1 identify noise sensitive receptors in the area surrounding the Parklands site.

Table 1.1: Noise Sensitive Receptor Locations

Receptor ID <sup>1</sup> .	Address	Lot	Plan Number	Easting	Northing
R1	26 Billinudgel Road, Billinudgel	2	708466	550545	6848276
R2	25 Yelgun Road, Yelgun (L5)	2	590451	549809	6848586
R3	84 Yelgun Road, Yelgun (L6)	2	581144	549272	6849152



Receptor ID <sup>1.</sup>	Address	Lot	Plan Number	Easting	Northing
R4	44 Yelgun Road, Yelgun	2	856229	549885	6849350
R6	Pacific Highway, Yelgun	271	755687	549200	6850879
R7	Tweed Valley Way, Wooyung	122	1003400	549782	6851201
R8	72 Wooyung Road, Crabbes Creek	11	868148	549911	6851539
R9	210 Wooyung Road, Wooyung	1	359521	550382	6851787
R12	237 Jones Road, Wooyung (L3)	1	589613	552309	6849959
R13	251 Jones Road, Wooyung (L2)	2	589613	552423	6850053
R14	38 Mia Court, Ocean Shores	73	1036242	553475	6848405
R15	26 Flinders Way, Ocean Shores	15	1016444	552578	6848002
R16	111 Balemo Drive, Ocean Shores	852	240400	552197	6846959
R17	Pacific Highway, Wooyung	21	1034998	549997	6850529
R18	Pacific Highway, Wooyung	21	1034998	550399	6850795
R19	7 Yelgun Road, Yelgun	1	217025	550110	6848674
R20	242 Middle Pocker Road, Middle Pocket	1	597810	547389	6848120
R21	749 The Pocket Road, The Pocket	2	248142	545003	6846851
R22	56 Pimble Valley Road, Crabbes Creek	3	807334	545133	6851118
R23	60 Bluegum Court, Crabbes Creek	13	855550	548256	6851560
R24	44 Hulls Road, Crabbes Creek	126	1003400	549427	6852646
R25	210 Wooyung Road, Wooyung	1	748228	551275	6851844
R26	412 Wooyung Road, Wooyung	4	604748	553046	6852236
R27	93 Yelgun Road, Yelgun	7	717125	549266	6848944
R28	108 Yelgun Road, Yelgun	3	544291	549179	6849099
R29	175 The Pocket Road, Billinudgel	6	623865	550265	6847093





<b>Receptor ID <sup>1.</sup></b>	<b>Address</b>	<b>Lot</b>	<b>Plan Number</b>	<b>Easting</b>	<b>Northing</b>
R30	39 Hardy Avenue, Ocean Shores	17	872205	552970	6848562
R31	101 The Tunnel Road, Billinudgel	1	952096	551603	6846410

The reported noise modelling results consider receptors R1 - R18 only as the nearest receptors to the venue. Noise levels for other receptors are expected to be lower than those reported for Receptors R1 - R18 due to the increased separation distance.

## 1.4 About the Noise Assessment

This report presents the background, methodology and findings of the noise assessment. An acoustic glossary is presented in Appendix A to assist the reader.





## 2 C-Weighted (Low Frequency) Noise Limits

### 2.1 Existing Noise Limits

The Planning Assessment Commission Approval for the Parklands venue (PAC Approval) provided no specific limits for low frequency noise emissions from events held at Parklands. Subsequent to the granting of the approval, Parklands independently adopted voluntary reporting levels for low frequency noise. These were intended to provide a baseline against which a more detailed understanding of the influence of low frequency noise emissions on the surrounding community could be assessed. These voluntary noise reporting levels were differentially applied for two zones of receptors as identified in Table 2.1 and Figure 2.1 below.

Table 2.1: Voluntary Low Frequency Noise Reporting Levels

Time Period	Zone 1 <sup>a</sup> .	Zone 2 <sup>b</sup> .
11 am – Midnight	L <sub>Cmax</sub> of 75 dB(C)	L <sub>Cmax</sub> of 70 dB(C)
Midnight to 2 am	L <sub>Cmax</sub> of 70 dB(C)	L <sub>Cmax</sub> of 65 dB(C)

a. Zone 1 receptors as shown in Figure 2.1 below.  
b. Zone 2 receptors include all receptors with the exception of those in Zone 1.



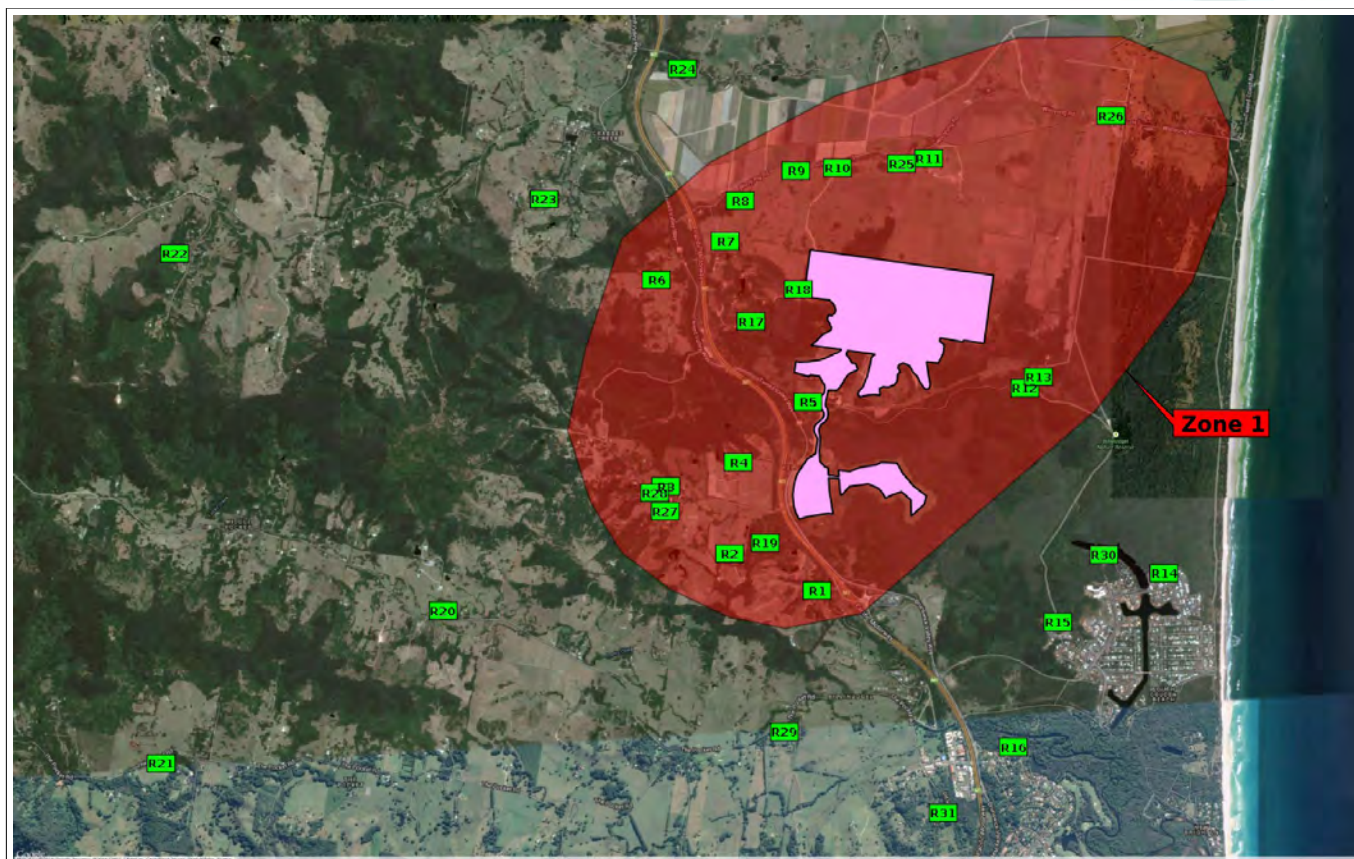


Figure 2.1: Zone 1 receptors

## 2.2 Need for C-weighted Noise Limits

In considering the need for a low frequency noise limit to be imposed on events held at Parklands, an analysis of the complaint data and noise monitoring data collated during SITG 2014 was undertaken. Table 2.2 below presents a summary of noise related complaints received by the event community hotline throughout the event. Review of the data indicated that noise related complaints were generally either described as related to the noise being too loud or specifically related to the low frequency noise content of the event noise.

Table 2.2: Summary of SITG 2014 Event Noise Complaints

Reason for Complaint	Number of Complaints			
	Thursday	Friday	Saturday <sup>1</sup>	Sunday
Noise too loud	0	36	28	10
Low frequency / bass noise too loud	1	21	27	12
Other	1	0	1	2



Reason for Complaint	Number of Complaints			
	Thursday	Friday	Saturday <sup>1</sup>	Sunday
Total complaints	2	57	56	24
1. Approximately 1/3rd of the complaints recorded on Saturday related to event activities that commenced on Friday 25 July 2014.				

Of the complaints recorded, a number of residents requested noise measurements be undertaken by event noise monitoring personnel at their premises. Review of the data indicates that for a large number of the complaints noise from the event was either characterised as low frequency noise or barely audible to inaudible. This further supports the hypothesis that low frequency noise was influencing the surrounding region and contributing to the occurrence of complaints to the hotline.

Overall, review of the complaints associated with the event identified that low frequency noise was a significant motivator for complainants. Further, specific controls were not incorporated into the event source noise levels to limit potential low frequency noise emissions although it is noted that ANE personnel contacted the event team on a number of occasions to reduce the low frequency content. The benefits of this approach were observed in the complaint data where complaints reduced significantly following implementation of controls of low frequency content by sound engineers.

## 2.3 Suitability of Voluntary C-weighted Reporting Levels

Unattended noise monitoring data collected during the SITG 2014 event indicated exceedences of the C-weighted reporting limits were observed for all receptors. Further, these exceedences, while more regularly observed during the period from 6 pm to midnight where headline acts were performing at the event, were also common throughout the day including periods where the event was not in operation.

For some receptors, these exceedences are expected to be related to other noise sources such as vehicle movements. Observations made by ANE personnel during the event identified that in many cases, the overall  $L_{Cmax}$  recorded was the result of extraneous noise sources. As a result, establishing limits based the existing voluntary  $L_{Cmax}$  reporting levels is not considered a suitable means of assessing and limiting noise emissions from the event.

## 2.4 Alternative C-Weighted Limits

### 2.4.1 Introduction

As can be seen from the discussion provided in Section 2.2, it is clear that a limit on low frequency noise emissions from events held at Parklands would result in significant improvements in amenity for the surrounding community. Further, Section 2.3 has identified that adoption of the existing C-weighted reporting levels as noise limits is considered unworkable and unlikely to provide an effective means of monitoring and controlling event performance.





In order to determine an appropriate alternative noise limit, the following information has been reviewed:

- legislated low frequency noise limits applied in jurisdictions in Australia;
- low frequency noise limits adopted for other venues and events in Australia; and
- noise monitoring data from SITG 2014.

The following sections of this report provide a summary of the outcomes of these reviews and the conclusions drawn regarding suitable alternative low frequency noise limits for the venue.

## 2.4.2 Legislated Noise Limits

Noise limits for outdoor music events are provided by state authorities through a range of legislation, policy documents and guidance documents in a number of states. In limiting noise from outdoor music events, all of these regulatory instruments consider only A-weighted noise levels. While the intent of this omission is unclear, it is expected that the assumption of a typical 10 dB difference between front of house A-weighted and C-weighted noise levels<sup>1</sup> is used as a de-facto low frequency noise limit.

## 2.4.3 Noise Limits at Other Venues

Despite the absence of specific low frequency noise limits provided in regulatory instruments, approvals provided for a number of outdoor music events held in Australia have specified low frequency limits. Table 2.3 presents a summary of the limits identified for a range of venues and events in Australia. Of the events summarised in Table 2.3, the first (A Day on the Green) is held at a winery estate in a rural residential area similar to that surrounding Parklands. The remainder of the events are held in urban areas where the existing noise climate is characterised by higher background noise levels.

Table 2.3: Summary of Noise Limits for Outdoor Entertainment Events

Event - Name, Location, Date	Locality	Noise Limits
A Day on the Green Centennial Vineyards (Bowral NSW) 11 November 2012	Rural Residential, Wingecarribee Shire Council	$L_{Cmax}$ 90dB(C)
St Jerome's Laneway Festival Rozelle Hospital Grounds (Sydney, NSW) 2 February 2014	Urban City, Leichardt City Council	$L_{Cmax}$ 75dB(C)

1 Discussions with sound engineers indicate that they typically aim for a 10 dB difference between A-weighted and C-weighted front-of-house noise levels in order to optimise sound quality. It is noted however that for much of SITG 2014, this variability was not observed (i.e. front of house C-weighted noise levels were >10 dB above A-weighted noise levels).





Event - Name, Location, Date	Locality	Noise Limits
Foo Fighters Sydney Football Stadium (Moore Park, NSW) 8 December 2011	Urban City Operates under venue NMP	$L_{Cmax}$ 100dB(C)
Field Day (Domain of the Sydney Royal Botanical Gardens) 31 December 2013 and 1 January 2014	City, South Sydney City Council	$L_{Cmax}$ 90 dB(C)
Bliss n Eso (Domain of the Sydney Royal Botanical Gardens) 16 and 17 April 2014	City, South Sydney City Council	$L_{Cmax}$ 90 dB(C)

Review of the noise limits adopted for other venues identifies that all are based on an the  $L_{Cmax}$  descriptor with specific limits ranging from 75 dB(C) to 100dB(C). However, as noted in Section 2.3, adoption of a low frequency noise limit based on measured  $L_{Cmax}$  noise levels is not considered a feasible means for the control of event noise emissions. Further, for all but one of the limits summarised, adoption for Parklands would have resulted in only minor non-compliances for a few receptors. Given the number of complaints related to low frequency noise content, adoption of these limits are not expected to deliver an acceptable outcome for the community.

## 2.4.4 Review of Monitoring Data

A review of noise monitoring data observed at both the event stages (front of house noise monitoring) and nearby receptors where event noise was influencing the acoustic environment, indicated that the low frequency influence of the event was largely dominated by the 63 Hz 1/1 octave band. This is due primarily to the type of music present at the event with measurements of the 63 Hz 1/1 octave band capturing most drum and bass beat signals.

## 2.4.5 Alternative Recommended Noise Limits

As noted above, the 63 Hz 1/1 octave band has been identified as a significant component of low frequency noise emissions from events held at Parklands. Further, it has been demonstrated that the existing voluntary low frequency reporting levels are unworkable and ineffective when applied as noise limits. It is therefore recommended that the following noise limits be imposed on future events held at Parklands to control low frequency noise and its associated impacts on the community:

- Controls established by the event are adequate to ensure that the maximum ( $L_{eq}$ ) Music Noise Level, when measured over a 10 minute period, does not exceed:
  - 75 dB(C) in the 63 hertz 1/1 octave band at sensitive receivers between 11am and midnight; and
  - 70 dB(C) in the 63 hertz 1/1 octave band at sensitive receivers between midnight and 2am.
- During periods of adverse meteorological conditions (including periods of strong winds or



temperature inversion) an additional 5 dB allowance is added to the above noise limits, giving 80 dB(C) pre-midnight and 75 dB(C) post-midnight in the 63 hertz 1/1 octave band. In these circumstances, the event is required to implement all reasonable and feasible acoustic controls to limit the potential impacts associated with event noise emissions.





## 3 A-Weighted Noise Limits

### 3.1 Existing Noise Limits

Existing noise limits for sensitive receivers in the area surrounding Parklands are provided in Condition B3 of the PAC Approval as follows:

- from 11 am to midnight: background plus 10 dB(A).
- From midnight to 2 am: background plus 5 dB(A) when measured outside bedroom windows.

For a given receptor location, the noise limit is defined as the existing minimum repeatable noise level (defined using the  $L_{A90}$  descriptor which represents the noise level exceeded for 90% of the time)<sup>2</sup> plus 10 dB(A) or 5 dB(A) for 11am - midnight or midnight to 2am respectively. Receptor noise levels during the event (measured as  $L_{Aeq}$  over a period of 10 minutes<sup>3</sup>, or energy average equivalent noise level) are compared with these noise limits. That is, for a background noise level of 40 dB(A), the receptor noise limit (measured as the  $L_{Aeq,10min}$  noise level) would be:

- for 11 am to 12 am:  $L_{Aeq,10min} = 40 \text{ dB(A)} + 10 \text{ dB(A)} = 50 \text{ dB(A)}$ ; or
- for 12 am to 2 am:  $L_{Aeq,10min} = 40 \text{ dB(A)} + 5 \text{ dB(A)} = 45 \text{ dB(A)}$ .

Background noise levels (derived from measured  $L_{A90}$  noise levels) are determined based on long-term monitoring campaigns for periods representative of the event. For example, for events held during winter where insect noise is reduced, background noise levels are based on monitoring of existing background noise in the area surrounding Parklands during the winter period.

Table 3.1 below provides a summary of existing noise limits based on long-term monitoring campaigns undertaken during 2014 and 2010 for Winter and Summer respectively.

Table 3.1: Existing A-Weighted Event Noise Limits

Receptor ID	Winter Event Noise Limits		Summer Event Noise Limits	
	11am - 12am	12am - 2am	11am - 12am	12am - 2am
R1	47	41	54	49
R2	47	41	57	49
R3	46	34	57	49
R4	47	41	54	49
R6	47	41	53	45

2 Determination of the assessment background level is by the tenth percentile method described in Appendix B of the NSW Industrial Noise Policy.

3 Equivalent to two songs including breaks for applause.



Receptor ID	Winter Event Noise Limits		Summer Event Noise Limits	
	11am - 12am	12am - 2am	11am - 12am	12am - 2am
R7	47	41	54	40
R8	47	41	57	49
R9	47	41	50	44
R12	43	36	46	45
R13	44	37	46	45
R14	44	37	46	45
R15	48	42	46	45
R16	48	42	53	45
R17	47	41	53	45
R18	47	41	57	49

Hence, for events held at Parklands, the existing noise limits during operation of the main event stages (11am - 12am), require noise from the event to be limited to 43 - 48 dB(A) during winter events and 46 - 57 dB(A) during summer events.

## 3.2 Suitability of Existing Noise Limits

A review of noise monitoring data collected throughout the SITG 2014 event<sup>4</sup> identified that:

- non-compliances with the  $L_{Aeq}$  background plus 10 and background plus 5 dB noise limits were observed for the majority of the event;
- non-compliances with the  $L_{Aeq}$  background plus 10 and background plus 5 dB noise limits were observed from 8 am (**more than 3 hours prior to event entertainment commencing**) due to local noise influences.

Further, the review identified that the existing approved background plus 10 dB and background plus 5 dB noise limits imposed on the venue by the conditions of approval do not provide a reasonable level of entertainment noise for the event. Throughout the event, front of house noise levels were maintained at 102 dB(A) which has been identified as the lowest noise level able to be used for an event of this size without impacting on crowd enjoyment. Thus, compliance of events with the existing noise limits is expected to result in adverse impacts on patron experience and ultimately

4 North Byron Parklands Pty Ltd- North Byron Parklands Noise Management Plan Review (November 2014) prepared by Air Noise Environment Pty Ltd



lead to the venue being unable to sustain its intended purpose of hosting outdoor music events.

Furthermore, review of the reasons for complaint recorded by the event complaints hotline during SITG 2014 indicated that low frequency noise, rather than broadband noise, was the dominant source of complaints. This is supported by subjective observations made by noise monitoring personnel at a number of complainant locations which identified broadband noise from the venue as being similar to that of the ambient environment.

It is noted that the unsuitability of the existing noise limits is not expected to be limited to the current Parklands venue. In fact, most venues in Australia able to accommodate events of the size supported by Parklands, are likely to be similarly restricted in their ability to operate within the existing noise limits.

Noise limits derived from existing background levels are designed for permanent noise sources in order to control the audibility of the noise for nearby noise sensitive receptors (e.g. industry, permanent music venues such as pubs and clubs). Outdoor music events as held at Parklands, on the other hand, are occasional events which are considered to add value to the broader community, and there is an expectation that the music will potentially be audible for the defined event period with the event defined in terms of the start and finish hours and number of days per year on which it may occur.

Overall, the noise limits currently approved for the venue are considered unworkable for outdoor entertainment events. It is therefore recommended that the noise limits for the venue be reviewed such that the venue can operate and comply with the noise limits for entertainment noise. The following section provides a review of noise limits applied at other venues in Australia and overseas with the aim of identifying an appropriate noise limit for future events.

## 3.3 Alternative A-Weighted Noise Limits

### 3.3.1 Introduction

In order to identify alternative noise limits that could be applied to control noise from events held at Parklands while achieving acceptable patron noise levels, a review of existing noise limits applied in Australia has been undertaken. The intent of the review is to identify the reasonableness of the existing noise limits and, in the case they are determined unreasonable, identify acceptable alternative noise limits for future events held at Parklands.

In particular, the review has considered the following:

- legislated A-weighted noise limits applied in jurisdictions in Australia; and
- A-weighted noise limits adopted for other venues and events in Australia.

The following sections of this report provide a summary of the outcomes of these reviews and the conclusions drawn regarding suitable A-weighted noise limits for the venue.





### 3.3.2 Legislated Noise Limits

Noise limits for outdoor music events are provided by state authorities through a range of legislation, policy documents and guidance documents in a number of states as summarised in Table 3.2 below.

Table 3.2: Summary of Legislated and Recommended Noise Limits

State Instrument / Guideline	Noise Limit
New South Wales: Noise Guide for Local Government	65 dB(A) $L_{A_{Max},15\text{-minute}}$ for non-suburban areas, and 75 dB(A) $L_{A_{max}, 15\text{-minute}}$ for suburban (traffic affected) areas recommended for control of concert noise impacts
Australian Capital Territory: Outdoor Concert Noise Environment Protection Policy 2001	Minimum criteria $L_{A10}$ 50 dB(A) with an upper limit of $L_{A10,15\text{ minutes}}$ 65dB(A).
Western Australia: Guidelines for concerts, events and organised gatherings	Guideline suggests 100 dB(A) at FOH mixing desk is suitable, measured as $L_{Aeq,1\text{ minute}}$ sample.
Queensland: Environmental Protection Act 1994, Section 440X	An occupier of premises must not use, or permit the use of, the premises for an open-air event on any day:  (a) before 7a.m, if the use causes audible noise; or  (b) from 7a.m. to 10p.m, if the use causes noise of more than 70dB(A); or  (c) from 10p.m. to midnight, if the use causes noise of more than the lesser of the following—  (i) 50dB(A);  (ii) 10dB(A) above the background level.  Section 73 (2) of the Environmental Protection Regulation 2008 notes that source noise for open-air events may be measured as $L_{Aeq,T}$ .

Of the noise limits summarised in Table 3.2 above, those provided by the NSW Noise Guide for Local Government are the most directly applicable. It is noted that these limits are not regulatory limits and are rather provided as guidance for local environmental authorities when considering approvals for outdoor music events. Review of the limits summarised indicates a range of both measurement parameters (including  $L_{Aeq}$ ,  $L_{A10}$  and  $L_{Amax}$ ) are provided by different states. Despite this, the adopted limits are similar for all jurisdictions with receptor noise level limits of between 65 dB(A) and 75 dB(A) compared with noise limits of 34 – 57 dB(A) for Parklands under the current PAC Approval.



### 3.3.3 Noise Limits at Other Venues

Table 3.3 provides a summary of the noise limits applied to a range of music entertainment events in Australia. Of the events summarised in Table 3.3, the first four (A Day on the Green events) are held at winery estates in rural residential areas similar to that surrounding Parklands. The remainder of the events summarised are held in urban areas where the existing noise climate is characterised by higher background noise levels.

Table 3.3: Summary of A-Weighted Noise Limits for Outdoor Entertainment Events

Event - Name, Location, Date	Locality	Noise Limits	Complaints, measured levels, treatments, comments on criteria
A Day on the Green Bimbadgen Estate Winery (NSW) 24 March 2014	Rural Residential, Cessnock City Council	$L_{Amax}$ 65dB(A)  <i>(Note: Applied noise limits from NSW Noise Guide for Local Government (2011). Original background plus noise limits in accordance with NSW Industrial Noise Policy referenced in development approval and later amended as considered too low.)</i>	No complaints
A Day on the Green Centennial Vineyards (Bowral NSW) 11 November 2012	Rural Residential, Wingecarribee Shire Council	$L_{Aeq}$ 65dB(A)	No complaints
A Day on the Green Sirromet Winery (Mt Cotton, QLD) 30 March 2014	Rural Residential, Redland City Council	$L_{Aeq}$ 70 dB(A)  <i>Note: Noise limits as specified in Environmental Protection Act 1994</i>	No complaints
A Day on the Green The Hill Winery (Waurin Ponds VIC) 16 February 2013	Rural Residential, Greater Geelong City Council	$L_{Aeq}$ 65dB(A) outdoors and 55dB(A) indoors.  <i>Note: Noise limits as specified in State Environment Protection Policy (Control of Music Noise from Public Premises) No. N-2.</i>	No complaints





Event - Name, Location, Date	Locality	Noise Limits	Complaints, measured levels, treatments, comments on criteria
St Jerome's Laneway Festival Rozelle Hospital Grounds (Sydney, NSW) 2 February 2013	Urban City, Leichardt City Council	L <sub>Amax</sub> 75dB(A) <i>(Note: Applied noise limits from NSW Noise Guide for Local Government (2011)).</i>	No complaints
St Jerome's Laneway Festival Rozelle Hospital Grounds (Sydney, NSW) 2 February 2014	Urban City, Leichardt City Council	L <sub>Amax</sub> 65dB(A)	Three complaints received. Two were within limits and one over limits. Noise levels reduced when limits exceeded.
Foo Fighters Sydney Football Stadium (Moore Park, NSW) 8 December 2011	Urban City Operates under venue NMP	L <sub>Amax</sub> 80 dB(A)	1 complaint
Sydney Festival (Parramatta, NSW) 21 January 2012	Urban City, Parramatta City Council	L <sub>Amax</sub> 75dB(A) <i>(Note: Applied noise limits from NSW Noise Guide for Local Government (2011)).</i>	No complaints
Field Day (Domain of the Sydney Royal Botanical Gardens) 31 December 2013 and 1 January 2014	City, South Sydney City Council	L <sub>Amax</sub> 70 dB(A)	3 complaints during event, 1 the following day
Bliss n Eso (Domain of the Sydney Royal Botanical Gardens) 16 and 17 April 2014	City, South Sydney City Council	L <sub>Amax</sub> 70 dB(A)	9 complaints relating to noise as the event was held on a business day.





Event - Name, Location, Date	Locality	Noise Limits	Complaints, measured levels, treatments, comments on criteria
Foo Fighters Metricon Stadium (Carrara, QLD) 10 December 2011	Urban, Gold Coast City Council	$L_{Aeq}$ 70 dB(A).  <i>Note: Noise limits as specified in Environmental Protection Act 1994</i>	8 complaints received (6 were measured and all were well within the noise limit)

Review of the information provided in Table 3.3 indicates that noise limits for other venues similar to Parklands include  $L_{Amax}$  of 65 dB(A) (Cessnock),  $L_{Aeq}$  of 65 dB(A) (Bowral and Waurn Ponds) and  $L_{Aeq}$  of 70 dB(A) (Mt Cotton). Based on monitoring at these and other venues, the  $L_{Aeq}$  65 – 70 dB(A) noise limits applied to venues in Cessnock, Bowral and Waurn Ponds would equate to music levels of approximately  $L_{Amax}$  75 – 85 dB(A) at the receptor. Each of these venues hold a number of events per year and typically do not receive any complaints associated with noise emissions from the venue.

Hence, from the above, it can be concluded that  $L_{Aeq}$  noise levels of 65 – 70 dB(A) are generally considered acceptable for communities affected by outdoor music events. The primary difference between events held at the other venues considered in Table 3.3 and Parklands relates to the duration of the event. For Parklands, events typically run over multiple days with up to three events per year permitted under the current approval. By comparison, the other venues considered above typically hold a larger number of single day events each year.

### 3.3.4 Alternative Recommended Noise Limits

From the information presented in Sections 3.3.2 and 3.3.3 above, event noise limits derived from background noise levels are uncommon. Further, as noted previously, the existing noise limits are considered unable to support an acceptable level of entertainment noise at the venue. In order to support the value to the broader community provided by the Parklands venue and events held there, it is recommended that alternative noise limits are adopted.

A review of noise limits applied for other venues throughout Australia and those provided in legislative instruments in other states confirms that, for outdoor music events, fixed noise limits represent the preferred approach. Given that events at Parklands are typically held over multiple days with entertainment noise extended until 12 midnight for main stages and 2 am for bars, cafes and dance floors it is recommended that noise limits for events held at Parklands are revised to the following:

- Between 11am and midnight, music noise levels at sensitive receivers must not exceed  $L_{Aeq}$  65 dB(A).
- Between midnight and 2am, music noise levels at sensitive receivers must not exceed  $L_{Aeq}$  55 dB(A).



- During periods of adverse meteorological conditions (including periods of strong winds or temperature inversion) an additional 5 dB allowance is added to the above recommended music noise limits. In these circumstances, the event is required to implement all reasonable and feasible acoustic controls to limit the potential impacts associated with event noise emissions.





## 4 Alternative Noise Limits Compliance

### 4.1 Introduction

The alternative noise limits proposed in Sections 2 and 3 can be summarised as follows:

Controls established by the event are adequate to ensure that:

- between 11am and midnight, the Music Noise Level when measured as:
  - $L_{Aeq}$  over a 10 minute period at sensitive receivers must not exceed  $L_{Aeq}$  65 dB(A); and
  - $L_{Ceq}$  in the 63 hertz 1/1 octave band over a 10 minute period at sensitive receivers must not exceed  $L_{Ceq,63 \text{ Hertz}}$  75 dB(A).
- between midnight and 2am, the Music Noise Level when measured as:
  - $L_{Aeq}$  over a 10 minute period at sensitive receivers must not exceed  $L_{Aeq}$  55 dB(A); and
  - $L_{Ceq}$  in the 63 hertz 1/1 octave band over a 10 minute period at sensitive receivers must not exceed  $L_{Ceq,63 \text{ Hertz}}$  70 dB(A).
- During periods of adverse meteorological conditions (including periods of strong winds or temperature inversion) an additional 5 dB allowance is added to the above noise limits. In these circumstances, the event is required to implement all reasonable and feasible acoustic controls to limit the potential impacts associated with event noise emissions.

In order to determine whether these alternative noise levels are able to be achieved by events held at Parklands, predictive noise modelling has been undertaken. The following sections provide a summary of the methodology adopted for the predictive noise modelling and conclusions able to be drawn from the results.

### 4.2 Noise Modelling Methodology

For the purposes of predicting impacts from amplified music during outdoor entertainment events held at Parklands, an environmental noise model of the sources and surrounding region was developed. The model package was developed using the proprietary software Cadna/A (Computer Aided Noise Abatement Model) developed by DataKustik.

The model incorporates influences of meteorology, terrain, ground type and air absorption in addition to source characteristics to predict noise impacts at each of the identified sensitive receptors near to the venue. For the purposes of the assessment, two meteorological scenarios have been considered as follows:

- Typical Meteorology:
  - Temperature: 10 degrees Celsius;
  - Humidity: 70 %;
  - Light source to receptor winds; and



- Neutral atmospheric stability.
- Worst-case meteorology:
  - Temperature: 10 degrees Celsius;
  - Humidity: 70 %;
  - Wind speed: 1 m.s<sup>-1</sup> (neutral meteorology) and 3 m.s<sup>-1</sup> (adverse meteorology);
  - F (adverse meteorology).

Four wind directions were considered, to predict for direct source to receptor winds at receptors to the north, south, east and west.

The receptor positions considered for the purposes of the noise modelling are as identified in Table 1.1.

### 4.3 Amplified Music Source Noise Levels

Noise propagation is highly dependent upon the frequency spectra of the noise source. To allow derivation of typical frequency spectra associated with the types of artist typically performing at Parklands events, noise monitoring data from SITG 2014 has been analysed. For each stage at SITG 2014 measurements were made in 1/1 octave frequency bands at the front of house position.

Source noise levels adopted to describe the main stages at events held at Parklands have been derived based on the 95<sup>th</sup> percentile of recorded  $L_{Aeq,5min}$  front of house noise levels measured at SITG 2014 for the Amphitheatre stage. It is noted that analysis of front of house noise levels indicates all main stages operated at similar levels with less than 1 dB difference between the 95<sup>th</sup> percentile front of house noise levels measured during SITG 2014.

The adoption of the 95<sup>th</sup> percentile of all measured  $L_{Aeq}$  noise levels presented in Table 4.1 represents the upper end emissions from the event during the headline act performances. In reality, front of house levels would typically be managed such that they increase throughout the day to the highest levels shown in Table 4.1 for the event headline acts.

For low frequency (C-weighted) source noise levels, a level 10 dB higher than the adopted A-weighted levels has been adopted. This has been identified as the optimal differential targeted by sound engineers in recognition of both the importance of low frequency content to the patron experience and the potential amenity impacts for nearby residences. **It is noted that this level represents a significant reduction in low frequency content compared with SITG 2014.** Given this, adoption of these source noise levels (when combined with the recommended low frequency noise limits) is expected to result in a significant improvement in amenity for the community.





Table 4.1: Modelled Source Noise Levels

Noise Parameter	Main Stages @ FOH Position	Bars, Cafes and Dance Floors @ 10m from Speakers
$L_{Aeq}$	102	85
$L_{Ceq}$	112	95

## 4.4 Sound System Characteristics

In addition to the absolute noise level and the frequency distribution of noise generated by an event stage, the sound system used also has a significant influence on sound propagation from the venue. For the purposes of the modelling, the sound system setup previously employed for the SITG 2014 event has been considered. This involved speakers mounted in stacks, positioned above the stage surface and hanging with a downward tilt to focus the noise on the crowd while reducing noise spill to the surrounding area. Sub-woofer units are positioned in stacks at stage level. For the Amphitheatre stage the system also employed a distributed sound system with delay towers used to fill directed sound beyond the mixing desk location.

Figure 4.1 presents the stage locations and orientation.

Propagation characteristics for the typical speaker types utilised have been included in the modelling. It is noted that the bars, cafes and dance floors are assumed to radiate noise in all directions (no directivity assumed for sound sources). Where enclosures or tents are proposed to be constructed around minor stages and bars these structures have been assumed to be acoustically transparent for the purposes of the predictions. Hence the modelling of emissions from these sources are considered a conservative worst-case prediction.



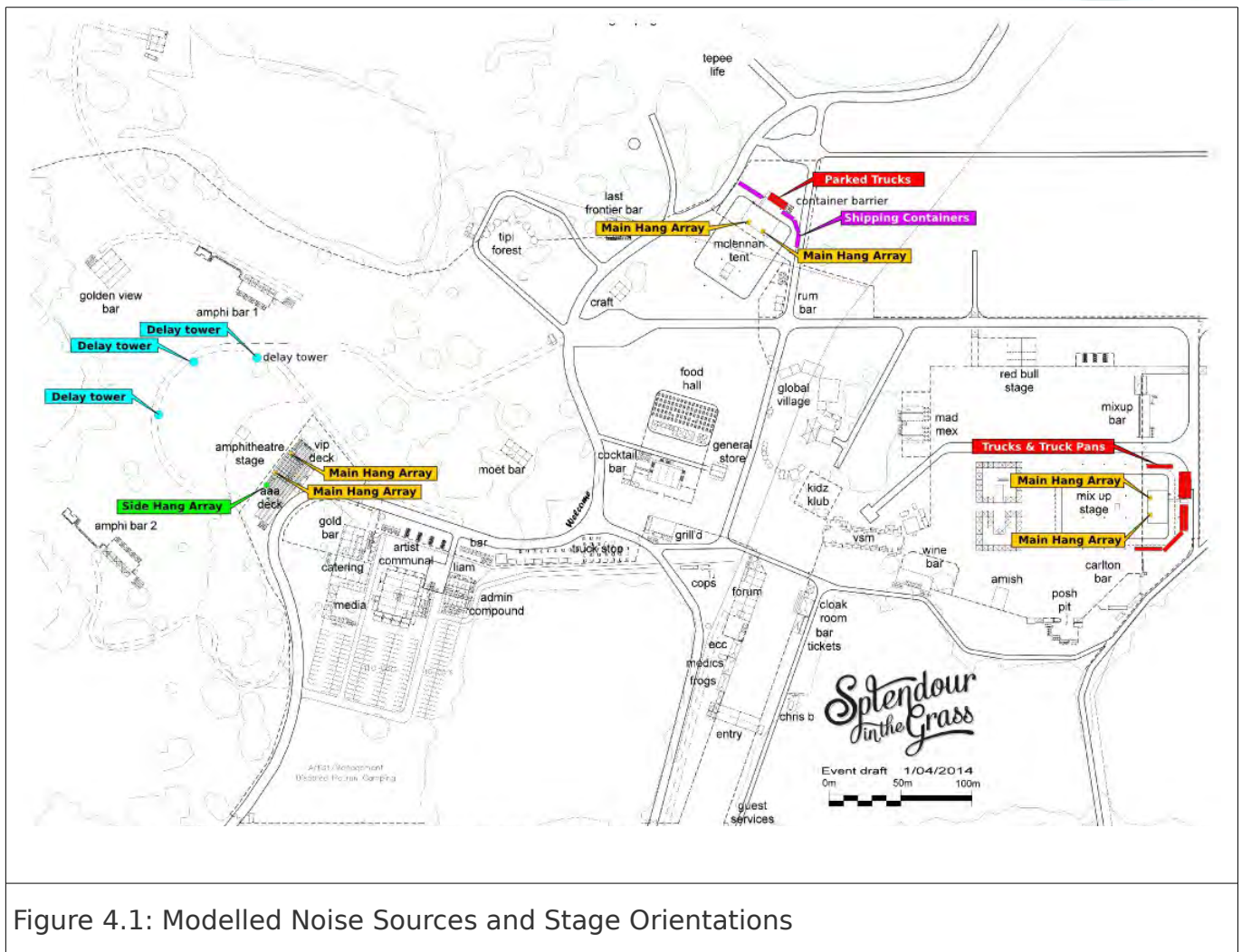


Figure 4.1: Modelled Noise Sources and Stage Orientations

## 4.5 Modelling Results

Tables 4.2 to 4.5 present predicted  $L_{Aeq}$  and  $L_{Ceq,63Hz}$  receptor noise levels as a result of emissions from the SITG 2014 event layout and the proposed alternative event noise limits. Also presented in Tables 4.2 to 4.5 is a comparison of predicted noise levels with those measured during attended and unattended noise monitoring undertaken during SITG 2014. Figures 4.2 and 4.3 present predicted  $L_{Aeq}$  noise contours for the period prior to midnight (where main stages are operating) and after midnight (where only bars, cafes and dance floors operate) respectively.

For the C-weighted receptor noise levels presented in Table 4.4, the predictions also incorporate additional controls of low frequency content beyond those employed during SITG 2014. The observed difference between measured and predicted low frequency noise levels presented in Tables 4.4 and 4.5 represent the improved anticipated as a result of the improved control of low frequency noise emissions compared with SITG 2014.

The results of the predictive noise modelling indicates that from 11am to midnight where the main



stages are operating, non-compliances with the existing background related A-weighted noise limits are predicted for all but one receptor for typical meteorological conditions and all receptors for worst-case temperature inversion conditions. These conclusions are also supported by the results of the attended and unattended noise monitoring undertaken during SITG 2014 which show observed exceedences of the noise limits for most receptors.

Similarly, for the period from midnight to 2am where only bars, cafes and dance floors operate, non-compliances with the existing background related A-weighted noise limits are predicted for 6 receptors for typical meteorological conditions and 11 receptors for worst-case temperature inversion conditions. The results of unattended noise monitoring undertaken during SITG 2014 further support this conclusion with all but one receptor where unattended noise monitoring was undertaken showing observed exceedences during this period.

Comparison of the results of the predictive noise modelling for the period where all stages, bars, cafes and dance floors are operating (Table 4.2) and only bars, cafes and dance floors operate (Table 4.3) indicate compliance with the alternative A-weighted noise limits is able to be achieved for all receptors by up to 3 dB for both typical and worst-case temperature inversion meteorological conditions. It is noted that this predicted compliance is within the expected uncertainty of the modelling. Hence, it is considered likely that where front of house noise levels are actively managed to achieve the required 102 dB(A), compliance with the recommended noise limits is achievable.

For C-weighted noise levels, the results of the predictive modelling indicate that compliance with the recommended noise limits can be achieved for all receptors except R18. For R18, a minor exceedence with the recommended noise limits of up to 1 dB is predicted. It is noted that R18 is a vacant building block with no residential uses currently constructed. Further, Parklands have advised that an agreement has been entered into with the owner of this allotment thereby removing it as a noise sensitive receptor.

Overall, the results of the predicted noise modelling indicate that, if the alternative noise limits are adopted for the event, noise emissions from the venue could be managed to achieve compliance at all nearby sensitive receptors while achieving amenity considered acceptable by regulatory agencies for other similar venues.



Table 4.2: Predicted L<sub>Aeq</sub> Receptor Noise Levels – All Stages, Bars, Cafes and Dance-floors (11am-12am)

Receptor ID	Measured Noise Level STIG 2014	Typical Meteorology			Worst-case Temperature Inversion		
		Predicted Noise Level	Existing Limit	Proposed Noise Limit	Predicted Noise Level	Existing Limit	Proposed Noise Limit
R1	48 <sup>(3)</sup>	54	47	65	59	47	70
R2	NA <sup>(1)</sup>	58	55	65	63	55	70
R3	58 <sup>(2)</sup>	56	51	65	61	51	70
R4	55 <sup>(3)</sup>	59	55	65	64	55	70
R6	NA <sup>(1)</sup>	58	44	65	62	44	70
R7	NA <sup>(1)</sup>	57	44	65	62	44	70
R8	52 <sup>(3)</sup>	62	55	65	67	55	70
R9	60 <sup>(3)</sup>	60	48	65	66	48	70
R12	53 <sup>(2),(3)</sup>	52	45	65	56	45	70
R13	55 <sup>(2),(3)</sup>	51	43	65	55	43	70
R14	NA <sup>(1)</sup>	45	45	65	49	45	70
R15	51 <sup>(2)</sup>	47	45	65	51	45	70



Receptor ID	Measured Noise Level STIG 2014	Typical Meteorology			Worst-case Temperature Inversion		
		Predicted Noise Level	Existing Limit	Proposed Noise Limit	Predicted Noise Level	Existing Limit	Proposed Noise Limit
R16	NA <sup>(1)</sup>	46	44	65	50	44	70
R17 <sup>1</sup>	55 <sup>(3)</sup>	62	44	65	67	44	70
R18	63 <sup>(3)</sup>	61	55	65	66	55	70

(1) Noise monitoring data not available for this location.

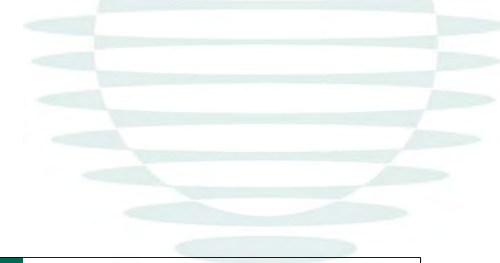
(2) 95<sup>th</sup> percentile of unattended noise measurements recorded between 11 am and midnight on event days.

(3) Maximum measured noise level during attended noise measurements where event noise was audible.



Table 4.3: Predicted  $L_{Aeq}$  Receptor Noise Levels – Bars, Cafes and Dance-floors Only (12am-2am)

Receptor ID	Measured Noise Level STIG 2014	Typical Meteorology			Worst-case Temperature Inversion		
		Predicted Noise Level	Existing Limit	Proposed Noise Limit	Predicted Noise Level	Existing Limit	Proposed Noise Limit
R1	NA <sup>(1)</sup>	42	42	55	47	42	60
R2	NA <sup>(1)</sup>	42	50	55	47	50	60
R3	54 <sup>(2)</sup>	42	46	55	46	46	60
R4	NA <sup>(1)</sup>	44	50	55	49	50	60
R6	NA <sup>(1)</sup>	43	39	55	48	39	60
R7	NA <sup>(1)</sup>	45	39	55	49	39	60
R8	NA <sup>(1)</sup>	46	50	55	50	50	60
R9	50 <sup>(2)</sup>	44	43	55	48	43	60
R12	47 <sup>(2)</sup>	48	40	55	53	40	60
R13	50 <sup>(2)</sup>	47	38	55	51	38	60
R14	NA <sup>(1)</sup>	39	40	55	44	40	60
R15	45 <sup>(2)</sup>	40	40	55	44	40	60



Receptor ID	Measured Noise Level STIG 2014	Typical Meteorology			Worst-case Temperature Inversion		
		Predicted Noise Level	Existing Limit	Proposed Noise Limit	Predicted Noise Level	Existing Limit	Proposed Noise Limit
R16	NA <sup>(1)</sup>	37	39	55	42	39	60
R17 <sup>1.</sup>	NA <sup>(1)</sup>	48	39	55	53	39	60
R18	NA <sup>(1)</sup>	48	50	55	52	50	60

(1) Noise monitoring data not available for this location.

(2) 95<sup>th</sup> percentile of unattended noise measurements recorded between 11 am and midnight on event days.

(3) Maximum measured noise level during attended noise measurements where event noise was audible.



Table 4.4: Predicted  $L_{Ceq,63Hz}$  Receptor Noise Levels - All Stages, Bars, Cafes and Dance-floors (11am-12am)

Receptor ID	Measured Noise Level STIG 2014	Typical Meteorology			Worst-case Temperature Inversion		
		Predicted Noise Level	Existing Limit	Proposed Noise Limit	Predicted Noise Level	Existing Limit	Proposed Noise Limit
R1	NA <sup>(1)</sup>	71	_ <sup>(2)</sup>	75	73	_ <sup>(2)</sup>	80
R2	NA <sup>(1)</sup>	74	_ <sup>(2)</sup>	75	76	_ <sup>(2)</sup>	80
R3	86 <sup>(3)</sup>	72	_ <sup>(2)</sup>	75	74	_ <sup>(2)</sup>	80
R4	NA <sup>(1)</sup>	74	_ <sup>(2)</sup>	75	77	_ <sup>(2)</sup>	80
R6	NA <sup>(1)</sup>	74	_ <sup>(2)</sup>	75	76	_ <sup>(2)</sup>	80
R7	NA <sup>(1)</sup>	74	_ <sup>(2)</sup>	75	76	_ <sup>(2)</sup>	80
R8	NA <sup>(1)</sup>	74	_ <sup>(2)</sup>	75	77	_ <sup>(2)</sup>	80
R9	83 <sup>(3)</sup>	74	_ <sup>(2)</sup>	75	76	_ <sup>(2)</sup>	80
R12	82 <sup>(3)</sup>	72	_ <sup>(2)</sup>	75	74	_ <sup>(2)</sup>	80
R13	76 <sup>(3)</sup>	72	_ <sup>(2)</sup>	75	74	_ <sup>(2)</sup>	80
R14	NA <sup>(1)</sup>	66	_ <sup>(2)</sup>	75	69	_ <sup>(2)</sup>	80
R15	75 <sup>(3)</sup>	68	_ <sup>(2)</sup>	75	71	_ <sup>(2)</sup>	80



Receptor ID	Measured Noise Level STIG 2014	Typical Meteorology			Worst-case Temperature Inversion		
		Predicted Noise Level	Existing Limit	Proposed Noise Limit	Predicted Noise Level	Existing Limit	Proposed Noise Limit
R16	NA <sup>(1)</sup>	67	- <sup>(2)</sup>	75	69	- <sup>(2)</sup>	80
R17 <sup>1.</sup>	NA <sup>(1)</sup>	75	- <sup>(2)</sup>	75	81	- <sup>(2)</sup>	80
R18	NA <sup>(1)</sup>	76	- <sup>(2)</sup>	75	82	- <sup>(2)</sup>	80

(1) Noise monitoring data not available for this location and/or parameter.

(2) No existing noise limit for C-weighted noise levels.

(3) Maximum measured  $L_{Ceq}$  noise level recorded by unattended noise monitoring where event was operating.



Table 4.5: Predicted  $L_{Ceq,63Hz}$  Receptor Noise Levels - Bars, Cafes and Dance-floors Only (12am-2am)

Receptor ID	Measured Noise Level STIG 2014	Typical Meteorology			Worst-case Temperature Inversion		
		Predicted Noise Level	Existing Limit	Proposed Noise Limit	Predicted Noise Level	Existing Limit	Proposed Noise Limit
R1	NA <sup>(1)</sup>	60	- <sup>(2)</sup>	70	62	- <sup>(2)</sup>	75
R2	NA <sup>(1)</sup>	60	- <sup>(2)</sup>	70	62	- <sup>(2)</sup>	75
R3	72 <sup>(3)</sup>	60	- <sup>(2)</sup>	70	62	- <sup>(2)</sup>	75
R4	NA <sup>(1)</sup>	62	- <sup>(2)</sup>	70	65	- <sup>(2)</sup>	75
R6	NA <sup>(1)</sup>	61	- <sup>(2)</sup>	70	63	- <sup>(2)</sup>	75
R7	NA <sup>(1)</sup>	63	- <sup>(2)</sup>	70	65	- <sup>(2)</sup>	75
R8	NA <sup>(1)</sup>	63	- <sup>(2)</sup>	70	65	- <sup>(2)</sup>	75
R9	74 <sup>(3)</sup>	62	- <sup>(2)</sup>	70	65	- <sup>(2)</sup>	75
R12	70 <sup>(3)</sup>	65	- <sup>(2)</sup>	70	67	- <sup>(2)</sup>	75
R13	70 <sup>(3)</sup>	64	- <sup>(2)</sup>	70	67	- <sup>(2)</sup>	75
R14	NA <sup>(1)</sup>	57	- <sup>(2)</sup>	70	60	- <sup>(2)</sup>	75
R15	66 <sup>(3)</sup>	58	- <sup>(2)</sup>	70	60	- <sup>(2)</sup>	75



Receptor ID	Measured Noise Level STIG 2014	Typical Meteorology			Worst-case Temperature Inversion		
		Predicted Noise Level	Existing Limit	Proposed Noise Limit	Predicted Noise Level	Existing Limit	Proposed Noise Limit
R16	NA <sup>(1)</sup>	56	- <sup>(2)</sup>	70	58	- <sup>(2)</sup>	75
R17 <sup>1.</sup>	NA <sup>(1)</sup>	65	- <sup>(2)</sup>	70	68	- <sup>(2)</sup>	75
R18	NA <sup>(1)</sup>	67	- <sup>(2)</sup>	70	69	- <sup>(2)</sup>	75

(1) Noise monitoring data not available for this location and/or parameter.

(2) No existing noise limit for C-weighted noise levels.

(3) Maximum measured  $L_{Ceq}$  noise level recorded by unattended noise monitoring where event was operating.





Figure 4.2: Predicted  $L_{Aeq}$  Receptor Noise Level Contours - All Stages, Bars, Cafes and Dance-floors (11am-12am)



Figure 4.3: Predicted  $L_{Aeq}$  Receptor Noise Level Contours – Bars, Cafes and Dance-floors Only (12am-2am)



## 4.6 Additional Mitigation of Noise Impacts

In addition to the acoustic controls and detailed speaker design incorporated into the predictive noise modelling, there is capacity for additional on-site acoustic controls (previously trialled at Falls Festival 2014) to provide further reductions in impacts for specific receptors. While these controls are dependent on the individual event layout and design, the following controls have previously been identified as effective in limiting the potential influence of events held at Parklands on nearby sensitive receptors:

- Silage Hay bales (500 kg each, one deep and two bales high) being placed around the rear and sides of event stages;
- Truck bodies being parked around stages to provide additional acoustic attenuation of noise radiating towards the nearest residences;
- Lining of the PA towers for the flown audio system with heavy drapes on the rear and sides to reduce noise spill in these directions;
- Incorporation of a roof sheet fixed to the scaffolding at the rear of the towers for the flown audio system to provide additional reduction of spill;
- The use of end fire sub-woofer array designs to reduce noise emissions to the rear of the stage; and
- Improved design of the audio system to provide event sound more tightly directed to the patron viewing areas thereby controlling noise spillage. This includes the use of delay towers and side fill arrays with sound directed downwards at levels nearer to ground level than was used for previous events.

The specific controls incorporated into the design of events held at Parklands are investigated during development of the stage layout and design of event PA systems and stage layouts. The investigations undertaken incorporate modification of the event design to optimise acoustic benefits for off-site receptors.

Prior to commencement of the event, the implementation of any additional control measures identified by the event team and noise consultants are audited and signed off by independent noise consultants engaged by Parklands. Any further modifications to the noise attenuation measures identified by the noise consultants prior to the event are also implemented subject to consultation with event organisers as necessary to ensure that the implications for the security and safety (of event staff, performers and patrons), emergency personnel access, fire and traffic have been effectively considered.

It is noted that subjective observations following implementation of these additional controls at Falls Festival 2014 indicated significant benefits in terms of reductions in noise propagation from the venue can be achieved for some receptors. Table 4.6 below provides the results of attended noise monitoring undertaken at Falls Festival 2014 following implementation of these control measures. The results of the monitoring represent those measurements where event music was audible. It





should be noted that for some of these measurements music noise was not the dominant source with other sources (e.g. traffic, bird noise and aircraft movements) contributing significantly to the measured levels. The results of the monitoring for this event demonstrate the significant benefits achieved by the control of low frequency noise emissions in particular, with measured  $L_{\text{Ceq},63\text{ Hz}}$  emissions remaining below the proposed noise limits throughout the event. For A-weighted noise, measured noise levels are generally consistent for the majority of sensitive receptors with those observed and predicted for SITG 2014.

Table 4.6: Attended Measured Noise Levels – Falls Festival 2014

Receptor	Measured $L_{\text{Aeq}}$	Measured $L_{\text{Ceq},63\text{ Hz}}$
1	56 - 60	57 - 61
2	49 - 57	56 - 65
3	47 - 59	51 - 60
4	46 - 56	53 - 65
6	65 - 69	66 - 68
7	50 - 55	53 - 58
8	46 - 64	53 - 71
9	51 - 66	55 - 71
12	43 - 65	46 - 62
13	44 - 51	45 - 59
15	44 - 53	47 - 61
17	50 - 56	59 - 65
18	45 - 54	56 - 66
25	44 - 62	51 - 63



## 5 Conclusions

A review of the suitability of the existing noise limits provided for outdoor music events held at Parklands has identified a number of areas where improvements are warranted. Specifically the review has identified that:

- low frequency (C-weighted) noise rather than broadband (A-weighted) noise was a significant motivator for complainants during events held at Parklands;
- the frequency of noise complaints relating to low frequency noise emissions is exacerbated by the omission of specific controls in the PAC Approval to limit low frequency noise emissions;
- implementation of a low frequency C-weighted noise limit provides an opportunity to achieve reductions in low frequency music content (and therefore improved amenity for the community);
- non-compliances with the A-weighted background plus 10 noise limit were observed from 8 am (**more than 3 hours prior to event entertainment commencing**) due to local noise influences indicating the ineffectiveness of the existing noise limits;
- compliance of events with the existing background related A-weighted noise limits is expected to result in adverse impacts on patron experience and ultimately lead to the venue being unable to sustain its intended purpose of hosting outdoor music events; and
- the existing background related A-weighted noise limits do not align with those applied for other similarly located venues nor do they align with the existing regulatory and guidance instruments provided by a number of States; and
- the existing A-weighted noise limits are unachievable for events where an acceptable level of event noise is generated to support the patron experience.

Given this, and in consideration of the value added to the broader community by the events held at Parklands, a review of the appropriateness of alternative noise limits has been undertaken. In order to provide certainty to the Parklands venue around future event noise limits, this report has considered the potential for the following alternative noise limits to be applied for events held at the venue:

*Controls established by the event are adequate to ensure that:*

- *between 11am and midnight, the Music Noise Level when measured as:*
  - *$L_{Aeq}$  over a 10 minute period at sensitive receivers must not exceed  $L_{Aeq}$  65 dB(A); and*
  - *$L_{Ceq}$  in the 63 hertz 1/1 octave band over a 10 minute period at sensitive receivers must not exceed  $L_{Ceq,63\text{ Hertz}}$  75 dB(A).*
- *between midnight and 2am, the Music Noise Level when measured as:*
  - *$L_{Aeq}$  over a 10 minute period at sensitive receivers must not exceed  $L_{Aeq}$  55 dB(A); and*





- $L_{Ceq}$  in the 63 hertz 1/1 octave band over a 10 minute period at sensitive receivers must not exceed  $L_{Ceq,63\text{ Hertz}}$  70 dB(A).
- During periods of adverse meteorological conditions (including periods of strong winds or temperature inversion) an additional 5 dB allowance is added to the above noise limits. In these circumstances, the event is required to implement all reasonable and feasible acoustic controls to limit the potential impacts associated with event noise emissions.

These noise limits have been determined based on a review of noise limits applied for other similar venues both in Australia and internationally along with a review of regulatory noise limits in other jurisdictions in Australia. Hence, in adopting these alternative noise limits, it is expected that a acoustic amenity commensurate with that provided for residents near to other outdoor entertainment events could be achieved.

Predictive noise modelling for the venue has further identified that, based on a typical event layout, compliance with these alternative noise limits could be achieved by future events. The report has also demonstrated that further reductions of potential impacts for nearby receptors can be achieved on an event by event basis through the incorporation of additional on-site acoustic controls into the event design.

Overall, the proposed alternative noise limits are considered suitable to achieve both an acceptable acoustic amenity for residents in the area surrounding the venue and an acceptable acoustic environment for patrons at the events. Adoption of these alternative noise limits will ensure the suitability of the venue (from an acoustic perspective) for its intended use and provide a level of certainty for event organisers and residents for the remainder of the trial period.





## Appendix A – Acoustic Glossary





## APPENDIX A - ACOUSTIC GLOSSARY

**Accredited Acoustical Consultant** means an acoustical consultant who is a member of one or more of the following organisations: The Association of Australian Acoustical Consultants; The Australian Acoustical Society; or the Institution of Engineers Australia.

**Background Noise Level** is the underlying level of noise present in the ambient noise, excluding event noise, when extraneous noise is removed. This is described using the  $L_{A90}$  descriptor. The background noise level is to be the single figure background level representing each period of the event.

**dB(A)** is a measure of the overall noise level of sound across the audible spectrum with a frequency weighting (i.e. 'A' weighting) to compensate for the varying sensitivity of the human ear to sound at different frequencies.

**dB(C)** is a measure of the overall noise level of sound across the audible spectrum with a frequency weighting (i.e. 'C' weighting) that places an increased focus on low frequency (bass) noise.

**Ecological Sensitive Receptors** means the animals within Taronga Zoo.

**Event** means an outdoor event whose primary purpose is entertainment involving continuous amplified musical performance taking place within a single 24 hour period.

**Event Noise** means noise from amplified entertainment noise measured as one of  $L_{Aeq}$  or  $L_{Ceq,63 \text{ Hertz}}$ .

**Event Stage Manager** means the person at the sound mixing console (or sound desk), who is in control of the volume of noise emanating from the speakers installed at an event;

**$L_{Aeq}$**  is the equivalent steady sound level in dB(A) containing the same acoustic energy as the actual fluctuating sound level over the given period.

**$L_{Ceq,63 \text{ Hertz}}$**  is the equivalent steady sound level in the 63 Hertz 1/1 octave band measured in dB(C) containing the same acoustic energy as the actual fluctuating sound level over the given period.

**$L_{AMax}$**  means A - weighted maximum RMS sound pressure level measured over a one (1) second interval. During noise measurements, this is the absolute highest (maximum) noise level for a given time period.

**$L_{CMax}$**  means C - weighted maximum RMS sound pressure level measured over a one (1) second interval. During noise measurements, this is the absolute highest (maximum) noise level for a given time period. The 'C' frequency weighting scale is relatively flat or contains little adjustment to the linear or Z weighted, dB(Z) noise level.

**$L_{A90}$**  is the noise level (measured in dB(A)) exceeded for 90% of the time. In the case of Taronga Zoo, the background noise level is defined by the measured  $L_{A90}$  noise level (see Background Noise Level above).

**Sensitive Receiver** means places such as residences, schools, childcare centres, hospitals and churches.

**Sound Check** means a test of the sound amplification equipment for an outdoor concert .





## Appendix B – Speaker Technical Specifications



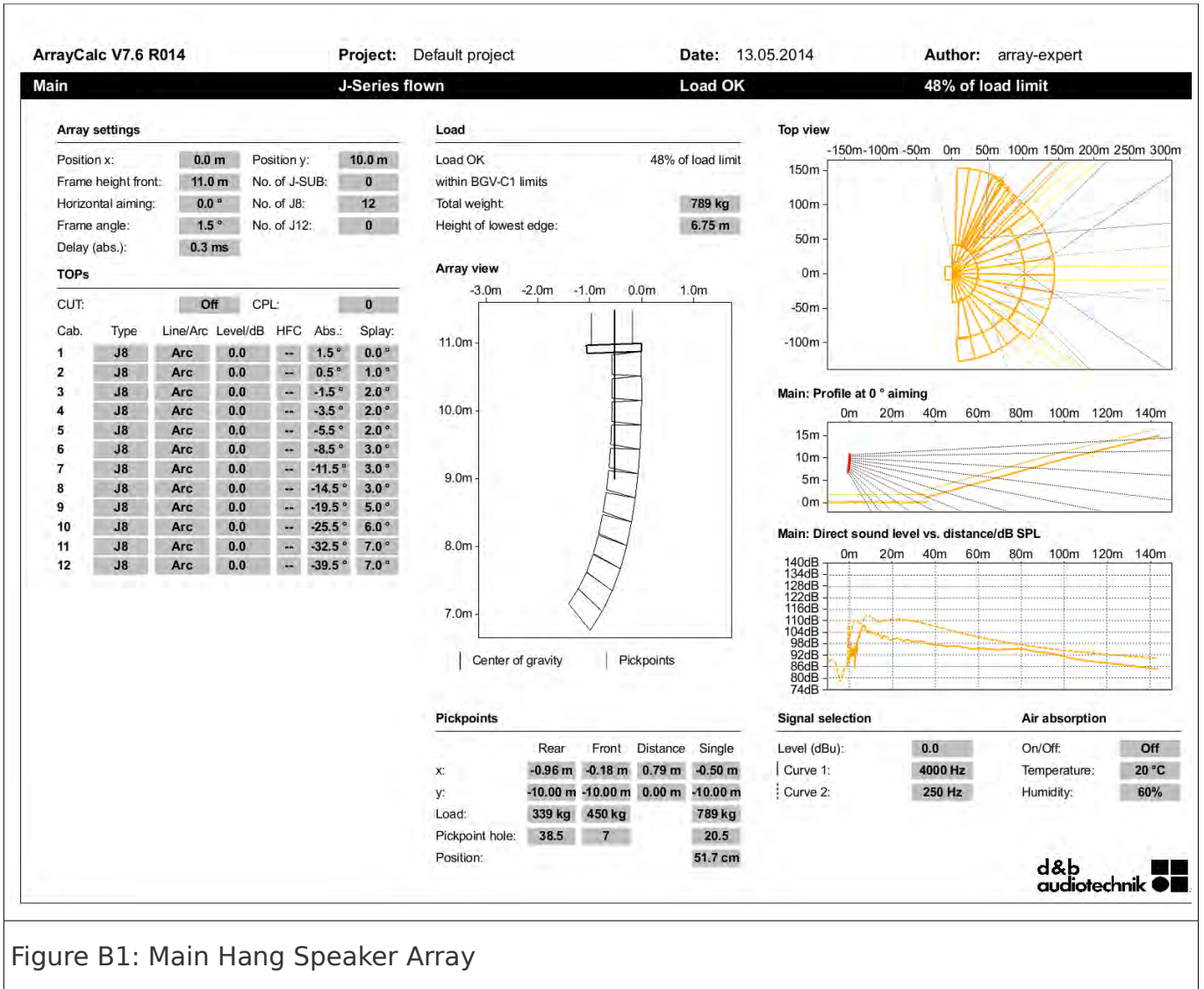
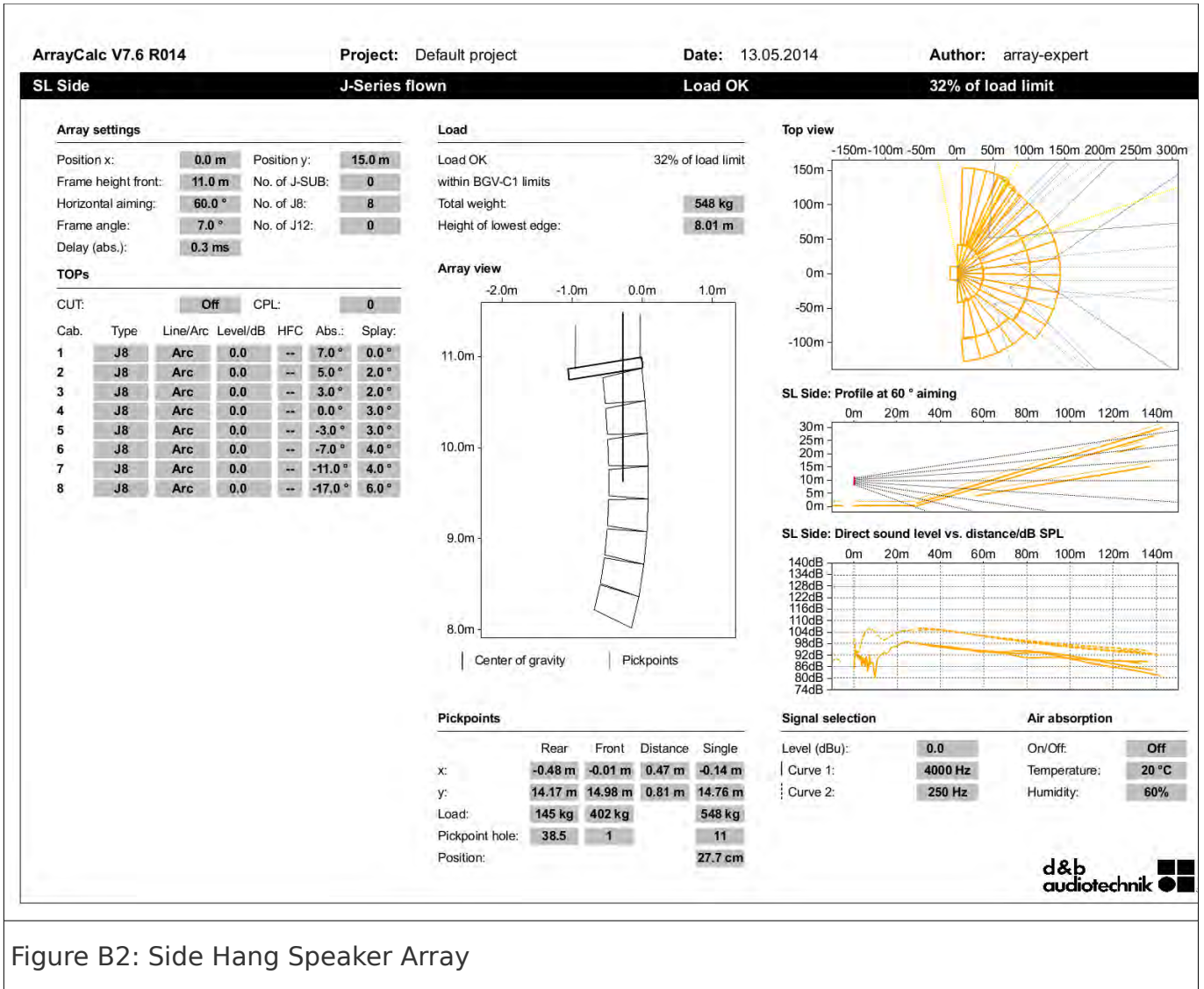


Figure B1: Main Hang Speaker Array



## ENDNOTES

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- 1 PAC, 2012(b)
- 2 Parklands 2014(b), p.32-50 & Appendices A & B
- 3 Parklands 2012(b), p.52-54
- 4 Parklands, 2010
- 5 Parklands 2014 (b), Appendix A
- 6 RPS, 2014
- 7 Parklands 2014(b), p.15 & 29
- 8 Personal communications Mat Morris and Ralph James, Manager, Compliance, BSC 3:00pm 15 December 2014 and Nick Tzannes, Team Leader, Compliance, TSC, 9:00am 23 December 2014
- 9 SITG \$52,000 + Falls Festival 14/15 \$55,000
- 10 PAC 2012(a)
- 11 Personal email communication M Morris and C Hauritz, Principal, Ocean Shores Primary School, 18 December 2013 - personal email communication M Morris and N Harris, Venues Manager, Tough Mudder, 5 November 2014 - personal email communication M Morris and B Hamlin, Interlink Training Services, 10 March 2014 - personal email communication M Morris and K Dickson, Westpac Helicopter Services, 14 March 2014;
- 12 Fitzgerald 2009, 2013, 2014
- 13 Ecological Monitoring at North Byron Parklands Summary: February 2015, Dr. Mark Fitzgerald, Ecological Consultant.
- 14 Native Vegetation Permanent Photo Point Assessment for Parklands: 2013 – 2015 Prepared by: Dr Robert M. Kooyman, 30 January 2015
- 15 Parklands 2014(b), p.39, 43-45
- 16 PAC 2012(b), Condition E17
- 17 SITG Summary Report, p.15, August 2014
- 18 Parklands 2014(b), p.32-33 & Appendix A
- 19 ANE, 2015
- 20 ANE 2015, p.18
- 21 Parklands 2014(b), p.13
- 22 BSC, 2014 (a)
- 23 RPS, 2014
- 24 RPS 2014, p.6
- 25 RPS 2014, p.6
- 26 Australian Government, Department of Employment  
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- 43 Parklands NBP Standard 015 – Community Management V4, 1 June 2014
- 44 SITG14 Stakeholder Debrief Meeting, 29 August 2014
- 45 Oral submissions to the PAC, November 2010
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- 47 Performance Report #2, p.55, 30 November 2014
- 48 Splendour in the Grass Debrief Meeting, 29 August 2014
- 49 Falls Festival Debrief Meeting, 10 February 2015
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- 57 Parklands 2014(b), p.4, 7, 21, 27, 31, 32, 33, 35, 36, 48, 49, 53, 54 & 57
- 58 Parklands 2014(b), p.28 & 76
- 59 Parklands 2014(b), p.33-34
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- 63 SITG14 Stakeholder Debrief Meeting, 29 August 2014
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- 66 Parklands 2014(b), p.46
- 67 Regulatory Working Group Meeting, 27 February 2013
- 68 North Byron Parklands Environmental Performance Report Ecology Year 2, 14 November 2014
- 69 Performance Report #2, p.39, 30 November 2014
- 70 Performance Report #2, p.39, 30 November 2014
- 71 Parklands 2014(b), p.39
- 72 Parklands 2014(b), p.39
- 73 Parklands 2014(b), p.39
- 74 Ecological Monitoring at North Byron Parklands Summary: February 2015, Dr. Mark Fitzgerald, Ecological Consultant.
- 75 Native Vegetation Permanent Photo Point Assessment for Parklands: 2013 – 2015 Prepared by: Dr Robert M. Kooyman, 30 January 2015
- 76 PAC 2012(a), p.8
- 77 PAC 2012(a), p.9
- 78 PAC 2012(a), p.9
- 79 PAC 2012(a), p.10
- 80 R12 and R13 Consultation Log
- 81 ANE, 2015
- 82 Parklands 2014(b), p.48
- 83 Parklands 2014(b), p.48
- 84 NBP Website, News Section as at 12 February 2015
- 85 BSC World Environment Day Awards, 5 June 2014
- 86 Parklands 2014(a), p.50-53 and 352 & Parklands 2014(b), p.32-50
- 87 PAC 2012(a), p.10
- 88 Comparing A-weighted emissions from SITG14 and FFB 14/15 and FFB 14/15 post event noise report.
- 89 Complaints registers covering SITG14 and FFB 14/15 and attended monitoring notes provided by acoustic engineers for SITG14 and FFB 14/15.
- 90 As articulated in Regulations and Guidelines like:
- Code of practice on environmental noise control at concerts [Noise Council (UK)] – providing for 65 dB(A) at rural venues;
  - Australian Capital Territory Outdoor Concert Noise and Environmental Protection Policy 2001 – providing for 65 dB(A) at rural venues;
  - NSW Noise Guide for Local Government – providing for 65 dB(A) at outdoor venues;
  - WA Environmental Protection (Noise) Regulations 1997 – providing for outdoor concerts of 65 dB(A) between 0700 hours and 1900 hours and 60 dB(A) between 1900 hours on any day and 0700 hours on the following day; and
  - Victorian State Environmental Protection Policy (Control of Music from Public Premises) made under the Environmental Protection Act 1970 – providing for 65 dB(A) at outdoor venues.)

<sup>91</sup> Parklands complaints Register covering SITG14, 11.08.14

<sup>92</sup> Report by J Parnell, Table 2, 30 October 2013.

<sup>93</sup> Summary of Lcmax Noise Limits for Outdoor Entertainment Events

Event - Name, Location, Date	Locality	Noise Limits
A Day on the Green Centennial Vineyards (Bowral NSW) 11 November 2012	Rural Residential, Wingecarribee Shire Council	LCmax 90dB(C)
St Jerome's Laneway Festival Rozelle Hospital Grounds (Sydney, NSW) 2 February 2014	Urban City, Leichardt City Council	LCmax 75dB(C)

<sup>94</sup> Code of Practice on Environmental Noise Control at Concerts, The Noise Council, 1995.

<sup>95</sup> Performance Report #2, p.37, 30 November 2014

<sup>96</sup> ANE 2015, Table 4.2

<sup>97</sup> Performance Report #2, p.37, 30 November 2014

<sup>98</sup> 7 February to 1 March 2010 as illustrated in Table 3.1 of the report by Benbow Environmental, Noise Impact Assessment, August 2010.

<sup>99</sup> Performance Report #2, p.37, 30 November 2014

<sup>100</sup> Summary of Legislated and Recommended Noise Limits

State Instrument/Guideline	Noise Limit
New South Wales: Noise Guide for Local Government	65 dB(A) LAMax, 15-minute for non-suburban areas, and 75 dB(A) LAMax, 15-minute for suburban (traffic affected) areas recommended for control of concert noise impacts
Australian Capital Territory: Outdoor Concert Noise Environment Protection Policy 2001	Minimum criteria LA10 50 dB(A) with an upper limit of LA10, 15 minutes 65 dB(A).
Western Australia: Guidelines for concerts, events and organised gatherings	Guideline suggests 100 dB(A) at FOH mixing desk is suitable, measured as LAeq, 1 minute sample.
Queensland: Environmental Protection Act 1994, Section 440X	An occupier of premises must not use, or permit the use of, the premises for an open-air event on any day: (a) before 7:00am, if the use causes audible noise; or (b) from 7:00am to 10:00pm, if the use causes noise of more than 70 dB(A); or (c) from 10:00pm to midnight, if the use causes noise of more than the lesser of the following— (i) 50 dB(A); (ii) 10 dB(A) above the background level. Section 73 (2) of the Environmental Protection Regulation 2008 notes that source noise for open-air events may be measured as LAeq,T.

<sup>101</sup> EPA, 2013

<sup>102</sup> ANE, 2015 p.22

<sup>103</sup> Summer Safety and Cultural Activities Committee Report Confirmed 17.01.14

<sup>104</sup> Examples of after midnight operations include:

New Year's Eve Event	Stage Times	Noise Criteria	Setting	Reference
Shore Thing Bondi Beach, NSW	3pm to 2:00am	<ul style="list-style-type: none"> <li>3:00pm to 2:00am - 75 dB LAmax and 95 dB LCmax at the residence</li> </ul>	High density residential	Noise Management Plan Report for Mi5 Media 2013 New Year's Eve Concert
Falls Festival Lorne, VIC	11:00am to 2:00am	<ul style="list-style-type: none"> <li>11:00am to 11:00pm – 65 dB(A) Leq at the residence</li> <li>11:00pm to 2:00am – 55 dB(A) Leq at the residence</li> <li>No C-weighted criteria</li> </ul>	Rural	Falls Festival 2013 project, Marion Bay-Bream Creek Field report for neighbourhood monitoring
Falls Festival Marion Bay, TAS	11:00am to 6am	<ul style="list-style-type: none"> <li>11:00am to 11:00pm – 65 dB(A) Leq at the residence</li> <li>11:00pm to 2:00am – 55 dB(A) Leq at the residence</li> <li>2:00am to 6:00am – 40 dB(A) Leq at the residence</li> <li>No C-weighted criteria</li> </ul>	Rural	Noise Management Plan – Falls Lorne 2014

<sup>105</sup> The model package was developed using the proprietary software Cadna/A (Computer Aided Noise Abatement Model) developed by Datakustik.

<sup>106</sup> ANE, 2015 p.20

<sup>107</sup> ANE, 2015 p.20