

## TECHNICAL MEMO

Project	Forbidden Forest Premises Licence Application
To	Melton Borough Council, Licencing Department
From	Robert Miller, Director, F1 Acoustics Company Limited
Date	22 November 2023
Reference	1899/F1AcousticsNoiseReport/Rev1

### **1 INTRODUCTION**

F1 Acoustics Company Limited has been appointed by Forbidden Festival Ltd to provide a review of the proposed Premises Licence application to increase the capacity of the Forbidden Forest event held at Frog Hollow, Belvoir Castle and how this may affect the ability of the event to comply with the licencing objective to prevent a public nuisance, with regard to music noise.

F1 Acoustics have been the sound management consultants for Forbidden Forest since 2022 and therefore we have a good understanding of the Premises Licence Conditions relating to music noise and the local context and noise climate.

The review of the proposed variation with regard to music noise has been carried out by Robert Miller BSc (Hons) MIOA(E), Director of F1 Acoustics Company Limited. Robert has been working in the field of Entertainment and Event sound control since 2008 and has proven experience in: expert witness at Premises Licence hearings; liaison with local licensing authorities; baseline noise assessments; venue assessment, noise management plans; assessments of event feasibility; event sound monitoring and management; and event noise modelling and prediction. In this time Robert has provided sound control advice and services to over 100 festivals and events ranging from 210,000 to 500 person capacity.

### **2 REVIEW OF THE PROPOSED LICENCE**

Although capacities for the event are proposed to increase there is no current proposal to increase the number of main stages.

The sound level limits at the local noise sensitive receptors are not proposed to be increased and therefore there will be no change to the current sound levels experienced by the residents local to the event. The off-site sound limits are based on the national guidance document Code of Practice on Environmental Noise Control at Concerts (1995).

Forbidden Festival Ltd strive to continually improve the on-site and off-site sound levels year on year with amendments to site layout and sound system design.

If the number of stages or the size of the stages were to be proposed for amendment in the future this would require approval by Melton Borough Council Environmental Health Department through the current licensing process where by a Noise Management Plan (NMP) is submitted prior to each event. The NMP provides details of each stage and sound propagation predictions to demonstrate that the stages can operate within the music noise level limits at the nearest noise sensitive premises.

For each event the following considerations are undertaken during the planning and design stage to minimise the music noise disturbance at surrounding noise sensitive premises with the aim to make year on year improvements:

- Review of site layout to ensure that the stages are orientated in the best direction to avoid noise sensitive premises (within the constraints of the site).
- Sound system review to ensure that the sound systems specified are of an appropriate size and layout for the arenas.
- Review of sound system set-ups to ensure the most appropriate rear rejection and low frequency pattern control is designed into the sub-woofer (low frequency) output of the sound systems.
- Review the proposed noise monitoring locations to include any new areas that have been highlighted since the last event and provide a list/map of locations to Melton Borough Council in the NMP for agreement prior to the event.
- Review the proposed music noise level limits at surrounding noise sensitive premises, including a specific consideration of low frequency music noise especially at locations further away from the site where the low frequency sound can be dominant. Provide the proposed music noise level limits in the NMP for agreement with the Local Authority prior to the event.

Based on the reasons given above, and my expert experience of the event and site, there is no reason the proposed increase in capacity would cause additional noise disturbance to local residents or increase the likelihood that the music noise limits as set out in the noise management plan would be exceeded.

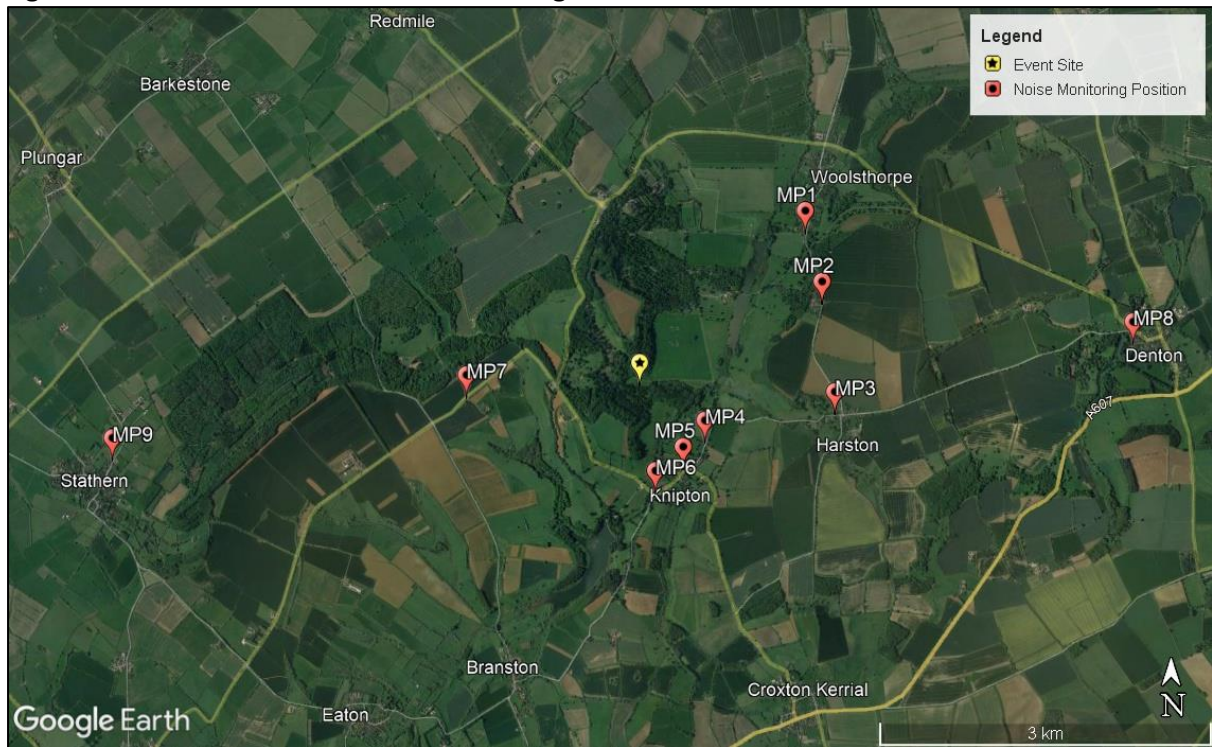
### **3 SUMMARY OF MUSIC NOISE MONITORING FOR FORBIDDEN FOREST IN 2022 AND 2023**

Music noise level monitoring at surrounding noise sensitive areas and premises is regularly carried out throughout the event whilst the main stages are operating. The following villages and areas in between, were monitored in 2022 and 2023:

- Woolsthorpe
- Denton (added in 2023)
- Harston
- Knipton
- Stathern (added in 2023)

Throughout the events the music noise level has been considerably below the music noise level limits agreed in the NMP at Denton, Harston and Stathern. Woolsthorpe measured greater sound levels in 2022 that were closer to but below the limits and were lower still in 2023. Knipton is regularly the location with the greatest music noise levels owing to its proximity to the event and is therefore monitored more regularly with measured sound levels consistently just below the music noise level limits. Figure 3.1 below shows the monitoring positions used in 2022 and 2023.

**Figure 3.1: Forbidden Forest Noise Monitoring Locations**



#### 4 PREMISES LICENCE VARIATION REPRESENTATIONS REFERRING TO MUSIC NOISE

In September 2023, our client submitted an application for variation of the premises licence to increase its capacity. Before it was withdrawn, eleven representations were received that referred to music noise from Forbidden Forest. Table 4.1 below outlines whether the representation is from an individual or organisation, the location, the specific reference to noise and a response based on my experience of noise monitoring for the event.

**Table 4.1: Summary of Representations Referring to Noise and Response**

Representation	Applicant Response
<p>From: (1) District Councillor</p> <p>Area: Belvoir Ward</p> <p>Representation: “The noise levels from the event to the local area plus the nuisance from event goers leaving or traveling from the event or during the day around the communities from noise and littering.”</p>	<p>Response:</p> <p>The sound levels were regularly monitored throughout the event in Belvoir Ward and were below the music noise limits agreed in the noise management plan prior to the event. Reviews of sound systems and site layout are undertaken at the planning stage of the event with the aim of making year on year improvements where possible.</p>

<p>From: (2) Individual</p> <p>Area: Main Street, Denton</p> <p>Representation: “Noise from the festival can be heard in the village late into the Friday, Saturday &amp; Sunday nights. This is generally bands /music noise.”</p>	<p>Response:</p> <p>Music from the event was not audible when monitored from Denton in 2023 on Friday at 18:40 and Saturday at 22:23. Stages only operated until 23:00. We will continue to monitor in Denton.</p>
<p>From: (4) Individual</p> <p>Area: Denton Lane, Harston</p> <p>Representation: “The noise levels generated by FF music are significant and can be heard all day long over the full weekend. Increasing the capacity and size of the festival will only make this worse.”</p>	<p>Response:</p> <p>As discussed in Section 2 of this memo there is no increase to the music noise levels at noise sensitive premises proposed.</p>
<p>From: (5) Individual</p> <p>Area: Pasture Lane, Knipton</p> <p>Representation: “I express my concern about the impact of such large numbers of festival goers on our village, including the levels of traffic and the ability to access our homes, noise levels and safety concerns.”</p>	<p>Response:</p> <p>The sound levels were regularly monitored throughout the event in Knipton and were below the music noise limits agreed in the noise management plan prior to the event. Reviews of sound systems and site layout are undertaken at the planning stage of the event with the aim of making year on year improvements where possible.</p>
<p>From: (7) Belvoir Parish Council</p> <p>Area: Belvoir, Knipton and Harston</p> <p>Representation: “The noise levels generated by the FF music was significantly invasive inside parishioners properties depending on the prevailing wind direction at the time. The deep resonant base notes were an unacceptable intrusion into peoples lives both inside and outside of properties. Several Parishioners are planning to go away for the event weekend in order to escape the pervasive noise. Surely this cannot be an acceptable state of affairs !”</p>	<p>Response:</p> <p>The sound levels were regularly monitored throughout the event in Belvoir, Knipton and Harston and were below the music noise limits agreed in the noise management plan prior to the event. Reviews of sound systems and site layout are undertaken at the planning stage of the event with the aim of making year on year improvements where possible.</p>

<p>From: (11) Denton Parish Council</p> <p>Area: Denton</p> <p>Representation: “The noise levels generated is clearly audible in Denton, but the resounding ever present bass was totally unforgiving and relentless and could be heard behind closed doors. It would be impossible to hold any event in Denton during this period.”</p>	<p>Response:</p> <p>Music from the event was not audible when monitored from Denton in 2023 on Friday at 18:40 and Saturday at 22:23. We will continue to monitor in Denton.</p>
<p>From: (13) Individual</p> <p>Area: Pasture Lane, Knipton</p> <p>Representation: “The noise levels generated by the event were definitely Invasive throughout the whole festival, and as a family we weren’t able to sit in our own gardens without the continual base noise, even during the so called Silent Disco!. We gave the monitoring authority access to our property on Pasture Lane, to which they admitted that the ‘Thump, thump of the base was unacceptable but unfortunately we were told that this noise isn’t registered on their equipment! The gentleman said he would be going up to the event to report this. Unfortunately Sunday the monitoring team weren’t working in our area and this was evident as the noise was noticeably louder on the Sunday.”</p>	<p>Response:</p> <p>I cannot comment on the local authority equipment but our own sound monitoring equipment can measure low frequency (bass) in third octave bands and we use this measurement data to control the event to the agreed music noise level limits. We were monitoring throughout the event and continued to monitor throughout Sunday. No evidence in our measurement data of music noise levels measured on Sunday being louder in Knipton than Saturday. Perhaps the wind direction changed characteristics of the sound being heard between the two days, however throughout the event the sound levels were below the music noise limits agreed in the noise management plan.</p>
<p>From: (15) Individual</p> <p>Area: Main Street, Knipton</p> <p>Representation: “The noise levels generated by the event are not acceptable a constant drone of Deep base noise from midday all through the day and night . Increasing in volume as weekend evolves . My animals hate it and are restless through the event . Let alone 300 residents .”</p>	<p>Response:</p> <p>The sound levels were regularly monitored throughout the event in Knipton and were below the music noise limits agreed in the noise management plan prior to the event. Reviews of sound systems and site layout are undertaken at the planning stage of the event with the aim of making year on year improvements where possible.</p>



<p>From: (19) Stathern Parish Council</p> <p>Area: Stathern</p> <p>Representation: “The village of Stathern is located to the South East of the festival location, separated by an undulating landscape that is largely wooded. Despite the distance, the festival could be clearly heard in the village of Stathern and caused a serious disturbance to a number of villagers and caused serious concern to one life stock holder.</p> <p>The volume, the length of time it could be heard for and the disturbance to local residents caused by Forbidden Forest constitutes a public nuisance.”</p>	<p>Response:</p> <p>Following a noise complaint received from Stathern during the 2023 event monitoring was carried out in Stathern on Saturday at 17:59 where it was noted that music was “barely audible almost indiscernible” and that a tractor in a nearby field was the dominant noise source, a measurement of the music noise was not possible. A further visit was made on Saturday at 21:53 where it was noted “music bass beat just audible”, the music noise levels measured were significantly below the proposed limits. We will continue to monitor in Stathern.</p>
<p>From: (20) Individual</p> <p>Area: Belvoir</p> <p>Representation: “The noise levels generated by the FF music was significantly invasive inside parishioners properties depending on the prevailing wind direction at the time. The deep resonant base notes were an unacceptable intrusion into peoples lives both inside and outside of properties. Several Parishioners are planning to go away for the event weekend in order to escape the pervasive noise. Surely this cannot be an acceptable state of affairs !”</p>	<p>Response:</p> <p>The sound levels were regularly monitored throughout the event and were below the music noise limits agreed in the noise management plan prior to the event. Reviews of sound systems and site layout are undertaken at the planning stage of the event with the aim of making year on year improvements where possible. A monitoring position will be added for music noise in the Belvoir area to the northwest of the castle.</p>
<p>From: (21) Woolsthorpe by Belvoir Parish Council</p> <p>Area: Woolsthorpe</p> <p>Representation: “The noise levels during the festival were excessive, the residents live very close to the event and the volume was so loud it could be heard within residents’ properties disturbing their living conditions.”</p>	<p>Response:</p> <p>The sound levels were regularly monitored throughout the event in Woolsthorpe and were below the music noise limits agreed in the noise management plan prior to the event. Reviews of sound systems and site layout are undertaken at the planning stage of the event with the aim of making year on year improvements where possible.</p>