

# Battel Hall & Castle View

## Amplified Music Noise Survey Report

23415/ENS1

27 October 2017

For:  
Leeds Castle  
Maidstone  
Kent  
ME17 1PL



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## Environmental Noise Survey Report 23415/ENS1

### Document Control

Rev	Date	Comment	Prepared by and Authorised by
0	27/10/2017	-	John Gibbs Director MIOA, MSEE, CEnv

This report has been prepared by Hann Tucker Associates Limited (HTA) with all reasonable skill, care and diligence in accordance with generally accepted acoustic consultancy principles and the purposes and terms agreed between HTA and our Client. Any information provided by third parties and referred to herein may not have been checked or verified by HTA unless expressly stated otherwise. This document contains confidential and commercially sensitive information and shall not be disclosed to third parties. Any third party relies upon this document at their own risk.



## **Environmental Noise Survey Report 23415/ENS1**

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### **Attachments**

Outdoor Amplified Music

Log Sheet of Telephone Complaints

Log Sheet – Noise Assessment



## 1.0 Introduction

Battel Hall & Castle View, Burberry Lane, Leeds, Kent has received planning permission for change of use for events including weddings. The planning permission included conditions limiting the activity of amplified sound outdoors, to protect residential amenity.

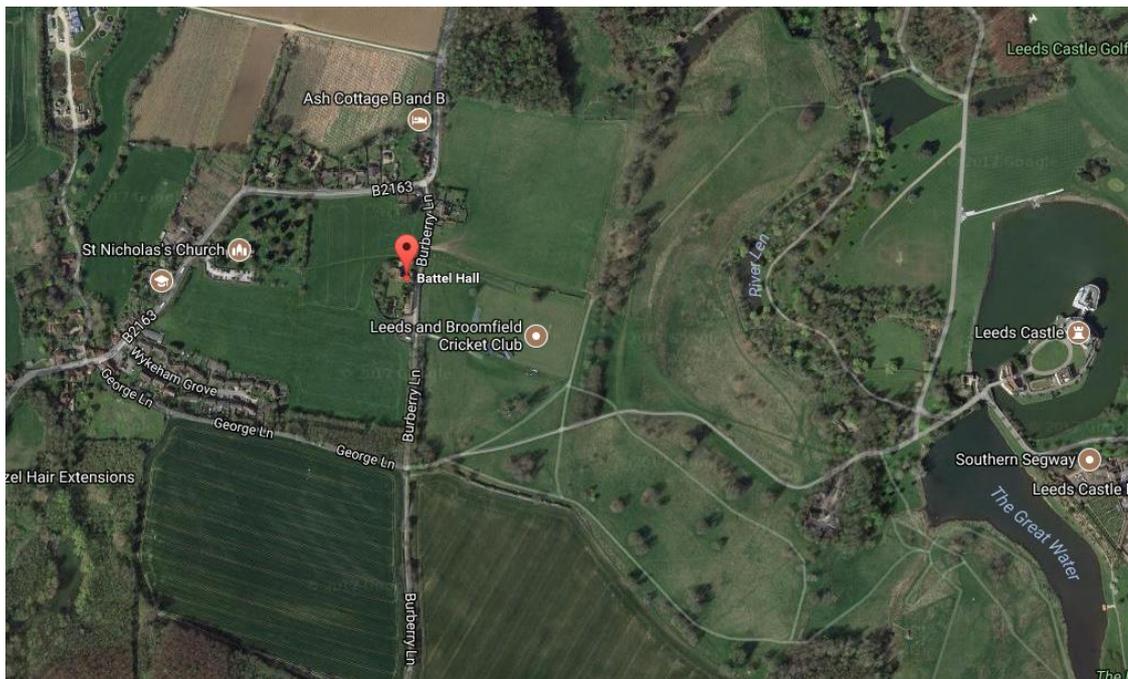
## 2.0 Objectives

Undertake a site survey to establish maximum sound levels. Based upon the results of the survey and Planning Condition No.8 prepare a noise management plan, for outside events with amplified music.

## 3.0 Site Description

### 3.1 Location

The site at Burberry Lane, Leeds, Kent ME17 1RH. The location is shown in the Location Map below.



Location Map

The site falls within the jurisdiction of Maidstone Borough Council.



### 3.2 Description

It is proposed weddings would be held in a marquee erected adjacent to the west façade of Battel Hall. The nearest residential properties are located approximately 95m north of Battel Hall. Residential properties are also located approximately 215m south west of Battel Hall.

The site is shown in the Site Plan below.



Site Plan

### 4.0 Acoustic Terminology

For an explanation of the acoustic terminology used in this report please refer to Appendix A enclosed.



## 5.0 Methodology

The survey was undertaken by John Gibbs MIOA, MSEE CEnv.

### 5.1 Manned Survey

#### 5.1.1 Procedure

Fully manned environmental noise monitoring was undertaken from approximately 10:00 hours to 12:00 hours on Wednesday 11 October 2017.

A loud speaker mounted on a stand which was orientated facing south. It is understood this will be the location for a PA when used for an outdoor/marquee event. For the purpose of the survey various popular/dance music was played.

During the survey period the wind conditions were variable and from approximately a southerly direction. The sky was generally overcast. There was some rain during the survey. Measurements were undertaken during spells of calm weather.

Measurements were taken of the A-weighted (dBA)  $L_{eq}$  sound pressure levels over periods of not less than one minute. Atypical noises were excluded as far as reasonably possible.

In addition, at each position  $L_{eq}$  octave band spectra (from 63Hz to 8kHz) were taken during the period in order to gain a more detailed description of the prevailing noise climate.

#### 5.1.2 Measurement Positions

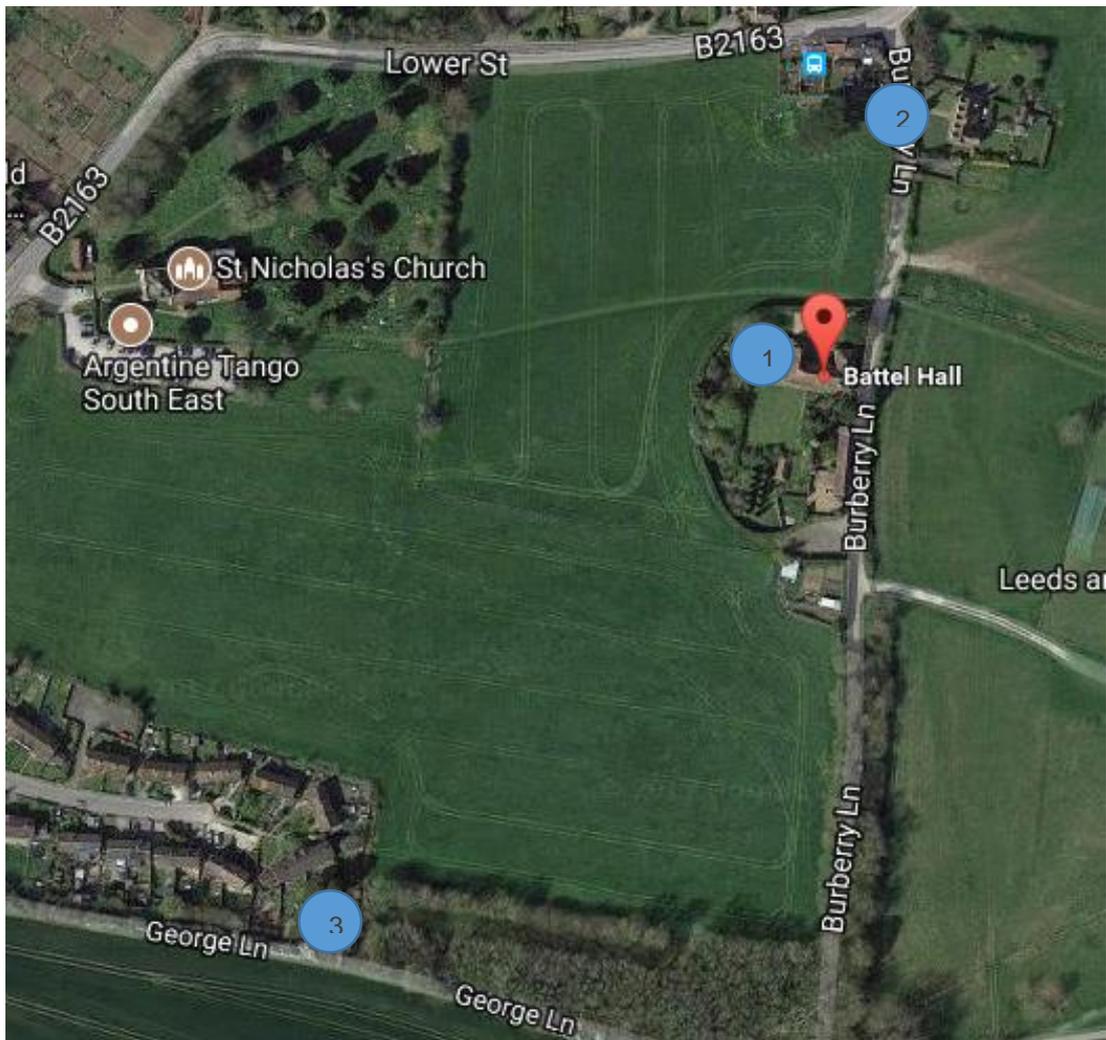
The noise level measurements were undertaken at 3No. positions around the development site. The measurement positions are described in the table below.

Position No	Description
1	In front of a speaker. The speaker was located 3m from the garden wall along the northern boundary, facing south.
2	In the Burberry Lane to the north, outside the nearest residential property.
3	In George Lane to the south west, outside the residential properties.

\*All measurements 1.2m above ground level.



The measurements positions are shown on the plan below.



Plan Showing Manned Measurement Positions

### 5.1.3 Instrumentation

The instrumentation used during the manned survey is presented in the table below:

Description	Manufacturer	Type	Serial Number	Calibration
Type 1 Precision Sound Level Meter	Brüel and Kjær	2260	2180670	B & K calibration on
Type 1 Calibrator	Brüel and Kjær	4231	2115545	B & K calibration on
Pistonphone	Brüel and Kjær	4220	1297463	B & K calibration on



The sound level meter was mounted on a tripod and was fitted with a Brüel and Kjær microphone windshield.

The sound level meter was calibrated prior to and on completion of the surveys. No significant changes were found to have occurred (no more than 0.1dB).

## 6.0 Results

The results of the survey are summarised in the table below:

Position	Comment	Leq Sound level (dB) @ Octave Band Centre Frequency								dBA
		63	125	250	500	1k	2k	4k	8k	
2	Background	57	48	43	44	46	42	32	27	49
1	Maximum volume	97	110	101	102	104	106	104	97	111
2	Music very audible	62	52	48	44	45	41	36	28	49
3	Music audible	56	48	38	39	38	34	30	32	41
1	Reduced volume	94	101	99	93	92	91	85	82	101
2	Music not audible	63	51	42	41	44	42	34	28	48
3	Music just audible	57	48	43	39	38	33	28	25	43
2	Background	56	47	40	40	43	38	28	20	46
3	background	53	45	36	37	36	33	31	25	41

## 7.0 Discussion Of Noise Climate

### 7.1 Requirement

The Planning Permission Conditions 7 & 8 requires the following:

(7) Amplified sound shall not be created on the site outside of the confines of the buildings annotated on drawing 5305/25/D as Battel Hall and Castle View other than in accordance with all of the following requirements:

a) Outside of the confines of the buildings of Battel Hall and Castle View, amplified sound shall not be created between 2400 hours and 0700 hours; and

b) Outside of the confines of the buildings of Battel Hall and Castle View, amplified sound shall only be created within the confines of a marquee to be located within the area annotated as the proposed marquee zone on drawing 5305/25/D; and



c) Outside of the confines of the buildings of Battel Hall and Castle View, amplified sound shall be created for not more than 15 days in any calendar year; and

d) A log shall be kept available for inspection that details all of the times when amplified sound is created outside of the confines of those buildings;

Reason: In the interests of residential amenity.

(8) Prior to the creation of any amplified sound outside of the confines of the buildings annotated on drawing 5305/25/D as Battel Hall and Castle View, a noise management plan shall be submitted to and approved by the Local Planning Authority. The plan shall include, but not be limited to, maximum sound levels at an agreed monitoring position; how and by whom sound levels will be monitored; a contact complaint telephone number and how that would be reacted to; and set out the minimum gap between amplified sound events. The plan shall include a mechanism for demonstrating compliance with the noise management plan; and for its review and updating when considered necessary in agreement with the Local Planning Authority. The approved noise management plan shall be followed at all times;

Reason: In the interests of residential amenity.

## 7.2 Noise Impact Assessment

As part of the application a noise impact assessment was undertaken. The results of the assessment were advised in our Report 23415/NIA1 dated 28 July 2016. In summary our report advised event noise levels should not exceed 43dB  $L_{Aeq,15mins}$  at 1m from the nearest residential façade.

## 7.3 Noise Levels at Venue

The purpose of the survey in Section 5.0 above was to determine the maximum noise levels at the venue to ensure a noise level of 43dB  $L_{Aeq,15mins}$  is not exceeded at 1m from the nearest residential façade.

Based upon the results of our survey and assuming a PA with two speakers locked/orientated in similar positions as assessed above we recommend the noise level emitted at venue should not exceed 95dB  $L_{Aeq,T}$  @ 1m in front of the speaker, to ensure a noise level of 43dB  $L_{Aeq,15mins}$  is not exceeded at 1m from the nearest residential façade.



#### **7.4 Noise Management Plan (Outdoor Amplified Music)**

Please see Appendix A for our recommended Noise Management Plan for outdoor amplified music.

A sound level meter suitable for the measurements would be Sinas Boogie ([www.sinus-leipzig.deen](http://www.sinus-leipzig.deen)) available from AcSoft ([www.acsoft.co.uk](http://www.acsoft.co.uk)).

#### **8.0 Conclusions**

An acoustic survey has been undertaken to set limiting sound levels from outdoor amplified music.

Based upon the results of the survey and in accordance with Planning Conditions 7 & 8 a noise management plan for outdoor amplified music has been produced.

**Battel Hall**  
**Outdoor Amplified Music**  
**Noise Management Plan – Measures in place / to be taken**

Amplified sound will cease by 0000 hours on up to 15 days per year, with up to 2 events per calendar week.

Maximum volume noise levels will be set during sound check prior to any event, by event staff using a Type 2 sound level meter.

Sound level not to exceed 95dB  $L_{eq,T}$  @ 1m in front of speaker.

Loud speakers will be pointed away and located as far away from noise sensitive properties as possible.

Telephone hotline number (01622 767870) to be advertised to local residents.

All complaints to be logged, see attached log sheet.

At critical times during an event including sound checks or following a complaint noise levels will be monitored at the venue and or outside the most affected noise sensitive properties.

Details of the assessment are to be logged, see attached sheet.

Noise levels at the venue should not exceed 95dB  $L_{Aeq,T}$  @ 1m in front of a speaker to ensure a noise level of 43dB  $L_{Aeq,15mins}$  is not exceeded @ 1m from the nearest noise sensitive residential façade. Noise levels will be recorded by event staff using a Type 2 Sound Level Metter.



