

TECHNICAL MEMO

Project	Camp Wildfire – Baseline Noise Survey 29 April 2021
To	Lee Denny, Camp Wildfire
From	Robert Miller, Director, F1 Acoustics Company Limited
Date	30 April 2021
Reference	1586/BaselineSurveyTechnicalMemo/Rev0

1 INTRODUCTION

F1 Acoustics Company Limited has been appointed by Camp Wildfire to undertake baseline noise monitoring for the Camp Wildfire events to be held at the St Clere Estate in Kent.

2 EVENT DESCRIPTION

Camp Wildfire will be held on up to four weekends with music curfew times of Friday 03:00, Saturday 03:00 and Sunday 02:00.

3 BASELINE NOISE SURVEYS

To measure the existing background and ambient noise levels representative of the nearest noise sensitive receptors (NSR), two baseline noise surveys were carried out on the evening and night of Thursday 29th April 2021.

The surveys were carried out following the guidance provided in the Code of Practice on Environmental Noise Control at Concerts (The Noise Council, 1995), that states the background sound levels should be measured over a period representative of the last four hours of the proposed music event, on a day without the event occurring. The four measured $L_{A90,1\text{hour}}$ background sound level measurements are then arithmetically averaged to provide a representative background sound level for the event.

As the event runs beyond daytime hours (07:00 to 23:00) measurements were made over the final four hours of the daytime period, 19:00 to 23:00 and the final four hours of the proposed events 23:00 to 03:00.

Location 1 – White Gate Cottage

The noise survey was located on the boundary of the field to the southeast of White Gate Cottage.

The microphone was installed at a height of 1.5 m above ground level and in a free-field location. The microphone was fitted with a weatherproof windshield.

The noise survey location is shown in Figure 1.

The noise environment during the baseline noise survey was comprised of distant road traffic noise (M20), birdsong, occasional aircraft and occasional set-up noise from a film shoot at the far end of the field. The background noise levels were dominated by the distant road traffic (M20). The noise from the film shoot preparation did not have a significant impact on the measured noise levels.

Location 2 – Terry’s Lodge Road

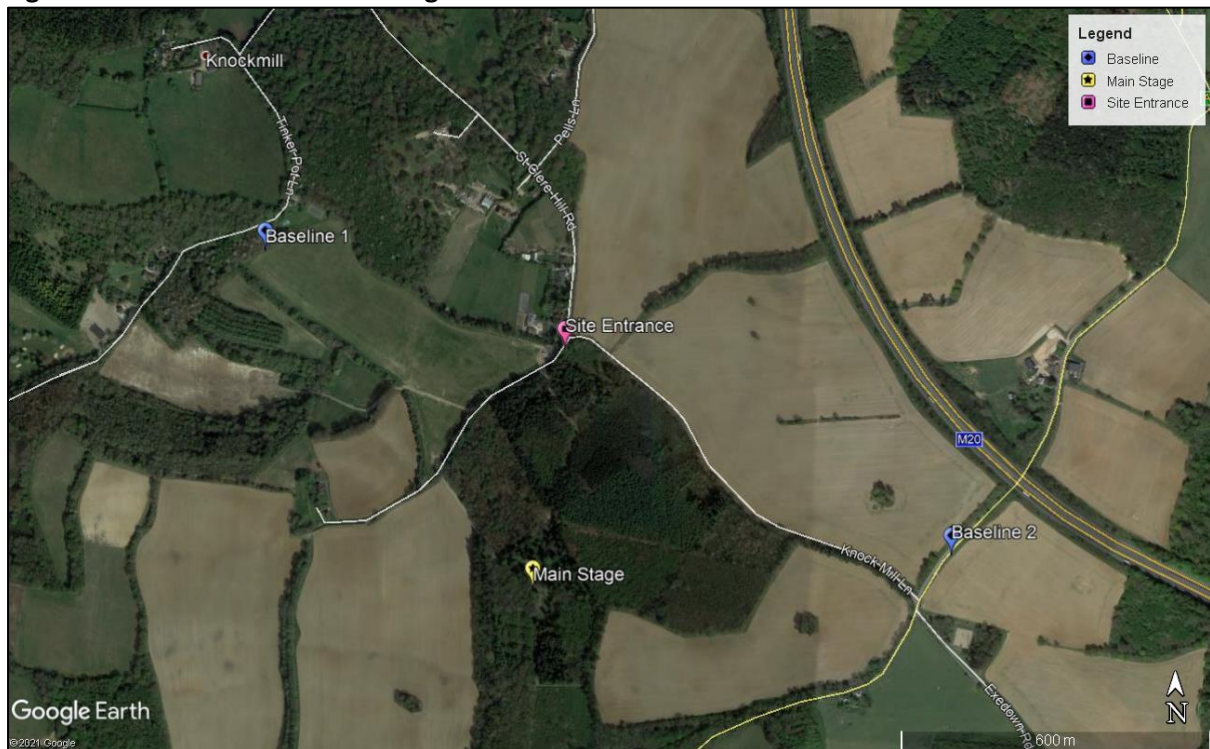
The noise survey was located 200 m south of the M20 motorway on Terry’s Lodge Road. The location was a comparable distance from the motorway to the residential properties located to the north of the M20 and is considered representative.

The microphone was installed at a height of 1.5 m above ground level and in a free-field location. The microphone was fitted with a weatherproof windshield.

The noise survey location is shown in Figure 1.

The noise environment during the baseline noise survey was dominated by road traffic noise from the M20. Other noise sources included birdsong and occasional aircraft.

Figure 1: Baseline Noise Monitoring Locations



Equipment and Calibration

The instrumentation used for the noise surveys were Rion NL-52 Class 1 sound level meters (SLM) (F1AC-001 and F1AC-002) and Rion NC-74 Calibrators (F1AC-003 and F1AC-004). The SLMs were configured to log $L_{p,100ms}$ data and 15-minute broadband measurements of the L_{Aeq} and L_{A90} with fast time weighting.

The SLMs had field calibration checks carried out prior to and immediately following the surveys and no significant deviation was recorded. All instrumentation used has been calibrated to traceable standards within two years.

Weather

The meteorological conditions were monitored throughout the duration of the noise survey. There was a short period of light rain between 23:30 and 23:40. There were no periods considered unsuitable for noise monitoring during the survey.

4 BASELINE NOISE SURVEY RESULTS

The broadband baseline noise survey results are presented in Table 1 below.

Table 1: Measured and Calculated Average Background and Ambient Sound Levels

Start Time	Location 1 – White Gate Cottage		Location 2 – Terry’s Lodge Road	
	Background L _{A90,1hour} , dB ¹	Ambient L _{Aeq,1hour} , dB	Background L _{A90,1hour} , dB ¹	Ambient L _{Aeq,1hour} , dB
19:00	32	40	57	61
20:00	35	41	57	61
21:00	37	41	56	60
22:00	36	40	54	59
23:00	33	38	49	56
00:00	31	37	47	56
01:00	30	37	43	54
02:00	34	40	44	55
Average 19:00 to 23:00 ²	35	40	56	60
Average 23:00 to 03:00 ²	32	38	46	55

1 Calculated from L_p,100ms data.

2 Background averages are arithmetic and ambient averages are logarithmic.