

Hunter Power Project – 3200-0663

Attended Noise Monitoring Results – 6th February 2023

Prepared by Cristina Lang - UGL Senior Environmental Advisor

Date: 8th February 2023

The first continuous concrete pour activity at Gas Turbine 1 - Hunter Power Project was undertaken on 6th of February 2023, commencing at 2am and finalising at 6pm.

In compliance with the condition L5.1 of the EPL 21627, UGL conducted two attended noise monitoring activities in five strategic noise catchment areas proposed in the *Jacobs Concrete Pour Noise and Vibration Impact Assessment* (Jacobs, November 2022) and *UGL Noise Management Plan* (UGL, January 2023). A Casella Precision Integrating Octave band Sound Level meter CEL-62OB1/K1 was utilised for the noise measurement levels. The equipment was calibrated on 15 of August 2022 and field calibration was performed before and after each monitoring event. The first round of noise monitoring was initiated at 4:30am and concluded at 6:39 am (night – outside of construction hours) and the second round of noise monitoring was initiated at 10:12 am and concluded at 12:11 pm (day – standard construction hours).

The noise monitoring record sheets and the Appendix A *raw data*, documents embedded with this memorandum, display a more detailed description of the noise monitoring events performed on 6th February 2023.

The results from noise monitoring are presented in the table A below:

NCA	Address	L _{eq} (15 min) dB(A)	LAMax dB(A)	L _{eq} (15 min) dB(A)	LAMax dB(A)
		Day (standard construction hours)	Day (standard construction hours)	Night (outside construction hours)	Night (outside construction hours)
		7:00 am – 6:00 pm	7:00 am – 6:00 pm	10:00pm- 7:00am	10:00pm- 7:00am
1	103 Bishops Bridge Rd, Sawyers Gully	62.1	84.7	61.2	71.3
2	6 Dawes Ave, Loxford	60.2	81	65.8	75.2
3	20 Bowditch Ave, Loxford	52	68.2	43.5	62.1
4	464 Cessnock Rd, Gillieston Heights	70.7	84	67.6	84
5	15 Sawyers Gully Rd, Sawyers Gully	60.1	82.4	58.9	75

Table A. Results from noise monitoring activities on 6th February 2023

PROJECT DETAILS		Noise Monitoring Record sheet								
Project Name		Hunter Power Project								
Monitoring Location		NCA 01			103 Bishops Bridge Rd, Sawyers Gully					
Date		06/02/2023			Time		11:56am			
Construction Activity		Concrete Pour								
Distance from Noise Source		1,240 m								
Weather Conditions		Sunshine, scattered clouds, light wind, 28°C								
Noise Source/s		Hunter Expressway, insects, birds, dog bark								
SOUND METER DETAILS										
Serial Number		5015288		Make		Casella		Model		CEL-620B
Calibration Details		Meter calibrated by Supplier on the 15/08/2022								
Test Standards		AS 1055.1:1997 and AS 2659.2:1983								
Noise Management Levels	Std Construction Hrs 7:00 am – 6:00 pm Weekdays	55	Period 1 Evening 6:00pm-10:00pm	50	Period 2 Night 10:00pm-7:00am	41	Sleep Disturbance (LAeq)	41	Sleep Disturbance (LAMax)	52
RESULTS										
Qualitative Assessment										
Construction Noise Inaudible			<input checked="" type="checkbox"/>		Construction noise intermittently audible				<input type="checkbox"/>	
Construction noise typically audible			<input type="checkbox"/>		Construction noise clearly audible				<input type="checkbox"/>	
Construction noise is dominant noise source			<input type="checkbox"/>		Impulsive construction noise audible (e.g. rock-breaking)				<input type="checkbox"/>	
High noise generating activities audible (e.g. chainsaws)			<input type="checkbox"/>		Tonal construction noise audible				<input type="checkbox"/>	
Quantitative Assessment										
Start Time		11:56am			Finish time		12:11am			
LAm _{ax}			84.7		dBA					
LAm _{in}			51.5		dBA					
LAeq 15 min			62.1		dBA					
Exceedance of NML			5.1		dBA					
Comments During monitoring, construction noise was inaudible. Other noise sources included insects, dog bark and the Hunter Expressway. The Hunter Expressway was located parallel to this monitoring location hence noises from the highway were quite audible. Dogs were barking sporadically during the 15-minute monitoring interval. Noise originating from cicadas was also recorded and remained constant throughout monitoring. No construction noise was observed										

**Appendix A - NOISE
METER: RAW DATA**

**NCA 01 - 103 Bishops Bridge
Rd, Sawyers Gully**

<CEL-620B Data>

Version

<Run>

Location FreeField

Response 6/02/2023 11:56

Start 0:15:00

Duration 0:00:00

Paused Duration 5015288

Serial Number 21

Run No

Overload No

Battery Low

<Broadband> 91.7

LZSmax 6/02/2023 11:57

LZSmax Time 96.5

LZFmax 6/02/2023 11:57

LZFmax Time 100.7

LZImax 6/02/2023 11:56

LZImax Time 81.6

LCSmax 6/02/2023 11:57

LCSmax Time 88

LCFmax 6/02/2023 11:57

LCFmax Time 92.1

LClmax 6/02/2023 11:56

LClmax Time 73.5

LASmax 6/02/2023 11:57

LASmax Time 80

LAFmax 6/02/2023 11:57

LAFmax Time 84.7

LAlmax 6/02/2023 11:57

LAlmax Time 60.9

LZSmin 6/02/2023 12:05

LZSmin Time 59.7

LZFmin 6/02/2023 12:05

LZFmin Time 61

LZlmin 6/02/2023 12:05

LZlmin Time	58.6
LCSmin	6/02/2023 12:06
LCSmin Time	57.3
LCFmin	6/02/2023 12:06
LCFmin Time	59.3
LClmin	6/02/2023 12:09
LClmin Time	51.9
LASmin	6/02/2023 12:05
LASmin Time	50.9
LAFmin	6/02/2023 11:58
LAFmin Time	51.5
LAlmin	6/02/2023 11:58
LAlmin Time	73.5
LZeq	67.9
LCeq	59.6
LAeq	62.1
LAlaq	0
Lavg Threshold	59.4
Lavg Q=4	59.3
Lavg Q=5	108.5
LZpeak	6/02/2023 11:56
LZpeak Time	107.8
LCpeak	6/02/2023 11:57
LCpeak Time	107.5
LApeak	6/02/2023 11:57
LApeak Time	89.2
LAE	44.2
LAeq(T=80)	62.1
LAFTm3	62.9
LAFTm5	64.6
LAlTm3	66.3
LAlTm5	
<Octave LZeq>	64.5
16Hz	65.8
31.5Hz	64
64Hz	59.8
125Hz	52.5
250Hz	53.4
500Hz	53.5

1KHz	47.2
2KHz	55.4
4KHz	47.6
8KHz	31.7
16KHz	
<Octave LZFmax>	89.9
16Hz	87.8
31.5Hz	81.8
64Hz	76
125Hz	70.2
250Hz	69.4
500Hz	70.9
1KHz	77
2KHz	72.5
4KHz	67.9
8KHz	60.8
16KHz	
<Octave LZSmax>	84.8
16Hz	80.2
31.5Hz	77.4
64Hz	75
125Hz	63.8
250Hz	64.2
500Hz	65.7
1KHz	69
2KHz	67
4KHz	60.8
8KHz	54
16KHz	
<Calibration>	6/02/2023 11:56
Before Cal Date	94
Cal Ref.Level	0
Cal Position	6/02/2023 12:13
After Cal Date	-0.2
Cal Change	

PROJECT DETAILS		Noise Monitoring Record sheet								
Project Name		Hunter Power Project								
Monitoring Location		NCA 02			6 Dawes Avenue, Loxford					
Date		06/02/2023			Time		11:10am			
Construction Activity		Concrete pour								
Distance from Noise Source		1,610 m								
Weather Conditions		Sunshine, scattered clouds, light wind, 28°C								
Noise Source/s		Cicadas, birds, horses, traffic from Hunter Expressway, industrial noise								
SOUND METER DETAILS										
Serial Number		5015288		Make		Casella		Model		CEL-620B
Calibration Details		Meter calibrated by Supplier on the 15/08/2022								
Test Standards		AS 1055.1:1997 and AS 2659.2:1983								
Noise Management Levels	Std Construction Hrs 7:00 am – 6:00 pm Weekdays	48	Period 1 Evening 6:00pm-10:00pm	43	Period 2 Night 10:00pm-7:00am	42	Sleep Disturbance (LAeq)	42	Sleep Disturbance (LAMax)	52
RESULTS										
Qualitative Assessment										
Construction Noise Inaudible			<input checked="" type="checkbox"/>		Construction noise intermittently audible			<input type="checkbox"/>		
Construction noise typically audible			<input type="checkbox"/>		Construction noise clearly audible			<input type="checkbox"/>		
Construction noise is dominant noise source			<input type="checkbox"/>		Impulsive construction noise audible (e.g. rock-breaking)			<input type="checkbox"/>		
High noise generating activities audible (e.g. chainsaws)			<input type="checkbox"/>		Tonal construction noise audible			<input type="checkbox"/>		
Quantitative Assessment										
Start Time		11:10am			Finish time		11:25			
LAm _{ax}			81			dBA				
LAm _{in}			50.7			dBA				
LAeq 15 min			60.2			dBA				
Exceedance of NML			12.2			dBA				
Comments During monitoring, construction noise was inaudible. Other noise sources included birds, insects, horses, commercial activities and the Hunter Expressway. Factory equipment noises were audible from a small commercial building located in the street adjacent to Dawes Ave. Vehicles from the Hunter Expressway could be well heard. Intense noise originating from cicadas was also recorded and remained constant throughout monitoring. Mild horse neighs were observed during the standard construction hours monitoring. No construction noise was observed.										

**Appendix A - NOISE METER :
RAW DATA**

**NCA 02 - 6 Dawes Avenue,
Loxford**

Version	
<Run>	
Location	
Response	FreeField
Start	6/02/2023 11:10
Duration	0:15:00
Paused Duration	0:00:00
Serial Number	5015288
Run	19
Overload	No
Battery Low	No
<Broadband>	
LZSmax	83.3
LZSmax Time	6/02/2023 11:12
LZFmax	88.2
LZFmax Time	6/02/2023 11:12
LZImax	90.7
LZImax Time	6/02/2023 11:12
LCSmax	73.2
LCSmax Time	6/02/2023 11:15
LCFmax	79.9
LCFmax Time	6/02/2023 11:15
LCImax	83
LCImax Time	6/02/2023 11:15
LASmax	74
LASmax Time	6/02/2023 11:15
LAFmax	81
LAFmax Time	6/02/2023 11:15
LAlmax	84.4
LAlmax Time	6/02/2023 11:15
LZSmin	60.3
LZSmin Time	6/02/2023 11:22
LZFmin	58
LZFmin Time	6/02/2023 11:21
LZImin	60.7
LZImin Time	6/02/2023 11:23

LCSmin	57
LCSmin Time	6/02/2023 11:22
LCFmin	54.9
LCFmin Time	6/02/2023 11:20
LCImin	57.3
LCImin Time	6/02/2023 11:19
LASmin	52.2
LASmin Time	6/02/2023 11:22
LAFmin	50.7
LAFmin Time	6/02/2023 11:23
LAlmin	51.8
LAlmin Time	6/02/2023 11:22
LZeq	68.7
LCeq	61.5
LAeq	60.2
LAlaq	62.4
Lavg Threshold	0
Lavg Q=4	59.9
Lavg Q=5	59.7
LZpeak	107.3
LZpeak Time	6/02/2023 11:15
LCpeak	107
LCpeak Time	6/02/2023 11:15
LApeak	107.4
LApeak Time	6/02/2023 11:15
LAE	89.7
LAeq(T=80)	45.2
LAFTm3	62.5
LAFTm5	63.5
LAlTm3	64.5
LAlTm5	65.8
<Octave LZeq>	
16Hz	59.2
31.5Hz	58.5
64Hz	51.9
125Hz	52
250Hz	43
500Hz	39.3
1KHz	40.5

2KHz	46.6
4KHz	58.6
8KHz	47.7
16KHz	28.4

<Octave LZFmax>

16Hz	79.1
31.5Hz	75.3
64Hz	68.5
125Hz	73.2
250Hz	65.3
500Hz	64.6
1KHz	70.4
2KHz	72.8
4KHz	78.3
8KHz	68.1
16KHz	49.5

<Octave LZSmax>

16Hz	75.6
31.5Hz	70.1
64Hz	64.2
125Hz	70.7
250Hz	59.3
500Hz	58.9
1KHz	63.8
2KHz	65.6
4KHz	71.2
8KHz	61.3
16KHz	42.9

<Calibration>

Before Cal Date	6/02/2023 11:10
Cal Ref.Level	94
Cal Position	0.1
After Cal Date	6/02/2023 11:26
Cal Change	-0.7

PROJECT DETAILS		Noise Monitoring Record sheet																			
Project Name		Hunter Power Project																			
Monitoring Location		NCA 03			20 Bowditch Avenue, Loxford																
Date		06/02/2023			Time		10:47am														
Construction Activity		Concrete pour																			
Distance from Noise Source		1,150 m																			
Weather Conditions		Sunshine, scattered clouds, light wind, 27°C																			
Noise Source/s		Cicadas, birds, helicopter, Hunter Expressway																			
SOUND METER DETAILS																					
Serial Number		5015288		Make		Casella		Model		CEL-620B											
Calibration Details		Meter calibrated by Supplier on the 15/08/2022																			
Test Standards		AS 1055.1:1997 and AS 2659.2:1983																			
Noise Management Levels		Std Construction Hrs 7:00 am – 6:00 pm Weekdays		50		Period 1 Evening 6:00pm-10:00pm		45		Period 2 Night 10:00pm-7:00am		43		Sleep Disturbance (LAeq)		43		Sleep Disturbance (LAMax)		53	
RESULTS																					
Qualitative Assessment																					
Construction Noise Inaudible				<input checked="" type="checkbox"/>		Construction noise intermittently audible				<input type="checkbox"/>											
Construction noise typically audible				<input type="checkbox"/>		Construction noise clearly audible				<input type="checkbox"/>											
Construction noise is dominant noise source				<input type="checkbox"/>		Impulsive construction noise audible (e.g. rock-breaking)				<input type="checkbox"/>											
High noise generating activities audible (e.g. chainsaws)				<input type="checkbox"/>		Tonal construction noise audible				<input type="checkbox"/>											
Quantitative Assessment																					
Start Time		10:47am				Finish time		11:02am													
LAmax				68.2				dBA													
LAmin				35.9				dBA													
LAeq 15 min				52				dBA													
Exceedance of NML				2				dBA													
Comments																					
<p>During monitoring, construction noise was inaudible. Other noise sources included birds, insects, a helicopter and the Hunter Expressway. Noise originating from cicadas was also recorded and remained a constant throughout monitoring.</p> <p>No construction noise was observed.</p>																					

Appendix A - NOISE METER : RAW DATA

**NCA 03 - 20 Bowditch Avenue,
Loxford**

Version	
<Run>	
Location	
Response	FreeField
Start	6/02/2023 10:47
Duration	0:15:00
Paused Duration	0:00:00
Serial Number	5015288
Run	18
Overload	No
Battery Low	No
<Broadband>	
LZSmax	89.9
LZSmax Time	6/02/2023 10:56
LZFmax	95.6
LZFmax Time	6/02/2023 10:56
LZlmax	98.4
LZlmax Time	6/02/2023 10:56
LCSmax	78.2
LCSmax Time	6/02/2023 10:56
LCFmax	82.9
LCFmax Time	6/02/2023 10:56
LClmax	85.1
LClmax Time	6/02/2023 10:56
LASmax	62.6
LASmax Time	6/02/2023 10:47
LAFmax	68.2
LAFmax Time	6/02/2023 10:47
LAlmax	71.7
LAlmax Time	6/02/2023 10:52
LZSmin	52.4
LZSmin Time	6/02/2023 10:55
LZFmin	49.9
LZFmin Time	6/02/2023 10:55
LZlmin	52.6
LZlmin Time	6/02/2023 10:55
LCSmin	47.5

LCSmin Time	6/02/2023 10:55
LCFmin	45.1
LCFmin Time	6/02/2023 10:52
LCImin	48
LCImin Time	6/02/2023 10:56
LASmin	36.8
LASmin Time	6/02/2023 10:52
LAFmin	35.9
LAFmin Time	6/02/2023 10:52
LAImin	36.4
LAImin Time	6/02/2023 10:52
LZeq	74.5
LCeq	62
LAeq	52
LAEq	54.8
Lavg Threshold	0
Lavg Q=4	51.3
Lavg Q=5	50.9
LZpeak	103.3
LZpeak Time	6/02/2023 10:56
LCpeak	90.8
LCpeak Time	6/02/2023 10:56
LApeak	90.7
LApeak Time	6/02/2023 10:47
LAE	81.5
LAeq(T=80)	0
LAFTm3	55.1
LAFTm5	56.1
LAITm3	57.8
LAITm5	58.8
<Octave LZeq>	
16Hz	66.1
31.5Hz	61
64Hz	53.9
125Hz	45.9
250Hz	41
500Hz	39.9
1KHz	37.1
2KHz	38.2

4KHz	49.9
8KHz	42.5
16KHz	36.1
<Octave LZFmax>	
16Hz	89.2
31.5Hz	79.6
64Hz	74.3
125Hz	70.9
250Hz	64.5
500Hz	69.3
1KHz	60.3
2KHz	56.1
4KHz	62.4
8KHz	62.3
16KHz	55.8
<Octave LZSmax>	
16Hz	83.9
31.5Hz	76.2
64Hz	71.3
125Hz	64.2
250Hz	56.6
500Hz	62.8
1KHz	54.1
2KHz	49.8
4KHz	57.8
8KHz	55.1
16KHz	49.7
<Calibration>	
Before Cal Date	6/02/2023 10:47
Cal Ref.Level	94
Cal Position	0
After Cal Date	6/02/2023 11:02
Cal Change	-0.1

PROJECT DETAILS		Noise Monitoring Record sheet								
Project Name	Hunter Power Project									
Monitoring Location	NCA 04		464 Cessnock Rd, Gillieston Heights							
Date	06/02/2023	Time	10:12am							
Construction Activity	Concrete pour									
Distance from Noise Source	1,240 m									
Weather Conditions	Sunshine, scattered clouds, light wind, 27°C									
Noise Source/s	Birds, cicadas, traffic on the main road									
SOUND METER DETAILS										
Serial Number	5015288	Make	Casella	Model	CEL-620B					
Calibration Details	Meter calibrated by Supplier on the 15/08/2022									
Test Standards	AS 1055.1:1997 and AS 2659.2:1983									
Noise Management Levels	Std Construction Hrs 7:00 am – 6:00 pm Weekdays	55	Period 1 Evening 6:00pm-10:00pm	50	Period 2 Night 10:00pm-7:00am	41	Sleep Disturbance (LAeq)	41	Sleep Disturbance (LAMax)	52
RESULTS										
Qualitative Assessment										
Construction Noise Inaudible		<input checked="" type="checkbox"/>	Construction noise intermittently audible					<input type="checkbox"/>		
Construction noise typically audible		<input type="checkbox"/>	Construction noise clearly audible					<input type="checkbox"/>		
Construction noise is dominant noise source		<input type="checkbox"/>	Impulsive construction noise audible (e.g. rock-breaking)					<input type="checkbox"/>		
High noise generating activities audible (e.g. chainsaws)		<input type="checkbox"/>	Tonal construction noise audible					<input type="checkbox"/>		
Quantitative Assessment										
Start Time	10:12am			Finish time	10:27am					
LAmx	84			dBA						
L Amin	46.1			dBA						
LAeq 15 min	70.7			dBA						
Exceedance of NML	15.7			dBA						
Comments During monitoring, construction noise was inaudible. Other noise sources included birds, insects and vehicles on the main road. During the day noise monitoring, traffic on the main road was more intense; heavy vehicles were predominantly heavy. Noise originating from cicadas was recorded and remained constant throughout monitoring. No construction noise was observed.										

**Appendix A - NOISE METER :
RAW DATA**

**NCA 04 - 464 Cessnock Rd,
Gillieston Heights**

<CEL-620B Data>

Version

<Run>

Location

FreeField

Response

6/02/2023 10:12

Start

0:15:00

Duration

0:00:00

Paused Duration

5015288

Serial Number

17

Run

No

Overload

No

Battery Low

<Broadband>

91.5

LZSmax

6/02/2023 10:24

LZSmax Time

95.3

LZFmax

6/02/2023 10:24

LZFmax Time

96.3

LZlmax

6/02/2023 10:24

LZlmax Time

90.7

LCSmax

6/02/2023 10:24

LCSmax Time

94.7

LCFmax

6/02/2023 10:24

LCFmax Time

95.7

LClmax

6/02/2023 10:24

LClmax Time

81.3

LASmax

6/02/2023 10:26

LASmax Time

83.4

LAFmax

6/02/2023 10:26

LAFmax Time

84

LAlmax

6/02/2023 10:26

LAlmax Time

57.6

LZSmin

6/02/2023 10:19

LZSmin Time

54.9

LZFmin

6/02/2023 10:19

LZFmin Time

58

LZlmin

6/02/2023 10:19

LZlmin Time	54.2
LCSmin	6/02/2023 10:21
LCSmin Time	52.2
LCFmin	6/02/2023 10:19
LCFmin Time	54.6
LClmin	6/02/2023 10:21
LClmin Time	45.9
LASmin	6/02/2023 10:15
LASmin Time	43.8
LAFmin	6/02/2023 10:23
LAFmin Time	46.1
LAlmin	6/02/2023 10:25
LAlmin Time	76.1
LZeq	73.8
LCeq	68.8
LAeq	70.7
LAlaq	0
Lavg Threshold	68
Lavg Q=4	67.5
Lavg Q=5	104
LZpeak	6/02/2023 10:23
LZpeak Time	102.6
LCpeak	6/02/2023 10:23
LCpeak Time	95.6
LApk	6/02/2023 10:26
LApk Time	98.3
LAE	56.7
LAeq(T=80)	72.6
LAFTm3	73.8
LAFTm5	73.7
LAITm3	74.7
LAITm5	
<Octave LZeq>	63.2
16Hz	63.1
31.5Hz	70.5
64Hz	65.1
125Hz	63.7
250Hz	63.3
500Hz	66.4

1KHz	60.7
2KHz	50.2
4KHz	42.9
8KHz	40.3
16KHz	
<Octave LZFmax>	82.6
16Hz	87.9
31.5Hz	95.1
64Hz	89.2
125Hz	85.1
250Hz	81.5
500Hz	80.8
1KHz	73.9
2KHz	64.6
4KHz	63.8
8KHz	57.1
16KHz	
<Octave LZSmax>	77.8
16Hz	82.5
31.5Hz	91.1
64Hz	85.1
125Hz	81.5
250Hz	78.8
500Hz	78.7
1KHz	71.3
2KHz	62
4KHz	56.2
8KHz	52.6
16KHz	
<Calibration>	6/02/2023 10:11
Before Cal Date	94
Cal Ref.Level	0.1
Cal Position	6/02/2023 10:28
After Cal Date	-0.4
Cal Change	

PROJECT DETAILS											Noise Monitoring Record sheet												
Project Name				Hunter Power Project																			
Monitoring Location				NCA 05								15 Sawyers Gully Rd, Sawyers Gully											
Date				06/02/2023				Time				11:36am											
Construction Activity				Concrete pour																			
Distance from Noise Source				3,210 m																			
Weather Conditions				Sunshine, scattered clouds, light wind, 28°C																			
Noise Source/s				Birds, cicadas, local main road, Hunter Expressway, airplane, vehicles on main road																			
SOUND METER DETAILS																							
Serial Number				5015288				Make				Casella				Model				CEL-620B			
Calibration Details				Meter calibrated by Supplier on the 15/08/2022																			
Test Standards				AS 1055.1:1997 and AS 2659.2:1983																			
Noise Management Levels		Std Construction Hrs 7:00 am – 6:00 pm Weekdays		45		Period 1 Evening 6:00pm-10:00pm		35		Period 2 Night 10:00pm-7:00am		35		Sleep Disturbance (LAeq)		40		Sleep Disturbance (LAMax)		52			
RESULTS																							
Qualitative Assessment																							
Construction Noise Inaudible											<input checked="" type="checkbox"/>		Construction noise intermittently audible								<input type="checkbox"/>		
Construction noise typically audible											<input type="checkbox"/>		Construction noise clearly audible								<input type="checkbox"/>		
Construction noise is dominant noise source											<input type="checkbox"/>		Impulsive construction noise audible (e.g. rock-breaking)								<input type="checkbox"/>		
High noise generating activities audible (e.g. chainsaws)											<input type="checkbox"/>		Tonal construction noise audible								<input type="checkbox"/>		
Quantitative Assessment																							
Start Time				11:36am								Finish time				11:51am							
LAmax						82.4						dBA											
LAmin						45.1						dBA											
LAeq 15 min						60.1						dBA											
Exceedance of NML						15.1						dBA											
Comments																							
<p>During monitoring, construction noise was inaudible. Other noise sources included birds, insects and airplanes. Vehicles from the Hunter Expressway could also be heard but were slightly faint. Light and heavy vehicles were travelling on the main road. Noise originating from cicadas was also recorded and remained constant throughout monitoring.</p> <p>No construction noise was observed.</p>																							

**Appendix A - NOISE
METER : RAW DATA**

**NCA 05 - 15 Sawyers Gully
Rd, Sawyers Gully**

<CEL-620B Data>

Version

<Run>

Location FreeField

Response 6/02/2023 11:36

Start 0:15:00

Duration 0:00:00

Paused Duration 5015288

Serial Number 20

Run No

Overload No

Battery Low

<Broadband> 94.7

LZSmax 6/02/2023 11:50

LZSmax Time 100.1

LZFmax 6/02/2023 11:49

LZFmax Time 102.9

LZImax 6/02/2023 11:49

LZImax Time 86.9

LCSmax 6/02/2023 11:39

LCSmax Time 89.9

LCFmax 6/02/2023 11:49

LCFmax Time 93.6

LClmax 6/02/2023 11:49

LClmax Time 79.8

LASmax 6/02/2023 11:39

LASmax Time 81.9

LAFmax 6/02/2023 11:39

LAFmax Time 82.4

LAlmax 6/02/2023 11:39

LAlmax Time 61.9

LZSmin 6/02/2023 11:42

LZSmin Time 59.7

LZFmin 6/02/2023 11:42

LZFmin Time 63

LZlmin 6/02/2023 11:42

LZlmin Time	55.7
LCSmin	6/02/2023 11:36
LCSmin Time	55.9
LCFmin	6/02/2023 11:51
LCFmin Time	58.9
LClmin	6/02/2023 11:51
LClmin Time	45.5
LASmin	6/02/2023 11:38
LASmin Time	44.9
LAFmin	6/02/2023 11:38
LAFmin Time	45.1
LAlmin	6/02/2023 11:38
LAlmin Time	80
LZeq	71
LCeq	57.7
LAeq	60.1
LAlaq	0
Lavg Threshold	55.8
Lavg Q=4	54.8
Lavg Q=5	107.9
LZpeak	6/02/2023 11:49
LZpeak Time	102.2
LCpeak	6/02/2023 11:49
LCpeak Time	93.8
LApeak	6/02/2023 11:39
LApeak Time	87.3
LAE	51.4
LAeq(T=80)	62.6
LAFTm3	64.4
LAFTm5	63.8
LAlTm3	65.3
LAlTm5	
<Octave LZeq>	72.7
16Hz	68.8
31.5Hz	66.4
64Hz	62.1
125Hz	57.3
250Hz	54.1
500Hz	52.7

1KHz	48.4
2KHz	47.4
4KHz	39.5
8KHz	36.1
16KHz	
<Octave LZFmax>	95.4
16Hz	88.4
31.5Hz	83.3
64Hz	87.4
125Hz	83.4
250Hz	78.5
500Hz	77
1KHz	74.4
2KHz	68.6
4KHz	63
8KHz	61.6
16KHz	
<Octave LZSmax>	90.3
16Hz	83.7
31.5Hz	80.7
64Hz	84.4
125Hz	80
250Hz	76.1
500Hz	74.7
1KHz	72
2KHz	65.9
4KHz	60.2
8KHz	57.5
16KHz	
<Calibration>	6/02/2023 11:36
Before Cal Date	94
Cal Ref.Level	-0.2
Cal Position	6/02/2023 11:52
After Cal Date	0.1
Cal Change	

PROJECT DETAILS		Noise Monitoring Record sheet								
Project Name		Hunter Power Project								
Monitoring Location		NCA 01 103 Bishops Bridge Rd, Sawyers Gully								
Date		06/02/2023			Time		6:24am			
Construction Activity		Concrete Pour								
Distance from Noise Source		1,240 m								
Weather Conditions		Clear, no wind, 23 °C								
Noise Source/s		Hunter Expressway, insects (cicadas and crickets), birds, dog bark								
SOUND METER DETAILS										
Serial Number		5015288		Make		Casella		Model		CEL-620B
Calibration Details		Meter calibrated by Supplier on the 15/08/2022								
Test Standards		AS 1055.1:1997 and AS 2659.2:1983								
Noise Management Levels	Std Construction Hrs 7:00 am – 6:00 pm Weekdays	55	Period 1 Evening 6:00pm-10:00pm	50	Period 2 Night 10:00pm-7:00am	41	Sleep Disturbance (LAeq)	41	Sleep Disturbance (LAMax)	52
RESULTS										
Qualitative Assessment										
Construction Noise Inaudible			<input checked="" type="checkbox"/>		Construction noise intermittently audible				<input type="checkbox"/>	
Construction noise typically audible			<input type="checkbox"/>		Construction noise clearly audible				<input type="checkbox"/>	
Construction noise is dominant noise source			<input type="checkbox"/>		Impulsive construction noise audible (e.g. rock-breaking)				<input type="checkbox"/>	
High noise generating activities audible (e.g. chainsaws)			<input type="checkbox"/>		Tonal construction noise audible				<input type="checkbox"/>	
Quantitative Assessment										
Start Time		6:24am			Finish time		6:39am			
LAmax			71.3		dBA					
LAmin			54.6		dBA					
LAeq 15 min			61.2		dBA					
Exceedance of NML			20.2		dBA					
Comments During monitoring, construction noise was inaudible. Other sources included insects, dog bark and the Hunter Expressway. The Hunter Expressway was located parallel to this monitoring location hence noises from the highway were quite audible. Several dogs were barking towards the end of the 15 minutes monitoring interval. Noise originating from cicadas was also recorded and remained constant throughout monitoring. No construction noise was observed										

Appendix A - NOISE METER: RAW DATA

NCA 01- 103 Bishops Bridge Rd, Sawyers Gully

<CEL-620B Data>

Version

<Run>

Location FreeField

Response 6/02/2023 6:24

Start 0:15:00

Duration 0:00:00

Paused Duration 5015288

Serial Number 16

Run No

Overload No

Battery Low

<Broadband> 73.5

LZSmax 6/02/2023 6:24

LZSmax Time 75.4

LZFmax 6/02/2023 6:24

LZFmax Time 76.7

LZImax 6/02/2023 6:24

LZImax Time 72.1

LCSmax 6/02/2023 6:27

LCSmax Time 73.6

LCFmax 6/02/2023 6:27

LCFmax Time 75

LClmax 6/02/2023 6:29

LClmax Time 65.1

LASmax 6/02/2023 6:27

LASmax Time 67.1

LAFmax 6/02/2023 6:37

LAFmax Time 71.3

LAlmax 6/02/2023 6:37

LAlmax Time 62.5

LZSmin 6/02/2023 6:38

LZSmin Time 60.6

LZFmin 6/02/2023 6:38

LZFmin Time 62.8

LZImin 6/02/2023 6:38

LZImin Time 60.7

LCSmin	6/02/2023 6:38
LCSmin Time	58.9
LCFmin	6/02/2023 6:38
LCFmin Time	60.9
LCImin	6/02/2023 6:38
LCImin Time	54.5
LASmin	6/02/2023 6:34
LASmin Time	52.8
LAFmin	6/02/2023 6:38
LAFmin Time	54.6
LAlmin	6/02/2023 6:34
LAlmin Time	67.9
LZeq	66.4
LCeq	60.2
LAeq	61.2
LAlaq	0
Lavg Threshold	60.1
Lavg Q=4	60.1
Lavg Q=5	93.4
LZpeak	6/02/2023 6:37
LZpeak Time	93
LCpeak	6/02/2023 6:37
LCpeak Time	91.5
LApeak	6/02/2023 6:37
LApeak Time	89.7
LAE	0
LAeq(T=80)	62
LAFTm3	62.4
LAFTm5	63
LAITm3	63.5
LAITm5	
<Octave LZeq>	58.1
16Hz	61.2
31.5Hz	62.9
64Hz	58.7
125Hz	48.5
250Hz	55.4
500Hz	58.5
1KHz	50.5
2KHz	38.1
4KHz	31.3
8KHz	28.2
16KHz	

<Octave LZFmax>	68.5
16Hz	74.1
31.5Hz	72.8
64Hz	70.5
125Hz	59.2
250Hz	68.4
500Hz	65
1KHz	59.3
2KHz	56.7
4KHz	57.8
8KHz	54
16KHz	
<Octave LZSmax>	65.1
16Hz	70.7
31.5Hz	70.8
64Hz	69.3
125Hz	57.8
250Hz	64.8
500Hz	63.5
1KHz	54.3
2KHz	48.4
4KHz	49.7
8KHz	46.4
16KHz	
<Calibration>	6/02/2023 6:23
Before Cal Date	94
Cal Ref.Level	0.8
Cal Position	6/02/2023 6:40
After Cal Date	0
Cal Change	

PROJECT DETAILS		Noise Monitoring Record sheet								
Project Name		Hunter Power Project								
Monitoring Location		NCA 02			6 Dawes Avenue, Loxford					
Date		06/02/2023			Time		5:31am			
Construction Activity		Concrete pour								
Distance from Noise Source		1,610 m								
Weather Conditions		Clear, no wind, 23°C								
Noise Source/s		Cicadas, birds, dog bark, traffic from Hunter Expressway								
SOUND METER DETAILS										
Serial Number		5015288		Make		Casella		Model		CEL-620B
Calibration Details		Meter calibrated by Supplier on the 15/08/2022								
Test Standards		AS 1055.1:1997 and AS 2659.2:1983								
Noise Management Levels	Std Construction Hrs 7:00 am – 6:00 pm Weekdays	48	Period 1 Evening 6:00pm-10:00pm	43	Period 2 Night 10:00pm-7:00am	42	Sleep Disturbance (LAeq)	42	Sleep Disturbance (LAMax)	52
RESULTS										
Qualitative Assessment										
Construction Noise Inaudible			<input checked="" type="checkbox"/>		Construction noise intermittently audible				<input type="checkbox"/>	
Construction noise typically audible			<input type="checkbox"/>		Construction noise clearly audible				<input type="checkbox"/>	
Construction noise is dominant noise source			<input type="checkbox"/>		Impulsive construction noise audible (e.g. rock-breaking)				<input type="checkbox"/>	
High noise generating activities audible (e.g. chainsaws)			<input type="checkbox"/>		Tonal construction noise audible				<input type="checkbox"/>	
Quantitative Assessment										
Start Time		5:31am			Finish time		5:46am			
LAm _{ax}			75.2		dBA					
LAm _{in}			38.8		dBA					
LAeq 15 min			65.8		dBA					
Exceedance of NML			23.8		dBA					
Comments During monitoring, construction noise was inaudible. Other noise sources included birds, insects and the Hunter Expressway. During the 15 minutes interval it was noted kookaburras chirping in the vicinity of the noise monitoring area. Vehicles from the Hunter Expressway could be well heard, and dogs were barking sporadically. Noise originating from cicadas was also recorded and remained constant throughout monitoring. No construction noise was observed.										

**Appendix A - NOISE METER:
RAW DATA**

**NCA 02 - 6 Dawes Avenue,
Loxford**

<CEL-620B Data>

Version

<Run>

Location FreeField

Response 6/02/2023 5:31

Start 0:15:00

Duration 0:00:00

Paused Duration 5015288

Serial Number 14

Run No

Overload No

Battery Low

<Broadband> 90.3

LZSmax 6/02/2023 5:32

LZSmax Time 97.7

LZFmax 6/02/2023 5:32

LZFmax Time 101

LZlmax 6/02/2023 5:32

LZlmax Time 84.8

LCSmax 6/02/2023 5:32

LCSmax Time 92.3

LCFmax 6/02/2023 5:32

LCFmax Time 95.7

LClmax 6/02/2023 5:32

LClmax Time 72.1

LASmax 6/02/2023 5:45

LASmax Time 72.5

LAFmax 6/02/2023 5:45

LAFmax Time 75.2

LAlmax 6/02/2023 5:46

LAlmax Time 55.1

LZSmin 6/02/2023 5:36

LZSmin Time 52.8

LZFmin 6/02/2023 5:32

LZFmin Time 55.9

LZlmin	6/02/2023 5:36
LZlmin Time	51.7
LCSmin	6/02/2023 5:36
LCSmin Time	49.9
LCFmin	6/02/2023 5:36
LCFmin Time	52
LCImin	6/02/2023 5:36
LCImin Time	39.4
LASmin	6/02/2023 5:32
LASmin Time	38.2
LAFmin	6/02/2023 5:32
LAFmin Time	38.8
LAlmin	6/02/2023 5:32
LAlmin Time	67.3
LZeq	65
LCeq	65.3
LAeq	65.8
LAlaq	0
Lavg Threshold	64.1
Lavg Q=4	63.2
Lavg Q=5	105.3
LZpeak	6/02/2023 5:32
LZpeak Time	99.5
LCpeak	6/02/2023 5:32
LCpeak Time	89.9
LApeak	6/02/2023 5:32
LApeak Time	94.8
LAE	30.6
LAeq(T=80)	66.1
LAFTm3	66.4
LAFTm5	66.9
LAITm3	67.2
LAITm5	
<Octave LZeq>	60
16Hz	60.4
31.5Hz	51.6
64Hz	47.6
125Hz	39.2
250Hz	41.4

500Hz	40.5
1KHz	54.8
2KHz	63.6
4KHz	45.2
8KHz	26
16KHz	
<Octave LZFmax>	94.4
16Hz	93.9
31.5Hz	79.4
64Hz	69.9
125Hz	66.4
250Hz	67.7
500Hz	67.9
1KHz	63.4
2KHz	70.8
4KHz	53.8
8KHz	43.6
16KHz	
<Octave LZSmax>	87.5
16Hz	86.5
31.5Hz	72
64Hz	62.3
125Hz	58.7
250Hz	59.6
500Hz	59.8
1KHz	61.9
2KHz	70.3
4KHz	52
8KHz	35.7
16KHz	
<Calibration>	6/02/2023 5:31
Before Cal Date	94
Cal Ref.Level	0.8
Cal Position	6/02/2023 5:47
After Cal Date	0
Cal Change	

PROJECT DETAILS		Noise Monitoring Record sheet								
Project Name		Hunter Power Project								
Monitoring Location		NCA 03			20 Bowditch Avenue, Loxford					
Date		06/02/2023			Time		5:08am			
Construction Activity		Concrete pour								
Distance from Noise Source		1,150 m								
Weather Conditions		Clear, no wind, 23°C								
Noise Source/s		Cicadas, birds, Hunter Expressway								
SOUND METER DETAILS										
Serial Number		5015288		Make		Casella		Model		CEL-620B
Calibration Details		Meter calibrated by Supplier on the 15/08/2022								
Test Standards		AS 1055.1:1997 and AS 2659.2:1983								
Noise Management Levels	Std Construction Hrs 7:00 am – 6:00 pm Weekdays	50	Period 1 Evening 6:00pm-10:00pm	45	Period 2 Night 10:00pm-7:00am	43	Sleep Disturbance (LAeq)	43	Sleep Disturbance (LAMax)	53
RESULTS										
Qualitative Assessment										
Construction Noise Inaudible			<input checked="" type="checkbox"/>		Construction noise intermittently audible				<input type="checkbox"/>	
Construction noise typically audible			<input type="checkbox"/>		Construction noise clearly audible				<input type="checkbox"/>	
Construction noise is dominant noise source			<input type="checkbox"/>		Impulsive construction noise audible (e.g. rock-breaking)				<input type="checkbox"/>	
High noise generating activities audible (e.g. chainsaws)			<input type="checkbox"/>		Tonal construction noise audible				<input type="checkbox"/>	
Quantitative Assessment										
Start Time		5:08am			Finish time		5:23am			
LAmax			62.1		dBA					
LAmin			36.8		dBA					
LAeq 15 min			43.5		dBA					
Exceedance of NML			0.5		dBA					
Comments										
<p>During monitoring, construction noise was inaudible. Other noise sources included birds, insects and the Hunter Expressway. During the 15-minute interval plovers and kookaburras were observed, producing mild noises. Noise originating from cicadas was also recorded and remained constant throughout monitoring.</p> <p>No construction noise was observed.</p>										

**Appendix A - NOISE
METER : RAW
DATA**

**NCA 03 - 20 Bowditch Avenue,
Loxford**

<CEL-620B Data>

Version

<Run>

Location FreeField

Response 6/02/2023 5:08

Start 0:15:00

Duration 0:00:00

Paused Duration 5015288

Serial Number 13

Run No

Overload No

Battery Low

<Broadband> 77.1

LZSmax 6/02/2023 5:13

LZSmax Time 83.3

LZFmax 6/02/2023 5:13

LZFmax Time 86.3

LZImax 6/02/2023 5:13

LZImax Time 62.7

LCSmax 6/02/2023 5:13

LCSmax Time 70

LCFmax 6/02/2023 5:13

LCFmax Time 73.7

LCImax 6/02/2023 5:13

LCImax Time 51.4

LASmax 6/02/2023 5:08

LASmax Time 58.1

LAFmax 6/02/2023 5:08

LAFmax Time 62.1

LAlmax 6/02/2023 5:08

LAlmax Time 50.5

LZSmin 6/02/2023 5:16

LZSmin Time 48

LZFmin 6/02/2023 5:19

LZFmin Time 51.3

LZlmin 6/02/2023 5:15

LZlmin Time	46.3
LCSmin	6/02/2023 5:08
LCSmin Time	44.6
LCFmin	6/02/2023 5:09
LCFmin Time	46.8
LClmin	6/02/2023 5:09
LClmin Time	37.1
LASmin	6/02/2023 5:08
LASmin Time	36.2
LAFmin	6/02/2023 5:08
LAFmin Time	36.8
LAlmin	6/02/2023 5:09
LAlmin Time	62.8
LZeq	50.6
LCeq	39.9
LAeq	43.5
LAlaq	0
Lavg Threshold	39.8
Lavg Q=4	39.8
Lavg Q=5	89
LZpeak	6/02/2023 5:13
LZpeak Time	81.5
LCpeak	6/02/2023 5:08
LCpeak Time	83.6
LApeak	6/02/2023 5:08
LApeak Time	69.5
LAE	0
LAeq(T=80)	43.5
LAFTm3	44.2
LAFTm5	46.6
LAlTm3	47.5
LAlTm5	
<Octave LZeq>	53
16Hz	47.4
31.5Hz	45
64Hz	43
125Hz	35.1
250Hz	31.4
500Hz	33.5

1KHz	27.7
2KHz	36.1
4KHz	22.8
8KHz	19.9
16KHz	
<Octave LZFmax>	75.6
16Hz	69.3
31.5Hz	58.3
64Hz	60.5
125Hz	54.9
250Hz	51.6
500Hz	54.8
1KHz	50.7
2KHz	52.3
4KHz	51.5
8KHz	42.6
16KHz	
<Octave LZSmax>	69.2
16Hz	62.4
31.5Hz	56.1
64Hz	52.7
125Hz	47.4
250Hz	44.5
500Hz	47.4
1KHz	43.7
2KHz	45.2
4KHz	44.9
8KHz	40.7
16KHz	
<Calibration>	6/02/2023 5:07
Before Cal Date	94
Cal Ref.Level	0.8
Cal Position	6/02/2023 5:24
After Cal Date	0
Cal Change	

PROJECT DETAILS		Noise Monitoring Record sheet								
Project Name		Hunter Power Project								
Monitoring Location		NCA 04			464 Cessnock Rd, Gillieston Heights					
Date		06/02/2023			Time		4:32am			
Construction Activity		Concrete pour								
Distance from Noise Source		1,240 m								
Weather Conditions		Clear, no wind, 23°C								
Noise Source/s		Birds, cicadas, traffic on the main road								
SOUND METER DETAILS										
Serial Number		5015288		Make		Casella		Model		CEL-620B
Calibration Details		Meter calibrated by Supplier on the 15/08/2022								
Test Standards		AS 1055.1:1997 and AS 2659.2:1983								
Noise Management Levels	Std Construction Hrs 7:00 am – 6:00 pm Weekdays	55	Period 1 Evening 6:00pm-10:00pm	50	Period 2 Night 10:00pm-7:00am	41	Sleep Disturbance (LAeq)	41	Sleep Disturbance (LAMax)	52
RESULTS										
Qualitative Assessment										
Construction Noise Inaudible				<input checked="" type="checkbox"/>		Construction noise intermittently audible				<input type="checkbox"/>
Construction noise typically audible				<input type="checkbox"/>		Construction noise clearly audible				<input type="checkbox"/>
Construction noise is dominant noise source				<input type="checkbox"/>		Impulsive construction noise audible (e.g. rock-breaking)				<input type="checkbox"/>
High noise generating activities audible (e.g. chainsaws)				<input type="checkbox"/>		Tonal construction noise audible				<input type="checkbox"/>
Quantitative Assessment										
Start Time		4:32am			Finish time		4:47am			
LAmax			84			dBA				
LAmin			34.9			dBA				
LAeq 15 min			67.6			dBA				
Exceedance of NML			26.6			dBA				
Comments During monitoring, construction noise was inaudible. Other noise sources included birds, insects and vehicles on the main road. During the 15 min interval, it was noted cicadas and birds chirping. Noise originating from cicadas was recorded and remained constant throughout monitoring. No construction noise was observed.										

**Appendix A - NOISE METER
: RAW DATA**

	NCA 04 - 464 Cessnock Rd, Gillieston Heights
<CEL-620B Data>	
Version	
<Run>	
Location	FreeField
Response	6/02/2023 4:32
Start	0:15:00
Duration	0:00:00
Paused Duration	5015288
Serial Number	12
Run	No
Overload	No
Battery Low	
<Broadband>	86.9
LZSmax	6/02/2023 4:34
LZSmax Time	94.3
LZFmax	6/02/2023 4:34
LZFmax Time	97.5
LZlmax	6/02/2023 4:34
LZlmax Time	83.8
LCSmax	6/02/2023 4:34
LCSmax Time	89.3
LCFmax	6/02/2023 4:34
LCFmax Time	92.4
LClmax	6/02/2023 4:34
LClmax Time	79.5
LASmax	6/02/2023 4:44
LASmax Time	83.2
LAFmax	6/02/2023 4:44
LAFmax Time	84
LAlmax	6/02/2023 4:44
LAlmax Time	55
LZSmin	6/02/2023 4:47
LZSmin Time	50.5
LZFmin	6/02/2023 4:33
LZFmin Time	56.1

LZlmin	6/02/2023 4:47
LZlmin Time	45.9
LCSmin	6/02/2023 4:33
LCSmin Time	44.1
LCFmin	6/02/2023 4:33
LCFmin Time	47
LClmin	6/02/2023 4:33
LClmin Time	35.2
LASmin	6/02/2023 4:33
LASmin Time	34.6
LAFmin	6/02/2023 4:33
LAFmin Time	34.9
LAlmin	6/02/2023 4:33
LAlmin Time	71.8
LZeq	68.3
LCeq	64.9
LAeq	67.6
LAlaq	0
Lavg Threshold	63.3
Lavg Q=4	62.2
Lavg Q=5	101.5
LZpeak	6/02/2023 4:34
LZpeak Time	96.8
LCpeak	6/02/2023 4:34
LCpeak Time	96.4
LApeak	6/02/2023 4:47
LApeak Time	94.4
LAE	51.9
LAEq(T=80)	69.4
LAFTm3	71.2
LAFTm5	70.9
LAITm3	72.5
LAITm5	
<Octave LZeq>	61.5
16Hz	59.9
31.5Hz	61.8
64Hz	60.7
125Hz	57.3
250Hz	57.8

500Hz	62.6
1KHz	57.7
2KHz	47.2
4KHz	38.4
8KHz	33
16KHz	
<Octave LZFmax>	89.9
16Hz	91.4
31.5Hz	82.6
64Hz	84.5
125Hz	79.3
250Hz	77.6
500Hz	81.7
1KHz	75.7
2KHz	64.5
4KHz	62.9
8KHz	56.1
16KHz	
<Octave LZSmax>	82.5
16Hz	84.2
31.5Hz	78.5
64Hz	81.7
125Hz	76.6
250Hz	73.9
500Hz	77.5
1KHz	72.4
2KHz	61.4
4KHz	54.8
8KHz	47.8
16KHz	
<Calibration>	6/02/2023 4:32
Before Cal Date	94
Cal Ref.Level	0.9
Cal Position	6/02/2023 4:48
After Cal Date	0
Cal Change	

PROJECT DETAILS		Noise Monitoring Record sheet								
Project Name		Hunter Power Project								
Monitoring Location		NCA 05			15 Sawyers Gully Rd, Sawyers Gully					
Date		06/02/2023			Time		6:01am			
Construction Activity		Concrete pour								
Distance from Noise Source		3,210 m								
Weather Conditions		Clear, no wind, 23°C								
Noise Source/s		Birds, cicadas, local main road, Hunter Expressway, airplane, vehicles on main road								
SOUND METER DETAILS										
Serial Number		5015288		Make		Casella		Model		CEL-620B
Calibration Details		Meter calibrated by Supplier on the 15/08/2022								
Test Standards		AS 1055.1:1997 and AS 2659.2:1983								
Noise Management Levels	Std Construction Hrs 7:00 am – 6:00 pm Weekdays	45	Period 1 Evening 6:00pm-10:00pm	35	Period 2 Night 10:00pm-7:00am	35	Sleep Disturbance (LAeq)	40	Sleep Disturbance (LAMax)	52
RESULTS										
Qualitative Assessment										
Construction Noise Inaudible				<input checked="" type="checkbox"/>		Construction noise intermittently audible				<input type="checkbox"/>
Construction noise typically audible				<input type="checkbox"/>		Construction noise clearly audible				<input type="checkbox"/>
Construction noise is dominant noise source				<input type="checkbox"/>		Impulsive construction noise audible (e.g. rock-breaking)				<input type="checkbox"/>
High noise generating activities audible (e.g. chainsaws)				<input type="checkbox"/>		Tonal construction noise audible				<input type="checkbox"/>
Quantitative Assessment										
Start Time		6:01am			Finish time		6:16am			
LAm _{ax}			75			dBA				
LAm _{in}			47.6			dBA				
LAeq 15 min			58.9			dBA				
Exceedance of NML			23.9			dBA				
Comments During monitoring, construction noise was inaudible. Other noise sources included birds, insects and the local main road. Vehicles from the Hunter Expressway could also be heard but were slightly faint. Light and heavy vehicles were travelling on the main road. Noise originating from cicadas was also recorded and remained constant throughout monitoring. A garbage truck stopped by across the road, producing significant noise at 6:09am No construction noise was observed.										

**Appendix A - NOISE
METER : RAW DATA**

**NCA 05 - 15 Sawyers
Gully Rd, Sawyers Gully**

<CEL-620B Data>

Version

<Run>

Location

FreeField

Response

6/02/2023 6:01

Start

0:15:00

Duration

0:00:00

Paused Duration

5015288

Serial Number

15

Run

No

Overload

No

Battery Low

<Broadband>

81.6

LZSmax

6/02/2023 6:16

LZSmax Time

83.9

LZFmax

6/02/2023 6:16

LZFmax Time

84.7

LZImax

6/02/2023 6:16

LZImax Time

80.8

LCSmax

6/02/2023 6:16

LCSmax Time

83.6

LCFmax

6/02/2023 6:16

LCFmax Time

84.4

LClmax

6/02/2023 6:16

LClmax Time

71.8

LASmax

6/02/2023 6:16

LASmax Time

74.4

LAFmax

6/02/2023 6:16

LAFmax Time

75

LAlmax

6/02/2023 6:16

LAlmax Time

60.6

LZSmin

6/02/2023 6:12

LZSmin Time

57.5

LZFmin

6/02/2023 6:12

LZFmin Time

61

LZlmin

6/02/2023 6:12

LZlmin Time	57.6
LCSmin	6/02/2023 6:12
LCSmin Time	55.7
LCFmin	6/02/2023 6:12
LCFmin Time	58.3
LClmin	6/02/2023 6:12
LClmin Time	47.8
LASmin	6/02/2023 6:12
LASmin Time	46.9
LAFmin	6/02/2023 6:12
LAFmin Time	47.6
LAlmin	6/02/2023 6:12
LAlmin Time	67.7
LZeq	66.4
LCeq	57.7
LAeq	58.9
LAlaq	0
Lavg Threshold	57
Lavg Q=4	56.6
Lavg Q=5	92.1
LZpeak	6/02/2023 6:16
LZpeak Time	91.1
LCpeak	6/02/2023 6:16
LCpeak Time	89.4
LApeak	6/02/2023 6:10
LApeak Time	87.2
LAE	0
LAeq(T=80)	60.4
LAFTm3	61.7
LAFTm5	61.5
LAlTm3	62.7
LAlTm5	
<Octave LZeq>	57.4
16Hz	58.5
31.5Hz	63.5
64Hz	60.7
125Hz	56.1
250Hz	51.9
500Hz	53.1

1KHz	49.5
2KHz	49
4KHz	36.6
8KHz	24.2
16KHz	
<Octave LZFmax>	77.6
16Hz	74.8
31.5Hz	79.3
64Hz	77.9
125Hz	82.9
250Hz	70.4
500Hz	68.7
1KHz	63.5
2KHz	59.6
4KHz	58.6
8KHz	44.2
16KHz	
<Octave LZSmax>	73.4
16Hz	72.5
31.5Hz	75.7
64Hz	75.2
125Hz	79
250Hz	66.3
500Hz	66.1
1KHz	61.6
2KHz	57.9
4KHz	55.5
8KHz	41.5
16KHz	
<Calibration>	6/02/2023 6:01
Before Cal Date	94
Cal Ref.Level	0.8
Cal Position	6/02/2023 6:17
After Cal Date	-0.1
Cal Change	