

30 October 2015

610.13569 M4 East Additional Noise Logging Summary 20151030.docx

WestConnex Delivery Authority 101 Miller Street North Sydney NSW 2060

Attention: David Kelly

Dear David

### WestConnex M4 East Additional Noise Logger Survey Monitoring Summary

This letter contains a summary of the noise monitoring undertaken in response to a request for additional noise logging made by the NSW Department of Planning and Environment (DPE) during the exhibition phase of the WestConnex M4 East project.

The noise monitoring locations detailed in **Table 1** were selected to be representative of wider receivers and communities potentially affected by the noise from construction and operation of the M4 East project.

Noise monitoring equipment was deployed with consideration of other noise sources that may influence the measurements, accessibility and security, and consent of relevant land owners.

The results of the noise monitoring have been processed to exclude noise identified as extraneous and/or affected by adverse weather conditions (ie strong wind or rain) so as to establish representative noise levels from all noise sources typical of the surrounding area.

The results of the unattended ambient noise surveys are summarised in **Table 1** as the Rating Background Level (RBL) and the LAeq (energy averaged) noise levels for the *Interim Construction Noise Guideline* (ICNG) / *Industrial Noise Policy* (INP) daytime, evening and night-time periods.

Table 1 Summary of unattended noise logging results - 16 October to 26 October 2015

LOC ID	Address	RBL (dBA) <sup>1</sup>		LAeq (d	LAeq (dBA) <sup>2</sup>		
		Day	Eve	Night	Day	Eve	Night
ADD01	10 Welfare Street, Homebush West	51	49	46	58	57	55
ADD02	38 Loftus Crescent, North Strathfield	44	40	37	61	60	57
ADD03	50 Underwood Road, Homebush	47	45	37	65	63	59
ADD04	18 Elliott Street, North Strathfield	42	42	41	54	55	50
ADD05	5 Carrington Street, North Strathfield	43	42	39	55	54	50
ADD06	5 Thornleigh Avenue, Concord	42	40	38	55	54	49
ADD07	15 Edward St, Concord	42	42	39	54	54	50

LOC ID	Address	RBL (dBA) <sup>1</sup>		LAeq (d	LAeq (dBA) <sup>2</sup>		
		Day	Eve	Night	Day	Eve	Night
ADD08	12 Luke Avenue, Burwood	50	50	43	59	59	58
ADD09	6 Loftus Street, Concord	49	47	41	60	59	54
ADD10	174 Queens Road, Canada Bay	57	50	42	70	69	65
ADD11	28 Page Avenue, Ashfield	47	46	40	58	57	55
ADD12	5 Wolseley Street, Haberfield	45	45	42	57	55	54
ADD13	26 Walker Avenue, Haberfield	41	43	37	55	54	51
ADD14	1 Walker Avenue, Haberfield	45	45	39	58	57	54

Note 1: Rating Background Level as defined by the NSW Industrial Noise Policy.

Note 2: The A-weighted equivalent noise level (basically the average noise level). It is defined as the steady sound level that contains the same amount of acoustical energy as the corresponding time-varying sound.

Photographs of the monitoring locations as well as the 24 hour daily noise levels at each monitoring location are presented in the **Appendices**.

I trust this information meets your current requirements, however, please feel free to contact me if you require further information.

Yours sincerely

ROBERT HALL Associate

M4 East Additional Noise Logging Summary 2015 Page 1 of 7

ADD01 Ambient Noise Monitoring Results

Noise Monitoring Location: ADD01 Map of Noise Monitoring Location

Noise Monitoring Address: 10 Welfare St, Homebush West

Logger Device Type: Svantek 957

Logger Serial No: 20665

Ambient noise logger deployed immediately outside residential address 10 Welfare St, Homebush West. Logger located in front yard on western side of property.

Attended noise measurements indicate the ambient noise environment at this location is dominated by road traffic noise from Parramatta Rd during the daytime. Constant tyre-pavement noise from light-vehicle traffic on Parramatta Rd can be heard at this location with discrete traffic noise level peaks from heavy vehicle movements occurring frequently.

Recorded Noise Levels (LAmax):

Parramatta Rd Heavy-vehicle road traffic: 70-72 dBA, Parramatta Rd Light-vehicle road traffic: 55-60 dBA,

Air traffic: 59-62 dBA, Birds: 60-76



Photo of Noise	Monitoring	Location
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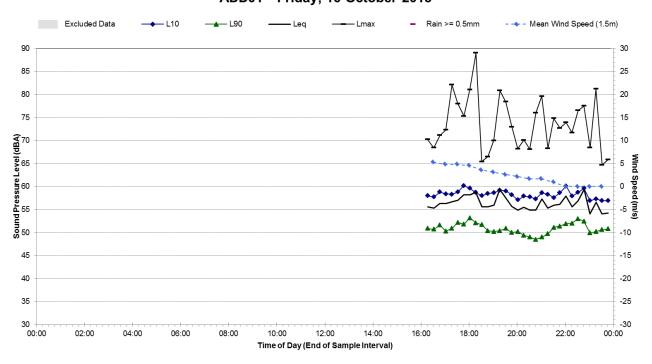
Ambient Noise Logging Results – INP Defined Time Periods						
Monitoring Period	Noi	se Level (dBA)				
	RBI	_ LAeq	L10	L1		
Daytime	51	58	60	66		
Evening	49	57	58	64		
Night-time	46	55	56	63		
Ambient Noise Lo	gging Results	- RNP Defined Time	Periods			
Monitoring Period	Noi	se Level (dBA)				
	Wee	ekday LAeq(Period)	Weekend LAeq(Peri	od) Weekly LAeq(Period)		
Number of Valid D	<b>ays</b> 5		4	N/A (7 Day Average)		
Daytime (7am-10p	<b>m)</b> 59		57	58		
Night-time (10pm-	<b>7am)</b> 56		55	55		
Attended Noise Me	easurement R	esults				
Date Start Time		Meas	ured Noise Level (dB/	A)		
		LA90	LAeq	LAmax		
16/10/2015	15:26	51	56	76		



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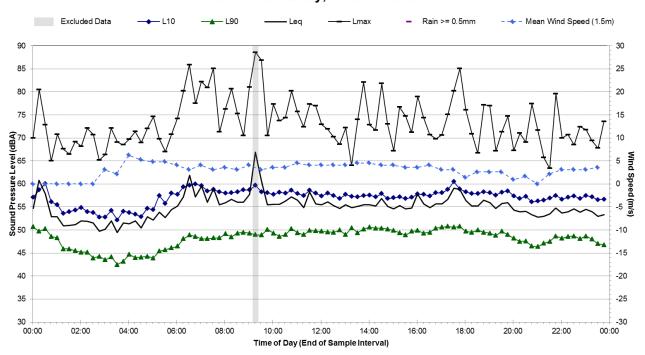
ADD01 Ambient Noise Monitoring Results

#### Statistical Ambient Noise Levels ADD01 - Friday, 16 October 2015



#### **Statistical Ambient Noise Levels**

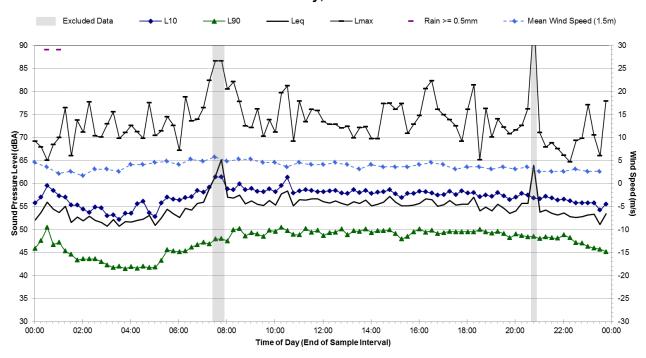
ADD01 - Saturday, 17 October 2015



M4 East Additional Noise Logging Summary 2015 Page 3 of 7

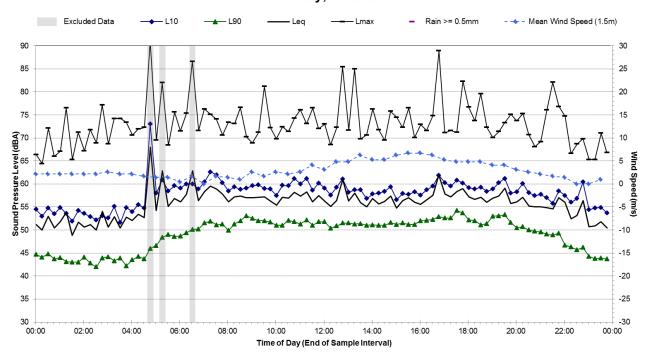
ADD01 Ambient Noise Monitoring Results

### Statistical Ambient Noise Levels ADD01 - Sunday, 18 October 2015



#### **Statistical Ambient Noise Levels**

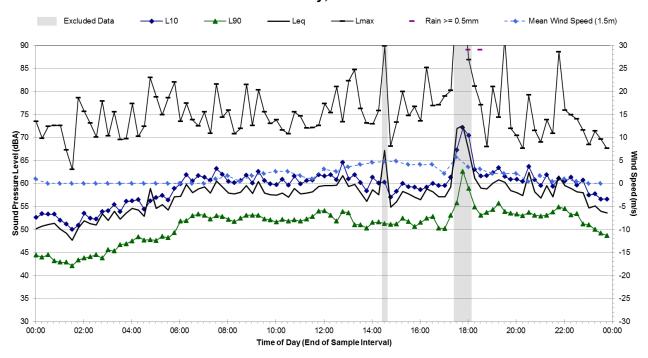
ADD01 - Monday, 19 October 2015



M4 East Additional Noise Logging Summary 2015 Page 4 of 7

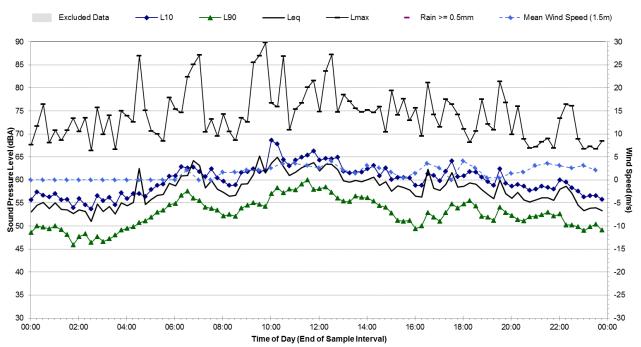
ADD01 Ambient Noise Monitoring Results

#### Statistical Ambient Noise Levels ADD01 - Tuesday, 20 October 2015



## **Statistical Ambient Noise Levels**

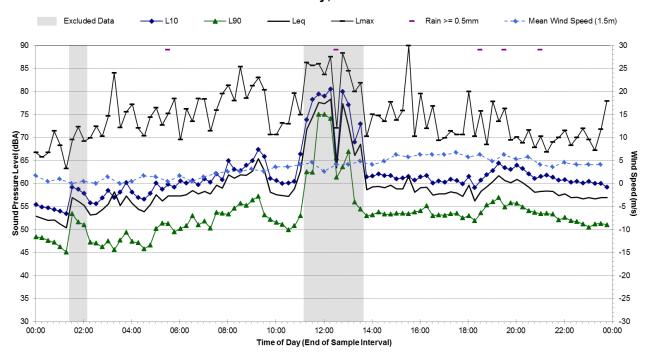
ADD01 - Wednesday, 21 October 2015



M4 East Additional Noise Logging Summary 2015 Page 5 of 7

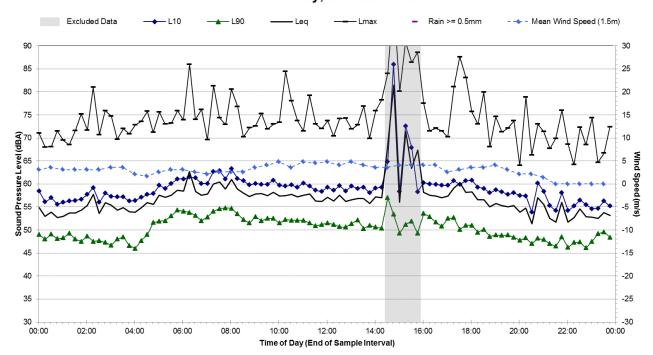
ADD01 Ambient Noise Monitoring Results

### Statistical Ambient Noise Levels ADD01 - Thursday, 22 October 2015



### **Statistical Ambient Noise Levels**

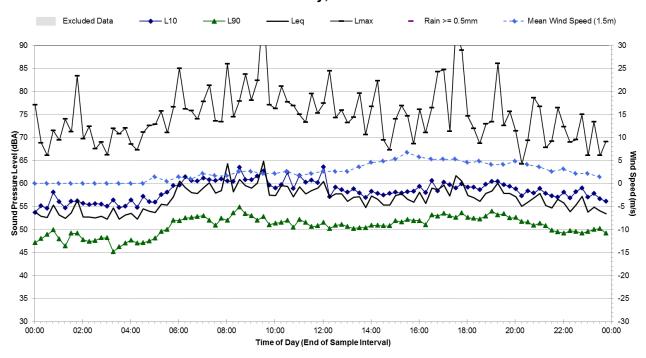
ADD01 - Friday, 23 October 2015



M4 East Additional Noise Logging Summary 2015 Page 6 of 7

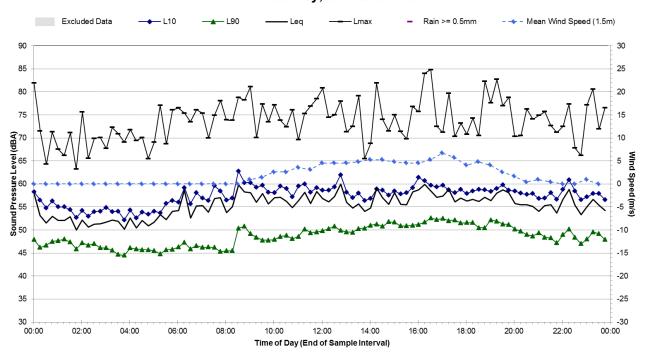
ADD01 Ambient Noise Monitoring Results

### Statistical Ambient Noise Levels ADD01 - Saturday, 24 October 2015



#### **Statistical Ambient Noise Levels**

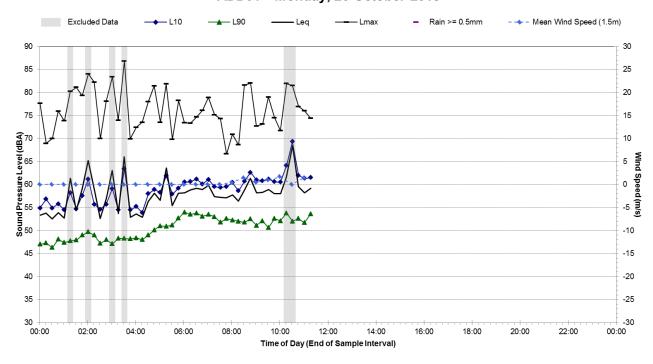
ADD01 - Sunday, 25 October 2015



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ADD01 Ambient Noise Monitoring Results

### Statistical Ambient Noise Levels ADD01 - Monday, 26 October 2015



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ADD02 Ambient Noise Monitoring Results

Noise Monitoring Location: ADD02 Map of Noise Monitoring Location

Noise Monitoring Address: 38 Loftus Cres, North Strathfield

Logger Device Type: Svantek 957

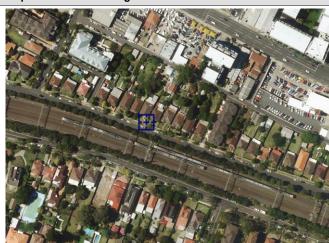
Logger Serial No: 23816

Ambient noise logger deployed immediately outside residential address 38 Loftus Cres, North Strathfield. Logger located in front yard on southern side of property.

Attended noise measurements indicate the ambient noise environment at this location is dominated by rail traffic and distant road traffic noise from Parramatta Rd during the daytime. Local traffic passbys on Loftus Cres and The Crescent were occasional.

#### Recorded Noise Levels (LAmax):

Loftus Cres Light-vehicle road traffic: 58-76 dBA, The Crescent Light-vehicle road traffic: 51-54 dBA, Distant road traffic Parramatta Rd: 47 dBA, Rail traffic: 57-81 dBA, Air traffic: 57 dBA



Ambient Noise Logging Results – INP Defined Time Periods	Photo of Noise Monitoring Location
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Monitoring Period	Noise Leve				
	RBL	LAeq	L10	L1	
Daytime	44	61	64	72	
Evening	40	60	61	72	
Night-time	37	57	52	69	

#### Ambient Noise Logging Results – RNP Defined Time Periods

Noise Level (dBA)					
Weekday LAeq(Period)	Weekend LAeq(Period)	Weekly LAeq(Period)			
5	4	N/A (7 Day Average)			
61	59	61			
57	56	57			
	Weekday LAeq(Period) 5 61	Weekday LAeq(Period)  Weekend LAeq(Period)  4  61  59			

#### **Attended Noise Measurement Results**

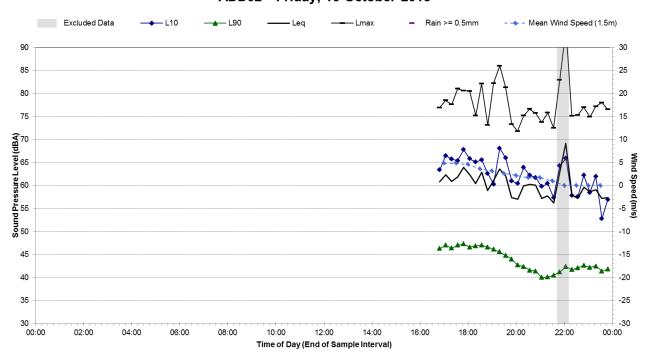
Date	Start Time	Measured N	Measured Noise Level (dBA)		
		LA90	LAeq	LAmax	
16/10/2015	15:51	48	61	81	



M4 East Additional Noise Logging Summary 2015 Page 2 of 7

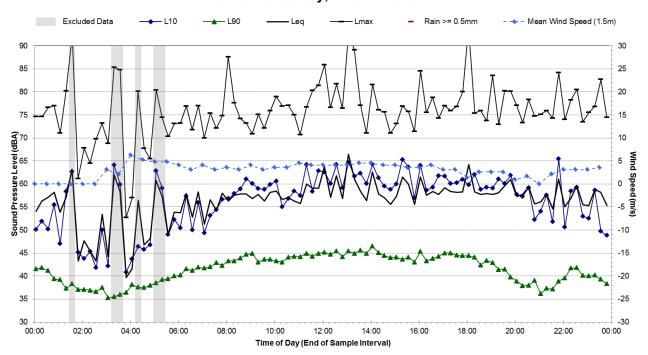
ADD02 Ambient Noise Monitoring Results

#### Statistical Ambient Noise Levels ADD02 - Friday, 16 October 2015



### **Statistical Ambient Noise Levels**

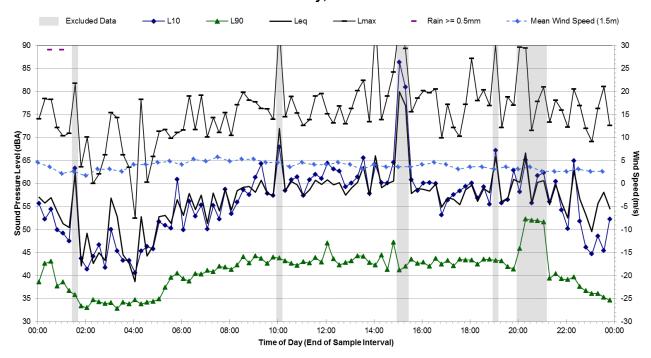
ADD02 - Saturday, 17 October 2015



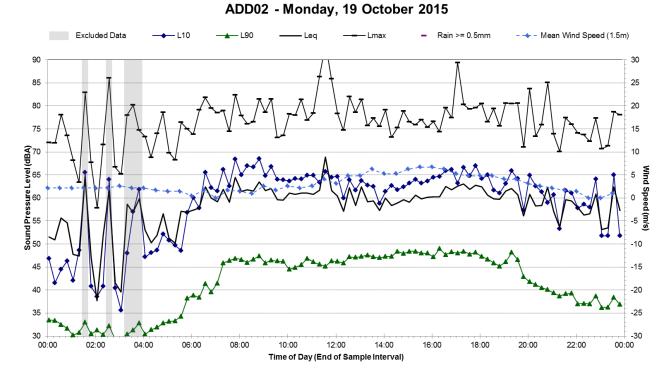
M4 East Additional Noise Logging Summary 2015 Page 3 of 7

ADD02 Ambient Noise Monitoring Results

### Statistical Ambient Noise Levels ADD02 - Sunday, 18 October 2015



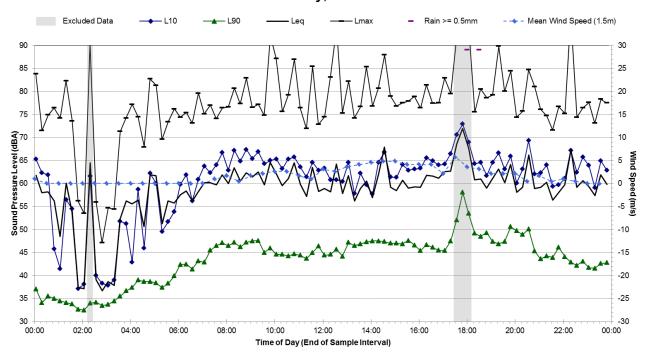
## Statistical Ambient Noise Levels



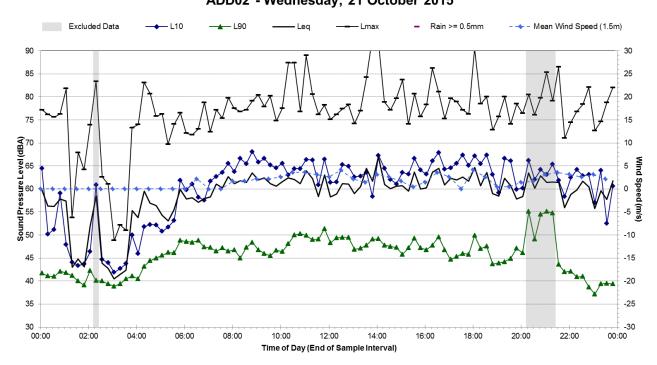
M4 East Additional Noise Logging Summary 2015 Page 4 of 7

ADD02 Ambient Noise Monitoring Results

#### Statistical Ambient Noise Levels ADD02 - Tuesday, 20 October 2015



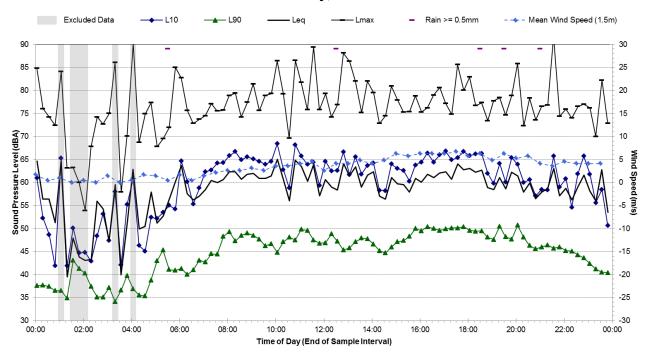
### Statistical Ambient Noise Levels ADD02 - Wednesday, 21 October 2015



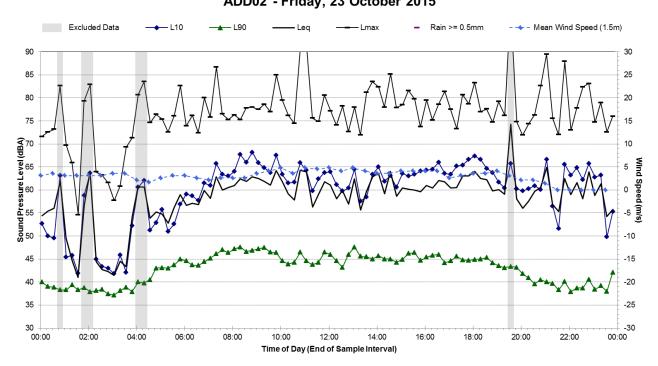
M4 East Additional Noise Logging Summary 2015 Page 5 of 7

ADD02 Ambient Noise Monitoring Results

### Statistical Ambient Noise Levels ADD02 - Thursday, 22 October 2015



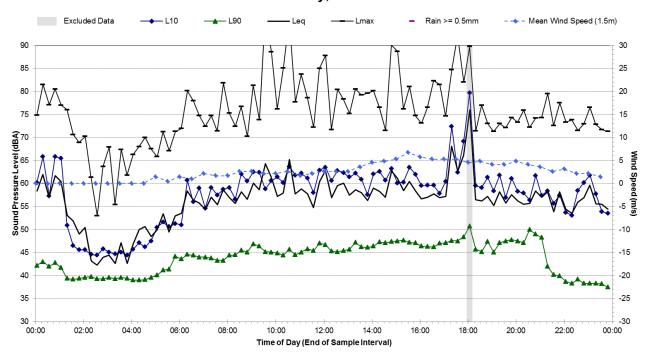
#### Statistical Ambient Noise Levels ADD02 - Friday, 23 October 2015



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ADD02 Ambient Noise Monitoring Results

### Statistical Ambient Noise Levels ADD02 - Saturday, 24 October 2015



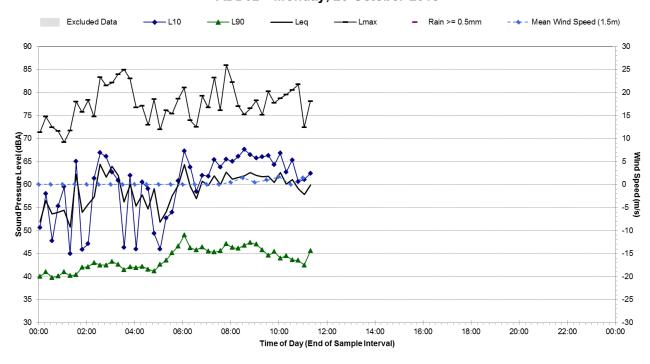
### Statistical Ambient Noise Levels ADD02 - Sunday, 25 October 2015

Excluded Data Rain >= 0.5mm – L10 <u></u> L90 → - Mean Wind Speed (1.5m) 90 30 25 85 20 15 75 Wind Speed (m/s) 0 -10 45 -15 -20 40 35 -25 30 -30 00:00 02:00 04:00 06:00 08:00 10:00 12:00 14:00 16:00 18:00 20:00 22:00 00:00 Time of Day (End of Sample Interval)

M4 East Additional Noise Logging Summary 2015 Page 7 of 7

ADD02 Ambient Noise Monitoring Results

### Statistical Ambient Noise Levels ADD02 - Monday, 26 October 2015



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ADD03 Ambient Noise Monitoring Results

Noise Monitoring Location: ADD03 Map of Noise Monitoring Location

Logger Device Type: ARL 316 Logger Serial No: 16-207-046

**Noise Monitoring Address:** 

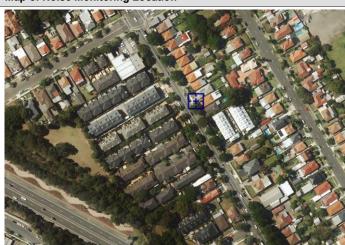
Ambient noise logger deployed immediately outside residential address 50 Underwood Rd, Homebush. Logger located in front yard on western side of property.

Attended noise measurements indicate the ambient noise environment at this location is dominated by road traffic noise from Underwood Rd during the daytime. Constant tyre-pavement noise from light-vehicle traffic on Underwood Rd can be heard at this location with discrete traffic noise level peaks from heavy vehicle movements occurring frequently.

50 Underwood Rd, Homebush

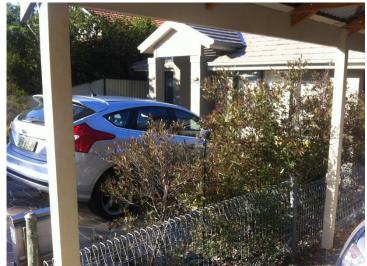
Recorded Noise Levels (LAmax):

Underwood Rd Heavy-vehicle road traffic: 74-87 dBA, Underwood Rd Light-vehicle road traffic: 66-75 dBA, Air traffic: 69-72 dBA



**Photo of Noise Monitoring Location** 

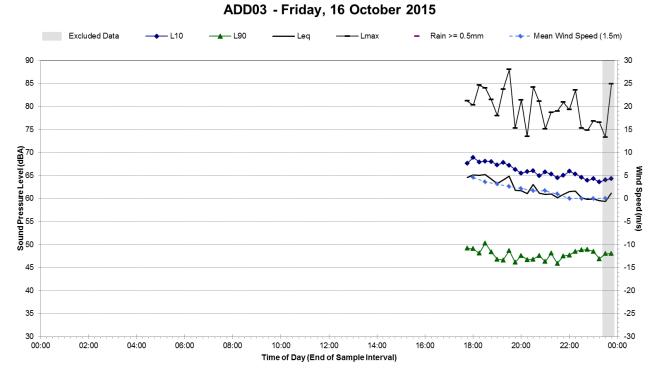
Ambient Noise Logging Results – INP Defined Time Periods						
Monitoring Period	Noise Leve	el (dBA)				
	RBL	LAeq	L10	L1		
Daytime	47	65	68	74		
Evening	45	63	67	71		
Night-time	37	59	59	69		
Ambient Noise Logg	ing Results – RNP	Defined Time P	eriods			
Monitoring Period	Noise Leve	Noise Level (dBA)				
	Weekday L	.Aeq(Period)	Weekend LAeq(Period)	Weekly LAeq(Period)		
Number of Valid Day	<b>/s</b> 5	2	1	N/A (7 Day Average)		
Daytime (7am-10pm	) 65	6	64	65		
Night-time (10pm-7a	<b>m)</b> 59	5	59	59		
Attended Noise Mea	surement Results					
Date	Start Time	Measure	ed Noise Level (dBA)			
		LA90	LAeq	LAmax		
16/10/2015	16:54	56	68	87		



M4 East Additional Noise Logging Summary 2015 Page 2 of 7

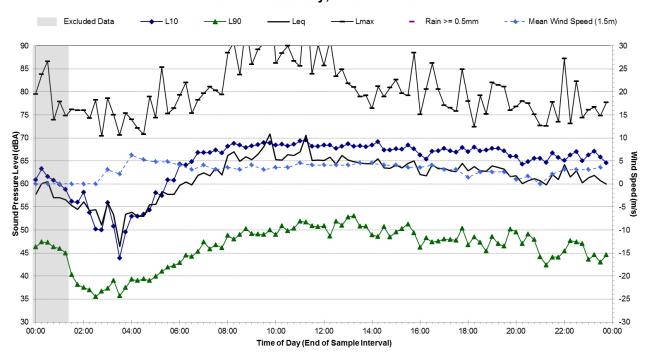
ADD03 Ambient Noise Monitoring Results

## Statistical Ambient Noise Levels



### **Statistical Ambient Noise Levels**

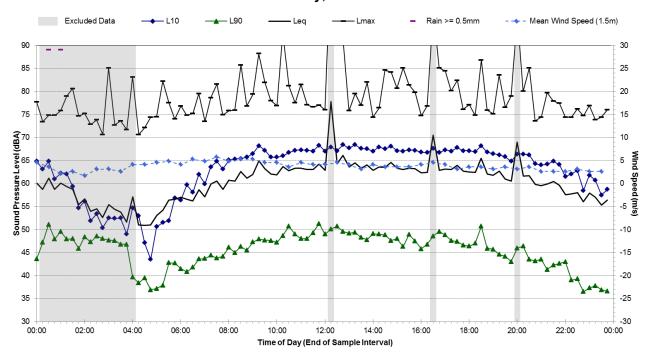
ADD03 - Saturday, 17 October 2015



M4 East Additional Noise Logging Summary 2015 Page 3 of 7

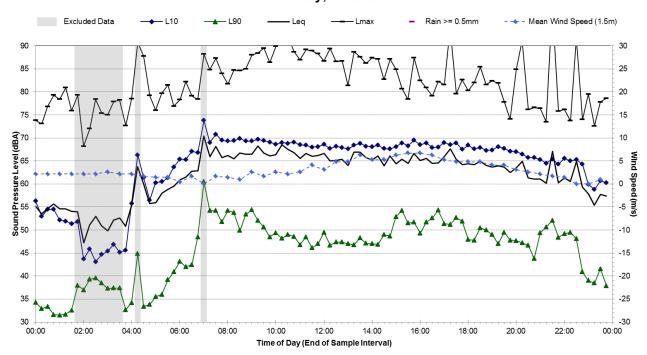
ADD03 Ambient Noise Monitoring Results

### Statistical Ambient Noise Levels ADD03 - Sunday, 18 October 2015



### **Statistical Ambient Noise Levels**

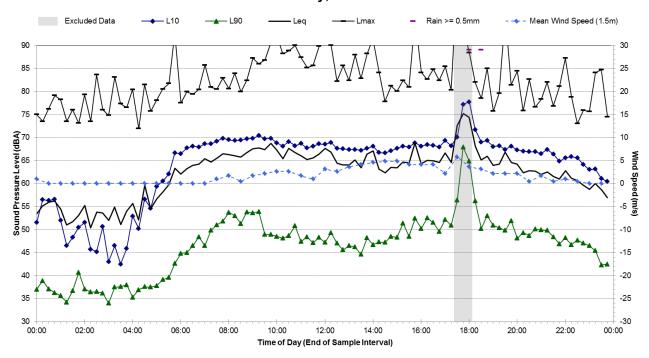
ADD03 - Monday, 19 October 2015



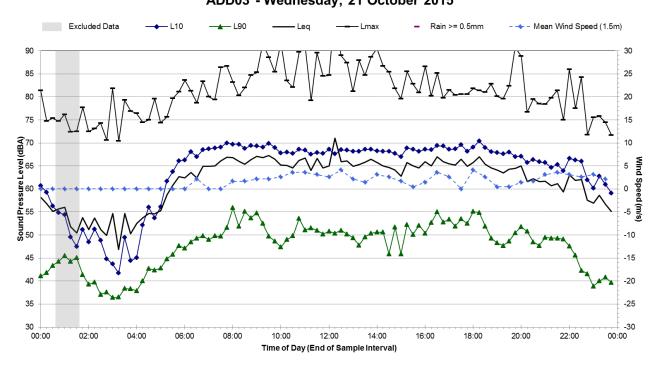
M4 East Additional Noise Logging Summary 2015 Page 4 of 7

ADD03 Ambient Noise Monitoring Results

#### Statistical Ambient Noise Levels ADD03 - Tuesday, 20 October 2015



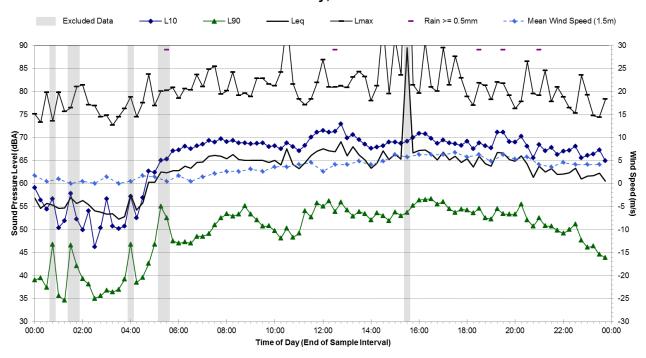
### Statistical Ambient Noise Levels ADD03 - Wednesday, 21 October 2015



M4 East Additional Noise Logging Summary 2015 Page 5 of 7

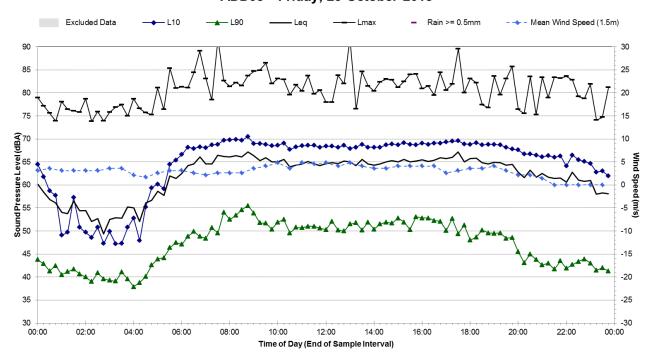
ADD03 Ambient Noise Monitoring Results

### Statistical Ambient Noise Levels ADD03 - Thursday, 22 October 2015



### **Statistical Ambient Noise Levels**

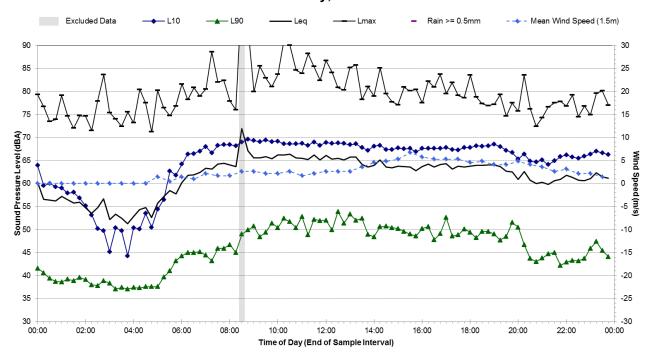
ADD03 - Friday, 23 October 2015



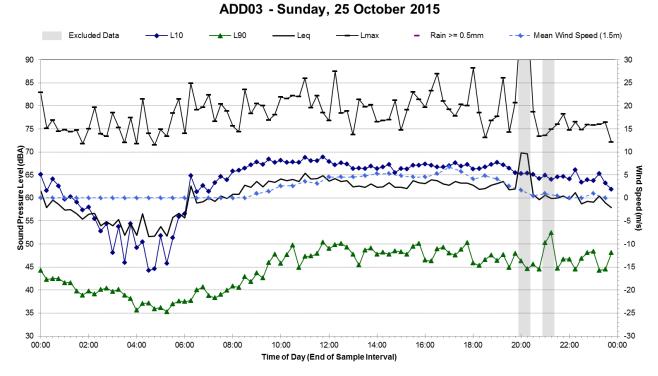
M4 East Additional Noise Logging Summary 2015 Page 6 of 7

ADD03 Ambient Noise Monitoring Results

### Statistical Ambient Noise Levels ADD03 - Saturday, 24 October 2015



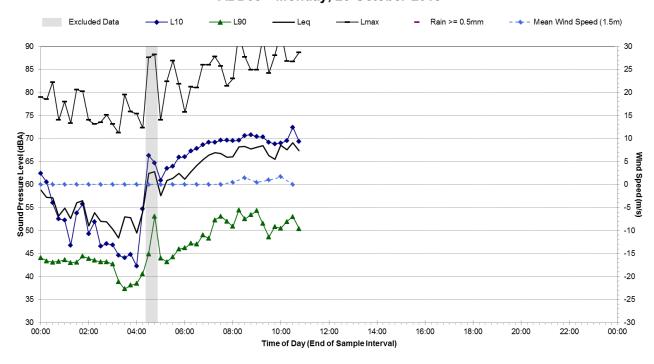
# Statistical Ambient Noise Levels



M4 East Additional Noise Logging Summary 2015 Page 7 of 7

ADD03 Ambient Noise Monitoring Results

### Statistical Ambient Noise Levels ADD03 - Monday, 26 October 2015



M4 East Additional Noise Logging Summary 2015 Page 1 of 7

ADD04 Ambient Noise Monitoring Results

Noise Monitoring Location: ADD04 Map of Noise Monitoring Location

Noise Monitoring Address: 18 Elliott St, North Strathfield

Logger Device Type: ARL 316 Logger Serial No: 16-203-509

Ambient noise logger deployed immediately outside residential address 18 Elliott St, North Strathfield. Logger located in front yard on eastern side of property.

Attended noise measurements indicate the ambient noise environment at this location is dominated by natural noise such as birds during the daytime. Distant traffic noise was audible. Local traffic passbys on Pomeroy St were occasional.

Recorded Noise Levels (LAmax):

Distant road traffic: 44 dBA, Local road traffic: 52 dBA, Birds: 60-63 dBA



Photo of Noise Monitoring Location	

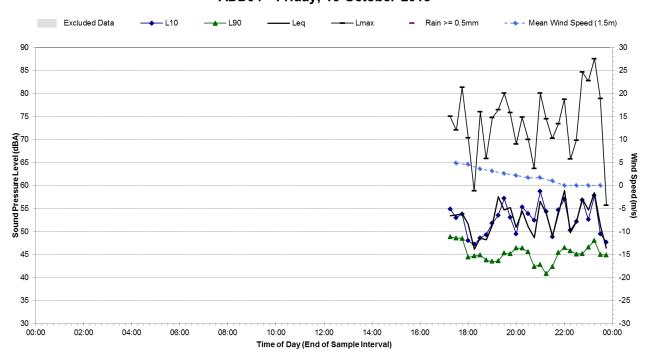
Ambient Noise Logging Results – INP Defined Time Periods						
Monitoring Period	Noise Level (di	BA)				
	RBL	LAeq	L10	L1		
Daytime	42	54	53	62		
Evening	42	55	52	63		
Night-time	41	50	48	53		
Ambient Noise Logging	Results – RNP Def	ined Time	Periods			
Monitoring Period	Noise Level (di	Noise Level (dBA)				
	Weekday LAeq	(Period)	Weekend LAeq(Perio	d) Weekly LAeq(Period)		
Number of Valid Days	5		4	N/A (7 Day Average)		
Daytime (7am-10pm)	54		54	54		
Night-time (10pm-7am)	50		49	50		
Attended Noise Measurement Results						
Date Star	t Time	Measured Noise Level (dBA)		)		
		LA90	LAeq	LAmax		
16/10/2015 16:3	5	44	49	63		



M4 East Additional Noise Logging Summary 2015 Page 2 of 7

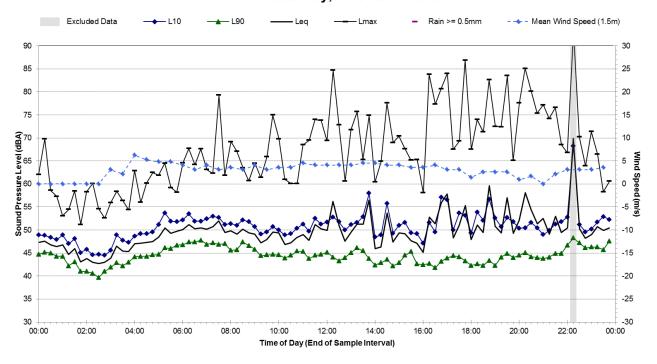
ADD04 Ambient Noise Monitoring Results

#### Statistical Ambient Noise Levels ADD04 - Friday, 16 October 2015



## **Statistical Ambient Noise Levels**

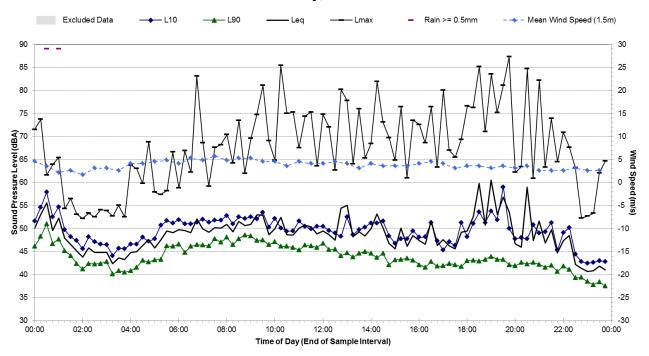
ADD04 - Saturday, 17 October 2015



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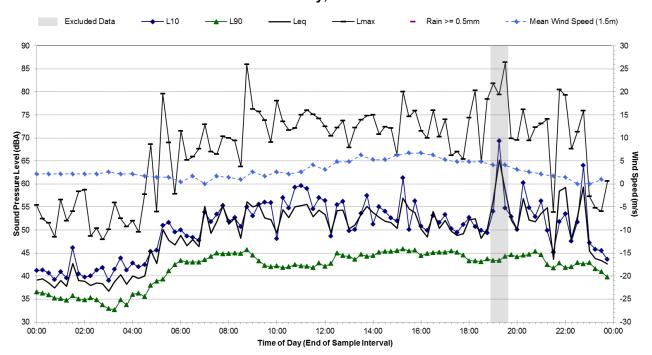
ADD04 Ambient Noise Monitoring Results

### Statistical Ambient Noise Levels ADD04 - Sunday, 18 October 2015



### **Statistical Ambient Noise Levels**

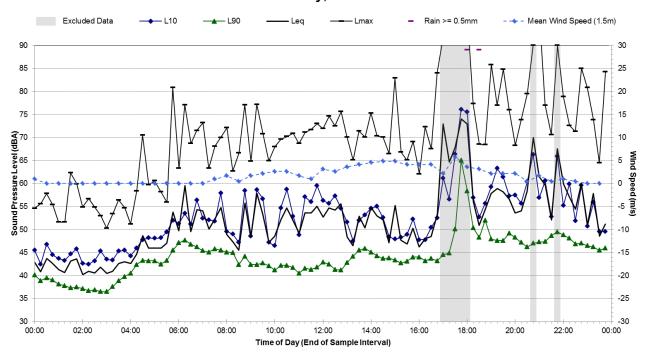
ADD04 - Monday, 19 October 2015



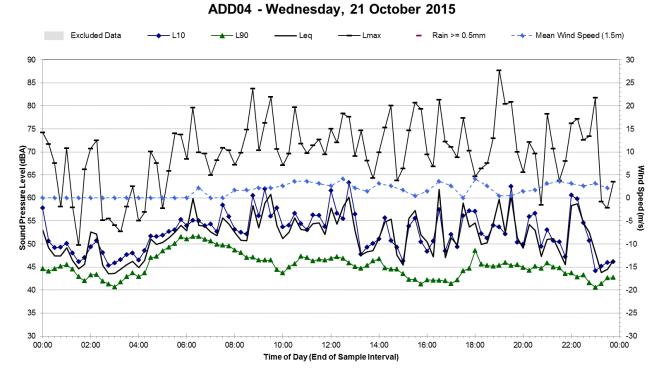
M4 East Additional Noise Logging Summary 2015 Page 4 of 7

ADD04 Ambient Noise Monitoring Results

#### Statistical Ambient Noise Levels ADD04 - Tuesday, 20 October 2015



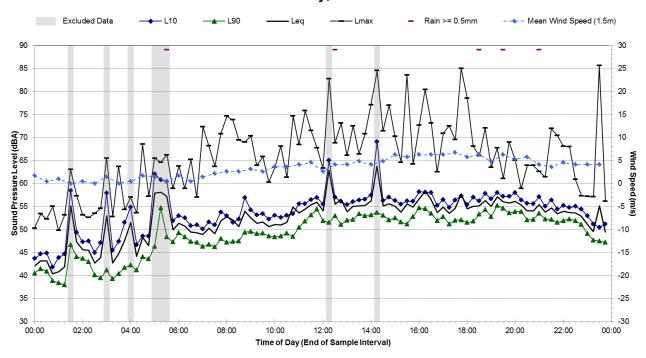
# Statistical Ambient Noise Levels



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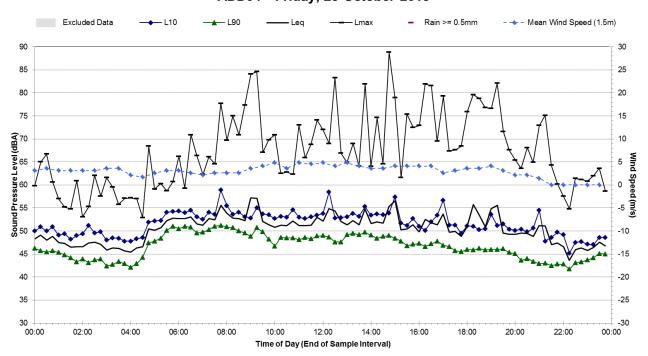
ADD04 Ambient Noise Monitoring Results

### Statistical Ambient Noise Levels ADD04 - Thursday, 22 October 2015



#### **Statistical Ambient Noise Levels**

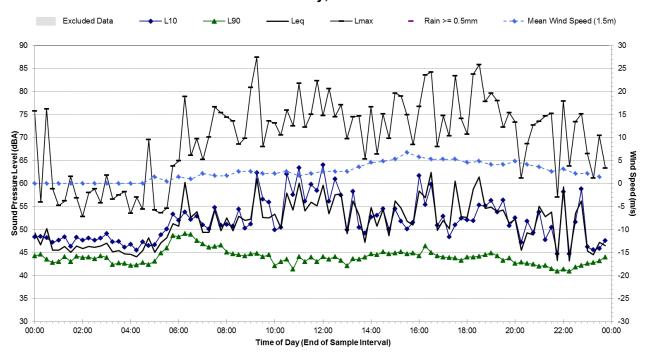
ADD04 - Friday, 23 October 2015



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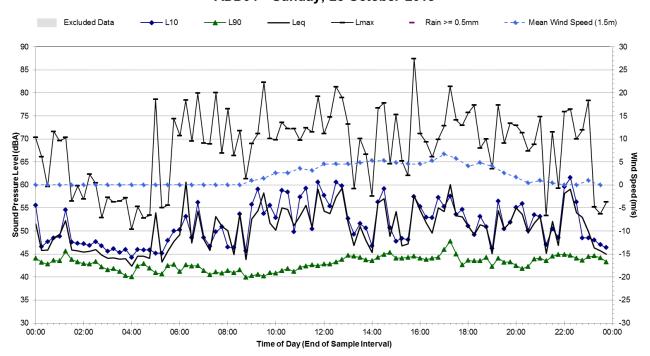
ADD04 Ambient Noise Monitoring Results

#### Statistical Ambient Noise Levels ADD04 - Saturday, 24 October 2015



### Statistical Ambient Noise Levels

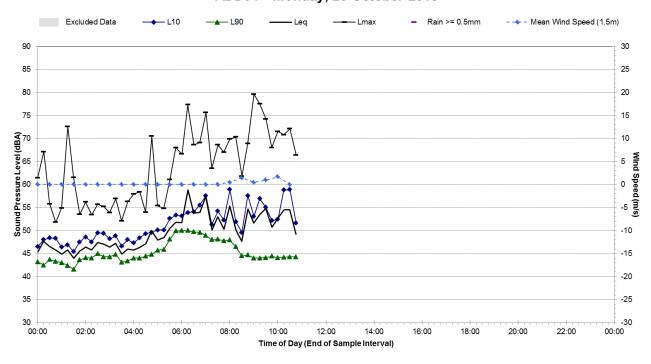
ADD04 - Sunday, 25 October 2015



M4 East Additional Noise Logging Summary 2015 Page 7 of 7

ADD04 Ambient Noise Monitoring Results

### Statistical Ambient Noise Levels ADD04 - Monday, 26 October 2015



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ADD05 Ambient Noise Monitoring Results

Noise Monitoring Location:	ADD05	Map of Noise Monitoring Location
Noise Monitoring Address:	5 Carrington St, North Strathfield	

Logger Device Type: Svantek 957

Logger Serial No: 23241

Ambient noise logger deployed immediately outside residential address 5 Carrington St, North Strathfield. Logger located in front yard on southern side of property.

Attended noise measurements indicate the ambient noise environment at this location is dominated by distant road traffic noise from Concord Rd during the daytime. Local traffic passbys on Pomeroy St were occasional.

Recorded Noise Levels (LAmax):

Distant road traffic Concord Rd: 44 dBA, Local road traffic: 51-57 dBA, Air traffic: 63-83 dBA



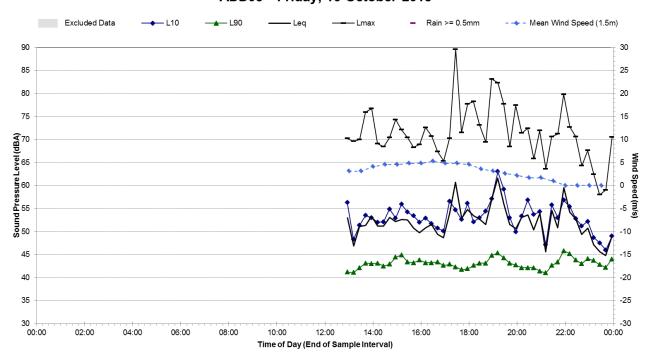
Monitoring Period	Noise Level (dBA)				
	RBL	LAeq	L10	L1	
Daytime	43	55	56	64	
Evening	42	54	53	63	
Night-time	39	50	48	54	
Ambient Noise Lo	gging Results – RNP	Defined Time Per	iods		
Monitoring Period	Noise Leve	Noise Level (dBA)			
	Weekday L	.Aeq(Period) W	eekend LAeq(Period	) Weekly LAeq(Period	
Number of Valid [	Days 5	4	4		
Daytime (7am-10p	om) 55	54		55	
Night-time (10pm-	<b>7am)</b> 50	49		50	
Attended Noise M	easurement Results				
Date	Start Time	Measured	sured Noise Level (dBA)		
		LA90	LAeq	LAmax	
16/10/2015	12:07	42	62	83	



M4 East Additional Noise Logging Summary 2015 Page 2 of 7

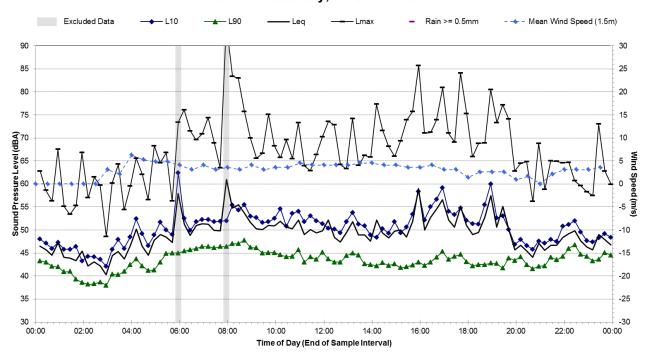
ADD05 Ambient Noise Monitoring Results

#### Statistical Ambient Noise Levels ADD05 - Friday, 16 October 2015



## **Statistical Ambient Noise Levels**

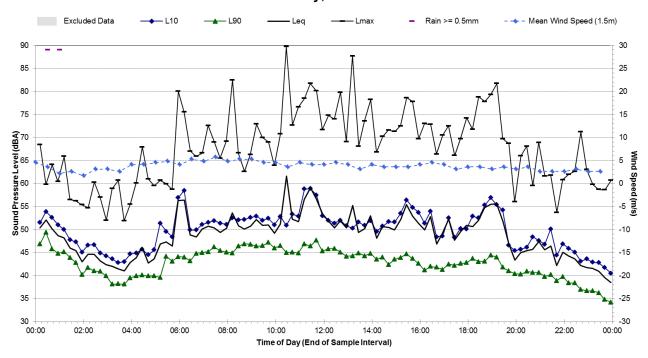
ADD05 - Saturday, 17 October 2015



M4 East Additional Noise Logging Summary 2015 Page 3 of 7

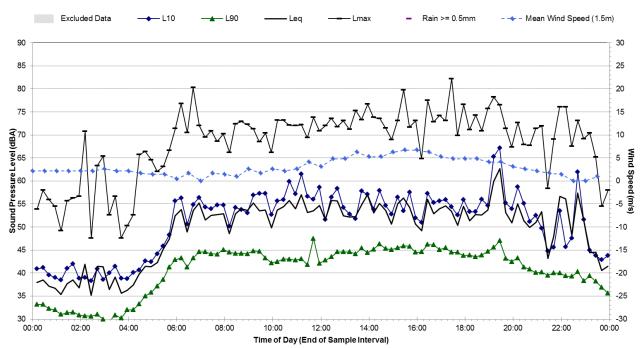
ADD05 Ambient Noise Monitoring Results

### Statistical Ambient Noise Levels ADD05 - Sunday, 18 October 2015



### **Statistical Ambient Noise Levels**

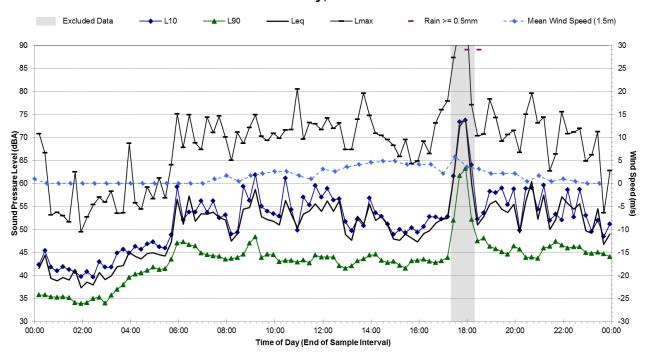
ADD05 - Monday, 19 October 2015



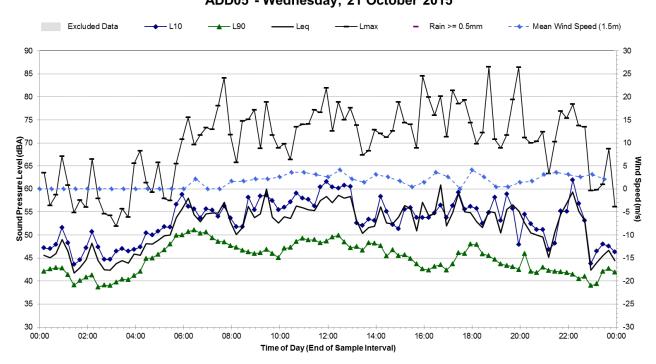
M4 East Additional Noise Logging Summary 2015 Page 4 of 7

ADD05 Ambient Noise Monitoring Results

#### Statistical Ambient Noise Levels ADD05 - Tuesday, 20 October 2015



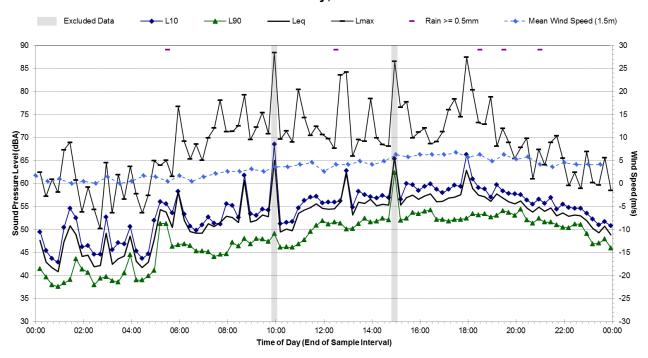
### Statistical Ambient Noise Levels ADD05 - Wednesday, 21 October 2015



M4 East Additional Noise Logging Summary 2015 Page 5 of 7

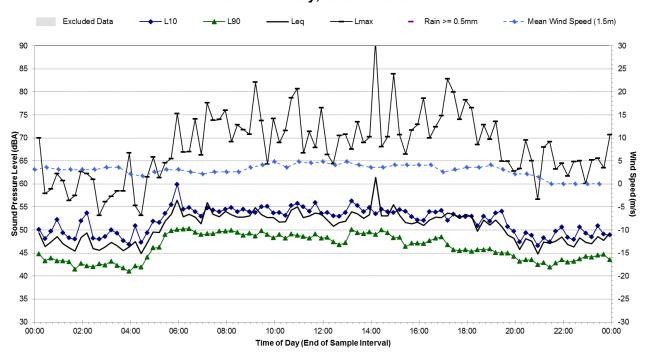
ADD05 Ambient Noise Monitoring Results

### Statistical Ambient Noise Levels ADD05 - Thursday, 22 October 2015



## **Statistical Ambient Noise Levels**

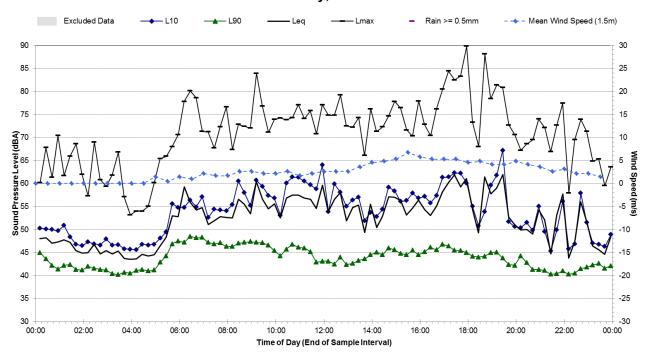
ADD05 - Friday, 23 October 2015



M4 East Additional Noise Logging Summary 2015 Page 6 of 7

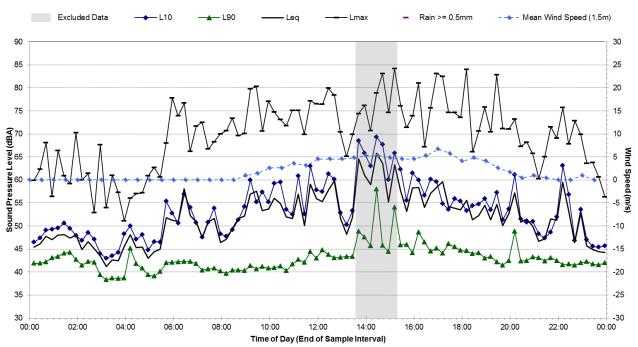
ADD05 Ambient Noise Monitoring Results

#### Statistical Ambient Noise Levels ADD05 - Saturday, 24 October 2015



### **Statistical Ambient Noise Levels**

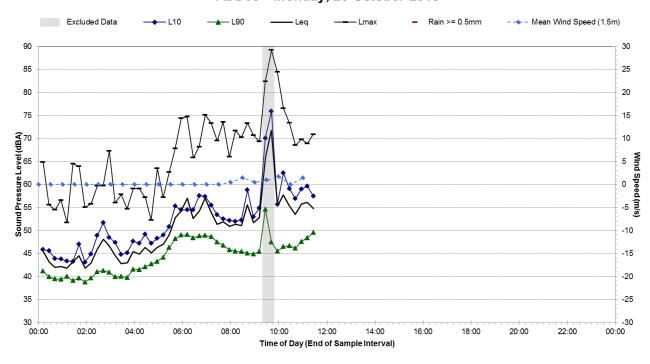
ADD05 - Sunday, 25 October 2015



M4 East Additional Noise Logging Summary 2015 Page 7 of 7

ADD05 Ambient Noise Monitoring Results

#### Statistical Ambient Noise Levels ADD05 - Monday, 26 October 2015



M4 East Additional Noise Logging Summary 2015 Page 1 of 7

ADD06 Ambient Noise Monitoring Results

Noise Monitoring Location: ADD06 Map of Noise Monitoring Location

Logger Device Type: Svantek 957

**Noise Monitoring Address:** 

Logger Serial No: 23243

Ambient noise logger deployed immediately outside residential address 5 Thornleigh Ave, Concord. Logger located in front yard on western side of property.

5 Thornleigh Ave, Concord

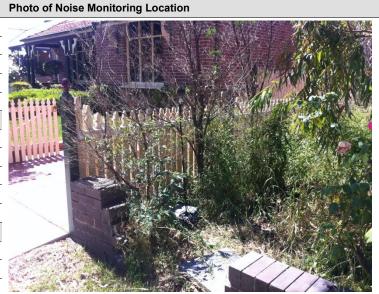
Attended noise measurements indicate the ambient noise environment at this location is dominated by local road traffic noise and distant road traffic noise from Concord Road during the daytime.

Recorded Noise Levels (LAmax):

Distant road traffic Concord Rd: 41 dBA, Local road traffic: 64-68 dBA, Air traffic: 72-73 dBA



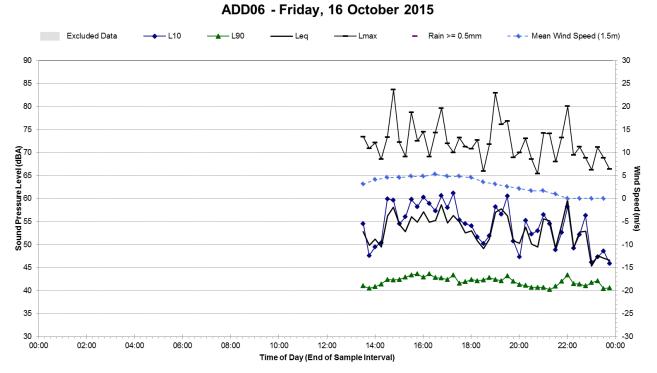
Monitoring Period	Noise Leve	Noise Level (dBA)					
	RBL	LAeq	L10	L1			
Daytime	42	55	57	67			
Evening	40	54	54	65			
Night-time	38	49	45	53			
Ambient Noise Loggin	g Results – RNP	Defined Time P	eriods				
Monitoring Period	Noise Leve	Noise Level (dBA)					
	Weekday L	Aeq(Period)	Weekend LAeq(Period)	Weekly LAeq(Period			
Number of Valid Days	5	4	4	N/A (7 Day Average)			
Daytime (7am-10pm)	55		55	55			
Night-time (10pm-7am	) 49	4	49	49			
Attended Noise Measu	rement Results						
Date S	tart Time	Time Measured Noise Level (dBA)					
		LA90	LAeq	LAmax			
16/10/2015 12	2:42	40	53	73			



M4 East Additional Noise Logging Summary 2015 Page 2 of 7

ADD06 Ambient Noise Monitoring Results

# Statistical Ambient Noise Levels



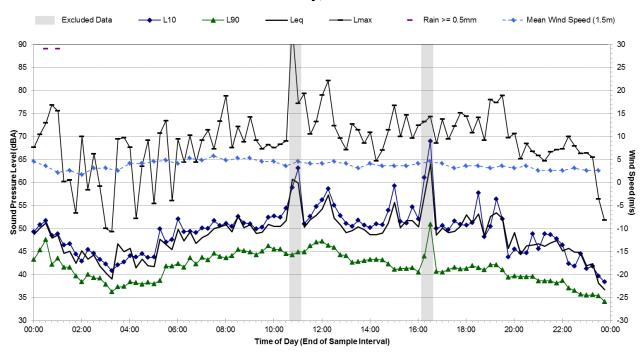
#### Statistical Ambient Noise Levels ADD06 - Saturday, 17 October 2015

Excluded Data - L10 \_\_\_\_ L90 - Rain >= 0.5mm Mean Wind Speed (1.5m) 90 30 85 25 80 75 15 **(gBA)** 10 Wind Speed (m/s) Sound Pressure Level -10 40 -20 -25 35 30 ----00:00 -30 02:00 04:00 08:00 12:00 16:00 18:00 20:00 22:00 00:00 Time of Day (End of Sample Interval)

M4 East Additional Noise Logging Summary 2015 Page 3 of 7

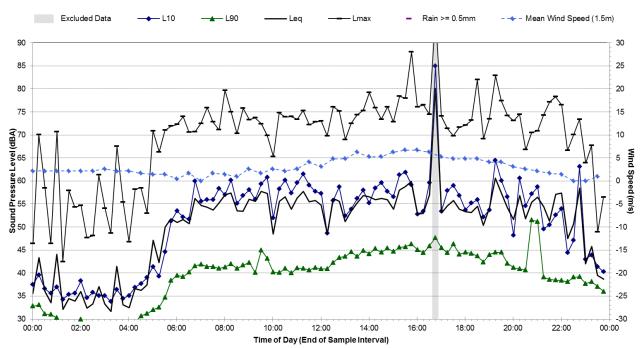
ADD06 Ambient Noise Monitoring Results

#### Statistical Ambient Noise Levels ADD06 - Sunday, 18 October 2015



## **Statistical Ambient Noise Levels**

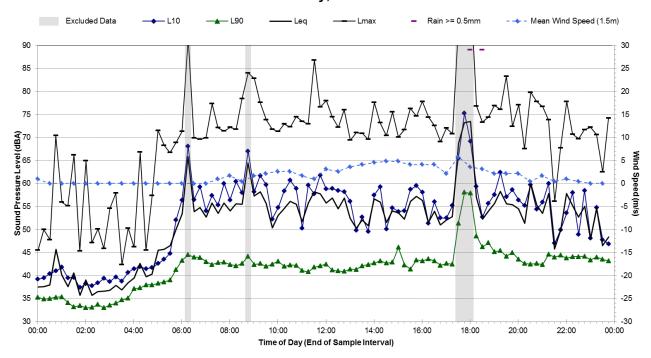
ADD06 - Monday, 19 October 2015



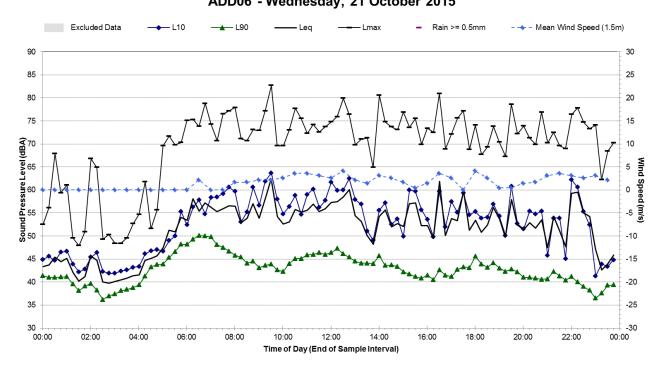
M4 East Additional Noise Logging Summary 2015 Page 4 of 7

ADD06 Ambient Noise Monitoring Results

#### Statistical Ambient Noise Levels ADD06 - Tuesday, 20 October 2015



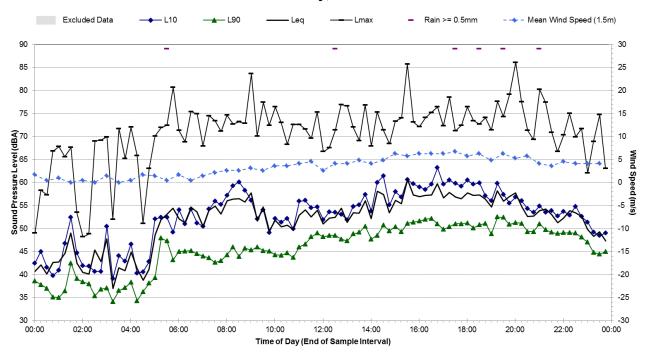
#### Statistical Ambient Noise Levels ADD06 - Wednesday, 21 October 2015



M4 East Additional Noise Logging Summary 2015 Page 5 of 7

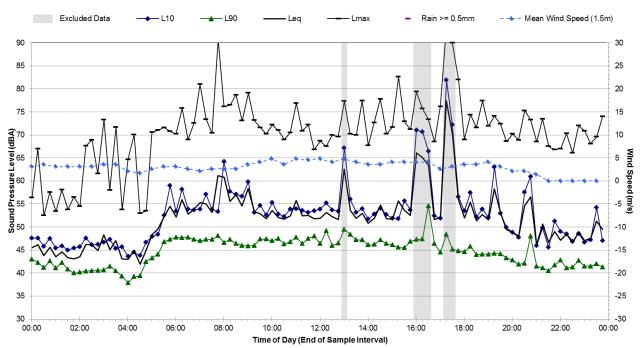
ADD06 Ambient Noise Monitoring Results

#### Statistical Ambient Noise Levels ADD06 - Thursday, 22 October 2015



#### **Statistical Ambient Noise Levels**

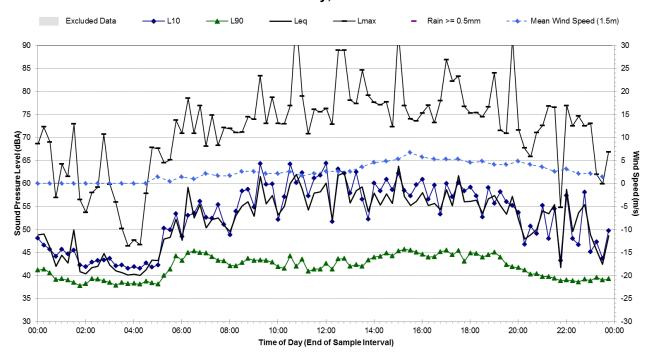
ADD06 - Friday, 23 October 2015



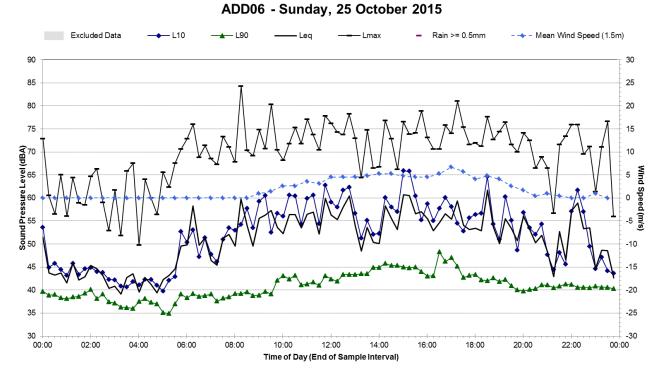
M4 East Additional Noise Logging Summary 2015 Page 6 of 7

ADD06 Ambient Noise Monitoring Results

#### Statistical Ambient Noise Levels ADD06 - Saturday, 24 October 2015



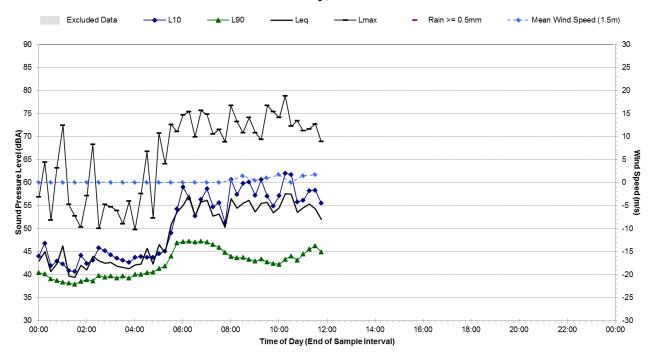
# Statistical Ambient Noise Levels



M4 East Additional Noise Logging Summary 2015 Page 7 of 7

ADD06 Ambient Noise Monitoring Results

#### Statistical Ambient Noise Levels ADD06 - Monday, 26 October 2015



M4 East Additional Noise Logging Summary 2015 Page 1 of 7

ADD07 Ambient Noise Monitoring Results

ADD07 **Noise Monitoring Location: Map of Noise Monitoring Location** 15 Edward St, Concord

Logger Device Type: Svantek 957

**Noise Monitoring Address:** 

Logger Serial No: 27578

Ambient noise logger deployed immediately outside residential address 15 Edward St, Concord. Logger located in front yard on southern side of property.

Attended noise measurements indicate the ambient noise environment at this location is dominated by distant road traffic noise from Concord Road during the daytime. Local traffic passbys were occasional.

Recorded Noise Levels (LAmax):

Distant road traffic Concord Rd: 46-50 dBA, Local road traffic: 55-69 dBA, Air traffic: 65-73 dBA,

Birds: 50-61 dBA



Dhoto	of Noise	Monitoring	Location
PHOLO	oi noise	Monitoring	Location

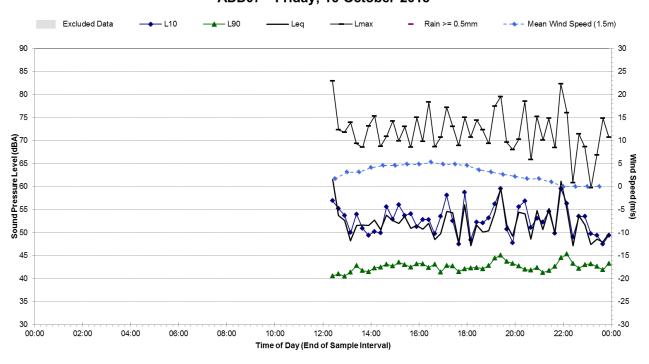
Monitoring Period		Noise Level (dBA)				
		RBL	LAeq		L10	L1
Daytime		42	54		55	64
Evening		42	54		52	64
Night-time		39	50		48	54
Ambient Noise Lo	ogging Re	sults - RNP	Defined Time	Periods		
Monitoring Period		Noise Level (dBA)				
		Weekday L	Aeq(Period)	Weeker	nd LAeq(Period)	Weekly LAeq(Period)
Number of Valid I	Days	5		4		N/A (7 Day Average)
Daytime (7am-10p	om)	55		54		54
Night-time (10pm	-7am)	50		49		50
Attended Noise M	leasurem	ent Results				
Date Star		ime Measured Noise Level (dBA)				
			LA90		LAeq	LAmax
16/10/2015	11:36		43		56	73



M4 East Additional Noise Logging Summary 2015 Page 2 of 7

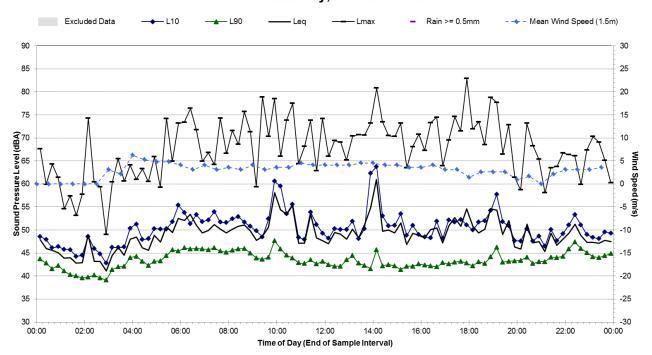
ADD07 Ambient Noise Monitoring Results

#### Statistical Ambient Noise Levels ADD07 - Friday, 16 October 2015



## **Statistical Ambient Noise Levels**

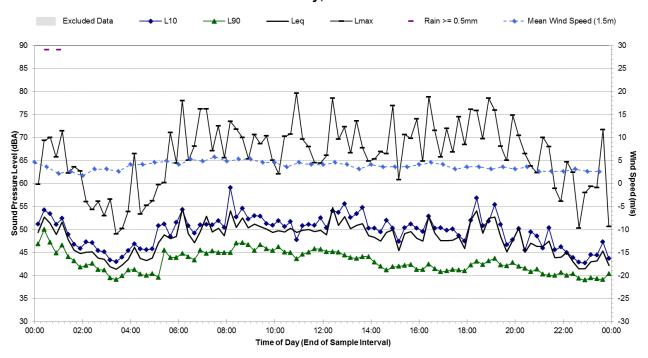
ADD07 - Saturday, 17 October 2015



M4 East Additional Noise Logging Summary 2015 Page 3 of 7

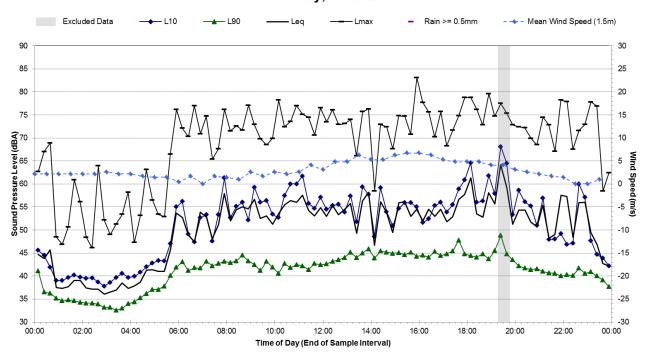
ADD07 Ambient Noise Monitoring Results

#### Statistical Ambient Noise Levels ADD07 - Sunday, 18 October 2015



#### Statistical Ambient Noise Levels

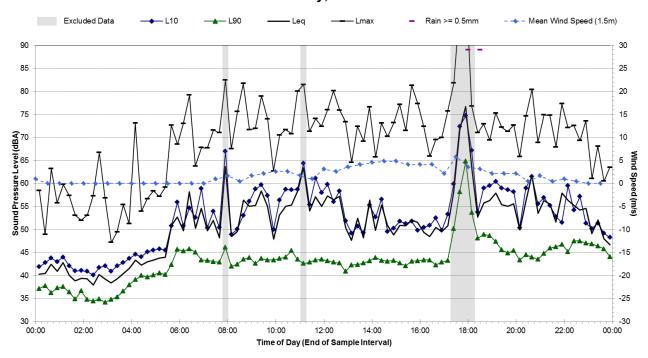
ADD07 - Monday, 19 October 2015



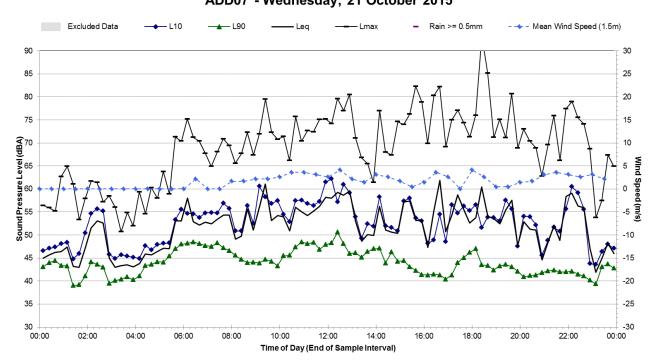
M4 East Additional Noise Logging Summary 2015 Page 4 of 7

ADD07 Ambient Noise Monitoring Results

#### Statistical Ambient Noise Levels ADD07 - Tuesday, 20 October 2015



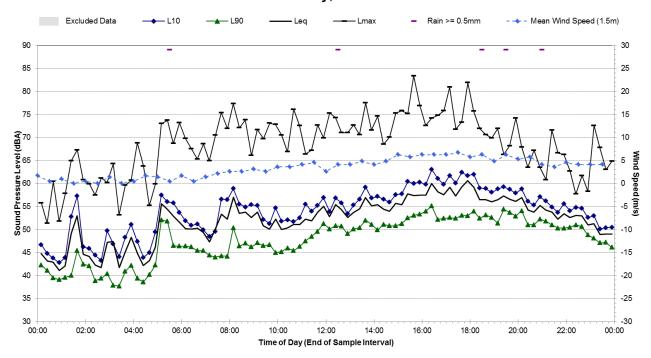
#### Statistical Ambient Noise Levels ADD07 - Wednesday, 21 October 2015



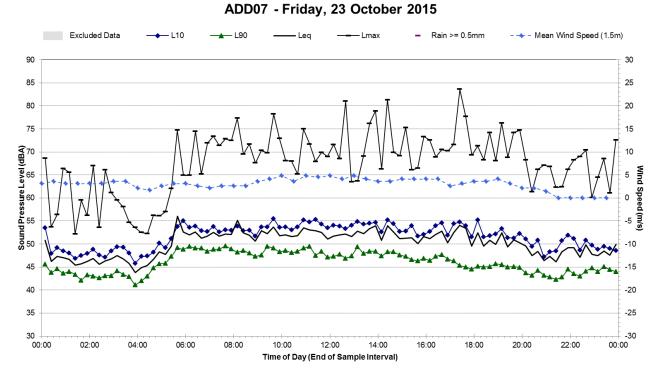
M4 East Additional Noise Logging Summary 2015 Page 5 of 7

ADD07 Ambient Noise Monitoring Results

#### Statistical Ambient Noise Levels ADD07 - Thursday, 22 October 2015



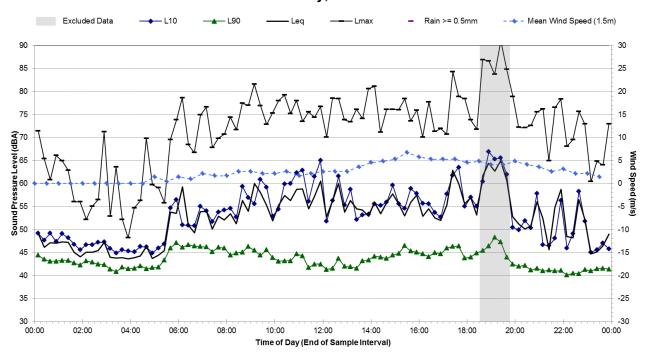
# Statistical Ambient Noise Levels



M4 East Additional Noise Logging Summary 2015 Page 6 of 7

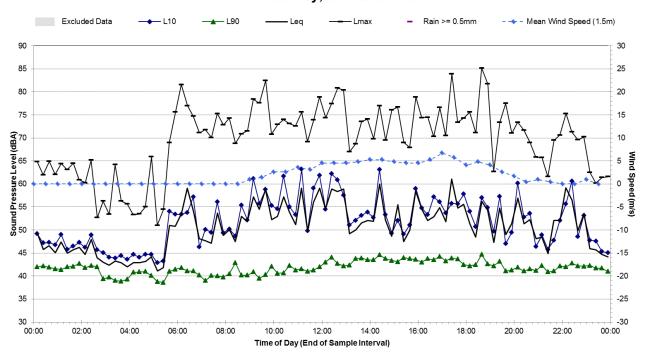
ADD07 Ambient Noise Monitoring Results

#### Statistical Ambient Noise Levels ADD07 - Saturday, 24 October 2015



## **Statistical Ambient Noise Levels**

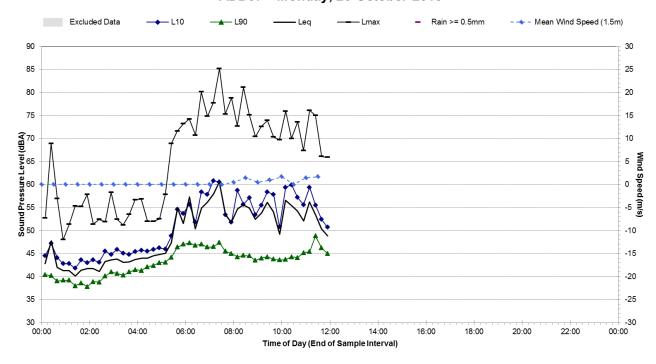
ADD07 - Sunday, 25 October 2015



M4 East Additional Noise Logging Summary 2015 Page 7 of 7

ADD07 Ambient Noise Monitoring Results

#### Statistical Ambient Noise Levels ADD07 - Monday, 26 October 2015



M4 East Additional Noise Logging Summary 2015 Page 1 of 7

ADD08 Ambient Noise Monitoring Results

Noise Monitoring Location: ADD08 Map of Noise Monitoring Location

Noise Monitoring Address: 12 Luke Ave, Burwood

Logger Device Type: Svantek 957

Logger Serial No: 23247

Ambient noise logger deployed immediately outside residential address 12 Luke Ave, Burwood. Logger located in front yard on western side of property.

Attended noise measurements indicate the ambient noise environment at this location is dominated by road traffic noise from Parramatta Rd during the daytime. Constant tyre-pavement noise from light-vehicle traffic on Parramatta Rd can be heard at this location with discrete traffic noise level peaks from heavy vehicle movements occurring frequently. Bus movements within the adjacent bus depot were frequent.

Recorded Noise Levels (LAmax):

Parramatta Rd Heavy-vehicle road traffic: 63-76 dBA, Parramatta Rd Light-vehicle road traffic: 55-61 dBA, Bus Depot: 71-73 dBA, Air traffic: 65 dBA



#### **Photo of Noise Monitoring Location**

Ambient Noise Logging	g Results – INP D	efined Time Pe	eriods			
Monitoring Period	Noise Leve	Noise Level (dBA)				
	RBL	LAeq	L10	L1		
Daytime	50	59	61	69		
Evening	50	59	60	66		
Night-time	43	58	60	65		
Ambient Noise Logging	g Results - RNP	Defined Time P	eriods			
Monitoring Period	Noise Leve	Noise Level (dBA)				
	Weekday L	Aeq(Period) \	Weekend LAeq(Period)	Weekly LAeq(Period)		
Number of Valid Days	5	2	4	N/A (7 Day Average)		
Daytime (7am-10pm)	59	Į	59	59		
Night-time (10pm-7am)	58	į	58	58		
Attended Noise Measurement Results						
Date St	art Time	me Measured Noise Level (dBA)				
		LA90	LAeq	LAmax		
16/10/2015 14	:00	54	61	76		

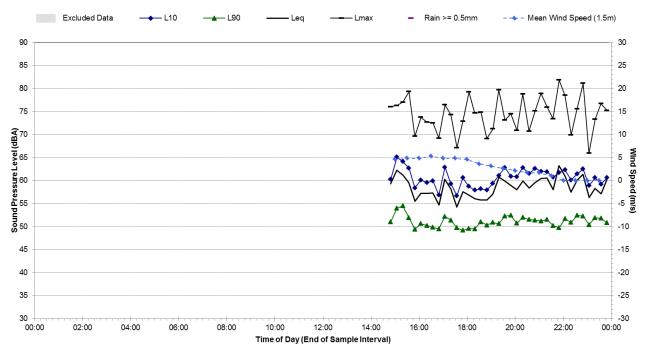


M4 East Additional Noise Logging Summary 2015 Page 2 of 7

ADD08 Ambient Noise Monitoring Results

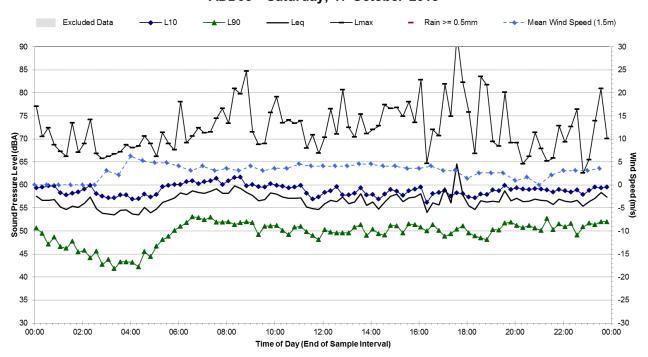
## **Statistical Ambient Noise Levels**

ADD08 - Friday, 16 October 2015



#### **Statistical Ambient Noise Levels**

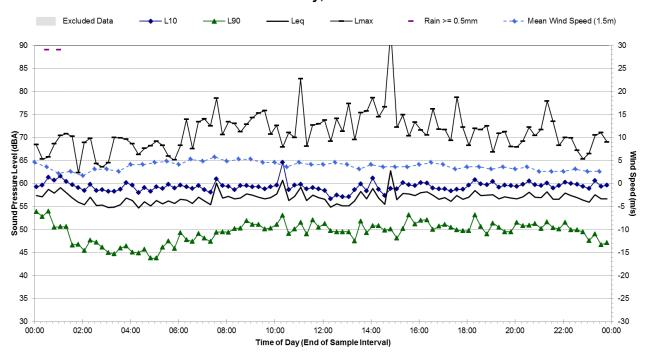
ADD08 - Saturday, 17 October 2015



M4 East Additional Noise Logging Summary 2015 Page 3 of 7

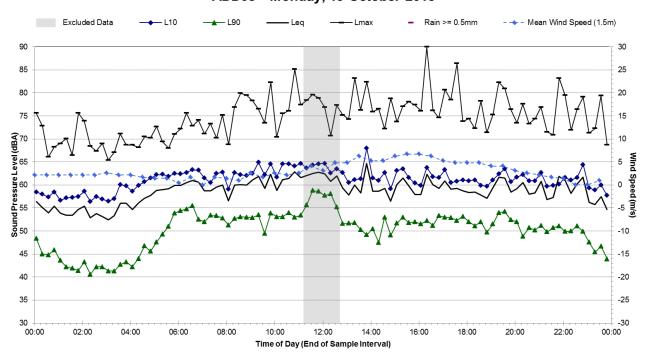
ADD08 Ambient Noise Monitoring Results

#### Statistical Ambient Noise Levels ADD08 - Sunday, 18 October 2015



#### **Statistical Ambient Noise Levels**

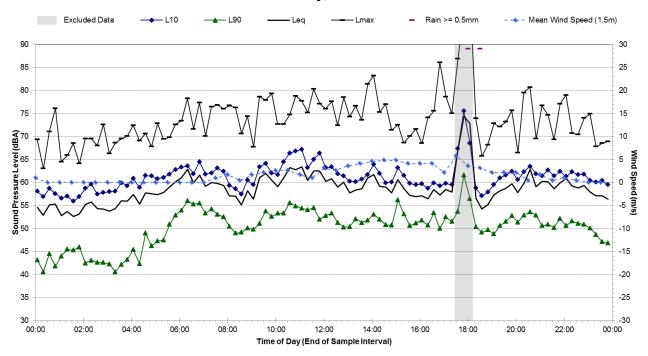
ADD08 - Monday, 19 October 2015



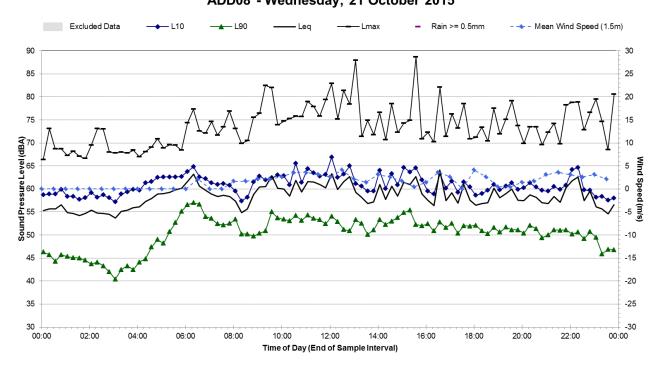
M4 East Additional Noise Logging Summary 2015 Page 4 of 7

ADD08 Ambient Noise Monitoring Results

#### Statistical Ambient Noise Levels ADD08 - Tuesday, 20 October 2015



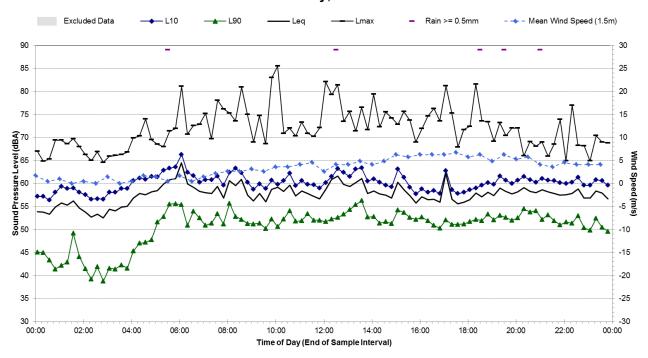
#### Statistical Ambient Noise Levels ADD08 - Wednesday, 21 October 2015



M4 East Additional Noise Logging Summary 2015 Page 5 of 7

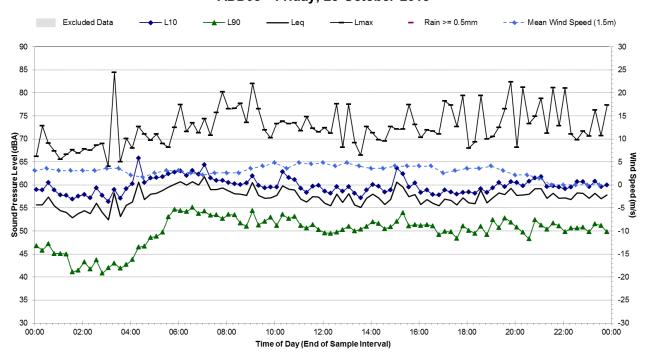
ADD08 Ambient Noise Monitoring Results

#### Statistical Ambient Noise Levels ADD08 - Thursday, 22 October 2015



#### Statistical Ambient Noise Levels

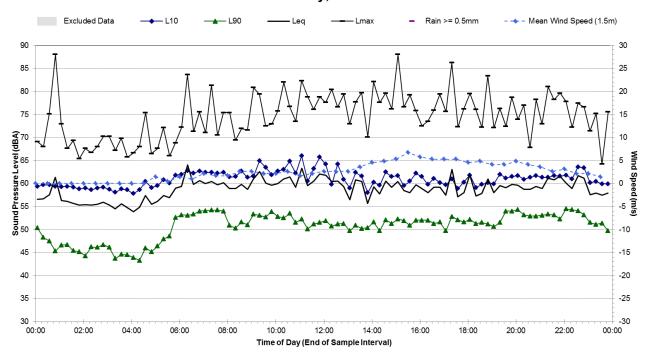
ADD08 - Friday, 23 October 2015



M4 East Additional Noise Logging Summary 2015 Page 6 of 7

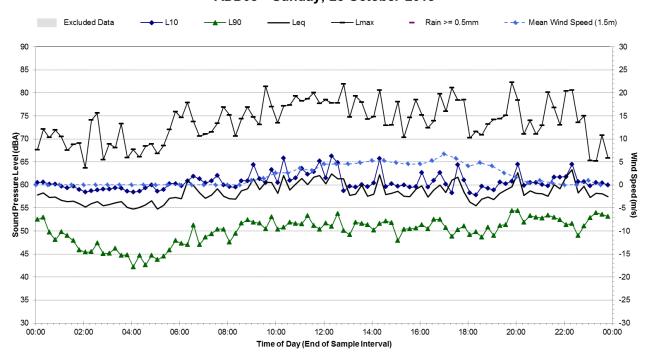
ADD08 Ambient Noise Monitoring Results

#### Statistical Ambient Noise Levels ADD08 - Saturday, 24 October 2015



#### Statistical Ambient Noise Levels

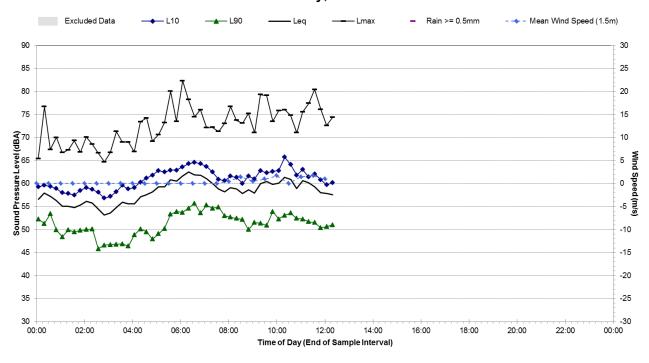
ADD08 - Sunday, 25 October 2015



M4 East Additional Noise Logging Summary 2015 Page 7 of 7

ADD08 Ambient Noise Monitoring Results

#### Statistical Ambient Noise Levels ADD08 - Monday, 26 October 2015



M4 East Additional Noise Logging Summary 2015 Page 1 of 7

ADD09 Ambient Noise Monitoring Results

**Noise Monitoring Location:** ADD09 **Map of Noise Monitoring Location** 6 Loftus St, Concord

Logger Device Type: Svantek 957

Logger Serial No: 27522

**Noise Monitoring Address:** 

Ambient noise logger deployed immediately outside residential address 6 Loftus St, Concord. Logger located in front yard on eastern side of property.

Attended noise measurements indicate the ambient noise environment at this location is dominated by road traffic noise from Loftus St and Gipps St during the daytime. Road traffic noise from Parramatta Rd was audible during lulls in local traffic.

Recorded Noise Levels (LAmax):

Gipps St Heavy-vehicle road traffic: 76-78 dBA, Gipps St Light-vehicle road traffic: 62 dBA, Local road traffic: 64-71 dBA, Air traffic: 74 dBA, Distant road traffic Parramatta Rd: 50 dBA



<b>Photo of Noise</b>	Monitoring	Location
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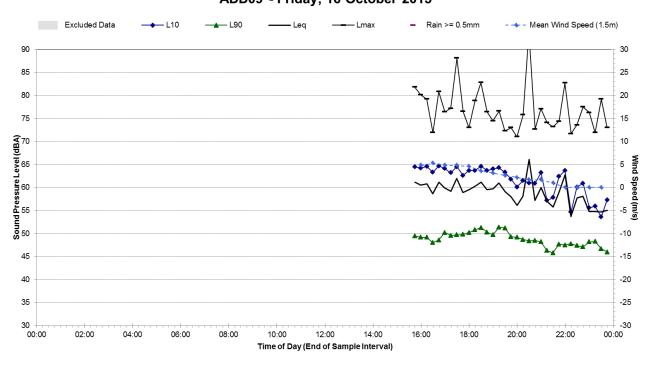
Ambient Noise Logging Results – INP Defined Time Periods							
Monitoring Period	d Noi	Noise Level (dBA)					
	RB	L LAeq	L10	L1			
Daytime	49	60	63	70			
Evening	47	59	61	69			
Night-time	41	54	53	64			
Ambient Noise Lo	ogging Results	s - RNP Defined Time	Periods				
Monitoring Period	d Noi	Noise Level (dBA)					
	We	ekday LAeq(Period)	Weekend LAeq(Perio	od) Weekly LAeq(Period)			
Number of Valid I	<b>Days</b> 5		4	N/A (7 Day Average)			
Daytime (7am-10	<b>om)</b> 60		59	60			
Night-time (10pm	<b>-7am)</b> 55		54	55			
Attended Noise M	leasurement R	esults					
Date	Start Time	me Measured Noise Level (dBA)		A)			
		LA90	LAeq	LAmax			
16/10/2015	14:56	53	62	78			



M4 East Additional Noise Logging Summary 2015 Page 2 of 7

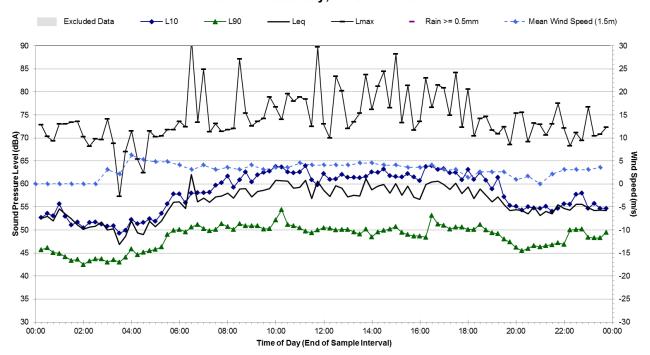
ADD09 Ambient Noise Monitoring Results

#### Statistical Ambient Noise Levels ADD09 - Friday, 16 October 2015



## **Statistical Ambient Noise Levels**

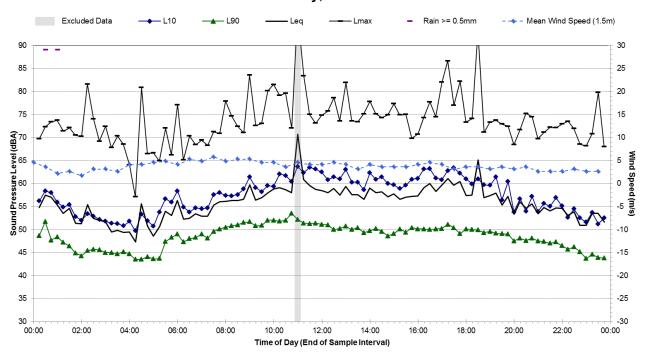
ADD09 - Saturday, 17 October 2015



M4 East Additional Noise Logging Summary 2015 Page 3 of 7

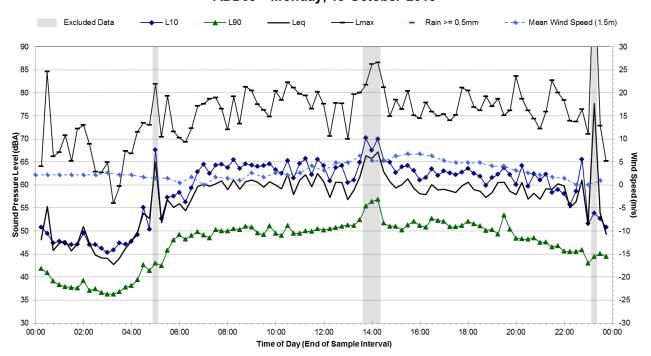
ADD09 Ambient Noise Monitoring Results

#### Statistical Ambient Noise Levels ADD09 - Sunday, 18 October 2015



#### **Statistical Ambient Noise Levels**

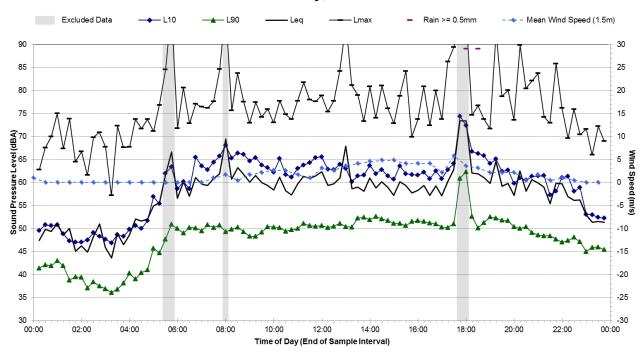
ADD09 - Monday, 19 October 2015



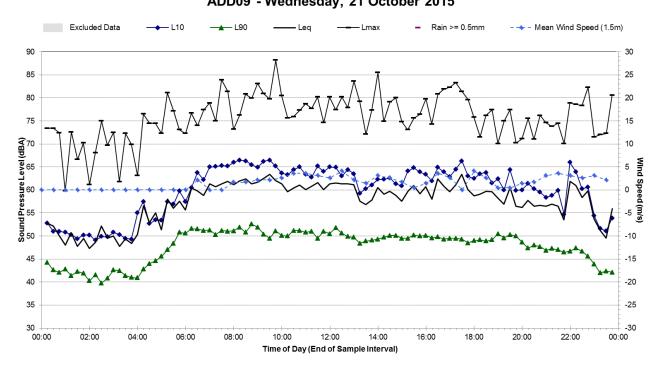
M4 East Additional Noise Logging Summary 2015 Page 4 of 7

ADD09 Ambient Noise Monitoring Results

#### Statistical Ambient Noise Levels ADD09 - Tuesday, 20 October 2015



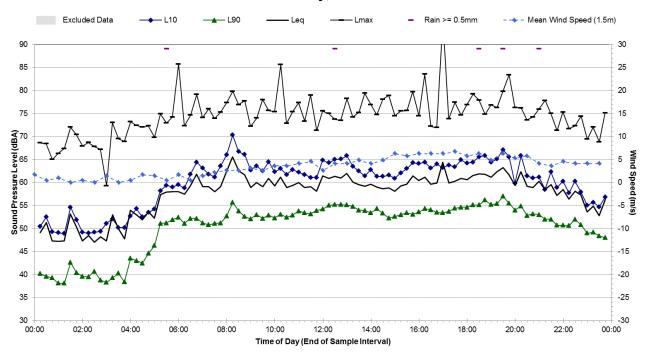
#### Statistical Ambient Noise Levels ADD09 - Wednesday, 21 October 2015



M4 East Additional Noise Logging Summary 2015 Page 5 of 7

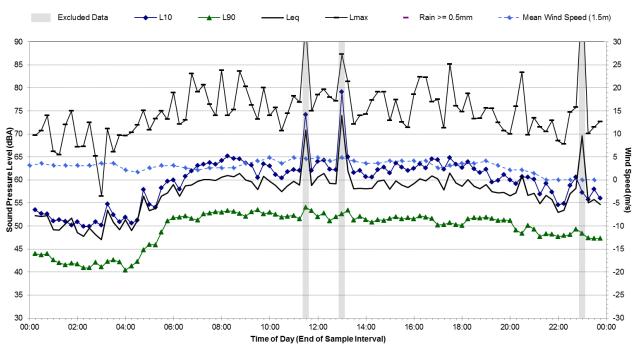
ADD09 Ambient Noise Monitoring Results

#### Statistical Ambient Noise Levels ADD09 - Thursday, 22 October 2015



## **Statistical Ambient Noise Levels**

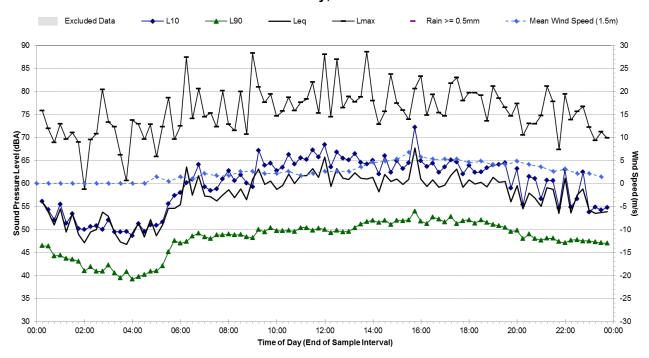
ADD09 - Friday, 23 October 2015



M4 East Additional Noise Logging Summary 2015 Page 6 of 7

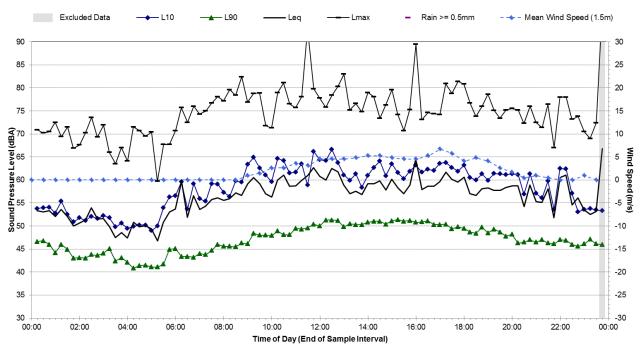
ADD09 Ambient Noise Monitoring Results

#### Statistical Ambient Noise Levels ADD09 - Saturday, 24 October 2015



## **Statistical Ambient Noise Levels**

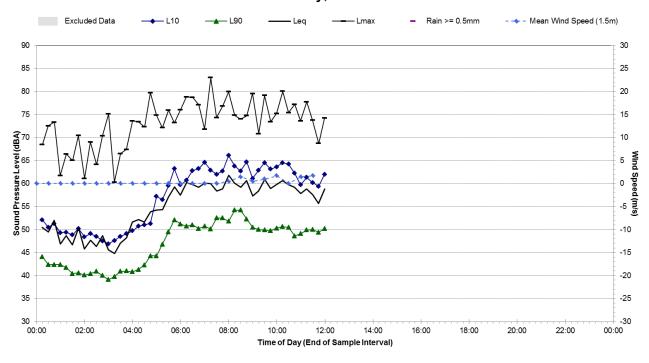
ADD09 - Sunday, 25 October 2015



M4 East Additional Noise Logging Summary 2015 Page 7 of 7

ADD09 Ambient Noise Monitoring Results

#### Statistical Ambient Noise Levels ADD09 - Monday, 26 October 2015



M4 East Additional Noise Logging Summary 2015 Page 1 of 7

ADD10 Ambient Noise Monitoring Results

Noise Monitoring Location: ADD10 Map of Noise Monitoring Location

Noise Monitoring Address: 174 Queens Rd, Canada Bay

Logger Device Type: Svantek 957

Logger Serial No: 23815

Ambient noise logger deployed immediately outside residential address 174 Queens Rd, Canada Bay. Logger located in front yard on southern side of property.

Attended noise measurements indicate the ambient noise environment at this location is dominated by road traffic noise from Queens Rd during the daytime. Constant tyre-pavement noise from light-vehicle traffic on Queens Rd can be heard at this location with discrete traffic noise level peaks from heavy vehicle movements occurring frequently.

Recorded Noise Levels (LAmax):

Queens Rd Heavy-vehicle road traffic: 73-89 dBA, Queens Rd Light-vehicle road traffic: 67-71 dBA,

Air traffic: 65 dBA



Dhoto	of Noise	Monitoring	Location
PHOLO	oi noise	Monitoring	Location

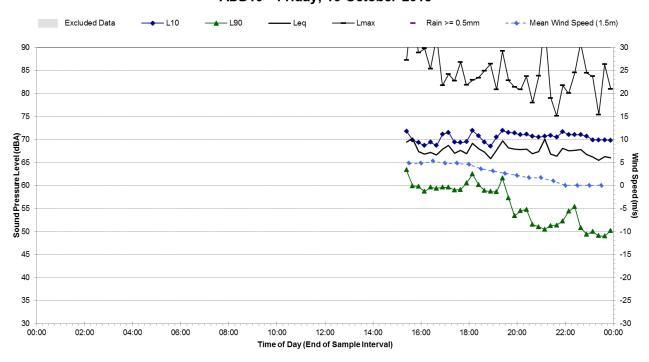
Ambient Noise Loggin	g Results - INP I	Defined Time Per	riods			
Monitoring Period	Noise Leve	Noise Level (dBA)				
	RBL	LAeq	L10	L1		
Daytime	57	70	72	76		
Evening	50	69	71	75		
Night-time	42	65	68	74		
Ambient Noise Loggin	g Results – RNP	Defined Time Pe	eriods			
Monitoring Period	Noise Leve	Noise Level (dBA)				
	Weekday L	Aeq(Period) V	Veekend LAeq(Period)	Weekly LAeq(Period)		
Number of Valid Days	5	4		N/A (7 Day Average)		
Daytime (7am-10pm)	70	6	9	69		
Night-time (10pm-7am	) 66	6	5	65		
Attended Noise Measu	rement Results					
Date St	tart Time	Time Measured Noise Level (dBA)				
		LA90	LAeq	LAmax		
16/10/2015 14	1:36	64	70	89		



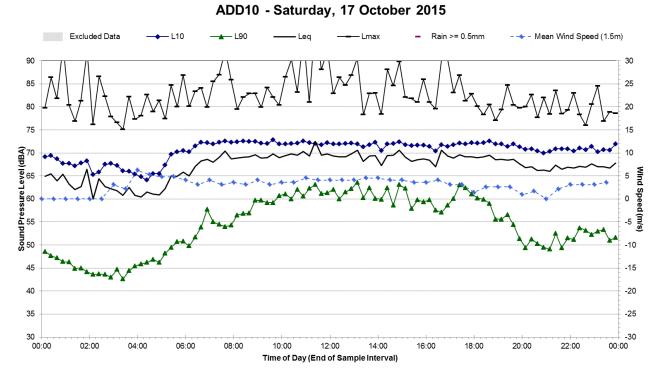
M4 East Additional Noise Logging Summary 2015 Page 2 of 7

ADD10 Ambient Noise Monitoring Results

#### Statistical Ambient Noise Levels ADD10 - Friday, 16 October 2015



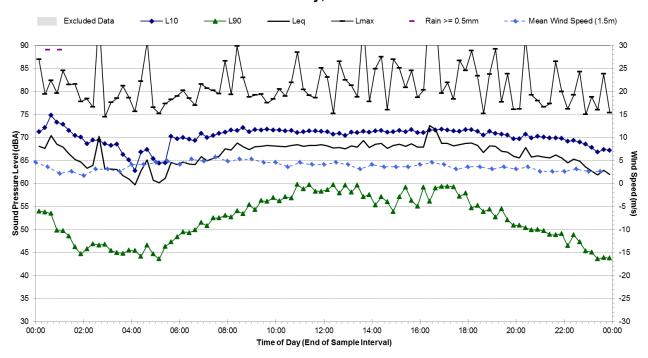
# Statistical Ambient Noise Levels



M4 East Additional Noise Logging Summary 2015 Page 3 of 7

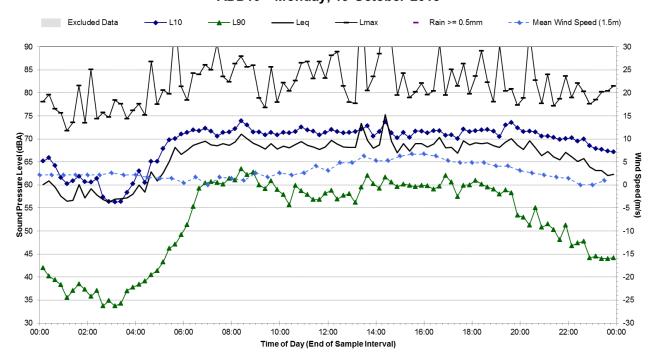
ADD10 Ambient Noise Monitoring Results

#### Statistical Ambient Noise Levels ADD10 - Sunday, 18 October 2015



## **Statistical Ambient Noise Levels**

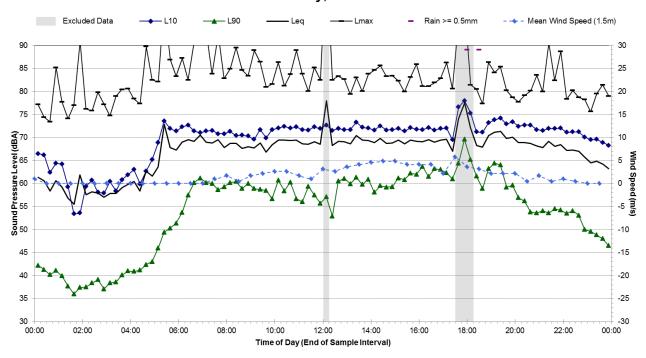
ADD10 - Monday, 19 October 2015



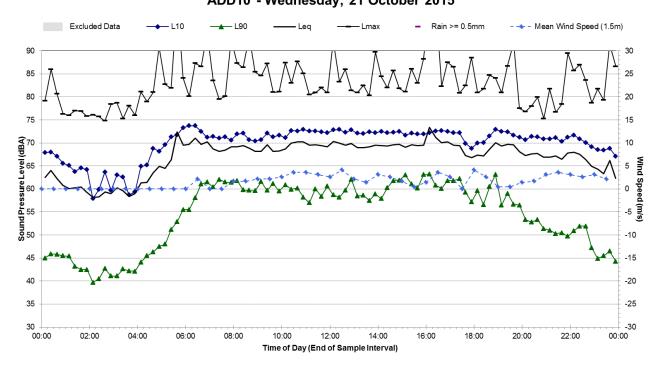
M4 East Additional Noise Logging Summary 2015 Page 4 of 7

ADD10 Ambient Noise Monitoring Results

#### Statistical Ambient Noise Levels ADD10 - Tuesday, 20 October 2015



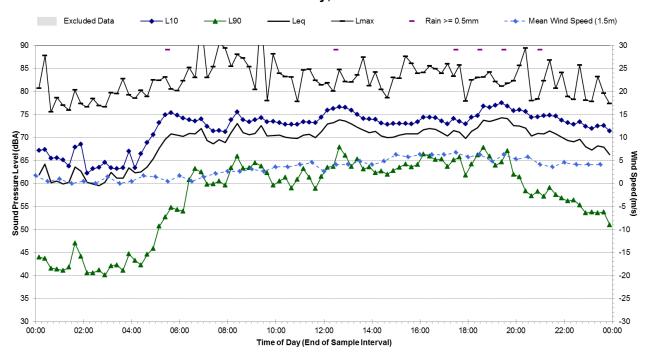
#### Statistical Ambient Noise Levels ADD10 - Wednesday, 21 October 2015



M4 East Additional Noise Logging Summary 2015 Page 5 of 7

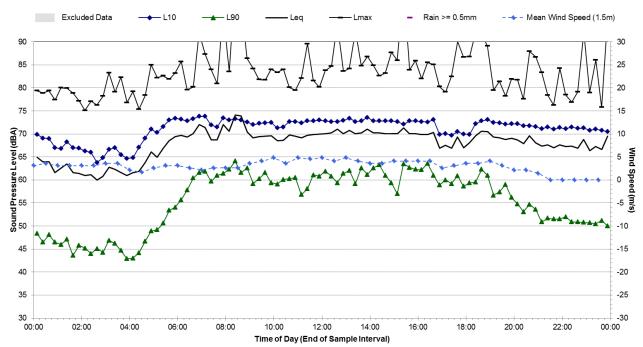
ADD10 Ambient Noise Monitoring Results

#### Statistical Ambient Noise Levels ADD10 - Thursday, 22 October 2015



## Statistical Ambient Noise Levels

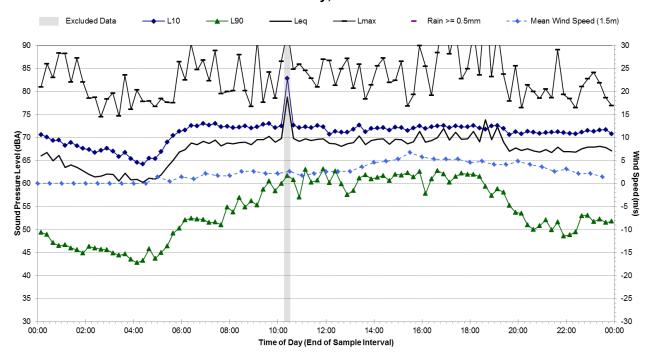
ADD10 - Friday, 23 October 2015



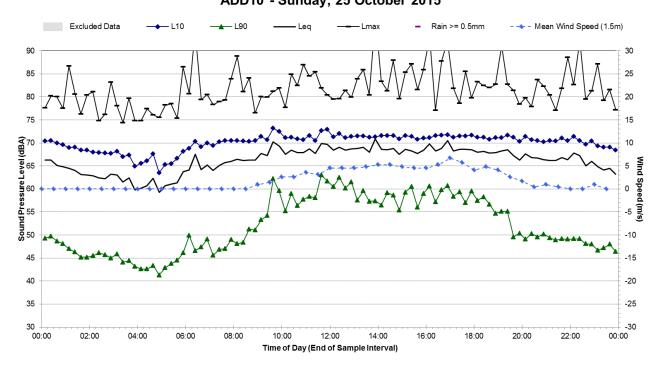
M4 East Additional Noise Logging Summary 2015 Page 6 of 7

ADD10 Ambient Noise Monitoring Results

#### Statistical Ambient Noise Levels ADD10 - Saturday, 24 October 2015



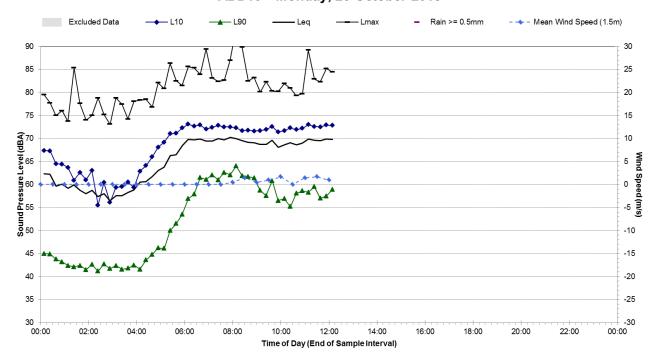
#### Statistical Ambient Noise Levels ADD10 - Sunday, 25 October 2015



M4 East Additional Noise Logging Summary 2015 Page 7 of 7

ADD10 Ambient Noise Monitoring Results

#### Statistical Ambient Noise Levels ADD10 - Monday, 26 October 2015



M4 East Additional Noise Logging Summary 2015 Page 1 of 7

**ADD11 Ambient Noise Monitoring Results** 

Noise Monitoring Location: ADD11 Map of Noise Monitoring Location

Noise Monitoring Address: 28 Page Ave, Ashfield

Logger Device Type: Svantek 957

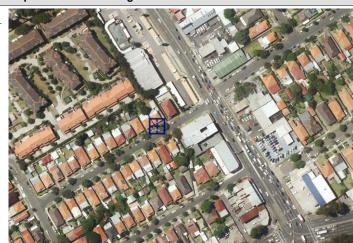
Logger Serial No: 21884

Ambient noise logger deployed immediately outside residential address 28 Page Ave, Ashfield. Logger located in front yard on southern side of property.

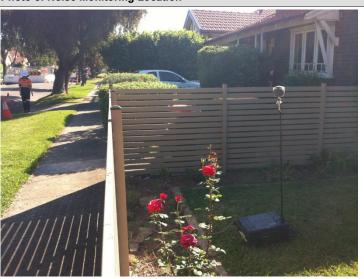
Attended noise measurements indicate the ambient noise environment at this location is dominated by road traffic noise from Parramatta Rd during the daytime. Constant tyre-pavement noise from light-vehicle traffic on Parramatta Rd can be heard at this location with discrete traffic noise level peaks from heavy vehicle movements occurring frequently.

#### Recorded Noise Levels (LAmax):

Parramatta Rd Heavy-vehicle road traffic: 60-74 dBA, Parramatta Rd Light-vehicle road traffic: 59-66dBA, Insects: 55-57 dBA



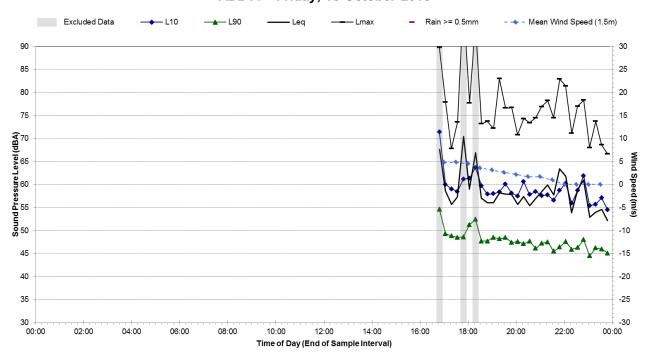
Ambient Noise Logging Results – INP Defined Time Periods						
Monitoring Period	Noise Level (dBA)					
	RBL	LAeq	L10	L1		
Daytime	47	58	59	67		
Evening	46	57	58	64		
Night-time	40	55	56	62		
Ambient Noise Logging Results – RNP Defined Time Periods						
Monitoring Period	Noise Level	(dBA)				
	Weekday LA	eq(Period)	Weekend LAeq(Period	d) Weekly LAeq(Period)		
Number of Valid Days	7		4	N/A (7 Day Average)		
Daytime (7am-10pm)	58		57	58		
Night-time (10pm-7am)	56		55	56		
Attended Noise Measurement Results						
Date Start	Time	Time Measured Noise Level (dBA)				
		LA90	LAeq	LAmax		
16/10/2015 15:49		52	58	74		



M4 East Additional Noise Logging Summary 2015 Page 2 of 7

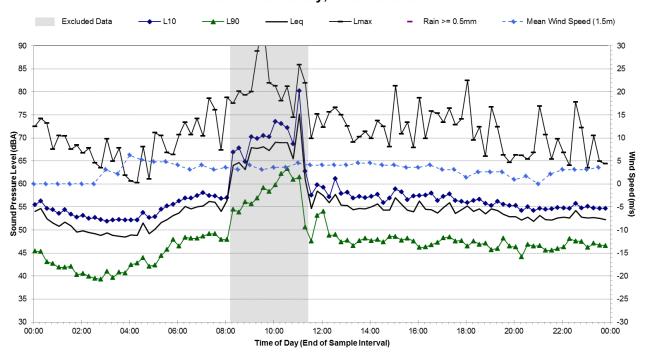
ADD11 Ambient Noise Monitoring Results

# Statistical Ambient Noise Levels ADD11 - Friday, 16 October 2015



## **Statistical Ambient Noise Levels**

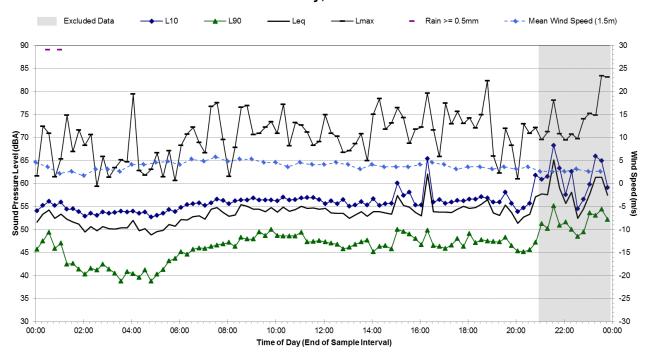
ADD11 - Saturday, 17 October 2015



M4 East Additional Noise Logging Summary 2015 Page 3 of 7

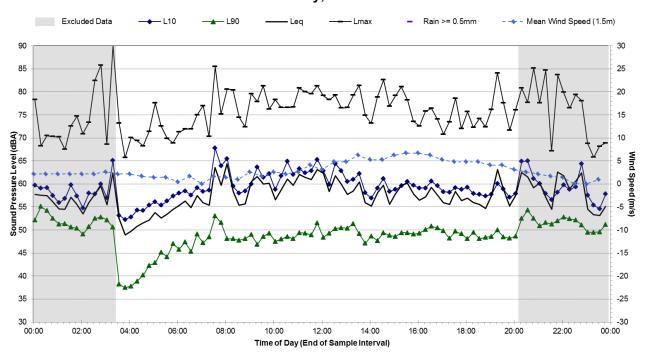
ADD11 Ambient Noise Monitoring Results

### Statistical Ambient Noise Levels ADD11 - Sunday, 18 October 2015



### **Statistical Ambient Noise Levels**

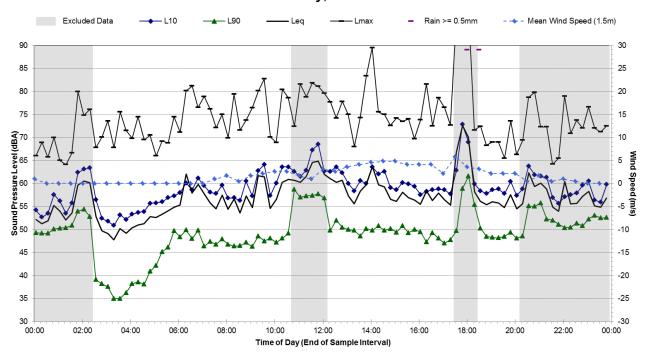
ADD11 - Monday, 19 October 2015



M4 East Additional Noise Logging Summary 2015 Page 4 of 7

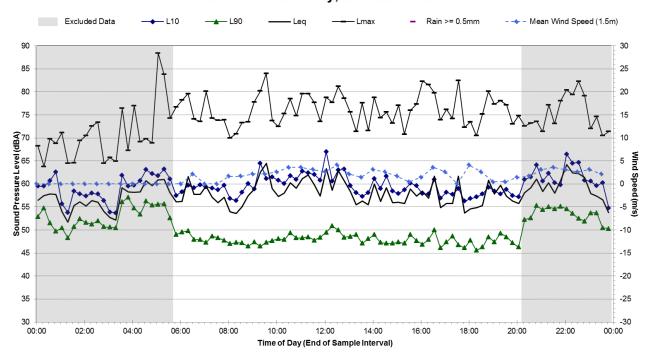
ADD11 Ambient Noise Monitoring Results

### Statistical Ambient Noise Levels ADD11 - Tuesday, 20 October 2015



## **Statistical Ambient Noise Levels**

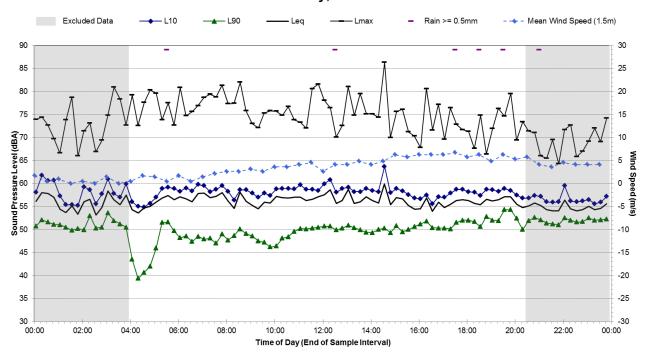
ADD11 - Wednesday, 21 October 2015



M4 East Additional Noise Logging Summary 2015 Page 5 of 7

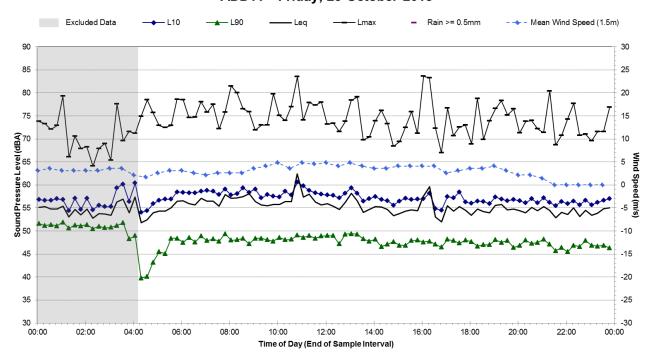
ADD11 Ambient Noise Monitoring Results

### Statistical Ambient Noise Levels ADD11 - Thursday, 22 October 2015



### **Statistical Ambient Noise Levels**

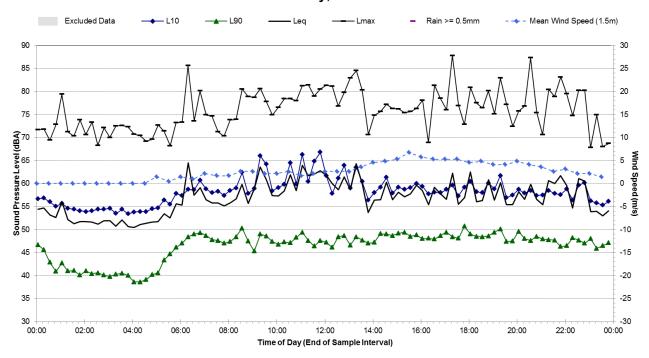
ADD11 - Friday, 23 October 2015



M4 East Additional Noise Logging Summary 2015 Page 6 of 7

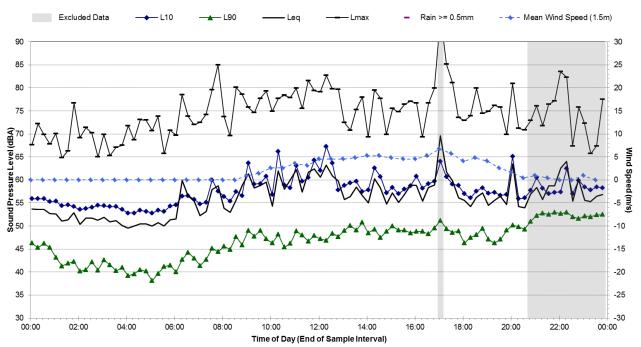
ADD11 Ambient Noise Monitoring Results

### Statistical Ambient Noise Levels ADD11 - Saturday, 24 October 2015



## **Statistical Ambient Noise Levels**

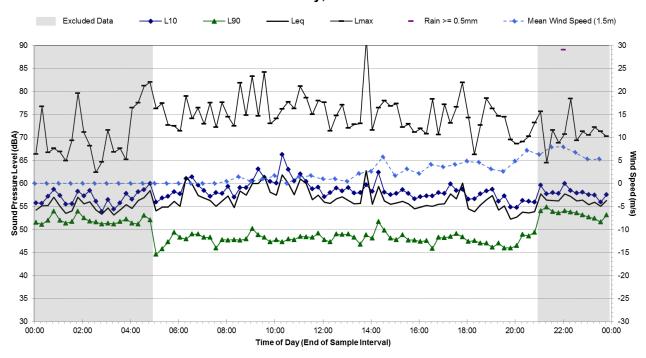
ADD11 - Sunday, 25 October 2015



M4 East Additional Noise Logging Summary 2015
Page 7 of 7

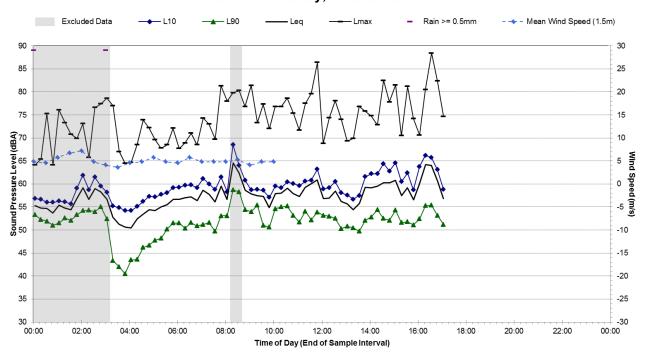
ADD11 Ambient Noise Monitoring Results

### Statistical Ambient Noise Levels ADD11 - Monday, 26 October 2015



#### **Statistical Ambient Noise Levels**

ADD11 - Tuesday, 27 October 2015



M4 East Additional Noise Logging Summary 2015 Page 1 of 7

ADD12 Ambient Noise Monitoring Results

Noise Monitoring Location: ADD12 Map of Noise Monitoring Location

Noise Monitoring Address: 5 Wolseley St, Haberfield

Logger Device Type: Svantek 957

Logger Serial No: 20667

Ambient noise logger deployed immediately outside residential address 5 Wolseley St, Haberfield. Logger located in front yard on northern side of property.

Attended noise measurements indicate the ambient noise environment at this location is dominated by road traffic noise from Wolseley St and Parramatta Rd during the daytime. Constant tyre-pavement noise from light-vehicle traffic on Parramatta Rd can be heard at this location. Local traffic passbys on Wolseley St were frequent.

Recorded Noise Levels (LAmax):

Parramatta Rd road traffic: 50 dBA, Wolseley St road traffic: 54-68 dBA, Birds: 74-80 dBA



Photo	of Noise	Monitoring	Location

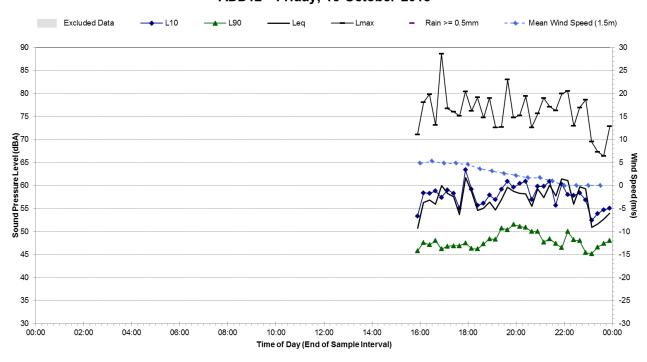
<b>Monitoring Period</b>	Noise Leve	Noise Level (dBA)				
	RBL	LAeq	L10	L1		
Daytime	45	57	57	67		
Evening	45	55	55	64		
Night-time	42	54	52	58		
Ambient Noise Log	ging Results – RNP	Defined Time I	Periods			
Monitoring Period	Noise Leve	Noise Level (dBA)				
	Weekday L	.Aeq(Period)	Weekend LAeq(Period)	Weekly LAeq(Period)		
Number of Valid Da	ays 5		4	N/A (7 Day Average)		
Daytime (7am-10pr	<b>n)</b> 56		57	56		
Night-time (10pm-7	<b>'am)</b> 54		54	54		
Attended Noise Me	asurement Results					
Date	Start Time	Measu	red Noise Level (dBA)			
		LA90	LAeq	LAmax		
16/10/2015	15:04	49	58	80		



M4 East Additional Noise Logging Summary 2015 Page 2 of 7

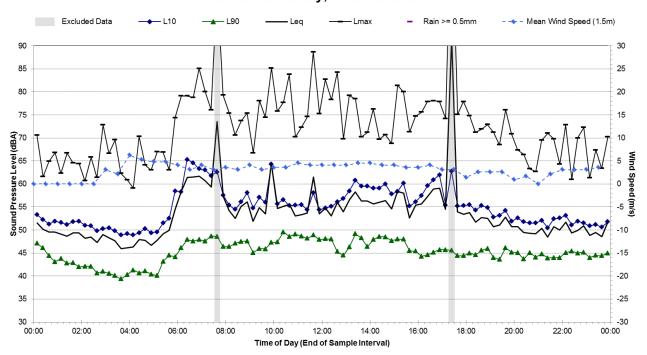
ADD12 Ambient Noise Monitoring Results

### Statistical Ambient Noise Levels ADD12 - Friday, 16 October 2015



## **Statistical Ambient Noise Levels**

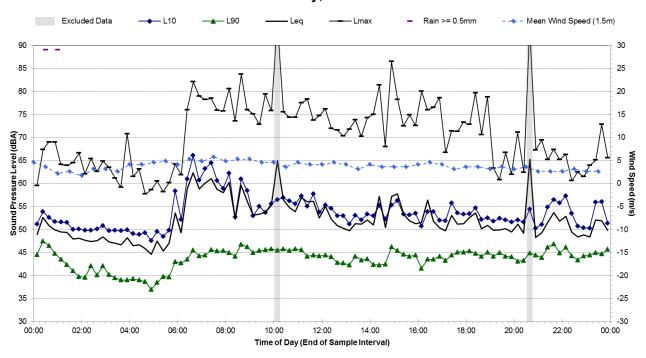
ADD12 - Saturday, 17 October 2015



M4 East Additional Noise Logging Summary 2015 Page 3 of 7

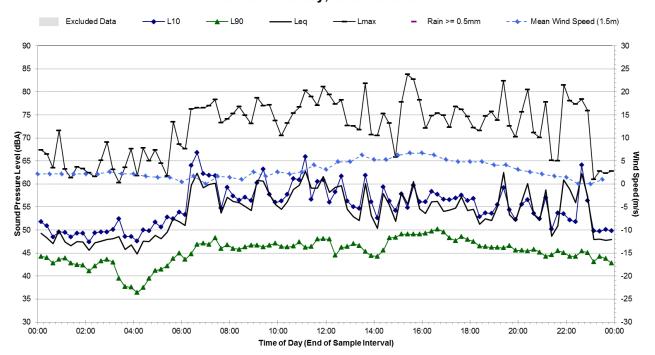
ADD12 Ambient Noise Monitoring Results

### Statistical Ambient Noise Levels ADD12 - Sunday, 18 October 2015



### Statistical Ambient Noise Levels

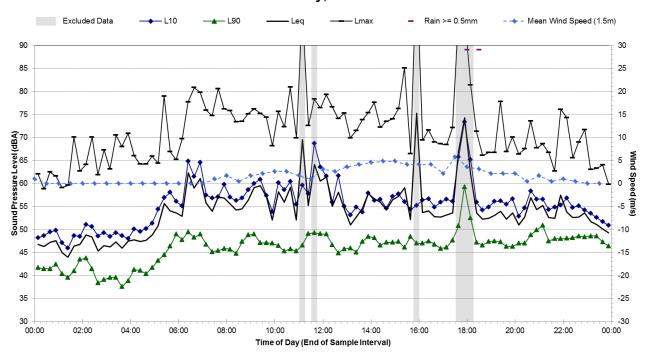
ADD12 - Monday, 19 October 2015



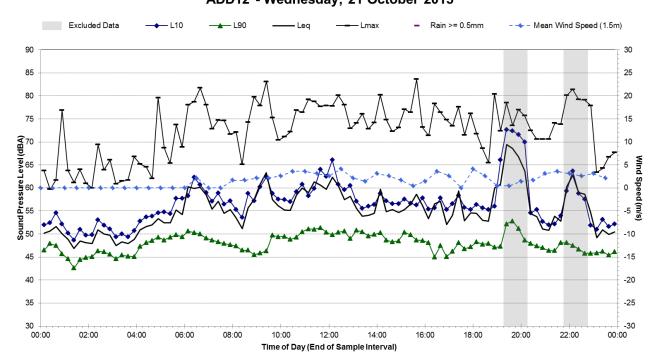
M4 East Additional Noise Logging Summary 2015 Page 4 of 7

ADD12 Ambient Noise Monitoring Results

### Statistical Ambient Noise Levels ADD12 - Tuesday, 20 October 2015



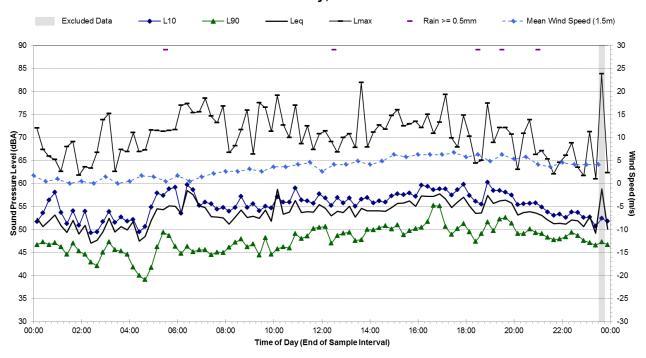
### Statistical Ambient Noise Levels ADD12 - Wednesday, 21 October 2015



M4 East Additional Noise Logging Summary 2015 Page 5 of 7

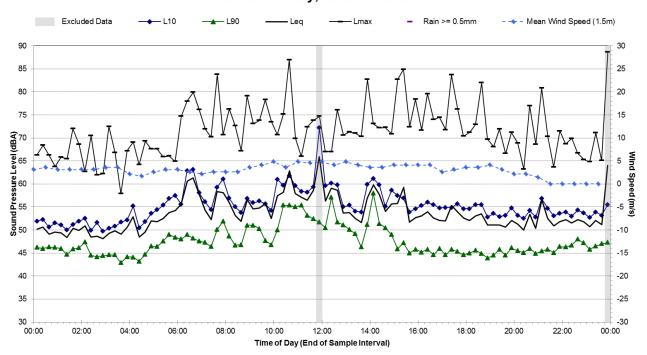
ADD12 Ambient Noise Monitoring Results

### Statistical Ambient Noise Levels ADD12 - Thursday, 22 October 2015



### Statistical Ambient Noise Levels

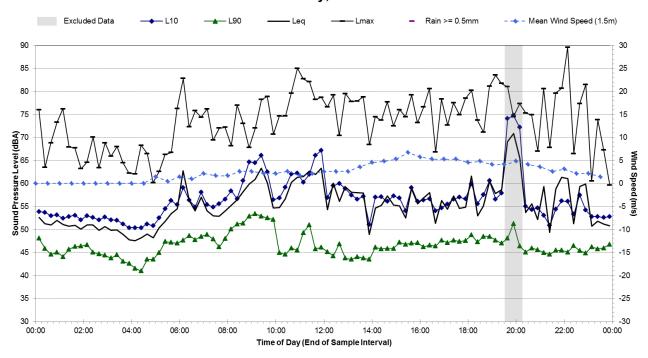
ADD12 - Friday, 23 October 2015



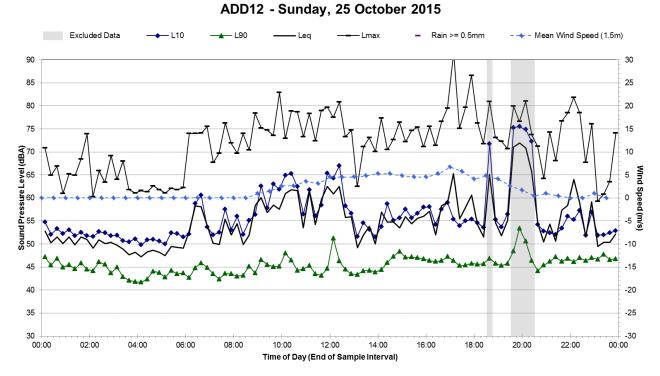
M4 East Additional Noise Logging Summary 2015 Page 6 of 7

ADD12 Ambient Noise Monitoring Results

### Statistical Ambient Noise Levels ADD12 - Saturday, 24 October 2015



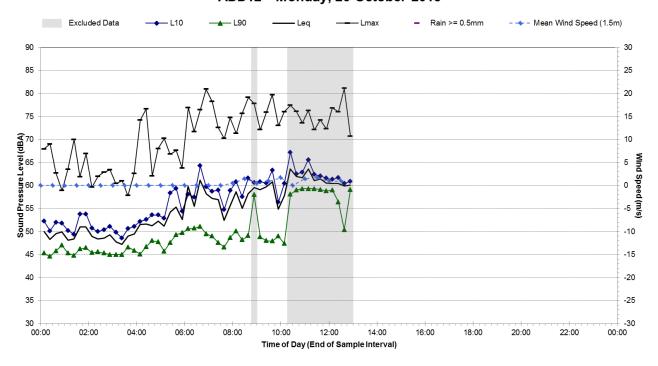
## Statistical Ambient Noise Levels



M4 East Additional Noise Logging Summary 2015 Page 7 of 7

ADD12 Ambient Noise Monitoring Results

### Statistical Ambient Noise Levels ADD12 - Monday, 26 October 2015



M4 East Additional Noise Logging Summary 2015 Page 1 of 7

ADD13 Ambient Noise Monitoring Results

Noise Monitoring Location: ADD13 Map of Noise Monitoring Location

Noise Monitoring Address: 26 Walker Ave, Haberfield

Logger Device Type: Svantek 957

Logger Serial No: 27579

Ambient noise logger deployed immediately outside residential address 26 Walker Ave, Harberfield. Logger located in rear yard on northern side of property.

Attended noise measurements indicate the ambient noise environment at this location is dominated by distant road traffic noise from Wattle St during the daytime. Constant tyre-pavement noise from light-vehicle traffic on the M4 can be heard at this location.

Recorded Noise Levels (LAmax):

Distant road traffic Wattle St: 48-58 dBA, Air traffic: 59-71 dBA, Birds: 48-68 dBA



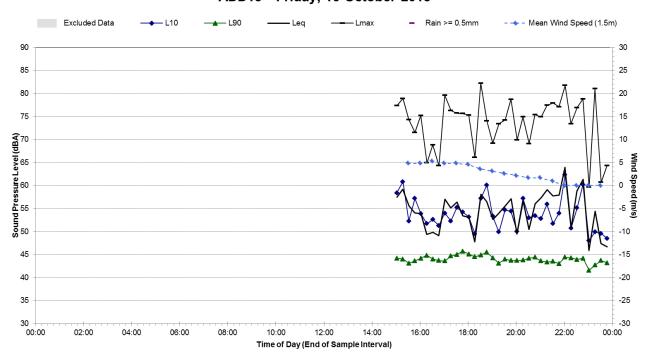
Monitoring Period	Noise Leve	Noise Level (dBA)				
	RBL	LAeq	L10	L1		
Daytime	41	55	54	64		
Evening	43	54	52	62		
Night-time	37	51	47	52		
Ambient Noise Logging	Results - RNP	Defined Time Pe	riods			
Monitoring Period	Noise Leve	Noise Level (dBA)				
	Weekday L	Aeq(Period) W	eekend LAeq(Period)	Weekly LAeq(Period		
Number of Valid Days	6	4		N/A (7 Day Average)		
Daytime (7am-10pm)	55	5	5	55		
Night-time (10pm-7am)	50	5	1	51		
Attended Noise Measur	ement Results					
Date Sta	rt Time	Measure	d Noise Level (dBA)			
		LA90	LAeq	LAmax		
			•			



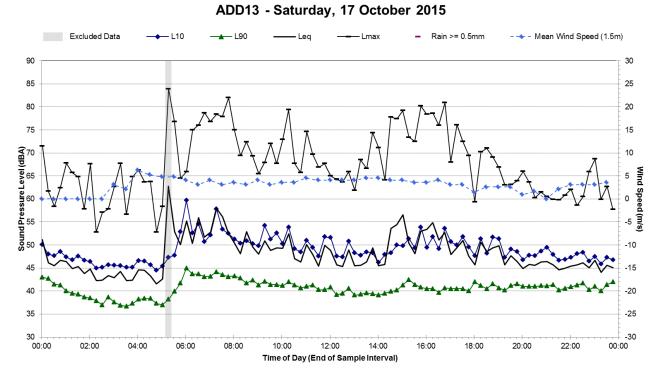
M4 East Additional Noise Logging Summary 2015 Page 2 of 7

ADD13 Ambient Noise Monitoring Results

### Statistical Ambient Noise Levels ADD13 - Friday, 16 October 2015



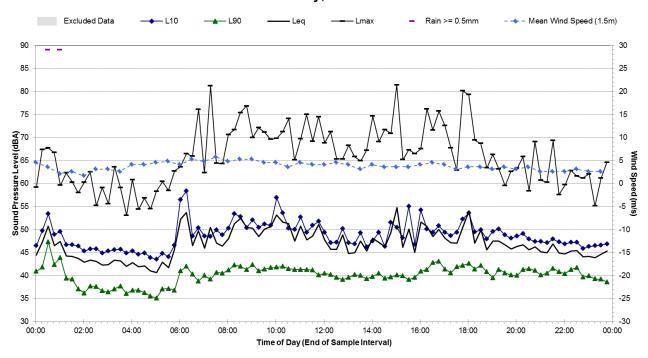
# Statistical Ambient Noise Levels



M4 East Additional Noise Logging Summary 2015 Page 3 of 7

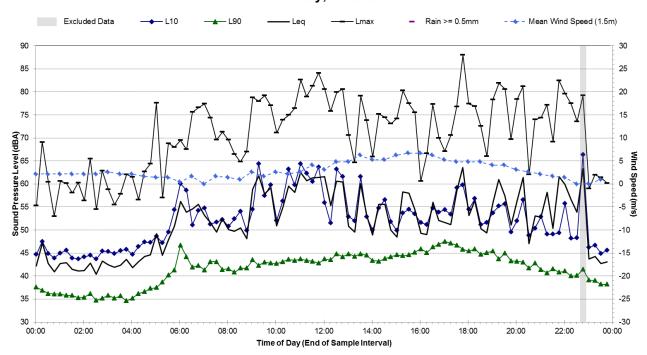
ADD13 Ambient Noise Monitoring Results

### Statistical Ambient Noise Levels ADD13 - Sunday, 18 October 2015



### Statistical Ambient Noise Levels

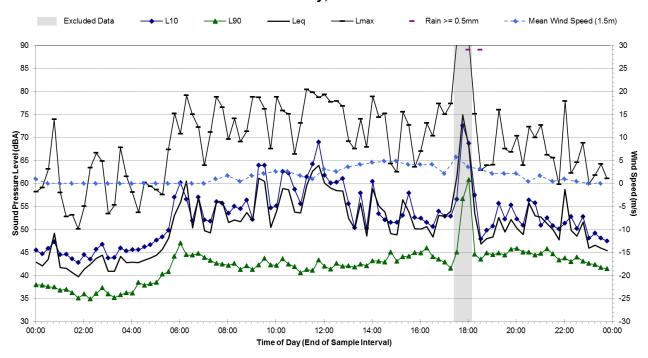
ADD13 - Monday, 19 October 2015



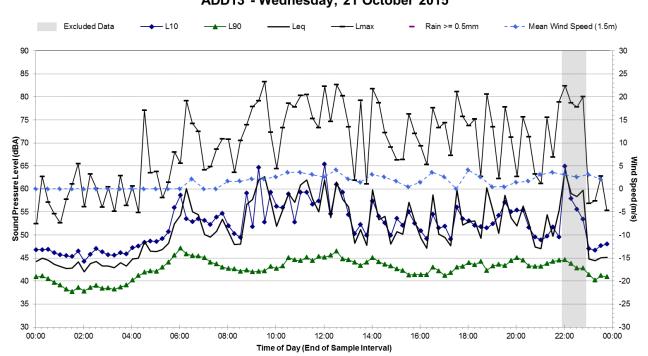
M4 East Additional Noise Logging Summary 2015 Page 4 of 7

ADD13 Ambient Noise Monitoring Results

### Statistical Ambient Noise Levels ADD13 - Tuesday, 20 October 2015



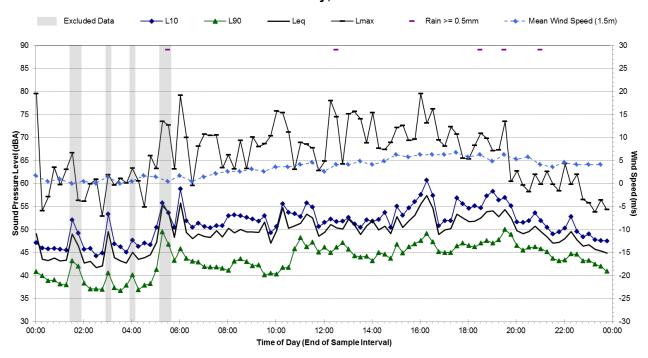
### Statistical Ambient Noise Levels ADD13 - Wednesday, 21 October 2015



M4 East Additional Noise Logging Summary 2015 Page 5 of 7

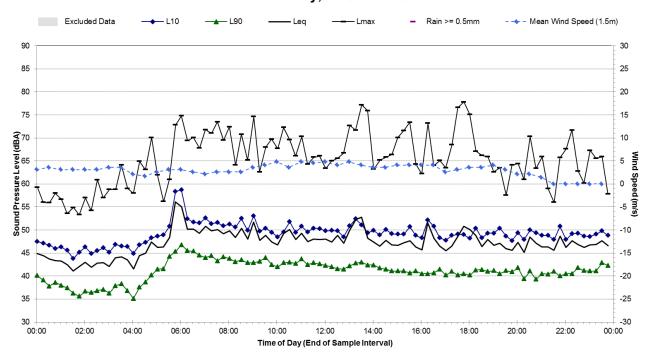
ADD13 Ambient Noise Monitoring Results

### Statistical Ambient Noise Levels ADD13 - Thursday, 22 October 2015



## **Statistical Ambient Noise Levels**

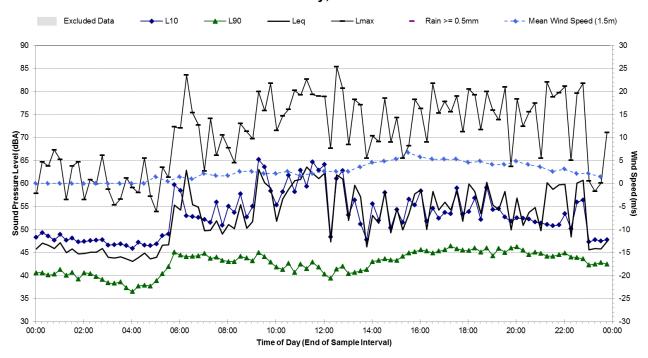
ADD13 - Friday, 23 October 2015



M4 East Additional Noise Logging Summary 2015 Page 6 of 7

ADD13 Ambient Noise Monitoring Results

### Statistical Ambient Noise Levels ADD13 - Saturday, 24 October 2015



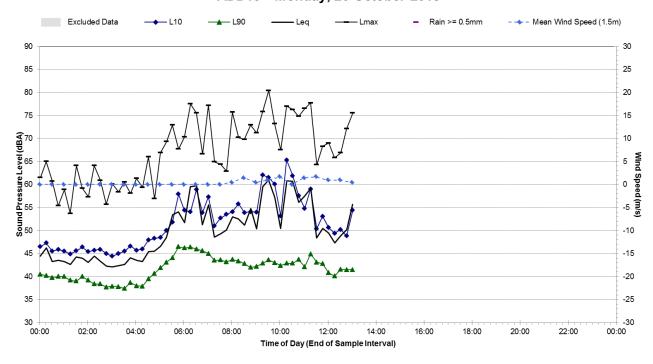
### Statistical Ambient Noise Levels ADD13 - Sunday, 25 October 2015

Excluded Data Rain >= 0.5mm – L10 <u></u> L90 → - Mean Wind Speed (1.5m) - Leq 90 30 85 25 20 75 15 Sound Pressure Level (dBA) 10 Wind Speed (m/s) -10 -15 -20 40 -25 35 30 -30 00:00 02:00 04:00 06:00 08:00 10:00 12:00 14:00 16:00 18:00 20:00 22:00 00:00 Time of Day (End of Sample Interval)

M4 East Additional Noise Logging Summary 2015 Page 7 of 7

ADD13 Ambient Noise Monitoring Results

### Statistical Ambient Noise Levels ADD13 - Monday, 26 October 2015



M4 East Additional Noise Logging Summary 2015 Page 1 of 7

ADD14 Ambient Noise Monitoring Results

Noise Monitoring Location: ADD14 Map of Noise Monitoring Location

Logger Device Type: Svantek 957

Logger Serial No: 23293

**Noise Monitoring Address:** 

Ambient noise logger deployed immediately outside residential address 1 Walker Ave, Haberfield. Logger located in front yard on northern side of property.

1 Walker Ave, Haberfield

Attended noise measurements indicate the ambient noise environment at this location is dominated by road traffic noise from Parramatta Rd and Walker Ave during the daytime. Constant tyre-pavement noise from light-vehicle traffic on Parramatta Rd can be heard at this location. Local traffic passbys on Walker Ave were frequent.

Recorded Noise Levels (LAmax):

Parramatta Rd road traffic: 44-55 dBA, Walker Ave road traffic: 65-73 dBA, Birds: 63-70 dBA



Ambient Noise Logging Results – INP Defined Time Periods	Photo of Noise Monitoring Location

Monitoring Period	Noise Level (dBA)				
	RBL	LAeq	L10	L1	
Daytime	45	58	60	67	
Evening	45	57	57	66	
Night-time	39	54	55	62	

#### Ambient Noise Logging Results – RNP Defined Time Periods

Monitoring Period	Noise Level (dBA)				
	Weekday LAeq(Period)	Weekend LAeq(Period)	Weekly LAeq(Period)		
Number of Valid Days	6	4	N/A (7 Day Average)		
Daytime (7am-10pm)	58	57	58		
Night-time (10pm-7am)	55	53	54		

#### **Attended Noise Measurement Results**

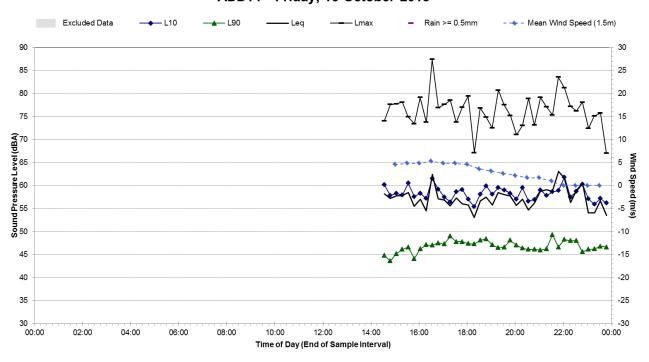
Date	Start Time	Measured Noise Level (dBA)		
		LA90	LAeq	LAmax
16/10/2015	13:26	45	55	73



M4 East Additional Noise Logging Summary 2015 Page 2 of 7

ADD14 Ambient Noise Monitoring Results

### Statistical Ambient Noise Levels ADD14 - Friday, 16 October 2015



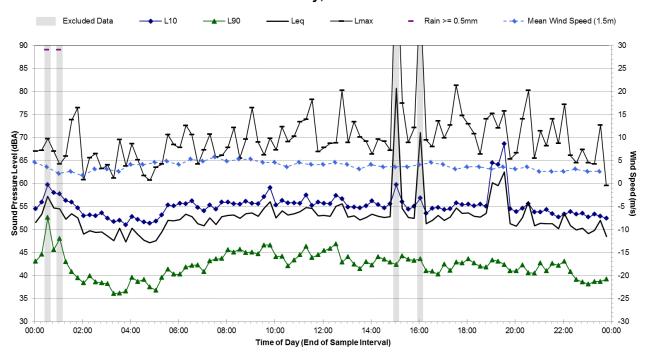
### Statistical Ambient Noise Levels ADD14 - Saturday, 17 October 2015

Excluded Data - L10 — L90 Rain >= 0.5mm - Mean Wind Speed (1.5m) 90 30 85 25 80 75 15 10 Wind Speed (m/s) -10 -15 40 -20 35 -25 30 00:00 -30 02:00 04:00 08:00 10:00 16:00 18:00 20:00 22:00 00:00 Time of Day (End of Sample Interval)

M4 East Additional Noise Logging Summary 2015 Page 3 of 7

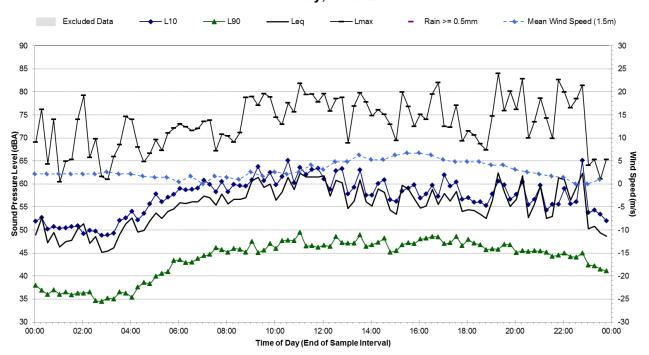
ADD14 Ambient Noise Monitoring Results

### Statistical Ambient Noise Levels ADD14 - Sunday, 18 October 2015



### **Statistical Ambient Noise Levels**

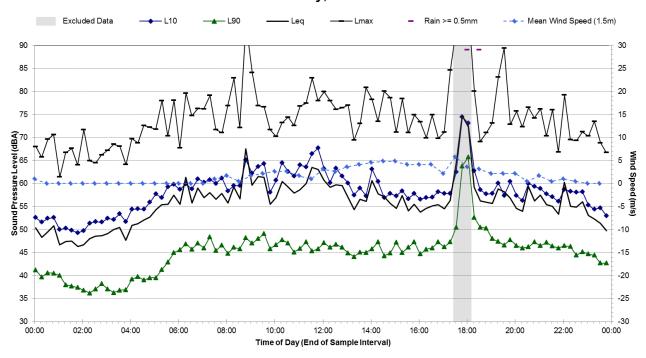
ADD14 - Monday, 19 October 2015



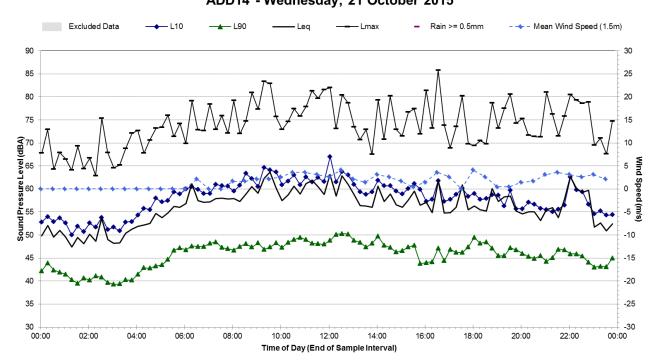
M4 East Additional Noise Logging Summary 2015 Page 4 of 7

ADD14 Ambient Noise Monitoring Results

### Statistical Ambient Noise Levels ADD14 - Tuesday, 20 October 2015



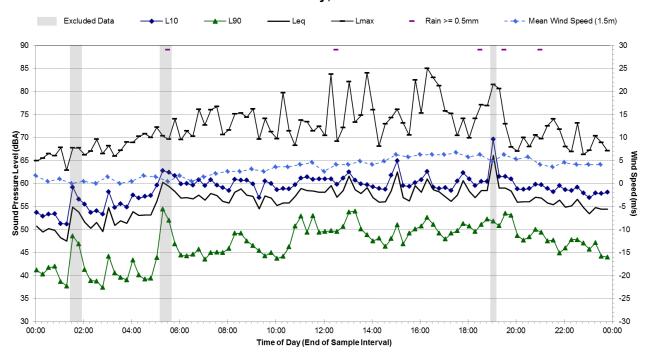
### Statistical Ambient Noise Levels ADD14 - Wednesday, 21 October 2015



M4 East Additional Noise Logging Summary 2015 Page 5 of 7

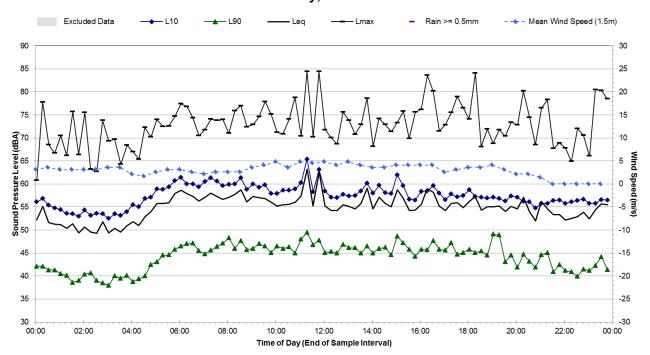
ADD14 Ambient Noise Monitoring Results

### Statistical Ambient Noise Levels ADD14 - Thursday, 22 October 2015



### **Statistical Ambient Noise Levels**

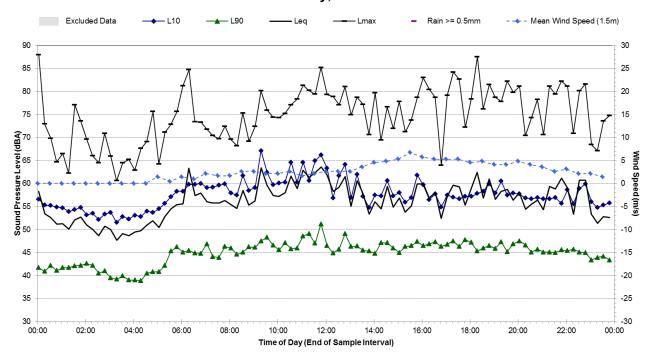
ADD14 - Friday, 23 October 2015



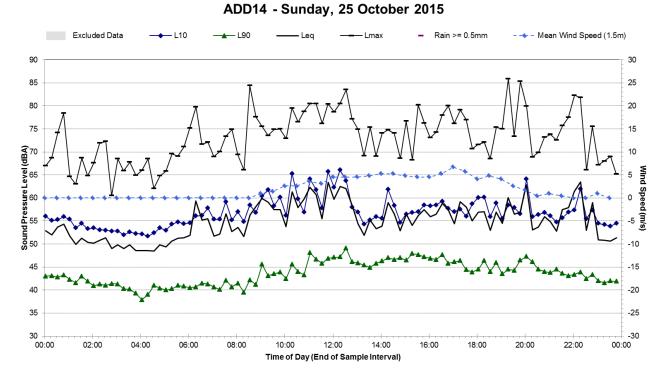
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ADD14 Ambient Noise Monitoring Results

### Statistical Ambient Noise Levels ADD14 - Saturday, 24 October 2015



# Statistical Ambient Noise Levels



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ADD14 Ambient Noise Monitoring Results

### Statistical Ambient Noise Levels ADD14 - Monday, 26 October 2015

