

## September 2018 Noise Monitoring



Licensee: Laing O'Rourke Australia Construction Pty Ltd

Premises: Woolgoolga to Ballina Pacific Highway Upgrade Project, Harwood NSW 2465

Licence No: 20713

Contractor	Type of Noise Monitoring - Monthly or OOHW	Date of noise monitoring	Time of Noise Monitoring	Location	RBL (for OOHW noise monitoring)	Noise Monitoring Results						Comments
						Laeq	Lafmax	Lzpk	Lafmin	Laf10	Laf90	
BGC	OOHW	8/09/2018	7:08:00	132 McIntyres Lane Gulmarrad	33	55.1	79.8	84.7	36.0	52.8	40.9	Construction noise inaudible, main noise from environmental factors and biggest contributor is highway noise.
BGC	OOHW	15/09/2018	7:01:00	Lot 3031 DP1231714, Bondi Hill Rd, Tyndale	41	43.6	63.2	71	31.7	46.9	37.4	Refuelling activities not audible, main source of noise in environmental (birds).
BGC	OOHW	15/09/2018	7:20:00	Lot 3031 DP1231714, Bondi Hill Rd, Tyndale	41	45.3	65.7	74.9	33.4	47.9	37.7	Construction noise is inaudible, main source of noise is environmental factors (birds).
SCE	OOHW	25/09/2018	18:00:00	R1331, 2 Petticoat Lane Harwood	44	62.5	72.1		47.2	66.4	53	Traffic noise very audible, works not audible.
SCE	OOHW	25/09/2018	21:40:00	R1331, 2 Petticoat Lane Harwood	44	62.7	81.2		40.3	67.7	42.2	Period of no traffic = 43dB. Heavy vehicle traffic = 69-78dB
SCE	OOHW	25/09/2018	23:45:00	R1331, 2 Petticoat Lane Harwood	39	54.2	86.3		29.0	58.7	33.6	During minimal traffic = 50dB. Heavy vehicle engine breaking =>75dB
SCE	OOHW	26/09/2018	20:27:00	R1331, 2 Petticoat Lane Harwood	44	55.6	79.2		36.9	58.3	42	Quiet period = 40-55dB. Heavy vehicle traffic = 70dB
SCE	OOHW	27/09/2018	21:45:00	R1331, 2 Petticoat Lane Harwood	44	57.3	76.5		32.8	61.4	38.7	No traffic = 40dB. Heavy vehicle engine breaking = 60-75dB
BMD	OOHW	31/08/2018	5:55:00	A34 200m north of works	33	39	55.2		36.2	48.8	41.7	highway traffic constant background noise with peaks up to 56dB. Morning bird calls 48-57dB. Construction inaudible
BHA JV	OOHW	22/09/2018	7:05:00	391 Chatsworth Rd	35	41.5	48.1			42.4	44.2	Pacific Hwy audible. Birds present in close proximity to monitoring.
BMD	Monthly	26/09/2018	8:46:00	1 Jackybulbin Road, Mororo	46	60.4	85.2		38.6	54.6	43.2	Dominated mostly by local traffic and trucks from Jackybulbin Road 60.5 - 83.7dB (A). Construction works outside Gate 102.7 North and South 46.2 - 53.4 dB(A). Pacific Highway 51.4 - 54.6 dB(A). Birds calls 50 dB(A) with peaks of 56 dB(A). NML = 56 dB(A) - works considered complaint.
BMD	Monthly	26/09/2018	9:40:00	6530 Pacific Highway Jackybulbin	46	62.9	75.6		43.7	67	49.7	Dominant noise source: Dogs from residence barking 59.3 dB(A) with peaks of 73.3 dB(A). Traffic on the existing Pacific Highway 62.0 dB(A) with peaks of 73.2 dB(A). Works adjacent to residence 50.7 dB(A) with peaks of 51.4 dB(A). NML = 56 dB(A) - works considered compliant.
BMD	OoHW	10/09/2018	18:08:00	Chainage 104730 (OoH monitoring for softcutting of concrete at 6.4)	46	65.3	76.5		59.5	68.2	61.1	Dominant noise source: Trucks on the Pacific Highway (63.3-76.5). Daymaker and softcutting in lull of Pacific Highway traffic 59.6-62.0 dB(A). Construction audible in lull of traffic 62.0 dB(A) to be used for extrapolation. Extrapolated noise = 36 dB(A) - works considered compliant with night time NML although this activity was being undertaken under EPL condition L5.4.
AFHJV	Monthly	21/09/2018	15:19:00	1 Petticoat Lane (R1331)	45	57.2	77.5	-	48.6	55.8	51.7	
AFHJV	Monthly	21/09/2018	14:58:00	8 Martin Road (R1283)	45	53.7	67	-	52.6	60.6	55.3	
AFHJV	Monthly	21/09/2018	14:40:00	40 Morpeth Street (R1396)	45	59.9	70.7	-	51.2	62.6	51.7	
AFHJV	Monthly	21/09/2018	14:13:00	35 James Creek Road (R1256)	45	48.7	63	-	40.4	52.1	43.3	
AFHJV	OOHW	14/09/2018	5:08:00	36 James Creek Road (R1256)	39	53.7	67.5	-	39.8	58.4	43.2	Delivery and erection of parapets
CPB	OOHW	15/09/2018	7:03:00	CH142075	45	50.1	75.1	91.9	40.2	51	43	Nearby cow on residence most audible impact. Other contractor (BHA) between CPB work activity and monitoring location.
LendLease	Monthly	19/09/2018	7:54:00	NMP01 (10950 Pacific Highway)	41	41.3	61.7	88.9	28.5	43.7	33	Main contributing noise source: Birds, Traffic No audible construction activities identified
LendLease	Monthly	19/09/2018	8:23:00	NMP02 (1184 Pacific Highway)	41	51.5	69.1	87.8	38.1	54.9	43.9	Main contributing noise source: Traffic No audible construction activities identified
LendLease	Monthly	18/09/2018	13:12:00	NMP03 (1202 Wardell Rd)(R242)	41	58.1	69	92.6	46.1	60.6	53.9	Main Contributing noise source: R2B construction activities: Grader & Vibratory Roller (3), Reverse beepers, LV's, Tipper (5) & Water Cart; Small hand tools (Quickway) Extraneous noise sources: Wind in trees & birds Reading was below modelled/approved noise scenario as detailed within the CCNMP.
LendLease	Monthly	18/09/2018	14:03:00	NMP04 (1175 Wardell Rd)(R245)	41	55.5	67.1	85	42.8	58.4	51.2	Main Contributing noise source: R2B construction activities: Grader & Vibratory Roller (1), Reverse beepers, LV's, Tipper (9) & Water Cart (2); Extraneous noise sources: Wind in trees, cicadas & birds Reading was below modelled/approved noise scenario as detailed within the CCNMP.
LendLease	Monthly	19/09/2018	7:17:00	NMP05 (848 Pimlico Rd)	41	56.4	65.8	88.2	45.2	59.7	49	Main contributing noise source: Traffic, Birds & Dog Barking R2B construction activities intermittently audible: Excavator loading into tipper, horn of excavator, watercart
LendLease	Monthly	19/09/2018	8:55:00	NMP06 (109 Meridian Drive)	41	41.1	65.5	81.8	34.2	41.7	36.6	Main contributing noise source: Traffic, Birds & Dog Barking R2B construction activities intermittently audible: Piling (AFS), Excavator tramping.

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LendLease	Monthly	19/09/2018	9:34:00	NMP07 (3 McAndrews Lane)	41	45.8	58	84.1	40.6	47.9	43	Main contributing noise source: Traffic R2B construction activities intermittently audible: Grader, intermittent small hand tool, vibratory roller, reverse beeper
LendLease	Monthly	18/09/2018	14:58:00	NMP08 (55 Whytes Lane West)	41	51.4	65.9	94.7	46	53	48.7	Main contributing noise source: Wind in cane & Traffic R2B construction activities intermittently audible: reverse beeper & excavator tramming
LendLease	Monthly	18/09/2018	16:31:00	NMP09 (151 Uralba Rd)	41	51	70.4	90.3	44.8	52.6	47.6	Main contributing noise source: Traffic & Wind in cane R2B construction activities intermittently audible: tail gate of tipper (4)
Quickway	Monthly	14/09/2018	9:30:00	X: 543048, Y: 6800012, 302 Lumleys Lane	41	49.33	72.3	73.6	39.7	46.7	40.8	Noise dominated by main civils bulk earth works haulage. Peak noise caused by passing car.
Quickway	OOHW	24/09/2018	18:00:00	X: 542937 Y: 6792329, 556 Back Channel Road, Wardell.	38	54.1	70.5	83.7	48.6	56.6	51	OOHW Noise monitoring undertaken during representative period as agreed with PC. OOHW noise source not audible from nearest sensitive receiver. OOHW period dominated by highway traffic noise. Bridge Deck Curing D50.
LendLease - RRB	Monthly	21/09/2018	7:19:00	NMP01 (9810 P Hway, Broadwater)	45	69.4	84.6	106.2	45.7	73.7	56.1	RRB not audible during reading. Traffic main source of noise. Approx. 150 cars, 46 trucks, 2 x motorbikes, Birds
LendLease - RRB	Monthly	21/09/2018	8:19:00	NMP02 (2-4 P Hway, Broadwater)	45	60.3	73.6	97.9	44.6	64.5	50.8	RRB not audible during reading. Birds were constant through reading. Traffic was main source of noise. Approx. 125 cars, 30 trucks.
LendLease - RRB	Monthly	21/09/2018	7:52:00	NMP03 (85 E Head Rd, Broadwater)	45	60	80.6	94.1	42.3	63.5	45	RRB not audible during reading. Traffic main source of noise. Approx. 43 cars and 4 trucks. Birds were constant through reading. Construction from CPB was audible.
LendLease - RRB	OOHW	18/09/2018	6:12:00	556 Back Channel Road (R5)	45	51.7	61	83.9	46.4	53.6	48.6	OOH Predicted noise level was 54 dBA based on noise modelling. RRB not audible during reading. Traffic on the Pacific Highway was audible peaking between 56-59 dBA. Traffic was continuous throughout the reading. The dominant noise was traffic on the Pacific Highway.
Georgiou Group	Monthly	21/09/2018	10:15:00	83 Smith Drive	62.8	61.2	84.2	122.7	44.1	57	53	Monthly monitoring
Georgiou Group	Monthly	21/09/2018	10:45:00	55 Pimlico Road	58.3	56.4	80.9	118.3	42.4	55	44	Monthly monitoring
Georgiou Group	OOHW	21/09/2018	6:15:00	83 Smith Drive	54.7	52.4	81.4	119.3	40.3	52	44	OOHW Works - Monthly
Georgiou Group	OOHW	21/09/2018	6:35:00	55 Pimlico Road	51	49.6	72.3	110.1	32.6	47	40	OOHW Works - Monthly
Georgiou Group	OOHW	22/09/2018	14:15:00	83 Smith Drive	62.8	59.6	83.2	121.3	42.3	59	48	
Georgiou Group	OOHW	22/09/2018	14:45:00	55 Pimlico Road	58.3	56.4	81.2	117.1	33.2	56	47	