

## June 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	
Golding	OOHW	19/06/2018	20:30:00	Garrett's Lane - Lot 29, DP1195140			64.137		48.0			Noise sources mostly from traffic and trucks passing on the Pacific highway. Peak of noise recorded 79.1 due to cars passing on Garrett's Lane.
Golding	OOHW	20/06/2018	20:05:00	Garrett's Lane - Lot 29, DP1195140			66.42		46.2			Highway and local traffic dominant noise source. Highest reading of 78dB due to local traffic/cars on Garrett's Lane
Golding	OOHW	21/06/2018	20:15:00	Garrett's Lane - Lot 29, DP1195140			64.6		50.1			Noise sources mostly from highway. Highest reading recorded of 77.1 dB due to local traffic on Garrett's Lane.
Golding	OOHW	22/06/2018	18:25:00	Garrett's Lane - Lot 29, DP1195140			70.18823529		52.8			Dominant noise sources recorded were local traffic on Garrett's Lane. Peak of noise recorded at 85.5 dB due to barrier truck passing on Garrett's Lane.
BGC - A S4	Monthly	25/06/2018	15:36:00	127 Clyde Essex, Gulmarrad - 350m construction works	41	50.7	76.1	78.5	42.9	52.8	45.4	Dominant noise from Bird/Trees: Noise levels within the predicted 25 dB exceedance
BGC - A S4	Monthly	25/06/2018	15:00:00	Ferry Park, Pacific Highway & Cameron Street, Maclean - 100m from works	41	67.1	77.8	88.3	50.5	71.1	55	Main source of noise: Existing highway traffic. Existing highway: Noise levels within the predicted 25 dB exceedance
BHA JV - B S5	OOHW	13/06/2018	21:15:00	Chatsworth Rd, Chatsworth (522660, 6749261)	39	21	22.6		20.3			No issues or complaints
BMD Constructions - B S6	OOHW	19/06/2018	21:50:00	Project boundary near sensitive receiver - Ellem property	34	55.2	66		42.6	60	46.3	OOHW - Spray Sealing. Lull in traffic - traffic control radio's and truck engine from bitumen sprayer 45-46.5 dB(A) with peaks of 47-48 dB(A). Bitumen sprayer 49-50.5 (dBa) with peaks of 52 dB(A). Pacific Highway traffic 60-63 dB(A). Compression brakes - highway traffic 64dB(A). Noise level from spray seal 48-50(dBa) 564m to sensitive receiver. Noise at receiver = 33.6 dB(A) through extrapolation calculation for distance which is therefore compliant with the NML 39 dB(A).
BMD Constructions - B S6	Monthly	28/06/2018	10:57:00	1 Jackybulbin Road, Mororo	42	66.9	93.6		37.6	59.6	43.8	Pacific Highway traffic 58.1 - 59.4 dB(A) with peaks of 63.9 dB(A). Noise level from local traffic including trucks 71.3 - 78.0 dB(A) with peaks of 93.2 dB(A) was the dominant noise. Rainbow Lorikeets 64.2 dB(A). BMD works at gate 102.7 53-54.7 dB(A). Background noise 43dB(A). NML = 52dB(A) (Construction noise only 1-2 dB(A) over the daytime NML)
BMD Constructions - B S6	Monthly	28/06/2018	11:21:00	6530 Pacific Highway Jackybulbin	42	67.4	79.1		40.1	72	48.8	Dominated mostly by traffic noise from the existing Pacific Highway. Constructions works cannot be heard above background noise from monitoring location. Truck and Dog 72.4 - 77.1 dB(A) with peaks of 77.5 dB(A). Pacific Highway traffic 68.6 - 74 dB(A). Dogs barking at monitoring location 48.7 - 55.7 dB(A). Truck compression braking sth bound 75.8 dB(A). Background noise 45.6 dB(A).
CPB - C S9	OOHW	20/06/2018	7:39:00	CH141200 Eastern boundary. Dwelling 65m south east of monitoring location. Broadwater, New South Wales 2472, -29.024978, 153.432461	50	48.9						Saturday 7am - 8am

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LendLease - D	Monthly	22/06/2018	9:58:00	NMP04 (1175 Wardell Rd)	41	54.1	71.1	89.6	41.7	55.3	45.1	Wind- Still. R2B main contributing source. Excavator to the north and moxys to the south, reversing quackers all contributing to the reading. Some minor input from Quickway works area. Input from birds. 15 LVs and trucks used Wardell Rd during the reading. Reading was below modelled/approved noise scenario as detailed within the CCNVMP.
LendLease - D	Monthly	22/06/2018	9:33:00	NMP05 (848 Pimlico Rd)	41	57.1	71.3	90.1	48.0	59.3	52.1	Wind- WSW @ 2.3m/sec. Pac highway main contributing source. R2B not audible during reading. 3 LVs used Pimlico rd during reading. Some input from birds. Cloud cover has decreased.
LendLease - D	Monthly	22/06/2018	9:06:00	NMP06 (109 Meridian Drive)	41	48.3	66.2	90.6	43.8	49.7	45.6	Wind- SW @ 1.9m/sec. Pac highway main contributing source. R2B potentially only audible during reading with input from a reversing beeper from Bearing 170 degrees which was audible towards end of reading. 1 car used Meridian drive during reading.
LendLease - D	Monthly	22/06/2018	8:36:00	NMP07 (3 McAndrews Lane)	41	49.8	65.7	100.1	45.8	51.4	47.3	Wind- SW @ 2.3m/sec. Pac highway main contributing source. R2B not audible during reading. Other contributing factors were birds, wind in cane, frogs in drainage lines, 1 flight during reading.
LendLease - D	Monthly	22/06/2018	8:01:00	NMP08 (55 Whytes Lane West)	41	52.4	77.3	95.4	44.4	51	46.5	Wind- SW @ 2.7m/sec. R2B not audible during reading. Pac Highway main contributing source. Other contributing factors include wind in the cane, frogs, dog barking, 2 flights during reading. 3 cars used Whytes Lane West during reading
LendLease - D	Monthly	22/06/2018	7:30:00	NMP09 (151 Uralba Rd)	41	55.1	75.7	95.9	47.1	53.3	48.6	Wind- SW @ 1.9m/sec. R2B not audible during reading. Pacific and Bruxner Highways main contributing source. Water running in cane drain may have contributed to reading. 4 cars used Uralba Rd during reading.
Quickway - D	Monthly	7/06/2018	9:15:00	106 Thurgates Lane Wardell NSW DP755691 28°56'56.2"S 153°25'58.2"E	60	51.8	56.7	57.3	31.2	48.9	41	Quickway Operations Demobe works from bridge site deck works Lend Lease Plant and Equipment 28 x light vehicles on haul rd 16 x heavy vehicles 2 x excavator working Quickway Plant and Equipment 1 x small generator for deck curing 3 x light vehicles External 1 x private vehicles passing
Quickway - D	Monthly	14/06/2018	11:18:00	106 Thurgates Lane Wardell NSW DP755691 28°56'56.2"S 153°25'58.2"E	60	51.7	55.7	53.5	30.8	47.6	42.2	Quickway Operations Demobe works from bridge site deck works Lend Lease Plant and Equipment 21 x light vehicles on haul rd 9 x heavy vehicles 1 x excavator working Quickway Plant and Equipment 4 x light vehicles External 3 x private vehicles passing

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Quickway - D	Monthly	20/05/2018	13:36:00	302 Lumleys Lane Warddeell NSW DP123430 28°55'38.9"S 153°26'38.5"E	60	53	53.4	52.4	50.2	51.4	50.4	Quickway Operations Wing wall installation, telehandler movements Lend Lease Plant and Equipment 16 x Heavy Vehicles 21 x Light Vehicles Quickway Plant and Equipment 1 x generator 15Kva 4 x light vehicles 1 x telehandler External 1 x private vehicles passing
AFHJV - E	OOHW	5/06/2018	6:35:00	4a Petticoat	39	66.8	74.8	96.4	58.7	69.6	61.5	Out of hours monitoring for Deck Pour at span 27 south bound lane. Construction was the dominant noise source (60 - 68dB(A)).
AFHJV - E	OOHW	8/06/2018	5:36:00	60 Morpeth Street	39	59.2	73	88.8	42.0	56.8	49.9	Out of hours monitoring for steelfixing. Construction noise was inaudible. The existing pacific highway was the the dominant noise source (55-68dB(A)).
AFHJV - E	Monthly	14/06/2018	12:03:00	1 Petticoat Lane (R1331)	45	56.2	65.6	85.8	50.3	58.4	53.4	Just above NML 55dB(A) however below predicted cumulative LAeq 15min of 69dB(A) for transfloor works within CCNVMP. Works occurring during monitoring were steel fixers and preparation works for deck pour at Pier 27 (52-55dB(A)), crane operating between pier 27 and 30 (54-56dB(A)) and RMS designed B3 road construction where a grader and water truck were operating (52-57dB(A)). A local resident was lawn mowing (56-59dB(A)) and the pacific highway 55-60dB(A) were also dominant noise sources
AFHJV - E	Monthly	14/06/2018	10:56:00	8 Martin Road (R1283)	45	57.3	66.9	86.9	46.9	61.1	50.4	Just above NML 55dB(A) and the predicted cumulative LAeq 15 min of 55dB(A) for girder construction scenario within CCNVMP. The dominant noise source during monitoring was council constructing a boat ramp across from the monitoring location and using a saw and power tools (56-63dB(A)). Construction works were not audible. The pacific highway and existing bridge was also a dominant noise source (50-55dB(A)).
AFHJV - E	Monthly	14/06/2018	10:22:00	40 Morpeth Street (R1396)	45	52	71.9	81.6	43.9	54.3	48.1	Below NML 55dB(A) and the predicted cumulative LAeq 15 min of 55dB(A) for trans floor construction within CCNVMP. However, the dominant noise source was the Pacific Highway traffic (50-570dB(A)). Construction works occurring during monitoring were steel fixers on top of deck 26 (46-49dB(A)).
AFHJV - E	Monthly	14/06/2018	11:33:00	35 James Creek Road (R1256)	45	59.1	89.8	88.7	43.9	52	46.9	Above NML 55dB(A) and predicted cumulative LAeq 15min of 55dB(A) for transfloor works within CCNVMP. Local traffic and Highway were the dominant noise sources (52-60dB(A)). Construction works were not audible during monitoring. SEE Civil were also working on Portion B within southern abutment area (46-52dB(A)).
AFHJV - E	OOHW	15/06/2018	4:45:00	526 Yamba Street	39	52.8	63.3	82.4	43.0	56.3	46.5	Out of hours monitoring for deck pour at span 2 SB lane. Pacific highway and local traffic along Yamba Road were the dominant noise source (52 - 56dB(A)). Concrete pour approximately 45 - 51dB(A) where agi's having concrete test at Pier 8 were loudest component of construction works.
AFHJV - E	OOHW	15/06/2018	5:10:00	35 James Creek Road	39	52.6	68.5	82.2	47.7	54.3	50.2	Out of hours monitoring for deck pour at span 2 SB lane. Works were inaudible over the pacific highway (51-55dB(A)). When no traffic vibrators were audible (49 - 51dB(A)).
AFHJV - E	OOHW	16/06/2018	7:00:00	16 River Street	39	68.2	80.8	97.8	62.2	70.1	64.7	Out of hours monitoring for loading of marine girder at jetty onto the barge. The crane was the dominant noise source (63 - 68dB(A)) however the pacific highway as a significant contributor to noise levels. Crane noise levels with pacific highway traffic was (69 - 72dB(A)).

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AFHJV - E	OOHW	16/06/2018	7:45:00	10 River Street	39	63.7	80.3	93.3	50.9	66.9	63.8	Out of hours monitoring of barge transporting marine girder at Span 20. The barge movement was inaudible. Pacific highway was the dominant noise source (58-74dB(A)). Local traffic on River street also dominant noise source (70-75dB(A)).
LendLease - F	Monthly	23/06/2018	10:35:00	NMP01 (9810 P Hwy, Broadwater)	45	68.9	79.5	108	51.3	72.1	59	RRB not audible during reading. Traffic main source of noise. Approx. 190 cars, 24 trucks. Birds in trees.
LendLease - F	Monthly	23/06/2018	11:01:00	NMP02 (2-4 P Hwy, Broadwater)	45	61.2	80.5	96.3	39.8	64.9	50.1	RRB not audible during reading. Traffic main source of noise. Approx. 167 cars, 22 trucks. Birds were constant through reading.
LendLease - F	Monthly	23/06/2018	11:30:00	NMP03 (85 E Head Rd, Broadwater)	45	60.8	73	95.9	77.6	65.4	40.5	RRB not audible during reading. Traffic main source of noise. Approx. 40 cars, 1 trucks. Birds were constant through reading. Construction heard from the CPB (SW direction)
LendLease - F	OOHW	14/06/2018	6:45:00	10770-10840 Pacific Highway Broadwater (R8)	43	73	87.9	105.9	46.5	76.8	54.2	The existing Pacific Highway was the main contributing noise source. Noise peaks were attributable to passing trucks. Crickets were audible during lulls in traffic noise. RRB not audible during reading.
LendLease - F	OOHW	14/06/2018	7:10:00	R13 (School)	43	68	77.6	95.9	37.3	65.4	40.5	The existing Pacific Highway was the main contributing noise source. RRB not audible during reading.
LendLease - F	OOHW	14/06/2018	6:15:00	556 Back Channel Road, Wardell (R5)	43	53.9	63.1	88.3	46.6	56.4	49.3	RRB intermittently audible during reading (daymakers and crane) but peak noise from these sources was indistinguishable over background noise. Traffic on the existing Pacific Highway was the dominant noise source with noise peaks associated with passing trucks.
LendLease - F	OOHW	17/06/2018	14:25:00	10770-10840 Pacific Highway Broadwater (R8)	36	57.6	79.2	96.4	25.0	57.1	30.7	The existing Pacific Highway was the main contributing noise source, including queued traffic. RRB not audible during reading. RRB not audible during reading.
LendLease - F	OOHW	16/06/2018	11:56:00	226-228 Pacific Highway Broadwater (R13 - School)	36	49.1	64.7	88.6	33.4	52.5	35.7	The existing Pacific Highway was the main contributing noise source, including queued traffic. RRB not audible during reading.
Georgiou - G	OOHW	19/06/2018	6:15:00	83 Smith Drive	54.7	52.1	74.6	104.6	41.2	51	42	OOHW Works - Monthly
Georgiou - G	OOHW	19/06/2018	6:35:00	55 Pimlico road	51	49.3	58.2	99.6	39.8	48	40	OOHW Works - Monthly
Georgiou - G	OOHW	23/06/2018	13:55:00	83 Smith Drive	62.8	59.3	83.2	119.3	42.3	59	48	OOHW Works - Monthly
Georgiou - G	OOHW	23/06/2018	14:20:00	55 Pimlico road	58.3	56.2	81.2	110.1	34.2	56	47	OOHW Works - Monthly
Georgiou - G	Monthly	25/06/2018	10:15:00	55 Pimlico road	58.3	56.6	68.5	109.4	45.9	56.3	50	Monthly monitoring
Georgiou - G	Monthly	26/06/2018	10:45:00	83 Smith Drive	62.8	56.9	70.4	103.6	48.3	57.1	53	Monthly monitoring