

August 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 | |
| SWC | OOHW | 4/08/2018 | 7:34:00 | On the western shoulder of the Old Pacific Highway at Glenugie adjacent to 6707 Old Pacific Highway, Glenugie | | 57.6 | 54.7 | | 42.6 | 52.6 | 49.2 | Dominant noise source being the birds churping and the traffic on the existing highway (tally 130 vehicles recorded during monitoring period). No wind. Observed 3 trucks parked south of the residents, engines were off. Member of public drove past really fast on local road. |
| SWC | Monthly | 15/08/2018 | 9:14 | 37 Old Six Mile Lane | 42 | 55.8 | 67.7 | | 43.9 | 54.5 | 49.9 | Works going on mainline works directly opposite receiver (dominant noise source), Ave road local road works (dominant noise source), Ave road bridge works, Compound & Batch plant and the jail. Resident was home and working about yard (very minor noise impact). Birds were heard churping. |
| SWC | Monthly | 15/08/2018 | 11:13 | 970 Woolli Road | 42 | 47.6 | 65.8 | | 36.9 | 42.6 | 39.9 | Works going on Woolli Road local road upgrade which included traffic control directly out the front of receiver under single lane set up (dominant noise source, Woolli Road bridge works and mainline works). Local traffic network using Woolli Road (dominant noise source) |
| SWC | Monthly | 15/08/2018 | 11:55 | 165 Somervale Road | 42 | 37.9 | 55.9 | | 30.8 | 35.3 | 33 | BMD bridge works at A23 which included crane lifts, power tools and people talking loudly (dominant noise source). Squawkers & beepers heard periodically. Birds churping (magpies mainly intermittently) (dominant noise source). Resident was home going about business (very minor noise impact) |
| SWC | Monthly | 15/08/2018 | 12:32 | 15 Tallowood Lane | 42 | 44 | 63.5 | | 36.3 | 41 | 38.3 | BMD bridge works at A24. Power tools, EWP (with reversing beeper), yelling (dominant noise source). Rollers and grader could be heard working north in cut 21. LV's, road trains, trucks and plant using haul road adjacent to property boundary (intermittent). Birds churping in background periodically |
| SWC | Monthly | 15/08/2018 | 13:34 | 2860 Pacific Highway Tyndale | 51 | 60.7 | 80.6 | | 40.1 | 52.6 | 48.1 | Chook's & roosters constantly clucking & crowing (dominant noise source). Highway noise intermittent (dominant noise source). Washing machine on inside house adjacent to noise meter (continuous) |
| SWC | Monthly | 15/08/2018 | 15:17 | 2826 Pacific Highway Tyndale | 51 | 55.8 | 69 | | 44.3 | 53.9 | 48.8 | Highway traffic fluctuating (tally = 194 vehicles). Birds churping. Site access gate SWC=2 BMD=1 PC=1 SEE CIVIL=6 COATES=1 SEE Civil quarry works heard continuously (47-51dBA). No breeze. Faintly heard hammers in cut 30 for 10sec |
| SWC | OOHW | 26/08/2018 | 7:34:00 | In proximity to the sensitive receiver on Bostock rd. Curing light vehicle at Bridge A20 | 42 | 50.4 | 65.6 | | 30.9 | 41.2 | 36.1 | Low Noise recorded. Dominant noise source being the birds. Light vehicle checking curing setup at Bridge A20 was not audible. |
| BGC | OOHW | 3/08/2018 | 6:11am | McIntyres Lane (CH76800-76900) | 33 | 59.2 | 86.9 | 83.2 | 36.1 | 55 | 47.5 | Dominant noise is from traffic along McIntyres Lane and existing highway. OOH refuelling works inaudible. |
| BGC | OOHW | 4/08/2018 | 7:01am | Lot 1 DP1088617 McIntyres Lane | 41 | 58.2 | 80.9 | 87.8 | 37.2 | 57 | 41.5 | Dominant noise is from traffic along McIntyres Lane and birds. OOH concrete pour works inaudible. |
| BMD | OOHW | 6/08/2018 | 18:45:00 | 300m south of A25 | 32 | 38.3 | 45.8 | | 32.5 | 41.5 | 37.6 | Noise levels very low. Occasional bird call in distance 45dB. Insects constant background noise at 35dB. Construction inaudible |
| BMD | OOHW | 27/08/2018 | 5:30:00 | 200m north of A23 | 29 | 40.3 | 48.2 | | 32.1 | 42.7 | 40.9 | Morning bird calls main influence on record with peaks up to 48dB. Construction inaudible |
| BHA | OOHW | 28/07/2018 | 6:55:00 | Chatsworth Rd, B60 | 35 | 55.6 | 79.7 | | | 51.8 | 43.3 | Noisy rock construction on opposite side of river not related to project works |
| BHA | OOHW | 18/08/2018 | 6:36:00 | South Bank Road | 44 | 63.3 | 89.7 | | | 59.3 | 51.9 | Landholder drove by with 2 x Harley Davidsons. Pacific Highway noise audible |
| BHA | OOHW | 18/08/2018 | 6:44:00 | Ryan's Lane | 44 | 50.3 | 61.6 | | | 52.8 | 48.2 | Landholder ploughing his paddock adjacent to monitoring position |

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| | | | | | | Laeq | Lafmax | Lzpk | Lafmin | Laf10 | Laf90 | |
| SEE CIVIL | Monthly | 17/08/2018 | 12:42:00 | 132 Farlow's Lane, Maclean | 45 | 56.4 | 72.1 | | 47.1 | 59.1 | | Main noise sources were highway noise and construction activities (Cut/fill works) located approximately 165m to the southeast |
| BMD | OOHW | 31/07/2018 | 20:50:00 | Chainage: 104000 (OoH monitoring for the barrier installation in 6.4) | 34 | 68.9 | 85.3 | | 54.6 | 73.2 | 57.8 | Dominant noise source: Trucks on the Pacific Highway 60-74 (dBa). Reversing of crane 61-62 dB(A). Daymakers and crane in lull of Pacific Highway traffic 55-57 dB(A). Construction audible in lull of traffic only 57dB(A) to be used for extrapolation. Extrapolated noise = 36.9 dB(A) which is below the night time NML of 39 dB(A). |
| BMD | Monthly | 28/08/2018 | 12:02:00 | 6530 Pacific Highway Jackybulbin | 42 | 62.6 | 73.8 | | 45.9 | 67 | 54.5 | Dominant noise source: Traffic on the existing Pacific Highway 58.6 dB(A) with peaks of 70.8 dB(A). Dogs from residence barking for the first 6 minutes 60.4 dB(A) with peaks of 62.4 dB(A). Works adjacent to residence 52 dB(A) with peaks of 57 dB(A). NML = 52dB(A) - works considered compliant. |
| BMD | Monthly | 28/08/2018 | 11:34:00 | 1 Jackybulbin Road, Mororo | 42 | 56.8 | 83.1 | | 38.8 | 52.2 | 42.8 | Pacific Highway and local traffic main influence at 54.0 dB(A) with peaks of 81.2 dB(A). Rooster crowing 48.2 dB(A) with peaks of 50.8 dB(A). BMD works 52.1 dB(A) at Gate 102.7. NML = 52 dB(A) - works considered compliant. |
| CPB | OOHW | 11/08/2018 | 7:05:00 | Trustrums Hill Rd, west of CH129150 | 42 | 61.4 | 78.3 | | 47.2 | 64.5 | 52 | Work activity inaudible at location, predominant noise source Pacific Highway and birds (lorriquets). Distance from source south 455m. SR distance from source south 495m. Pacific Highway on north east side of monitoring location and SR at distance of 75m. Noise levels prior to commencement of work were higher than targeted monitoring. |
| CPB | OOHW | 11/08/2018 | 6:46:00 | Trustrums Hill Rd, west of CH129150 | 42 | 62.7 | 75.8 | | 44.4 | 69.5 | 54.5 | Noise levels prior to commencement of work |
| LendLease | OOHW | 31/07/2018 | 19:08:00 | R130 | 41 | 55.2 | 82.2 | 98.6 | 40.1 | 57.3 | 42.5 | Main contributing source was the Pacific Highway. 2 cars used Pimlico Rd during the reading. R2B was only audible from LED lighting plant set up at intersection. Some input from dogs barking and nearby cane farming activities. Clear night with mild temperatures. |
| LendLease | Monthly | 3/08/2018 | 10:58:00 | NMP09 (151 Uralba Rd) | 41 | 52 | 77.6 | 91.7 | 40.5 | 49.2 | 43.5 | R2B not audible during reading. Pacific and Bruxner Highways were main contributing sources. Other extraneous noise sources: Flight overhead at 3:45 minutes, birds and wind in sugar cane immediately adjacent to monitoring location. |
| LendLease | Monthly | 3/08/2018 | 11:33:00 | NMP08 (55 Whytes Lane West) | 41 | 44.4 | 66.4 | 92.7 | 37.1 | 46.6 | 40.1 | Wind: Gusts up to 2.7m/s. Pac Hwy main contributing source. R2B only audible with infrequent reverse quackers. One instant noise of rear trailer door slamming. Other extraneous noise sources: Flight overhead at 7:30 minutes and wind in sugar cane immediately adjacent to monitoring location. |
| LendLease | Monthly | 3/08/2018 | 11:58:00 | NMP07 (3 McAndrews Lane) | 41 | 48.1 | 63.1 | 83.4 | 40.3 | 50.2 | 44.3 | Wind: Gusts up to 2.1 m/s. Pac Hwy main contributing source. Some input from LVs going over cattle grid exiting gates of Whytes Office compound. |
| LendLease | Monthly | 3/08/2018 | 12:30:00 | NMP06 (109 Meridian Drive) | 41 | 47.2 | 67.2 | 80.3 | 37.3 | 48.1 | 41.1 | Wind: Gusts up to 2.3m/s. Pac Hwy main contributing source. R2B only audible with 1 reversing quacker and an excavator bucket noise to the south. Other extraneous noise sources: Birds and 1 car using local road. |
| LendLease | Monthly | 3/08/2018 | 12:50:00 | NMP05 (848 Pimlico Rd) | 41 | 51.4 | 74.4 | 88.1 | 38.1 | 48.5 | 41.4 | Wind: N gusts up to 1.5m/s. Pac Hwy main contributing source. R2B not audible during reading. 8 cars used Pimlico Rd during reading. |
| LendLease | Monthly | 3/08/2018 | 13:30:00 | NMP04 (1175 Wardell Rd) | 41 | 56.4 | 71.2 | 95.3 | 46.1 | 59.1 | 49.1 | Wind: N with 2m/s gusts. R2B main contributing source. Operations observed: 50t truck movements, Watercarts, Truck and dogs, LV's, Bobcat, Excavator. Other extraneous noise sources: dog barking, birds, use of a chainsaw at distant property. Reading was below modelled/approved noise scenario as detailed within the CCNVMP. |
| LendLease | Monthly | 3/08/2018 | 13:50:00 | NMP03 (1202 Wardell Rd) | 41 | 54.8 | 69.3 | 89.6 | 41.7 | 57.4 | 43.9 | Wind: N with 2.3m/s gusts. R2B main contributing source. Dozer operating Nth of Wardell rd with track noise was the main source. 6 cars used Wardell Rd during the reading. Reading was below modelled/approved noise scenario as detailed within the CCNVMP. |
| LendLease | Monthly | 3/08/2018 | 14:20:00 | NMP02 (1184 Pacific Highway) | 41 | 50.1 | 61.9 | 104.7 | 45.5 | 51.7 | 47.4 | Wind: N with gusts up to 4m/s. R2B not audible during reading. |
| LendLease | Monthly | 3/08/2018 | 14:45:00 | NMP01 (10950 Pacific Highway) | 41 | 66.9 | 78.2 | 96.4 | 49.3 | 69.8 | 59.7 | Wind: N with gusts up to 3.5m/s. R2B not audible. Pac Hwy main source with 32 trucks and 187 LVs using hwy during reading. |
| LendLease | OOHW | 8/08/2018 | 6:50:00 | 302 Lumley's Lane | 38 | 43.2 | 60.4 | 74.8 | 36.4 | 45.9 | 38.8 | OOHW D189 Concrete Pour setup. Main contributing noise source: Dog constantly barking (every 2 seconds), Rooster crowing. R2B inaudible over extraneous noise sources |
| LendLease | OOHW | 9/08/2018 | 6:42:00 | 1129 Wardell Road | 38 | 47.8 | 60.6 | 89.4 | 37.4 | 51.3 | 40.3 | OOHW D187 Concrete Pour setup. Main contribution noise source: Traffic on Wardell Road, birds in trees, leaves rustling. R2B inaudible over extraneous noise sources |

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| | | | | | | Laeq | Lafmax | Lzpk | Lafmin | Laf10 | Laf90 | |
| Quickway | Monthly | 14/08/2018 | 13:10:00 | X: 541132, Y: 6795547, 103 Montis Road Wardell. | 41 | 44.9 | 54.9 | 56.7 | 38.1 | 43.5 | 41.1 | Construction Noise not audible. D04 Girder Lifts. |
| Quickway | Monthly | 21/08/2018 | 15:16:00 | X: 543048, Y: 6800012, 302 Lumleys Lane | 41 | 47.21 | 74.5 | 75.9 | 38.8 | 45.7 | 42.4 | Peak noise caused by passing car. D55/D56 Backfill. |
| Quickway | OOHW | 26/08/2018 | 16:45:00 | X: 541132, Y: 6795547, 103 Montis Road Wardell. | 38 | 39.2 | 60.6 | 68.8 | 28.6 | 37.6 | 31.8 | Peak noise caused by bird call. Noise source not audible. |
| LendLease | OOHW | 28/07/2018 | 7:14:00 | 556 Back Channel Road (R5) | 45 | 53.1 | 70 | 96.3 | 47.4 | 54.8 | 49.6 | OOH Predicted noise level was 54 dBA based on noise modelling. RRB audible during reading with the positioning of the tremmie line peaking at 52 dBA and the positioning of the platform peaking at 56 dBA. Traffic on the Pacific Highway was audible with trucks peaking between 56-59 dBA and cars peaking between 54-56 dBA. The dominant noise was traffic on the Pacific Highway. |
| LendLease | Monthly | 28/08/2018 | 7:23:00 | NMP01 (9810 P Hwy, Broadwater) | 45 | 67.7 | 80.4 | 101 | 46.1 | 71.9 | 50.7 | RRB not audible during reading. Traffic main source of noise. Approx. 120 cars, 35 trucks. Birds |
| LendLease | Monthly | 28/08/2018 | 7:46:00 | NMP03 (85 E Head Rd, Broadwater) | 45 | 59.9 | 75 | 89.9 | 48.4 | 64 | 50.3 | RRB not audible during reading. Traffic main source of noise. Approx. 72 cars. Birds were constant through reading. |
| LendLease | Monthly | 28/08/2018 | 8:09:00 | NMP02 (2-4 P Hwy, Broadwater) | 45 | 63.7 | 80.7 | 100.2 | 47.6 | 67 | 54.7 | RRB not audible during reading. Birds were main source of noise and were constant through reading. Approx. 118 cars, 32 trucks. |
| AFHJV | Monthly | 23/08/2018 | 7:31:00 | 1 Petticoat Lane (R1331) | 45 | 55.8 | 64.3 | - | 49.6 | 56.8 | 50.7 | |
| AFHJV | Monthly | 23/08/2018 | 8:08:00 | 8 Martin Road (R1283) | 45 | 54.5 | 63.8 | - | 50.8 | 57.2 | 53.1 | |
| AFHJV | Monthly | 23/08/2018 | 8:42:00 | 40 Morpeth Street (R1396) | 45 | 55.4 | 69.8 | - | 46.4 | 59.2 | 53.1 | |
| AFHJV | Monthly | 23/08/2018 | 9:06:00 | 35 James Creek Road (R1256) | 45 | 55 | 69.8 | - | 46.4 | 53.6 | 47.5 | |
| Georgiou | Monthly | 23/08/2018 | 10:28:00 | 83 Smith Drive | 62.8 | 61.8 | 83 | 122.9 | 40.9 | 62 | 46 | Monthly monitoring |
| Georgiou | Monthly | 23/08/2018 | 10:53:00 | 55 Pimlico Road | 58.3 | 57.2 | 77.9 | 119.2 | 39.5 | 57 | 44 | Monthly monitoring |
| Georgiou | OOHW | 25/08/2018 | 14:15:00 | 83 Smith Drive | 62.8 | 59.4 | 83.2 | 119.3 | 42.3 | 59 | 48 | OOHW Works - Monthly |
| Georgiou | OOHW | 25/08/2018 | 14:45:00 | 55 Pimlico Road | 58.3 | 56.8 | 79.2 | 112.4 | 34.2 | 56 | 44 | OOHW Works - Monthly |