

WE44/45/46/47/48 Noise Monitoring Results - May 2015 - Auburn Junction Project (SIG16)

Site #	Monitoring Location	Weather Conditions	Date	Time	Construction Activities	Main source of noise	LA(eq)	LA(10)	LA(90)	LA(max)	LA(min)	Shift	Audible noise from AJP construction activities	Predicted construction sound pressure level (LA(eq,15min))	Compliance	Comments
1	223 Rawson St	Overcast	2-May-15	14:25	OHW Works, Generator, Excavator	Dominated by road traffic	72.0	75.1	63.6	89.6	60.2	1		59	Yes	Dominated by road traffic
1	223 Rawson St	Calm	3-May-15	19:56	Track	Dominated by road traffic	69.8	72.9	61.3	88.8	59.8	2	Works train -60dBA	59	Yes	Work train idling in corridor @ -50 m @ -60 dBA Noise dominated by traffic
2	183 Rawson St	Calm	3-May-15	20:23	Track	Dominated by road traffic	71.1	73.1	65.3	93.7	60.9	2	daymaker	70	Yes	Temper working @ -120 m Daymaker @ -10 m 62 dBA Dominated by traffic
3	2-4 Macquarie Rd	Calm	3-May-15	20:43	Demob	Dominated by road traffic	69.1	72	59.3	87.6	52.6	2	daymaker	63	Yes	Daymaker @ 40m Crane Truck Dominated by traffic
1	223 Rawson St	Calm	3-May-15	22:37		Dominated by road traffic	67.6	71.6	51.9	86.5	48.3	2	daymaker	59	Yes	Daymaker @ 50m - 52 dBA Occasional Hydrema passing by Dominated by traffic
2	183 Rawson St	Calm	3-May-15	23:21	Track	Daymaker @ 10m - 63 dBA Excavator spreading Tamper idling	68.7	70.6	64.2	89.4	62.4	2	daymaker	70	Yes	Daymaker @ 10m - 63 dBA Excavator spreading Tamper idling
2	183 Rawson St	Calm	4-May-15	1:09	Tamping	Dominated by road traffic	75.4	76.8	72.8	83.7	68.5	1		70	Yes	Tamping @ 10m - 76 dBA Daymaker @ 12m Noise dominated by traffic, some vehicles - 84 dBA Train (tangara) - 75 dBA Apart from the Daymaker, construction activity largely non-discernable from the traffic.
2	183 Rawson St	Calm	4-May-15	17:37	Excavator loading spoil	Dominated by road traffic, and car honking	72.5	74.6	65.0	91.5	89.2	2	daymaker	62	Yes	Car honking @ 14:50 mark - 91.5 dBA Daymaker @ 12m Small excavator moving rails @ 15m Spoil loading @ 25 m distance High volume of traffic on Rawson St
1	213 Rawson St	Calm	4-May-15	18:27	Excavator loading spoil, hydrema movement	High volume of traffic on Rawson St	72.3	73.8	65.2	90.8	61.2	2	daymaker	77	Yes	Freight train @ 3:30 Moderate traffic on Rawson St Truck and Dog @ 79dBA Dozer moving railings - 20 m distance - 65-70 dBA Car honk @ 9:00, 5 m distance
1	223 Rawson St	Calm	4-May-15	20:25	Excavator loading spoil, moving rail	Moderate traffic on Rawson St	68.9	71.6	60.4	88.8	57.3	2		66	Yes	Moderate to heavy traffic - 9 vehicles per minute Train (waratah) 70 dBA Non-project trucks - 80 dBA -59 dBA when no traffic visible
2	183 Rawson St	Calm	4-May-15	21:13	Excavator loading spoil	Moderate to heavy traffic - 9	68.2	71.1	61	89.8	57.6	2		62	Yes	Truck & Dog - 80 dBA Daymaker @ 15 m Dozer operating constantly Low-moderate levels of traffic on Rawson St SUV - 79 dBA Train - 72 dBA Ute startup @ 11:56 - 74 dBA Monitoring point adjacent to traffic controllers
1	223 Rawson St	Calm	4-May-15	22:51	Excavator loading spoil, rails loaded into truck, hammering (hand tools)	Truck & Dog - 80 dBA	67.4	69.9	54.4	85.8	50.9	2		62	Yes	Nearest plant @ 15m Moderate traffic at Rawson St Car @ 90 dBA Dozer @ 64.7 dBA 56 dBA when idle Plan flew overhead at 7:20
1	199 Rawson St	Calm	5-May-15	0:01	Excavator scraping, loading spoil	Monitoring point adjacent to traffic controllers	67.7	70.3	62.3	82.9	60	2	daymaker	66	Yes	Nearest daymaker operating @ 100m, daymaker @ 12 m off. Heavy traffic on Rawson St > 20 vehicles per minute 53 dBA when no traffic or trains present
2	183 Rawson St	Slight breeze	5-May-15	17:52	Excavator loading spoil	Heavy traffic on Rawson St > 20 vehicles per minute	69.1	72.2	61.5	83.1	52.9	2	daymaker	62	Yes	High volume of traffic on Rawson St Waratah train - 64 dBA Vehicles - 74 dBA
1	199 Rawson Street	Calm	5-May-15	18:14	Street sweeper, excavator loading spoil	High volume of traffic on Rawson St	66.7	70	59.6	78.4	54.8	2		66	Yes	Nearest plant @ 15m Moderate traffic at Rawson St Car @ 90 dBA Dozer @ 64.7 dBA 56 dBA when idle Plan flew overhead at 7:20
1	223 Rawson St	Calm	5-May-15	20:13	Roller, hydrema, backfilling	Moderate traffic at Rawson St Car @ 90 dBA	68.7	70.6	60.7	93.6	55	2		66	Yes	Vegetation rustling train @ 74 dBA Truck and Dog @ 76.6 dBA Street sweeper @ 74 dBA Freight train @ 7:35 up to 75 dBA Breeze picked up @ 7:50 and windy from 10:00 Moderate levels of traffic Gust at 11:00 - 64 dBA
1	201 Rawson St	Breezy	5-May-15	21:46	Excavators on track	Moderate levels of traffic	68.7	72.4	60.5	83.6	57	2		70	Yes	Freight train at beginning of monitoring Low traffic
1	223 Rawson St	Calm	5-May-15	23:58	Backfill	Freight train at beginning of monitoring Low traffic	66.1	68.5	62.3	97.2	56.7	2		66	Yes	Freight train at beginning of monitoring Low traffic
2	183 Rawson St	Mild Breeze	6-May-15	18:55	Backfill, roller	Car @ 83 dBA at 1:20 High volume of traffic on Rawson St	67.9	71.5	59.1	83	55.6	2	daymaker	62	Yes	Car @ 83 dBA at 1:20 High volume of traffic on Rawson St Daymaker @ 15 m -59 dBA when no traffic visible
1	223 Rawson St	calm	6-May-15	21:13	Toolbox talk, backfill, sleeper placement	Moderate vehicle traffic - 62 dBA Train @ 63 dBA - 55 dBA when no traffic visible Project briefing immediately adjacent to monitor @ 7:00	65.7	69.3	55.4	83	50.6	2		66	Yes	train - 76 dBA moderate to high volume of traffic - 68 - 70 dBA Train - 64 dBA No visible traffic - 54 dBA Moderate intermittent traffic on Rawson St
1	199 Rawson St	Calm	6-May-15	22:05	Backfilling	train - 76 dBA moderate to high volume of traffic - 68 - 70 dBA	62.9	70	60.1	84.6	57.3	2	daymaker	66	Yes	Train - 64 dBA No visible traffic - 54 dBA Moderate intermittent traffic on Rawson St train + traffic - 71 dBA moderate traffic and intermittent hand tools @ 25 m non project truck - 80 dBA
1	223 Rawson St	Mild Breeze	7-May-15	20:25	Sleeper placement, hand tools	Train - 64 dBA No visible traffic - 54 dBA Moderate intermittent traffic on Rawson St	66.8	69.2	58.9	82.7	48.9	2		66	Yes	Daymakers on Nearest active works - 100m - 48 dBA when no traffic visible Low traffic Works - 100m
1	199 Rawson St	Slight breeze	7-May-15	21:41	Sleeper placement, hand tools	train + traffic - 71 dBA moderate traffic and intermittent hand tools @ 25 m non project truck - 80 dBA	66.1	68.9	57	91	54.4	2		66	Yes	Daymakers on Nearest active works - 100m - 48 dBA when no traffic visible Low traffic Works - 100m
1	223 Rawson St	Slight breeze	7-May-15	23:14	Track	Daymakers on Nearest active works - 100m - 48 dBA when no traffic visible Low traffic	60.2	65.4	47.1	74.2	45.3	2	daymaker	66	Yes	nearest daymakers switched off moderate level of traffic on Rawson St - 72 - 74 dBA Plane overhead @ 3:00, - 58-60 dBA Non-project concrete trucks - 80 dBA Train (tangara) - 65.9 dBA Freight train from 12:00
2	183 Rawson St	Calm to slight breeze	8-May-15	0:25	Track	Works - 100m	65	67.8	52.5	83	50.1	2		62	Yes	nearest daymakers switched off moderate level of traffic on Rawson St - 72 - 74 dBA Plane overhead @ 3:00, - 58-60 dBA Non-project concrete trucks - 80 dBA Train (tangara) - 65.9 dBA Freight train from 12:00
2	183 Rawson St	Calm	8-May-15	21:31	Track	nearest daymakers switched off moderate level of traffic on Rawson St - 72 - 74 dBA Plane overhead @ 3:00, - 58-60 dBA Non-project concrete trucks - 80 dBA Train (tangara) - 65.9 dBA Freight train from 12:00	67.3	70.6	54.7	83.6	51.8	2	daymaker	62	Yes	-53 dBA when no traffic Low to moderate traffic on Rawson St Non-Project Concrete Truck - 78 - 80 dBA Diesel ute idling on Hampstead Road - 54 dBA
1	223 Rawson St	Calm	8-May-15	22:48	PEMLEM idle, hydrema passing	-53 dBA when no traffic Low to moderate traffic on Rawson St Non-Project Concrete Truck - 78 - 80 dBA Diesel ute idling on Hampstead Road - 54 dBA	64	68.1	51	80.5	47.4	2		66	Yes	Non-project Concrete Truck - 80 dBA Light traffic Freight train from 7:00 to 8:00 - 74 dBA
2	183 Rawson St	Calm	8-May-15	23:36	Ballast delivery and backfill	Non-project Concrete Truck - 80 dBA Light traffic Freight train from 7:00 to 8:00 - 74 dBA	66.1	71.1	53.6	81.7	51.5	2		62	Yes	Low traffic Idling freight train located - 50-100 m distance Freight train movement from 12:20 - 13:40
1	223 Rawson St	Calm	9-May-15	0:24	Track, fill delivery	Low traffic Idling freight train located - 50-100 m distance Freight train movement from 12:20 - 13:40	64.4	67.5	53.2	81.4	51.5	2		66	Yes	No passing hydremas No audible works Dominated by local traffic
6	25 Gelibolu Pde	Sunny, light breeze	9-May-15	14:14	Drainage	No passing hydremas No audible works Dominated by local traffic	59	61	48.9	85.3	45.5	1		59	Yes	Passing hydrema + loader Dominated by road traffic noise
1	223 Rawson St	Sunny, light breeze	9-May-15	14:59	ULX + Local Routes	Dominated by road traffic noise	68.2	71.6	57.3	81.9	51.4	1	Hydrema	56	Yes	Loader + Hydrema + 13t excavator adjacent Dominated by constant road traffic Hydremas passing - quiet shift change over
3	2-4 Macquarie Rd	Sunny, light breeze	9-May-15	15:45	Drainage	Dominated by road traffic	69.9	72.8	60	86.4	55.5	1		54	Yes	Excavator + Hydrema + daymaker opposite Dominated by road traffic
1	223 Rawson St	Cool, light breeze	10-May-15	18:03	Local Routes	Dominated by road traffic	68.1	72.2	57.9	81.5	53.2	2	Excavator + Hydrema + daym	55	Yes	Day makers sitting at road level Hydremas + excavators + track welding crews Dominated by road traffic Passing ambulance under sirens
2	183 Rawson St	Cool, light breeze	10-May-15	18:28	Track + Local Routes	Dominated by road traffic	74.9	73.2	60.3	103.2	57.8	2	Excavator + Hydrema + daym	61	Yes	Hydrema idle Road traffic only
3	2-4 Macquarie Rd	Cool, light breeze	10-May-15	18:43	Drainage	Dominated by road traffic	40.5	43.5	32.2	57.5	29	2	Excavator + Hydrema + daym	54	Yes	
Monitoring sheets missing, results taken from logger backup							11-May-15	22:58	65.7	70	47.5	82.1	30.8	2		
							11-May-15	23:27	65.7	70	47.5	82.1	30.8	2		
							11-May-15	23:50	65.8	70.6	47.5	86.9	41.1	2		
							13-May-15	22:08	66.7	71.9	52.6	80.1	48.7	2		
							13-May-15	22:32	67.9	70.9	51.3	94.1	49.3	2		
							13-May-15	22:53	66.7	71.5	53.6	80.5	51.4	2		
							14-May-15	19:22	70	74.3	55.8	88.6	50.9	2		
							14-May-15	19:46	70	74.1	57.9	82.1	55.9	2		
							16-May-15	9:52	70.7	73.6	65.5	85.1	59.9	1		
							16-May-15	11:24	68.6	71.05	57.2	85	51.4	1		
							16-May-15	14:58	69.5	72.5	62.3	84.8	56.3	1		
							16-May-15	20:10	69.3	74.1	54	87.7	51.8	2		
							16-May-15	20:33	71.7	73.8	68.1	85.2	63.3	2		
							16-May-15	22:29	69.2	73.8	54.6	84.4	50.1	2		
							16-May-15	22:51	73.1	75	64.1	98	59.6	2		
							17-May-15	0:32	67.2	72.1	51.5	85.1	48.1	2		
							17-May-15	17:36	75.5	78.4	66.9	94.3	64.2	2	Daymakers	71
2	183 Rawson St	Calm, cold	17-May-15	19:45	Track	Traffic dominated	75.6	72	61.4	109.9	61.4	2	3 daymakers Excavator	71	Yes	
2	183 Rawson St	Calm, cold	17-May-15	22:06	Track	Traffic dominated	70.7	71.9	64.6	97.9	63	2	2 daymakers, excavator, w	71	Yes	
1	223 Rawson St	Warm, calm	24-May-15	11:05	Signal Commissioning	Traffic dominated	71.2	75.9	53.1	83.4	45.2	1	nil	60	Yes	
1	223 Rawson St	Warm, calm	30-May-15	14:39	Track and signals	Traffic dominated	70.7	74.2	54.9	81.1	49.2	1	nil	52	Yes	
2	183 Rawson St	calm	30-May-15	18:32	Track	Traffic dominated	70	73.4	62.7	82.1	59.4	2	daymakers, grinder	66	Yes	
1	223 Rawson St	calm	30-May-15	20:45	Signalling	Traffic dominated	67.5	70.7	47.6	86	43.3	2	nil	52	Yes	
2	183 Rawson St	calm	30-May-15	21:31	Signalling	Traffic dominated	65.9	69.6	59.7	81.6	58	2	daymakers	66	Yes	
2	183 Rawson St	calm	31-May-15	1:24	Signalling	Traffic dominated	64.4	67.6	59.3	83.8	58.3	2	daymakers	52	Yes	
4	2-4 Macquarie Rd	calm	31-May-15	7:47	Drainage	Traffic dominated	67.5	71.9	52.5	80.5	46.4	1	Crane truck and hydrema	52	Yes	

* higher than predicted noise levels due to non-construction related activities i.e. traffic