

APPENDIX 11.5
PEAK CONSTRUCTION YEAR MODELLING

Appendix 11.5- Modelled annual mean concentrations at existing receptor locations in peak construction year.

Table 1- NO₂ Annual Mean Concentrations for peak construction year (2023) construction and future baseline scenarios

Receptor	X	Y	2023 Baseline	2023 Construction	Percentage Change	% of AQAL	IAQM Impact Descriptor
R1	516155	177401	38.1	38.1	0	95	Negligible
R2	516034	177348	34.5	34.4	0	86	Negligible
R3	516161	177367	42.9	43.0	0	107	Negligible
R4	516038	177298	35.6	35.6	0	89	Negligible
R5	516304	177296	35.4	35.3	0	88	Negligible
R6	516376	177237	32.2	32.1	0	80	Negligible
R7	516491	177207	32.8	32.7	0	82	Negligible
R8	516541	177088	31.3	31.2	0	78	Negligible
R9	516532	176912	34.6	34.4	-1	86	Negligible
R10	516384	176799	25.5	25.5	0	64	Negligible
R11	516517	176686	31.5	31.4	0	79	Negligible
R12	516676	176951	27.4	27.3	0	68	Negligible

Table 2 - PM₁₀ Annual Mean Concentrations for peak construction year (2023) construction and future baseline scenarios

Receptor	X	Y	2023 Baseline	2023 Construction	Percentage Change	% of AQAL	IAQM Impact Descriptor
R1	516155	177401	21.5	21.5	0	54	Negligible
R2	516034	177348	21.2	21.2	0	53	Negligible
R3	516161	177367	22.0	22.0	0	55	Negligible
R4	516038	177298	21.6	21.6	0	54	Negligible
R5	516304	177296	20.7	20.7	0	52	Negligible
R6	516376	177237	20.0	20.0	0	50	Negligible
R7	516491	177207	20.3	20.3	0	51	Negligible
R8	516541	177088	19.9	19.9	0	50	Negligible
R9	516532	176912	19.7	19.7	0	49	Negligible
R10	516384	176799	17.3	17.3	0	43	Negligible
R11	516517	176686	19.0	19.0	0	47	Negligible
R12	516676	176951	17.9	17.9	0	45	Negligible

Table 3 – PM_{2.5} Annual Mean Concentrations for peak construction year (2023) construction and future baseline scenarios

Receptor	X	Y	2023 Baseline	2023 Construction	Percentage Change	% of AQAL	IAQM Impact Descriptor
R1	516155	177401	15.1	15.1	0	60	Negligible
R2	516034	177348	14.9	14.9	0	60	Negligible
R3	516161	177367	15.5	15.5	0	62	Negligible
R4	516038	177298	15.1	15.1	0	61	Negligible
R5	516304	177296	14.7	14.7	0	59	Negligible
R6	516376	177237	14.2	14.2	0	57	Negligible
R7	516491	177207	14.4	14.4	0	58	Negligible
R8	516541	177088	14.2	14.2	0	57	Negligible
R9	516532	176912	13.4	13.6	1	54	Negligible
R10	516384	176799	12.0	12.0	0	48	Negligible
R11	516517	176686	12.9	12.9	0	52	Negligible
R12	516676	176951	12.3	12.3	0	49	Negligible