

Appendix 12.1 Pollutant Concentrations from Traffic Emissions (see Vol. III)

Appendix 12.2 Graphical Representation of Pollutant Concentrations (see Vol. III)

Appendix 12.1 Pollutant concentrations due to traffic emissions

Receptor Name	Met Year	Pollutant concentrations at receptors (excluding background concentrations)		
		NO ₂	PM ₁₀	CO
		Annual mean µg m ⁻³	Annual mean µg m ⁻³	8-hour mean µg m ⁻³
Without Development	2013			
R1		1.95	0.33	0.01
R2		2.89	0.49	0.02
R3		1.53	0.26	0.01
R4		1.73	0.29	0.01
R5		1.67	0.28	0.01
R6		1.51	0.26	0.01
R7		1.38	0.23	0.01
R8		1.31	0.22	0.01
R9		1.24	0.21	0.01
R10		1.17	0.20	0.01
R11		1.05	0.18	0.01
R12		1.06	0.18	0.01
R13		1.92	0.33	0.01
R14		12.79	2.17	0.07
R15		1.83	0.31	0.01
R16		1.27	0.22	0.01
R17		2.07	0.35	0.01
R18		12.85	2.18	0.07
R19		1.28	0.22	0.01
R20		1.85	0.31	0.01
R21		2.75	0.47	0.01
R22		3.47	0.59	0.02

Receptor Name	Met Year	Pollutant concentrations at receptors (excluding background concentrations)		
		NO ₂	PM ₁₀	CO
		Annual mean µg m ⁻³	Annual mean µg m ⁻³	8-hour mean µg m ⁻³
R23		4.12	0.70	0.02
R24		4.75	0.80	0.03
R25		11.59	1.96	0.06
R26		6.26	1.06	0.03
Without Development	2014			
R1		1.25	0.21	0.01
R2		2.05	0.35	0.01
R3		0.95	0.16	0.01
R4		1.15	0.20	0.01
R5		0.96	0.16	0.01
R6		0.93	0.16	0.01
R7		0.80	0.14	0.00
R8		0.80	0.13	0.00
R9		0.76	0.13	0.00
R10		0.78	0.13	0.00
R11		0.66	0.11	0.00
R12		0.70	0.12	0.00
R13		1.39	0.24	0.01
R14		9.91	1.68	0.05
R15		1.33	0.23	0.01
R16		0.88	0.15	0.00
R17		1.45	0.25	0.01
R18		9.94	1.68	0.05

Receptor Name	Met Year	Pollutant concentrations at receptors (excluding background concentrations)		
		NO ₂	PM ₁₀	CO
		Annual mean µg m ⁻³	Annual mean µg m ⁻³	8-hour mean µg m ⁻³
R19		0.88	0.15	0.00
R20		1.34	0.23	0.01
R21		1.93	0.33	0.01
R22		2.46	0.42	0.01
R23		2.58	0.44	0.01
R24		2.96	0.50	0.02
R25		6.30	1.07	0.03
R26		3.62	0.61	0.02
Without Development	2015			
R1		1.19	0.20	0.01
R2		1.98	0.34	0.01
R3		0.90	0.15	0.00
R4		1.11	0.19	0.01
R5		0.90	0.15	0.00
R6		0.88	0.15	0.00
R7		0.75	0.13	0.00
R8		0.75	0.13	0.00
R9		0.73	0.12	0.00
R10		0.75	0.13	0.00
R11		0.63	0.11	0.00
R12		0.68	0.12	0.00
R13		1.35	0.23	0.01
R14		9.59	1.62	0.05

Receptor Name	Met Year	Pollutant concentrations at receptors (excluding background concentrations)		
		NO ₂	PM ₁₀	CO
		Annual mean µg m ⁻³	Annual mean µg m ⁻³	8-hour mean µg m ⁻³
R15		1.30	0.22	0.01
R16		0.85	0.14	0.00
R17		1.40	0.24	0.01
R18		9.60	1.63	0.05
R19		0.86	0.14	0.00
R20		1.31	0.22	0.01
R21		1.83	0.31	0.01
R22		2.34	0.40	0.01
R23		2.29	0.39	0.01
R24		2.73	0.46	0.01
R25		6.29	1.07	0.03
R26		3.61	0.61	0.02
Without Development	2016			
R1		1.25	0.21	0.01
R2		2.06	0.35	0.01
R3		0.95	0.16	0.01
R4		1.16	0.20	0.01
R5		0.97	0.16	0.01
R6		0.93	0.16	0.01
R7		0.81	0.14	0.00
R8		0.80	0.14	0.00
R9		0.77	0.13	0.00
R10		0.78	0.13	0.00

Receptor Name	Met Year	Pollutant concentrations at receptors (excluding background concentrations)		
		NO ₂	PM ₁₀	CO
		Annual mean µg m ⁻³	Annual mean µg m ⁻³	8-hour mean µg m ⁻³
R11		0.67	0.11	0.00
R12		0.71	0.12	0.00
R13		1.39	0.24	0.01
R14		10.07	1.71	0.05
R15		1.33	0.23	0.01
R16		0.88	0.15	0.00
R17		1.46	0.25	0.01
R18		10.10	1.71	0.05
R19		0.88	0.15	0.00
R20		1.35	0.23	0.01
R21		1.94	0.33	0.01
R22		2.47	0.42	0.01
R23		2.63	0.44	0.01
R24		2.99	0.50	0.02
R25		6.24	1.06	0.03
R26		3.61	0.61	0.02
Without Development	2017			
R1		1.15	0.20	0.01
R2		2.01	0.34	0.01
R3		0.86	0.15	0.00
R4		1.10	0.19	0.01
R5		0.82	0.14	0.00
R6		0.84	0.14	0.00

Receptor Name	Met Year	Pollutant concentrations at receptors (excluding background concentrations)		
		NO ₂	PM ₁₀	CO
		Annual mean µg m ⁻³	Annual mean µg m ⁻³	8-hour mean µg m ⁻³
R7		0.69	0.12	0.00
R8		0.72	0.12	0.00
R9		0.70	0.12	0.00
R10		0.75	0.13	0.00
R11		0.62	0.11	0.00
R12		0.69	0.12	0.00
R13		1.39	0.24	0.01
R14		9.52	1.61	0.05
R15		1.33	0.23	0.01
R16		0.87	0.15	0.00
R17		1.43	0.24	0.01
R18		9.50	1.61	0.05
R19		0.87	0.15	0.00
R20		1.34	0.23	0.01
R21		1.63	0.28	0.01
R22		2.11	0.36	0.01
R23		1.72	0.29	0.01
R24		2.14	0.36	0.01
R25		6.76	1.14	0.04
R26		4.02	0.68	0.02
With Development	2013			
R1		1.34	0.23	0.01
R2		2.18	0.37	0.01
R3		1.02	0.17	0.01

Receptor Name	Met Year	Pollutant concentrations at receptors (excluding background concentrations)		
		NO ₂	PM ₁₀	CO
		Annual mean µg m ⁻³	Annual mean µg m ⁻³	8-hour mean µg m ⁻³
R4		1.23	0.21	0.01
R5		1.04	0.18	0.01
R6		1.00	0.17	0.01
R7		0.86	0.15	0.00
R8		0.85	0.14	0.00
R9		0.81	0.14	0.00
R10		0.81	0.14	0.00
R11		0.69	0.12	0.00
R12		0.73	0.12	0.00
R13		1.46	0.25	0.01
R14		10.43	1.77	0.06
R15		1.39	0.23	0.01
R16		0.91	0.15	0.00
R17		1.54	0.26	0.01
R18		10.47	1.77	0.06
R19		0.92	0.16	0.00
R20		1.40	0.24	0.01
R21		2.15	0.36	0.01
R22		2.71	0.46	0.01
R23		2.78	0.47	0.02
R24		3.15	0.53	0.02
R25		6.56	1.11	0.04
R26		3.73	0.63	0.02
With Development	2014			

Receptor Name	Met Year	Pollutant concentrations at receptors (excluding background concentrations)		
		NO ₂	PM ₁₀	CO
		Annual mean µg m ⁻³	Annual mean µg m ⁻³	8-hour mean µg m ⁻³
R1		1.37	0.23	0.01
R2		2.28	0.39	0.01
R3		1.04	0.18	0.01
R4		1.27	0.22	0.01
R5		1.05	0.18	0.01
R6		1.02	0.17	0.01
R7		0.88	0.15	0.00
R8		0.87	0.15	0.00
R9		0.84	0.14	0.00
R10		0.85	0.14	0.00
R11		0.72	0.12	0.00
R12		0.77	0.13	0.00
R13		1.53	0.26	0.01
R14		11.02	1.87	0.06
R15		1.47	0.25	0.01
R16		0.96	0.16	0.01
R17		1.61	0.27	0.01
R18		11.05	1.87	0.06
R19		0.97	0.16	0.01
R20		1.48	0.25	0.01
R21		2.14	0.36	0.01
R22		2.72	0.46	0.01
R23		2.75	0.46	0.01
R24		3.14	0.53	0.02

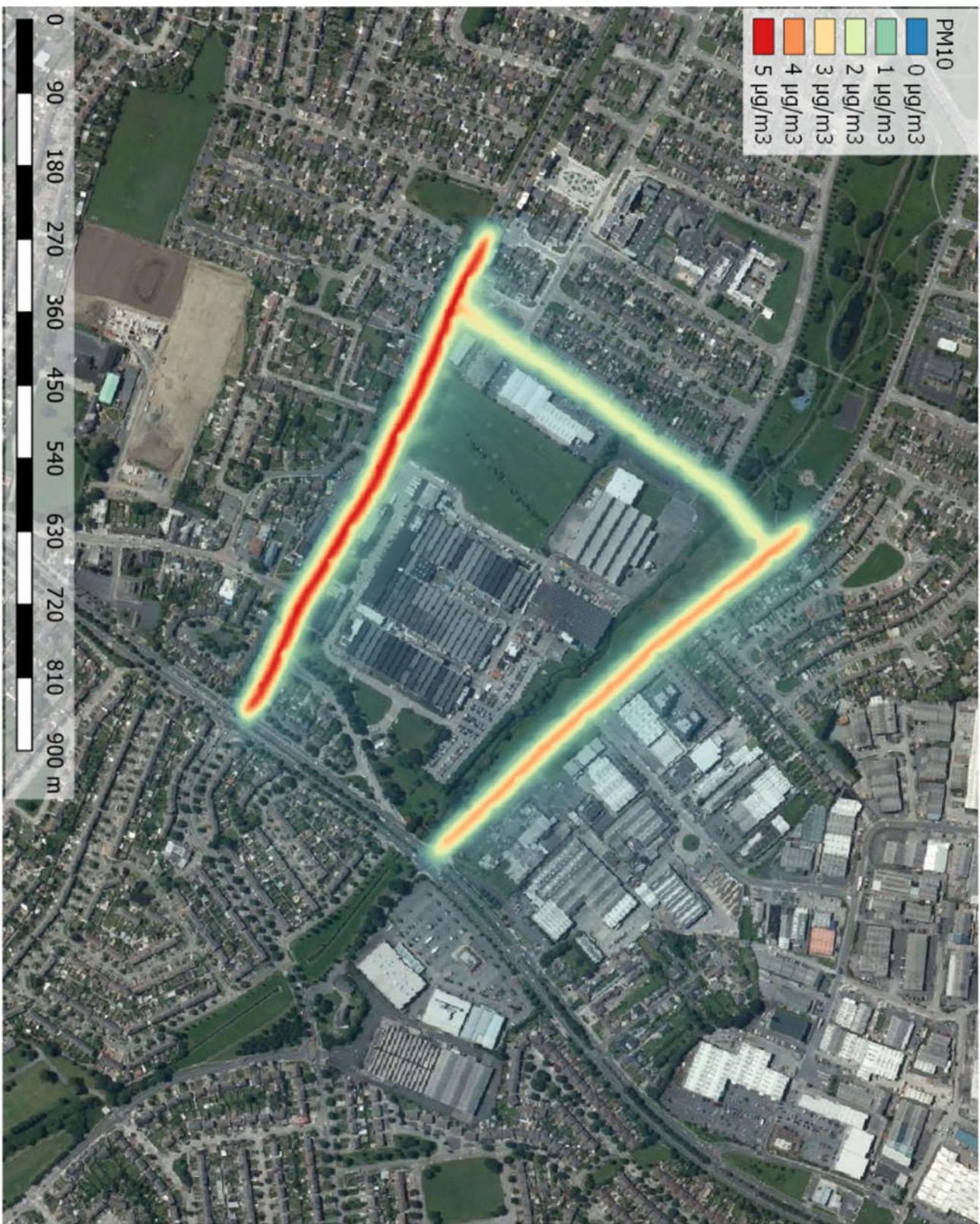
Receptor Name	Met Year	Pollutant concentrations at receptors (excluding background concentrations)		
		NO ₂	PM ₁₀	CO
		Annual mean µg m ⁻³	Annual mean µg m ⁻³	8-hour mean µg m ⁻³
R25		6.92	1.17	0.04
R26		3.98	0.68	0.02
With Development	2015			
R1		1.31	0.22	0.01
R2		2.20	0.37	0.01
R3		0.98	0.17	0.01
R4		1.22	0.21	0.01
R5		0.99	0.17	0.01
R6		0.97	0.16	0.01
R7		0.82	0.14	0.00
R8		0.83	0.14	0.00
R9		0.79	0.13	0.00
R10		0.82	0.14	0.00
R11		0.69	0.12	0.00
R12		0.74	0.13	0.00
R13		1.49	0.25	0.01
R14		10.65	1.81	0.06
R15		1.43	0.24	0.01
R16		0.93	0.16	0.01
R17		1.55	0.26	0.01
R18		10.67	1.81	0.06
R19		0.94	0.16	0.01
R20		1.45	0.25	0.01
R21		2.02	0.34	0.01

Receptor Name	Met Year	Pollutant concentrations at receptors (excluding background concentrations)		
		NO ₂	PM ₁₀	CO
		Annual mean µg m ⁻³	Annual mean µg m ⁻³	8-hour mean µg m ⁻³
R22		2.58	0.44	0.01
R23		2.44	0.41	0.01
R24		2.89	0.49	0.02
R25		6.91	1.17	0.04
R26		3.98	0.67	0.02
With Development	2016			
R1		1.38	0.23	0.01
R2		2.28	0.39	0.01
R3		1.04	0.18	0.01
R4		1.28	0.22	0.01
R5		1.06	0.18	0.01
R6		1.03	0.17	0.01
R7		0.89	0.15	0.00
R8		0.88	0.15	0.00
R9		0.84	0.14	0.00
R10		0.86	0.14	0.00
R11		0.73	0.12	0.00
R12		0.77	0.13	0.00
R13		1.54	0.26	0.01
R14		11.19	1.89	0.06
R15		1.47	0.25	0.01
R16		0.97	0.16	0.01
R17		1.61	0.27	0.01
R18		11.22	1.90	0.06

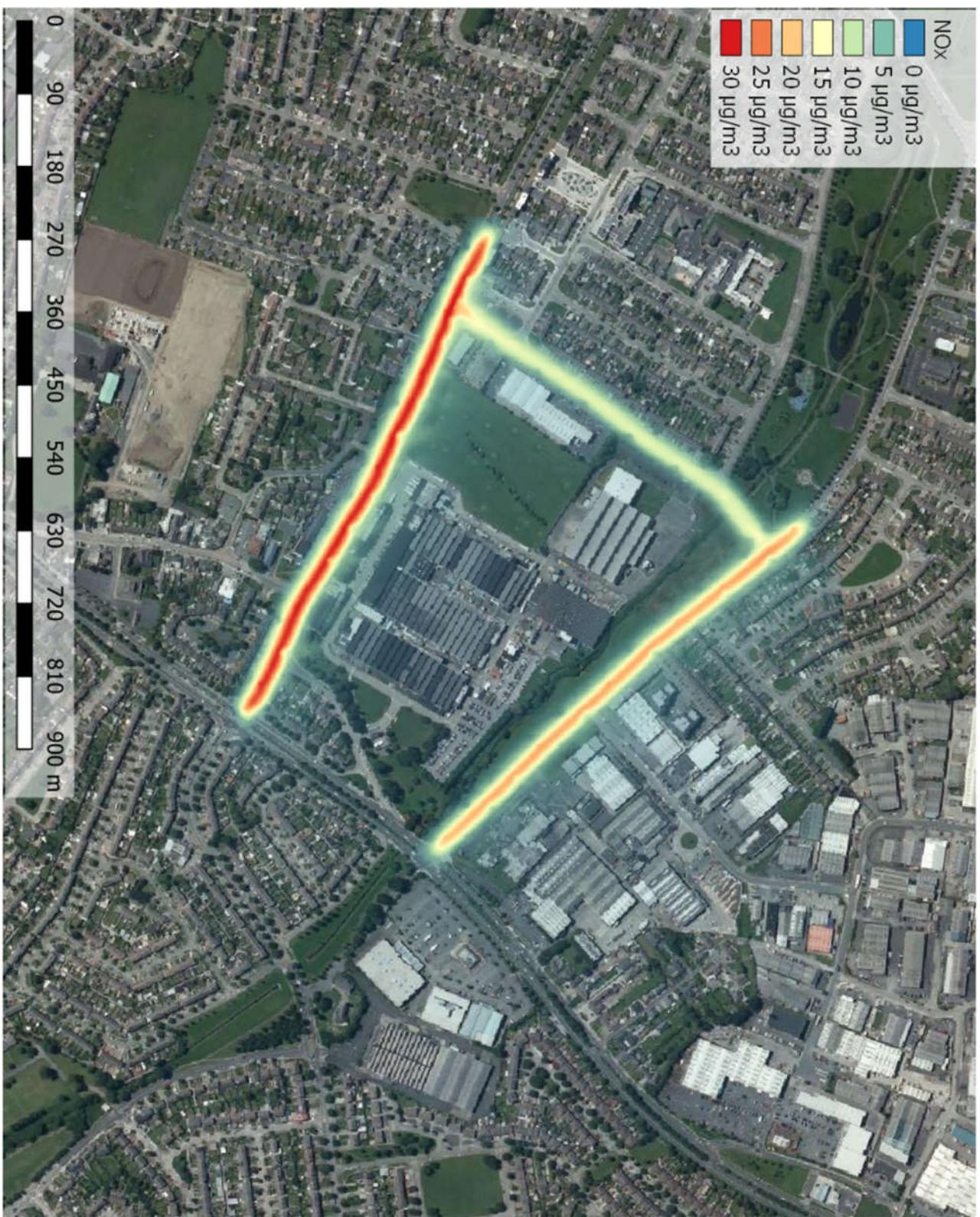
Receptor Name	Met Year	Pollutant concentrations at receptors (excluding background concentrations)		
		NO ₂	PM ₁₀	CO
		Annual mean µg m ⁻³	Annual mean µg m ⁻³	8-hour mean µg m ⁻³
R19		0.97	0.16	0.01
R20		1.48	0.25	0.01
R21		2.15	0.36	0.01
R22		2.72	0.46	0.01
R23		2.80	0.47	0.02
R24		3.17	0.53	0.02
R25		6.85	1.16	0.04
R26		3.98	0.67	0.02
With Development	2017			
R1		1.85	0.31	0.01
R2		3.03	0.51	0.02
R3		1.42	0.24	0.01
R4		1.73	0.29	0.01
R5		1.43	0.24	0.01
R6		1.40	0.24	0.01
R7		1.21	0.20	0.01
R8		1.20	0.20	0.01
R9		1.16	0.20	0.01
R10		1.19	0.20	0.01
R11		1.03	0.18	0.01
R12		1.11	0.19	0.01
R13		2.09	0.35	0.01
R14		13.64	2.31	0.07
R15		2.00	0.34	0.01

Receptor Name	Met Year	Pollutant concentrations at receptors (excluding background concentrations)		
		NO ₂	PM ₁₀	CO
		Annual mean µg m ⁻³	Annual mean µg m ⁻³	8-hour mean µg m ⁻³
R16		1.35	0.23	0.01
R17		2.17	0.37	0.01
R18		13.61	2.31	0.07
R19		1.35	0.23	0.01
R20		2.02	0.34	0.01
R21		2.42	0.41	0.01
R22		3.14	0.53	0.02
R23		2.80	0.48	0.02
R24		3.51	0.60	0.02
R25		13.54	2.29	0.07
R26		7.65	1.29	0.04
Limit Value		40 µg m ⁻³	40 µg m ⁻³	10 µg m ⁻³

Appendix 12.2 Graphical Representation of pollutant concentrations due to traffic emissions



Project ID:	IRWIN CARR CONSULTING
Modeller:	Output type: $\mu\text{g}/\text{m}^3$
C. Jordan	Notes: PM10 values 0-5 $\mu\text{g}/\text{m}^3$
Date	
April 04 - 2019	



Project ID: 201793	Company Name IRWIN CARR CONSULTING	Output type: $\mu\text{g}/\text{m}^3$
	Notes: NOx values 0-30 $\mu\text{g}/\text{m}^3$	
	Modeller: C. Jordan	Date April 04 - 2019



Project ID: 201793	Company Name IRWIN CARR CONSULTING
Date April 04 - 2019	Output type: $\mu\text{g}/\text{m}^3$
Notes: CO values 0-0.2 $\mu\text{g}/\text{m}^3$	Modeller: C. Jordan