M2 Junction 5 Improvements Environmental Statement Volume 2 - Appendix B Air Quality June 2019

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Reviewer List

Name	Role
Environment Support Centre	SES Environment Group

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Appendix B (Air Quality)

Appendix B. Air Quality

B.1 $PM_{2.5}$

B.1.1 At the closest monitoring station to the Scheme, the Chatham Roadside site, concentrations measured between 2013 and 2017 were below the annual mean air quality criterion of 25 µg/m³, ranging between 12 µg/m³ and 14 µg/m³.

B.1.2 Highways England has calculated that a large increase in 10,000 vehicles a day at a point very close to the edge of a motorway (5m), would lead to an increase in $PM_{2.5}$ of approximately 0.5 µg/m³, and even allowing for an uncertainty estimate of a factor of 2, would result in a maximum change of 1 µg/m³.

B.1.3 Combining a maximum increase in $PM_{2.5}$ roadside concentrations of 1 µg/m³ with a measured concentration of 14 µg/m³, as recorded at Chatham Roadside in 2017, would result in a concentration of 15 µg/m³, which is 10 µg/m³ below the limit value. On this basis there is not considered to be a risk that the Scheme would exceed the $PM_{2.5}$ air quality criterion and consequently an assessment of $PM_{2.5}$ has not been undertaken for this Scheme.

B.2 Further Details on Dispersion Modelling

B.2.1 The dispersion model was set up based on the following key inputs and assumptions:

- Road sources were modelled using the ADMS-Roads source representation tool;
- Ordnance Survey Master Map topography base mapping was used to define the road geometry;
- A single centreline was entered in the model for modelled roads with the exception of dual carriageways and motorway links which have a centreline included for both carriageway directions; and
- Road widths assumed a standard single carriageway width of 3.65 m where obtaining distinct widths was not possible from Ordnance Survey Master Map data.

B.2.2 Hourly sequential meteorological data for 2016 Gravesend meteorological station was used. The parameters required by the model included: date, time, wind direction (angle wind blowing from), wind speed (at 10 metres above ground level), surface air temperature (degrees Celsius), and cloud cover (oktas – or eighths of sky covered).

B.2.3 A latitude of 51.2 degrees was selected. This determines times of sunrise and sunset for each day throughout the year, which in turn affects stability calculations.

B.2.4 Surface roughness coefficients have been defined as 0.3 metres (representative of agricultural areas (max)) for the air quality study area and 0.5 metres (representative of parkland, open suburbia) for the meteorological site. The surface roughness is important in the approximation of turbulent conditions within

the atmospheric boundary layer and thus in the estimation of pollutant concentrations at receptors.

B.2.5 Minimum Monin-Obukhov length (to reasonably limit the occurrence of very stable atmospheric conditions) has been defined as 10 metres at both the meteorological site and dispersion site (representative of small towns). This parameter limits the occurrence of very stable boundary layer conditions (i.e. when the air is still) to a degree that is appropriate to the general land-use. In general the potential for very stable conditions is lowest in large urban areas where the 'heat island' effect promoting turbulent motion in the boundary layer is strongest.

B.3 Comparison of Background Concentrations

Table B.1: Comparison of Measured and Mapped Background NO_2 Concentrations (µg/m^3)

Site Name	Site Type	Monitoring Type	Grid Reference	Monitored Concentration 2016	Mapped Concentration 2016	% Difference
Maidstone Rural	Rural Background	Automatic	580108, 159703	12.0	12.2	-2%
Rochester Stoke	Rural Background	Automatic	583164, 176313	13.3	12.0	10%
Average						4%

Table B.2: Comparison of Measured and Mapped Background PM_{10} Concentrations (µg/m^3)

Site Name	Site Type	Monitoring Type	Grid Reference	Monitored Concentration 2016	Mapped Concentration 2016	% Difference
Maidstone Rural	Rural Background	Automatic	580108, 159703	20.0	14.2	29%
Rochester Stoke	Rural Background	Automatic	583164, 176313	15.8	14.9	6%
Average						17%

B.4 Model Verification

Table B.3: Diffusion Tube Sites Excluded from Model Verification

Site ID	X, Y	Reason for exclusion from verification
M2J5_005_2016	587469, 161377	Not able to accurately reflect gradient effects at this location
M2J5_007_2016	587967, 164216	Not able to accurately reflect gradient effects at this location
M2J5_010_2016	587775, 163468	Beyond modelled domain
M2J5_011_2016	588687, 162733	Excluded as traffic model predicts no flow on sections of this link
M2J5_014_2016	579733, 163371	Beyond modelled domain

Site ID	X, Y	Reason for exclusion from verification
M2J5_015_2016	580522, 163095	Beyond modelled domain
M2J5_016_2016	580022, 163054	Beyond modelled domain
M2J5_017abc_2016	585861, 164816	Beyond modelled domain
M2J5_018_2016	583390, 162002	Beyond modelled domain

Table B.4: Comparison of Unadjusted Modelled and Measured NO_2 Concentrations (µg/m^3)

Site ID	Modelled NO_2	Measured NO_2	Modelled - Measured	Modelled / Measured	% Difference
M2J5_001_2016	26.9	52.3	-25.4	0.5	-49%
M2J5_002_2016	20.1	29.2	-9.1	0.7	-31%
M2J5_003_2016	19.2	22.7	-3.5	0.8	-15%
M2J5_004_2016	23.6	27.6	-4.1	0.9	-15%
M2J5_006_2016	29.0	29.3	-0.4	1.0	-1%
M2J5_008_2016	14.0	20.8	-6.8	0.7	-33%
M2J5_009_2016	18.4	24.6	-6.3	0.7	-25%
M2J5_012_2016	19.5	20.7	-1.1	0.9	-6%
M2J5_013_2016	24.0	23.9	0.1	1.0	+1%
SW62	30.3	38.3	-8.0	0.8	-21%
Maid66	26.3	31.0	-4.7	0.8	-15%

Table B.5: Comparison of Modelled and Measured Road NO_x Concentrations (µg/m^3)

Site ID	Modelled Road NO_x	Measured Road NO_x	Modelled - Measured	Modelled / Measured	% Difference
M2J5_001_2016	29.0	88.8	-59.8	3.1	-67%
M2J5_002_2016	15.4	33.9	-18.5	2.2	-55%
M2J5_003_2016	11.6	18.4	-6.8	1.6	-37%
M2J5_004_2016	20.3	28.6	-8.3	1.4	-29%
M2J5_006_2016	32.5	33.3	-0.8	1.0	-2%
M2J5_008_2016	5.3	18.3	-13.1	3.5	-71%
M2J5_009_2016	11.6	24.0	-12.4	2.1	-52%
M2J5_012_2016	17.1	19.4	-2.3	1.1	-12%
M2J5_013_2016	22.0	21.8	0.3	1.0	+1%
SW62	35.3	53.2	-17.9	1.5	-34%
Maid66	25.5	35.4	-9.8	1.4	-28%

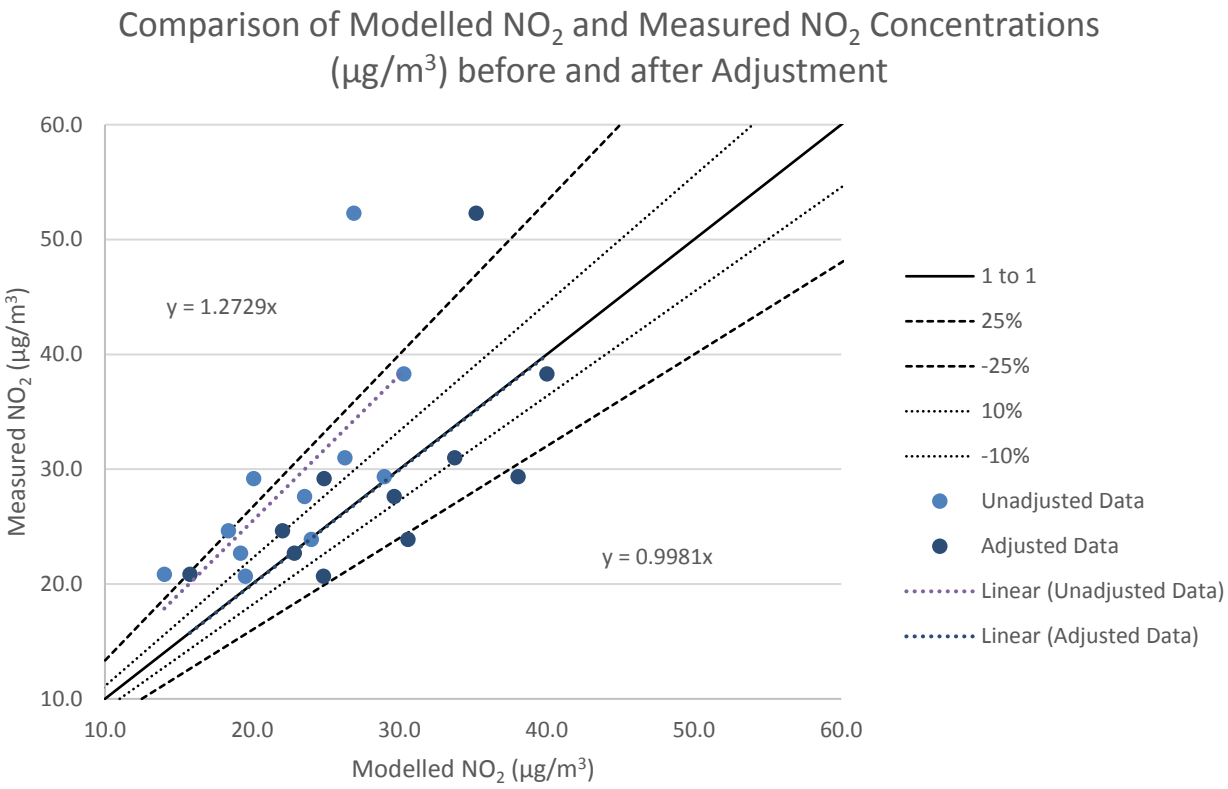
Table B.6: Adjustment Factors and Model Performance Statistics

Number of Monitoring Sites included in verification	Number of Monitoring Sites within ±25% of the Monitored Concentration Pre-Adjustment	Raw RMSE (Pre-Adjustment µg/m^3)	Model Adjustment Factor	Adjusted Model RMSE	Fractional Bias (Post Adjustment)	Number of Monitoring Sites within ±25% of the Monitored Concentration Post-Adjustment
11	7	9.19	1.62	6.71	0.01	8

Table B.7: Comparison of Adjusted Modelled and Measured NO_2 Concentrations

Site ID	Adjusted Modelled Total NO_2	Measured NO_2	Modelled - Measured	Modelled / Measured	% Difference
M2J5_001_2016	35.2	52.3	-17.1	0.7	-33%
M2J5_002_2016	24.9	29.2	-4.3	0.9	-15%
M2J5_003_2016	22.9	22.7	0.2	1.0	+1%
M2J5_004_2016	29.6	27.6	2.0	1.1	+7%
M2J5_006_2016	38.1	29.3	8.7	1.3	+30%
M2J5_008_2016	15.8	20.8	-5.1	0.8	-24%
M2J5_009_2016	22.1	24.6	-2.6	0.9	-10%
M2J5_012_2016	24.8	20.7	4.2	1.2	+20%
M2J5_013_2016	30.6	23.9	6.7	1.3	+28%
SW62	40.0	38.3	1.7	1.0	+4%
Maid66	33.7	31.0	2.8	1.1	+9%

Figure B.1: Comparison of Modelled and Measured NO_2 Concentrations ($\mu g/m^3$) before and after Adjustment



B.5 Trend Analysis

Table B.1: Summary of Annual Mean NO_2 Trend Analysis

Site ID	Site Type	Monitoring Type	Local Authority	Number of Data Points	Required S Value	S Value	Sen's Slope	Significant (Y/N)
CM2	Other (semi-rural)	Automatic	Maidstone	9	+/-18	-18	-0.4	Y (0.1)
CM1	Roadside	Automatic	Maidstone	8	+/-16	-16	-2.2	Y (0.1)
ZW3	Roadside	Automatic	Swale	9	+/-18	+4	+0.1	N
ZW6	Roadside	Automatic	Swale	7	+/-13	0	0.0	N
ZW7	Roadside	Automatic	Swale	6	+/-11	-5	-0.5	N
ZW8	Roadside	Automatic	Swale	5	+/-8	+5	+0.4	N

Site ID	Site Type	Monitoring Type	Local Authority	Number of Data Points	Required S Value	S Value	Sen's Slope	Significant (Y/N)
Maid 66	Other (semi-rural)	Diffusion tube	Maidstone	8	+/-16	-14	-0.7	N
SW6 2	Kerbside	Diffusion tube	Swale	9	+/-18	-16	-1.3	N

B.6 Receptors

Table B.2: Discrete Receptors included in the Dispersion Model

Receptor ID	Name	X	Y	Local Authority
R1	Workhouse Cottage, Detling	578495	157734	Maidstone
R2	1 Pilgrims Way, Detling	579096	158402	Maidstone
R3	Bluebells Short Break Unit, Detling	579212	158331	Maidstone
R4	Ducklings of Detling Pre-School, Detling	579262	158338	Maidstone
R5	1 East Court Cottages, Detling	579357	158393	Maidstone
R6	Pilgrims Lodge, Detling Hill, Detling	580073	158655	Maidstone
R7	Huntersfield, Detling Hill, Detling	580149	158756	Maidstone
R8	33 Wollaston Close, Gillingham	580614	163126	Medway
R9	Kent County Show Ground, Detling	580693	158832	Maidstone
R10	20 Burnham Walk, Gillingham	581325	163403	Medway
R11	Aspen House, Matts Hill Road, Gillingham	581439	163230	Medway
R12	Fosters, Detling Hill, Detling	581456	159229	Maidstone
R13*	Footpath to the north of the M2 at Reed's Shaw	582131	163591	Swale
R14*	Footpath to the east of A429 at Longton Wood	582985	160131	Maidstone
R15	Oak Barn Cottages, Yaughter Lane, Hartlip	583079	163596	Swale
R16	Halfway, Stockbury Valley, Stockbury	583408	160461	Maidstone
R17	Greenways, Stockbury Valley, Stockbury	584122	160868	Maidstone
R18	Three Squirrels, Stockbury Valley, Stockbury	584147	160946	Maidstone
R19	Vale Cottages, Stockbury Valley, Stockbury	585200	161711	Maidstone
R20	Whipstakes Farm, Stockbury Valley, Stockbury	585539	161852	Maidstone
R21*	Footpath to the north of M2 J5	585619	162466	Swale
R22	High Trees, Maidstone Road, Borden	585897	162726	Swale
R23	Lancastria, Maidstone Road, Borden	586074	162829	Swale
R24	The Studio, Oak Street, Borden	586097	162176	Swale
R25	Snords Cottages, Maidstone Road, Borden	586274	163101	Swale
R26*	Footpath to the north of the M2	586714	161738	Swale
R27	The Chapel, Oad Street, Borden	586949	162135	Swale
R28	Shillinghurst Cottages, Oad Street, Borden	586987	162124	Swale
R29	Scoones Cottage, Keycol Hill, Bobbing	587117	164472	Swale

Receptor ID	Name	X	Y	Local Authority
R30	Belle Vue, Keycol Hill, Bobbing	587119	164489	Swale
R31	Hazeldene, Chestnut Street, Borden	587195	163696	Swale
R32	Mount Place, Chestnut Street, Borden	587235	163737	Swale
R33	Chestnut Cottage, Chestnut Street, Borden	587578	163916	Swale
R34	Olde Houses, Chestnut Street, Borden	587582	163893	Swale
R35	Hengist Field Care Centre, Borden	587665	162059	Swale
R36	Florence Cottages, Chestnut Street, Borden	587670	163977	Swale
R37	Ma Alehsh, Pond Farm Road, Borden	587802	162134	Swale
R38	Forward Care Home, Bobbing	587836	164298	Swale
R39	14 Keycol Hill, Bobbing	587910	164297	Swale
R40	Leabank, Old Maidstone Road, Bobbing	587936	164225	Swale
R41	Bobbing Hill House, Bobbing	588027	164324	Swale
R42	12 Key Street, Sittingbourne	588150	164228	Swale
R43	2 Netherend Villas, Bredgar	588238	160832	Swale
R44	Pine Lodge Care Centre, Sittingbourne	588254	164202	Swale
R45	Ridgway, Rookery Close, Bredgar	588276	160897	Swale
R46	66 Key Street, Sittingbourne	588362	164179	Swale
R47	45 Key Street, Sittingbourne	588365	164199	Swale
R48*	Play area and cricket ground on Key Street	588431	164185	Swale
R49	1 Barn Close, Borden	588489	162838	Swale
R50	Harmans Corner House, The Street, Borden	588713	162724	Swale
R51	136 Borden Lane, Borden	588872	162887	Swale
R52	122 Borden Lane, Sittingbourne	589185	163279	Swale
R53	189 Borden Lane, Sittingbourne	589219	163265	Swale
R54	Picton Hall, Sharsted Road, Doddington	594256	159092	Swale
R55	Little Sharsted Farmhouse, Sharsted Rd, Doddington	594412	158991	Swale
R56	1 The Kennels, Rushett Lane, Norton	597192	159353	Swale
R57	Highfield, Faversham Road, Ospringe	597323	159192	Swale
R58	1 Broomhill Cottages, Ospringe	599150	159680	Swale
R59	1 Abbots Hill Cottages, Ospringe	599551	159758	Swale
*Selected for comparison with 1-hour mean NO_2 AQS objective				

Table B.3: Ecological Receptors included in the Dispersion Model

Receptor ID	Distance to the Road Edge (metres)	Name	X	Y	Local Authority
Wouldham_SSSI_11m	11	Wouldham to Detling Escarpment (SSSI) - 11m north of A249	579400	158447	Maidstone
Wouldham_SSSI_16m	16	Wouldham to Detling Escarpment (SSSI) - 16m north of A249	579400	158452	Maidstone
Wouldham_SSSI_21m	21	Wouldham to Detling Escarpment (SSSI) - 21m north of A249	579400	158457	Maidstone

Receptor ID	Distance to the Road Edge (metres)	Name	X	Y	Local Authority
Wouldham_SSSI_26m	26	Wouldham to Detling Escarpment (SSSI) - 26m north of A249	579400	158462	Maidstone
Wouldham_SSSI_31m	31	Wouldham to Detling Escarpment (SSSI) - 31m north of A249	579400	158467	Maidstone
Wouldham_SSSI_41m	41	Wouldham to Detling Escarpment (SSSI) - 41m north of A249	579400	158477	Maidstone
Wouldham_SSSI_51m	51	Wouldham to Detling Escarpment (SSSI) - 51m north of A249	579401	158487	Maidstone
Wouldham_SSSI_61m	61	Wouldham to Detling Escarpment (SSSI) - 61m north of A249	579401	158497	Maidstone
Wouldham_SSSI_71m	71	Wouldham to Detling Escarpment (SSSI) - 71m north of A249	579401	158507	Maidstone
Wouldham_SSSI_81m	81	Wouldham to Detling Escarpment (SSSI) - 81m north of A249	579401	158517	Maidstone
Wouldham_SSSI_91m	91	Wouldham to Detling Escarpment (SSSI) - 91m north of A249	579401	158527	Maidstone
Wouldham_SSSI_101m	101	Wouldham to Detling Escarpment (SSSI) - 101m north of A249	579401	158537	Maidstone
Wouldham_SSSI_111m	111	Wouldham to Detling Escarpment (SSSI) - 111m north of A249	579401	158547	Maidstone
Wouldham_SSSI_136m	136	Wouldham to Detling Escarpment (SSSI) - 136m north of A249	579402	158572	Maidstone
Wouldham_SSSI_161m	161	Wouldham to Detling Escarpment (SSSI) - 161m north of A249	579402	158597	Maidstone
Wouldham_SSSI_186m	186	Wouldham to Detling Escarpment (SSSI) - 186m north of A249	579402	158622	Maidstone
Queensdown_SSSI_155m	155	Queendown Warren (SSSI/SAC) - 155m south of M2	583208	163359	Swale
Queensdown_SSSI_160m	160	Queendown Warren (SSSI/SAC) - 160m south of M2	583206	163354	Swale
Queensdown_SSSI_165m	165	Queendown Warren (SSSI/SAC) - 165m south of M2	583205	163349	Swale
Queensdown_SSSI_170m	170	Queendown Warren (SSSI/SAC) - 170m south of M2	583204	163344	Swale
Queensdown_SSSI_175m	175	Queendown Warren (SSSI/SAC) - 175m south of M2	583203	163339	Swale

Receptor ID	Distance to the Road Edge (metres)	Name	X	Y	Local Authority
Queensdown _SSSI_185m	185	Queendown Warren (SSSI/SAC) - 185m south of M2	583201	163330	Swale

B.7 Results

Gap Factor Calculations

Table B.4: Derivation of GAP Factor in Accordance with Highways England IAN 170/12v3 LTTE6 for Human Health Receptors

Receptor ID	Base 2016 NO_2	Projected Base NO_2	2022 Long Term Adjustment Factor / 2016 Long Term Adjustment Factor (Ratio B)	Projected Base NO_2 / Base 2016 NO_2 (Ratio A)	Gap Factor (Ratio B/ Ratio A)
R1	40.2	27.8	0.8	0.7	1.2
R2	38.6	26.8	0.8	0.7	1.2
R3	20.8	15.2	0.8	0.7	1.1
R4	20.6	15.0	0.8	0.7	1.1
R5	27.9	19.7	0.8	0.7	1.1
R6	27.5	19.2	0.8	0.7	1.1
R7	26.9	18.9	0.8	0.7	1.1
R8	27.4	19.4	0.8	0.7	1.1
R9	40.8	28.0	0.8	0.7	1.2
R10	26.3	18.5	0.8	0.7	1.1
R11	20.0	14.7	0.8	0.7	1.1
R12	30.8	21.5	0.8	0.7	1.2
R13*	44.8	30.3	0.8	0.7	1.2
R14*	29.4	20.4	0.8	0.7	1.2
R15	35.8	24.4	0.8	0.7	1.2
R16	30.4	21.0	0.8	0.7	1.2
R17	22.1	15.7	0.8	0.7	1.1
R18	40.0	27.5	0.8	0.7	1.2
R19	31.0	21.4	0.8	0.7	1.2
R20	22.5	16.1	0.8	0.7	1.1
R21*	51.5	34.5	0.8	0.7	1.2
R22	26.5	18.3	0.8	0.7	1.2
R23	23.0	16.4	0.8	0.7	1.1
R24	26.5	18.7	0.8	0.7	1.1
R25	24.4	17.2	0.8	0.7	1.1
R26*	42.2	28.5	0.8	0.7	1.2
R27	21.0	15.6	0.8	0.7	1.1

Receptor ID	Base 2016 NO_2	Projected Base NO_2	2022 Long Term Adjustment Factor / 2016 Long Term Adjustment Factor (Ratio B)	Projected Base NO_2 / Base 2016 NO_2 (Ratio A)	Gap Factor (Ratio B/ Ratio A)
R28	20.2	15.1	0.8	0.7	1.1
R29	30.4	21.4	0.8	0.7	1.1
R30	31.1	21.8	0.8	0.7	1.1
R31	20.8	15.0	0.8	0.7	1.1
R32	24.5	17.3	0.8	0.7	1.1
R33	23.7	16.8	0.8	0.7	1.1
R34	20.6	14.9	0.8	0.7	1.1
R35	15.0	11.5	0.8	0.8	1.0
R36	26.1	18.3	0.8	0.7	1.1
R37	16.7	12.6	0.8	0.8	1.1
R38	31.7	22.1	0.8	0.7	1.1
R39	36.4	25.2	0.8	0.7	1.2
R40	30.9	21.3	0.8	0.7	1.2
R41	28.8	20.2	0.8	0.7	1.1
R42	37.4	25.6	0.8	0.7	1.2
R43	22.9	16.0	0.8	0.7	1.1
R44	30.1	21.0	0.8	0.7	1.1
R45	34.2	23.1	0.8	0.7	1.2
R46	30.7	21.4	0.8	0.7	1.2
R47	31.2	21.7	0.8	0.7	1.2
R48*	30.3	21.2	0.8	0.7	1.1
R49	15.4	11.9	0.8	0.8	1.0
R50	16.1	12.3	0.8	0.8	1.0
R51	14.6	11.3	0.8	0.8	1.0
R52	15.0	11.9	0.8	0.8	1.0
R53	14.6	11.6	0.8	0.8	1.0
R54	22.3	15.4	0.8	0.7	1.2
R55	27.5	18.6	0.8	0.7	1.2
R56	19.5	13.6	0.8	0.7	1.2
R57	15.1	10.9	0.8	0.7	1.1
R58	17.1	12.2	0.8	0.7	1.1
R59	33.6	22.4	0.8	0.7	1.2
*Selected for comparison with 1-hour mean NO_2 AQS objective					

Table B.5: Derivation of GAP Factor for NO_x in Accordance with Highways England IAN 170/12v3 LTTE6 for Ecological Receptors

Receptor ID	Base 2016 NO_x	Projected Base NO_x	2022 Long Term Adjustment Factor / 2016 Long Term Adjustment Factor (Ratio B)	Projected Base NO_x / Base 2016 NO_x (Ratio A)	Gap Factor (Ratio B/ Ratio A)
Wouldham_SSSI_11m	71.2	45.8	0.7	0.6	1.1
Wouldham_SSSI_16m	62.8	40.8	0.7	0.6	1.1
Wouldham_SSSI_21m	56.9	37.2	0.7	0.7	1.1
Wouldham_SSSI_26m	52.6	34.6	0.7	0.7	1.1
Wouldham_SSSI_31m	49.2	32.6	0.7	0.7	1.1
Wouldham_SSSI_41m	44.4	29.7	0.7	0.7	1.1
Wouldham_SSSI_51m	40.9	27.7	0.7	0.7	1.1
Wouldham_SSSI_61m	38.4	26.1	0.7	0.7	1.1
Wouldham_SSSI_71m	36.4	25.0	0.7	0.7	1.1
Wouldham_SSSI_81m	34.9	24.0	0.7	0.7	1.1
Wouldham_SSSI_91m	33.6	23.3	0.7	0.7	1.1
Wouldham_SSSI_101m	32.5	22.6	0.7	0.7	1.1
Wouldham_SSSI_111m	31.5	22.1	0.7	0.7	1.1
Wouldham_SSSI_136m	29.7	21.0	0.7	0.7	1.0
Wouldham_SSSI_161m	28.3	20.2	0.7	0.7	1.0
Wouldham_SSSI_186m	27.3	19.6	0.7	0.7	1.0
Queensdown_SSSI_155m	27.7	19.8	0.7	0.7	1.0
Queensdown_SSSI_160m	27.5	19.7	0.7	0.7	1.0
Queensdown_SSSI_165m	27.3	19.6	0.7	0.7	1.0
Queensdown_SSSI_170m	27.0	19.4	0.7	0.7	1.0
Queensdown_SSSI_175m	26.8	19.3	0.7	0.7	1.0
Queensdown_SSSI_185m	26.4	19.1	0.7	0.7	1.0
Queensdown_SSSI_195m	26.1	18.9	0.7	0.7	1.0

Human Health Results

Table B.6: Estimated Annual Mean NO_2 concentrations (µg/m^3) for Human Health Receptors, Highways England IAN 170/12v3 LTTE6 method

Receptor ID	Background 2016 NO_2	2016 Base NO_2	Background 2022 NO_2	2022 DM NO_2	2022 DS NO_2	2022 NO_2 Change	2022 NO_2 Change Criteria
R1	13.5	**40.2**	10.9	32.1	32.6	0.5	Small increase
R2	13.1	38.6	10.5	30.7	31.2	0.5	Small increase
R3	13.1	20.8	10.5	16.7	16.9	0.2	Imperceptible
R4	13.1	20.6	10.5	16.5	16.7	0.2	Imperceptible
R5	13.1	27.9	10.5	22.5	22.8	0.3	Imperceptible
R6	12.4	27.5	9.9	22.2	22.5	0.3	Imperceptible
R7	12.4	26.9	9.9	21.6	21.9	0.3	Imperceptible
R8	14.2	27.4	11.7	22.5	22.7	0.2	Imperceptible

Receptor ID	Background 2016 NO_2	2016 Base NO_2	Background 2022 NO_2	2022 DM NO_2	2022 DS NO_2	2022 NO_2 Change	2022 NO_2 Change Criteria
R9	12.4	**40.8**	9.9	32.8	33.3	0.5	Small increase
R10	13.1	26.3	10.7	21.7	21.8	0.1	Imperceptible
R11	13.1	20.0	10.7	16.3	16.4	0.1	Imperceptible
R12	11.5	30.8	9.4	24.7	25.1	0.4	Imperceptible
R13*	12.9	**44.8**	10.6	37.4	37.8	0.4	Imperceptible
R14*	11.6	29.4	9.5	23.7	24.2	0.5	Small increase
R15	12.5	35.8	10.3	29.8	30.0	0.2	Imperceptible
R16	11.1	30.4	9.1	24.5	24.9	0.4	Imperceptible
R17	11.2	22.1	9.1	17.8	18.0	0.2	Imperceptible
R18	11.2	**40.0**	9.1	32.1	32.5	0.4	Imperceptible
R19	12.0	31.0	9.7	25.0	18.6	-6.4	Large decrease
R20	12.0	22.5	9.7	18.1	19.1	1.0	Small increase
R21*	12.0	**51.5**	9.7	**42.9**	**53.2**	10.3	Large increase
R22	12.0	26.5	9.7	22.1	21.5	-0.6	Small decrease
R23	13.0	23.0	10.5	18.9	18.2	-0.7	Small decrease
R24	13.0	26.5	10.5	21.6	21.2	-0.4	Imperceptible
R25	12.2	24.4	10.0	20.1	18.9	-1.2	Small decrease
R26*	11.4	**42.2**	9.3	35.1	35.2	0.1	Imperceptible
R27	13.0	21.0	10.5	16.9	16.2	-0.7	Small decrease
R28	13.0	20.2	10.5	16.3	15.7	-0.6	Small decrease
R29	12.1	30.4	10.0	24.5	24.5	<0.1	Imperceptible
R30	12.1	31.1	10.0	25.0	25.0	<0.1	Imperceptible
R31	12.2	20.8	9.9	17.0	16.4	-0.6	Small decrease
R32	12.2	24.5	9.9	20.0	18.5	-1.5	Small decrease
R33	12.2	23.7	9.9	19.2	18.1	-1.1	Small decrease
R34	12.2	20.6	9.9	16.8	16.2	-0.6	Small decrease
R35	12.1	15.0	9.8	12.1	12.0	-0.1	Imperceptible
R36	12.2	26.1	9.9	21.1	20.0	-1.1	Small decrease
R37	12.1	16.7	9.8	13.4	12.7	-0.7	Small decrease
R38	12.1	31.7	10.0	25.6	25.7	0.1	Imperceptible
R39	12.1	36.4	10.0	29.4	29.5	0.1	Imperceptible
R40	12.1	30.9	10.0	25.0	25.2	0.2	Imperceptible
R41	12.5	28.8	10.3	23.3	23.4	0.1	Imperceptible
R42	12.5	37.4	10.3	30.3	30.7	0.4	Imperceptible
R43	10.4	22.9	8.5	18.8	18.9	0.1	Imperceptible

Receptor ID	Background 2016 NO_2	2016 Base NO_2	Background 2022 NO_2	2022 DM NO_2	2022 DS NO_2	2022 NO_2 Change	2022 NO_2 Change Criteria
R44	12.5	30.1	10.3	24.3	24.6	0.3	Imperceptible
R45	10.4	34.2	8.5	28.4	28.5	0.1	Imperceptible
R46	12.5	30.7	10.3	24.8	25.1	0.3	Imperceptible
R47	12.5	31.2	10.3	25.2	25.6	0.4	Imperceptible
R48*	12.5	30.3	10.3	24.5	24.8	0.3	Imperceptible
R49	11.6	15.4	9.5	12.4	11.7	-0.7	Small decrease
R50	11.6	16.1	9.5	12.9	12.0	-0.9	Small decrease
R51	11.6	14.6	9.5	11.7	11.2	-0.5	Small decrease
R52	12.3	15.0	10.2	12.1	11.8	-0.3	Imperceptible
R53	12.3	14.6	10.2	11.7	11.6	-0.1	Imperceptible
R54	9.7	22.3	7.9	18.4	18.5	0.1	Imperceptible
R55	9.3	27.5	7.5	22.7	22.8	0.1	Imperceptible
R56	9.4	19.5	7.6	16.0	16.1	0.1	Imperceptible
R57	9.4	15.1	7.6	12.3	12.3	<0.1	Imperceptible
R58	9.7	17.1	7.8	14.0	14.1	0.1	Imperceptible
R59	9.7	33.6	7.8	27.9	28.1	0.2	Imperceptible
*Selected for comparison with 1-hour mean NO2 AQS objective							

Table B.7: Estimated Annual Mean NO_2 concentrations (µg/m^3) for Human Health Receptors, Defra LAQM.TG(16) method

Receptor ID	Background 2016 NO_2	2016 Base NO_2	Background 2022 NO_2	2022 DM NO_2	2022 DS NO_2	2022 NO_2 Change	2022 NO_2 Change Criteria
R1	13.5	**40.2**	10.9	27.7	28.1	0.4	Imperceptible
R2	13.1	38.6	10.5	26.6	27.0	0.4	Imperceptible
R3	13.1	20.8	10.5	15.2	15.3	0.1	Imperceptible
R4	13.1	20.6	10.5	15.0	15.2	0.2	Imperceptible
R5	13.1	27.9	10.5	19.7	20.1	0.4	Imperceptible
R6	12.4	27.5	9.9	19.3	19.6	0.3	Imperceptible
R7	12.4	26.9	9.9	18.9	19.1	0.2	Imperceptible
R8	14.2	27.4	11.7	19.9	20.1	0.2	Imperceptible
R9	12.4	**40.8**	9.9	28.1	28.5	0.4	Imperceptible
R10	13.1	26.3	10.7	19.0	19.2	0.2	Imperceptible
R11	13.1	20.0	10.7	15.0	15.1	0.1	Imperceptible
R12	11.5	30.8	9.4	21.5	21.8	0.3	Imperceptible
R13*	12.9	**44.8**	10.6	31.6	31.9	0.3	Imperceptible
R14*	11.6	29.4	9.5	20.6	20.9	0.3	Imperceptible
R15	12.5	35.8	10.3	25.3	25.5	0.2	Imperceptible
R16	11.1	30.4	9.1	21.1	21.5	0.4	Imperceptible
R17	11.2	22.1	9.1	15.7	16.0	0.3	Imperceptible
R18	11.2	**40.0**	9.1	27.5	27.9	0.4	Imperceptible
R19	12.0	31.0	9.7	21.6	16.0	-5.6	Large decrease

Receptor ID	Background 2016 NO_2	2016 Base NO_2	Background 2022 NO_2	2022 DM NO_2	2022 DS NO_2	2022 NO_2 Change	2022 NO_2 Change Criteria
R20	12.0	22.5	9.7	16.2	17.0	0.8	Small increase
R21*	12.0	**51.5**	9.7	35.8	**44.4**	8.6	Large increase
R22	12.0	26.5	9.7	19.1	18.6	-0.5	Small decrease
R23	13.0	23.0	10.5	16.8	16.2	-0.6	Small decrease
R24	13.0	26.5	10.5	19.0	18.7	-0.3	Imperceptible
R25	12.2	24.4	10.0	17.7	16.7	-1.0	Small decrease
R26*	11.4	**42.2**	9.3	29.6	29.7	0.1	Imperceptible
R27	13.0	21.0	10.5	15.6	15.0	-0.6	Small decrease
R28	13.0	20.2	10.5	15.1	14.6	-0.5	Small decrease
R29	12.1	30.4	10.0	21.5	21.5	<0.1	Imperceptible
R30	12.1	31.1	10.0	21.9	21.9	<0.1	Imperceptible
R31	12.2	20.8	9.9	15.3	14.8	-0.5	Small decrease
R32	12.2	24.5	9.9	17.6	16.2	-1.4	Small decrease
R33	12.2	23.7	9.9	17.0	16.0	-1.0	Small decrease
R34	12.2	20.6	9.9	15.1	14.7	-0.4	Imperceptible
R35	12.1	15.0	9.8	11.6	11.5	-0.1	Imperceptible
R36	12.2	26.1	9.9	18.4	17.5	-0.9	Small decrease
R37	12.1	16.7	9.8	12.7	12.0	-0.7	Small decrease
R38	12.1	31.7	10.0	22.3	22.3	<0.1	Imperceptible
R39	12.1	36.4	10.0	25.3	25.4	0.1	Imperceptible
R40	12.1	30.9	10.0	21.5	21.7	0.2	Imperceptible
R41	12.5	28.8	10.3	20.4	20.4	<0.1	Imperceptible
R42	12.5	37.4	10.3	25.9	26.3	0.4	Imperceptible
R43	10.4	22.9	8.5	16.4	16.4	<0.1	Imperceptible
R44	12.5	30.1	10.3	21.2	21.4	0.2	Imperceptible
R45	10.4	34.2	8.5	24.0	24.1	0.1	Imperceptible
R46	12.5	30.7	10.3	21.5	21.8	0.3	Imperceptible
R47	12.5	31.2	10.3	21.9	22.2	0.3	Imperceptible
R48*	12.5	30.3	10.3	21.3	21.6	0.3	Imperceptible
R49	11.6	15.4	9.5	11.9	11.2	-0.7	Small decrease
R50	11.6	16.1	9.5	12.3	11.4	-0.9	Small decrease
R51	11.6	14.6	9.5	11.3	10.9	-0.4	Imperceptible
R52	12.3	15.0	10.2	11.9	11.7	-0.2	Imperceptible
R53	12.3	14.6	10.2	11.7	11.5	-0.2	Imperceptible
R54	9.7	22.3	7.9	15.8	15.9	0.1	Imperceptible
R55	9.3	27.5	7.5	19.2	19.3	0.1	Imperceptible

Receptor ID	Background 2016 NO_2	2016 Base NO_2	Background 2022 NO_2	2022 DM NO_2	2022 DS NO_2	2022 NO_2 Change	2022 NO_2 Change Criteria
R56	9.4	19.5	7.6	13.9	14.0	0.1	Imperceptible
R57	9.4	15.1	7.6	11.1	11.2	0.1	Imperceptible
R58	9.7	17.1	7.8	12.4	12.5	0.1	Imperceptible
R59	9.7	33.6	7.8	23.3	23.4	0.1	Imperceptible
*Selected for comparison with 1-hour mean NO2 AQS objective							

Table B.8: Estimated Annual Mean PM_{10} concentrations (µg/m^3) for Human Health Receptors

Receptor ID	Background 2016 PM_{10}	2016 Base PM_{10}	Background 2022 PM_{10}	2022 DM PM_{10}	2022 DS PM_{10}	2022 PM_{10} Change	2022 PM_{10} Change Criteria
R1	17.5	20.4	16.9	19.3	19.4	0.1	Imperceptible
R2	16.5	19.3	16.0	18.2	18.2	<0.1	Imperceptible
R3	16.5	17.2	16.0	16.6	16.6	<0.1	Imperceptible
R4	16.5	17.2	16.0	16.6	16.6	<0.1	Imperceptible
R5	16.5	18.0	16.0	17.2	17.2	<0.1	Imperceptible
R6	15.8	17.3	15.2	16.4	16.5	0.1	Imperceptible
R7	15.8	17.2	15.2	16.4	16.4	<0.1	Imperceptible
R8	15.0	16.3	14.4	15.5	15.6	0.1	Imperceptible
R9	15.8	18.9	15.2	17.7	17.8	0.1	Imperceptible
R10	15.6	17.0	15.1	16.2	16.2	<0.1	Imperceptible
R11	15.6	16.3	15.1	15.7	15.7	<0.1	Imperceptible
R12	15.0	17.0	14.5	16.1	16.1	<0.1	Imperceptible
R13*	15.7	19.4	15.1	18.3	18.3	<0.1	Imperceptible
R14*	14.6	16.4	14.1	15.5	15.5	<0.1	Imperceptible
R15	16.4	18.9	15.8	17.9	18.0	0.1	Imperceptible
R16	14.8	16.7	14.2	15.8	15.8	<0.1	Imperceptible
R17	15.0	16.1	14.5	15.3	15.3	<0.1	Imperceptible
R18	15.0	18.2	14.5	17.0	17.1	0.1	Imperceptible
R19	14.8	16.7	14.3	15.8	15.1	-0.7	Small decrease
R20	14.8	15.9	14.3	15.1	15.3	0.2	Imperceptible
R21*	16.7	20.9	16.2	19.6	21.4	1.8	Small increase
R22	16.7	18.2	16.2	17.4	17.4	<0.1	Imperceptible
R23	15.0	16.0	14.5	15.3	15.2	-0.1	Imperceptible
R24	15.0	16.4	14.5	15.6	15.6	<0.1	Imperceptible
R25	15.6	16.8	15.0	16.1	15.9	-0.2	Imperceptible
R26*	15.9	19.4	15.3	18.2	18.3	0.1	Imperceptible
R27	15.0	15.9	14.5	15.2	15.1	-0.1	Imperceptible
R28	15.0	15.8	14.5	15.1	15.1	<0.1	Imperceptible
R29	15.9	17.9	15.3	17.1	17.1	<0.1	Imperceptible
R30	15.9	18.0	15.3	17.2	17.2	<0.1	Imperceptible
R31	15.3	16.2	14.8	15.5	15.4	-0.1	Imperceptible
R32	15.3	16.7	14.8	15.9	15.6	-0.3	Imperceptible

Receptor ID	Background 2016 PM_{10}	2016 Base PM_{10}	Background 2022 PM_{10}	2022 DM PM_{10}	2022 DS PM_{10}	2022 PM_{10} Change	2022 PM_{10} Change Criteria
R33	15.3	16.6	14.8	15.8	15.6	-0.2	Imperceptible
R34	15.3	16.2	14.8	15.5	15.4	-0.1	Imperceptible
R35	15.1	15.4	14.6	14.8	14.8	<0.1	Imperceptible
R36	15.3	16.8	14.8	16.0	15.8	-0.2	Imperceptible
R37	15.1	15.6	14.6	15.0	14.9	-0.1	Imperceptible
R38	15.9	18.0	15.3	17.2	17.2	<0.1	Imperceptible
R39	15.9	18.6	15.3	17.7	17.7	<0.1	Imperceptible
R40	15.9	17.8	15.3	16.9	16.9	<0.1	Imperceptible
R41	17.0	18.7	16.5	17.9	17.9	<0.1	Imperceptible
R42	17.0	19.6	16.5	18.7	18.7	<0.1	Imperceptible
R43	16.2	17.4	15.6	16.7	16.7	<0.1	Imperceptible
R44	17.0	18.9	16.5	18.1	18.1	<0.1	Imperceptible
R45	16.2	18.7	15.6	17.8	17.8	<0.1	Imperceptible
R46	17.0	19.0	16.5	18.2	18.2	<0.1	Imperceptible
R47	17.0	19.1	16.5	18.2	18.3	0.1	Imperceptible
R48*	17.0	18.9	16.5	18.1	18.2	0.1	Imperceptible
R49	15.3	15.7	14.7	15.0	15.0	<0.1	Imperceptible
R50	15.3	15.7	14.7	15.1	15.0	-0.1	Imperceptible
R51	15.3	15.6	14.7	15.0	14.9	-0.1	Imperceptible
R52	15.3	15.7	14.8	15.1	15.0	-0.1	Imperceptible
R53	15.3	15.6	14.8	15.0	15.0	<0.1	Imperceptible
R54	15.1	16.3	14.5	15.6	15.6	<0.1	Imperceptible
R55	14.4	16.3	13.9	15.4	15.4	<0.1	Imperceptible
R56	15.4	16.4	14.9	15.7	15.8	0.1	Imperceptible
R57	15.4	16.0	14.9	15.4	15.4	<0.1	Imperceptible
R58	15.5	16.2	15.0	15.6	15.6	<0.1	Imperceptible
R59	15.5	18.1	15.0	17.1	17.2	0.1	Imperceptible
*Selected for comparison with 1-hour mean NO2 AQS objective							

Table B.9: Estimated Number of 24hr Mean PM_{10} Exceedances for Human Health Receptors

Receptor ID	Number of 24hr Mean PM_{10} Exceedances 2016	Number of 24hr Mean PM_{10} Exceedances 2022 DM	Number of 24hr Mean PM_{10} Exceedances 2022 DS	2022 Number of Exceedances PM_{10} Change
R1	4	3	3	<1
R2	3	2	2	<1
R3	1	1	1	<1
R4	1	1	1	<1
R5	1	1	1	<1
R6	1	0	0	<1

Receptor ID	Number of 24hr Mean PM_{10} Exceedances 2016	Number of 24hr Mean PM_{10} Exceedances 2022 DM	Number of 24hr Mean PM_{10} Exceedances 2022 DS	2022 Number of Exceedances PM_{10} Change
R7	1	0	0	<1
R8	0	0	0	<1
R9	2	1	1	<1
R10	1	0	0	<1
R11	0	0	0	<1
R12	1	0	0	<1
R13*	3	2	2	<1
R14*	0	0	0	<1
R15	2	1	1	<1
R16	1	0	0	<1
R17	0	0	0	<1
R18	2	1	1	<1
R19	1	0	0	<1
R20	0	0	0	<1
R21*	5	3	5	2
R22	2	1	1	<1
R23	0	0	0	<1
R24	0	0	0	<1
R25	1	0	0	<1
R26*	3	2	2	<1
R27	0	0	0	<1
R28	0	0	0	<1
R29	1	1	1	<1
R30	1	1	1	<1
R31	0	0	0	<1
R32	1	0	0	<1
R33	1	0	0	<1
R34	0	0	0	<1
R35	0	0	0	<1
R36	1	0	0	<1
R37	0	0	0	<1
R38	1	1	1	<1
R39	2	1	1	<1
R40	1	1	1	<1
R41	2	1	1	<1
R42	3	2	2	<1
R43	1	1	1	<1
R44	2	1	1	<1
R45	2	1	1	<1

Receptor ID	Number of 24hr Mean PM_{10} Exceedances 2016	Number of 24hr Mean PM_{10} Exceedances 2022 DM	Number of 24hr Mean PM_{10} Exceedances 2022 DS	2022 Number of Exceedances PM_{10} Change
R46	2	2	2	<1
R47	2	2	2	<1
R48*	2	1	2	1
R49	0	0	0	<1
R50	0	0	0	<1
R51	0	0	0	<1
R52	0	0	0	<1
R53	0	0	0	<1
R54	0	0	0	<1
R55	0	0	0	<1
R56	0	0	0	<1
R57	0	0	0	<1
R58	0	0	0	<1
R59	1	1	1	<1
*Selected for comparison with 1-hour mean NO_2 AQS objective				

B.8 Ecological Results

Table B.10: Total Modelled NOx (µg/m^3) at designated ecological sites, Highways England IAN 170/12v3 LTTE6 method

Receptor ID	Background 2016 Nox	2016 Base Nox	Background 2022 Nox	2022 DM Nox	2022 DS Nox	2022 NOx Change	2022 NOx Change Criteria
Wouldham_SSSI_11m	17.9	**71.2**	14.1	**52.2**	**53.2**	1.0	Small increase
Wouldham_SSSI_16m	17.9	**62.8**	14.1	**46.1**	**46.9**	0.8	Small increase
Wouldham_SSSI_21m	17.9	**56.9**	14.1	**41.8**	**42.6**	0.8	Small increase
Wouldham_SSSI_26m	17.9	**52.6**	14.1	**38.6**	**39.3**	0.7	Small increase
Wouldham_SSSI_31m	17.9	**49.2**	14.1	**36.2**	**36.8**	0.6	Small increase
Wouldham_SSSI_41m	17.9	**44.4**	14.1	**32.6**	**33.1**	0.5	Small increase
Wouldham_SSSI_51m	17.9	**40.9**	14.1	**30.1**	**30.6**	0.5	Small increase
Wouldham_SSSI_61m	17.9	**38.4**	14.1	28.3	28.7	0.4	Imperceptible
Wouldham_SSSI_71m	17.9	**36.4**	14.1	26.8	27.2	0.4	Imperceptible
Wouldham_SSSI_81m	17.9	**34.9**	14.1	25.7	26.0	0.3	Imperceptible

Receptor ID	Background 2016 Nox	2016 Base Nox	Background 2022 Nox	2022 DM Nox	2022 DS Nox	2022 NOx Change	2022 NOx Change Criteria
Wouldham_SSSI_91m	17.9	**33.6**	14.1	24.7	25.0	0.3	Imperceptible
Wouldham_SSSI_101m	17.9	**32.5**	14.1	23.9	24.2	0.3	Imperceptible
Wouldham_SSSI_111m	17.9	**31.5**	14.1	23.2	23.5	0.3	Imperceptible
Wouldham_SSSI_136m	17.9	29.7	14.1	21.9	22.1	0.2	Imperceptible
Wouldham_SSSI_161m	17.9	28.3	14.1	20.9	21.1	0.2	Imperceptible
Wouldham_SSSI_186m	17.9	27.3	14.1	20.1	20.3	0.2	Imperceptible
Queensdown_SSSI_155m	17.0	27.7	13.8	20.9	21.0	0.1	Imperceptible
Queensdown_SSSI_160m	17.0	27.5	13.8	20.7	20.8	0.1	Imperceptible
Queensdown_SSSI_165m	17.0	27.3	13.8	20.5	20.6	0.1	Imperceptible
Queensdown_SSSI_170m	17.0	27.0	13.8	20.3	20.4	0.1	Imperceptible
Queensdown_SSSI_175m	17.0	26.8	13.8	20.1	20.2	0.1	Imperceptible
Queensdown_SSSI_185m	17.0	26.4	13.8	19.8	19.9	0.1	Imperceptible
Queensdown_SSSI_195m	17.0	26.1	13.8	19.6	19.6	<0.1	Imperceptible

Table B.11: Background Nitrogen Deposition Rates Used in the Assessment

Receptor ID	APIS Background N Deposition Rate (kg N/ha/year)	
	2016 Base Year	2022 Opening Year
Wouldham_SSSI	27.9	24.4
Queensdown_SSSI	26.2	23.0

Table B.12: Estimated Nitrogen Deposition Rates (kg/N/ha/yr) at designated ecological sites

Receptor ID	Total N Deposition Rate (kg N/ha/year)			Difference between Do-Something and Do-Minimum Scenarios	
	2016 Base	2022 Do-Minimum	2022 Do-Something	Change in Total N Deposition Rate (kg N/ha/year)	% Change in Relation to lowest Critical Load Level
Wouldham_SSSI_11m	30.96	26.40	26.45	0.05	0.95%
Wouldham_SSSI_16m	30.59	26.11	26.15	0.04	0.85%
Wouldham_SSSI_21m	30.33	25.90	25.94	0.04	0.78%
Wouldham_SSSI_26m	30.13	25.74	25.78	0.04	0.71%

Receptor ID	Total N Deposition Rate (kg N/ha/year)			Difference between Do-Something and Do-Minimum Scenarios	
	2016 Base	2022 Do-Minimum	2022 Do-Something	Change in Total N Deposition Rate (kg N/ha/year)	% Change in Relation to lowest Critical Load Level
Wouldham_SSSI_31m	29.97	25.62	25.65	0.03	0.66%
Wouldham_SSSI_41m	29.74	25.43	25.46	0.03	0.57%
Wouldham_SSSI_51m	29.57	25.30	25.32	0.02	0.52%
Wouldham_SSSI_61m	29.44	25.20	25.22	0.02	0.45%
Wouldham_SSSI_71m	29.35	25.12	25.14	0.02	0.40%
Wouldham_SSSI_81m	29.27	25.06	25.07	0.01	0.38%
Wouldham_SSSI_91m	29.20	25.00	25.02	0.02	0.35%
Wouldham_SSSI_101m	29.14	24.96	24.98	0.02	0.33%
Wouldham_SSSI_111m	29.10	24.92	24.94	0.02	0.28%
Wouldham_SSSI_136m	29.00	24.85	24.86	0.01	0.24%
Wouldham_SSSI_161m	28.93	24.79	24.80	0.01	0.22%
Wouldham_SSSI_186m	28.88	24.74	24.75	0.01	0.19%
Queensdown_SSSI_155m	28.89	24.78	24.78	<0.01	0.11%
Queensdown_SSSI_160m	28.87	24.77	24.77	<0.01	0.11%
Queensdown_SSSI_165m	28.86	24.76	24.76	<0.01	0.11%
Queensdown_SSSI_170m	28.85	24.75	24.75	<0.01	0.11%
Queensdown_SSSI_175m	28.84	24.74	24.74	<0.01	0.09%
Queensdown_SSSI_185m	28.82	24.72	24.72	<0.01	0.09%
Queensdown_SSSI_195m	28.80	24.70	24.71	<0.01	0.08%

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