

2017 Air Quality Annual Status Report (ASR)

In fulfilment of Part IV of the Environment Act 1995 Local Air Quality Management

June 2017

Local Authority Officer	Alison Old
Department	Environmental Quality
Address	Cygnet Court Long Stratton Norwich Norfolk NR15 2XE
Telephone	01508 533699
E-mail	envserv@s-norfolk.gov.uk
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Executive Summary: Air Quality in Our Area Air Quality in South Norfolk

Air pollution is associated with a number of adverse health impacts. It is recognised as a contributing factor in the onset of heart disease and cancer. Additionally, air pollution particularly affects the most vulnerable in society: children and older people, and those with heart and lung conditions. There is also often a strong correlation with equalities issues, because areas with poor air quality are also often the less affluent areas^{1,2}.

The annual health cost to society of the impacts of particulate matter alone in the UK is estimated to be around $\pounds 16$ billion³.

Air quality in the South Norfolk Council area is generally good with no recorded exceedance of air quality objectives. There are no declared Air Quality Management Areas (AQMA's) within the district.

The main pollutant of local concern is nitrogen dioxide– primarily from road traffic sources and stationary combustion sources (such a domestic and other appliances). This is typical for a primarily rural and semi urban area such as South Norfolk.

As regards nitrogen dioxide (NO2), monitoring of takes place at 29 locations within the district. There are a couple of locations which have are close to the NO2 annual mean AQS objective but none have been recorded as breaching the Air Quality standards. As highlighted in previous a bypass has been proposed for Long Stratton as part of the Long Stratton Area Action Plan.

A detailed assessment is not required for any pollutants and the Council will progress to the next Annual Status Report for 2017.

Actions to Improve Air Quality

The District does not have any AQMAs and so there is no action plan to improve air quality. However, the Council works closely with a range of partners as air pollution is a transboundary (and international) issue. The Norfolk Environmental Protection group is the principal body across the County coordinating and seeking consistency

¹ Environmental equity, air quality, socioeconomic status and respiratory health, 2010

² Air quality and social deprivation in the UK: an environmental inequalities analysis, 2006

³ Defra. Abatement cost guidance for valuing changes in air quality, May 2013

in the management of air quality by partner local authorities including Norfolk County Council's Highway Department and Public Health Team and the Environment Agency.

Local authorities regulate a range of industries that may cause local emissions to air and this work also forms part of our response to securing air quality in the district. We work closely with businesses and industry to ensure that no adverse impacts arise from industrial processes as part of the so called LA-PPC regime. We also work closely as part of the development and planning process to secure local air quality where development is proposed.

Conclusions and Priorities

• The Council's vision supports the review and assessment of air quality

Corporate Vision - 2016/20

"To retain and improve the quality of life and prosperity of South Norfolk, for now and future generations, to make it one of the best places to live and work in the country"

Corporate Priorities -

- Economic growth, productivity and prosperity: Providing the conditions to stimulate growth, productivity and prosperity, sharing the benefits of growth with our communities.
- Health, Well-being and Early help Proactively working with communities to provide help at the earliest opportunity and enhancing the health and well-being of our residents
- Place, Communities and Environment Improving the quality of life of our communities and enhancing the built and natural environment in our towns and villages

The focus of our work on air quality relates to nitrogen dioxide from road traffic. As a rural district the most residents use private vehicles. This causes localised peaks with vehicle emissions in some towns particularly where there are busy through roads.

We will continue to measure NOx using non-automatic diffusion tubes. We will continue to assess progression of the application for the Long Stratton bypass and associated development plans.

Local Engagement and How to get Involved

Residents and businesses can discuss any concerns or questions in relation to air quality to the Environmental Quality team.

If people would like to find out more about air quality, and how they can contribute to improving it in their area, these links can provide further information:

- Defra's UK Government UK-Air website: <u>https://uk-air.defra.gov.uk/</u>
- Sustrans' 'CleanSpace' sustainable transport and air quality movement: <u>http://www.sustrans.org.uk/what-you-can-do/use-your-car-less/join-air-quality-movement</u> -
- 'Air Pollution' website college/university level: <u>http://www.air-</u> <u>quality.org.uk/index.php</u>
- BBC 'Bitesize' GCSE air quality: <u>http://www.bbc.co.uk/schools/gcsebitesize/science/21c/air_quality/</u>
- 'Clean Air Kids' air quality website for children aged 5-11: <u>http://www.clean-air-kids.org.uk/index.html</u>
- Evolution of WHO air quality guidelines: past, present and future (2017) report on the World Health Organisation's evolving advice: <u>http://www.euro.who.int/en/health-topics/environment-and-health/air-</u> <u>quality/publications/2017/evolution-of-who-air-quality-guidelines-past,-present-</u> <u>and-future-2017</u>

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1 Local Air Quality Management

This report provides an overview of air quality in South Norfolk during 2016. It fulfils the requirements of Local Air Quality Management (LAQM) as set out in Part IV of the Environment Act (1995) and the relevant Policy and Technical Guidance documents.

The LAQM process places an obligation on all local authorities to regularly review and assess air quality in their areas, and to determine whether or not the air quality objectives are likely to be achieved. Where an exceedance is considered likely the local authority must declare an Air Quality Management Area (AQMA) and prepare an Air Quality Action Plan (AQAP) setting out the measures it intends to put in place in pursuit of the objectives. This Annual Status Report (ASR) is an annual requirement showing the strategies employed by South Norfolk Council to improve air quality and any progress that has been made.

The statutory air quality objectives applicable to LAQM in England can be found in Table E.1 in Appendix E.

2 Actions to Improve Air Quality

2.1 Air Quality Management Areas

Air Quality Management Areas (AQMAs) are declared when there is an exceedance or likely exceedance of an air quality objective. After declaration, the authority must prepare an Air Quality Action Plan (AQAP) within 12-18 months setting out measures it intends to put in place in pursuit of compliance with the objectives.

South Norfolk Council currently does not have any AQMAs

For reference, a map of South Norfolk Council's monitoring locations is available in Appendix D.

2.2 Progress and Impact of Measures to address Air Quality in South Norfolk

Defra's appraisal of last year's ASR concluded - "On the basis of the evidence provided by the local authority the conclusions reached are acceptable for all sources and pollutants.

The next step for South Norfolk Council is to submit an Annual Status Report in 2017"

As such no measures to address air quality were required.

2.3 PM_{2.5} – Local Authority Approach to Reducing Emissions and/or Concentrations

As detailed in Policy Guidance LAQM.PG16 (Chapter 7), local authorities are expected to work towards reducing emissions and/or concentrations of PM_{2.5} (particulate matter with an aerodynamic diameter of 2.5µm or less). There is clear evidence that PM_{2.5} has a significant impact on human health, including premature mortality, allergic reactions, and cardiovascular diseases.

South Norfolk is taking the following measures to address PM_{2.5}.

 The Council is working through the Norfolk Environmental Protection Group's (NEPG) Air Quality Sub-Group, to ensure regular two-way engagement with representatives of Public Health England, and the Director of Public Health at Norfolk County Council;

- The Council is looking to work directly with Public Health England including working to encourage active travel resulting in improvements to air quality;
- Government's removal of environmental permits for small waste oil burners, which has been a source of the PM_{2.5}. The SWOB's provided a localised pressure on air quality.
- We have also been working with local industrial processes and new developments to ensure local air quality is safeguarded via the planning regime.

South Norfolk Council is not required to monitor for $PM_{2.5}$ as there is no statutory requirement to do so. Instead the UK government has a network of air quality monitoring stations across the UK which monitors levels of $PM_{2.5}$ The results show that the UK currently complies with the $25\mu g/m^3$ limit value set by the EU air quality directive.

3 Air Quality Monitoring Data and Comparison with Air Quality Objectives and National Compliance

3.1 Summary of Monitoring Undertaken

3.1.1 Automatic Monitoring Sites

South Norfolk Council does not undertake any continuous monitoring.

3.1.2 Non-Automatic Monitoring Sites

South Norfolk Council undertook non- automatic (passive) monitoring of NO₂ at 29 sites during 2016 Table A.1 in Appendix A shows the details of the sites.

Maps showing the location of the monitoring sites are provided in Appendix D. Further details on Quality Assurance/Quality Control (QA/QC) for the diffusion tubes, including bias adjustments and any other adjustments applied (e.g. "annualisation" and/or distance correction), are included in Appendix C.

3.2 Individual Pollutants

The air quality monitoring results presented in this section are, where relevant, adjusted for bias, "annualisation" and distance correction. Further details on adjustments are provided in Appendix C.

3.2.1 Nitrogen Dioxide (NO₂)

Table A.2 in Appendix A compares the ratified and adjusted monitored NO₂ annual mean concentrations for the past 5 years with the air quality objective of $40\mu g/m^3$.

For diffusion tubes, the full 2016 dataset of monthly mean values is provided in Appendix B.

There was one exceedance of the annual mean air quality objective for NO₂. This occurred at a roadside location (location 7) which is not representative of public exposure.

We have use the NO₂ fall-off with distance calculator on the LAQM support website and calculated that the levels at a location of relevant exposure are reduced to 33.5ug/m^3

All monitoring data presented has been properly ratified and corrected for bias.

Site ID	Site Name	Site Type	X OS Grid Ref	Y OS Grid Ref	Pollutants Monitored	In AQMA?	Distance to Relevant Exposure (m) ⁽¹⁾	Distance to kerb of nearest road (m) ⁽²⁾	Tube collocated with a Continuous Analyser?	Height (m)
1	46a Old Newmareket Road, Cringleford	Suburban	619208	304645	NO2	NO	0	15	NO	1.5
2	131 LONGWATER LANE, COSTESSEY	Suburban	616797	310477	NO2	NO	0	15	NO	1.5
3	90 THE STREET, PORINGLAND	Suburban	626803	302092	NO2	NO	0	5	NO	1.5
4	87 DENMARK ST, DISS	Suburban	611223	279637	NO2	NO	0	3	NO	1.5
5	131 VICTORIA RD, DISS	Suburban	611945	279572	NO2	NO	0	3	NO	1.8
6	21 CHURCH PLAIN, LODDON	Suburban	636192	298751	NO2	NO	0	3	NO	1.5
7	A140 LONG STRATTON	Roadside	619722	292745	NO2	NO	3	1	NO	2.1
8	FAIRLAND ST, WYMONDHAM	Roadside	611129	301425	NO2	NO	0	3	NO	2.1
9	KIRBY BEDON ROAD, BIXLEY	Roadside	625439	305944	NO2	NO	20	2	NO	2.1
10	209 NORWICH RD, WYMONDHAM	Suburban	612515	302652	NO2	NO	0	15	NO	1.5
11	2 THICKTHORN COTTAGES	Rural	618137	305678	NO2	NO	0	10	NO	1.5
12	RIGHTUP LANE, WYMONDHAM	Suburban	611528	300987	NO2	NO	20	3	NO	2.1

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13	233 NORWICH RD, WYMONDHAM	Suburban	612663	302751	NO2	NO	0	12	NO	1.5
14	28 NORWICH RD,WYMONDHAM	Suburban	611380	302751	NO2	NO	0	8	NO	1.5
15	HARLESTON (HOTEL)	Roadside	624484	283276	NO2	NO	0	2	NO	2.1
16	DISS ROAD,SCOLE	Roadside	614895	278864	NO2	NO	8	1	NO	1.8
17	84 WEST END, COSTESSEY	Roadside	616652	311650	NO2	NO	1	1	NO	2.1
18	Long Stratton CHINESE	Roadside	619710	292730	NO2	NO	1	1	NO	2.1
19	Long Stratton TRAFFIC LIGHT EAST	Roadside	619732	292740	NO2	NO	7	1	NO	2.1
20	Long Stratton O/S CHEM MAIN ROAD	Suburban	619706	292724	NO2	NO	0	2	NO	2.1
21	Long Stratton SOUTHBOUND 60 MTRS	Suburban	619694	292653	NO2	NO	0	2	NO	2.1
22	Long Stratton SWAN LANE CO- OP CHEM	Roadside	619710	292722	NO2	NO	0	2	NO	2.1
23	3 NORWICH ROAD, COSTESSEY	Suburban	618991	309796	NO2	NO	0	15	NO	1.5
24	14 STATION RD, WYMONDHAM	Suburban	618823	293032	NO2	NO	0	5	NO	1.5
25	BUS STOP, NWH RD, STRATTON	Roadside	619823	293032	NO2	NO	5	1	NO	2.1
26	NEWMARKET ROAD, CRINGLEFORD	Roadside	619801	305859	NO2	NO	20	2	NO	2.1
27	LORD NELSON DR	Roadside	616348	310585	NO2	NO	100	1	NO	2.1

28	RIVERSIDE COURT	Suburban	616797	311225	NO2	NO	0	15	NO	1.5
29	25 BROAD ST, HARLESTON	Suburban	619131	305633	NO2	NO	8	0	NO	1.5

Notes:

(1) Om if the monitoring site is at a location of exposure (e.g. installed on/adjacent to the façade of a residential property).

(2) N/A if not applicable.

Table A.2 – Annual Mean NO2 Monitoring Results

0	0	Monitoring	Valid Data Capture for	Valid Data		NO ₂ Annual M	ean Concentra	ation (µg/m³) ⁽³)
Site ID	Site Type	Туре	Monitoring Period (%) ⁽¹⁾	Capture 2016 (%) ⁽²⁾	2012	2013	2014	2015	2016
1	Suburban	Diffusion Tube	100	100	24.1	19.5	21.5	17.1	20.2
2	Suburban	Diffusion Tube	100	100	23.4	18.7	20.3	18.1	21.2
3	Suburban	Diffusion Tube	100	100	21.1	17.3	18	15.4	19.3
4	Suburban	Diffusion Tube	100	100	30	24.1	24.1	20.9	29.2
5	Suburban	Diffusion Tube	100	100	36.7	25.3	33	25.9	29.9
6	Suburban	Diffusion Tube	100	100	15.5	13	12	10.4	13.5
7	Roadside	Diffusion Tube	100	100	46.2	36.1	37.8	31.9	33.5
8	Roadside	Diffusion Tube	100	100	28	23.5	23.4	18.4	23.3
9	Roadside	Diffusion Tube	100	100	30.4	22.8	26.7	21.4	25.4
10	Suburban	Diffusion Tube	100	100	17.7	17.1	16.7	12	18
11	Rural	Diffusion Tube	100	100	16.6	15	15.9	12.8	15.8
12	Roadside	Diffusion Tube	100	100	24.8	18	21.4	16.3	21.9
13	Suburban	Diffusion Tube	100	100	18.3	13.7	14.2	11.9	15.9
14	Suburban	Diffusion Tube	100	100	21.7	17.7	18.1	13.3	17

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15	Suburban	Diffusion Tube	80	100	-	25.3	28.1	25.1	27.6
16	Suburban	Diffusion Tube	80	100	-	21	20.5	18.1	21.4
17	Suburban	Diffusion Tube	80	100	-	12.2	13.1	10.8	19.4
18	Roadside	Diffusion Tube	100	100	33.1	28.4	27.4	25.9	29.8
19	Roadside	Diffusion Tube	100	100	43.4	34.2	36.3	30.6	36.9
20	Roadside	Diffusion Tube	100	100	44.5	36.4	35.9	33.6	32.9
21	Roadside	Diffusion Tube	100	100	40.1	36.6	35.1	26.9	31.1
22	Roadside	Diffusion Tube	98	91.7	26.9	23.3	26.4	23.2	25.2
23	Suburban	Diffusion Tube	100	100	19.4	16.9	16.2	13	16.7
24	Suburban	Diffusion Tube	100	100	19.4	16.9	17.1	13.9	17.4
25	Roadside	Diffusion Tube	100	100	-	33	31.7	29.3	30.1
26	Roadside	Diffusion Tube	80	100	-	33	24.4	21.4	25.5
27	Roadside	Diffusion Tube	100	100	32.7	29	28.3	23.1	28.4
28	Suburban	Diffusion Tube	40	100	-	-	-	16.3	14.1
29	Roadside	Diffusion Tube	100	100	44.9	38.9	38.6	31.8	38.2

☑ Diffusion tube data has been bias corrected

\boxtimes Annualisation has been conducted where data capture is <75%

\boxtimes If applicable, all data has been distance corrected for relevant exposure

Notes:

Exceedances of the NO₂ annual mean objective of $40\mu g/m^3$ are shown in **bold**.

NO2 annual means exceeding 60µg/m³, indicating a potential exceedance of the NO2 1-hour mean objective are shown in bold and underlined.

(1) Data capture for the monitoring period, in cases where monitoring was only carried out for part of the year.

(2) Data capture for the full calendar year (e.g. if monitoring was carried out for 6 months, the maximum data capture for the full calendar year is 50%).

(3) Means for diffusion tubes have been corrected for bias. All means have been "annualised" as per Boxes 7.9 and 7.10 in LAQM.TG16 if valid data capture for the full calendar year is less than 75%. See Appendix C for details.

Appendix B: Full Monthly Diffusion Tube Results for 2016

Table B.1 – NO2 Monthly Diffusion Tube Results - 2016

							NO₂ Mea	n Concen	trations (μ	ıg/m³)					
														Annual Mea	n
Site ID	Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Raw Data	Bias Adjusted (0.94) and Annualised	Distance Corrected to Nearest Exposure (²)
1	30	23	19	13	22	14	17	17	25	21	25	32	22	20.21	20.21
2	27	28	16	16	21	17	24	21	25	19	27	29	23	21.15	21.15
3	26	25	21	13	21	16	17	15	23	19	23	27	21	19.27	19.27
4	30	40	39	20	33	24	22	21	31	37	39	37	31	29.2183333	29.218333
5	40	33	30	17	31	27	30	27	40	35	34	37	32	29.845	29.845
6	19	17	14	10	14	10	10	9	17	14	16	22	14	13.4733333	13.473333
7	45	47	49	37	44	37	41	38	46	43	41	45	43	40.185	33.5
8	26	30	27	15	24	20	19	17	28	27	31	34	25	23.3433333	23.3
9	37	33	30	12	26	18	22	21	27	28	31	39	27	25.38	25.4
10	22	21	22	15	21	12	12	12	23	21	22	27	19	18.0166667	18.0
11	20	19	15	11	17	12	11	10	23	17	20	26	17	15.745	15.7
12	26	27	23	12	22	20	22	19	30	24	25	29	23	21.855	21.9
13	23	19	16	11	16	12	12	11	22	13	20	28	17	15.9016667	15.9
14	21	22	19	14	18	15	14	10	18	16	23	27	18	16.9983333	17.0
15	30	33	29	15	34	23	29	24	33	29	36	37	29	27.5733333	27.6

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16	29	26	25	13	22	17	20	18	25	21	27	30	23	21.385	21.4
17	21	12	15	15	22	19	19	17	25	24	28	30	21	19.3483333	19.3
18	38	28	35	22	31	27	25	25	36	38	37	38	32	29.7666667	29.8
19	41	43	40	23	42	35	37	32	48	44	42	43	39	36.8166667	36.8
20	46	52	27	20	41	36	28	25	37	32		41	35	32.9	32.9
21	32	37	40	19	33	30	30	29	36	41	36	34	33	31.0983333	31.1
22	27	30	48	20	23	20	19	18	30	29	26	31	27	25.145	25.1
23	24	21	17	12	17	12	13	11	21	16	22	27	18	16.685	16.7
24	19	22	17	15	20	14	12	13	20	22	21	27	19	17.39	17.4
25	36	37	31	15	30	26	33	29	42	31	36	38	32	30.08	30.1
26	37	32	26	17	24	19	24	21	32	27	30	36	27	25.4583333	25.5
27	26	33	36	21	36	16	26	26	32	44	35	31	30	28.3566667	28.4
28	32	19	14	9	11	9	10	10	15	12	17	22	15	14.1	14.1
29	46	43	42	18	46	35	38	35	47	43	44	50	41	38.1483333	38.1

□ Local bias adjustment factor used

☑ National bias adjustment factor used

Annualisation has been conducted where data capture is <75%

Notes:

Exceedances of the NO₂ annual mean objective of 40µg/m³ are shown in **bold**.

NO₂ annual means exceeding 60µg/m³, indicating a potential exceedance of the NO₂ 1-hour mean objective are shown in **bold and underlined**.

(1) See Appendix C for details on bias adjustment and annualisation.

(2) Distance corrected to nearest relevant public exposure.

Appendix C: Supporting Technical Information / Air Quality Monitoring Data QA/QC

QA/QC of Diffusion Tube Monitoring

The diffusion tubes are supplied by Gradko Environmental, part of Gradko International Ltd. They consist of 20% TEA (Triethanolamine) in deionised water. Once received by post the tubes are stored in a refrigerator until required. Once the tubes have been placed in their holders, the end caps are removed and the tubes exposed for a month. At the end of the period the tubes are recapped and retrieved and stored in the refrigerator until returned by post to the laboratory for analysis. A travel blank is used. This travels everywhere with the exposed tubes but is not itself exposed. It is stored in the refrigerator and sent for analysis with the exposed tubes. Its purpose is to check on contamination of the tubes.

Gradko International is accredited by UKAS for the analysis of NO₂. Gradko also take part in the AIR NO₂ Proficiency Testing Scheme on a quarterly basis. Their AIR results over the last twelve rounds of testing gave 100% laboratory performance in terms of the accuracy and precision of results (Summary of Laboratory Performance in AIR NO2 Proficiency Testing Scheme (April 2015 – February 2017))

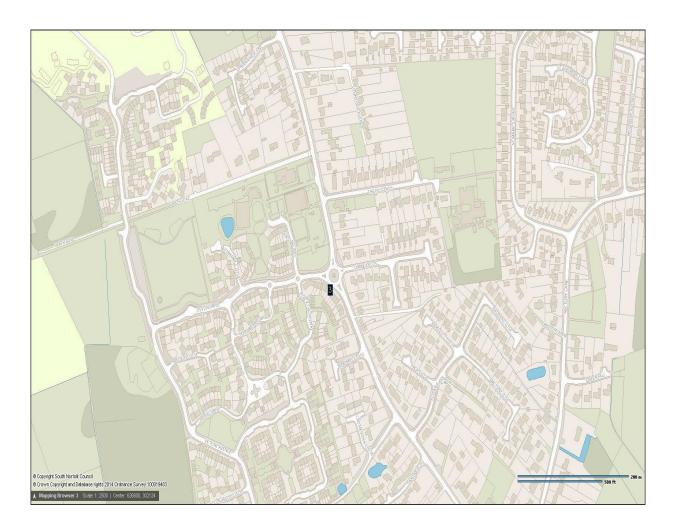
Diffusion Tube Bias Adjustment Factors

The National bias adjustment factor for the period was 0.94 (Spreadsheet Version 2 3/17)

Appendix D: Map(s) of Monitoring Locations and AQMAs

Poringland

Tube I.D.	Location	Height	Grid
3	On Drain pipe Poringland.	1.5m	0626803 0302092



Bixley

Tube I.D.	Location	Height	Grid
9	Kirby Bedon Road Bixley.	2.1	0625439 0305944



Thickthorn Roundabout A11

Tube I.D.	Location	Height	Grid
11	2 THICKTHORN COTTAGES	2.1	0618137 0305678



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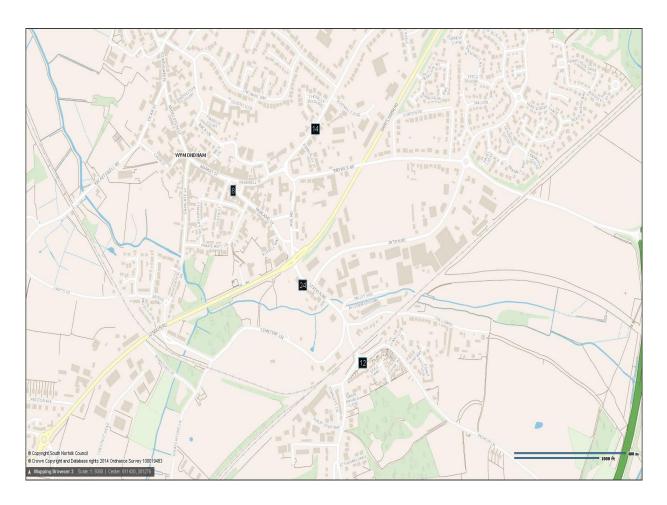
Wymondham

Tube I.D.	Location	Height	Grid
10	209 Norwich Wymondham	1.5	0612515 0302652
13	233 Norwich Road Wymondham	1.8	06126630302751



Wymondham

Tube I.D.	Location	Height	Grid
8	Fairland, Wymondham	2.1	0611129 0301425
12	Right up Lane	2.1	0611528 0300987
14	28 Norwich Road	1.5	0611380 0301638
24	14 Station Rd	1.5	0611323 0301190



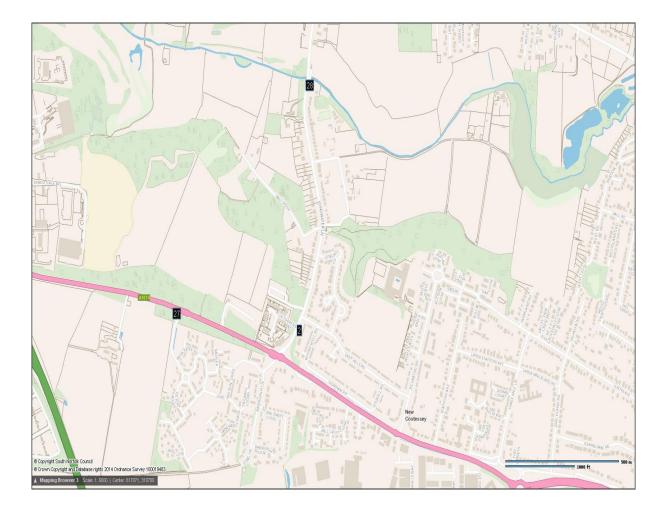
Costessey

Tube I.D.	Location	Height	Grid
23	3 Norwich Road Costessey	1.5	0618991 0309796



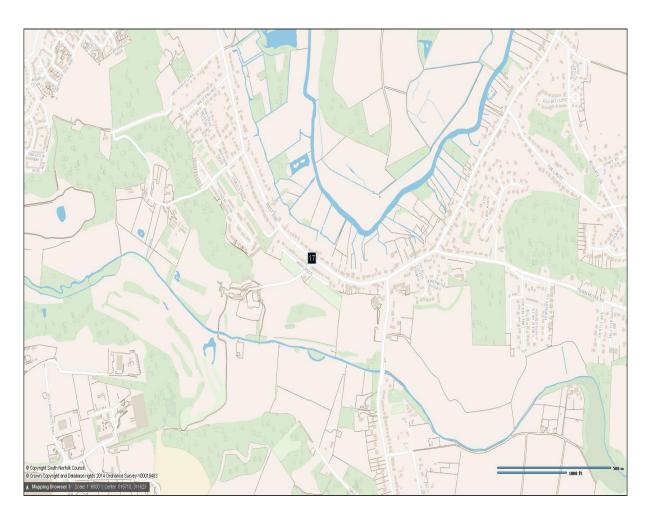
Tube I.D.	Location	Height	Grid
2	131 Longwater	1.5	0616797 0310477
2	Lane Lord Nelson Drive	2.1	
27			0616348 0310585
28	2 Riverside Court Costessey	1.5	0 0310585616386

Costessey



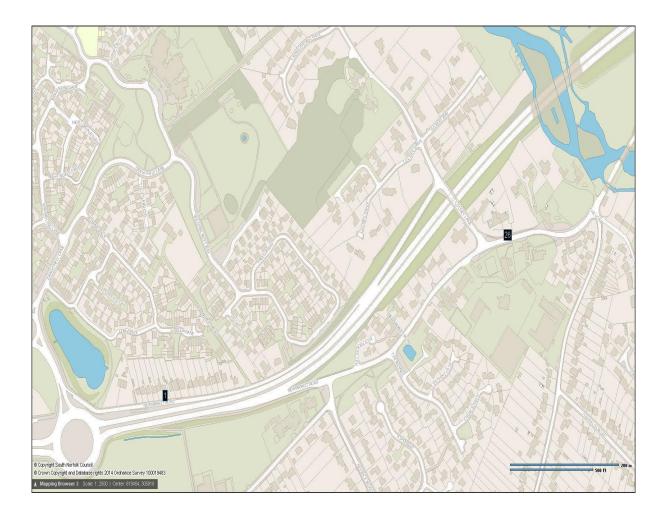
Costessey

Tube I.D.	Location	Height	Grid
17	84 West End Costessey	2.1	0616652 0311650



Cringleford

Tube I.D.	Location	Height	Grid
1	46a Old Newmarket Road, Cringleford	1.5	0619208 0304645
26	Newmarket Road, Cringleford	2.1	0619801 0305859



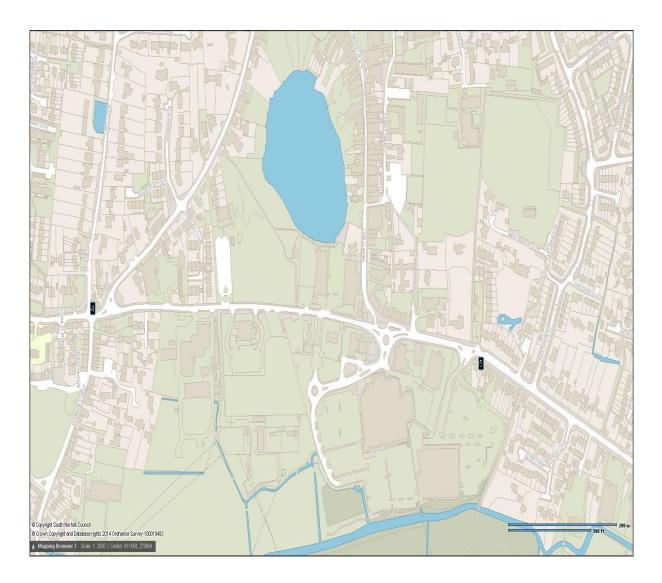
Tube I.D.	Location	Height	Grid
7	A140 Long Stratton	2.1	0619722 0292745
18	Chinese Long Stratton	2.1	0619710 0292730
19	Traffic Light East	2.1	0619732 0292740
20	Outside the chemist Long Stratton	2.1	0619706 0292724
21	Long Stratton 60 mtr from centre Southbound	2.1	0619694 0292653
22	Long Stratton, CO- OP Swan Lane,	2.1	0619710 0292722
25	Bus Stop, Norwich Road, Long Stratton	2.1	0619823 0293032

Long Stratton



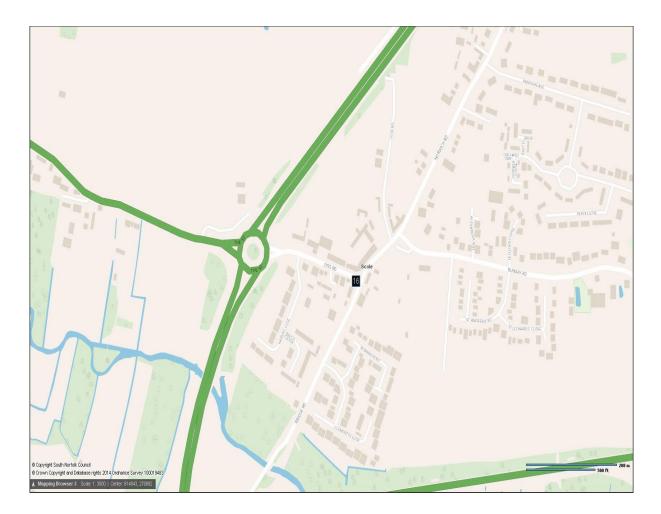
Diss

Tube I.D.	Location	Height	Grid
4	87 Denmark Street, Diss	1.5	0611223 0279637
5	131 Victoria Diss	1.8	0611945 0279572



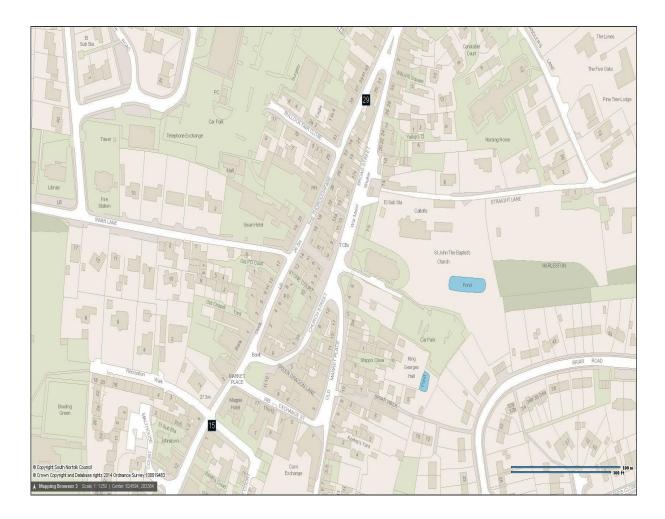
Scole

Tube I.D.	Location	Height	Grid
16	Diss Road , Scole	0614895 0278864	1.8



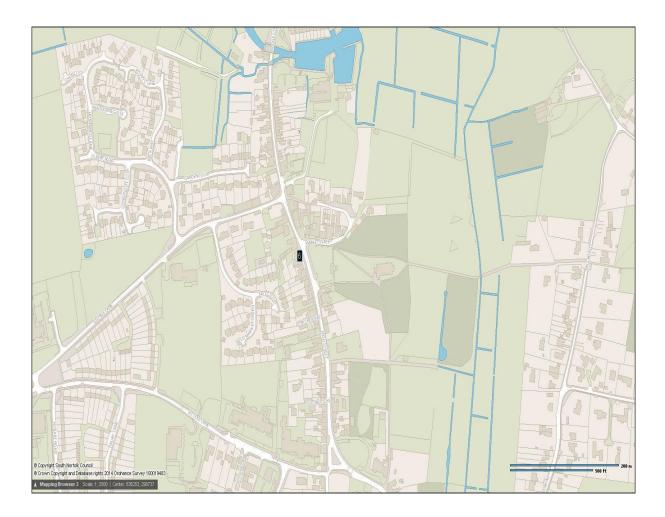
Harleston

Tube I.D.	Location	Height	Grid
15	Harleston (Hotel)	2.1	0624484 0283276
29	25 Broad Street Harleston	1.5	0615754 0310637



Loddon

Tube I.D.	Location	Height	Grid
6	21 Church Plain, Loddon	1.5	0636192 0298751



Appendix E: Summary of Air Quality Objectives in England

Table E.1 – Air Quality Objectives in England

Pollutant	Air Quality Objective ⁴		
	Concentration	Measured as	
Nitrogen Dioxide	200 µg/m ³ not to be exceeded more than 18 times a year	1-hour mean	
(NO ₂)	40 μg/m ³	Annual mean	
Particulate Matter (PM ₁₀)	50 μg/m ³ , not to be exceeded more than 35 times a year	24-hour mean	
	40 μg/m ³	Annual mean	
Sulphur Dioxide (SO ₂)	350 μg/m ³ , not to be exceeded more than 24 times a year	1-hour mean	
	125 µg/m ³ , not to be exceeded more than 3 times a year	24-hour mean	
	266 µg/m ³ , not to be exceeded more than 35 times a year	15-minute mean	

 $^{^4}$ The units are in microgrammes of pollutant per cubic metre of air (µg/m³).

Glossary of Terms

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Abbreviation	Description	
AQAP	Air Quality Action Plan - A detailed description of measures, outcomes, achievement dates and implementation methods, showing how the local authority intends to achieve air quality limit values'	
AQMA	Air Quality Management Area – An area where air pollutant concentrations exceed / are likely to exceed the relevant air quality objectives. AQMAs are declared for specific pollutants and objectives	
ASR	Air quality Annual Status Report	
Defra	Department for Environment, Food and Rural Affairs	
DMRB	Design Manual for Roads and Bridges – Air quality screening tool produced by Highways England	
EU	European Union	
FDMS	Filter Dynamics Measurement System	
LAQM	Local Air Quality Management	
NO ₂	Nitrogen Dioxide	
NO _x	Nitrogen Oxides	
PM ₁₀	Airborne particulate matter with an aerodynamic diameter of 10µm (micrometres or microns) or less	
PM _{2.5}	Airborne particulate matter with an aerodynamic diameter of $2.5 \mu m$ or less	
QA/QC	Quality Assurance and Quality Control	
SO ₂	Sulphur Dioxide	