South Holland District Council

2026 Annual Status Report

July 2026



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2026 Air Quality Annual Status Report (ASR)

In fulfilment of Part IV of the Environment Act 1995 Local Air Quality Management, as amended by the Environment Act 2021

Date: July 2026

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Local Responsibilities and Commitment

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This ASR has not been signed off by a Director of Public Health but has been sent to them for review.

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Executive Summary: Air Quality in Our Area

Air Quality in South Holland District Council

Breathing in polluted air affects our health and costs the NHS and our society billions of pounds each year. Air pollution is recognised as a contributing factor in the onset of heart disease and cancer and can cause a range of health impacts, including effects on lung function, exacerbation of asthma, increases in hospital admissions and mortality.

Air pollution particularly affects the most vulnerable in society, children, the elderly, and those with existing heart and lung conditions. Low-income communities are also disproportionately impacted by poor air quality, exacerbating health and social inequalities.

Table ES 1 provides a brief explanation of the key pollutants relevant to Local Air Quality Management and the kind of activities they might arise from.

Table ES 1 - Description of Key Pollutants

Pollutant	Description
Nitrogen Dioxide (NO_2)	Nitrogen dioxide is a gas which is generally emitted from high-temperature combustion processes such as road transport or energy generation.
Sulphur Dioxide (SO_2)	Sulphur dioxide (SO_2) is a corrosive gas which is predominantly produced from the combustion of coal or crude oil.
Particulate Matter (PM_{10} and $PM_{2.5}$)	Particulate matter is everything in the air that is not a gas. Particles can come from natural sources such as pollen, as well as human made sources such as smoke from fires, emissions from industry and dust from tyres and brakes. PM_{10} refers to particles under 10 micrometres. Fine particulate matter or $PM_{2.5}$ are particles under 2.5 micrometres.

The main source of air pollution in South Holland District Council is road traffic emissions from major roads, notably the A16, A17 and A151, which connect South Holland with North Lincolnshire, the Humber estuary, and Southwest Lincolnshire. There are currently no Air Quality Management Areas (AQMAs) declared in South Holland.

South Holland District Council's monitoring network comprises of two automatic analysers and 15 non-automatic (passive) diffusion tube samplers.

During 2025, all diffusion tube monitoring locations continued to report annual NO_2 concentrations well below the NO_2 Air quality objective (40µg/m^3). In 2025 80% of monitoring sites reported an increase in annual mean NO_2 concentration however the greatest increase was 2.8µg/m^3. This represents a 15.3% increase compared to 2024, however the concentration 22.2µg/m^3 is well below the annual mean NO_2 concentration.

Annual NO_2 concentrations at both continuous monitoring sites were below 10µg/m^3, and neither continuous monitor reported hourly NO_2 concentrations exceeding 200µg/m^3. As per LAQM.TG(22), an annual mean NO_2 concentration greater than 60µg/m^3 can be used as a proxy to indicate whether there is an exceedance of the NO_2 1-hour mean AQS objective (no more than 18 hourly mean concentrations in exceedance of 200µg/m^3). It is therefore assumed that there have been no exceedances of the 1-hour mean objective at any monitoring site.

PM_{10} is monitored at both automatic sites, which in 2025 continued to report annual means well below the annual PM_{10} air quality objective (40µg/m^3). Compared with 2024 data, concentrations at Site CM1 (Spalding Monkhouse School) decreased by 0.7µg/m^3, while those at CM2 (Westmere School) decreased by 2.8µg/m^3.

There were no exceedances of 24-hour objective value of 50µg/m^3 at either site. The objective permits up to 35 exceedances per year, therefore both sites are compliant with the 24-hour objective.

Annual average $PM_{2.5}$ concentrations were estimated by applying a national background factor to the PM_{10} concentrations. Estimated $PM_{2.5}$ annual concentrations were 4.1µg/m^3 at CM1 and 6.5µg/m^3 at site CM2, which are both well below the target value of 20µg/m^3.

Actions to Improve Air Quality

Whilst air quality has improved significantly in recent decades, there are some areas where local action is needed to protect people and the environment from the effects of air pollution.

During 2025 South Holland District Council focused on the following measures:

- **Continue the roll out of green waste service and discourage the use of bonfires** – 467 new subscriptions were taken out in 2025 and 4,746.63 tonnes of

green waste were collected. These figures are lower than 2024 figures and after a restructuring project it is hoped that in 2026 new subscriptions can be opened.

- **Devise a communication plan to educate the public on the importance of looking after our air quality, and the potential health risks associated with poor air quality –** four posts on social media were met with negative reactions and as such the communication plan is being reconsidered.
- **Undertake Environmental Permit Inspections** – The Council has focused on completing high risk inspections to ensure continued compliance with the regulations.

Conclusions and Priorities

In 2026 South Holland District Council will continue to work to improve air quality in the district.

The main priorities are:

- **Continue the roll out of green waste service and discourage the use of bonfires** – The Council is planning to expand the Garden Waste Collection service across the entire district and the Waste Services team is currently undertaking a comprehensive route review to help design new collection rounds that can accommodate future demand. In 2026 the Council hopes to open for new subscriptions
- **Maintain a program of Environmental Permit inspections** – A program of inspections was first produced in 2022, and the Council will continue to implement this over the coming year prioritising high risk inspections.
- **Revise planning conditions and approach to Construction & Environmental Management Plans (CEMPs).** The Council will review its current planning conditions to reduce actual and perceived air pollution from construction works.

How to get Involved

South Holland District Council continues to promote a variety of actions that can be undertaken by everyone to help keep air pollution low, and protect their health when levels rise:

- Don’t light a bonfire when pollution levels are high.

- Try to use your car less often – Walk, cycle, or use public transport (cycling and walking are healthier for both the environment and you.
- Ask your employer, school, or college about developing a green travel plan.
- Do not drive your car when there are warnings of high air pollution. You will normally receive pollution warnings on your local regional news and weather forecast.

South Holland's air quality webpages provide further information and guidance on how to get involved. The South Holland automatic air quality monitoring data is available to view and download on Air Quality England (AQE). Further information on air quality issues and how you can help can also be found at the Clean Air Lincolnshire Project.

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1 Local Air Quality Management

This report provides an overview of air quality in South Holland District Council during 2025. It fulfils the requirements of Local Air Quality Management (LAQM) as set out in Part IV of the Environment Act (1995), as amended by the Environment Act (2021), 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 order to achieve and maintain the objectives and the dates by which each measure will be carried out. This Annual Status Report (ASR) is an annual requirement showing the strategies employed by South Holland District Council to improve air quality and any progress that has been made.

The statutory air quality objectives applicable to LAQM in England are presented in Table E.1.

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 should prepare an Air Quality Action Plan (AQAP) within 18 months. The AQAP should specify how air quality targets will be achieved and maintained and provide dates by which measures will be carried out.

South Holland District Council currently does not have any declared AQMAs. A local Air Quality Strategy is under development to prevent and reduce polluting activities.

2.2 Progress and Impact of Measures to address Air Quality in South Holland District Council

Defra's appraisal of last year's ASR concluded the report is well structured, detailed, and provides the information specified in the Guidance.

1. Comments from previous ASR appraisals have been included and responded to. This is welcomed and encouraged for future reports.

Comments from the 2025 ASR have been included below.

2. SHDC should aim to publish a local AQS in the next reporting year.

Due to resourcing issues this was not possible in 2025.

3. The Council include some discussion on $PM_{2.5}$ in the district, despite not monitoring this pollutant, which is welcomed. The PHOF D01 indicator is a useful addition.

The inclusion of the D01 indicator has been included in the 2026 ASR.

4. SHDC has included thorough discussion of trends with comparison to the AQO. This is level of detail is encouraged for future reports.

Discussion has also been included in the 2026 ASR.

5. Although not a requirement, SHDC has received sign off the Director of Public Health. This is commended.

SHDC will continue to get a Director of Public Health to sign off on the ASR.

6. The Council has included high quality graphs which aid the discussion of trends in the district. This is commended.

These graphs have been included in the 2026 ASR.

7. The Council has a robust QA/QC procedure and have included all the relevant information and calculations in the report.

These QA/QC procedures were continued in 2025.

8. SHDC have stated that the Defra diffusion tube calendar has been adhered to in 2024. This is commended.

The calendar was also adhered to in 2025.

9. The Council has identified a number of planning applications that may impact air quality in the district. This commended and a useful inclusion in the report.

SHDC has identified further planning applications which may impact air quality from 2025 in Appendix C.

South Holland District Council has taken forward a number of direct measures during the current reporting year of 2025 in pursuit of improving local air quality. Details of all measures completed, in progress or planned are set out in Table 2.1. Four measures are included within Table 2.1, with the type of measure and the progress South Holland District Council have made during the reporting year of 2025 presented. Where there have been, or continue to be, barriers restricting the implementation of the measure, these are also presented within Table 2.1.

South Holland District Council worked to implement these measures in partnership with the following stakeholders during 2025:

- Clean Air Lincolnshire Project
- South & East Lincolnshire Councils Partnership
- South Holland District Council Waste Services team

The principal challenges and barriers to implementation that South Holland District Council anticipates facing are resourcing and funding issues which has meant limited availability for Environmental Permit inspections.

South Holland District Council's priorities for the coming year are:

- **Continue the roll out of green waste service and discourage the use of bonfires** – The Council is planning to expand the Garden Waste Collection service across the entire district and the Waste Services team is currently undertaking a comprehensive route review to help design new collection rounds that can accommodate future demand. In 2026 the Council hopes to open for new subscriptions
- **Maintain a program of Environmental Permit inspections** – A program of inspections was first produced in 2022, and the Council will continue to implement this over the coming year prioritising high risk inspections.
- **Revise planning conditions and approach to Construction & Environmental Management Plans (CEMPs). -** The Council will review its current planning conditions to reduce actual and perceived air pollution from construction works. This will include requesting screening and assessment in accordance with the

Institute of Air Quality Management guidance ‘Assessment of dust from demolition and construction’ (2024 V2.2), as well as developers implementing the subsequent recommendations made.

Whilst Defra sets out national air quality objectives, the World Health Organisation (WHO) does not consider any level of air pollution safe for humans. The Council’s position is therefore that whilst there are no indications that national air quality objectives are being exceeded, efforts to reduce air pollution to a minimum will continue.

The Council support the Clean Air Lincolnshire Project, which is funded via the Defra Air Quality Grant Scheme. The project is a partnership involving all eight Lincolnshire councils, eight local schools and two businesses specialising in air quality monitoring and website design respectively (Clarity and Root Studio). The partnership’s aim is to produce a public awareness campaign and to use air quality monitoring equipment in schools to educate students, staff and parents on the causes of air pollution and how we can take action to reduce air pollution around our schools.

Table 2.1 – Progress on Measures to Improve Air Quality

Measure No.	Measure Title	Category	Classification	Year Measure Introduced in AQAP	Estimated / Actual Completion Date	Organisations Involved	Funding Source	Funding Status	Estimated Cost of Measure	Measure Status	Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments / Barriers to Implementation
Priority Air Quality Actions														
1	Continue the roll out of green waste service and discourage the use of bonfires	Public Information	Other	N/A	Ongoing	South Holland District Council	Subscription	Fully Funded	<10k	Implementation	Reduced emissions from outdoor burning	Sign up rate, measured, tonnage green waste collected and formal actions on waste related burning	467 new waste subscriptions were taken in 2025. This was significantly down from 2024 as the service was closed to new subscriptions to allow the waste routes to be re-configured. 4,746.63 tonnes of green waste was collected in 2025, 8.2% lower than in 2024. The long hot dry summer could account for this reduction.	Work on the re-routing continues and it is hoped to open the service back for new subscribers across the whole district in 2026.
2	Devise a communication plan to educate the public on the importance of looking after our air quality, and the potential health risks associated with poor air quality	Public Information	Via the Internet	N/A	Ceased 02/2025	South Holland District Council / South & East Lincolnshire Councils Partnership	N/A	Not Funded	<£10k	Ceased	Increased public awareness leading to lower emissions from bonfires, wood burning stoves and vehicles	-	A series of four posts on social media for clean air night had a focus on education, burning the right fuels and promoting the garden waste service. Engagement and views were successful; however comments and interactions were in the majority very negative, and the posts had to be removed. Post / Post reach / Post engagement 1 / 6486 / 82 2 / 2385 / 35 3 / 1728 / 30 4 / 2096 / 27	Very negative responses meant that no further air quality comms were scheduled as a result.
3	Maintain a program of Environmental Permit inspections	Environmental Permits	Other	N/A	Ongoing	South Holland District Council	Permit fees & general fund	Fully Funded	£10k - £50k	Implementation	Ensure operators use Best Available Techniques (BAT)	Number of permit inspections undertaken	High risk inspections continue to be prioritized. Advice was given at the pre-planning/ planning stage on a proposed black soldier fly larvae farm and an asphalt batching plant. Neither have progressed. No non-compliance notice under Environmental Permitting (England and Wales) Regulations 2016 Regulation 38(2) were served.	Challenges with staffing roles mean the focus on maintaining higher risk inspection programs has continued throughout 2025.
4	Revise planning conditions and approach to Construction & Environmental Management Plans (CEMPs) to reduce actual and perceived air pollution from construction works.	Planning	Other	N/A	December 2026	South Holland District Council	N/A	Not Funded	<10K	Pre-commencement	Ensures developers follow the Institute of Air Quality Management 'Guidance on the assessment of dust from demolition and construction' (Version 2.2) will result in lower fine particulate matter emissions in the vicinity of construction sites.	-	-	Acceptance by developers may be challenging in the short to medium term. Ensuring planner buy in will be important in promoting these changes.

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

As detailed in Policy Guidance LAQM.PG22 (Chapter 8) and the Air Quality Strategy[1], local authorities are expected to work towards reducing emissions and/or concentrations of fine particulate matter ($PM_{2.5}$)). There is clear evidence that $PM_{2.5}$ (particulate matter smaller 2.5 micrometres) has a significant impact on human health, including premature mortality, allergic reactions, and cardiovascular diseases.

Whilst the main source of air pollution in South Holland District Council is road traffic emissions from major roads, agri-food industries, particularly intense farming, are a known source of $PM_{2.5}$. Given that over 50% of jobs in South Holland are directly linked to the agri-food value chain, the Council recognises the potential impacts of this.

The Defra 2024 background maps for South Holland District Council (2021 reference year)[2] show that all background concentrations of $PM_{2.5}$ are far below the annual mean target of 20µg/m^3 for $PM_{2.5}$. The 2025 average $PM_{2.5}$ background concentration for South Holland District Council was 5.87µg/m^3. The highest background concentration was estimated to be 7.06µg/m^3 within the 1 x 1km grid square with the centroid grid reference of 523500, 322500. This grid square is located in Spalding; it is a largely residential area and encompasses part of the A151.

The background maps also provide a breakdown of sources. For the highest background concentration grid square, the majority of the estimated $PM_{2.5}$ concentration (4.00µg/m^3) is attributed to secondary $PM_{2.5}$ formation, where $PM_{2.5}$ is formed from the chemical reactions of other gaseous atmospheric pollutants such as sulphur dioxide (SO_2) and nitrogen oxides (NO_x, NO and NO_2). The background concentrations attributed to local domestic sources was also highest at this location, indicating that domestic solid fuel burning may be contributing to increased $PM_{2.5}$ concentrations, particularly in residential areas.

[1] Defra. Air Quality Strategy – Framework for Local Authority Delivery, August 2023

[2] Defra Background Mapping data for local authorities (2021-based), available online at https://uk-air.defra.gov.uk/data/laqm-background-maps?year=2021

The Public Health Outcomes Framework data tool[3] compiled by Public Heath England quantifies the mortality burden of $PM_{2.5}$ within England on a county and local authority scale. The 2024 fraction, the most recent year available of mortality attributable to particle air pollution (indicator D01) is 5.2% in South Holland. In both areas, this is lower than the average for the East Midlands region (5.4%), but slightly higher than the England average (5.3%). The 2024 estimates of the fraction of mortality attributable to $PM_{2.5}$ pollution range from 3.2% in the Isles of Scilly to 8.1% in the City of London.

[3] Public Health Outcomes Framework, Public Health England. data tool available online at https://fingertips.phe.org.uk/profile/public-health-outcomes-framework/data#page/3/gid/1000043/pat/6/ati/501/are/E07000140/iid/93861/age/230/sex/4/cat/-1/ctp/-1/yrr/1/cid/4/tbm/1/page-options/car-ao-0_car-do-0

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

This section sets out the monitoring undertaken within 2025 by South Holland District Council and how it compares with the relevant air quality objectives. In addition, monitoring results are presented for a five-year period between 2021 and 2025 to allow monitoring trends to be identified and discussed.

3.1 Summary of Monitoring Undertaken

3.1.1 Automatic Monitoring Sites

South Holland District Council undertook automatic (continuous) monitoring at two sites during 2025. Table A.1 in Appendix A shows the details of the automatic monitoring sites.

The Air Quality in England page presents automatic monitoring results for South Holland District Council.

Maps showing the location of the monitoring sites are provided in Appendix D. Further details on how the monitors are calibrated and how the data has been adjusted are included in Appendix C.

3.1.2 Non-Automatic Monitoring Sites

South Holland District Council undertook non- automatic (i.e. passive) monitoring of NO_2 at 15 sites during 2025. Table A.2 in Appendix A presents the details of the non-automatic 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 (where the annual mean data capture is below 75% and greater

than 25%), and distance correction. Further details on adjustments are provided in Appendix C.

3.2.1 Nitrogen Dioxide (NO_2)

Table A.3 and Table A.4 in Appendix A compare the ratified and adjusted monitored NO_2 annual mean concentrations for the past five years with the air quality objective of 40µg/m^3. Note that the concentration data presented represents the concentration at the location of the monitoring site, following the application of bias adjustment and annualisation, as required (i.e. the values are exclusive of any consideration to fall-off with distance adjustment).

For diffusion tubes, the full 2025 dataset of monthly mean values is provided in Appendix B. Note that the concentration data presented in Table B.1 includes distance corrected values, only where relevant.

In 2025, all NO_2 monitoring locations were below the annual mean air quality objective of 40µg/m^3. This continues the trend over the past five years of no exceedances of the NO_2 annual mean objective in District. The highest concentration was recorded at Winsover Road (SH2a, SH2b and SH2c) which is located in between a set of traffic lights and a level crossing, so the regular slowing and stopping of traffic is likely responsible for the higher concentrations at this location. The annual mean concentration here was 28.4µg/m^3, an increase of 2.0µg/m^3 compared to 2024 concentration but still well below the annual mean NO_2 air quality objective.

In 2025, 80% of monitoring locations showed an increase in NO_2 annual mean concentrations compared to 2024, this may be for a number of reasons including meteorological conditions. The largest increase in NO_2 was noted on the High Street in Spalding (SH17) with a 2.8µg/m^3 increase. This represents a 15.3% increase compared to 2024, however the concentration 22.2µg/m^3 is well below the annual mean NO_2 concentration.

Table A.5 in Appendix A compares the ratified continuous monitored NO_2 hourly mean concentrations for the past five years with the air quality objective of 200µg/m^3, not to be exceeded more than 18 times per year.

Annual concentrations at both continuous monitoring sites were below 10µg/m^3, and neither continuous monitor reported hourly NO_2 concentrations exceeding 200µg/m^3. Additionally, as per LAQM.TG(22), an annual mean NO_2 concentration greater than

60µg/m^3 can be used as a proxy to indicate whether there is an exceedance of the NO_2 1-hour mean air quality objective (no more than 18 hourly mean concentrations in exceedance of 200µg/m^3). It is therefore assumed that there have been no exceedances of the 1-hour mean objective of 200µg/m^3 at any non-automatic monitoring sites.

3.2.2 Particulate Matter (PM_{10})

Table A.6 in Appendix A: Monitoring Results compares the ratified and adjusted monitored PM_{10} annual mean concentrations for the past five years with the air quality objective of 40µg/m^3.

Compared with 2024 data, concentrations at Site CM1 (Spalding Monkhouse School) decreased by 0.7µg/m^3 and those at CM2 (Westmere School) decreased by 2.8µg/m^3. Both sites continue to report annual means well below the annual PM_{10} air quality objective (40µg/m^3) with annual mean concentrations of 9.1 and 11.0µg/m^3 respectively.

Table A.7 in Appendix A compares the ratified continuous monitored PM_{10} daily mean concentrations for the past five years with the air quality objective of 50µg/m^3, not to be exceeded more than 35 times per year. There were no exceedances of the daily PM_{10} mean air quality objective in 2025.

3.2.3 Particulate Matter ($PM_{2.5}$)

South Holland District Council did not undertake $PM_{2.5}$ monitoring in 2025 however PM_{10} monitoring is undertaken. In accordance with LAQM.TG(22), $PM_{2.5}$ concentrations can be estimated from monitored PM_{10} concentrations using either a local PM_{10} and $PM_{2.5}$ monitoring PM_{coarse} split (the fraction of PM between 10µm and 2.5µm, i.e. PM_{10} minus $PM_{2.5}$), or a nationally derived factor[4].

The national factor for PM_{coarse} split is 5.0 for background sites and 6.7 for roadside sites in 2025. As there is no local monitoring for $PM_{2.5}$, the nationally derived background factor has been applied to the PM_{10} concentrations to provide an estimate of $PM_{2.5}$ concentrations at each site. Table 3.1 details the estimated $PM_{2.5}$ concentrations for 2025.

[4] Defra. Estimating $PM_{2.5}$ from PM_{10} Measurements. Available at: https://laqm.defra.gov.uk/air-quality/air-quality-assessment/estimating-pm2-5-from-pm10-measurements/

Table 3.1 Estimated PM2.5 concentrations in 2025

Site	2025 Annual Mean PM_{10} ($\mu g/m^3$)	PM_{coarse} factor	Estimated 2025 $PM_{2.5}$ Concentration ($\mu g/m^3$)
CM1	9.1	5.0	4.1
CM2	11.0	4.5	6.5

The maximum estimated $PM_{2.5}$ concentration in 2025 was therefore 6.5$\mu g/m^3$, which is well below the $PM_{2.5}$ annual mean target (20$\mu g/m^3$).

3.2.4 Sulphur Dioxide (SO_2)

South Holland District Council did not undertake SO_2 monitoring in 2025.

Appendix A: Monitoring Results

Table A.1 – Details of Automatic Monitoring Sites

Site ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	In AQMA?	Which AQMA? (1)	Monitoring Technique	Distance to Relevant Exposure (m) (1,2)	Distance to kerb of nearest road (m) (1)	Inlet Height (m)
CM1	Spalding Monkhouse School	Urban Background	523174	322455	NO_2, PM_{10}	No	N/A	Chemiluminescence, TEOM corrected by VCM	1.0	25.0	3.0
CM2	Westmere School	Urban Background	547269	321718	NO_2, PM_{10}, Ozone	No	N/A	Chemiluminescence, UV Absorption, TEOM corrected by VCM	14.0	190.0	3.0

Notes:

(1) N/A if not applicable

(2) 0m if the monitoring site is at a location of exposure (e.g. installed on the façade of a residential property).

Table A.2 – Details of Non-Automatic Monitoring Sites

Diffusion Tube ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	In AQMA? Which AQMA?	Distance to Relevant Exposure (m) (1)	Distance to kerb of nearest road (m) (2)	Tube Co-located with a Continuous Analyser?	Tube Height (m)
SH1	21 Millfield	Urban Background	524318	310542	NO_2	No	6.8	0.3	No	1.9
SH2a,SH2b,SH2c	Winsover Road	Urban Background	524312	322597	NO_2	No	0.0	1.3	No	2.6
SH3	Woodfield Close	Urban Background	525696	322003	NO_2	No	7.0	1.7	No	2.1

Diffusion Tube ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	In AQMA? Which AQMA?	Distance to Relevant Exposure (m) (1)	Distance to kerb of nearest road (m) (2)	Tube Co-located with a Continuous Analyser?	Tube Height (m)
SH4	46 The Hollies	Urban Background	536502	325072	NO_2	No	8.4	1.4	No	2.2
SH5	Station Road	Roadside	526633	328726	NO_2	No	24.9	1.1	No	2.1
SH6	Boston Road A17	Roadside	535509	325609	NO_2	No	4.0	1.8	No	2.1
SH7	Field End A17	Roadside	540966	324399	NO_2	No	9.0	2.1	No	2.1
SH8a,SH8b,SH8c	Westmere	Urban Background	547265	321721	NO_2	No	69.4	61.2	Yes	N/A
SH11	Donington A52	Roadside	520924	336058	NO_2	No	49.0	1.5	No	2.1
SH13	Pinchbeck Road	Kerbside	524604	323792	NO_2	No	20.7	2.0	No	2.1
SH19	Whaplode	Roadside	532686	324316	NO_2	No	7.0	4.0	No	1.9
SH15	Pinchbeck	Roadside	524185	325812	NO_2	No	12.0	1.7	No	2.0
SH16	Gosberton	Roadside	524236	331492	NO_2	No	7.0	1.9	No	2.2
SH17	High Street	Roadside	524893	322579	NO_2	No	0.0	0.9	No	1.9
SH18	BP Garage	Roadside	524194	321331	NO_2	No	1.5	3.9	No	2.1

Notes:

(1) 0m if the monitoring site is at a location of exposure (e.g. installed on the façade of a residential property).

(2) N/A if not applicable.

Table A.3 – Annual Mean NO_2 Monitoring Results: Automatic Monitoring (µg/m^3)

Site ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) (1)	Valid Data Capture 2025 (%) (2)	2021	2022	2023	2024	2025
CM1	523174	322455	Urban Background	98.6	98.6	8.7	8.9	8.2	7.4	8.4
CM2	547269	321718	Urban Background	99.8	99.8	7.4	7.8	6.8	6.2	7.2

☒ **Annualisation has been conducted where data capture is <75% and >25% in line with LAQM.TG22**

☒ **Reported concentrations are those at the location of the monitoring site (annualised, as required), i.e. prior to any fall-off with distance correction.**

☒ **Where exceedances of the NO_2 annual mean objective occur at locations not representative of relevant exposure, the fall-off with distance concentration has been calculated and reported concentration provided in brackets for 2025.**

Notes:

The annual mean concentrations are presented as µg/m^3.

Exceedances of the NO_2 annual mean objective of 40µg/m^3 are shown in **bold**.

All means have been "annualised" as per LAQM.TG22 if valid data capture for the full calendar year is less than 75%. See Appendix C for details.

Concentrations are those at the location of monitoring and not those following any fall-off with distance adjustment.

(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%).

Table A.4 – Annual Mean NO_2 Monitoring Results: Non-Automatic Monitoring (µg/m^3)

Diffusion Tube ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) (1)	Valid Data Capture 2025 (%) (2)	2021	2022	2023	2024	2025
SH1	524318	310542	Urban Background	100.0	100.0	8.8	9.7	8.3	7.3	8.4
SH2a, SH2b, SH2c	524312	322597	Urban Background	100.0	100.0	29.8	32.2	30.1	26.3	28.4
SH3	525696	322003	Urban Background	100.0	100.0	9.7	10.7	9.0	8.5	9.2
SH4	536502	325072	Urban Background	100.0	100.0	8.7	9.6	8.2	7.6	8.2
SH5	526633	328726	Roadside	100.0	100.0	11.6	12.1	11.1	10.5	11.3
SH6	535509	325609	Roadside	100.0	100.0	23.8	27.6	24.3	22.6	21.7
SH7	540966	324399	Roadside	100.0	100.0	19.5	21.6	18.3	17.2	17.8
SH8a, SH8b, SH8c	547265	321721	Urban Background	100.0	100.0	7.3	7.9	6.8	6.2	7.3
SH11	520924	336058	Roadside	100.0	100.0	14.3	14.4	13.6	11.7	13.1
SH13	524604	323792	Kerbside	100.0	100.0	24.0	25.9	23.8	23.5	21.5
SH19 (Former 14)	532686	324316	Roadside	100.0	100.0	14.5	14.5	13.1	12.6	12.0
SH15	524185	325812	Roadside	100.0	100.0	19.9	19.6	17.5	17.4	18.9
SH16	524236	331492	Roadside	100.0	100.0	13.4	13.6	12.3	10.3	12.0
SH17	524893	322579	Roadside	90.4	90.4	19.0	22.2	19.6	18.4	21.2

Diffusion Tube ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) (1)	Valid Data Capture 2025 (%) (2)	2021	2022	2023	2024	2025
SH18	524194	321331	Roadside	100.0	100.0	17.3	18.7	16.3	16.6	16.2

☒ **Annualisation has been conducted where data capture is <75% and >25% in line with LAQM.TG22.**

☒ **Diffusion tube data has been bias adjusted.**

☒ **Reported concentrations are those at the location of the monitoring site (bias adjusted and annualised, as required), i.e. prior to any fall-off with distance correction.**

Notes:

The annual mean concentrations are presented as µg/m^3.

Exceedances of the NO_2 annual mean objective of 40µg/m^3 are shown in **bold**.

NO_2 annual means exceeding 60µg/m^3, indicating a potential exceedance of the NO_2 1-hour mean objective are shown in **bold and underlined**.

Means for diffusion tubes have been corrected for bias. All means have been "annualised" as per LAQM.TG22 if valid data capture for the full calendar year is less than 75%. See Appendix C for details.

Concentrations are those at the location of monitoring and not those following any fall-off with distance adjustment.

(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%).

Figure A.1 – Trends in Annual Mean NO_2 Concentrations – automatic and passive monitoring

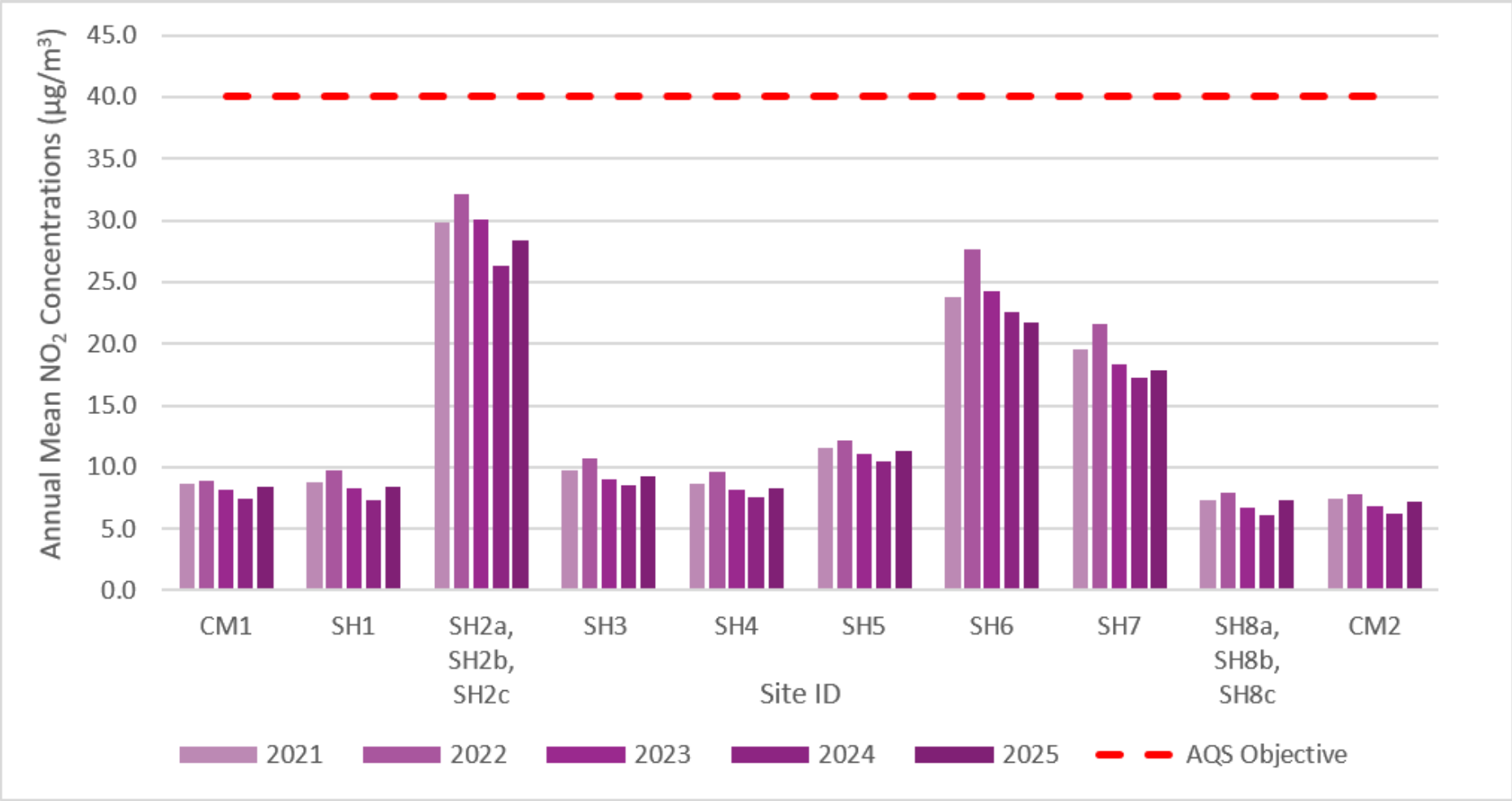


Figure A.2 – Trends in Annual Mean NO_2 Concentrations – tubes SH11 – SH18

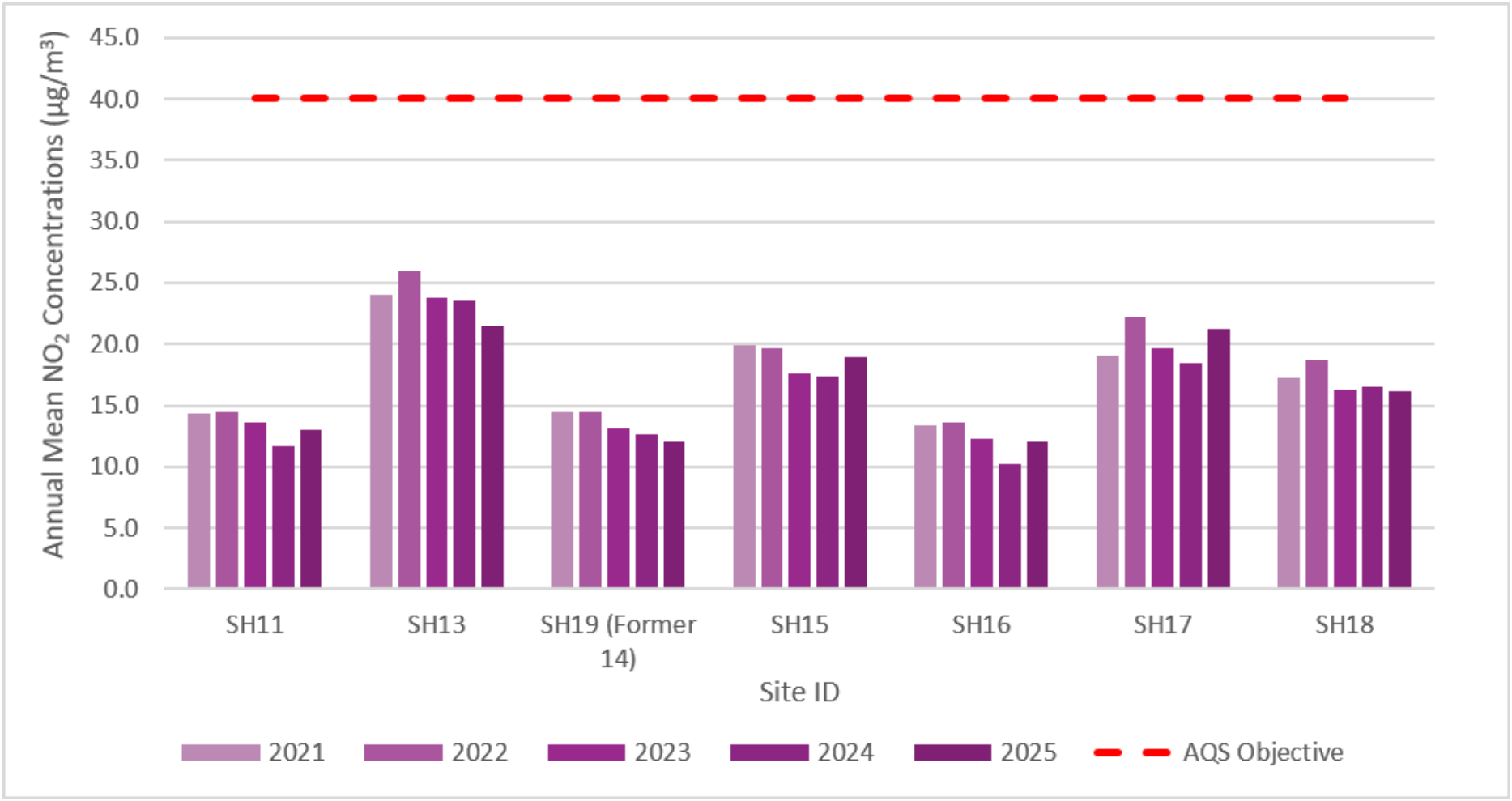


Table A.5 – 1-Hour Mean NO_2 Monitoring Results, Number of 1-Hour Means > 200µg/m^3

Site ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) (1)	Valid Data Capture 2025 (%) (2)	2021	2022	2023	2024	2025
CM1	523174	322455	Urban Background	98.6	98.6	0	0	0	0	0
CM2	547269	321718	Urban Background	99.8	99.8	0	0	0	0	0

Notes:

Results are presented as the number of 1-hour periods where concentrations greater than 200µg/m^3 have been recorded.

Exceedances of the NO_2 1-hour mean objective (200µg/m^3 not to be exceeded more than 18 times/year) are shown in **bold**.

If the period of valid data is less than 85%, the 99.8th percentile of 1-hour means is provided in brackets.

(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%).

Table A.6 – Annual Mean PM_{10} Monitoring Results ($\mu g/m^3$)

Site ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) (1)	Valid Data Capture 2025 (%) (2)	2021	2022	2023	2024	2025
CM1	523174	322455	Urban Background	85.2	85.2	9.0	11.5	10.9	9.9	9.1
CM2	547269	321718	Urban Background	80.7	80.7	12.6	14.5	13.4	13.8	11.0

☐ **Annualisation has been conducted where data capture is <75% and >25% in line with LAQM.TG22.**

Notes:

The annual mean concentrations are presented as $\mu g/m^3$.

Exceedances of the PM_{10} annual mean objective of $40\mu g/m^3$ are shown in **bold**.

All means have been "annualised" as per LAQM.TG22 if valid data capture for the full calendar year is less than 75%. See Appendix C for details.

(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%).

Figure A.3 – Trends in Annual Mean PM_{10} Concentrations

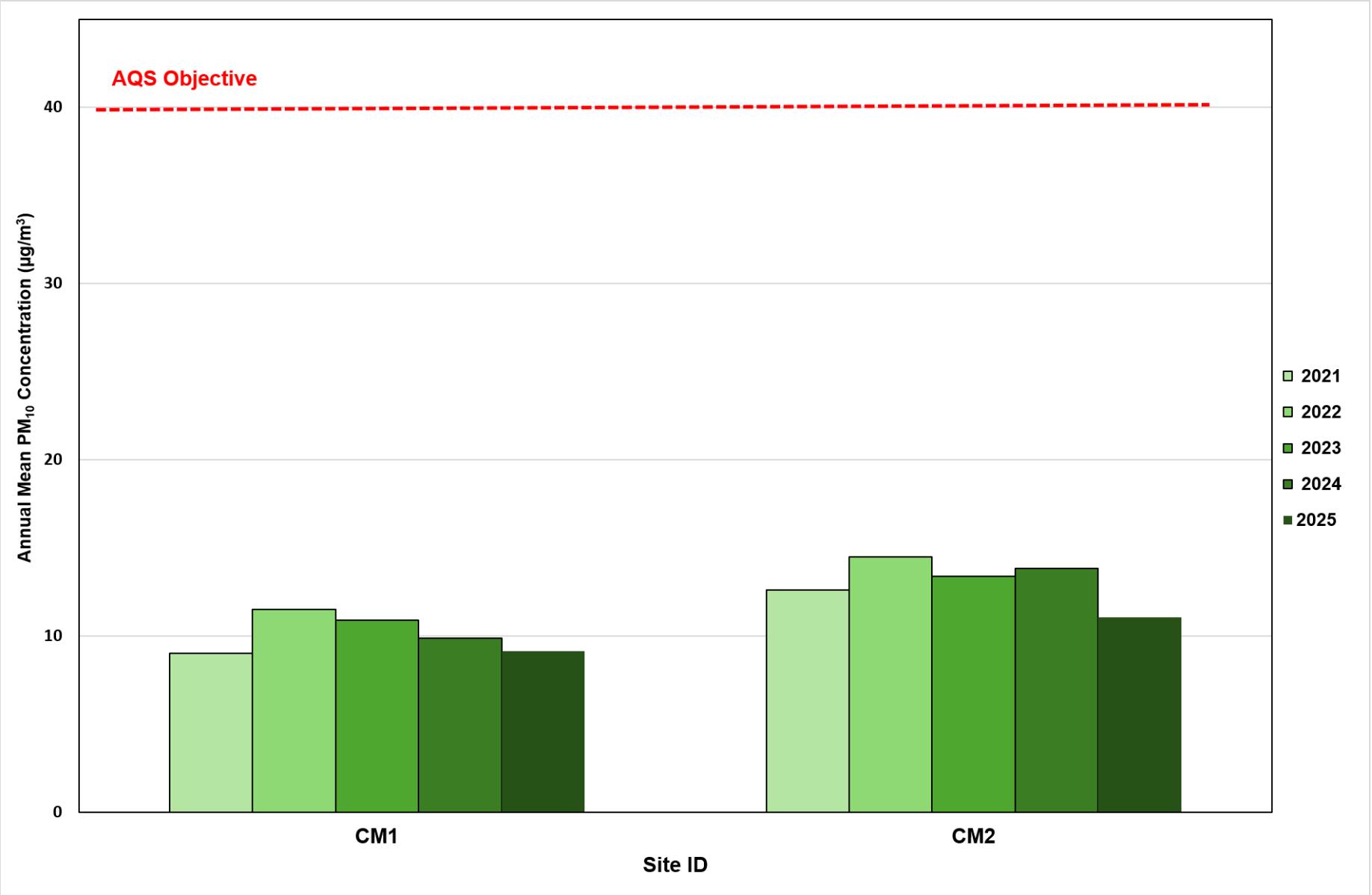


Table A.7 – 24-Hour Mean PM_{10} Monitoring Results, Number of PM_{10} 24-Hour Means > 50µg/m^3

Site ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) (1)	Valid Data Capture 2025 (%) (2)	2021	2022	2023	2024	2025
CM1	523174	322455	Urban Background	85.2	85.2	0	0	0	0	0
CM2	547269	321718	Urban Background	80.7	80.7	0	0	0	1	0 (18)

Notes:

Results are presented as the number of 24-hour periods where daily mean concentrations greater than 50µg/m^3 have been recorded.

Exceedances of the PM_{10} 24-hour mean objective (50µg/m^3 not to be exceeded more than 35 times/year) are shown in **bold**.

If the period of valid data is less than 85%, the 90.4th percentile of 24-hour means is provided in brackets.

(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%).

Appendix B: Full Monthly Diffusion Tube Results for 2025

Table B.1 – NO_2 2025 Diffusion Tube Results ($\mu g/m^3$)

DT ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Mean: Raw Data	Annual Mean: Annualised and Bias Adjusted (0.88)	Annual Mean: Distance Corrected to Nearest Exposure	Comment
SH1	524318	310542	16.4	14.3	12.0	8.7	4.5	5.1	5.5	6.5	8.1	9.3	12.7	10.5	9.5	8.4	-	
SH2a	524312	322597	43.3	38.7	33.1	39.7	27.5	32.9	22.1	31.8	29.2	29.6	33.9	29.8	-	-	-	Triplicate Site with SH2a, SH2b and SH2c - Annual data provided for SH2c only
SH2b	524312	322597	39.9	36.3	36.3	41.3	24.8	31.6	24.2	32.2	27.2	33.0	29.4	28.5	-	-	-	Triplicate Site with SH2a, SH2b and SH2c - Annual data provided for SH2c only
SH2c	524312	322597	41.2	34.2	32.8	37.7	27.3	29.7	22.7	31.9	27.6	31.0	33.0	28.5	32.1	28.4	-	Triplicate Site with SH2a, SH2b and SH2c - Annual data provided for SH2c only
SH3	525696	322003	19.4	14.3	13.5	10.1	5.4	6.4	5.9	6.7	8.3	10.4	13.3	11.5	10.4	9.2	-	
SH4	536502	325072	18.2	11.8	12.9	9.6	5.7	5.7	6.3	5.3	7.9	8.1	10.8	9.4	9.3	8.2	-	
SH5	526633	328726	18.6	13.3	16.8	10.8	8.7	15.1	11.6	9.4	12.1	10.2	14.9	12.0	12.8	11.3	-	
SH6	535509	325609	26.4	26.2	29.6	34.6	25.4	19.1	22.6	25.8	23.4	23.2	19.7	17.9	24.5	21.7	-	
SH7	540966	324399	24.0	20.9	18.6	22.0	15.5	23.3	22.4	19.5	20.0	20.4	19.0	15.7	20.1	17.8	-	
SH8a	547265	321721	16.7	11.1	11.4	8.7	3.8	5.0	4.5	5.1	6.3	7.6	10.6	9.7	-	-	-	Triplicate Site with SH8a, SH8b and SH8c - Annual data provided for SH8c only
SH8b	547265	321721	16.0	11.6	10.6	8.1	4.3	5.0	4.9	5.2	6.3	6.8	9.9	8.9	-	-	-	Triplicate Site with SH8a, SH8b and SH8c - Annual data provided for SH8c only
SH8c	547265	321721	17.5	11.0	10.8	8.2	3.9	5.0	4.3	4.7	7.4	7.8	8.9	9.0	8.2	7.3	-	Triplicate Site with SH8a, SH8b and SH8c - Annual data provided for SH8c only
SH11	520924	336058	22.4	16.2	19.2	17.5	10.4	11.5	10.5	13.0	12.9	12.9	16.6	14.0	14.8	13.1	-	
SH13	524604	323792	38.5	29.0	29.1	17.7	15.7	23.6	21.9	24.0	22.1	25.2	25.9	19.4	24.3	21.5	-	
SH19 (Former 14)	532686	324316	21.4	15.7	15.0	14.5	11.7	12.5	14.2	11.6	11.4	10.5	13.0	11.6	13.6	12.0	-	
SH15	524185	325812	30.8	27.0	29.0	19.5	17.3	16.0	16.7	18.9	18.5	22.1	21.2	19.2	21.3	18.9	-	
SH16	524236	331492	20.7	17.9	17.2	13.5	8.8	9.4	11.2	10.1	11.8	13.2	15.9	13.1	13.6	12.0	-	
SH17	524893	322579	32.9	27.6	27.9	23.3		23.2	15.3	22.7	22.7	20.7	26.1	21.5	24.0	21.2	-	
SH18	524194	321331	26.4	22.2	22.3	17.6	13.6	16.6	14.5	13.8	16.6	17.0	20.4	18.5	18.3	16.2	-	

☒ **All erroneous data has been removed from the NO_2 diffusion tube dataset presented in Table B.1.**

☒ **Annualisation has been conducted where data capture is <75% and >25% in line with LAQM.TG22.**

☒ **Local bias adjustment factor used.**

☐ **National bias adjustment factor used.**

☒ **Where applicable, data has been distance corrected for relevant exposure in the final column.**

☒ **South Holland District Council confirm that all 2025 diffusion tube data has been uploaded to the Diffusion Tube Data Entry System.**

Notes:

Exceedances of the NO_2 annual mean objective of 40µg/m^3 are shown in **bold**.

NO_2 annual means exceeding 60µg/m^3, indicating a potential exceedance of the NO_2 1-hour mean objective are shown in **bold and underlined**.

See Appendix C for details on bias adjustment and annualisation.

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

New or Changed Sources Identified Within South Holland District Council During 2025

Several Nationally Significant Infrastructure Projects (NSIPs) are proposed for the SHDC area over the coming years. SHDC is committed to providing feedback on these applications and engaging with working groups to ensure that the air quality impact to our residents from construction is as low as possible. These projects are summarised in Table C.1.

Table C.1 – NSIPs identified in 2025

NSIP	Summary	2025 Actions taken
Meridian Solar Farm	Meridian Solar Farm will comprise the construction, operation, maintenance and decommissioning of a solar photovoltaic (PV) and electrical battery storage generating facility with a generation capacity of up to 750MW. This will include the associated development and infrastructure required to facilitate a connection to the National Grid.	Two phases of statutory consultation undertaken with comments and feedback given with respect to air quality and construction management.
Eastern Green Link 3 & 4	Eastern Green Link 3 (EGL 3) and Eastern Green Link 4 (EGL 4) are two primarily marine high voltage electricity links between Scotland and England, comprising underground cabling in the SHDC area.	Stage two consultation was undertaken in spring 2025.

NSIP	Summary	2025 Actions taken
NGET Grimsby to Walpole	Grimsby to Walpole is a 140 km overhead line between Northeast Lincolnshire and North Norfolk.	Statutory consultation was undertaken with comments and feedback given with respect to air quality and construction management. Officers attend the Air Quality Technical Group meetings.
WMEL (Weston Marsh to East Leicestershire)	Around 60 km of new 400 kV overhead line from the infrastructure at Weston Marsh substation(s) (part of the Grimsby to Walpole project) to a proposed new substation near Wartnaby in Leicestershire.	Stage 1 consultation was undertaken during summer 2025 with comments and feedback given with respect to air quality and construction management.

In addition to the NSIPs, several major planning applications have been identified in 2025 which may impact air quality. These applications are summarised in Table C.2.

Table C.2 – Major Planning Applications identified in 2025

Application Number	Address	2025 Actions Taken
H22-0192-25	Weston Marsh Spalding Lincs	Notification of Environmental Impact Assessment scoping report consultation

Application Number	Address	2025 Actions Taken
H09-0442-25	Land off Battlefields Lane South Holbeach Spalding PE12 7PG	Hybrid Application for 158 Dwellings Comprising:- Full Application for the Erection of 62 Dwellings, Associated Landscaping and Infrastructure and Outline Application for the Erection of Approximately 96 Dwellings (Some Matters Reserved)
H16-0515-25	Land at Horseshoe Road Spalding PE11 3JB	Residential development of 76 dwellings and associated infrastructure
H16-0584-25	Land off Monks House Lane Spalding PE11 3LH	Hybrid application: Full planning application for the erection of 160 dwellings and associated infrastructure, demolition of existing buildings and outline planning application for the erection of up to 274 dwellings.
H09-0721-25	Land South of Wignals Gate Holbeach Spalding	Development of 57 Affordable Dwellings with associated access, open space and drainage.
H02-0759-25	Land East of Normanton Road Crowland	Development for 80 dwellings with access, landscape, drainage, open space and associated infrastructure
H16-1019-25	Land at Spalding Retail Park Holland Market Spalding PE11 1RQ	Provision of one substation, two power banks, one feeder pillar and associated bollards, and two lighting columns to support a scheme for 11 no. electric vehicle charging spaces

Application Number	Address	2025 Actions Taken
H22-1091-25	Weston Marsh to East Leicestershire (WMEL)	Notification of Environmental Impact Assessment scoping report consultation
H16-1235-25	Land Adj to existing Plant Based Protein Extraction Facility between A16 & Rangell Gate Spalding	Proposed Anaerobic Digestor Plant & Associated Buildings
H17-1225-25	Land to the East of Surfleet Bank and West of Woad Farm Surfleet	Proposed Anaerobic Digestor Plant and associated buildings

Additional Air Quality Works Undertaken by South Holland District Council During 2025

South Holland District Council did not undertake any additional works in 2025.

QA/QC of Diffusion Tube Monitoring

South Holland District Council's diffusion tubes in 2025 were supplied and analysed by Gradko International Ltd., using the 20% Triethanolamine (TEA) in water preparation method. Gradko's laboratory is UKAS accredited, participating in the AIR-PT Scheme for NO_2 tube analysis and the Annual Field Inter-Comparison Exercise. These provide strict performance criteria for participating laboratories to meet, thereby ensuring NO_2 concentrations reported are of a high calibre. The lab follows the procedures set out in the Harmonisation Practical Guidance. These provide strict performance criteria for participating laboratories to meet, thereby ensuring that the reported NO_2 concentrations are of a high calibre. In the most recent results, covering the data in this report (2025), Gradko International were awarded the following scores:

- AIR-PT AR062 (January – February 2025) = 50%.
- AIR-PT AR063 (April – June 2025) = 75%.
- AIR-PT AR064 (July – September 2025) = 100%.
- AIR-PT AR065 (October – December 2025) = 100%.

2025 data indicates that all results were deemed to be satisfactory, based on a z-score of less than ± 2 for the majority of the tests, highlighting a good performance of Gradko International Limited.

During 2025, the diffusion tubes were deployed in line with the national calendar (± 2 days).

Diffusion Tube Annualisation

All diffusion tube monitoring locations within South Holland District Council recorded data capture of 75% therefore it was not required to annualise any monitoring data. In addition, any sites with a data capture below 25% do not require annualisation.

Diffusion Tube Bias Adjustment Factors

The diffusion tube data presented within the 2025 ASR have been corrected for bias using an adjustment factor. Bias represents the overall tendency of the diffusion tubes to under or over-read relative to the reference chemiluminescence analyser. LAQM.TG22 provides guidance with regard to the application of a bias adjustment factor to correct diffusion tube monitoring. Triplicate co-location studies can be used to determine a local bias factor based on the comparison of diffusion tube results with data taken from NO_x/NO_2 continuous analysers. Alternatively, the national database of diffusion tube co-location surveys provides bias factors for the relevant laboratory and preparation method.

South Holland District Council have applied a local bias adjustment factor of 0.88 to the 2025 monitoring data. A summary of bias adjustment factors used by South Holland District Council over the past five years is presented in Table C.3. The applicable national bias adjustment factor was also 0.88 in 2025.

Table C.3 – Bias Adjustment Factor

Monitoring Year	Local or National	If National, Version of National Spreadsheet	Adjustment Factor
2025	Local	-	0.88
2024	Local	-	0.94
2023	Local	03/25	0.85
2022	National	03/24	0.81
2021	National	03/23	0.83

Table C.4 – Local Bias Adjustment Calculation

	Local Bias Adjustment Input 1
Periods used to calculate bias	12
Bias Factor A	0.89 (0.84 - 0.94)
Bias Factor B	13% (7% - 19%)
Diffusion Tube Mean (µg/m³)	8.2
Mean CV (Precision)	5.4%
Automatic Mean (µg/m³)	7.3
Data Capture	100%
Adjusted Tube Mean (µg/m³)	7 (7 - 8)

Notes:

A single local bias adjustment factor has been used to bias adjust the 2025 diffusion tube results.

Figure C. 1 - National Bias Adjustment Factor Spreadsheet

National Diffusion Tube Bias Adjustment Factor Spreadsheet — Spreadsheet Version Number: 06/26

Follow the steps below in the correct order to show the results of relevant co-location studies
Data only apply to tubes exposed monthly and are not suitable for correcting individual short-term monitoring periods
Whenever presenting adjusted data, you should state the adjustment factor used and the version of the spreadsheet
This spreadsheet will be updated every few months: the factors may therefore be subject to change. This should not discourage their immediate use.

This spreadsheet will be updated at the end of September 2026
LAQM Helpdesk Website

The LAQM Helpdesk is operated on behalf of Defra and the Devolved Administrations by Bureau Veritas, in conjunction with contract partners AECOM and the National Physical Laboratory.

Spreadsheet maintained by the National Physical Laboratory. Original compiled by Air Quality Consultants Ltd.

Step 1: Select the Laboratory that Analyses Your Tubes from the Drop-Down List
If a laboratory is not shown, we have no data for this laboratory.

Step 2: Select a Preparation Method from the Drop-Down List
If a preparation method is not shown, we have no data for this method at this laboratory.

Step 3: Select a Year from the Drop-Down List
If a year is not shown, we have no data[2]

Step 4: Where there is only one study for a chosen combination, you should use the adjustment factor shown with caution. Where there is more than one study, use the overall factor[3] shown in blue at the foot of the final column.
If you have your own co-location study then see footnote[4]. If uncertain what to do then contact the Local Air Quality Management Helpdesk at LAQMHelpdesk@bureauveritas.com or 0800 0327953

Analysed By[1]	Method (To undo your selection, choose (All) from the pop-up list)	Year[5] (To undo your selection, choose (All))	Site Type	Local Authority	Length of Study (months)	Diffusion Tube Mean Conc. (Dm) (µg/m³)	Automatic Monitor Mean Conc. (Cm) (µg/m³)	Bias (B)	Tube Precision[6]	Bias Adjustment Factor (A) (Cm/Dm)
Gradko	20% TEA in water	2025	R	Blackburn With Darwen Bc	11	22	17	25.0%	G	**0.80**
Gradko	20% TEA in water	2025	R	Bath & North East Somerset	12	23	20	13.4%	G	**0.88**
Gradko	20% TEA in Water	2025	R	Monmouthshire County Council	12	26	22	13.8%	G	**0.88**
Gradko	20% TEA in water	2025	R	Gateshead Council	12	20	19	4.5%	G	**0.96**
Gradko	20% TEA in water	2025	R	Gateshead Council	12	20	18	9.3%	G	**0.92**
Gradko	20% TEA in water	2025	R	Gateshead Council	12	22	19	13.1%	G	**0.88**
Gradko	20% TEA in water	2025	R	Gateshead Council	11	22	19	18.8%	G	**0.84**
Gradko	20% TEA in water	2025	R	Gateshead Council	11	27	24	9.8%	G	**0.91**
Gradko	20% TEA in water	2025	R	Gedling Borough Council	12	27	24	11.3%	G	**0.90**
Gradko	20% TEA in water	2025	R	City Of Lincoln Council	12	29	20	42.3%	G	**0.70**
Gradko	20% TEA in water	2025	KS	Marylebone Road Intercomparison	12	37	31	17.4%	G	**0.85**
Gradko	20% TEA in water	2025	UB	Dudley Mbc	12	18	15	24.1%	G	**0.81**
Gradko	20% TEA in water	2025	R	Dudley Mbc	12	35	34	4.5%	G	**0.96**
Gradko	20% TEA in water	2025	R	Belfast City Council	10	22	22	0.6%	G	**0.99**
Gradko	20% TEA in water	2025	R	The Highland Council	11	15	12	22.9%	G	**0.81**
Gradko	20% TEA in water	2025	R	Eastleigh Borough Council	12	29	25	17.1%	G	**0.85**
Gradko	20% TEA in water	2025	UB	Eastleigh Borough Council	12	19	18	1.1%	G	**0.99**
Gradko	20% TEA in water	2025	R	Eastleigh Borough Council	12	20	19	8.5%	G	**0.92**
Gradko	20% TEA in water	2025	R	Cheshire West And Chester	12	28	28	-0.5%	G	**1.00**
Gradko	20% TEA in water	2025	R	Cheshire West And Chester	12	27	25	8.4%	G	**0.92**
Gradko	20% TEA in water	2025	R	Liverpool City Council	11	32	26	24.0%	G	**0.81**
Gradko	20% TEA in water	2025	KS	Liverpool City Council	10	46	40	15.9%	G	**0.86**
Gradko	20% TEA in water	2025	R	Nottingham City Council	10	25	24	3.3%	G	**0.97**
Gradko	20% TEA in water	2025	R	Belfast City Council	12	40	34	17.2%	G	**0.85**
Gradko	20% TEA in water	2025	R	Belfast City Council	12	33	31	6.5%	G	**0.94**
Gradko	20% TEA in water	2025	R	Wychavon District Council	12	27	26	5.5%	G	**0.95**
Gradko	20% TEA in water	2025	R	Worcestershire	12	12	13	-6.6%	G	**1.07**
Gradko	20% TEA in water	2025	KS	Brighton & Hove City Council	10	37	29	28.0%	G	**0.78**
Gradko	20% TEA in water	2025	R	Ards And North Down Borough Council	12	28	19	47.1%	G	**0.68**
Gradko	20% TEA in water	2025	R	Lisburn & Castlereagh City Council	12	21	19	10.8%	G	**0.90**
Gradko	20% TEA in water	2025		**Overall Factor[3] (30 studies)**				**Use**		**0.88**

NO_2 Fall-off with Distance from the Road

No diffusion tube NO_2 monitoring locations within South Holland District Council required distance correction during 2025.

QA/QC of Automatic Monitoring

South Holland District Council contracts data management for their continuous analysers to Ricardo-AEA. The QA/QC procedures employed by Ricardo-AEA are equivalent to the UK Automatic Urban and Rural Network (AURN) procedures. All data have been ratified and TEOM data have been VCM corrected.

PM_{10} Monitoring Adjustment

The PM_{10} results have been corrected by Ricardo-AEA who undertake the data management for the two automatic continuous monitoring sites. TEOM data have been Volatile Correction Model (VCM) corrected.

Automatic Monitoring Annualisation

All automatic monitoring locations within South Holland District Council recorded data capture of greater than 75% therefore it was not required to annualise any monitoring data. In addition, any sites with a data capture below 25% do not require annualisation.

NO_2 Fall-off with Distance from the Road

No automatic NO_2 monitoring locations within South Holland District Council required distance correction during 2025.

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

Figure D.1 – Map of Non-Automatic Monitoring Sites – District Level

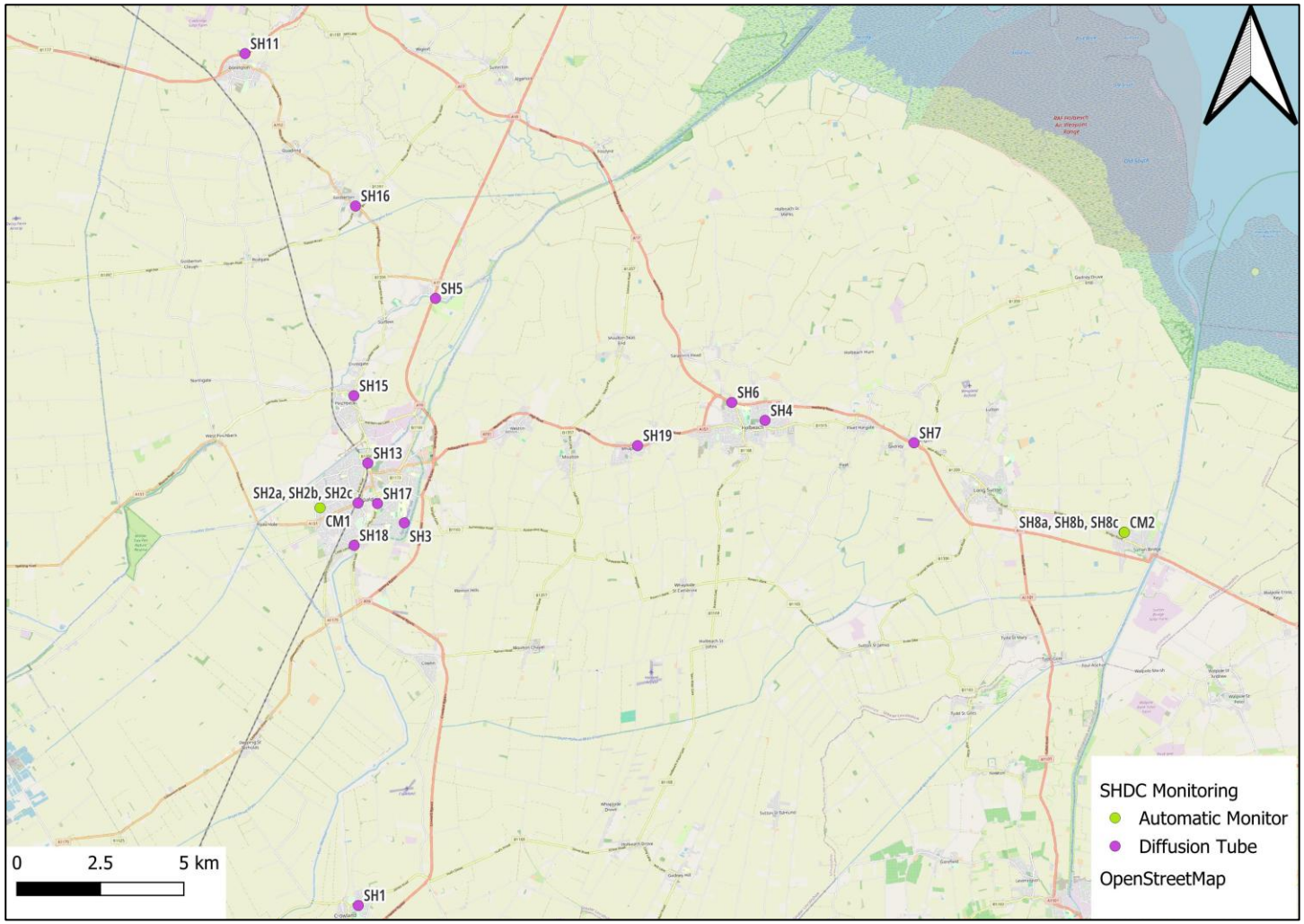


Figure D.2 – Map of Non-Automatic Monitoring Site – North of the District

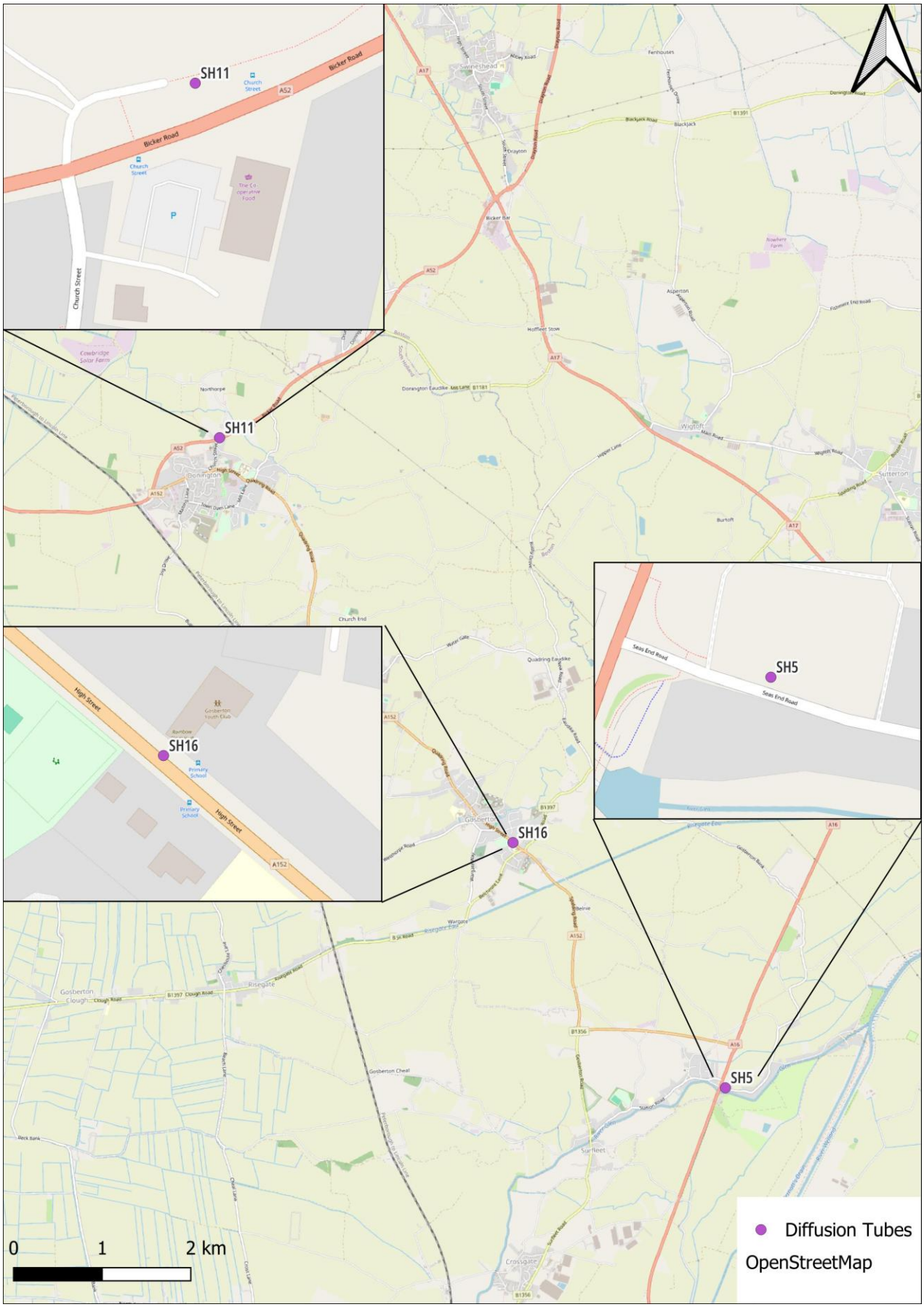


Figure D.3 – Map of Non-Automatic Monitoring Site – Spalding

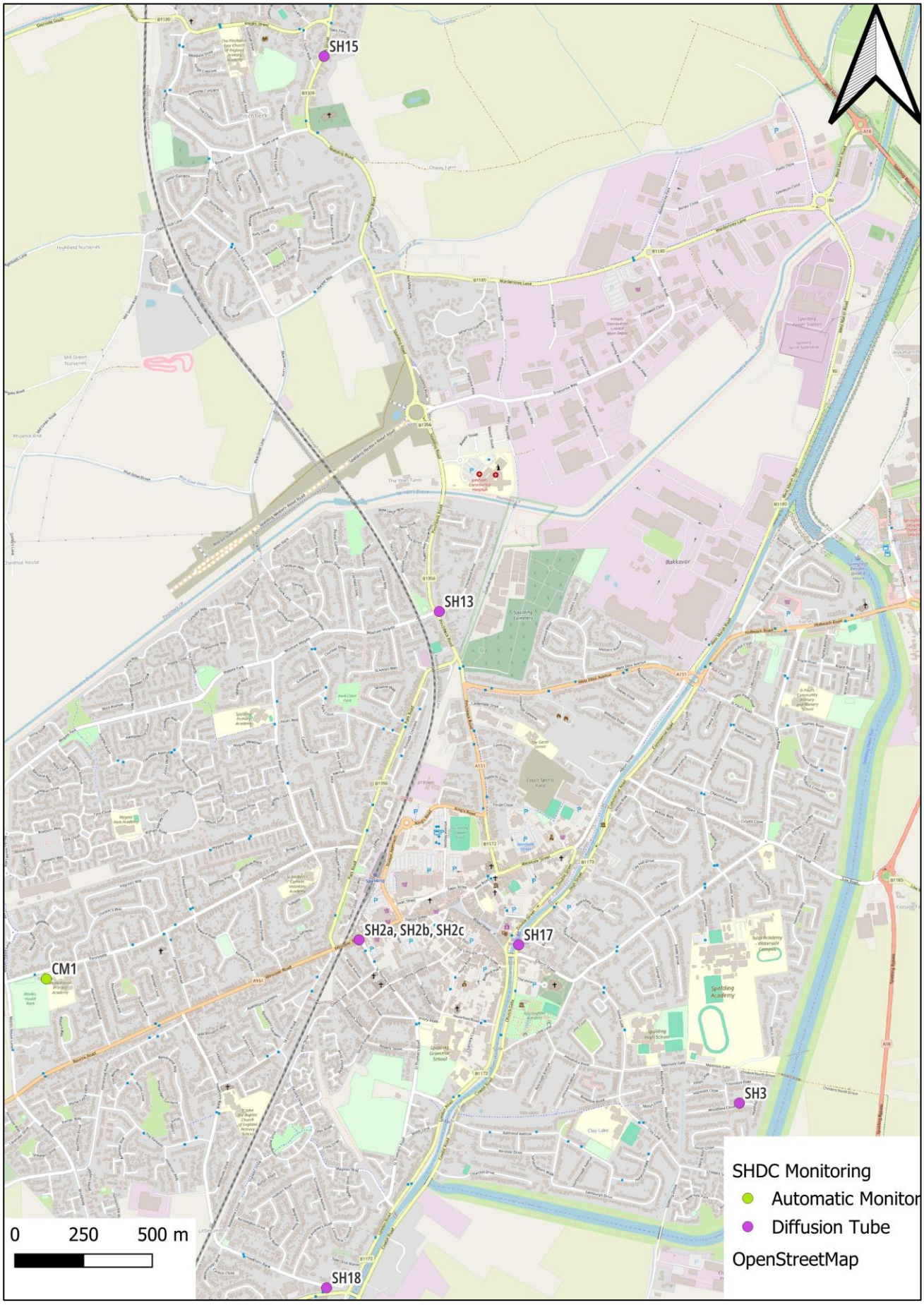


Figure D.4 – Map of Non-Automatic Monitoring Site – Holbeach

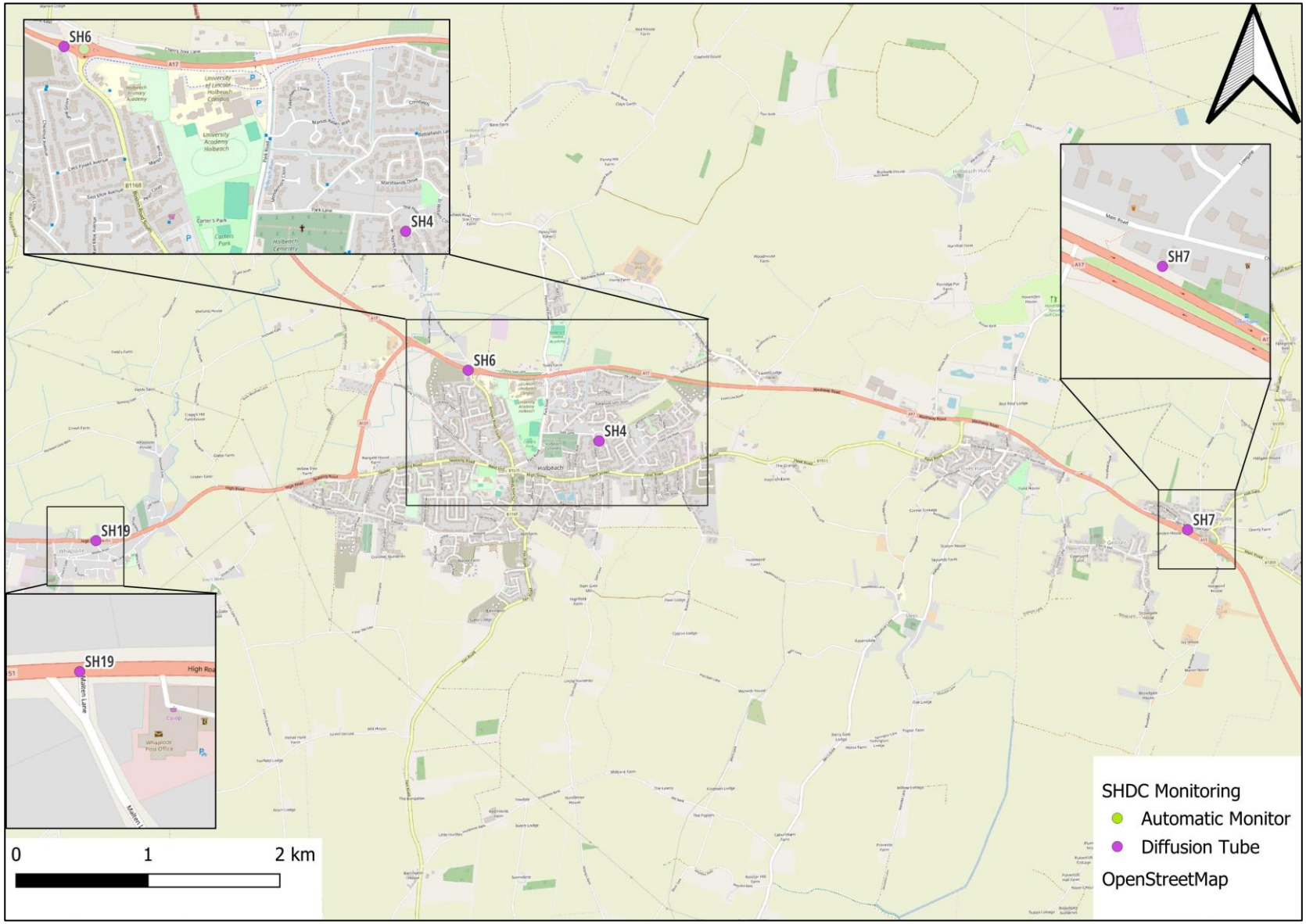


Figure D.5 – Map of Non-Automatic Monitoring Site – Sutton Bridge

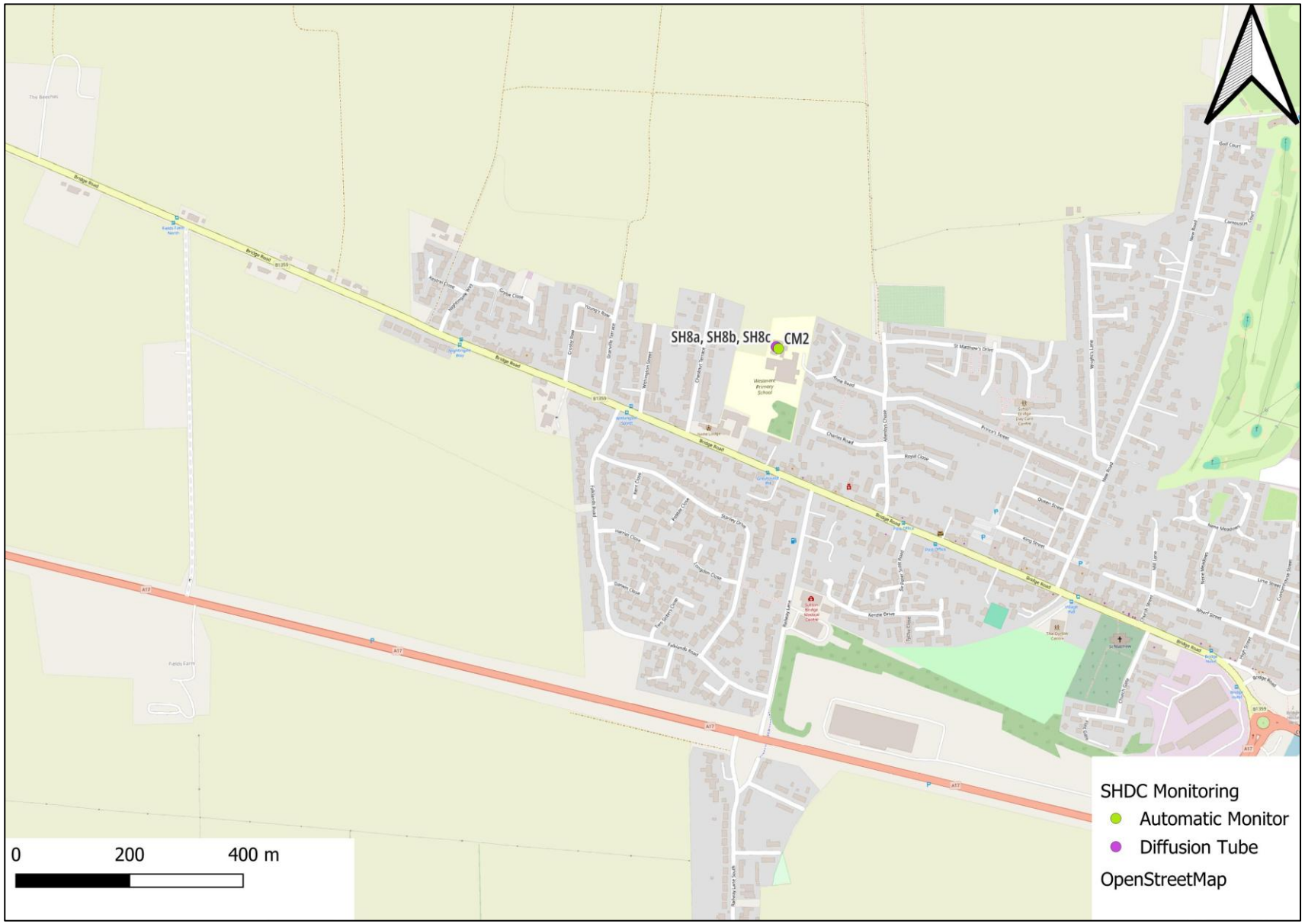
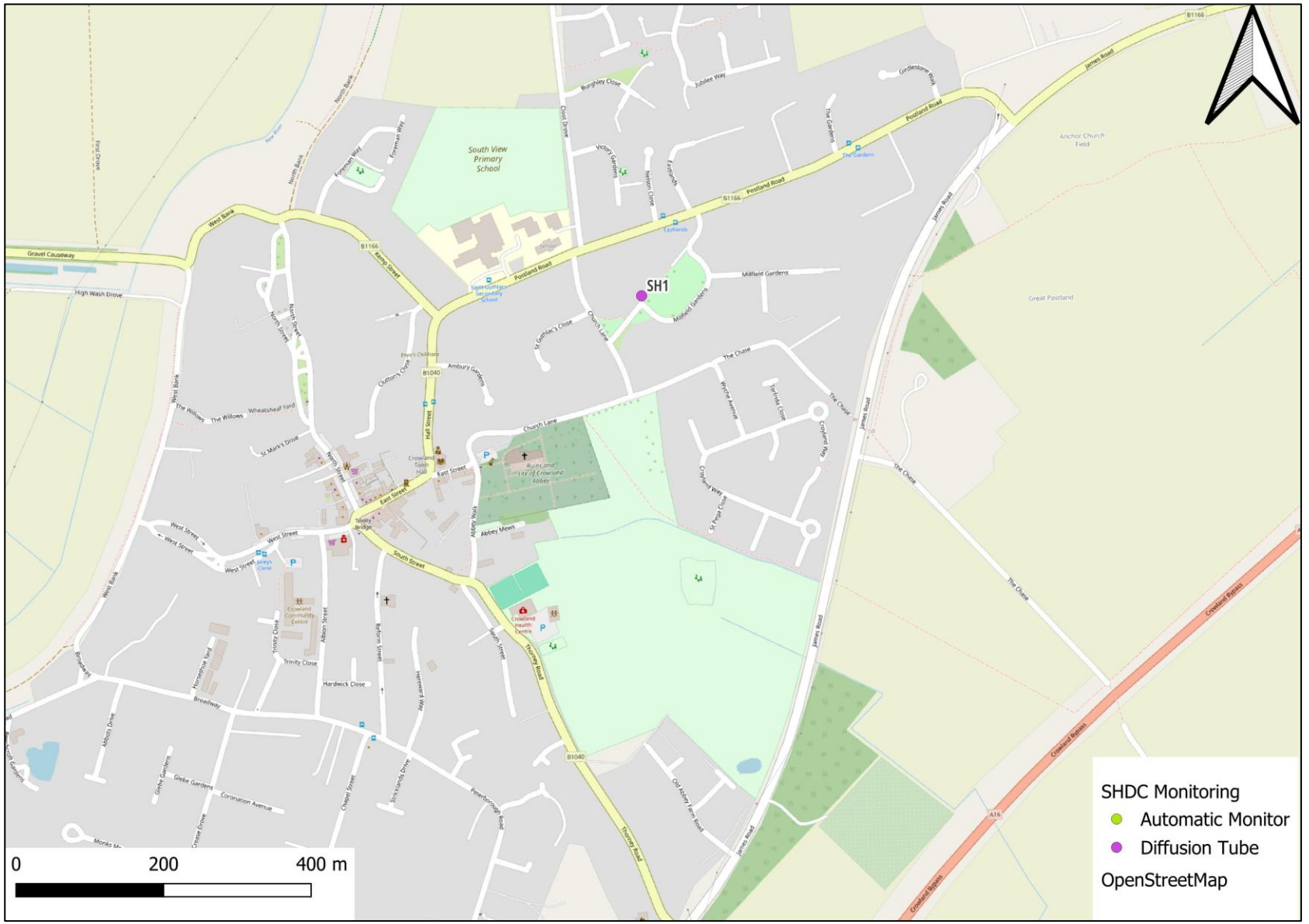


Figure D.6 – Map of Non-Automatic Monitoring Site – Crowland



Appendix E: Summary of Air Quality Objectives in England

Table E.1 – Air Quality Objectives in England[5]

Pollutant	Air Quality Objective: Concentration	Air Quality Objective: Measured as
Nitrogen Dioxide (NO_2)	200µg/m^3 not to be exceeded more than 18 times a year	1-hour mean
Nitrogen Dioxide (NO_2)	40µg/m^3	Annual mean
Particulate Matter (PM_{10})	50µg/m^3, not to be exceeded more than 35 times a year	24-hour mean
Particulate Matter (PM_{10})	40µg/m^3	Annual mean
Sulphur Dioxide (SO_2)	350µg/m^3, not to be exceeded more than 24 times a year	1-hour mean
Sulphur Dioxide (SO_2)	125µg/m^3, not to be exceeded more than 3 times a year	24-hour mean
Sulphur Dioxide (SO_2)	266µg/m^3, not to be exceeded more than 35 times a year	15-minute mean

[5] The units are in microgrammes of pollutant per cubic metre of air (µg/m^3).

Glossary of Terms

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	Annual Status Report
Defra	Department for Environment, Food and Rural Affairs
DMRB	Design Manual for Roads and Bridges – Air quality screening tool produced by National Highways
LAQM	Local Air Quality Management
NO_2	Nitrogen Dioxide
NO_x	Nitrogen Oxides
PM_{10}	Airborne particulate matter with an aerodynamic diameter of 10µm or less
$PM_{2.5}$	Airborne particulate matter with an aerodynamic diameter of 2.5µm or less
QA/QC	Quality Assurance and Quality Control
SO_2	Sulphur Dioxide

References

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- Defra. UK AIR available at https://uk-air.defra.gov.uk/
- Defra. Diffusion Tube Data Processing Tool version 6.1, published May 2026
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- Local Air Quality Management https://laqm.defra.gov.uk/air-quality/air-quality-assessment/qa-qc-framework/