2017 Air Quality Annual Status Report (ASR)

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

June 2017

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Date	June 2017

Executive Summary: Air Quality in Our Area

This report details the results of air quality monitoring undertaken in 2016 across Mid Sussex District and is prepared in accordance with the guidance issued by the Department for Environment, Food and Rural Affairs (Defra).

Local Authorities across the United Kingdom are required to regularly review and assess air quality in their areas, and to determine whether or not the air quality objectives set by the Government are likely to be achieved. Where exceedances are 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

Air Quality in Mid Sussex

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.

The annual health cost to society of the impacts of particulate matter alone in the UK is estimated to be around £16 billion[1].

The area covered by Mid Sussex District Council is primarily countryside with three major towns. One area of the district, the Sussex Downs, has been designated as part of a National Park, with a significant number of villages, hamlets, ancient churches and woodlands in character and does not incorporate a significant heavy industrial base. Locally, the most significant contributions to poor air quality come from road transport and the air pollutant of most concern is nitrogen dioxide (NO_2).

[1] Defra. Abatement cost guidance for valuing changes in air quality, May 2013

The main source of air pollution in the district are road traffic emissions from major roads, notably the increased use by HGV traffic on the A2300 from the A23 and the A273 north and south of Burgess Hill.

Air quality monitoring and modelling carried out by the Council indicated that despite good air quality within most of the District, the air quality objectives for Nitrogen Dioxide (NO_2) were not being met in the Stonepound Crossroads area of Hassocks. Therefore, in March 2012 an Air Quality Management Area (AQMAs) was declared at Stonepound Crossroads Hassocks.

Monitoring results in 2016 show a slight increase in the Nitrogen Dioxide (NO_2) levels across the district to those recorded in 2015. However, the levels are similar to those that we recorded in 2014.

Within the AQMA at Stonepound Crossroads in Hassocks the main pollutant (NO_2) is from road traffic emissions. Exceedances are due to the topography and volume of road traffic. Since the AQMA was declared there has been an overall reduction in NO_2.

The Council have drawn up an Air Quality Action Plan (AQAP) which focuses on a range of measures designed to limit the exceedance of the NO_2 air quality objective of 40ug/m^3. These include:

- Ensuring traffic light sequencing is operating at optimum efficiency
- Signage and advertising to encourage use of the A2300 as an alternative route
- Future widening of the A2300
- “Cut engine, cut pollution” signs erected approaching each arm of the crossroads
- Travel wise schemes to promote sustainable transport - to include more car share schemes and alternatives to the car. Promotion of school and work travel plans. Development and promotion of cycle routes
- Education and raising awareness - increasing the availability of air quality information and incentivising people to change their travel behaviour
- Working with Planners to ensure appropriate mitigation measures are implemented for new development affecting the AQMA

Although the work under Local Air Quality Management (LAQM) is the legal obligation of district councils, actions aimed at improving air quality most of the time require the cooperation of various departments and organisations. Mid Sussex District Council works in conjunction with other stakeholders, such as planning, Public Health England, West Sussex County Council (WSCC) highways, neighbouring districts, Sussex-Air Partnership and the Environment Agency. The assessment and implementation of the identified traffic management schemes is done in cooperation with WSCC as they are the authority responsible for roads and transport management. An air quality action plan group has been set up, the work of which contributes largely to the development of Action Plans for the AQMA and the district as a whole. The Council is consulted by the Environment Agency upon the granting of environmental permits for 'Part A1' processes and liaises with the Agency regarding any issues concerning those permits.

Additionally, Mid Sussex District Council are members of the Sussex Air Quality Partnership (Sussex Air) which benefits from the co-ordinated monitoring of air pollutants across the region, including the airAlert* and coldAlert services:

**airAlert is a free service for the residents of Sussex which provides an early warning of poor air quality by text/SMS, voice-mail or e-mail for individuals with asthma or poor respiratory health. This service is also available as a smart-phone app.*

Actions to Improve Air Quality

Mid Sussex District Council has taken forward a number of measures during the current reporting year of 2016 in pursuit of improving local air quality. The key action plans in 2016 focused on a range of measures designed to limit the exceedance of the NO_2 air quality objective. These include:

- Ensuring traffic light sequencing is operating at optimum efficiency
- Signage and advertising to encourage use of the A2300 as alternative route
- Future widening of the A2300 as part of a forthcoming development
- "Cut engine, cut pollution" signs erected at crossroads
- Working with local schools to amend travel plans
- Working with Planning to ensure maximum mitigation measures implemented for new development affecting the AQMA

- District Plan to include policies DP19 Transport and DP27 Noise, Air and Light requiring transport mitigation and due consideration to be given to Air Quality issues

Conclusions and Priorities

Mid Sussex District Council has taken forward a number of measures during the current reporting year of 2016 in pursuit of improving local air quality.

The Council's priorities for the coming year are:-

- The promotion of a Green Travel day to be held at the Council in the Summer of 2017 with incentives for staff to take sustainable methods of travel into work to promote the new cycle-to-work scheme and Easit membership benefits
- Improvement to new Cycling and Walking routes from Hassocks Station to the South Downs Way via Lodge Lane
- Draft Hassocks Neighbourhood Plan includes reference to supporting additional cycle ways and bridleways, including a route to Clayton and Hurstpierpoint
- The County Council is currently working with Sustrans to consider a prioritisation approach to the delivery of cycle route infrastructure across the county
- Section 106 funds have been allocated from the Sustainable Transport Fund to upgrade slow electric vehicle chargers to fast chargers in MSDC car parks, Rapid chargers exist at Hassocks Train Station. New sites for charging to be identified in liaison with Planning Officers and others
- A Sustainable Travel Event aimed at Burgess Hill businesses to take place in 2017 at the Martlets
- Car sharing being promoted through the Green Travel Pages on the Mid Sussex District Council intranet
- Hassocks Parish Council Parking and Traffic Flow Report includes consideration of parking restrictions on the roads in the area north east of the crossroads (e.g. Stanford Avenue), to dissuade commuters from driving through the AQMA to park up for free during the day

- Educating/encouraging the public to reduce reliance on car use
- Effectively communicating the issues to the public and to professional partners and colleagues
- Reducing levels of NO_2 towards meeting the health based objective level at the Stonepound Crossroads AQMA

Local Engagement and How to get Involved

Mid Sussex District Council are members of the Sussex Air Quality Partnership (Sussex Air) which benefits from the co-ordinated monitoring of air pollutants across the region, and includes the airAlert and coldAlert services:

airAlert

Sussex Air offers to residents of Sussex a free service which provides an early warning of poor air quality by text/SMS, voice-mail or e-mail for individuals with asthma or poor respiratory health.
This service is now also available as a smart-phone app.

coldAlert

Sussex Air offers to residents in Sussex free cold weather alerts. The service is open over the winter months, normally from November to March, and sends alerts by text/SMS, voice-mail or e-mail to individuals who may be susceptible to the cold weather.
This service is now also available as a smart-phone app.

To receive local air pollution alerts and /or cold weather alerts you register at

- airAlert online at www.airalert.info/
- coldAlert online at www.coldalert.info/
- both by telephone on 01273 484 337
- alternatively download the airAlert app for Apple or Android phones

Additionally, members of the public can:

Plan your route via Travel West Sussex at http://www.travelwestsussex.co.uk/

Find out from your child's school about available travel options for getting to school

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1 Local Air Quality Management

This report provides an overview of air quality in Mid Sussex 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 Mid Sussex District 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.

A summary of AQMAs declared by Mid Sussex District council can be found in Table 2.1.

Further information related to declared AQMAs, including maps of AQMA boundaries are available online at:-

http://www.midsussex.gov.uk/environment-health/pollution/air-quality/stonepound-crossroads-air-quality-management-area-hassocks/

Also see Appendix D: Map(s) of Monitoring Locations and AQMAs, which provides for a map of air quality monitoring locations in relation to the AQMA.

For reference, a map of Mid Sussex District Council's monitoring locations are also available in Appendix D.

Table 2.1 Declared Air Quality Management Area

AQMA Name	Date of Declaration	Pollutants and Air Quality Objectives	City / Town	One Line Description	Is air quality in the AQMA influenced by roads controlled by Highways England?	Level of Exceedance (maximum monitored/modelled concentration at a location of relevant exposure)		Action Plan (inc. date of publication)
						At Declaration	Now	
Mid Sussex District Council AQMA (No.1) 2012	13/03/2012	NO_2 Annual Mean	Hassocks	An area encompassing 3 residential properties located on approach to Stonepound Crossroads	NO	47.0 µg/m3	43.2 µg/m3	Mid Sussex District Council Air Quality Action Plan Updated March 2017 http://www.midsussex.gov.uk/media/79521/air-quality-action-plan-2017-web.pdf

☒ **Mid Sussex District Council confirm the information on UK-Air regarding their AQMA is up to date**

2.2 Progress and Impact of Measures to address Air Quality in Mid Sussex District Council

Mid Sussex District Council has had an action plan in place for the AQMA since 2013 and during 2016 we have made progress on a number of measures including assessing traffic light sequencing at the Stonepound crossroads in Hassocks and work on school travel plans and travel schemes. A number of measures in the plan are now complete, others are ongoing or due for completion in 2017.

Mid Sussex District Council has identified and outlined their priorities for the forthcoming year.

Table 2.2 clearly outlines which measures are currently funded and what specific progress has been made in 2016 together with an update on progress made.
Mid Sussex District Council has taken forward a number of direct measures during the current reporting year, in pursuit of improving local air quality. Details of all measures completed, in progress, or planned are set out in Table 2.2.

Key completed measures are:

- Ensuring traffic light sequencing is operating at optimum efficiency
- Signage and advertising to encourage use of the A2300 as alternative route
- “Cut engine, cut pollution” signs erected at AQMA crossroads
- Continued Working with local schools to amend travel plans
- Continued working with Planning to ensure maximum mitigation measures implemented for all new developments affecting the AQMA
- Car sharing is promoted through the Green Travel Pages on the MSDC intranet.
- Working through the Mid Sussex Wellbeing Hub regarding initiatives aimed at respiratory illnesses. Links to Air Alert and Cold Alert published 2016

Mid Sussex District Council expects the following measures to be completed over the course of the next reporting year:

- The promotion of a Green Travel day to be held at the Council in the Summer of 2017 with incentives for staff to take sustainable methods of travel to and

from work to promote the new cycle-to-work scheme and Easit membership benefits

- Improvement to new Cycling and Walking routes from Hassocks Station to the South Downs Way via Lodge Lane
- Mid Sussex District Neighbourhood Plan includes reference to supporting additional cycle ways and bridleways, including routes to Clayton and Hurstpierpoint
- The County Council is currently working with Sustrans to consider a prioritisation approach to the delivery of cycle route infrastructure across the county
- Section 106 funds have been allocated from the Sustainable Transport Fund to upgrade slow electric vehicle chargers to fast chargers in MSDC car parks, rapid chargers exist at Hassocks Train Station. New sites for charging to be identified in liaison with Planning Officers and others
- A Sustainable Travel Event aimed at Burgess Hill businesses to take place in 2017 at the Martlets
- Car sharing being promoted through the Green Travel Pages on the Mid Sussex District Council intranet
- Hassocks Parish Council Parking and Traffic Flow Report include consideration of parking restrictions on the roads in the area NE of the crossroads (e.g. Stanford Avenue), which will dissuade commuters from driving through the AQMA to park up for free during the day

The principal challenges and barriers to implementation that Mid Sussex District Council anticipates facing are

- The existing restraints preventing improvements at the AQMA – traffic light sequencing is operating at optimum performance; road widening or other measures to improve flow limited by topography; alternative routes viewed by users as unreliable
- The lack of a demonstrable 5-year supply of housing means that developers rather than residents and the local authority may identify sites for new housing

- New development – the challenge of finding a balance between the need for new housing and the impact that the related traffic increase will have on existing pollution levels, particularly for forthcoming developments close to the AQMA
- Using available evidence to better understand air pollution in the context of public health and to disseminate this information

Progress on minimising HGV movements & encouragement of alternate transport modes has been slower than expected due to the fact that whilst funding has been received the timing of improvements to the road are linked to the progress with the Northern Arc development. The Neighbourhood Plan for Hassocks is still in draft and yet to be approved with regard to the promotion of new cycle routes and will involve commitment from West Sussex County Council (WSCC) for implementation.

Whilst the measures stated above and in Table 2.2 will help to contribute towards compliance, Mid Sussex District Council anticipates that further additional measures, not yet prescribed, will be required in subsequent years to achieve compliance and enable the revocation of Stonepound Crossroads AQMA

Table 2.2 Progress on Measures to Improve Air Quality

Measure No.	Measure	EU Category	EU Classification	Organisations involved and Funding Source	Planning Phase	Implementation Phase	Key Performance Indicator	Reduction in Pollutant / Emission from Measure	Progress to Date	Estimated / Actual Completion Date	Comments / Barriers to implementation
1	Re-assess traffic light sequencing	Traffic Management	Strategic highway improvements, Re-prioritising road space away from cars, including Access management, Selective vehicle priority, bus priority, high vehicle occupancy lane	WSCC		Complete	N/A	N/A	There is very little alteration which can be made to the sequencing of lights which will increase the throughput of traffic. The traffic signal controlled already runs on software which monitors the throughput and queues on all approaches for each green light phase and makes decisions on when to turn from green to red to maximise capacity. WSCC revalidated the junction 14/7/14 when the operation of the signals was optimised with the current configuration. A traffic mitigation plan was submitted by the developer with the Ham Fields planning application and WSCC have considered upgrades to the software to improve the traffic light software, changes to the stage sequencing and changes to the island layouts and some	End of 2014	N/A

									road widening. WSCC concluded that these changes would result in a small improvement, but could not be introduced without a full refurbishment of the site costing in the region of £200k.		
2	Minimising HGV movements – advisory lorry routes	Freight and Delivery Management	Route Management Plans/ Strategic routing strategy for HGV's	WSCC		Complete	N/A	N/A	Completed- four signs were installed on 29 August 2014, one on each approach. A joint press release was issued on 1 September and MSDC Cabinet Member conducted local radio interviews. An article regarding the signs and the Air Quality Action Plan appeared in the Winter 2014 edition of the MSDC magazine Mid Sussex Matters.	End of 2015	N/A
3	Cut Engine, Cut pollution" signs	Traffic Management	Anti-idling enforcement	WSCC		Completed	N/A	Reduced vehicle emissions	Completed- four signs were installed on 29 August 2014, one on each approach. A joint press release was issued on 1 September and MSDC Cabinet Member conducted local radio interviews. An article regarding the signs and the Air Quality Action Plan appeared in the Winter 2014 edition of the MSDC magazine Mid Sussex Matters.	End of 2014	First phase successful, second phase on-going

4	Mid Sussex District Council Travel Plan	Promoting Travel Alternatives	Other	MSDC		completed	N/A	Reduced vehicle emissions	Travel Scheme review to be completed. MSDC has joined easit and are promoting train use to staff through discount cards. A Green Travel day was held at the Council in the Summer with incentives for staff to take sustainable methods of travel into work and promotion of easit cards. A further travel event will be held in Spring 2017 to promote the new cycle-to-work scheme and Easit membership benefits	End of 2015	N/A
5	School and work travel plans	Promoting Travel Alternatives	School Travel Plans	WSCC & MSDC		completed	N/A	N/A	Hassocks schools are expanding their capacity and revising their travel plans accordingly. The WSCC School Travel Advisor has worked with Downlands to produce a new School Travel Plan, including updated travel to school survey results. This identifies additional car sharing as a priority and to have 50% walking/scootering or cycling to school by July 2015. The School Travel Advisor has also been working with Hassocks Infant School on their Plan. Windmills Junior School have revised	On-going	N/A

									their Plan. The Walk to School LSTF programme led by Living Streets covers 60 schools in West Sussex, including ones in Mid Sussex, which provides an outreach project officer to work with pupils to encourage them to walk to school. The walk to School LSTF funding is to March 2016 after a successful application for a one year extension. Living Streets are actively engaged in projects with Windmills Junior School and Downlands School and are planning school route audit assessments with the schools and local community early in 2016. The Council's Sustainability Officer has worked with the Downlands School Eco-Co-ordinator to arrange a series of "Bike It" events in the week of 28 September to 2 October. This also involved a number of other organisations such as Hassocks Community Bike Hire and Proper Cycle Café. 'Bike it' was designed to get more children to cycle to and from school, through events such		

									as a smoothie bike lunchtime, bike maintenance workshops, BMX skills presentation and participation in the Hurst Bike Train. 68 children biked to school on at least one of the days.		
6	Improve and promote cycle routes	Transport Planning and Infrastructure	Cycle network	MSDC		on-going	N/A	Minimal	Progress with the Hassocks station to the South Downs cycle path has stalled due to land access issues. The alternative route that was considered to the east of the railway line has not proved to be viable. Alternatives are being considered including upgrading the existing cycle route via Lodge Lane or the possibility of a wayfinding plinth at the station. Meeting with WSCC Officers to discuss the new West Sussex Cycling and Walking Strategy. The route from Hassocks Station to the South Downs Way via Lodge Lane will also be discussed. The South Downs National Park Local Sustainable Transport Fund project was successful in getting an extension for 2015/16 for revenue based activities (promotional	On-going	N/A

									activities, maps etc.). As part of a broader strategy for South Mid Sussex, a wider cycle path network plan can be developed and prioritised for delivery through the South Mid Sussex Local Committee. The County Council is currently working with Sustrans to consider a prioritisation approach to the delivery of cycle route infrastructure across the county. The Consultation Draft Hassocks Neighbourhood Plan includes reference to supporting additional cycleways and bridleways, including a route to Clayton. Southern Rail have been successful in a bid for developing a Cycle Hub at Hassocks station, but they need to demonstrate complementary spend on cycling (up to the station boundary) in order to release the funds for the Hub. A Sustrans-commissioned feasibility study exploring route options between Burgess Hill and Haywards Heath has been completed. This may impact on		

									cycling to and from Hassocks. The Consultation Draft Hassocks Neighbourhood Plan includes references to supporting additional cycleways and bridleways, including routes to Clayton and Hurstpierpoint. At March 2017 the Neighbourhood Plan is still in draft and yet to be approved."		
7	Encourage alternate transport modes	Promoting Travel Alternatives	Other	MSDC & WSCC		on-going	N/A	Minimal	West Sussex County Council launched their Travel West Sussex website in April 2015 www.travelwestsussex.co.uk This enables residents to plan journeys by bus, rail, bicycle. The South Downs National Park Authority has a Sustainable Transport Fund, designed to encourage people to travel sustainably to and within the South Downs. They have also been running promotions such as two for one entry to tourist attractions if accessed by public transport. Note – mapping of local sustainable routes and services can be produced for local employers centred on their site, for a fee via a company called Pindar. Other	On-going	N/A

									initiatives that can be pursued include Bike ability training in schools (see Action 5 Downland School updates). The energise network (formerly EVSouthEast) was launched formally in July 2014, as part of the project to install around 40 rapid electric vehicle charging points in the South East by March 2015. WSCC has been supporting this and scoping out potential sites for the chargers to be installed – initial locations include Hickstead and Pyecombe Services on A23. Website - http://www.energisenetwork.co.uk/. Section 106 funds have been allocated from the Sustainable Transport Fund to upgrade slow electric vehicle chargers to fast chargers in MSDC car parks, Rapid chargers exist at Hassocks Train Station. New sites for charging to be identified in liaison with Planning Officers and others. Continuing to attend Energise meetings. A Sustainable Travel Event aimed at Burgess Hill businesses is taking		

									place on the 13th June at the Martlets. www.sustainablebusiness.org.uk/network/sustainable-travel		
8	Car share promotion	Alternatives to private vehicle use	Car & lift sharing schemes	WSCC & MSDC		on-going	Number of new users	Minimal	WSCC projects under the Travelwise Sustainable Transport Fund behaviour change initiatives have included promotion of West Sussex car share www.westsussexcarshare.com through radio and other media and provision of an online journey planner that promotes active travel and public transport. Local projects will be developed through MSDC's Sustainability Officer. The Travel West Sussex website www.travelwestsussex.co.uk includes a search facility for potential journey sharers. MSDC has joined easit and is promoting its use by businesses through the Council's website, See http://www.easit.org.uk/ Car sharing is promoted through the Green Travel Pages on the MSDC intranet. It has been promoted in light of the Southern Strikes.	By End of 2014	N/A

9	Partnership work with bus and train operators	Promoting Travel Alternatives	Promote use of rail and inland waterways	WSCC		on-going		Minimal	The new Thameslink franchise has been awarded to GoVia (Southern) who took over the First Capital Connect services from September 2014 with the Southern services merging into the franchise in 2015. The geography for the franchise will cover Sussex, Surrey, London and north to Bedford, Cambridge and Kings Lynn. As part of the franchise there will be more investment in cycle parking, station improvements and access to stations. Real time information on bus arrivals will require investment from WSCC and bus companies. Opportunities for better use of the existing community bus service and potential new services to be explored.	End of 2015	N/A
10	Better driving techniques	Vehicle Fleet Efficiency	Driver training and ECO driving aids	MSDC		completed		Minimal	A list of the top 10 better driving techniques will be made available on the Mid Sussex District Council website, once the review of the Air Quality information available is complete (see action 11). A link to eco-driving tips on the AA website was included in the Mid Sussex Matters	By End of 2015	N/A

									article. Publicising the benefits of better driving techniques e.g. through website.		
11	Increase air quality information available	Policy Guidance and Development Control	Air Quality Planning and Policy Guidance	MSDC		on-going		Minimal	The 2014 Air Quality Progress Report has been submitted to Defra and published on the Council's website. This includes additional air quality data, including latest data for monitoring at Stonepound Crossroads. The 2015 Updating and Screening Assessment has been published containing further air quality monitoring data .http://www.midsussex.gov.uk/media/USA_Mid_Sussex_2015_England_web.pdf Provision of additional air quality information via Council website. MSDC Annual Monitoring Report completed June 2016	By End of 2015	N/A
12	Health and Wellbeing promotion	Public Information	Via the Internet	MSDC		on-going		Minimal	Links to Airalert and the ColdAlert service have been added to the MSDC website. Provision of services by Sussex Air is currently under review by the Council. No directly relevant initiatives aimed at respiratory illnesses are included in the current Mid	On-going	N/A

									Sussex Wellbeing programme. Promotion of service offered by Sussex Air, e.g. Airalert service through link on our website. Working through the Mid Sussex Wellbeing Hub regarding initiatives aimed at respiratory illnesses. Links to Air Alert and Cold Alert published 2016.		
13	EPA90 statutory nuisance	Policy Guidance and Development Control	Other policy	MSDC		on-going		Minimal	All complaints, including smoke from bonfires, are investigated for statutory nuisance as and when they are received. Environmental Health also regulates certain industrial process for emissions to the atmosphere, but there is currently none in the area of the AQMA. Usual enforcement of emissions from industrial, commercial and domestic sources (ad hoc) or targeted Hassocks initiative. Ongoing - part of Environmental Protection normal workload	On-going	N/A
14	Mid Sussex District Plan & Local Development Framewor	Policy Guidance and Development Control	Air Quality Planning and Policy Guidance	MSDC		on-going		Minimal	The District Plan is now due to be submitted early in 2016, following consultation on proposed amendments to housing numbers.	On-going	N/A

	k								The new District Plan includes Transport Policy DP18 and Noise, air and light pollution policy DP26. Existing Local Plan policies require transport mitigation plans and account to be taken of air quality issues. The District Plan was submitted in August 2016 and is the subject of an examination in public scheduled to take place between November 2016 and March 2017. The submitted District Plan includes Transport Policy DP19 and Noise, Air and Light Pollution policy DP27. Existing Local Plan policies require transport mitigation plans and account to be taken of air quality issues.		
15	Incorporate "SAQP: Air Quality Guidance for Planners	Policy Guidance and Development Control	Air Quality Planning and Policy Guidance	MSDC		on-going		Minimal	Developers are directed to the Guidance and Environmental Health will reference it in their response to planning applications. Where required, Environmental Health also recommend conditions to planning permissions that minimise the adverse impacts on Air Quality.	On-going	N/A

16	Air Quality Monitoring	Other	Other	MSDC		on-going		Minimal	On-going monitoring of air quality across the District. Results are referred to in the Annual Monitoring Report. Also publication of the Air Quality Updating and Screening Assessment. The impact of any measures taken in the AQMA will be monitored. Continued air quality monitoring across the District as part of Environmental Protection normal workload	On-going	N/A
17	Consider introduction of lower speed limits and/or traffic calming measures to reduce the rate at which traffic arrives at the junction.	Traffic Management	Reduction of speed limits, 20mph zones	WSCC		Completed		N/A	Completed- If there were more suitable alternative routes it would be an easier and more defendable action to dissuade traffic from using this route. Other action plan measures are considering the routing of HGVs via the A23, however any other local route would be an unsuitable alternative for longer distance through traffic. The success of a speed limit relies on a driver's understanding of the need to adopt a lower speed – for example in built up area or where there may be conflicting crossing movements. Therefore use of a lower speed limit without these other	completed	N/A

									factors is unlikely to produce beneficial results and could just lead to more drivers ignoring speed limits. For this to be effective there also needs to be robust enforcement of the speed limit.		
18	Consider enforcement of commuter on-street car parking around Hassocks station	Traffic Management	Emission based parking or permit charges	MSDC		On-going		Minimal	Actions in the Hassocks Parish Council Parking and Traffic Flow Report include consideration of parking restrictions on the roads in the area NE of the crossroads (e.g. Stanford Avenue), which will dissuade commuters from driving through the AQMA to park up for free during the day. West Sussex County has now included the Hassocks Parking Report in their programme of future work. Initially consultants will review the recommendations that apply to WSCC and in discussion with the Parking Working Group will draw up an action plan. Public consultation on parking restrictions is likely to be undertaken in the spring. Public consultation on traffic issues in Hassocks took place in June 2016 and at March 2017 West Sussex	End of 2017	N/A

									County Council is looking to enter these proposals on to the Integrated Works Programme for the next financial year.		

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.

Mid Sussex District Council is taking the following measures to address $PM_{2.5}$:

Mid Sussex District Council undertakes air quality emissions reduction measures (set out in table 2.2) which are aimed at reducing NO_2 but will also contribute to reducing $PM_{2.5}$ emissions as these air pollutants share similar source, e.g. road traffic emissions, combustion sources.

Mid Sussex will work in partnership with Public health to communicate the impacts of air pollution including $PM_{2.5}$. Additionally, Mid Sussex will utilise the “Air quality and emissions mitigation guidance for Sussex authorities (2013)” to encourage lower emission developments with planning and transport authorities to assist in reducing $PM_{2.5}$ emissions.

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

Mid Sussex have no Automatic Monitoring Sites

3.1.2 Non-Automatic Monitoring Sites

Mid Sussex District Council undertook non- automatic (passive) monitoring of NO_2 at 25 sites during 2016.

Table A.2 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 (NO_2)

Table A.3 in Appendix A compares the ratified and adjusted monitored NO_2 annual mean concentrations for the past 5 years with the air quality objective of 40µg/m^3.

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

3.2.2 Particulate Matter (PM_{10})

Mid Sussex do not monitor for PM_{10}

3.2.3 Particulate Matter ($PM_{2.5}$)

Mid Sussex do not monitor for $PM_{2.5}$

3.2.4 Sulphur Dioxide (SO_2)

Mid Sussex do not monitor for SO_2

Appendix A: Monitoring Results

Table A.1 Details of Automatic Monitoring Sites

Mid Sussex have no automatic monitoring sites

Table A.2 Details of Non-Automatic Monitoring Sites

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)
MSAQ1	South Road Haywards Heath	Roadside	533342	123587	NO2	NO	0m	2.5	NO	1.6
MSAQ2	Traunstein Way Bolnore Village Haywards Heath	Roadside	532155	122463	NO2	NO	43m	2.1	NO	2
MSAQ3	London Road East Grinstead	Kerbside	538690	138759	NO2	NO	18m	0.5	NO	2.2
MSAQ5	Lewes Road East Grinstead	Suburban	541245	136996	NO2	NO	16	1.5	NO	2.3
MSAQ6	Smugglers End Handcross	Roadside	526138	129827	NO2	NO	0	15	NO	1.8
MSAQ7	Crabbett Park Worth	Suburban	530440	137280	NO2	NO	0	50	NO	2.15
MSAQ9	Water Tower Colwood Lane Warninglid	Rural	525664	125035	NO2	NO	40	35	NO	2.1
MSAQ10	Stonepound Crossroads Hassocks	Roadside	529911	115489	NO2	YES	6.7	1.5	NO	1.7

MSAQ11	Over Court Northern Façade 1 Keymer Road Hassocks	Roadside	529930	115481	NO2	YES	0	5.5	NO	2.5
MSAQ12	Telegraph Pole Keymer Road Hassocks	Kerbside	529999	115488	NO2	NO	26	1.1	NO	2.4
MSAQ13	Lamp Post Keymer Road Hassocks	Kerbside	529995	115476	NO2	NO	19	0.85	NO	2.3
MSAQ14	Bus Stop London Road Hassocks	Kerbside	529911	115598	NO2	NO	23	1.6	NO	2.6
MSAQ15	Traffic Lights sign London Road Hassocks	Kerbside	529930	115600	NO2	NO	6.5	1.6	NO	2.4
MSAQ16	South Bank Lodge (formally Royston Nursing Home) Keymer Road Hassocks	Roadside	529918	115441	NO2	YES	11.5	11.5	NO	2.4
MSAQ17	Lampost No.4B Brighton Road Hassocks	Kerbside	529894	115340	NO2	NO	10	1.25	NO	2.6
MSAQ18	Bus Stop Brighton Road Hassocks	Kerbside	529907	115428	NO2	NO	9	2	NO	2.5

MSAQ19	Lamppost 04 Hurst Road Hassocks	Roadside	529779	115557	NO2	NO	13.2	1.3	NO	2.5
MSAQ20	New Way Lane Hurstpierpoint	Rural	528854	114517	NO2	NO	100	2	NO	2.3
MSAQ21	London Road Burgess Hill	Roadside	530792	119821	NO2	NO	2.5	1.9	NO	2
MSAQ22	Leylands Road Burgess Hill	Roadside	532160	120069	NO2	NO	3	1.5	NO	2
MSAQ23	Over Court Eastern Façade 1 Keymer Road Hassocks	Roadside	529935	115478	NO2	YES	0	5.8	NO	2
MSAQ24	Over Court Western Façade 1 Keymer Road Hassocks	Roadside	529918	115476	NO2	YES	0	7.5	NO	1.8
MSAQ25	Erica Way Copthorne	Kerbside	531176	138829	NO2	NO	0	4	NO	2
MSAQ26	High Street Lampost No.14 Hurstpierpoint	Suburban	528289	116395	NO2	NO	0	2.1	NO	2.5
MSAQ27	London Road (A23 Sliproad) Hickstead	Suburban	526870	120238	NO2	NO	10	3.8	NO	2.2

Notes:

(1) 0m 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.3 Annual Mean NO_2 Monitoring Results

Site ID	Site Type	Monitoring Type	Valid Data Capture for Monitoring Period (%) (1)	Valid Data Capture 2016 (%) (2)	NO_2 Annual Mean Concentration ($\mu g/m^3$) (3)				
					2012	2013	2014	2015	2016
MSAQ1	Roadside	Diffusion Tube	100	100	24.4	24.6	22.7	19.5	21.7
MSAQ2	Roadside	Diffusion Tube	100	100	17.5	14.2	14.9	23.2	23.7
MSAQ3	Kerbside	Diffusion Tube	100	100	**41.8**	37.5	39.3	36.9	36.7
MSAQ4	Suburban	Diffusion Tube	N/A	N/A	23.4	18.3	18.7		
MSAQ5	Suburban	Diffusion Tube	100	100	37.6	34.3	37.2	32.8	34.5
MSAQ6	Roadside	Diffusion Tube	100	100	31.6	23.9	23.3	28	28.7
MSAQ7	Suburban	Diffusion Tube	92	92	30.1	26.7	27.1	25.3	26.5
MSAQ8	Roadside	Diffusion Tube	N/A	N/A	31.4	29	29.5		
MSAQ9	Rural	Diffusion Tube	92	92	9.2	11	8	8	10
MSAQ10	Roadside	Diffusion Tube	92	92	**47.4**	**48.2**	**41.1**	**40.4**	**43.4**
MSAQ11	Roadside	Diffusion Tube	100	100	**47**	**43.4**	**42.7**	**40.5**	**43.2**
MSAQ12	Kerbside	Diffusion Tube	100	100	40	40.9	36.5	35.5	38.2
MSAQ13	Kerbside	Diffusion Tube	100	100	**43.4**	**45**	**41**	**42.1**	**44.7**
MSAQ14	Kerbside	Diffusion Tube	100	100	**41.9**	35.7	**40.5**	35	36

MSAQ15	Kerbside	Diffusion Tube	92	92	38.4	38.2	35.8	36.9	37.9
MSAQ16	Roadside	Diffusion Tube	92	92	22.8	24.4	20.4	19.2	20.7
MSAQ17	Kerbside	Diffusion Tube	100	100	25.4	26.8	27.5	23.4	28
MSAQ18	Kerbside	Diffusion Tube	100	100	34.9	35.2	33.3	32.2	33.4
MSAQ19	Roadside	Diffusion Tube	100	100	20.7	21.3	18.4	16.5	18.7
MSAQ20	Rural	Diffusion Tube	75	75	9.4	10.9	8.8	8.2	9.1
MSAQ21	Roadside	Diffusion Tube	92	92	31.2	34	29.8	27.4	32.1
MSAQ22	Roadside	Diffusion Tube	100	100	27.7	30.6	28.3	27.3	28.4
MSAQ23	Roadside	Diffusion Tube	100	100		35.4	33.3	31.8	35.3
MSAQ24	Roadside	Diffusion Tube	100	100		28.7	22.5	22.5	28.3
MSAQ25	Kerbside	Diffusion Tube	100	100				29.1	30
MSAQ26	Suburban	Diffusion Tube	100	100				24.3	25.7
MSAQ27	Suburban	Diffusion Tube	100	100				21.4	23.3

☒ **Diffusion tube data has been bias corrected**

☒ **Annualisation has been conducted where data capture is <75%**

☒ **If applicable, all data has been distance corrected for relevant exposure**

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.**

(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.

Table A.4 Annual Mean NO_2 Monitoring Results within the AQMA

Site ID	Site Type	Monitoring Type	Valid Data Capture for Monitoring Period (%) (1)	Valid Data Capture 2016 (%) (2)	NO_2 Annual Mean Concentration ($\mu g/m^3$) (3)				
					2012	2013	2014	2015	2016
MSAQ10	Roadside	Diffusion Tube	92	92	**47.4**	**48.2**	**41.1**	**40.4**	**43.4**
MSAQ10 (Distance corrected to nearest relevant exposure)	Roadside	Diffusion Tube	92	92	37.4	37.9	32.9	32.4	34.0
MSAQ11	Roadside	Diffusion Tube	100	100	**47**	**43.4**	**42.7**	**40.5**	**43.2**
MSAQ23	Roadside	Diffusion Tube	100	100		35.4	33.3	31.8	35.3
MSAQ24	Roadside	Diffusion Tube	100	100		28.7	22.5	22.5	28.3

Exceedances of the NO_2 annual mean objective of 40$\mu g/m^3$ are shown in **bold**.

Figure A.1 Trends in Annual Mean NO_2 Concentrations

Annual mean concentrations (bias corrected) 2011 to 2016 of nitrogen dioxide diffusion tube measurements at five urban centre sites.

Year	London Road Burgess Hill	Leylands Road Burgess Hill	London Road East Grinstead	Lewes Road East Grinstead	South Road Haywards Heath
2011			39.1	35.6	24.2
2012	31.2	27.7	**41.8**	37.6	24.4
2013	34.0	30.6	37.5	34.3	24.6
2014	29.8	28.3	39.3	37.2	22.7
2015	27.4	27.3	36.9	32.8	19.5
2016	32.1	28.4	36.7	34.5	21.7

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

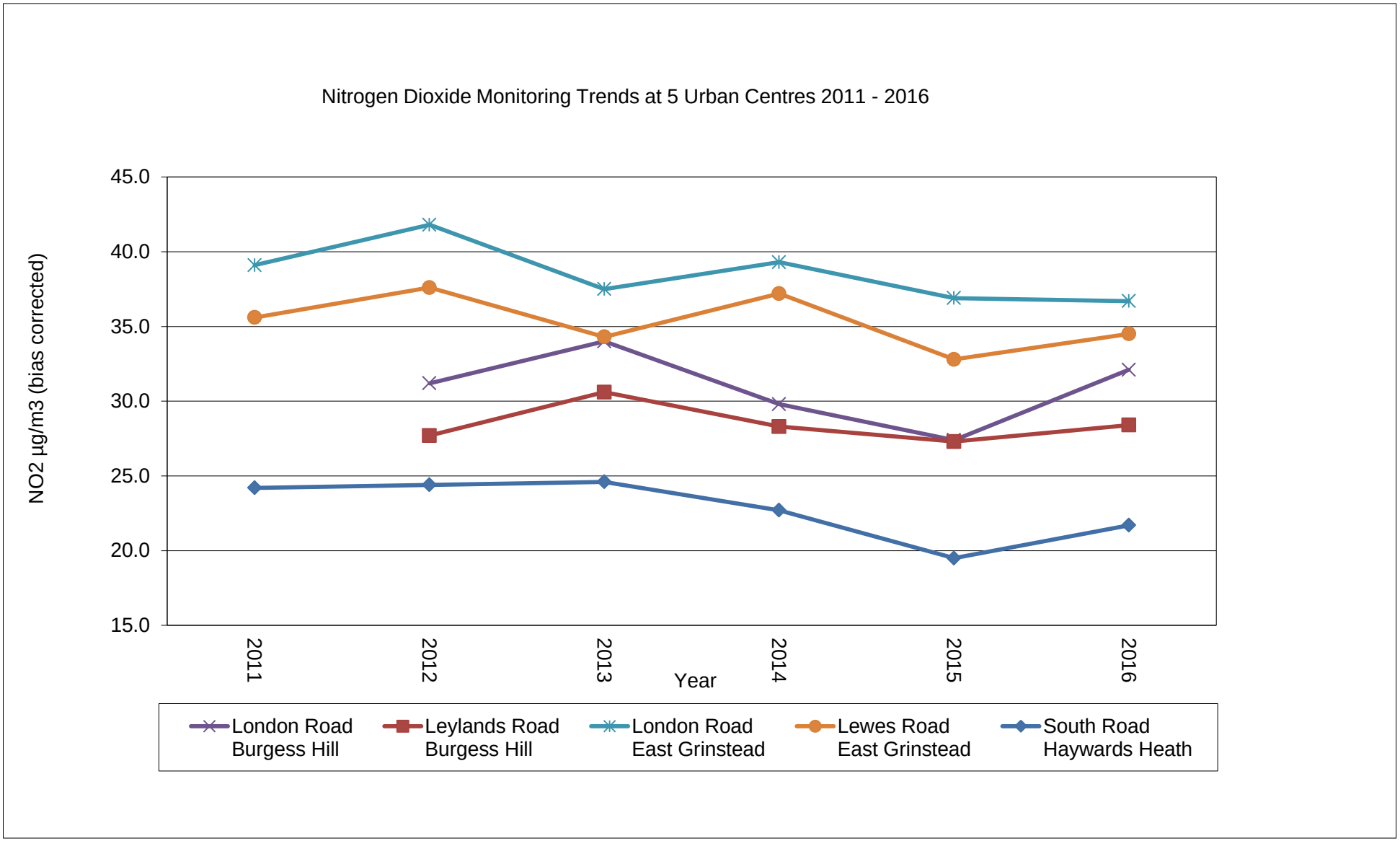
In 2013 concentrations reduced at the two sites in East Grinstead and increased at the two Burgess Hill sites.

In 2014 concentrations reduced at three of the sites and increased at the two sites in East Grinstead.

All sites showed a reduction in levels in 2015.

4 sites showed an increase in 2016.

Overall the levels have reduced since 2011.


Nitrogen Dioxide Monitoring Trends at 5 Urban Centres 2011 - 2016
NO2 µg/m3 (bias corrected)
45.0
40.0
35.0
30.0
25.0
20.0
15.0
2011
2012
2013
2014
2015
2016
Year
London Road Burgess Hill
Leylands Road Burgess Hill
London Road East Grinstead
Lewes Road East Grinstead
South Road Haywards Heath

.

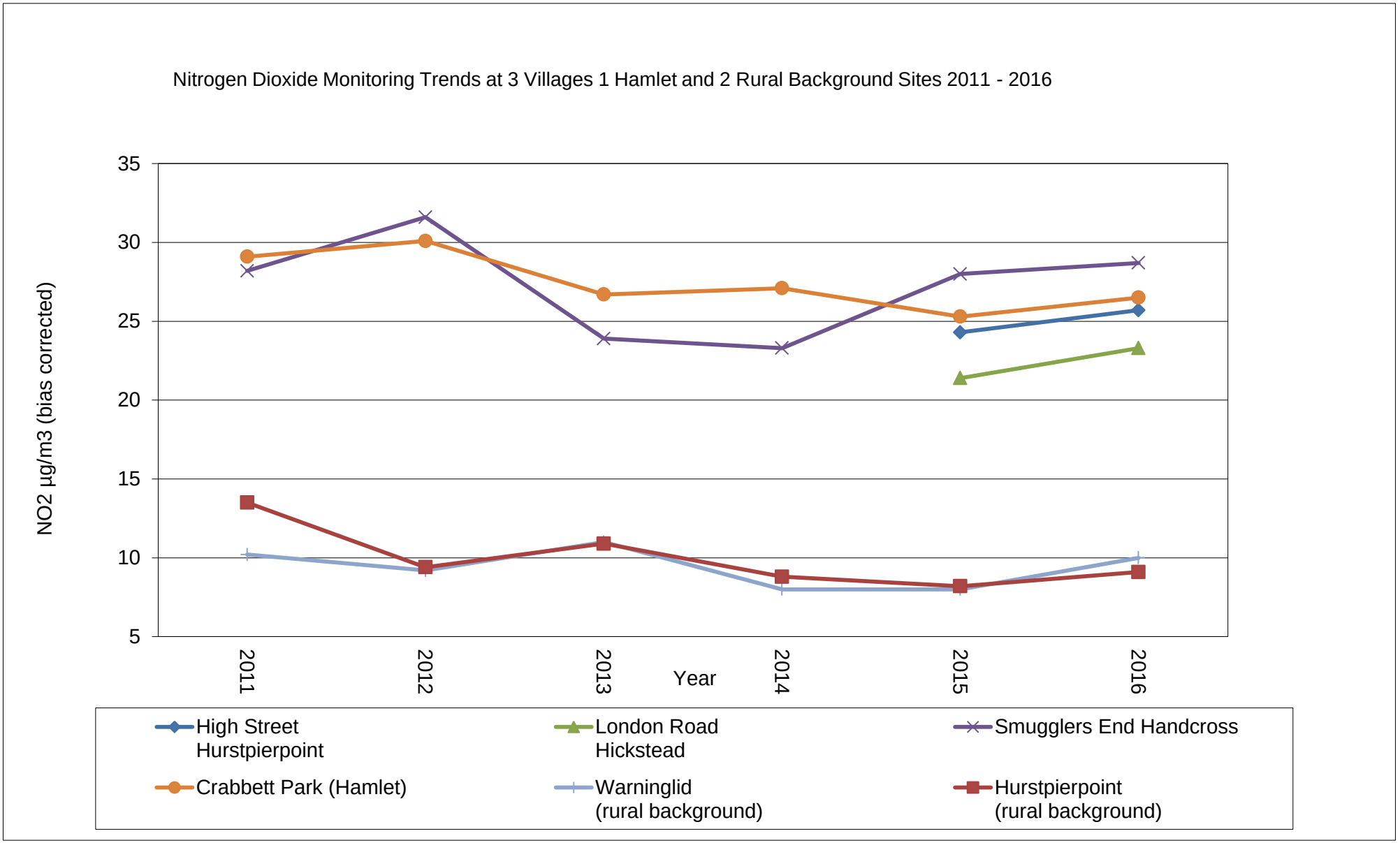
Annual mean concentrations (bias corrected) 2011 to 2016 of nitrogen dioxide diffusion tube measurements at three villages, one hamlet and two rural background sites

Year	High Street Hurstpierpoint	London Road Hickstead	Smugglers End Handcross	Crabbett Park Worth (Hamlet)	Warninglid (rural background)	Hurstpierpoint (rural background)
2011			28.2	29.1	10.2	13.5
2012			31.6	30.1	9.2	9.4
2013			23.9	26.7	11.0	10.9
2014			23.3	27.1	8.0	8.8
2015	24.3	21.4	28.0	25.3	8.0	8.2
2016	25.7	23.3	28.7	26.5	10.0	9.1

Two of the sites showed an increase in levels in 2012, whilst the other two reduced.

Three of the sites showed a reduction in 2014.

Overall the levels have reduced at 2 of the sites and marginally increased at one since 2011.


Nitrogen Dioxide Monitoring Trends at 3 Villages 1 Hamlet and 2 Rural Background Sites 2011 - 2016
NO2 µg/m3 (bias corrected)
35
30
25
20
15
10
5
2011
2012
2013
2014
2015
2016
Year
High Street Hurstpierpoint
London Road Hickstead
Smugglers End Handcross
Crabbett Park (Hamlet)
Warninglid (rural background)
Hurstpierpoint (rural background)

.Annual mean concentrations (bias corrected) 2011 to 2016 of nitrogen dioxide diffusion tube measurements at Hassocks.

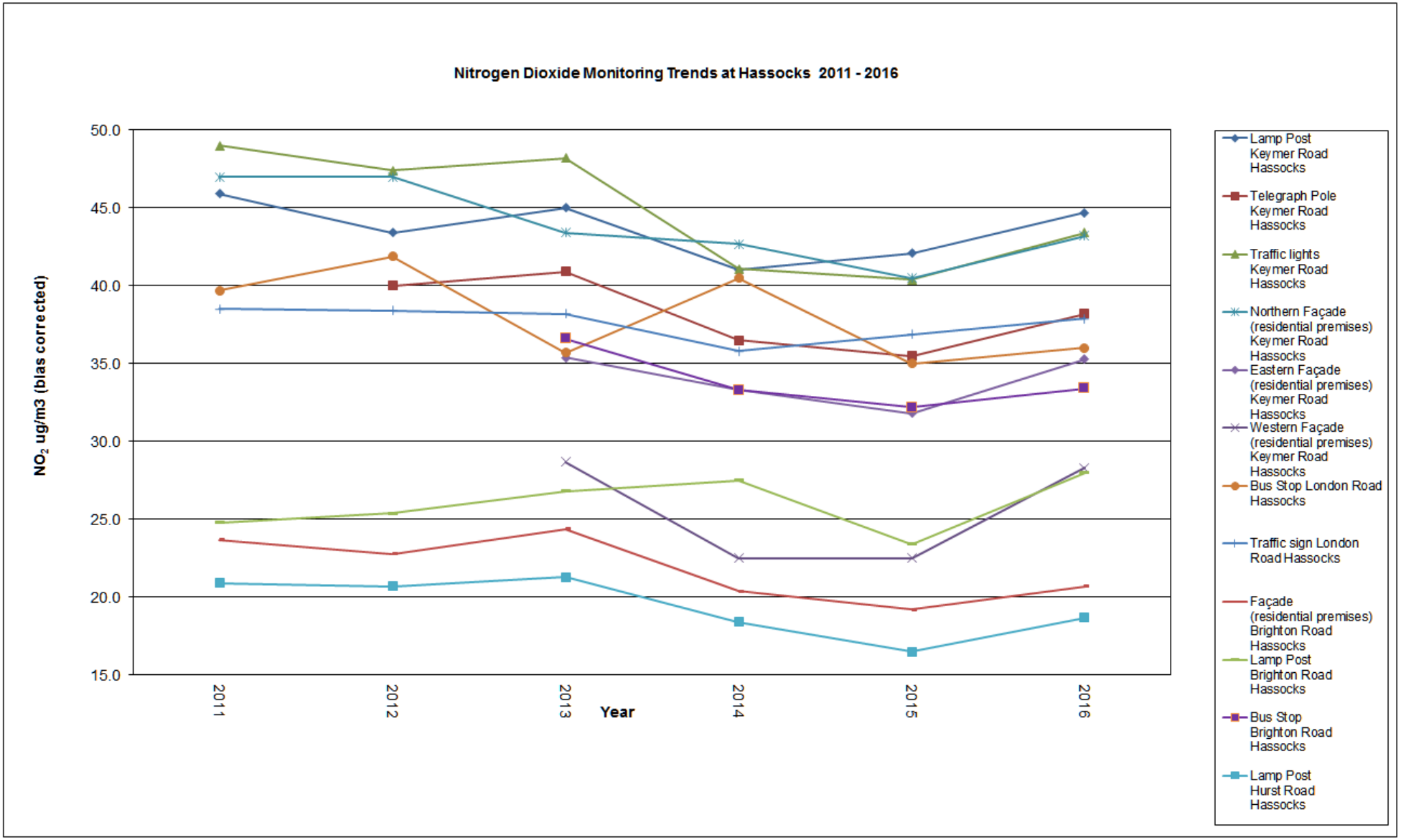
Year	Lamp Post Keymer Road Hassocks	Telegraph Pole Keymer Road Hassocks	Traffic lights Keymer Road Hassocks	Northern Façade (residential premises) Keymer Road Hassocks	Eastern Façade (residential premises) Keymer Road Hassocks	Western Façade (residential premises) Keymer Road Hassocks	Bus Stop London Road Hassocks	Traffic sign London Road Hassocks	Façade (residential premises) Brighton Road Hassocks	Lamp Post Brighton Road Hassocks	Bus Stop Brighton Road Hassocks	Lamp Post Hurst Road Hassocks
2011	**45.9**		**49.0**	**47.0**			39.7	38.5	23.7	24.8		20.9
2012	**43.4**	40.0	**47.4**	**47.0**			**41.9**	38.4	22.8	25.4		20.7
2013	**45.0**	**40.9**	**48.2**	**43.4**	35.4	28.7	35.7	38.2	24.4	26.8	36.6	21.3
2014	**41.0**	36.5	**41.1**	**42.7**	33.3	22.5	40.5	35.8	20.4	27.5	33.3	18.4
2015	**42.1**	35.5	**40.4**	**40.5**	31.8	22.5	35.0	36.9	19.2	23.4	32.2	16.5
2016	**44.7**	38.2	**43.4**	**43.2**	35.3	28.3	36.0	37.9	20.7	28.0	33.4	18.7

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

The Bus stop at London Road Hassocks showed a sharp decline in measured concentrations in 2013 and the level in 2016 is virtually the same.

Concentrations reduced slightly at most sites in 2015 but have increased again in 2016

Three of the sites are above the national air quality objective in 2016.
The 2016 level recorded at the location of **relevant exposure** (MSAQ11 - Over Court, Northern façade, Keymer Road, Hassocks) remained above the objective level at **43.2µg/m³.**


Nitrogen Dioxide Monitoring Trends at Hassocks 2011 - 2016
NO2 ug/m3 (bias corrected)
50.0
45.0
40.0
35.0
30.0
25.0
20.0
15.0
2011
2012
2013
2014
2015
2016
Year
Lamp Post Keymer Road Hassocks
Telegraph Pole Keymer Road Hassocks
Traffic lights Keymer Road Hassocks
Northern Façade (residential premises) Keymer Road Hassocks
Eastern Façade (residential premises) Keymer Road Hassocks
Western Façade (residential premises) Keymer Road Hassocks
Bus Stop London Road Hassocks
Traffic sign London Road Hassocks
Façade (residential premises) Brighton Road Hassocks
Lamp Post Brighton Road Hassocks
Bus Stop Brighton Road Hassocks
Lamp Post Hurst Road Hassocks

Annual mean concentrations (bias corrected) 2011 to 2016 of nitrogen dioxide diffusion tube measurements within the AQMA at Stonepound Hassocks

Year	Traffic lights Keymer Road Hassocks	Distance corrected results for Traffic lights Keymer Road Hassocks (see Appendix C)	Northern Façade (residential premises) Keymer Road Hassocks	Eastern Façade (residential premises) Keymer Road Hassocks	Western Façade (residential premises) Keymer Road Hassocks
2011	**49.0**	38.1	**47.0**		
2012	**47.4**	37.4	**47.0**		
2013	**48.2**	37.9	**43.4**	35.4	28.7
2014	**41.1**	32.9	**42.7**	33.3	22.5
2015	**40.4**	32.4	**40.5**	31.8	22.5
2016	**43.4**	34.0	**43.2**	35.3	28.3

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

There has been an overall reduction in the levels recorded at the sites within the AQMA area since it was declared.

Two of the sites recorded levels above the national air quality objective in 2016.

When the Traffic Lights Keymer Road recorded level is distance corrected to predict the level at the nearest façade for public exposure it is below the objective level at 34µg/m^3.

However, the level recorded at the location of **relevant exposure** (MSAQ11 - Over Court, Northern façade, Keymer Road, Hassocks) remained above the objective level at **43.2µg/m^3**.

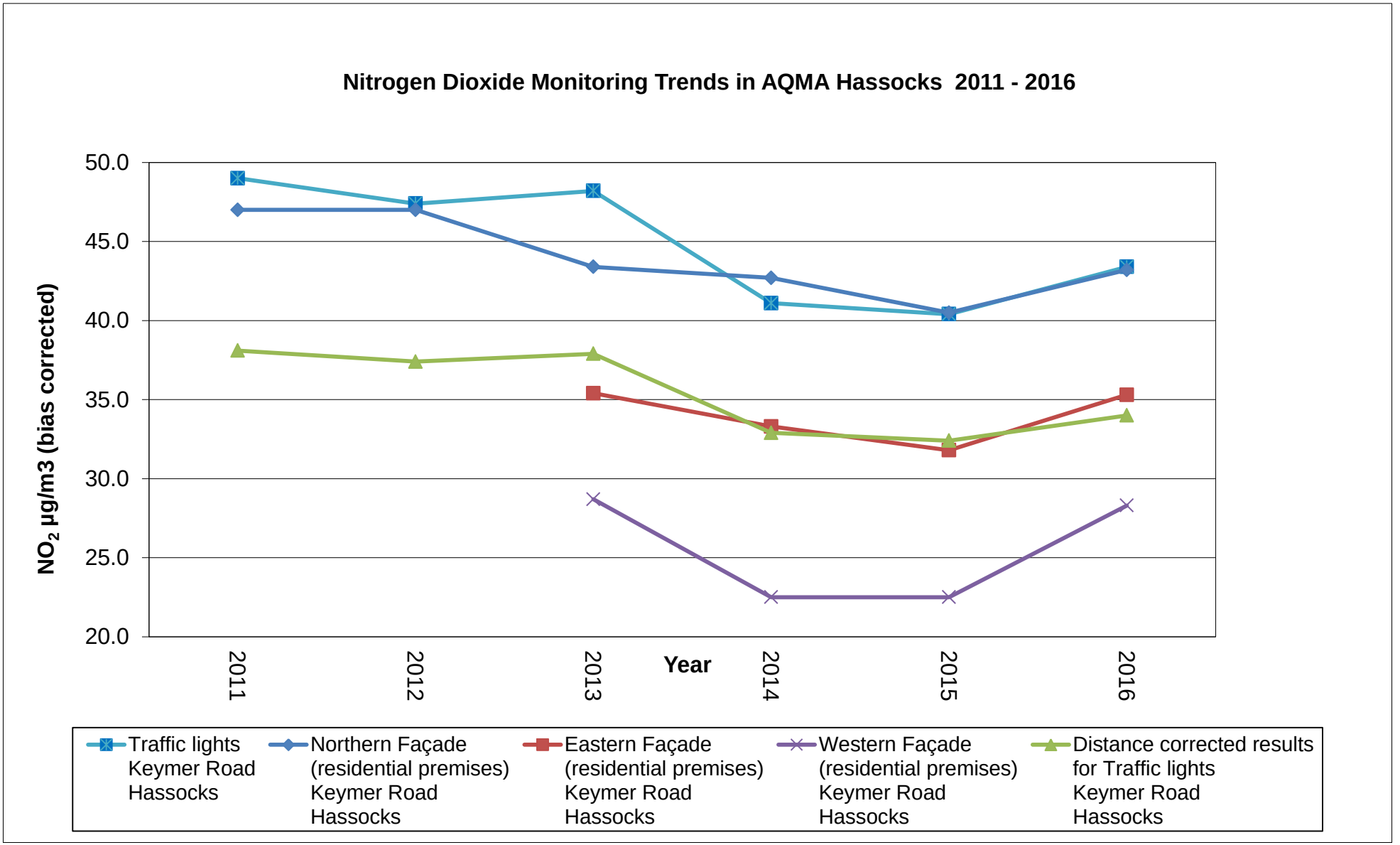

Nitrogen Dioxide Monitoring Trends in AQMA Hassocks 2011 - 2016
NO2 µg/m3 (bias corrected)
50.0
45.0
40.0
35.0
30.0
25.0
20.0
2011
2012
2013
2014
2015
2016
Year
Traffic lights Keymer Road Hassocks
Northern Façade (residential premises) Keymer Road Hassocks
Eastern Façade (residential premises) Keymer Road Hassocks
Western Façade (residential premises) Keymer Road Hassocks
Distance corrected results for Traffic lights Keymer Road Hassocks

Table A.5 1-Hour Mean NO_2 Monitoring Results

Mid Sussex do not monitor hourly levels.

None of the annual average diffusion tube levels exceed 60 µg/m^3 indicating the hourly objective has not been exceeded at any of the monitoring sites.

Table A.6 – Annual Mean PM_{10} Monitoring Results

Mid Sussex do not monitor for PM_{10}

Table A.7 – 24-Hour Mean PM_{10} Monitoring Results

Mid Sussex do not monitor for PM_{10}

Table A.8 – $PM_{2.5}$ Monitoring Results

Mid Sussex do not monitor for $PM_{2.5}$

Table A.9 – SO_2 Monitoring Results

Mid Sussex do not monitor for SO_2

Appendix B: Full Monthly Diffusion Tube Results for 2016

Table B.1 NO_2 Monthly Diffusion Tube Results - 2016

Site ID	NO_2 Mean Concentrations (µg/m^3) Dates entered if exposure period varies from defra suggested calendar												Annual Mean		
	Jan	Feb (4 Feb to 7 Mar)	Mar (7 Mar to 1 Apr)	Apr	May	Jun (27 May to 5 Jul)	Jul (5 Jul to 4 Aug)g	Aug (4 Aug to 24 Aug)	Sep	Oct	Nov	Dec	Raw Data	Bias Adjusted (0.94) and Annualised (1)	Distance Corrected to Nearest Exposure (2)
MSAQ1	26.6	23.1	21.0	21.9	20.6	17.5	17.8	18.6	25.0	23.9	28.9	32.2	23.1	21.7	
MSAQ2	25.9	25.5	25.7	22.1	26.5	22.4	20.8	20.5	24.3	27.0	30.4	31.3	25.2	23.7	
MSAQ3	43.8	43.7	32.3	40.4	37.1	34.5	36.1	34.1	45.0	32.7	38.9	48.8	39.0	36.7	21.1
MSAQ5	39.2	39.1	30.7	37.4	31.9	28.2	33.6	30.8	41.7	38.7	41.5	47.6	36.7	34.5	21.0
MSAQ6	33.4	27.8	24.2	29.3	27.4	28.1	33.5	23.0	38.1	29.1	36.2	35.4	30.5	28.7	
MSAQ7	36.0	31.4	26.0	32.1	22.7	19.6	27.0	23.9	30.0	26.5	Lost	35.3	28.2	26.5	
MSAQ9	10.7	11.4	10.6	8.9	Lost	7.5	5.6	6.0	9.5	13.5	14.4	18.3	10.6	10.0	
MSAQ10	37.7	47.1	42.4	42.0	39.8	41.2	Erroneous reading	40.1	66.6	48.5	56.4	45.9	46.2	**43.4**	34.0
MSAQ11	49.9	47.3	36.9	43.1	45.5	39.6	38.9	41.7	62.6	45.8	49.8	51.2	46.0	**43.2**	
MSAQ12	40.1	47.0	43.5	45.8	40.9	33.5	37.4	40.9	38.2	38.6	42.8	37.0	40.6	38.2	
MSAQ13	45.6	57.9	54.9	51.5	49.6	40.1	36.9	43.8	44.8	46.6	46.4	52.8	47.6	**44.7**	23.7
MSAQ14	40.4	33.7	32.8	37.4	40.0	29.9	36.7	34.1	45.2	38.3	44.7	46.2	38.3	36.0	
MSAQ15	49.3	42.0	40.2	40.9	40.3	25.0	36.6	38.8	43.4	40.7	41.1	45.2	40.3	37.9	28.0
MSAQ16	17.8	27.9	24.8	15.0	20.0	Lost	17.8	17.3	20.1	24.7	30.0	27.0	22.0	20.7	

MSAQ17	28.1	34.3	35.5	28.7	27.2	26.6	21.8	22.9	30.3	32.6	35.6	34.5	29.8	28.0	19.9
MSAQ18	31.3	40.7	38.7	31.6	31.0	29.8	33.2	32.1	36.8	37.6	44.4	38.9	35.5	33.4	24.3
MSAQ19	20.0	24.8	23.3	18.4	15.7	14.2	14.7	14.4	18.1	19.1	28.3	27.9	19.9	18.7	14.5
MSAQ20	Lost	10.5	10.8	8.0	7.8	6.3	6.5	Lost	9.4	12.1	Lost	15.7	9.7	9.1	
MSAQ21	28.3	36.3	27.7	31.5	30.6	26.3	Lost	30.0	35.3	43.0	42.6	44.1	34.2	32.1	30.9
MSAQ22	33.0	37.8	27.1	28.7	28.8	22.6	19.4	24.3	27.9	34.1	39.3	38.8	30.2	28.4	24.2
MSAQ23	41.8	43.3	37.2	38.2	37.5	35.2	33.0	35.0	37.0	35.5	34.5	41.5	37.5	35.3	
MSAQ24	34.3	34.4	31.5	28.3	26.8	23.3	31.3	22.7	25.1	34.5	37.8	30.8	30.1	28.3	
MSAQ25	36.8	30.9	26.8	32.6	31.7	26.4	29.8	30.4	38.0	30.7	29.2	39.4	31.9	30.0	
MSAQ26	26.8	31.0	28.2	20.9	25.1	20.8	22.3	32.9	28.2	27.2	33.3	30.3	27.3	25.7	24.4
MSAQ27	22.6	26.7	25.6	23.1	25.3	21.8	12.8	18.0	24.4	33.8	32.7	30.2	24.8	23.3	19.3

☒ **National bias adjustment factor used**

☒ **Annualisation has been conducted where data capture is <75%**

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.**

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

(2) Distance corrected to nearest relevant public exposure see Appendix C.

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

Supporting Technical Information

Distance Correction for monitoring sites

Distance correction is an important point to consider If monitoring sites are not representative of public exposure (e.g. if located at roadside or kerbside sites where the façades of nearest properties are set back further from the road)

The monitored result at that site can be distance corrected to estimate the level at the façade of a nearby building.

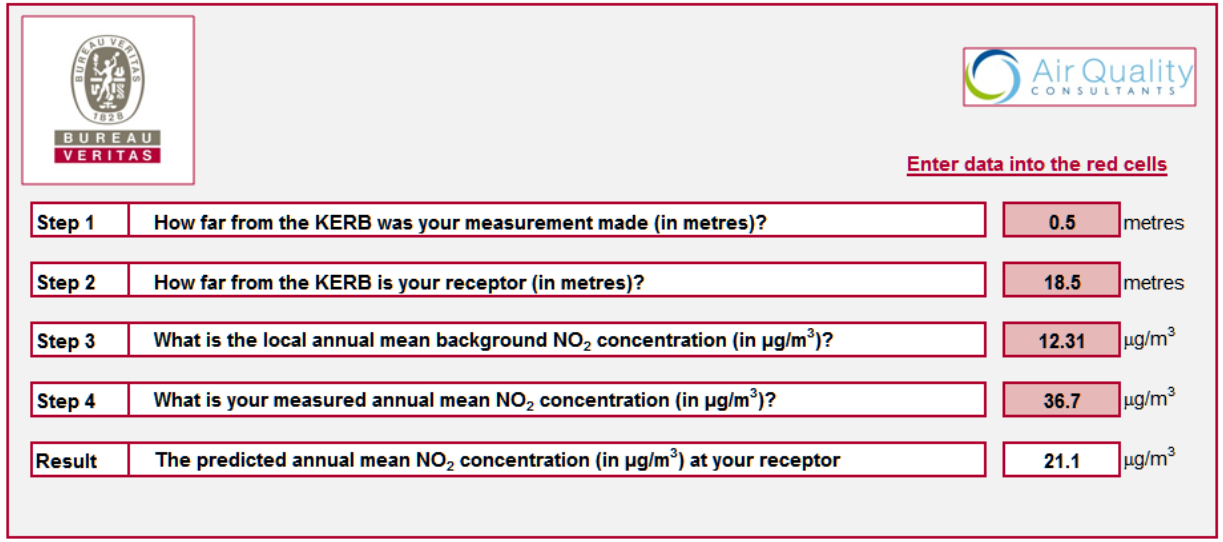
The distance corrected results for such sites monitored are shown in Appendix B.

Below are the spreadsheets used to make the calculations.

The NO_2 fall off with distance from the roads calculator v4.1 is available at:-

https://laqm.defra.gov.uk/tools-monitoring-data/no2-falloff.html

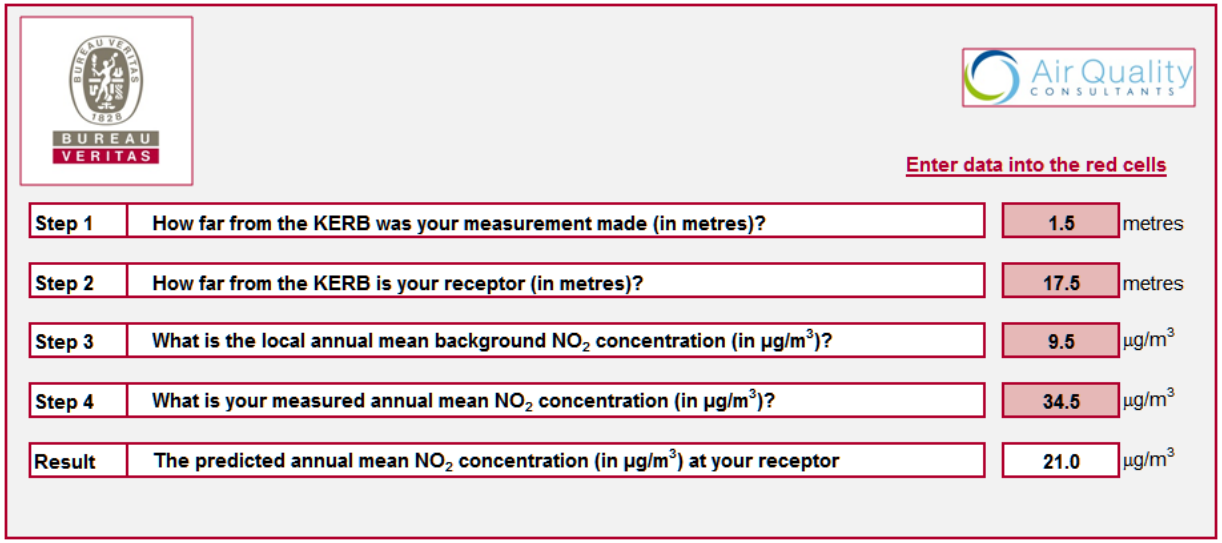
MSAQ3 London Road East Grinstead 2016



Enter data into the red cells

Step 1	How far from the KERB was your measurement made (in metres)?	0.5	metres
Step 2	How far from the KERB is your receptor (in metres)?	18.5	metres
Step 3	What is the local annual mean background NO_2 concentration (in $\mu g/m^3$)?	12.31	$\mu g/m^3$
Step 4	What is your measured annual mean NO_2 concentration (in $\mu g/m^3$)?	36.7	$\mu g/m^3$
Result	The predicted annual mean NO_2 concentration (in $\mu g/m^3$) at your receptor	21.1	$\mu g/m^3$

MSAQ5 Lewes Road East Grinstead 2016



Enter data into the red cells

Step 1	How far from the KERB was your measurement made (in metres)?	1.5	metres
Step 2	How far from the KERB is your receptor (in metres)?	17.5	metres
Step 3	What is the local annual mean background NO_2 concentration (in $\mu g/m^3$)?	9.5	$\mu g/m^3$
Step 4	What is your measured annual mean NO_2 concentration (in $\mu g/m^3$)?	34.5	$\mu g/m^3$
Result	The predicted annual mean NO_2 concentration (in $\mu g/m^3$) at your receptor	21.0	$\mu g/m^3$

MSAQ10 Stonepound Traffic Lights Hassocks 2016

Enter data into the red cells

Step 1	How far from the KERB was your measurement made (in metres)?	1.5	metres
Step 2	How far from the KERB is your receptor (in metres)?	5.5	metres
Step 3	What is the local annual mean background NO_2 concentration (in µg/m^3)?	10.53	µg/m^3
Step 4	What is your measured annual mean NO_2 concentration (in µg/m^3)?	43.4	µg/m^3
Result	The predicted annual mean NO_2 concentration (in µg/m^3) at your receptor	34.0	µg/m^3

MSAQ10 Stonepound Traffic Lights Hassocks 2015

This calculator allows you to predict the annual mean NO_2 concentration for a location ("receptor") that is close to a monitoring site, but nearer or further the kerb than the monitor. The next sheet shows your results on a graph.

Enter data into the yellow cells

Step 1	How far from the KERB was your measurement made (in metres)?	(Note 1)	1.5	metres
Step 2	How far from the KERB is your receptor (in metres)?	(Note 1)	5.5	metres
Step 3	What is the local annual mean background NO_2 concentration (in µg/m^3)?	(Note 2)	12.3	µg/m^3
Step 4	What is your measured annual mean NO_2 concentration (in µg/m^3)?	(Note 2)	40.4	µg/m^3
Result	The predicted annual mean NO_2 concentration (in µg/m^3) at your receptor	(Note 3)	32.4	µg/m^3

Note 1: In some cases the term "kerb" may be taken to be the edge of the trafficked road - see the FAQ at http://laqm2.defra.gov.uk/FAQs/Monitoring/Location/index.htm for further details. Distances should be measured horizontally from the kerb and assumes that the monitor and receptor have similar elevations. Each distance should be greater than 0.1m and less than 50m (In practice, using a value of 0.1m when the monitor is closer to the kerb than this is likely to be reasonable). The receptor is the location for which you wish to make your prediction. The monitor can either be closer to the kerb than the receptor, or further from the kerb than the receptor. The closer the monitor and the receptor are to each other, the more reliable the prediction will be. When your receptor is further from the kerb than your monitor, it is recommended that the receptor and monitor should be within 20m of each other. When your receptor is closer to the kerb than your monitor, it is recommended that the receptor and monitor should be within 10m of each other.

Note 2: The measurement and the background must be for the same year. The background concentration could come from the national maps published at www.airquality.co.uk, or alternatively from a nearby monitor in a background location.

Note 3: The calculator follows the procedure set out in Box 2.3 of LAQM TG(09). The results will have a greater uncertainty than the measured data. More confidence can be placed in results where the distance between the monitor and the receptor is small than where it is large.

Issue 4: 25/01/11. Created by Dr Ben Marner; Approved by Prof Duncan Laxen. Contact: benmarner@aqconsultants.co.uk

MSAQ10 Stonepound Traffic Lights Hassocks 2014

This calculator allows you to predict the annual mean NO_2 concentration for a location ("receptor") that is close to a monitoring site, but nearer or further the kerb than the monitor. The next sheet shows your results on a graph.

Air Quality CONSULTANTS

Enter data into the yellow cells

Step 1	How far from the KERB was your measurement made (in metres)?	(Note 1)	1.5	metres
Step 2	How far from the KERB is your receptor (in metres)?	(Note 1)	5.5	metres
Step 3	What is the local annual mean background NO_2 concentration (in $\mu g/m^3$)?	(Note 2)	12.2	$\mu g/m^3$
Step 4	What is your measured annual mean NO_2 concentration (in $\mu g/m^3$)?	(Note 2)	41.1	$\mu g/m^3$
Result	The predicted annual mean NO_2 concentration (in $\mu g/m^3$) at your receptor	(Note 3)	32.9	$\mu g/m^3$

Note 1: In some cases the term "kerb" may be taken to be the edge of the trafficked road - see the FAQ at http://laqm2.defra.gov.uk/FAQs/Monitoring/Location/index.htm for further details. Distances should be measured horizontally from the kerb and assumes that the monitor and receptor have similar elevations. Each distance should be greater than 0.1m and less than 50m (In practice, using a value of 0.1m when the monitor is closer to the kerb than this is likely to be reasonable). The receptor is the location for which you wish to make your prediction. The monitor can either be closer to the kerb than the receptor, or further from the kerb than the receptor. The closer the monitor and the receptor are to each other, the more reliable the prediction will be. When your receptor is further from the kerb than your monitor, it is recommended that the receptor and monitor should be within 20m of each other. When your receptor is closer to the kerb than your monitor, it is recommended that the receptor and monitor should be within 10m of each other.

Note 2: The measurement and the background must be for the same year. The background concentration could come from the national maps published at www.airquality.co.uk, or alternatively from a nearby monitor in a background location.

Note 3: The calculator follows the procedure set out in Box 2.3 of LAQM TG(09). The results will have a greater uncertainty than the measured data. More confidence can be placed in results where the distance between the monitor and the receptor is small than where it is large.

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MSAQ10 Stonepound Traffic Lights Hassocks 2013

This calculator allows you to predict the annual mean NO_2 concentration for a location ("receptor") that is close to a monitoring site, but nearer or further the kerb than the monitor. The next sheet shows your results on a graph.

Air Quality CONSULTANTS

Enter data into the yellow cells

Step 1	How far from the KERB was your measurement made (in metres)?	(Note 1)	1.5	metres
Step 2	How far from the KERB is your receptor (in metres)?	(Note 1)	5.5	metres
Step 3	What is the local annual mean background NO_2 concentration (in $\mu g/m^3$)?	(Note 2)	12.2	$\mu g/m^3$
Step 4	What is your measured annual mean NO_2 concentration (in $\mu g/m^3$)?	(Note 2)	48.2	$\mu g/m^3$
Result	The predicted annual mean NO_2 concentration (in $\mu g/m^3$) at your receptor	(Note 3)	37.9	$\mu g/m^3$

Note 1: In some cases the term "kerb" may be taken to be the edge of the trafficked road - see the FAQ at http://laqm2.defra.gov.uk/FAQs/Monitoring/Location/index.htm for further details. Distances should be measured horizontally from the kerb and assumes that the monitor and receptor have similar elevations. Each distance should be greater than 0.1m and less than 50m (In practice, using a value of 0.1m when the monitor is closer to the kerb than this is likely to be reasonable). The receptor is the location for which you wish to make your prediction. The monitor can either be closer to the kerb than the receptor, or further from the kerb than the receptor. The closer the monitor and the receptor are to each other, the more reliable the prediction will be. When your receptor is further from the kerb than your monitor, it is recommended that the receptor and monitor should be within 20m of each other. When your receptor is closer to the kerb than your monitor, it is recommended that the receptor and monitor should be within 10m of each other.

Note 2: The measurement and the background must be for the same year. The background concentration could come from the national maps published at www.airquality.co.uk, or alternatively from a nearby monitor in a background location.

Note 3: The calculator follows the procedure set out in Box 2.3 of LAQM TG(09). The results will have a greater uncertainty than the measured data. More confidence can be placed in results where the distance between the monitor and the receptor is small than where it is large.

Issue 4: 25/01/11 Created by Dr Ben Marner; Approved by Prof Duncan Laxen. Contact: benmarner@aqconsultants.co.uk

MSAQ10 Stonepound Traffic Lights Hassocks 2012

This calculator allows you to predict the annual mean NO_2 concentration for a location ("receptor") that is close to a monitoring site, but nearer or further the kerb than the monitor. The next sheet shows your results on a graph.

Air Quality CONSULTANTS

Enter data into the yellow cells

Step 1	**How far from the KERB was your measurement made (in metres)?**	(Note 1)	**1.5**	metres
Step 2	**How far from the KERB is your receptor (in metres)?**	(Note 1)	**5.5**	metres
Step 3	**What is the local annual mean background NO_2 concentration (in µg/m^3)?**	(Note 2)	**12.3**	µg/m^3
Step 4	**What is your measured annual mean NO_2 concentration (in µg/m^3)?**	(Note 2)	**47.4**	µg/m^3
Result	**The predicted annual mean NO_2 concentration (in µg/m^3) at your receptor**	(Note 3)	**37.4**	µg/m^3

Note 1: In some cases the term "kerb" may be taken to be the edge of the trafficked road - see the FAQ at http://laqm2.defra.gov.uk/FAQs/Monitoring/Location/index.htm for further details. Distances should be measured horizontally from the kerb and assumes that the monitor and receptor have similar elevations. Each distance should be greater than 0.1m and less than 50m (In practice, using a value of 0.1m when the monitor is closer to the kerb than this is likely to be reasonable). The receptor is the location for which you wish to make your prediction. The monitor can either be closer to the kerb than the receptor, or further from the kerb than the receptor. The closer the monitor and the receptor are to each other, the more reliable the prediction will be. When your receptor is further from the kerb than your monitor, it is recommended that the receptor and monitor should be within 20m of each other. When your receptor is closer to the kerb than your monitor, it is recommended that the receptor and monitor should be within 10m of each other.

Note 2: The measurement and the background must be for the same year. The background concentration could come from the national maps published at www.airquality.co.uk, or alternatively from a nearby monitor in a background location.

Note 3: The calculator follows the procedure set out in Box 2.3 of LAQM TG(09). The results will have a greater uncertainty than the measured data. More confidence can be placed in results where the distance between the monitor and the receptor is small than where it is large.

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MSAQ10 Stonepound Traffic Lights Hassocks 2011

This calculator allows you to predict the annual mean NO_2 concentration for a location ("receptor") that is close to a monitoring site, but nearer or further the kerb than the monitor. The next sheet shows your results on a graph.

Air Quality CONSULTANTS

Enter data into the yellow cells

Step 1	**How far from the KERB was your measurement made (in metres)?**	(Note 1)	**1.5**	metres
Step 2	**How far from the KERB is your receptor (in metres)?**	(Note 1)	**5.5**	metres
Step 3	**What is the local annual mean background NO_2 concentration (in µg/m^3)?**	(Note 2)	**13.2**	µg/m^3
Step 4	**What is your measured annual mean NO_2 concentration (in µg/m^3)?**	(Note 2)	**48.1**	µg/m^3
Result	**The predicted annual mean NO_2 concentration (in µg/m^3) at your receptor**	(Note 3)	**38.1**	µg/m^3

Note 1: In some cases the term "kerb" may be taken to be the edge of the trafficked road - see the FAQ at http://laqm2.defra.gov.uk/FAQs/Monitoring/Location/index.htm for further details. Distances should be measured horizontally from the kerb and assumes that the monitor and receptor have similar elevations. Each distance should be greater than 0.1m and less than 50m (In practice, using a value of 0.1m when the monitor is closer to the kerb than this is likely to be reasonable). The receptor is the location for which you wish to make your prediction. The monitor can either be closer to the kerb than the receptor, or further from the kerb than the receptor. The closer the monitor and the receptor are to each other, the more reliable the prediction will be. When your receptor is further from the kerb than your monitor, it is recommended that the receptor and monitor should be within 20m of each other. When your receptor is closer to the kerb than your monitor, it is recommended that the receptor and monitor should be within 10m of each other.

Note 2: The measurement and the background must be for the same year. The background concentration could come from the national maps published at www.airquality.co.uk, or alternatively from a nearby monitor in a background location.

Note 3: The calculator follows the procedure set out in Box 2.3 of LAQM TG(09). The results will have a greater uncertainty than the measured data. More confidence can be placed in results where the distance between the monitor and the receptor is small than where it is large.

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MSAQ13 Lamp Post Keymer Road Hassocks 2016

Enter data into the red cells

Step 1	How far from the KERB was your measurement made (in metres)?	0.85	metres
Step 2	How far from the KERB is your receptor (in metres)?	19.8	metres
Step 3	What is the local annual mean background NO_2 concentration (in µg/m^3)?	10.53	µg/m^3
Step 4	What is your measured annual mean NO_2 concentration (in µg/m^3)?	44.7	µg/m^3
Result	The predicted annual mean NO_2 concentration (in µg/m^3) at your receptor	23.7	µg/m^3

MSAQ15 Traffic Light sign London Road Hassocks 2016

Enter data into the red cells

Step 1	How far from the KERB was your measurement made (in metres)?	1.6	metres
Step 2	How far from the KERB is your receptor (in metres)?	8.1	metres
Step 3	What is the local annual mean background NO_2 concentration (in µg/m^3)?	10.53	µg/m^3
Step 4	What is your measured annual mean NO_2 concentration (in µg/m^3)?	37.9	µg/m^3
Result	The predicted annual mean NO_2 concentration (in µg/m^3) at your receptor	28.0	µg/m^3

MSAQ17 Lamp Post Brighton Road Hassocks 2016

Enter data into the red cells

Step 1	How far from the KERB was your measurement made (in metres)?	1.25	metres
Step 2	How far from the KERB is your receptor (in metres)?	11.25	metres
Step 3	What is the local annual mean background NO_2 concentration (in $\mu g/m^3$)?	10.53	$\mu g/m^3$
Step 4	What is your measured annual mean NO_2 concentration (in $\mu g/m^3$)?	28	$\mu g/m^3$
Result	The predicted annual mean NO_2 concentration (in $\mu g/m^3$) at your receptor	19.9	$\mu g/m^3$

MSAQ18 Bus Stop Brighton Road Hassocks 2016

Enter data into the red cells

Step 1	How far from the KERB was your measurement made (in metres)?	2	metres
Step 2	How far from the KERB is your receptor (in metres)?	11	metres
Step 3	What is the local annual mean background NO_2 concentration (in $\mu g/m^3$)?	10.53	$\mu g/m^3$
Step 4	What is your measured annual mean NO_2 concentration (in $\mu g/m^3$)?	33.4	$\mu g/m^3$
Result	The predicted annual mean NO_2 concentration (in $\mu g/m^3$) at your receptor	24.3	$\mu g/m^3$

MSAQ19 Lamp Post Hurst Road Hassocks 2016

Enter data into the red cells

Step 1	How far from the KERB was your measurement made (in metres)?	1.3	metres
Step 2	How far from the KERB is your receptor (in metres)?	14.5	metres
Step 3	What is the local annual mean background NO_2 concentration (in $\mu g/m^3$)?	10.53	$\mu g/m^3$
Step 4	What is your measured annual mean NO_2 concentration (in $\mu g/m^3$)?	18.7	$\mu g/m^3$
Result	The predicted annual mean NO_2 concentration (in $\mu g/m^3$) at your receptor	14.5	$\mu g/m^3$

MSAQ21 London Road Burgess Hill 2016

Enter data into the red cells

Step 1	How far from the KERB was your measurement made (in metres)?	1.9	metres
Step 2	How far from the KERB is your receptor (in metres)?	2.5	metres
Step 3	What is the local annual mean background NO_2 concentration (in $\mu g/m^3$)?	12.68	$\mu g/m^3$
Step 4	What is your measured annual mean NO_2 concentration (in $\mu g/m^3$)?	32.1	$\mu g/m^3$
Result	The predicted annual mean NO_2 concentration (in $\mu g/m^3$) at your receptor	30.9	$\mu g/m^3$

MSAQ22 Leylands Road Burgess Hill 2016

Enter data into the red cells

Step 1	How far from the KERB was your measurement made (in metres)?	1.5	metres
Step 2	How far from the KERB is your receptor (in metres)?	4.5	metres
Step 3	What is the local annual mean background NO_2 concentration (in µg/m^3)?	10.82	µg/m^3
Step 4	What is your measured annual mean NO_2 concentration (in µg/m^3)?	28.4	µg/m^3
Result	The predicted annual mean NO_2 concentration (in µg/m^3) at your receptor	24.2	µg/m^3

MSAQ26 High Street Hurstpierpoint 2016

Enter data into the red cells

Step 1	How far from the KERB was your measurement made (in metres)?	2.1	metres
Step 2	How far from the KERB is your receptor (in metres)?	3	metres
Step 3	What is the local annual mean background NO_2 concentration (in µg/m^3)?	10.87	µg/m^3
Step 4	What is your measured annual mean NO_2 concentration (in µg/m^3)?	25.7	µg/m^3
Result	The predicted annual mean NO_2 concentration (in µg/m^3) at your receptor	24.4	µg/m^3

MSAQ27 London Road Hickstead 2016

Enter data into the red cells

Step 1	How far from the KERB was your measurement made (in metres)?	3.8	metres
Step 2	How far from the KERB is your receptor (in metres)?	15	metres
Step 3	What is the local annual mean background NO_2 concentration (in $\mu g/m^3$)?	12.62	$\mu g/m^3$
Step 4	What is your measured annual mean NO_2 concentration (in $\mu g/m^3$)?	23.3	$\mu g/m^3$
Result	The predicted annual mean NO_2 concentration (in $\mu g/m^3$) at your receptor	19.3	$\mu g/m^3$

Industrial Installations

Mid Sussex confirms that no significant changes to industrial installations occurred in the Local Authority area since the last Annual Status Report (ASR) in 2016.

Road Construction

Mid Sussex confirms that no significant roads were proposed or constructed in the Local Authority area since the last ASR in 2016.

Combustion Installations

No changes to existing installations in 2016.

Planning Applications

A list of planning applications, which could potentially affect air quality are given in the Table 3

Table 3 Planning applications

Date	Application number	Description
18/07/2016	DM/15/4736	**Land At Little Park Farm, Hurstpierpoint, West Sussex** Reserved matters application for details of the appearance, landscaping, layout and scale following outline permission 12/04141/OUT for the construction of 140 dwellings with associated access, parking and amenity space. (Amended plans received 13 June 2016)
29/07/2016	DM/15/3448	**Land At Gamblemead, Fox Hill, Haywards Heath, West Sussex** Outline Planning Application for residential development comprising of 99 new dwellings, including 30% affordable, with upgraded access taken from B2112/Fox Hill.

Date	Application number	Description
05/08/2016	DM/16/1923	**Hurstpierpoint College, Chalkers Lane, Hurstpierpoint, West Sussex** Construction of a new Performing Arts Centre.
05/08/2016	DM/15/3508	**The Priory, Syresham Gardens, Haywards Heath, West Sussex** Conversion of former convent building (B1 and D1 use) and part of former Chapel (A3 use) to 41 residential units (17no. 1 bed, 17no. 2 bed, and 7no. 3 bed flats) together with associated internal and external alterations.
19/09/2016	DM/15/3309	**Stafford House, 91 Keymer Road, Hassocks, West Sussex** Conversion of Stafford House into 4 apartments and erection of 10 houses in the grounds.
23/09/2016	DM/15/0855	**Phoenix House, 23 - 25 Cantelupe Road, East Grinstead, West Sussex** The erection of 12no. flats consisting of 7no. two bed flats and 5no. 1 bed flats
07/10/2016	DM/15/3658	**Barratts Development Site, Chalkers Lane, Hurstpierpoint, West Sussex** Revised Description - Full planning application for 61 dwellings (inc. 30% affordable) with access from Chalkers Lane, with associated landscaping, car parking, garaging and improved access road to Fairfield Recreation Ground.
12/10/2016	DM/15/4379	**Land Off Kings Way, East Of Gerald Close, Burgess Hill, West Sussex,** Outline planning application for up to 64 dwellings

Date	Application number	Description
		(including 19 affordable homes) together with public open space and natural green space with all matters reserved except the means of access.
14/10/2016	DM/15/5107	**Land South Of Old Rocky Lane, Haywards Heath, West Sussex** Outline application including access details for the development of up to 30 residential dwellings including vehicular access, open space, sustainable urban drainage systems; and associated landscaping, infrastructure and earthworks.
14/10/2016	DM/16/0665	**Perrymount House, 38 - 42 Perrymount Road, Haywards Heath, West Sussex** Erection of an 78 bed hotel and associated restaurant.
28/11/2016	DM/15/4711	**Land East Of Brighton Road, Pease Pottage, West Sussex** The phased development of approximately 600 dwellings (Use Class C3), (including affordable housing), 48 bed care facility (Use Class C2), Community building (Use Class D1), cafe (Use Class A3) and retail (Use Class A1), up to 1 form-entry primary school (Use Class D1), hard/soft landscaping including a noise bund/fence, infrastructure provision, creation of accesses and car parking. The application includes demolition of 2 dwelling houses, ancillary agricultural buildings, removal of waste facility and stopping up existing vehicular access (post construction). (additional information submitted 7th March 2016) AMENDMENT: "Additional information

Date	Application number	Description
		received - Environment Statement Volume 1 - Main Statement Addendum."
21/12/2016	DM/16/2531	**Slaugham Manor, Slaugham Place, Slaugham, Haywards Heath, West Sussex, RH17 6AJ** Hybrid application consisting of demolition of 6 buildings and outline application (access, landscaping, layout, and scale) for construction of 15 new dwellings, and full application for the conversion and extension of the retained Manor House into 9 flats and change of use and extension of Ryders into a single dwelling
29/12/2016	DM/16/1312	**Crest Nicholson Development Site South Of, Rocky Lane, Haywards Heath, West Sussex** Outline Application for residential development comprising 134 dwellings with associated garaging, car parking, open space, landscaping and access roads (phase 2 to permission ref:12/00535/OUT for phase 1)
18/01/2017	DM/15/1467	**Kingsland Laines, Reeds Lane, Sayers Common, Hassocks, West Sussex** Outline planning application for the approval of access details for 40 houses, extra care facility with access from London Road/B2118.
27/01/2017	DM/16/2718	**Keymer Brick & Tile Co Ltd, Nye Road, Burgess Hill, West Sussex** Reserved Matters application in respect of outline planning permission for the erection of 170 new dwellings and apartments with associated infrastructure including a community building, health

Date	Application number	Description
		centre, retail space and a community park with formal and informal sports areas for Phase 2 of Keymer Tile Works site.
07/02/2017	DM/16/3119	**Barn Cottage, Lewes Road, Scaynes Hill, Haywards Heath, West Sussex** Outline planning application (with all matters reserved apart from means of access), for the removal of an existing dwelling (Barn Cottage) and the erection of up to 51 dwellings (including 30% affordable), together with vehicular and pedestrian access, open space, vehicular parking and landscaping measures.
09/02/2017	DM/16/2204	**Persimmon Homes Phase 2 Kings Way Development, Kings Way, Burgess Hill, West Sussex** Reserved Matters application for the approval of the appearance, landscaping, layout and scale for the proposed development of Kings Way (Phase 2 erection of 95 dwellings) following outline application 12/01532/OUT.
17/02/2017	DM/16/2180	**Crest Nicholson Development Site South Of, Rocky Lane, Haywards Heath, West Sussex** Reserved Matters application for the approval of the appearance, landscaping, layout and scale of the proposed development of 134 dwellings and associated works on the land at Rocky Lane following outline application DM/16/1312.
17/02/2017	DM/16/2204	**Persimmon Homes Phase 2 Kings Way Development, Kings Way, Burgess Hill, West Sussex**

Date	Application number	Description
		Reserved Matters application for the approval of the appearance, landscaping, layout and scale for the proposed development of Kings Way (Phase 2 erection of 95 dwellings) following outline application 12/01532/OUT.
17/02/2017	DM/16/2180	**Crest Nicholson Development Site South Of, Rocky Lane, Haywards Heath, West Sussex** Reserved Matters application for the approval of the appearance, landscaping, layout and scale of the proposed development of 134 dwellings and associated works on the land at Rocky Lane following outline application DM/16/1312.
17/02/2017	DM/16/4357	**The Priory, Syresham Gardens, Haywards Heath, West Sussex** Internal and external alterations to facilitate the conversion of former convent building (B1 and D1 use) and part of former Chapel (A3 use) to 41 residential (17x1 bedroom, 17x2 bedroom and 7x3 bedroom flats).
17/02/2017	DM/16/4657	**Handcross Garden Centre, London Road, Handcross, West Sussex** Demolition of existing garden centre buildings, former residential unit and dog day care centre, associated structures and hardstanding. Erection of two industrial units accommodating 7,800sq.m of floorspace for Class B1(b)/B1(c)/B8 use.
07/03/2017	DM/16/5648	**Land To The East Of Gravelye Lane, Gravelye Lane, Lindfield, West Sussex** Outline application for a residential development of up

Date	Application number	Description
		to 130 no. dwellings, together with vehicular and pedestrian access, public open space, car parking and landscaping. All matters to be reserved except for access. Resubmission of DM/16/1012.
10/03/2017	DM/16/5648	**Land To The East Of Gravelye Lane, Gravelye Lane, Lindfield, West Sussex** Outline application for a residential development of up to 130 no. dwellings, together with vehicular and pedestrian access, public open space, car parking and landscaping. All matters to be reserved except for access. Resubmission of DM/16/1012.
10/03/2017	DM/16/5547	**Land South Of Old Rocky Lane, Haywards Heath, West Sussex** Reserved Matters application for 30 residential units including details of appearance, landscaping, layout and scale.
10/04/2017	DM/16/3427	**Phase 5B, Bolnore Village Development, Parkfield Way, Haywards Heath, West Sussex** Increase in the number of dwellings to be erected in Phase 5B (formerly part of Phase 4B) of the Bolnore village Development from 47 to 69 dwellings following the approval of 14/00264/REM.
10/04/2017	DM/16/4496	**Rookery Farm, Rocky Lane, Haywards Heath, West Sussex** Outline application for the erection of 320 new dwellings, including 30% affordable housing, the provision of public open space, and vehicular access from Rocky Lane. All matters to be reserved except for access. (Please note amended description.

Date	Application number	Description
		Additional information received on highway matters along with illustrative layout and parameters Plan)

Air Quality Monitoring Data QA/QC

Diffusion Tube Bias Adjustment Factors

The tubes are supplied by Gradko laboratories and are prepared using 20% TEA in water. The bias adjustment factor used to correct the diffusion tube monitoring results is 0.94 taken from the database of diffusion tube bias factors spreadsheet (v03.17v2) available at http://laqm.defra.gov.uk/bias-adjustment-factors/national-bias.html.

QA/QC of Diffusion Tube Monitoring

Results for the nitrogen dioxide diffusion colocation studies available at http://laqm.defra.gov.uk/diffusion-tubes/precision.html show Gradko laboratory had good precision.
https://laqm.defra.gov.uk/assets/tubeprecision2016version0317finalreducedv2.pdf

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

Figure 1 Air Quality Monitoring Sites 2016

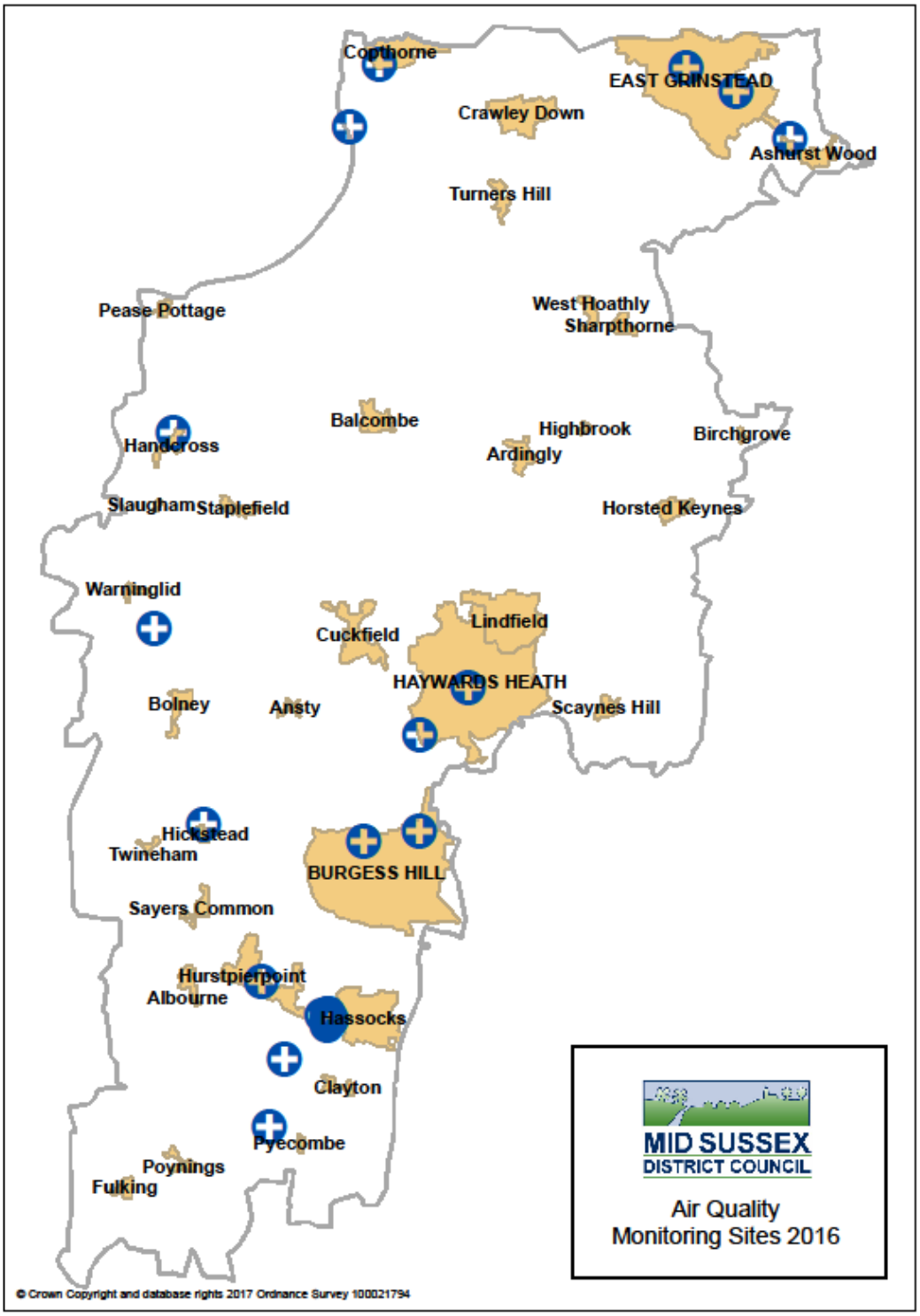


Figure 2 Air Quality Management Area Hassocks

Figure 3 MSAQ1 South Road, Haywards Heath, adjacent to The Cook Shop

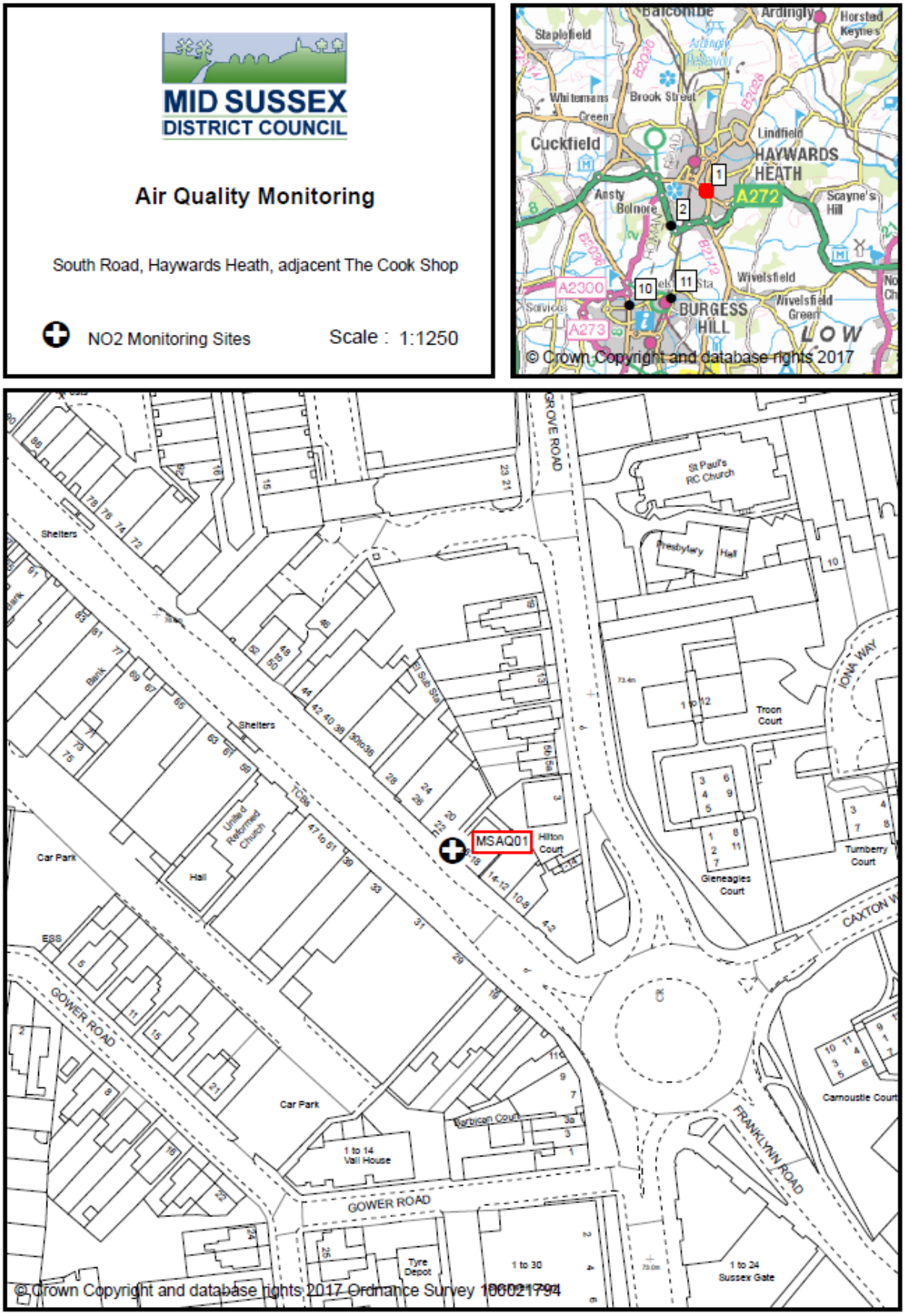


Figure 4 MSAQ2 Lower Village roundabout, Traunstein Way, Haywards Heath

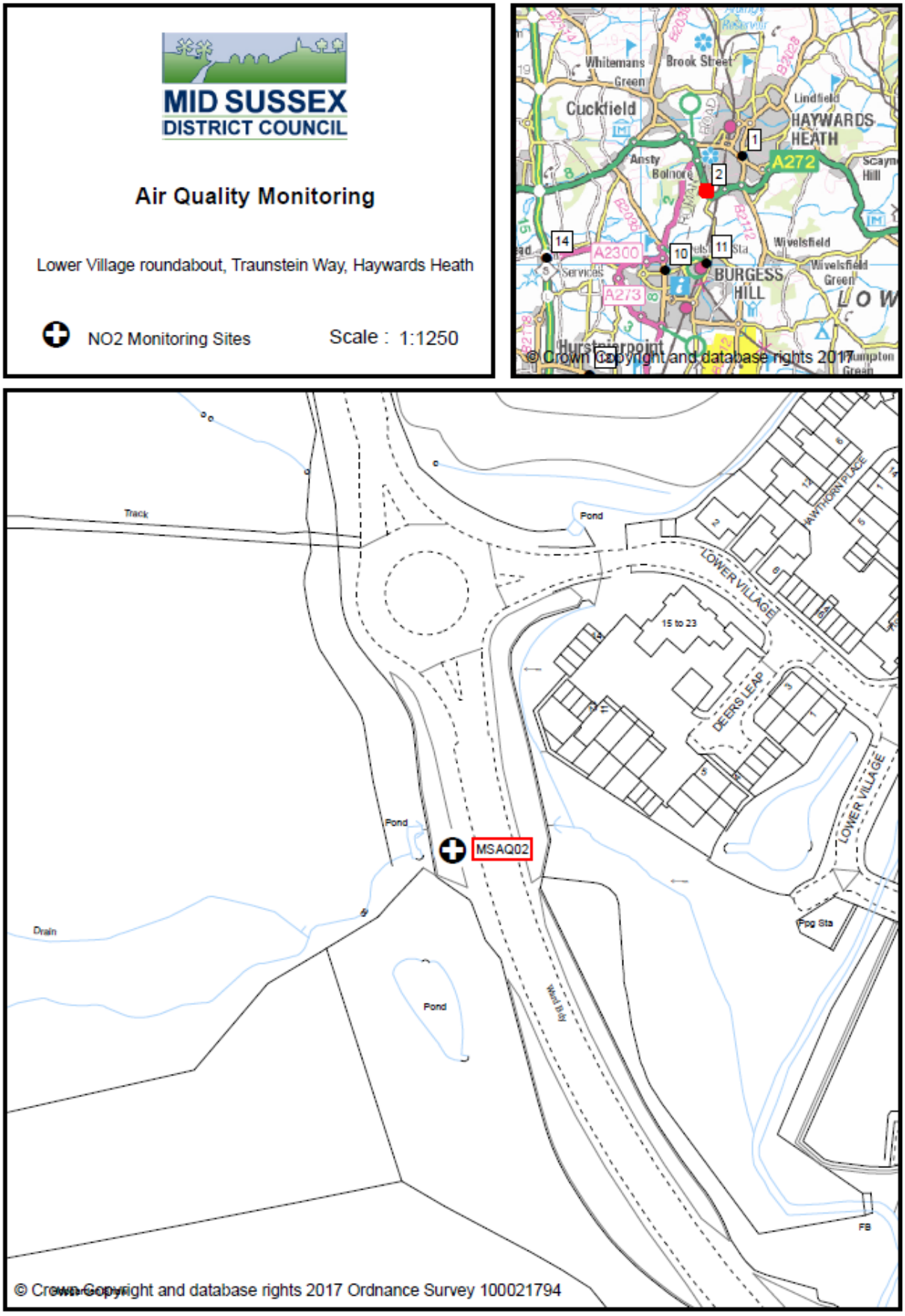


Figure 5 MSAQ3 London Road, East Grinstead, adjacent to Southwick House

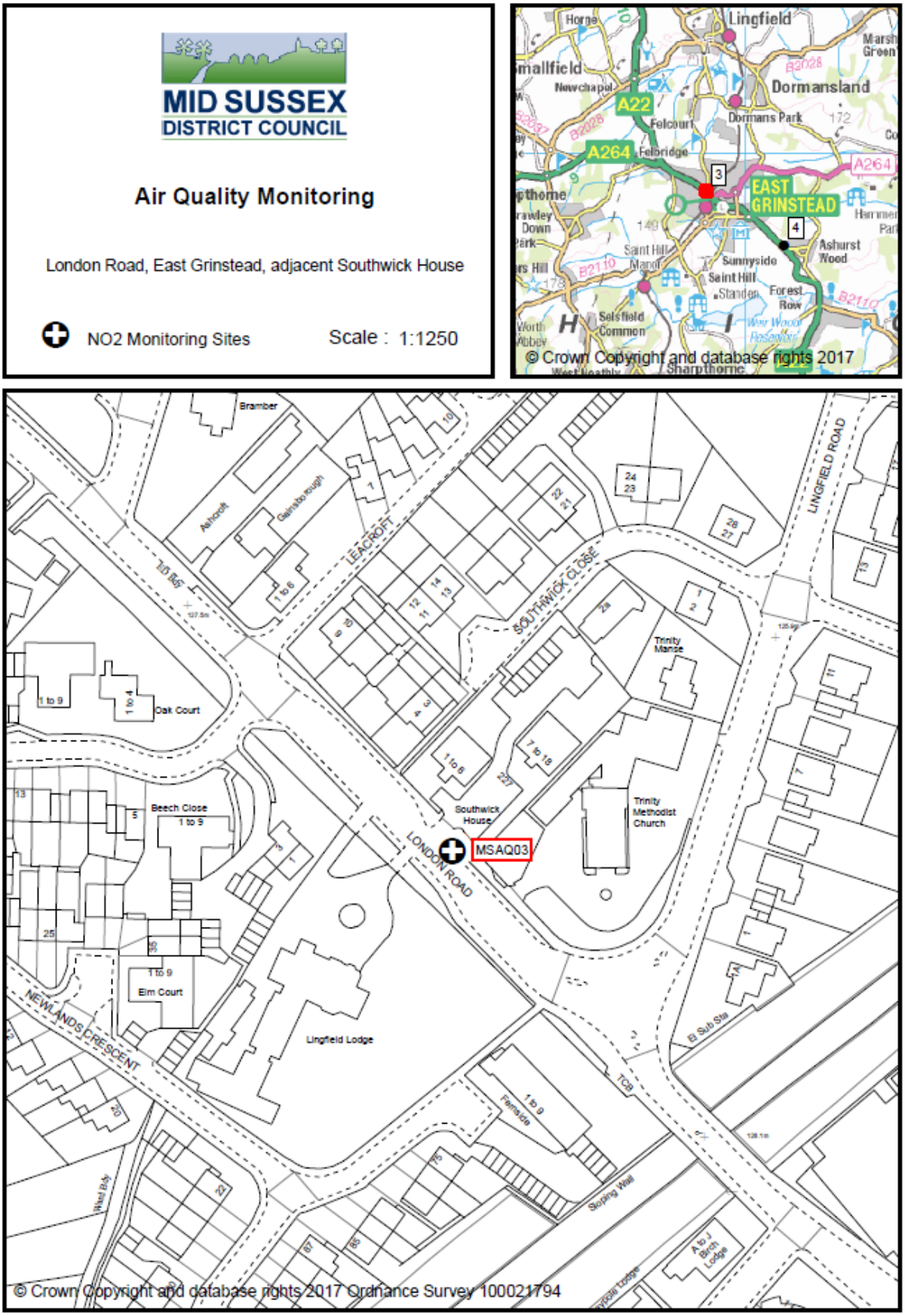


Figure 6 MSAQ5 Lewes Road, East Grinstead

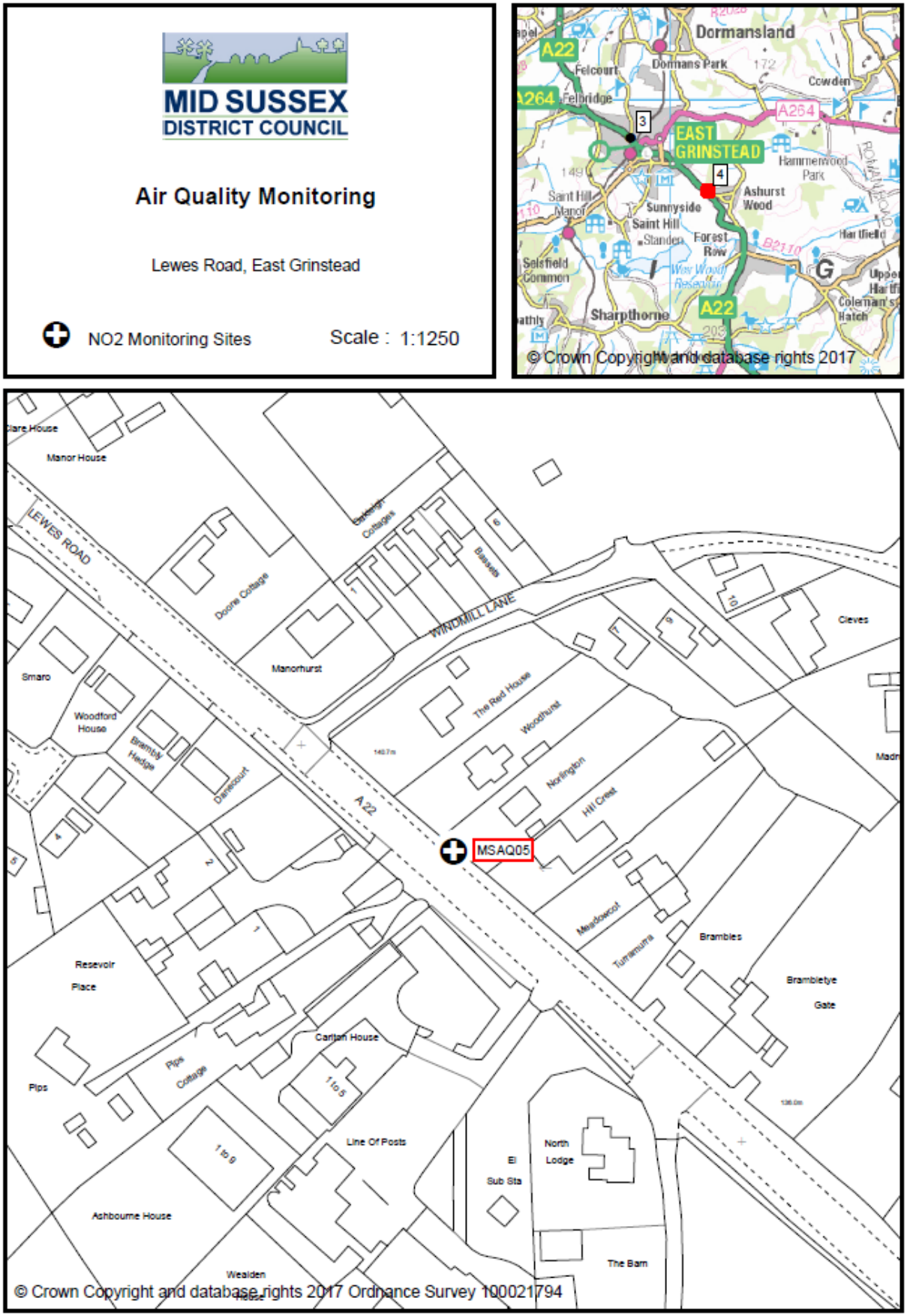


Figure 7 MSAQ6 Smugglers End, Handcross

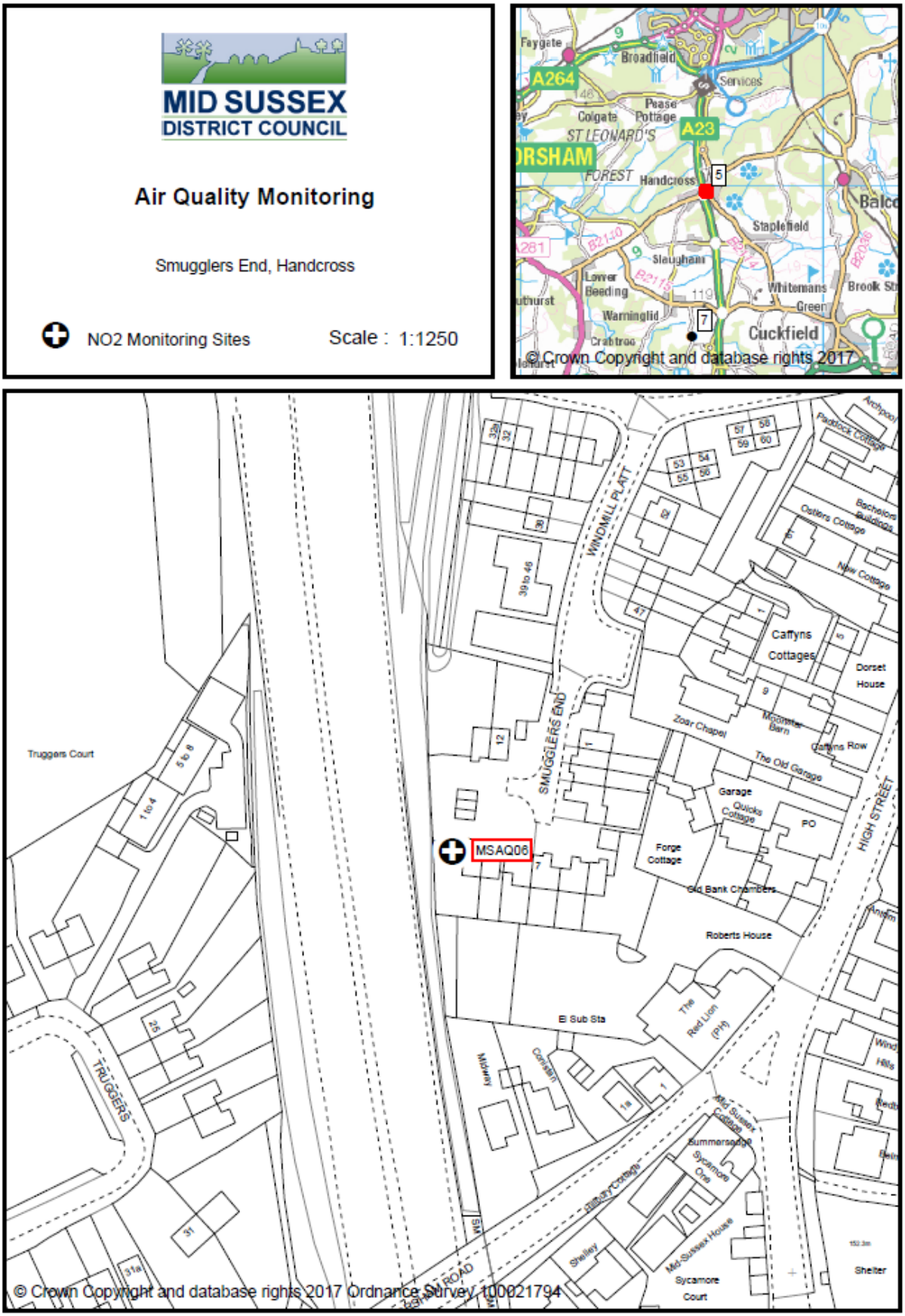


Figure 8 MSAQ7 Crabbet Park, Worth

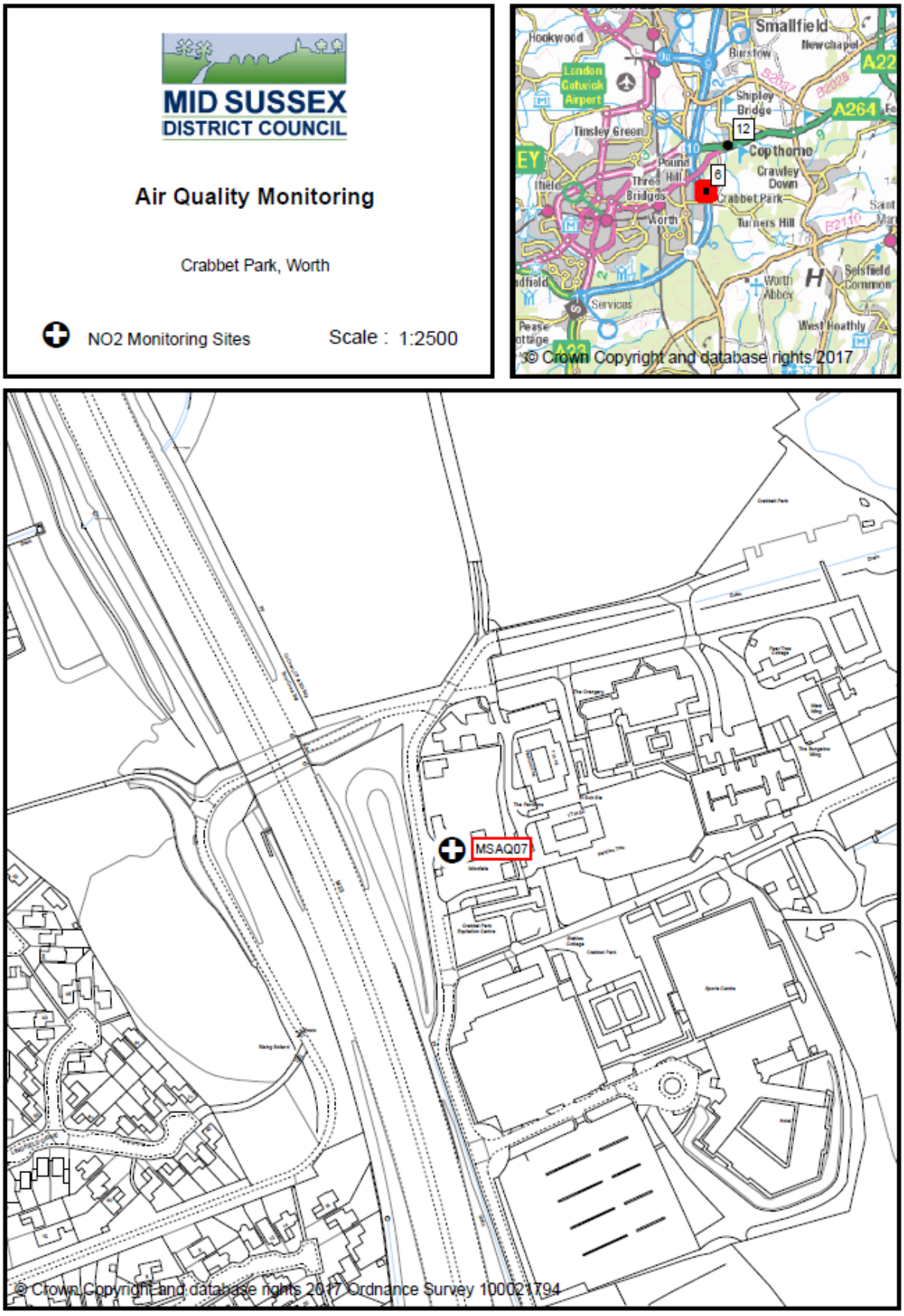


Figure 9 MSAQ09 Water Tower, Colwood Lane, Warninglid

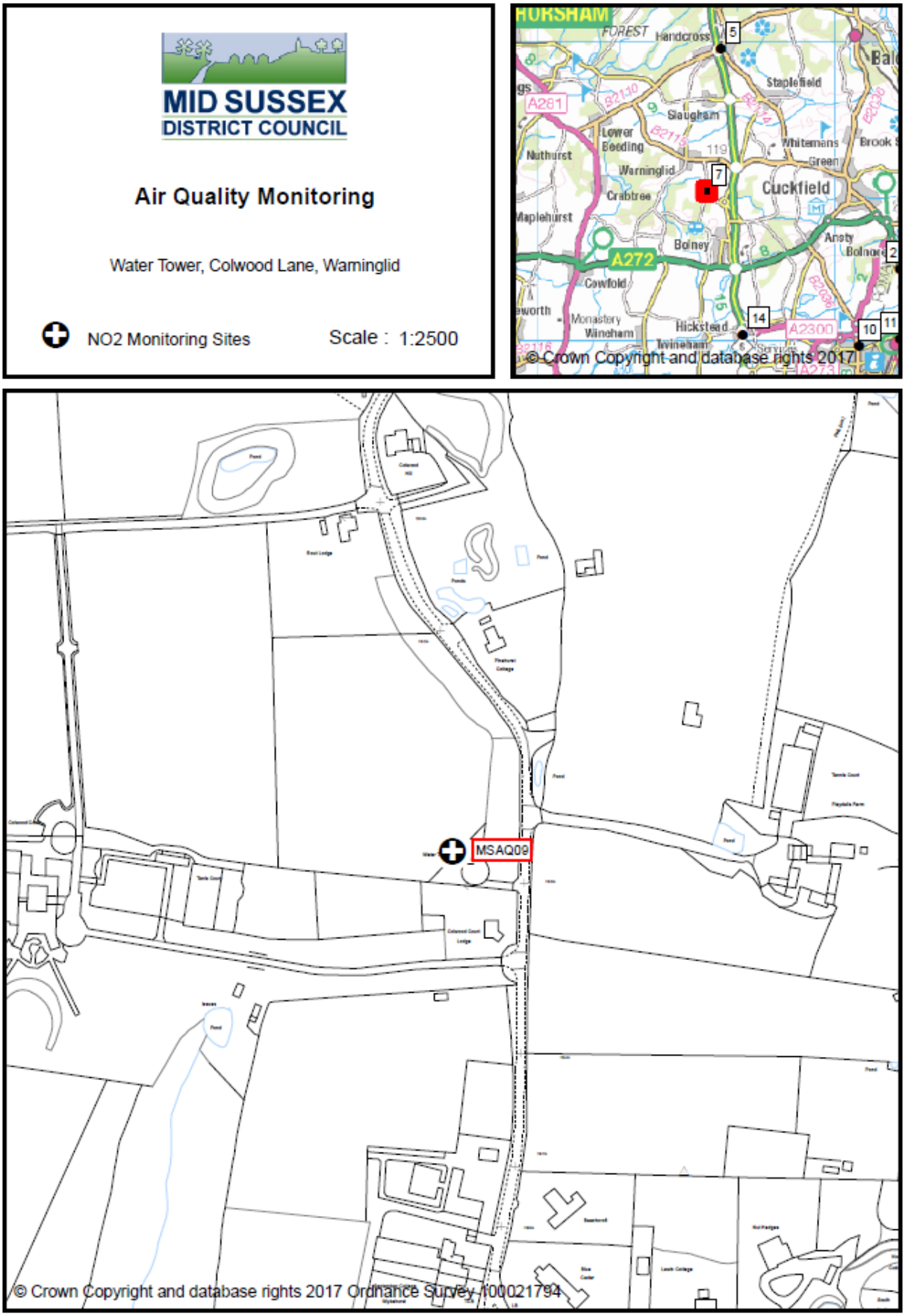


Figure 10 MSAQ10 to MSAQ19 and MSAQ23 and MSAQ24 Stonepound Crossroads, Keymer Road, Hassocks

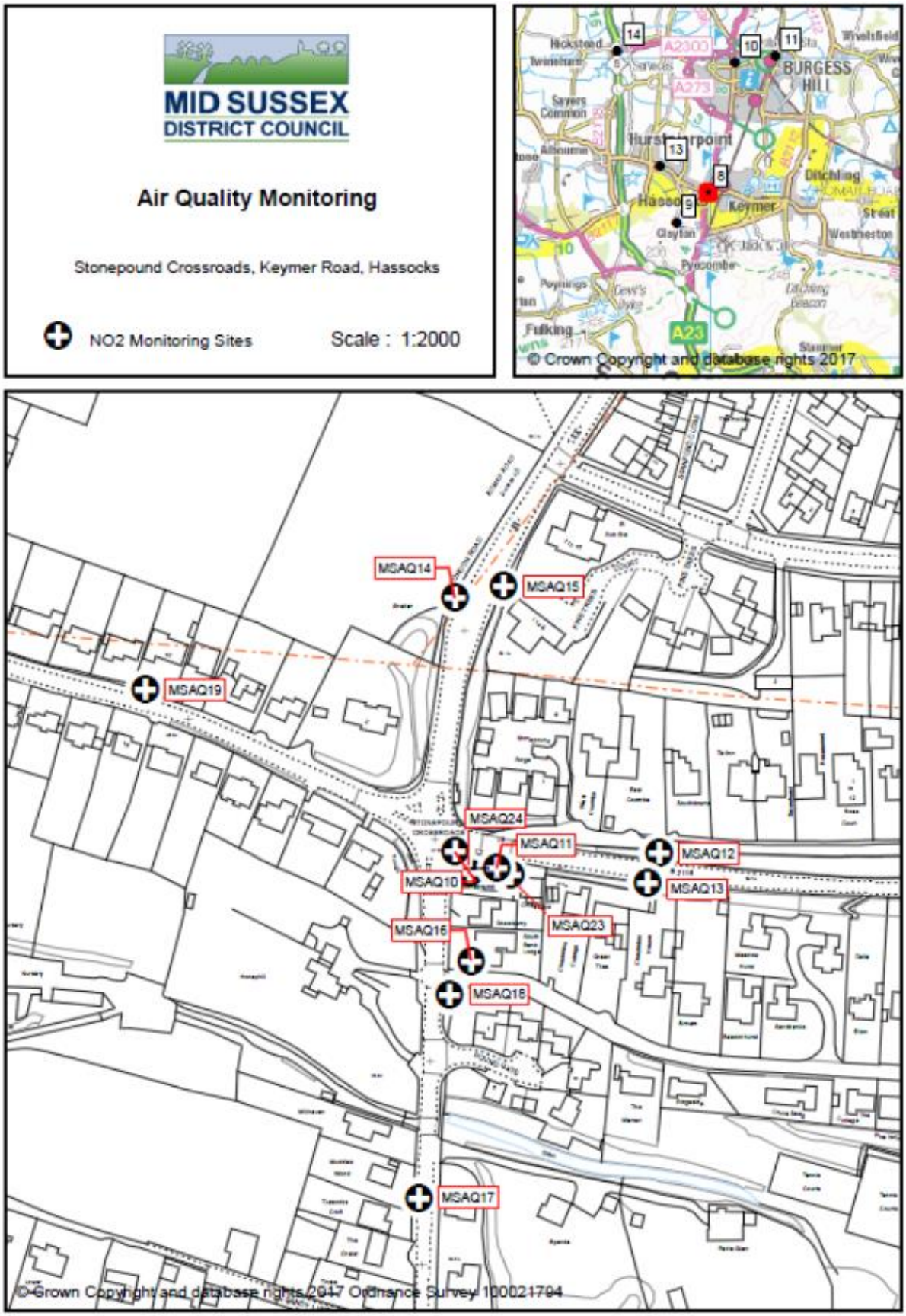


Figure 11 NO_2 Monitoring sites within AQMA

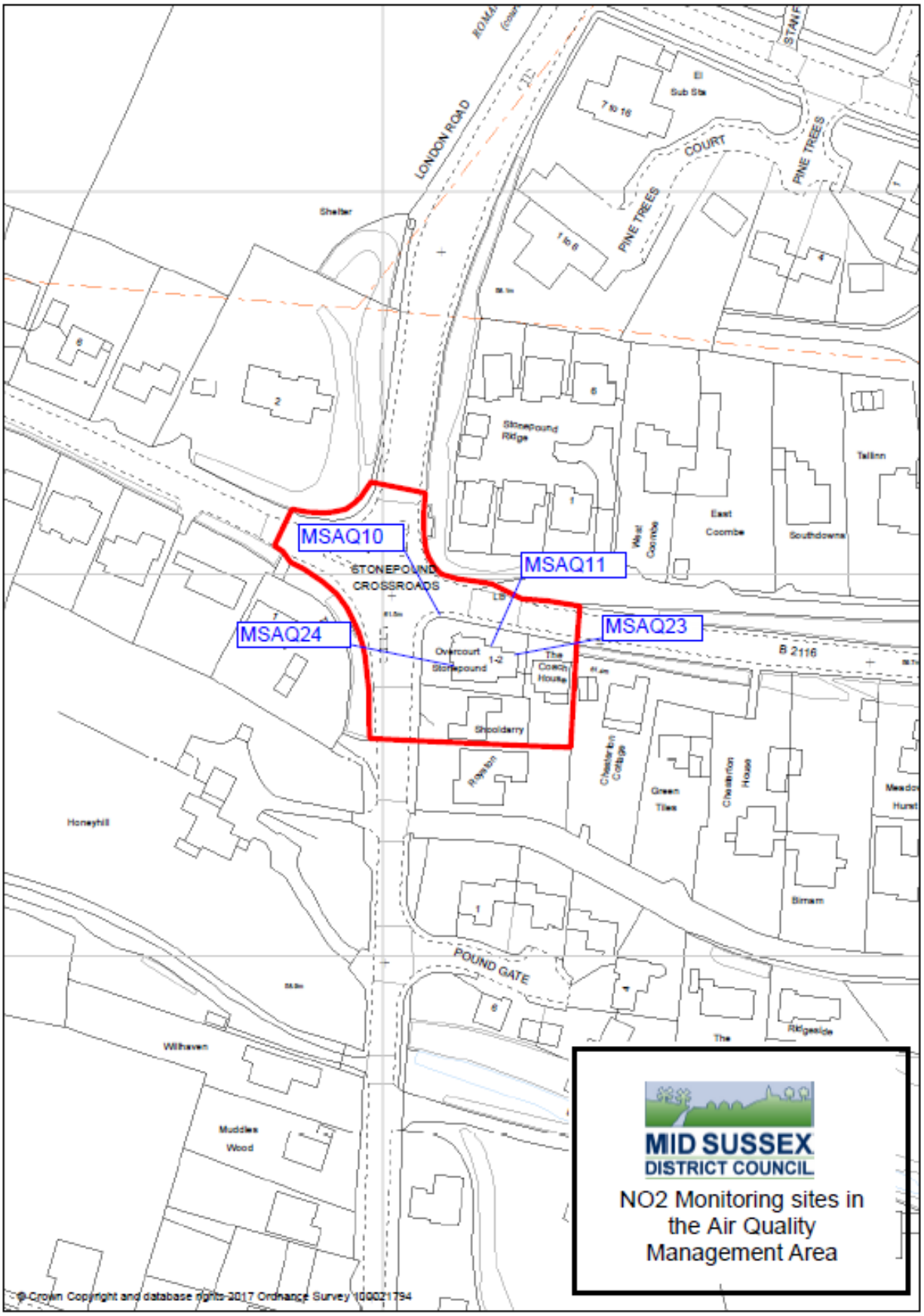


Figure 12 MSAQ20 New Way Lane, Hurstpierpoint

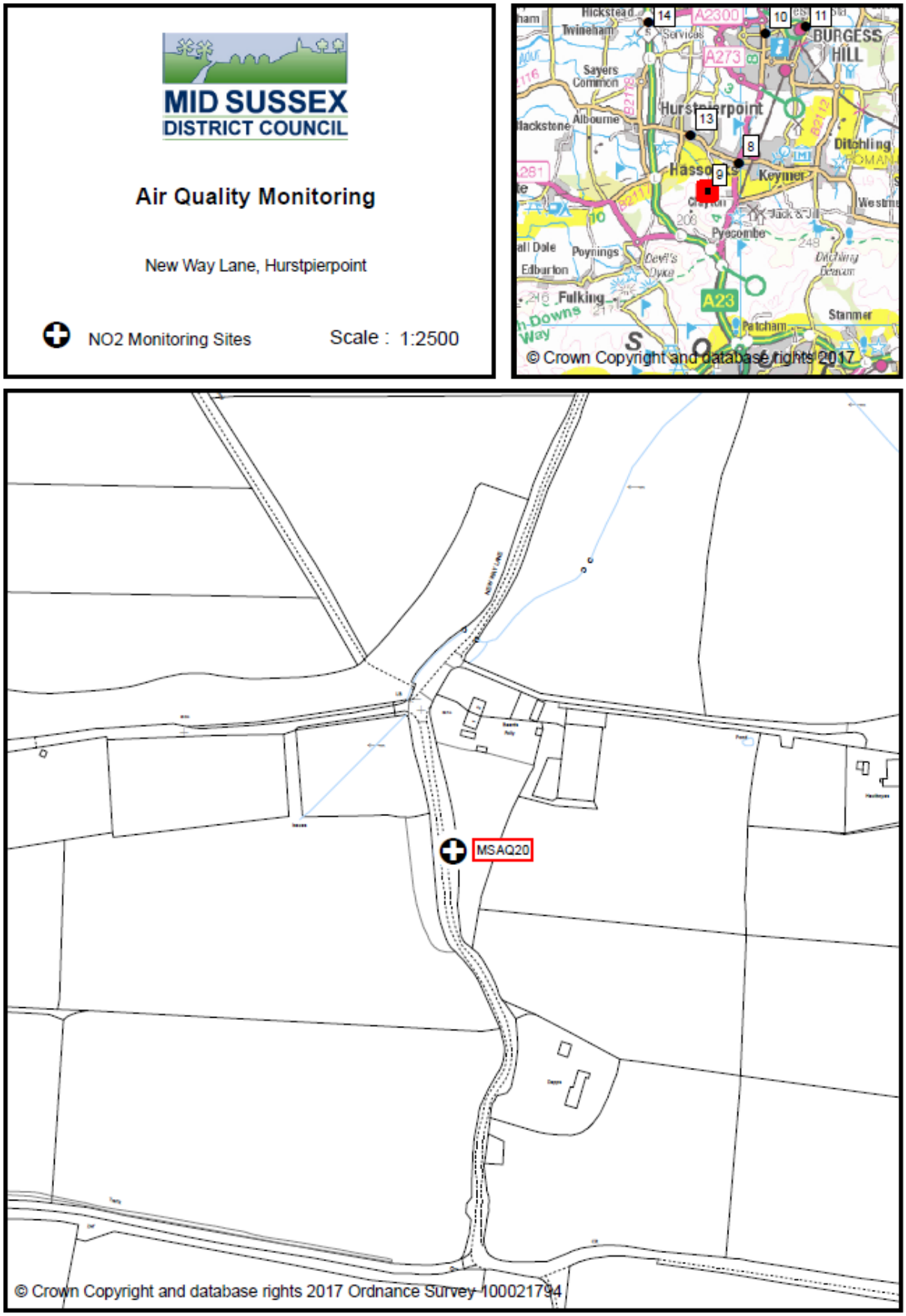


Figure 13 MSAQ21 86-88 London Road, Burgess Hill

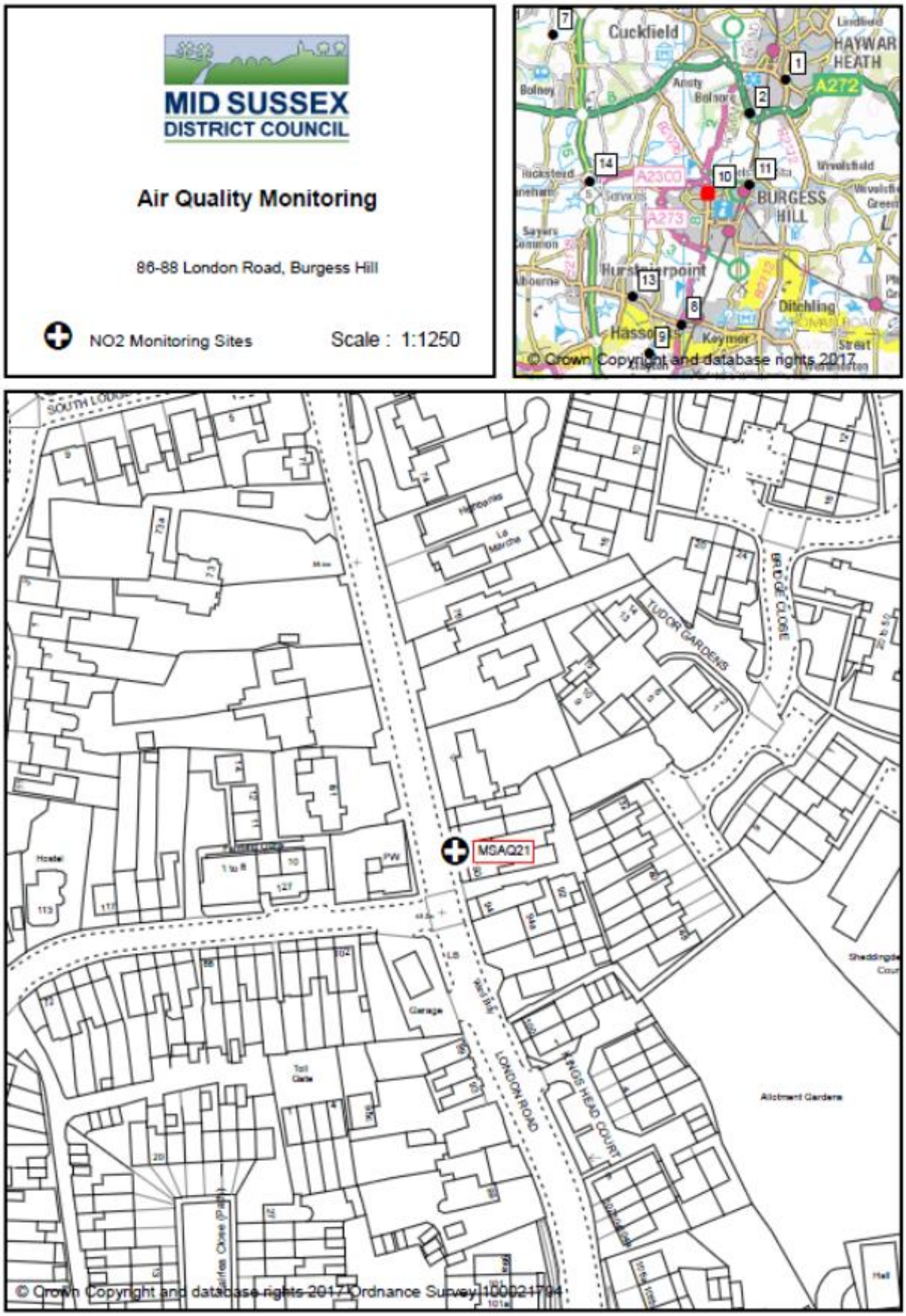


Figure 14 MSAQ22 26, Leylands Road, Burgess Hill

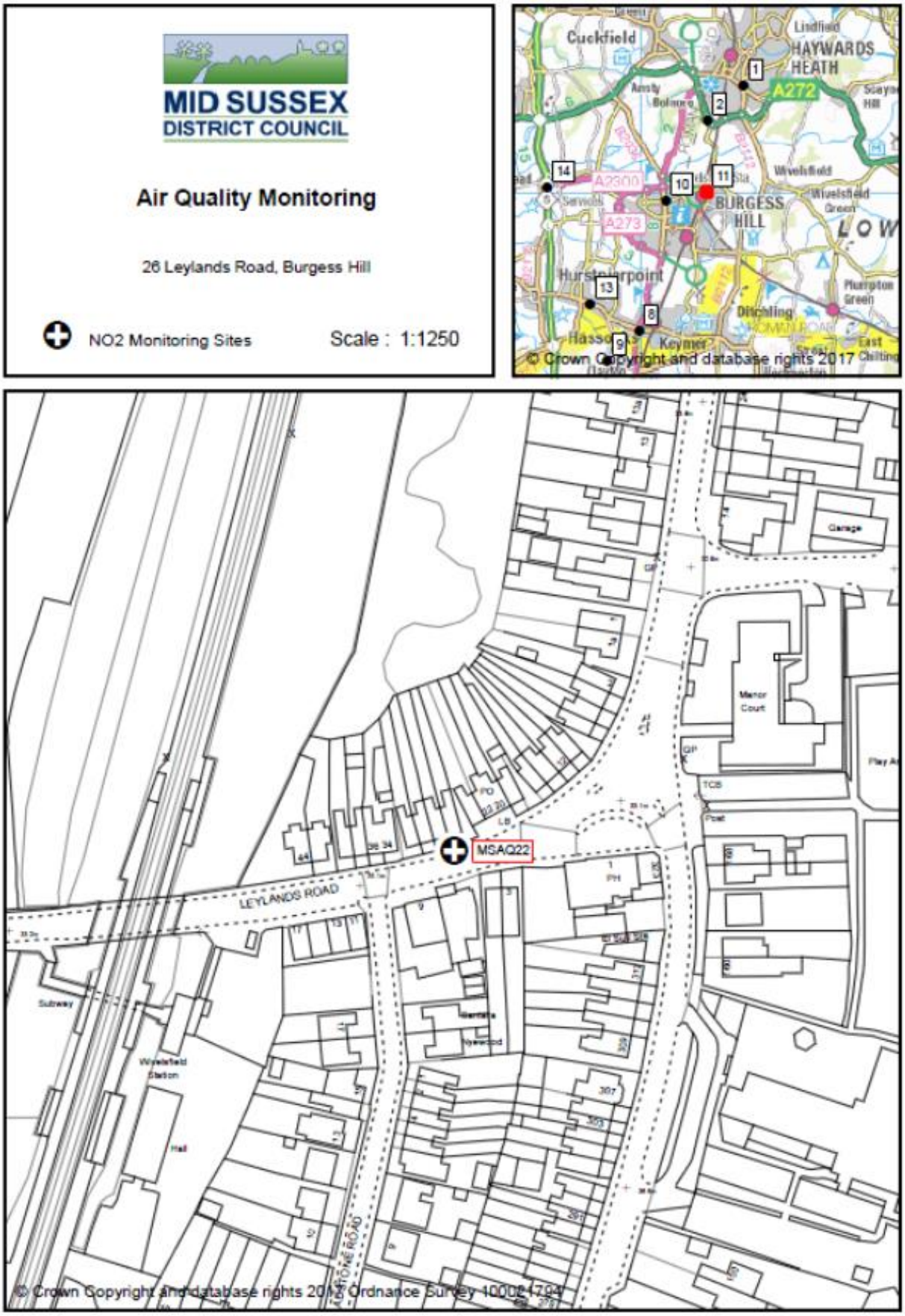


Figure 15 MSAQ25 Erica Way, Copthorne

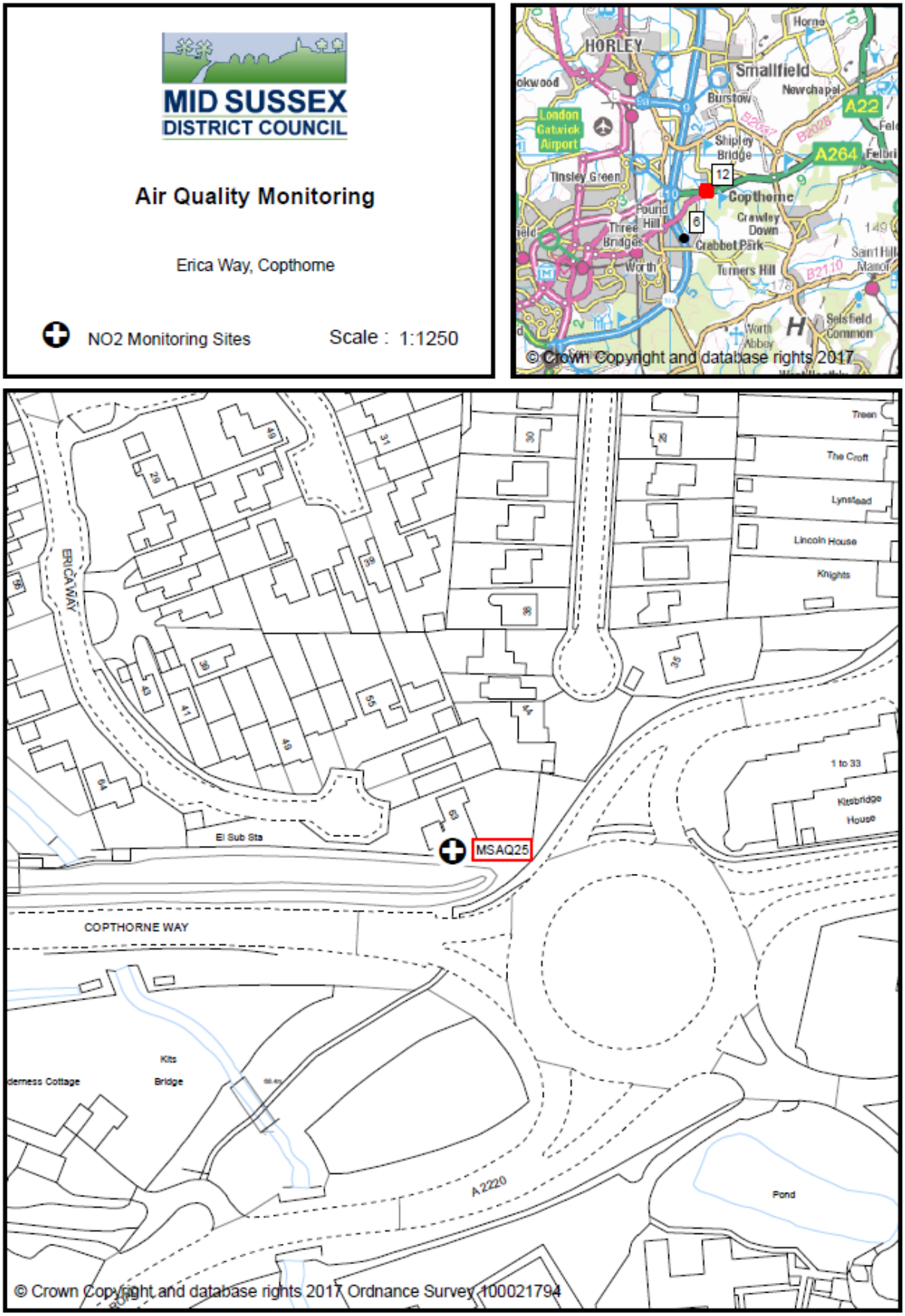


Figure 16 MSAQ26 Lamp Post 14, High Street, Hurstpierpoint

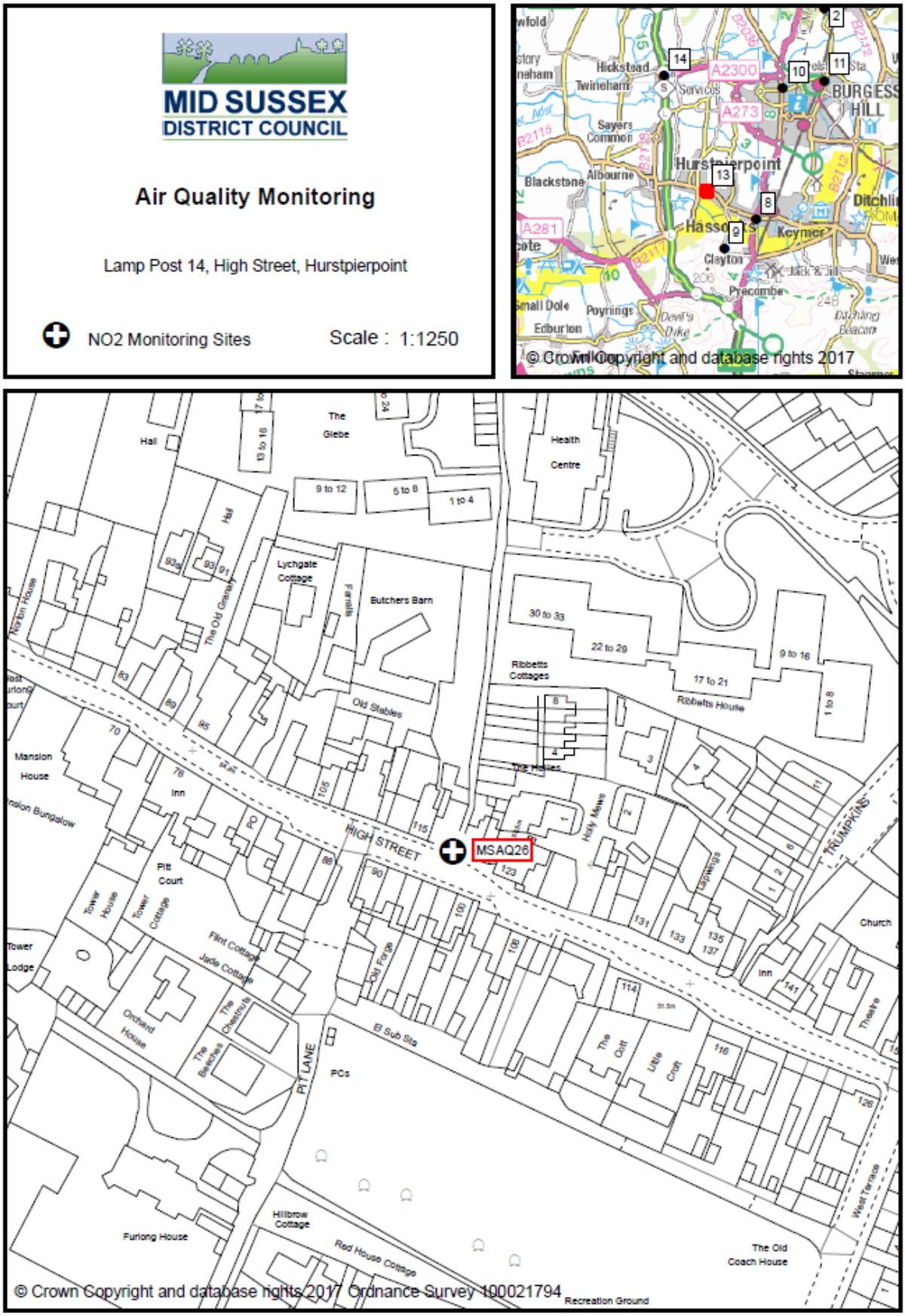
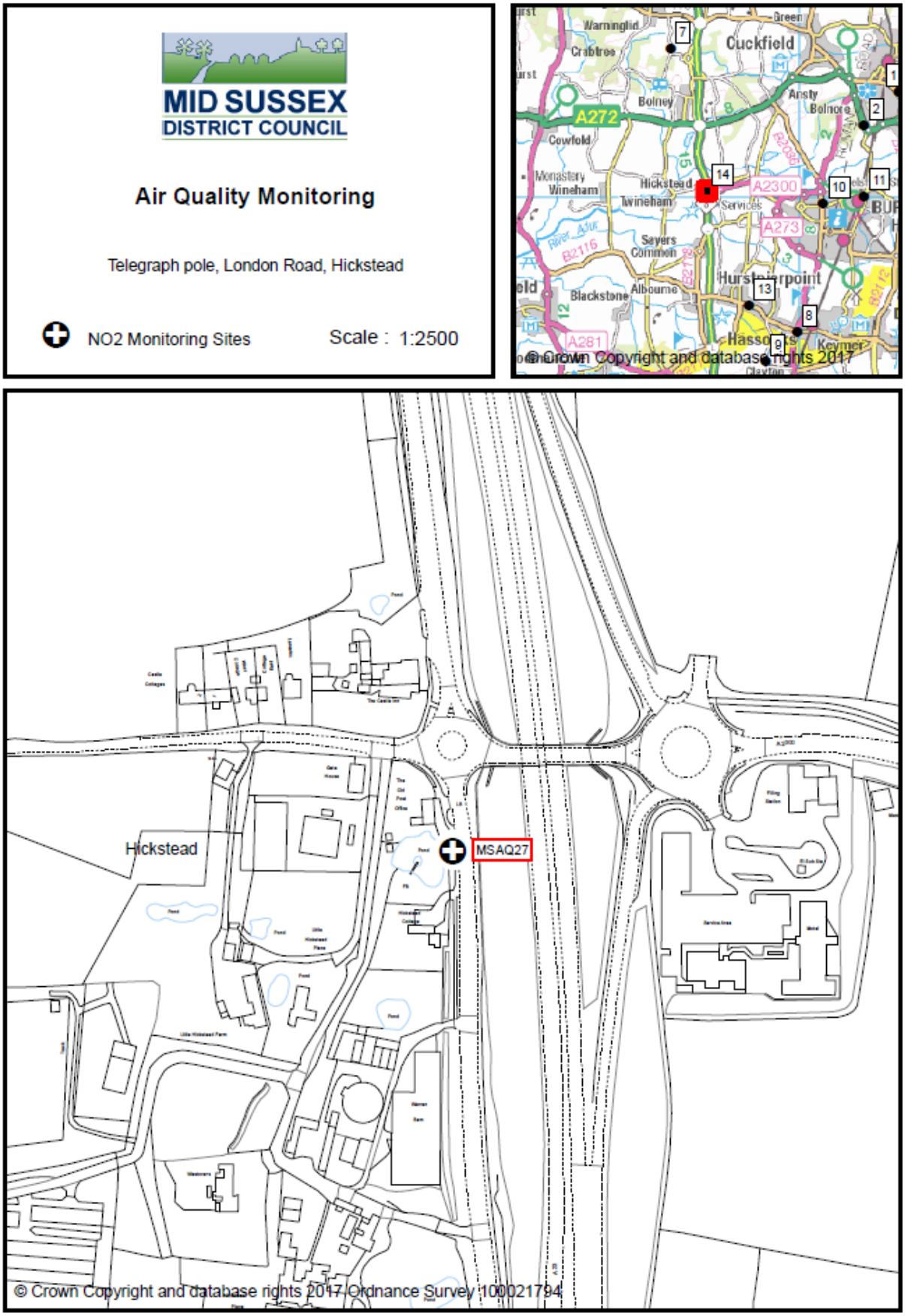


Figure 17 MSAQ27 Telegraph pole, London Road, Hickstead



Appendix E: Summary of Air Quality Objectives in England

Table E.1 – Air Quality Objectives in England

Pollutant	Air Quality Objective[2]	
	Concentration	Measured as
Nitrogen Dioxide (NO_2)	200 µg/m^3 not to be exceeded more than 18 times a year	1-hour mean
	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

[2] 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	Air quality Annual Status Report
Defra	Department for Environment, Food and Rural Affairs
EU	European Union
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 2.5µm or less
SO_2	Sulphur Dioxide
QA/QC	Quality Assurance and Quality Control

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