



West Northamptonshire Council

DRAFT Air Quality Action Plan

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

14th February 2024

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Executive Summary

This Air Quality Action Plan (AQAP) has been produced as part of our statutory duties required by the Local Air Quality Management framework. It outlines the action we will take to improve air quality in West Northamptonshire.

On the 1st April 2021, the new unitary authority called West Northamptonshire Council (WNC) was formed, incorporating the former sovereign Councils of Daventry District, Northampton Borough, South Northamptonshire District, and parts of Northamptonshire County Council.

West Northamptonshire had an estimated population around 406,733 people in 2020. Whilst the land area is predominately rural, most residents live in Northampton and the market towns of Brackley, Daventry and Towcester.

This action plan replaces the former sovereign South Northamptonshire Council - Towcester Action Plan - which ran from 2021-2023. It also operates alongside the former Northampton Borough Council's adopted Northampton Low Emission Strategy (NLES) 2017 – 2025.

Key tasks delivered already as part of the work of the former sovereign Councils of Daventry District, Northampton Borough, Northampton County and South Northamptonshire District include:

- More effective use of the planning control system to ensure air quality is fully considered, including the successful adoption of a Supplementary Planning Document (SPD) on air quality in the South Northants area and via the Northampton's Low Emission Strategy;
- Road improvement schemes to ease congestion and therefore improve emissions;
- Installing electric vehicle infrastructure and
- Continuing with the statutory local air quality management process of monitoring and reporting.

This Action Plan will consolidate the air quality improvement work across the district and move forward the priorities for West Northamptonshire Council.

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

The annual health cost to society of the impacts of particulate matter alone in the UK is estimated to be around £16 billion³. West Northamptonshire is committed to reducing the exposure of people in West Northamptonshire to poor air quality in order to improve health. Our aim is to meet the air quality objectives across West Northamptonshire and also support the national government policy of reducing fine particulate matter (PM2.5) through collaborative working in policy areas such as transport, public health, and planning control.

Our priorities can be considered under 10 broad topics:

- Continuing to review local air quality and take action as required under our Local Air Quality Management (LAQM) obligations;

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

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

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

- Transport planning and infrastructure changes that support air quality improvement;
- Promoting travel alternatives to private vehicle use such as walking, cycling, scooting and other wheeling to encourage modal shift;
- Promoting and providing infrastructure for low emission transport such as electric vehicles;
- Policy guidance and development control that reduces emissions from all developments;
- Public information and education to facilitate informed travel, health and lifestyle choices;
- Active traffic management to reduce congestion in our AQMA's;
- Vehicle fleet efficiency in our Council fleet and our contractors, and through our taxi licensing policy;
- Reducing emissions from domestic solid fuel burning through regulation and education.
- The ongoing regulation of Council issued Environmental Permits to improve industrial emissions and other statutory controls of dust and smoke.

So we can move these priorities forwards we will need to:

- Review our monitoring data for the existing AQMA's, with a view to revoking x2 of the existing AQMAs (AQMA5- A45, AQMA1- M1 as data shows no NO₂ objective level exceedance or not within 10% of the NO₂ air quality objective in the past 4 years and 5 years respectively – this is line with DEFRA technical guidance and;
- Continue to monitor NO₂ in the remaining AQMA's (AQMA 8- St Michael's, AQMA - Towcester, AQMA6 - Campbell Square, AQMA4- Harborough Rd, AQMA2 - Victoria Promenade and AQMA3- St James) as data shows NO₂ objective level exceedance or is within 10% of the NO₂ air quality objective level in the past 3 years – this is line with DEFRA technical guidance and;
- Continue to monitor NO₂ in Bradshaw Street – this is the only area of objective level exceedance noted outside of an existing AQMA. Only x1 monitored location out of the x4 monitoring locations in the area exceeds the NO₂ air quality objective level in the past 3 years and x1 location is within 10% of the objective level.
- A further review of 2023 data will take place in 2024 to ensure that these plans remain valid in that there is no unexpected rise in NO₂ levels. Declaration of a new AQMA for Bradshaw Street will be considered at this time.

However, we recognise that there are a large number of air quality policy areas that are outside of our influence (such as vehicle emissions standards agreed in Europe), but for which we may have useful evidence, and so we will continue to work with regional and central government on policies and issues beyond West Northamptonshire Council's direct influence.

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1. Introduction

This report outlines the actions that West Northamptonshire Council will deliver to reduce concentrations of air pollutants and exposure to air pollution; thereby positively impacting on the health and quality of life of residents and visitors to West Northamptonshire.

It has been developed in recognition of the legal requirement on the local authority to work towards Air Quality Strategy (AQS) objectives under Part IV of the Environment Act 1995 and relevant regulations made under that part and to meet the requirements of the Local Air Quality Management (LAQM) statutory process.

These require the local authority to regularly review and assess air quality in our area, and to determine whether or not the air quality objectives are likely to be achieved. The key pollutant and air quality objective for our area is nitrogen dioxide (NO₂) produced by the combustion of fossil fuels, and mainly road traffic emissions.

Under the Environment Act 2021 there are also two nationally set, legally binding targets to reduce concentrations of fine particulate matter. PM_{2.5}. These are:

- an annual mean concentration of 10 µg/ m³ or below and
- a reduction in average population exposure by 35% by 2040 compared to a 2018 baseline.

PM_{2.5} concentrations are affected by local emissions of particulates from a range of sources including the burning of solid fuel (domestic combustion contributed 27% of emissions in 2021), and emissions relating to transport and by sources in the wider environment such as pollen, sea salt, desert dust and chemical reactions in the air. A proportion of the PM_{2.5} present in our air originates in other countries (and some PM_{2.5} emitted in the UK travels abroad).

The Government's National Air Quality Strategy recognises that there are sources of PM_{2.5} over which local authorities do not have control. The targets are therefore nationally set and not applied to local authorities as legally binding air quality objectives though there is an expectation that we will contribute towards achieving these targets.

This Plan will be reviewed every five years at the latest and progress on measures set out within this Plan will be reported on annually within West Northamptonshire's air quality ASR.

At the time of publishing this AQAP, annual mean NO₂ concentrations in the area have followed the national reduction trend, partly due to the pandemic changing the way we travel and work, partly because of improvements in vehicle technology and partly because of some of the actions implemented locally to improve air quality.

2. Responsibilities and Commitment

This draft AQAP was prepared by the Regulatory Services team of West Northamptonshire Council in partnership with colleagues from Transport, Highways, Planning, Sustainability, Regeneration and Public Health.

This draft AQAP will be approved by the Assistant Director, Regulatory Services and the Cabinet Member for Community Safety, Engagement and Regulatory Services, once it has been accepted by DEFRA.

This draft AQAP will also be signed off by the Director of Public Health.

The final AQAP will be subject to an annual review, appraisal of progress and reporting to the Cabinet Member for Environment and Place. Progress each year will be also reported in the Annual Status Reports (ASRs) produced by West Northamptonshire Council as part of our statutory Local Air Quality Management duties.

If you have any comments on this draft AQAP please send them to us by email via environmentalhealth@westnorthants.gov.uk or follow the consultation links on the Council's webpage

3. Summary of Current Air Quality in West Northamptonshire

The main factor affecting air quality in the council's area is transport emissions. West Northamptonshire is served by several National Highways controlled main trunk roads and motorways which are a major source of air pollution in the council's area. The main roads and the primary routes of significance are: M1, M40, A43, A45, A5, A425 and A508. In addition, the main West Coast Mainline railway crosses the council's area as will the new HS2 railway.

Between 2003-2009 the former Northampton Borough Council (NBC) declared x11 Air Quality Management Areas (AQMAs) within the borough. All of these are related to traffic emissions and were designated as a result of monitored levels of nitrogen dioxide (NO₂) above air quality objective levels. In April 2012 x4 of the AQMAs were revoked - Barrack Road (AQMA 7), Park Avenue North (AQMA 9), A45 (Riverside) (AQMA 10), Lumbertubs Way (AQMA 11).

There are currently x7 remaining AQMA's in the former Northampton Borough Council area for NO₂:

- AQMA1- M1
- AQMA2 - Victoria Promenade
- AQMA3- St James
- AQMA4- Harborough Rd
- AQMA5- A45
- AQMA6 - Campbell Square
- AQMA 8- St Michael's

The former South Northamptonshire Council also declared an Air Quality Management Area, (AQMA) in Towcester in 2005 designated as a result of monitored levels of NO₂ above objective levels.

WNC carries out monitoring of nitrogen dioxide concentrations using a network of diffusion tubes at 142 sites. There is also a DEFRA AURN national network automatic station at Spring Park, Northampton.

All the WNC monitoring sites are shown in section 9.

Overall, annual mean NO₂ concentrations in the area have followed the national reduction trend, partly due to the COVID-19 pandemic changing the way we travel and work, partly because of improvements in vehicle technology and partly because of some of the actions implemented locally to improve air quality listed in our 2022 Annual Status Report. The Council has therefore reviewed local and national trends of measured data to determine its way forward in line with the recommendations made in DEFRA's technical guidance.

DEFRA have clarified what constitutes a COVID-19 year with respect to air pollution, and it is considered that due to the effects of COVID-19 on traffic levels and as such local pollutant concentrations, monitoring data from 2020 and 2021 should be excluded when a local authority is considering compliant years for AQMA revocation.

Where nitrogen dioxide monitoring is completed using diffusion tubes, to account for the inherent uncertainty associated with the monitoring method, it is recommended that revocation of an AQMA should be considered following three consecutive years of annual

mean NO₂ concentrations being lower than 36µg/m³ (i.e. within 10% of the annual mean NO₂ objective), excluding 2020 and 2021.

In 2022 data has indicated that only x1 monitoring locations had an annual mean NO₂ concentration that was above the air quality objective of 40 µg/m³. This was;

- Diffusion Tube Location 74 Bradshaw Street 2 – this is outside of an existing AQMA; Monitored result is 42.6µg/m³, when the distance correction is applied to a relevant receptor then the result is brought down to 42.3µg/m³

This location is close to Northampton's main bus station. Source apportionment will be needed to determine if buses are the main contributor to high levels of nitrogen dioxide in this area, and so this will be reviewed as part of our draft Air Quality Action Plan going forwards.

The following section presents monitoring data for each of the AQMAs, and the Bradshaw Street area, and makes recommendations for WNC in progressing with the LAQM process.

In summary, as priority actions with regards to our monitoring data, the Council will therefore look to

- further review the 2023 data in 2024 to ensure that our plans remain valid in that there is no unexpected rise in NO₂ levels. We can not review the 2023 data fully until DEFRA release the 2023 national bias correction factor that is generally around March/April of each year;
- revoking x2 of the existing AQMAs (AQMA5- A45, AQMA1- M1) as data shows no NO₂ objective level exceedance or not within 10% of the NO₂ air quality objective in the past 3 years excluding 2020 and 2021– this is line with DEFRA technical guidance and;
- continue to monitor NO₂ in the remaining AQMA's (AQMA 8- St Michael's, AQMA - Towcester, AQMA6 - Campbell Square, AQMA4- Harborough Rd, AQMA2 - Victoria Promenade and AQMA3- St James) as data shows NO₂ objective level exceedance or is within 10% of the NO₂ air quality objective level in the past 3 years excluding 2020 and 2021 – this is line with DEFRA technical guidance and;
- Continue to monitor NO₂ in Bradshaw Street – this is the only area of objective level exceedance noted outside of an existing AQMA. x1 monitored location out of the x4 monitoring locations in the area exceeds the NO₂ air quality objective level in the past 3 years and x1 location is within 10% of the objective level excluding 2020 and 2021.
- A further review of 2023 data will take place in 2024 to ensure that these plans remain valid in that there is no unexpected rise in NO₂ levels. Declaration of a new AQMA for Bradshaw Street will be considered at this time as will the need for source apportionment.

AQMA maps including Bradshaw Street which is under consideration can be found in section 15 of this report.

Please refer to the latest ASR from West Northamptonshire. All the Annual reports are on the council's website: [Air quality | West Northamptonshire Council \(westnorthants.gov.uk\)](https://www.westnorthants.gov.uk/air-quality).

3.1 Bradshaw Street area, Northampton

Monitoring is carried out using diffusion tubes at x4 locations in this area, which is outside an existing AQMA (tube ID 73 to 76), as seen in Figure 1 and table 1. Excluding the pandemic years of 2020 and 2021 there have been a number of exceedances of the air quality objective, though only tube location 74 exceeds in 2022, though all locations have increased incrementally since 2020 which could indicate that traffic has almost returned to pre-pandemic levels. Tube locations 75 and 76 also have nitrogen dioxide levels within 10% of the air quality objective 2019 ($>36\mu\text{g}/\text{m}^3$).

Given the pre-pandemic exceedances of the air quality objective and since the pandemic there is an incremental rise in nitrogen dioxide levels, this area has been prioritised for further review. A decision will be made when the 2023 data is reviewed so that we have a full picture of what is happening in this area.

Source apportionment will need to be completed to establish what vehicle type is the likely cause of these pollution levels. It is noted that the area is adjacent to the Northampton Town Bus Station with tube location 74 being directly opposite the vehicle entrance/exit.

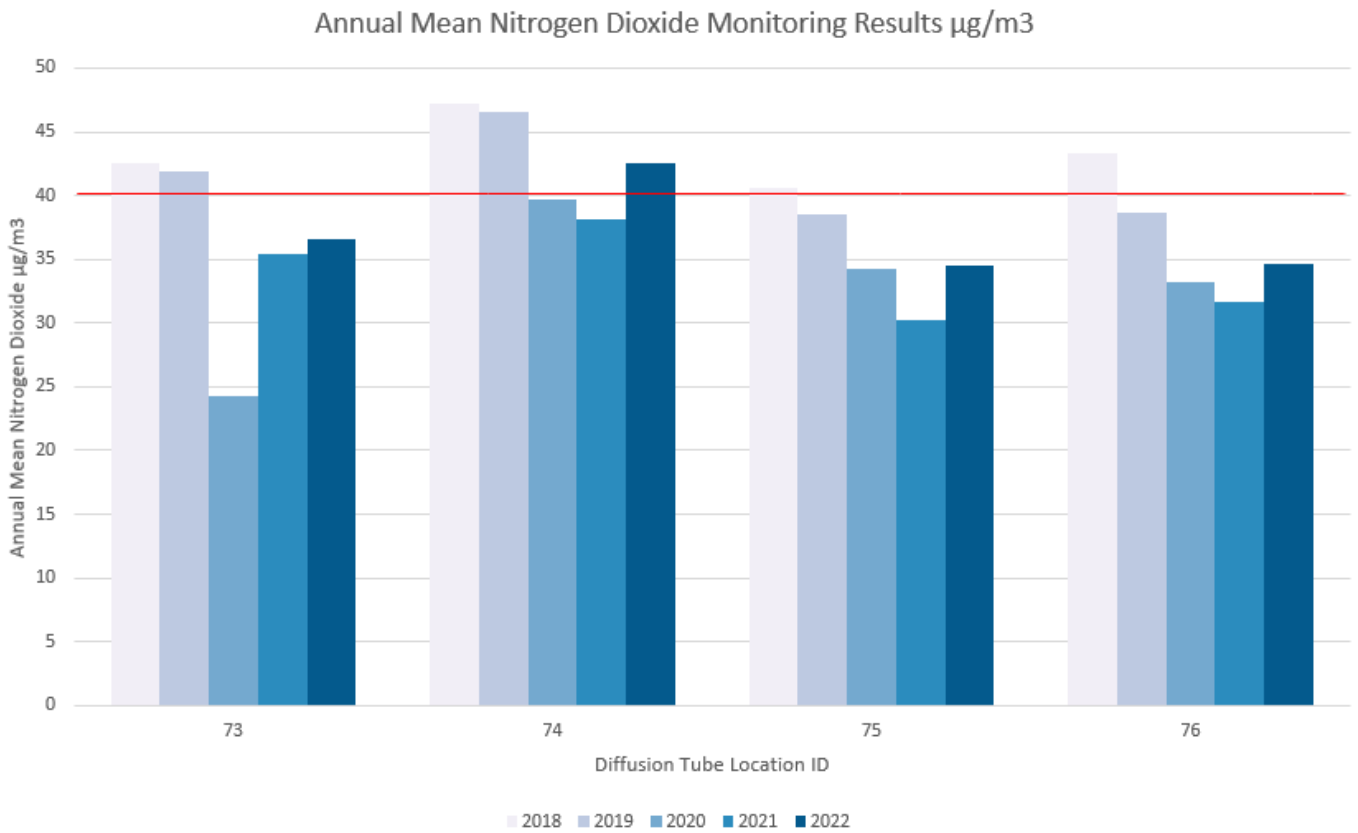
WNC and Stagecoach have submitted a joint funding bid to the national ZEBRA bus scheme to help introduce zero-emission buses and the infrastructure needed to support them. If this bid is successful, changing bus fleet to zero emission buses will help to reduce traffic emissions from this transport type.

Table 1 - Summary of Nitrogen Dioxide (NO₂) Monitoring (2018-2022) in Bradshaw Street area ($\mu\text{g}/\text{m}^3$)

Diffusion Tube ID	Site Name	2018	2019	2020	2021	2022
73	Bradshaw Street 1	42.6	41.9	24.3	35.4	36.6
74	Bradshaw Street 2	47.2	46.6	39.7	38.1	42.6
75	Sheep Street 1	40.6	38.5	34.3	30.2	34.5
76	Sheep Street 2	43.3	38.7	33.2	31.6	34.7
Air Quality Objective	40					

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

Figure 1 - Annual Mean Nitrogen Dioxide Concentrations in Bradshaw Street area (µg/m3) between 2018 and 2022 (air quality objective shown by red line)



3.2 AQMA1 – M1

Monitoring is carried out using diffusion tubes at x2 locations within the AQMA (tube ID 14 & 15). As shown in Figure 2 and Table 2, concentrations at all monitoring sites within the AQMA have been consistently below or within 10% of the objective for 3 years excluding the pandemic years of 2020 and 2021.

The Council will therefore look to revoke this AQMA provided that the 2023 data shows no significant increase, in line with DEFRA guidance.

Figure 2: Annual Mean Nitrogen Dioxide Concentrations in AQMA1 - M1 ($\mu\text{g}/\text{m}^3$) between 2018 and 2022 (air quality objective shown by red line)

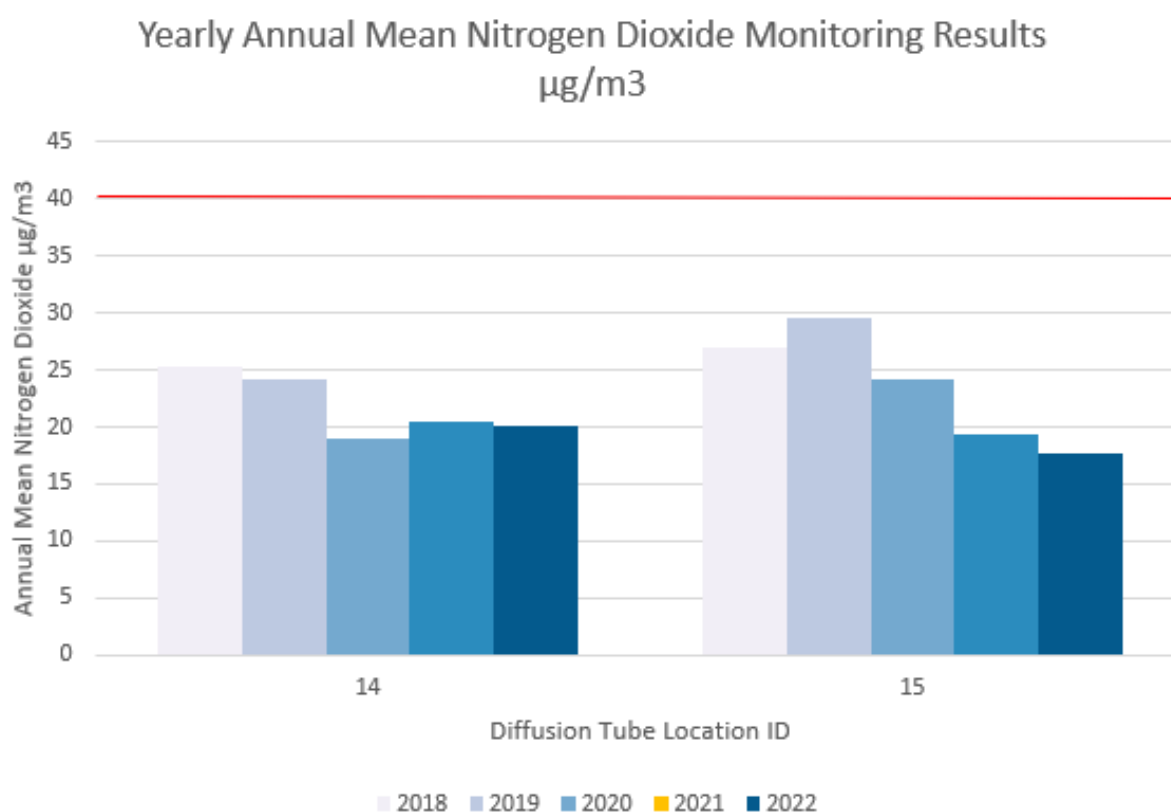


Table 2 -Summary of Nitrogen Dioxide (NO₂) Monitoring (2018-2022) in AQMA1 - M1 ($\mu\text{g}/\text{m}^3$)

Diffusion Tube ID	Site Name	2018	2019	2020	2021	2022
14	A45	25.3	24.2	18.9	20.5	20
15	Crematorium	27	29.5	24.2	19.3	17.7
Air Quality Objective	40					

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

3.3 AQMA2 – Victoria Promenade

Monitoring is carried out using diffusion tubes at x7 locations within the AQMA (tube ID 1 to 7). As shown in Figure 3 and Table 3, concentrations at all monitoring sites within the AQMA have been consistently below the objective since 2018, excluding the pandemic years of 2020 and 2021 except for tube location 4 in 2021 where the annual mean was 51.1µg/m³. The Council will continue to monitor this AQMA until there is 3 years data below the air quality objective excluding the pandemic years of 2020 and 2021 in line with the recommendations made in DEFRA's technical guidance.

Figure 3 - Annual Mean Nitrogen Dioxide Concentrations in AQMA2 – Victoria Promenade (µg/m³) between 2018 and 2022(air quality objective shown by red line)

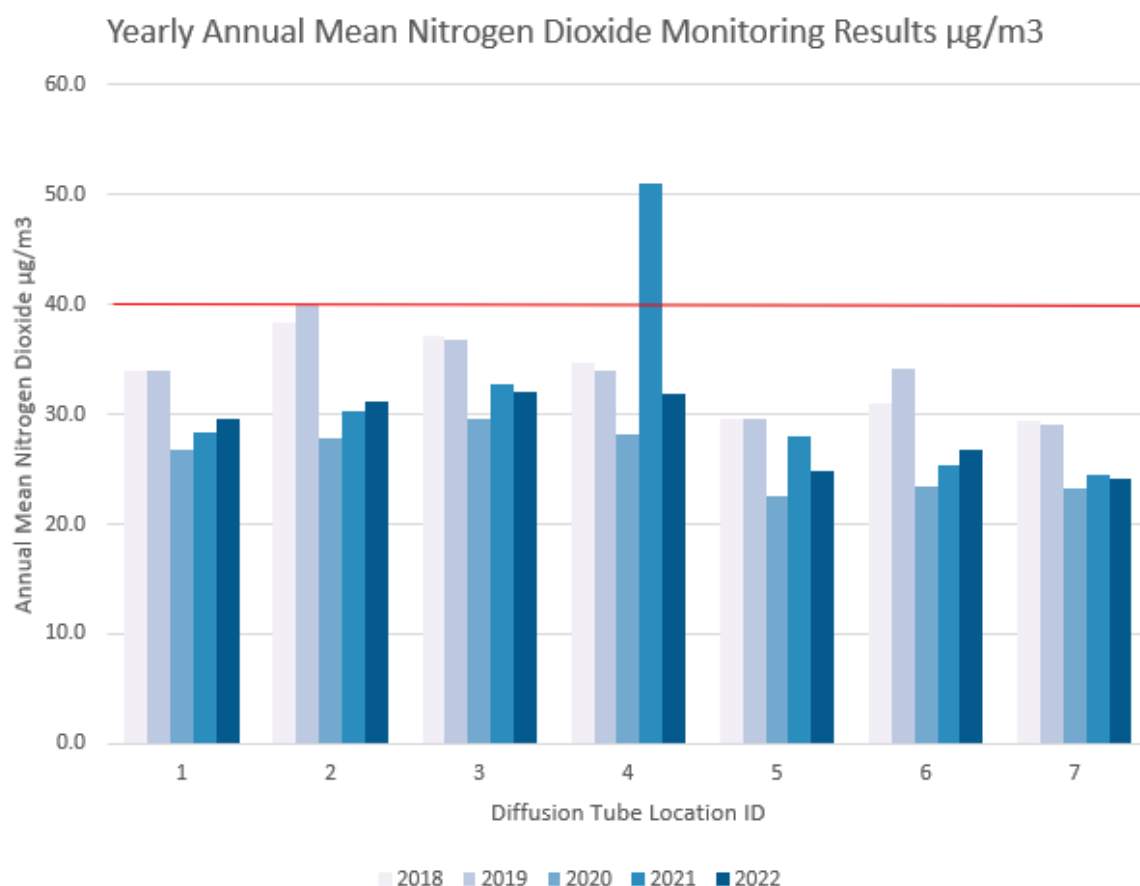


Table 3- Summary of Nitrogen Dioxide (NO₂) Monitoring (2018-2022) in AQMA2 – Victoria Promenade (µg/m³)

Diffusion Tube ID	Site Name	2018	2019	2020	2021	2022
1	Bridge Street 2	33.9	33.9	26.8	28.3	29.6
2	Bridge Street 3	38.3	39.9	27.8	30.3	31.1
3	Plough 1	37.1	36.8	29.6	32.8	32
4	Plough 2	34.6	34	28.1	51.1	31.9
5	Victoria Promenade 1	29.5	29.6	22.6	28	24.8
6	Victoria Promenade 2	31	34.1	23.4	25.4	26.8
7	Cattlemarket 2	29.4	29.1	23.2	24.4	24.2
Air Quality Objective		40				

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

3.4 AQMA3 – St James

Monitoring is carried out using diffusion tubes at x12 locations within the AQMA (tube ID 16 to 29). As shown in Figure 4 and Table 4, concentrations at all monitoring sites within the AQMA have been consistently below the objective excluding the pandemic years of 2020 and 2021 except for tube locations 23 & 26 in 2019 & 2020. These locations also had nitrogen dioxide levels within 10% of the air quality objective ($>36\mu\text{g}/\text{m}^3$).

The Council will continue to monitor this AQMA until there is 3 years data below the air quality objective, or within 10%, excluding the pandemic years of 2020 and 2021 in line with the recommendations made in DEFRA's technical guidance.

Figure 4- Annual Mean Nitrogen Dioxide Concentrations in AQMA3 – St James ($\mu\text{g}/\text{m}^3$) between 2018 and 2022 (air quality objective shown by red line)

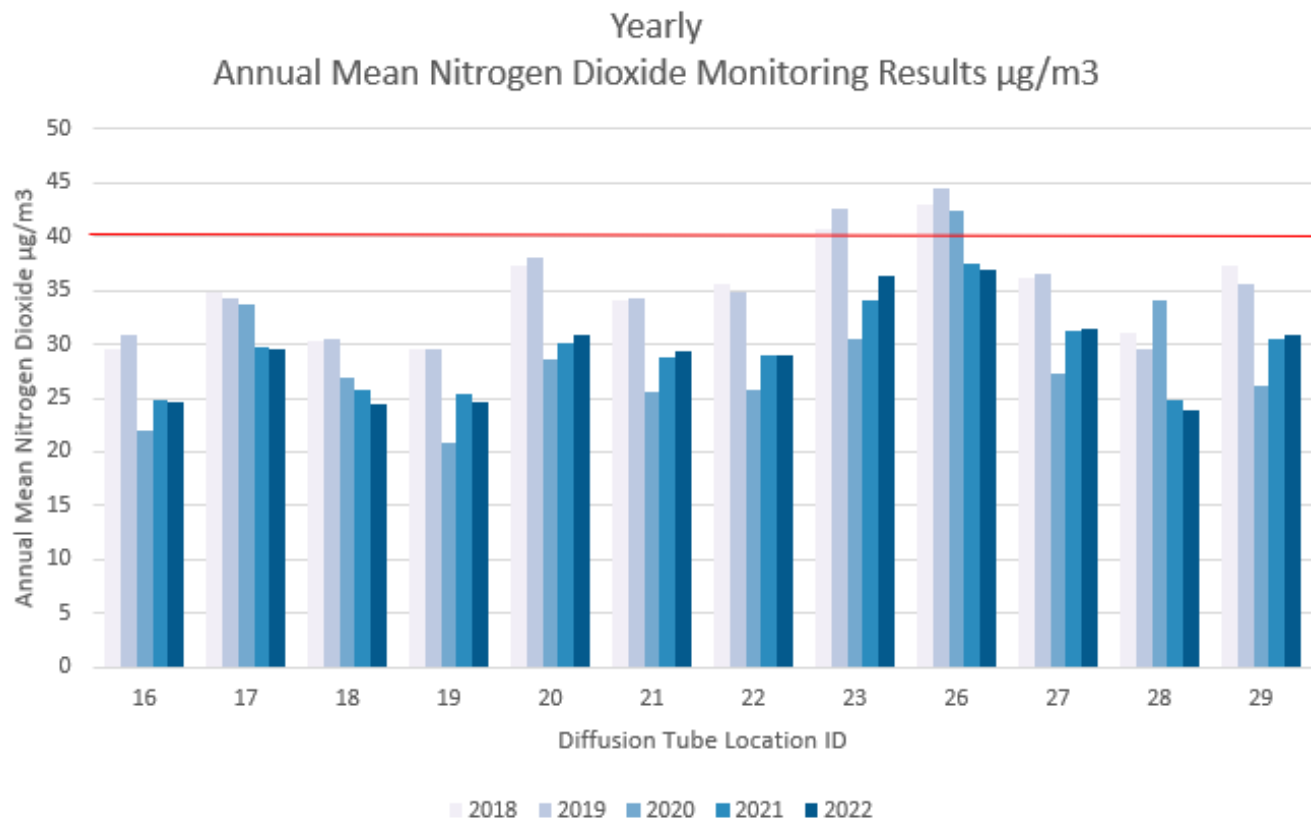


Table 4 - Summary of Nitrogen Dioxide (NO₂) Monitoring (2018-2022) in AQMA3 – St James ($\mu\text{g}/\text{m}^3$)

Diffusion Tube ID	Site Name	2018	2019	2020	2021	2022
16	Weedon Rd 1	29.5	30.8	22	24.9	24.7
17	Weedon Rd 2	34.9	34.2	33.7	29.7	29.5
18	Weedon Rd 3	30.3	30.4	26.9	25.8	24.5
19	Weedon Rd 6	29.6	29.5	20.9	25.4	24.7
20	Spencer Bridge Rd 1	37.2	38.1	28.6	30.1	30.9
21	Spencer Bridge Rd 2	34.1	34.3	25.5	28.8	29.3
22	Harlestone Rd	35.6	34.9	25.8	28.9	28.9
23	Spencer Bridge Rd 3	40.7	42.6	30.5	34	36.4

26	Aberdeen Terrace	42.9	44.4	42.3	37.5	37
27	St James Rd 1	36.1	36.5	27.2	31.3	31.5
28	St James Rd 2	31.1	29.5	34	24.8	23.9
29	St James Rd 4	37.3	35.6	26.1	30.5	30.8
Air Quality Objective	40					

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

3.5 AQMA4 – Harborough Road

Monitoring is carried out using diffusion tubes at x13 locations within the AQMA (tube ID 52 to 64). As shown in Figure 5 and Table 5, concentrations at some monitoring sites within the AQMA have exceeded the air quality objective, although in the past 3 years the tube location 57 is the only exceedance, in 2021 & 2022. However, there are x2 locations (tube 54 & 67) that show nitrogen dioxide levels within 10% of the air quality objective ($>36\mu\text{g}/\text{m}^3$).

The Council will continue to monitor this AQMA until there is 3 years data below the air quality objective, or within 10%, excluding the pandemic years of 2020 and 2021 in line with the recommendations made in DEFRA's technical guidance.

Figure 5- Annual Mean Nitrogen Dioxide Concentrations in AQMA4 – Harborough Rd ($\mu\text{g}/\text{m}^3$) between 2018 and 2022 (air quality objective shown by red line)

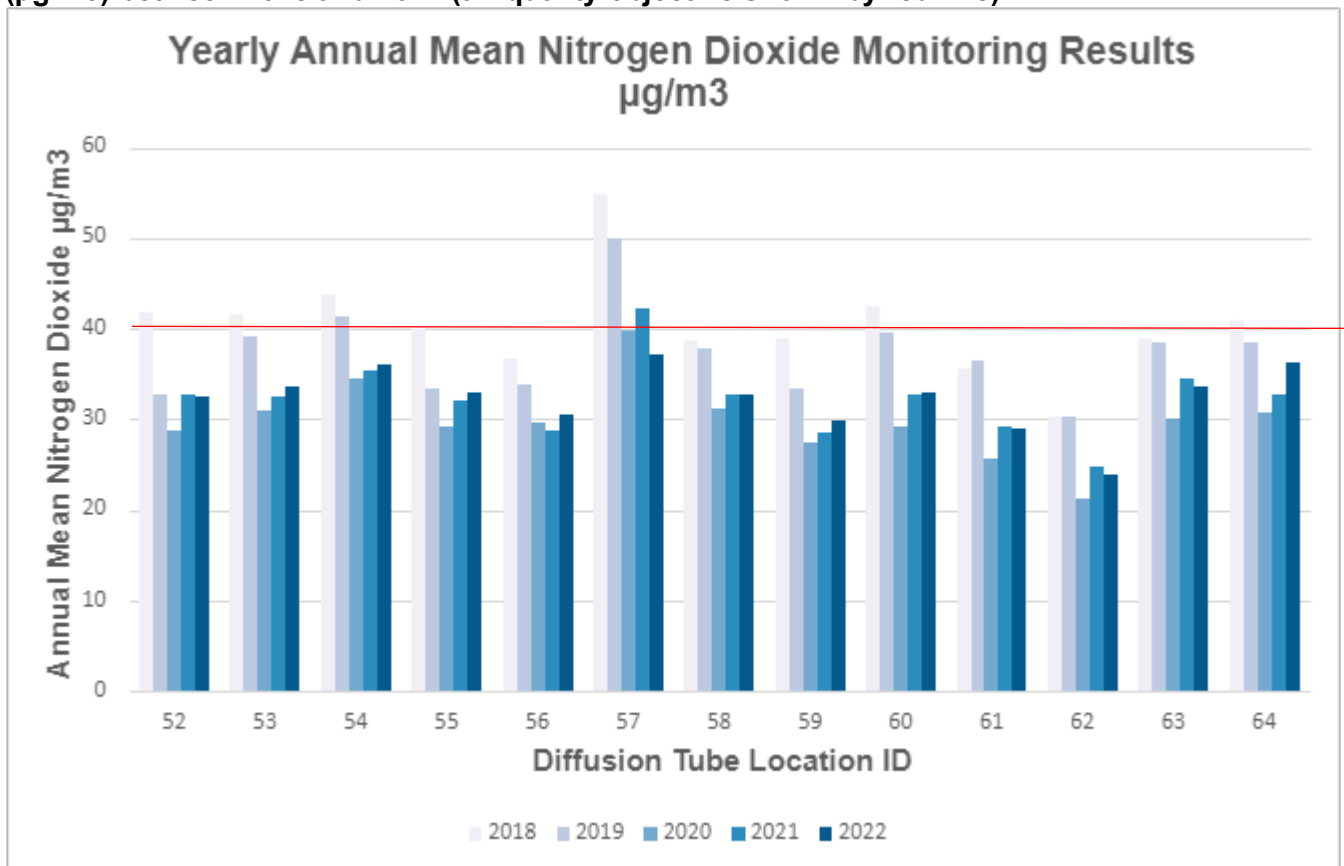


Table 5 - Summary of Nitrogen Dioxide (NO₂) Monitoring (2018-2022) in AQMA4 – Harborough Rd ($\mu\text{g}/\text{m}^3$)

Diffusion Tube ID	Site Name	2018	2019	2020	2021	2022
52	Harborough Rd 4	41.9	32.8	28.7	32.8	32.6
53	Harborough Rd 5	41.6	39.1	30.9	32.5	33.6
54	Harborough Rd 6	43.8	41.3	34.6	35.3	36
55	Harborough Rd 7	40.1	33.5	29.3	32.1	33
56	Harborough Rd 8	36.7	33.8	29.7	28.8	30.6
57	Harborough Rd 9	54.9	50	39.9	42.3	37.2
58	Harborough Rd 10	38.8	37.9	31.1	32.8	32.8
59	Harborough Rd 11	38.9	33.4	27.5	28.6	29.8
60	Harborough Rd 12	42.5	39.6	29.2	32.7	33

West Northamptonshire Council

61	Kingsthorpe Grove 1	35.7	36.6	25.7	29.3	29
62	Kingsthorpe Grove 2	30.4	30.4	21.2	24.8	23.9
63	Wellingborough Rd 1	39	38.4	30	34.4	33.7
64	Wellingborough Rd 2	40.9	38.4	30.7	32.8	36.2
Air Quality Objective	40					

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

3.6 AQMA5 – A45

Monitoring is carried out using diffusion tubes at x4 locations within the AQMA (tube ID 1-13 & 66). As shown in Figure 6 and Table 6, concentrations at all monitoring sites within the AQMA have been consistently below the objective for a consistent 3 years excluding the pandemic years of 2020 and 2021.

The Council will therefore look to revoke this AQMA provided that the 2023 data shows no significant increase in line with the recommendations made in DEFRA's Local Air Quality Management Technical Guidance TG22.

Figure 6 - Annual Mean Nitrogen Dioxide Concentrations in AQMA5 – A45 ($\mu\text{g}/\text{m}^3$) between 2018 and 2022 (air quality objective shown by red line)

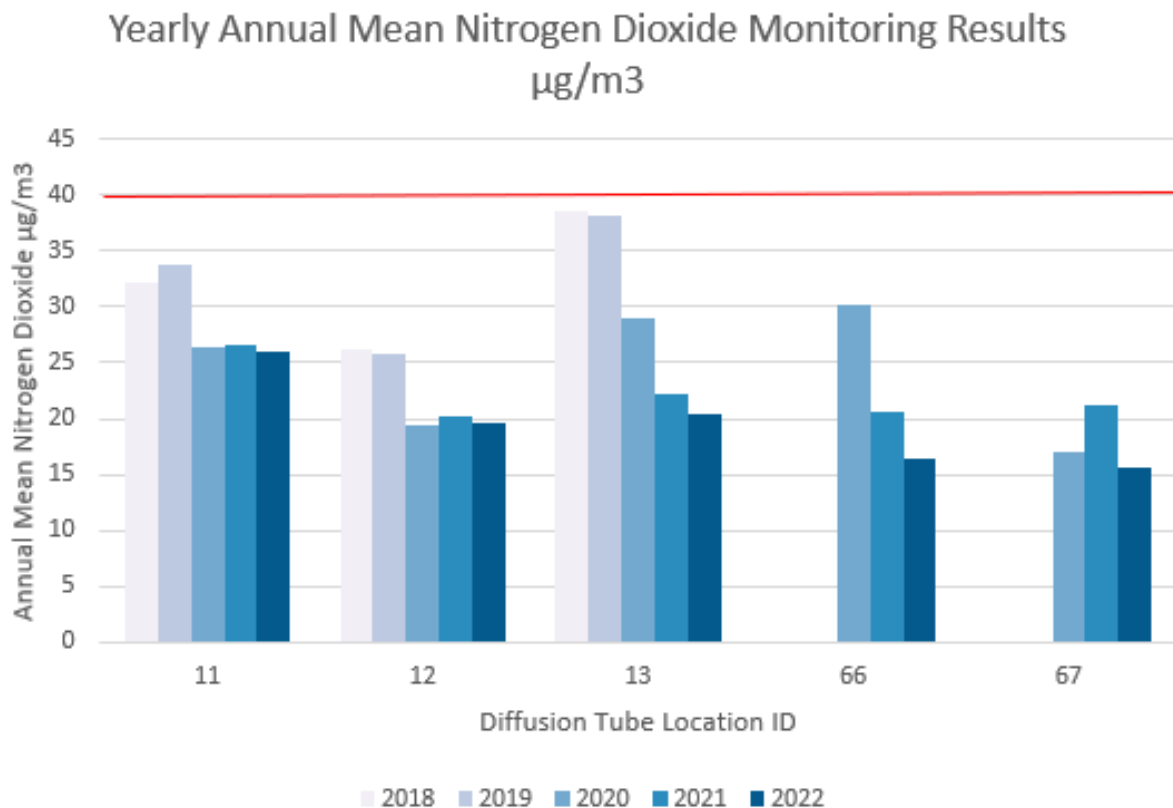


Table 6 - Summary of Nitrogen Dioxide (NO₂) Monitoring (2018-2022) in AQMA5 – A45 ($\mu\text{g}/\text{m}^3$)

Diffusion Tube ID	Site Name	2018	2019	2020	2021	2022
11	Hermitage Way	32.1	33.8	26.3	26.5	25.9
12	Chestnut Avenue	26.1	25.8	19.4	20.2	19.7
13	High Street, C'tree	38.5	38.2	28.9	22.2	20.5
66	42 Wootton Park, Wootton	No data	No data	30.1	20.6	16.4
67	37 East Rising, Wootton	No data	No data	17	21.3	15.7
Air Quality Objective		40				

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

3.7 AQMA6 – Campbell Square

Monitoring is carried out using diffusion tubes at x4 locations within the AQMA (tube ID 36 to 39). As shown in Figure 7 and Table 7, concentrations at all monitoring sites within the AQMA have been consistently below the objective since 2018, excluding the pandemic years of 2020 and 2021 except for tube locations 38. These locations also had nitrogen dioxide levels within 10% of the air quality objective ($36\mu\text{g}/\text{m}^3$).

The Council will continue to monitor this AQMA until there is 3 years data below the air quality objective, or within 10%, excluding the pandemic years of 2020 and 2021 in line with the recommendations made in DEFRA's technical guidance.

Figure 7- Annual Mean Nitrogen Dioxide Concentrations in AQMA6 – Campbell Square ($\mu\text{g}/\text{m}^3$) between 2018 and 2022 (air quality objective shown by red line)

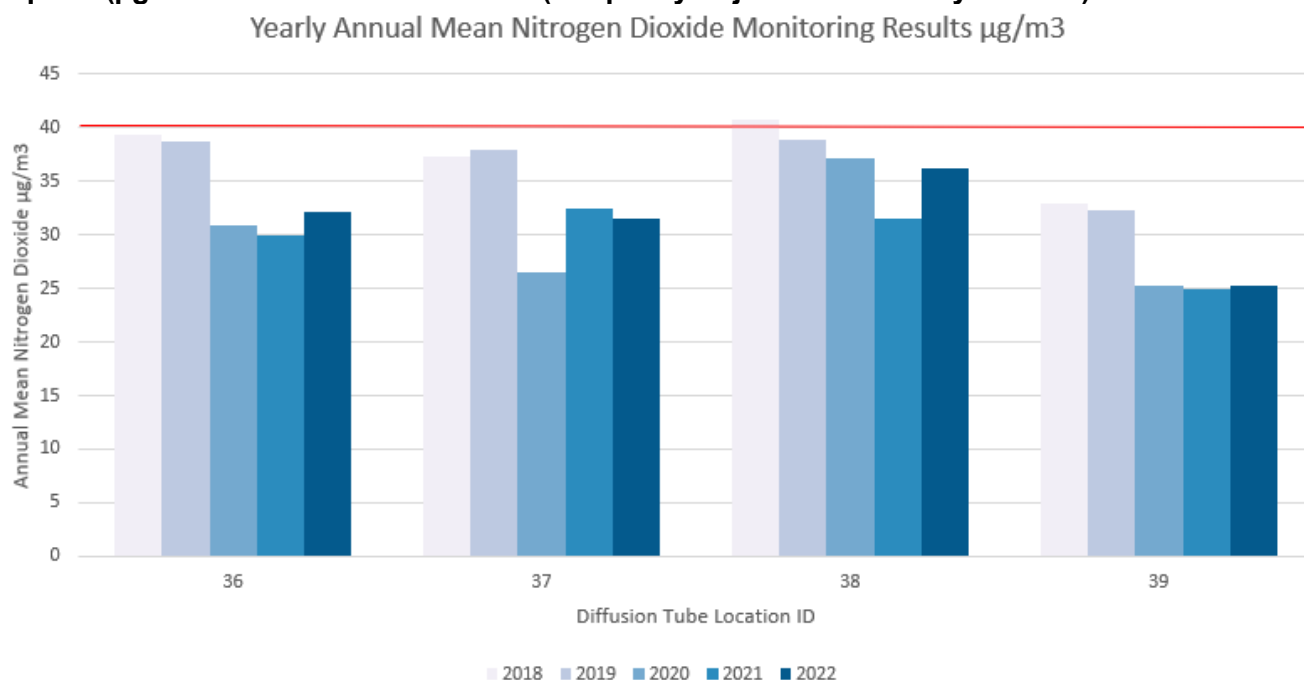


Table 7 - Summary of Nitrogen Dioxide (NO₂) Monitoring (2018-2022) in AQMA6 – Campbell Square ($\mu\text{g}/\text{m}^3$)

Diffusion Tube ID	Site Name	2018	2019	2020	2021	2022
36	Campbell Sq 1	39.4	38.8	30.9	30	32.1
37	Campbell Sq 2	37.3	37.9	26.5	32.4	31.6
38	Campbell Sq 3	40.7	38.9	37.2	31.6	36.3
39	Campbell Sq 4	33	32.3	25.3	24.9	25.3
Air Quality Objective		40				

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

3.8 AQMA8 – St Michaels

Monitoring is carried out using diffusion tubes at x6 locations within the AQMA (tube ID 30-35). As shown in Figure 8 and Table 8, concentrations at all monitoring sites within the AQMA have been consistently below the objective since 2018, but have included some within 10% of the air quality objective excluding the pandemic years of 2020 and 2021.

The Council will continue to monitor this AQMA until there is 3 years data below the air quality objective, or within 10%, excluding the pandemic years of 2020 and 2021 in line with the recommendations made in DEFRA's technical guidance.

Figure 8 - Annual Mean Nitrogen Dioxide Concentrations in AQMA8 – St Michaels ($\mu\text{g}/\text{m}^3$) between 2018 and 2022 (air quality objective shown by red line)

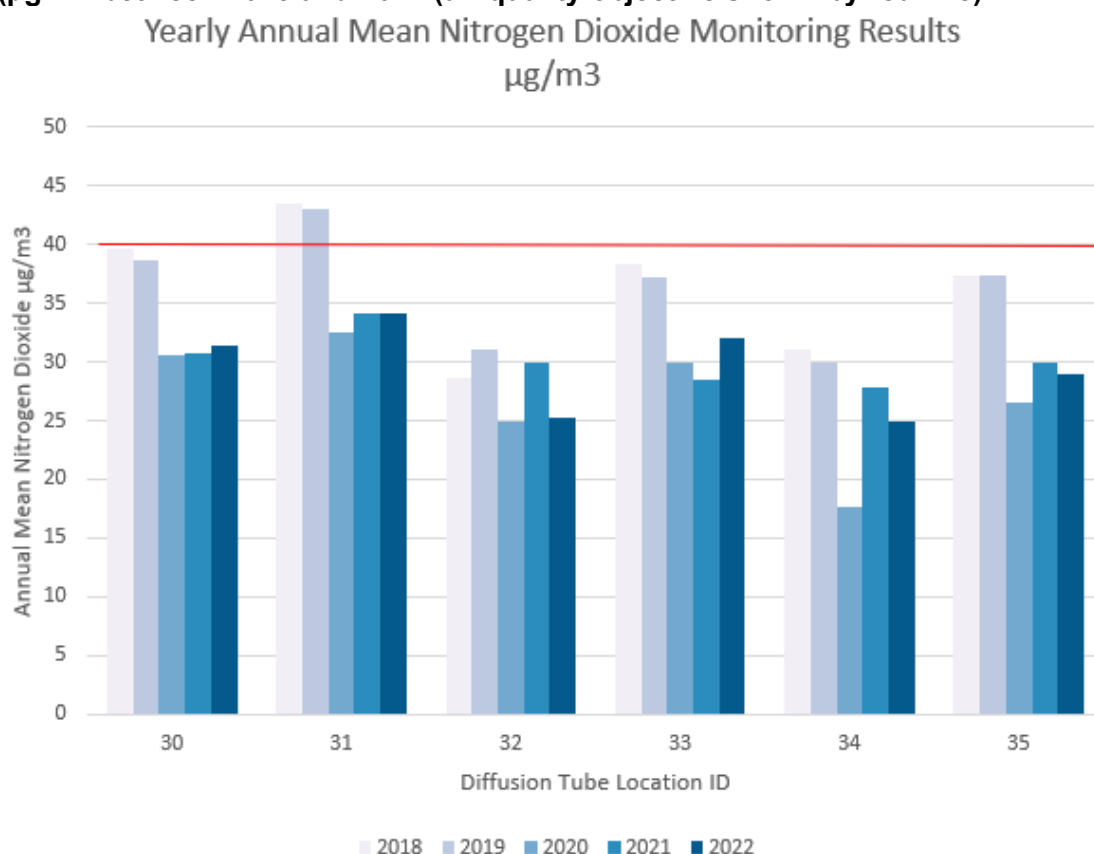


Table 8 - Summary of Nitrogen Dioxide (NO₂) Monitoring (2018-2022) in AQMA8 – St Michaels ($\mu\text{g}/\text{m}^3$)

Diffusion Tube ID	Site Name	2018	2019	2020	2021	2022
30	St Michaels Rd 1	39.7	38.6	30.6	30.8	31.4
31	St Michaels Rd 2	43.5	43	32.5	34.2	34.1
32	St Michaels Rd 3	28.7	31	24.9	29.9	25.2
33	St Michaels Rd 4	38.4	37.2	30	28.5	32
34	St Michaels Rd 5	31	29.9	17.7	27.9	25
35	St Michaels Rd 6	37.3	37.3	26.5	29.9	28.9
Air Quality Objective		40				

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

3.9 Towcester AQMA

Monitoring is carried out using diffusion tubes at x8 locations within the AQMA. As shown in Figure 9 and Table 9, concentrations at all monitoring sites within the AQMA have been consistently below the objective since 2018 but x1 tube TK1 is within 10% of the objective in 2019.

The Council will continue to monitor this AQMA until there is 3 years data below the air quality objective, or within 10%, excluding the pandemic years of 2020 and 2021 in line with the recommendations made in DEFRA's technical guidance.

Figure 9 - Annual Mean Nitrogen Dioxide Concentrations in AQMA – Towcester ($\mu\text{g}/\text{m}^3$) between 2018 and 2022 (air quality objective shown by red line)

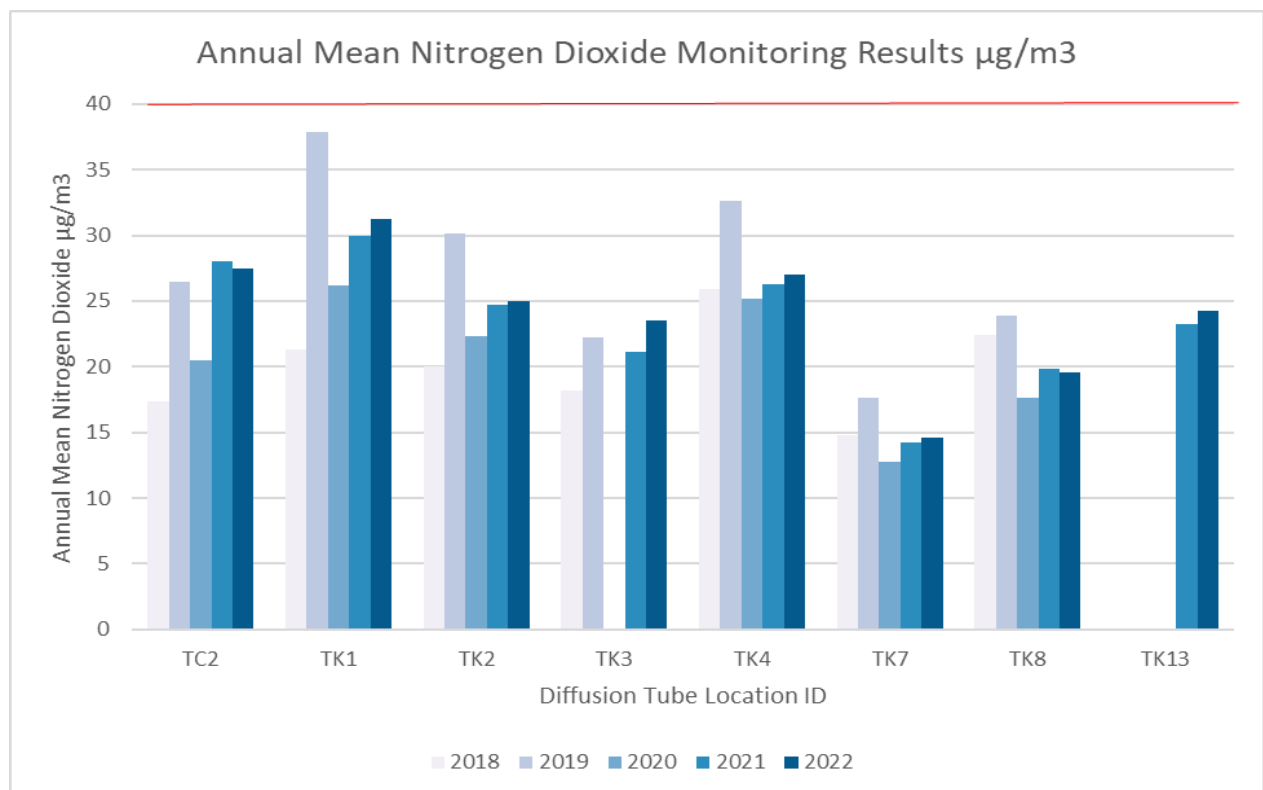


Table 9- Summary of Nitrogen Dioxide (NO₂) Monitoring (2018-2022) in AQMA – Towcester ($\mu\text{g}/\text{m}^3$)

Diffusion Tube ID	Site Name	2018	2019	2020	2021	2022
TC1	Towcester town Hall 2	17.4	26.5	20.5	28	27.5
TC2	Towcester town Hall 2	17.4	26.5	20.5	28	27.5
TK1	78 Watling street Towcester	21.3	37.9	26.2	30	31.2
TK2	183 Watling Street Towcester	20	30.1	22.3	24.7	25
TK3	213 Watling Street Towcester	18.2	22.2	No data	21.1	23.5
TK4	225 Watling Street Towcester	25.9	32.6	25.2	26.3	27
TK7	o/s 9 Richmond Court Towcester	14.8	17.6	12.8	14.2	14.6
TK8	153 Watling Street Towcester	22.4	23.9	17.6	19.8	19.6

TK13	150 Watling Street Towcester	No data	No data	No data	23.2	24.3
Air Quality Objective	40					

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

4. West Northamptonshire's Air Quality Priorities

Our commitment to reduce emissions and improve air quality is set out in several key policy and strategy areas that all link together:

- Public Health - Joint Health and Wellbeing Strategy
- Planning and Planning Policy
- Sustainability Strategy
- Local Transport Plan (LTP)
- Supporting Active Travel
- Active Traffic Management
- Improving Infrastructure
- Emission Reduction Policies (fleet, buildings/services, Taxi Policy)
- Regulatory Duties

Further details on each policy area are given below with some information on key projects that are being delivered. References and web links are given to provide more specific information as required, or you can contact us directly by email to get more information at environmentalhealth@westnorthants.gov.uk

The priority actions for 2023/24 are listed in table 11 and in summary include:

- Ongoing collaborative work with transport, planning, public health and sustainability colleagues and our wider partners to reduce emissions and improve awareness of air quality.
- Deliver the DEFRA grant funded project to establish if active traffic management in Northampton town centre is effective in reducing congestion and thereby improve air quality;
- Deliver the DEFRA grant funded domestic solid fuel burning project to reduce domestic emissions across the district;
- Implement a planning policy across the district that requires all development to reduce emissions, based on the former South Northants SPD and the former Northampton Low Emissions Strategy.
- Continue to review and assess local air quality across the district to fulfil our legal obligations, and this may include the revocation of existing AQMA's or declaration of new AQMA's depending on the data trends;
- Develop a high level Air Quality Strategy that outlines the Council's key priorities and links to other policies and strategies.

5. Policy Context

5.1 International and national policy

a) EU Directive 2008/50/EC 4.1.1

The key international air quality policy that influences UK air quality policy is the EU Directive 2008/50/EC¹ for ambient air quality and cleaner air for Europe. This sets legally binding limits for sulphur dioxide, nitrogen dioxide, particulate matter, lead, benzene, and carbon monoxide emissions. The 2008/50/EC was made in law in England through the Air Quality Standards Regulations 2010⁹, which were amended in 2016¹⁰. This legislation was implemented on ambient air quality limit values, assessment, and management. The Regulations aim to designate zones in which ambient air will be managed by limiting pollutant concentrations within them at a local level.

b) Air Quality Strategy

The Air Quality Strategy¹¹ published by the Department for Environment, Food, and Rural Affairs (Defra) and Devolved Administrations, provides the policy framework for air quality management and assessment in the UK. It provides air quality standards and objectives for key air pollutants, which are designed to protect human health and the environment. It also sets out how the different sectors: industry, transport and local government, can contribute to achieving the air quality objectives. The strategy describes the Local Air Quality Management (LAQM) regime that has been established, whereby each authority must carry out regular reviews and assessments of air quality in its area to identify whether the objectives have been, or will be, achieved at relevant locations. If this is not the case, the authority must declare an Air Quality Management Area (AQMA) and prepare an action plan which identifies appropriate measures that will be introduced in pursuit of the objectives.

c) Clean Air Strategy

The UK government's plans for dealing with air pollution was developed further in the Clean Air Strategy 2019¹². The strategy identifies the actions on how government and society will protect public health and the environment, secure clean growth and innovation, reduce emissions from transport, homes, farming and industry, and monitor progress.

d) Air Quality Plan for Nitrogen Dioxide in UK

The Air Quality Plan for Nitrogen Dioxide in UK (2017)¹³ provides a separate long-term strategy to reduce roadside NO₂ concentrations. This includes a ban on the sale of new diesel and petrol vehicles by 2040. In 2020, this ban was moved forward to the end of 2030¹⁴.

e) National Planning Policy Framework

Air quality objectives for key pollutants are laid out in the National Air Quality Regulations 2010. Therefore, the impact on air quality a proposed development has, is a material consideration in making planning decisions.

The National Planning Policy Framework¹⁴ (states that, "planning policies and decisions should contribute to and enhance the natural and local environment. Development should, wherever possible, help to improve local environmental conditions such as air quality. Planning decisions should sustain and contribute towards compliance with relevant limit

values or national objectives for pollutants, taking into account the presence of Air Quality Management Areas and Clean Air Zones, and the cumulative impacts from individual sites in local areas. Planning decisions should ensure that any new development in Air Quality Management Areas and Clean Air Zones is consistent with the local Air Quality Action Plan. An Air Quality Action Plan is a legal requirement for councils with an Air Quality Management Area, which sets out the councils' planned actions to meet the National Air Quality Objectives."

5.2 Local Policy

a) Corporate Plan

West Northamptonshire Council's Corporate Plan: Fresh Start Bright Future 2021-2025¹⁵ provides the vision for making West Northamptonshire a great place to live, work, visit and thrive.

The Corporate Plan sets out six priorities that will make West Northamptonshire a place to thrive.

The priority Green and Clean, Environment & Wellbeing commits to the following objectives.

- Net zero by 2030
- Climate summit in first few months
- Increased wildlife species & more trees
- Increased electric charging & energy efficiency
- Vibrant towns & villages
- High quality parks
- Accessible green space for all

The Council declared a climate emergency and has pledged, as part of the UK100, to focus on tackling the climate emergency and reducing its carbon emissions. The pledge commits the Council to cutting its own carbon emissions to net zero by 2030 and those of residents and businesses to net zero by 2045. In delivering this objective the Council will deliver economic, and social benefits to residents, employees, and visitors. The Council has also adopted the United Nations Sustainable Development Goals (SDGs) to provide a wider context to its sustainability efforts.

There are many key projects that link to the Corporate Plan priorities that will also improve air quality and these are listed in their more specific sections below such as Transport and Infrastructure Improvements to provide an overall summary of actions in all policy areas.

b) Sustainability Strategy

Our Sustainability Strategy¹⁶ which launched in March 2022 and makes x3 Sustainability Pledges:

- Net zero own emissions by 2030 and those of residents and businesses by 2045;
- We will take a community leadership role for Sustainability in West Northants;
- Ensure all our Council strategies and policies are aligned to and contribute to the delivery of the United Nations Sustainable Development Goals (SDGs)¹⁷.

There are many key projects identified in the strategy that will also improve air quality and these are listed in their more specific sections below such as Transport and Infrastructure Improvements to provide an overall summary of actions in all policy area.

c) Planning Policy

The development plan for West Northamptonshire consists of the West Northamptonshire Joint Core Strategy (WNJCS) (Part 1), adopted in 2014 and Part 2 Plans for the Daventry, Northampton and South Northamptonshire areas¹⁸. These plans all contain policies relating to sustainable development and improving air quality that are used to guide proposals and make decisions.

For example, Policy BN9, Planning for Pollution Control, requires developments to “provide opportunities to minimize and where possible reduce pollution issues that are a barrier to achieving sustainable development and healthy communities including maintaining and improving air quality particularly in poor air quality areas in accordance with national air quality standards and best practice”.

Other examples include

- Policies S10 and S11 of the WNJCS specifically set out the sustainable development principles that applicants should adhere to with Policy C1 seeking to achieve modal shift to foot and cycle for most journeys.
- Policy ST1 of the Daventry Settlements and Countryside LPP2 supports measures to promote walking and cycling within and around Daventry town, including connections with nearby villages; between villages that depend on each other for services and facilities; and between other towns and villages. It also promotes specific walking and cycling routes and sustainable routes along the canal and disused railway line networks. The policy also encourages the provision of EV charging infrastructure within developments.
- Policy ENV9 supports proposals for renewable and low carbon development subject to their impact on a variety of environmental assets and existing development.
- Policy CW1 promotes healthy lifestyles including collocating services and provision of sustainable links between developments, services and facilities, jobs and the countryside.
- Policy Q3 of the Northampton LPP2 requires developments to provide a Sustainability Statement to be submitted with planning applications discussing, among other issues, how the development will adapt to climate change, reduce carbon and manage water resources.
- Policy MO1 ‘Designing sustainable transport and travel’ requires new developments to be designed to promote, improve, and encourages active lifestyles to improve wellbeing. Similarly, policies within the South Northamptonshire LPP2 (ST1, ENV9 and ENV11) require applicants to promote measures such as cycling and walking over the use of the private car, support renewable energy development and manage flood risk.

The Council is currently preparing a new Local Plan for West Northamptonshire as a whole unitary. Sustainable development and improving air quality will be a golden thread running through the plan.

To support these policies, updated Air Quality and Emissions planning guidance will be developed which covers the whole of West Northamptonshire. This is currently in place in the former South Northants district as a Supplementary Planning Document (SPD) and in the former Northampton Borough district as part of the Low Emission Strategy. A decision

will be made on whether a similar approach is taken across the whole district or the principles are enshrined within other policies.

The principles will require that emissions are mitigated in all proposed developments, in the first instance. The extent of mitigation is dependent on whether the application is a minor, major or large-scale major scheme. Mitigation includes traffic and travel management, provision of vehicle recharging and active travel infrastructure, construction dust management and green infrastructure provision and enhancement.

d) Local Transport Plan (LTP)

The Northamptonshire Transportation Plan is Northamptonshire's (LTP) Local Transport Plan¹⁹ and sets out our transport policies, objectives and vision for the longer term. Production of a Local Transport Plan is a statutory requirement of the Transport Act 2000 and Local Transport Act 2008 which require us to set out our plans and policies for transport as well as how we intend to implement them. It also helps us to deliver the environmental improvements that are part of the West Northamptonshire Joint Core Strategies mentioned in the Planning Policy section above.

The plan sets out x6 “Fit For” objectives:

1. **Fit for.....the Future** – creating a transport system that supports and encourages growth and plans for the future impacts of growth, whilst successfully providing benefits for the County.

2. **Fit for.....the Community** – through the transport system help to maintain and create safe, successful, strong, cohesive and sustainable communities where people are actively involved in shaping the places where they live.

3. **Fit to.....Choose** – ensuring that the people of Northamptonshire have the information and the options available to them to be able to choose the best form of transport for each journey that they make.

4. **Fit for.....Economic Growth** – creating a transport system that supports economic growth, regeneration and a thriving local economy and successfully provides for population and business growth.

5. **Fit for.....the Environment** – to deliver a transport system that minimises and wherever possible reduces the effect of travel on the built, natural and historic environment.

6. **Fit for.....Best Value** - being clear about our priorities for investment and focusing on value for money by prioritising what we spend money on and how it can be beneficial for the county as a whole and search for alternative sources of funding.

There are 12 thematic strategies that underpin these objectives:

- Freight
- Parking
- Bus
- Rail
- Walking
- Cycling
- Air Quality
- Road Safety
- Smart Travel Choices
- Transport Management
- Highways Improvement
- Development Management

The Highways Air Quality Strategy does not sit in isolation as air quality improvements cannot be made without considering network management and modal shift. This strategy,

therefore, has strong links to the Highway Management Strategy and the Northamptonshire Transportation Plan strategies that seek to increase modal shift by increasing the attractiveness of alternatives to the private car, including the walking, cycling, and bus, rail, and Smarter Travel Choices strategies.

The key tasks of the Highways Air Quality Strategy are:

	Fit for..... the Future	Fit for..... the Community	Fit to..... Choose	Fit for..... Economic Growth	Fit for..... the Environment	Fit for..... Best Value
Air Quality Strategy	Tackling the air quality issues that would otherwise arise is an important part of accommodating future growth in the county.	Tackling the air quality issues that affect local communities.	Providing alternative journey options is an important part of the Air Quality Strategy.	Tackling congestion in Air Quality Management Areas is an important part of the Air Quality Strategy that will have benefits for economic growth.	Air Quality is a key environmental issue.	Funding for all schemes, including those intended to improve air quality will be prioritised in order to achieve best value for money.

The current plan was developed by the former Northamptonshire County Council in 2012 but should be refreshed every five years. We are in the process of developing a new Local Transport Plan for West Northants with a draft expected for consultation by late summer 2024 and the document being formally adopted in January 2025.

The Department for Transport is currently developing new guidance for Local Transport Plans which are likely to place more emphasis on sustainability and decarbonation of the transport network.

e) Transport and Transport Infrastructure

i) Supporting Active Travel

We are supporting active travel by:

- Facilitating the Smart Move Northamptonshire website ²⁰. The website is the transport information hub for live Northamptonshire bus and train times in real-time, information on electric vehicles, car clubs, cycle hire, journey planners and more for residents, workers and visitors;
- Public e-scooters and e-bikes – In 2023 we made major in-roads into making Northampton’s e-scooters part of everyday life for our residents, offering an affordable, low carbon and flexible way to travel. Working with our micro mobility partners Voi, we committed to extending it and steering a significant increase in take-up. Across Northamptonshire there has been 109,00 users to date, taking 4.8 million rides, and replacing 2.4 million car journeys ²¹. A Task and Finish Group has been set up to review the use of e-scooters and address some of the safety concerns raised by the Police and the public. The scooter trial has been extended to 2026 to allow for this review to take place and any recommendations implemented. Voi has also developed plans for providing e-bikes alongside the e-scooters. The e-scooter trial is funded by Voi.

- Active Travel Strategy development and behavioural change - in 2022/23 we were successful in securing £152,723 from the Capability and Ambition Fund. Some of the funding was used to develop a draft Local Cycling and Walking Infrastructure Plan (LCWIP) for Towcester. This document sets out the priorities for improving walking and cycling infrastructure in Towcester over the next 10 years. It has been developed with stakeholders including National Highways to ensure integration with their proposals for the A5. Draft Local Cycling and Walking Infrastructure Plans for Brackley and Daventry have also been developed and consultation on the draft LCWIPs for Brackley, Daventry and Towcester was launched in January 2024. The documents will be updated following feedback received and will be taken to Cabinet for adoption in 2024. An extension of Capability and Ambition funding is being used to draft a LCWIP for Northampton. The first stakeholder meeting is being held in February 2024 with a draft expected in late summer 2024, with the document consulted on by the end of 2024;
- Bikeability training for school children, £29,670 of the Capability and Ambition Fund is being used to support delivery of a range of behaviour change initiatives that include cycle training, loan bikes both electric and pedal, led rides aimed at different sectors of the community and maintenance and training qualifications. The area was chosen to complement the proposed traffic free routes in the Delapre area. Funding for these was secured through Active Travel Fund round 4. Construction is planned to start on site in spring 2024 and open in summer 2024.
- During 2022/23 we also continued to develop the Abington Area Active Travel Scheme, through the Active Travel Fund and the UK Shared Prosperity Fund (UKSPF). Following feasibility design, public consultation was undertaken in spring 2023. The comments, online survey results and feedback are being analysed and compiled into a consultation report which will be published on the consultation portal. The feedback will be used to inform the next steps.

ii) Active Traffic Management

▪ **SCOOT (Split Cycle Offset Optimisation Technique)**

(SCOOT) is a real time adaptive traffic control system for the coordination and control of traffic signals across an urban road network. It is in use on several key junctions in the area to improve traffic flow and reduce congestion and emissions.

SCOOT automatically adjusts the traffic signal timings to adapt to current traffic conditions, using flow data from traffic sensors

▪ **DEFRA funded Active Traffic Management Project**

In March 2022, DEFRA awarded WNC £148,297 to undertake an active traffic management project. The project seeks to reduce congestion through active traffic management on the affected road network in and around our AQMA's, and influence public behaviour through the provision of public information messages. All these measures seek to improve air quality and reduce public exposure.

The project has installed up to 20 automatic continuous sensor air quality measurement units on congested routes to measure air quality (NO₂, PM_{2.5}, and PM₁₀) in real time, providing data that will integrate directly with real time traffic management systems such as SCOOT that will respond and make changes to reduce air pollution. For example, the timing of traffic light changes, varying traffic speeds etc.

▪ **Enforcement**

New regulations from the Department for Transport (DfT) came into effect in May 2022 through the Traffic Management Act (2004) that enabled local authorities to apply for powers

to enforce against moving traffic contraventions. The Government approved plans for West Northamptonshire Council to take on this responsibility, following a positive response to a public consultation around x5 proposed sites, x3 of which will be coming forward for enforcement in February 2024. Further sites for enforcement are under consideration, especially those that residents suggested during the consultation process. Many of these will ensure carriageways don't become blocked by vehicles and increase congestion, and will also help congestion by avoiding accidents taking place at busy junctions.

- **Event traffic management**

WNC continues to work with major event locations to manage traffic. For instance, Silverstone Circuit in the former South Northamptonshire district has implemented significant traffic management plans including park and ride, amendments to the strategic road network for large public events such as the F1 Grand Prix.

iii) Improvements in Infrastructure

- **Local Electric Vehicle Charging Infrastructure (LEVI)**

X4 rapid chargers suitable for taxis and other vehicles were installed and went live in November 2020.

In February 2022, x14 on-street charge points were installed at x7 locations in Northampton, providing x28 sockets funded through Innovate UK. The charge points are owned and maintained by Believ.

For more information please see the Zap Map ²²

The Council is also working on a large-scale concession contract to support the roll-out of EV charging facilities on its street and car parks, and the car parks of any willing partners. UK Government introduced the Local Electric Vehicle Charging Infrastructure (LEVI) fund to support local authorities with the deployment of local electric vehicle (EV) infrastructure. The fund provides upfront resource funding to recruit dedicated staff to undertake the planning required for EV infrastructure. WNC was awarded £73,620 for the capability fund in 2022/23 with a further tranche of £335,380 awarded in 2023/24. A project manager has been appointed and recruitment is underway to fill the remaining posts for the EV infrastructure team. The second aspect of LEVI is the capital fund, this will enable the Council to bid for funds to deliver EV charge point infrastructure. WNC has provisionally been allocated £2.8 million for this purpose.

Utilisation data from all chargepoint sites, along with requests sent in from residents for future locations will be used to develop an ULEV Strategy for WNC to inform our Local Electric Vehicle Infrastructure (LEVI) bid for capital funding to install a network of chargepoints. This will support those without access to off-street parking to transition to electric vehicles.

- **Road Improvements**

The council will continue to work with National Highways and neighbouring authorities to implement schemes to improve traffic flow through and around our town centres.

National Highways schemes

1. Persimmon Homes A5_A43 Towcester Southern Development Link Road

The funding, design, construction and delivery of the Towcester Southern Development Link Road is a project which is being led by a private developer, Persimmon Homes, and as such is outside of the control of National Highways.

2. National Highways A5 Towcester Improvement Scheme also known as 'Towcester Traffic Calming Scheme'

This scheme will benefit Towcester by improving road safety, accessibility, air quality and noise impact by reducing traffic through the town centre. Construction is likely in the financial year 2025/2026, however this is dependant and reliant upon the developer's programme for the A5_A43 Towcester Southern Development Link Road outlined above. Works cannot commence upon National Highways A5 Towcester Improvement Scheme until the A5_A43 Towcester Southern Development Link Road is open to traffic and fully operational. More information can be found on the National Highways website ²³

West Northamptonshire Council schemes

More details can be found on our website ²⁴ and include::

1. A361 Chipping Warden relief road

The A361 runs through Chipping Warden and serves as the main route between Daventry and the M40. The level of traffic through the village has long been a concern for local residents. HS2 Limited are constructing a relief road to remove through traffic from the centre of the village. The first phase of the relief road has been completed and work to complete the relief road is expected to start in 2024.

2. A422 Farthinghoe bypass

West Northamptonshire Council has undertaken a technical assessment of the case for a Farthinghoe bypass and concluded that it is not currently economically viable as it has been appraised as representing low value for money. The Council has committed to explore other options to address issues caused by the A422 through the village. This includes work already undertaken on a traffic signal scheme in the village, and work which is underway to implement a weight restriction through the village accompanied by an upgrade of the parallel B4525 to accommodate the rerouted traffic.

3. A43 Northampton to Kettering improvements

The A43 between Northampton and Kettering suffers from congestion hotspots, journey time delay and road safety issues due to vehicles trying to overtake. To tackle these problems, it is proposed to dual the A43 all the way between the A45 and the A14. Due to the scale of the scheme this will be achieved in phases. Phase 3 is intended to extend the dualling to the Holcot and Sywell roundabout. A bid for Government funding towards this phase was submitted in 2016 but was not successful. A bid for Major Road Network funding to construct this section was submitted in August 2019. We are now developing a Strategic Outline Business Case to support this submission. Further phases will be needed to complete the dualling through to the A14 but have not yet been determined.

4. A45 Northampton growth management scheme

The A45 Northampton Growth Management Scheme (NGMS) is a number of junction improvements along the A45 between M1 Junction 15 and the Great Billing Interchange. This will be undertaken in a phased approach, with Phase 1 focusing on improvements to A45 Queen Eleanor Interchange and A45 Brackmills Interchange.

5. Cliftonville Corridor improvements (completed)

Cliftonville Road, Alfred Street and St Edmund Street together provide an important north-south link between the main east-west Bedford Road and Wellingborough Road corridors to the east of Northampton town centre. Cliftonville Road is also one of the main accesses to and from Northampton General Hospital.

6. Northampton Northern Orbital Route

The Northampton Northern Orbital Route is a proposal for a new road which will relieve traffic from the north of Northampton and surrounding villages.

7. Northampton North-West relief road

The Northampton North-West Relief Road will link the A428 Harlestone Road with the A5199 Welford Road. It will serve the housing growth that is proposed to the west and north of Northampton. It will also help address existing congestion by providing another crossing of the river valley

iv) Network management

With the current pressures being placed on local authority budgets the need to be effectively and efficiently managing the highway network has never been greater.

The objectives, policies and standards required to effectively deliver services and manage the county's highway network are detailed in the Network Management Plan ²⁵ and these include the policy around dealing with mud on the highway. Mud on the highway can contribute to localised higher levels of particulate matter especially in dry warmer weather.

f) Emission Reduction Policies

i) Buildings/Services

- Sustainable heat network - In partnership with Northamptonshire Partnership Homes (NPH), the council has been awarded £112k as part of the Heat Network Delivery Unit phase 12 funding, to carry out a feasibility study for a sustainable heat network for Northampton and Rothersthorpe village. Public Health grant 6 and NPH are match funding the study in a bid to help alleviate fuel poverty by designing a solution to deliver lower-cost large-scale carbon heat to homes and to commercial properties. Sources of heat being explored include large-scale water and air source heat pumps and waste industrial heat. If the feasibility study suggests a network would be viable, the next step would be to apply for a further grant for design development and commercial assessment
- Public Sector Decarbonisation Scheme (PSDS) - The Council was successful in securing £7m from the PSDS phase 3b to decarbonise and improve energy efficiency of x4 leisure centres across West Northamptonshire and this was match funded by a contribution from WNC bringing the total project value to £8m. The objective is to bring facilities up to date and contribute towards decarbonisation. The funding will be used to decommission the end-of-life gas boilers and replace them with air source heat pumps or similar low carbon heating solutions which will be partially fed by electricity produced from new solar photovoltaic (PV) systems at Daventry Leisure Centre, Moulton Leisure Centre, Brackley Leisure Centre, and Towcester Centre for Leisure

ii) Fleet

West Northamptonshire Council is leading by example and has committed to

meeting Net Zero in its fleet by 2030. A Fleet Strategy will be developed that sets out how the Council intends to reduce the use of vehicles and minimise emissions by using low emission technologies. This will apply to all vehicles used in the delivery of services including staff owned vehicles. It is expected that a draft strategy will be shared with stakeholders in Summer 2024 after a data collection exercise has been completed.

iii) Taxi Licensing Policy

Vehicles are constantly being improved by manufacturers, and improved standards are imposed by the Government. Newer vehicles are safer, less environmentally damaging and less likely to break down. Vehicles deteriorate due to a combination of age and use.

In order to reduce emissions it is important to set standards that are common to all within the Hackney Carriage fleet, to ensure consistency and a level playing field for proprietors. The age of vehicles and the exhaust emissions are critical to the level of pollutants emitted. Consequently, to improve air quality and reduce emissions from the Hackney Carriage fleet, the following standards will apply, initially in each sovereign area.

Daventry Zone

- From 1 April 2023, licences will not be granted in respect of vehicles that were first registered (or, in the case of imported vehicles, manufactured) more than 4 years prior to the date that the application was made, or which have travelled more than 100,000 miles as registered on the odometer (evidenced by service records).
- From 1 April 2023, licences will not be renewed in respect of any licensed vehicle that was first registered (or, in the case of imported vehicles, manufactured) more than 7 years prior to the date of renewal, or 11 years in the case of a wheelchair accessible vehicle. This applies to the renewal of licences only. All such vehicles will therefore meet Euro 5 standards
- A vehicle that does not comply with these emissions requirements may be considered for licensing if it is in 'exceptional condition'. Any vehicle licensed under this exception will be tested every 4 months.

Northampton Zone

- From 1 April 2023, new licences (first grant) will only be granted in respect of vehicles that meet or exceed Euro 6+ emission standards.
- From 1 April 2025, licences will not be granted or renewed in respect of any licensed vehicle that does not meet or exceed the following requirements:
 - ULEV (Ultra Low Emission Vehicle <75 g/km and 10 KM zero emission capability);
 - petrol hybrid vehicles Euro 5+;
 - petrol vehicles Euro 6+;
 - diesel vehicles Euro 6+ (all these categories include vehicles adapted with a retrofit to an agreed approved standard)
- From 31st December 2028, licences will not be granted or renewed in respect of any vehicle that does not meet or exceed the following requirements:
 - ULEV (Ultra Low Emission Vehicle <75 g/km and 10 KM zero emission capability);
 - petrol hybrid vehicles Euro 5+; (both these categories include vehicles adapted with a retrofit to an agreed approved standard)

South Northamptonshire Zone

- From 1 April 2023, licences will not be granted in respect of vehicles that were first registered (or, in the case of imported vehicles, manufactured) more than 6 years prior to the date that the application was made.
- From 1 April 2023, licences will not be renewed in respect of any licensed vehicle that was first registered (or, in the case of imported vehicles, manufactured) more than 10 years prior to the date of renewal.
- A vehicle that does not comply with these age limits may be considered for licensing if it is in 'exceptional condition'. Any vehicle licensed under this exception will be tested every 4 months.

g) Other Policies

i) Tree Strategy & Policy

Following a review by a task and finish group of the Place Overview & Scrutiny Committee, Cabinet endorsed proposals for the Council to develop a Tree Strategy & Policy, and Council approved as part of the budget funding for a strategic tree officer to work on the strategy and policy, and then its implementation. The recommendations reflected the outcomes of engagement with parish councils and community groups, and a survey of public attitudes and priorities. Challenges with recruitment initially slowed the process, but the Council has now appointed a consultancy to commence work on the document, and recruitment for the officer post is underway. There will be further public engagement as work on the strategy and policy proceeds. Key to the strategy is the greening of the region to improve air quality.

ii) Tree Planting

During the year the Council used funding from the Forestry Commission to plant x64 trees as part of their Urban Tree Challenge Fund. The three year project aims to complete planting of x127 trees across three parks – Bradlaugh Fields, The Racecourse and Eastfield Park. Other areas of the Council's work, such as the Construction & Maintenance Climate Strategy, will also consider opportunities to support tree planting.

iii) No Mow May

From early 2023, we started preparing to implement the 'No Mow May' campaign across the area. Several parks were selected including Abington Park, The Racecourse and more. We also contacted parish and town councils asking them to participate in the campaign, as well as starting discussions around road verges that can be left unmown without causing an obstruction to safety. Overall, we had x16 parish and town councils officially confirm they would be participating in the campaign, although we expect actual participation to be much higher. This will have several benefits to the area from increasing biodiversity and reducing emissions from grass cutting equipment. The outcome of the 2023 campaign will be reported in the 2024 sustainability report.

iv) Other greening projects

The Council will actively look to improve the greening of our region through its existing policies including planning development control and regeneration.

Examples of this are:

- the Marefair Heritage Park where we will remove the surface level Chalk Lane car park and replace this with parkland, grassland and trees which will contribute towards

improving the air quality in that area. In terms of timescale the project is aiming to start on site in May 2024 and be completed by March 2025.

- The Four Waterside development includes some public realm space which includes green space and trees being delivered on what is currently a hard surface landscape.

iv) Climate Change and Environmental Management Plan

The contract 'Climate Change and Environmental Management Plan' was adopted by the Council in November 2023 ²⁶

This is a management plan with a suite of appendices to manage environment and sustainability with all construction and maintenance works undertaken by the Council and its contractors.

6. Public Health Context

A Joint Strategic Needs Assessment (JSNA) was undertaken by the former Northamptonshire County Council, which concluded that air pollution is estimated to account for 3.9% of number of years lost due to ill-health, disability or early death (DALYs) in Northamptonshire. An estimated £2,569 per person per year is spent on dealing with NO₂ in the health and social care system. This rises to £7,569 per person per year for PM.

Public Health now sits within WNC at unitary level. The Council has a Joint Health and Wellbeing Strategy 2023-2028 ²⁷ Ambition 5 outlines our commitment to provide good housing in places which are clean, and that we will support the development and implementation of air quality action plans through a collaborative working group.

WNC also participates in the Public Health England East Midlands Air Quality Group and Public Health England (Northamptonshire) attend the county-wide Environmental Protection Sub-Group meetings. By participating in these groups and using resources like the national Air Quality Hub, WNC is able to keep abreast of emerging and innovative solutions to air quality and collaborate on projects which are likely to have an impact upon the air quality and public health within the district and further afield.

6.1 Key public health projects:

a) Breathlessness Pathway Project

The Breathlessness Pathway Project is a test and learn programme to address inequalities in respiratory outcomes in the Northampton Central (formerly N4) Local Area Partnership area, by developing a project to increase awareness of and reduce poor air quality by:

- Delivering a multi-facet campaign focused on schools and nurseries to increase awareness of the impact of poor air quality and how to contribute to a cleaner environment;
- Using promotional material outside of schools alongside information shared with children and parents/carers about the harmful effects of idling and encourage anti-idling;
- Promoting active travel routes to schools and the use of public transport or drop off points at a distance as an alternative;
- Developing eco-friendly living walls as a positive point of engagement for behaviour change to improve air quality;
- Encouraging schools to sign up to the Schools Air Quality Monitoring for Health programme to monitor indoor air quality;
- Promoting the Clean Air Champions scheme by Asthma + Lung UK for students to become ambassadors for clean air.

If successful, it is hoped that the project will be opened to the whole West region subject to DEFRA Air Quality Funding.

b) DEFRA funded project domestic burning

In March 2023 WNC was awarded £292,378 by DEFRA to develop the local evidence base for concentrations of particulate matter, gain information on the prevalence of solid fuel combustion in domestic properties and establish the economic and health impact of smoke control areas (SCAs) across the district, as well as advise how residents can make a difference to their health and emissions through public health messaging, and national and

local campaigns to encourage use of other heating sources, cleaner fuels, shorter burn times, less frequent use, and the more efficient use of burning appliances,

This may involve fuel use/fuel sale surveys, and emissions modelling, supported by the development of a local sensor based particulate monitoring network. Social media and engagement in local and national campaigns will be used to show how locals can make a difference to their health and emissions.

7. Regulatory Duties

The Council has statutory functions set out in legislation that contribute towards improving air quality and this will continue to be delivered by its Regulatory Services and Planning Enforcement Teams:

- Inspect all its environmental permitted processes under the Environmental Permitting (England and Wales) Regulations 2016, (EPR) to ensure compliance with pollution control conditions, that these permits are updated as and when appropriate' and operating conditions are up to date with the latest guidance. This will reduce industrial emissions.
- Encourage local businesses and residents to dispose of waste in a responsible manner to prevent or minimise the emissions of smoke, using the Clean Air Act 1993 and other related pollution control and waste management legislation.
- Enforce planning conditions for Construction Management Plans (CMP) that control the generation of dust and minimise entrained mud onto our highways.
- Enforce existing smoke and dust control legislation to reduce emissions

8. Source Apportionment

The AQAP measures presented in this report are intended to be targeted towards the predominant sources of emissions within West Northamptonshire's area which is generally transport emissions.

The 2022 NO₂ diffusion tube results indicate that only 2 locations in Northampton breach the objective value for NO₂, and x10 locations within 10% of the objective value.

Given the downward trend in NO₂ concentrations WNC has not commissioned a district wide source apportionment study as the cost of this is not justified at the current time. Resources will therefore be directed towards projects which reduce emissions.

The exception to this is Bradshaw Street in Northampton. As already outlined above, a review of data from 2023 may determine that a new AQMA is required in this location, and as such a source apportionment study in this area may be required. This review will take place in 2024.

9. Required Reduction in Emissions

Nationally and locally there has been a downward trend in nitrogen dioxide levels. During 2022 only two locations breached the annual average nitrogen dioxide air quality objective of annual, which is 40 µg/m³.

These locations along with locations where concentrations are above 36 µg/m³ will be evaluated every year as part of the review and assessment process, with existing Air Quality Management Areas (AQMA's) reviewed and additional Air Quality Management Areas (AQMA's) declared as needed.

Our aim is to meet NO₂ air quality objective levels across West Northamptonshire. With regards to fine particulate matter (PM_{2.5} and PM₁₀) there is no legislative air quality objective that the Council must comply with. However, we recognise our contribution in reducing particulate matter pollution, and that many actions taken to reduce nitrogen dioxide will have a similar impact on particulate matter.

The measures outlined in this action plans are considered sufficient to meet our legal obligations, and support the national Government's strategy reduction in particulate matter emissions.

10. Key Priorities

The former sovereign councils who are now part of West Northamptonshire Council had their own actions listed in the last Annual Status Report. As a unitary we are now moving forwards with priority actions for the West as a whole.

Table 11 outlines all the actions that will be undertaken to improve air quality.

The priority actions can be summarised for as:

- Ongoing collaborative work with transport, planning, public health, regeneration, energy management and sustainability colleagues and our wider partners to reduce emissions, personal exposure and improve awareness of air quality.
- Deliver the DEFRA grant funded project to establish if active traffic management in Northampton town centre is effective in reducing congestion and thereby improve air quality;
- Deliver the DEFRA grant funded domestic solid fuel burning project to reduce domestic emissions across the district;
- Implement a planning policy across the district that requires all development to reduce emissions, based on the former South Northants SPD and the former Northampton Low Emissions Strategy.
- Continue to review and assess local air quality across the district to fulfil our legal obligations, and this may include the revocation of existing AQMA's or declaration of new AQMA's depending on the data trends;
- The Council has statutory functions set out in legislation that contribute towards improving air quality and this will continue to be delivered by its Regulatory Services and Planning Enforcement Teams;
- Develop a high level Air Quality strategy that easily communicates the links between improving air quality and other policies.

11. Development and Implementation of West Northamptonshire's AQAP

Consultation and Stakeholder Engagement

In developing/updating this AQAP, we will work with other local authorities, agencies, businesses and the local community to improve local air quality. Schedule 11 of the Environment Act 1995 requires local authorities to consult the bodies listed in Table 10. In addition, we will undertake stakeholder engagement through public consultation: The response to our consultation stakeholder engagement will be included in the final AQAP.

Table 10 – Consultation Undertaken

Consultee	Consultation Undertaken
The Secretary of State	To be confirmed in Final AQAP
The Environment Agency	To be confirmed in Final AQAP
National Highways	To be confirmed in Final AQAP
All neighbouring local authorities	To be confirmed in Final AQAP
Other public authorities as appropriate	To be confirmed in Final AQAP
Bodies representing local business interests and other organisations as appropriate	To be confirmed in Final AQAP

Steering Group

The draft AQAP was developed by an Air Quality Steering Group with membership from the following departments:

- transport and land use planners;
- highways;
- environmental protection and energy management officers;
- economic development and regeneration;
- corporate policy and resources;

The Steering Group will decide if it needs to engage support from other outside bodies, businesses and local community groups to take the process forward following the public consultation on the draft AQAP.

12.AQAP Measures

Table 11 shows the West Northamptonshire AQAP measures. It contains:

- a list of the actions that form part of the plan
- the responsible individual and departments/organisations who will deliver this action
- estimated cost where known of implementing each action (overall cost and cost to the local authority)
- expected benefit in terms of pollutant emission and/or concentration reduction
- the timescale for implementation
- how progress will be monitored

NB: Please see future ASRs for regular annual updates on implementation of these measures

Table 11 – Air Quality Action Plan Measures (not in priority order)

Measure No.	Measure	Category	Classification	Estimated Year Measure to be Introduced	Estimated / Actual Completion Year	Organisations Involved	Funding Source	Defra AQ Grant Funding	Funding Status	Estimated Cost of Measure	Measure Status	Target Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments / Potential Barriers to Implementation
1	Local air quality review and assessment including diffusion tube monitoring and statutory reporting	Policy Guidance and Development Control	Other Policy	Ongoing	Ongoing	WNC - Regulatory Services	WNC - existing budgets	No	NA	£50k - £100k	Ongoing	No emissions/ concentrations benefit but critical in terms of understanding emissions, concentrations, and the monitoring and evaluation of the Action Plan.	Target: Over 90% data capture at all sites. Target: Submission of statutory annual status report on time each year.	Ongoing	Existing budgets cover staff costs and monitoring equipment
2	Revocation of x2 existing AQMA's (A45, M1) as NO ₂ levels have decreased to below AQ Objectives	Policy Guidance and Development Control	Other Policy	2024	2024	WNC - Regulatory Services	WNC - existing budgets	No	NA	£50k - £100k	Ongoing	Reduction in Number of AQMA's in district	AQMA's revoked	Ongoing	Existing budgets cover staff costs and monitoring equipment
3	Decision to declare Bradshaw St AQMA	Policy Guidance and Development Control	Other Policy	2024	2024	WNC - Regulatory Services	WNC - existing budgets	No	NA	£50k - £100k	Ongoing	AQMA declared or decision not to	AQMA declared or decision not to made	Ongoing	Existing budgets cover staff costs and monitoring equipment
4	Develop high level Air Quality Strategy	Policy Guidance and Development Control	Other Policy	2024	2025	WNC - Regulatory Services	WNC - existing budgets	No	NA	£50k - £100k	Ongoing	No emissions/ concentrations benefit but critical in terms of high level understanding links with other policies and partners	Air Quality Strategy drafted	Ongoing	Existing budgets cover staff
5	ZEBRA bus fund application to provide 20 electric buses to run in Northampton area	Promoting Low Emission Transport	Procuring alternative Refuelling infrastructure to promote Low Emission Vehicles, EV recharging, Gas fuel recharging	2024	2026	WNC - Economic Development Team and Stagecoach	ZEBRA bus fund	No	Application submitted December 2023	£1-£10 million	Waiting for award decision	Reduction in Bus Emissions	Number of electric buses in service year on year compared to base year	Waiting for award decision	Dependent on ZEBRA bus fund

6	Breathlessness Pathway - schools project to raise awareness of impact of poor air quality and steps that can be taken to improve such as anti-idling on school drop off/pick up	Public Information	Via other mechanisms and the internet	2024	2024	WNC, Public Health, Regulatory Services, Education and Schools Teams	Public Health Funding	No	NA	£10k	Ongoing	Reduction in Emissions and Increase in Awareness	Delivery of project	Ongoing	Extension to whole of West dependant on DEFRA funding
7	Deliver DEFRA funded active traffic management traffic project	Traffic management	UTC, Congestion management, traffic reduction	2023	2025	WNC - Regulatory Services, Highways and Kier	DEFRA AQ Grant	Yes	Ongoing	£180,000	Ongoing	Reduction in Congestion and Pollution Levels in AQMA's	Reduction in Congestion and Pollution Levels in AQMA's	x20 Sensors deployed, UTC integration completed and traffic management being trialled in Harborough Rd AQMA	
8	Deliver DEFRA funded domestic burning project	Policy Guidance and Development Control and Public Information	Via other mechanisms and the internet	2023	2025	WNC - Regulatory Services	DEFRA AQ Grant	Yes	Ongoing	£292k	Ongoing	Baseline particulate monitoring results Health Impact and Economic Impact assessments	Delivery of project	Ongoing	
9	Develop new Local Transport Plan (LTP)	Policy Guidance and Traffic Management	Other	2023	2025	WNC – Highways and Transport	WNC – Existing budgets	No	NA	£50 - £100k	Ongoing	Reduction in Congestion and Transport Emissions	Adoption of LTP	Draft for public consultation will be issued in Summer 2024	Timing of adoption may be impacted by General Election.
10	Delivery of Road Improvement Schemes to reduce congestion and improve travel times	Traffic management	Strategic highway improvements, Re-prioritising road space away from cars, inc Access management, Selective vehicle priority, bus priority, high vehicle occupancy lane	2024 - 2026	2024 - 2026	WNC, National Highways, Network Rail, Homes England, Local Developers.	Existing budgets	N/A	Part Secured	£1 million to £10 million	Ongoing	Reduction in Traffic Emissions	Reduction in Traffic Emissions	A361 Chipping Warden relief road - North West Relief Road - 80% complete, opening dependent on completion of developer infrastructure A45 NGMS - Awaiting funding approval. Delivery expected 2024-2026.	Part dependent on completion of developer infrastructure Some schemes awaiting funding approval which may affect delivery

11	Cycle schemes/planning policies	Transport Planning and Infrastructure	Cycle network Active Travel England Funded scheme in Abington Area	2024	2025	WNC – Highways and Transport	Active Travel Fund round 2	No	Ongoing	£1 million to £10 million	Ongoing	Reduction in Traffic Emissions	Baseline and monitoring of usage post delivery	Currently in detailed design phase	
12	Connecting the Active Quarter – Access for All Delapre, Northampton	Transport Planning and Infrastructure	Cycling and walking network	2023	2024	WNC – Highways and Transport	Active Travel Fund round 4	No	Ongoing	£500k to £1million	Ongoing	Reduction in Traffic Emissions	Baseline and monitoring of usage post delivery	Baseline surveys completed March 2022. Planning permission granted. Construction to start Spring 2024.	
13	Delivery of cycling and walking corridors in Brackley LCWIP	Transport Planning and Infrastructure	Cycling and walking network	2025	2041	WNC – Highways and Transport	Active Travel England/ IT Block/ Developer Funding	No	Ongoing	£1 million - £10 million	Ongoing	Reduction in Vehicle Use	KPIs to be set in Local Transport Plan (LTP)	Consultation of LCWIPs ends 25/02/2024. Adoption early summer 2024. Phased programme of feasibility design subject to funding.	Lack of revenue funding for engagement, feasibility design and early consultation to generate pipeline of schemes. Lack of capital funding to deliver detailed design, consultation and delivery. Inflationary pressures on construction costs.
14	Delivery of cycling and walking corridors in Daventry LCWIP	Transport Planning and Infrastructure	Cycling and walking network	2025	2041	WNC – Highways and Transport	Active Travel England/ IT Block/ Developer Funding	No	Ongoing	>£10 million	Ongoing	Reduction in Vehicle Use	KPIs to be set in Local Transport Plan (LTP)	Consultation of LCWIPs ends 25/02/2024. Adoption early summer 2024. Phased programme of feasibility design subject to funding.	Lack of revenue funding for engagement, feasibility design and early consultation to generate pipeline of schemes. Lack of capital funding to deliver detailed design, consultation and delivery. Inflationary pressures on construction costs.

15	Delivery of cycling and walking corridors in Towcester LCWIP	Transport Planning and Infrastructure	Cycling and walking network	2026	2041	WNC – Highways and Transport	Active Travel England/ IT Block/ Developer Funding	No	Ongoing	£1 million - £10 million	Ongoing	Reduction in Vehicle Use	KPIs to be set in LTP.	Consultation of LCWIPs ends 25/02/2024. Adoption early summer 2024. Phased programme of feasibility design subject to funding.	Lack of revenue funding for engagement, feasibility design and early consultation to generate pipeline of schemes. Lack of capital funding to deliver detailed design, consultation and delivery. Inflationary pressures on construction costs.
16	Delivery of cycling and walking corridors in Northampton LCWIP	Transport Planning and Infrastructure	Cycling and walking network	2026	2041	WNC – Highways and Transport	Active Travel England/ IT Block/ Developer Funding	No	Ongoing	>£10 million	Ongoing	Reduction in Vehicle use	KPIs to be set in LTP	Consultation planned for autumn 2024. Adoption 2024. Phased programme of feasibility design subject to funding.	Lack of revenue funding for engagement, feasibility design and early consultation to generate pipeline of schemes. Lack of capital funding to deliver detailed design, consultation and delivery. Inflationary pressures on construction costs.
17	Cycle schemes	Promoting Travel Alternatives	Promotion of cycling	ongoing	ongoing	WNC – Highways and Transport	WNC - existing budgets	No	NA	£10k-£50k	Ongoing	Reduction in Vehicle Use	Provision of hard copy and online local cycle maps and information	Provision of hard copy and online local cycle maps and information	Existing funds
18	Cycle schemes	Promoting Travel Alternatives	Promotion of cycling Capability Project Northampton delivering cycle training and events to adults and children	2022/23	2024	WNC – Highways and Transport	Capability and Ambition Fund	No	Ongoing	£10k-£50k	Ongoing	Reduction in Vehicle Use	Number of people accessing training	Ongoing	

19	Walking schemes	Promoting Travel Alternatives	Promotion of walking	ongoing	ongoing	WNC – Highways and Transport	WNC - existing budgets	No	NA	<£10k	Ongoing	Reduction in Vehicle Use	Provision of walking maps and online local walking information schemes		
20	E scooters	Transport Planning and Infrastructure	Other	ongoing	2026	WNV and Voi	Voi	No	NA	Costs covered by Voi	Ongoing	Reduction in Vehicle Use	KPI's to be set by Voi	Trial extended to 2026	Safety concerns
21	Taxi Licensing policy	Promoting Low Emission Transport	Taxi Licensing conditions	2024	Ongoing	WNC - Regulatory Services	WNC - existing budgets	No	NA	£50k - £100k	Ongoing	Reduction in Taxi Emissions	Increase in number of taxis licensed that meet emission requirements year on year compared to base year	Ongoing	Existing budgets cover staff costs
22	EV infrastructure	Promoting Low Emission Transport	Procuring alternative refuelling infrastructure to promote Low Emission Vehicles, EV recharging, Gas fuel recharging	2024	2025/26	WNC – EV Infrastructure Team	LEVI and Capability Fund	No	Ongoing	£100-500k	Ongoing	Increase in public accessibility to EV charging	Number of EV charge points installed	Ongoing	Recruitment - project manager has been appointed recruitment is underway to fill the remaining posts for the EV infrastructure team
23	Environmental Permitting - Compliance Inspections and Enforcement - Inspection frequency dependent on risk - higher risk premises are inspected more frequently. Penalty in risk rating for contribution to local air quality issues	Environmental Permits	Other	Ongoing	Ongoing	WNC - Regulatory Services	WNC - existing budgets	No	NA	£50k - £100k	Ongoing	Reduction in Industrial Emissions	Due inspections completed and appropriate enforcement for non-compliance	Ongoing	Existing budgets cover staff costs and monitoring equipment
24	Statutory regulation and enforcement – dust and smoke control	Regulation	Other	Ongoing	Ongoing	WNC - Regulatory Services	WNC - existing budgets	No	NA	£50k - £100k	Ongoing	Reduction in Emissions	Number of complaints & number of enforcement actions taken	Ongoing	Existing budgets cover staff costs and monitoring equipment
25	Lowering Fleet Emissions – Develop Fleet Strategy	Promoting Low Emission Transport	Other	2024	Ongoing	WNC -	WNC – existing budgets	No	NA	Unknown at this stage	Ongoing	Reduction in Fleet Emissions	Reduction in fleet emissions from baseline data collection year	Draft fleet strategy to be shared with stakeholders in 2024	<ul style="list-style-type: none"> Existing lease/other contract commitments Available technology
26	Planning conditions requiring dust and mud control through approval of demolition/construction management plans will be applied to all developments where	Policy Guidance and Development Control	Other	2024	2024	WNC - Regulatory Services and Planning	WNC - existing budgets	No	NA	£50k - £100k	Ongoing	Reduction in Dust from Construction and Demolition Sites	Number of sites where demolition/construction management plans applied	Ongoing	Existing budgets cover staff costs and monitoring equipment

	groundworks are needed and enforced as needed														
27	Develop West wide planning guidance to mitigate impact of all development on air quality	Policy Guidance and Development Control	Air Quality Planning and Policy Guidance	2024	2025	WNC - Regulatory Services and Planning Policy	WNC - existing budgets	No	NA	£10k - £50k	Ongoing	Reduction in Emissions	Guidance in place	Air quality mitigation in draft Place Shaping Strategy for review	<ul style="list-style-type: none"> Existing staff resources Political agreement of policy Viability of development concerns May be controlled by Planning Inspectorate on appeal
28	Sustainable Heat Network Feasibility Study	Promoting Low Emission Plant	Other Policy	2024	2025	WNC – Energy Management	Heat Network Delivery Unit phase 12 funding Public Health grant 6 and NPH are match funding	No	Ongoing	£100k - £500k	Ongoing	Reduction in Emissions	Feasibility study completed	Ongoing	
29	Public Sector Decarbonisation Scheme (PSDS)	Promoting Low Emission Plant	Other Policy	2024	2027	WNC – Energy Management	PSDS phase 3b	No	Ongoing	£1 million to £10 million	Ongoing	Reduction in Emissions	Decommission and replacement of the end-of-life gas boilers and replace them with low carbon heating systems at Daventry Leisure Centre, Moulton Leisure Centre, Brackley Leisure Centre, and Towcester Centre for Leisure	Ongoing	Upgrade of electrical infrastructure needed by Western Power so completion dates will vary
30	Tree Strategy and Greening	Policy Guidance	Other Policy	2024	Ongoing	WNC – All service areas	WNC - existing budgets	No	NA	£50k-£100k	Ongoing	Expected increase in number of trees and canopy cover	Tree Strategy in Place	Public Consultation closed 01/01/2024	

13. Response to Consultation

Table 12 - Summary of Responses to Consultation and Stakeholder Engagement on the AQAP

Consultee	Category	Response
To be confirmed in final AQAP	To be confirmed in final AQAP	To be confirmed in final AQAP

14. Monitoring Locations

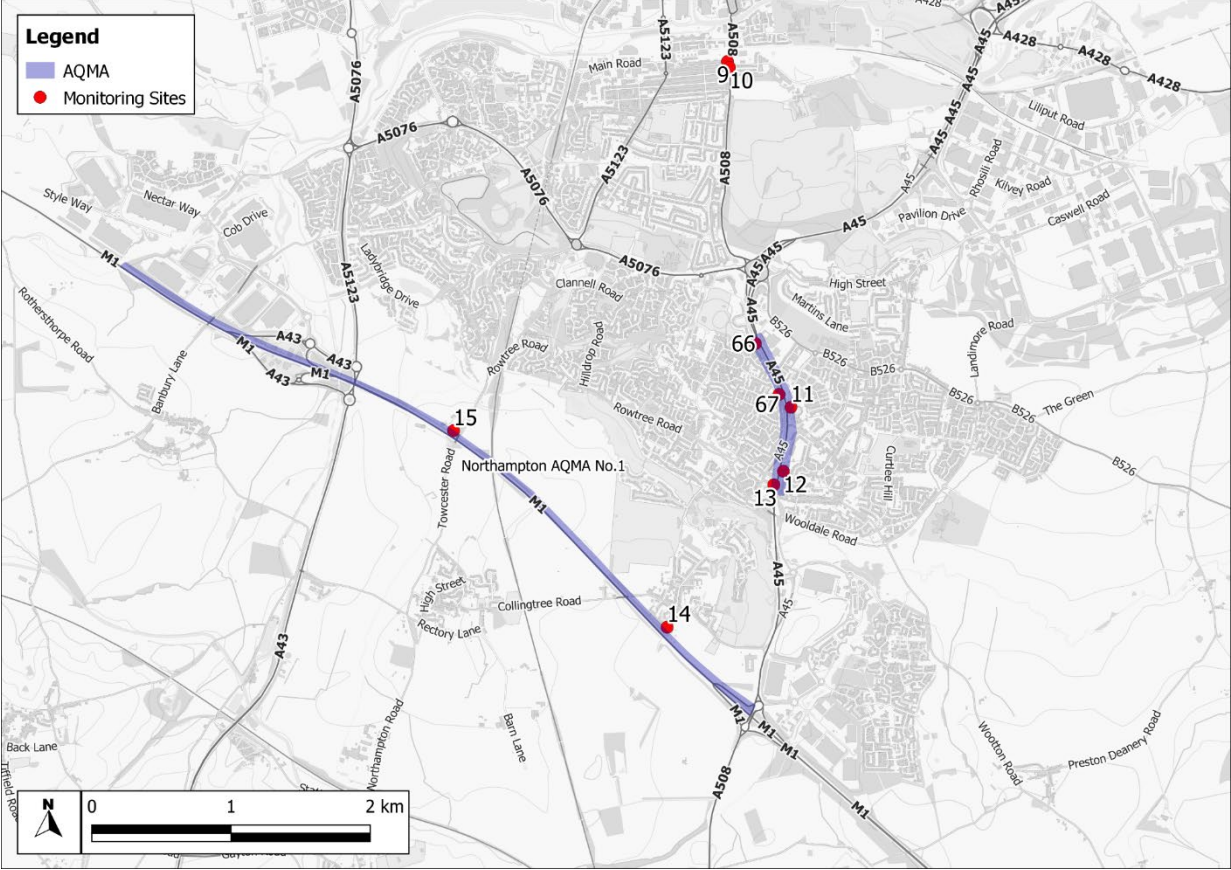
- Northampton area

Figure C.1 – Locations of Monitoring Sites in the North and AQMA 4 - Harbrough Road



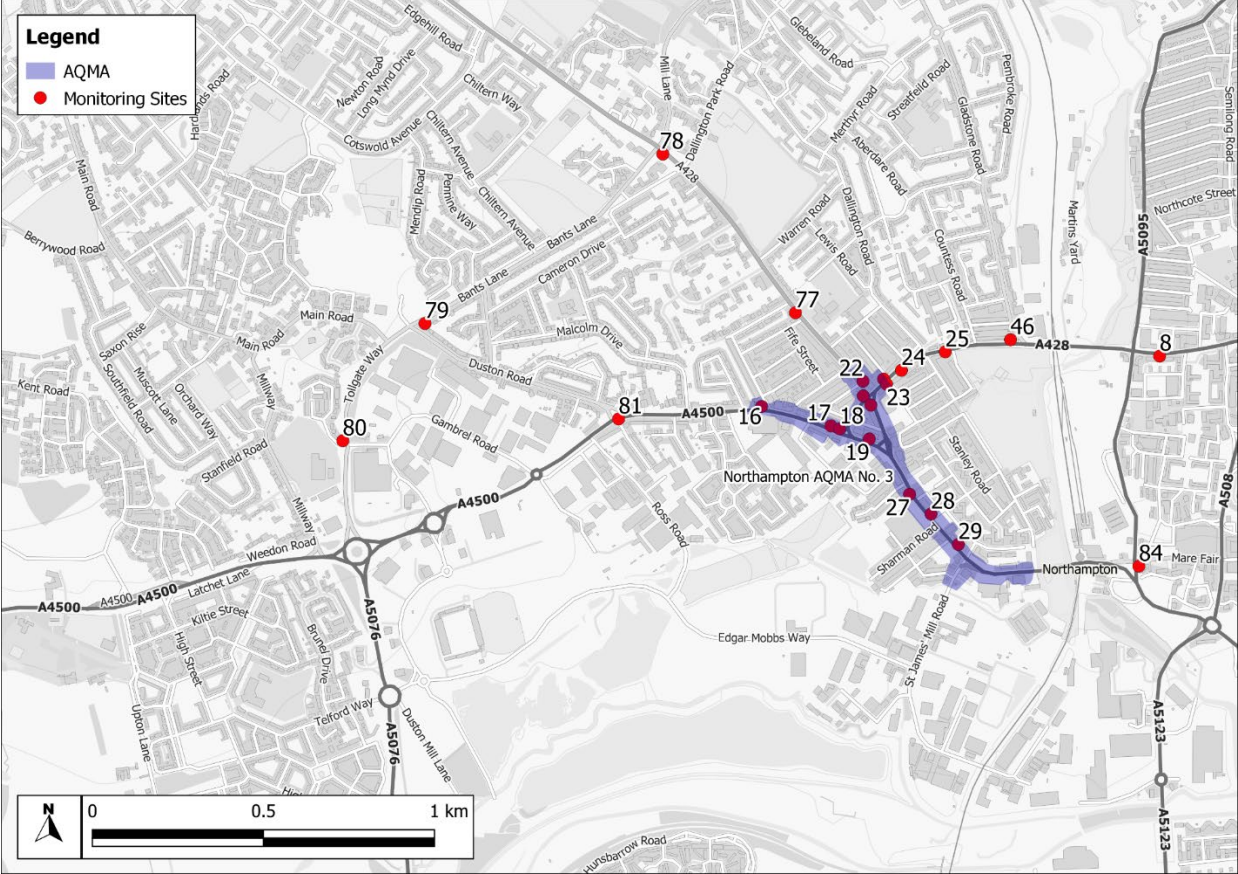
Imagery ©2022 OS. Map data ©2022.

Figure C.3 – Locations of Monitoring Sites in the South and AQMA 1 – M1 and AQMA5 – A45



Imagery ©2022 OS. Map data ©2022.

Figure C.4 – Locations of Monitoring Sites in the West and AQMA 3 – St James



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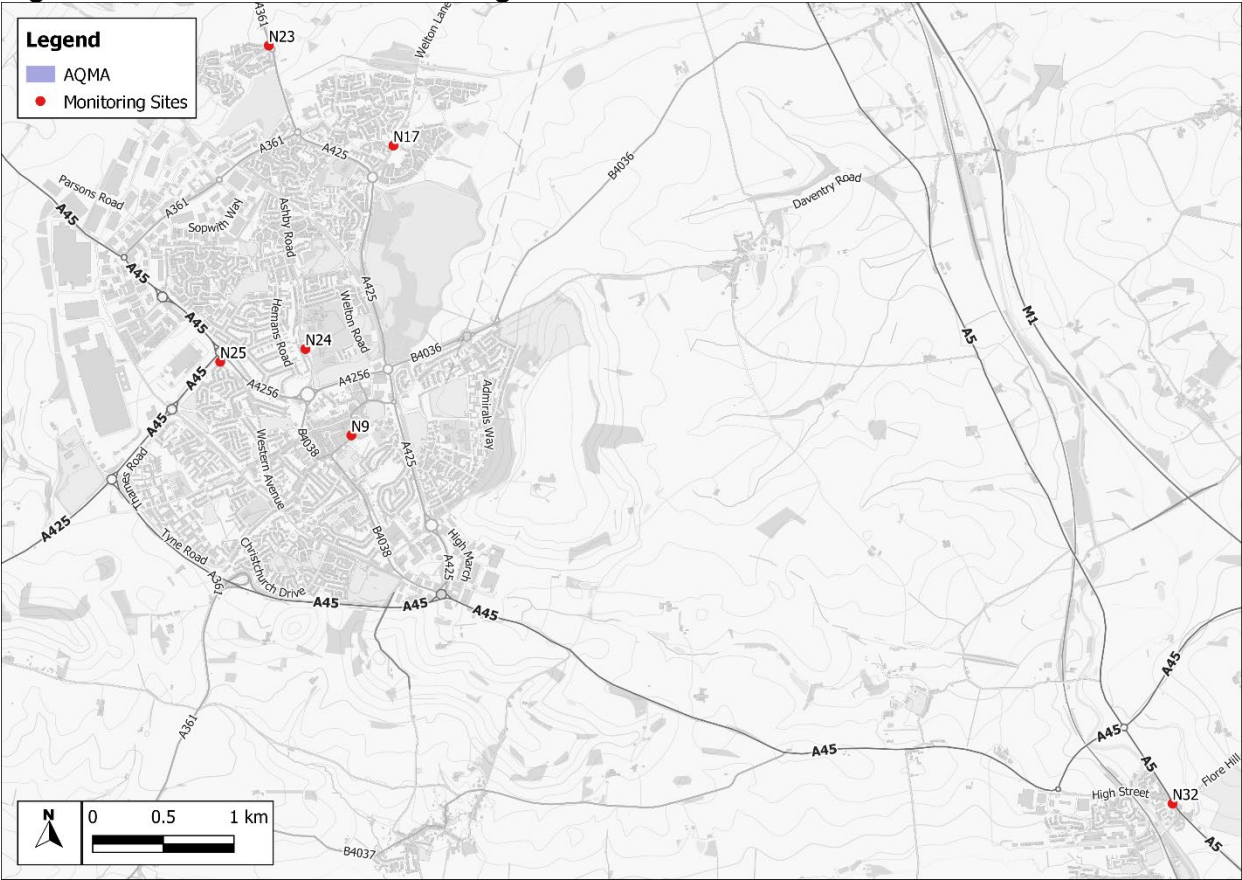
Figure C.5 – Locations of Monitoring Sites in the East



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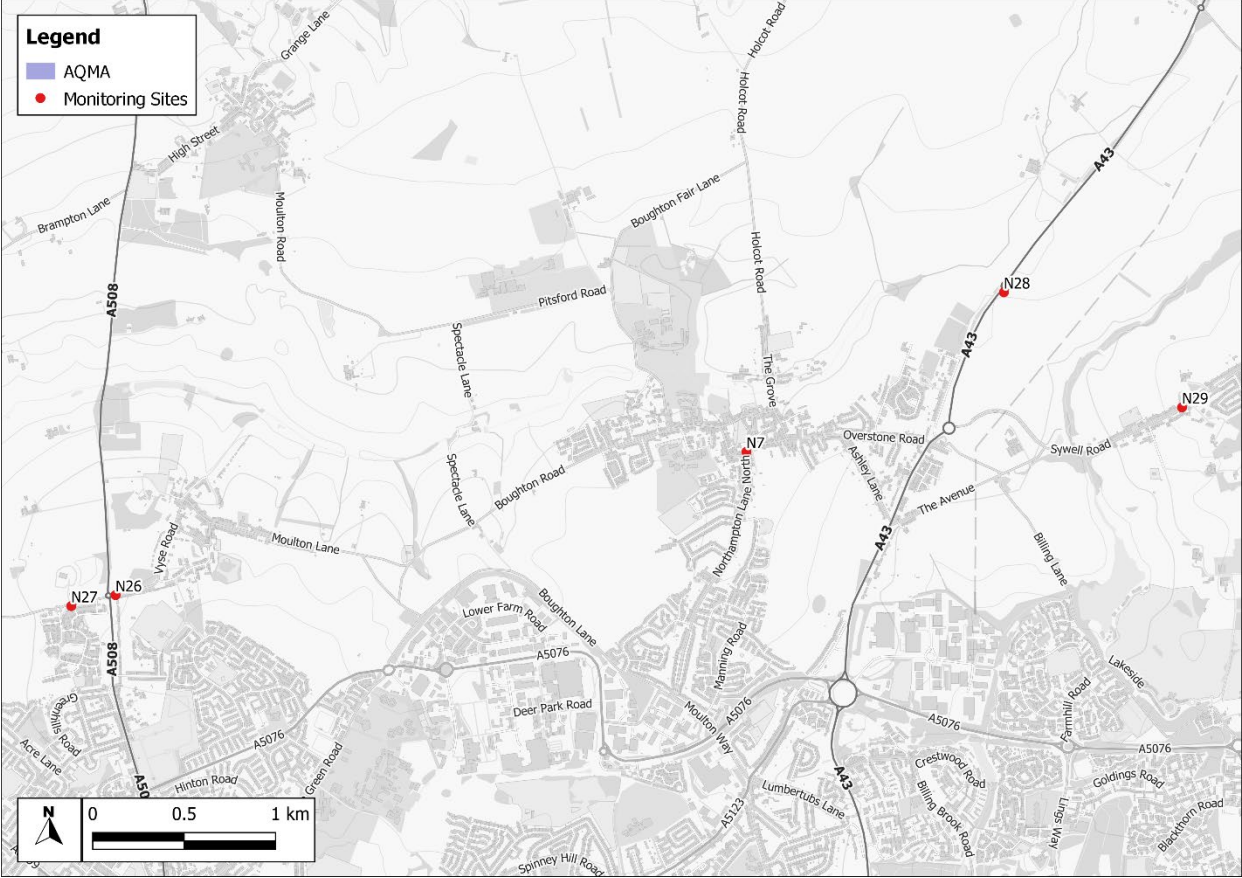
○ Daventry area

Figure C.6 – Locations of Monitoring Sites in the West



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Figure C.8 – Locations of Monitoring Sites in the East



Imagery ©2022 OS. Map data ©2022.

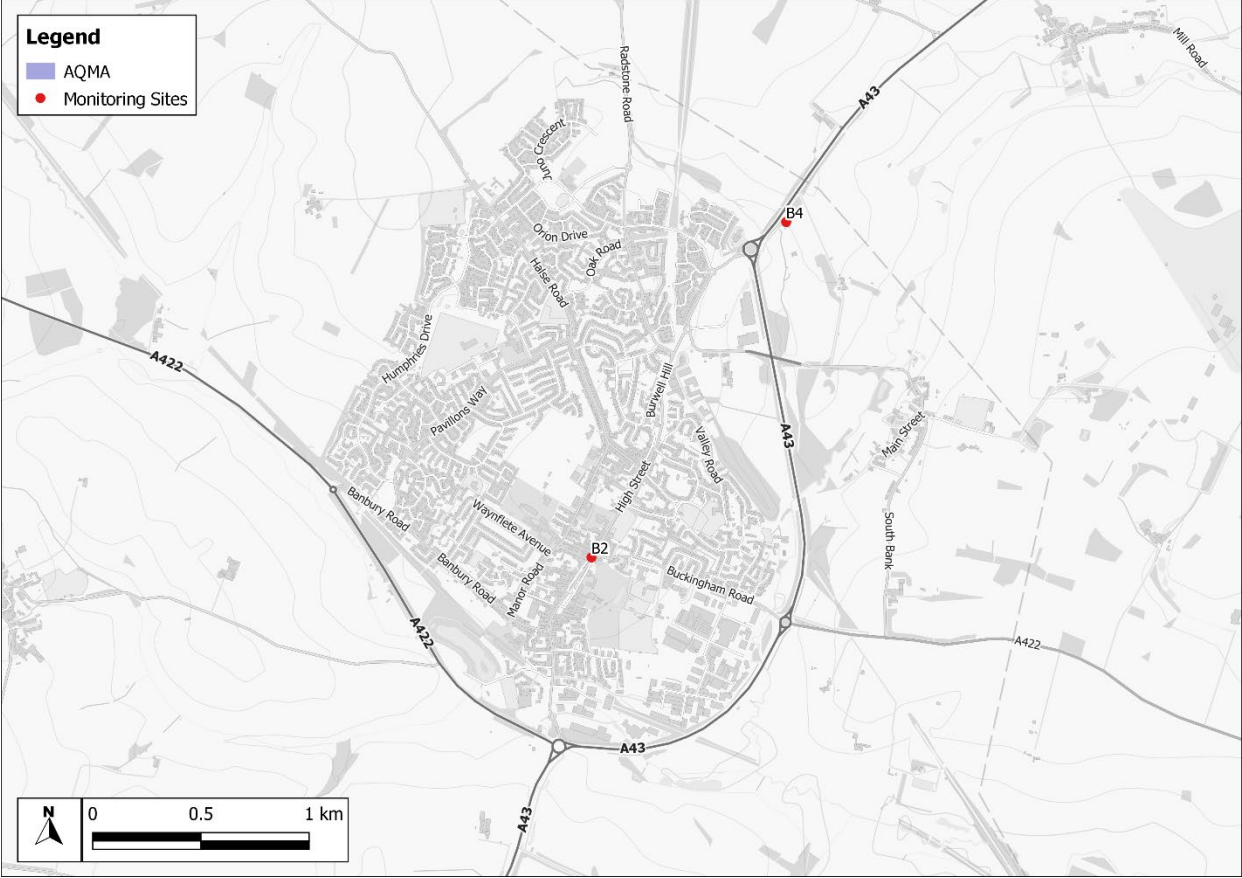
○ South Northamptonshire area

Figure D.9 – Locations of Monitoring Sites in Towcester and AQMA



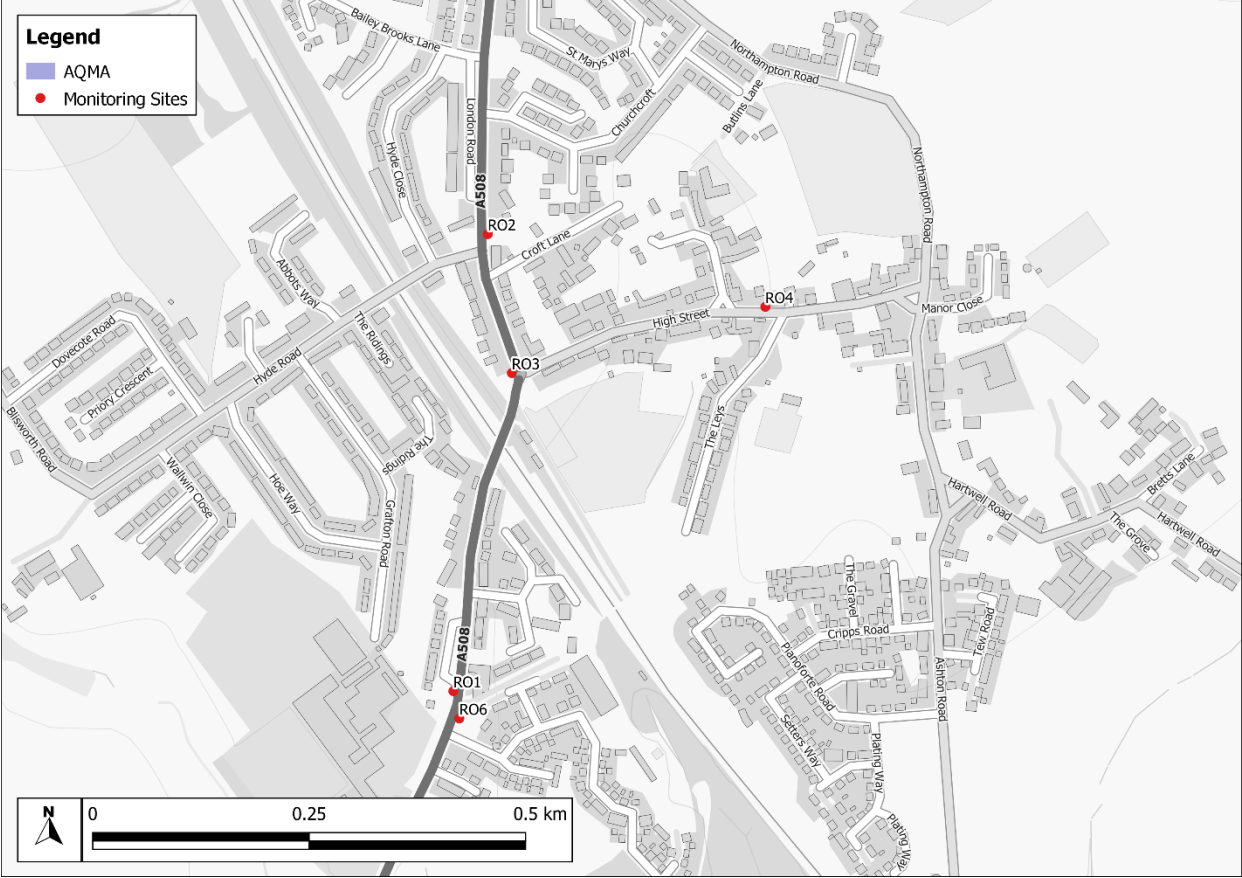
Imagery ©2022 OS. Map data ©2022.

Figure D.10 – Locations of Monitoring Sites in Brackley



Imagery ©2022 OS. Map data ©2022.

Figure D.11 – Locations of Monitoring Sites in Road



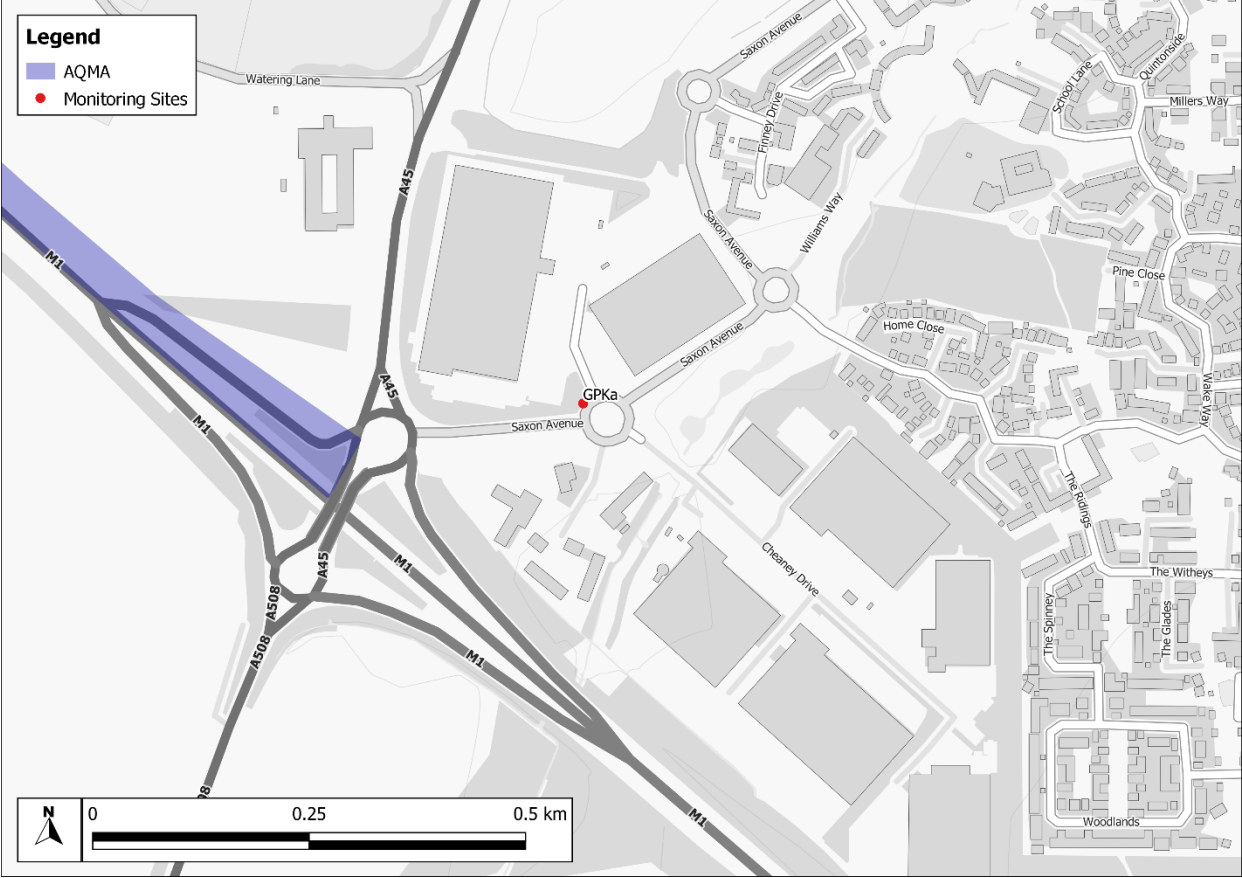
Imagery ©2022 OS. Map data ©2022.

Figure D.12 – Locations of Monitoring Sites in Hartwell



Imagery ©2022 OS. Map data ©2022.

Figure D.13 – Locations of Monitoring Sites in Grange Park



Imagery ©2022 OS. Map data ©2022.

Figure D.14 – Locations of Monitoring Sites in Old Stratford



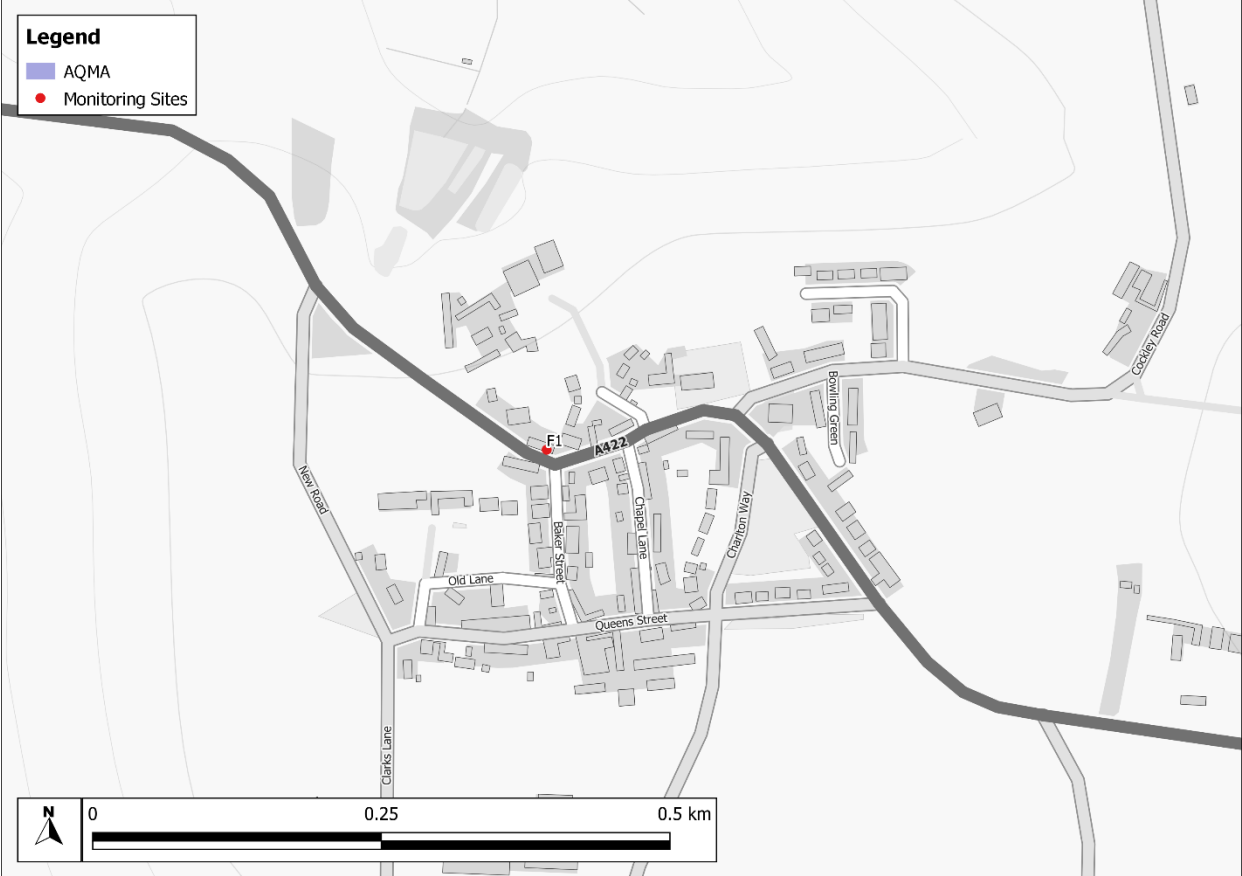
Imagery ©2022 OS. Map data ©2022.

Figure D.15 – Locations of Monitoring Sites in Kislingbury



Imagery ©2022 OS. Map data ©2022.

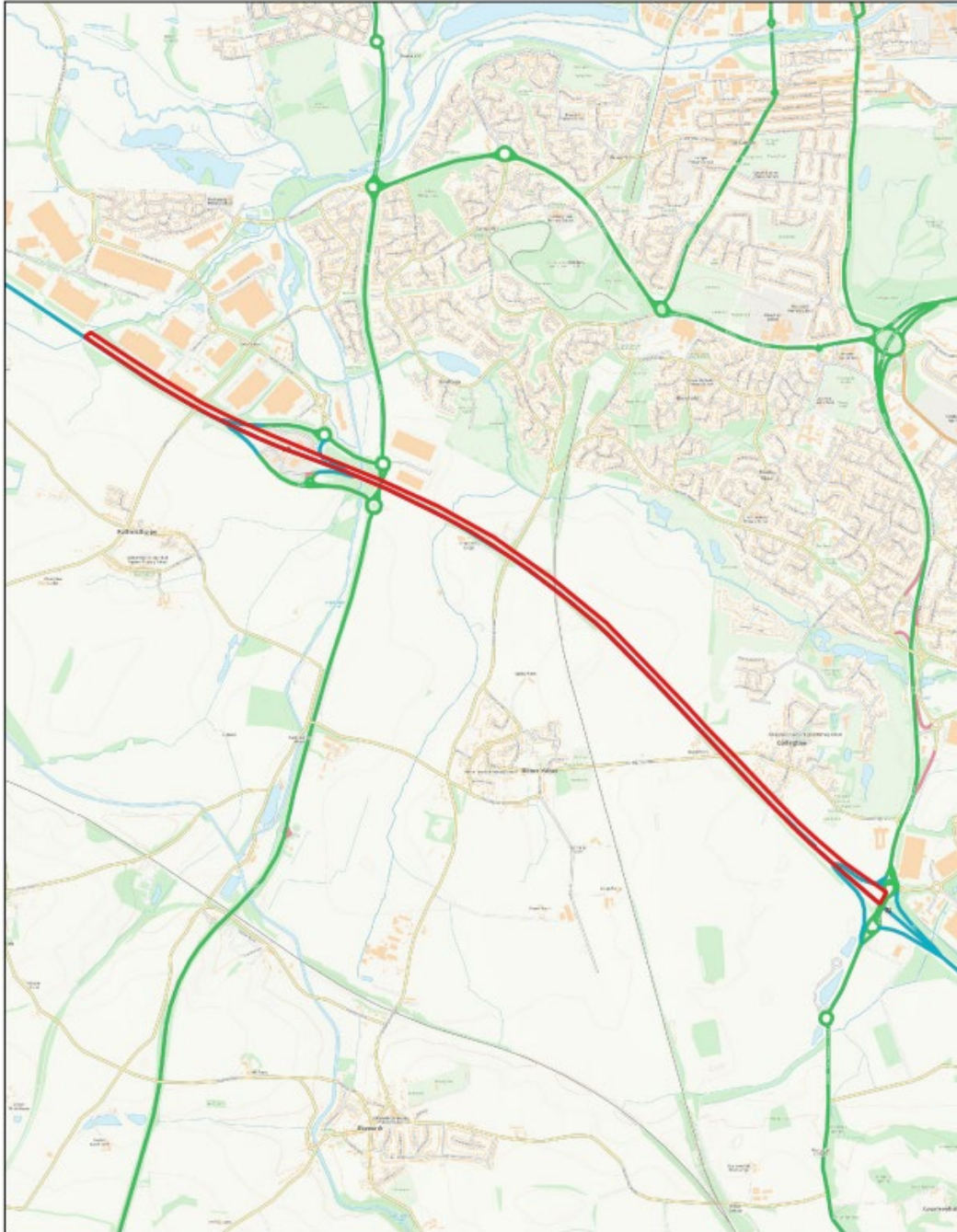
Figure D.16 – Locations of Monitoring Sites in Farthinghoe




Imagery ©2022 OS. Map data ©2022.

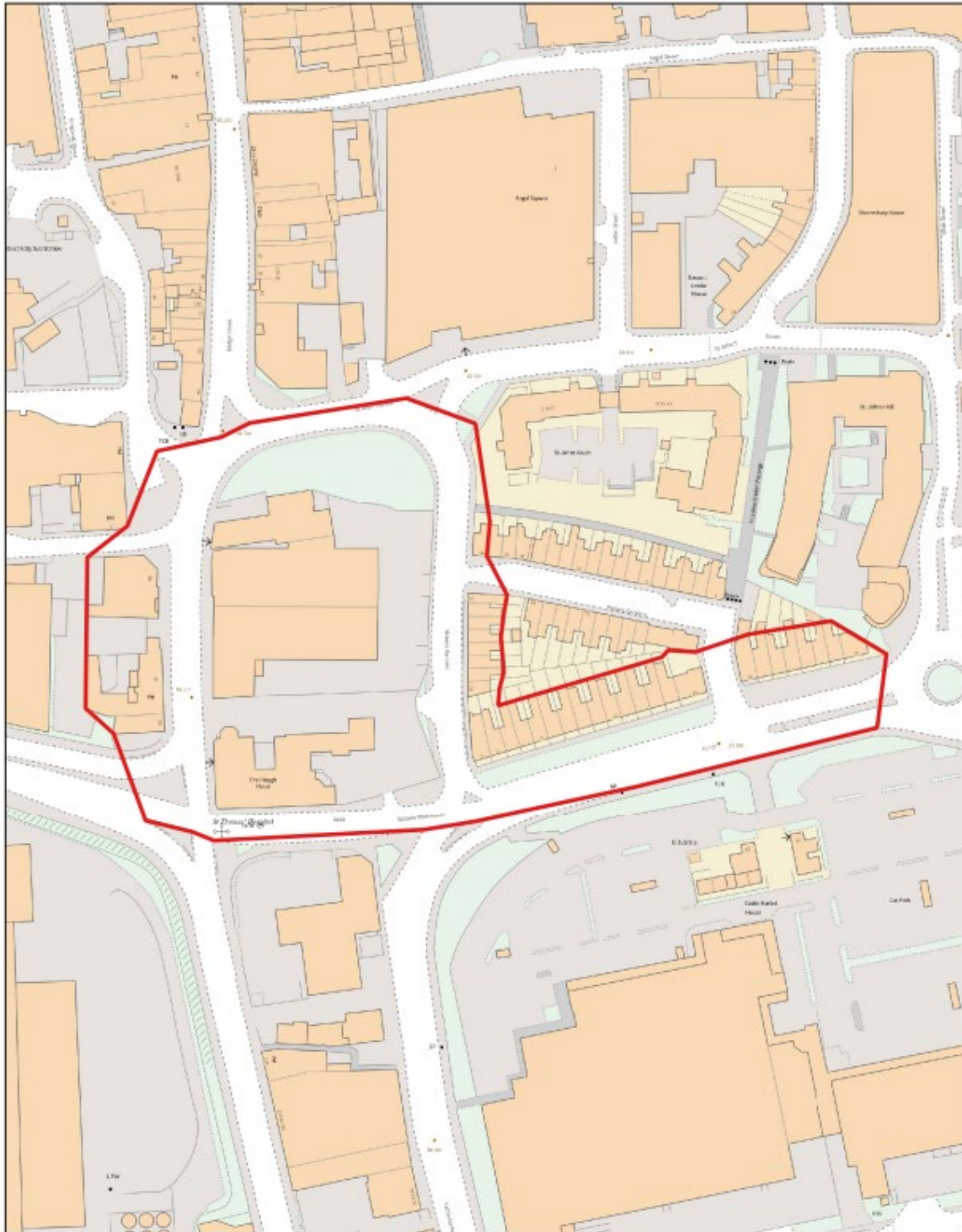
15. Maps of Air Quality Management Areas (AQMA's)


AQMA1 – M1



	<p>Location: The area of land which runs alongside the southbound carriageway of the M1 Motorway. The area varies in depth from between 40 and 54 metres when measured from the central reservation on the M1. Declared: Yes</p> <p><small>© Crown copyright and database rights 2024 Ordnance Survey licence no. 100063706</small></p>	<p>Date: 14-02-2024 Scale: 1:27,267 @A4 Drawn: S Hume</p>
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AQMA2 – Victoria Promenade



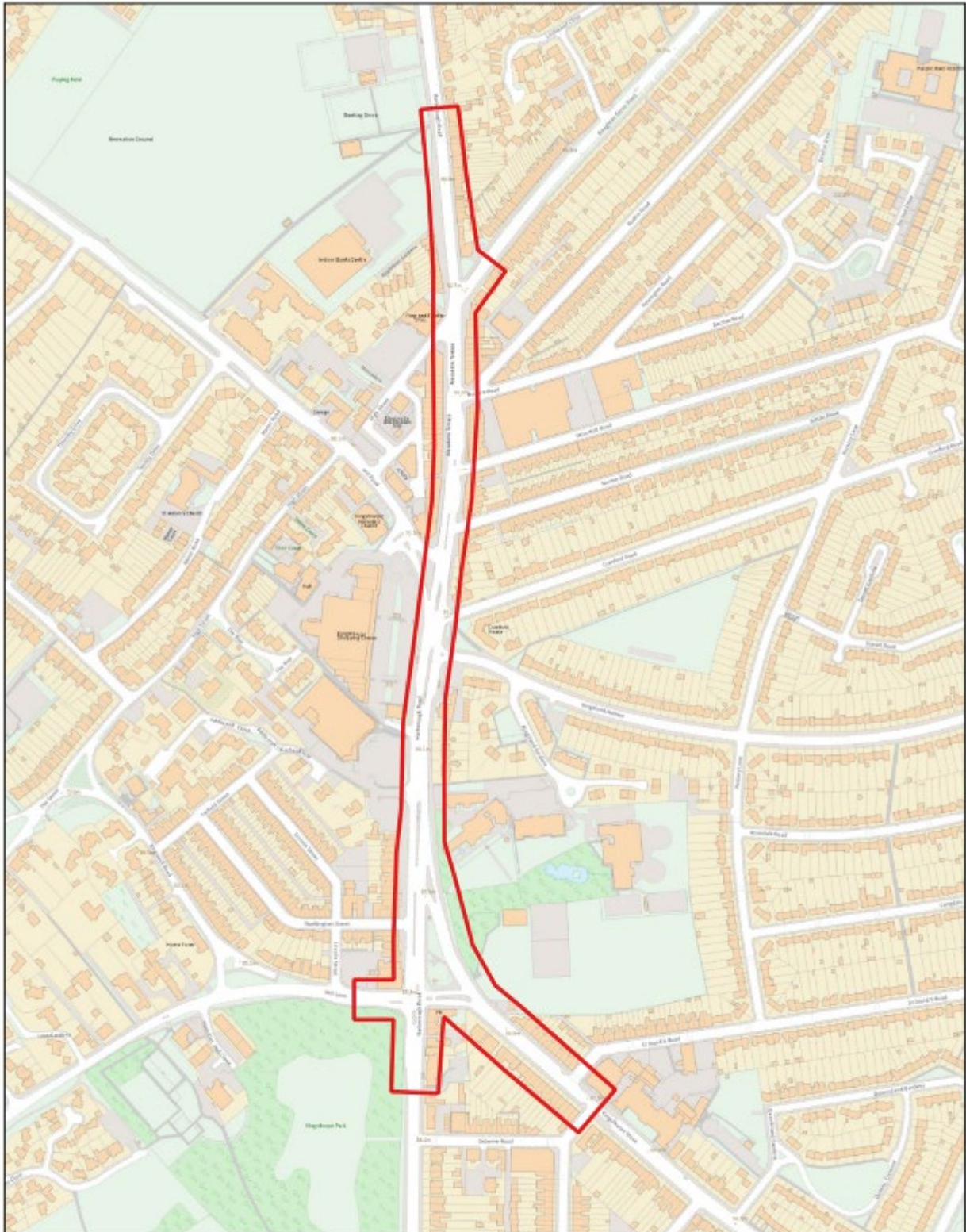
	<p>Location: An area encompassing a number of properties along Bridge Street, Victoria Promenade & Victoria Gardens, including the Plough Hotel. Declared: Yes</p> <p>© Crown copyright and database rights 2024 Ordnance Survey licence no. 100063706</p>	<p>Date: 14-02-2024 Scale: 1:1,577 @A4 Drawn: S Hume</p>
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AQMA3 – St James



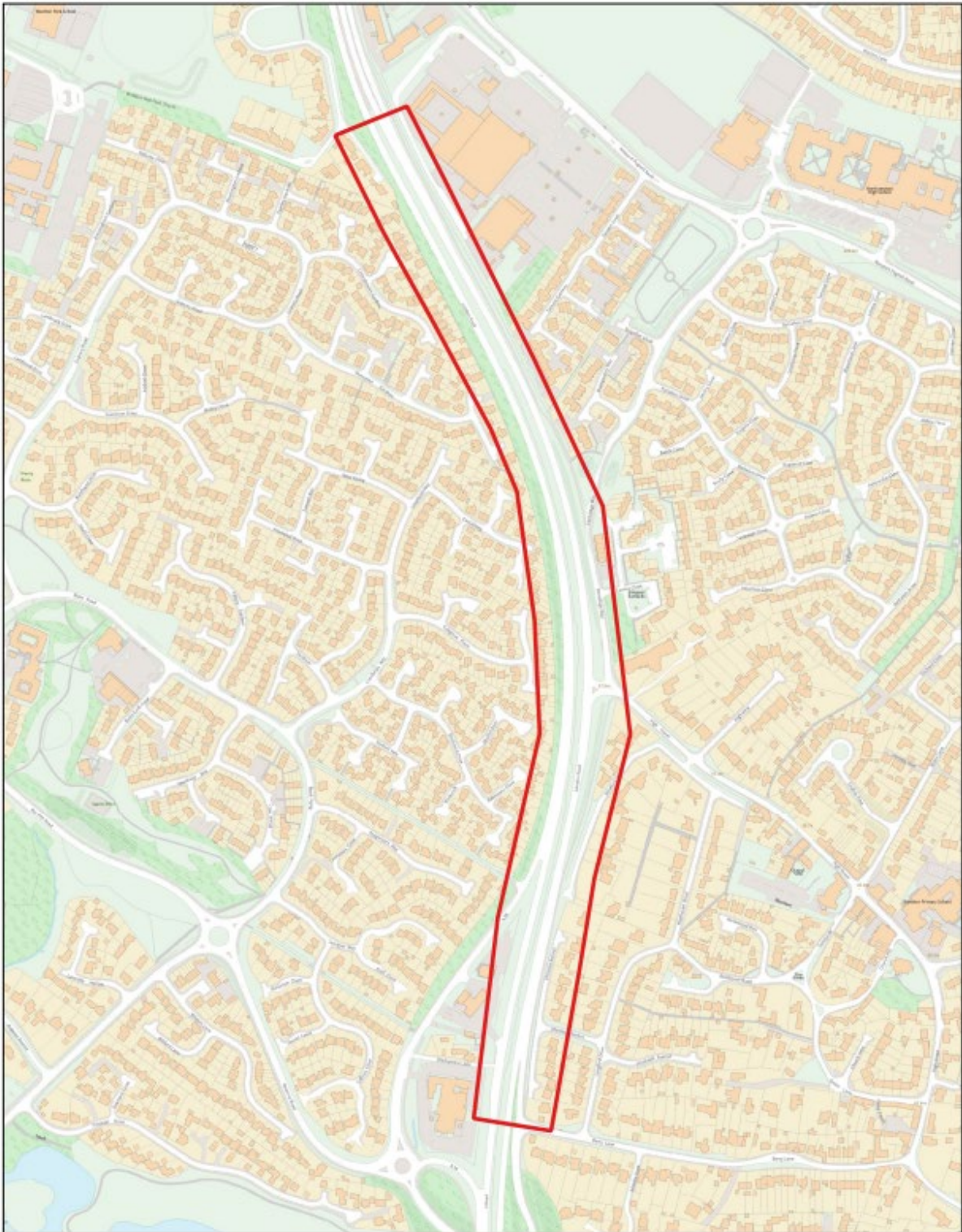
	<p>Location: An area encompassing a number of properties along St James Road, Weedon Road, Harlestone Road and adjoining streets. Declared: Yes</p> <p>© Crown copyright and database rights 2024 Ordnance Survey licence no. 100063706</p>	<p>Date: 14-02-2024 Scale: 1:5,014 @A4 Drawn: S Hume</p>
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AQMA 4 – Harbrough Road



	<p>Location: An area encompassing roads and properties fronting parts of Kingsthorpe Grove, Harbrough Road, Cranford Terrace, Alexandra Terrace & Boughton Green Road. Declared: Yes</p>	<p>Date: 14-02-2024 Scale: 1:4,427 @A4 Drawn: S Hume</p>
	<p>© Crown copyright and database rights 2024 Ordnance Survey licence no. 100063706</p>	

AQMA5 – A45



Location: An area encompassing properties in Wootton Hall Park, Cottesbrooke Gardens, Hermitage Way, Stratford Drive and Chestnut Drive close to the A45 London Road.
Declared: Yes

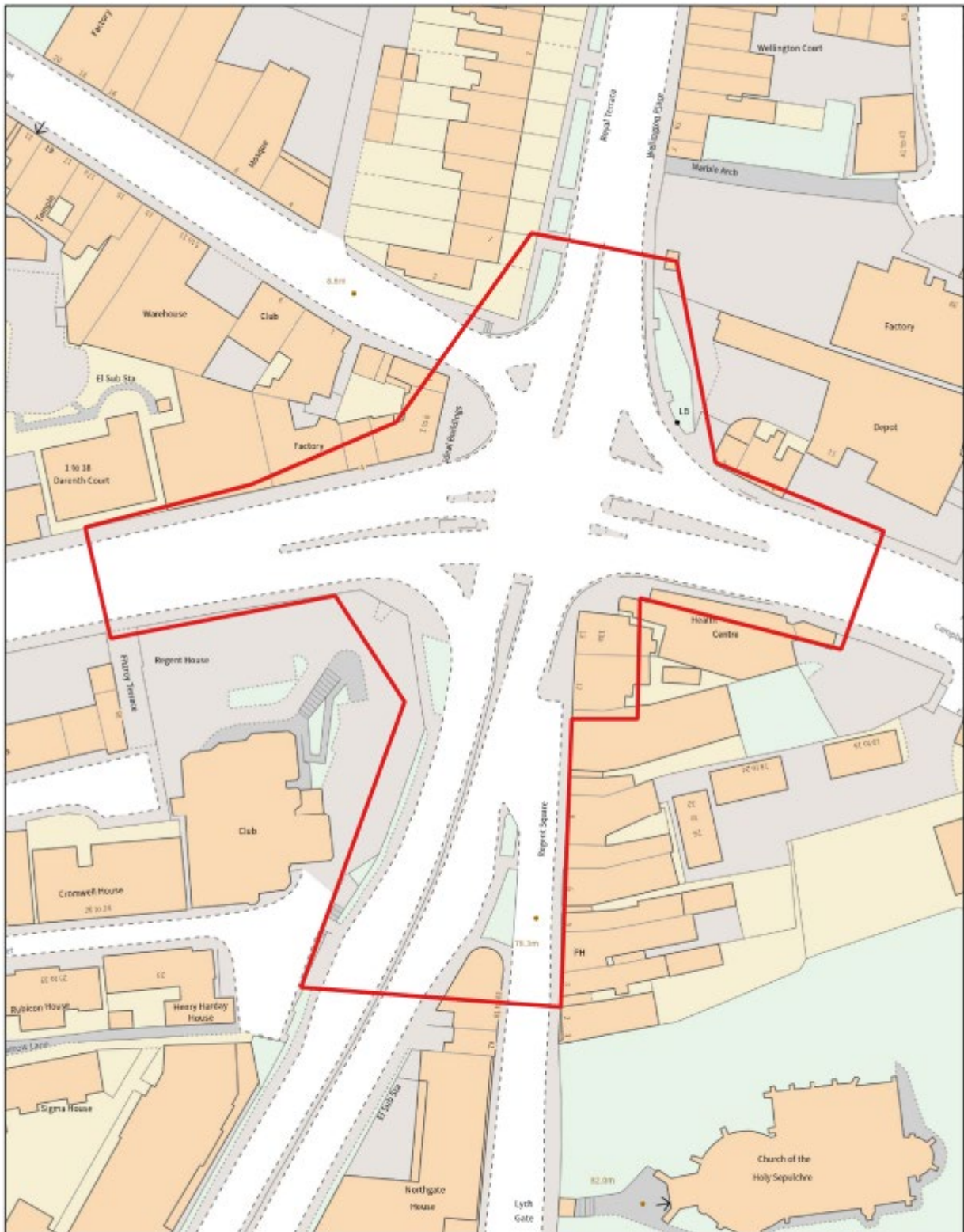
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Date: 14-02-2024

Scale: 1:5,419 @A4

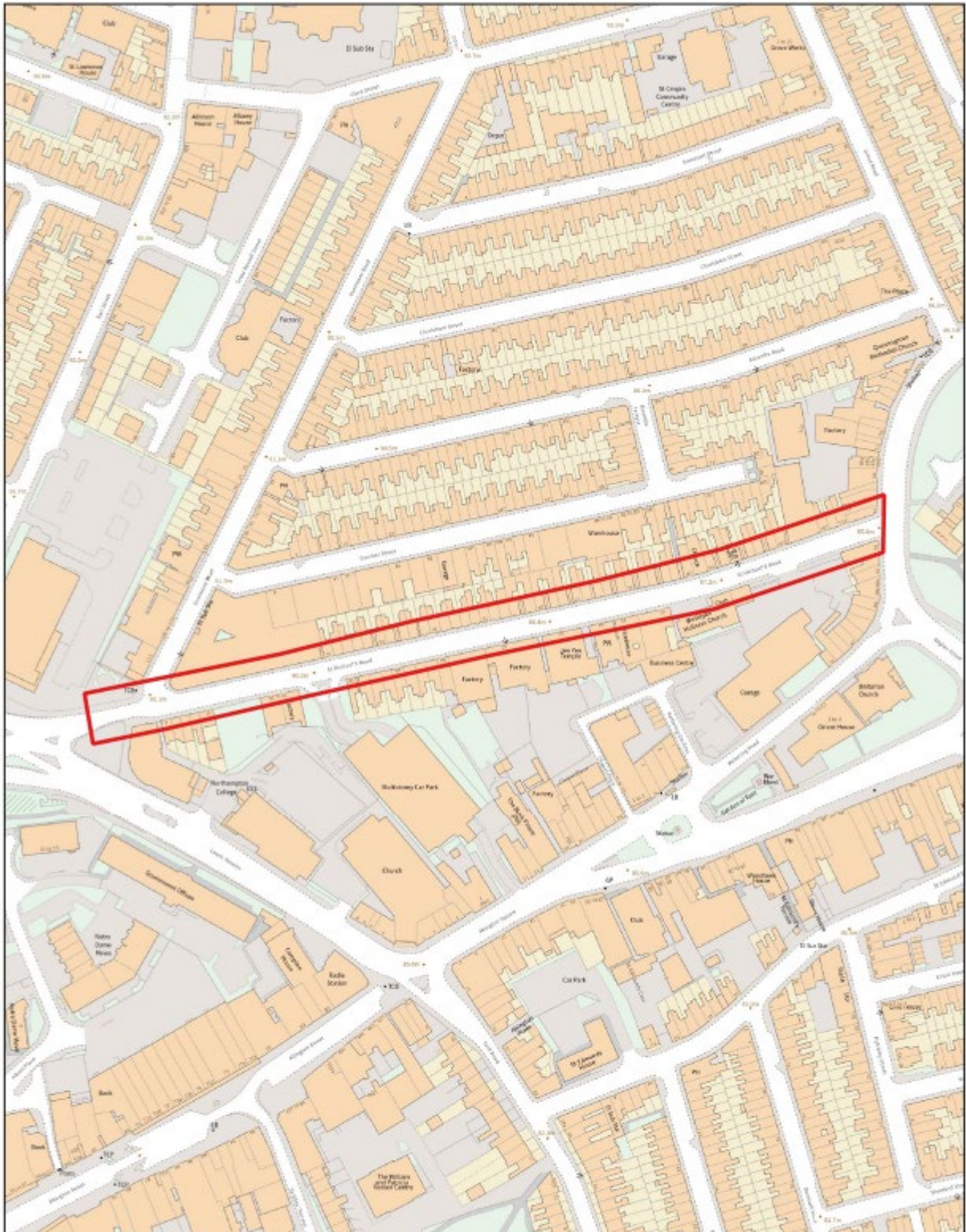
Drawn: S Hume


AQMA6 – Campbell Square



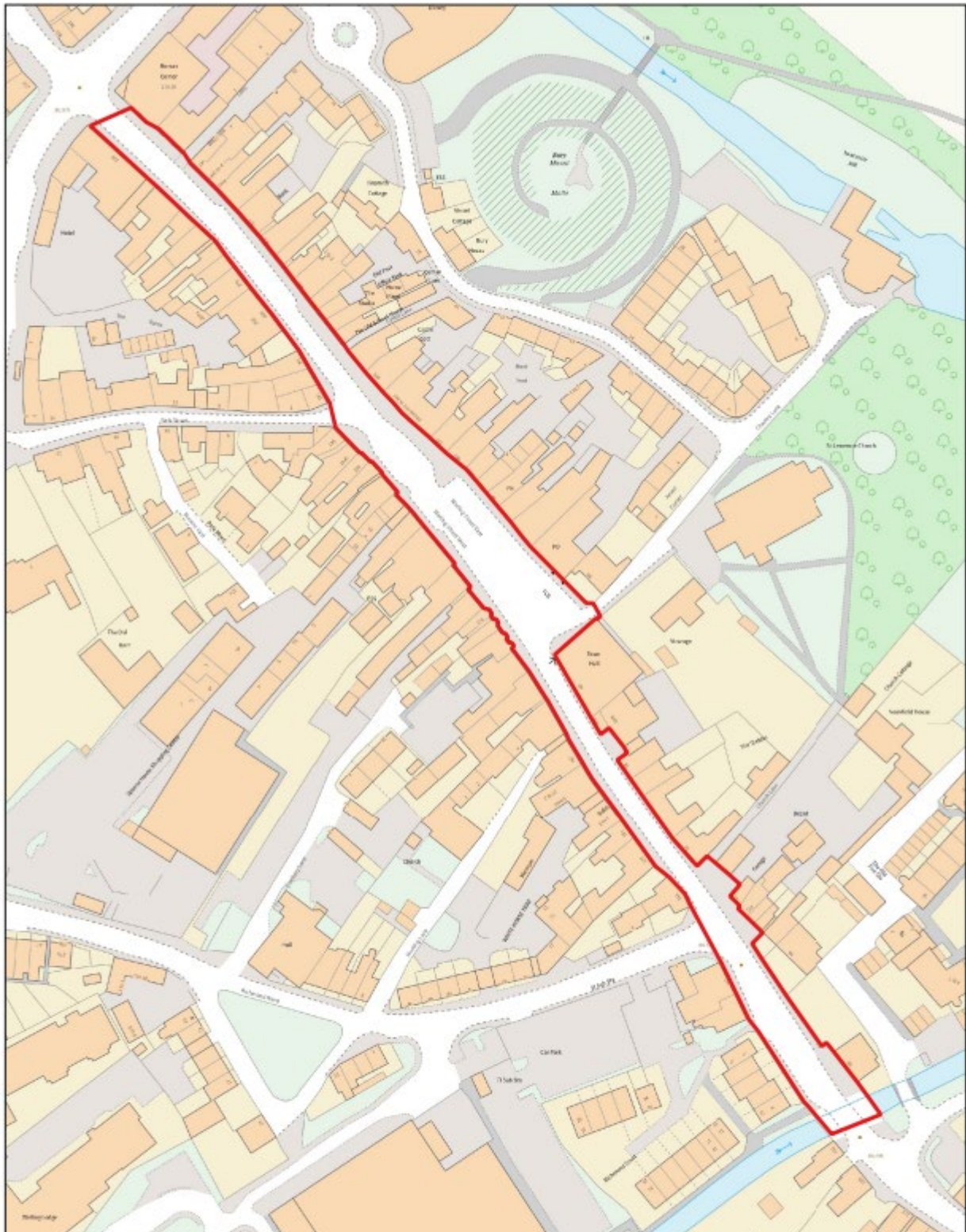
	<p>Location: An area encompassing a number of properties in or near Campbell Square at the junction of the A4500 (Grafton Street) & Regent Street in central Northampton. Declared: Yes</p>	<p>Date: 14-02-2024 Scale: 1:977 @A4 Drawn: S Hume</p>
	<p>© Crown copyright and database rights 2024 Ordnance Survey licence no. 100063706</p>	


AQMA8 – St Michaels



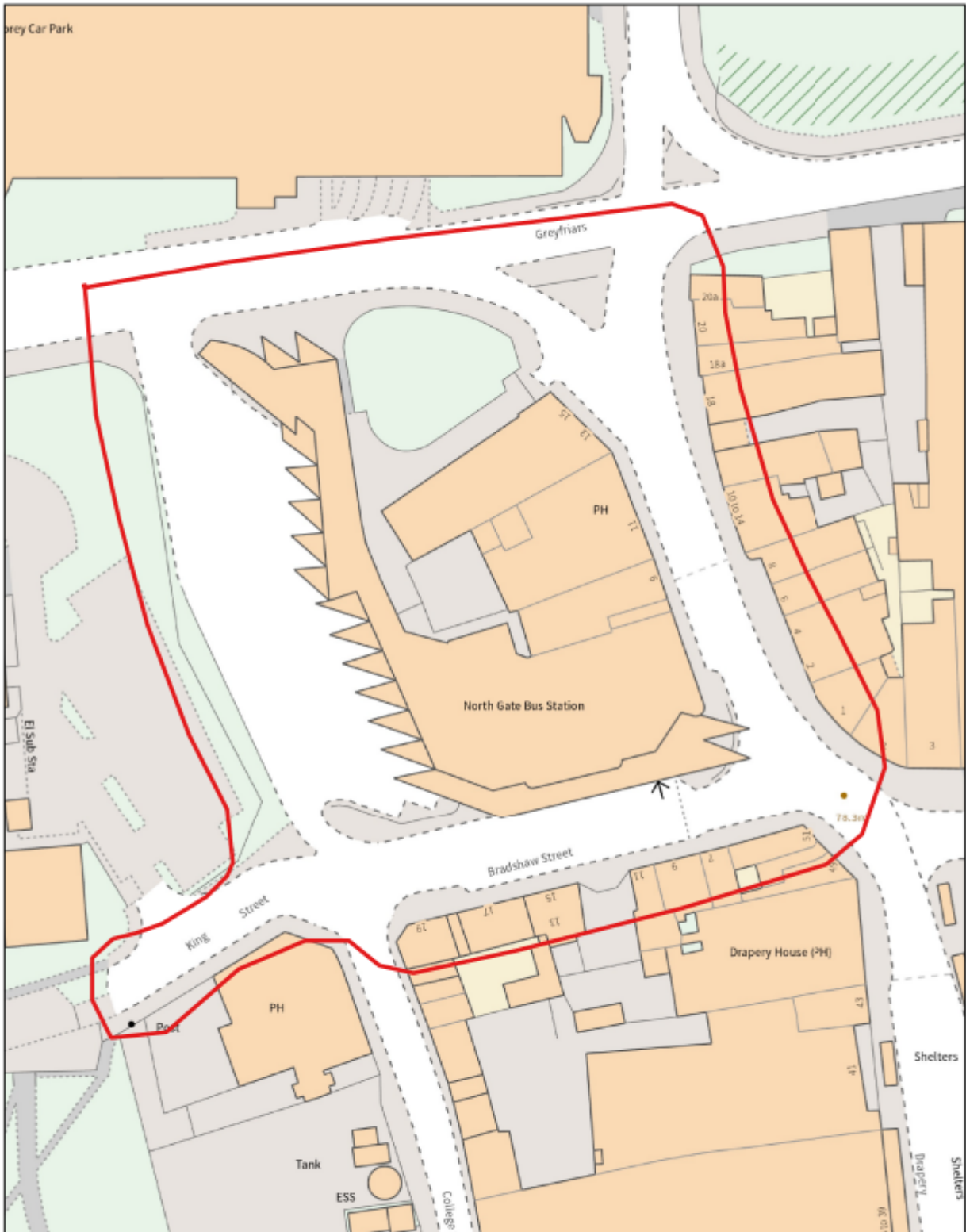
	<p>Location: An area encompassing a number of properties along St Michael's Road and close to the junction on Kettering Road. Declared: Yes</p>	<p>Date: 14-02-2024 Scale: 1:2,253 @A4 Drawn: S Hume</p>
	<p>© Crown copyright and database rights 2024 Ordnance Survey licence no. 100063706</p>	


AQMA- Towcester



	Location: An area encompassing parts of Watling Street through Towcester. Declared: Yes	Date: 14-02-2024
	© Crown copyright and database rights 2024 Ordnance Survey licence no. 100063706	Scale: 1:1,560 @A4 Drawn: S Hume

Bradshaw Street – not yet declared, under consideration



	<p>Location: An area encompassing North Gate Bus Terminus, Bradshaw Street, (part of) King Street, Sheep Street & (part of) Greyfriars. Declared: Under consideration</p>	<p>Date: 14-02-2024 Scale: 1:729 @A4 Drawn: S Hume</p>
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16. 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
AQS	Air Quality Strategy
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
WNC	West Northamptonshire Council (comprising of the former Daventry District Council, Northampton Borough Council, Northampton County Council and South Northamptonshire Council)

17. References

- 1 Environmental equity, air quality, socioeconomic status and respiratory health, 2010 [Environmental equity, air quality, socioeconomic status, and respiratory health: a linkage analysis of routine data from the Health Survey for England | Journal of Epidemiology & Community Health \(bmj.com\)](#)
- 2 Air quality and social deprivation in the UK: an environmental inequalities analysis, 2006 [Microsoft Word - AQinequalitiesFNL AEAT 0506.doc \(defra.gov.uk\)](#)
- 3 Defra. Abatement cost guidance for valuing changes in air quality, May 2013 [Abatement cost guidance for valuing changes in air quality \(publishing.service.gov.uk\)](#)
- 8 EU Directive 2008/50/EC [Directive 2008/50/EC of the European Parliament and of the Council on ambient air quality and cleaner air for Europe. | FAOLEX](#)
- 9 The Air Quality Standards Regulations 2010 [The Air Quality Standards Regulations 2010 \(legislation.gov.uk\)](#)
- 10 The Air Quality Standards (Amendment) Regulations 2016 [The Air Quality Standards \(Amendment\) Regulations 2016 \(legislation.gov.uk\)](#)
- 11 The Air Quality Strategy 2007 [The air quality strategy for England - GOV.UK \(www.gov.uk\)](#)
- 12 Clean Air Strategy 2019 [Clean Air Strategy 2019 - GOV.UK \(www.gov.uk\)](#)
- 13 Air Quality Plan for Nitrogen Dioxide in UK (2017) [Air quality plan for nitrogen dioxide \(NO2\) in UK \(2017\) - GOV.UK \(www.gov.uk\)](#)
- 14 National Planning Policy Framework [National Planning Policy Framework - GOV.UK \(www.gov.uk\)](#)
- 15 Corporate Plan [Corporate Plan | West Northamptonshire Council \(westnorthants.gov.uk\)](#)
- 16 Sustainability Strategy [Sustainable West Northants | West Northamptonshire Council](#)
- 17 UN Sustainable Development Goals [American Leadership on the SDGs \(unfoundation.org\)](#)
- 18 West Northamptonshire Joint Core Strategy [West Northamptonshire Joint Core Strategy Local Plan \(Part 1\) | West Northamptonshire Council \(westnorthants.gov.uk\)](#)
- 19 Northamptonshire's (LTP) Local Transport Plan [Highways plans and strategies | West Northamptonshire Council \(westnorthants.gov.uk\)](#)
- 20 Smart Move Northamptonshire website [Home | Northamptonshire County Council \(smartmovenorthamptonshire.net\)](#)
- 21 [E-Scooters | Northamptonshire County Council \(smartmovenorthamptonshire.net\)](#)
- 22 Zap Map [Map of electric charging points for electric cars UK: Zapmap \(zap-map.com\)](#)
- 23 National Highways website <https://nationalhighways.co.uk/our-roads/east-midlands/a5-towcester-improvements/>
- 24 Major WNC Highways projects [Major highways projects | West Northamptonshire Council \(westnorthants.gov.uk\)](#)
- 25 Network Management Plan [Highways plans and strategies | West Northamptonshire Council \(westnorthants.gov.uk\)](#)
- 26 Climate Change and Environmental Management Plan [Agenda for Cabinet on Tuesday 14th November 2023, 6.00 pm - West Northamptonshire Council \(moderngov.co.uk\)](#)
- 27 Joint Health and Wellbeing Strategy 2023-2028 [Health and Wellbeing Board - Key responsibilities | West Northamptonshire Council \(westnorthants.gov.uk\)](#)