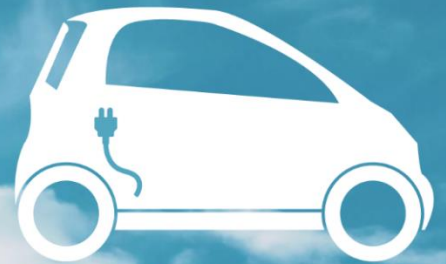




Air Quality Assessment for the Proposed Development at 104 London Street, Reading

Report to Beenlore Limited

August 2024



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1 Introduction

Aether has been commissioned by Beenlore Limited to undertake an air quality assessment for the development at 104 London Street, Reading.

The development will consist of a change of use from offices to a small HMO at the site at 104 London Street, Reading. The existing residential flat at the back will be retained. One parking space will be provided at the rear of the development.

The development lies in Reading Borough Council (RBC), which has declared one Air Quality Management Area (AQMA), encompassing all the main arterial routes in and out of Reading and central area¹. The development is located within the AQMA.

It is important to assess whether there will be an exceedance of the air quality objectives for nitrogen dioxide (NO₂), and also other pollutants for which there are air quality objectives such as particulate matter (PM₁₀ and PM_{2.5}), at the proposed site and whether the development will cause any significant worsening of air quality in the local vicinity and then advise whether any action is required.

2 Assessment Scope

This report describes existing air quality within the study area, assesses the impact of the construction and operation of the development on air quality in the surrounding area and considers the suitability of the site for the proposed development. Potential sources of emissions have been identified and assessed in the context of existing air quality and the nature and location of receptors.

Due to the development solely requiring a refurbishment of the existing offices to a small HMO and therefore no construction will be undertaken, a dust risk assessment has not been undertaken.

2.1 Pollutants of Concern

The main air pollutants of concern related to road traffic are nitrogen dioxide (NO₂), PM₁₀ and particulate matter with an aerodynamic diameter of less than 2.5 µm (PM_{2.5}).

The oxides of nitrogen (NO_x) comprise principally of nitric oxide (NO) and nitrogen dioxide (NO₂). NO₂ occurs as a result of the oxidation of NO, which in turn originates from the combination of atmospheric nitrogen and oxygen during combustion processes. NO₂ can also form in the atmosphere due to a chemical reaction between NO and ozone (O₃). Health based standards for NO_x generally relate to NO₂, where acute and long-term exposure may adversely affect the respiratory system.

Particulate matter is a term used to describe all suspended solid matter, sometimes referred to as Total Suspended Particulate matter (TSP). Sources of particles in the air include road transport, power stations, quarrying, mining and agriculture. Chemical processes in the atmosphere can also lead to the formation of particles. PM₁₀ and PM_{2.5} are the subject of health concerns because of its ability to penetrate deep within the lungs.

¹ https://uk-air.defra.gov.uk/aqma/local-authorities?la_id=201

A growing body of research has also pointed towards the smaller particles, PM_{2.5}, as a metric more closely associated with adverse health impacts. Ultimately, Local Authorities in England have a flexible role² in working towards reducing emissions and concentrations of PM_{2.5}.

Further information on the health effects of air pollution can be found in the reports produced by the Committee on the Medical Effects of Air Pollutants³.

² LAQM TG22

³ <https://www.gov.uk/government/collections/comeap-reports>

3 Site Description

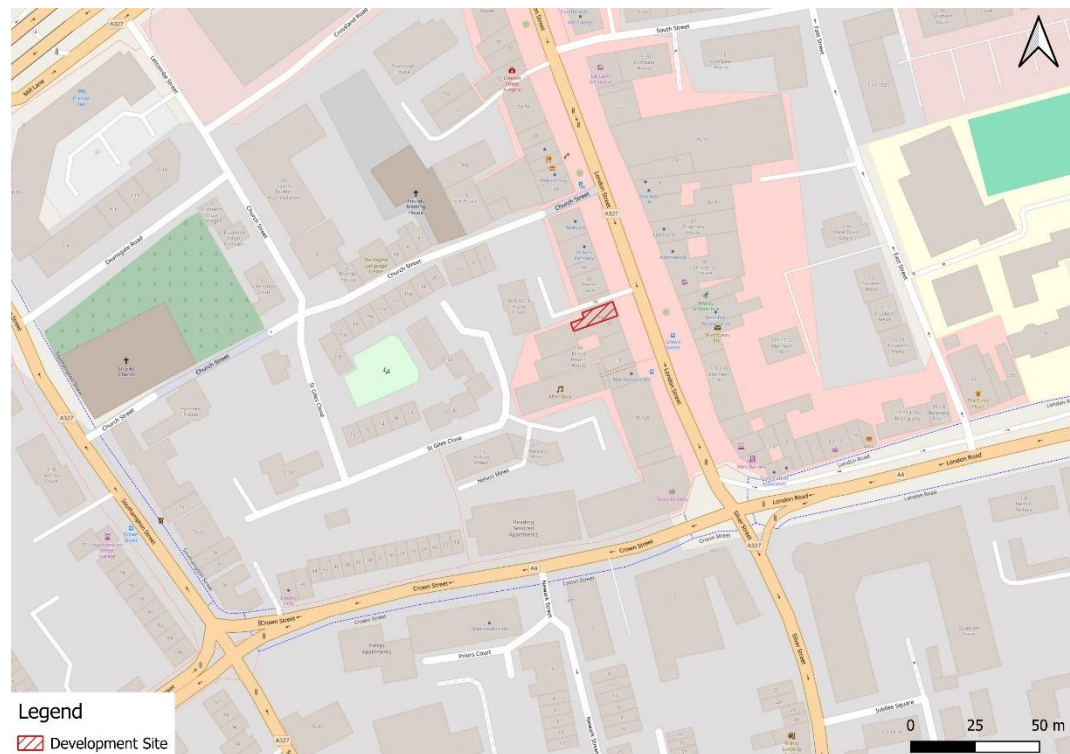
3.1 Site Location

The proposed development site is located at 104 London Street in the centre of Reading.

3.2 Site Designations

The development lies in Reading Borough Council (RBC), which has declared one Air Quality Management Area (AQMA), encompassing all the main arterial routes in and out of Reading and central area. The development is located within the AQMA.

Figure 1: Location of the development site, outlined in red.

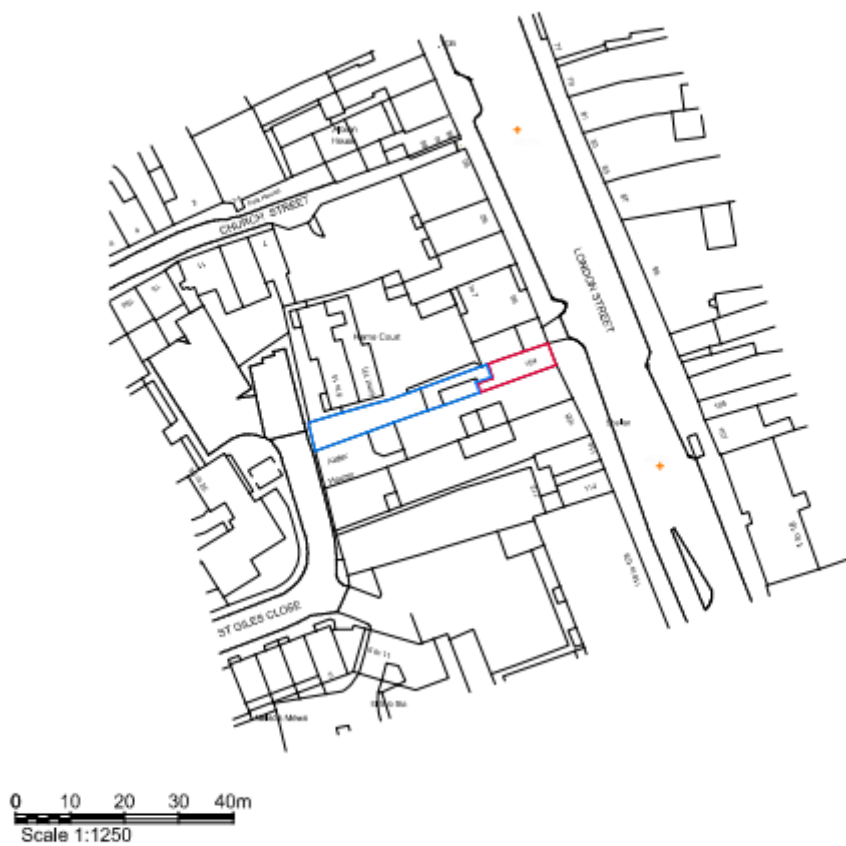


3.3 Proposed Development Description

The project proposals involve the change of use from offices to a small HMO at the site. The existing residential flat at the back will be retained.

One parking space will be provided for the development.

Figure 2: Proposed Development Plan



Source: Provided by Davis Planning Ltd.

4 Policy Context

The assessment has been informed by the following legislation, policies and published guidance:

- International Legislation including:
 - The European Air Quality Framework Directive and Daughter Directives^{4,5}, which set out a series of limit values for the protection of human health
- National Legislation and Policy including:
 - Air Quality Standards (Amendment) Regulations 2016⁶, which amended the Standard Regulations 2010⁷
 - The Environment Act⁸
 - Part IV of the Environment Act 1995 (as amended)⁹
 - Clean Air Strategy¹⁰
 - National Planning Policy Framework (NPPF)¹¹ and Planning Practice Guidance (PPG)¹²
 - Environmental Improvement Plan 2023¹³
 - Regulation 2 of the Environment (Miscellaneous Amendments) (EU Exit) Regulations 2020/1313 (“Environment EU Exit Regulations 2020”)¹⁴
- National guidance and industry standards, including:
 - Air Quality Strategy for England, Scotland, Wales and Northern Ireland, which implements the European Union’s Directives and sets out the air quality objectives (AQOs) and government policy on achieving these objectives¹⁵
 - Local Air Quality Management Technical Guidance 2022 (LAQM.TG(22))¹⁶, which provides advice as to where the national AQOs apply and support to local authorities in carrying out their duties under the Environment Act 1995 and subsequent regulations

⁴ Directive 2008/50/EC of the European Parliament and of the Council of 21 May 2008 on ambient air quality and cleaner air for Europe.

⁵ European Air Quality Directive 2004/107/EC. European Air Quality Directive 2004/107/EC of the European Parliament and of the Council of 15 December 2004 relating to arsenic, cadmium, mercury, nickel and polycyclic aromatic hydrocarbons in ambient air.

⁶ Secretary of State, 2016. Statutory Instrument 2016, No. 1184, The Air Quality Standards (Amendment) Regulations 2016. HMSO, London.

⁷ Secretary of State, 2010. Statutory Instrument 2010, No. 1001, The Air Quality Standards Regulations 2010. HMSO, London.

⁸ Secretary of State, 2021. The Environment Act Chapter 30. HMSO

⁹ Secretary of State, The Environment Act 1995 part IV Air Quality. HMSO.

¹⁰ Department for Environment, Food and Rural Affairs (Defra), 2019. Clean Air Strategy.

¹¹ Ministry of Housing, Communities and Local Government, 2021. National Planning Policy Framework. HMSO.

¹² Ministry of Housing, Communities and Local Government, 2019. Planning Practice Guidance. Available from: <https://www.gov.uk/government/collections/planning-practice-guidance>

¹³ <https://www.gov.uk/government/publications/environmental-improvement-plan>

¹⁴ <https://www.legislation.gov.uk/ukxi/2020/1313/made>

¹⁵ Department of the Environment, Transport and the Regions in Partnership with the Welsh Office, Scottish Office and Department of the Environment for Northern Ireland, 2007. The Air Quality Strategy for England, Scotland, Wales, Northern Ireland. HMSO, London.

¹⁶ Defra, 2022. Local Air Quality Management Technical Guidance (England) 2022 (TG22). HMSO.

- IAQM guidance on the Assessment of Dust from Demolition and Construction¹⁷
- IAQM guidance on Land-Use Planning and Development Control: Planning for Air Quality¹⁸

4.1 Local Planning Policy

4.1.1 Local Plan

Policy EN15: Air Quality in the Reading Local Plan¹⁹ states:

“Development should have regard to the need to improve air quality and reduce the effects of poor air quality.

i. Development that would detrimentally affect air quality will not be permitted unless the effect is to be mitigated. The following criteria should be taken into account:

- *Whether the proposal, including when combined with the cumulative effect of other developments already permitted, would worsen air quality;*
- *Whether the development is within, or accessed via, an Air Quality Management Area; and*
- *Whether it can be demonstrated that a local worsening in air quality that would not detrimentally affect human health or the environment would be offset by an overall improvement in air quality, for instance through reduction in the need to travel.*

ii. Where a development would introduce sensitive uses (such as residential, schools and nurseries, hospitals, care facilities) into, or intensify such uses within, an Air Quality Management Area, detrimental effects on that use will be mitigated. Mitigation measures should be detailed in any planning application. If there are significant detrimental effects that cannot be mitigated, the application should be refused.

iii. Where required, planning obligations will be used to secure contributions to measures to tackle poor air quality or for air quality monitoring.”

4.1.2 Reading Borough Council Air Quality Action Plan

Reading Borough Council’s Air Quality Action Plan (AQAP)²⁰ sets out measures that will be undertaken to improve air quality between 2024 – 2029. The report sets out six key priorities for action:

- Priority 1 – reduce road NO_x & PM emissions throughout Reading, with emphasis placed on reducing emissions on Reading’s Inner Distribution Road (IDR);
- Priority 2 – reduce exposures of individuals and locations where vulnerable people (children, elderly and those with cardiovascular disease) live, work or visit;

¹⁷ Stooling et al, 2024. IAQM Guidance on the Assessment of Dust from Demolition and Construction, Institute of Air Quality Management, London. <http://iaqm.co.uk/guidance/>

¹⁸ Moorcroft and Barrowcliffe et al., 2017. Land-use Planning & Development Control: Planning for Air Quality. v1.2. Institute of Air Quality Management, London. <http://iaqm.co.uk/guidance/>

¹⁹ https://images.reading.gov.uk/2019/12/Local_Plan_Adopted_November_2019.pdf

²⁰ https://images.reading.gov.uk/2024/05/Reading-AQAP-2024-2029_-Final.pdf

- Priority 3 – encourage, enable and support people and businesses to shift from high polluting to zero emission transport or energy options;
- Priority 4 – inform and educate people on the financial, environmental and health benefits of active travel, modal shift and reducing emissions through our daily lives;
- Priority 5 – inform, educate and enforce compliance (where necessary) on domestic wood burning regulations, to reduce local PM_{2.5} emissions; and
- Priority 6 – improve our monitoring network and planning requirements to support other projects and ensure new developments align with the aims of this AQAP.

4.1.3 Climate Emergency Declaration and Strategy 2020 – 2025

Reading Borough Council set out their Climate Emergency Strategy in 2020 and it contains the actions required between 2020 and 2025 to work towards the objective of a net zero carbon Reading by 2030²¹. It included the following actions to help decrease air pollutant emissions:

- T13: Develop a zero-emission vehicle strategy for the Borough
- T14: Decarbonise the Council Vehicle Fleet
- T15: Increase Public Electric Vehicle Charging Points
- T16: Increase Zero Emission Vehicles Uptake
- T18: Planning Policy for EV Charging in new properties
- T19: Reduce emissions from the Taxi Fleet; and
- T20: Improve Electric Vehicle Charging Infrastructure

²¹ <https://readingcan.org.uk/wp-content/uploads/2020/10/our-plan-READING-CLIMATE-EMERGENCY-STRATEGY-2020-25-Final.pdf>

5 Methodology

5.1 Assessment Criteria

A summary of the air quality objectives (AQOs) relevant to the proposed development, as set out in the UK Air Quality Strategy²² and Air Quality Standards Regulations 2010 (as amended by the Environment (Miscellaneous Amendments) (EU Exit) Regulations 2020²³), is presented in Table 1 below.

Table 1: UK Air Quality Objectives for NO₂ and PM₁₀ and target for PM_{2.5}

Pollutant	Concentration	Measured as
NO ₂	40 µg/m ³	Annual mean
	200 µg/m ³	Hourly mean not to be exceeded more than 18 times per year (99.8 th percentile)
PM ₁₀	40 µg/m ³	Annual mean
	50 µg/m ³	24 hour mean not to be exceeded more than 35 times a year (90.4 th percentile)
PM _{2.5}	20 µg/m ³	Annual mean

In January 2023, legally binding PM_{2.5} Annual Mean Concentration Target (AMCT) were prescribed in the Environmental Targets (Fine Particulate Matter) (England) Regulations 2023²⁴ and also published in the Environmental Improvement Plan²⁵. The PM_{2.5} AMCT to be achieved by the end of 2040 are:

- Annual average of 10 µg/m³ not to be exceeded at any monitoring station.
- Population exposure at least 35% less than in 2018.

The Environmental Improvement Plan also includes an interim target of 12 µg/m³ to be achieved by the end of January 2028.

Analysis of long-term monitoring data²⁶ suggests that if the annual mean NO₂ concentration is less than 60 µg/m³ then the one-hour mean NO₂ objective is unlikely to be exceeded where road transport is the main source of pollution; this concentration has been used in this assessment to screen whether the one-hour mean objective is likely to be achieved. Similar to NO₂, a PM₁₀ annual mean below 32 µg/m³ is used to screen whether the 24-hour PM₁₀ mean objective is likely to be achieved.

As defined by the regulations, the AQOs for the protection of human health are applicable outside of buildings (or other natural or man-made structures above or below ground) and where members of the public are regularly present. AQOs do not apply in

²²Department of the Environment, Transport and the Regions in Partnership with the Welsh Office, Scottish Office and Department of the Environment for Northern Ireland, 2007. The Air Quality Strategy for England, Scotland, Wales, Northern Ireland. HMSO, London.

²³ Statutory Instrument 2020, No. 000, The Environment (Miscellaneous Amendments) (EU Exit) Regulations 2020.

²⁴ Statutory Instrument 2023, No. 96, The Environmental Targets (Fine Particulate Matter) (England) Regulations 2023.

²⁵ Defra, 2023. Environmental Improvement Plan 2023. Available from:

<https://www.gov.uk/government/publications/environmental-improvement-plan/environmental-improvement-plan-2023-executive-summary>

²⁶ Defra, 2022. Local Air Quality Management Technical Guidance (England) 2022 (TG22). HMSO.

workplace locations, to internal air or where people are unlikely to be regularly exposed (i.e., centre of roadways). Guidance on where the AQOs should and should not apply is provided within LAQM.TG (22), as detailed in Table 2.

Table 2: Locations where the AQOs should and should not generally apply

Averaging Period	Objectives Should Apply at	Objectives Should Generally Not Apply at
Annual mean	All locations where members of the public might be regularly exposed. Building façades of residential properties, schools, hospitals, care homes etc.	Building façades of offices or other places of work where members of the public do not have regular access. Hotels, unless people live there as their permanent residence. Gardens of residential properties.
24-hour mean	All locations where the annual mean objective would apply, together with hotels. Gardens of residential properties.	Kerbside sites (as opposed to locations at the building façade), or any other location where public exposure is expected to be short-term.
1-hour mean	All locations where the annual mean and: 24 and 8-hour mean objectives apply. Kerbside sites (for example, pavements of busy shopping streets). Those parts of car parks, bus stations and railway stations etc. which are not fully enclosed, where members of the public might reasonably be expected to spend one hour or more. Any outdoor locations where members of the public might reasonably expect to spend one hour or longer.	Kerbside sites where the public would not be expected to have regular access.

5.1.1 Air Quality Objectives Applicable to the Proposed Development

Using these recommendations, the annual mean, 24-hour mean and 1-hour mean objectives will all apply to this development.

5.2 Baseline

The baseline air quality within in the vicinity of the site was established based on review of relevant monitoring data. Data was obtained from the following sources:

- Air quality monitoring conducted by Reading Borough Council²⁷
- National background pollution maps published by Defra²⁸. These cover the whole country on a 1x1 km grid

5.3 Operational Impacts

5.3.1 Road traffic emissions

Emissions associated with vehicles flows generated by the proposed development were assessed following IAQM guidance²⁹. The guidance provides indicative criteria for when an air quality assessment might be required:

- A change of Light Duty Vehicles (LDVs) flows of more than 100 Annual Average Daily Traffic (AADT) within or adjacent to an AQMA or more than 500 AADT elsewhere
- A change of Heavy-Duty Vehicles (HDVs) flows of more than 25 AADT within or adjacent to an AQMA or more than 100 AADT elsewhere.

If traffic from a development exceeds these levels, then it does not necessary mean that a detailed modelling assessment is necessary, only that air quality impacts of traffic require more detailed consideration.

Traffic flows associated with the proposed development were compared against the IAQM criteria to determine whether they would result in significant increases in traffic on the local road network.

²⁷ https://images.reading.gov.uk/2024/05/ReadingBC_ASR_2023.pdf

²⁸ Defra, 2019. 2018 Based Background Maps for NO_x, NO₂, PM₁₀ and PM_{2.5}. Available from : <https://iaqm.defra.gov.uk/review-and-assessment/tools/background-maps.html>

²⁹ Moorcroft and Barrowcliffe et al., 2017. Land-use Planning & Development Control: Planning for Air Quality. v1.2. Institute of Air Quality Management, London.

6 Baseline Assessment

6.1 Local Pollutant Sources and Concentrations

Local authorities are required to periodically review and assess the current and future quality of air in their areas. Where it is determined that an air quality objective is not likely to be met, the authority must designate an AQMA and produce an AQAP.

6.1.1 Nitrogen Dioxide

Reading Borough Council operates both automatic and passive diffusion tube monitoring of air quality at a number of locations within its jurisdiction. No exceedances of the NO₂ objectives were identified in the district in 2022.

A summary of the most recent available monitoring data at sites closest to the proposed site, taken from the latest Annual Status Report (ASR)³⁰ published by Reading Borough Council are presented in

³⁰ https://images.reading.gov.uk/2024/05/ReadingBC_ASR_2023.pdf

Table 3 and shown in Figure 3, with distance markers to provide more context for the proximity of monitoring sites to the development.

Figure 3: Reading Borough Council Monitoring locations closest to the site

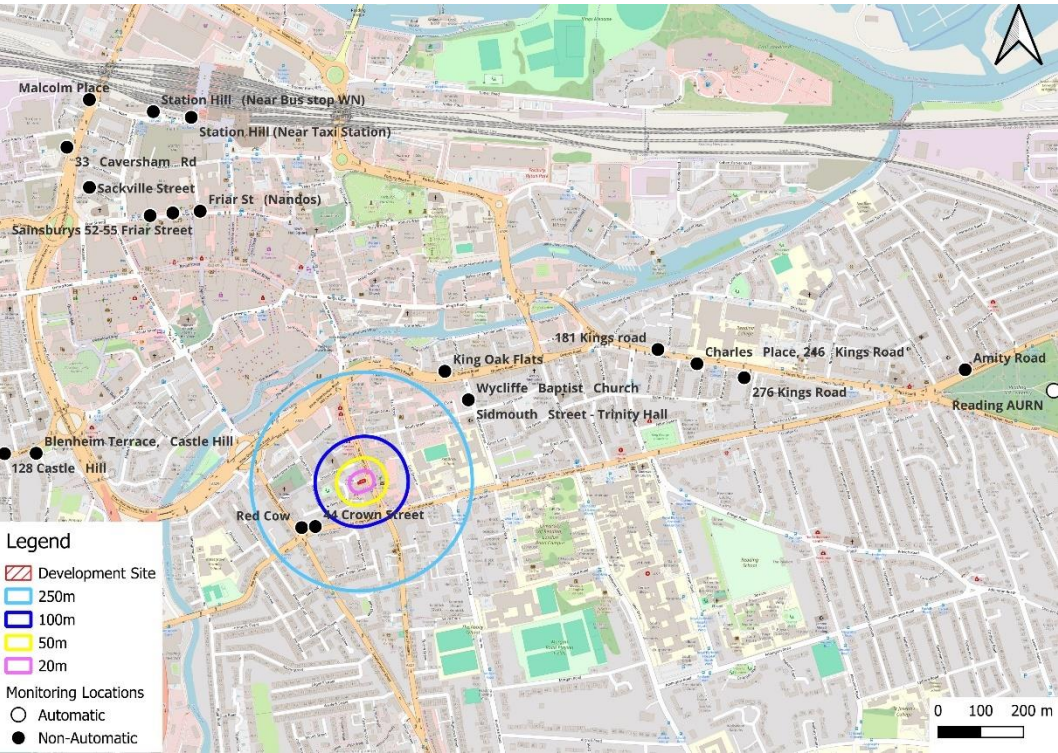


Table 3: Measured NO₂ concentrations at monitoring locations closest to the development site

Site name	Site Type	NO ₂ Annual Mean (µg/m ³)				
		2018	2019	2020	2021	2022
Reading AURN*	UB	26	22	15	20	23
RD1 Caversham Rd*	R	40	35	25	26	27
44 Crown Street	R	34	29.4	22.3	26.8	24.2
Red Cow	R	37.6	31.4	24.5	28.7	26.9
Wycliffe Baptist Church	R	37	39.2	28.5	33.3	31.5
Sidmouth Street – Trinity Hall	R	37	34	23.2	25.2	25.2
King Oak Flats	R	32.1	27.9	20.1	24.1	22.5
181 Kings Road	R	N/A	34.9	27.9	35.2	32.7
Blenheim Terrace, Castle Hill	R	33	34.1	26.8	29.8	27.6
Charles Place, 246 Kings Road	R	N/A	40.8	28.2	30.6	32.1
128 Castle Hill	R	42.4	38.6	26	32.2	30.3
Objective		40				

UB = Urban Background, R = roadside, * = Automatic monitoring site. Exceedances of annual average AQO highlighted in bold.

Measured annual mean NO₂ concentrations along the A4155 in Reading at the 128 Castle Hill monitoring site and along the Caversham Road at the RD1 monitoring site exceeded the relevant AQOs in 2018. In 2019, measured annual mean NO₂ concentrations along the King's Road at the Charles Place, 246 Kings Road monitoring site exceeded the relevant AQO. Air quality at all sites is seen to improve considerably during the period 2018 - 2022 and measured concentrations at all monitoring locations shown were comfortably below the AQO in 2022. Therefore, at the 104 London Street site and in the immediate proximity annual mean NO₂ concentrations are likely to be substantially below the objective. This is in accordance with the Council's latest Air Quality Annual Status Report which states that the majority of the AQMA does not exceed the annual mean NO₂ objective.

As expected, concentrations are lower in 2020 and 2021 due to the impact of the Covid 19 pandemic and have remained low in 2022.

Measured annual mean NO₂ concentrations at the diffusion tube site in 2018-2022 were below 60 µg/m³, which indicates that the hourly mean objective was unlikely to have been exceeded at the diffusion tube monitoring sites.

6.1.2 Particulates (PM₁₀ and PM_{2.5})

Reading Borough Council conducts monitoring of PM₁₀ at all four of its automatic monitoring sites. A summary of the most recent available monitoring data at the closest two sites to the development is provided in Table 4. PM_{2.5} is also monitored at one monitoring site in Reading. The most recent available monitoring data for this pollutant is also provided in Table 4. No exceedances of the relevant AQOs have been recorded in Reading between 2018-2022.

Table 4: Measured PM₁₀ and PM_{2.5} concentrations at monitoring locations closest to the development site

Site name	Pollutant	Site Type	Annual Mean (µg/m ³)				
			2018	2019	2020	2021	2022
Reading AURN*	PM ₁₀	UB	13	13	15	15	16
RD1 Caversham Rd*	PM ₁₀	R	24	24	20	20	25
Reading AURN*	PM _{2.5}	UB	7	8	8	8	8

UB = Urban Background, R = roadside, * = Automatic monitoring site. Exceedances of annual average AQO highlighted in bold.

6.1.3 Background Mapped Data

Background concentrations are those levels that would be observed away from specific sources such as roads and industry. Background pollutant concentration maps are available from the Defra LAQM website³¹. These 2018 baseline, 1 kilometre grid resolution maps are derived from a complex modelling exercise that takes into account emissions inventories and measurements of ambient air pollution from both automated and non-automated sites. The projections in the 2018 LAQM background maps are based on assumptions which were current before the Covid-19 outbreak in the UK. In consequence these maps do not reflect short or longer term impacts on emissions in 2020 and beyond resulting from behavioural change due to the national or local lockdowns.

The estimated mapped background NO₂, PM₁₀ and PM_{2.5} concentrations at the development site are presented for the current year (2024) and estimated first year of full site occupation (2025)³² in Table 5.

Table 5: Defra's Projected Mapped Annual Mean Background Concentrations (µg/m³)

Year	Grid Ref	Annual Mean (µg/m³)		
		NO ₂	PM ₁₀	PM _{2.5}
2024	471500, 172500	15.9	14.5	9.1
2025		15.4	14.4	9.1
UK AQO/Target		40	40	20

The background concentrations are substantially below the NO₂, PM₁₀ and PM_{2.5} objectives and targets for 2024, and air quality is expected to improve in future years. It is therefore expected that background concentrations will be below the relevant AQOs during the operational phase.

³¹ LAQM Background Mapping data for Local Authorities, available at: <https://uk-air.defra.gov.uk/data/laqm-background-maps?year=2018>

³² Given the refurbishment is to be completed before the end of 2024, it has been assumed that 2025 would be the earliest first full year of occupation at the site.

6.2 Assessment of Baseline Data

Measured concentrations at locations closest to the development site in 2022 indicate that the AQOs are not expected to be exceeded. The site is within 100m of the A4 and approximately 250m south of the larger main road of the A327. The road adjacent to the site, London Street, is one-way, except for buses. No other significant traffic emission sources are in the immediate vicinity of the site.

Due to the small size of the site, the rapid fall-off of concentrations away from an emissions source is not expected to affect the variation in in NO₂, PM₁₀ and PM_{2.5} concentrations around the site. The major road link of the A327 is the largest source of emissions in the immediate vicinity of the site, though the King Oak Flats monitoring site, situated on the A327, has measured NO₂ levels well below the AQOs. The nearby Red Cow and 44 Crown Street monitoring stations, situated adjacent to the A4, have also measured NO₂ well below the AQOs. Therefore, concentrations across the whole development site are expected to be comfortably below the AQOs.

Pollutant concentrations at background and roadside locations are predicted to decrease in future years due to the gradual renewal of the road transport fleet with less polluting models and implementation of national policies, such as the intention to ban new combustion engine private vehicle sales by 2030^{33, 34}, as well as regional policies. The concentrations at the site would therefore be expected to be below the relevant AQOs prior to the development taking place.

³³ <https://www.gov.uk/government/news/government-takes-historic-step-towards-net-zero-with-end-of-sale-of-new-petrol-and-diesel-cars-by-2030>

³⁴ Air Quality Consultants, 2020. Nitrogen Oxides Trends in the UK 2013 to 2019. January 2020. Available at: <https://www.aqconsultants.co.uk/resources>. Air Quality Consultants (AQC) published a study looking at trends in nitrogen oxides in the UK between 2013 to 2019. The study concluded that there is an overall reduction trend in NOx concentrations that have continued through 2019 'with NOx concentrations at roadside sites have reduced by an average of 5.14% per year since 2013'.

7 Operational Phase Assessment

7.1 Impact of the development

The proposed work at the development site does not include any construction or demolition work as it is a refurbishment from office space to a small HMO. One additional car parking space will be created as part of the development.

The addition of one car parking space is not expected to create any significant impact on air quality, as one space equates to a maximum increase of 3 Average Annual Daily Trips (AADT). This is well below the >100 AADT for light-duty vehicles within an AQMA threshold for dispersion modelling, as set out in the IAQM guidance.

There will be no on-site energy generation as the site is fully electric.

7.2 Site Suitability

As detailed in section 6.2, measured concentrations at nearby roadside monitoring sites have been below the AQOs since 2020. Background concentrations at the development site are also well below the AQOs, and therefore no exceedances of the relevant objectives would be expected at the site during the operational phase.

Concentrations at the site would be expected to remain below AQOs levels as the development work is not expected to result in any significant increases in road traffic volume. This would also be more than offset by the improvement in vehicle emissions³⁵,³⁶. The site is therefore considered suitable for the proposed development without the need for specific mitigation measures in relation to operational air quality impacts.

7.1 Mitigation Measures

The air quality objectives are expected to be met at the proposed site, and no significant effects of the development operational traffic on local air quality are expected. Air quality mitigation measures to protect future site users from poor air quality and to reduce the impacts of the development on local air quality are therefore not required.

³⁵ Air Quality Consultants, 2020. Performance of Defra's Emission Factor Toolkit 2013-2019. February 2020. Available at: <https://www.aqconsultants.co.uk/resources>. The study concludes that NOx concentrations are most likely to decline more quickly in the future, on average, than predicted by the EFT.

³⁶ Air Quality Consultants, 2020. Comparison of EFT v10 with EFT v9. September 2020. Available at: <https://www.aqconsultants.co.uk/resources>. The study concludes that EFT v10 generally predicts lower NOx emissions than EFT v9. It also predicts a greater reduction in emissions over time into the future.

8 Summary

This report provides an air quality assessment for the proposed development at 104 London Street, Reading.

The proposed development falls within the administrative boundary of Reading Borough Council, which has declared an air quality management area (AQMA). The development site falls within this AQMA.

Measured concentrations at roadside monitoring sites in the urban area of Reading, which are the closest locations for which air pollution monitoring data is available show that concentrations have been below the air quality objectives in the most recent years and therefore no exceedances of the relevant objectives would be expected at the site.

The proposed development is not expected to result in any significant change in daily vehicular trips to the site during the operational phase. Traffic emissions impacts and associated effects on local air quality are therefore considered to be not significant.

The development plans do not include any energy generation, and therefore there will be no substantial combustion processes or related emissions.

Overall, it is concluded that there are no air quality constraints to the proposed development and the proposed development complies with regional and local policies.



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