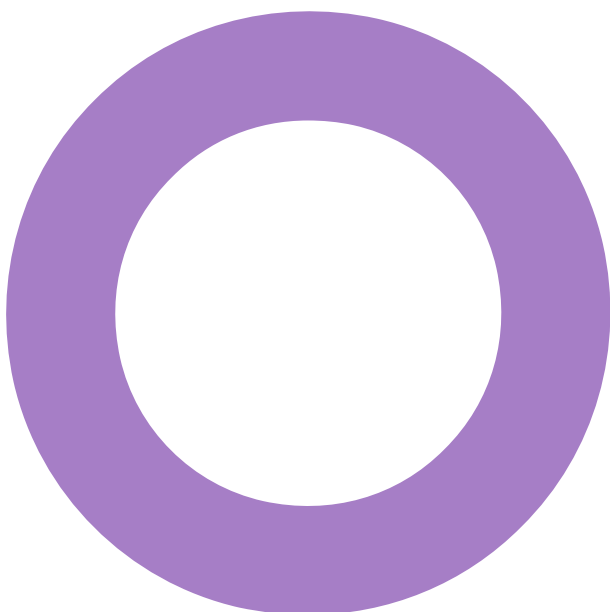


Project Taverna. Manchester.

Manchester City Football Club Ltd.

AIR QUALITY
AIR QUALITY ASSESSMENT

REVISION 02 – 05 MARCH 2026



Audit sheet.

Rev.	Date	Description of change / purpose of issue	Prepared	Reviewed	Authorised
00	30/01/2026	First Draft	TB	JJ	LB
01	27/02/2026	First Issue	TB	JJ	JJ
02	05/03/2026	Second Issue	TB	JJ	JJ

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Executive summary.

Hoare Lea have been commissioned by Manchester City Football Club Ltd to undertake an Air Quality Assessment to support the planning application for the proposed Immersive Events Space, located on Collar Site at the Etihad Campus, Manchester, M11 3FF (the 'Application Site').

The proposals comprise the construction of a modular Immersive Events Space with Gross Internal Area (GIA) of circa 3,000 m², with associated landscaping and infrastructure (the 'Proposed Development').

The baseline assessment has shown that the Application Site is located within the Manchester Air Quality Management Area (AQMA). There were no exceedances of the 1-hour mean or annual mean nitrogen dioxide (NO₂) Air Quality Objectives (AQOs) recorded at nearby monitoring in the baseline year of 2024. Additionally, 2024 Defra predicted background concentrations are below the relevant AQOs for NO₂ and particulate matter (PM₁₀ and PM_{2.5}) concentrations.

The impacts of demolition and construction work on dust soiling and ambient fine particulate matter concentrations have been assessed and appropriate mitigation measures have been identified. Provided these mitigation measures are implemented and included within a Dust Management Plan, for example through a planning condition, the residual impacts are considered to be not significant.

The traffic generated by the Proposed Development has been screened against the criteria set-out in the Environmental Protection United Kingdom (EPUK) and Institute of Air Quality Management (IAQM) planning guidance to determine the need for a detailed assessment. This screening assessment has shown that the potential impact of additional road traffic on local air quality is considered insignificant and a detailed assessment is not required.

The proposed energy strategy is all electric, utilising zero combustion emission technology. As no combustion sources are proposed for the primary energy supply, no local air quality impacts are anticipated and a detailed assessment of impacts of combustion emissions from the energy plant is not required.

A qualitative Site Suitability Assessment showed that pollutant concentrations are in compliance with the 1-hour mean and annual mean NO₂ AQOs. Therefore, the Application Site is considered suitable for leisure use without the inclusion mitigation measures.

Based on the assessment results, the Application Site is considered suitable for the Proposed Development without the inclusion of mitigation, air quality should not be considered as a constraint to the planning consent and the Proposed Development conforms to the principles of the National Planning Policy Framework and the Places for Everyone Joint Development Plan and the Manchester Local Development Framework – Core Strategy.

1. Introduction.

Hoare Lea have been commissioned by Manchester City Football Club Ltd to undertake an Air Quality Assessment to support the planning application for the proposed Immersive Events Space, located on Collar Site at the Etihad Campus, Manchester, M11 3FF (the 'Application Site').

1.1 Proposed development.

The proposals comprise the construction of a modular Immersive Events Space with Gross Internal Area (GIA) of circa 3,000 m², with associated landscaping and infrastructure (the 'Proposed Development').

The proposed energy strategy is all electric, utilising zero combustion emission technology. As no combustion sources are proposed for the primary energy supply, no local air quality impacts are anticipated and a detailed assessment of impacts of combustion emissions from the energy plant is not required.

1.2 Application site description and location.

The Application Site is located within Manchester City Centre (MCC) administrative area at the approximate National Grid Reference (NGR): X 386900 Y 398700. The Application Site is bound by the Metrolink line to the north, Alan Turing Way to the east, Gibbon Street to the south, and Loverose Street to the west.

The Application Site is currently used as a temporary construction compound for the North Stand Expansion scheme.

Figure 1 illustrates the location of the Application Site and the Manchester Air Quality Management Area (AQMA).

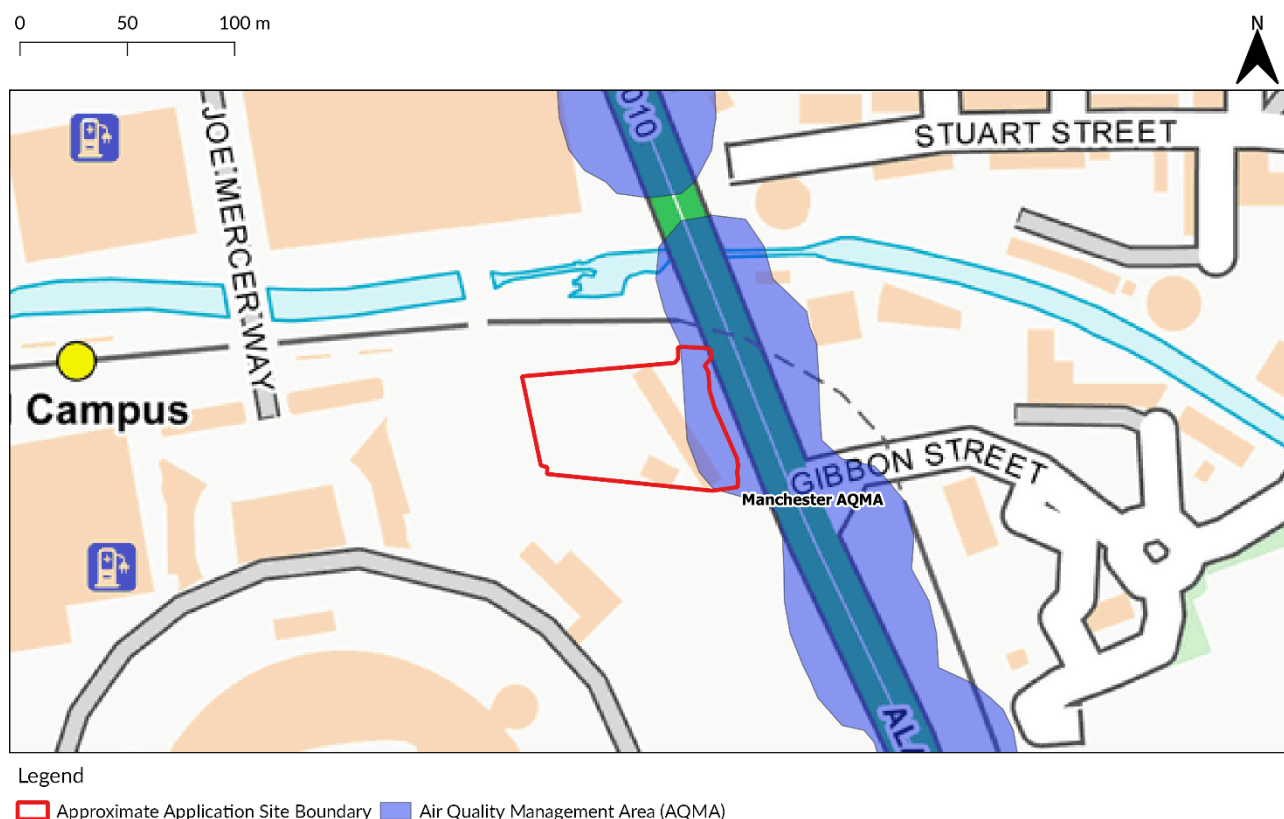


Figure 1: Approximate location of the Application Site and the Manchester AQMA. Contains OS Data © Crown Copyright and Database rights 2025.

1.3 Scope of assessment.

An email detailing the proposed methodology for the Air Quality Assessment was provided to MCC Environmental Health Officer (EHO) on the 27th of January 2026. A response from the MCC EHO was received on the 2nd of February 2026. A copy of the correspondence with MCC EHO has been included in Appendix 1.

A summary of the scope of the assessment includes:

- Review of national and local policy;
- Determination of baseline scenario, using MCC monitoring data;
- Assessment of potential air quality impacts during the construction phase;
- Assessment of potential air quality impacts during the operational phase;
- An assessment of the suitability of the Application Site for its proposed Immersive Events Space; and
- Identification of required mitigation measures, where necessary.

2. Legislation, policy and guidance documents.

2.1 Legislation.

The following legislation has informed the Air Quality Assessment and is detailed further in the Appendix 2:

- The Environment Act^{1,2}
- The Air Quality Strategy³
- The Air Quality (England) Regulations 2000⁴
- The Air Quality (England) (Amendment) Regulations 2002⁵
- The Air Quality Standards Regulations 2010⁶
- The Air Quality Standards (Amendment) Regulations 2016⁷
- The Environmental Improvement Plan (EIP)⁸
- Part III of the Environmental Protection Act (EPA) 1990 (as amended)⁹
- The Clean Air Strategy (CAS)¹⁰
- Part F of the Building Regulations (2021)¹¹

2.2 Policy.

The following policy has informed the Air Quality Assessment and is detailed further in the Appendix 2:

- The National Planning Policy Framework (NPPF) 2024¹²
- The Planning Practice Guidance (PPG)¹³

2.3 Guidance.

The following guidance has informed the Air Quality Assessment and is detailed further in the Appendix 2:

- Defra's Local Air Quality Management Technical Guidance¹⁴ - This guidance will be referred to as 'LAQM.TG(22)' throughout this report.
- The Environmental Protection UK (EPUK) and the Institute of Air Quality Management's (IAQM) Air Quality Guidance for Planning¹⁵ - This guidance will be referred to as 'EPUK and IAQM planning guidance' throughout this report.
- The IAQM 'Guidance on the assessment of dust from demolition and construction'¹⁶ - This will be referred to as 'IAQM construction guidance' throughout this report.

2.4 Local policy and guidance.

In addition to the documents outlined in the previous sections above, Table 1 contains a summary of the local Policy and Guidance which are relevant to this assessment.

Table 1: Local policy and guidance documents.

Local policy and guidance document	Summary notes
Places for Everyone Joint Development Plan	Places for Everyone Joint Development Plan ¹⁷ was adopted in 2024 and runs through until 2039. The Joint Development Plan sets out the bold and ambitious vision for the Greater Manchester (GM) region until 2039. It also contains detailed policies for development control purposes. The relevant policies for this assessment are: <ul style="list-style-type: none">• Policy JP-S5: Clean Air; and,• Policy JP-C1: An Integrated Network.

Local policy and guidance document	Summary notes
Manchester Local Development Framework – Core Strategy	<p>Manchester Local Development Framework – Core Strategy¹⁸ was adopted in 2012. It is the key document in Manchester's Local Development Framework and covers a period of 15 years from 2012 to 2027. It describes Manchester today and outlines the Council's vision for Manchester in 2027 along with the planning policies which will be used to deliver that vision. It also contains detailed policies for development control purposes. The relevant policies for this assessment are:</p> <ul style="list-style-type: none"> • Policy EN 16 – Air Quality; • Policy CC 5 – Transport; and, • Policy DM 1 – Development Management.
Greater Manchester Transport Strategy 2040	<p>The Greater Manchester Transport Strategy¹⁹ was published in 2017, updated in 2021 and runs through until 2040. The 2040 Transport Strategy supports GM's spatial planning and the Greater Manchester Local Industrial Strategy, as sustainable growth will be driven by improved connectivity. The 2040 Transport Strategy details how air quality can be improved by reducing transport emissions through planning and vehicle fleet updates.</p>
Greater Manchester Clean Air Plan	<p>The GM Clean Air Plan²⁰ has been designed to reduce nitrogen dioxide (NO₂) pollution to legal limits across the city-region by 2026. It focuses on improving air quality without introducing a Clean Air Zone charging scheme, instead prioritising targeted upgrades, cleaner transport, and local traffic interventions. The plan aims to protect public health, accelerate the shift to low-emission vehicles, and address road-based pollution in the shortest possible time. The key measures outlined within the plan are:</p> <ul style="list-style-type: none"> • Bus Investment; • Local Traffic Measures; • Upgrading the Local Vehicle Fleet; • Implementation of the Clean Air Zone; • Monitoring and Compliance; and, • Taxi and private hire vehicle upgrades.

2.5 Air quality objectives.

The Air Quality Objectives (AQOs) for NO₂ and particulate matter (PM₁₀ and PM_{2.5}) are set out in Table 2. The AQOs for NO₂, PM₁₀ and PM_{2.5} were to have been achieved by 2005, 2004 and 2020 respectively and continue to apply in all future years thereafter.

The AQOs apply at locations where members of the public are likely to be regularly present and exposed over the averaging period of the AQO. Examples of where the annual mean AQOs should apply are provided in the LAQM.TG(22), and include building façades of residential properties, schools, hospitals. The annual mean AQOs are not relevant for the building façades of offices or other places of work where members of the public do not have regular access, as well as kerbsides or gardens.

The 24-hour mean AQO for PM₁₀ is considered to apply at the same locations as the annual mean AQO, as well as in gardens of residential properties and at hotels.

The 1-hour mean AQO for NO₂ also applies wherever members of the public might regularly spend 1-hour or more, including outdoor eating locations, pavements of busy shopping streets, car parks and bus stations which are not fully enclosed. The 1-hour mean AQO does not apply at kerbside sites where the public do not have regular access.

Table 2: Air Quality Objectives for NO₂, PM₁₀ and PM_{2.5}.

Pollutant	Time Period	Objective
Nitrogen Dioxide (NO ₂)	1-hour Mean	200 µg/m ³ Not to be exceeded more than 18 times a year
	Annual Mean	40 µg/m ³
PM ₁₀	24-hour Mean	50 µg/m ³ Not to be exceeded more than 35 times a year
	Annual Mean	40 µg/m ³
PM _{2.5}	Annual Mean	20 µg/m ³
Notes: Measured gravimetrically *The time period in LAQM.TG(22) states "Work towards reducing emissions/concentrations of fine particulate matter (PM _{2.5})"		

In December 2025, Defra updated the EIP PM_{2.5} interim targets. They are as follows:

- An annual mean concentration target of 10 micrograms per cubic metre to be achieved by December 2030.
- A population exposure reduction target of 30% compared to 2018 to be achieved by December 2030.

This target has been put in place to focus on reducing concentrations of, and exposure to, PM_{2.5}.

3. Methodology of assessment.

3.1 Existing air quality in the study area.

A baseline air quality review was undertaken to determine the existing air quality in the vicinity of the Application Site.

This desk-top study was undertaken using the following sources:

- Air quality data for MCC, including a review of the Greater Manchester Combined Authority (GMCA) air quality reports²¹ and local monitoring data.
- The UK Pollutant Release and Transfer Register²².
- Background pollution maps from Defra's Local Air Quality Management (LAQM) website²³.
- Pollution Inventory from the Environment Agency²⁴.
- The UK Ambient Air Quality Interactive Map²⁵.
- Ordnance Survey data and Aerial photography from Google Maps.

3.2 Construction phase impacts.

3.2.1 Construction dust assessment.

The assessment of construction dust impacts has been undertaken in line with the methodology outlined in the IAQM construction guidance. As there are no permanent structures at the Application Site, demolition activities are not required. Activities on the proposed construction site have been divided into three types to reflect their different potential impacts. These are:

- Earthworks
- Construction
- Trackout

The risk of dust emissions was assessed for each activity with respect to:

- Potential loss of amenity due to dust soiling;
- The risk of health effects due to a significant increase in exposure to PM₁₀; and
- The risk of ecological impacts due to a significant increase in exposure to dust.

The first stage of the assessment involves screening to determine whether there are any sensitive receptors within the threshold distances defined by the IAQM construction guidance. A detailed assessment of the impact of dust from construction sites will be required where:

- A 'human receptor' is located within 250 m of the boundary of the Application Site or within 50 m of the route(s) used by construction vehicles on the public highway, up to 250 m from the Application Site entrance.
- An 'ecological receptor' is located within 50 m of the boundary of the Application Site or within 50 m of the route(s) used by construction vehicles on the public highway, up to 250 m from the Application Site entrance.

The magnitude of dust emission for each activity is determined on the basis of the guidance, indicative thresholds, information available relating to the project and expert judgement. The risk of dust effects arising is based upon the relationship between the dust emission magnitude and the sensitivity of the area. The risk of impact is then used to determine the mitigation requirements.

3.2.2 Construction emissions assessment.

3.2.2.1 Construction traffic emissions screening.

The screening assessment has been undertaken with reference to the following EPUK and IAQM planning guidance indicative criteria:

- a change of Light Duty Vehicle (LDV) flows of more than 100 Annual Average Daily Traffic (AADT) (within an AQMA); and/or

- a change of Heavy Duty Vehicle (HDV) flows of more than 25 AADT (within an AQMA).

3.2.2.2 NRMM emissions screening.

Non-Road Mobile Machinery (NRMM) refers to mobile machines, transportable industrial equipment or vehicles which are fitted with an internal combustion engine and not intended for transporting goods or passengers on roads. NRMM emissions have been screened following IAQM construction guidance.

3.3 Operational phase impacts.

3.3.1 Road traffic emissions assessment.

The screening assessment has been undertaken following the EPUK and IAQM planning guidance indicative criteria:

- a change of LDV flows of more than 100 AADT (within an AQMA); and/or
- a change of HDV flows of more than 25 AADT (within an AQMA).

Where these criteria are exceeded, a detailed assessment is required, although the guidance advises that “*the criteria provided are precautionary and should be treated as indicative*”, and “*it may be appropriate to amend them on the basis of professional judgement*”.

Where impacts can be screened out there is no need to progress to a more detailed assessment.

3.3.2 Site suitability assessment.

An assessment has been undertaken to consider the site suitability which refers to the exposure of future occupants of the Proposed Development to existing air quality.

The assessment of site suitability will be assessed qualitatively using monitoring data and Defra predicted background concentrations in the vicinity of the Application Site.

3.4 Assessment of significance.

3.4.1 Construction dust.

The IAQM construction guidance states that the primary aim of the construction phase risk assessment is to identify site specific mitigation that, once implemented, should ensure that there will be no significant effect. Therefore, the assessment has been used to determine an appropriate level of mitigation for the construction phase.

The determination of which mitigation measures are recommended include elements of professional judgement and the professional experience of the consultants preparing this report is set out in Appendix 4.

3.4.2 Operational impacts.

The EPUK and IAQM planning guidance has been used to assess the potential for significant impacts as a result of vehicle emissions from traffic associated with the Proposed Development. The focus of the guidance is to assess traffic emission impacts and advises on how to describe the air quality impacts and their significance.

3.4.3 Site suitability assessment.

To determine the significance of predicted air quality impacts based upon a site suitability assessment, the EPUK and IAQM planning guidance states: “*Where the air quality is such that an air quality objective at the building façade is not met, the effect on residents or occupants will be judged as significant, unless provision is made to reduce their exposure by some means.*”

As the Proposed Development is for an event space, the 1-hour mean AQO for NO₂ is applicable. However, the long-term NO₂ AQO has also been considered for the Proposed Development in order to predict compliance with Part F of the Buildings Regulations (2021).

4. Baseline environment.

This section sets out the available information on air quality in the vicinity of the Application Site.

4.1 Local air quality management review and assessment.

The Application Site is located within the Manchester AQMA, which was declared in 2001 after there were found to be exceedances of the annual mean NO₂ and 24-hour mean PM₁₀ AQOs. This AQMA was later amended in 2007 and 2016 to only include exceedances of the annual mean NO₂ AQO.

It should be noted that the pollutant concentrations recorded in 2020 and 2021 from the most GMCA ASR are lower than previous years as a direct result of reduced traffic levels during the COVID-19 pandemic. As such the pollutant concentrations recorded in 2020 and 2021 are not considered to be representative of 'normal' air quality conditions. Monitoring data from 2024 has been presented and discussed as this is the latest year of available representative monitoring data.

4.2 Local air quality monitoring.

In 2024, the GMCA operated a combined 24 automatic monitoring stations to monitor NO₂, PM₁₀ and PM_{2.5} pollutant concentrations. Following a review of the study area, there were no automatic monitoring stations located within 2 km of the Application Site. As such, none of the automatic monitoring stations within the administrative area is considered representative of conditions at the Application Site.

GMCA operate 383 passive diffusion tubes to monitor NO₂ concentrations in 2024. A review of the most recent monitoring data available indicated that there are three passive diffusion tube monitoring locations within 2 km of the Application Site. Recent monitoring results (2020 to 2024) are shown in Table 3 and the passive diffusion tube monitoring locations are illustrated in Figure 2.

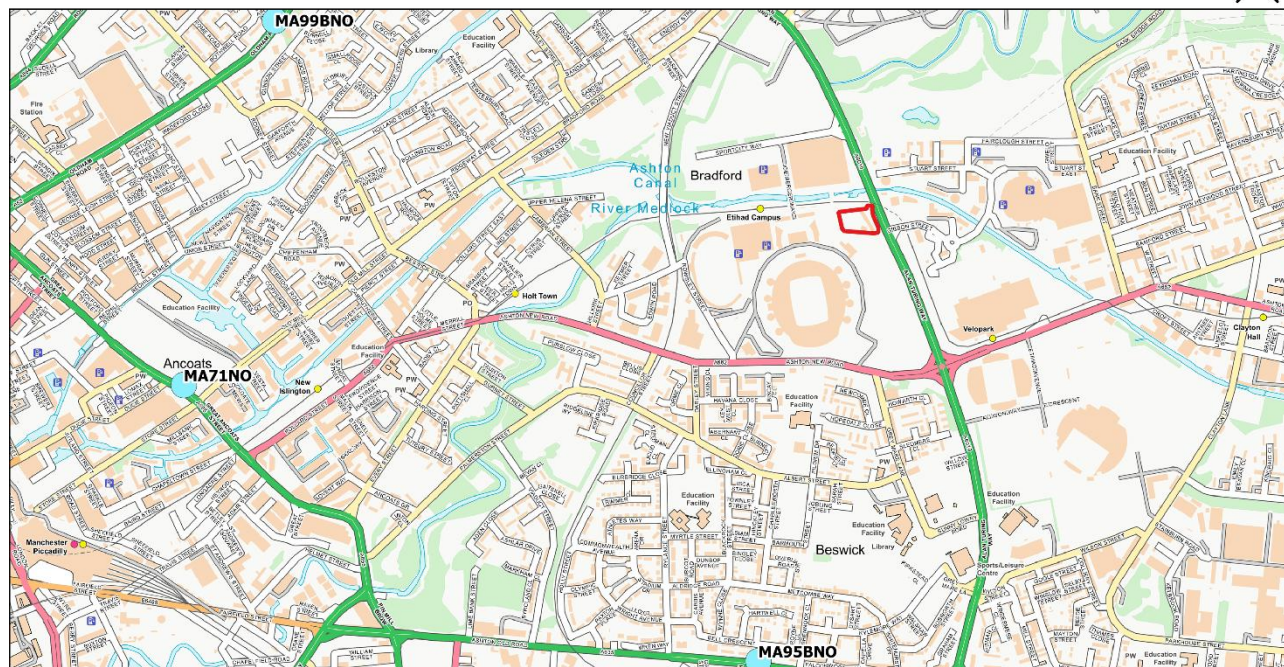
Table 3: Passive diffusion tube monitoring results.

Site ID	Site Type	Distance (km) from site (approx.)	Annual Mean NO ₂ Concentration (µg/m ³)				
			2020	2021	2022	2023	2024
MA95BNO	Roadside	1.2	32	34	34	32	27
MA99BNO	Roadside	1.6	27	33	33	31	28
MA71NO	Roadside	1.8	31	34	34	31	29
Notes: Concentrations in the GMCA ASR rounded to the nearest whole number							

As listed in Table 3 and illustrated in Figure 2, there were no exceedances of the annual mean NO₂ AQO recorded in the last five years of monitoring, at passive diffusion tubes located within 2 km of the Application Site.

As outlined in LAQM.TG(22), an annual mean concentration of 60 µg/m³ or above is often used to indicate a possible exceedance of the 1-hour mean NO₂ AQO. In the last five years of monitoring, none of the passive diffusion tubes within the vicinity of the Application Site have recorded an exceedance of 60 µg/m³ and so no exceedance of the 1-hour mean NO₂ AQO is expected.

0 250 500 m



Legend

- Approximate Application Site Boundary
 Passive Diffusion Tube
- 2024 Annual Mean NO₂ Concentrations (µg/m³)
 10 - 20
 30 - 40
 50 - 60
 20 - 30
 40 - 50
 60 - 99
 0 - 10

Figure 2: Monitoring locations within the vicinity of the Application Site. Contains OS Data © Crown Copyright and Database rights 2025.

4.3 Industrial pollution.

A desk-based review of potential industrial sources using the UK Pollutant Release and Transfer Register and the Pollution Inventory from the Environment Agency identified one potential industrial or waste management source of air pollution within 1 km of the Application Site. However, this source is controlled by an environmental permit and as such, industrial pollution is not anticipated to have a significant on air quality at the Application Site.

4.4 Defra predicted concentrations.

The background concentrations have been obtained from the national maps published by Defra. These estimated concentrations are produced on a 1 km by 1 km grid basis for the whole of the UK. The Application Site falls into grid square X 386500 Y 398500 and the predicted annual mean concentrations for this grid square for NO₂, PM₁₀ and PM_{2.5} are provided in Table 4 for 2024, the most recent year with available monitoring data; and for 2026, the current and earliest anticipated opening year for the Proposed Development. The data in Table 4 has been provided for the 2021 reference year and 2018 reference year, which was predicted prior to the COVID-19 pandemic, in line with the recommendation from the MCC EHO.

Table 4: Predicted background concentrations for grid square X 386500 Y 398500.

Year	Predicted Background Concentration (µg/m³)		
	NO ₂	PM ₁₀	PM _{2.5}
2018 Reference year			
2024	16.4	11.8	7.7
2026	15.5	11.7	7.6
2021 Reference year			
2024	16.3	13.2	7.7
2026	15.2	13.1	7.6

As shown in Table 4, background concentrations are below the relevant AQOs for all pollutants in both the 2021 and 2028 reference years.

4.5 Summary of background data.

The baseline assessment has shown that the Application Site is within the Manchester AQMA.

Monitoring data within the vicinity of the Application Site indicates that no exceedances of the indicative 1-hour mean or annual mean NO₂ AQO have been recorded in the last five years.

There is one industrial source of air pollution in the vicinity of the Application Site. This industrial source is not likely to have a significant effect on the Application Site with regards to air quality.

This is supported by the Defra predicted background concentrations which indicate that the annual mean NO₂, PM₁₀ and PM_{2.5} AQOs are anticipated to be met at the Application Site in 2024 and 2026.

5. Construction phase assessment.

The potential for air quality impacts during the construction of the Proposed Development are assessed in this section.

5.1 Construction phase dust assessment.

The risk of dust impacts is based on the potential dust emissions magnitude and the sensitivity of the area. These two factors are then combined to determine the risk of dust impacts with no mitigation applied. In the absence of any site-specific information, a higher risk category has been applied to represent a worst-case scenario.

5.1.1 Assessment screening.

There are 'human receptors' within 250 m of the Application Site and one sensitive ecological receptor within 50 m of the Application Site boundary or within 50 m of the route(s) used by construction vehicles on the public highway, up to 250 m from the Application Site entrance. Therefore, an assessment of the impacts of construction dust on both human and ecological receptors is required.

5.1.2 Potential dust emission magnitude.

As there are no permanent structures at the Application Site, demolition activities are not required. The potential magnitude of dust emissions from earthworks, construction and trackout have been assessed, as identified in Table 5.

Table 5: Predicted magnitude of dust emissions.

Activity	Magnitude	Justification
Earthworks	Small	The Soil type at the Application Site was reviewed using the application Soilscape ²⁶ which classified the soil type as 'loamy, some clayey' which can be a potentially dusty soil type. The Application Site is generally flat. The total site area for earthworks is <18,000 m ² based on the latest available site plans*. As such, the dust emission magnitude with regards to earthworks has been classed as small.
Construction	Small	The proposals comprise the erection of an event space with a total construction volume between 12,000 – 75,000 m ³ based on the latest available site plans*. The construction materials are likely to primarily involve metal cladding, steel and wood, which have a low potential for dust release. Therefore, despite the volume of construction, given that the Proposed Developments modular nature will minimise on-site construction activities, and the likely materials used means that the dust emission magnitude during construction has been classed as small.
Trackout	Small	Outward trips of HDVs during the construction phase were not available at the time of writing this report. A desk-based review of the Application Site using QGIS and satellite imagery shows that there is a low potential for unpaved roads in the Application Site as the existing ground is developed. Additionally, the soil type analysed using the application Soilscape classified the soil as 'loamy, some clayey' which is a potentially dusty soil type. Due to the length of unpaved roads and the scale of construction activities, the dust emission magnitude regarding trackout has been classed as small.
* Drawing Number: 3679.3-PLA-XX-XX-DR-L-0002, Date: 25/02/2026, Planit I.E Limited		

5.1.3 Sensitivity of the study area.

The sensitivity of the area takes into account the following factors:

- The specific sensitivities of receptors in the area;
- The proximity and number of those receptors;
- In the case of PM₁₀, the local background concentration; and
- Site-specific factors, such as whether there are natural shelters, such as trees or other vegetation, to reduce the risk of wind-blown dust.

Figure 3 illustrates the distance band criteria (sensitivity buffers) from the Application Site boundary.

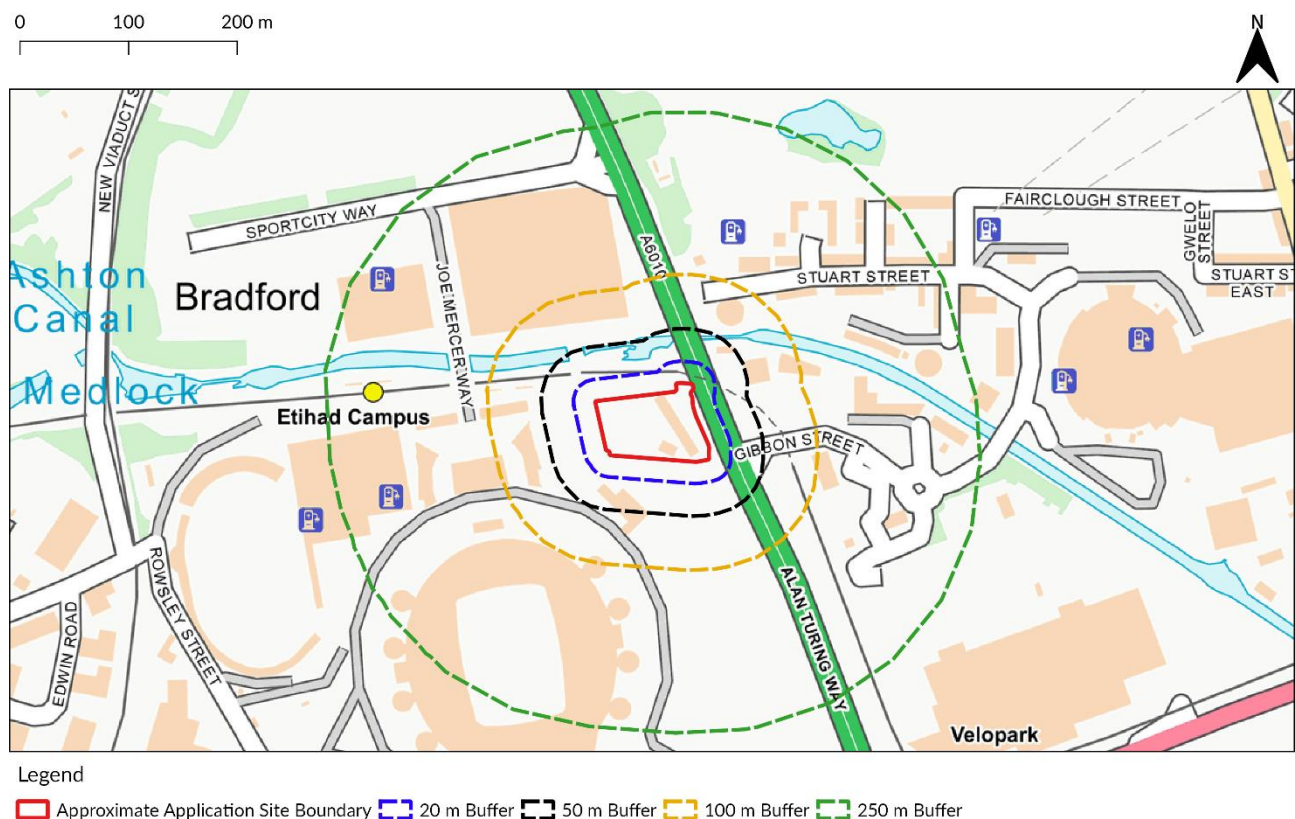


Figure 3: Demolition and construction dust distance band criteria from the Application Site boundary. Contains Ordnance Survey Data © Crown Copyright 2025.

The sensitivity of the area and the factors considered are detailed in Table 6.

Table 6: Sensitivity of the area.

Sensitivity Type	Factors	Sensitivity of Area	
		On – Site Activity	Trackout
Dust Soiling	<p>Following a review of the nearby surround area of the Application Site, using the distance bands included in Figure 3, there are between 10 - 100 medium sensitivity receptors within 20 m of the Application Site boundary in the form of parking spaces for the nearby Etihad Stadium. It should be noted that the parking spaces will only be in used for low to medium frequency. Other receptors up to 250 m will also be considered within this assessment. Therefore, to ensure a robust assessment, the sensitivity of the area surrounding the Application Site has been classified as medium sensitivity with regards to dust soiling for on-site activity.</p> <p>For trackout, the distances are measured within 20 m from the side of the roads up to 250 m of the anticipated routes used by construction traffic from the Application Site. There are between 10 - 100 medium sensitivity receptors within 20 m of the roads used for construction traffic and up to 250 m from the Application Site. Therefore, the sensitivity of the area surrounding the Application Site, with respect to dust soiling for trackout, has been classified as medium.</p>	Medium	Medium
Human Health	<p>The Defra predicted background concentration for PM₁₀ was 13.2 µg/m³ in the baseline year of 2024. There are between 10 - 100 medium sensitivity receptors within 20 m of the Application Site boundary in the form of parking spaces for the nearby Etihad Stadium. It should be noted that the parking spaces will only be in used for low to medium frequency. Other receptors up to 250 m will also be considered within this assessment. As the PM₁₀ concentration is below 24 µg/m³, the sensitivity of the area surrounding the Application Site has been classified as low sensitivity with regards to dust soiling for on-site activity.</p> <p>For trackout, the distances are measured within 20 m from the side of the roads up to 250 m of the anticipated routes used by construction traffic from the Application Site access. There are between 10 - 100 medium sensitivity receptors within 20 m of the roads used for construction traffic and up to 250 m from the Application Site. As the PM₁₀ concentration is below 24 µg/m³, the sensitivity of the area surrounding the Application Site, with respect to human health for trackout, has been classified as low.</p>	Low	Low
Ecology	<p>The Aston Canal Site of Biological Importance (SBI) is located 15 m north of the Application Site boundary and within 20 m of a possible route used by operational vehicles. SBI's such as Aston Canal are non-statutory and as such, are classified as a low sensitivity receptor to the effects of dust deposition, in line with the IAQM guidance. Therefore, the sensitivity of the area to ecological impacts is considered to be low for on-site activity and low for trackout.</p>	Low	Low

5.1.4 Risk of dust impacts

The outcome of the assessments of potential magnitude of dust emissions and the sensitivity of the area are combined to determine the risk of impact. This risk is then used to inform the selection of appropriate mitigation. Table 7 details the risk of dust impacts for demolition, earthworks, construction and trackout activities.

Table 7: Summary of potential unmitigated dust risks.

Potential Impact	Sensitivity	Earthworks	Construction	Trackout
Magnitude		Small	Small	Small
Dust Soiling Impacts	Medium	Low Risk	Low Risk	Low Risk
Human Health Impacts	Low	Negligible	Negligible	Negligible
Ecology	Low	Negligible	Negligible	Negligible

5.2 Construction phase – vehicular pollutants.

The Application Site is located within the Manchester AQMA and therefore the more stringent screening criteria (i.e. 100 LDV and 25 HDV) would apply.

Information on traffic movements anticipated during construction works was unavailable for the completion of the Air Quality Assessment. However, the development quantum is not anticipated to result in a significant increase in movements above the threshold outlined in the EPUK and IAQM planning guidance. The duration of movements will be short-term in nature and are not considered further within the context of this assessment. Therefore, in accordance with the criteria presented within EPUK and IAQM planning guidance, additional road vehicle trips during the construction phase of the Proposed Development “*can be considered to have insignificant effects*” on air quality.

5.3 Construction phase – non-road mobile machinery.

Pollutants emitted by NRMM that may have the most significant potential effects on local air quality are PM₁₀, PM_{2.5} and NO_x/NO₂. Typically, NRMM is associated with construction sites and, therefore there is a potential for NRMM emissions to adversely affect local air quality as a result of the Proposed Development.

IAQM construction guidance states that, with the application of suitable control measures and site management, exhaust emissions from on-site NRMM are “*unlikely to make a significant impact on local air quality. In the vast majority of cases, they will not need to be quantitatively assessed*”.

6. Operational phase assessment.

The potential for air quality impacts during the operation of the Proposed Development are assessed in this section.

6.1 Road traffic emissions screening assessment.

Road traffic data associated with the Proposed Development has been provided by Arup, the appointed Transport Consultants for the project. The traffic flows indicate that there will be a total 24-hour AADT increase of 242 LDV and 4 HDVs as a result of the Proposed Development. Arup, the appointed transport consultants have confirmed that 108 LDV AADT will route north along Alan Turing Way while 135 LDV AADT will route south. Both the northbound and southbound traffic flows are in exceedance of the lower screening criteria of a change of more than 100 LDV AADT.

As outlined within Paragraph 6.16 within the EPUK and IAQM planning guidance, an exceedance of the screening criteria does not lead to the requirement of a detailed assessment, provided that sufficient evidence can be provided to show that a significant impact is unlikely.

The southbound flows are 135 LDV and 2 HDVs. However, this exceedance is only observed from the Application Site to the Ashton New Road/Alan Turing way Junction. At this Junction, the LDV numbers split to below the criteria. Furthermore, there are no highly sensitive receptors along Alan Turing Way, southbound of the Application Site access road, which will be exposed to the exceedance of 135 LDV. The nearest receptors are the users of the Asda car park which is located 30 m from Alan Turing Way.

The northbound flows are 108 LDV and 2 HDVs. This exceedance of the lower screening criteria continues northbound until the Oldham Road/Hulme Hall Lane Junction. There are approximately three residential receptors which are located 6 m from the road along Hulme Hall Lane, while the rest of the highly sensitive receptors are set back at least 10 m back from the road.

Given the traffic flows on Alan Turing Way are similar to Aston Old Road to the south of the Application Site based on Department for Traffic count point data²⁷, and the 2024 monitored annual mean NO₂ concentration at passive diffusion tube MA95BNO is 27 µg/m³ along Aston Old Road (headroom of 13 µg/m³), we can assume that Alan Turing Way will experience similar NO₂ concentrations.

In line with the EPUK and IAQM planning guidance, it would take a change of 10% of the AQO (i.e. 4 µg/m³) in concentration to lead to a moderate significant impact. Given that the traffic flows are not significantly greater than the low screening criteria, the setback nature of the existing sensitive receptors from Hulme Hall Lane and Alan Turing Way as well as the 13 µg/m³ headroom to the annual mean NO₂ AQO, it is considered that there will be no significant air quality impacts. As such, further assessment is not considered to be required.

These conclusions are determined based on the professional experience of the authors of this assessment as set out in Appendix 2 and in accordance with the EPUK and IAQM planning guidance, the impacts on air quality from operational phase traffic generation are considered to be not significant.

6.2 Site suitability assessment.

This section presents a review of GMCA monitoring data and Defra predicted background concentrations in the vicinity of the Application Site, for the purpose of identifying the suitability of the Application Site which is an event space and identify any requirements for potential mitigation to be embedded into the Proposed Developments design.

As presented in Section 3.3.2 in line with LAQM.TG(22), the short-term 1-hour mean NO₂ AQO is applicable for event space use. However, the long-term NO₂ AQO has also been considered for the Proposed Development in order to determine compliance with Part F of the Buildings Regulations (2021).

6.2.1 NO₂ concentrations.

A review of the 1-hour mean and annual mean NO₂ concentrations monitored within 2 km of the Application Site has been completed as part of the baseline review with recent monitoring results, presented in Table 3.

Concentrations monitored at passive diffusion tube MA95BNO, located 1.2 km south of the Application Site, are suitable for use as they represent a worst-case likely scenario of pollutant concentrations experienced at the Application Site. Passive diffusion tube MA95BNO is classed as roadside and is located 2.5 m from the nearest road, the A635. The Application Site however is setback 20 m from the nearest road, the A6010. As pollution concentrations reduce with increased distance from the pollution source, concentrations at the Application Site are likely to be lower than those recorded at passive diffusion tube MA95BNO.

As outlined in LAQM.TG(22), an annual mean concentration of $60 \mu\text{g}/\text{m}^3$ or above is often used to indicate a possible exceedance of the 1-hour mean NO_2 AQO. In the baseline year of 2024, passive diffusion tube MA95BNO recorded an annual mean NO_2 concentration of $27 \mu\text{g}/\text{m}^3$ which is below the indicative $60 \mu\text{g}/\text{m}^3$ for the 1-hour mean and the annual mean NO_2 AQO. Additionally, the Defra predicted background concentrations for NO_2 is $16.3 \mu\text{g}/\text{m}^3$. As such, the local air quality at the Proposed Development is considered to be compliant with the 1-hour mean and annual mean NO_2 AQO.

The NO_2 concentrations in the locale of the Application Site are considered to be below both the 1-hour mean NO_2 AQO and the annual mean NO_2 AQO (in line with Part F of the Building Regulations (2021)) based on local monitoring data within the locale of the Application Site. Therefore, the Application Site is considered suitable for the proposed leisure use without the need for mitigation measures.

6.2.2 Significance of air quality impacts

To determine the significance of predicted air quality impacts based upon a site suitability assessment, such as that undertaken as part of this assessment, the EPUK and LAQM planning guidance states:

“Where the air quality is such that an air quality objective at the building façade is not met, the effect on residents or occupants will be judged as significant, unless provision is made to reduce their exposure by some means.”

With regards to the Proposed Development, the unmitigated impact significance associated with the Proposed Development has been predicted in accordance with the stated assessment methodology. The following factors have been considered when providing justification:

- The Proposed Development will not introduce any new receptor into an area of exceedance of the 1-hour mean or annual mean NO_2 AQOs based upon a review of NO_2 monitoring data and Defra predicted background concentrations within the development locale.

As no exceedances of the considered AQOs are predicted, mitigation measures are not required for the operational phase of the Proposed Development. As such, the overall effect is considered to be 'not significant'.

7. Mitigation.

7.1 Construction phase.

To mitigate the potential impacts during the construction phase it is recommended that mitigation measures as detailed in the IAQM construction guidance are implemented. Table 10, in Appendix 3, details the measures that are recommended to be incorporated in the Dust Management Plan (DMP).

These mitigation measures have been selected for the Proposed Development and are based upon the dust risk categories outlined in Table 7 of this report. For general mitigation measures, which exclude those specifically targeted towards earthworks, construction and trackout (which are given towards the end of the table), low risk measures have been applied as these represent the highest risk category determined in Table 7. This approach is consistent with the IAQM construction guidance.

It should be noted that potential dust effects during the construction phase are considered to be temporary and short term in nature. The impacts are determined to be temporary as they will only potentially occur throughout the construction phase and short-term because these will only arise at particular times when certain activities and meteorological conditions combine to create the predicted level of magnitude.

However, with the application of the dust control and mitigation measures outlined in Appendix 3, it is considered that impacts at all receptors will be 'not significant' in accordance with the IAQM construction guidance.

7.1.1 Construction phase road traffic emissions

Potential air quality impacts associated with construction phase road traffic emissions, principally HDV movements, have been screened out for further assessment with associated impacts on air quality predicted to result in an 'insignificant' effect. Therefore, mitigation measures are not considered to be required.

7.1.2 Construction phase NRMM emissions

In accordance with Part 4 of the IAQM construction guidance, all NRMM would need to adhere to the emissions standards for NO₂ and PM₁₀ set out for NRMM. It is therefore considered the likely effects of construction plant on local air quality would be insignificant.

7.2 Operational phase.

7.2.1 Road traffic emissions

Potential air quality impacts associated with operational phase development trips have been screened out from further assessment as '*the impacts [on air quality from operational phase movements] can be considered to have insignificant effects*' in accordance with the EPUK and IAQM planning guidance. Therefore, additional mitigation measures are not considered to be required, with regards to road traffic emissions.

7.2.2 Site suitability assessment

A review of GMCA monitoring data and Defra predicted background concentrations in consideration of the Application Site indicates no likely exceedance of the 1-hour or annual mean NO₂ AQOs.

As no exceedances of any considered AQOs are predicted, this follows the 1st hierarchy principle of the EPUK and IAQM planning guidance to '*prevent and avoid* exposure'. Therefore, no additional mitigation into the Proposed Development design is required and natural ventilation is possible from an air quality perspective.

8. Summary and conclusions.

This report details the potential air quality impacts associated with the construction and operation of a proposed Immersive Events Space located on Alan Turing Way, Manchester, M11 3FF.

The findings of the assessment are as follows:

- The baseline assessment has shown that the Application Site is located within the Manchester AQMA. There were no exceedances of the 1-hour mean or annual mean NO₂ AQOs recorded at nearby monitoring in the baseline year of 2024. Additionally, 2024 Defra predicted background concentrations are below the relevant AQOs for NO₂ and PM₁₀ and PM_{2.5} concentrations;
- The impacts of the construction phase on dust soiling and ambient fine particulate matter concentrations have been assessed, and appropriate mitigation measures have been identified. Provided these mitigation measures are implemented and included within a dust management plan, for example through a planning condition, the residual impacts are considered to be not significant;
- The traffic generated by the Proposed Development has been screened against the criteria set-out in the EPUK and IAQM planning guidance to determine the need for a detailed assessment. This screening assessment has shown that the potential impact of additional road traffic on local air quality is considered insignificant and a detailed assessment is not required;
- The proposed energy strategy is expected to be all electric, utilising zero emission technology. As no combustion sources are proposed for the primary energy supply, no local air quality impacts are anticipated and a detailed assessment of impacts of combustion emissions from energy plant is not required; and
- A qualitative Site Suitability Assessment showed that pollutant concentrations are in compliance with the 1-hour mean and annual mean NO₂ AQOs. Therefore, the Application Site is considered suitable for leisure use without the inclusion mitigation measures.

Based on the information above, it is considered that air quality should not be viewed as a constraint to planning and the Proposed Development conforms to the principles of the National Planning Policy Framework and the Places for Everyone Joint Development Plan and the Manchester Local Development Framework – Core Strategy.

Glossary of terms.

AADT	Annual Average Daily Traffic
AQDMP	Air Quality Dust Management Plan
AQMA	Air Quality Management Area
AQO	Air Quality Objective
ASR	Annual Status Report
DMP	Dust Management Plan
Defra	Department for Environment, Food and Rural Affairs
EHO	Environmental Health Officer
EIP	Environmental Improvement Plan
EPA	Environment Protection Act
EPUK	Environmental Protection UK
GMCA	Greater Manchester Combined Authority
GIA	Gross Internal Area
HDV	Heavy Duty Vehicles (> 3.5 tonnes gross vehicle weight)
IAQM	Institute of Air Quality Management
LAQM	Local Air Quality Management
LDV	Light Duty Vehicles ($\leq$ 3.5 tonnes gross vehicle weight)
MCC	Manchester City Council
$\mu\text{g}/\text{m}^3$	Micrograms per cubic metre
NGR	National Grid Reference
NO_2	Nitrogen dioxide
NO_x	Nitrogen oxides (taken to be $\text{NO}_2 + \text{NO}$)
NPPF	National Planning Policy Framework
NRMM	Non-Road Mobile Machinery
Objectives	A nationally defined set of health-based concentrations for nine pollutants, seven of which are incorporated in Regulations, setting out the extent to which the standards should be achieved by a defined date. There are also vegetation-based objectives for sulphur dioxide and nitrogen oxides
PM_{10}	Particulate matter with an aerodynamic diameter less than 10 micrometres
$\text{PM}_{2.5}$	Particulate matter with an aerodynamic diameter less than 2.5 micrometres
PPG	Planning Practice Guidance
SBI	Site of Biological Importance
SPG	Supplementary Planning Guidance
Standards	A nationally defined set of concentrations for nine pollutants below which health effects do not occur or are minimal
Trackout	The transport of dust and dirt from the construction / demolition site onto the public road network, where it may be deposited and then re-suspended by vehicles using the network. This arises when heavy duty vehicles (HDVs) leave the construction / demolition site with dusty materials, which may then spill onto the road, and/or when HDVs transfer dust and dirt onto the road having travelled over muddy ground on site

References.

- ¹ The Stationery Office (1995) The Environment Act 1995 (Part IV), London
- ² The Stationery Office (2021) Statutory Instrument 2021, The Environment Act 2021, London
- ³ Defra (2007) The Air Quality Strategy for England, Scotland, Wales and Northern Ireland – [online] (Last accessed: 23/01/2025), Available at: www.gov.uk/government/publications/the-air-quality-strategy-for-england-scotland-wales-and-northern-ireland-volume-1
- ⁴ The Stationery Office (2000) Statutory Instrument 2000, No 928, The Air Quality (England) Regulations 2000, London
- ⁵ The Stationery Office (2002) Statutory Instrument 2002, No 3043, The Air Quality (England) (Amendment) Regulations 2002, London
- ⁶ The Stationery Office (2010) Statutory Instrument 2010, No 1001, The Air Quality Standards Regulations 2010, London
- ⁷ The Stationery Office (2016) Statutory Instrument 2016, No 1184, The Air Quality Standards (Amendment) Regulations 2016, London
- ⁸ Department for Environment, Food & Rural Affairs (2025) Environmental Improvement Plan 2025 – [online], (Last accessed: 23/01/2025), Available at: <https://www.gov.uk/government/publications/environmental-improvement-plan-2025/environmental-improvement-plan-eip-2025>
- ⁹ The Stationery Office (1990) Environmental Protection Act 1990 – [online] (Last accessed: 23/01/2025), Available at: legislation.gov.uk/ukpga/1990/43/part/III
- ¹⁰ Defra (2019) The Clean Air Strategy – [online] (Last accessed: 23/01/2025), Available at: www.gov.uk/government/publications/clean-air-strategy-2019
- ¹¹ HMSO (2021). The Building Regulations 2021. Approved Document Part F: Ventilation
- ¹² Department for Housing, Communities & Local Government, (2024) National Planning Policy Framework, London. Available: National Planning Policy Framework (publishing.service.gov.uk)
- ¹³ Ministry of Housing, Communities & Local Government (2019) Planning Practice Guidance, London
- ¹⁴ Defra (2022) Local Air Quality Management Technical Guidance (TG22) – [online] (Last accessed: 23/01/2025), Available at: <https://laqm.defra.gov.uk/wp-content/uploads/2022/08/LAQM-TG22-August-22-v1.0.pdf>
- ¹⁵ Environmental Protection UK and Institute of Air Quality Management (2017), Land-Use Planning & Development Control: Planning For Air Quality v1.2 – [online] (Last accessed: 23/01/2025), Available at: iaqm.co.uk/text/guidance/air-quality-planning-guidance.pdf
- ¹⁶ Institute of Air Quality Management (2024) Guidance on the assessment of dust from demolition and construction v2.2 – [online], (Last accessed: 23/01/2025), Available at: iaqm.co.uk/wp-content/uploads/2013/02/Construction-Dust-Guidance-Jan-2024.pdf
- ¹⁷ Greater Manchester Combined Authority (2024) Places for Everyone Joint Development Plan – [online], (Last accessed: 23/01/2026), Available at: <https://www.greatermanchester-ca.gov.uk/media/2drduk0t/places-for-everyone-joint-development-plan-dec24.pdf>
- ¹⁸ Manchester City Council (2012) Core Strategy 2012–2027 – [online], (Last accessed: 23/01/2026), Available at: https://www.manchester.gov.uk/info/200074/planning/6573/core_strategy_2012-2027
- ¹⁹ Transport for Greater Manchester (2021) Greater Manchester Transport Strategy 2040 – [online], (Last accessed: 23/01/2026), Available at: https://assets.ctfassets.net/nv7y93idf4jq/01xbKQQNWOZYLYvcj1z7c/4b6804acd572f00d8d728194ef62bb89/Greater_Manchester_Transport_Strategy_2040_final.pdf
- ²⁰ Clean Air Greater Manchester (2026) Greater Manchester Clean Air Plan – [online], (Last accessed: 23/01/2026), Available at: <https://cleanairgm.com/clean-air-plan/>
- ²¹ Greater Manchester Combined Authority (2024) Greater Manchester Air Quality Annual Status Report 2024 – [online], (Last accessed: 23/01/2026), Available at: https://downloads.ctfassets.net/tlpgbv1k6h2/1DjJeKrZKA1elyT5pVcAl/8494037e574f88380d1b25149b99ff6b/Greater_Manchester_Air_Quality_Annual_Status_Report_2024.pdf
- ²² Defra (2014) UK Pollutant Release and Transfer Register – [online], (Last accessed: 23/01/2025), Available at: www.gov.uk/guidance/uk-pollutant-release-and-transfer-register-prtr-data-sets
- ²³ Defra (2025) Background Pollution Maps – 2021 – [online], (Last accessed: 23/01/2025), Available at: uk-air.defra.gov.uk/data/laqm-background-maps?year=2021
- ²⁴ Environment Agency (2020) Pollution Inventory – [online], (Last accessed: 23/01/2025), Available at: data.gov.uk/dataset/cfd94301-a2f2-48a2-9915-e477ca6d8b7e/pollution-inventory
- ²⁵ Defra (n.d) UK Ambient Air Quality Interactive Map – [online], (Last accessed: 23/01/2025), Available at: uk-air.defra.gov.uk/data/gis-mapping
- ²⁶ Cranfield Soil and Agrifood Institute Soilscales map – [online], (last accessed: 23/01/2025), Available at: <http://www.landis.org.uk/soilscales/>
- ²⁷ Department for Transport (2025) Road Traffic Statistics – Count Points – [online], (Last accessed: 23/01/2026), Available at: <https://roadtraffic.dft.gov.uk/count-points>

Appendix 1 - EHO consultation.

Good Evening,

Hoare Lea have been instructed to undertake an Air Quality Assessment (AQA) to support the planning application for the proposed event space located on Alan Turing Way, Manchester, M11 3FF. Please see the Site boundary below for reference.



The proposals comprise the construction of an event space, with associated landscaping and infrastructure.

Hoare Lea propose to undertake the assessment using the following methodology:

- A baseline assessment will be undertaken utilising the Greater Manchester Combined Authority (GMCA) monitoring data from the most recent Annual Status Report (2024).
- Monitoring data from 2024 will be used to establish the baseline. Could you please confirm you are happy for us to use 2024 monitoring data?
- Defra's background pollution maps published for 2021 reference year, will be used to further establish background concentrations in the area. Could you please confirm you are happy for us to use Defra background pollution maps using 2021 reference year?
- The existing monitoring data and Defra background concentrations will be used to qualitatively inform the suitability of the site for the proposed use.
- An assessment of the construction impacts on air quality and dust using the IAQM methodology, in compliance with the most recent 'The Control of Dust and Emissions During Construction and Demolition' guidance published in January 2024 (v2.2).
- Road traffic associated with the Proposed Development will be provided by ARUP, the appointed transport consultant for the project, and screened against the relevant EPUK and IAQM criteria of 100 LDVs and/or 25 HDVs annual average daily traffic (AADT) for a development inside of an Air Quality Management Area as all development traffic will route onto Alan Turing Way. In line with Paragraph 6.16 within the EPUK and IAQM guidance, provided that sufficient evidence can be provided to show that a significant impact is unlikely, a detailed assessment may not be required if there is an exceedance of the criteria. Following professional judgement, if it is determined that a detailed assessment isn't required, an Air Quality Screening assessment will be completed. If it is determined that a detailed assessment is required then I will send a follow up to this consultation, outlining the proposed methodology for the detailed assessment.
- The primary energy strategy is expected to be all electric, utilising zero combustion emission technologies. As no combustion sources are expected during normal operation, no local air quality impacts are anticipated and a detailed assessment of impacts of combustion emissions from the energy plant has been screened out of this assessment.
- The assessment will be undertaken in line with the EPUK/IAQM document 'Land-Use Planning & Development Control: Planning for Air Quality' January 2017.
- Air quality policies set out in the Manchester Core Strategy 2012-2027 and Supplementary Planning Documents will be taken into account.

Please let me know if there are any additional guidance documents that aren't publicly available that you would like us to consider.

It would be appreciated if you could please confirm your acceptance of the proposed methodology. However, if you have any questions or queries, please do not hesitate to contact me on the email below.

Kind Regards,

EHO Response:

I have been passed your enquiry regarding the above.

In general, we agree with your proposals. Our only comment is regarding the use of the 2021 background maps as they are likely to be impacted by post covid lower traffic levels.

As you are proposing to use nearby local monitoring data too this may not be an issue but you may want to also look at the 2018 background maps too.

Kind Regards

Appendix 2 – Legislation, policy and guidance.

Table 8: Legislation and national policy summary.

Legislation and national policy	Summary notes
The Environment Act 1995 (Part IV)	The Environment Act requires the Secretary of State to publish an air quality strategy and local authorities to review and assess the quality of air within their boundaries (the latter is known as Local Air Quality Management)
The Air Quality Strategy	The Air Quality Strategy provides the policy framework for local air quality management and assessment in the UK. It sets out air quality standards and objectives for key air pollutants. These standards and objectives are designed to protect human health and the environment. The Strategy also sets out how the different sectors of industry, transport, and local government, can contribute to achieving these AQOs
The Environment Act 2021	The Environment Act 2021 acts as the UK's new framework of environmental protection and came into force on 1st April 2022. Regarding air quality, the Environment Act establishes a legally binding duty on government to bring forward at least two new air quality targets in secondary legislation. This was implemented through the Environmental Improvement Plan which outlines new PM _{2.5} targets for future years. These are a long-term target of 10 µg/m ³ by 2040 and an interim target of 12 µg/m ³ by 31st January 2028. These targets are expected to focus on reducing concentrations of, and exposure to, PM _{2.5} .
The Environmental Improvement Plan	In 2025, Defra released an interim planning guidance on the consideration of the Environment Act PM _{2.5} targets. The interim planning guidance outlines the environmental targets (Fine particulate matter) (England) Regulations 2023. This is a target of 10 µg/m ³ by 2030. This target has been put in place to focus on reducing concentrations of, and exposure to PM _{2.5} .
EU Limit Values.	The European Union has also set limit values for NO ₂ , PM ₁₀ and PM _{2.5} ; these are legally binding and have been implemented into English legislation by The Air Quality Standards Regulations 2010 and The Air Quality Standards (Amendment) Regulations 2016. The limit values for NO ₂ , PM ₁₀ and PM _{2.5} are the same as the English objectives (given in Table 2), but applied from 2010 for NO ₂ , 2005 for PM ₁₀ and 2015 for PM _{2.5} . The limit values apply at all locations (apart from where the public does not have access, where health and safety at work provisions apply and on the road carriageway).
Statutory Nuisance Legislation	Part III of the Environmental Protection Act (EPA) 1990 (as amended) and Section 79 of the EPA. Fractions of dust greater than 10 µm (i.e., greater than PM ₁₀) in diameter typically relate to nuisance effects as opposed to potential health effects and therefore are not covered within the UK Air Quality Strategy. In legislation there are currently no numerical limits in terms of what level of dust deposition constitutes a nuisance.
Clean Air Strategy	The Clean Air Strategy (CAS), published in 2019 sets out the Government's proposals aimed at delivering cleaner air in England, and indicates how devolved administrations intend to make emissions reductions. It sets out the comprehensive action that is required from across all parts of government and society to deliver clean air.
Building Regulations	Part F of the Building Regulations (2021) provides guidance for indoor air quality and the pollutant concentrations that must not be exceeded in both buildings for dwellings and non-dwellings.
National Planning Policy Framework	The National Planning Policy Framework (NPPF) 2024 sets out planning policy for England. It includes advice on when air quality should be a material consideration in development control decisions. The most relevant Paragraphs for air quality are included below:

Legislation and national policy	Summary notes
	<p>Paragraph 187: <i>“Planning policies and decisions should contribute to and enhance the natural and local environment by: [...]”</i></p> <p><i>e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans. [...]”</i></p> <p>Paragraph 199: <i>“Planning policies and 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. Opportunities to improve air quality or mitigate impacts should be identified, such as through traffic and travel management, and green infrastructure provision and enhancement. So far as possible these opportunities should be considered at the plan-making stage, to ensure a strategic approach and limit the need for issues to be reconsidered when determining individual applications. 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.”</i></p> <p>Paragraph 201: <i>“The focus of planning policies and decisions should be on whether proposed development is an acceptable use of land, rather than the control of processes or emissions (where these are subject to separate pollution control regimes). Planning decisions should assume that these regimes will operate effectively. Equally, where a planning decision has been made on a particular development, the planning issues should not be revisited through the permitting regimes operated by pollution control authorities.”</i></p>
Planning Practice Guidance	<p>The NPPF is supported by Planning Practice Guidance (PPG) which sets out relevant information for this assessment in:</p> <ul style="list-style-type: none"> • Paragraph 001 (Reference ID: 32-001-20191101) • Paragraph 002 (Reference ID: 32-002-20191101) • Paragraph 005 (Reference ID: 32-005-20191101) <p>The PPG also sets out the information that may be required in an air quality assessment in:</p> <ul style="list-style-type: none"> • Paragraph 007 (Reference ID: 32-007-20191101) <p>It also provides guidance on options for mitigating air quality impacts in:</p> <ul style="list-style-type: none"> • Paragraph 008 (Reference ID: 32-008-20191101):

Table 9: Primary guidance documents summary table.

Primary guidance documents	Summary notes
Defra Local Air Quality Management Technical Guidance	Defra's LAQM.TG(22) was published for use by local authorities in their LAQM review and assessment work. The document provides key guidance in aspects or air quality assessment, including screening, use of monitoring data and use of background data that are applicable to all air quality assessments.

Primary guidance documents	Summary notes
EPUK and IAQM 'Air Quality Guidance for Planning'	Environmental Protection UK (EPUK) and the Institute of Air Quality Management (IAQM) have together published guidance (EPUK and IAQM planning guidance) to help ensure that air quality is properly accounted for in the development control process.
IAQM 'Construction and Demolition Dust Guidance'	Guidance on the assessment of dust from demolition and construction has been published by the IAQM (IAQM construction guidance) ¹⁶ . The guidance provides a methodology to determine the dust emission magnitude and provides a series of matrices to determine the risk magnitude of potential dust sources associated with construction activities.

Appendix 3 - Mitigation measures for construction phase.

Table 10: Mitigation measures for construction phase.

Issue	Mitigation measure
Communications	Display the name and contact details of person(s) accountable for air quality and dust issues on the site boundary. This may be the environment manager/engineer or the site manager.
	Display the head or regional office contact information.
Dust Management Plan	Develop and implement a Dust Management Plan (DMP), which may include measures to control other emissions, approved by the Local Authority. The DMP may include monitoring of dust deposition, dust flux, real-time PM ₁₀ continuous monitoring and/or visual inspections.
Site Management	Record all dust and air quality complaints, identify cause(s), take appropriate measures to reduce emissions in a timely manner, and record the measures taken.
	Make the complaints log available to the Local Authority when asked.
	Record any exceptional incidents that cause dust and/or air emissions, either on- or off- site, and the action taken to resolve the situation in the log book.
Monitoring	Undertake daily on-site and off-site inspection, where receptors (including roads) are nearby, to monitor dust, record inspection results, and make the log available to the Local Authority when asked. This should include regular dust soiling check of surfaces such as street furniture, cars, window sills within 100 m of the site boundary, with cleaning to be provided if necessary.
	Carry out regular site inspections to monitor compliance with the DMP, record inspection results, and make an inspection log available to the Local Authority when asked.
	Increase the frequency of site inspections by the person accountable for air quality and dust issues on site when activities with a high potential to produce dust are being carried out and during prolonged dry or windy conditions.
	Agree dust deposition, dust flux, or real-time PM ₁₀ continuous monitoring locations with the Local Authority. Where possible, commence baseline monitoring at least three months before work commences on site or, if it is a large site, before work on a phase commences if required.
Preparing and maintaining the site	Plan site layout so that machinery and dust causing activities are located away from receptors, as far as is possible.
	Erect solid screens or barriers around dusty activities or the site boundary that are at least as high as any stockpiles on site.
	Fully enclose site or specific operations where there is a high potential for dust production and the site is active for an extensive period.
	Avoid site runoff of water or mud.
	Keep site fencing, barriers and scaffolding clean using wet methods.
	Remove materials that have a potential to produce dust from site as soon as possible, unless being re-used on site. If they are being re-used cover as described below.
	Cover, seed or fence stockpiles to prevent wind whipping.
	Ensure all vehicles switch off engines when stationary – no idling vehicles.

Issue	Mitigation measure
Operating vehicles/machinery and sustainable travel	Avoid the use of diesel or petrol-powered generators and use mains electricity or battery powered equipment where practicable.
	Impose and signpost a maximum-speed-limit of 15 mph on surfaced and 10 mph on unsurfaced haul roads and work areas (if long haul routes are required these speeds may be increased with suitable additional control measures provided, subject to the approval of the nominated undertaker and with the agreement of the Local Authority, where applicable).
Operations	Only use cutting, grinding or sawing equipment fitted or in conjunction with suitable dust suppression techniques such as water sprays or local extraction, e.g. suitable local exhaust ventilation systems.
	Ensure an adequate water supply on the site for effective dust/particulate matter suppression/mitigation, using non-potable water where possible and appropriate.
	Use enclosed chutes and conveyors and covered skips.
	Minimise drop heights from conveyors, loading shovels, hoppers and other loading or handling equipment and use fine water sprays on such equipment wherever appropriate.
	Ensure equipment is readily available on site to clean any dry spillages, and clean up spillages as soon as reasonably practicable after the event using wet cleaning methods.
Waste management	Avoid bonfires and burning of waste materials.
Construction	Avoid scabbling (roughening of concrete surfaces) if possible.
	Ensure sand and other aggregates are stored in bunded areas and are not allowed to dry out, unless this is required for a particular process, in which case ensure that appropriate additional control measures are in place.
Trackout	Use water-assisted dust sweeper(s) on the access and local roads, to remove, as necessary, any material tracked out of the site. This may require the sweeper being in continuous use.
	Avoid dry sweeping of large areas.
	Ensure vehicles entering and leaving sites are covered to prevent escape of materials during transport.
	Record all inspections of haul routes and any subsequent action in a site log book.
	Implement a wheel washing system (with rumble grids to dislodge accumulated dust and mud prior to leaving the site where reasonably practicable).

Appendix 4 - Professional experience.

Lauren Buchanan (Hoare Lea), MSc, BSc (Hons), AMIEnvSc, MIAQM

Lauren is a Principal Air Quality Consultant at Hoare Lea. She is an Associate Member of the Institution of Environmental Sciences and a Member of the Institute of Air Quality Management. She has worked on a range of projects gaining experience in many different aspects of air quality assessment, including monitoring and detailed dispersion modelling of dust, odour, roads and industrial emissions for a variety of sectors and to fulfil Local Air Quality Management (LAQM) duties on behalf of Local Authorities. Lauren has undertaken air quality assessments for permit requirements and planning applications, including stand-alone reports, Environmental Impact Assessments, Habitats Regulations Assessments and Development Consent Orders.

Josh Jones (Hoare Lea), MSci (Hons), MEnvSc, MIAQM

Josh is a Principal Air Quality Consultant with Hoare Lea. He has over 8 years' experience in the Air Quality field. His role includes the production and project management of air quality assessments, including monitoring and detailed dispersion modelling of dust, odour, roads and industrial emissions, in support of both planning and permit applications for a wide variety of clients across a range of sectors, including residential, industrial, energy and healthcare. He also has detailed knowledge of the LAQM process, the EIA process, co-ordination of multi-disciplinary environmental impact assessment work in support of planning applications and dispersion modelling studies.

T-Jay Brown (Hoare Lea), BSc, AMIEnvSc, AMIAQM

T-Jay is an Air Quality Consultant with Hoare Lea. He is an Associate Member of the Institution of Environmental Sciences and an Associate Member of the Institute of Air Quality Management. T-Jay has worked on a range of projects within multiple sectors such as industrial, education and residential.

At Hoare Lea, T-Jay has worked on the air quality assessments for projects which have been successfully submitted for planning. Additionally, he has experience in undertaking detailed dispersion modelling of roads, air quality monitoring and producing indoor air quality plans. T-Jays interests lie in air quality management and its relation to public health and wellbeing.



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