



**AIR QUALITY SOLUTIONS**



# **HS ARORA PROPERTIES**

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**25 YEADING LANE,  
HAYES**

**AIR QUALITY  
ASSESSMENT**

**2026-01-14**

**AIR QUALITY SOLUTIONS LTD  
AQ15008**

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## TABLE OF CONTENTS

<b>EXECUTIVE SUMMARY .....</b>	<b>4</b>
<b>1. INTRODUCTION .....</b>	<b>5</b>
1.1 Background.....	5
1.2 Site Location and Assessment Context .....	5
1.3 Limitations.....	5
<b>2. LEGISLATION, GUIDANCE AND POLICY .....</b>	<b>6</b>
2.1 UK Legislation and Guidance .....	6
2.2 Planning Policy.....	9
2.3 Local Planning Policy .....	10
<b>3. METHODOLOGY .....</b>	<b>12</b>
3.1 Construction Phase Assessment.....	12
3.2 Operational Phase Assessment .....	12
3.3 Air Quality Neutral Assessment.....	14
<b>4. BASELINE .....</b>	<b>16</b>
4.1 Local Air Quality Management .....	16
4.2 Air Quality Monitoring .....	16
4.3 Background Pollutant Concentrations .....	17
4.4 Sensitive Receptors.....	18
<b>5. ASSESSMENT .....</b>	<b>21</b>
5.1 Construction Phase Assessment.....	21
5.2 Operational Phase Assessment .....	25
5.3 Air Quality Neutral Assessment.....	27
<b>6. CONCLUSION .....</b>	<b>29</b>
<b>ABBREVIATIONS.....</b>	<b>30</b>
<b>APPENDIX A: FIGURES.....</b>	<b>31</b>
<b>APPENDIX B: ASSESSMENT INPUTS.....</b>	<b>40</b>
<b>APPENDIX C: CONSTRUCTION PHASE METHODOLOGY .....</b>	<b>80</b>

## EXECUTIVE SUMMARY

Air Quality Solutions were commissioned by HS Arora Properties to undertake an Air Quality Assessment in support of a proposed development at 25 Yeading Lane, Hayes, UB4 0EL.

The proposal comprises the Erection of 2 x two storey buildings to provide self-contained flats with associated parking, involving demolition of existing bungalow.

Due to the location of the development within Hillingdon AQMA, there is the potential for the development to expose future site users to poor air quality, as well as to cause impacts at nearby sensitive receptors because of the construction and operational phases. Therefore, an Air Quality Assessment is required to determine baseline conditions at the site, assess site suitability for the proposed end-use and assess the potential impacts as a result of the proposed development.

Potential construction phase air quality impacts from fugitive dust emissions were assessed as a result of demolition, earthworks and construction activities. It is considered that the use of good practice control measures would provide suitable mitigation for a development of this size and nature and reduce potential impacts to an acceptable level.

Dispersion modelling was undertaken in order to predict annual mean pollutant concentrations across the application site to determine exposure risk to future occupiers. Results were subsequently verified using local monitoring results provided by London Borough of Hillingdon (LBoH) and neighbouring Ealing Council.

The dispersion modelling results indicated that annual mean pollutant concentrations across the application site were below the relevant air quality objectives at proposed sensitive locations.

The level of anticipated traffic generation from the site concluded that impacts on existing pollutant levels as a result of operational phase pollutant emissions were predicted to be not significant in accordance with relevant screening criteria. The use of robust assumptions, where necessary, was considered to provide sufficient confidence of results for an assessment of this nature.

GLA states that new developments must be considered Air Quality Neutral. The development is classified as a minor development, so a simplified AQN procedure is deemed sufficient. The development does not exceed maximum residential parking standards provided in the London Plan and will not include a new heating system with NO<sub>x</sub> emissions rated at greater than 40 mg/kWh. In line with the GLA guidance, and given the lack of development generated emissions, the development is considered Air Quality Neutral.

Based on the assessment results the site is considered suitable for the proposed end use and complies with the LBoH Local Plan, the GLA Policy and NPPF.

## **1. INTRODUCTION**

### **1.1 Background**

Air Quality Solutions has been commissioned by HS Arora Properties, hereafter referred to as “the Client” to undertake an Air Quality Assessment in support of a proposal, comprising the Erection of 2 x two storey buildings to provide self-contained flats with associated parking, involving demolition of existing bungalow, hereinafter referred to as the “Proposed Development”.

### **1.2 Site Location and Assessment Context**

The application site is located at 25 Yeading Lane, Hayes, UB4 0EL at approximate National Grid Reference (NGR) 510683, 181256.

The application site is located within Hillingdon Air Quality Management Area (AQMA) which has been declared due to exceedances of NO<sub>2</sub> Air Quality Objective (AQO). Subsequently, the Proposed Development has the potential to introduce future occupants into an area of elevated NO<sub>2</sub> and particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>) concentrations, as well as to cause impacts at sensitive receptor locations during the construction and operational phases.

An Air Quality Assessment has been produced to assess the potential for air quality impacts at existing sensitive use and to assess site suitability for the proposed end-use. The assessment will be undertaken in accordance with the requirements of the National Planning Policy Framework (NPPF), the Greater London Authority (GLA) Policy and the LBoH Local Planning Policy.

Reference should be made to Figure 1 within Appendix A for a location plan.

### **1.3 Limitations**

This report has been produced in accordance with Air Quality Solutions' standard terms of engagement. Air Quality Solutions has prepared this report solely for the use of the Client and those parties with whom a warranty agreement has been executed, or with whom an assignment has been agreed. Should any third party wish to use or rely upon the contents of the report, written approval must be sought from Air Quality Solutions; a charge may be levied against such approval.

## 2. LEGISLATION, GUIDANCE AND POLICY

The following legislation, guidance and policy will be considered and adhered to during the preparation of the Air Quality Assessment:

- European Union (EU) Directive 2008/50/EC;
- The National Planning Policy Framework (NPPF), updated on 12<sup>th</sup> December 2024;
- The National Planning Practice Guidance (NPPG), relevant chapters produced on 1<sup>st</sup> November 2019;
- Section 82 of the Environment Act (1995) (Part IV), updated 9<sup>th</sup> November 2021;
- Air Quality Strategy: Framework for local authority delivery, April 2023;
- The Air Quality Standards (Amendment) Regulations (2016);
- London Local Air Quality Management (LLAQM) Technical Guidance 2019, LLAQM.TG(19), GLA, 2019;
- Guidance on the Assessment of Dust from Demolition and Construction, Institute of Air Quality Management (IAQM), January 2024;
- The Control of Dust and Emissions During Construction and Demolition Supplementary Planning Guidance, GLA, 2016;
- London Councils Air Quality and Planning Guidance, London Councils, 2007; and
- London Plan Guidance, Air Quality Neutral, February 2023;
- The London Plan 2021, Mayor of London, March 2021;
- Land-Use Planning and Development Control: Planning for Air Quality, Environmental Protection UK (EPUK) and Institute of Air Quality Management (IAQM), January 2017;
- Environmental Improvement Plan 2025, DEFRA, December 2025;
- London Borough of Hillingdon Local Plan: Part 1 Strategic Policies, November 2012; and
- London Borough of Hillingdon Local Plan: Part 2 Development Management Policies, January 2020.

### 2.1 UK Legislation and Guidance

The Air Quality Standards (Amendment) Regulations (2016) came into force on 31<sup>st</sup> December 2016. These Regulations amend the Air Quality Standards Regulations 2010 and transpose the EU Directive 2008/50/EC into UK law. Air Quality Limit Values (AQLVs) were published in these regulations for 7 pollutants, as well as Target Values for an additional 6 pollutants. It should be taken into consideration that the AQLV for PM<sub>2.5</sub> stated in the Air Quality Standards Regulations (2010) was amended in the Environment (Miscellaneous Amendments) (EU Exit) Regulations (2020).

Part IV of the Environment Act (2021) requires the UK government to produce a national Air Quality Strategy (AQS) which contains standards, objectives and measures for improving ambient air quality. The most recent AQS was produced by DEFRA and published on 28<sup>th</sup> April 2023. The AQS sets out Air Quality Objectives (AQOs) that are maximum ambient pollutant concentrations that are not to be exceeded either without exception or with a permitted number of exceedances

over a specified timescale. These are generally in line with the AQLVs, although the requirements for compliance vary slightly.

The Environmental Improvement Plan, released in December 2025, outlines both long-term and interim objectives aimed at minimising public exposure to PM<sub>2.5</sub>. Following this, the 2040 concentration goal was established within the Environmental Targets (Fine Particulate Matter) Regulations (2023).

Table 1 presents the AQOs for pollutants considered within this assessment.

**Table 1: Air Quality Objectives**

Pollutant	Air Quality Objectives	
	Concentration (µg/m <sup>3</sup> )	Averaging Periods
NO <sub>2</sub>	40	Annual mean
	200	1-hour mean; not to be exceeded more than 18 times a year
PM <sub>10</sub>	40	Annual mean
	50	24-hour mean; not to be exceeded more than 35 times a year
PM <sub>2.5</sub>	20 (10*)	Annual mean

\* Target to be achieved by 2030.

Table 2 summarises the advice provided in LLAQM.TG(19) on where the AQOs for pollutants considered within this report apply.

**Table 2: Examples of Where the Air Quality Objectives Apply**

Averaging Periods	Objectives Should Apply At	Objectives Should 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; kerbside sites (as opposed to locations at the building façade); or any other location where public exposure is expected to be short term.
24-hour mean	All locations where the annual mean objective would apply, together with hotels and 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-hour mean objectives apply; kerbside sites (for example, pavements of busy shopping streets); those parts of car parks, bus stations and railway	Kerbside sites where the public would not be expected to have regular access.

Averaging Periods	Objectives Should Apply At	Objectives Should Not Apply At
	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 be expected to spend one hour or longer.	

The results of the dispersion modelling assessment will also be compared against the relevant AQOs detailed in Table 1 as well as the Air Pollution Exposure Criteria (APEC) contained within the London Councils Air Quality and Planning Guidance to determine significance.

The APEC are outlined in Table 3.

**Table 3: Air Pollution Exposure Criteria**

Category	Applicable Range Annual Mean: NO <sub>2</sub> and PM <sub>10</sub>	Applicable Range 24hr Daily Mean: PM <sub>10</sub>	Recommendation
APEC - A	Below 5% of the annual mean AQO	> 1-day less than national objective	No air quality grounds for refusal; however mitigation of any emissions should be considered
APEC - B	Between 5% below or above the annual mean AQO	Between 1-day above or below national objective	May not be sufficient air quality grounds for refusal, however appropriate mitigation must be considered e.g. maximise distance from pollutant source, proven ventilation systems, parking considerations, winter gardens, internal layout considered and internal pollutant emissions minimised
APEC - C	Above 5% of the annual mean AQO	>1-day more than national objective	Refusal on air quality grounds should be anticipated, unless the LA has a specific policy enabling such land use and ensure best endeavours to reduce exposure are incorporated. Worker exposure in commercial/industrial land uses should be considered further. Mitigation measures must be presented with air quality assessment, detailing anticipated outcomes of mitigation measures

It should be noted that a significant area of London would fall under APEC - C due to high NO<sub>2</sub> concentrations throughout the city. As such, a presumption against planning consent in these locations may result in large areas of land becoming undevelopable and prevent urban regeneration. The inclusion of suitable mitigation measures to protect future users is therefore considered a suitable way to progress sustainable schemes in these locations and has been considered within this assessment.

## 2.2 Planning Policy

### The London Plan

The Mayor of London formerly adopted The Publication London Plan as the new London Plan in March 2021. The plan outlines the Spatial Development Plan for London and part of the statutory Development Plan for Greater London from 2019 to 2041. A review of the London Plan Publication indicated the following policy in relation to air quality:

#### *Policy SI1 - Improving air quality*

- A) Development Plans, through relevant strategic, site-specific and area-based policies, should seek opportunities to identify and deliver further improvements to air quality and should not reduce air quality benefits that result from the Mayor's or boroughs' activities to improve air quality.
- B) To tackle poor air quality, protect health and meet legal obligations the following criteria should be addressed: Development proposals should not: a) lead to further deterioration of existing poor air quality b) create any new areas that exceed air quality limits, or delay the date at which compliance will be achieved in areas that are currently in exceedance of legal limits c) create unacceptable risk of high levels of exposure to poor air quality.

In order to meet the requirements in Part 1, as a minimum:

- a) development proposals must be at least Air Quality Neutral
  - b) development proposals should use design solutions to prevent or minimise increased exposure to existing air pollution and make provision to address local problems of air quality in preference to post-design or retro-fitted mitigation measures
  - c) major development proposals must be submitted with an Air Quality Assessment. Air quality assessments should show how the development will meet the requirements of B1
  - d) development proposals in Air Quality Focus Areas or that are likely to be used by large numbers of people particularly vulnerable to poor air quality, such as children or older people should demonstrate that design measures have been used to minimise exposure.
- C) Masterplans and development briefs for large-scale development proposals subject to an Environmental Impact Assessment should consider how local air quality can be improved across the area of the proposal as part of an air quality positive approach. To achieve this a statement should be submitted demonstrating: 1) how proposals have considered ways to maximise benefits to local air quality, and 2) what measures or design features will be put in place to reduce exposure to pollution, and how they will achieve this.

- D) In order to reduce the impact on air quality during the construction and demolition phase development proposals must demonstrate how they plan to comply with the Non-Road Mobile Machinery Low Emission Zone and reduce emissions from the demolition and construction of buildings following best practice guidance
- E) Development proposals should ensure that where emissions need to be reduced to meet the requirements of Air Quality Neutral or to make the impact of development on local air quality acceptable, this is done on-site. Where it can be demonstrated that emissions cannot be further reduced by on-site measures, off-site measures to improve local air quality may be acceptable, provided that equivalent air quality benefits can be demonstrated within the area affected by the development.

### 2.3 Local Planning Policy

A review of the local policy indicated the following policy in relation to air quality that is relevant to this assessment:

#### **Policy EM8: Land, Water, Air and Noise**

##### **Air Quality**

All development should not cause deterioration in the local air quality levels and should ensure the protection of both existing and new sensitive receptors.

All major development within the Air Quality Management Area (AQMA) should demonstrate air quality neutrality (no worsening of impacts) where appropriate; actively contribute to the promotion of sustainable transport measures such as vehicle charging points and the increased provision for vehicles with cleaner transport fuels; deliver increased planting through soft landscaping and living walls and roofs; and provide a management plan for ensuring air quality impacts can be kept to a minimum.

The Council seeks to reduce the levels of pollutants referred to in the Government's National Air Quality Strategy and will have regard to the Mayor's Air Quality Strategy. London Boroughs should also take account of the findings of the Air Quality Review and Assessments and Actions plans, in particular where Air Quality Management Areas have been designated.

The Council has a network of Air Quality Monitoring stations but recognises that this can be widened to improve understanding of air quality impacts. The Council may therefore require new major development in an AQMA to fund additional air quality monitoring stations to assist in managing air quality improvements.

#### **Policy DMEI 14: Air Quality**

A) Development proposals should demonstrate appropriate reductions in emissions to sustain compliance with and contribute towards meeting EU limit values and national air quality objectives for pollutants.

B) Development proposals should, as a minimum:

- i) be at least "air quality neutral";
- ii) include sufficient mitigation to ensure there is no unacceptable risk from air pollution to

sensitive receptors, both existing and new; and  
iii) actively contribute towards the improvement of air quality, especially within the Air Quality Management Area.

Reference has been made to these policies during the undertaking of this Air Quality Assessment.

### 3. METHODOLOGY

#### 3.1 Construction Phase Assessment

There is the potential for fugitive dust emissions to occur as a result of construction phase activities. These have been assessed in accordance with the methodology outlined within the IAQM document 'Guidance on the Assessment of Dust from Demolition and Construction' and the GLA supplementary planning document 'The Control of Dust and Emissions During Construction and Demolition'.

Reference should be made to Appendix C for details of the relevant IAQM construction phase assessment criteria, which were utilised in conjunction with site specific information.

Activities on the proposed construction site have been divided into the following types to reflect their different potential impacts. These are:

- Demolition
- Earthworks
- Construction
- Trackout

The potential for dust emissions was assessed for each activity that is likely to take place and considered three separate dust effects:

- Annoyance due to dust soiling
- Harm to ecological receptors
- The risk of health effects due to a significant increase in exposure to PM<sub>10</sub> and PM<sub>2.5</sub>

A desktop survey will be undertaken to identify human and ecological receptors within the relevant assessment buffers specified by the IAQM guidance. Should sensitive receptors not be present within the relevant distances then negligible impacts would be expected and further assessment is not necessary.

Following the identification of sensitive receptors, a site is then allocated a risk category which is assigned to each activity, based on the scale and nature of the works, as well as the sensitivity of the area to dust impacts.

The assigned magnitude and sensitivity will then determine the overall risk and appropriate mitigation measures to be employed during construction phase activities.

#### 3.2 Operational Phase Assessment

### 3.2.1 Future Exposure

The Proposed Development is located within from Hillingdon. As such, the proposals have the potential to introduce new receptors into an area of existing poor air quality, as well as to cause impacts upon existing pollution levels at nearby sensitive receptors within the AQMA.

Detailed dispersion modelling was therefore undertaken to quantify NO<sub>2</sub>, PM<sub>10</sub> and PM<sub>2.5</sub> pollutant exposure across the site and determine suitability for the proposed use. The following modelling scenarios were utilised during the assessment:

- 2024 as baseline year for verification against latest ratified data;
- 2026 do-something (DS) (predicted traffic flows in 2026 should the proposals be completed)

In light of expected emission improvements to the national vehicle fleet guided by government policy, it would be unrealistic not to assume a reduction to vehicle emission factors in future years, given the anticipated development year of 2026.

The 2026 scenario assumes an emission drop off based on assumptions provided by the Emission Factor Toolkit (Eft v12.0) supported by the uptake of low emission vehicles and government incentives and targets concerning fleet proportions by 2030.

The results of the dispersion modelling assessment will also be compared against the relevant AQOs detailed in Table 1 to determine significance. Full details of data used for the modelling assessment are presented in Appendix B of this report.

### 3.2.2 Road Vehicle Exhaust Impact Assessment

Based on the details of the Proposed Development and anticipated trip generation a screening assessment in accordance with the EPUK and IAQM guidance was determined a suitable assessment approach. The assessment will determine road traffic exhaust and combustion emission impacts associated with the Proposed Development and confirm the requirement for detailed assessment work. The EPUK and IAQM document states the following criteria to help establish when an air quality assessment is likely to be considered necessary:

- Proposals that will cause a change in Light Duty Vehicle (LDV) flows of more than 100 Annual Average Daily Traffic (AADT) within or adjacent to an AQMA or more than 500 elsewhere;
- Proposals that will cause a change in Heavy Duty Vehicle (HDV) flows of more than 25 AADT within or adjacent to an AQMA or more than 100 elsewhere;
- Proposals which include either a centralised plant using biofuel, a combustion plant with single or thermal input >300KWh or a standby emergency generator associated with a centralised energy centre; and
- Proposals which include combustion processes of any size.

Should the above criteria not be met, the EPUK and IAQM document considers air quality impacts associated with the scheme to be not significant and no further assessment is required. Conversely, should the criterion be exceeded it may be deemed necessary that further assessment is required.

### **3.3 Air Quality Neutral Assessment**

In line with the requirements of the London Plan, an Air Quality Neutral Assessment is required in order to compare benchmark emissions with the development emissions. The methodology outlined in the GLA document is provided below:

‘Air Quality Neutral’ is a term for developments that do not contribute to air pollution beyond allowable benchmarks. There are two sets of benchmarks, which cover the two main sources of air pollution from new developments:

- Building Emissions Benchmark (BEB) - emissions from equipment used to supply heat and energy to the buildings
- Transport Emissions Benchmark (TEB) - emissions from private vehicles travelling to and from the development.

A development must meet both benchmarks separately in order to be Air Quality Neutral. If one or both benchmarks are not met, appropriate mitigation or offsetting will be required.

The following assessment procedure is relevant to this assessment:

#### **3.3.1 Simplified procedure TEB**

Where minor developments include new parking, they can be assumed to meet the TEB if the maximum parking standards set out in policies T6 and T6.1 to T6.5 of the London Plan are not exceeded. For land uses where maximum parking standards are not defined, a full calculation against the benchmarks should be carried out.

Where major developments meet the definition of ‘car-free’, they can be assumed to meet the TEB. This assumption does not exempt a development from considering building emissions.

The relevant maximum parking standard policies are provided in Table 4.

**Table 4: Maximum Residential Parking Standards**

Maximum residential parking standards		
Location	Number of beds	Maximum parking provision
Central Activities Zone Inner London Opportunity Areas Metropolitan and Major Town Centres All areas of PTAL 5 – 6 Inner London PTAL 4	All	Car free
Inner London PTAL 3	All	Up to 0.25 spaces per dwelling
Inner London PTAL 2 Outer London Opportunity Areas	All	Up to 0.5 spaces per dwelling
Inner London PTAL 0 – 1	All	Up to 0.75 spaces per dwelling
Outer London PTAL 4	1 – 2	Up to 0.5 - 0.75 spaces per dwelling
Outer London PTAL 4	3+	Up to 0.5 - 0.75 spaces per dwelling
Outer London PTAL 2 – 3	1 – 2	Up to 0.75 spaces per dwelling
Outer London PTAL 2 – 3	3+	Up to 1 space per dwelling
Outer London PTAL 0 – 1	1 – 2	Up to 1.5 space per dwelling
Outer London PTAL 0 – 1	3+	Up to 1.5 spaces per dwelling

### 3.3.2 Simplified procedure BEB

Where minor developments include new heating systems, they can be assumed to meet the BEB if:

- The new heating system is a heat pump or other zero emission heat source;
- The new heating system is a gas boiler with NO<sub>x</sub> emissions rated at less than 40 mg/kWh; or
- The development is connecting to an existing heat network.

## 4. BASELINE

Existing air quality conditions in the vicinity of the application site were identified in order to provide a baseline for assessment. These are detailed in the following sections.

### 4.1 Local Air Quality Management

As required by the Environment Act (2021), LBoH has undertaken a review and assessment of air quality within their area of administration. The closest AQMA that has been declared is described as:

- Hillingdon AQMA

The application site is located within Hillingdon AQMA. London also has designated Air Quality Focus Areas (AQFAs) across the borough which are selected hotspots where air quality is predicted to be poor and public exposure is at its highest. The Proposed Development is located within the Uxbridge Road Corridor Focus Area.

As such there is the potential for the Proposed Development to introduce future site users into an area of elevated NO<sub>2</sub>, and cause air quality impacts during the construction and operational phases. This has been considered within this report.

LBoH has concluded that concentrations of all other pollutants considered within the AQS are currently below the relevant AQOs and as such no further AQMAs have been designated.

### 4.2 Air Quality Monitoring

Monitoring of pollutant concentrations is undertaken by LBoH and neighbouring Ealing Council using monitoring methods throughout their areas of administration. A review of most recent Air Quality Monitoring Data indicated that there are currently no automatic analysers and 8 diffusion tubes located within the vicinity of the Proposed Development, presented in Table 5.

**Table 5: Monitoring Results**

ID	Site Name	Type	NGR (m)		Distance to Site (m)	Annual Mean Concentration (µg/m <sup>3</sup> )		
			X	Y		2022	2023	2024
Hillingdon Hayes	Hillingdon Hayes	Roadside	509906	179917	1543.12	34.0	34.0	28.0
EA10	150 Brent Road, Southall, UB2 5LD	Roadside	511167	179240	2074.19	27.2	30.3	25.4
EA13	11 The Broadway, Southall, UB1 3PX	Roadside	512768	180402	2253.77	36.2	34.2	32.8

ID	Site Name	Type	NGR (m)		Distance to Site (m)	Annual Mean Concentration ( $\mu\text{g}/\text{m}^3$ )		
			X	Y		2022	2023	2024
EA14	25 Lady Margaret Road, Southall, UB1 2RA	Roadside	512817	180515	2253.78	32.5	29.8	27.2
EA12	Hambrough Primary School	Roadside	512678	180067	2317.16	23.0	22.2	19.8
EA11	2 Merrick Road, Southall, UB2 4AU	Roadside	512657	179703	2509.97	19.3	20.3	18.3
EA9	18 Western Road, Southall, UB2 5DU	Roadside	512181	179219	2528.91	23.4	21.7	18.8
EA8	55 King Street, Southall, UB2 4DQ	Roadside	512341	179186	2652.51	32.3	28.7	26.3

As indicated in Table 5, there were no exceedances of annual mean AQOs at the monitoring locations in recent years. Reference should be made to Figure 2 within Appendix A for a graphical representation of the monitoring locations.

### 4.3 Background Pollutant Concentrations

The total concentration of a pollutant consists of explicit local emission sources (such as roads and industrial sources) and the background component. The background component consists of indeterminate sources which are transported into an area from further away by meteorological conditions. Background pollutant concentrations are therefore the ambient level of pollution that is not affected by local sources of pollution.

It is not usually practical to obtain a true representation of background levels in urban areas due to corruption by local sources; background levels used in assessments may contain a mixture of both sources.

Predictions of background pollutant concentrations on a 1km by 1km grid basis have been produced by DEFRA for the entire of the UK to assist LAs in their Review and Assessment of air quality. The Proposed Development site is located across grid square:

- NGR: 510500, 181500

Data for this location was downloaded from the DEFRA website. For the purpose of this assessment, background concentrations are summarised in Table 6 for the base year (2024) and the predicted development opening year (2026).

**Table 6: Predicted Background Pollutant Concentrations**

Pollutant	Predicted Background Concentration ( $\mu\text{g}/\text{m}^3$ )	
	2024	2026
NO <sub>x</sub>	21.38804	19.80172
NO <sub>2</sub>	15.54975	14.52019
PM <sub>10</sub>	13.874337	13.72785
PM <sub>2.5</sub>	8.236792	8.085187

As shown in Table 6, background concentrations of all pollutants are below the relevant AQOs detailed in Table 1.

#### 4.4 Sensitive Receptors

A sensitive receptor is defined as any location which may be affected by changes in air quality as a result of a development. These have been defined for construction dust impacts in the following Sections.

##### 4.4.1 Construction Phase Sensitive Receptors

There are no nationally or European designated ecological receptors within 50m of the Site boundary, or within 50m from a route used by construction vehicles on the public highway (up to 250m from the Site entrance(s)). Therefore, the risk of dust effects at a nationally or European designated ecological receptor site from construction impacts have not been considered further in this assessment.

Human receptors sensitive to potential dust impacts during demolition, earthworks and construction were identified from a desk-top study of the area up to 250m from the Proposed Development boundary. These are summarised in Table 7.

**Table 7: Construction Phase Dust Sensitive Receptors**

Distance from Site Boundary (m)	Approximate Number of Human Receptors
Less than 20	10 - 100
20 - 50m	10 - 100
50 - 100m	More than 100
100 - 250m	More than 100

Reference should be made to Figure 3 within Appendix A for a graphical representation of construction phase dust buffer zones.

Receptors sensitive to potential dust impacts from trackout were identified from a desk-top study of the area up to 50m from the road network within 250m of the site access route. These are

summarised in Table 8. The construction traffic will access the Proposed Development via Yeading Lane.

**Table 8: Trackout Dust Sensitive Receptors**

Distance from Trackout Routes (m)	Approximate Number of Human Receptors
Less than 20	1 - 10
20 - 50m	More than 100

Reference should be made to Figure 4 within Appendix A for a graphical representation of trackout dust buffer zones. A number of additional factors have been considered when determining the sensitivity of the surrounding area. These are summarised in Table 9.

**Table 9: Additional Area Sensitivity Factors**

Guidance	Comment
Whether there is any history of dust generating activities in the area	The site is located in a High sensitivity area. There is likely to have been a history of dust generating activities due to commuting and development processes in the locality.
The likelihood of concurrent dust generating activity on nearby sites.	A review of the LBoH Planning Portal indicated that there are planning applications within 500m of the Proposed Development. As such, there is potential for concurrent dust generation to occur should the construction phases of the aforementioned developments overlap.
Pre-existing screening between the source and the receptors	There is vegetation present along the boundaries of the site. If retained, this could provide natural protective screening to receptors in these directions.
Conclusions drawn from analysing local meteorological data which accurately represent the area: and if relevant the season during which works will take place	The wind direction is predominantly from the Southwest of the development. As such, properties to the Northeast of the site would be most affected by dust emissions.
Conclusions drawn from local topography	The topography of the area appears to be predominantly flat. As such, there are no constraints to dust dispersion.
Duration of the potential impact, as a receptor may become more sensitive over time	Currently the duration of the construction phase is unknown.
Any known specific receptor sensitivities which go beyond the classifications given in the document.	No specific receptor sensitivities identified during the baseline.

**4.1.2 Operational Phase Sensitive Receptors**

A desk top study was undertaken to identify the closest receptor locations to the application site. This indicated residential locations within close proximity to development boundaries. There are

no educational or medical facilities in the vicinity of the application site and affected road networks.

## 5. ASSESSMENT

### 5.1 Construction Phase Assessment

The undertaking of activities such as excavation, ground works, cutting, construction, concrete batching and storage of materials has the potential to result in fugitive dust emissions throughout the construction phase. Vehicle movements both on-site and on the local road network also have the potential to result in the re-suspension of dust from haul road and highway surfaces.

The desk-study detailed in Section 4.4 identified a number of receptors with a high classification of sensitivity within 250m of the site boundary, and within 50m of the anticipated trackout routes. As such, a detailed assessment of potential dust impacts was required, and summarised in the below sections.

Reference should be made to Appendix B for details of the relevant IAQM construction phase assessment criteria, which were utilised in conjunction with site specific information.

#### 5.1.1 Step 2A – Magnitude

The scale and nature of the works was determined to assess the magnitude of dust arising from each construction phase activity. The determination of magnitude was based upon the criteria detailed in Appendix B, with the outcome of Step 2A is summarised below in Table 10.

##### **Demolition**

Demolition will involve the removal of existing bungalow. The volume of buildings to be demolished is therefore likely to be less than 12,000m<sup>3</sup>. As such, the magnitude of potential emissions related to earthworks activities is considered Small.

##### **Earthworks**

The area of the site is less than 18,000m<sup>2</sup>. As such, the magnitude of potential dust emissions related to earthwork activities is considered Small.

##### **Construction**

Construction will involve Erection of 2 x two storey buildings. Given the scale of the Proposed Development the total building and infrastructure volume is less than 12,000m<sup>3</sup>. As such, the magnitude of potential dust emissions related to construction activities is considered Small.

##### **Trackout**

Information on the number of HDV trips to be generated during the construction phase of the Proposed Development was not available at the time of assessment. As such, it is anticipated that

the unpaved road length is likely to be less than 50m. The magnitude of potential dust emissions from trackout is therefore considered Small.

**Table 10: Dust Emission Magnitude**

Magnitude of Activities			
Demolition	Earthworks	Construction	Trackout
Small	Small	Small	Small

### 5.1.2 Step 2B – Sensitivity

The next step (Step 2B) is to determine the sensitivity of the surrounding area, based on general principles such as amenity and aesthetics, as well as human exposure sensitivity.

#### Dust Soiling

As shown in Section 4.4.1, the desktop study indicated approximately more than 100 sensitive receptors within 250m of the Proposed Development boundary and more than 100 within 20m of the anticipated trackout routes.

Based on the assessment criteria detailed in Appendix B, the sensitivity of the receiving environment to potential dust soiling impacts was considered to be High for all construction phase activities. This is because the site is situated in a predominantly High sensitivity area, and the people would reasonably be expected to be present here for extended periods of time.

#### Human Health

The annual mean concentration of PM<sub>10</sub> is 13.87µg/m<sup>3</sup> as detailed in Section 4. Based on annual mean PM<sub>10</sub> concentrations, receptor sensitivity and the receptor counts provided above, the area is considered to be Low for all construction phase activities.

The sensitivity of the receiving environment to specific potential dust impacts, based on the criteria detailed in Appendix B is summarised in Table 11.

**Table 11: Sensitivity of the Surrounding Area**

Potential Impact	Sensitivity of the Surrounding Area			
	Demolition	Earthworks	Construction	Trackout
Dust Soiling	High	High	High	High
Human Health	Low	Low	Low	Low
Ecological	Negligible	Negligible	Negligible	Negligible

### 5.1.3 Step 2C – Risk

Both the magnitude and sensitivity factors are combined in Step 2C to determine the risk of dust impacts without the application of best practice mitigation measures.

It should be noted that the potential for impacts depends significantly on the distance between the dust generating activity and receptor location. Risk was predicted based on a worst-case scenario of works being undertaken at the site boundary closest to each sensitive area. Therefore, actual risk is likely to be lower than that predicted during the majority of the construction phase. A summary of the risk from each dust generating activity is provided in Table 12.

**Table 12: Summary of Potential Unmitigated Dust Risks**

Potential Impact	Risk			
	Demolition	Earthworks	Construction	Trackout
Dust Soiling	Medium	Low	Low	Low
Human Health	Negligible	Negligible	Negligible	Negligible
Ecological	Negligible	Negligible	Negligible	Negligible

### 5.1.4 Step 3 – Mitigation

The IAQM guidance provides a number of potential mitigation measures to reduce impacts during the construction phase. These measures have been adapted for the Proposed Development site as summarised in Table 13.

**Table 13: Fugitive Dust Mitigation Measures**

Issue	Control Measure
Communication	<ul style="list-style-type: none"> <li>• Develop and implement a stakeholder communications plan that includes community engagement before work commences on site.</li> <li>• 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.</li> <li>• Display the head or regional office contact information.</li> <li>• Develop and implement a Dust Management Plan (DMP), which may include measures to control other emissions, approved by the Local Authority. The level of detail will depend on the risk, and should include as a minimum the highly recommended measures in this document. The desirable measures should be included as appropriate for the site. In London additional measures may be required to ensure compliance with the Mayor of London's guidance. The DMP may include monitoring of dust deposition, dust flux, realtime PM10 continuous monitoring and/or visual inspections.</li> </ul>

Issue	Control Measure
Site Management	<ul style="list-style-type: none"> <li>• 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.</li> <li>• Make the complaints log available to the local authority when asked.</li> <li>• 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.</li> </ul>
Monitoring	<ul style="list-style-type: none"> <li>• 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 checks of surfaces such as street furniture, cars and window sills within 100 m of site boundary, with cleaning to be provided if necessary.</li> <li>• 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.</li> <li>• 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.</li> <li>• Agree dust deposition, dust flux, or real-time PM10 continuous monitoring locations with the Local Authority. Where possible commence baseline monitoring at least three months before work commences on site or, if it a large site, before work on a phase commences. Further guidance is provided by IAQM on monitoring during demolition, earthworks and construction.</li> </ul>
Preparing and Maintaining the Site	<ul style="list-style-type: none"> <li>• Plan site layout so that machinery and dust causing activities are located away from receptors, as far as is possible.</li> <li>• Erect solid screens or barriers around dusty activities or the site boundary that are at least as high as any stockpiles on site.</li> <li>• Fully enclose site or specific operations where there is a high potential for dust production and the site is active for an extensive period.</li> <li>• Avoid site runoff of water or mud.</li> <li>• Keep site fencing, barriers and scaffolding clean using wet methods.</li> <li>• 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 on-site cover as described below.</li> <li>• Cover, seed or fence stockpiles to prevent wind whipping.</li> </ul>
Operating vehicle/machinery and sustainable travel	<ul style="list-style-type: none"> <li>• Ensure all on-road vehicles comply with the requirements of the London Low Emission Zone and the London NRMM standards, where applicable.</li> <li>• Ensure all vehicles switch off engines when stationary - no idling vehicles.</li> <li>• Avoid the use of diesel or petrol powered generators and use mains electricity or battery powered equipment where practicable.</li> <li>• 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 appropriate).</li> <li>• Implement a Travel Plan that supports and encourages sustainable travel (public transport, cycling, walking, and car-sharing).</li> </ul>
Operations	<ul style="list-style-type: none"> <li>• 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.</li> </ul>

Issue	Control Measure
	<ul style="list-style-type: none"> <li>• Ensure an adequate water supply on the site for effective dust/particulate matter suppression/ mitigation, using non-potable water where possible and appropriate.</li> <li>• Use enclosed chutes and conveyors and covered skips.</li> <li>• Minimise drop heights from conveyors, loading shovels, hoppers and other loading or handling equipment and use fine water sprays on such equipment wherever appropriate.</li> <li>• 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.</li> </ul>
Waste Management	<ul style="list-style-type: none"> <li>• Avoid bonfires and burning of waste materials.</li> </ul>
Demolition	<ul style="list-style-type: none"> <li>• Soft strip inside buildings before demolition (retaining walls and windows in the rest of the building where possible, to provide a screen against dust).</li> <li>• Ensure effective water suppression is used during demolition operations. Hand held sprays are more effective than hoses attached to equipment as the water can be directed to where it is needed. In addition high volume water suppression systems, manually controlled, can produce fine water droplets that effectively bring the dust particles to the ground.</li> <li>• Avoid explosive blasting, using appropriate manual or mechanical alternatives.</li> <li>• Bag and remove any biological debris or damp down such material before demolition.</li> </ul>
Construction	<ul style="list-style-type: none"> <li>• Avoid scabbling (roughening of concrete surfaces) if possible.</li> <li>• 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.</li> </ul>
Trackout	<ul style="list-style-type: none"> <li>• 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 continuously in use.</li> <li>• Avoid dry sweeping of large areas.</li> <li>• Ensure vehicles entering and leaving sites are covered to prevent escape of materials during transport.</li> <li>• Record all inspections of haul routes and any subsequent action in a site log book.</li> <li>• Implement a wheel washing system (with rumble grids to dislodge accumulated dust and mud prior to leaving the site where reasonably practicable).</li> </ul>

### 5.1.5 Step 4 – Residual Impacts

Assuming the relevant mitigation measures outlined in Table 13 are implemented, the residual effect from all dust generating activities is predicted to be negligible and therefore **not significant** in accordance with the IAQM guidance.

## 5.2 Operational Phase Assessment

The assessment was undertaken in accordance with the methodology detailed in Section 3.2.

### 5.2.1 Future Exposure

Annual mean NO<sub>2</sub>, PM<sub>10</sub> and PM<sub>2.5</sub> concentrations were predicted across the Proposed Development for the 2026 DS scenario at a height of 1.5m to represent exposure across the ground floor level, as shown in Figures 7 to 9 within Appendix A.

Background NO<sub>2</sub> PM<sub>10</sub> and PM<sub>2.5</sub> levels are likely to be lower at elevated heights due to increased distance from emission sources, such as roads. Therefore, predicted concentrations at heights above ground floor level are considered acceptable in regards to future exposure and have not been assessed further.

### Nitrogen Dioxide (NO<sub>2</sub>)

Predicted annual mean NO<sub>2</sub> concentrations across the Proposed Development site during the DS scenario are summarised in Table 14.

**Table 14: Modelling Results - Annual Mean NO<sub>2</sub> at Proposed Development**

Floor Level	Predicted 2026 Annual Mean NO <sub>2</sub> Concentration (µg/m <sup>3</sup> )
Ground (1.5m)	16.26 - 17.41

The predicted concentrations indicate that there were no exceedances of the AQO across the Proposed Development. As such, it is considered that annual mean NO<sub>2</sub> levels at the Proposed Development site should not be viewed as a constraint to development.

In addition, concentrations across the Proposed Development are classified as APEC - A (No air quality grounds for refusal).

Predictions of 1-hour NO<sub>2</sub> concentrations were not produced as part of the dispersion modelling assessment. LLAQM.TG(19) states if annual mean NO<sub>2</sub> concentrations are below 60µg/m<sup>3</sup> then it is unlikely that the 1-hour AQO will be exceeded. As such, based on the results in Table 14, it is not predicted that on-site concentrations will exceed the 1-hour mean AQO for NO<sub>2</sub>.

Based on the results of the dispersion modelling assessment, the site is considered to be suitable for the proposed end use for NO<sub>2</sub> concentrations.

### Particulate Matter (PM<sub>10</sub> & PM<sub>2.5</sub>)

Predicted annual mean PM<sub>10</sub> and PM<sub>2.5</sub> concentrations across the Proposed Development site during the DS scenario are summarised in Table 15.

**Table 15: Modelling Results - Annual Mean PM<sub>10</sub> and PM<sub>2.5</sub> at Proposed Development**

Floor Level	Predicted 2026 Annual Mean Concentration ( $\mu\text{g}/\text{m}^3$ )	
	PM <sub>10</sub>	PM <sub>2.5</sub>
Ground (1.5m)	14.87 - 15.71	8.64 - 9.12

The predicted concentrations indicate that there were no exceedances of the AQO across the Proposed Development. As such, it is considered that annual mean PM<sub>10</sub> and PM<sub>2.5</sub> levels at the Proposed Development site should not be viewed as a constraint to development.

In addition, concentrations across the Proposed Development are classified as APEC - A (No air quality grounds for refusal).

Based on the results of the dispersion modelling assessment, the site is considered to be suitable for the proposed end use for PM<sub>10</sub> and PM<sub>2.5</sub> concentrations.

### 5.2.2 Road Vehicle Exhaust Emission Impacts

Any additional vehicle movements associated with the proposed development will generate exhaust emissions, such as NO<sub>2</sub>, PM<sub>10</sub> and PM<sub>2.5</sub> on the local and regional road networks.

It is considered that the operational phase of the site will not result in a change of AADT flows of more than 100, produce over 25 HDV movements per day or significantly affect average speeds on the local road network.

Subsequently, potential air quality impacts associated with operational phase road vehicle exhaust emissions are predicted to be **not significant** in accordance with the EPUK and IAQM screening criteria shown in Section 3.2.2.

## 5.3 Air Quality Neutral Assessment

### 5.3.1 Development Classification

The proposed development comprises the Erection of 2 x two storey buildings to provide 4 self-contained flats with associated parking. As such, it is classified as a Minor development. The development is expected to include additional emissions sources. Therefore, a simplified Air Quality Neutral assessment procedure is required.

### 5.3.2 Simplified Transport Emission Benchmark

The relevant maximum parking standards set out in policies of the London Plan, shown in Table 4, are not exceeded. Subsequently, the Proposed Development can be assumed to meet the Transport Emission Benchmarks. Therefore, the development is considered Air Quality Neutral for Transport Emissions.

### 5.3.3 Simplified Building Emission Benchmark

The development can be assumed to meet the Building Emission Benchmark as the new heating system will not exceed ratings of NO<sub>x</sub> emissions of 40 mg/kWh. Therefore, the development is considered Air Quality Neutral for Building Emissions.

### 5.3.4 Entire Development

The development building emissions are less than the BEB. The development transport emissions are less than the TEB. The development therefore is considered **Air Quality Neutral**.

## 6. CONCLUSION

Air Quality Solutions were commissioned by HS Arora Properties to undertake an Air Quality Assessment in support of a proposed residential development at 25 Yeading Lane, Hayes UB4 0EL.

During the construction phase of the Proposed Development there is the potential for air quality impacts as a result of fugitive dust emissions from the site. These were assessed in accordance with the IAQM and GLA methodology. Assuming good practice dust control measures are implemented, the residual potential air quality impacts from dust generated by demolition, earthworks and construction and trackout activities was predicted to be **not significant**.

Dispersion modelling was undertaken to quantify annual mean NO<sub>2</sub>, PM<sub>10</sub> and PM<sub>2.5</sub> concentrations across the application to assess suitability for proposed use. Modelling results were subsequently verified using local monitoring data.

The dispersion modelling results indicated that annual mean NO<sub>2</sub>, PM<sub>10</sub> and PM<sub>2.5</sub> concentrations across the application site were **below** the relevant AQOs at the proposed sensitive use.

An assessment was undertaken using the EPUK and IAQM screening criteria to determine the potential for vehicle trips generated by the Proposed Development to affect local air quality. The traffic data indicated that operational traffic flows are **below** the relevant EPUK and IAQM assessment thresholds.

GLA states that new developments must be considered Air Quality Neutral. The development is classified as a minor development, so a simplified AQN procedure was deemed sufficient. The development does not exceed maximum residential parking standards provided in the London Plan and will not include a new heating system with NOX emissions rated at greater than 40 mg/kWh. In line with the GLA guidance, and given the lack of development generated emissions, the development is considered **Air Quality Neutral**.

Based on the assessment results the site is considered suitable for the proposed end use and complies with the LBoH Local Plan, the GLA Policy and NPPF.

## ABBREVIATIONS

LBoH	London Borough of Hillingdon
AADT	Annual Average Daily Traffic
ADM	Atmospheric Dispersion Modelling
APEC	Air Pollution Exposure Criteria
AQLV	Air Quality Limit Value
AQMA	Air Quality Management Area
AQO	Air Quality Objectives
AQS	Air Quality Strategy
BEB	Building Emission Benchmark
CERC	Cambridge Environmental Research Consultants
DEFRA	Department for Environment, Food and Rural Affairs
DfT	Department for Transport
DM	Do Minimum
DS	Do Something
DMP	Dust Management Plan
EPUK	Environmental Protection UK
EU	European Union
GIA	Gross Internal Area
GLA	Greater London Authority
HDV	Heavy Duty Vehicle
IAQM	Institute of Air Quality Management
LLAQM	London Local Air Quality Management
LA	Local Authority
LDV	Light Duty Vehicle
NGR	National Grid Reference
NO <sub>2</sub>	Nitrogen dioxide
NO <sub>x</sub>	Oxides of nitrogen
NPPF	National Planning Policy Framework
NPPG	National Planning Practice Guidance
NRMM	Non Road Mobile Machinery
PM <sub>2.5</sub>	Particulate matter with an aerodynamic diameter of less than 2.5µm
PM <sub>10</sub>	Particulate matter with an aerodynamic diameter of less than 10µm
TEB	Transport Emission Benchmark
TEMPRO	Trip End Model Presentation Program
z <sub>0</sub>	Roughness Length

***END OF REPORT***

### APPENDIX A: FIGURES

Figure 1  
Site Location

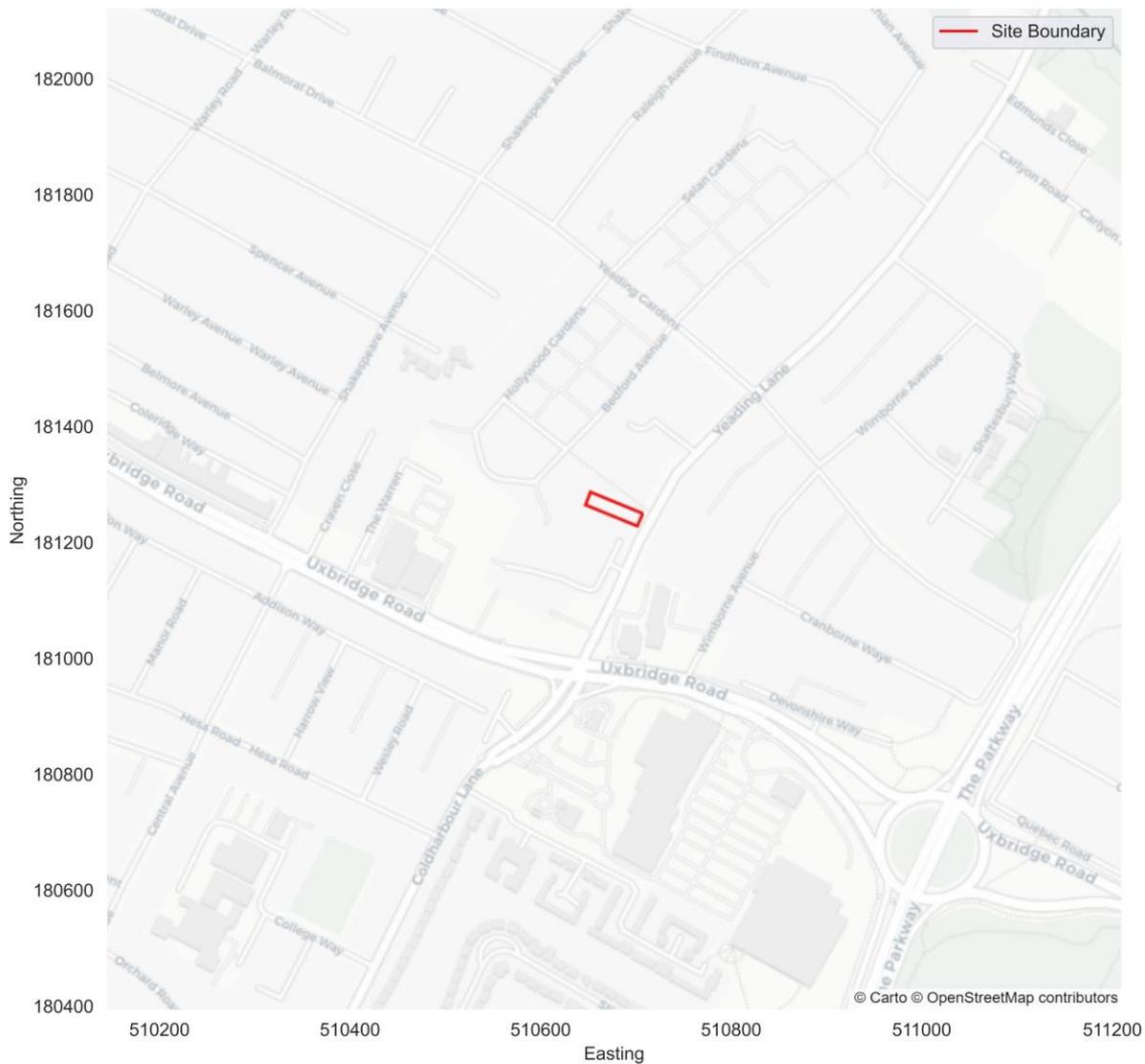
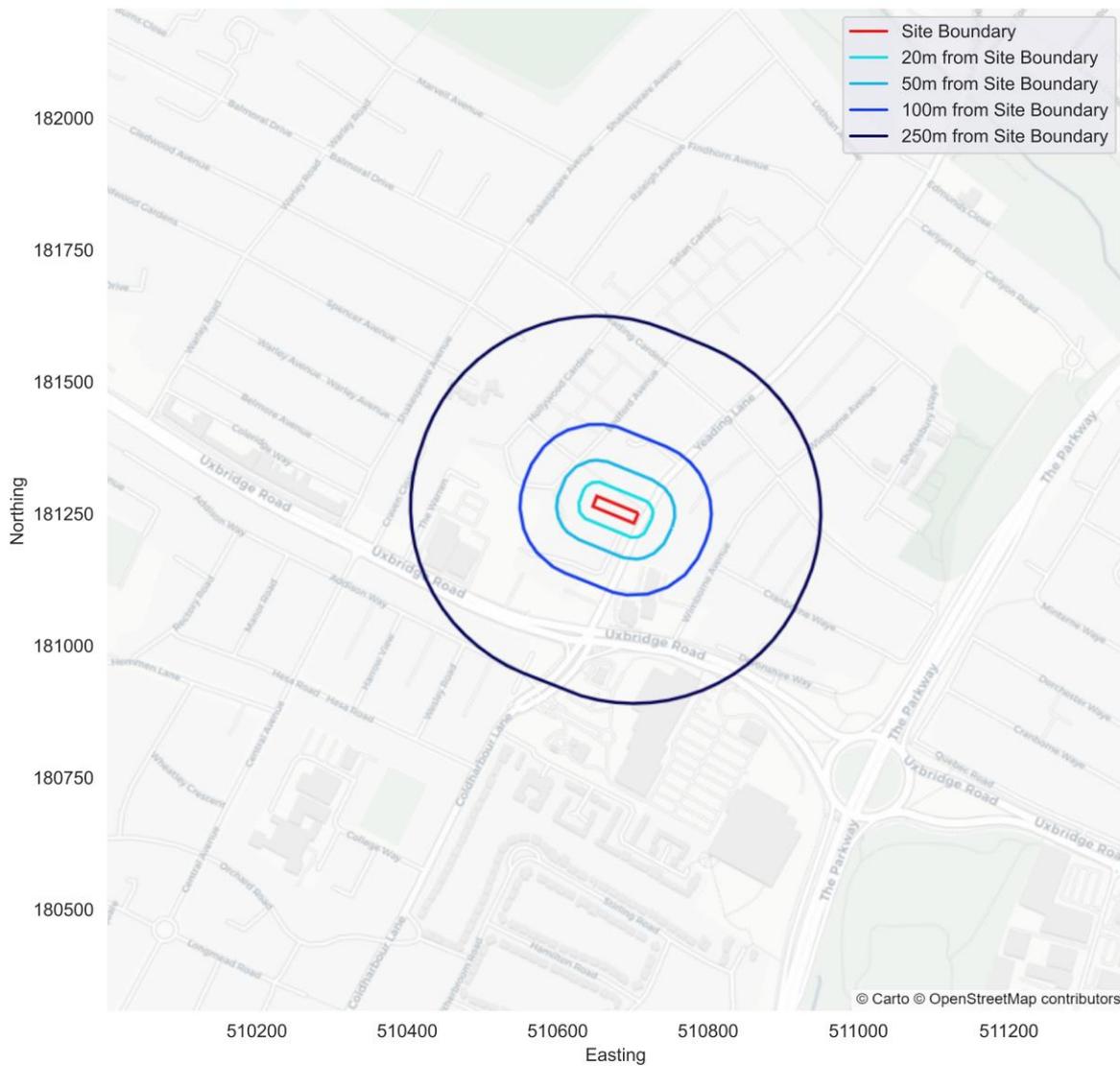


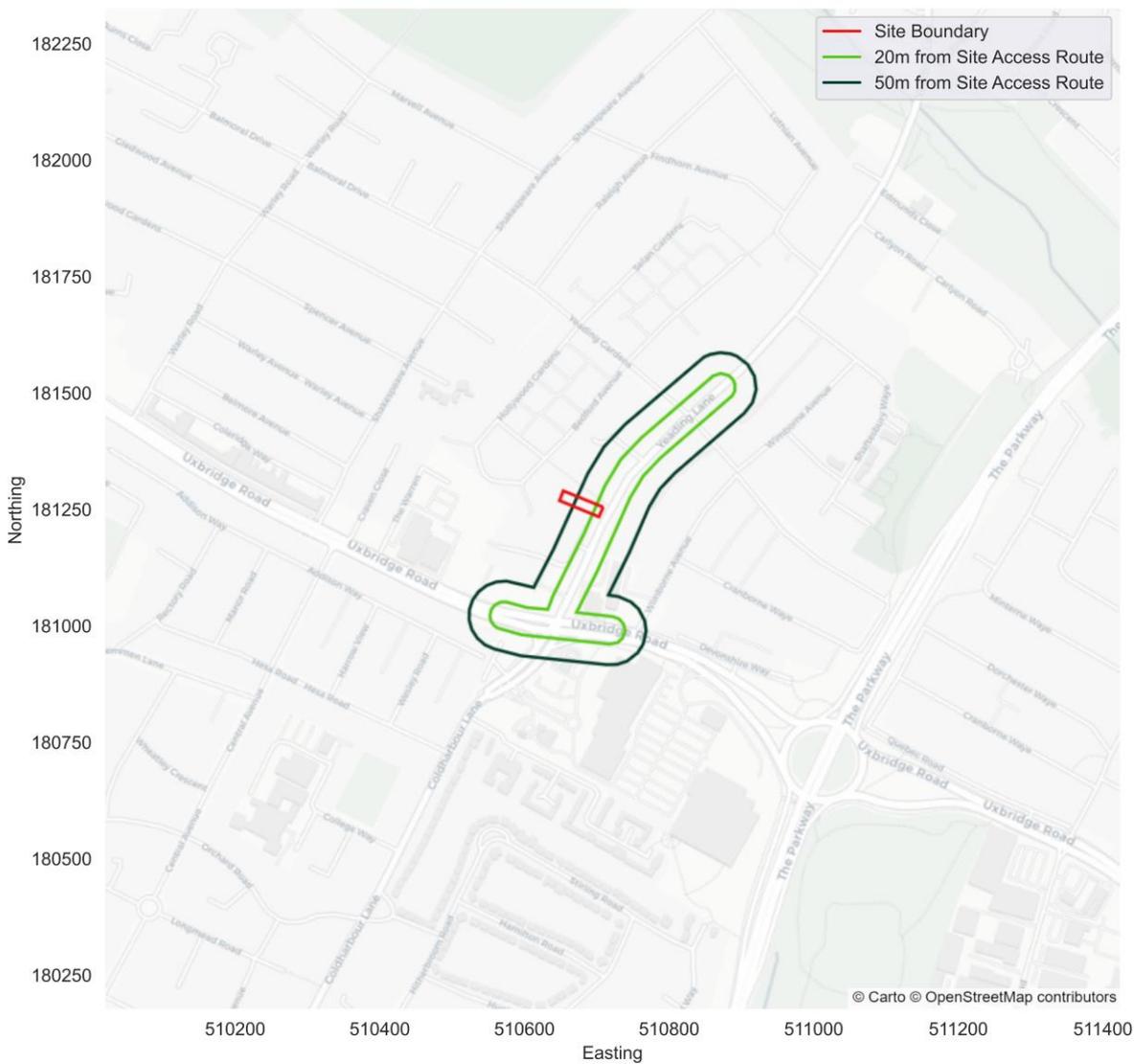
Figure 2  
Monitoring Locations



Demolition and Construction Dust Buffer Zones



Trackout Dust Buffer Zones



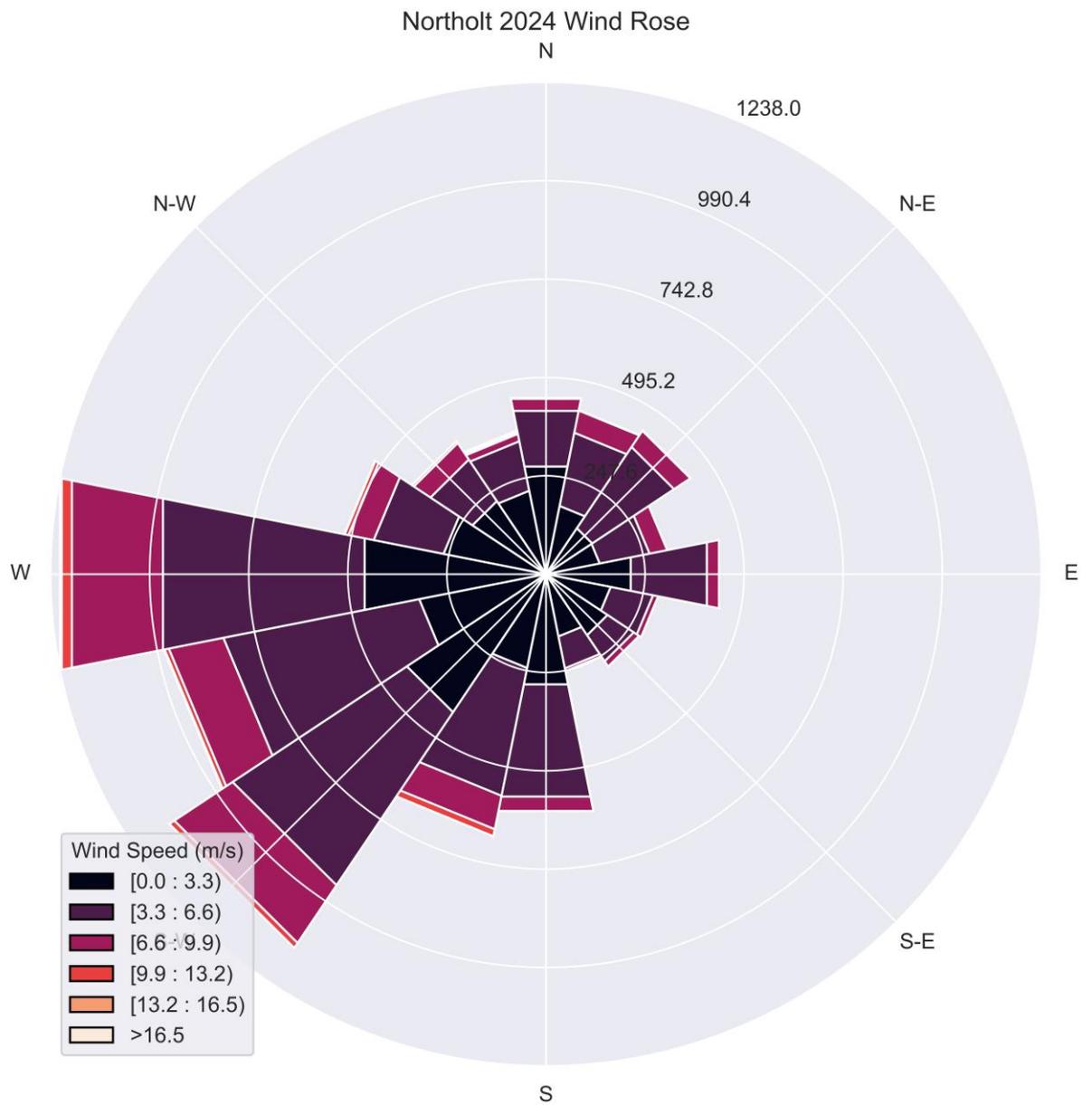
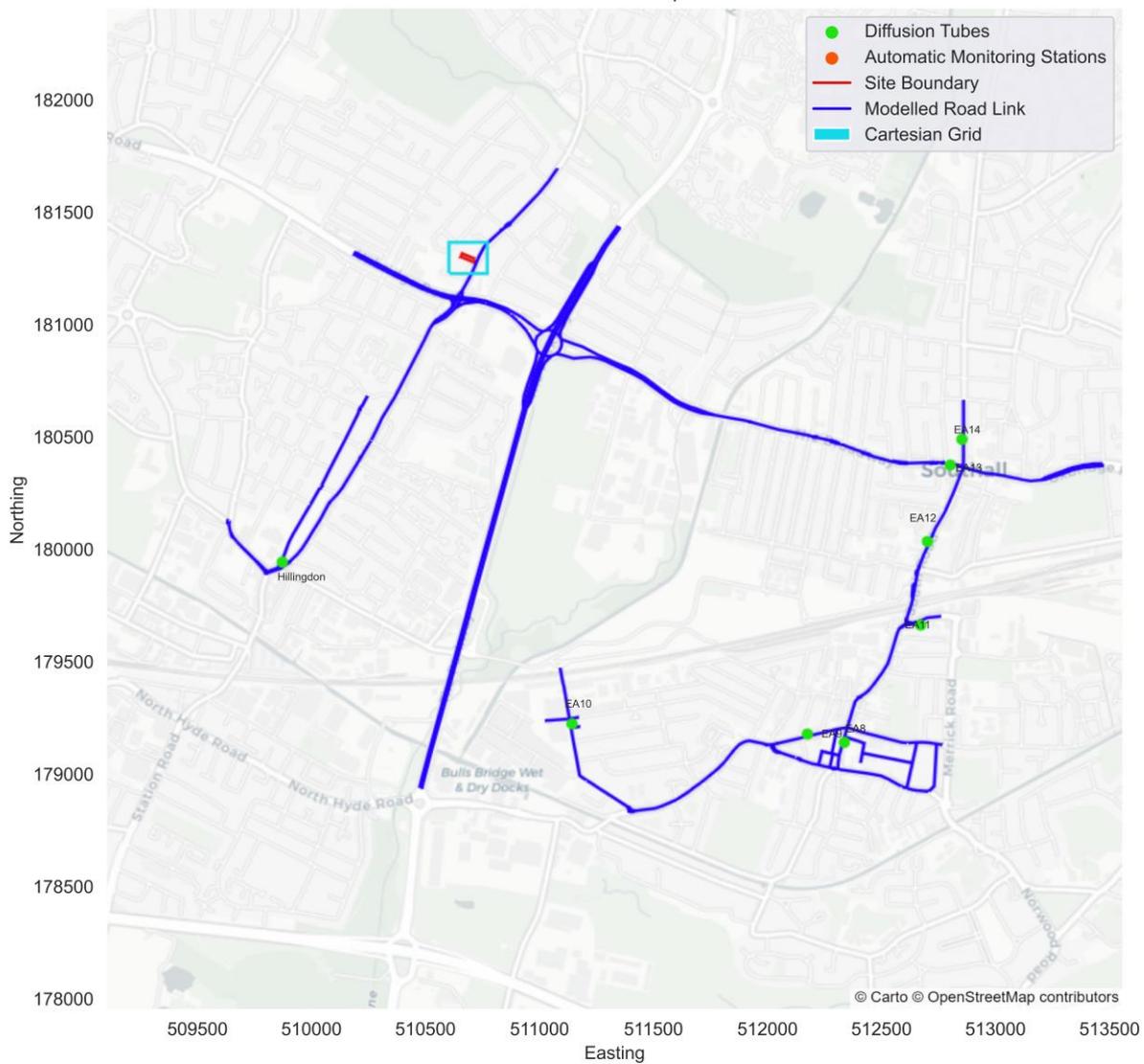
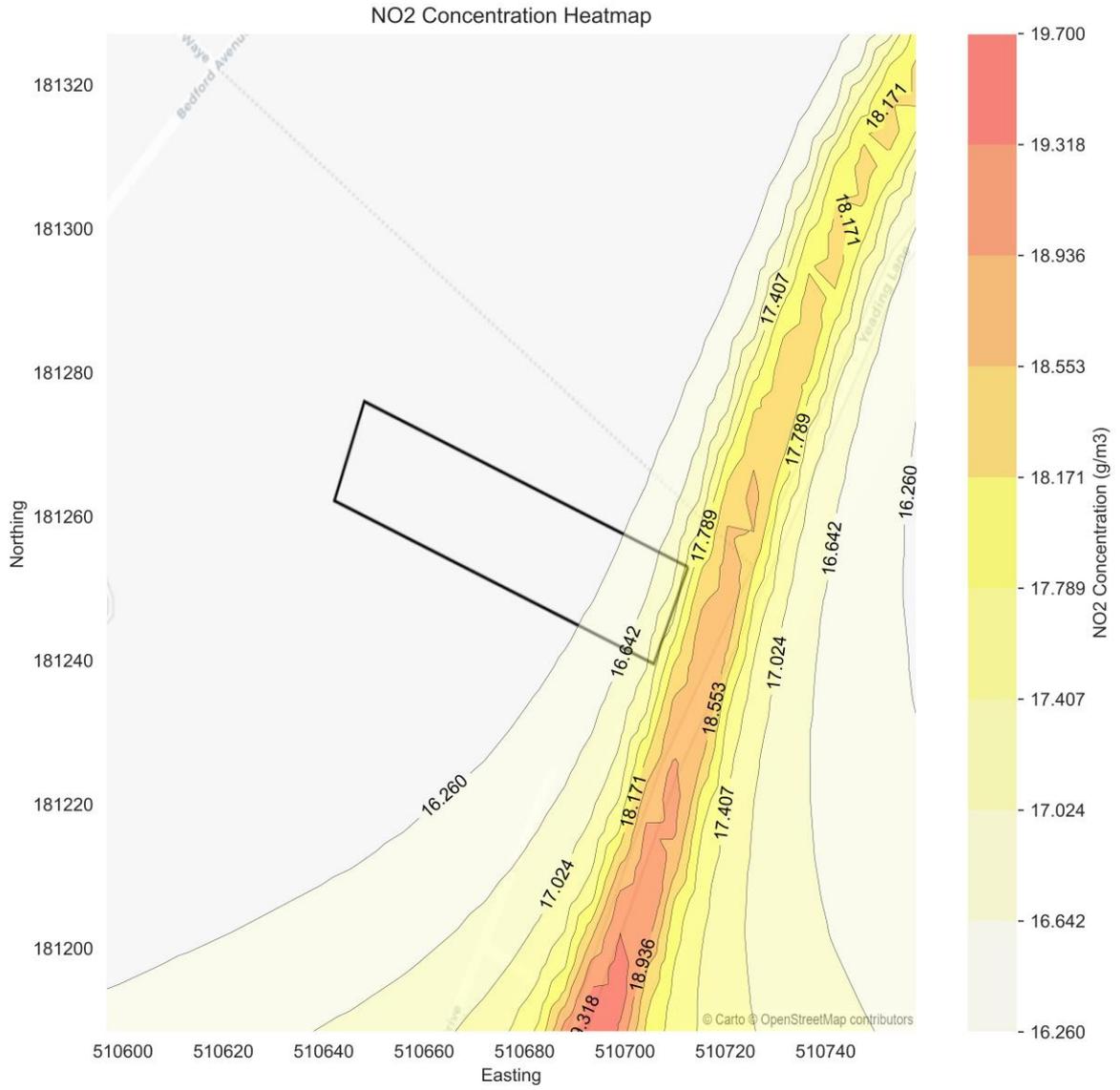
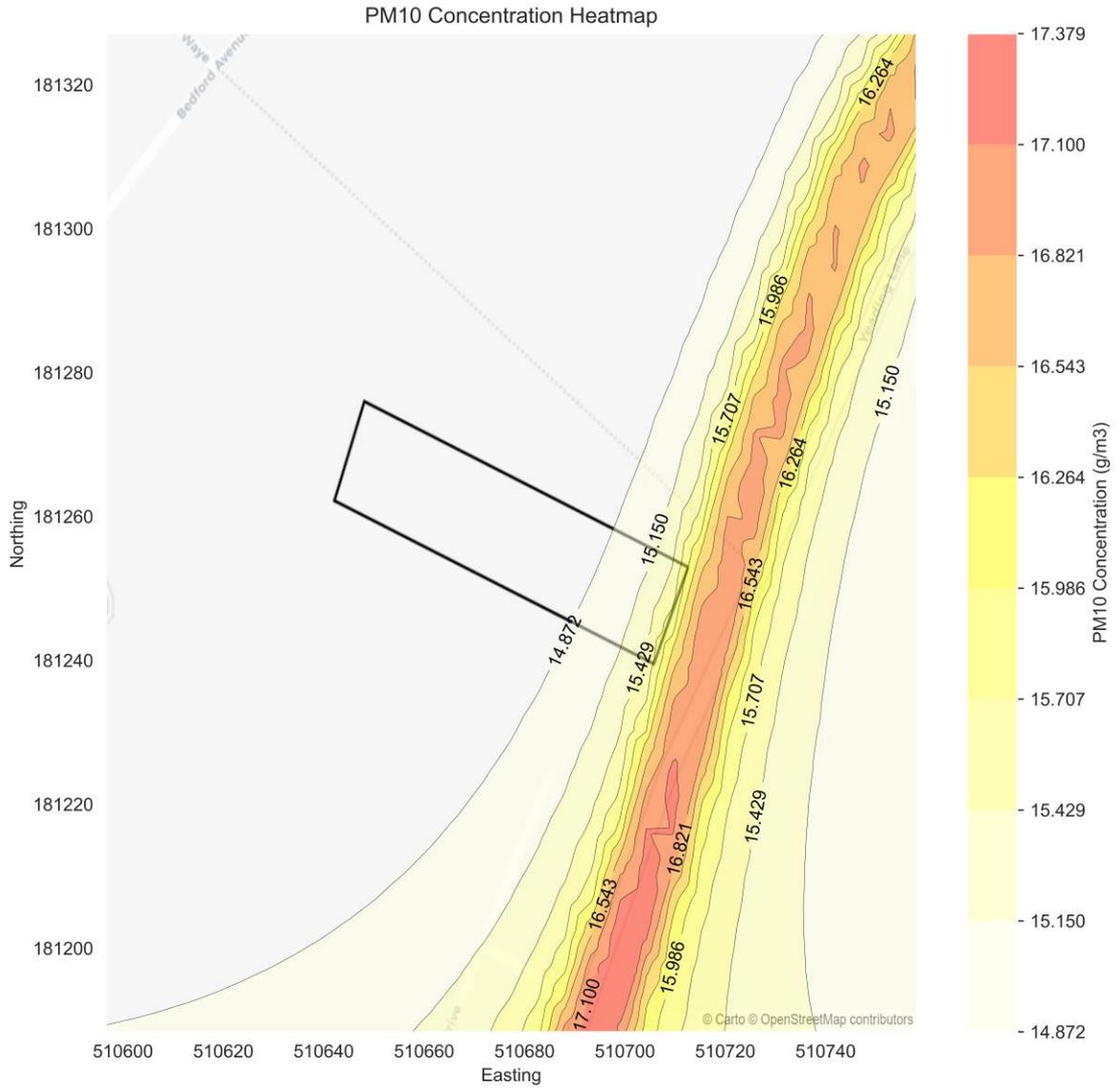
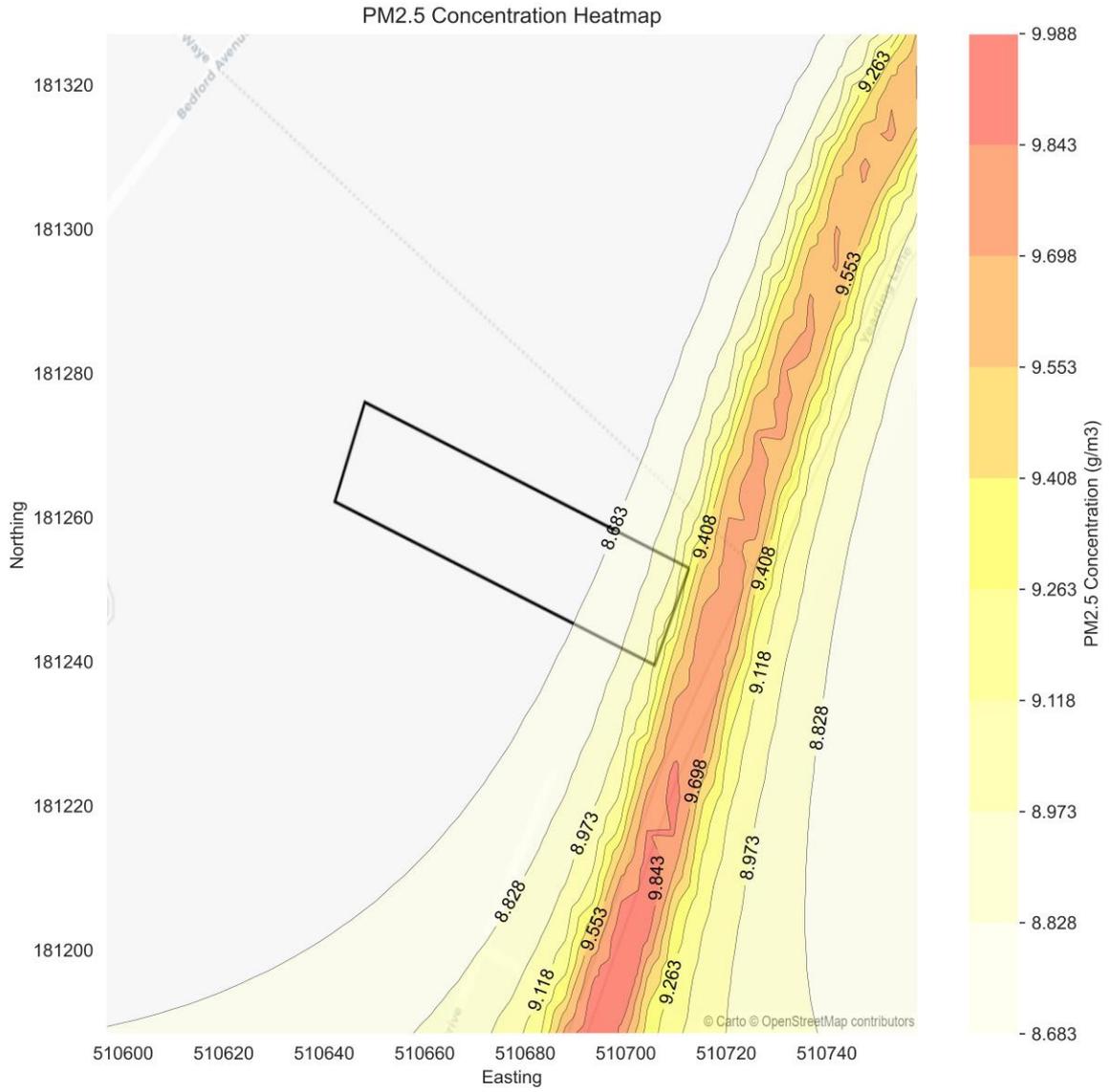


Figure 6  
ADMS Roads Inputs









## **APPENDIX B: ASSESSMENT INPUTS**

The Proposed Development has the potential to introduce future site users to poor air quality. Dispersion modelling using ADMS Roads was therefore undertaken to predict pollutant concentrations across the site to consider site suitability for the proposed end-use.

The assessment was undertaken in accordance with the guidance contained within LLAQM.TG(19) and the EPUK and IAQM guidance.

### **Dispersion Model**

Dispersion modelling was undertaken using the ADMS-Roads dispersion model (version 5.0). ADMS-Roads is developed by Cambridge Environmental Research Consultants (CERC) and is routinely used throughout the world for the prediction of pollutant dispersion from road sources. Modelling predictions from this software package are accepted within the UK by the Environment Agency and DEFRA.

The model requires input data that details the following parameters:

- Assessment area;
- Traffic flow data;
- Vehicle emission factors;
- Spatial coordinates of emissions;
- Street width;
- Meteorological data;
- Roughness length; and
- Monin-Obukhov length.

### **Assessment Area**

Ambient concentrations were predicted over the Proposed Development site and surrounding highway network. One Cartesian grid was included in the model over the area at approximately NGR: 510683, 181256 at a height of 1.5m to represent the proposed ground floor level for the 2026 opening year scenario.

Results were subsequently used to produce contour plots. Reference should be made to Figure 6 within Appendix A for a graphical representation of the verification inputs and operation phase DS extents, respectively.

### **Traffic Flow Data**

Development flow traffic data and associated network distribution was provided by the appointed Transport Consultants for the scheme and indicated that a total flow generation of 6.0 AADT is anticipated as a result of the Proposed Development.

Baseline traffic data for the road links were obtained from the Department for Transport (DfT) and London Atmospheric Emissions Inventory (LAEI). The DfT Matrix web tool enables the user to view and download traffic flows at count points in Great Britain from 1999 to present. The DfT matrix is referenced in LAQM.TG(22) as being a suitable source of data for air quality assessments and is therefore considered to provide a reasonable representation of traffic flows in the vicinity of the site.

The LAEI tool is a database of pollutant emissions and sources including geographically referenced data and maps, up to the year 2022.

Growth factors provided by the Trip End Model Presentation Program (TEMPRO) software package were utilised to allow for conversion from the obtained traffic flow to 2026 which was used to represent the opening year scenario. Vehicle speeds and road widths were obtained from the Ordnance Survey.

A summary of the traffic data used in the verification scenario is provided in Table B1.

**Table B1: 2024 Verification Traffic Data**

Road Link		Road Width (m)	24 Hour AADT Flow	HDV Pop (%)	Mean Vehicle Speed (km/hr)
L1	138 Brent Rd	8.3	11252.0	3.0	15.0
L2	Botwell Lane	5.5	7866.0	11.5	28.1
L3	Botwell Lane	8.5	6773.0	10.7	14.5
L4	Botwell Lane	9.1	6693.0	11.5	23.0
L5	Botwell Lane	9.5	7375.0	9.7	36.8
L6	Botwell Lane	11.0	14214.0	10.3	19.5
L7	Botwell Lane	8.1	1152.0	35.4	23.3
L8	Botwell Lane	10.5	4400.0	12.9	20.3
L9	Botwell Lane	9.2	12518.0	8.4	37.7
L10	Botwell Lane	10.3	5013.0	10.8	20.2
L11	Botwell Lane	4.9	4926.0	12.9	20.3
L12	Botwell Lane	10.2	8146.0	9.7	60.4
L13	Botwell Lane	9.9	6123.0	11.4	20.1
L14	Botwell Lane	5.4	7365.0	9.9	12.0

Road Link		Road Width (m)	24 Hour AADT Flow	HDV Pop (%)	Mean Vehicle Speed (km/hr)
L15	Botwell Lane	7.4	1159.0	34.9	21.1
L16	Botwell Lane	9.1	8987.0	9.6	15.2
L17	Botwell Lane	7.0	1201.0	37.3	27.5
L18	Botwell Lane	11.2	4427.0	12.7	19.6
L19	Botwell Lane	5.6	7205.0	12.0	28.5
L20	Botwell Lane	7.8	5969.0	11.4	18.8
L21	Botwell Lane	5.5	7401.0	9.7	17.6
L22	Botwell Lane	6.7	8359.0	9.9	30.6
L23	Botwell Lane	14.4	12794.0	12.0	22.9
L24	Botwell Lane	9.1	7390.0	9.7	29.2
L25	Botwell Lane	8.2	7415.0	9.7	18.5
L26	Botwell Lane	8.3	12589.0	8.9	25.4
L27	Botwell Lane	6.1	5676.0	10.9	11.9
L28	Botwell Lane	7.5	1065.0	29.5	25.5
L29	Botwell Lane	7.4	1168.0	36.2	31.2
L30	Botwell Lane	6.6	7380.0	9.7	23.3
L31	Botwell Lane	7.4	7282.0	11.8	24.5
L32	Botwell Lane	8.1	7450.0	9.6	23.4
L33	Botwell Lane	6.7	7375.0	9.7	10.5
L34	Brent Road	8.2	11245.0	3.0	15.0
L35	Brent Road	7.9	11272.0	3.1	25.0
L36	Brent Road	7.9	11031.0	3.1	26.4
L37	Brent Road	7.5	11065.0	3.1	33.2
L38	Brent Road	8.8	11147.0	2.9	21.8
L39	Brent Road	7.3	11111.0	3.1	34.1
L40	Brent Road	7.1	11259.0	3.1	25.0
L41	Brent Road	12.5	11274.0	3.1	21.0
L42	Brent Road	7.4	11185.0	3.1	32.5
L43	Brent Road	10.2	10927.0	3.1	19.6
L44	Brent Road	7.4	11221.0	3.1	29.6
L45	Brent Road	7.6	11270.0	3.1	23.7
L46	Brent Road	7.9	11077.0	3.1	35.3
L47	Brent Road	11.8	11195.0	3.0	22.4
L48	Brent Road	7.5	11261.0	3.1	25.0

Road Link		Road Width (m)	24 Hour AADT Flow	HDV Pop (%)	Mean Vehicle Speed (km/hr)
L49	Brent Road	8.1	11255.0	3.0	15.0
L50	Brent Road	11.1	11165.0	2.9	22.2
L51	Brent Road	11.9	10927.0	3.1	9.5
L52	Brent Road	10.5	11225.0	3.0	15.0
L53	Brent Road	7.4	11149.0	3.1	31.6
L54	Brent Road	13.3	11275.0	3.1	23.7
L55	Coldharbour Lane	11.4	9381.0	2.6	36.9
L56	Coldharbour Lane	6.7	10666.0	2.3	25.0
L57	Coldharbour Lane	10.5	8803.0	2.8	14.4
L58	Coldharbour Lane	13.3	9770.0	2.5	30.0
L59	Coldharbour Lane	10.0	9619.0	2.6	29.7
L60	Coldharbour Lane	8.8	10851.0	2.3	16.7
L61	Coldharbour Lane	12.9	9194.0	2.6	35.7
L62	Coldharbour Lane	5.1	10667.0	2.3	23.1
L63	Coldharbour Lane	9.3	8820.0	2.8	29.6
L64	Coldharbour Lane	12.5	10733.0	2.3	19.6
L65	Coldharbour Lane	18.0	8864.0	2.8	25.3
L66	Coldharbour Lane	10.8	8797.0	2.8	9.3
L67	Coldharbour Lane	22.8	8883.0	2.8	24.0
L68	Coldharbour Lane	9.4	9805.0	2.5	27.6
L69	Coldharbour Lane	9.6	9302.0	2.7	33.4
L70	Coldharbour Lane	9.1	10849.0	2.3	18.0
L71	Coldharbour Lane	14.4	8922.0	2.8	36.8
L72	Coldharbour Lane	10.6	9716.0	2.5	32.0
L73	Coldharbour Lane	11.1	10738.0	2.3	18.6
L74	Coldharbour Lane	11.1	9418.0	2.7	34.8
L75	Coldharbour Lane	5.3	10869.0	2.4	13.4
L76	Coldharbour Lane	11.0	10654.0	2.3	20.2
L77	Coldharbour Lane	21.3	8905.0	2.8	38.2
L78	Coldharbour Lane	10.6	10702.0	2.3	15.9
L79	Coldharbour Lane	8.5	8823.0	2.8	22.8
L80	Coldharbour Lane	12.8	8811.0	2.8	5.0
L81	Coldharbour Lane	5.0	10861.0	2.3	17.8
L82	Coldharbour Lane	7.3	8861.0	2.8	13.5

Road Link		Road Width (m)	24 Hour AADT Flow	HDV Pop (%)	Mean Vehicle Speed (km/hr)
L83	Coldharbour Lane	10.7	9036.0	2.8	30.7
L84	Coldharbour Lane	11.6	8844.0	2.8	13.8
L85	Coldharbour Lane	11.8	9206.0	2.7	35.3
L86	Coldharbour Lane	12.2	9511.0	2.6	38.3
L87	Coldharbour Lane	11.1	9570.0	2.6	34.4
L88	Coldharbour Lane	11.4	10603.0	2.4	26.8
L89	Coldharbour Lane	11.9	9851.0	2.5	28.4
L90	Coldharbour Lane	11.9	9731.0	2.5	37.5
L91	Coldharbour Lane	13.9	8950.0	2.8	31.8
L92	Coldharbour Lane	7.2	9804.0	2.5	34.7
L93	Coldharbour Lane	14.6	8783.0	2.8	17.8
L94	Coldharbour Lane	18.5	8787.0	2.8	28.2
L95	Coldharbour Lane	27.3	8881.0	2.8	25.4
L96	Coldharbour Lane	11.8	9660.0	2.6	29.6
L97	Coldharbour Lane	11.5	9171.0	2.6	34.9
L98	Coldharbour Lane	19.6	8887.0	2.8	23.0
L99	Coldharbour Lane	13.7	8920.0	2.8	12.8
L100	Coldharbour Lane	11.0	9447.0	2.6	38.6
L101	Coldharbour Lane	20.9	9781.0	2.5	30.4
L102	Coldharbour Lane	11.3	10783.0	2.3	19.0
L103	Dagmar Mews	17.1	9931.0	3.0	29.6
L104	Dagmar Mews	8.3	9925.0	3.0	16.1
L105	Dagmar Road	6.6	9933.0	3.0	13.1
L106	Dagmar Road	6.9	9915.0	3.0	13.3
L107	Dagmar Road	6.8	10000.0	3.0	16.2
L108	East Avenue	5.1	9816.0	2.5	21.8
L109	East Avenue	8.5	9228.0	2.6	19.6
L110	East Avenue	7.1	10746.0	2.4	16.0
L111	East Avenue	7.3	10672.0	2.4	23.3
L112	East Avenue	3.7	10611.0	2.4	26.0
L113	East Avenue	6.0	10482.0	2.4	18.7
L114	East Avenue	7.2	10620.0	2.4	24.3
L115	East Avenue	6.9	10729.0	2.4	18.3
L116	East Avenue	12.4	9242.0	2.6	23.5

Road Link		Road Width (m)	24 Hour AADT Flow	HDV Pop (%)	Mean Vehicle Speed (km/hr)
L117	East Avenue	7.3	10805.0	2.4	16.1
L118	East Avenue	6.2	10607.0	2.4	16.2
L119	East Avenue	4.7	10835.0	2.4	17.1
L120	East Avenue	6.0	9517.0	2.6	22.4
L121	East Avenue	7.1	10786.0	2.3	20.3
L122	Guru Nanak Road	6.8	10178.0	2.8	18.8
L123	Guru Nanak Road	9.3	3547.0	7.9	9.4
L124	Guru Nanak Road	7.3	9414.0	3.0	28.2
L125	Guru Nanak Road	7.0	10225.0	2.9	20.8
L126	Guru Nanak Road	7.7	1178.0	14.9	25.2
L127	Guru Nanak Road	9.0	9325.0	3.0	28.3
L128	Guru Nanak Road	8.2	9631.0	3.0	18.4
L129	Guru Nanak Road	6.8	9459.0	3.0	26.0
L130	Guru Nanak Road	7.5	9267.0	3.0	20.0
L131	Guru Nanak Road	7.7	9549.0	3.0	23.0
L132	Guru Nanak Road	7.2	10208.0	2.9	20.1
L133	Guru Nanak Road	7.3	1170.0	14.4	19.0
L134	Guru Nanak Road	7.4	9307.0	3.0	23.6
L135	Guru Nanak Road	6.7	9680.0	3.0	12.7
L136	Hammond Road	7.3	9739.0	3.0	16.0
L137	Hammond Road	7.5	9710.0	3.0	16.2
L138	Hammond Road	6.7	9797.0	3.0	17.8
L139	Hammond Road	7.6	9413.0	3.0	19.9
L140	Hammond Road	6.4	9846.0	3.0	15.6
L141	Hammond Road	7.3	9660.0	3.0	21.9
L142	Hammond Road	7.4	9458.0	3.0	20.4
L143	Hammond Road	7.5	9724.0	3.0	21.8
L144	Hammond Road	7.5	9590.0	3.0	21.4
L145	Hammond Road	7.4	9505.0	3.0	18.9
L146	High Street	13.3	17974.0	9.8	23.5
L147	High Street	12.1	13256.0	12.7	16.8
L148	High Street	10.2	12232.0	13.1	14.0
L149	High Street	9.8	13576.0	11.1	21.1
L150	High Street	9.8	12168.0	13.0	15.9

Road Link		Road Width (m)	24 Hour AADT Flow	HDV Pop (%)	Mean Vehicle Speed (km/hr)
L151	High Street	12.1	12985.0	14.2	18.8
L152	High Street	10.2	12232.0	13.1	14.5
L153	High Street	15.4	13149.0	12.6	20.1
L154	High Street	10.8	12973.0	14.1	12.6
L155	King Street	6.3	9880.0	3.0	14.6
L156	King Street	10.6	10270.0	2.9	10.0
L157	King Street	9.8	10256.0	2.9	12.0
L158	King Street	9.4	10236.0	2.9	15.6
L159	King Street	9.6	10245.0	2.9	15.4
L160	King Street	6.2	9881.0	3.0	19.3
L161	King Street	10.8	9877.0	3.0	10.7
L162	King Street	8.4	10288.0	2.9	13.8
L163	King Street	6.6	9870.0	3.0	16.2
L164	King Street	10.0	10218.0	2.8	15.7
L165	Lady Margaret Road	9.0	8944.0	13.2	18.3
L166	Lady Margaret Road	11.0	9310.0	2.8	12.8
L167	Lady Margaret Road	9.2	8368.0	2.9	22.1
L168	Lady Margaret Road	9.0	9297.0	2.8	14.0
L169	Merrick Road	10.9	9349.0	11.9	17.5
L170	Merrick Road	8.6	5910.0	1.3	19.7
L171	Merrick Road	16.1	9176.0	10.3	11.9
L172	Merrick Road	16.0	8271.0	10.8	24.5
L173	Merrick Road	9.0	5910.0	1.3	18.9
L174	Merrick Road	6.5	648.0	1.5	20.4
L175	Merrick Road	9.9	5410.0	3.0	19.6
L176	Merrick Road	11.9	5031.0	5.1	25.7
L177	Merrick Road	8.9	5263.0	1.3	9.6
L178	Montague Way	12.8	4598.0	18.8	19.1
L179	Montague Way	6.1	10164.0	3.0	23.8
L180	Montague Way	6.0	10164.0	3.0	24.9
L181	Montague Way	13.9	9885.0	3.0	13.3
L182	Montague Way	14.8	4598.0	18.8	18.8
L183	Montague Way	7.9	9917.0	2.9	18.3
L184	Montague Way	9.4	3461.0	23.9	24.9

Road Link		Road Width (m)	24 Hour AADT Flow	HDV Pop (%)	Mean Vehicle Speed (km/hr)
L185	Montague Way	6.5	9911.0	2.9	24.3
L186	Montague Way	10.7	9930.0	2.9	16.2
L187	Montague Way	10.7	10068.0	3.0	27.5
L188	Montague Way	12.3	4598.0	18.8	22.8
L189	Montague Way	10.7	9912.0	3.0	10.8
L190	Montague Way	8.9	10140.0	3.0	29.2
L191	Montague Way	15.4	4598.0	18.8	17.6
L192	Montague Way	10.7	10186.0	3.0	24.7
L193	Montague Way	10.0	10118.0	3.0	24.6
L194	Montague Way	10.4	9912.0	3.0	15.0
L195	Norwood Road	7.5	9802.0	3.0	19.8
L196	Norwood Road	9.1	9311.0	3.0	28.8
L197	Norwood Road	7.6	9600.0	3.0	20.9
L198	Norwood Road	8.8	9371.0	3.0	27.1
L199	Norwood Road	10.3	9659.0	3.0	20.0
L200	Norwood Road	9.6	9413.0	3.0	25.7
L201	Norwood Road	6.2	9259.0	3.0	29.9
L202	Norwood Road	9.7	9865.0	3.0	14.7
L203	Norwood Road	5.7	9249.0	3.0	31.0
L204	Norwood Road	7.1	9507.0	3.0	23.3
L205	Norwood Road	6.0	9259.0	3.0	34.4
L206	Norwood Road	8.8	9715.0	3.0	18.4
L207	Norwood Road	7.7	9772.0	3.0	19.6
L208	Norwood Road	8.1	9457.0	3.0	23.0
L209	Norwood Road	7.7	9827.0	3.0	16.7
L210	Rectory Road	8.1	9235.0	3.0	21.8
L211	Rectory Road	7.2	9227.0	3.0	21.2
L212	Rectory Road	7.2	9214.0	3.0	18.5
L213	Rectory Road	8.4	9231.0	3.0	15.0
L214	Rectory Road	7.1	9219.0	3.0	23.9
L215	Rectory Road	7.1	9225.0	3.0	24.5
L216	Rubastic Road	9.0	11418.0	3.0	15.0
L217	Scotts Road	7.0	11216.0	3.0	15.0
L218	Scotts Road	8.0	11238.0	3.0	15.0

Road Link		Road Width (m)	24 Hour AADT Flow	HDV Pop (%)	Mean Vehicle Speed (km/hr)
L219	Scotts Road	7.1	11201.0	3.0	15.0
L220	South Road	12.0	10556.0	10.1	23.2
L221	South Road	12.3	11309.0	8.6	11.0
L222	South Road	12.1	13774.0	7.8	27.9
L223	South Road	9.4	9626.0	13.9	21.2
L224	South Road	10.6	7842.0	16.5	22.6
L225	South Road	12.5	11315.0	10.9	11.5
L226	South Road	11.8	9913.0	11.2	15.9
L227	South Road	22.0	12134.0	7.0	27.8
L228	South Road	10.8	8517.0	3.6	15.5
L229	South Road	10.8	8517.0	3.6	20.9
L230	South Road	11.1	9797.0	7.8	22.7
L231	South Road	9.5	11595.0	12.0	14.1
L232	South Road	10.8	10556.0	10.1	12.4
L233	South Road	11.2	11403.0	11.6	17.0
L234	South Road	15.3	11974.0	6.9	10.2
L235	South Road	12.4	13774.0	7.8	11.5
L236	South Road	13.6	9909.0	7.7	19.6
L237	South Road	12.5	12657.0	7.6	25.8
L238	South Road	14.2	11491.0	6.8	16.0
L239	South Road	11.5	9299.0	11.4	14.6
L240	South Road	9.5	9395.0	13.1	23.0
L241	South Road	9.3	9193.0	13.5	24.8
L242	South Road	14.6	11919.0	6.9	24.1
L243	South Road	8.8	12945.0	7.9	18.9
L244	South Road	13.5	10538.0	6.9	11.5
L245	South Road	9.6	9349.0	11.9	20.9
L246	South Road	11.2	11527.0	12.6	17.9
L247	South Road	12.3	7845.0	16.5	20.0
L248	South Road	12.1	9349.0	11.9	28.7
L249	South Road	12.7	11309.0	8.6	22.1
L250	South Road	8.8	18553.0	8.3	19.0
L251	The Broadway	13.0	24070.0	8.7	24.5
L252	The Broadway	10.9	12059.0	12.0	17.0

Road Link		Road Width (m)	24 Hour AADT Flow	HDV Pop (%)	Mean Vehicle Speed (km/hr)
L253	The Broadway	11.0	11303.0	12.5	12.6
L254	The Broadway	4.5	26362.0	4.7	19.8
L255	The Broadway	11.4	20010.0	8.8	18.6
L256	The Broadway	10.1	24084.0	8.7	30.4
L257	The Broadway	4.7	24696.0	5.9	20.2
L258	The Broadway	5.4	22521.0	8.3	18.7
L259	The Broadway	10.3	24084.0	8.7	17.5
L260	The Broadway	5.5	22625.0	8.0	18.4
L261	The Broadway	6.3	12145.0	11.9	19.6
L262	The Broadway	11.4	18467.0	9.0	19.8
L263	The Broadway	12.6	22562.0	8.6	18.6
L264	The Broadway	5.8	12821.0	11.5	18.9
L265	The Broadway	13.0	18196.0	9.0	26.8
L266	The Broadway	12.3	24017.0	8.8	21.5
L267	The Broadway	12.7	24057.0	8.7	23.1
L268	The Broadway	5.7	12145.0	11.9	15.0
L269	The Broadway	11.5	12284.0	11.8	17.7
L270	The Broadway	13.1	22354.0	8.9	23.7
L271	The Broadway	5.0	22547.0	8.2	18.8
L272	The Broadway	11.8	23937.0	8.8	21.0
L273	The Broadway	8.7	20626.0	8.8	20.5
L274	The Broadway	10.4	22508.0	8.4	18.0
L275	The Broadway	9.2	13224.0	11.2	17.6
L276	The Broadway	9.4	23262.0	7.1	19.4
L277	The Broadway	9.3	21556.0	10.1	17.6
L278	The Broadway	13.1	18845.0	9.0	25.6
L279	The Broadway	12.1	21460.0	8.9	18.5
L280	The Broadway	10.7	17745.0	9.2	21.2
L281	The Broadway	12.9	20179.0	8.9	25.3
L282	The Broadway	9.3	14859.0	10.3	17.4
L283	The Broadway	9.7	22706.0	7.8	17.8
L284	The Broadway	6.5	12536.0	11.6	17.8
L285	The Broadway	9.9	21601.0	8.5	18.7
L286	The Broadway	9.4	23308.0	7.1	19.0

Road Link		Road Width (m)	24 Hour AADT Flow	HDV Pop (%)	Mean Vehicle Speed (km/hr)
L287	The Broadway	10.0	16442.0	9.6	19.3
L288	The Broadway	11.4	18452.0	9.0	20.6
L289	The Broadway	9.5	21719.0	8.9	17.9
L290	The Broadway	12.2	21169.0	9.0	18.5
L291	The Broadway	7.3	21719.0	8.9	21.8
L292	The Broadway	12.0	25352.0	8.3	20.1
L293	The Broadway	11.5	22312.0	8.7	16.0
L294	The Broadway	12.2	23937.0	8.8	20.2
L295	The Broadway	12.5	24096.0	8.7	25.3
L296	The Broadway	13.6	22821.0	7.8	17.6
L297	The Broadway	11.4	20001.0	8.8	19.1
L298	The Broadway	9.4	22356.0	7.9	19.4
L299	The Broadway	11.7	12403.0	11.7	16.8
L300	The Broadway	3.9	12896.0	11.4	16.6
L301	The Broadway	11.9	23937.0	8.8	20.3
L302	The Broadway	12.7	21169.0	9.0	21.9
L303	The Green	7.5	10189.0	2.8	19.1
L304	The Green	10.5	10142.0	2.8	17.8
L305	The Green	7.4	10020.0	2.8	19.0
L306	The Green	11.1	10116.0	2.8	18.3
L307	The Green	11.4	9884.0	2.8	19.2
L308	The Green	8.7	9984.0	2.8	17.5
L309	The Green	9.7	9896.0	2.8	19.6
L310	The Green	11.0	9890.0	2.8	18.4
L311	The Green	8.6	10010.0	2.8	17.8
L312	The Green	8.5	9938.0	2.8	19.5
L313	The Green	13.2	9868.0	2.8	11.0
L314	The Green	9.9	10166.0	2.8	16.4
L315	The Green	9.3	10044.0	2.8	19.0
L316	The Green	7.3	10189.0	2.8	14.8
L317	The Green	9.3	10097.0	2.8	18.3
L318	The Green	8.9	10076.0	2.8	17.0
L319	The Green	9.6	9907.0	2.8	19.4
L320	The Green	12.4	9868.0	2.8	20.4

Road Link		Road Width (m)	24 Hour AADT Flow	HDV Pop (%)	Mean Vehicle Speed (km/hr)
L321	The Parkway	7.3	31711.0	4.1	33.9
L322	The Parkway	7.3	39771.0	4.3	59.0
L323	The Parkway	15.1	21666.0	5.8	38.9
L324	The Parkway	7.3	38865.0	3.9	55.8
L325	The Parkway	16.9	18526.0	4.6	69.9
L326	The Parkway	9.8	34029.0	4.0	68.1
L327	The Parkway	8.4	32544.0	3.6	80.2
L328	The Parkway	7.3	39762.0	4.3	33.1
L329	The Parkway	8.8	18528.0	4.2	53.4
L330	The Parkway	7.6	34877.0	4.5	48.3
L331	The Parkway	9.7	18342.0	4.6	54.4
L332	The Parkway	9.2	34029.0	4.0	67.1
L333	The Parkway	10.7	31015.0	4.7	70.7
L334	The Parkway	9.2	34029.0	4.0	41.3
L335	The Parkway	7.3	39808.0	4.3	71.4
L336	The Parkway	8.3	32489.0	3.6	99.2
L337	The Parkway	8.9	12423.0	5.0	52.0
L338	The Parkway	9.1	15257.0	5.3	49.7
L339	The Parkway	7.8	31712.0	4.1	20.0
L340	The Parkway	9.0	42058.0	4.7	42.0
L341	The Parkway	8.4	5307.0	5.2	55.7
L342	The Parkway	10.7	18636.0	4.7	65.0
L343	The Parkway	14.2	13077.0	6.1	17.5
L344	The Parkway	17.4	17430.0	5.2	35.6
L345	The Parkway	9.6	18357.0	4.6	69.8
L346	The Parkway	9.8	18528.0	4.2	62.9
L347	The Parkway	9.1	5216.0	6.7	27.7
L348	The Parkway	9.6	18528.0	4.2	43.7
L349	The Parkway	7.3	34877.0	4.5	61.7
L350	The Parkway	8.6	30502.0	4.7	71.7
L351	The Parkway	8.5	34029.0	4.0	65.0
L352	The Parkway	9.9	43783.0	4.7	73.1
L353	The Parkway	7.3	39635.0	4.3	33.0
L354	The Parkway	7.3	39648.0	4.3	53.6

Road Link		Road Width (m)	24 Hour AADT Flow	HDV Pop (%)	Mean Vehicle Speed (km/hr)
L355	The Parkway	7.3	38900.0	3.9	33.7
L356	The Parkway	12.0	21218.0	4.4	64.1
L357	The Parkway	9.6	21204.0	3.8	75.4
L358	The Parkway	10.1	30835.0	4.1	75.1
L359	The Parkway	9.7	18636.0	4.7	71.5
L360	The Parkway	9.3	46162.0	4.7	69.6
L361	The Parkway	8.4	30530.0	4.7	66.0
L362	The Parkway	18.7	21779.0	5.8	25.2
L363	The Parkway	8.4	32056.0	3.7	69.2
L364	Uxbridge Road	15.7	12359.0	7.6	30.3
L365	Uxbridge Road	8.2	13329.0	6.8	37.5
L366	Uxbridge Road	15.5	10332.0	9.6	35.6
L367	Uxbridge Road	7.4	11937.0	8.2	39.3
L368	Uxbridge Road	13.7	12307.0	9.9	23.4
L369	Uxbridge Road	23.9	12654.0	7.6	22.0
L370	Uxbridge Road	9.3	12256.0	9.7	30.1
L371	Uxbridge Road	7.4	15625.0	6.3	33.8
L372	Uxbridge Road	10.7	15374.0	8.2	8.9
L373	Uxbridge Road	7.9	10261.0	9.7	23.0
L374	Uxbridge Road	7.1	10329.0	9.9	42.1
L375	Uxbridge Road	16.1	15335.0	5.6	5.2
L376	Uxbridge Road	11.7	17183.0	5.1	31.7
L377	Uxbridge Road	8.8	12276.0	7.0	28.4
L378	Uxbridge Road	14.1	15915.0	5.2	14.5
L379	Uxbridge Road	14.2	17007.0	6.2	22.9
L380	Uxbridge Road	12.7	23935.0	8.8	27.2
L381	Uxbridge Road	7.3	8286.0	10.1	36.5
L382	Uxbridge Road	10.4	9888.0	11.1	27.8
L383	Uxbridge Road	11.3	16030.0	5.3	40.6
L384	Uxbridge Road	16.5	24003.0	5.8	32.3
L385	Uxbridge Road	15.7	21842.0	5.8	29.7
L386	Uxbridge Road	16.7	13198.0	5.4	14.7
L387	Uxbridge Road	13.1	13107.0	9.1	34.1
L388	Uxbridge Road	11.3	16604.0	5.5	43.0

Road Link		Road Width (m)	24 Hour AADT Flow	HDV Pop (%)	Mean Vehicle Speed (km/hr)
L389	Uxbridge Road	16.5	18480.0	7.9	11.5
L390	Uxbridge Road	13.0	12307.0	9.9	23.2
L391	Uxbridge Road	15.8	23902.0	6.0	34.7
L392	Uxbridge Road	11.3	15915.0	5.2	38.5
L393	Uxbridge Road	7.5	18843.0	6.0	32.5
L394	Uxbridge Road	10.4	17446.0	5.0	28.6
L395	Uxbridge Road	10.9	12869.0	7.5	18.0
L396	Uxbridge Road	10.4	14233.0	5.7	39.6
L397	Uxbridge Road	8.4	16893.0	6.2	38.9
L398	Uxbridge Road	8.7	11421.0	9.9	26.8
L399	Uxbridge Road	9.3	17127.0	5.1	37.9
L400	Uxbridge Road	29.2	15009.0	5.9	35.2
L401	Uxbridge Road	22.0	18700.0	4.9	30.5
L402	Uxbridge Road	7.6	15648.0	6.3	45.0
L403	Uxbridge Road	15.7	15211.0	5.6	5.8
L404	Uxbridge Road	15.1	9698.0	9.5	24.9
L405	Uxbridge Road	13.4	16965.0	5.2	28.3
L406	Uxbridge Road	16.2	8632.0	3.4	13.7
L407	Uxbridge Road	13.0	18164.0	5.1	18.1
L408	Uxbridge Road	17.9	14702.0	5.8	16.9
L409	Uxbridge Road	8.4	9787.0	10.2	35.5
L410	Uxbridge Road	12.8	12635.0	9.5	31.8
L411	Uxbridge Road	15.7	18704.0	5.9	25.9
L412	Uxbridge Road	8.0	13275.0	6.8	38.8
L413	Uxbridge Road	16.9	26252.0	5.6	35.0
L414	Uxbridge Road	12.4	12161.0	9.2	28.7
L415	Uxbridge Road	14.0	12307.0	9.9	24.2
L416	Uxbridge Road	11.1	9698.0	9.5	14.0
L417	Uxbridge Road	8.2	26260.0	5.4	36.7
L418	Uxbridge Road	15.1	15374.0	8.2	8.6
L419	Uxbridge Road	16.6	12342.0	9.4	16.0
L420	Uxbridge Road	20.7	5100.0	8.7	34.4
L421	Uxbridge Road	6.6	8286.0	10.1	37.4
L422	Uxbridge Road	8.5	12256.0	6.8	45.4

Road Link		Road Width (m)	24 Hour AADT Flow	HDV Pop (%)	Mean Vehicle Speed (km/hr)
L423	Uxbridge Road	12.0	14562.0	5.8	5.0
L424	Uxbridge Road	11.2	14222.0	6.6	34.8
L425	Uxbridge Road	9.8	13284.0	6.8	38.3
L426	Uxbridge Road	11.1	18162.0	5.1	34.3
L427	Uxbridge Road	13.8	17446.0	5.0	11.1
L428	Uxbridge Road	22.2	21113.0	5.7	22.3
L429	Uxbridge Road	18.8	13346.0	7.5	26.2
L430	Uxbridge Road	9.6	12157.0	9.1	7.2
L431	Uxbridge Road	16.5	18695.0	5.9	15.2
L432	Uxbridge Road	12.7	15653.0	5.2	38.5
L433	Uxbridge Road	17.3	13192.0	5.3	31.1
L434	Uxbridge Road	8.3	12276.0	7.0	33.8
L435	Uxbridge Road	9.5	14075.0	6.8	30.3
L436	Uxbridge Road	8.6	13346.0	7.5	14.9
L437	Uxbridge Road	8.0	12276.0	7.0	32.7
L438	Uxbridge Road	9.1	17026.0	5.1	39.3
L439	Uxbridge Road	10.6	14475.0	5.8	6.1
L440	Uxbridge Road	8.6	14462.0	5.8	40.7
L441	Uxbridge Road	7.5	9103.0	10.5	17.6
L442	Uxbridge Road	7.3	14399.0	6.7	45.2
L443	Uxbridge Road	18.4	14644.0	5.7	39.3
L444	Uxbridge Road	10.9	12506.0	7.8	11.3
L445	Uxbridge Road	7.9	15089.0	6.4	29.8
L446	Uxbridge Road	10.5	13118.0	6.8	38.3
L447	Uxbridge Road	17.0	12205.0	9.2	30.8
L448	Uxbridge Road	9.2	18677.0	6.0	30.7
L449	Uxbridge Road	12.4	13107.0	9.1	22.5
L450	Uxbridge Road	8.2	12276.0	7.0	33.1
L451	Uxbridge Road	13.6	12263.0	9.3	33.8
L452	Uxbridge Road	8.2	12276.0	7.0	33.6
L453	Uxbridge Road	7.5	10430.0	9.8	34.8
L454	Uxbridge Road	15.6	7992.0	5.8	16.5
L455	Uxbridge Road	10.9	13753.0	6.6	38.6
L456	Uxbridge Road	28.6	14233.0	5.7	35.6

Road Link		Road Width (m)	24 Hour AADT Flow	HDV Pop (%)	Mean Vehicle Speed (km/hr)
L457	Uxbridge Road	7.8	14572.0	5.9	43.6
L458	Uxbridge Road	10.6	15351.0	8.1	22.9
L459	Uxbridge Road	12.2	9863.0	11.0	22.2
L460	Uxbridge Road	16.7	17617.0	5.6	40.0
L461	Uxbridge Road	30.7	15426.0	6.2	32.4
L462	Uxbridge Road	11.5	15281.0	5.3	33.7
L463	Uxbridge Road	9.6	15920.0	5.2	23.6
L464	Uxbridge Road	17.2	25591.0	5.1	36.5
L465	Uxbridge Road	10.1	17302.0	5.1	35.3
L466	Uxbridge Road	11.5	14304.0	6.3	15.0
L467	Uxbridge Road	16.1	31283.0	5.5	13.3
L468	Uxbridge Road	10.0	13889.0	6.7	35.3
L469	Uxbridge Road	7.3	15245.0	6.4	32.7
L470	Uxbridge Road	14.5	12584.0	9.6	24.8
L471	Uxbridge Road	16.0	13198.0	5.4	14.1
L472	Uxbridge Road	10.9	12256.0	9.7	23.9
L473	Uxbridge Road	18.0	14883.0	5.8	18.7
L474	Victoria Road	7.1	9383.0	3.0	22.6
L475	Victoria Road	8.5	9385.0	3.0	15.6
L476	Victoria Road	7.3	9369.0	3.0	17.3
L477	Victoria Road	7.2	9379.0	3.0	20.4
L478	Western Road	13.9	4995.0	20.2	22.3
L479	Western Road	12.2	10800.0	2.9	20.3
L480	Western Road	8.2	10692.0	3.1	22.3
L481	Western Road	8.8	10451.0	2.9	34.2
L482	Western Road	7.4	10784.0	3.1	18.6
L483	Western Road	11.5	10856.0	2.9	20.8
L484	Western Road	9.6	10990.0	3.1	20.4
L485	Western Road	8.8	6814.0	11.6	20.5
L486	Western Road	6.2	9794.0	2.9	22.1
L487	Western Road	7.1	10644.0	3.1	23.8
L488	Western Road	10.1	10866.0	3.1	21.5
L489	Western Road	9.1	10874.0	3.1	16.8
L490	Western Road	7.9	13335.0	11.8	18.9

Road Link		Road Width (m)	24 Hour AADT Flow	HDV Pop (%)	Mean Vehicle Speed (km/hr)
L491	Western Road	7.0	9871.0	2.9	22.0
L492	Western Road	6.6	1785.0	38.8	23.2
L493	Western Road	6.8	1779.0	38.6	21.2
L494	Western Road	7.2	15728.0	11.0	19.9
L495	Western Road	6.3	8897.0	10.4	13.4
L496	Western Road	10.1	13335.0	11.8	19.3
L497	Western Road	7.9	15737.0	11.1	17.4
L498	Western Road	7.0	1779.0	38.6	12.4
L499	Western Road	12.0	9925.0	2.9	18.9
L500	Western Road	5.2	9896.0	2.9	20.4
L501	Western Road	4.9	9896.0	2.9	21.7
L502	Western Road	13.5	10771.0	2.9	18.8
L503	Western Road	5.4	10783.0	2.9	15.9
L504	Western Road	11.3	10845.0	2.9	20.3
L505	Western Road	5.3	10784.0	2.9	20.7
L506	Western Road	9.3	11066.0	3.2	21.8
L507	Western Road	7.6	10674.0	3.1	24.3
L508	Western Road	8.4	10617.0	3.1	22.4
L509	Western Road	6.6	10476.0	2.9	25.1
L510	Western Road	13.2	4991.0	20.2	29.5
L511	Western Road	7.3	10925.0	2.9	27.1
L512	Western Road	9.5	11134.0	3.2	20.9
L513	Western Road	14.5	4640.0	14.3	18.9
L514	Western Road	7.6	10892.0	3.1	21.6
L515	Western Road	8.7	15720.0	11.0	21.0
L516	Western Road	8.4	10913.0	2.9	22.9
L517	Western Road	11.1	4969.0	19.9	21.2
L518	Western Road	15.4	4991.0	20.2	37.8
L519	Western Road	12.8	4644.0	14.3	33.2
L520	Western Road	7.6	13335.0	11.8	25.3
L521	Yeading Lane	14.1	8683.0	2.8	17.6
L522	Yeading Lane	13.0	8151.0	2.9	39.1
L523	Yeading Lane	21.1	8741.0	2.8	30.6
L524	Yeading Lane	8.3	8341.0	2.8	38.7

Road Link		Road Width (m)	24 Hour AADT Flow	HDV Pop (%)	Mean Vehicle Speed (km/hr)
L525	Yeading Lane	13.6	8285.0	2.8	39.6
L526	Yeading Lane	11.3	8319.0	2.8	35.1
L527	Yeading Lane	8.3	8750.0	2.8	44.1
L528	Yeading Lane	12.2	8393.0	2.8	37.5
L529	Yeading Lane	11.2	8568.0	2.8	31.9
L530	Yeading Lane	11.8	8639.0	2.8	25.1
L531	Yeading Lane	15.9	8747.0	2.8	22.6
L532	Yeading Lane	11.5	8466.0	2.8	38.3
L533	Yeading Lane	27.6	8761.0	2.8	32.7
L534	Yeading Lane	12.1	8320.0	2.8	34.0
L535	Yeading Lane	15.7	8331.0	2.8	34.1
L536	Yeading Lane	6.7	8340.0	2.8	34.2
L537	Yeading Lane	13.3	8720.0	2.8	26.0
L538	Yeading Lane	14.5	8720.0	2.8	5.0
L539	Yeading Lane	13.7	8096.0	2.9	37.3
L540	Yeading Lane	14.5	8701.0	2.8	15.5
L541	Yeading Lane	12.1	8060.0	2.9	37.1

Reference should be made to Figure 6 within Appendix A for a graphical representation of the road link locations used within the verification assessment. The road width and mean vehicle speed shown in Table B1 remained the same for the 2026 scenarios.

A summary of the 2026 traffic data is shown in Table B2.

**Table B2: 2026 Traffic Data**

Road Link		DS Scenario	
		24 Hr AADT Flow	HDV Prop (%)
L1	138 Brent Rd	11431.0	3.0
L2	Botwell Lane	7993.0	11.5
L3	Botwell Lane	6883.0	10.7
L4	Botwell Lane	6802.0	11.5
L5	Botwell Lane	7495.0	9.7
L6	Botwell Lane	14439.0	10.3
L7	Botwell Lane	1176.0	35.2

Road Link		DS Scenario	
		24 Hr AADT Flow	HDV Prop (%)
L8	Botwell Lane	4474.0	12.9
L9	Botwell Lane	12717.0	8.4
L10	Botwell Lane	5096.0	10.8
L11	Botwell Lane	5008.0	12.9
L12	Botwell Lane	8277.0	9.7
L13	Botwell Lane	6223.0	11.4
L14	Botwell Lane	7484.0	9.9
L15	Botwell Lane	1183.0	34.7
L16	Botwell Lane	9131.0	9.6
L17	Botwell Lane	1225.0	37.1
L18	Botwell Lane	4501.0	12.7
L19	Botwell Lane	7322.0	12.0
L20	Botwell Lane	6067.0	11.4
L21	Botwell Lane	7521.0	9.7
L22	Botwell Lane	8494.0	9.9
L23	Botwell Lane	12997.0	12.0
L24	Botwell Lane	7510.0	9.7
L25	Botwell Lane	7535.0	9.7
L26	Botwell Lane	12789.0	8.9
L27	Botwell Lane	5769.0	10.9
L28	Botwell Lane	1087.0	29.3
L29	Botwell Lane	1192.0	36.0
L30	Botwell Lane	7500.0	9.7
L31	Botwell Lane	7400.0	11.8
L32	Botwell Lane	7571.0	9.6
L33	Botwell Lane	7495.0	9.7
L34	Brent Road	11424.0	3.0
L35	Brent Road	11452.0	3.1
L36	Brent Road	11207.0	3.1
L37	Brent Road	11241.0	3.1
L38	Brent Road	11325.0	2.9
L39	Brent Road	11288.0	3.1
L40	Brent Road	11438.0	3.1
L41	Brent Road	11454.0	3.1
L42	Brent Road	11363.0	3.1

Road Link		DS Scenario	
		24 Hr AADT Flow	HDV Prop (%)
L43	Brent Road	11101.0	3.1
L44	Brent Road	11400.0	3.1
L45	Brent Road	11450.0	3.1
L46	Brent Road	11254.0	3.1
L47	Brent Road	11373.0	3.0
L48	Brent Road	11440.0	3.1
L49	Brent Road	11434.0	3.0
L50	Brent Road	11343.0	2.9
L51	Brent Road	11101.0	3.1
L52	Brent Road	11404.0	3.0
L53	Brent Road	11327.0	3.1
L54	Brent Road	11455.0	3.1
L55	Coldharbour Lane	9531.0	2.6
L56	Coldharbour Lane	10836.0	2.3
L57	Coldharbour Lane	8945.0	2.8
L58	Coldharbour Lane	9926.0	2.5
L59	Coldharbour Lane	9773.0	2.6
L60	Coldharbour Lane	11024.0	2.3
L61	Coldharbour Lane	9342.0	2.6
L62	Coldharbour Lane	10837.0	2.3
L63	Coldharbour Lane	8962.0	2.8
L64	Coldharbour Lane	10904.0	2.3
L65	Coldharbour Lane	9007.0	2.8
L66	Coldharbour Lane	8938.0	2.8
L67	Coldharbour Lane	9026.0	2.8
L68	Coldharbour Lane	9962.0	2.5
L69	Coldharbour Lane	9451.0	2.7
L70	Coldharbour Lane	11022.0	2.3
L71	Coldharbour Lane	9065.0	2.8
L72	Coldharbour Lane	9872.0	2.5
L73	Coldharbour Lane	10909.0	2.3
L74	Coldharbour Lane	9569.0	2.7
L75	Coldharbour Lane	11042.0	2.4
L76	Coldharbour Lane	10824.0	2.3
L77	Coldharbour Lane	9048.0	2.8

Road Link		DS Scenario	
		24 Hr AADT Flow	HDV Prop (%)
L78	Coldharbour Lane	10873.0	2.3
L79	Coldharbour Lane	8965.0	2.8
L80	Coldharbour Lane	8953.0	2.8
L81	Coldharbour Lane	11034.0	2.3
L82	Coldharbour Lane	9003.0	2.8
L83	Coldharbour Lane	9181.0	2.8
L84	Coldharbour Lane	8986.0	2.8
L85	Coldharbour Lane	9354.0	2.7
L86	Coldharbour Lane	9663.0	2.6
L87	Coldharbour Lane	9723.0	2.6
L88	Coldharbour Lane	10772.0	2.4
L89	Coldharbour Lane	10009.0	2.5
L90	Coldharbour Lane	9887.0	2.5
L91	Coldharbour Lane	9094.0	2.8
L92	Coldharbour Lane	9961.0	2.5
L93	Coldharbour Lane	8924.0	2.8
L94	Coldharbour Lane	8928.0	2.8
L95	Coldharbour Lane	9024.0	2.8
L96	Coldharbour Lane	9815.0	2.6
L97	Coldharbour Lane	9318.0	2.6
L98	Coldharbour Lane	9030.0	2.8
L99	Coldharbour Lane	9063.0	2.8
L100	Coldharbour Lane	9598.0	2.6
L101	Coldharbour Lane	9938.0	2.5
L102	Coldharbour Lane	10955.0	2.3
L103	Dagmar Mews	10090.0	3.0
L104	Dagmar Mews	10084.0	3.0
L105	Dagmar Road	10092.0	3.0
L106	Dagmar Road	10074.0	3.0
L107	Dagmar Road	10160.0	3.0
L108	East Avenue	9973.0	2.5
L109	East Avenue	9376.0	2.6
L110	East Avenue	10917.0	2.4
L111	East Avenue	10842.0	2.4
L112	East Avenue	10780.0	2.4

Road Link		DS Scenario	
		24 Hr AADT Flow	HDV Prop (%)
L113	East Avenue	10649.0	2.4
L114	East Avenue	10790.0	2.4
L115	East Avenue	10900.0	2.4
L116	East Avenue	9390.0	2.6
L117	East Avenue	10977.0	2.4
L118	East Avenue	10776.0	2.4
L119	East Avenue	11008.0	2.4
L120	East Avenue	9670.0	2.6
L121	East Avenue	10958.0	2.3
L122	Guru Nanak Road	10341.0	2.8
L123	Guru Nanak Road	3608.0	7.9
L124	Guru Nanak Road	9565.0	3.0
L125	Guru Nanak Road	10388.0	2.9
L126	Guru Nanak Road	1202.0	14.8
L127	Guru Nanak Road	9475.0	3.0
L128	Guru Nanak Road	9785.0	3.0
L129	Guru Nanak Road	9611.0	3.0
L130	Guru Nanak Road	9416.0	3.0
L131	Guru Nanak Road	9702.0	3.0
L132	Guru Nanak Road	10371.0	2.9
L133	Guru Nanak Road	1194.0	14.3
L134	Guru Nanak Road	9456.0	3.0
L135	Guru Nanak Road	9835.0	3.0
L136	Hammond Road	9895.0	3.0
L137	Hammond Road	9866.0	3.0
L138	Hammond Road	9954.0	3.0
L139	Hammond Road	9564.0	3.0
L140	Hammond Road	10004.0	3.0
L141	Hammond Road	9815.0	3.0
L142	Hammond Road	9610.0	3.0
L143	Hammond Road	9880.0	3.0
L144	Hammond Road	9744.0	3.0
L145	Hammond Road	9657.0	3.0
L146	High Street	18257.0	9.8
L147	High Street	13466.0	12.7

Road Link		DS Scenario	
		24 Hr AADT Flow	HDV Prop (%)
L148	High Street	12426.0	13.1
L149	High Street	13791.0	11.1
L150	High Street	12361.0	13.0
L151	High Street	13191.0	14.2
L152	High Street	12426.0	13.1
L153	High Street	13357.0	12.6
L154	High Street	13179.0	14.1
L155	King Street	10038.0	3.0
L156	King Street	10434.0	2.9
L157	King Street	10420.0	2.9
L158	King Street	10400.0	2.9
L159	King Street	10409.0	2.9
L160	King Street	10039.0	3.0
L161	King Street	10035.0	3.0
L162	King Street	10452.0	2.9
L163	King Street	10028.0	3.0
L164	King Street	10381.0	2.8
L165	Lady Margaret Road	9088.0	13.2
L166	Lady Margaret Road	9459.0	2.8
L167	Lady Margaret Road	8503.0	2.9
L168	Lady Margaret Road	9446.0	2.8
L169	Merrick Road	9499.0	11.9
L170	Merrick Road	6007.0	1.3
L171	Merrick Road	9323.0	10.3
L172	Merrick Road	8404.0	10.8
L173	Merrick Road	6007.0	1.3
L174	Merrick Road	664.0	1.5
L175	Merrick Road	5499.0	3.0
L176	Merrick Road	5114.0	5.1
L177	Merrick Road	5350.0	1.3
L178	Montague Way	4675.0	18.8
L179	Montague Way	10327.0	3.0
L180	Montague Way	10327.0	3.0
L181	Montague Way	10043.0	3.0
L182	Montague Way	4675.0	18.8

Road Link		DS Scenario	
		24 Hr AADT Flow	HDV Prop (%)
L183	Montague Way	10076.0	2.9
L184	Montague Way	3520.0	23.9
L185	Montague Way	10070.0	2.9
L186	Montague Way	10089.0	2.9
L187	Montague Way	10229.0	3.0
L188	Montague Way	4675.0	18.8
L189	Montague Way	10071.0	3.0
L190	Montague Way	10302.0	3.0
L191	Montague Way	4675.0	18.8
L192	Montague Way	10349.0	3.0
L193	Montague Way	10280.0	3.0
L194	Montague Way	10071.0	3.0
L195	Norwood Road	9959.0	3.0
L196	Norwood Road	9460.0	3.0
L197	Norwood Road	9754.0	3.0
L198	Norwood Road	9521.0	3.0
L199	Norwood Road	9814.0	3.0
L200	Norwood Road	9564.0	3.0
L201	Norwood Road	9408.0	3.0
L202	Norwood Road	10023.0	3.0
L203	Norwood Road	9397.0	3.0
L204	Norwood Road	9659.0	3.0
L205	Norwood Road	9408.0	3.0
L206	Norwood Road	9871.0	3.0
L207	Norwood Road	9928.0	3.0
L208	Norwood Road	9609.0	3.0
L209	Norwood Road	9984.0	3.0
L210	Rectory Road	9383.0	3.0
L211	Rectory Road	9375.0	3.0
L212	Rectory Road	9362.0	3.0
L213	Rectory Road	9379.0	3.0
L214	Rectory Road	9367.0	3.0
L215	Rectory Road	9373.0	3.0
L216	Rubastic Road	11600.0	3.0
L217	Scotts Road	11395.0	3.0

Road Link		DS Scenario	
		24 Hr AADT Flow	HDV Prop (%)
L218	Scotts Road	11417.0	3.0
L219	Scotts Road	11379.0	3.0
L220	South Road	10725.0	10.1
L221	South Road	11489.0	8.6
L222	South Road	13992.0	7.8
L223	South Road	9780.0	13.9
L224	South Road	7969.0	16.5
L225	South Road	11495.0	10.9
L226	South Road	10072.0	11.2
L227	South Road	12327.0	7.0
L228	South Road	8654.0	3.6
L229	South Road	8654.0	3.6
L230	South Road	9954.0	7.8
L231	South Road	11780.0	12.0
L232	South Road	10725.0	10.1
L233	South Road	11585.0	11.6
L234	South Road	12164.0	6.9
L235	South Road	13992.0	7.8
L236	South Road	10068.0	7.7
L237	South Road	12858.0	7.6
L238	South Road	11674.0	6.8
L239	South Road	9448.0	11.4
L240	South Road	9546.0	13.1
L241	South Road	9341.0	13.5
L242	South Road	12109.0	6.9
L243	South Road	13150.0	7.9
L244	South Road	10706.0	6.9
L245	South Road	9499.0	11.9
L246	South Road	11711.0	12.6
L247	South Road	7972.0	16.5
L248	South Road	9499.0	11.9
L249	South Road	11489.0	8.6
L250	South Road	18845.0	8.3
L251	The Broadway	24447.0	8.7
L252	The Broadway	12251.0	12.0

Road Link		DS Scenario	
		24 Hr AADT Flow	HDV Prop (%)
L253	The Broadway	11483.0	12.5
L254	The Broadway	26774.0	4.7
L255	The Broadway	20324.0	8.8
L256	The Broadway	24461.0	8.7
L257	The Broadway	25082.0	5.9
L258	The Broadway	22874.0	8.3
L259	The Broadway	24461.0	8.7
L260	The Broadway	22979.0	8.0
L261	The Broadway	12338.0	11.9
L262	The Broadway	18757.0	9.0
L263	The Broadway	22915.0	8.6
L264	The Broadway	13024.0	11.5
L265	The Broadway	18482.0	9.0
L266	The Broadway	24393.0	8.8
L267	The Broadway	24433.0	8.7
L268	The Broadway	12338.0	11.9
L269	The Broadway	12479.0	11.8
L270	The Broadway	22704.0	8.9
L271	The Broadway	22900.0	8.2
L272	The Broadway	24312.0	8.8
L273	The Broadway	20950.0	8.8
L274	The Broadway	22861.0	8.4
L275	The Broadway	13434.0	11.2
L276	The Broadway	23626.0	7.1
L277	The Broadway	21894.0	10.1
L278	The Broadway	19141.0	9.0
L279	The Broadway	21796.0	8.9
L280	The Broadway	18024.0	9.2
L281	The Broadway	20496.0	8.9
L282	The Broadway	15094.0	10.3
L283	The Broadway	23062.0	7.8
L284	The Broadway	12735.0	11.6
L285	The Broadway	21940.0	8.5
L286	The Broadway	23673.0	7.1
L287	The Broadway	16701.0	9.6

Road Link		DS Scenario	
		24 Hr AADT Flow	HDV Prop (%)
L288	The Broadway	18742.0	9.0
L289	The Broadway	22059.0	8.9
L290	The Broadway	21501.0	9.0
L291	The Broadway	22059.0	8.9
L292	The Broadway	25748.0	8.3
L293	The Broadway	22662.0	8.7
L294	The Broadway	24312.0	8.8
L295	The Broadway	24473.0	8.7
L296	The Broadway	23178.0	7.8
L297	The Broadway	20315.0	8.8
L298	The Broadway	22706.0	7.9
L299	The Broadway	12600.0	11.7
L300	The Broadway	13101.0	11.4
L301	The Broadway	24312.0	8.8
L302	The Broadway	21501.0	9.0
L303	The Green	10352.0	2.8
L304	The Green	10304.0	2.8
L305	The Green	10180.0	2.8
L306	The Green	10278.0	2.8
L307	The Green	10042.0	2.8
L308	The Green	10144.0	2.8
L309	The Green	10054.0	2.8
L310	The Green	10048.0	2.8
L311	The Green	10170.0	2.8
L312	The Green	10097.0	2.8
L313	The Green	10026.0	2.8
L314	The Green	10329.0	2.8
L315	The Green	10205.0	2.8
L316	The Green	10352.0	2.8
L317	The Green	10258.0	2.8
L318	The Green	10237.0	2.8
L319	The Green	10066.0	2.8
L320	The Green	10026.0	2.8
L321	The Parkway	32205.0	4.1
L322	The Parkway	40389.0	4.3

Road Link		DS Scenario	
		24 Hr AADT Flow	HDV Prop (%)
L323	The Parkway	22006.0	5.8
L324	The Parkway	39470.0	3.9
L325	The Parkway	18817.0	4.6
L326	The Parkway	34559.0	4.0
L327	The Parkway	33051.0	3.6
L328	The Parkway	40380.0	4.3
L329	The Parkway	18819.0	4.2
L330	The Parkway	35420.0	4.5
L331	The Parkway	18630.0	4.6
L332	The Parkway	34559.0	4.0
L333	The Parkway	31499.0	4.7
L334	The Parkway	34559.0	4.0
L335	The Parkway	40427.0	4.3
L336	The Parkway	32995.0	3.6
L337	The Parkway	12620.0	5.0
L338	The Parkway	15498.0	5.3
L339	The Parkway	32206.0	4.1
L340	The Parkway	42712.0	4.7
L341	The Parkway	5395.0	5.2
L342	The Parkway	18929.0	4.7
L343	The Parkway	13284.0	6.1
L344	The Parkway	17704.0	5.2
L345	The Parkway	18646.0	4.6
L346	The Parkway	18819.0	4.2
L347	The Parkway	5302.0	6.7
L348	The Parkway	18819.0	4.2
L349	The Parkway	35420.0	4.5
L350	The Parkway	30978.0	4.7
L351	The Parkway	34559.0	4.0
L352	The Parkway	44463.0	4.7
L353	The Parkway	40251.0	4.3
L354	The Parkway	40265.0	4.3
L355	The Parkway	39505.0	3.9
L356	The Parkway	21551.0	4.4
L357	The Parkway	21537.0	3.8

Road Link		DS Scenario	
		24 Hr AADT Flow	HDV Prop (%)
L358	The Parkway	31316.0	4.1
L359	The Parkway	18929.0	4.7
L360	The Parkway	46879.0	4.7
L361	The Parkway	31006.0	4.7
L362	The Parkway	22120.0	5.8
L363	The Parkway	32556.0	3.7
L364	Uxbridge Road	12555.0	7.6
L365	Uxbridge Road	13540.0	6.8
L366	Uxbridge Road	10497.0	9.6
L367	Uxbridge Road	12127.0	8.2
L368	Uxbridge Road	12503.0	9.9
L369	Uxbridge Road	12855.0	7.6
L370	Uxbridge Road	12451.0	9.7
L371	Uxbridge Road	15872.0	6.3
L372	Uxbridge Road	15617.0	8.2
L373	Uxbridge Road	10425.0	9.7
L374	Uxbridge Road	10494.0	9.9
L375	Uxbridge Road	15577.0	5.6
L376	Uxbridge Road	17454.0	5.1
L377	Uxbridge Road	12471.0	7.0
L378	Uxbridge Road	16166.0	5.2
L379	Uxbridge Road	17275.0	6.2
L380	Uxbridge Road	24310.0	8.8
L381	Uxbridge Road	8420.0	10.1
L382	Uxbridge Road	10046.0	11.1
L383	Uxbridge Road	16283.0	5.3
L384	Uxbridge Road	24379.0	5.8
L385	Uxbridge Road	22184.0	5.8
L386	Uxbridge Road	13407.0	5.4
L387	Uxbridge Road	13315.0	9.1
L388	Uxbridge Road	16866.0	5.5
L389	Uxbridge Road	18771.0	7.9
L390	Uxbridge Road	12503.0	9.9
L391	Uxbridge Road	24276.0	6.0
L392	Uxbridge Road	16166.0	5.2

Road Link		DS Scenario	
		24 Hr AADT Flow	HDV Prop (%)
L393	Uxbridge Road	19139.0	6.0
L394	Uxbridge Road	17721.0	5.0
L395	Uxbridge Road	13073.0	7.5
L396	Uxbridge Road	14458.0	5.7
L397	Uxbridge Road	17159.0	6.2
L398	Uxbridge Road	11603.0	9.9
L399	Uxbridge Road	17397.0	5.1
L400	Uxbridge Road	15246.0	5.9
L401	Uxbridge Road	18994.0	4.9
L402	Uxbridge Road	15895.0	6.3
L403	Uxbridge Road	15451.0	5.6
L404	Uxbridge Road	9853.0	9.5
L405	Uxbridge Road	17232.0	5.2
L406	Uxbridge Road	8771.0	3.4
L407	Uxbridge Road	18450.0	5.1
L408	Uxbridge Road	14934.0	5.8
L409	Uxbridge Road	9944.0	10.2
L410	Uxbridge Road	12836.0	9.5
L411	Uxbridge Road	18998.0	5.9
L412	Uxbridge Road	13485.0	6.8
L413	Uxbridge Road	26662.0	5.6
L414	Uxbridge Road	12354.0	9.2
L415	Uxbridge Road	12503.0	9.9
L416	Uxbridge Road	9853.0	9.5
L417	Uxbridge Road	26670.0	5.4
L418	Uxbridge Road	15617.0	8.2
L419	Uxbridge Road	12538.0	9.4
L420	Uxbridge Road	5185.0	8.7
L421	Uxbridge Road	8420.0	10.1
L422	Uxbridge Road	12451.0	6.8
L423	Uxbridge Road	14792.0	5.8
L424	Uxbridge Road	14447.0	6.6
L425	Uxbridge Road	13495.0	6.8
L426	Uxbridge Road	18448.0	5.1
L427	Uxbridge Road	17721.0	5.0

Road Link		DS Scenario	
		24 Hr AADT Flow	HDV Prop (%)
L428	Uxbridge Road	21444.0	5.7
L429	Uxbridge Road	13558.0	7.5
L430	Uxbridge Road	12350.0	9.1
L431	Uxbridge Road	18989.0	5.9
L432	Uxbridge Road	15900.0	5.2
L433	Uxbridge Road	13401.0	5.3
L434	Uxbridge Road	12471.0	7.0
L435	Uxbridge Road	14298.0	6.8
L436	Uxbridge Road	13558.0	7.5
L437	Uxbridge Road	12471.0	7.0
L438	Uxbridge Road	17294.0	5.1
L439	Uxbridge Road	14704.0	5.8
L440	Uxbridge Road	14691.0	5.8
L441	Uxbridge Road	9249.0	10.5
L442	Uxbridge Road	14627.0	6.7
L443	Uxbridge Road	14876.0	5.7
L444	Uxbridge Road	12705.0	7.8
L445	Uxbridge Road	15327.0	6.4
L446	Uxbridge Road	13326.0	6.8
L447	Uxbridge Road	12399.0	9.2
L448	Uxbridge Road	18971.0	6.0
L449	Uxbridge Road	13315.0	9.1
L450	Uxbridge Road	12471.0	7.0
L451	Uxbridge Road	12458.0	9.3
L452	Uxbridge Road	12471.0	7.0
L453	Uxbridge Road	10597.0	9.8
L454	Uxbridge Road	8121.0	5.8
L455	Uxbridge Road	13971.0	6.6
L456	Uxbridge Road	14458.0	5.7
L457	Uxbridge Road	14802.0	5.9
L458	Uxbridge Road	15593.0	8.1
L459	Uxbridge Road	10021.0	11.0
L460	Uxbridge Road	17894.0	5.6
L461	Uxbridge Road	15670.0	6.2
L462	Uxbridge Road	15522.0	5.3

Road Link		DS Scenario	
		24 Hr AADT Flow	HDV Prop (%)
L463	Uxbridge Road	16171.0	5.2
L464	Uxbridge Road	25991.0	5.1
L465	Uxbridge Road	17574.0	5.1
L466	Uxbridge Road	14530.0	6.3
L467	Uxbridge Road	31771.0	5.5
L468	Uxbridge Road	14109.0	6.7
L469	Uxbridge Road	15486.0	6.4
L470	Uxbridge Road	12784.0	9.6
L471	Uxbridge Road	13407.0	5.4
L472	Uxbridge Road	12451.0	9.7
L473	Uxbridge Road	15118.0	5.8
L474	Victoria Road	9533.0	3.0
L475	Victoria Road	9536.0	3.0
L476	Victoria Road	9519.0	3.0
L477	Victoria Road	9529.0	3.0
L478	Western Road	5078.0	20.2
L479	Western Road	10972.0	2.9
L480	Western Road	10863.0	3.1
L481	Western Road	10618.0	2.9
L482	Western Road	10956.0	3.1
L483	Western Road	11029.0	2.9
L484	Western Road	11165.0	3.1
L485	Western Road	6925.0	11.6
L486	Western Road	9951.0	2.9
L487	Western Road	10814.0	3.1
L488	Western Road	11039.0	3.1
L489	Western Road	11047.0	3.1
L490	Western Road	13546.0	11.8
L491	Western Road	10029.0	2.9
L492	Western Road	1818.0	38.7
L493	Western Road	1812.0	38.5
L494	Western Road	15976.0	11.0
L495	Western Road	9040.0	10.4
L496	Western Road	13546.0	11.8
L497	Western Road	15985.0	11.1

Road Link		DS Scenario	
		24 Hr AADT Flow	HDV Prop (%)
L498	Western Road	1812.0	38.5
L499	Western Road	10084.0	2.9
L500	Western Road	10054.0	2.9
L501	Western Road	10054.0	2.9
L502	Western Road	10943.0	2.9
L503	Western Road	10955.0	2.9
L504	Western Road	11018.0	2.9
L505	Western Road	10956.0	2.9
L506	Western Road	11242.0	3.2
L507	Western Road	10844.0	3.1
L508	Western Road	10787.0	3.1
L509	Western Road	10643.0	2.9
L510	Western Road	5074.0	20.2
L511	Western Road	11099.0	2.9
L512	Western Road	11311.0	3.2
L513	Western Road	4717.0	14.3
L514	Western Road	11066.0	3.1
L515	Western Road	15968.0	11.0
L516	Western Road	11087.0	2.9
L517	Western Road	5052.0	19.9
L518	Western Road	5074.0	20.2
L519	Western Road	4722.0	14.3
L520	Western Road	13546.0	11.8
L521	Yeading Lane	8823.0	2.8
L522	Yeading Lane	8283.0	2.9
L523	Yeading Lane	8882.0	2.8
L524	Yeading Lane	8475.0	2.8
L525	Yeading Lane	8419.0	2.8
L526	Yeading Lane	8453.0	2.8
L527	Yeading Lane	8891.0	2.8
L528	Yeading Lane	8528.0	2.8
L529	Yeading Lane	8706.0	2.8
L530	Yeading Lane	8778.0	2.8
L531	Yeading Lane	8888.0	2.8
L532	Yeading Lane	8602.0	2.8

Road Link		DS Scenario	
		24 Hr AADT Flow	HDV Prop (%)
L533	Yeading Lane	8902.0	2.8
L534	Yeading Lane	8454.0	2.8
L535	Yeading Lane	8465.0	2.8
L536	Yeading Lane	8474.0	2.8
L537	Yeading Lane	8860.0	2.8
L538	Yeading Lane	8860.0	2.8
L539	Yeading Lane	8227.0	2.9
L540	Yeading Lane	8841.0	2.8
L541	Yeading Lane	8190.0	2.9

Reference should be made to Figure 6 within Appendix A for a graphical representation of the road link locations used within the operation phase assessment.

### Emission Factors

Emission factors for each link were calculated using the relevant traffic flows and the Emissions Factor Toolkit (version 13.1) released in April 2025, which incorporates updated COPERT v5.6 vehicle emissions factors for NO<sub>x</sub>, PM<sub>10</sub> and PM<sub>2.5</sub> and EURO 6 vehicle fleet sub-categories.

### NO<sub>x</sub> to NO<sub>2</sub> Conversion

Predicted annual mean NO<sub>x</sub> concentrations from the dispersion model were converted to NO<sub>2</sub> concentrations using the NO<sub>x</sub> to NO<sub>2</sub> Calculator (v.9.1) provided by DEFRA, which is the method detailed within LLAQM.TG(19).

### Meteorological Data

Meteorological data used in this assessment was taken from Northolt meteorological station over the period 1<sup>st</sup> January 2024 to 31<sup>st</sup> December 2024 (inclusive).

Northolt meteorological station is located at approximate NGR: 509857, 184532 which is approximately 3.38km North of the Proposed Development. Northolt data has been used for this assessment as it represents the closest meteorological station to the development site and as such, it is considered to provide a reasonable representation of conditions present.

All meteorological records used in the assessment were provided by the Met Office. Reference should be made to Figure 5 within Appendix A for a wind rose of utilised meteorological data.

### Roughness Length

The specific roughness length ( $z_0$ ) values used to represent conditions during the verification process, DS scenario, as well as conditions at the Northolt meteorological station are summarised in Table B3.

**Table B3: Utilised Roughness Lengths**

Scenario	Roughness Length (m)	ADMS Description
Verification, DM and DS Scenarios	1.5	Large urban areas
Northolt	0.3	Agricultural areas (max)

These values of  $z_0$  are considered appropriate for the morphology of the assessment area.

### Monin-Obukhov Length

The Monin-Obukhov length provides a measure of the stability of the atmosphere within certain urban or rural contexts. The specific length values used to represent conditions during the verification process, DS scenario, as well as conditions at Northolt are summarised in Table B4.

**Table B4: Utilised Monin-Obukhov Lengths**

Scenario	Monin-Obukhov Length (m)	ADMS Description
Verification, DM and DS Scenarios	100	Large conurbations > 1 million
Northolt	100	Large conurbations > 1 million

This Monin-Obukhov value is considered appropriate for the morphology of the assessment area.

### Background Concentrations

The 2024 annual mean background concentrations detailed in Table B5, were used in the dispersion modelling assessment to represent annual mean pollutant levels at the Proposed Development site and local monitoring sites.

Table B5 displays the specific background concentrations as predicted by DEFRA, utilised to represent the condition at the monitoring locations used within the verification process.

**Table B5: Predicted Background Pollutant Concentrations for Monitoring Locations**

Monitoring Location	DEFRA Grid Square	Pollutant	2024 Predicted Background Concentration ( $\mu\text{g}/\text{m}^3$ )
Hillingdon Hayes	509500, 179500	NO <sub>x</sub>	25.3826

Monitoring Location	DEFRA Grid Square	Pollutant	2024 Predicted Background Concentration ( $\mu\text{g}/\text{m}^3$ )
		NO <sub>2</sub>	17.9982
		PM <sub>10</sub>	13.7745
		PM <sub>2.5</sub>	8.161
EA10	511500, 179500	NO <sub>x</sub>	23.5652
		NO <sub>2</sub>	16.8889
		PM <sub>10</sub>	13.6278
		PM <sub>2.5</sub>	8.1517
EA13	512500, 180500	NO <sub>x</sub>	23.0787
		NO <sub>2</sub>	16.5999
		PM <sub>10</sub>	14.4127
		PM <sub>2.5</sub>	8.399
EA14	512500, 180500	NO <sub>x</sub>	23.0787
		NO <sub>2</sub>	16.5999
		PM <sub>10</sub>	14.4127
		PM <sub>2.5</sub>	8.399
EA12	512500, 180500	NO <sub>x</sub>	23.0787
		NO <sub>2</sub>	16.5999
		PM <sub>10</sub>	14.4127
		PM <sub>2.5</sub>	8.399
EA11	512500, 179500	NO <sub>x</sub>	23.6664
		NO <sub>2</sub>	16.9532
		PM <sub>10</sub>	14.093
		PM <sub>2.5</sub>	8.2616
EA9	512500, 179500	NO <sub>x</sub>	23.6664
		NO <sub>2</sub>	16.9532
		PM <sub>10</sub>	14.093
		PM <sub>2.5</sub>	8.2616
EA8	512500, 179500	NO <sub>x</sub>	23.6664
		NO <sub>2</sub>	16.9532
		PM <sub>10</sub>	14.093
		PM <sub>2.5</sub>	8.2616

### Verification

The predicted results from a dispersion model may differ from measured concentrations for a large number of reasons, including:

- Estimates of background concentrations;
- Uncertainties in source activity data such as traffic flows and emission factors;
- Variations in meteorological conditions;
- Overall model limitations; and
- Uncertainties associated with monitoring data, including locations.

Model verification is the process by which these and other uncertainties are investigated and where possible minimised. In reality, the differences between modelled and monitored results are likely to be a combination of all of these aspects.

For the purpose of this assessment model verification was undertaken for 2024, using traffic data, meteorological data and monitoring results from this year.

LBoH undertakes periodic monitoring of NO<sub>2</sub> concentrations at 8 roadside monitoring locations within the assessment extent. The road contribution to total NO<sub>x</sub> concentration was calculated from the monitored NO<sub>2</sub> result for use in the verification process. This was undertaken following the methodology contained within LLAQM.TG(19). The monitored annual mean NO<sub>x</sub> concentration and calculated road NO<sub>x</sub> concentration are summarised in Table B6.

**Table B6: NO<sub>x</sub> Concentrations**

Site ID	Monitored Road NO <sub>x</sub> Concentration (µg/m <sup>3</sup> )	Modelled Road NO <sub>x</sub> Concentration (µg/m <sup>3</sup> )
Hillingdon Hayes	23.82	8.406
EA10	19.8	6.084
EA13	40.53	13.228
EA14	25.08	9.182
EA12	7.09	2.748
EA11	2.95	2.045
EA9	4.06	1.916
EA8	21.92	8.81

The monitored and modelled Road NO<sub>x</sub> contribution concentrations were compared, and this indicated that a verification factor of **2.8556** was required to be applied to NO<sub>x</sub> modelling results, as shown in Graph 1.

Graph 1 is provided below.

**Graph 1 - Verification Adjustment Factor**

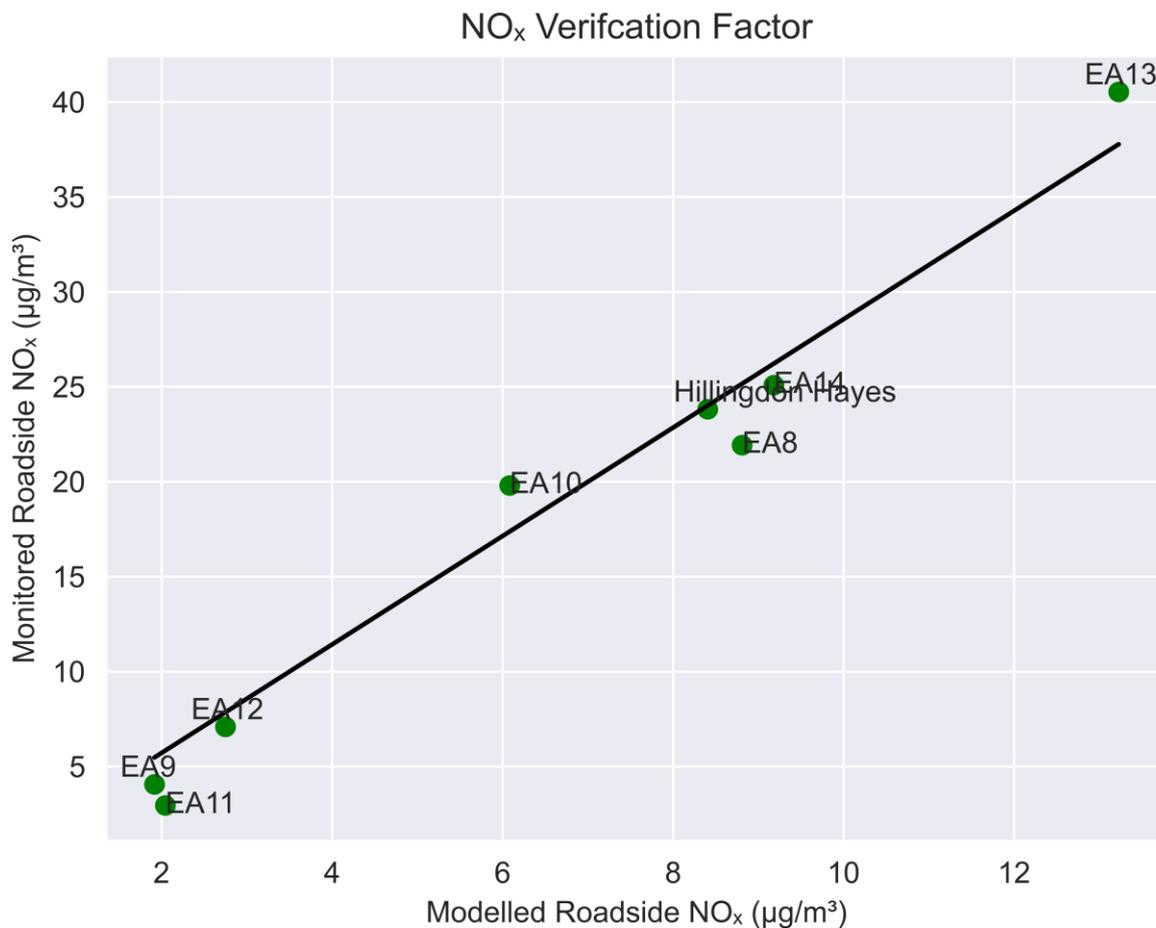


Table B7 presents the monitored annual mean NO<sub>2</sub> concentrations and the adjusted modelled total NO<sub>2</sub> concentration based on the above verification factor. Exceedances of the annual mean NO<sub>2</sub> AQO are highlighted in **bold**.

**Table B7: NO<sub>2</sub> Concentrations**

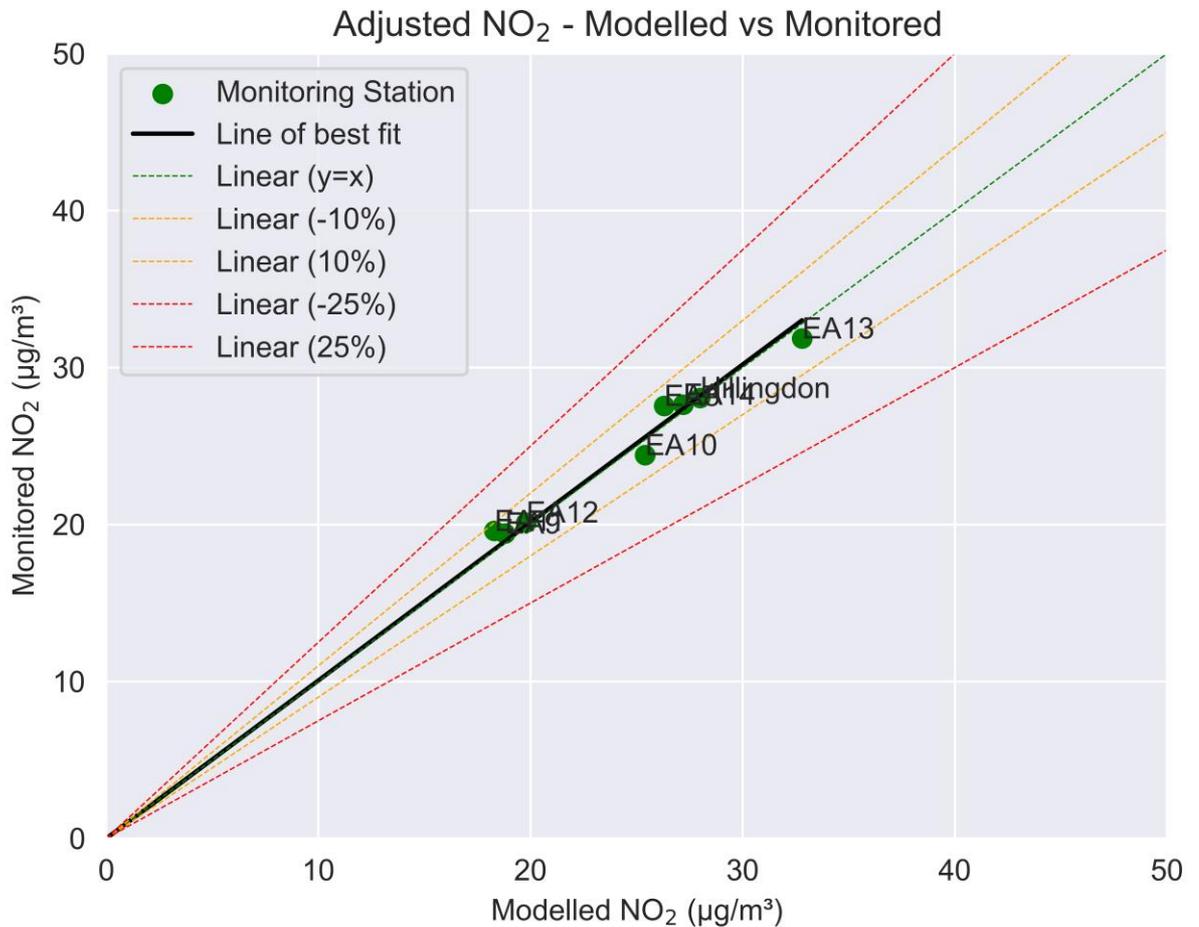
Site ID	Monitored Road NO <sub>2</sub> Concentration (µg/m <sup>3</sup> )	Adjusted Modelled Road NO <sub>2</sub> Concentration (µg/m <sup>3</sup> )	% Difference ((Monitored - Modelled)/Monitored) * 100
Hillingdon Hayes	28.0	28.068	-0.24%
EA10	25.4	24.419	3.86%
EA13	32.8	31.85	2.9%
EA14	27.2	27.64	-1.62%

Site ID	Monitored Road NO <sub>2</sub> Concentration (µg/m <sup>3</sup> )	Adjusted Modelled Road NO <sub>2</sub> Concentration (µg/m <sup>3</sup> )	% Difference ((Monitored - Modelled)/Monitored) * 100
EA12	19.8	20.13	-1.67%
EA11	18.3	19.593	-7.07%
EA9	18.8	19.433	-3.37%
EA8	26.3	27.553	-4.76%

As demonstrated in Table B7, the percentage difference between modelled and monitored concentrations is deemed acceptable and is less than 25% in all cases, and less than or equal to 10% at 8 locations. This reduces uncertainties in the model predictions and provides a robust representation of pollutant concentrations in accordance with the guidance suggested in LLAQM.TG(19).

A graphical representation of the adjusted NO<sub>2</sub> concentrations is provided within Graph 2.

**Graph 2 – Modelled vs Monitored NO<sub>2</sub>**



As PM<sub>10</sub> and PM<sub>2.5</sub> monitoring is not undertaken within the assessment extents, the NO<sub>2</sub> adjustment factor of **2.8556** was utilised to adjust model predictions of PM<sub>10</sub> and PM<sub>2.5</sub> in accordance with the guidance provided within LLAQM.TG(19).

## APPENDIX C: CONSTRUCTION PHASE METHODOLOGY

There is the potential for fugitive dust emissions to occur as a result of construction phase activities. These have been assessed in accordance with the methodology outlined within the Institute of Air Quality Management (IAQM) document 'Guidance on the Assessment of Dust from Demolition and Construction'.

Activities on the proposed construction site have been divided into three types to reflect their different potential impacts. These are:

- Demolition
- Earthworks
- Construction
- Trackout

The potential for dust emissions was assessed for each activity that is likely to take place and considered three separate dust effects:

- Annoyance due to dust soiling;
- Harm to ecological receptors; and
- The risk of health effects due to a significant increase in exposure to PM<sub>10</sub> and PM<sub>2.5</sub>.

The assessment steps are detailed below.

### Step 1

Step 1 screens the requirement for a more detailed assessment. Should human receptors be identified within 250m from the site boundary or 50m from the construction vehicle route up to 250m from the site entrance, then the assessment should proceed to Step 2. Additionally, should ecological receptors be identified within 50m of the boundary site or 50m from the construction vehicle route up to 250m from the site entrance, then the assessment should also proceed to Step 2.

Should sensitive receptors not be present within the relevant distances then negligible impacts would be expected and further assessment is not necessary.

### Step 2

Step 2 assesses the risk of potential dust impacts. A site is allocated to a risk category based on two factors:

- The scale and nature of the works, which determines the magnitude of dust arising as: small, medium or large (Step 2A); and
- The sensitivity of the area to dust impacts, which can be defined as low, medium or high sensitivity (Step 2B).

The two factors are combined in Step 2C to determine the risk of dust impacts without mitigation applied.

Step 2A defines the potential magnitude of dust emission through the construction phase. The relevant criteria are summarised in Table C1.

**Table C1: Construction Dust - Magnitude of Emission**

Magnitude	Activity	Criteria
Large	Demolition	<ul style="list-style-type: none"> <li>Total building volume greater than 75,000m<sup>3</sup></li> <li>Potentially dusty construction material (e.g. concrete)</li> <li>On-site crushing and screening</li> <li>Demolition activities greater than 12m above ground level</li> </ul>
	Earthworks	<ul style="list-style-type: none"> <li>Total site area greater than 110,000m<sup>2</sup></li> <li>Potentially dusty soil type (e.g. clay, which will be prone to suspension when dry due to small particle size)</li> <li>More than 10 heavy earth moving vehicles active at any one time</li> <li>Formation of bunds greater than 6m in height</li> </ul>
	Construction	<ul style="list-style-type: none"> <li>Total building volume greater than 75,000m<sup>3</sup></li> <li>On site concrete batching</li> <li>Sandblasting</li> </ul>
	Trackout	<ul style="list-style-type: none"> <li>More than 50 Heavy Duty Vehicle (HDV) trips per day</li> <li>Potentially dusty surface material (e.g. high clay content)</li> <li>Unpaved road length greater than 100m</li> </ul>
Medium	Demolition	<ul style="list-style-type: none"> <li>Total building volume 12,000m<sup>3</sup> to 75,000m<sup>3</sup></li> <li>Potentially dusty construction material</li> <li>Demolition activities 6m to 12m above ground level</li> </ul>
	Earthworks	<ul style="list-style-type: none"> <li>Total site area 18,000m<sup>2</sup> to 110,000m<sup>2</sup></li> <li>Moderately dusty soil type (e.g. silt)</li> <li>5 to 10 heavy earth moving vehicles active at any one time</li> <li>Formation of bunds 3m to 6m in height</li> </ul>
	Construction	<ul style="list-style-type: none"> <li>Total building volume 18,000m<sup>3</sup> to 110,000m<sup>3</sup></li> <li>Potentially dusty construction material (e.g. concrete)</li> <li>On site concrete batching</li> </ul>
	Trackout	<ul style="list-style-type: none"> <li>20 to 50 HDV trips per day</li> <li>Moderately dusty surface material (e.g. high clay content)</li> <li>Unpaved road length 50m to 100m</li> </ul>
Small	Demolition	<ul style="list-style-type: none"> <li>Total building volume under 12,000m<sup>3</sup></li> <li>Construction material with low potential for dust release (e.g. metal cladding or timber)</li> <li>Demolition activities less than 6m above ground level</li> <li>Demolition during wetter months</li> </ul>
	Earthworks	<ul style="list-style-type: none"> <li>Total site area less than 18,000m<sup>2</sup></li> <li>Soil type with large grain size (e.g. sand)</li> <li>Less than 5 heavy earth moving vehicles active at any one time</li> <li>Formation of bunds less than 4m in height</li> <li>Earthworks during wetter months</li> </ul>
	Construction	<ul style="list-style-type: none"> <li>Total building volume less than 18,000m<sup>3</sup></li> </ul>

Magnitude	Activity	Criteria
		<ul style="list-style-type: none"> <li>Construction material with low potential for dust release (e.g. metal cladding or timber)</li> </ul>
	Trackout	<ul style="list-style-type: none"> <li>&lt;20 HDV (3.5t) outward movements in any one day</li> <li>Surface material with low potential for dust release</li> <li>Unpaved road length &lt;50m</li> </ul>

Step 2B defines the sensitivity of the area around the development site for construction, earthworks and trackout. The factors influencing the sensitivity of the area are shown in Table C2.

**Table C2: Examples of Factors Defining Sensitivity of an Area**

Sensitivity	Examples	
	Human Receptors	Ecological Receptors
High	<ul style="list-style-type: none"> <li>Users expect of high levels of amenity</li> <li>High aesthetic or value property</li> <li>People expected to be present continuously for extended periods of time</li> <li>Locations where members of the public are exposed over a time period relevant to the AQO for PM<sub>10</sub> e.g. residential properties, hospitals, schools and residential care homes</li> </ul>	<ul style="list-style-type: none"> <li>Internationally or nationally designated site e.g. Special Area of Conservation</li> </ul>
Medium	<ul style="list-style-type: none"> <li>Users would expect to enjoy a reasonable level of amenity</li> <li>Aesthetics or value of their property could be diminished by soiling</li> <li>People or property wouldn't reasonably be expected to be present here continuously or regularly for extended periods as part of the normal pattern of use of the land e.g. parks and places of work</li> </ul>	<ul style="list-style-type: none"> <li>Nationally designated site e.g. Sites of Special Scientific Interest</li> </ul>
Low	<ul style="list-style-type: none"> <li>Enjoyment of amenity would not reasonably be expected</li> <li>Property would not be expected to be diminished in appearance</li> <li>Transient exposure, where people would only be expected to be present for limited periods. e.g. public footpaths, playing fields, shopping streets, playing fields, farmland, footpaths, short term car park and roads</li> </ul>	<ul style="list-style-type: none"> <li>Locally designated site e.g. Local Nature Reserve</li> </ul>

The guidance also provides the following factors to consider when determining the sensitivity of an area to potential dust impacts during the construction phase:

- Any history of dust generating activities in the area;
- The likelihood of concurrent dust generating activity on nearby sites;
- Any pre-existing screening between the source and the receptors;

- Any conclusions drawn from analysing local meteorological data which accurately represent the area; and if relevant the season during which works will take place;
- Any conclusions drawn from local topography;
- Duration of the potential impact, as a receptor may become more sensitive over time; and
- Any known specific receptor sensitivities which go beyond the classifications given in the document.

These factors were considered in the undertaking of this assessment. The sensitivity of the area to dust soiling effects on people and property is shown in Table C3.

**Table C3: Sensitivity of the Area to Dust Soiling Effects on People and Property**

Receptor Sensitivity	Number of Receptors	Distance from the Source (m)			
		Less than 20	Less than 50	Less than 100	Less than 250
High	More than 100	High	High	Medium	Low
	10 - 100	High	Medium	Low	Low
	1 - 10	Medium	Low	Low	Low
Medium	More than 1	Medium	Low	Low	Low
Low	More than 1	Low	Low	Low	Low

Table C4 outlines the sensitivity of the area to human health impacts.

**Table C4: Sensitivity of the Area to Human Health Impacts**

Receptor Sensitivity	Annual Mean PM <sub>10</sub> Concentration	Number of Receptors	Distance to Site			
			Less than 20	Less than 50	Less than 100	Less than 250
High	Greater than 32µg/m <sup>3</sup>	More than 100	High	High	High	Medium
		10 - 100	High	High	Medium	Low
		1 - 10	High	Medium	Low	Low
	28 - 32µg/m <sup>3</sup>	More than 100	High	High	Medium	Low
		10 - 100	High	Medium	Low	Low
		1 - 10	High	Medium	Low	Low
	24 - 28µg/m <sup>3</sup>	More than 100	High	Medium	Low	Low
		10 - 100	High	Medium	Low	Low
		1 - 10	Medium	Low	Low	Low
	Less than 24µg/m <sup>3</sup>	More than 100	Medium	Low	Low	Low
		10 - 100	Low	Low	Low	Low
		1 - 10	Low	Low	Low	Low
Medium	Greater than 32µg/m <sup>3</sup>	More than 10	High	Medium	Low	Low

	28 - 32µg/m <sup>3</sup>	1 - 10	Medium	Low	Low	Low
		More than 10	Medium	Low	Low	Low
	24 - 28µg/m <sup>3</sup>	1 - 10	Low	Low	Low	Low
		More than 10	Low	Low	Low	Low
	Less than 24µg/m <sup>3</sup>	1 - 10	Low	Low	Low	Low
		More than 10	Low	Low	Low	Low
Low	-	More than 1	Low	Low	Low	Low

Table C5 outlines the sensitivity of the area to ecological impacts.

**Table C5: Sensitivity of the Area to Ecological Impacts**

Receptor Sensitivity	Distance from the Source (m)	
	Less than 20	Less than 50
High	High	Medium
Medium	Medium	Low
Low	Low	Low

Step 2C combines the dust emission magnitude with the sensitivity of the area to determine the risk of unmitigated impacts.

**Table C6: Dust Risk Category from Demolition**

Receptor Sensitivity	Dust Emission Magnitude		
	Large	Medium	Small
High	High	Medium	Medium
Medium	High	Medium	Low
Low	Medium	Low	Negligible

Table C7 outlines the risk category from earthworks and construction activities.

**Table C7: Dust Risk Category from Earthworks and Construction**

Receptor Sensitivity	Dust Emission Magnitude		
	Large	Medium	Small
High	High	Medium	Low
Medium	Medium	Medium	Low
Low	Low	Low	Negligible

Table C8 outlines the risk category from trackout.

**Table C8: Dust Risk Category from Trackout**

Receptor Sensitivity	Dust Emission Magnitude		
	Large	Medium	Small
High	High	Medium	Low
Medium	Medium	Medium	Low
Low	Low	Low	Negligible

**Step 3**

Step 3 requires the identification of site-specific mitigation measures within the IAQM guidance to reduce potential dust impacts based upon the relevant risk categories identified in Step 2. For sites with negligible risk mitigation measures beyond those required by legislation are not required. However, additional controls may be applied as part of good practice.

**Step 4**

Once the risk of dust impacts has been determined and the appropriate mitigation measures identified, the final step is to determine the significance of any residual impacts. For almost all construction activity, the aim should be to control effects through the use of effective mitigation. Experience shows that this is normally possible. Hence the residual effect will normally be 'not significant'.