

Air Quality and Dust Monitoring Monthly Report – January 2024

Birmingham City Council



Department for Transport

High Speed Two (HS2) Limited has been tasked by the Department for Transport (DfT) with managing the delivery of a new national high speed rail network. It is a non-departmental public body wholly owned by the DfT.

High Speed Two (HS2) Limited,
Two Snowhill
Snow Hill Queensway
Birmingham B4 6GA

Telephone: 08081 434 434

General email enquiries: HS2enquiries@hs2.org.uk

Website: www.gov.uk/hs2

A report prepared by EWCs and MWCCs on behalf of HS2 Ltd.

High Speed Two (HS2) Limited has actively considered the needs of blind and partially sighted people in accessing this document. The text will be made available in full on the HS2 website. The text may be freely downloaded and translated by individuals or organisations for conversion into other accessible formats. If you have other needs in this regard please contact High Speed Two (HS2) Limited.

© High Speed Two (HS2) Limited, 2024, except where otherwise stated.

Copyright in the typographical arrangement rests with High Speed Two (HS2) Limited.

This information is licensed under the Open Government Licence v2.0. To view this licence, visit www.nationalarchives.gov.uk/doc/open-government-licence/version/2 **OGI** or write to the Information Policy Team, The National Archives, Kew, London TW9 4DU, or e-mail: psi@nationalarchives.gsi.gov.uk. Where we have identified any third-party copyright information you will need to obtain permission from the copyright holders concerned.



Monthly Summary

1.1.1 This Summary Report is published in fulfilment of commitments detailed in the High Speed Rail (London-West Midlands) Environmental Minimum Requirements, Annex 1: Code of Construction Practice, for the nominated undertaker to present the results of dust monitoring undertaken within Birmingham City Council (BCC) during January 2024.

1.1.2 Figure 1 to Figure 3 in Appendix A present the current worksites together with the dust monitoring locations.

1.1.3 This summary should be read in conjunction with the overview monitoring report monthly available from www.gov.uk/government/collections/monitoring-the-environmental-effects-of-hs2, which highlights: the applicable standards and guidance, as well as the air quality and dust monitoring methodologies to be implemented by nominated undertakers throughout construction.

1.1.4 The current worksites, as presented in Appendix A, Figure 1 to Figure 3, include:

Washwood Heath (Sublot 4)

- Traffic on main site haul road, including haul road maintenance with excavator, Articulated Dump Trucks (ADTs), dozer, and roller to compact.
- Stockpile management area including tipping and loading of ADTs and wagons, excavators, and dozers.
- Tarmac batching plant operations, including delivery of aggregates, operating plant, and concrete wagons.

Bromford East Tunnel Portal (Sublot 1B)

- Continue Vac ex to buried cable at column 57/16D.
- Continue excavating column 57/16B.
- Continued excavating column 57/16B & D.
- Removing 2 more sections of palisade fencing and K guard fencing.
- Finished excavating column 57/16B.

Curzon Street Station – Pre-main works

- Stripping of weathering layer
- Pile matt construction
- Installation of temporary haul road

1.1.5 Seven (7) dust monitors are installed around these worksites, where works are underway. These sites returned a medium dust risk rating.

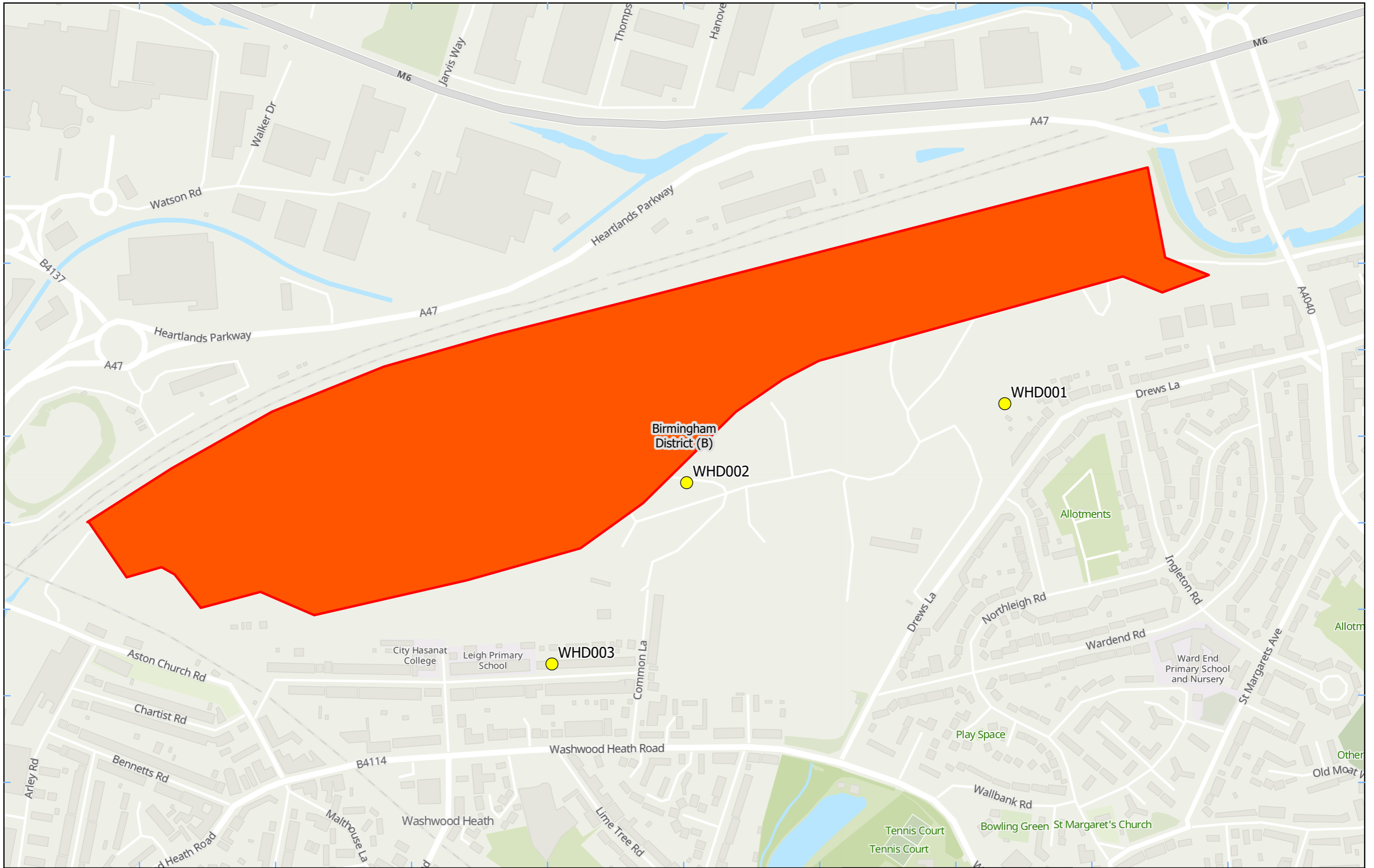
1.1.6 Dust monitoring locations and results are presented in Appendix B, Table 1, together with line charts of monthly data from each dust monitor, presented in Figure 4. All continuous

dust monitoring is undertaken using indicative monitors. Despite being Environment Agency (MCERTS) certified, indicative monitors carry a higher level of uncertainty than reference monitors, and therefore cannot be strictly compared with Air Quality Standards for human health and the environment. The purpose of the monitoring undertaken is to ensure the effectiveness of the on-site mitigation.

- 1.1.7 The trigger level for PM₁₀ concentrations of 190 µg/m³, over a 1-hour period, in accordance with the updated guidance document '*Guidance on Monitoring in the Vicinity of Demolition and Construction Sites (October 2018)*' has been applied.
- 1.1.8 No (0) dust trigger alerts were recorded during the monitoring period (January 2024).
- 1.1.9 Data capture was below 90% for multiple monitors. Fewer daylight hours and wetter than usual weather conditions in January resulted in less power being generated by the solar panels for the monitors external batteries, leading to more battery failures over the course of the month. During the evening, the monitors rely mostly on battery power. Since there was not enough sunlight to charge the batteries during the day, the batteries did not have enough energy stored to power the monitors during the evening, therefore most of the battery failures occurred overnight. Battery refreshes were scheduled regularly throughout the month to mitigate this problem.
- 1.1.10 There were no (0) complaints received during the reporting period (January 2024).

Appendix A – Worksites and Monitoring Locations

Figures 1 - 3: Worksites and Monitoring Locations within BCC



Legend
 [Red outline] District Borough Unitary Boundaries [Red fill] Worksite
 [Yellow dot] Dust Monitor

Service Layer Credits: GB Topographic: Contains OS data © Crown Copyright and database right 2023
 Contains data from OS Zoomstack

Map Number
 Map Name
**Worksite and Monitoring Locations
 In BCC (Sheet 1)**
 Birmingham City Council

hs2
 Registered in England. Registration number 06791686.
 Registered office: 2 Snowhill, Queensway,
 Birmingham B4 6GA.

© Crown copyright and database rights 2024.
 Ordnance Survey Licence Number 100049190.

Doc Number: _____

Scale at A3: 1:5,000

Date: 22/01/24



Legend
 [---] District Borough Unitary Boundaries [Red Box] Worksite
 [Yellow Dot] Dust Monitor

Service Layer Credits: GB Topographic: Contains OS data © Crown Copyright and database right 2023
 Contains data from OS Zoomstack

Map Number
 Map Name
**Worksite and Monitoring Locations
 In BCC (Sheet 2)**
 Birmingham City Council

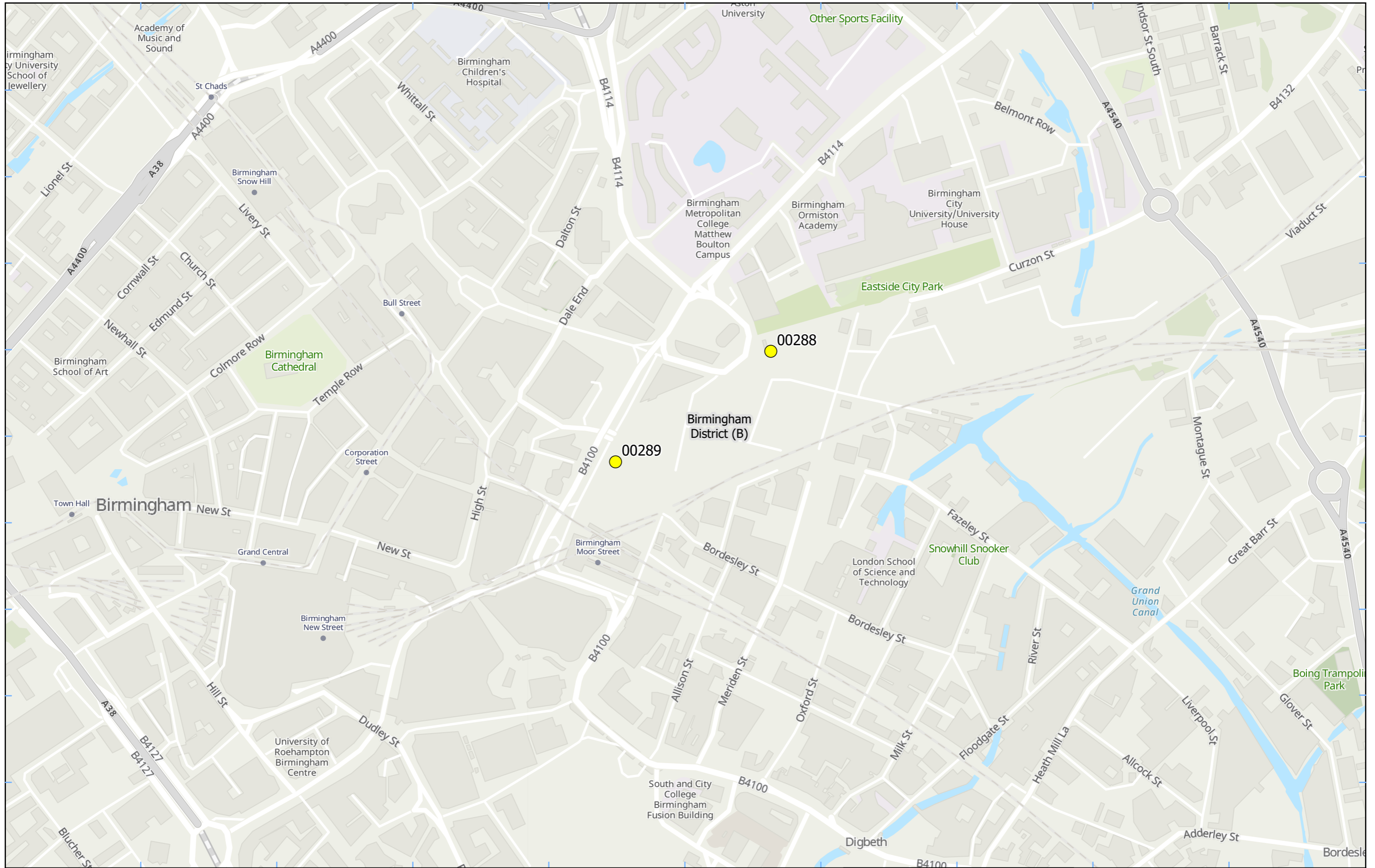
hs2
 Registered in England. Registration number 06791686.
 Registered office: 2 Snowhill, Queensway,
 Birmingham B4 6GA.



HS2 Ltd accept no responsibility for any circumstances, which
 arise from the reproduction of this map after alteration,
 amendment or abbreviation or if it is issued in part or issued
 incomplete in any way.

Scale at A3: 1:4,000

© Crown copyright and database rights 2024.
 Ordnance Survey Licence Number 100049190.


Doc Number: [] Date: 22/01/24



- Legend**
-  District Borough Unitary Boundaries
 -  Dust Monitor

Service Layer Credits: GB Topographic: Contains OS data © Crown Copyright and database right 2023
 Contains data from OS Zoomstack


Map Number	
Map Name	Monitoring Locations In BCC (Sheet 3)
Birmingham City Council	




Registered in England. Registration number 06791686.
 Registered office: 2 Snowhill, Queensway,
 Birmingham B4 6GA.

© Crown copyright and database rights 2024.
 Ordnance Survey Licence Number 100049190.

Doc Number:



Scale at A3: 1:5,000



Metres

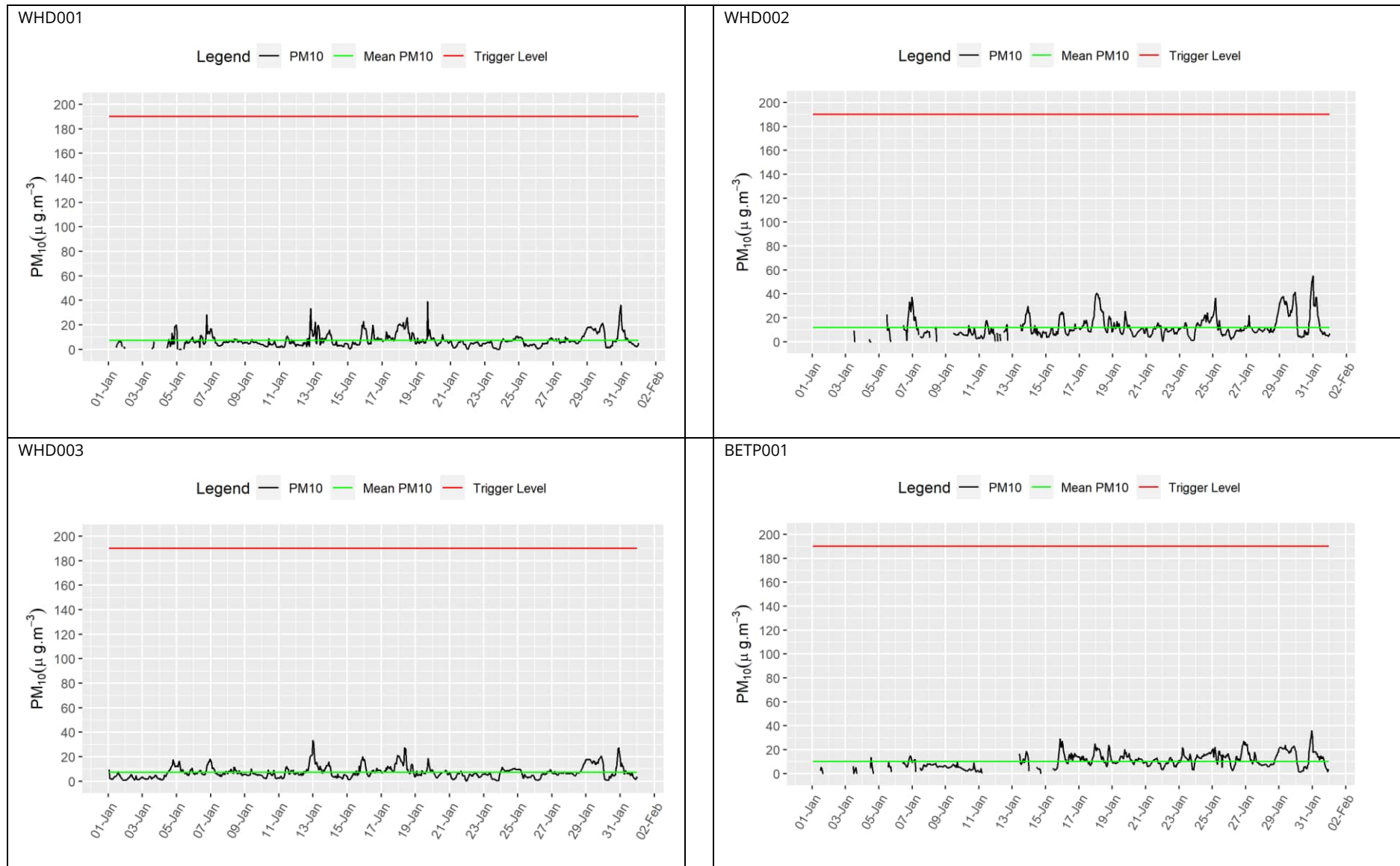
Date: 22/01/24

Appendix B – Dust Monitoring Results

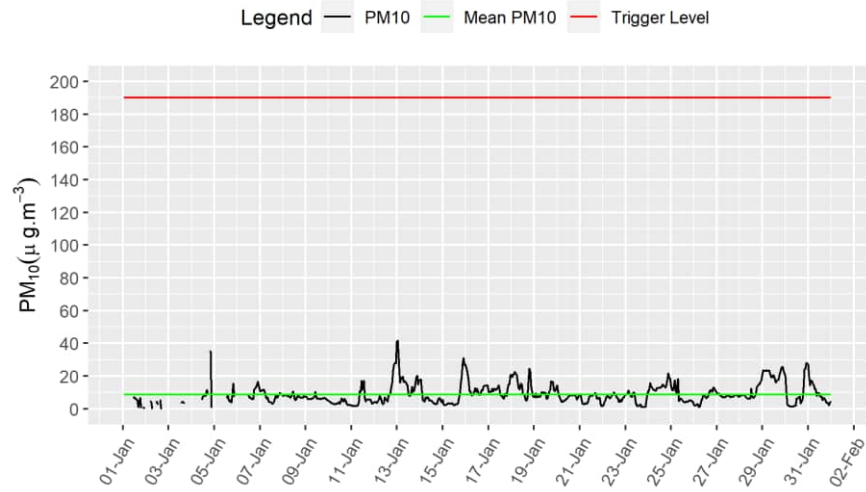
Table 1: Dust Monitoring Locations and Results

Monitoring site ID	Coordinates (X,Y)	Location description	Dust risk rating for site	Monitoring site active during period	Change to site since previous period report	Mean 1-hour PM10 concentration (µg/m3)	Minimum 1-hour PM10 concentration (µg/m3)	Maximum 1-hour PM10 concentration (µg/m3)	Number of 1-hour periods exceeding trigger level of 190 µg/m3	Data capture (%)
WHD001	411221, 289245	Washwood Heath Depot, near receptors on Drews Lane	M	Yes	No	7.2	0.0	39.0	0	92.7
WHD002	410758, 289130	Washwood Heath Depot, near receptors on Common Lane	M	Yes	No	11.8	0.0	55.0	0	81.2
WHD003	410562, 288866	Washwood Heath Depot, near receptors on Warren Road	M	Yes	No	7.3	0.1	33.2	0	100.0
BETP001	416719, 290767	Bromford East Tunnel Portal, Twisted Oak Stables	M	Yes	No	10.2	0.0	35.9	0	79.7
BETP002	417406, 290605	Bromford East Tunnel Portal, Attleboro Lane	M	Yes	No	8.7	0.0	41.8	0	93.0
00288	407676, 287057	Curzon St – East Side City Park	M	Yes	No	9.0	0.9	32.69	0	100
00289	407450, 286896	Curzon St – Moor St Queensway	M	Yes	No	8.26	0.67	29.08	0	100

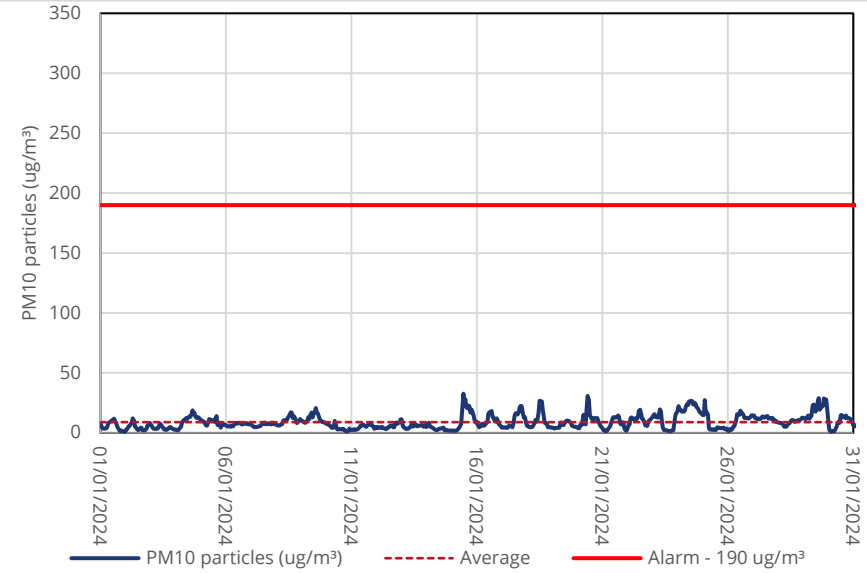
Figure 4: Construction dust 1-hour mean indicative PM₁₀ concentration for all dust monitors



BETP002



00288



00289

