

## Air Quality and Dust Monitoring Monthly Report – December 2022

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.

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

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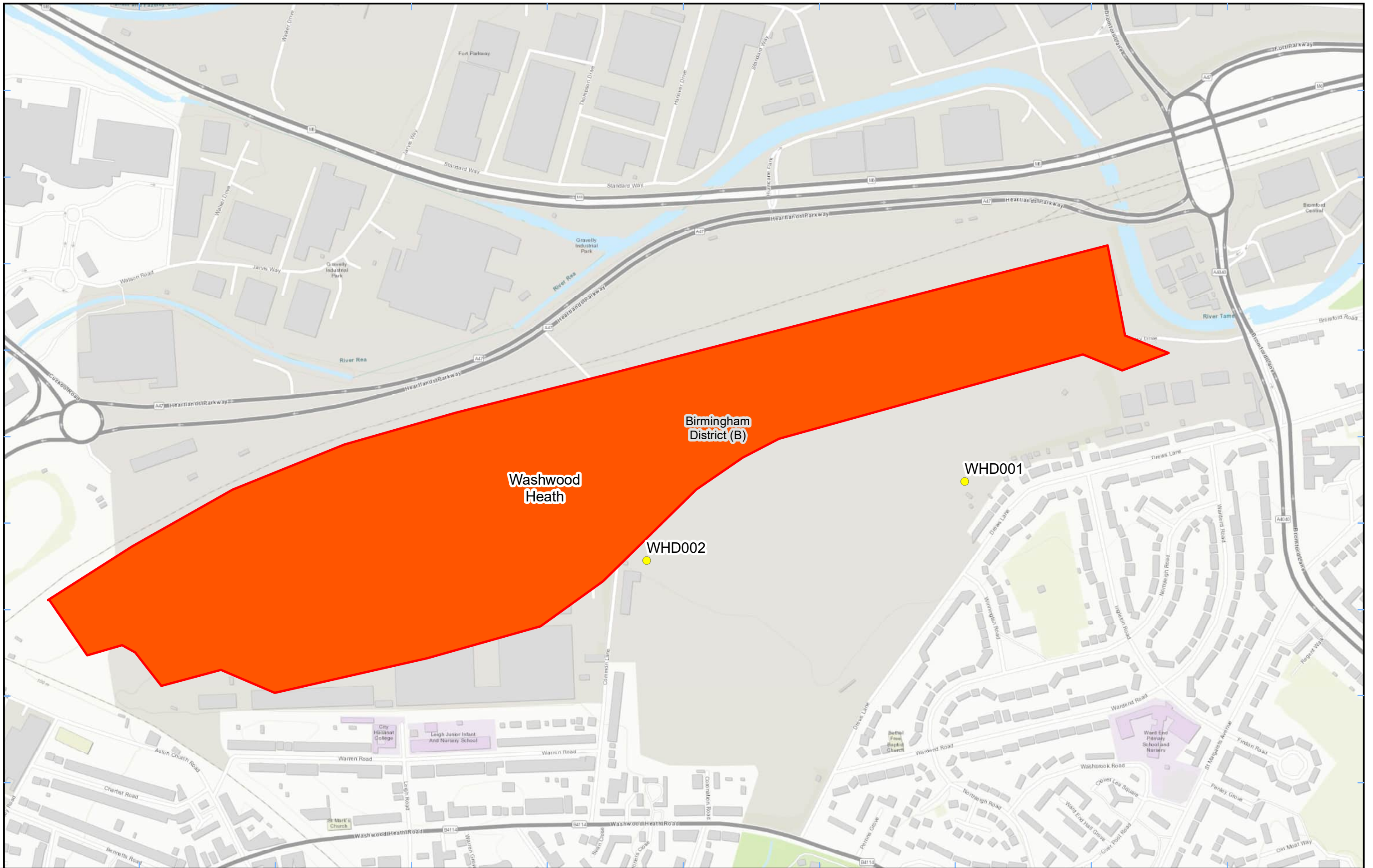
# Monthly Summary

- 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 December 2022.
- 1.1.2 Figures 1 – 3 in Appendix A indicates the BCC worksite together with dust monitoring locations for December 2022.
- 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](http://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, Figures 1 – 3, include:
- Washwood Heath (Sublot 4)**
- Setup of the compound area and haulage routes; and
  - Demolition and crushing of existing concrete foundations on site.
- Bromford East Tunnel Portal (BETP) (Sublot 1B)**
- On-site slurry treatment.
- 1.1.5 Seven (7) dust monitors are installed at the worksite, where works are underway. These sites returned a medium to high dust risk rating.
- 1.1.6 Dust monitoring locations and results are presented in Appendix B, Table 1 together with line charts 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 PM<sub>10</sub> concentrations of 190 µg/m<sup>3</sup>, over a 1-hour period, in accordance with the updated guidance document '*Guidance on Monitoring in the Vicinity of Demolition and Construction Sites – (December 2018)*' has been applied.

- 1.1.8 There were no (0) dust trigger alerts recorded during the monitoring period (December 2022).
- 1.1.9 Data capture was below 90% for multiple monitors due to power disconnection on site.
- 1.1.10 No (0) complaints were received during the reporting period (December 2022).

# Appendix A –Worksite and Dust Monitoring Locations

Figures 1 – 3: Worksites and monitoring locations within the BCC



**Legend**

- Dust Monitor
- District Borough Unitary Boundaries
- Worksite

Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Map Number

Map Name  
**Worksite and Monitoring Locations  
 In BCC (Sheet 1)**

Birmingham City Council

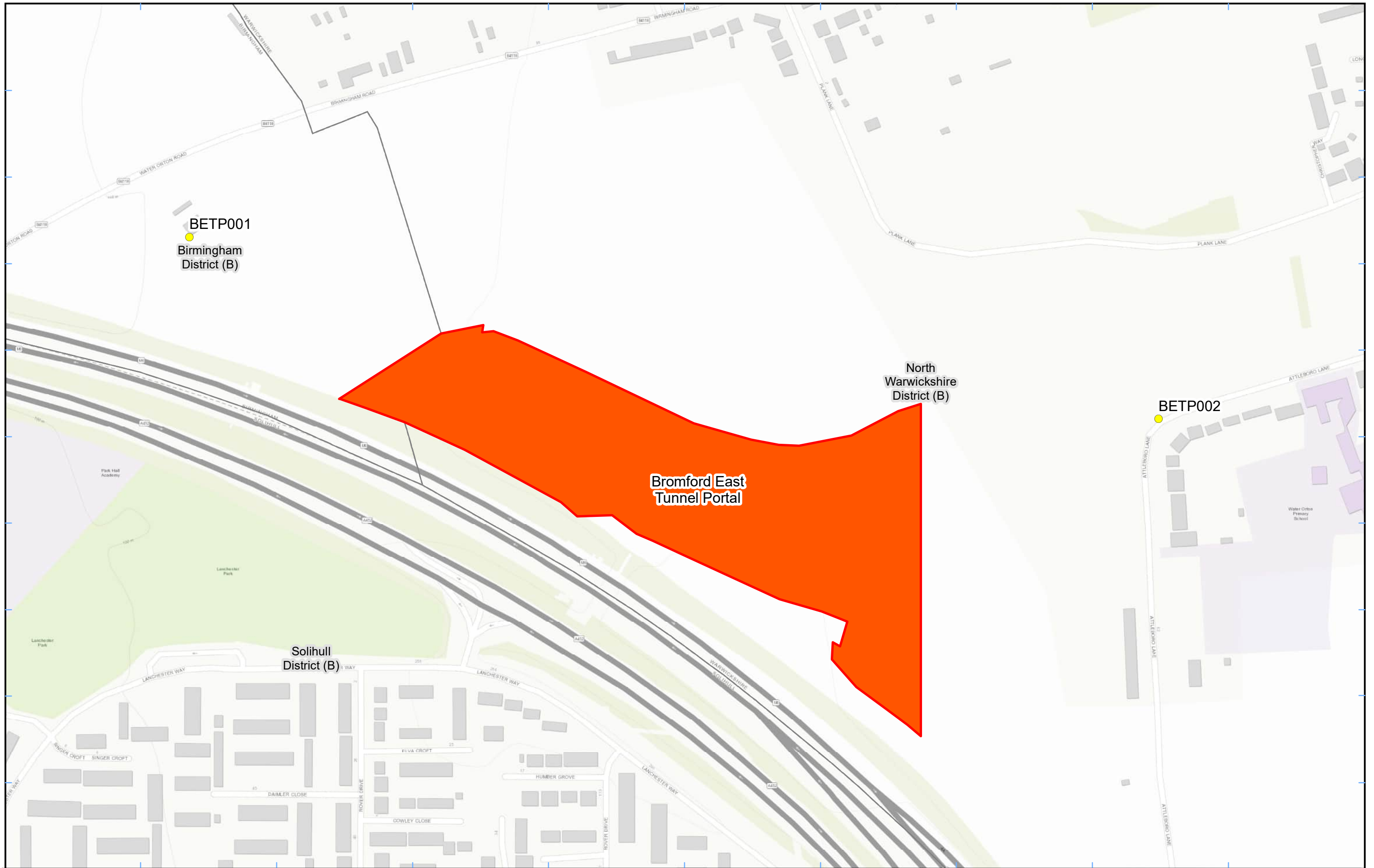
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**Legend**

- Dust Monitor
- District Borough Unitary Boundaries
- Worksite

Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Map Number

Map Name  
**Worksite and Monitoring Locations  
 In BCC (Sheet 2)**

Birmingham City Council

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0 30 60 90 120  
 Metres

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**Legend**

- Dust Monitor
- District Borough Unitary Boundaries

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Map Number

Map Name  
**Monitoring Locations  
In BCC (Sheet 3)**

**Birmingham City County**

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## Appendix B – Dust Monitoring Results

Table 1: Dust monitoring locations and December 2022 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 PM <sub>10</sub> concentration (µg/m <sup>3</sup> )	Minimum 1-hour PM <sub>10</sub> concentration (µg/m <sup>3</sup> )	Maximum 1-hour PM <sub>10</sub> concentration (µg/m <sup>3</sup> )	Number of 1-hour periods exceeding trigger level of 190 µg/m <sup>3</sup>	Data capture rate (%)
Dust #530 (old #555)	407702, 287079	Curzon Street Station HS2 Site	H	N/A	N/A	9.5	0.1	48.3	0	99.5
Dust #753	407619, 287006	Curzon Street Station HS2 Site	H	N/A	N/A	7.1	0.1	37.6	0	92.7
Dust #552	407765, 287073	Curzon Street Station HS2 Site	H	N/A	N/A	15.3	0.6	56.8	0	44.6
WHD001	411221, 289245	Washwood Heath Depot, near receptors on Drews Lane	M	Yes	No	15.7	0.1	61.1	0	100.0
WHD002	410758, 289130	Washwood Heath Depot, near receptors on Common Lane	M	Yes	No	15.2	0.1	59.9	0	88.7
BETP001	416719, 290767	Bromford East Tunnel Portal, Twisted Oak Stables	M	Yes	No	5.2	0.1	48.7	0	93.5
BETP002	417406, 290605	Bromford East Tunnel Portal, Attleboro Lane	M	Yes	No	12.1	0.1	47.5	0	92.7

Figure 4: Construction dust hourly mean indicative PM<sub>10</sub> concentration for all dust monitors

