

## Air Quality and Dust Monitoring Monthly Report – December 2021 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 air quality and dust monitoring undertaken within Birmingham City Council (BCC) during December 2021.
- 1.1.2 Figure 1 to 3 in Appendix A indicates 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](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 phase of works commenced in October 2020 and are expected to be completed by 2025. The current worksites, as presented in Appendix A, Figure 1 to 3, include:

## **Curzon Street Station**

- Ground remediation; and
- Utility diversion works

## **Washwood Heath**

- Setup of the compound area and haulage routes; and
- Demolition and crushing of existing concrete foundations on site

## **Bromford East Tunnel Portal**

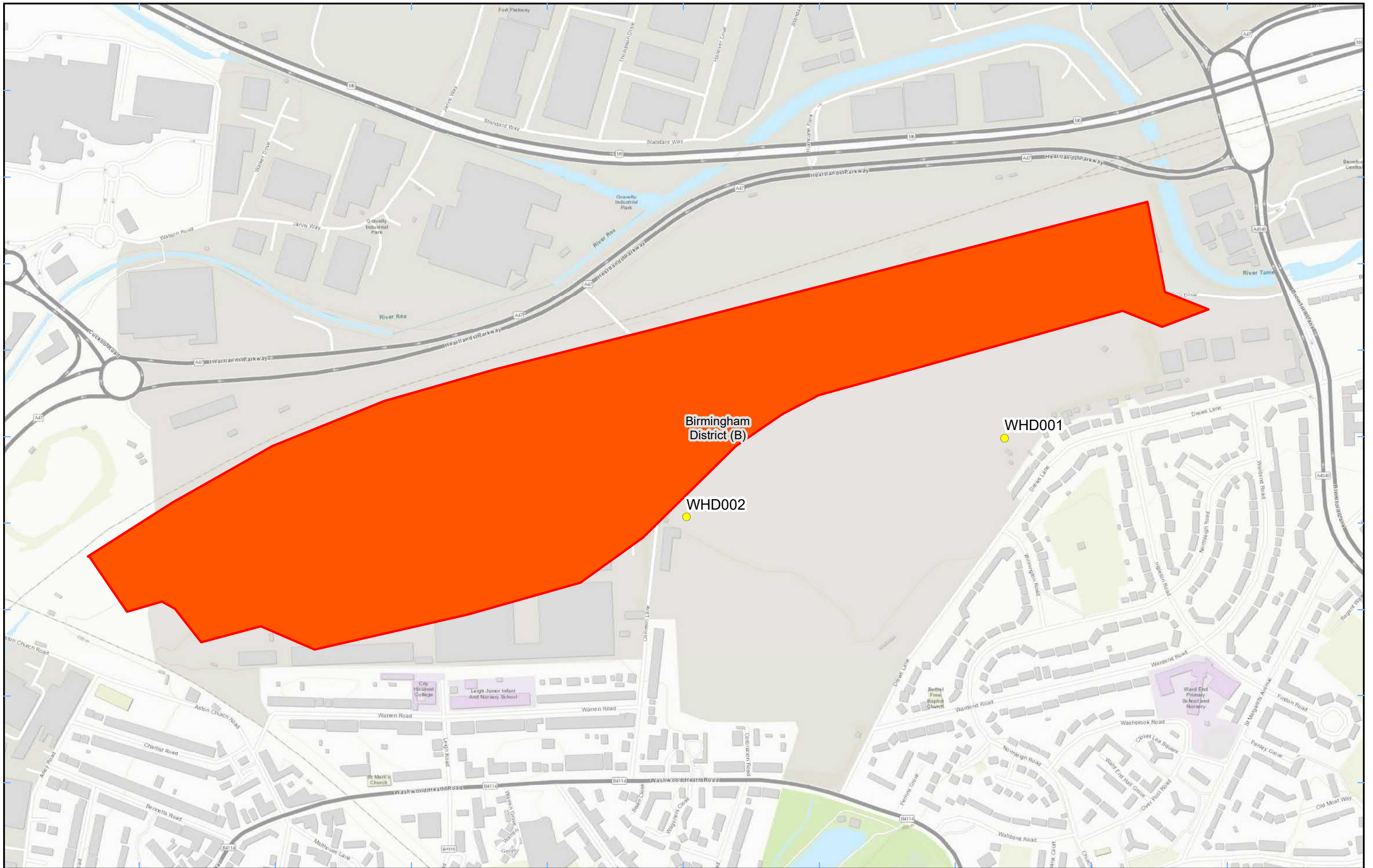
- On site slurry treatment

- 1.1.5 Six (6) dust monitors are installed around worksites, where works are underway. These sites returned a medium to high dust risk rating.
- 1.1.6 Dust monitoring locations and results for December 2021 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 mitigations.

- 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 - (October 2018)*' has been applied.
- 1.1.8 No (0) dust trigger alerts recorded during the monitoring period (December 2021).
- 1.1.9 There were no (0) complaints received during this reporting period.
- 1.1.10 Data capture was below 90% for multiple monitors in December 2021 due to technical issues and power faults.

# Appendix A – Worksites and Monitoring Locations


Figure 1 to 3: Worksites and monitoring locations within the BCC



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

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Map Number
Map Name <b>Worksite and Monitoring Locations In BCC (Sheet 1)</b>
<b>Birmingham City Council</b>



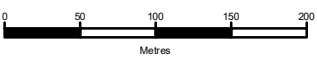
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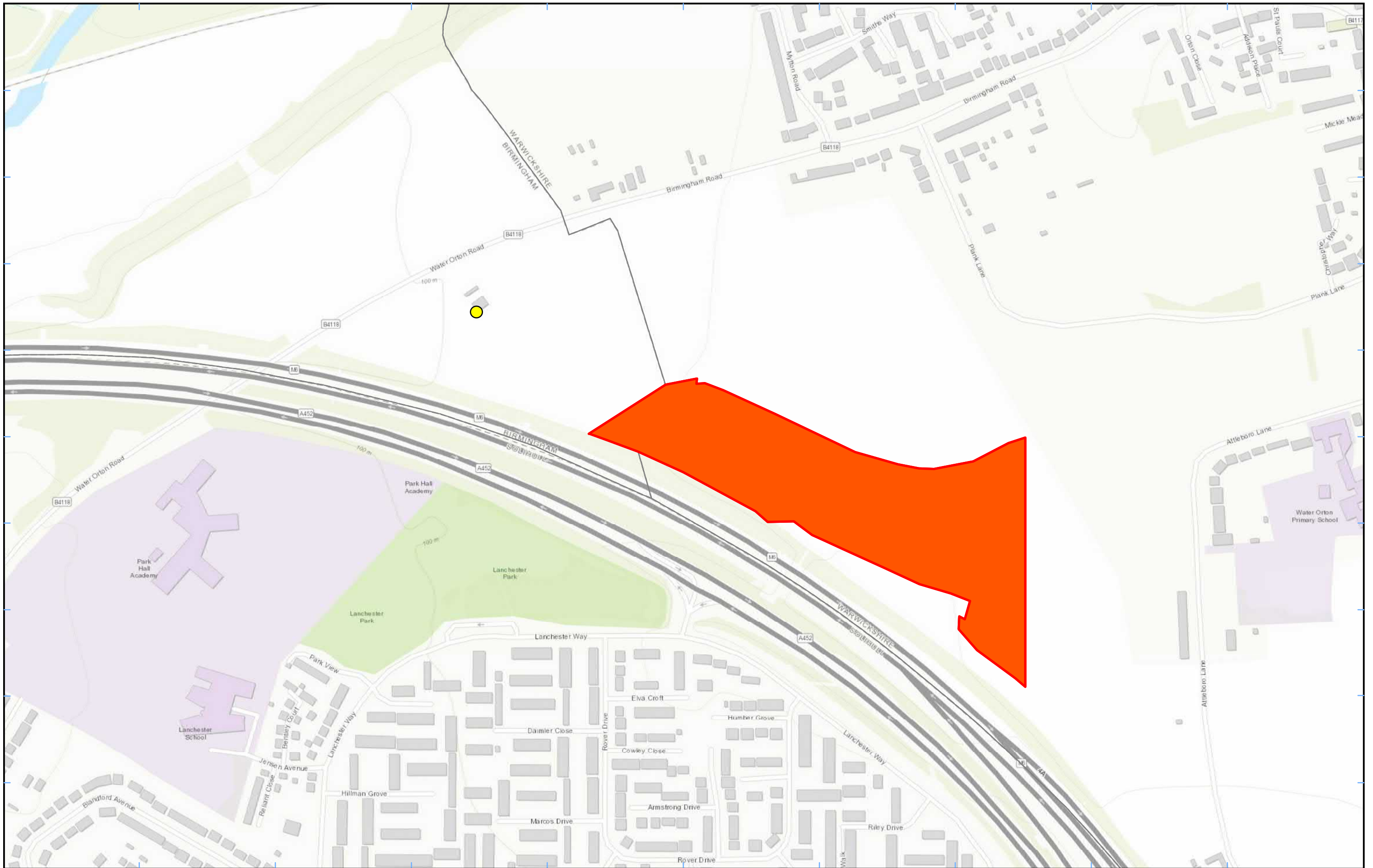
Scale at A3: 1:5,000






Metres

**Date: 23/11/21**






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

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Map Number
Map Name <b>Worksite and Monitoring Locations In BCC (Sheet 2)</b>
<b>Birmingham City Council</b>

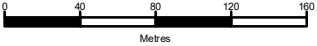
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 0 40 80 120 160  
Metres

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**Legend**  
 Dust Monitor  
 District Borough Unitary Boundaries

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

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## Appendix B – Dust Monitoring Results

Table 1: Dust monitoring locations and December 2021 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 (%)
WHD001	411221, 289245	Washwood Heath Depot, near receptors on Drews Lane	M	Yes	No	5.0	0.1	26.9	0	80.4
WHD002	410758, 289130	Washwood Heath Depot, near receptors on Common Lane	M	Yes	No	1.3	0.1	25.4	0	79.8
BETP001	416620, 290808	Bromford East Tunnel Portal, Twisted Oak Stables	M	Yes	No	4.8	0.1	27.5	0	62.1
BETP002	417467, 290649	Bromford East Tunnel Portal, Attleboro Lane	M	Yes	No	6.8	0.1	30.8	0	93.4
Dust #530 (old #555)	407702, 287079	Curzon Street Station HS2 Site	H	N/A	N/A	5.7	0.1	32.3	0	99.5
Dust #753	407619, 287006	Curzon Street Station HS2 Site	H	N/A	N/A	4.8	0.1	30.4	0	99.5

Figure 4: Construction dust 1-hour mean mean indicative PM<sub>10</sub> concentration for all dust monitors

