

## Air Quality and Dust Monitoring Monthly Report – September 2023

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 September 2023.
- 1.1.2 Figures 1 and Figure 2 in Appendix A indicate 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 worksites, as presented in Appendix A, Figure 1 and Figure 2, include:

## **Washwood Heath (Sublot 4)**

- Traffic on main site haul road, including haul road maintenance with excavator, ADTs, dozer, and roller to compact.
- Vehicle delivery check area, including reversing vehicles and loading/unloading deliveries.
- Excavation of contaminated material behind the brook diversion sheet piles, backfill with ADTs and Dozer, no compaction.
- 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.
- Screening with three-way screener of topsoil bund around the perimeter of site. Use of excavator to load and loading shovel for clearing away to stockpile.
- Crushing concrete to 6F5.

## **Bromford East Tunnel Portal (Sublot 1B)**

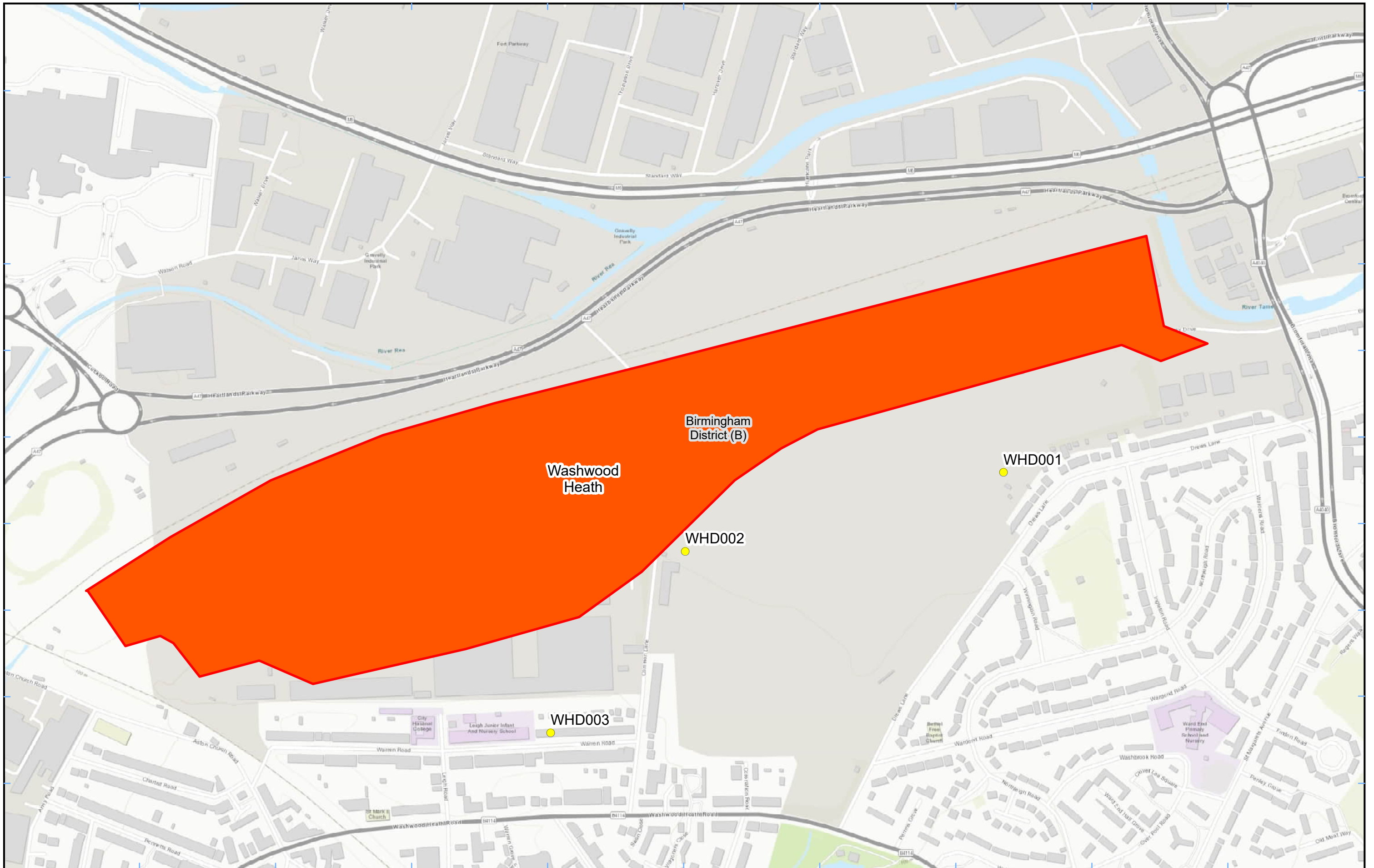
- Fixing shutters to the pedestal beam and concrete, fixing rebar on topping beam and pouring concrete, fixing rebars and shutter for plinths and concrete, saw cutting slab, stone up for a ramp.
- General housekeeping and snagging
- Install barriers for discharge pipes along the haul road.
- Road signs on haul road
- Concrete to Esso footpath.

- Backfilling south road.
- Erecting pre-cast L-walls and grouting
- Shuttering to bund wall
- Drilling for bund wall upstands

- 1.1.5 Five (5) dust monitors are installed around the worksites, where works are underway. These sites returned a medium risk rating.
- 1.1.6 The dust monitoring locations and results are presented in Appendix B, Table 1, together with line charts of monthly data from the dust monitors presented in Figure 3. 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 were recorded during the monitoring period (September 2023).
- 1.1.9 Data capture was below 90% for WHD003 due to power supply issues. A repair was done on 14<sup>th</sup> September 2023 to resolve this.
- 1.1.10 There were no (0) complaints received during the reporting period (September 2023).

# Appendix A – Worksites and Monitoring Locations

Figures 1 and 2: Worksites and Monitoring Locations within BCC



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

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

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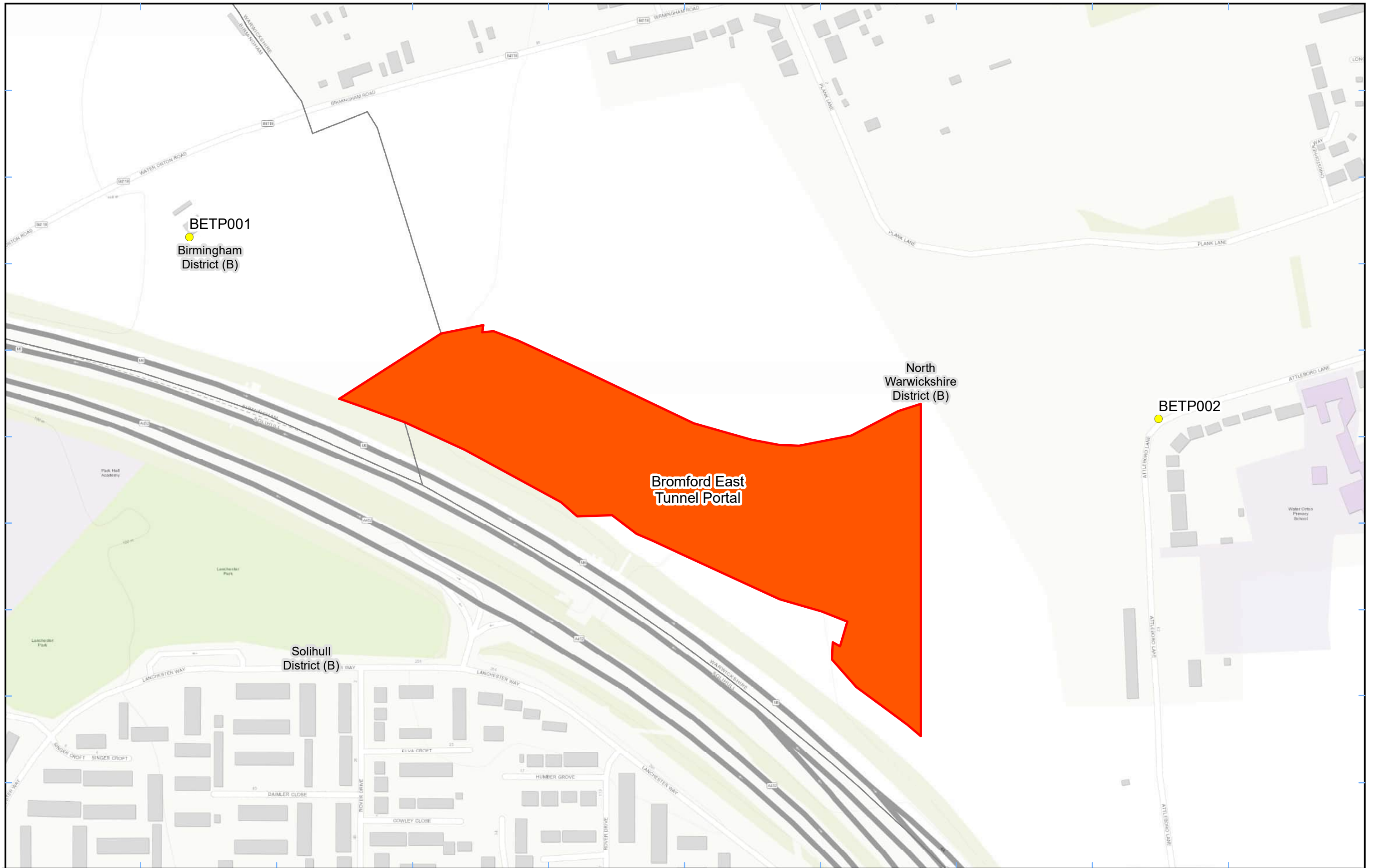
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**Legend**

- Dust Monitor
- District Borough Unitary Boundaries
- Worksite

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Map Number

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

Birmingham City Council

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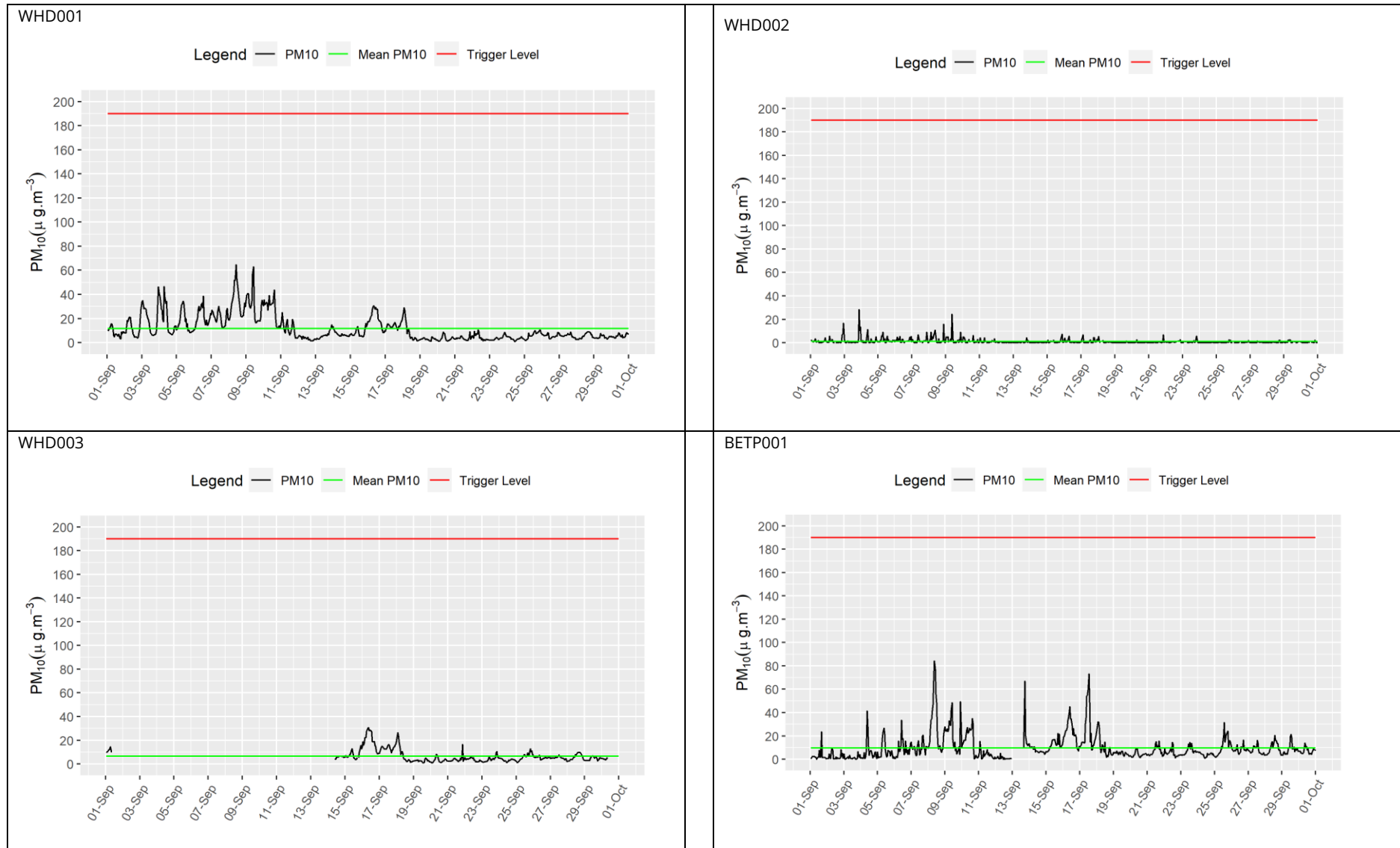
## Appendix B – Dust Monitoring Results

Table 1: Dust monitoring locations and September 2023 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	11.6	1.0	64.8	0	100.0
WHD002	410758, 289130	Washwood Heath Depot, near receptors on Common Lane	M	Yes	No	1.1	0.1	28.3	0	98.9
WHD003	410562, 288866	Washwood Heath Depot, near receptors on Warren Road	M	Yes	No	6.6	0.9	30.7	0	54.3
BETP001	416719, 290767	Bromford East Tunnel Portal, Twisted Oak Stables	M	Yes	No	9.7	0.1	84.3	0	97.6
BETP002	417406, 290605	Bromford East Tunnel Portal, Attleboro Lane	M	Yes	No	9.5	0.8	55.2	0	100.0



Figure 3: Construction dust 1-hour mean indicative PM10 concentration for all dust monitors



BETP002

