

Air Quality and Dust Monitoring Monthly Report – July 2023

Warwick District Council



Department for Transport

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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 in Warwick District Council (WDC) during July 2023.
- 1.1.2 Figure 1 to Figure 3 in Appendix A indicate the current worksites together with the dust monitoring locations for July 2023.
- 1.1.3 This summary should be read in conjunction with the overview monitoring report 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:

Sublot 2A2

Stoneleigh Park

- Operational haul road;
- Borehole water monitoring;
- Construction of the north accommodation overbridge; and
- Construction of the river Avon temporary bridge.

Offchurch Cutting

- Welsh Road UB Installation of reinforcement to wing wall bases, concrete of bases 1B and 3 and continue concrete repairs;
- Placement of fill from Conveyor belt (from SL1) to form Grand Union Canal (GUC) Embankment;
- Construction concrete labe to south side of canal;
- Offchurch Cutting topsoiling and drainage blanket;
- Tarmac roadways to Fosse Way Road Head;
- Install wheel wash to Road head;
- Fencing and gates to Road head;
- Bulk excavation and construction of piling platforms and access roads to Fosse Way Overbridge;
- Mobilise piling rig and crane for piling prep at Fosse Way Overbridge;
- Severn Trent - trenching works for water main diversion;
- Pile cropping to Hunningham Rd Overbridge;
- Excavate around piles for Hunningham Rd Overbridge;
- Directional drilling works for twin sewer pipe diversion at River leam;

- Move stockpiles for STW diversion works;
- Bulk Earthworks to River Leam Embankment area;
- Vegetation clearance to Hunningham Road and River Leam Area; and
- Excavate and prepare stoned up platform for new temporary compound at Fosse Way Overbridge.

Cubbington

- Installing sheet piles;
- Drilling and installing dewatering wells;
- Bulk earthworks;
- Install wheel wash and tarmac entrance at Leicester Lane;
- Fencing and soil stripping Cubbington Cutting;
- Stockpiling;
- Strimming; and
- Haul road maintenance.

Sublot 2B2

- Cromwell Lane realignment; and
- Utility diversions.

Sublot 2AS

- Welsh Road UB Installation of reinforcement to wing wall bases, concrete of bases 1B and 3 and continue concrete repairs;
- Placement of fill from Conveyor belt (from SL1) to form Grand Union Canal (GUC) Embankment;
- Construction of concrete slab to south side of canal;
- Offchurch Cutting topsoiling and drainage blanket;
- Tarmac roadways to Fosse Way Road Head;
- Install wheel wash to Road head;
- Fencing and gates to Road head;
- Bulk excavation and construction of piling platforms and access roads to Fosse Way Overbridge;
- Mobilise piling rig and crane for piling prep at Fosse Way Overbridge;
- Severn Trent - trenching works for water main diversion;
- Pile capping to Hunningham Rd Overbridge;
- Excavate around piles for Hunningham Rd Overbridge;
- Directional drilling works for twin sewer pipe diversion at River Leam;
- Move stockpiles for STW diversion works;
- Bulk Earthworks to River Leam Embankment area;
- Vegetation clearance to Hunningham Road and River Leam Area; and
- Excavate and prepare stoned up platform for new temporary compound at Fosse Way Overbridge.

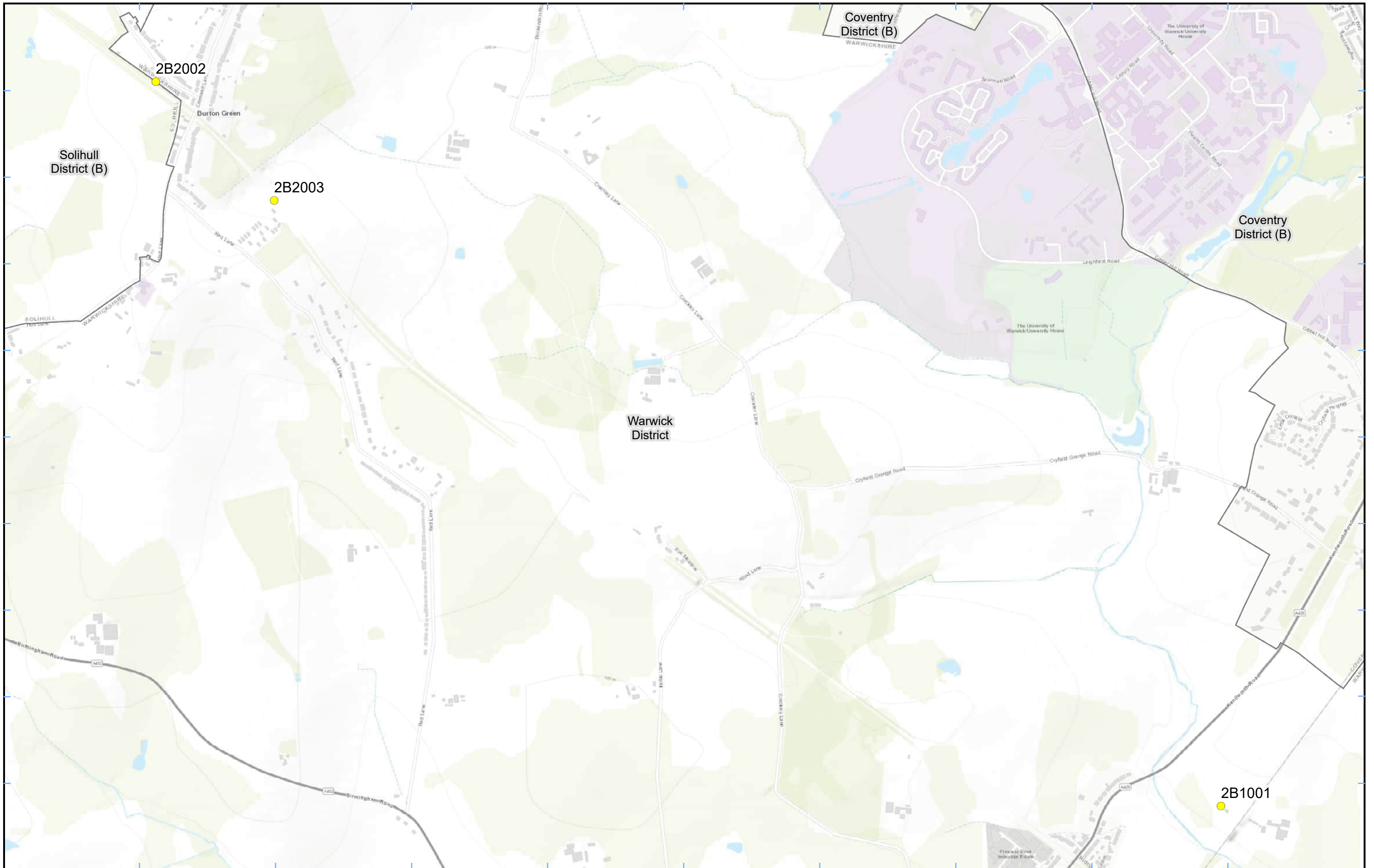
Sublot 2B1

- Excavation of Kenilworth Curring. Box push preparation including large volumes of material haulage and stockpiling;
- 24h: Box push using hydraulics. Large volumes of plant movements. Excavation of existing railway. Material haulage; and
- Drainage system clearance using a small excavator. Road head and laydown maintenance.

- 1.1.5 Nine (9) dust monitors are installed around worksites, where works are underway. These sites returned a low to 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, 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 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 Dust trigger alerts were recorded during the monitoring period (July 2023) and are reported in Appendix B, Table 2.
- 1.1.9 Data capture was below 90% for multiple monitors in July 2023. Data capture at 2B2003 was affected by the removal of isolated readings of unrealistically low data early in the month. A battery refresh and vegetation clearance were carried out, and vegetation mats were installed after clearance. Data quality was much improved thereafter with no further issues. Low data capture recorded at 2B2003 was due to the removal of spurious data from 10th July 2023 onwards. A site visit found the cause to be due to overgrowing vegetation resulting in a power supply issue. A battery refresh and vegetation clearance were carried out in early August 2023, and vegetation mats were installed after clearance. Data capture at 2AS001 was affected by a faulty monitor with no data being collected prior to 4th July 2023. The monitor was replaced with a new one at the same location on 4th July 2023, and the issues resolved.
- 1.1.10 There were no (0) complaints received during this reporting period (July 2023).

Appendix A – Worksites and Monitoring Locations

Figure 1 to Figure 2: Worksites and Monitoring Locations within WDC



Legend
 Dust
 District Borough Unitary Boundaries

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Map Number
 Map Name
**Monitoring Locations
 In WDC (Sheet 1)**
 Warwick District Council

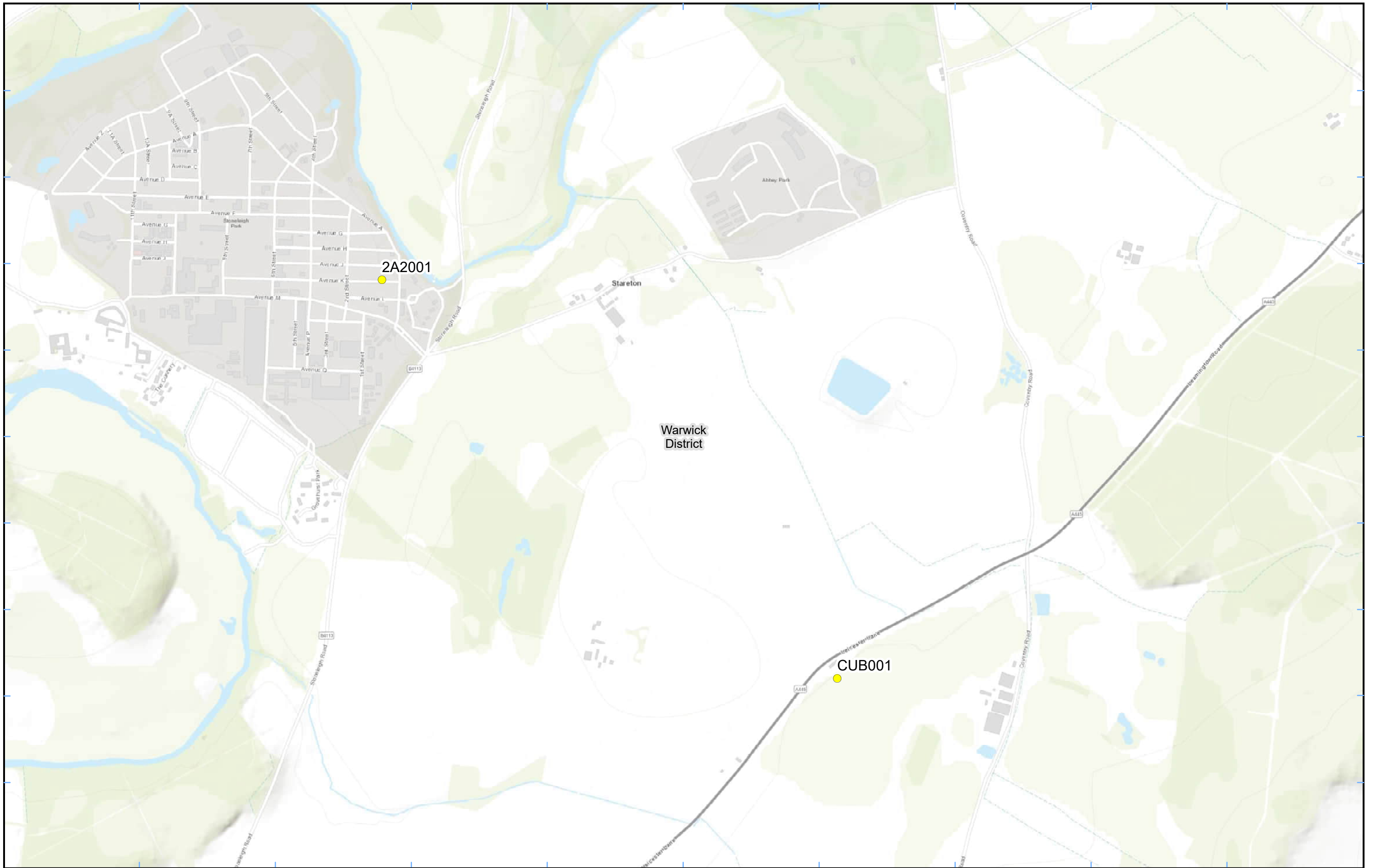
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Legend
 Dust
 District Borough Unitary Boundaries

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Map Number
 Map Name
**Monitoring Locations
 In WDC (Sheet 2)**
 Warwick District Council

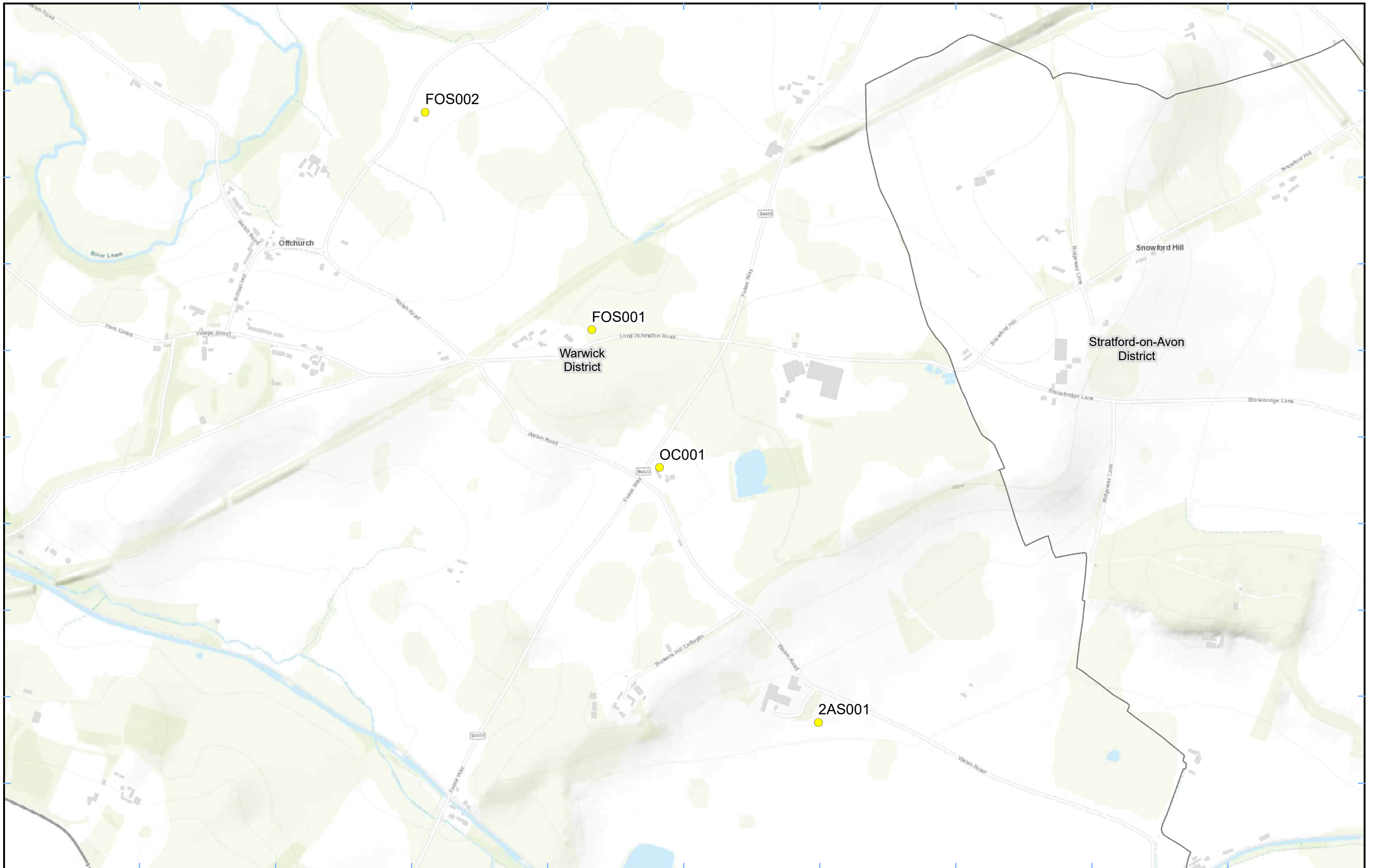
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 In WDC (Sheet 3)**
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Appendix B – Dust Monitoring Results

Table 1: Dust Monitoring Locations and July 2023 results

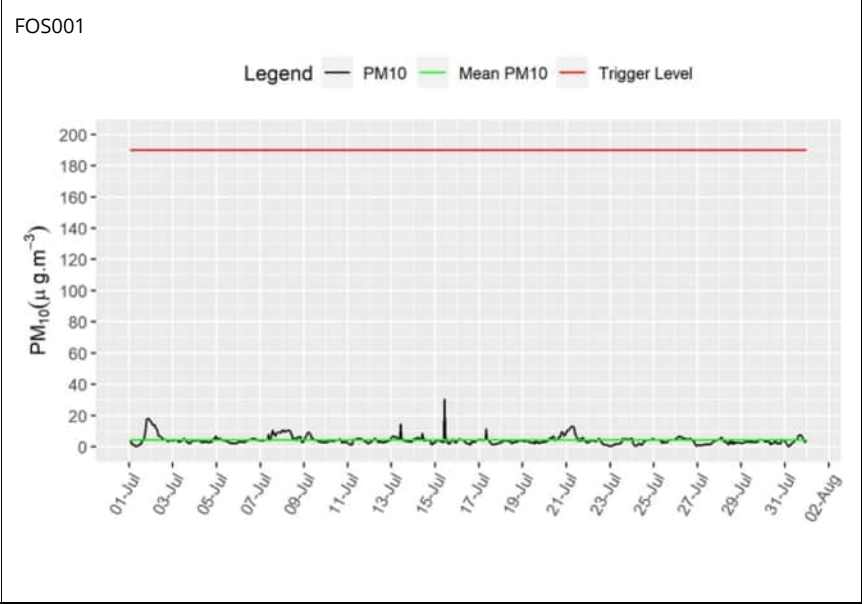
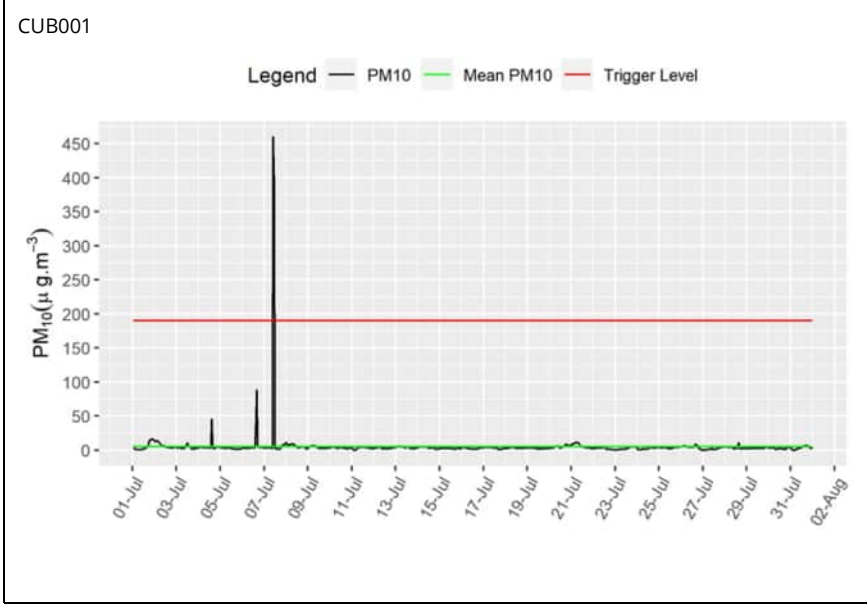
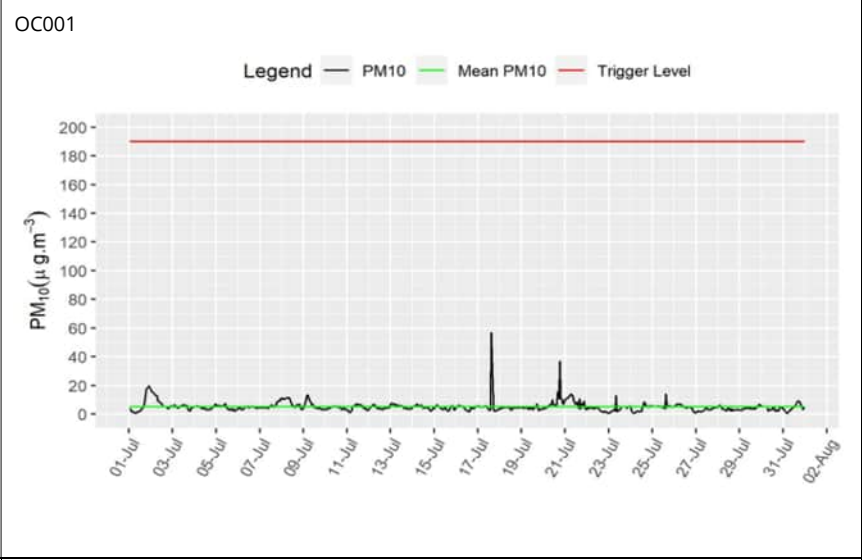
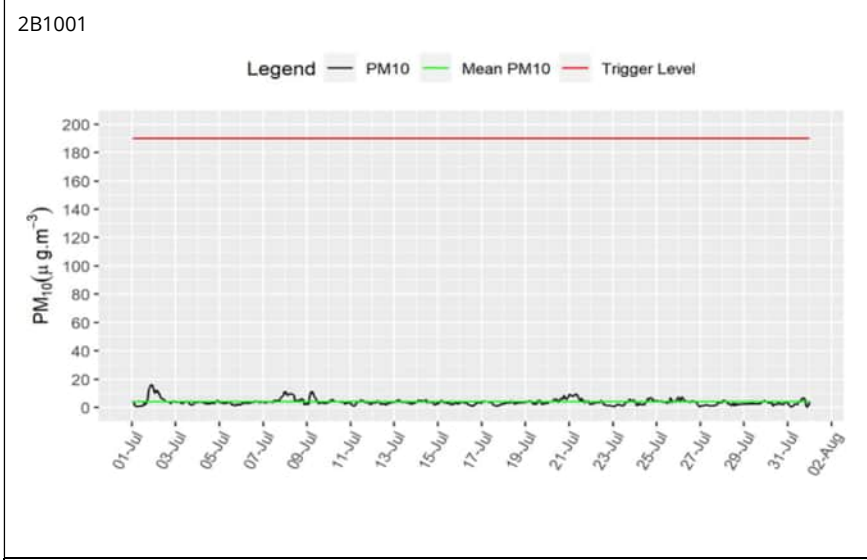
Monitoring site ID	Coordinates (X,Y)	Location description	Dust risk rating for site	Monitoring site active during period	Change to site since previous period report	Mean 1-hour PM ₁₀ concentration (µg/m ³)	Minimum 1-hour PM ₁₀ concentration (µg/m ³)	Maximum 1-hour PM ₁₀ concentration (µg/m ³)	Number of 1-hour periods exceeding trigger level of 190 µg/m ³	Data capture (%)
2A2001	432798, 271434	East Lodge, Stoneleigh Park	M	Yes	N	4.0	0.1	19.1	0	99.9
2B2002	426772, 276017	Sublot 2B2, at nearest sensitive receptor on Hodgetts Lane	M	Yes	N	4.0	0.0	25.8	0	95.2
2B2003	427151, 275637	Sublot 2B2, at Broadwell Woods Caravan Park	M	Yes	N	5.4	0.9	17.9	0	31.2
2B1001	430183, 273698	Sublot 2B1, at Brookview Farm, Millburn Grange	M	Yes	N	3.8	0.4	16.2	0	100.0
2AS001	437574, 264500	Sublot 2AS, at Welsh Road Farm	M	Yes	N	3.8	0.1	12.5	0	88.6
OC001	437111, 265242	Springhill Cottages, Offchurch Cutting	M	Yes	N	5.1	0.4	56.8	0	99.5
CUB001	434124, 270273	Sublot 2A2, at Furzon Hill Cottages	M	Yes	N	5.1	0.1	459.8	2	100.0
FOS001	436914, 265643	Fosse Way Compound, on Long Itchington Road	L	Yes	N	4.2	0.3	30.4	0	100.0
FOS002	436429, 266276	Valley Fields, Fosse Way Main	L	Yes	N	4.7	0.0	76.8	0	99.9

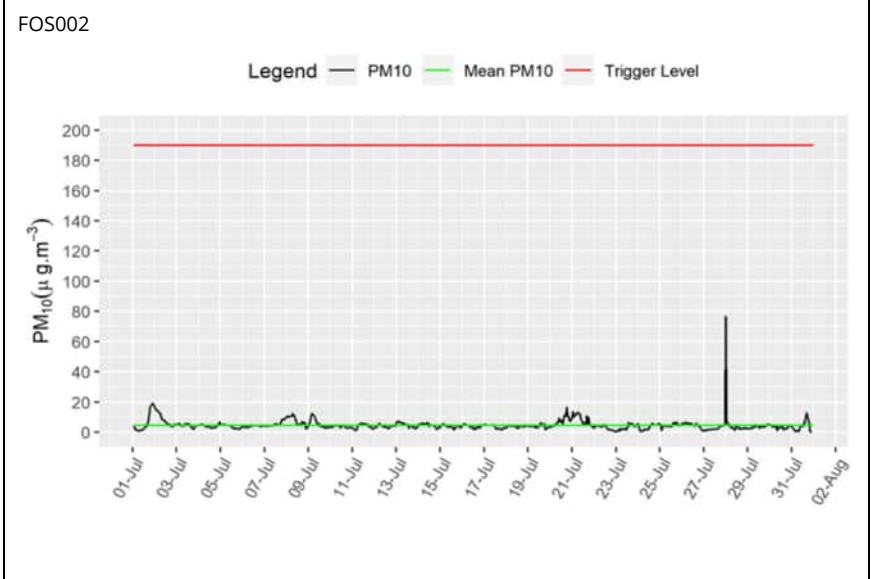
Table 2: Summary of exceedances of trigger level in July 2023

Monitoring site ID	Period exceeding trigger level	Investigation	Outcomes / Resolution / Remedial measures implemented
CUB001	07/07/2023 09:01 – 10:00; 459.8 µg/m ³ 10:01 – 11:00; 402.8 µg/m ³	There were no construction activities in the area at the times of the exceedances and so the exceedances are considered unrelated to BBV activities.	n/a

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







2B2001

n/a