

Air Quality and Dust Monitoring Monthly Report – September 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 air quality and dust monitoring undertaken in Warwick District Council (WDC) during September 2023.
- 1.1.2 Figures 1 to Figure 3 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, 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 to 3, include:

Sublot 2A2

Offchurch Cutting

- Welsh Road Underbridge Installation of reinforcement to abutment Wall 1 and 2 and install scaffold access.
- Placement of fill around Welsh Road Underbridge to top of base level.
- Veg clearance to south side of canal
- Topsoil strip to south of canal
- Ditch diversion to south of canal
- Offchurch Cutting topsoiling and drainage blanket.
- Set manholes and covers to roadhead and install fencing.
- Bulk excavation and construction of secondary piling platforms and access roads to Fosse Way Overbridge
- Piling to Fosse Way Overbridge.
- Prepare stone and concrete bases for additional compound area at Foss Overbridge
- Severn Trent - trenching works and pipe install for water main diversion.
- Realignment of haul road at water main location
- Pile cap construction and concrete of bases Abutment AB0 and AB3
- Backfill to Pier pilecaps at Hunningham Road Overbridge.
- Drainage pipe repairs to temp drainage system at Hunningham Road
- Bulk Earthworks to River Leam Embankment area
- Veg clearance to Hunningham Road Verges
- Hunningham Road Sewer diversion pipe excavation and installation

Stoneleigh Park

- Operational haul road and plant crossing.
- Stare Ton Lane realignment.
- Utility diversions.
- Construction of piling platform.
- AECOM attended site for maintenance of monitors

Cubbington Compound Worksite

- Moving topsoil bund.
- Dust suppression.
- Strimming.
- Laying and compacting stones.
- Installing and moving fencing around site.
- Excavating pond.
- Constructing platform at River Leam, including excavation, placing stone, and rolling.
- Relocation of sump.
- Excavate and install 450mm pipe, backfill and compact with stone.
- Installation of signage.
- Laying tarmac.
- Painting of white lines along public road.
- Installing and diverting v-ditches.
- Installing pipe work for drainage.
- Construction of refuelling area.
- Construction of concrete washout area.
- Reseal ponds and bunds.
- Coco mat lining along v-ditches.

Burton Green Tunnel (Sublot 2B2)

- Excavation/Utility works.
- Collins earthwork activities using crane/dumpers/diggers.

Welsh Road Underbridge Satellite Compound (Sublot 2AS)

- Welsh Rd UB Installation of reinforcement to abutment Wall 1 and 2 and install scaffold access.
- Placement of fill around Welsh Rd Underbridge to top of base level.
- Veg clearance to south side of canal
- Topsoil strip to south of canal
- Ditch diversion to south of canal
- Offchurch Cutting topsoiling and drainage blanket.
- Set manholes and covers to roadhead and install fencing.
- Bulk excavation and construction of secondary piling platforms and access roads to Fosse Way Overbridge

- Piling to Fosse Way OB
- Prepare stone and concrete bases for additional compound area at Foss Overbridge
- Severn Trent - trenching works and pipe install for water main diversion.
- Realignment of haul road at water main location
- Pile cap construction and concrete of bases Abutment AB0 and AB3
- Backfill to Pier pilecaps at Hunn Rd OB
- Drainage pipe repairs to temp drainage system at Hunn Rd
- Bulk Earthworks to River Leam Embankment area
- Veg clearance to Hunningham Rd Verges
- Hunningham Rd Sewer diversion pipe excavation and installation

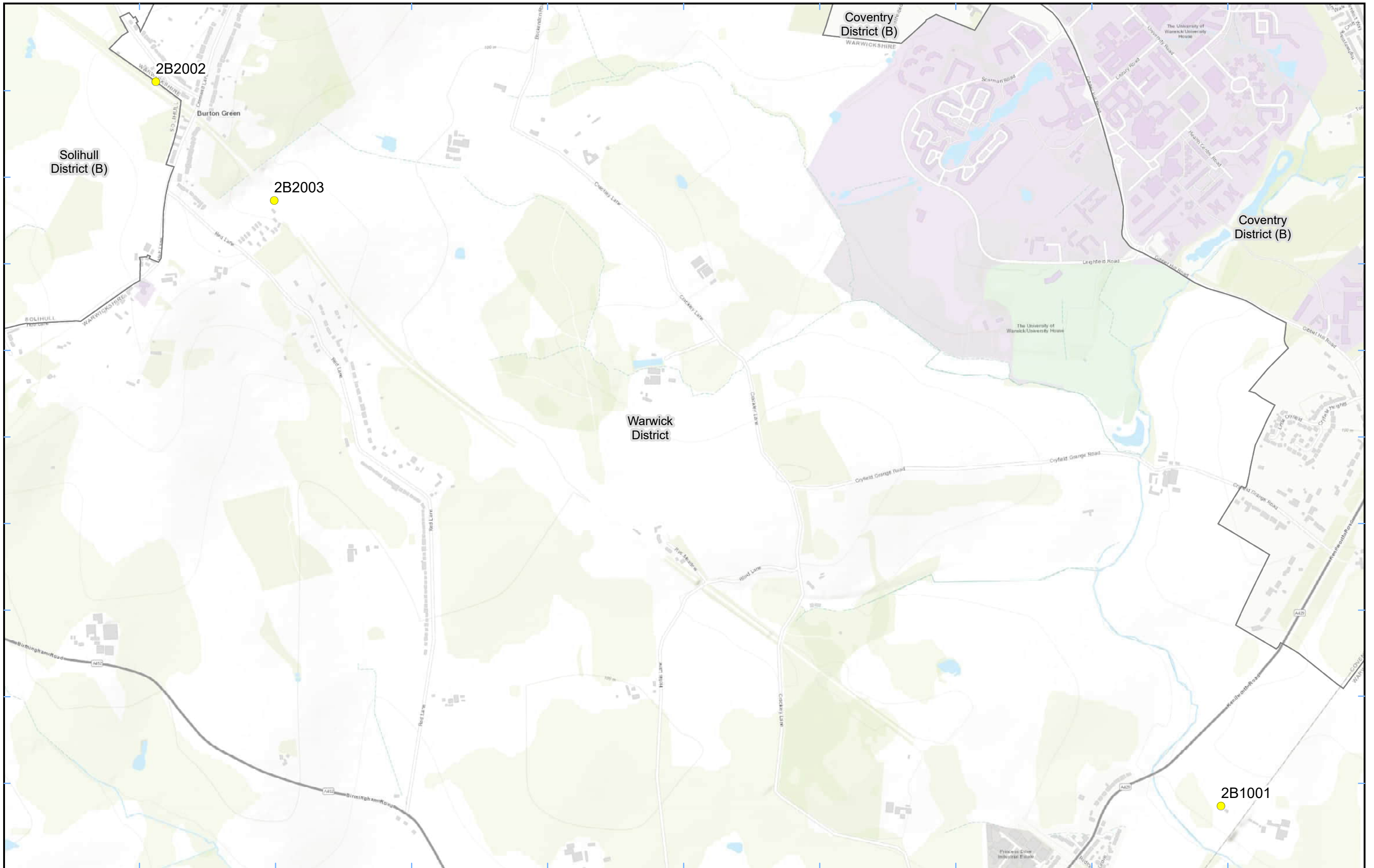
A429 Kenilworth Road Overbridge (Sublot 2B1)

- Maintenance/cleaning up of noise monitoring equipment by AECOM.

- 1.1.5 Nine (9) dust monitors are installed at worksites, where works are underway. These sites returned a low to medium dust risk rating.
- 1.1.6 Dust monitoring location and results are presented in Appendix B, Table 1, together with line charts of monthly data from the dust monitors 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 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 Details of the trigger alert investigations and remediations are presented in Appendix B, Table 2.
- 1.1.9 There were no (0) complaints received during this reporting period (September 2023).

Appendix A – Worksites and Monitoring Locations

Figures 1-3: 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

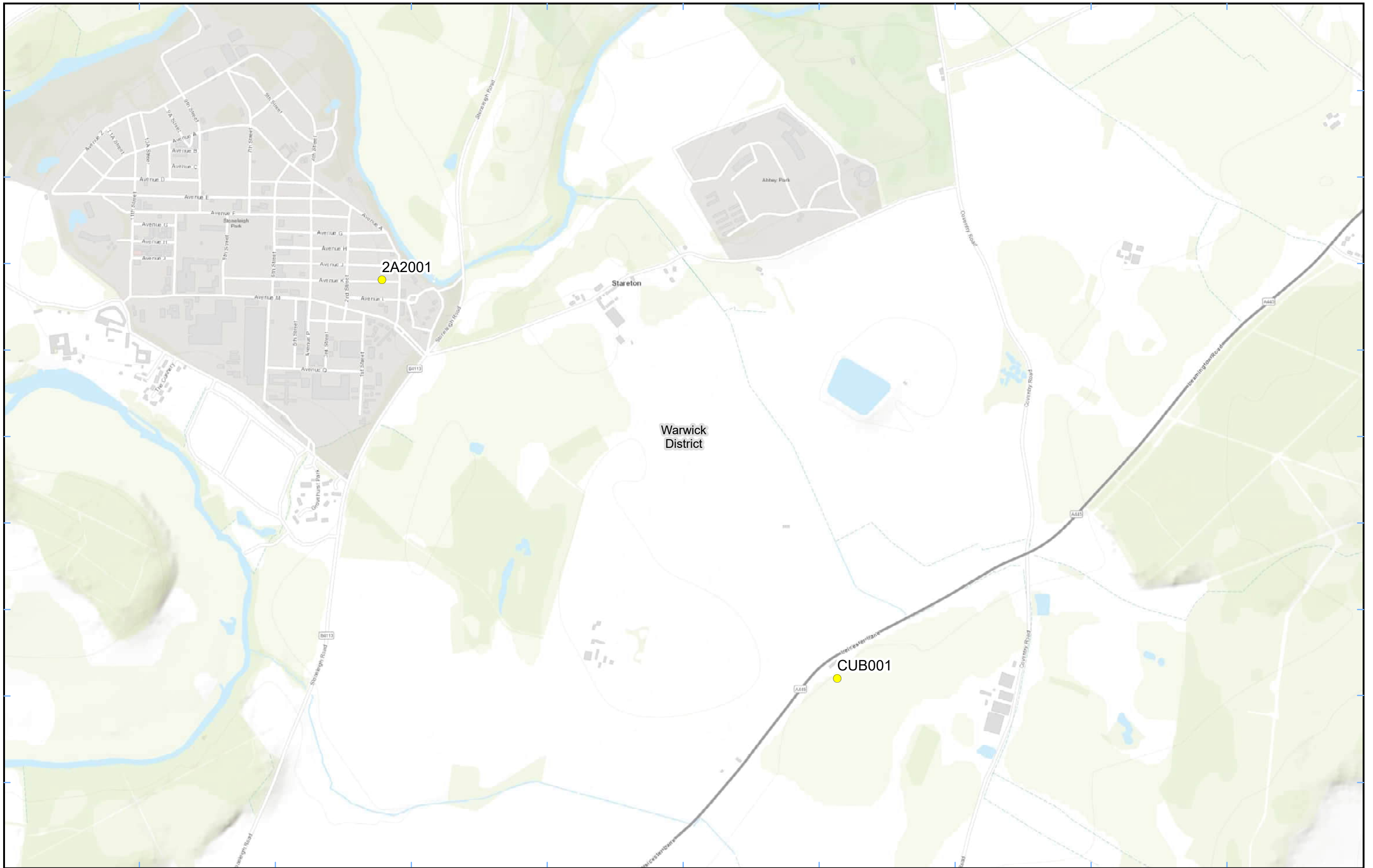
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Legend
 ● Dust
 □ District Borough Unitary Boundaries

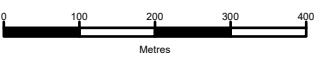
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Map Number
 Map Name
**Monitoring Locations
 In WDC (Sheet 2)**
 Warwick District Council

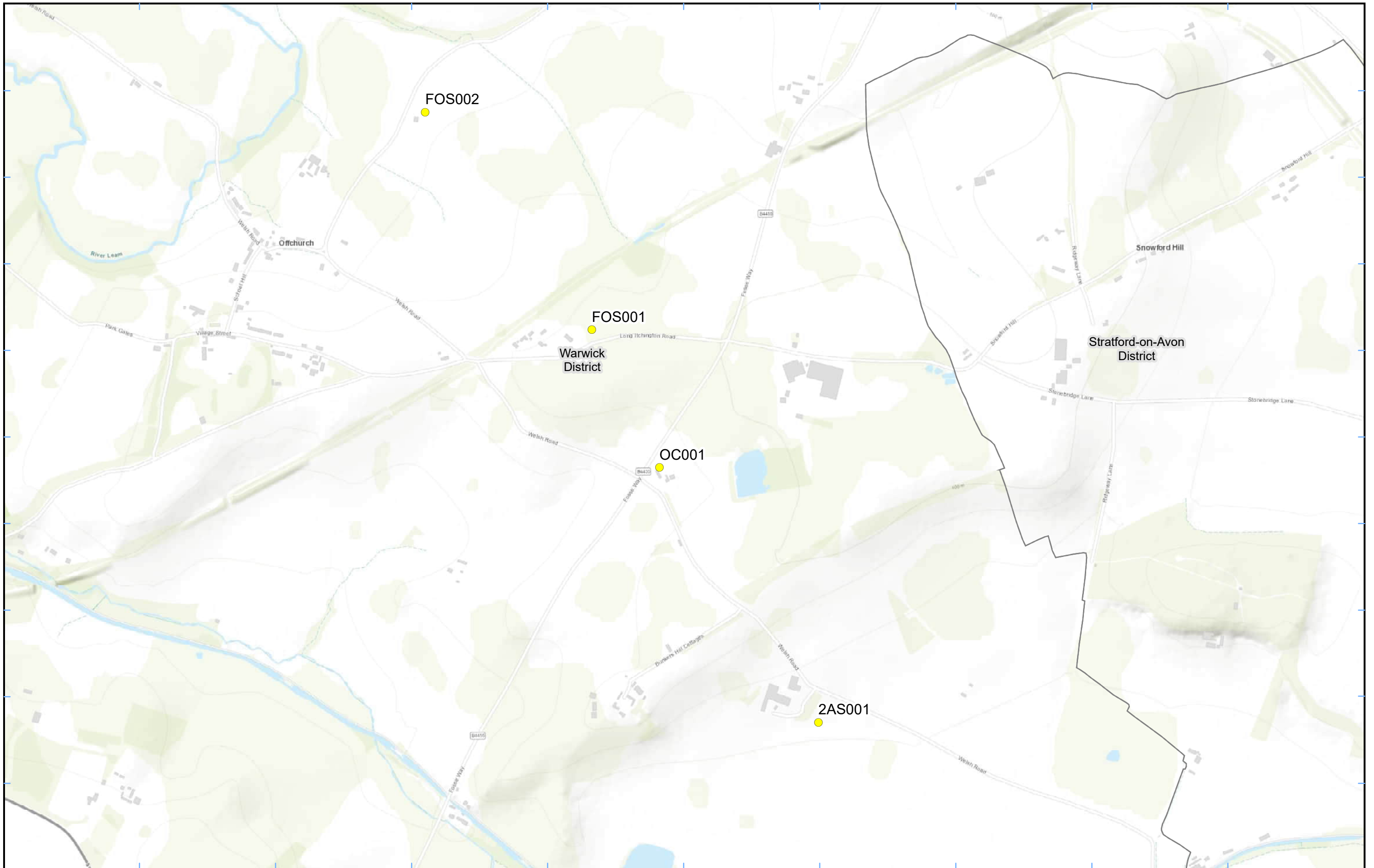

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Legend
 Dust
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Map Number
 Map Name
**Monitoring Locations
 In WDC (Sheet 3)**
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Appendix B – Dust Monitoring Results

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 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	No	8.5	0.3	55.9	0	100.0
2B2002	426772, 276017	Sublot 2B2, at nearest sensitive receptor on Hodgetts Lane	M	Yes	No	8.8	0.2	45.9	0	96.7
2B2003	427151, 275637	Sublot 2B2, at Broadwell Woods Caravan Park	M	Yes	No	13.4	1.1	73.4	0	100.0
2B1001	430183, 273698	Sublot 2B1, at Brookview Farm, Millburn Grange	M	Yes	No	8.7	0.2	54.9	0	100.0
2AS001	437574, 264500	Sublot 2AS, at Welsh Road Farm	M	Yes	No	7.6	0.1	44.2	0	96.3
OC001	437111, 265242	Springhill Cottages, Offchurch Cutting	M	Yes	No	9.7	0.2	52.4	0	100.0
CUB001	434124, 270273	Sublot 2A2, at Furzon Hill Cottages	M	Yes	No	10.3	0.2	576.7	2	100.0
FOS001	436914, 265643	Fosse Way Compound, on Long Itchington Road	L	Yes	No	9.3	0.3	52.5	0	100.0
FOS002	436429, 266276	Valley Fields, Fosse Way Main	L	Yes	No	9.0	0.3	49.5	0	100.0

Table 2: Summary of exceedances during period (September 2023)

Monitoring Site ID	Period of trigger alert & Concentration recorded	Investigation	Outcomes / Resolution / Remedial measures implemented
CUB001	02/09/23: 18:00 - 18:59; 576.7 $\mu\text{g m}^{-3}$ 19:00 - 19:59; 206.6 $\mu\text{g m}^{-3}$	These dust trigger alerts occurred outside of BBV construction hours and the exceedances were not associated with HS2 construction works.	N/A

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



