

Air Quality and Dust Monitoring Monthly Report – December 2022

Warwick District 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 in Warwick District (WDC) during December 2022.

1.1.2 Figures 1 - 3 in Appendix A indicate the current worksites together with the 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, 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:

The East Lodge Stoneleigh Park site (Sublot 2A2)

- Topsoil stripping;
- Haul roads construction; and
- Earthworks cutting (transporting material to River Leam embankment via haul road).

Burton Green Tunnel (Sublot 2B2)

- Construction of the haul road and compound at the South Portal;
- Earthworks in the vicinity of Hodgetts Lane; and
- Removal of tree roots and vegetation from North Cromwell Lane to Waste Lane.

Welsh Road Underbridge Satellite Compound (Sublot 2AS)

- Compound extension;
- Crossing construction and road widening;
- Subsoil stockpile; and
- Earthworks cutting.

A429 Kenilworth Road Overbridge (Sublot 2B1)

- Soil stripping;
- Stockpiling; and
- Temporary drainage construction.

Fosse Way compound (Subplot 2A2)

- Topsoil stripping;
- Haul roads construction; and
- Earthworks cutting (transporting material to River Leam embankment via haul road).

1.1.5 Eight (8) 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.

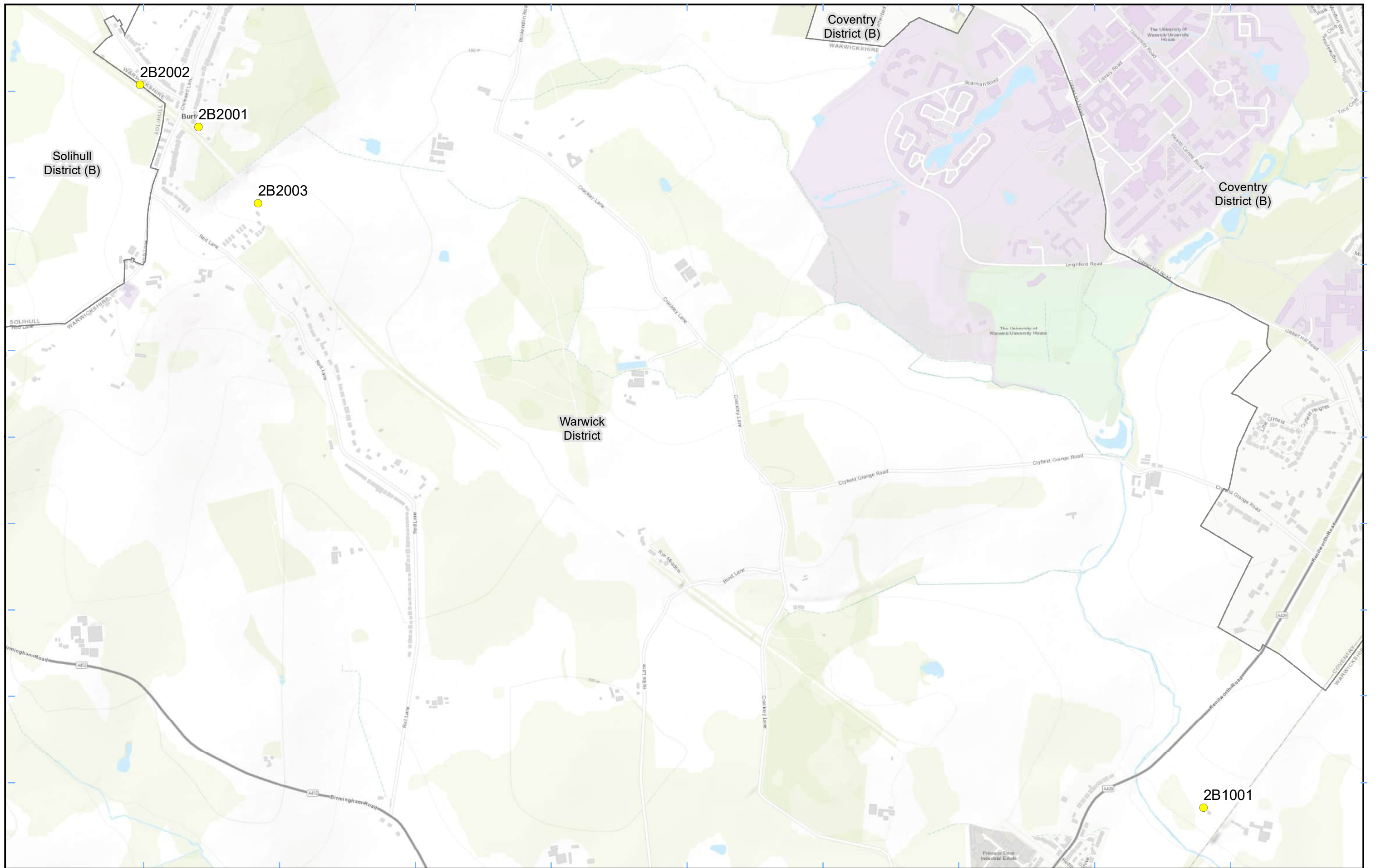
1.1.9 Data capture was below 90% for multiple monitors due to battery replacements to help power the monitors through the winter months.

1.1.10 No monitoring data was recorded at dust monitor 2B2001 (at the nearest sensitive receptor on Cromwell Lane) throughout December 2022 as the monitor has been offline since 15th November 2022. This is in preparation for the monitor being moved to the front of 301 Cromwell Lane as the works to the east of Cromwell Lane have finished and the works to the west of Cromwell Lane have commenced.

1.1.11 No (0) complaints were received during the reporting period (2022).

Appendix A – Worksites and Monitoring Locations


Figures 1 - 3: Worksites and Monitoring Locations within the WDC



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

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



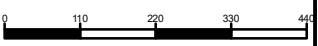
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Legend
 Dust Monitor
 District Borough Unitary Boundaries

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

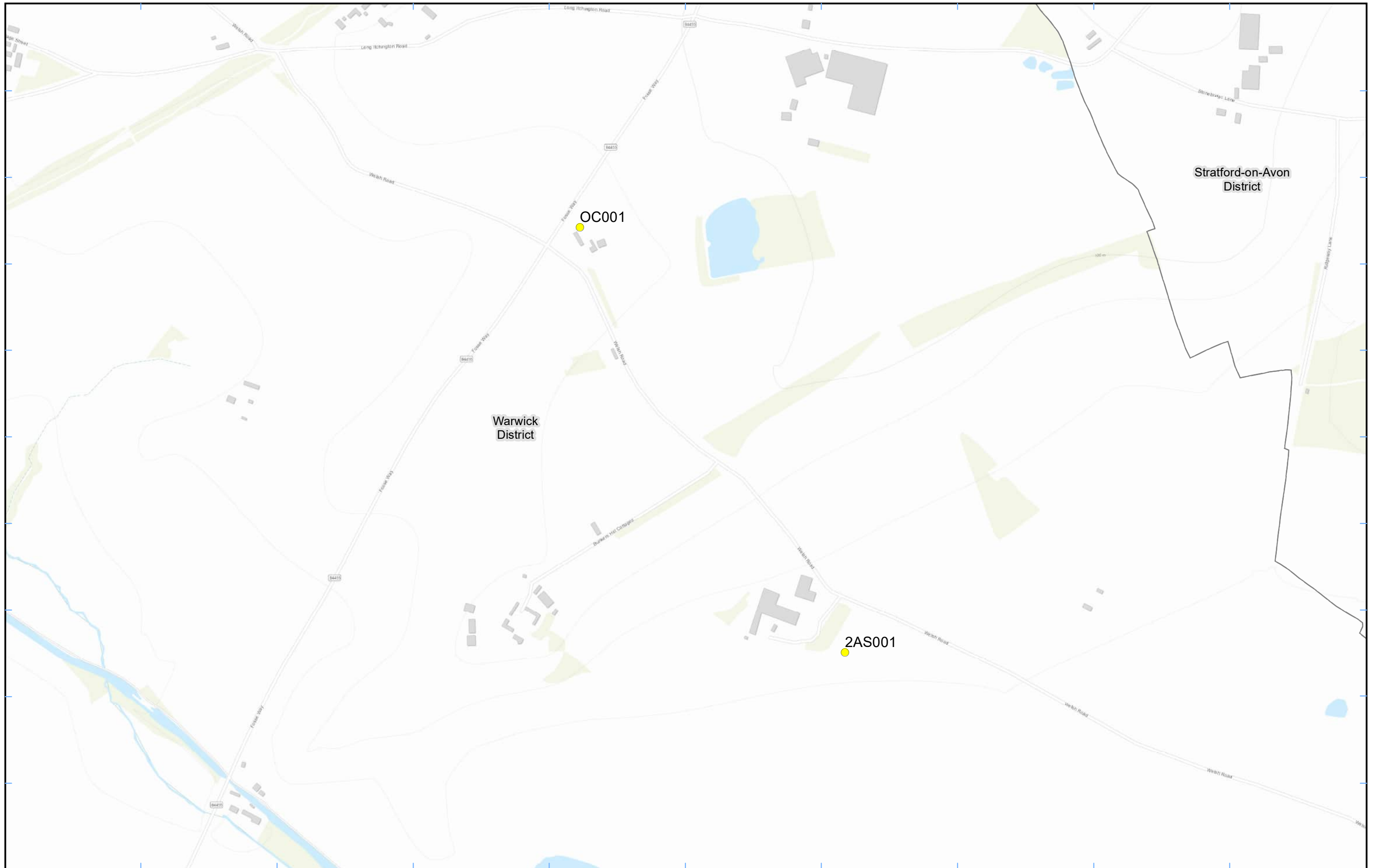
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Legend

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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 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 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	L	Yes	No	15.2	0.1	67.4	0	87.6
2B2001	426960, 275882	Sublot 2B2, at nearest sensitive receptor on Cromwell Lane	M	Yes	No	-	-	-	-	0
2B2002	426772, 276017	Sublot 2B2, at nearest sensitive receptor on Hodgetts Lane	M	Yes	No	14.4	0.1	69.8	0	61.0
2B2003	427151, 275637	Sublot 2B2, at Broadwell Woods Caravan Park	M	Yes	No	21.1	0.4	219.2	1	100.0
2B1001	430183, 273698	Sublot 2B1, at Brookview Farm, Millburn Grange	M	Yes	No	9.6	0.1	47.3	0	71.5
2AS001	437574, 264500	Sublot 2AS, at Welsh Road Farm	M	Yes	No	13.0	0.1	52.6	0	99.7
OC001	437111, 265242	Springhill Cottages, Offchurch Cutting	M	Yes	No	12.7	0.1	40.5	0	99.3
CUB001	434124, 270273	Sublot 2A2, at Furzon Hill Cottages	M	Yes	No	1.9	0.1	35.4	0	46.6

Table 2: Summary of exceedances during period (December 2022)

Monitoring Site ID	Period of trigger alert & Concentration recorded	Investigation	Outcomes / Resolution / Remedial measures implemented
2B2003	23/12/2022: 04:00 - 04:59; 219.2 µg/m ³	These times are outside the normal working hours for the worksites which means that the cause of these dust trigger alerts was an external source unrelated to the works.	N/A

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

