

## Air Quality and Dust Monitoring Monthly Report – September 2022

West Northamptonshire 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 the West Northamptonshire (WNDC) during September 2022.
- 1.1.2 Figures 1 and 2 in Appendix A presents the current worksites together with the dust monitoring locations for September 2022.
- 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](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, Figures 1 and 2, include:

## **Twyford to Greatworth (T2G)**

### Radstone and Hall Farm

- Topsoil stripping;
- Bulk excavation – Cutting;
- Stockpile management;
- Site Access Road maintenance;
- Compound maintenance;
- Drainage, temporary ponds; and
- Utilisation of haulage road for moving material.

### Greatworth Hall

- Topsoil stripping
- Bulk excavation – Cutting
- Stockpile management
- Site Access Road maintenance
- Drainage and temporary ponds
- Construction of landscape bunds (Brackley north Cutting)
- Utilisation of haulage road for moving material
- Compound maintenance

## **G2S**

### Chipping warden – Ramac

- Stockpile management
- Site Access Road maintenance

- Chipping warden batching plant
- Utilisation of haulage road for moving material
- Compound maintenance
- Appletree lane utility diversion

#### CW Village

- A361 Temporary Overbridge
- Stockpile management
- Site Access Road maintenance
- Chipping warden batching plant
- Utilisation of haulage road for moving material
- Compound maintenance
- Appletree lane utility diversion

#### Lower Boddington

- Stockpile management
- Site Access Road maintenance
- Utilisation of haulage road for moving material
- Drainage and temporary ponds
- Highfurlong brook pilling works
- Bulk excavation – cutting

#### Fir Tree Nursery

- Stockpile management
- Site Access Road maintenance
- Utilisation of haulage road for moving material
- Drainage and temporary ponds

#### Greatworth Village

- Stockpile management
- Site Access Road maintenance
- Utilisation of haulage road for moving material
- Drainage and temporary ponds
- Lower Thorpe pilling works

#### Lower Thorpe

- Stockpile management
- Site Access Road maintenance
- Utilisation of haulage road for moving material
- Drainage and temporary ponds
- Lower Thorpe pilling works

#### Backgrounds

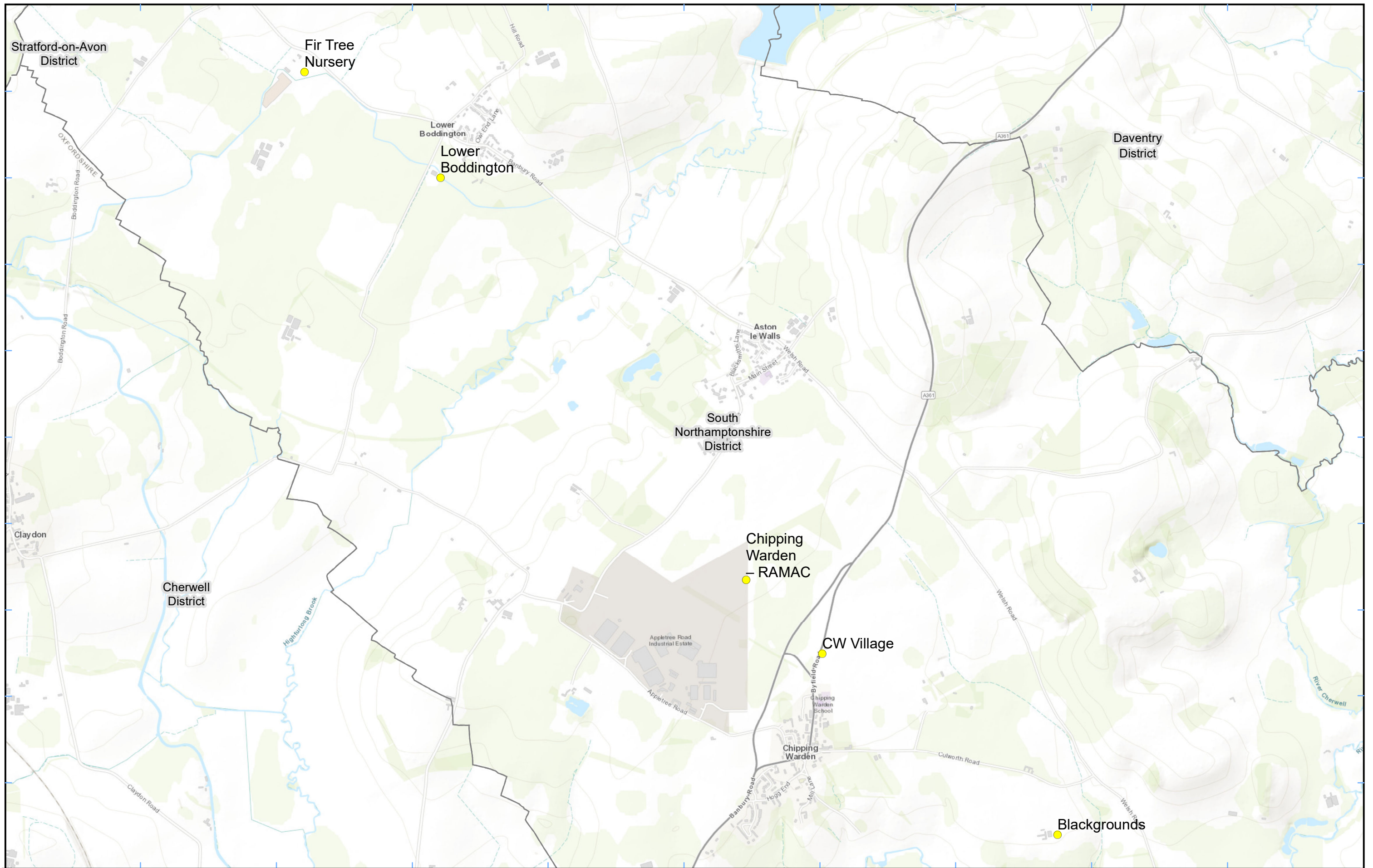
- Stockpile management
- Site Access Road maintenance
- Utilisation of haulage road for moving material

- Drainage and temporary ponds

- 1.1.5 Ten (10) dust monitors are installed at the worksites, where works are underway. These sites returned a medium dust risk rating.
- 1.1.6 Dust monitoring locations and results are presented in Appendix B, Table 1, together with a line chart of monthly data from the dust monitor 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 mitigation.
- 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 Data capture was below 90% for multiple monitors due to a battery fault in the Radstone monitor and the Blackgrounds monitor was installed on the 8<sup>th</sup> September 2022.

# Appendix A –Monitoring Locations

Figure 1 and 2: Worksite and monitoring locations within the WNDC



**Legend**

- Dust
- District Borough Unitary Boundaries

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Map Number

Map Name  
**Monitoring Locations  
In WNDC (Sheet 1)**

**West Northamptonshire Council**

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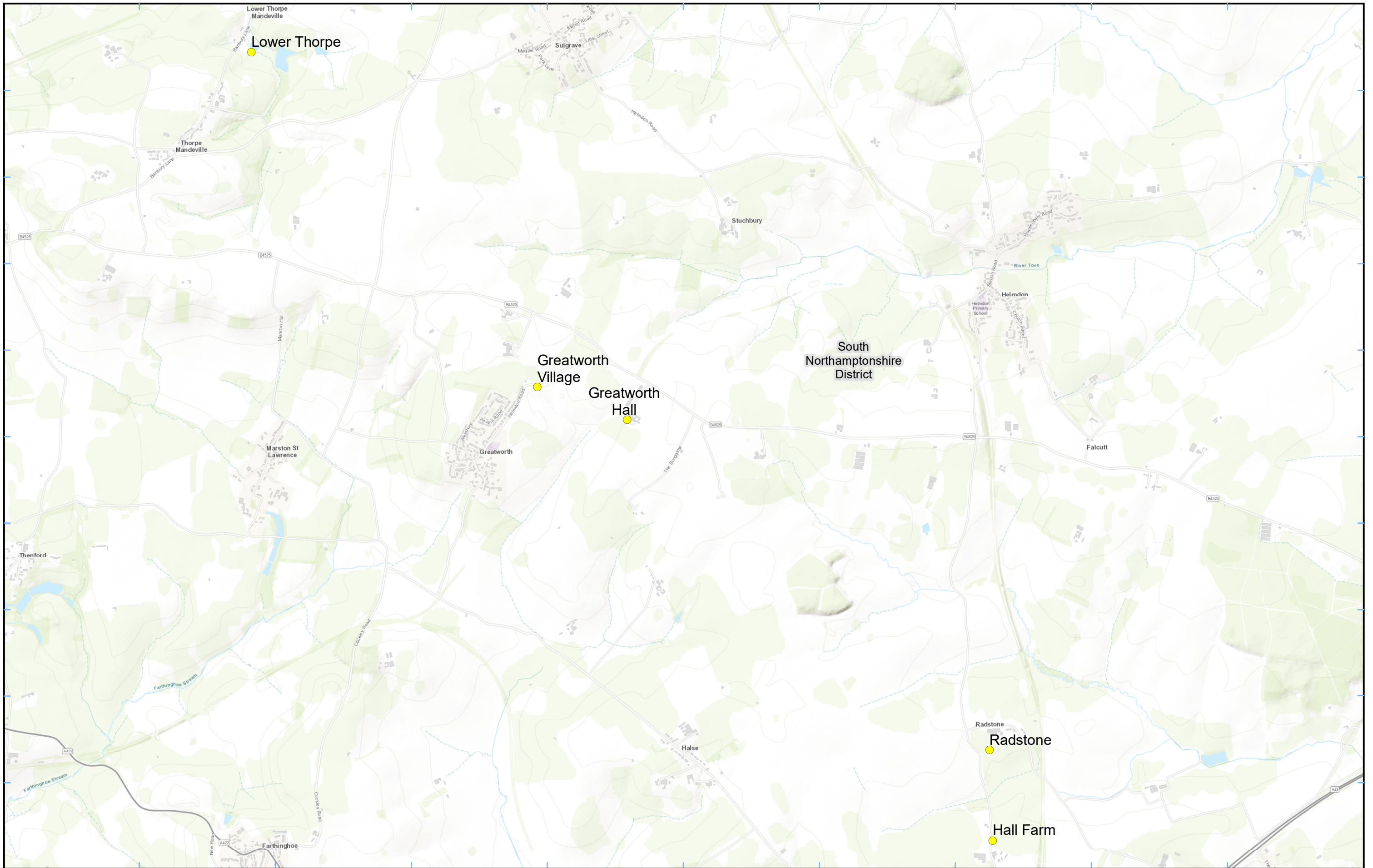
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**Legend**  
 Dust  
 District Borough Unitary Boundaries

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Map Number  
 Map Name  
**Monitoring Locations  
 In WNDC (Sheet 2)**  
 West Northamptonshire Council

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## Appendix B – Dust Monitoring Results

Table 1: Dust monitoring locations and September 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 <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>	1-hour data capture (%)
Chipping Warden – RAMAC	449600, 249755	Chipping Warden, West Northamptonshire	M	Yes	Yes	5.4	1.0	36.0	0	100.0
CW Village	450000, 249367	Chipping Warden, West Northamptonshire	M	Yes	Yes	5.6	1.0	36.0	0	100.0
Lower Boddington	447997, 251865	Lower Boddington, West Northamptonshire	M	Yes	Yes	5.6	1.0	33.0	0	100.0
Fir Tree Nursery	447283, 252421	Fire Tree Nursery, West Northamptonshire	M	Yes	Yes	-	-	-	-	-
Radstone	458712, 240454	Radstone Road, Brackley, West Northamptonshire	M	Yes	Yes	5.2	1.0	27.0	0	26.0
Hall Farm	458734, 239823	Hall Farm, Radstone Road	M	Yes	Yes	6.1	1.0	44.0	0	100.0
Greatworth Village	455551, 242992	Greatworth Village, Helmdon Road,	M	Yes	Yes	5.6	1.0	43.0	0	99.3
Lower Thorpe	453553, 245334	Banbury Lane, Lower Thorpe	M	Yes	Yes	5.4	1.0	37.0	0	99.4
Greatworth Hall	456179, 242763	Greatworth Hall, Greatworth	M	Yes	Yes	5.5	1.0	42.0	0	100.0
Blackgrounds	451235, 248417	Blackgrounds, West Northamptonshire	M	Yes	Yes	1.0	4.5	24.0	0	75.0

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

