

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

West Northamptonshire 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 dust monitoring undertaken in the West Northamptonshire District Council (WNDC) area during August 2023.
- 1.1.2 Figure 1 to Figure 2 in Appendix A indicate the current worksites together with air quality and dust monitoring locations.
- 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, Figure 1 to Figure 2, include:

## **Twyford to Greatworth**

### Radstone and Hall Farm

- Topsoil Stripping;
- Stockpile management;
- Bulk Excavation;
- Site Access Road/ Haul Road use and maintenance;
- Drainage; and
- Piling works at Radstone Road.

### Greatworth Hall

- Topsoil stripping;
- Stockpile management;
- Utilisation & maintenance of Site Access Road (SAR) and Haul Road;
- Bulk excavation; and
- Drainage.

## **Greatworth To Southam**

### Chipping warden

- Chipping warden Green tunnel PCC erection;
- Green Tunnel maintenance for PCC erection;
- Chipping warden green tunnel – Structural backfill;
- A361 temporary bridge – general maintenance;
- Chipping Warden earthworks Soil Swap area;

- Bulk earthworks;
- Site Access Road maintenance;
- Utilisation of haulage road for moving material;
- Chipping warden batching plant;
- General maintenance;
- Stockpile management;
- Vegetation maintenance;
- Site Access Road maintenance;
- Compound maintenance;
- Water management;
- Ditch maintenance;
- Plant maintenance; and
- Material processing.

#### CW Village

- Chipping warden Green tunnel PCC erection;
- Green Tunnel maintenance for PCC erection;
- Chipping warden green tunnel – Structural backfill;
- A361 temporary bridge – general maintenance;
- Chipping Warden earthworks Soil Swap area;;
- Bulk earthworks;
- Site Access Road maintenance;
- Utilisation of haulage road for moving material;
- Chipping warden batching plant;
- General maintenance;
- Stockpile management;
- Vegetation maintenance;
- Site Access Road maintenance;
- Compound maintenance;
- Water management;
- Ditch maintenance;
- Plant maintenance; and
- Material processing.

#### Lower Boddington

- Topsoil stripping;
- Claydon road overbridge;
- Stockpile management;
- Site Access Road maintenance;
- Utilisation of haulage road for moving material;
- Drainage and temporary ponds;
- Vegetation maintenance;
- Highfurlong brook viaduct;
- Bulk excavation – cutting;
- Claydon road overbridge;

- Lower Boddington Landscape fill;
- Water management (Checking pumps); and
- Ditch maintenance.

#### Fir tree nursery

- Topsoil stripping;
- Stockpile management;
- Site Access Road maintenance;
- Utilisation of haulage road for moving material;
- Drainage and temporary ponds;
- Vegetation maintenance;
- Site access road maintenance;
- Water management;
- Ditch maintenance; and
- Cedars farm BT diversion.

#### Greatworth Village

- Stockpile management;
- Site Access Road maintenance;
- Utilisation of haulage road for moving material;
- Drainage and temporary ponds;
- Utilities;
- Greatworth Green Tunnel works; and
- Bulk earthworks.

#### Lower Thorpe

- Stockpile management;
- Site Access Road maintenance;
- Utilisation of haulage road for moving material;
- Drainage and temporary ponds;
- Greatworth Green Tunnel works;
- Bulk earthworks;
- Utility diversions and general utility works;
- Helmdon Road Utility Plant Crossing;
- Lower Thorpe Viaduct excavations works and pile caps duct; and
- Laying of erosion matting.

#### Blackgrounds

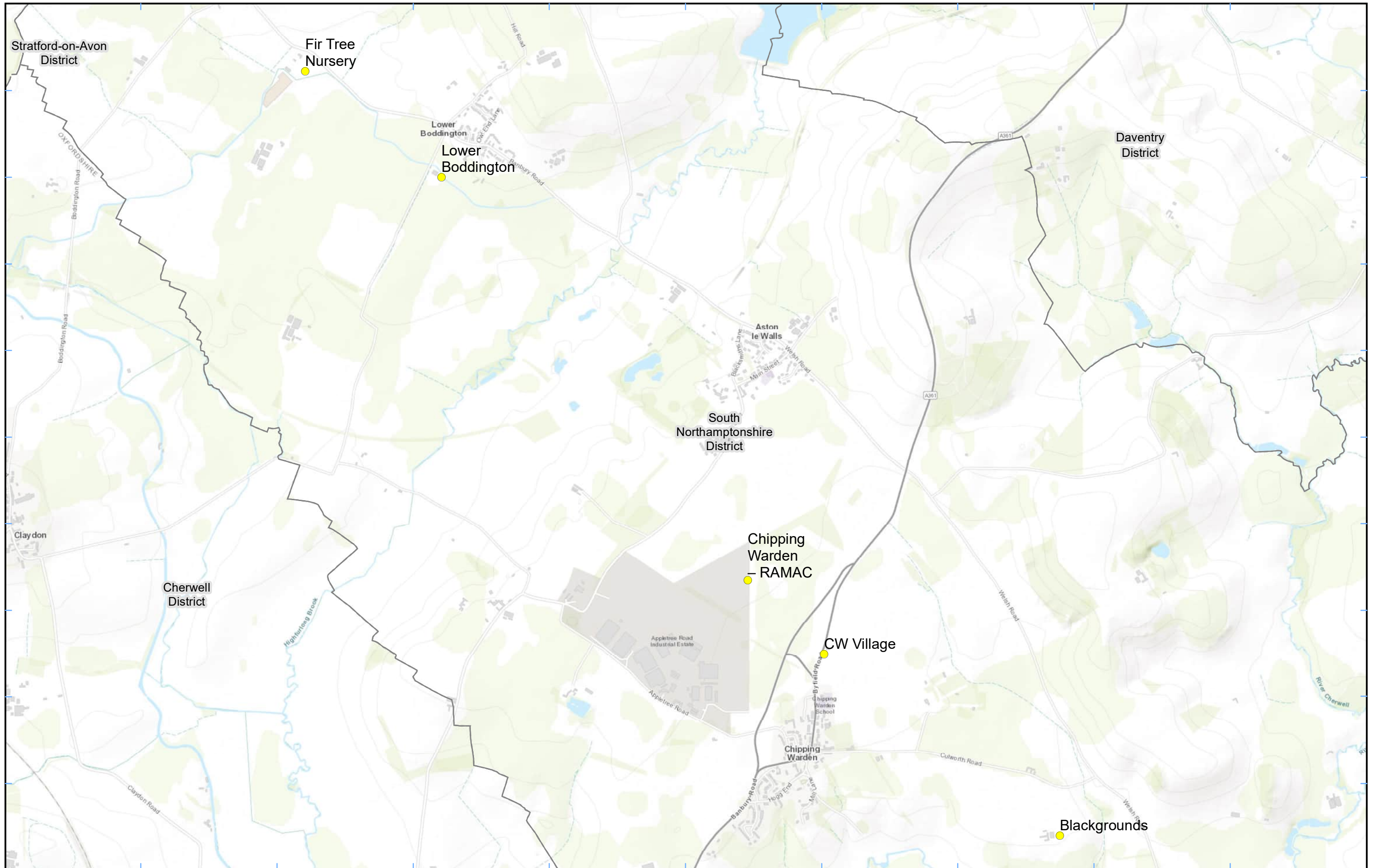
- Topsoil stripping;
- Stockpile management;
- Site Access Road maintenance;
- Vegetation maintenance;
- Utilisation of haulage road for moving material;
- Drainage and temporary ponds;
- Water management; and

- Ditch maintenance.

- 1.1.5 Ten (10) dust monitors are installed around 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 No (0) dust trigger alerts were recorded during the monitoring period (August 2023).
- 1.1.9 Data capture was below 90% for multiple monitors in August 2023. For the monitor at Radstone this was due to a battery fault with the monitor. For the monitor at Lower Thorpe this was due to a monitor fault that has since been resolved. No data was captured at the Blackgrounds monitor for the month of August 2023. This was due to a solar controller fault with the monitor.
- 1.1.10 There were no (0) complaints received during this reporting period.

# Appendix A –Monitoring Locations

Figure 1 to Figure 2: Worksite and Monitoring locations within 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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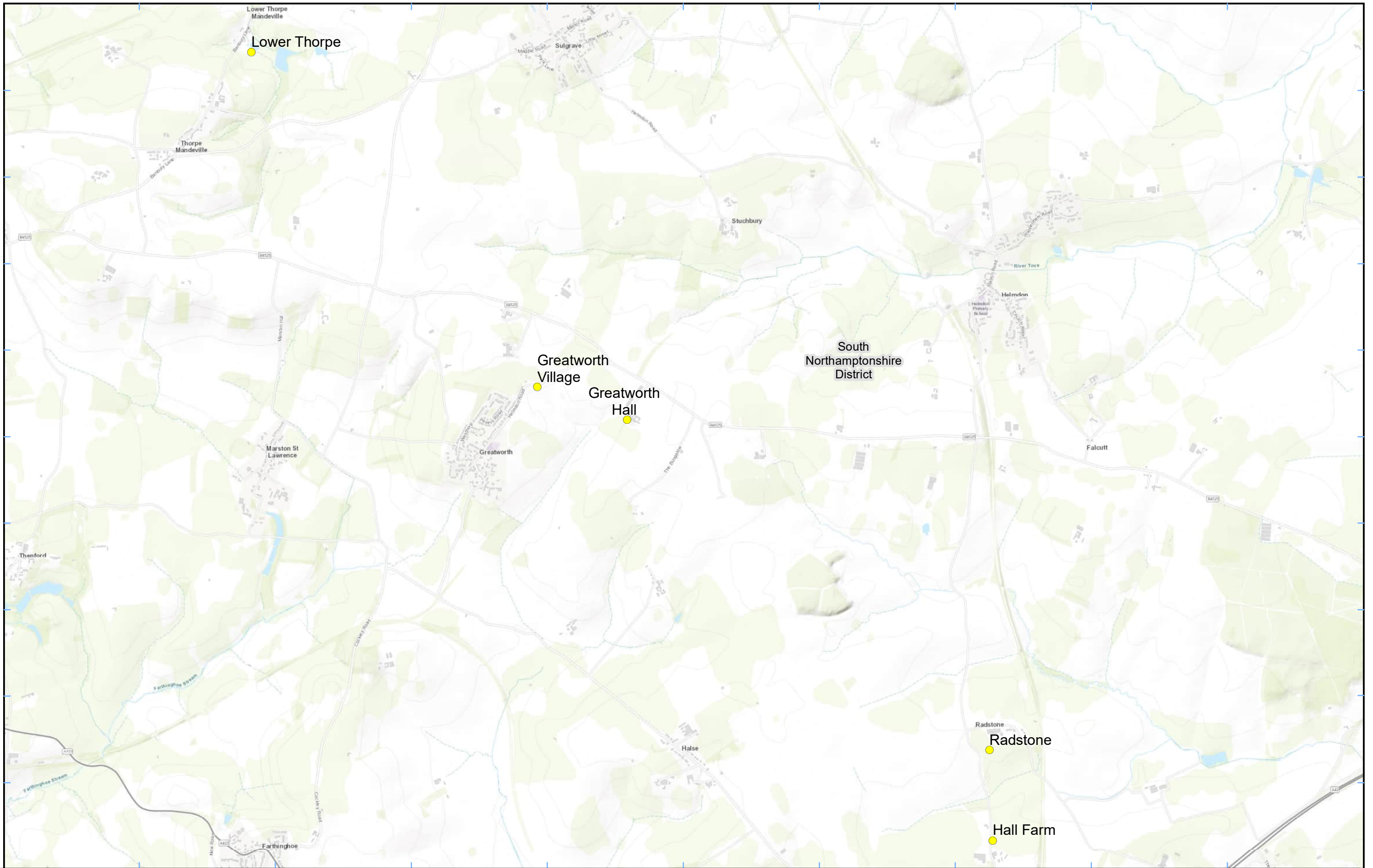
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**Legend**  
 Dust  
 District Borough Unitary Boundaries

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

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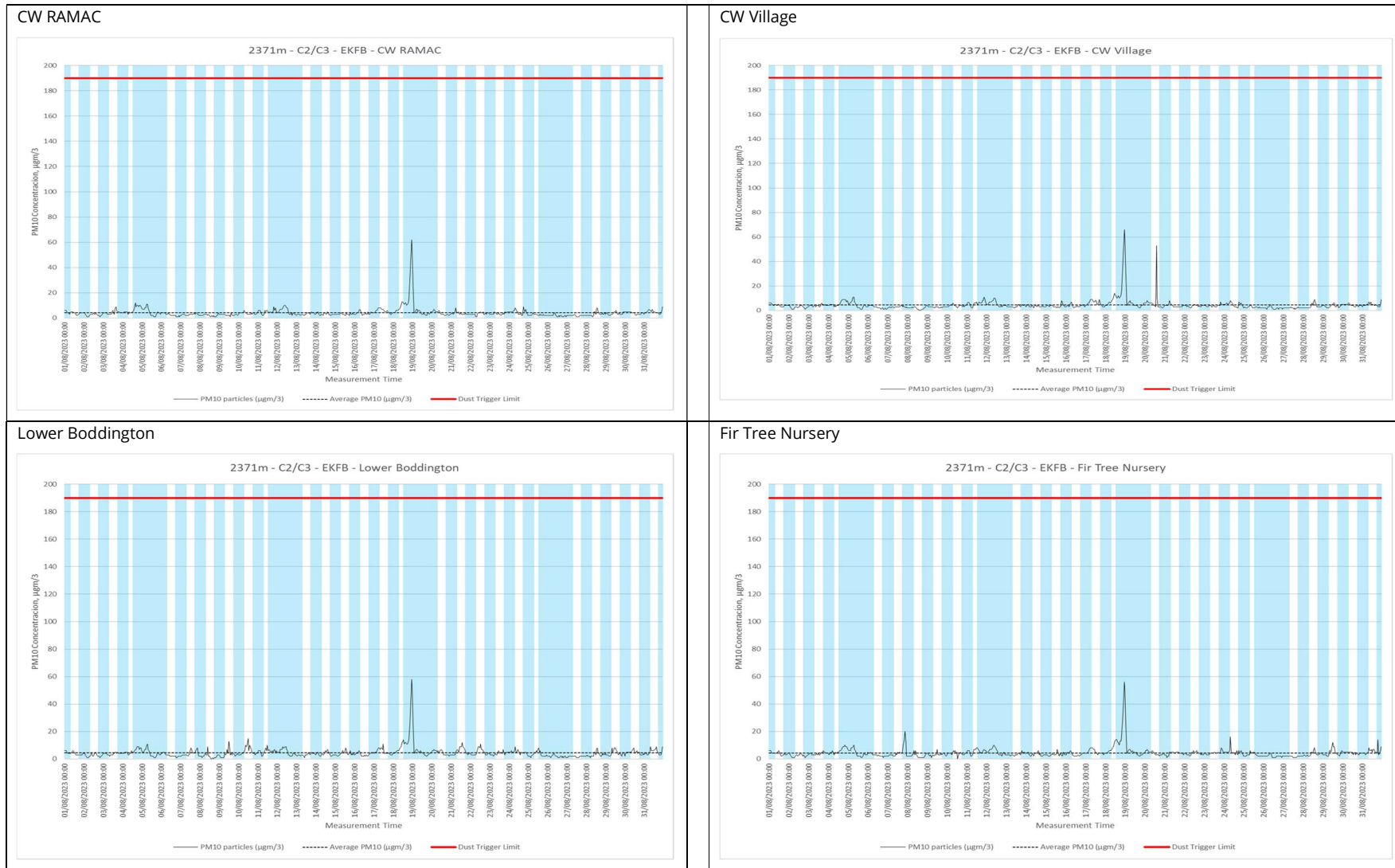
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## Appendix B – Dust Monitoring Results

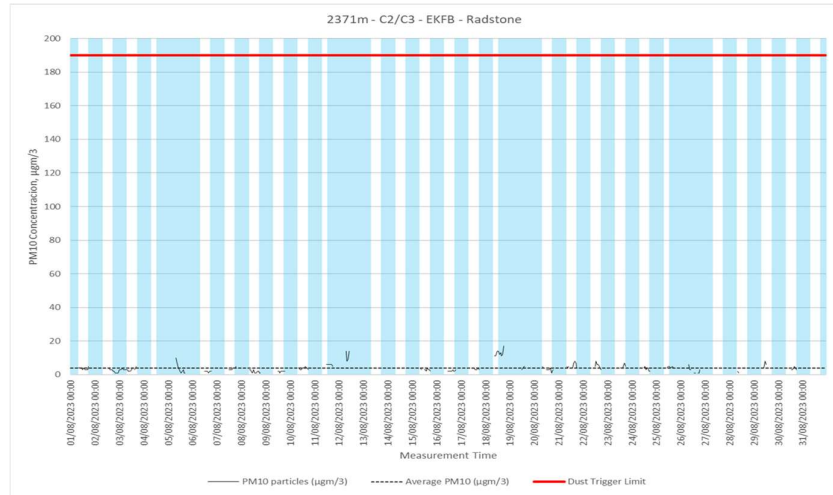
Table 1: Dust monitoring locations and August 2023 results

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 <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	Y	4.1	1.0	62.0	0	100.0
CW Village	450000, 249367	Chipping Warden, West Northamptonshire	M	Yes	Y	4.4	1.0	66.0	0	99.60
Lower Boddington	447997, 251865	Lower Boddington, West Northamptonshire	M	Yes	Y	4.5	1.0	58.0	0	99.60
Fir Tree Nursery	447283 , 252421	Fir Tree Nursery, West Northamptonshire	M	Yes	Y	4.4	1.0	56.0	0	99.87
Radstone	458712 , 240454	Radstone Road, Brackley, West Northamptonshire	M	Yes	Y	4.0	1.0	17.0	0	29.84
Hall Farm	458734, 239823	Hall Farm, Radstone Road	M	Yes	Y	4.7	1.0	68.0	0	99.60
Greatworth Village	455551, 242992	Greatworth Village, Helmdon Road,	M	Yes	Y	3.9	1.0	63.0	0	99.46
Lower Thorpe	453553, 245334	Banbury Lane, Lower Thorpe	M	Yes	Y	3.7	1.0	12.0	0	60.35
Greatworth Hall	456179, 242763	Greatworth Hall, Greatworth	M	Yes	Y	4.0	1.0	63.0	0	99.60
Blackgrounds	450846, 248413	Blackgrounds, West Northamptonshire	M	Yes	Y	-	-	-	-	-

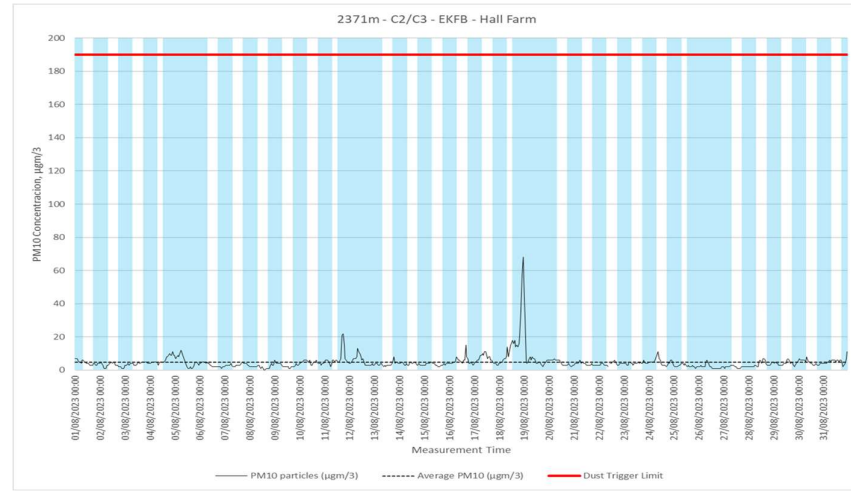
Figure 3: Construction dust 1-hour mean indicative PM10 concentration for dust monitors



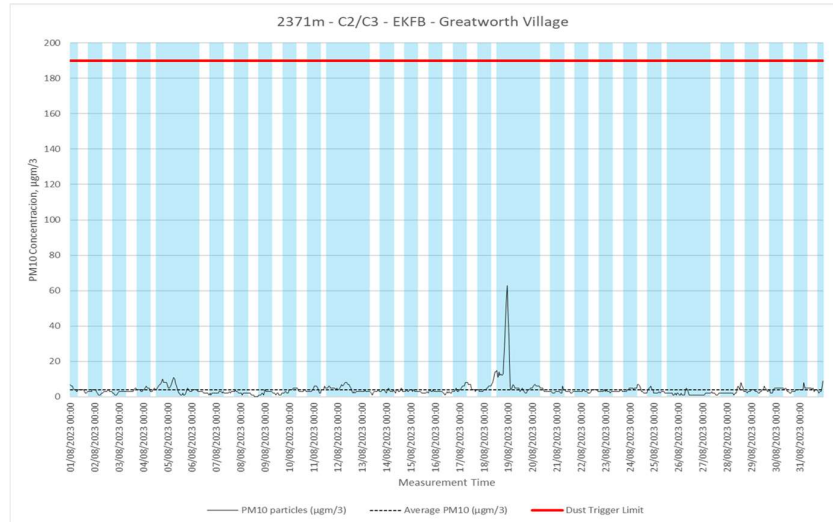
Radstone



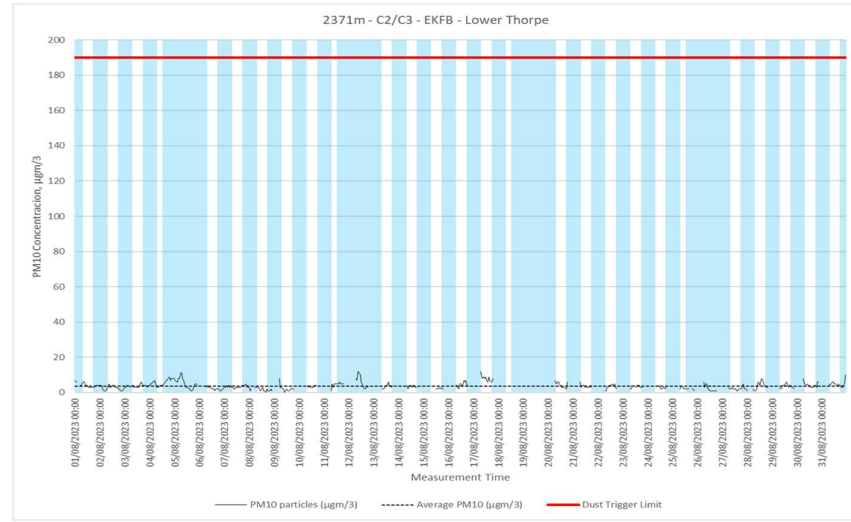
Hall Farm



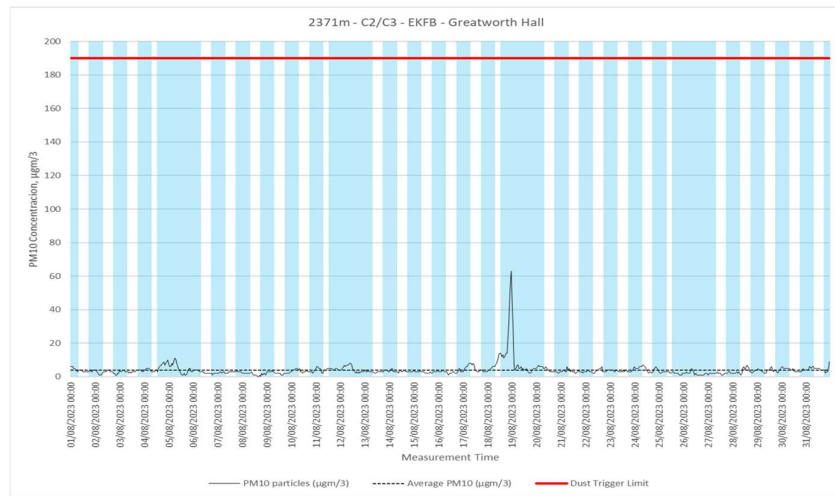
Greatworth Village



Lower Thorpe



### Greatworth Hall



### Backgrounds

NO DATA CAPTURED FOR AUGUST 2023