

Air Quality and Dust Monitoring Monthly Report – November 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.

High Speed Two (HS2) Limited,
Two Snowhill
Snow Hill Queensway
Birmingham B4 6GA

Telephone: 08081 434 434

General email enquiries: HS2enquiries@hs2.org.uk

Website: www.gov.uk/hs2

A report prepared by EWCs and MWCCs on behalf of HS2 Ltd.

High Speed Two (HS2) Limited has actively considered the needs of blind and partially sighted people in accessing this document. The text will be made available in full on the HS2 website. The text may be freely downloaded and translated by individuals or organisations for conversion into other accessible formats. If you have other needs in this regard please contact High Speed Two (HS2) Limited.

© High Speed Two (HS2) Limited, 2021, except where otherwise stated.

Copyright in the typographical arrangement rests with High Speed Two (HS2) Limited.

This information is licensed under the Open Government Licence v2.0. To view this licence, visit www.nationalarchives.gov.uk/doc/open-government-licence/version/2 **OGI** or write to the Information Policy Team, The National Archives, Kew, London TW9 4DU, or e-mail: psi@nationalarchives.gsi.gov.uk. Where we have identified any third-party copyright information you will need to obtain permission from the copyright holders concerned.



Printed in Great Britain on paper containing at least 75% recycled fibre.

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 (WNDC) during November 2023.
- 1.1.2 Figure 1 and Figure 2 in Appendix A present the current worksites together with the 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, 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 and 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
- Concreting at Radstone Road.

Greatworth Hall

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

Greatworth To Southam

Chipping Warden – RAMAC

- Chipping warden Green tunnel PCC erection
- Green Tunnel maintenance for PCC erection
- Chipping warden green tunnel – Structural backfill
- Chipping Warden earthworks Soil Swap area

- Bulk earthworks
- Site Access Road maintenance
- Utilisation of haulage road for moving material
- Chipping warden batching plant
- Chipping warden surface water sewer
- General maintenance
- Stockpile management
- Vegetation maintenance
- Site Access Road maintenance
- Compound maintenance
- Water management
- Ditch maintenance
- Plant maintenance

CW village

- Chipping warden green tunnel PCC erection
- Green Tunnel maintenance for PCC erection
- Chipping warden green tunnel – Structural backfill
- Chipping Warden earthworks Soil Swap area
- Bulk earthworks
- Site Access Road maintenance
- Utilisation of haulage road for moving material
- Chipping warden batching plant
- Chipping warden surface water sewer
- General maintenance
- Stockpile management
- Vegetation maintenance
- Site Access Road maintenance
- Compound maintenance
- Water management
- Ditch maintenance
- Plant maintenance

Lower Boddington

- Topsoil stripping
- Claydon road overbridge
- Nursery site feeder canal culvert
- 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
- Claydon road highways
- Lower Boddington Landscape fill
- Water management (Checking pumps)
- 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
- Nursery site feeder canal
- Boddington highways

Greatworth Village

- Stockpile management
- Site Access Road maintenance
- Utilisation of haulage road for moving material
- Drainage and temporary ponds
- Bulk earthworks
- AG09 and AG10 overbridges
- HDD works (Culworth Grounds)
- Permanent culverts
- Greatworth Green Tunnel works.

Lower Thorpe

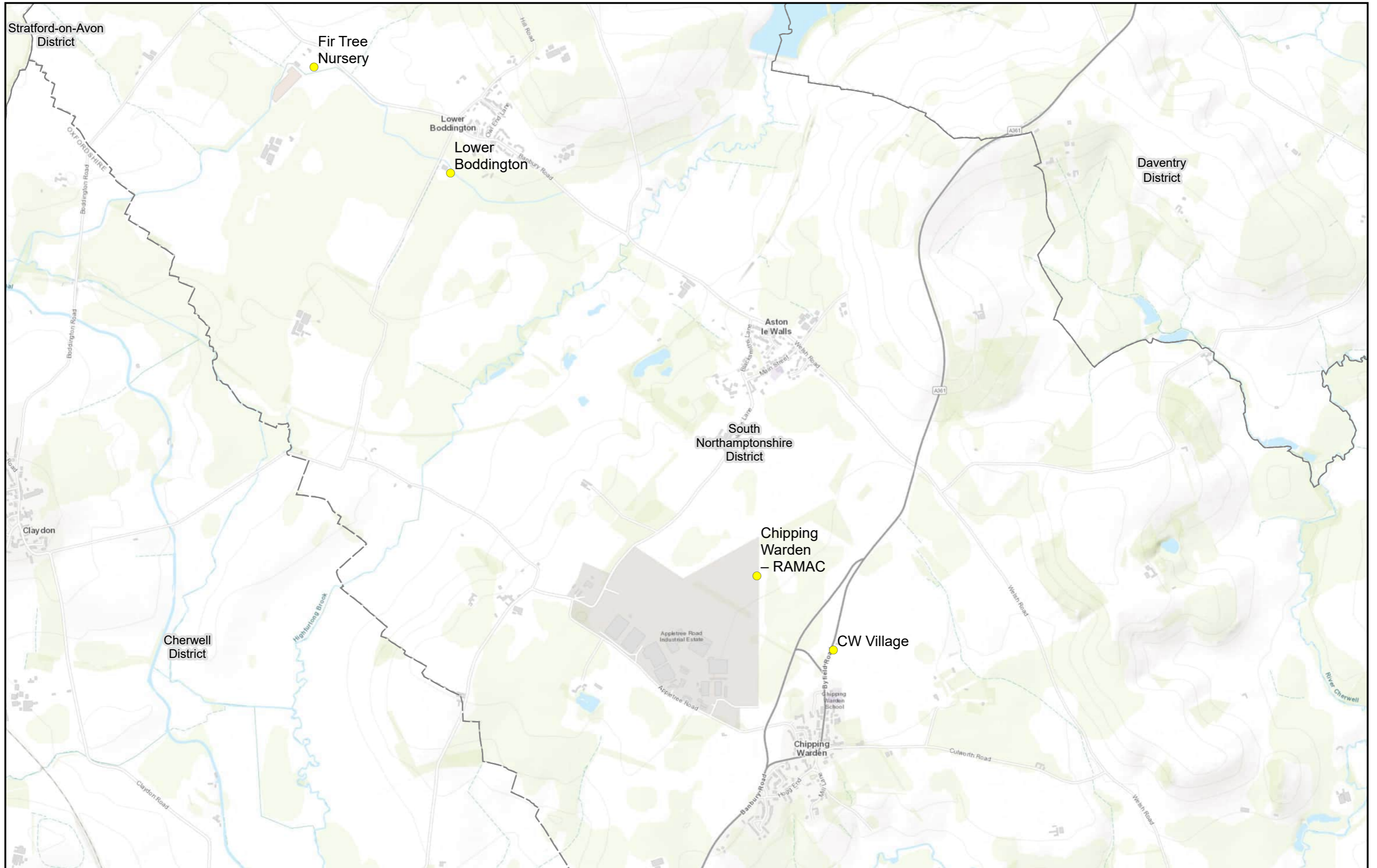
- Stockpile management
- Site Access Road maintenance
- Utilisation of haulage road for moving material
- Drainage and temporary ponds
- Bulk earthworks
- AG09 and AG10 overbridges
- HDD works (Culworth Grounds)
- Permanent culverts
- Greatworth Green Tunnel works.

1.1.5 Nine (9) dust monitors are installed around these 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 line charts of monthly data from each 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 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 No (0) dust trigger alerts were recorded during the monitoring period (November 2023).
- 1.1.9 Data capture was below 90% for multiple monitors due to the Radstone monitor having a battery fault. There are ongoing issues with the monitor circuit causing recurring issues, a repair is being arranged for the monitor. Data from the 21st to 28th November has been excluded for the Lower Boddington monitor due to a suspected fault with the monitor. This monitor is in for repair. All other low data captures can be attributed to lack of solar charge.
- 1.1.10 There were no (0) complaints received during the reporting period (November 2023).

Appendix A – Worksites and Monitoring Locations



Figures 1 and 2: Worksites and Monitoring Locations within WNDC



Legend
 ● Dust Monitor
 - - - District Borough Unitary Boundaries


Service Layer Credits: World Topographic Map: Esri UK, Esri, HERE, Garmin, INCREMENT P, USGS, METI/NASA

Map Number
 Map Name
**Monitoring Locations
 In WNDC (Sheet 1)**
 West Northamptonshire Council

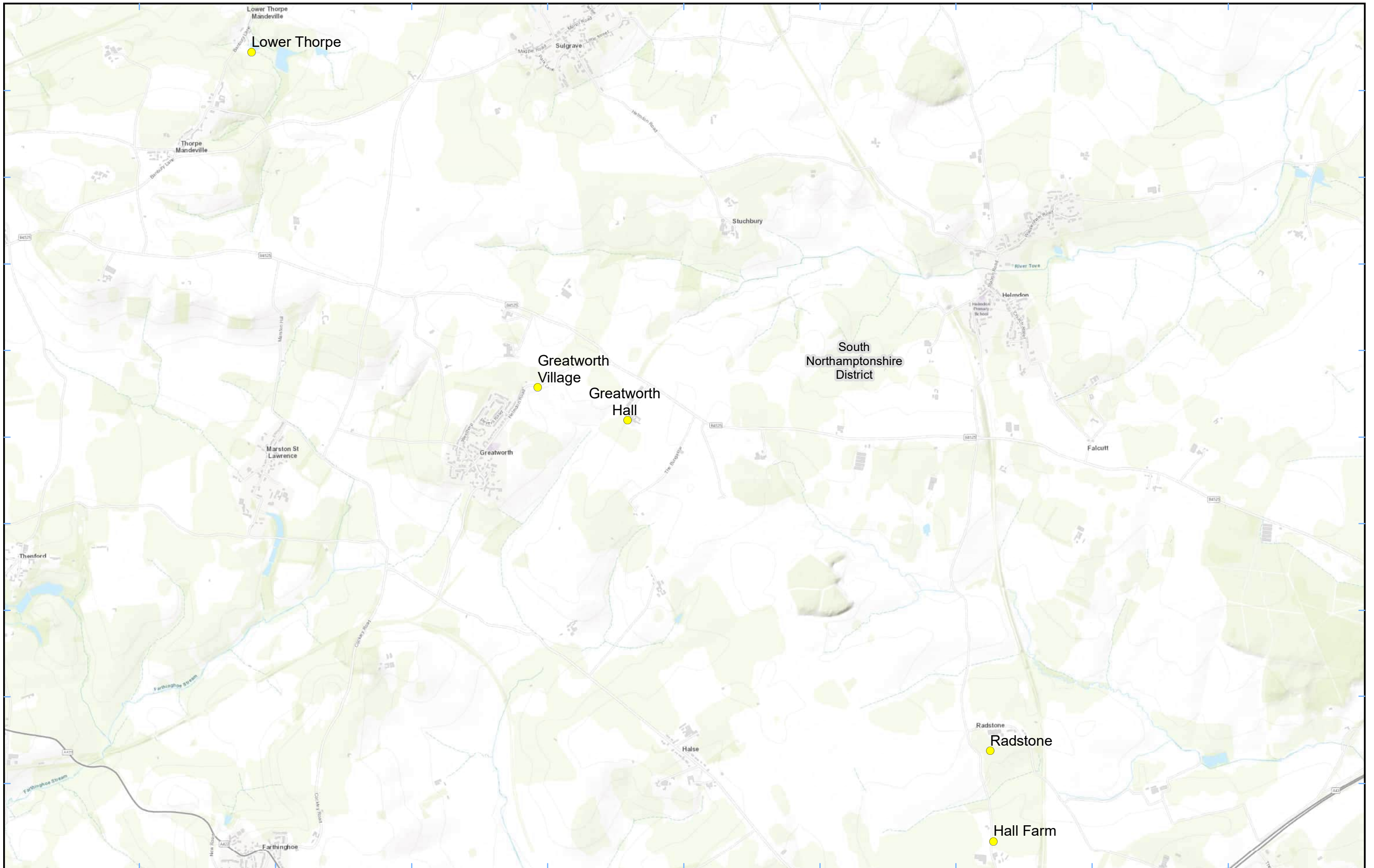

 HS2 Ltd accept no responsibility for any circumstances, which arise from the reproduction of this map after alteration, amendment or abbreviation or if it is issued in part or issued incomplete in any way.
 

Registered in England. Registration number 06791686.
 Registered office: 2 Snowhill, Queensway,
 Birmingham B4 6GA.

© Crown copyright and database rights 2023.
 Ordnance Survey Licence Number 100049190.

Scale at A3: 1:18,000

 Metres

Doc Number: _____ Date: 22/11/23



Legend

- Dust
- District Borough Unitary Boundaries

Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Map Number

Map Name
**Monitoring Locations
In WNDC (Sheet 2)**

West Northamptonshire Council

hs2

HS2 Ltd accept no responsibility for any circumstances, which arise from the reproduction of this map after alteration, amendment or abbreviation or if it is issued in part or issued incomplete in any way.

Registered in England. Registration number 06791686.
Registered office: 2 Snowhill, Queensway,
Birmingham B4 6GA.

© Crown copyright and database rights 2022.
Ordnance Survey Licence Number 100049190.

Scale at A3: 1:24,000

0 240 480 720 960
Metres

Doc Number:

Date: 31/10/22

Appendix B – Dust Monitoring Results

Table 1: Dust Monitoring Locations and 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	1-hour data capture (%)
Chipping Warden – RAMAC	449600, 249755	Chipping Warden, West Northamptonshire	M	Yes	Yes	5.6	1.0	19.0	0	63.9
CW Village	450000, 249367	Chipping Warden, West Northamptonshire	M	Yes	Yes	5.7	1.0	22.0	0	38.1
Lower Boddington	447997, 251865	Lower Boddington, West Northamptonshire	M	Yes	Yes	7.9	1.0	121.0	0	51.8
Fir Tree Nursery	447283, 252421	Fir Tree Nursery, West Northamptonshire	M	Yes	Yes	6.5	1.0	37.0	0	78.1
Radstone	458712, 240454	Radstone Road, Brackley, West Northamptonshire	M	Yes	Yes	4.9	1.0	13.0	0	8.1
Hall Farm	458734, 239823	Hall Farm, Radstone Road	M	Yes	Yes	6.1	1.0	17.0	0	71.7
Greatworth Village	455551, 242992	Greatworth Village, Helmdon Road,	M	Yes	Yes	6.7	1.0	32.0	0	96.0
Lower Thorpe	453553, 245334	Banbury Lane, Lower Thorpe	M	Yes	Yes	6.1	1.0	30.0	0	93.1
Greatworth Hall	456179, 242763	Greatworth Hall, Greatworth	M	Yes	Yes	4.5	1.0	18.0	0	22.1

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

