

Thurrock - An ambitious and collaborative community which is proud of its heritage and excited by its diverse opportunities and future

Cleaner, Greener and Safer Overview and Scrutiny Committee

The meeting will be held at **7.00 pm** on **7 November 2023**

Committee Room 2, Civic Offices, New Road, Grays, Essex, RM17 6SL.

Membership:

Councillors Valerie Morris-Cook (Chair), Joycelyn Redsell (Vice-Chair), Alex Anderson, Mark Hurrell, Cathy Kent and Maureen Pearce

Substitutes:

Councillors Aaron Green, Steve Liddiard, Augustine Ononaji, Elizabeth Rigby, James Thandi and Watson

Agenda

Open to Public and Press

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1. Apologies for Absence	
2. Items of Urgent Business	
To receive additional items that the Chair is of the opinion should be considered as a matter of urgency, in accordance with Section 100B (4) (b) of the Local Government Act 1972. To agree any relevant briefing notes submitted to the Committee.	
3. Declaration of Interests	
4. Annual Report of the Cabinet Member for Environment, Sport, and Leisure	5 - 22
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Queries regarding this Agenda or notification of apologies:

Please contact Rhiannon Whiteley, Senior Democratic Services Officer by sending an email to Direct.Democracy@thurrock.gov.uk

Agenda published on: **30 October 2023**

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DECLARING INTERESTS FLOWCHART – QUESTIONS TO ASK YOURSELF

Breaching those parts identified as a pecuniary interest is potentially a criminal offence

Helpful Reminders for Members

- *Is your register of interests up to date?*
- *In particular have you declared to the Monitoring Officer all disclosable pecuniary interests?*
- *Have you checked the register to ensure that they have been recorded correctly?*

When should you declare an interest *at a meeting*?

- **What matters are being discussed at the meeting?** (including Council, Cabinet, Committees, Subs, Joint Committees and Joint Subs); or
- If you are a Cabinet Member making decisions other than in Cabinet **what matter is before you for single member decision?**



Does the business to be transacted at the meeting

- relate to; or
- likely to affect

any of your registered interests and in particular any of your Disclosable Pecuniary Interests?

Disclosable Pecuniary Interests shall include your interests or those of:

- your spouse or civil partner's
- a person you are living with as husband/ wife
- a person you are living with as if you were civil partners

where you are aware that this other person has the interest.

A detailed description of a disclosable pecuniary interest is included in the Members Code of Conduct at Chapter 7 of the Constitution. **Please seek advice from the Monitoring Officer about disclosable pecuniary interests.**

What is a Non-Pecuniary interest? – this is an interest which is not pecuniary (as defined) but is nonetheless so significant that a member of the public with knowledge of the relevant facts, would reasonably regard to be so significant that it would materially impact upon your judgement of the public interest.

Pecuniary

If the interest is not already in the register you must (unless the interest has been agreed by the Monitoring Officer to be sensitive) disclose the existence and nature of the interest to the meeting

If the Interest is not entered in the register and is not the subject of a pending notification you must within 28 days notify the Monitoring Officer of the interest for inclusion in the register

Unless you have received dispensation upon previous application from the Monitoring Officer, you must:

- Not participate or participate further in any discussion of the matter at a meeting;
- Not participate in any vote or further vote taken at the meeting; and
- leave the room while the item is being considered/voted upon

If you are a Cabinet Member you may make arrangements for the matter to be dealt with by a third person but take no further steps

Non- pecuniary

Declare the nature and extent of your interest including enough detail to allow a member of the public to understand its nature



You may participate and vote in the usual way but you should seek advice on Predetermination and Bias from the Monitoring Officer.

Our Vision and Priorities for Thurrock

An ambitious and collaborative community which is proud of its heritage and excited by its diverse opportunities and future.

1. **People** – a borough where people of all ages are proud to work and play, live and stay
 - High quality, consistent and accessible public services which are right first time
 - Build on our partnerships with statutory, community, voluntary and faith groups to work together to improve health and wellbeing
 - Communities are empowered to make choices and be safer and stronger together

2. **Place** – a heritage-rich borough which is ambitious for its future
 - Roads, houses and public spaces that connect people and places
 - Clean environments that everyone has reason to take pride in
 - Fewer public buildings with better services

3. **Prosperity** – a borough which enables everyone to achieve their aspirations
 - Attractive opportunities for businesses and investors to enhance the local economy
 - Vocational and academic education, skills and job opportunities for all
 - Commercial, entrepreneurial and connected public services

7 November 2023	ITEM: 4
Cleaner, Greener and Safer Overview and Scrutiny Committee	
22/23 Annual Report of the Cabinet Member for Environment, Sport, and Leisure	
Report of: Councillor Andrew Jefferies, Cabinet Member for Environment, Economic Development and Directional Leadership	
This report is Public	

Introduction

Around a million pound was spent on parks improvements in the last financial year. The Active Thurrock Partnership continued to link with Active Essex, the County Sports Partnership and secured £20k of funding from the County wide “Find your Active Programme” to respond to the challenges of engaging people who have become less physically active due to the pandemic.

We continued to engage with our communities as part of the Active Places Strategy and I would like to take this opportunity to thank all the community groups for their ongoing commitment, hard work, and support to the improvement of the borough.

There were some positive improvements across the waste service during the year i.e., the Authority’s levels of residual waste to landfill remains positive with 0% of our waste going to landfill and the flats’ recycling project was completed, with all flats within the borough having received recycling bins and communications and work was started on procuring a long-term waste treatment contract.

Admittedly, the service also experienced issues, mainly in relation to the operating model which is now being addressed with a series of options that will be delivered to members for consideration.

The Clean and Green teams continued to make steady progress maintaining our parks and open spaces, housing estates and highways land. Support from enforcement colleagues saw some excellent results in terms of littering, flyposting, fly tipping and graffiti. Proactive work of the teams working together resulted in offenders receiving fines and criminal charges, reinforcing our zero-tolerance message.

1. Leisure and Recreation

- 1.1 Leisure and recreation services continue to play an important role in the quality of life and wellbeing of residents. The increased cost of living makes the free access to parks and open spaces a welcomed resource to communities as does a range of choices of affordable leisure pursuits.

2. Active Parks

- 2.1 The Active Parks Team partner with the voluntary sector, community, and sports groups; regeneration colleagues, those from public health, the community safety partnership and youth services to develop parks and play areas by supporting external funding bids to attract investment into the borough. The team project manages the improvement of parks by working with residents, community fora, friends of parks groups and contractors.
- 2.2 The park engagement officers deliver community programmes such as school holiday camps for SEN children, themed programmes such as Thurrock Alternative Olympics and afterschool engagement sessions to reduce anti-social behaviour in parks.
- 2.3 Last year, in addition to supporting over 50 groups and events, the Active Parks Team organised over 70 activity sessions resulting in over 1,000 attendances.
- 2.4 Reflecting resources available, the team has focused on park developments and supporting the above partners as well as a range community groups and Friends of Parks Groups in the delivery of park activities. Some examples of the work of the team include:
- New Outdoor Gym Equipment and ball games area at Delafield Open Space, Little Thurrock.
 - New arial runway slides at Lime Close Open space, Hardie Park, Corringham Town Park and Gobions Park, which also had a new play slide.
 - New separate teenage and toddler play equipment and a junior climbing frame at Aveley Recreation Ground, along with new benches around the park.
 - New surfacing funded in Usk Park with money from Friends of Aveley and Kenningtons Parks.
 - New solar lighting along Grays Riverfront as part of the Safer Streets funding, a partnership Essex Fire and Crime Commissioners officer
 - New football practice goals at Bonnygate Park in a joint project with Thurrock's Housing Department.

- Weekly Outreach engagement and multi-sport sessions at West Thurrock Memorial Park in partnership with Thurrock Community Safety Partnership.

3. Impulse Leisure

- 3.1 Our Leisure services continue to be operated by Thurrock Community Leisure who are a registered Charity that operates as Impulse Leisure. They are a successful social enterprise, providing best value for the residents of Thurrock. All surpluses arising from the delivering the service are invested back into the upkeep and delivery of the three sites at Belhus Park, Blackshots and Corringham.
- 3.2 Since the pandemic the relationship with the charity has become significantly stronger with a regular clear and open dialogue concerning issues and opportunities This operating model has protected the Council from the financial exposure that was witnessed in other authorities throughout the pandemic, energy crisis and cost of living crisis. Impulse have been proactive and resourceful in obtaining sufficient support and funding to manage their way through these challenges.
- 3.3 We have maintained our landlord responsibilities, investing in the pool plant equipment at Corringham Leisure Centre and replaced multiple roof coverings at all three Leisure Centres during 22/23. Impulse have also contributed to further cosmetic improvements and absorbed the loss of income during these closures and disruptions.
- 3.4 The results from this more collaborative approach have seen many increases in performance and support. For example: the number of children learning to swim has increased by 32% over the last year to just over 2800 children per week. Impulse Leisure supported public health, delivering ill health prevention and rehabilitation sessions weekly, which has helped many residents with life restricting conditions such as Alzheimer's, COPD and Parkinson's. The feedback and testimonials from these sessions are exceptional and shows the positive impact on physical and mental wellbeing. Impulse Leisure also provided outreach work linking to many Council services on schemes such as Grub Club, Community Gardens, Children's Services Easter egg and Christmas campaigns.
- 3.5 Impulse are committed to providing further education, and training to help employees progress career opportunities in the leisure industry. Over 75% of their workforce are local people.
- 3.6 The Civic Hall continued to support our cultural offering providing a broad range of shows, events, and activities to meet a variety of genres and

interests. As well as delivering the day-to-day leisure and cultural activities at our facilities.

4. Active Thurrock

- 4.1 Active Thurrock is a partnership that includes key council departments as well as external organisations such as: Active Essex; Impulse Leisure; Thurrock and Brentwood MIND; Thurrock CVS and Thurrock Sports Council who work together to support, promote, and improve physical and mental wellbeing through the provision of activities across the borough.
- 4.2 The partnership works collaboratively to share resources and information whilst identifying priorities to lever in external funding. The partnership secured £20,000 of funding from the County Sports Partnership and commissioned three targeted physical health and wellbeing projects.
1. Football vs Fat weight management programme.
 2. A Community Garden at Belhus Park Leisure Centre
 3. Older persons activity programme at Belhus and Blackshots Leisure centres.
- 4.3 The partnership has also successfully worked with Active Essex on the Find Your Active Small Grants Programme and the Together Fund where over £52,000 was allocated to 16 Thurrock projects.

5. Waste Collection Services

- 5.1 The waste collection function is undertaken by an in-house team and in 22/23 provided a weekly collection of residual waste, dry recycling and kitchen waste, with garden waste collected fortnightly.
- 5.2 April and August 2022 saw significant disruption to collections, The Just Stop Oil protests caused some significant delays in bins being collected, with waste crews unable to gain access or leave the depot on several days. It also affected waste lorries access to the site where household waste is off-loaded for onward disposal, creating additional issues for collections.
- 5.3 In addition, operational factors further impacted on the effective delivery of the service in some areas of the borough during the year. Consequently, in September and October it was necessary to reset the green waste and recycling service with amendments to collection dates to enable the service to get back on track.
- 5.4 The service consequently rebalanced the rounds to create achievable and completable workloads on all rounds., it was necessary to increase the number of rounds from 26 to 28. In addition to this, a 'buddy' system was

established (whereby crews help each other out if problems are encountered during the day) for all crews to ensure that all work is completed consistently.

- 5.5 The rebalancing of rounds considered the need to allow for housing growth within the borough. The new rounds were introduced in January 2023. The rounds now have the capacity to absorb growth in housing over the next 12 months, but continuous reviews are taking place to ensure that the service has the future capacity to deliver.

6. Recycling

- 6.1 At year end the reported recycling rate was 29%. Admittedly more needs to be done to promote the benefits of recycling waste, but re-use should be the ultimate goal of any waste management hierarchy.
- 6.2 The Council does not send any waste to landfill, during 22/23 residual waste collected at the kerbside, was sent to an Energy from Waste (EfW) plant in Allington, where waste is turned into heat and power.
- 6.3 During the autumn term the waste team, with the support of its partners visited nine primary schools to deliver an exciting waste education campaign using a special mobile classroom built into a waste truck. Engaging with over 1000 children about recycling, recycling motivations and the planned food waste service which is now due to be rolled out in 2024. The children were very willing to learn and enjoyed the interactive sessions.
- 6.4 This project formed part of our wider waste strategy aimed at educating young people to ensure that they are aware of the issues of waste and how to prevent it and dispose of it correctly.
- 6.5 There was minimal cost to the Council, as through their social value obligations our contractor Ahern's, provided funding for an Education Officer from Essex Wildlife Trust to deliver this project, the Council supported this officer with a member of the team. A mobile classroom was provided by Denis Eagle (our vehicle suppliers) for free as well as some educational packs, which also fulfils their social value obligation from their contract for the purchase of new RCVs.
- 6.6 The Council continued to be part of a reuse scheme for the Forward Motion Cycle Hub Thurrock, in Tilbury, where bikes that would have otherwise been thrown away at the Linford Household Waste & Recycling Centre (HWRC) are donated, repaired and reused to provide affordable bikes for our community.

7. Vehicle Procurement

- 7.1 21 new vehicles were delivered in the summer months of 2022. This included 10 podded vehicles, intended for the concurrent collection of food waste and recycling from 2023, (since deferred to 2024), with food loaded from the side and recycling at the rear. However, following operational testing in the final

quarter of the year it was determined that the vehicles could not be utilised as originally envisaged.

7.2 As a result, the service developed an alternative operating model utilising vehicles with rear collection to ensure all vehicles were being deployed/utilise across all waste streams.

7.3 During 22/23 procurement processes were modified to ensure that the policy to eliminate, where possible, single use plastics across the Council was considered at the point of procurement and existing contracts reviewed to ensure compliance where possible. In addition, directorates and services are now required to ensure conditions for hire and events include the non-use of single use plastics and unnecessary packaging and have put in place monitoring arrangements to evidence action taken and impact.

8. Disposal Contracts

8.1 Waste disposal contracts remained compliant within the requirements of the Council's Municipal Waste Strategy, regarding the proximity principal and all future tender documents will specify that the tipping points must be in Thurrock.

9. Projects

9.1 The flats' recycling project was successfully completed, giving all residents in the borough the same access to recycling facilities. The recycling from flats does present a problem to the Council as it has high levels of contamination and impacts the overall quality of the material sent to the materials recycling facility, we are addressing this through communications with residents and managing agents.

10. Household Waste and Recycling Centre (HWRC)

10.1 The Council has a statutory obligation under S51 of the Environmental Protection Act to provide residents with a facility for the disposal of bulky household waste. The Council operates a single site at Buckingham Hill in Linford. The HWRC continues to operate with high levels of recycling rates (47%).

10.2 The service has reacted to significant changes in legislation regarding Persistent Organic Pollutants (POPS), for which additional (separate) containers for the storage of soft furnishings have been installed.

11. Grounds Maintenance

11.1 In addition to maintaining the Council's parks and open spaces, the teams are responsible for grass and hedge cutting and shrub pruning on council managed housing estates, highways land and several public rights of way.

11.2 The Grounds Maintenance teams carry out a seasonal programme of activity with a view to enhancing the appearance of the borough. A full programme of grass cutting took place during the spring and summer, with our last grass cuts being in October 2022. The winter maintenance programme commenced at this point through to the end of March 2023. The winter maintenance included path edging, shrub, and hedge pruning. Individual hedges and shrubs on Council owned land are pruned on a regular basis, depending on plant growth, this was undertaken between August and February to avoid disturbing nesting birds.

12. Play Inspection and Maintenance

12.1 The Play Team continued with their programmed safety inspections and the renovations of many of our play sites, these improvements were not only to address identified safety concerns but to also improve the sites aesthetically. The table below provides a summary of the works conducted.

Park Address	Equipment Painted	Flooring	Comments
Corringham Rec/ Pawes Field	Yes	No	Various play equipment painted, and graffiti removed
Stanford Rec Ground	Yes	Yes	Various play equipment painted and new bark (approx. 50 tons) in play Area and shuttering
Ruskin Road	Yes	Yes	Various play equipment painted and tiles under swing set repaired
Hardie Road Park	No	Yes	Bark pit had top up (approx. 7 ton of bark)
Bulphan Rec Ground	Yes	Yes	Various play equipment painted, and new bark added to play area (approx. 60-70 tons) and new shuttering all round
Linford Rec Ground	Yes	No	Various play equipment painted, and graffiti removed
Chadwell Rec	Yes	No	Various play equipment painted, and graffiti removed
St Francis Way/ Wickham Field	Yes	Yes	Various play equipment painted and tiles under swing set repaired
King Georges Park Daisyfield	Yes	Yes	Various play equipment painted and tiles under swing set repaired Bark pit had top up (approx. 6-7 ton of bark)
Cowper Ave	Yes	No	Various play equipment painted, and graffiti removed
Blackshots Rec Grounds	Yes	Yes	Various play equipment painted, and gym equipment and graffiti removed skate ramp painted wet por flooring attended to
Hillside	Yes	No	Various play equipment painted, and graffiti removed
Delafield	Yes	No	Various play equipment painted, and graffiti removed
Hathaway	No	Yes	Bark pit had top up (approx. 7 ton of bark)
Gobions	Yes	Yes	Various play equipment painted, plus skate ramp and new bark added to play area (approx. 70-80 tons) and shuttering plus basket swing reinstalled
Nutberry Field	Yes	No	Various play equipment painted, and graffiti removed from climbing wall
Grays Beach	Yes	Yes	Various play equipment (5) rebuilt, new decking side and roof panels painted, and graffiti removed
Keir Hardie House	Yes	No	Various play equipment painted, and graffiti removed
Brannets wood	Yes	No	Various play equipment painted, and graffiti removed
Dilkes Park	Yes	No	Various play equipment painted, and graffiti removed
Bonnygate	Yes	No	Various play equipment painted, and graffiti removed
South Ockendon Rec	Yes	No	Various play equipment painted, and graffiti removed

Palmeston Gdns	Yes	Yes	New Bark and shuttering , some play equipment painted
Corringham Town Park	Yes	Yes	New Bark and shuttering , some play equipment painted
Balstonia Park	Yes	Yes	New Bark and shuttering , some play equipment painted
Linny Close	Yes	No	Various play equipment painted
Coalhouse Fort	Yes	No	Various play equipment painted
Achorfield	Yes	No	Various play equipment painted
Aluric	Yes	Yes	Various play equipment painted , and Sand topped up
Grays Park	Yes	No	Various play equipment painted
West Thurrock	Yes	No	Various play equipment painted
Lime Close	Yes	No	Various play equipment painted
Averly Rec	Yes	No	Various play equipment painted
Martins Lane	Yes	No	Various play equipment painted

13. War Memorials

- 13.1 The team continued to deliver the scheduled inspections and maintenance of war memorials across the borough and ensured that all the memorials were looking their best for the Remembrance events across the borough.

14. Arboriculture

- 14.1 The tree team ensures that public trees (those growing in roadside verges, parks and open spaces, amenity greens and cemeteries) are well maintained and regularly inspected. All the Council's trees are surveyed on a regular basis and mapped on the Arbortrak system allowing for future inspections and works to be scheduled. The team are also reactive to emergency tree removals following high winds.
- 14.2 The tree team carried out tree planting of 210 trees in the last year continuing with the additional trees provided by the funding from the forestry commission. In addition, "Trees for the Queen" were planted in each ward in partnership with the local community to celebrate the Platinum Jubilee of Queen Elizabeth II. In addition, in February 23 a hazel tree gifted to Thurrock from the Tree of Trees that formed the Queen's Platinum Jubilee sculpture was planted in South Ockendon during a special ceremony.



14.3 The tree team had to carry out intensive watering of the trees planted in the winter over the extremely hot period in July 2022, this was very resource intensive and to assist them we used social media to encourage residents to water their local trees where possible.

15. Cemeteries and Burials

15.1 The service is responsible for the maintenance of twelve burial sites, including seven cemeteries and five closed church yards. During the reporting period the presentation standards within the Cemeteries continued to meet the standards expected. The burials team implemented the use of seasonal staff, resulting in an improved appearance of Thurrock’s burial grounds, evidenced by the low numbers of complaints and enquiries received throughout the year.

15.2 It was a busy year for the team having been completed the following:

- Total Burials: 292
- Graves Sold: 130
- Stone Works (additional inscriptions etc.): 67
- New Lawn Memorials: 49
- New Traditional Memorials: 49
- New Cremated Remains Memorials: 17
- New Memorial Kerbs Sold: 9
- Memorial Kerb Lease Renewals: 57
- Transfer of Ownership: 106

15.3 Following consultation which took place during the summer of 2022, The Thurrock Burials and Cemeteries Strategy and associated policies were approved in January 2023. The strategy outlined the Council’s aims and

ambitions, including a new crematorium in Thurrock and areas for natural burial as well as actions to further improve the presentation of the cemeteries and ensure adequate burials space in future years.

16. Street Cleaning

- 16.1 The team seeks to ensure the Council’s land is kept clear of litter, waste and detritus as required by the Environmental Protection Act 1990, and associated DEFRA code of Practice on Litter and Refuse. This responsibility includes the cleaning of most roads in Thurrock, including footways, however, the Council is not responsible for: National Highways roads (A13 from borough boundary to A1089, and the A1089), private roads, unregistered land, private alleyways.
- 16.2 The team completed all the required monitoring inspections since the introduction of the new Land Audit Management System (LAMS). This is the system that was put in place after the service stopped using Keep Britain Tidy (KBT) to carry out inspections. As well as using this for the monitoring of street cleansing standards the service also uses LAMS to record when inspections of our parks, open spaces, and cemeteries. Whilst the inspection results showed a good result for Litter for the number of inspected streets showing as a grade A, it shows that more work is needed on detritus and weeds.

Grade	A	B	C	D
Litter	347	790	22	2
Detritus	256	819	81	5
Weeds	199	796	142	9

- 16.3 The focus continued to be on high usage areas, such as town centres and shopping parades. In addition to the street cleansing rounds, a small weekend service operates to ensure bins in the high footfall areas are emptied, and accumulations of litter removed. The team deployed a range of mechanical sweepers to cover both roads and footpaths which followed a regime to ensure all areas of the borough were regularly swept. Towards the end of the year a more mobile approach to deployment was introduced, directing staff to where they were most needed, and making greater use of vehicles to cover larger areas.
- 16.4 The service continued working with colleagues in Children’s and Adults services providing 4 work placements for SEND young people through the governments “Kickstart” Programme.

17. Graffiti and fly tip removal.

- 17.1 The teams continued to carry out large scale clearances of graffiti, working closely with the Enforcement Team to address this ongoing issue. Clearances arise because of service requests coming into the teams and through proactive site visits identifying graffiti. In addition, the team work with

enforcement Officers to remove fly tips once they have been inspected for evidence.

18. Environmental Enforcement

- 18.1 The Environmental Enforcement Team provide high visibility, uniformed patrols across the borough, delivering proactive and reactive robust enforcement support related to enviro crime and some aspects of ASB.
- 18.2 The team strive to ensure the streets are clean and a safer place for the residents and businesses of Thurrock to live, work and play. This in turn will support and encourage growth within the community and greater prosperity for the Borough.
- 18.3 The Environmental Enforcement Officers (EEOs) are accredited through the Community Safety Accreditation Scheme (CSAS) and a summary of their key objectives and priorities is provided below.

Key Objectives

- To reduce all types of environmental crime across the borough.
- Act as a visible deterrent to Crime and ASB across the borough.
- Increase public and business confidence in the local authority and Police.
- Provide a high profiled, frontline, proactive and reactive response to all aspects of environmental crime.
- To promote social responsibility, community cohesion and awareness of the issues around environmental crime.
- To conduct specialist investigations incorporating high level legal, case preparation and case management to pursue those suspected of committing environmental crime within the borough.

Key Priorities

- To proactively monitor and patrol hot spot areas, delivering robust enforcement in connection with fly tipping, littering and Enviro related offences.
 - To respond to and effectively resolve environmental issues raised by residents and elected members.
 - To identify, assess and remove abandoned vehicles promptly.
 - Promote and support the Community Safety Partnership - Section 17 of the Crime and Disorder Act 1998 states all relevant authorities which include town and parish Councils have a duty to consider the impact of all their functions and decisions on Crime and Disorder in their local area.
- 18.4 The team delivered the below operational outcomes between April 2022 to March 2023:

- Increased partnership patrols between the Council and police leading to an added high visibility, deterrent against crime and public reassurance in support of the Thurrock Community Safety Partnership (TCSP).
- Increased partnership operations to tackle graffiti, ASB and enviro-crime such as littering, including nitrous oxide canisters.
- The team have **382** prosecutions utilising the single justice process, for those who fail to discharge their liability of Fixed Penalty Notices.
- Daily distribution of intelligence between internal and external partners regarding offenders and hot spots, resulting in more cohesive and robust enforcement.
- Increased enforcement linked to domestic duty of care fixed penalty notices in accordance with DEFRA guidelines.
- Applying to the Home Secretary to adopt further powers to issue Fixed Penalty Notices for Highways offences.
- Continued operational evidence and quickly removing criminal “tags” graffiti compiling a graffiti index and working with Police to issue fixed penalty notices.
- In partnership with the Council’s contractor, removed **365** untaxed and **52** abandoned vehicles.
- Increased operational support to partners.
- Vehicle seizure for those offenders linked to fly tipping/duty of care offending.
- HGV Enforcement – tackling Anti-social parking by HGV vehicles.
- Increased Patrols by Twilight Enforcement Team to tackle Crime, ASB weekend enforcement patrols, ASB hot spot locations.
- Out of Hours Patrols in partnership with ASB and Housing officers to tackle substance abuse and ASB is hot spot areas identified across the borough.
- Reduce all types of environmental crime across the borough.
- Act as a visible deterrent to Crime and ASB across the borough.
- Increase public and business confidence in the local authority and Police.

- Provide a high profiled, frontline, proactive and reactive response to all aspects of environmental crime.
- To promote social responsibility, community cohesion and awareness of the issues around environmental crime.
- To conduct specialist investigations incorporating high level legal, case preparation and case management to pursue those suspected of committing environmental crime within the borough.

18.5 The Enforcement Team have a range of powers and will take the required and appropriate enforcement action in line with legislation, policy and procedure. this includes, community engagement, issuance of warnings, enforcement notices, Fixed Penalty Notices (FPNs) and prosecution case work.

18.6 The total FPNs issued for the periods April 22 to March 23 in comparison to 2021/22 are provided in the tables below.

Total Fixed Penalty Notices issued **April 22 – March 23**

Time frame	Enforcement Contract	In House EEO	Total FPNs
April 22 to March 23	District 4140	1024	5164
April 21 to March 22	Kingdom 4156	1007	5163

18.7 The below tables provide a summary breakdown of enforcement investigations, notices and FPNs issued between **April 22 – March 23**

Section 47 Notice (Commercial Waste Receptacle)	25
Section 34 (Domestic Duty of Care)	3
Section 34 Notice (Commercial Duty of Care)	45
Community Protection Warnings	181
Community Protection Notices	284
Abandon Vehicles investigations	737
Fly tip investigations	2525

Fixed Penalty Notices for fly tipping	198
Domestic Duty of Care	3
FPN for littering:	151
FPN for breach of CPN	235
FPN for breach of PSPO	50
FPN for Fly Posting inc A boards	262
FPN for failing to have Waste Carriers Licence	20
FPN Failing to comply with Waste receptacle notice	11
FPN failing to produce waste transfer notes	45
FPN for nuisance parking: Vehicle Sales	7
FPN for Abandoned vehicles	42
Unauthorised encampments reported	7
Fixed Penalty Notices progressed to prosecution files for littering offences in the Magistrates Court:	382
Vehicles Seized linked to fly tipping offences	5
Cllr / MP Enquiries / Follow Up	232
Stage 1 / Stage 2 Complaints	20 (non-Upheld)

18.8 The below tables provide a summary breakdown of the Abandon Vehicle removals for the period April 21-March 22 in comparison to 2022/23.

Abandoned vehicle Removals

Time frame	Vehicle removed (non compliance)	Removed by the owner following enforcement intervention	Total Removed
April 22 to March 23	52	17	69
April 21 to March 22	38	38	76

19. Community Engagement

19.1 A community engagement officer working alongside and in support of the EEOs has provided a dedicated uniformed presence promoting community engagement and acting as a deterrent against Crime and ASB.

19.2 This officer has delivered excellent results, improving both internal and external partner relationships and seeking to deliver long term sustainable solutions. The Officer works in close partnership with business owners and act as eyes and ears gathering valuable Intel and information that is shared with Police partners, resulting in increased arrests.

19.3 The below table details the returns the community engagement officer has achieved against their performance measures between April 2022 to March 2023.

Annual Returns Year 22/23	Overall Total
Members Enquiries	9
Service Requests	37
FPN's	52
Notices	30
Site visits	4035
KPI (1) Business engagement visits	2233
KPI (2) High Vis patrol in hours	950
KPI (3) Intel reports	171
KPI (4) Referrals	470
KPI (5) CCTV interactions	142
KPI (6) Community Surgeries	13
KPI (7) Community Operations	7

19.4 Partnership operations - The team have consistently delivered and led on partnership operations aimed at delivering long term sustainable solutions utilising education, enforcement and engineering solutions, including:

- **Community Engagement surgeries** – Monthly pop-up community surgeries are held the last Friday of every month.
- **External partnership working:** Enforcement visit to known Vape store following engagement Intel. A joint search was conducted and 778 prohibited vape products were seized. Total value over £8,000
- **Operation Abercrombie** - To target and reduce graffiti offences, to evidence and support quick removal of graffiti tags. To also provide Police partners with information on gang related intelligence.
- **Operation Abbey-** Removal and prosecution of fly poster and fly sticker offenders in Grays Town Centre. The Environment Enforcement Team, working in partnership with Cleansing local businesses completed the removal of fly stickers and fly posters within Grays High Street which have a negative impact on the aesthetic view of the town centre. A co-ordinated clean-up day was organised in partnership work with local business owners, Council officers, street cleansing team and the Enforcement Team. A Total 170 unlawful fly stickers found and removed on shop fronts and fly posters resulted in 45 x FPNs issued
- **Operation Afton-** Working in partnership and patrolling with street cleansing team to identify fly tipping hot spots and identify offenders. A total of 12 x Fixed Penalty notices being issued for fly tipping.

- **Operation Adel** – Working in partnership with Trading Standards Team and Essex police enforcing on unregulated container yards. A total of five stolen motorcycles being recovered. Stolen pharmaceuticals to the value of £1.5 million, 2 x Fixed Penalty Notices issued in relation to waste duty of care and 1 x Notice in relation to waste transfer notes.
- **Operation Addlestone** - To tackle the ASB, Commercial waste in Towers Road and surrounding Industrial area.
- **Operation Allott** - Working in partnership with commercial waste team to identify those businesses breaching their duty of care in relation to duty of care and waste receptacles. A total of 11 businesses were issued with enforcement notices.
- **Operation Cue** – Supporting Essex Police operation Caesar targeting garages being used to store stolen vehicles or vehicles concerned in Anti-social behaviour of quad bikes and motorcycles. A total of 6 x motorcycles were recovered
- **Operation Cape Jarvis** – Working closely with Essex farmers and Rural Engagement Team to tackle fly tipping on rural land. The Environment Enforcement Team, working in partnership with Thurrock Farmers, cleansing teams and police, targeted local fly tip hot spots in Operation Cape Jarvis. This Operation was very successful resulting in the detection of 50 x fly tipping offences, 13 littering offences and the seizure of 7 vehicles for fly tipping.
- **Operation Collie** – Working with residents and businesses and the cleansing team successfully cleared 3 alleyways of waste, including removal of 17 tonnes of waste from 1 alleyway.
- **Operation Croydon** – Community engagement team have successfully moved on 50 mopeds warned in relation to parking on the High Street.
- **Operation Fat-** Environment Enforcement Team Leading operations with Essex Police linked to illegal waste carriers, stopping, and inspecting over 89 vehicles, resulting in 26 x FPNs for noncompliance, 2 uninsured vehicle seizures, and vehicles being seized for being in un-roadworthy condition.
- **Operation Irish Lions** – The Environmental Enforcement Officers worked with Essex Police on 10 x Irish Lions Operations during April 2022 to March 2023 of car cruising in West Thurrock. A total of 44 x Fixed Penalty Notices were issued for offences linked to the breach of the Public Space Protection Order concerning car cruising anti-social behaviour. In addition, 12 x Fixed Penalty Notices relating to other offences, 5 x Community Protection Warning Notices concerning the anti-social use of Nitrous oxide Canister's.
- **Operation Canberra** -The Manor way, Stanford-le-Hope is a known hotspot location for HGV parking, but this area has not been decriminalised, which means the Parking Team is restricted from using their Civil Enforcement powers at this location. Our inability to issue PCNs on The Manor way makes it an inviting hotspot for HGV nuisance parking, littering and ASB out of hours. Alternative enforcement solutions were required and explored resulting in Operation Canberra. An enforcement initiative that successfully gathered vital evidence in support of criminal enforcement action against the nuisance HGV

parking, under Section 43 of the Anti-social Behaviour Crime and Policing Act 2014. Total Community Protection Warnings (CPW) issued = 141. Total Community Protection Notices (CPN) issued = 47. Total Fixed Penalty Notices (FPNs) issued linked to breach of CPN = 239

- **Operation Community** Working in partnership with Essex Police Towns Team to enforce the Public Space Protection Order in Grays Town Centre, parks and cemeteries. This is to deter substance abuse, street drinking, dog fouling, and associate ASB. This has resulted in 9 x Public Space Protection warning notices being issued, offensive weapons recovered. 3 x referrals to supports agencies in relation to substance abuse.

19.5 The team are part of the Community Safety Accreditation Scheme (CSAS) The CSAS devolved powers, authorised by Essex Police, enable the team to wear a high visibility and professional uniform with the CSAS logo and provide them with the following: -

- Power to issue penalty notices for disorder.
- Power to issue fixed penalty notices for cycling on a footpath.
- Power to require giving of name and address.
- Power to deal with begging.
- Power to require name and address for anti-social behaviour.
- Power to require persons aged under 18 to surrender alcohol.
- Power to seize tobacco from a person aged under 16.
- Power to issue FPN for persons believed to be causing harassment, alarm, or distress.
- Consumption of alcohol by a person under 18 or allowing such consumption.

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7 November 2023		ITEM: 5
Cleaner, Greener and Safer Overview and Scrutiny Committee		
Financial penalties for the enforcement of consumer protection legislation relevant to Letting Agents and Landlords		
Wards and communities affected: All	Key Decision: Non-Key	
Report of: Charlotte Edwards – Trading Standards Manager		
Accountable Assistant Director: Mike Dineen – Assistant Director Investigation, Enforcement and Community Protection and Safety		
Accountable Director: Claire Demmel – Director of Public Realm		
This report is Public		

Executive Summary

This report has been prepared to inform the Cleaner, Greener and Safer Overview and Scrutiny Committee about a new policy for imposing financial penalties for breaches of legislation relating to Letting Agents and Landlords including

- Tenant Fees Act 2019
- Chapter 3, Part 3 of the Consumer Rights Act 2015
- The Redress Schemes for Lettings Agency Work and Property Management Work (Requirement to Belong to a Scheme etc) (England) Order 2014
- The Client Money Protection Schemes for Property Agents (Requirement to Belong to a Scheme etc.) Regulations 2019

These penalties are new sanctions made available to local authorities by the above legislations and we are required to have a policy in place to ensure consistency in approach.

1. Recommendation(s)

- 1.1 **Cleaner Greener and Safer Overview and Scrutiny note the contents of this report.**
- 1.2 **The Committee support the financial penalties policy for the enforcement of consumer protection legislation relevant to Letting Agents and Landlords, so it can be implemented within our Enforcement Policy once agreed at Cabinet.**

2. Introduction and Background

- 2.1 The private rented sector in the housing market is second only to owner occupation in England. The rapid growth of the sector has prompted a need for property management standards. There is currently no overarching statutory regulation of the private rented sector, although letting agents and landlords are subject to consumer protection laws. There are also specific provisions for letting agents and landlords in relation to the charging of fees and membership of redress schemes.
- 2.2 The consumer protection legislation that applies to this sector is as follows;
- The Tenant Fees Act 2019 prohibits landlords and agents from charging any fees to tenants other than those permitted in the Act.
 - The Consumer Rights Act 2015 (Chapter 3 of Part 3) requires agents to display a list of relevant fees that tenants and landlords are required to pay. They must also display details of their client money protection scheme and redress membership.
 - The Client Money Protection Schemes for Property Agents (Requirement to Belong to a Scheme etc.) Regulations 2019. A “property agent” who holds client money must be a member of an approved or designated client money protection scheme.
 - The Redress Schemes for Lettings Agency Work and Property Management Work (Requirement to Belong to a Scheme etc) (England) Order 2014 requires a person who engages in lettings agency or property management work is required to be a member of a redress scheme.
- 2.3 Trading Standards have a statutory duty to enforce the legislation as the “Weights and Measures Authority” and must determine the appropriate enforcement action where breaches are identified. A breach of the legislation will usually be civil in the first instance and may result in a financial penalty. However, if a further breach is committed within five years, this will be a criminal offence.
- 2.4 Enforcement authorities are expected to develop and document their own policy on when to prosecute and when to issue a financial penalty. Decisions must be made in line with that policy.
- 2.5 This policy is therefore essential in allowing us to take effective enforcement action under the legislation. It is a significant addition to the range of tools in the Council’s existing Enforcement Policy as a means of achieving business compliance.

3. Issues, Options and Analysis of Options

- 3.1 The policy proposed reflects the approach recommended by the National Trading Standards Estate and Letting Agents Team and has been successfully implemented across England by other Local Authorities.

3.2 Traditional enforcement outcomes for consumer protection offences often result in prosecution however these legislations implement a new approach to this business sector in terms of creating civil sanctions. These newly created penalties mean that rogue agents can be effectively tackled and vulnerable consumers protected.

4. Reasons for Recommendation

4.1 If this policy is not agreed by the Committee, then Trading Standards will not be able to impose financial penalties on unscrupulous landlords and letting agents. This will be to the detriment of Thurrock Residents who very often are vulnerable due to the nature of their short lease rental agreements.

5. Consultation (including Overview and Scrutiny, if applicable)

5.1 None

6. Impact on corporate policies, priorities, performance and community impact

6.1 The work on Tenant Fees contributes to all three of Thurrock's priorities in terms of;

- People - protecting vulnerable residents from being exploited by rogue land lords and letting agents.
- Place – safeguarding communities from illegal activity
- Prosperity – ensuring Thurrock has a thriving rental sector with a level playing field.

7. Implications

7.1 Financial

Implications verified by: **Laura Last**
Senior Management Accountant

This statutory work is funded by the Trading Standards budget. There are no additional financial implications arising from this report. There will be a small element of income generation from this work which should be invested back into the service. This will be reliant on identifying offenders and bringing them to task. This will not be a consistent income stream however as the intention of the policy is to bring about compliance.

7.2 Legal

Implications verified by: **Godwin Mangse**

Interim Manager Housing & Litigation, Legal Services

The current work of the Public Protection Service of the Council is governed by the legislation detailed in the body of this report and Legal Service will advise appropriately on any identified legal implications arising thereof from this report as and when required.

Furthermore, internal policies and working instructions should be formulated to guide officers on the issuing of financial penalties, in relation to breaches of relevant housing legislation. These documents will deal with the process by which notices are issued, appeals handled and penalties collected and enforced if unpaid.

In accordance with the remit of the CGS Overview and Scrutiny Committee, Members are asked to review and scrutinise the outlined in this report.

7.3 Diversity and Equality

Implications verified by: **Rebecca Lee**
Team Manager – Community Development and Equalities

The work outlined in this report helps protect vulnerable members of the community by ensuring rogue traders are brought to task. A CEIA has been completed.

7.4 Other implications (where significant) – i.e. Staff, Health Inequalities, Sustainability, Crime and Disorder, or Impact on Looked After Children

None

8. Background papers used in preparing the report (including their location on the Council's website or identification whether any are exempt or protected by copyright):

None

9. Appendices to the report

Appendix 1 – The Tenant Fees Act Policy

Report Author:

Charlotte Edwards
Trading Standards Manager
Public Protection

Thurrock Council Policy on Financial Penalties for the enforcement of consumer protection legislation relevant to Letting Agents and Landlords

Version Control

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Author:	Rachel Tones
Owner:	Charlotte Edwards
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1.0	February 2023	Initial draft
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1 Introduction

1.1 On 1 June 2019, the Tenant Fees Act 2019 (TFA 2019), came into force, prohibiting landlords and agents from charging any fees to tenants, other than those 'permitted' by the Act. Any tenancy that was signed on or after 1 June must adhere to the new regulations.

1.2 The TFA 2019 applies to assured short-hold tenancies, student accommodation tenancies and licences to occupy housing in the private rented sector. The act only applies to landlords, agents and tenants in England.

1.3 Thurrock Council (the Council) Trading Standards has a duty to enforce the TFA 2019, and where there has been a breach of the Act and/or associated legislation, to determine the appropriate enforcement action. The following policy guidance has been issued by the Council pursuant to this duty and should be read in conjunction with our published Enforcement Policy.

1.4 In creating this policy guidance, the Council has had regard to the Tenant Fees Act 2019 Statutory Guidance for Enforcement Authorities and the National Trading Standards Guidance for Enforcement of Sales and Letting Businesses.

1.5 Guidance for tenants, landlords and letting agents explaining how the Act affects them is available here: <https://www.gov.uk/government/publications/tenant-fees-act-2019-guidance>.

2 Legal References

2.1 The TFA 2019 prohibits the charging of fees in respect of a tenancy other than those which are specifically permitted and amends other legislation applicable to Thurrock Council as follows:

- a. In respect of the duty of letting agents to publicise fees and memberships of Client Money Protection and Redress Schemes under Section 87 of the Consumer Rights Act 2015
- b. In relation to the duty placed on enforcement authorities to have regard to any guidance issued by the Secretary of State ("the SoS") relating to the enforcement of an order under S83(1) or 84(1) as per Section 85 of the Enterprise & Regulatory Reform Act 2013
- c. In relation to the meaning of 'Lead Enforcement Authority'; under Section 135 of the Housing and Planning Act 2019 (enforcement of client money protection scheme regulations).

3 Sanctions

3.1 The TFA 2019 provides that enforcement authorities may impose financial penalties of up to £30,000 depending on the breach as follows:

- a. In respect of Prohibited Payments under S1 & 2 of the TFA 2019 a financial penalty not exceeding £5,000 for a first breach.
- b. Under S12 of the TFA 2019 a second or subsequent breach within 5 years of the previous breach provides for a financial penalty not exceeding £30,000. There is also a power to prosecute in the Magistrates Court, where an unlimited fine may be imposed.

3.2 The Council will determine whether it is appropriate to impose a financial penalty or prosecute in any relevant case having due regard to our Enforcement Policy, the Tenant Fees Act 2019 Statutory Guidance for Enforcement Authorities and the National Trading Standards Guidance for Enforcement of Sales and Letting Businesses. In appropriate circumstances consideration will be given to informal action such as warning letters or advice, in an effort to secure compliance, in accordance with our Enforcement Policy.

4 Consequential Amendments brought about by the TFA 2019

4.1 Additionally, the TFA 2019 amends the legislation referred to in paragraph 1 above and which separately provides that penalties may be imposed as follows:

- a. In respect of a failure of Letting Agents to publicise their fees and alongside those fees, details of Client Money Protection and Redress Scheme membership as required by S83(3), (6) and (7) of the CRA 2015 a financial penalty not exceeding £5,000.
- b. In respect of a failure by a property agent who holds client money to belong to an approved or designated Client Money Protection (“CMP”) Scheme as required by Regulation 3 of the Client Money Protection Schemes for Property Agents (Requirement to Belong to a Scheme etc.) Regulations 2019, a financial penalty not exceeding £30,000.
- c. In respect of a failure to obtain a certificate confirming membership or display that certificate as required or publish a copy of that certificate on the relevant website (where one exists) or produce a copy of the certificate free of charge to any person reasonably requiring it as required by Regulation 4(1) of the Client Money Protection Schemes for Property Agents (Requirement to Belong to a Scheme etc.) Regulations 2019 a financial penalty not exceeding £5,000.
- d. In respect of a failure by a property agent to notify any client within 14 days of a change in the details of an underwriter to the CMP scheme or that the membership of the CMP scheme has been revoked as required by Regulation 4(2) of the Client Money Protection Schemes for Property Agents (Requirement to Belong to a Scheme etc.) Regulations 2019 a financial penalty not exceeding £5,000.

5 Determining the level of the financial penalty

5.1 In accordance with the provisions of the TFA 2019 the level of financial penalties is to be determined by the Council. Although the statutory guidance recommends factors which may be taken into account it does not go into any significant level of detail in this regard. Each of those factors will be considered as a part of the Council's decision-making process and they are:

- a. The history of compliance/non-compliance
- b. The severity of the breach
- c. Deliberate concealment of the activity and/or evidence
- d. Knowingly or recklessly supplying false or misleading evidence
- e. The intent of the landlord/agent, individual and/or corporate body
- f. The attitude of the landlord/agent
- g. The deterrent effect of a prosecution on the landlord/agent and others
- h. The extent of financial gain as a result of the breach

5.2 Although the Council has therefore a wide discretion in determining the appropriate level of financial penalty in any particular case, regard has been given to the statutory guidance when making this policy.

5.3 Appendix 1 of this policy contains the processes that the Council will use in order to determine the level of financial penalty under the TFA 2019. All stages subsequent to the issue of a Notice of Intent are subject to statutory time limits and the impact of the exercise by the Landlord or Agent of the Appeal process.

Appendix 1 – The Council’s process for determining the level of penalty to set

STEP ONE – Determining the offence category

The council will determine the breach category using only the culpability and category of harm factors below. Where an offence does not fall squarely into a category, individual factors may require a degree of weighting to make an overall assessment. The Council may also apply a discretionary factor in order to reflect consistency across England and may consider decisions in other UK jurisdictions where they contain some relevant and persuasive content.

Culpability

Very high: Where the Landlord or Agent intentionally breached, or flagrantly disregarded, the law or has/had a high public profile¹ and knew their actions were unlawful

High: Actual foresight of, or wilful blindness to, risk of a breach but risk nevertheless taken

Medium: Breach committed through act or omission which a person exercising reasonable care would not commit

Low: Breach committed with little fault, for example, because:

- significant efforts were made to address the risk although they were inadequate on the relevant occasion
- there was not warning/circumstance indicating a risk
- failings were minor and occurred as an isolated incident

Harm

The following factors relate to both actual harm and risk of harm. Dealing with a risk of harm involves consideration of both the likelihood of harm occurring and the extent of it if it does.

Category 1 – High Likelihood of Harm

- Serious adverse effect(s) in individual(s) and/or having a widespread impact due to the nature and/or scale of the Landlord’s or Agent’s business
- High risk of an adverse effect on individual(s) – including where persons are vulnerable²

Category 2 – Medium Likelihood of Harm

- Adverse effect on individual(s) (not amounting to Category 1)
- Medium risk of an adverse effect on individual(s) or low risk of serious adverse effect.

¹ Which may include any significant role in a trade or business representative organisation

² A wide definition of vulnerability will be used. See Appendix 2 for a non-exhausted list

- Tenants and/or legitimate landlords or agents substantially undermined by the conduct.
- The Council's work as a regulator is inhibited
- Tenant or prospective tenant misled

Category 3 – Low Likelihood of Harm

- Low risk of an adverse effect on actual or prospective tenants.
- Public misled but little or no risk of actual adverse effect on individual(s)

We will define harm widely and victims may suffer financial loss, damage to health or psychological distress (especially vulnerable cases). There are gradations of harm within all of these categories.

The nature of harm will depend on personal characteristics and circumstances of the victim and the assessment of harm will be an effective and important way of taking into consideration the impact of a particular crime of the victim.

In some cases, no actual harm may have resulted and the enforcement authority will be concerned with assessing the relative dangerousness of the offender's conduct; it will consider the likelihood of harm occurring and the gravity of the harm that could have resulted.

To the community

Some offences cause harm to the community at large (instead of or as well as to an individual victim) and may include economic loss, harm to public health, or interference with the administration of justice.

STEP TWO – Starting point and category range

Having determined the category that the breach falls into, the Council will refer to the following starting points to reach an appropriate level of civil penalty within the category range. The Council will then consider further adjustment within the category range for aggravating and mitigating features.

Obtaining financial information

The statutory guidance advises that local authorities should use their powers under Schedule 5 to the CRA 2015 to, as far as possible, assess a Landlord's or Agent's assets and any income (not just rental or fee income) they receive when determining an appropriate penalty. The Council will use such lawful means as are at its disposal to identify where assets might be found.

In setting a financial penalty, the Council may conclude that the Landlord or Agent is able to pay any financial penalty imposed unless the Council has obtained, or the Landlord or Agent has supplied, any financial information to the contrary. The subject of a Final Notice, or a Notice of Intent where the subject does not challenge it, will be expected to disclose to the Council such data relevant to his/her financial

position to facilitate an assessment of what that person can reasonably afford to pay. Where the Council is not satisfied that it has been given sufficient reliable information, the Council will be entitled to draw reasonable inferences as to the person's means from evidence it has received, or obtained through its own enquiries, and from all the circumstances of the case which may include the inference that the person can pay any financial penalty.

Starting points and ranges

The tables in Appendices 4-10 below give the starting points, minimum and maximum financial penalties of each harm category and level of culpability for each type of breach.

- Appendix 4 First breach in respect of a Prohibited Payment
- Appendix 5 Second & subsequent breach in respect or a Prohibited Payment
- Appendix 6 Breach of requirements to publish Fees and details of Client Money Protections and Redress Scheme memberships
- Appendix 7 Breach in respect of membership of a Client Money Protection Scheme
- Appendix 8 Brach in respect of certificates in respect of a Client Money Protection Scheme
- Appendix 9 Breach of transparency requirements in respect of a Client Money Protection Scheme

Context

Below is a list of some, but not all factual elements that provide the context of the breach and factors relating to the Landlord or Agent. The Council will identify whether any combination of these, or other relevant factors, should result in an upward or downward adjustment from the starting point. In particular, relevant recent convictions³ are likely to result in a substantial upward adjustment. In some cases, having considered these factors, it may be appropriate to move outside the identified category range which will not exceed the statutory maximum permitted in any case.

Factors increasing seriousness

Aggravating factors:

- Previous breaches of the TFA 2019
- Previous convictions, having regard to:
 - the nature of the offence to which the conviction relates and its relevance to the current breach; and,
 - the time that has elapsed since the conviction:

³ See Appendix 3 for a list of relevant convictions

Other aggravating factors may include:

- Motivated by financial gain
- Deliberate concealment of illegal nature of activity
- Established evidence of wider/community impact
- Obstruction of the investigation
- Record of poor compliance
- Refusal of advice or training or to become a member of an Accreditation scheme

Factors reducing seriousness or reflecting personal mitigation

- No previous or no relevant/recent breaches
- No previous convictions or no relevant/recent convictions
- Steps voluntarily taken to remedy problem
- High level of co-operation with the investigation, beyond that which will always be expected
- Good record of relationship with tenants
- Self-reporting, co-operation and acceptance of responsibility
- Good character and/or exemplary conduct
- Mental disorder or learning disability, where linked to the commission of the breach
- Serious medical conditions requiring urgent, intensive or long-term treatment and supported by medical evidence

STEP THREE – General principles to consider in setting a penalty

The Council will finalise the appropriate level of penalty so that it reflects the seriousness of the offence and the Council must take into account the financial circumstances of the Landlord or Agent if representations are made by the Landlord or Agent following the issue of a Notice of Intent.

The level of financial penalty should reflect the extent to which the conduct fell below the required standard. The financial penalty should meet, in a fair and proportionate way, the objectives of punishment, deterrence and the removal of gain derived through the commission of the breach; it should not be cheaper to breach than to take the appropriate precautions and a fundamental principle involved is that there should be no financial gain to the perpetrator from the commission of the breaches.

If issuing a financial penalty for more than one breach, or where the offender has already been issued with a financial penalty, the Council will consider whether the total penalties are just and proportionate to the offending behaviour and will have regard to the factors in STEP EIGHT below.

STEP FOUR – Issue Notice of Intent

The Council will issue a Notice of Intent within 6 months of the enforcement authority for having sufficient evidence that the Landlord or Agent has breached the TFA 2019. If the breach is ongoing the 6-month deadline continues until the breach ceases. A Notice of Intent can be served spontaneously.

While there are slight variations in the Statutory Requirements according to which breach is being addressed a Notice of Intent will typically contain the date of the Notice, the amount of the proposed penalty, the reason for imposing the penalty and how the recipient can make representations concerning the penalty.

Examples of Notices of Intent may be found in the National Trading Standards Guidance.

STEP FIVE – Consideration of representations and review of financial penalty where appropriate

On consideration of representations, the Council should review the penalty and, if necessary adjust the initial amount reached at STEP FOUR, and represented in the Notice of Intent, to ensure that it fulfils the general principles set out below.

Any quantifiable economic benefit(s) derived from the breach, including through avoided costs or operating savings, should normally be added to the total financial penalty arrived at in step two. Where this is not readily available, the Council may draw on information available from enforcing authorities and others about the general costs of operating within the law. Whether the penalty will have the effect of putting the offender out of business will be relevant but in some serious cases this might be an acceptable outcome.

STEP SIX – Reductions

The Council will consider any factors which indicate that a reduction in the penalty is appropriate and in so doing will have regard to the following factors relating to the wider impacts of the financial penalty on innocent third parties; such as (but not limited to):

- The impact of the financial penalty on the Landlord or Agent's ability to comply with the law or make restitution where appropriate
- The impact of the financial penalty on employment of staff, service users, customers and the local economy.

The following factors will be considered in setting the level of reduction. When deciding on any reduction in a financial penalty, consideration will be given to:

- The stage in the investigation of thereafter when the offender accepted liability
- The circumstances in which they admitted liability
- The degree of co-operation with the investigation

The maximum level of reduction in a penalty for an admission of liability will be one-third. In some circumstances there will be a reduced or no level of discount. This may occur for example where the evidence of the breach is overwhelming or there is a pattern or breaching conduct.

Any reduction should not result in a penalty which is less than the amount of gain from the commission of the breach itself.

STEP SEVEN – Additional actions

In all cases the Council must consider whether to take additional action. This may include further enforcement action itself or reference to other organisations where appropriate.

STEP EIGHT – Totality of breaching conduct

Where the offender is issued with more than one financial penalty, the Council should consider the following guidance from the definitive guideline on Offences Taken into Consideration and Totality which appears to the Council to be an appropriate reference and guide.

As the total financial penalty is inevitably cumulative the Council should determine the financial penalty for each individual breach based on the seriousness of the breach and taking into account the circumstances of the case including the financial circumstances of the Landlord or Agent so far as they are known, or appear, to the Council.

The Council should add up the financial penalties for each offence and consider if they are just and proportionate. If the aggregate total is not just and proportionate the Council should consider how to reach a just and proportionate total financial penalty. There are a number of ways in which this can be achieved.

For example:

Where a Landlord or Agent is to be penalised for two or more breaches of where there are multiple breaches of a repetitive kind, especially when committed against the same person, it will often be appropriate to impose for the most serious breach a financial penalty which reflects the totality of the conduct where this can be achieved within the maximum penalty for that breach. No separate penalty should be imposed for the other breaches. Where a Landlord or Agent is to be penalised for two or more breaches that arose out of different incidents, it will often be appropriate to impose separate financial penalties for each breach. The Council should add up the financial penalties for each breach and consider if they are just and proportionate. If the aggregate amount is not just and proportionate the Council should consider whether all of the financial penalties can be proportionately reduced. Separate financial penalties should then be imposed. Where separate financial penalties are passed, the Council must take care to ensure that there is no double-counting.

STEP NINE – Recording the decision

The officer making a decision about a financial penalty will record their decision giving reasons for coming to the amount of financial penalty that will be imposed.

Appendix 2 – Non-exhaustive list of vulnerable people

Young adults and children

Persons vulnerable by virtue of age

Persons vulnerable by virtue of disability or sensory impairment

People on a low income

Persons with a drug or alcohol addiction

Victims of domestic abuse

Children in care or otherwise vulnerable by virtue of age

People with complex health conditions

People exploited where English is not their first language

Victims of trafficking of sexual exploitation

Refugees of Asylum seekers

People at risk of harassment or eviction

People at risk of homelessness.

Appendix 3 – Non-exhaustive list of relevant offences/breaches

Housing law or landlord and tenant related offences under:

- The Public Health Acts of 1936 and 1961
- The Building Act 1984
- The Environmental Protection Act 1990
- The Town and Country Planning Act 1990
- The Prevention of Damage by Pests Act 1949
- The Protection from Eviction Act 1977
- The Local Government (Miscellaneous Provisions) Acts of 1982 and 1976
- The Housing Grants, Construction and Regeneration Act 1996
- The Local Government and Housing Act 1989
- The Housing Act 2004

Offences involving fraud

Offences in which the victim has been deprived of money, property or other benefit by misrepresentation/deception on the part of the offender including:

- Theft
- Burglary
- Fraud
- Benefit fraud (particularly where tenants are in receipt of Housing Benefit)
- Conspiracy to defraud
- Obtaining money or property by deception
- People trafficking
- Being struck off as a company director

Offences involving violence

A conviction for the offence of:

- Murder
- Manslaughter
- Arson
- Malicious wounding or grievous bodily harm
- Grievous bodily harm with intent
- Actual bodily harm
- Robbery
- Criminal damage where the intent was to intimidate or was racially aggravated
- Common assault
- Common assault which is racially aggravated
- Assault occasioning actual bodily harm
- Possession of an offensive weapon
- Possession of a firearm

Offences involving drugs

- Consideration should be given to the nature of the offence and what bearing it could have on the Landlord or Agent's business activities. The nature, quantity, purity and class of drugs should be taken into account. In addition, where an offence of possession with intent to supply is involved regard should be had to the role and importance of the subject in the supply chain.

Offences involving sexual offences

- An offence contained in Schedule 3 of the Sexual Offences Act 2003.

Unlawful discrimination

- Unlawful discrimination can include findings of an Industrial Tribunal on unlawful employment practice such as discrimination under the Disability Discrimination Act. Consideration should be given to the nature of the unlawful discrimination and what bearing it could have on the management of a licensable property.

Other offences

- Modern Slavery/Human Trafficking
- Offences by persons for the purpose of exploitation but not considered to be the primary offender (for example involvement in the recruitment, transportation, transfer, harbouring or receipt of persons) are likely to attach a lower level of culpability.

Appendix 4 – Financial Penalty in the case of a first breach in respect of Prohibited Payments

The table below gives the starting points, minimum and maximum financial penalties for each harm category and level of culpability. Where exceptional circumstances apply the Council may reduce the minimum penalties further but may not increase them above the maximum permitted of £5,000

	Starting Point (£)	Min (£)	Range Max (£)
Low culpability			
Harm category 3	1250	250	2250
Harm category 2	1500	500	2500
Harm category 1	1750	750	2720
Medium culpability			
Harm category 3	2000	1000	3000
Harm category 2	2250	1250	3250
Harm category 1	2500	1500	3500
High culpability			
Harm category 3	2750	1750	3750
Harm category 2	3000	2000	4000
Harm category 1	3250	2250	4250
Very high culpability			
Harm category 3	3500	2500	4500
Harm category 2	3750	2750	4750
Harm category 1	4000	3000	5000

Appendix 5 – Financial Penalty in the case of a second or subsequent breach in respect of Prohibited Payments within 5 years of a previous breach

The table below gives the starting points, minimum and maximum financial penalties for each harm category and the level of culpability. Where exceptional circumstances apply the Council may reduce the minimum penalties further but may not increase them above the maximum permitted of £30,000

	Starting point (£)	Min (£)	Range Max (£)
Low culpability			
Harm category 3	3500	2000	8000
Harm category 2	6500	4000	10000
Harm category 1	8500	4500	15000
Medium culpability			
Harm category 3	6500	4750	17000
Harm category 2	10500	5000	20000
Harm category 1	12500	5500	22000
High culpability			
Harm category 3	10500	5500	20000
Harm category 2	15000	6250	24000
Harm category 1	18000	7000	26000
Very high culpability			
Harm category 3	15000	7000	24000
Harm category 2	17500	7250	28000
Harm category 1	20000	7500	30000

Appendix 6 – Financial Penalty in the case of a breach in respect of the publication of Fees or details of Client Money Protection and Redress Scheme memberships (Consumer Rights Act 2015 S.83)

The table below gives the starting points, minimum and maximum financial penalties for each harm category and level of culpability. Where exceptional circumstances apply the Council may reduce the minimum penalties further but may not increase them above the maximum permitted of £5,000.

	Starting point (£)	Min (£)	Range Max (£)
Low culpability			
Harm category 3	1250	250	2250
Harm category 2	1500	500	2500
Harm category 1	1750	750	2750
Medium culpability			
Harm category 3	2000	1000	3000
Harm category 2	2250	1250	3250
Harm category 1	2500	1500	3500
High culpability			
Harm category 3	2750	1750	3750
Harm category 2	3000	2000	4000
Harm category 1	3250	2250	4250
Very high culpability			
Harm category 3	3500	2500	4500
Harm category 2	3750	2750	4750
Harm category 1	4000	3000	5000

Appendix 7 – Financial Penalty in the case of a breach in respect of a failure to obtain membership of a Client Money Protection Scheme

The table below gives the starting points, minimum and maximum financial penalties for each harm category and level of culpability. Where exceptional circumstances apply the Council may reduce the minimum penalties further but may not increase them above the maximum permitted of £30,000.

	Starting point (£)	Min (£)	Range Max (£)
Low culpability			
Harm category 3	3500	2000	8000
Harm category 2	6500	4000	10000
Harm category 1	8500	4500	15000
Medium culpability			
Harm category 3	6500	4750	17000
Harm category 2	10500	5000	20000
Harm category 1	12500	5500	22000
High culpability			
Harm category 3	10500	5500	20000
Harm category 2	15000	6250	24000
Harm category 1	18000	7000	26000
Very high culpability			
Harm category 3	15000	7000	24000
Harm category 2	17500	7250	28000
Harm category 1	20000	7500	30000

Appendix 8 – Financial Penalty in the case of a breach in respect of issues relating to certificates of evidence of Membership of a Client Money Protection Scheme

The table below gives the starting points, minimum and maximum financial penalties for each harm category and level of culpability. Where exceptional circumstances apply the Council may reduce the minimum penalties further but may not increase them above the maximum permitted level of £5,000.

	Starting point (£)	Min (£)	Range Max (£)
Low culpability			
Harm category 3	1250	250	2250
Harm category 2	1500	500	2500
Harm category 1	1750	750	2750
Medium culpability			
Harm category 3	2000	1000	3000
Harm category 2	2250	1250	3250
Harm category 1	2500	1500	3500
High culpability			
Harm category 3	2750	1750	3750
Harm category 2	3000	2000	4000
Harm category 1	3250	2250	4250
Very high culpability			
Harm category 3	3500	2500	4500
Harm category 2	3750	2750	4750
Harm category 1	4000	3000	5000

Appendix 9 – Financial Penalty in the case of a breach in respect of transparency issues relating to Membership of a Client Money Protection Scheme

The table below gives the starting points, minimum and maximum financial penalties for each harm category and level of culpability. Where exceptional circumstances apply the Council may reduce the minimum penalties further but may not increase them above the maximum permitted of £5,000.

	Starting point (£)	Min (£)	Range Max (£)
Low culpability			
Harm category 3	1250	250	2250
Harm category 2	1500	500	2500
Harm category 1	1750	750	2750
Medium culpability			
Harm category 3	2000	1000	3000
Harm category 2	2250	1250	3250
Harm category 1	2500	1500	3500
High culpability			
Harm category 3	2750	1750	3750
Harm category 2	3000	2000	4000
Harm category 1	3250	2250	4250
Very high culpability			
Harm category 3	3500	2500	4500
Harm category 2	3750	2750	4750
Harm category 1	4000	3000	5000

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7 November 2023	ITEM: 6
Cleaner, Greener and Safer Overview and Scrutiny	
Annual Status Report on Air Quality in Thurrock	
Wards and communities affected: All	Key Decision: N/A
Report of: Peter Bond, Air Quality Officer, Public Protection	
Accountable Assistant Director: Michael Dineen, Assistant Director for Counter Fraud, Enforcement, Public Protection and Community Safety	
Accountable Director: Claire Demmel, Interim Director for Public Realm	
This report is Public	

Executive Summary

As part of the Council’s obligations under Part IV of the Environment Act (2021), Members are presented with a Status Report on Air Quality (ASR) – Appendix A.1. This document provides analysis of, and commentary on, the Council’s air quality monitoring data for the 2022 calendar year as well as updates from the relevant internal departments on progress made against the Air Quality Action Plan (AQAP) over the same period.

The data shows that concentrations of nitrogen dioxide are below or well below the Air Quality Strategy (AQS) objectives for this pollutant at all monitoring stations. All but two monitoring sites are at least 10% below the AQS objectives for this pollutant. The two exceptions are the Purfleet monitoring station and the Lakeside Tesco diffusion tube. All AQS objectives are included in Appendix A.3. The five year “long-term” graphs presented in the ASR all show a slow but largely consistent downward trend in nitrogen dioxide concentrations. However, readings from 2022 break this trend with a slight increase compared with 2021. This is likely due to traffic returning after the pandemic. 2022 readings are still largely below the concentrations reported during the most recent pre-pandemic year (2019).

Particulate matter (PM₁₀) concentrations across the five-year period peaked in 2019 but, aided by the pandemic, have reduced since then. No exceedances of the AQS objectives for this pollutant were registered in 2022. Particulate matter (PM_{2.5}) concentrations have been stable across the five-year period with no exceedance of the AQS target for this pollutant.

In 2022, air quality within all of the Council’s 18 Air Quality Management Areas (AQMAs) was compliant with all AQS objectives. While the increase in nitrogen dioxide concentrations between 2021 and 2022 is noted, the increase has been less

on average within Thurrock's AQMAs compared to monitoring sites outside them. A map of AQMAs can be found in Appendix A.2.

The findings of this year's ASR have been accepted by Defra and it is recommended that the Committee note these findings.

1. Recommendation(s)

1.1 That the report be noted.

2. Introduction and Background

2.1 The ASR has been included on the agenda because it is a statutory requirement under Part IV of the Environment Act (2021).

2.2 According to this legislation the Local Authority (LA) must declare an AQMA at locations with observed or expected exceedances of one or more AQS objectives. Subsequently the LA must create an Air Quality Action Plan (AQAP) to bring air quality within the declared AQMA into compliance with the AQS objectives. An ASR must be submitted to Defra each year until the AQMA is revoked. Revocation would be considered by the secretary of state in the case of continued compliance at a level of 10% below the AQS objective for which the AQMA was declared for at least three years, excluding outlier years such as 2020.

2.3 [Previous ASRs are available via the Council's website.](#)

3. Issues, Options and Analysis of Options

3.1 The Annual Status Report (ASR) on Air Quality is a statutory report which analyses and summarises air quality data from the Council's air quality monitoring network during the last calendar year. The report also discusses the actions taken by the Council to improve air quality in its designated AQMAs during the same period.

3.2 Air pollution is associated with a number of adverse health impacts. It is recognised as a contributing factor in the onset of heart disease and cancer. Additionally, air pollution particularly affects the most vulnerable in society: children, the elderly, and those with existing heart and lung conditions. There is also a strong correlation with equalities issues because areas with poor air quality are disproportionately less affluent.

3.3 The main air pollutants of concern in Thurrock are nitrogen dioxide (NO₂) and particulate matter (PM₁₀ & PM_{2.5}); both pollutants arise predominantly from road traffic emissions. Thurrock only has AQMAs which are declared for road traffic-based emissions; there are no industrial based AQMAs in the borough. The AQMAs are all declared for exceedance of the long-term objective for NO₂ (40 micrograms per cubic metre – henceforth: µg/m³). Out of the 18 AQMAs there are currently four that are also declared for exceedance of the

short-term objective (aka. 24-hour mean objective) for PM₁₀ which is 35 permitted exceedances of >50 µg/m³ in a given year.

- 3.4 Many of the roads around which Thurrock's AQMAs are declared are major commuter routes or used for logistical purposes. There is often a large amount of traffic during peak hours and in many of these areas there is relevant public exposure, principally in the form of residential dwellings which are in relatively close proximity to these roads. A full list of the AQMAs can be found in Table 2.1 of the ASR or on the Defra UK Air website.
- 3.5 Thurrock Council operates an extensive network of 69 diffusion tube monitors, monitoring nitrogen dioxide (NO₂) concentrations on a monthly basis. Additionally, we have four automatic monitoring stations which generate near-real-time, continuous data on a variety of different pollutants. All four monitor NO₂ concentrations. TK1 in Grays, TK3 in Stanford-le-Hope and TK8 in Purfleet also monitor PM₁₀. TK3 and TK9 in Tilbury monitor for PM_{2.5}. TK1 also monitors for ozone (O₃) and sulphur dioxide (SO₂).
- 3.6 During 2022, monitoring station TK8, located within AQMA 10, and the Lakeside Tesco diffusion tube site, saw the borough's only readings within 10% of the Air Quality Strategy (AQS) objective for NO₂ with readings of 39.3 and 36.7 µg/m³ respectively.
- 3.7 Overall, NO₂ concentrations increased between 2021 and 2022. Across the NO₂ monitoring network, concentrations increased by an average of 1.7 µg/m³. The greatest increase was observed at diffusion tube site "WT" on London Rd, West Thurrock, at +5.6 µg/m³. Reported increases are likely a result of traffic returning after the COVID-19 pandemic.
- 3.8 The average increase in annual mean NO₂ concentrations across all monitoring sites within AQMAs was 1.7µg/m³ when comparing annual mean concentrations between 2021 and 2022. The average increase in all sites outside AQMAs was 1.8 µg/m³.
- 3.9 In relation to the 1-hour AQS objective for NO₂, there were no exceedances reported in 2022. Additionally, all diffusion tube sites in 2022 were below 60µg/m³, which indicates that none were likely to exceed the 1-hour mean objective.
- 3.10 2022 monitoring data confirms that there are currently no areas breaching the annual mean air quality objective for PM₁₀. There were some exceedances of the 24-hour mean objective during 2022 at all three automatic sites, however these remained well below the number of permitted exceedances per year. The maximum number of exceedances of the PM₁₀ 24-hour mean objective was jointly at TK 1 and TK 3 in 2022 with a total of 3 exceedances each out of the permitted 35 per year.
- 3.11 All monitored concentrations of PM_{2.5} over the past five years have reported below the PM_{2.5} AQS target of 25µg/m³.

4. Reasons for Recommendation

- 4.1 To ensure that the Committee is fully informed on progress towards the Council's statutory obligations on air quality management.

5. Consultation (including Overview and Scrutiny, if applicable)

- 5.1 Not applicable. No consultation was required for this report.

6. Impact on corporate policies, priorities, performance and community impact

- 6.1 None. The ASR is a regular update report. Due to the nature of the recommendation of this report, this section is deemed not applicable.

7. Implications

7.1 Financial

Implications verified by: **Rosie Hurst**
Interim Senior Management Accountant

There are no direct finance implications arising from the report.

7.2 Legal

Implications verified by: **Jayne Middleton-Albooye**
Assistant Director - Legal

This report outlines the measures the Council has taken to comply with its duties under Part IV of the Environment Act 1995 as amended by schedule 11 of the Environment Act 2021.

In accordance with the remit of the Cleaner, Greener and Safer Overview and Scrutiny Committee, Members are asked to review and scrutinise the performance of the Council in relation to the analysis of, and commentary on, the Council's air quality monitoring data for the 2022 calendar year as well as updates from the relevant internal departments on progress made against the Air Quality Action Plan (AQAP) over the same period, as set out in this report.

7.3 Diversity and Equality

Implications verified by: **Natalie Smith**

Strategic Lead: Community Development and Equalities

Whilst the annual report highlights the potential health impacts and impacts on equality and diversity, there are no direct diversity and equality implications arising from the report.

- 7.4 **Other implications** (where significant) – i.e. Staff, Health Inequalities, Sustainability, Crime and Disorder, and Impact on Looked After Children

None

8. **Background papers used in preparing the report** (including their location on the Council's website or identification whether any are exempt or protected by copyright):

- NA

9. **Appendices to the report**

- [A.1 2023 Annual Status Report on Air Quality](#)
- [A.2 Map of Thurrock AQMAs](#)
- [A.3 Air Quality Strategy](#)

Report Author:

Peter Bond

Air Quality Officer

Public Protection

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2023 Air Quality Annual Status Report (ASR)

In fulfilment of Part IV of the Environment Act 1995
Local Air Quality Management, as amended by the
Environment Act 2021

Date: June, 2023

Information	Thurrock Council Details
Local Authority Officer	Peter Bond
Department	Public Protection
Address	Thurrock Council , Civic Offices, New Road, Grays, Essex RM17 6SL
Telephone	01375 652652
E-mail	envhealthadmin@thurrock.gov.uk
Report Reference Number	ASR 2023
Date	June 2023

Executive Summary: Air Quality in Our Area

Air Quality in Thurrock Borough Council

Air pollution is associated with a number of adverse health impacts. It is recognised as a contributing factor in the onset of heart disease and cancer. Additionally, air pollution particularly affects the most vulnerable in society: children, the elderly, and those with existing heart and lung conditions. There is also often a strong correlation with equalities issues because areas with poor air quality are also often less affluent areas^{1,2}.

The mortality burden of air pollution within the UK is equivalent to 29,000 to 43,000 deaths at typical ages³, with a total estimated healthcare cost to the NHS and social care of £157 million in 2017⁴.

Thurrock currently has 18 Air Quality Management Areas (AQMAs); these are a result of traffic related pollution along busy roads. Many of these roads are the main commuter routes or used for logistical purposes. There is often a large amount of traffic during peak hours and in many of these areas there is relevant public exposure, predominantly in the form of residential dwellings which are in relatively close proximity to these roads. A full list of the AQMAs can be found in [Table 2.1](#) of this report or on the Defra UK Air website via [this web-link](#).

The main pollutants of concern in Thurrock are nitrogen dioxide (NO₂) and particulate matter (PM₁₀ & PM_{2.5}); both of these pollutants arise from road traffic emissions. Thurrock only has AQMAs which are declared for road traffic-based emissions, there are no industrial based AQMAs. The AQMAs are all declared for exceedance of the long-term objective for NO₂ (40 µg/m³). Out of the 18 AQMAs there are currently four that are also declared for PM₁₀, for the short-term objective or 24-hour mean objective of 35 permitted exceedances of >50 µg/m³.

¹ Public Health England. Air Quality: A Briefing for Directors of Public Health, 2017

² Defra. Air quality and social deprivation in the UK: an environmental inequalities analysis, 2006

³ Defra. Air quality appraisal: damage cost guidance, January 2023

⁴ Public Health England. Estimation of costs to the NHS and social care due to the health impacts of air pollution: summary report, May 2018

The 2016 Air Quality Action Plans (AQAP) along with an Air Quality & Health Strategy Document (AQHSD) have been devised to provide an approach for the council to manage air quality within its 18 AQMAs, ensure compliance with established regulatory thresholds and also prevent new AQMA's arising in the future. The document can be viewed via the Thurrock Council Website links:

- [Thurrock Air Quality](#)
- [Thurrock Air Quality and Health Strategy, including AQAP that covers all declared AQMAs](#)

The Council works in collaboration with the Environment Agency (EA) on air quality issues from industrial activities within the borough, consulting as necessary on permitting variations/applications which the EA are responsible for under the Integrated Pollution Prevention & Control Directive (IPPC). The Council also carries out its statutory duties under Local Authority integrated Pollution & Prevention Control Regime (LA-IPPC).

In 2016 the council undertook a detailed modelling assessment to re-determine the extent of NO₂ & PM₁₀ exceedances over most of the borough and including all 18 AQMA's. The report found that 8 AQMA's should be revoked for NO₂ and all four for PM₁₀ should also be revoked. However, the report was not accepted by Defra as the assessment had not followed the procedures outlined the Defra Local Air Quality Management (LAQM) Technical Guidance (TG16). Following this assessment, the Council set up 12 additional monitoring locations from 2017 using NO₂ diffusion tubes within these locations. The Council planned to monitor at these locations for at least three years and make a determination in 2020 as to whether these AQMAs can be revoked for NO₂ on the basis of the monitoring results. It should be highlighted that owing to the Covid-19 pandemic, the 2020 results are not to be used alone in determining AQMA revocations, therefore the monitoring at the new locations is ongoing.

Thurrock Council joined the AirTEXT service in 2018 which is provided by Cambridge Environmental Research Consultants (CERC). This service allows members of the public to see air pollution forecasting based on detailed dispersion modelling for the area in which they live. They can also sign up to AirTEXT pollution alerts and receive voice, email or text messages when air pollution is forecast to be moderate or higher. This service is aimed to provide people who suffer with respiratory illnesses, as well as those which suffer with heart problems, detailed information about air quality on a given day, and alert them when not to go outside. Further information can be found on the [Air Text website](#) and the [CERC website](#).

Overall, NO₂ concentrations increased slightly between 2021 and 2022 with all but three passive monitoring sites reporting an increase in annual mean concentrations. The average change was +1.9 µg/m³ across the passive monitoring network. This increase is likely a result of a partial return to pre-pandemic traffic levels.

PM₁₀ concentrations have reduced slightly, in line with previous years, between 2021 and 2022 with an average reduction of 5%. However, results should be treated with caution because the average is skewed by data from the TK8 monitoring station which saw the largest reduction of 14% but only had 63% valid data capture during the 2022 monitoring period.

In 2022, Thurrock Council monitored PM_{2.5} at two locations: TK3 and TK9 monitoring stations, in Stanford-le-Hope and Tilbury respectively. While concentrations at both sites are higher than the newly introduced air quality objective for this pollutant, they were compliant with the applicable air quality target at the time. Concentrations at both sites have remained stable over the last five years, where data is available.

There is currently one location monitoring SO₂ within the borough located at Thurrock 1, Grays. SO₂ concentrations were well below the air quality objectives in 2022, with no exceedances reported.

Actions to Improve Air Quality

Whilst air quality has improved significantly in recent decades, there are some areas where local action is needed to protect people and the environment from the effects of air pollution.

The Environmental Improvement Plan⁵ sets out actions that will drive continued improvements to air quality and to meet the new national interim and long-term PM_{2.5} targets. The National Air Quality Strategy, due to be published in 2023, will provide more information on local authorities' responsibilities to work towards these new targets and reduce PM_{2.5} in their areas. The Road to Zero⁶ details the approach to reduce exhaust emissions from road transport through a number of mechanisms; this is extremely

⁵ Defra. Environmental Improvement Plan 2023, January 2023

⁶ DfT. The Road to Zero: Next steps towards cleaner road transport and delivering our Industrial Strategy, July 2018

important given that the majority of Air Quality Management Areas (AQMAs) are designated due to elevated concentrations heavily influenced by transport emissions.

In 2016, the council, in consultation with stakeholders, produced a strategy that frames its approach to tackling poor air quality and reducing exposure to safe levels across the borough. The [Thurrock Air Quality and Health Strategy \(2016\)](#) sets out the council's overarching objectives for air quality and contains policies and actions that the council will take to improve air quality.

The actions contained in the Air Quality and Health Strategy consist of borough-wide actions and specific actions to improve air quality in prioritised AQMAs in the borough. The creation of the Congestion Task Force (CTF), which brings together stakeholders with a major stake in the strategic road network, such as Highways England, Kent County Council, Essex County Council and Thurrock Council and the Police, in collaboration to formulate and implement actions to better manage the road network following incidents at Dartford Crossing. This engagement is on-going and seeking to eliminate other pinch-points which contribute to poor air quality, such as devolving powers to enforce yellow box junctions at Junctions of the M25, which cause significant congestion. Additional measures to be implemented by the Council include investment in new technologies to help dynamically tackle congestion, limiting the impact of traffic on air quality.

The Council aims to re-evaluate its Air Quality and Health Strategy to take into consideration new opportunities and develop additional and improved policies and actions. This was planned to be developed over the 2019/20 and 20/21 financial years, however delays associated with Covid-19 have re-directed resources and this will continue to be looked into over 2024/25 with the aid of a borough-wide air quality model which is currently under development.

Conclusions and Priorities

During 2022, NO₂ concentrations were monitored across the borough by a network of 66 diffusion tube sites (including one duplicate and one triplicate site) and four automatic monitoring sites. There were no reported exceedances of the AQS Objectives for NO₂ in 2022. Once corrected for distance, only one site – the TK8 monitoring station within AQMA 10 – reported an annual mean concentration within 10% of the AQS objective.

There was an average increase in annual mean NO₂ concentrations of 7% recorded at the monitoring sites located within AQMAs when comparing annual mean concentrations at

passive monitoring locations between 2021 and 2022. This increase has likely occurred as a result of traffic returning to the borough's roads in 2022 in the aftermath of the Covid-19 pandemic. An average increase of 9% was recorded at monitoring sites outside the borough's AQMAs.

In relation to the 1-hour AQS Objective for NO₂, there was one exceedance reported in 2022. This occurred at the TK9 monitoring station in Tilbury and is well below the permitted 18x1h exceedances permitted. All diffusion tube sites in 2022 were below 60µg/m³, which indicates that an exceedance of the 1-hour mean objective is unlikely at these sites.

2022 monitoring confirms that there are currently no areas breaching the annual mean air quality objective for PM₁₀. There were some exceedances of the 24-hour mean objective in 2022 at all three automatic sites, however these remained below the number of permitted exceedances per year. The maximum number of exceedances of the PM₁₀ 24-hour mean objective was jointly at the Thurrock 1 and 3 monitoring stations in 2022 (3 exceedances out of the permitted 35 exceedances per year).

Thurrock Council currently has two automatic monitoring stations (Thurrock 3; Stanford Le-Hope and Thurrock 9; Tilbury), that monitor PM_{2.5}. All concentrations over the past five years have reported above the new PM_{2.5} air quality objective of 10µg/m³ to be met by 2040 but well below the air quality target at the time (10µg/m³).

No changes to AQMA designations are currently proposed by the Council despite repeated years of compliance with the AQS objectives for which many were declared. This is to ensure that impetus to continually improve air quality for our residents is not diluted.

Thurrock Council are aiming to conduct a detailed assessment relating to the status of all declared AQMAs across the borough, particularly with regard to the AQMAs that do not currently have monitoring sites associated with them. At the time of writing, work on this project is underway, with an expected completion date in Spring 2024.

Local Engagement and How to get Involved

The public can assist in air pollution matters by continuing to address concerns when they think there is an air quality issue in the borough by reporting it via the [Thurrock Council website](https://www.thurrock.gov.uk/report) <https://www.thurrock.gov.uk/report> or by contacting our contact centre Tel: 01375 652955. The Environmental Health Team will continue to assist and address any such concerns as necessary.

The public can keep informed on local air quality matters by accessing a wealth of information on the [Council's air quality webpage](#).

They can find out what air quality is in their region from the [London Air Quality Network \(LAQN\)](#) or from the [EssexAir website](#):

The Public can also keep informed on the latest air quality forecasting from the Defra [UK-AIR website](#).

The public can now access the latest forecasting information for air quality which uses detailed dispersion modelling to predict air quality in near real-time using the newly subscribed [AirTEXT service](#) for Thurrock.

The public can also [subscribe](#) free to an AirTEXT alert service using a free mobile app.

Local Responsibilities and Commitment

This ASR was prepared by the Air Quality Officer of Thurrock Borough Council with the support and agreement of the following officers and departments:

Navtej Tung – Highways and Transportation

Gavin Dennett – Public Protection

Peter Reynolds – Environmental Protection

This ASR has been approved by:

Gavin Dennett



Signature:

This ASR has not been signed off by a Director of Public Health.

If you have any comments on this ASR, please send them to Peter Bond at:

Thurrock Council , Civic Offices, New Road, Grays, Essex RM17 6SL

01375 652 652

envhealthadmin@thurrock.gov.uk

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1 Local Air Quality Management

This report provides an overview of air quality in Thurrock Councils district during 2022. It fulfils the requirements of Local Air Quality Management (LAQM) as set out in Part IV of the Environment Act (1995), as amended by the Environment Act (2021), and the relevant Policy and Technical Guidance documents.

The LAQM process places an obligation on all local authorities to regularly review and assess air quality in their areas, and to determine whether or not the air quality objectives are likely to be achieved. Where an exceedance is considered likely the local authority must declare an Air Quality Management Area (AQMA) and prepare an Air Quality Action Plan (AQAP) setting out the measures it intends to put in place in order to achieve and maintain the objectives and the dates by which each measure will be carried out. This Annual Status Report (ASR) is an annual requirement showing the strategies employed by Thurrock Council to improve air quality and any progress that has been made.

The statutory air quality objectives applicable to LAQM in England are presented in Table E. 1.

2 Actions to Improve Air Quality

Air Quality Management Areas

Air Quality Management Areas (AQMAs) are declared when there is an exceedance or likely exceedance of an air quality objective. After declaration, the authority should prepare an Air Quality Action Plan (AQAP) within 18 months. The AQAP should specify how air quality targets will be achieved and maintained and provide dates by which measures will be carried out.

A summary of AQMAs declared by Thurrock Council can be found in Table 2.1. The table presents a description of the 18 AQMAs that are currently designated within Thurrock Borough Council. Appendix D: Map(s) of Monitoring Locations and AQMAs provides maps of AQMAs and also the air quality monitoring locations in relation to the AQMAs. The air quality objectives pertinent to the current AQMA designations are as follows:

- NO₂ annual mean;
- PM₁₀ 24-hour mean;

Table 2.1 – Declared Air Quality Management Areas

AQMA Name	Date of Declaration	Pollutants and Air Quality Objectives	One Line Description	Is air quality in the AQMA influenced by roads controlled by Highways England?	Level of Exceedance: Declaration	Level of Exceedance: Current Year	Number of Years Compliant with Air Quality Objective	Name and Date of AQAP Publication	Web Link to AQAP
AQMA 1	2001 (Amended 2005)	NO2 Annual Mean	An area encompassing a number of properties along London Road Grays, Orsett Road & Stanley Road Grays	NO	48.8 µg/m ³ (NAS1)	27.4 µg/m ³ (LRG)	>5	Air Quality and Health Strategy (2016)	https://www.thurrock.gov.uk/air-quality/air-quality-monitoring
AQMA 2	2001 (Amended 2005)	NO2 Annual Mean	An area encompassing Residential properties along London Road South Stifford.	NO	48 µg/m ³ (LRSS)	27.1 µg/m ³ (LRSS)	4	Air Quality and Health Strategy (2016)	https://www.thurrock.gov.uk/air-quality/air-quality-monitoring
AQMA 3	2001 (Amended 2005)	NO2 Annual Mean	An area encompassing Residential properties along Hogg Lane & Elizabeth Road.	NO	49 µg/m ³ (ER)	32.6 µg/m ³ (ER)	3	Air Quality and Health Strategy (2016)	https://www.thurrock.gov.uk/air-quality/air-quality-monitoring

AQMA 4	2001 (Amended 2005)	NO2 Annual Mean	An area encompassing Residential properties along A1306 west of Chafford Hundred Visitor Centre	NO	65.5 µg/m3 (NAS2) - proxy location, within AQMA 5	31.9 µg/m3 (NAS2) - proxy location, within AQMA 5	3	Air Quality and Health Strategy (2016)	https://www.thurrock.gov.uk/air-quality/air-quality-monitoring
AQMA 5	2001 (Amended 2005)	NO2 Annual Mean	An area encompassing Residential properties along Warren Terrace A1306 & A13	NO	NO2 = 65.5 µg/m3 (NAS2)	NO2 = 31.9 µg/m3 (NAS2)	3	Air Quality and Health Strategy (2016)	https://www.thurrock.gov.uk/air-quality/air-quality-monitoring
	2001 (Amended 2005)	PM10 24 Hour Mean	An area encompassing Residential properties along Warren Terrace A1306 & A14	NO	PM10 = No Data. Exceedance was based on modelling only	New modelling work is underway at the time of writing but not yet complete	Unknown	Air Quality and Health Strategy (2016)	https://www.thurrock.gov.uk/air-quality/air-quality-monitoring
AQMA 7	2001 (Amended 2005)	NO2 Annual Mean	A Hotel (IBIS) near to M25 north of the Dartford Crossing	YES	NO2 = 52 µg/m3 (IBIS)	NO2 = 32.0 µg/m3 (IBIS)	3	Air Quality and Health Strategy (2016)	https://www.thurrock.gov.uk/air-quality/air-quality-monitoring

	2001 (Amended 2005)	PM10 24 Hour Mean	A Hotel (IBIS) near to M25 north of the Dartford Crossing	NO	PM10 = No Data. Exceedance was based on modelling only	New modelling work is underway at the time of writing but not yet complete	Unknown	Air Quality and Health Strategy (2016)	https://www.thurrock.gov.uk/air-quality/air-quality-monitoring
AQMA 8	2001 (Amended 2005)	NO2 Annual Mean	A Hotel next to Jct 31 of the M25	YES		NO2 = 28.6 µg/m3 (PIH)	>5	Air Quality and Health Strategy (2016)	https://www.thurrock.gov.uk/air-quality/air-quality-monitoring
	2001 (Amended 2005)	PM10 24 Hour Mean	A Hotel next to Jct 31 of the M26	NO	PM10 = No Data. Exceedance was based on modelling only	New modelling work is underway at the time of writing but not yet complete	Unknown	Air Quality and Health Strategy (2016)	https://www.thurrock.gov.uk/air-quality/air-quality-monitoring
AQMA 9	2001 (Amended 2005)	NO2 Annual Mean	A Hotel next to Jct 31 of the M25	YES	No Data exceedance was based on modelling only	25.1 µg/m3 (THB)	>5	Air Quality and Health Strategy (2016)	https://www.thurrock.gov.uk/air-quality/air-quality-monitoring

AQMA 10	2001 (Amended 2005)	NO2 Annual Mean	An area encompassing Residential properties along London Road Purfleet near to Jarrah Cottages	NO	69.8 µg/m ³ (TK2) automatic site	NO2 = 39.3 µg/m ³ (TK8)	1	Air Quality and Health Strategy (2016)	https://www.thurrock.gov.uk/air-quality/air-quality-monitoring
	2001 (Amended 2005)	PM10 24 Hour Mean	An area encompassing Residential properties along London Road Purfleet near to Jarrah Cottages	NO	PM10 = No Data. Exceedance was based on modelling only	New modelling work is underway at the time of writing but not yet complete	Unknown	Air Quality and Health Strategy (2016)	https://www.thurrock.gov.uk/air-quality/air-quality-monitoring
AQMA 12	2001 (Amended 2005)	NO2 Annual Mean	An area encompassing Residential properties along A1306 on the Watts Wood Estate	NO	50.5 µg/m ³ (WC)	26.3 µg/m ³ (WC)	4	Air Quality and Health Strategy (2016)	https://www.thurrock.gov.uk/air-quality/air-quality-monitoring
AQMA 13	2001 (Amended 2005)	NO2 Annual Mean	An area encompassing Residential properties along A1306 London Road Aveley Arterial Road	NO	55.2 µg/m ³ (LRAR)	30.9 µg/m ³ (LRAR)	3	Air Quality and Health Strategy (2016)	https://www.thurrock.gov.uk/air-quality/air-quality-monitoring

AQMA 15	2001 (Amended 2005)	NO2 Annual Mean	1 residential dwelling near the M25 on the edge of Irvine Gardens	YES	40 µg/m3 (GDSO)	18.7 µg/m3 (GDSO)	>5	Air Quality and Health Strategy (2016)	https://www.thurrock.gov.uk/air-quality/air-quality-monitoring
AQMA 16	2001 (Amended 2005)	NO2 Annual Mean	1 residential dwelling near the M25 off Dennis Road	YES	42.6 µg/m3 (KCNO)	18.6 µg/m3 (KCNO)	>5	Air Quality and Health Strategy (2016)	https://www.thurrock.gov.uk/air-quality/air-quality-monitoring
AQMA 21	2005	NO2 Annual Mean	A former Hotel on Stonehouse Lane	NO	44.6 µg/m3 (STON)	No monitoring within this AQMA	Unknown	Air Quality and Health Strategy (2016)	https://www.thurrock.gov.uk/air-quality/air-quality-monitoring
AQMA 23	2005	NO2 Annual Mean	An area encompassing Residential properties along London Road West Thurrock	NO	55.1 µg/m3 (WT)	28.3 µg/m3 (WT)	>5	Air Quality and Health Strategy (2016)	https://www.thurrock.gov.uk/air-quality/air-quality-monitoring

AQMA 24	2014	NO2 Annual Mean	An area encompassing Residential properties along Calcutta Road, Dock Road & St Chads Road	NO	40.5 µg/m3 (TL)	28.3 µg/m3 (TILB)	3	Action Plan for AQMA 24 - Tilbury (2016)	https://www.thurrock.gov.uk/air-quality/air-quality-monitoring
AQMA 25	2016	NO2 Annual Mean	An area encompassing Residential properties along Aveley High St & Ship Lane	NO	41 µg/m3 (AVSL)	29.9 µg/m3 (AVSL)	3	Action Plan for AQMA 25 - Aveley (2016)	https://www.thurrock.gov.uk/air-quality/air-quality-monitoring
AQMA 26	2016	NO2 Annual Mean	An area encompassing Residential properties along the Purfleet Bypass	NO	37.8 µg/m3 (PBP)	23.1 µg/m3 (PBP)	>5	Action Plan for AQMA 26 – Purfleet bypass (2016)	https://www.thurrock.gov.uk/air-quality/air-quality-monitoring

Thurrock Council confirm the information on UK-Air regarding their AQMA(s) is up to date.

Thurrock Council confirm that all current AQAPs have been submitted to Defra.

Progress and Impact of Measures to address Air Quality in Thurrock Council district

Defra's appraisal of last year's ASR concluded *the following*:

The report is well structured, detailed, and provides the information specified in the Guidance. The following comments are designed to help inform future reports:

1. Extensive Trend graphs have been provided for all monitoring data, which is commended.

2. The council is commended for their in-depth discussion of their approach to tackling PM2.5 emissions with reference Public Health Outcomes Framework to account for the health effects of PM2.5.

3. The decision of STMBC to revoke both AQMA 15 and 16 following consecutive years of compliance is welcomed. The work in progress to produce detailed assessments relating to the status of all declared AQMAs across the borough is highly encouraged.

4. The Council have provided clear and accurate mapping of the diffusion tube network, which is commended.

5. There is a minor formatting issue with the report. The title of the report is "2021 Air Quality Annual Status Report". This is incorrect and should read "2022 Air Quality Annual Status Report". Additionally, all headers and footers in the report should be updated accordingly. The council is highly encouraged to download the latest version of the Annual Status Report Template on Defra's Website (<https://laqm.defra.gov.uk/air-quality/annual-reporting/annual-status-report-templates-england-exc-london/>) and update this document accordingly.

Comment: These errors have been rectified for this year's report.

6. The Council should clarify whether they have uploaded their diffusion tube data onto the DTDES. A few of the checkboxes beneath Table B.1 have been deleted from the original template and this make it slightly confusing for the reader.

Comment: These errors have been rectified for this year's report.

7. The council is recommended to continue to review their current monitoring regime, specifically the addition of several new non-automatic monitoring sites (diffusion tubes) across the region. This is important as additional sites will help to identify whether there are other key areas of relevant exposure where there may be exceedances and the appropriate measures can be adopted accordingly.

Comment: Thurrock Council is in the process of carrying out a borough-wide air quality modelling exercise which will help inform the siting of potential new monitors, both passive and continuous.

8. The Council have provided evidence of progress against the AQAP measures. They could also include the and funding status for each measure to improve air quality in TC. The AQAP was published in 2016. The Council intends re-evaluate its Air Quality and Health Strategy, which contains the overarching Air Quality Action Plan to take into consideration new opportunities and develop additional and improved policies and actions over the next reporting year with a target date for completion of Autumn 2023.

Comments: Table 2.2 has been corrected for this year. Additionally, due to unforeseen delays in the provision of our air quality model, delivery of the new AQAP has been delayed with an expected date for completion of Spring 2025.

Thurrock Council has taken forward a number of direct measures during the current reporting year of 2022 in pursuit of improving local air quality. Details of all measures completed, in progress or planned are set out in Table 2.2. 30 measures are included within Table 2.2, with the type of measure and the progress Thurrock Council have made during the reporting year of 2022 presented. Where there have been, or continue to be, barriers restricting the implementation of the measure, these are also presented within Table 2.2.

More detail on these measures can be found in the Air Quality Action Plan which sits within Thurrock's Air Quality and Health Strategy. Key completed measures are:

- Action 7: Personalised Travel Planning
- Action 24: Improve traffic signalling at traffic light junction within AQMA 13
- Action 26: HGV weight restriction in AQMAs 1 & 2
- Action 29: Air Quality Working Group

Thurrock Council expects the following measures to be completed over the course of the next reporting year:

- Action 21: Freight Quality Partnership expansion
- Action 30: Borough-wide air quality modelling exercise

Thurrock Council's priorities for the coming year are to ensure delivery of these proposed action measures, and review post implementation whether they have delivered noticeable improvements in air quality, if not then additional measures may be required in due course.

Thurrock Council worked to implement these measures in partnership with the following stakeholders during 2022:

- Neighbouring local authorities;
- National Highways;
- Environment Agency;
- Defra;
- Port Health Authority.

The principal challenges and barriers to implementation that Thurrock Council anticipates facing are challenges in identifying funding sources, and lack of resources to plan and implement measures.

Progress on the measures which may have rolled over from previous years has been slower than expected due to challenges in securing identified funding resources from external partners. Additionally, due to the increasing demands on Council resources, there has been the risk of some schemes slipping in previous years. The proposed review of the Air Quality and Health Strategy will help improve the focus on schemes to address air quality, by developing new actions and policies, and set in place a formal process for progressing these actions.

Table 2.2 – Progress on Measures to Improve Air Quality

Measure No.	Measure	Category	Classification	Year Measure Introduced in AQAP	Estimated / Actual Completion Date	Organisations Involved	Funding Source	Defra AQ Grant Funding	Funding Status	Estimated Cost of Measure	Measure Status	Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments / Barriers to Implementation
1	Public Awareness Raising & Education	Public Information	via the Internet	Ongoing	Ongoing	Env Protection Team/ Highways & Public Health	Env Protection Team/ Highways & Public Health	NO	Partially Funded		Planning	N/A	N/A	The council operates its own website as well as participating in the Essex Air site which is currently being updated to provide more comprehensive and accessible information for the public.	To Inform the Public of the state of Air Quality dissemination of air quality reports and download of AQ data from Thurrock Council website/ LAQN, EssexAir & Defra
2	Smarter Choices-Work Place Travel Planning : Action to road vehicle emissions	Promoting Travel Alternatives	Workplace Travel Planning	2012/13	Ongoing	Strategic Planning	Strategic Planning	NO	Funded		Planning	<1%	N/A	The process of encouraging modal shift is at the heart of policy. The council is developing a new Transport Strategy and Vision which further promotes sustainable transport and modal shift. The council continues to promote travel plans in education, residential and employment settings. Additional walking and cycling infrastructure continues to be planned to support more walking and cycling trips through the development of a new Local Cycling and Walking Implementation Plan.	Encourage modal shift (13 organisations supported since beginning of Local Sustainable Transport Fund (LSTF))
3	Action to road vehicle emissions	Promoting Travel Alternatives	Promotion of cycling	Ongoing	Ongoing	Highways / Strategic Planning	Highways / Strategic Planning	NO	Partially Funded		Implementation	<1%	N/A	The council continues to promote alternative modes of travel, and encourage	Encourage modal shift

Measure No.	Measure	Category	Classification	Year Measure Introduced in AQAP	Estimated / Actual Completion Date	Organisations Involved	Funding Source	Defra AQ Grant Funding	Funding Status	Estimated Cost of Measure	Measure Status	Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments / Barriers to Implementation	
															modal shift. The development of new cycle infrastructure across the borough progresses with the development of an LCWIP, and provision of low cost access to cycles through the ForwardMotion cycle hub. The completion of a cycle route on Calcutta Road is in progress and works of the route in Brennan Road - Tilbury continues.	
4	Action to road vehicle emissions	Promoting Travel Alternatives	School Travel Plans	2004	Complete	Highways / Strategic Planning	Highways / Strategic Planning	NO	Partially Funded		Implementation	<1%	N/A	The council continues to promote school travel plans, with dedicated resource in 2022/23. The borough achieved its first Platinum rated school, and increased the number of schools with accreditation. Next year, the council is looking to re-establish its walking buses.	Encourage modal shift	
5	Action to road vehicle emissions	Promoting Travel Alternatives	Promotion of walking	Ongoing	Ongoing	Highways / Strategic Planning	Highways / Strategic Planning	NO	Funded		Implementation	<1%	N/A	The wayfinding programme has come to an end, though some schemes are being finalised to help promote walking and cycling. A scheme was also installed in Orsett Heath Park.	Encourage modal shift	
6	Action to road vehicle emissions Public	Promoting Travel Alternatives	Promote use of rail and inland waterways	Ongoing	Ongoing	Highways / Strategic Planning	Highways / Strategic Planning	NO	Not Funded		Aborted	<1%	N/A	Not progressed	Encourage modal shift	

Measure No.	Measure	Category	Classification	Year Measure Introduced in AQAP	Estimated / Actual Completion Date	Organisations Involved	Funding Source	Defra AQ Grant Funding	Funding Status	Estimated Cost of Measure	Measure Status	Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments / Barriers to Implementation
	Transport (Metrorail)														
7	Action to road vehicle emissions	Promoting Travel Alternatives	Personalised Travel Planning	2010/11	2015/16	Highways / Strategic Planning	Highways / Strategic Planning	NO	Funded		Completed	<1%	N/A	Programme has completed and not progressed further	Encourage modal shift
8	Action to road vehicle emissions	Promoting Travel Alternatives	Intensive active travel campaign & infrastructure	2010/11	Ongoing	Highways / Strategic Planning	Highways / Strategic Planning	NO	Partially Funded		Planning	<1%	N/A	The council has a sustainable travel brand - shared with Southend Borough Council and Essex County Council - ForwardMotion which is used to promote active and sustainable travel, and supporting materials are being refreshed including the website.	Encourage modal shift
9	Action to road vehicle emissions	Transport Planning and Infrastructure	Cycle network	Ongoing	Ongoing	Highways / Strategic Planning	Highways / Strategic Planning	NO	Partially Funded		Planning	<1%	N/A	The cycle network is increasing with completion of the Dock Road/Calcutta Road cycle scheme, and commencement of the Brennan Road scheme. Consultations on other cycle schemes are ongoing. Aim is to have a traffic free cycle scheme from North Stifford to Stanford-le-Hope.	Encourage modal shift
10	Action to road vehicle emissions	Transport Planning and Infrastructure	Public transport improvements- interchanges stations and services	Ongoing	Ongoing	Highways / Strategic Planning	Highways / Strategic Planning	NO	Partially Funded		Implementation	<1%	N/A	The council has an ongoing shelter replacement programme and makes enhancements to existing infrastructure. The council is looking to replace the final bus shelter at Grays bus	Encourage modal shift

Measure No.	Measure	Category	Classification	Year Measure Introduced in AQAP	Estimated / Actual Completion Date	Organisations Involved	Funding Source	Defra AQ Grant Funding	Funding Status	Estimated Cost of Measure	Measure Status	Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments / Barriers to Implementation
														station to complete the renewal project at this site.	
11	Action to road vehicle emissions	Transport Planning and Infrastructure	Bus route improvements	Ongoing	Ongoing	Highways / Strategic Planning	Highways / Strategic Planning	NO	Not Funded		Planning	<1%	N/A	Due to significant changes in the Thurrock bus market, this has not been progressed. Thurrock Council continues to monitor its Bus Service Improvement Plan and look to adopt its Enhanced Partnership.	Encourage modal shift
12	LAPC Inspections, of local industry	Environmental Permits	Other	1990	Ongoing	Environmental Protection team	Environmental Protection team	NO	Funded	< £10k	Implementation	Effects not quantifiable, but probably limits local component of background pollution	N/A	LAPPC work is ongoing and part of our normal regulatory work.	Prevention of Pollution & Nuisance
13	Action to road vehicle emissions (116 drivers trained by SAFED up to March 2013)	Vehicle Fleet Efficiency	Driver training and ECO driving aids	2010/11	2014/15	Highways / Strategic Planning	Highways / Strategic Planning	NO	Not Funded		Aborted	<1%	N/A	No longer being implemented	Improve HGV driving efficiency to improve vehicle emissions
14	Action to road vehicle emissions (ECO Stars Freight Accreditation Scheme, 42 businesses currently have accreditation from the scheme)	Vehicle Fleet Efficiency	Fleet efficiency and recognition schemes	2010/11	2014/15	Highways / Strategic Planning	Highways / Strategic Planning	NO	Not Funded		Aborted	<1%	N/A	No longer being implemented	Improve HGV driving efficiency to improve vehicle emissions (funding available until March 2015)
15	Enforcement of local Taxi licencing	Promoting Low Emission Transport	Taxi Licencing conditions	Ongoing	Ongoing	Licencing	Licencing	NO	Funded		Implementation	<1%	N/A	Ongoing	Ensure that Road vehicles are road worthy and EU compliant vehicles
16	Provision of Electric vehicle car charging points around the borough	Promoting Low Emission Transport	Procurring alternative Refuelling infrastructure to promote Low Emission Vehicles, EV	2009	Ongoing	Highways / Strategic Planning	Highways / Strategic Planning	NO	Not Funded		Planning	<1%	N/A	Thurrock has a contract with EV charging supplier, and looking to seek additional funding to	Alternative fuelled vehicles

Measure No.	Measure	Category	Classification	Year Measure Introduced in AQAP	Estimated / Actual Completion Date	Organisations Involved	Funding Source	Defra AQ Grant Funding	Funding Status	Estimated Cost of Measure	Measure Status	Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments / Barriers to Implementation
			recharging, Gas fuel recharging											increase capacity. Hydrogen fuelling is being explored within the Thames Freeport bid.	
17	Council Introduced Home working / flexible working hours	Promoting Travel Alternatives	Encourage / Facilitate home-working	2014	Ongoing	TBC	TBC	NO	Not Funded		Implementation	N/A	N/A	Ongoing	To reduce and save money on unnecessary vehicle journeys
18	Introduction of Hybrid Buses into the fleet	Alternatives to private vehicle use	Other	Ongoing	Ongoing	Highways / Strategic Planning	Highways / Strategic Planning	NO	Funded		Implementation	<1%	N/A	Except for a very small number of buses, Thurrock has a clean bus fleet. Buses operated by First Essex Buses run hybrid vehicles while nearly all Ensign Buses are Euro 6 compliant. Only buses operated by Nibs and some school operators may not Euro 6.	Switch from Diesel to less polluting alternatives
19	Cycle Parking for AQMA 5	Transport Planning and Infrastructure	Other	2013/2014	Completed	Highways / Strategic Planning	Highways / Strategic Planning	NO	Funded		Implementation	<1%	N/A	A parking strategy has been adopted where cycle parking is a formal requirement of all new developments for both short and long-term stays.	Increase capacity for cycle network
20	Local Sustainable Transport Fund (LSTF) Improvement of Transport infrastructure (Boroughwide) Initiative	Transport Planning and Infrastructure	Other	2010/2014	Completed	Highways / Strategic Planning	Highways / Strategic Planning	NO	Not Funded		Aborted	<1%	N/A	No longer being implemented	Improvement of Transport Infrastructure
21	Freight Quality Partnership (FQP) Expansion of FQP (as of 2014 were 45 members in the FQP in Thurrock (AQMA 23)	Freight and Delivery Management	Freight Partnerships for city centre deliveries	2010/11	2015/16	Highways / Strategic Planning	Highways / Strategic Planning	NO	Not Funded		Implementation	<1%	N/A	The Thurrock Freight, Logistics and Transporting Partnership was reformed, but has not met in a number of years.	Partnership with local freight and logistic industry to provide discussion platform around freight issues.

Measure No.	Measure	Category	Classification	Year Measure Introduced in AQAP	Estimated / Actual Completion Date	Organisations Involved	Funding Source	Defra AQ Grant Funding	Funding Status	Estimated Cost of Measure	Measure Status	Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments / Barriers to Implementation
22	Pollution absorbent paint barrier (AQMA 13)	Transport Planning and Infrastructure	Other	2013	Complete	Environmental Protection Team /Highways / Strategic Planning	Environmental Protection Team /Highways / Strategic Planning	NO	Not Funded		Aborted	1-2%	Monitor NO2 diffusion tube results, see if there is an improvement	This action is no longer being pursued due to a lack of evidence of the efficacy of such a barrier.	Experimental mitigation measure to attempt to reduce NO2 pollution within AQMA 13
23	Public Transport - Eco driver training	Transport Planning and Infrastructure	Public transport improvements- interchanges stations and services	2014	ongoing	Highways / Strategic Planning	Highways / Strategic Planning	NO	Not Funded		Aborted	<1%	N/A	No longer being implemented	Improve driver efficiency in the bus fleet (limited application only 16 drivers trained, Ensign bus fleet operators)
24	Improve traffic signalling at traffic light junction within (AQMA 13)	Traffic Management	Other	2013	2013	Highways / Strategic Planning	Highways / Strategic Planning	NO	Funded		Completed	<1%	N/A	Completed	Improve flow of stationary traffic for smoother driving, hence attempt to lower emissions
25	SCOOT/ UTMC (AQMA 1 & AQMA 5)	Traffic Management	UTC, Congestion management, traffic reduction	2014	2014	Highways / Strategic Planning	Highways / Strategic Planning	NO	Funded		Completed	<1%	N/A	Completed	
26	HGV weight restriction (AQMA 1, 2)	Traffic Management	Other	2013	2013 / 2014	Highways / Strategic Planning	Highways / Strategic Planning	NO	Funded		Completed	<1%	N/A	Completed	Divert HGVs away from AQMAs along Devonshire road, to alleviate London Road from HGVs & Congestion
27	Improve Bus / Rail interchange (AQMA 5)	Transport Planning and Infrastructure	Public transport improvements- interchanges stations and services	Ongoing	Ongoing	Highways / Strategic Planning	Highways / Strategic Planning	NO	Partially Funded		Implementation	<1%	N/A	Ongoing programme to improve bus stops	Improve accessibility of public transport :Completed scheme, but will make future improvements as part of the Masterplan for Thurrock
28	Road layout review - future bus priority measures (AQMA 23)	Transport Planning and Infrastructure	Other	Unknown	TBC	Highways / Strategic Planning	Highways / Strategic Planning	NO	Not Funded		Aborted			Not implemented	
29	Air Quality Officer Working Group	Policy Guidance and Development Control	Air Quality Planning and Policy Guidance	2014/15	2015/16	Environmental Protection Team	Environmental Protection Team	NO	Not Funded	< £10k	Completed	n/a	n/a	Air Quality Officer is now in post and the first working group meeting was held on 20/04/22	To coordinate action between council departments (Health, Transport & Environment) and determine focus areas/initiatives

Measure No.	Measure	Category	Classification	Year Measure Introduced in AQAP	Estimated / Actual Completion Date	Organisations Involved	Funding Source	Defra AQ Grant Funding	Funding Status	Estimated Cost of Measure	Measure Status	Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments / Barriers to Implementation
30	Air Quality Study	Policy Guidance and Development Control	Air Quality Planning and Policy Guidance	2014/15	2015/16	Highways / Strategic Planning	Highways / Strategic Planning	NO	Funded	£10k - 50k	Implementation	n/a	n/a	Work with a consultant is now underway on developing a borough-wide air quality model	To investigate improvement options in AQMA 3, 4 and 5.

PM_{2.5} – Local Authority Approach to Reducing Emissions and/or Concentrations

As detailed in Policy Guidance LAQM.PG22 (Chapter 8), local authorities are expected to work towards reducing emissions and/or concentrations of PM_{2.5} (particulate matter with an aerodynamic diameter of 2.5µm or less). There is clear evidence that PM_{2.5} has a significant impact on human health, including premature mortality, allergic reactions, and cardiovascular diseases.

The dominant sources of PM_{2.5} in Thurrock include road transport, industry, and construction. Almost all actions within the Air Quality Action plan are designed to tackle PM_{2.5} in addition to other pollutants.

Thurrock Council is taking the following measures to address PM_{2.5}:

The Council has published an integrated Health and Air Quality Strategy to renew its approach to addressing poor air quality and reduce exposure across its area. The focus of the air quality policies and actions are targeted at exceedances of NO₂ in individual AQMAs, however it is acknowledged that many of the interventions proposed will also have beneficial reductions in PM_{2.5} concentrations. The following measures are examples of interventions proposed to also address PM_{2.5} (see Table 2.2 for full list of interventions proposed):

- Land Use Planning (no increase): Policies focusing on avoiding exacerbating existing AQMAs such as car free developments and promoting sustainable transport.
- HGV Traffic Management (10.0+ µg/m³): Introduction of weight restrictions/enforcement to discourage HGVs
- Engine Switch-off Zones (3.0+ µg/m³): Traffic orders and publicity to reduce idling at level crossings e.tc
- Speed limit reduction (5.0+ µg/m³): Localised traffic enforcement and speed reductions
- Clean Air Zone (15.0 µg/m³): Traffic enforcement/management to prevent or charge high polluting vehicles for using certain roads.

Thurrock Council currently undertakes PM_{2.5} monitoring at two sites, Thurrock 3; Stanford-Le-Hope, and Thurrock 9; Tilbury. PM₁₀ monitoring is also undertaken in the district and can therefore be used to estimate PM_{2.5} concentrations at these locations, as recommended in box 7.7 of LAQM.TG(22). The estimated PM_{2.5} concentration in 2022 at

the automatic monitoring sites Thurrock 1 and Thurrock 8 were $12.1\mu\text{g}/\text{m}^3$ and $14.2\mu\text{g}/\text{m}^3$ respectively. These concentrations are above the new $\text{PM}_{2.5}$ air quality objective of $10\mu\text{g}/\text{m}^3$ to be met by 2040.

The Council also has several Smoke Control Areas, in order to prevent any use of unauthorised domestic heating appliances and fuel substances within residential buildings within these areas. The Council's Environmental Protection Team have new powers to issue FPN's for [Smoke control area enforcement](#) and requirements set out in the Clean Air Act 1993 as amended by the Environment Act 2021. Details on Thurrock Smoke Control Areas can be provided via address Air.Quality@thurrock.gov.uk Additional information on Smoke Control Areas i.e. registered appliances & fuels etc. can be found on the [UK GOV website](#).

The current Defra background maps for Thurrock Council (these can be found online on the [UK Air Website](#)) show that all background concentrations of $\text{PM}_{2.5}$ are around the annual mean air quality objective for $\text{PM}_{2.5}$. The highest concentration is predicted to be $12.2\mu\text{g}/\text{m}^3$ in 2022 within the 1 x 1km grid square both with the centroid grid reference of 556500, 177500. This point is located at Purfleet docks, to the West of the railway line. The closest AQMA to this point is AQMA 10 which has been declared for exceedance of the NO_2 annual mean and PM_{10} 24-hour mean.

The [Public Health Outcomes Framework data tool](#) compiled by Public Health England quantifies the mortality burden of $\text{PM}_{2.5}$ within England on a county and local authority scale (latest available data: 2021). The 2021 fraction of mortality attributable to $\text{PM}_{2.5}$ pollution in Thurrock is 6.0%. This is above both the fractions reported for the East of England region which is 5.5% and the fraction across England which is 5.1%.

3 Air Quality Monitoring Data and Comparison with Air Quality Objectives and National Compliance

This section sets out the monitoring undertaken within 2022 by Thurrock Council and how it compares with the relevant air quality objectives. In addition, monitoring results are presented for a five-year period between 2018 and 2022 to allow monitoring trends to be identified and discussed.

Summary of Monitoring Undertaken

3.1.1 Automatic Monitoring Sites

Thurrock Council undertook automatic (continuous) monitoring at 4 sites during 2022. Table A. 1 in Appendix A shows the details of the automatic monitoring sites. The [LondonAir Webpage](#) presents automatic monitoring results for Thurrock Council, with automatic monitoring results also available through the UK-Air website.

Maps showing the location of the monitoring sites are provided in Appendix D. Further details on how the monitors are calibrated and how the data has been adjusted are included in Appendix C.

3.1.2 Non-Automatic Monitoring Sites

Thurrock Council undertook non- automatic (i.e. passive) monitoring of NO₂ at 66 sites during 2022. Table A. 2 in Appendix A presents the details of the non-automatic sites.

Maps showing the location of the monitoring sites are provided in Appendix D. Further details on Quality Assurance/Quality Control (QA/QC) for the diffusion tubes, including bias adjustments and any other adjustments applied (e.g. annualisation and/or distance correction), are included in Appendix C.

Individual Pollutants

The air quality monitoring results presented in this section are, where relevant, adjusted for bias, annualisation (where the annual mean data capture is below 75% and greater

than 25%), and distance correction. Further details on adjustments are provided in Appendix C.

3.1.3 Nitrogen Dioxide (NO₂)

Table A. 3 and Table A. 4 in Appendix A compare the ratified and adjusted monitored NO₂ annual mean concentrations for the past five years with the air quality objective of 40µg/m³. Note that the concentration data presented represents the concentration at the location of the monitoring site, following the application of bias adjustment and annualisation, as required (i.e. the values are exclusive of any consideration to fall-off with distance adjustment).

For diffusion tubes, the full 2022 dataset of monthly mean values is provided in Appendix B. Note that the concentration data presented in Table B. 1 includes distance corrected values, only where relevant.

Table A. 5 in Appendix A compares the ratified continuous monitored NO₂ hourly mean concentrations for the past five years with the air quality objective of 200µg/m³, not to be exceeded more than 18 times per year.

In 2022, the NO₂ monitoring network detected no exceedances of the annual mean limit for this pollutant. Only two sites recorded annual means within 10% of the 40µg/m³ limit. These were TK8 with a mean concentration of 39.1 µg/m³ and diffusion tube LT at 36.7 µg/m³. TK8 is within AQMA 10. LT is not within or close to an AQMA. All NO₂ monitoring data from continuous monitors was ratified by the Environmental Research Group. No changes to existing AQMAs or declaration of new AQMAs are proposed in light of these results.

Figure A. 1 to Figure A. 6 show trends in annual mean NO₂ concentration over the last five years. Notably, there is a clear increase at a majority of monitoring sites between 2021 and 2022 after a period of many years of steady reductions. This trend is visible at sites both within and outside the borough's AQMAs. It is likely that this is a result of traffic levels rebounding in the aftermath of the Covid-19 pandemic.

Further analysis of inter-annual trends when comparing the change within AQMAs and outside them reveals that, on average, NO₂ annual means at monitoring sites outside AQMAs dropped by 13% between 2020 and 2021 but then increased by 9% between 2021 and 2022. This change was broadly reflected within the borough's AQMAs with a 13% drop between 2020 and 2021, followed by a 7% rise between 2021 and 2022.

3.1.4 Particulate Matter (PM₁₀)

Table A. 6 in Appendix A: Monitoring Results compares the ratified and adjusted monitored PM₁₀ annual mean concentrations for the past five years with the air quality objective of 40µg/m³. Figure A. 8 shows that PM₁₀ concentrations have been in slow but steady decline over the last five years.

Figure A. 9 in Appendix A compares the ratified continuous monitored PM₁₀ daily mean concentrations for the past five years with the air quality objective of 50µg/m³, not to be exceeded more than 35 times per year.

All PM₁₀ monitoring sites were compliant with both the annual and 24h mean limit values in 2022. All PM₁₀ data has been ratified by the Environmental Research group. No changes to existing AQMAs or declaration of new AQMAs are proposed in light of these results.

3.1.5 Particulate Matter (PM_{2.5})

Table A. 8 in Appendix A presents the ratified and adjusted monitored PM_{2.5} annual mean concentrations for the past five years.

PM_{2.5} was monitored at two sites in Thurrock during 2022. Both sites were compliant with the Air Quality Strategy target of the time for this pollutant. Figure A. 10 shows that PM_{2.5} concentrations in Thurrock have been stable over the last five years with little change. This is likely to be because the majority of PM_{2.5} in Thurrock is “background” and this pollutant can travel for thousands of kilometers.

All PM_{2.5} data is ratified. Thurrock Council has recently added another PM_{2.5} monitoring site and data from this year will be reported in next year’s Annual Status Report.

3.1.6 Sulphur Dioxide (SO₂)

Table A. 9 in Appendix A compares the ratified continuous monitored SO₂ concentrations for 2022 with the air quality objectives for SO₂. Thurrock Council monitors SO₂ at one site. This site showed no exceedances of the 15 minute, 1 hour or 24h mean limit values for this pollutant during the reporting year.

Appendix A: Monitoring Results

Table A. 1 – Details of Automatic Monitoring Sites

Site ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	In AQMA? Which AQMA?	Monitoring Technique	Distance to Relevant Exposure (m) ⁽¹⁾	Distance to kerb of nearest road (m) ⁽²⁾	Inlet Height (m)
Thurrock 1 (TK1)	Thurrock, Grays AURN	Urban Background	561066	177894	NO2, PM10, PM2.5, O3, SO2	No	Chemiluminescent, BAM 1020, UV absorption, UV fluorescence	38	N/A	3.5
Thurrock 8 (TK8)	Purfleet, London Road	Roadside	556701	177937	NO2, PM10	AQMA 10	Chemiluminescent, BAM 1020	2.6	2	1.5
Thurrock 3 (TK3)	Stanford-le-Hope, Manorway	Roadside	569358	182736	NO2, PM10, PM2.5	No	Chemiluminescent, BAM 1020, BAM 1020	3	22	2.8
Thurrock 9 (TK9)	Dock Road Tilbury	Roadside	563489	176497	NO2, PM2.5	AQMA 24	Chemiluminescent, BAM 1020	5.7	5.5	1.6

Notes:

(1) 0m if the monitoring site is at a location of exposure (e.g. installed on the façade of a residential property).

(2) N/A if not applicable

Table A. 2 – Details of Non-Automatic Monitoring Sites

Diffusion Tube ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	In AQMA? Which AQMA?	Distance to Relevant Exposure (m) ⁽¹⁾	Distance to kerb of nearest road (m) ⁽²⁾	Tube Co-located with a Continuous Analyser?	Tube Height (m)
B	Bulphan (RB)	Rural	563855	184772	NO2	No	0.0	0.0		2.0
CR	Cromwell Road Grays From January 2001 (I)	Industrial	561572	178154	NO2	1	0.0	0.5		2.0
ER	Elizabeth Road (R)	Roadside	560954	179535	NO2	3	2.5	0.5		2.0
GDSO	Gatehope Drive (UB)	Urban Background	557595	181060	NO2	15	23.0	105.0		1.3
HL	Hogg Lane (R)	Roadside	561108	178922	NO2	No	27.5	1.2		2.0
HR	Howard Road (R)	Roadside	559118	179462	NO2	5	0.0	29.0		1.5
IBIS	Ibis Hotel (UB)	Urban Background	557570	177789	NO2	7	50.0	52.0		2.0
JC	Jarrah Cottages (R)	Roadside	556701	177937	NO2	10	0.0	2.6	Yes	1.5
KCNO	Kemps Cottage (UB)	Urban Background	558148	183532	NO2	16	10.0	57.0		2.0
LRAR	London Road Arterial Road (R)	Roadside	555301	179438	NO2	13	15.5	0.5		1.5
LRG	London Road Grays (R)	Roadside	560624	177811	NO2	1	4.8	2.5		2.0
LRSS	London Road South Stifford (R)	Roadside	559785	177910	NO2	2	4.0	3.5		2.0
LT	Lakeside Tesco Roundabout (R)	Roadside	557981	178700	NO2	No	48.0	1.0		2.0
ML, MM, MR	Manorway Monitoring Station	Roadside	569357	182737	NO2	No	22.0	3.0	Yes	2.8

Diffusion Tube ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	In AQMA? Which AQMA?	Distance to Relevant Exposure (m) ⁽¹⁾	Distance to kerb of nearest road (m) ⁽²⁾	Tube Co-located with a Continuous Analyser?	Tube Height (m)
PKSL	Park Road (R)	Roadside	567781	182400	NO2	No	24.0	9.0		2.0
PRS	Purfleet Rail Station (R)	Roadside	555389	178145	NO2	No	0.0	1.5		2.0
PS	Poison Store AURN Site (UB)	Urban Background	561066	177894	NO2	No	0.0	38.0	Yes	3.5
SL	Stanford Library (UB)	Urban Background	568501	182459	NO2	No	7.0	0.0		2.0
SRG	Stanley Road Grays (R)	Roadside	561685	177833	NO2	1	2.5	5.0		2.0
TL	Calcutta Road Tilbury (R)	Roadside	563867	176293	NO2	24	6.0	0.5		2.0
WC	Watts Crescent (R)	Roadside	556314	178765	NO2	12	32.0	2.0		2.0
WES	William Edwards School (R)	Roadside	561958	180967	NO2	No	38.0	0.0		2.0
WT	London Road W Thurrock (R)	Roadside	558483	177678	NO2	23	10.0	4.0		1.5
NAS1	Queensgate Centre Grays (R)	Roadside	561469	178063	NO2	1	0.0	5.0		2.0
NAS2	A1306 (R) From Jan 2001	Roadside	559720	179630	NO2	5	20.0	4.5		2.0
NAS3	Chestnut Avenue Grays (UB)	Urban Background	561830	179878	NO2	No	8.0	0.0		1.5
TILA	North Dock Road (R)	Roadside	563498	176483	NO2	24	14.0	2.5		2.0
TILB	Dock Road Broadway interstecion (R)	Roadside	563645	176348	NO2	24	9.0	2.5		2.0
TILC	St Andrews Road (R)	Roadside	563600	176321	NO2	No	0.0	2.5		1.5

Diffusion Tube ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	In AQMA? Which AQMA?	Distance to Relevant Exposure (m) ⁽¹⁾	Distance to kerb of nearest road (m) ⁽²⁾	Tube Co-located with a Continuous Analyser?	Tube Height (m)
TILD	Calcutta Road between Malta & Bermuda Road (R)	Roadside	563995	176291	NO2	24	6.0	0.5		2.0
TILE	Northside Calcutta Road (R)	Roadside	563870	176305	NO2	24	8.0	2.0		2.0
FRC	Francisco Close (I)	Industrial	559136	179084	NO2	No	10.0	17.0		2.0
LRARN	London Road Arterial Road (North) (I)	Industrial	555286	179501	NO2	13	0.5	19.5		2.0
LRARS	London Road Arterial Road (South) (I)	Industrial	555357	179362	NO2	No	40.0	15.0		1.0
PBP	Purfleet By-pass (R)	Roadside	556257	178438	NO2	26	5.5	9.5		1.5
PBPA	Purfleet By-pass A (R)	Roadside	556221	178461	NO2	No	3.2	9.5		1.5
LYD	Lydden (I)	Industrial	560057	179873	NO2	No	26.0	18.0		2.0
AVSL	Aveley Ship Lane (R)	Roadside	556713	180167	NO2	25	1.0	2.0		2.0
AVHS	Aveley High Street (R)	Roadside	556661	180180	NO2	25	6.5	0.8		2.0
SOAA	South Ockendon Arisdale Avenue	Roadside	558785	182323	NO2	No	6.0	7.0		2.0
TSR	Tilbury Sydney Road (UB)	Urban Background	564122	176152	NO2	No	0.0	0.0		2.0
DR	Devonshire Road (R)	Roadside	560279	178944	NO2	No	10.5	6.0		1.5

Diffusion Tube ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	In AQMA? Which AQMA?	Distance to Relevant Exposure (m) ⁽¹⁾	Distance to kerb of nearest road (m) ⁽²⁾	Tube Co-located with a Continuous Analyser?	Tube Height (m)
LRARMN	London Road Arterial Road (Mid North) (I)	Industrial	555299	179453	NO2	13	0.0	8.0		2.0
LRARMS	London Road Arterial Road (Mid South) (I)	Industrial	555329	179397	NO2	13	9.0	7.0		2.0
JRP	Joslin Road Purfleet (UB)	Urban Background	556384	178001	NO2	No	13.0	0.0		2.0
MRS	Manor Rd School (UB)	Urban Background	562413	177747	NO2	No	0.0	1.5		2.0
MTV	St Mary The Virgin Church (UB)	Urban Background	562615	177774	NO2	No	4.0	56.0		2.0
ACHL	Armada Court / Hogg Lane (façade) (R)	Roadside	561093	178974	NO2	3	9.0	8.0		1.5
CC	(Catherine Close) footpath (façade) (I)	Industrial	560770	179866	NO2	No	32.0	20.0		1.5
ERFA	Elizabeth Rd (façade) site A (R)	Roadside	560962	179527	NO2	3	32.0	8.2		1.5
ERFB	Elizabeth Rd (façade) site B (R)	Roadside	560963	179558	NO2	No	0.5	8.0		1.5
ERTM	Elizabeth Rd / Treaclemine R'bout (façade) (R)	Roadside	560965	179796	NO2	No	0.5	8.5		1.5
NC	Nutberry Close (façade) (I)	Industrial	561077	179912	NO2	No	6.6	19.5		1.5

Diffusion Tube ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	In AQMA? Which AQMA?	Distance to Relevant Exposure (m) ⁽¹⁾	Distance to kerb of nearest road (m) ⁽²⁾	Tube Co-located with a Continuous Analyser?	Tube Height (m)
HD	Hawkins Drive (façade) (R)	Roadside	560003	179694	NO2	5	8.4	9.0		1.5
GRPL	Grifon Rd / Pilgrims Lane R'bout (façade) (I)	Industrial	559551	179547	NO2	5	5.6	19.5		1.5
PIH	Premier Inn Hotel WT (R)	Roadside	557299	178802	NO2	8	6.6	21.0		1.5
WCF	Watts Crescent (façade) (R)	Roadside	556290	178749	NO2	12	7.5	17.0		1.5
THA	Thurrock Hotel (façade south facing) site A (I)	Industrial	557386	179065	NO2	9	0.0	78.0		1.5
THB	Thurrock Hotel (façade east facing) site B (I)	Industrial	557437	179099	NO2	9	0.0	39.0		1.5
SCR LTC	Stifford Clays Road (LTC) (UB)	Urban Background	562383	181157	NO2	No	29.0	55.5		1.5
BSA LTC	Baker Street (A) (North) (I)	Industrial	563486	181070	NO2	No	9.0	1.5		1.5
BSB LTC	Baker Street (B) (South) (I)	Industrial	563574	180770	NO2	No	7.2	1.3		1.5
HR LTC	Heath Road (I)	Industrial	563785	180157	NO2	No	6.5	0.9		1.5
SR LTC	Station Road (I)	Industrial	567351	177555	NO2	No	0.0	1.5		1.5
TTS LTC	Treetops School (UB)	Urban Background	563828	179597	NO2	No	0.0	38.0		1.5
TK9A, TK9B	Tilbury Dock Road Thurrock 9	Roadside	563489	176497	NO2	24	5.7	5.5	Yes	1.5

Notes:

(1) 0m if the monitoring site is at a location of exposure (e.g. installed on the façade of a residential property).

(2) N/A if not applicable.

Table A. 3 – Annual Mean NO₂ Monitoring Results: Automatic Monitoring (µg/m³)

Site ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) ⁽¹⁾	Valid Data Capture 2022 (%) ⁽²⁾	2018	2019	2020	2021	2022
Thurrock 1	561066	177894	Urban Background	99.0	99.0	24.8	23.4	19.3	20.6	19.1
Thurrock 3	569358	182736	Roadside	94.3	94.3	27.6	25.3	21.2	22.1	21.7
Thurrock 8	556701	177932	Roadside	95.5	95.5	51.6	47.7	41.6	41.9	39.3
Thurrock 9	563489	176497	Roadside	98.4	98.4	N/A	N/A	N/A(3)	29.1	29.2

Annualisation has been conducted where data capture is <75% and >25% in line with LAQM.TG22.

Reported concentrations are those at the location of the monitoring site (annualised, as required), i.e. prior to any fall-off with distance correction.

Notes:

The annual mean concentrations are presented as µg/m³.

Exceedances of the NO₂ annual mean objective of 40µg/m³ are shown in **bold**.

All means have been “annualised” as per LAQM.TG22 if valid data capture for the full calendar year is less than 75%. See Appendix C for details.

Concentrations are those at the location of monitoring and not those following any fall-off with distance adjustment.

(1) Data capture for the monitoring period, in cases where monitoring was only carried out for part of the year.

(2) Data capture for the full calendar year (e.g. if monitoring was carried out for 6 months, the maximum data capture for the full calendar year is 50%).

Table A. 4 – Annual Mean NO₂ Monitoring Results: Non-Automatic Monitoring (µg/m³)

Diffusion Tube ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) ⁽¹⁾	Valid Data Capture 2022 (%) ⁽²⁾	2018	2019	2020	2021	2022
B	563855	184772	Rural	100.0	100.0	15.2	14.6	11.9	9.5	12.3
CR	561572	178154	Industrial	100.0	100.0	30.9	33.0	24.0	22.2	21.7
ER	560954	179535	Roadside	100.0	100.0	49.8	48.8	38.1	30.5	32.6
GDSO	557595	181060	Urban Background	90.4	90.4	25.3	25.7	19.2	16.8	18.7
HL	561108	178922	Roadside	100.0	100.0	33.7	31.8	24.6	22.0	23.3
HR	559118	179462	Roadside	100.0	100.0	30.3	27.7	22.2	20.7	21.2
IBIS	557570	177789	Urban Background	100.0	100.0	45.3	47.0	37.4	28.9	32.0
JC	556701	177937	Roadside	100.0	100.0	49.5	46.6	37.4	32.1	35.1
KCNO	558148	183532	Urban Background	100.0	100.0	29.4	29.3	21.9	17.7	18.6
LRAR	555301	179438	Roadside	100.0	100.0	51.2	50.1	36.7	30.8	30.9
LRG	560624	177811	Roadside	100.0	100.0	36.2	36.7	26.4	25.6	27.4
LRSS	559785	177910	Roadside	100.0	100.0	39.2	39.0	24.3	26.1	27.1
LT	557981	178700	Roadside	90.4	90.4	54.7	52.0	39.9	34.1	36.7
ML, MM, MR	569357	182737	Roadside	100.0	100.0	28.5	26.5	21.6	18.9	20.6
PKSL	567781	182400	Roadside	100.0	100.0	29.4	26.0	20.7	18.1	19.7
PRS	555389	178145	Roadside	92.3	92.3	34.4	32.0	22.6	19.4	23.5
PS	561066	177894	Urban Background	92.3	92.3	25.4	24.9	18.8	18.0	19.4
SL	568501	182459	Urban Background	100.0	100.0	26.2	25.5	19.5	17.8	18.7
SRG	561685	177833	Roadside	76.9	76.9	29.6	30.6	23.0	21.4	25.1
TL	563867	176293	Roadside	100.0	100.0	32.9	34.8	28.0	23.8	24.7
WC	556314	178765	Roadside	76.9	76.9	41.1	39.1	29.7	24.8	26.3
WES	561958	180967	Roadside	100.0	100.0	29.5	26.6	20.3	16.8	18.6
WT	558483	177678	Roadside	100.0	100.0	38.2	35.5	27.5	22.6	28.3
NAS1	561469	178063	Roadside	82.7	82.7	32.9	31.0	23.6	21.7	23.4
NAS2	559720	179630	Roadside	82.7	82.7	51.3	49.9	37.6	29.3	31.9

Diffusion Tube ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) ⁽¹⁾	Valid Data Capture 2022 (%) ⁽²⁾	2018	2019	2020	2021	2022
NAS3	561830	179878	Urban Background	73.1	73.1	23.9	24.8	18.8	15.8	18.4
TILA	563498	176483	Roadside	92.3	92.3	38.0	39.8	31.1	23.4	25.7
TILB	563645	176348	Roadside	92.3	92.3	42.4	41.2	32.8	26.8	28.3
TILC	563600	176321	Roadside	100.0	100.0	37.8	33.3	28.2	22.5	25.2
TILD	563995	176291	Roadside	63.5	63.5	35.0	35.1	31.3	25.3	22.4
TILE	563870	176305	Roadside	100.0	100.0	33.4	35.2	31.7	22.8	25.5
FRC	559136	179084	Industrial	100.0	100.0	30.6	31.0	23.9	20.6	22.5
LRARN	555286	179501	Industrial	100.0	100.0	31.4	33.0	24.1	22.0	23.8
LRARS	555357	179362	Industrial	100.0	100.0	25.8	26.4	19.8	17.7	21.6
PBP	556257	178438	Roadside	92.3	92.3	33.1	31.0	24.1	20.3	23.1
PBPA	556221	178461	Roadside	92.3	92.3	33.1	30.7	23.8	21.6	24.3
LYD	560057	179873	Industrial	82.7	82.7	29.9	26.7	22.1	18.3	18.7
AVSL	556713	180167	Roadside	100.0	100.0	40.7	45.0	32.5	26.8	29.9
AVHS	556661	180180	Roadside	100.0	100.0	35.6	35.1	26.5	23.5	27.2
SOAA	558785	182323	Roadside	100.0	100.0	32.5	29.2	21.0	19.8	20.9
TSR	564122	176152	Urban Background	100.0	100.0	26.8	28.5	24.2	20.3	20.9
DR	560279	178944	Roadside	100.0	100.0	26.5	27.9	21.0	17.3	19.5
LRARMN	555299	179453	Industrial	100.0	100.0	39.6	36.7	26.6	23.9	26.1
LRARMS	555329	179397	Industrial	92.3	92.3	37.5	34.3	25.4	23.7	24.4
JRP	556384	178001	Urban Background	73.1	73.1	26.4	24.1	18.1	16.3	21.7
MRS	562413	177747	Urban Background	84.6	84.6		23.5	19.5	17.0	20.0
MTV	562615	177774	Urban Background	100.0	100.0		21.5	17.5	14.8	16.1
ACHL	561093	178974	Roadside	100.0	100.0	32.7	35.3	27.7	22.1	24.1
CC	560770	179866	Industrial	100.0	100.0	25.6	26.0	20.0	18.2	18.7
ERFA	560962	179527	Roadside	100.0	100.0	32.5	32.5	23.8	19.2	21.3
ERFB	560963	179558	Roadside	100.0	100.0	31.4	32.2	25.8	20.3	23.1
ERTM	560965	179796	Roadside	100.0	100.0	37.5	37.1	26.1	24.4	27.1
NC	561077	179912	Industrial	100.0	100.0	33.8	34.5	28.7	22.8	25.5
HD	560003	179694	Roadside	100.0	100.0	32.7	31.5	25.5	21.8	24.2

Diffusion Tube ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) ⁽¹⁾	Valid Data Capture 2022 (%) ⁽²⁾	2018	2019	2020	2021	2022
GRPL	559551	179547	Industrial	100.0	100.0	32.5	31.0	24.4	22.0	22.9
PIH	557299	178802	Roadside	92.3	92.3	35.1	30.7	24.1	31.9	28.6
WCF	556290	178749	Roadside	82.7	82.7	32.7	32.6	24.4	24.8	27.0
THA	557386	179065	Industrial	100.0	100.0	34.3	29.7	24.0	19.8	22.9
THB	557437	179099	Industrial	92.3	92.3	35.7	31.8	24.4	21.0	25.1
SCR LTC	562383	181157	Urban Background	100.0	100.0	32.4	30.1	22.3	17.6	20.3
BSA LTC	563486	181070	Industrial	100.0	100.0	24.0	25.9	18.9	17.0	18.3
BSB LTC	563574	180770	Industrial	100.0	100.0	30.2	28.3	23.5	20.1	20.9
HR LTC	563785	180157	Industrial	100.0	100.0	27.3	29.0	22.1	17.7	18.6
SR LTC	567351	177555	Industrial	67.3	67.3	18.7	17.1	15.4	13.1	12.2
TTS LTC	563828	179597	Urban Background	100.0	100.0	23.7	21.5	19.2	16.0	17.5
TK9A, TK9B	563489	176497	Roadside	82.7	82.7			29.4	23.1	25.9

Annualisation has been conducted where data capture is <75% and >25% in line with LAQM.TG22.

Diffusion tube data has been bias adjusted.

Reported concentrations are those at the location of the monitoring site (bias adjusted and annualised, as required), i.e. prior to any fall-off with distance correction.

Notes:

The annual mean concentrations are presented as $\mu\text{g}/\text{m}^3$.

Exceedances of the NO₂ annual mean objective of $40\mu\text{g}/\text{m}^3$ are shown in **bold**.

NO₂ annual means exceeding $60\mu\text{g}/\text{m}^3$, indicating a potential exceedance of the NO₂ 1-hour mean objective are shown in **bold and underlined**.

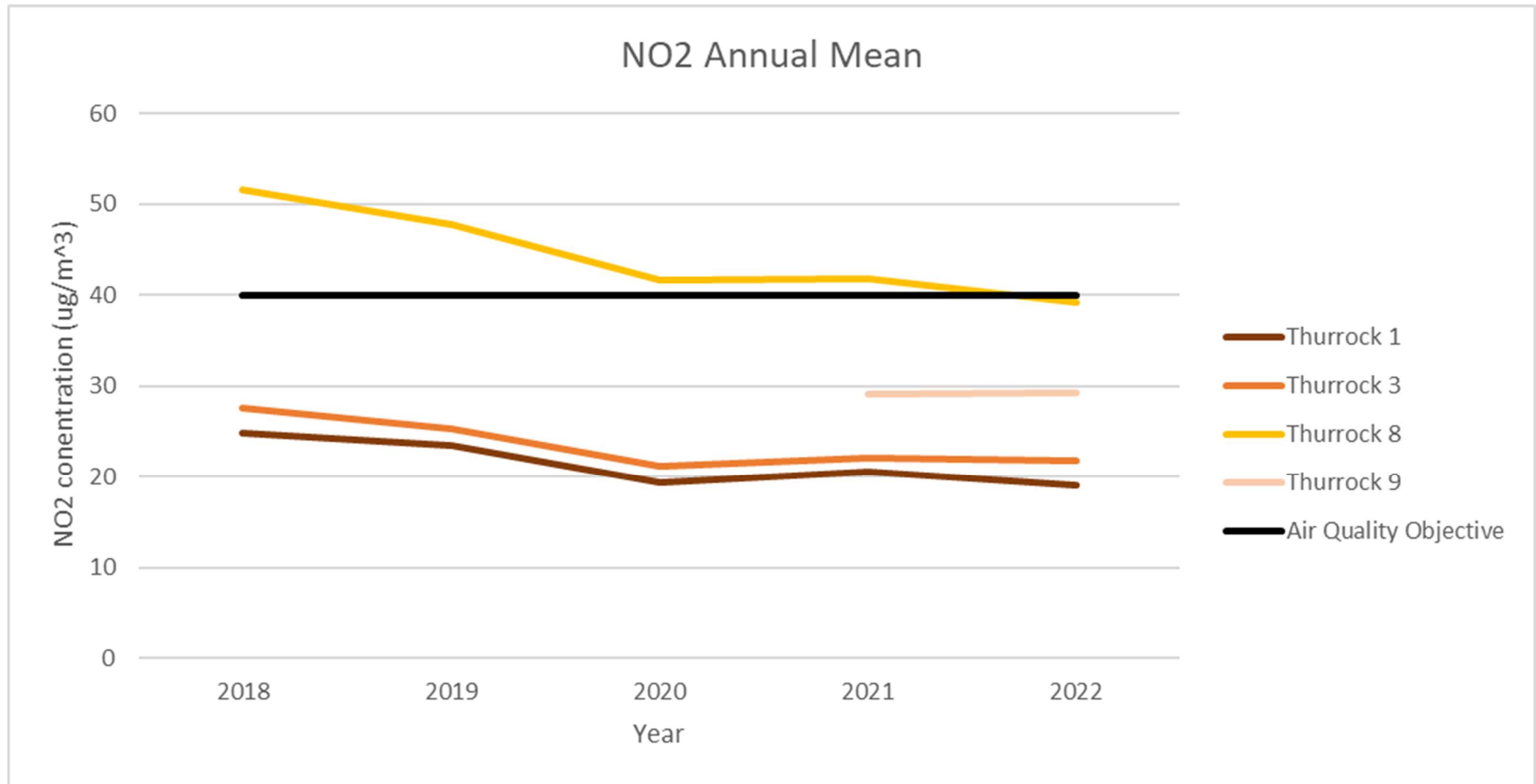
Means for diffusion tubes have been corrected for bias. All means have been “annualised” as per LAQM.TG22 if valid data capture for the full calendar year is less than 75%. See Appendix C for details.

Concentrations are those at the location of monitoring and not those following any fall-off with distance adjustment.

(1) Data capture for the monitoring period, in cases where monitoring was only carried out for part of the year.

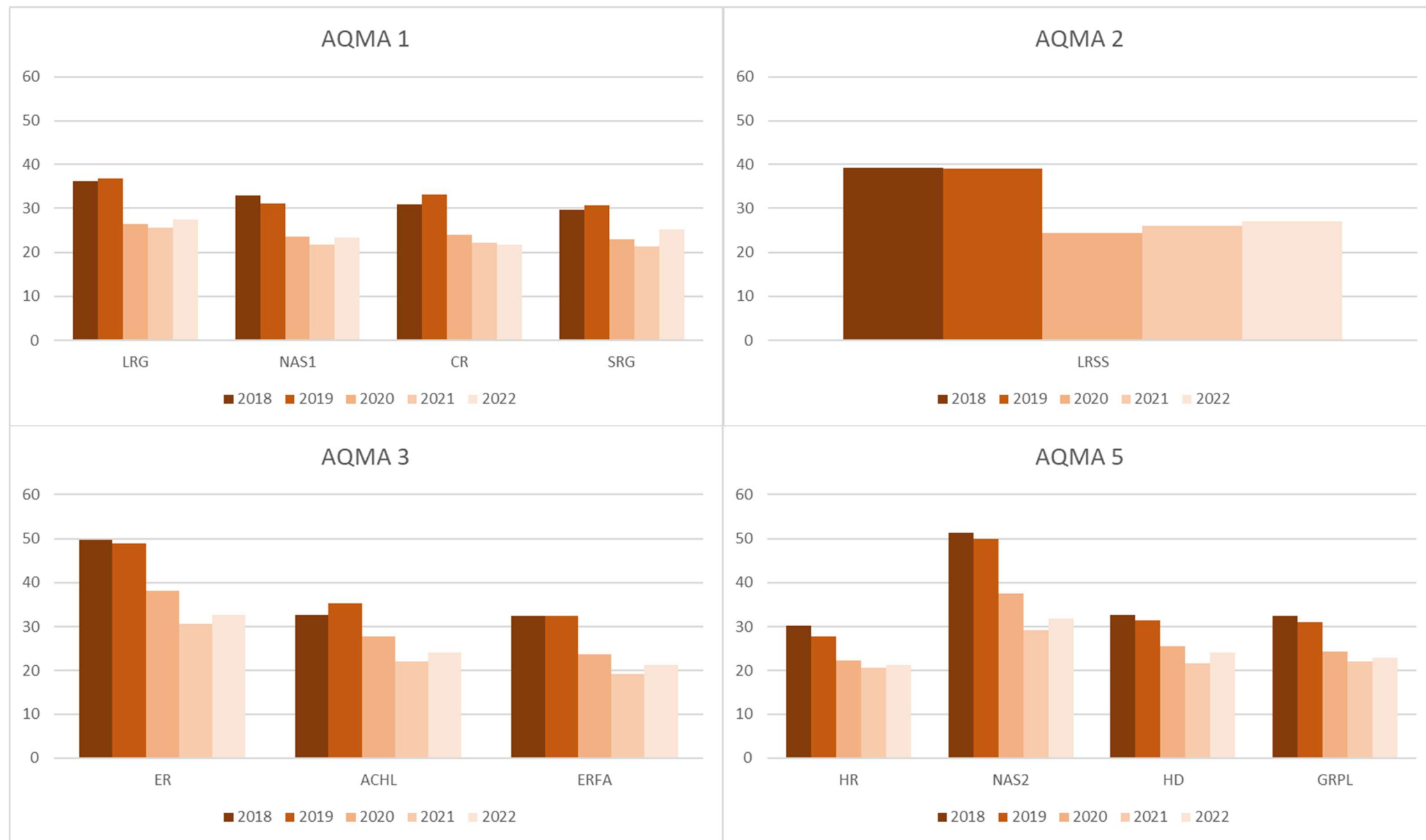
(2) Data capture for the full calendar year (e.g. if monitoring was carried out for 6 months, the maximum data capture for the full calendar year is 50%).

Figure A. 1 – Trends in Annual Mean NO₂ Concentration



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Figure A. 2 – Trends in Annual Mean NO₂ Concentrations – Passive Monitoring Sites in AQMA 1, 2, 3 and 5



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Figure A. 3 – Trends in Annual Mean NO₂ Concentrations – Passive Monitoring Sites in AQMA 7, 8, 9 and 10

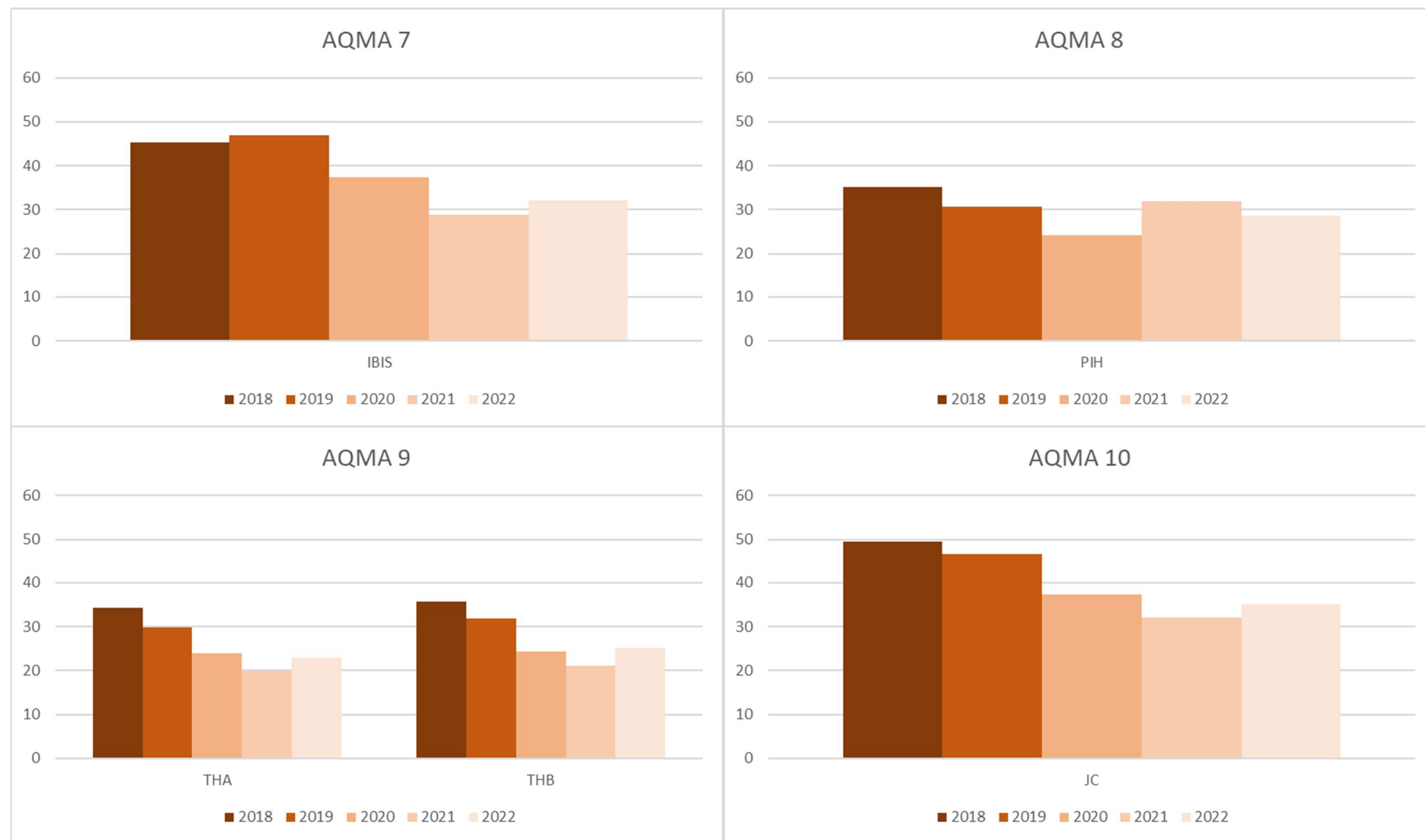
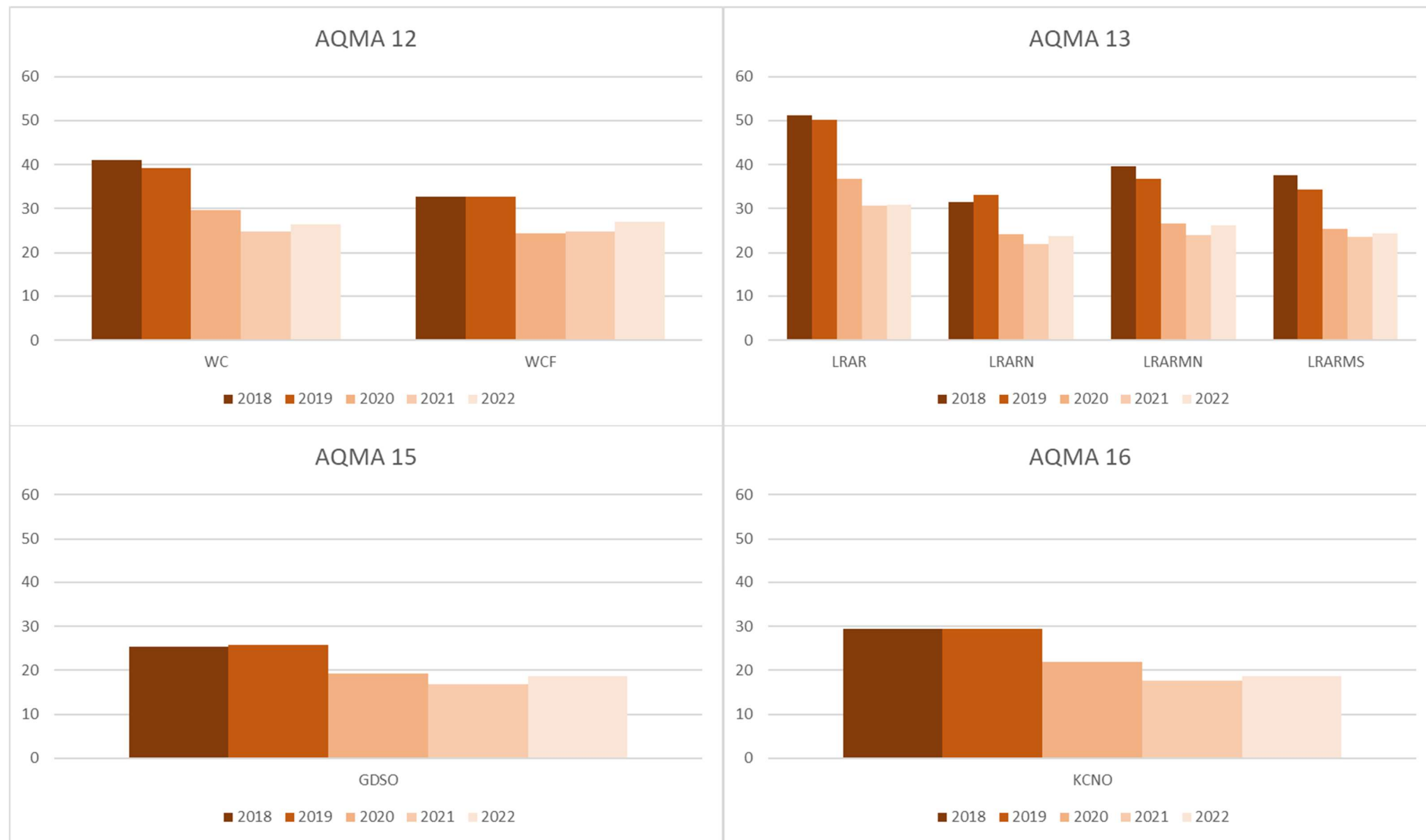


Figure A. 4 – Trends in Annual Mean NO₂ Concentrations – Passive Monitoring Sites in AQMA 12, 13, 15 and 16



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Figure A. 5 – Trends in Annual Mean NO₂ Concentrations – Passive Monitoring Sites in AQMA 23, 24, 25 and 26

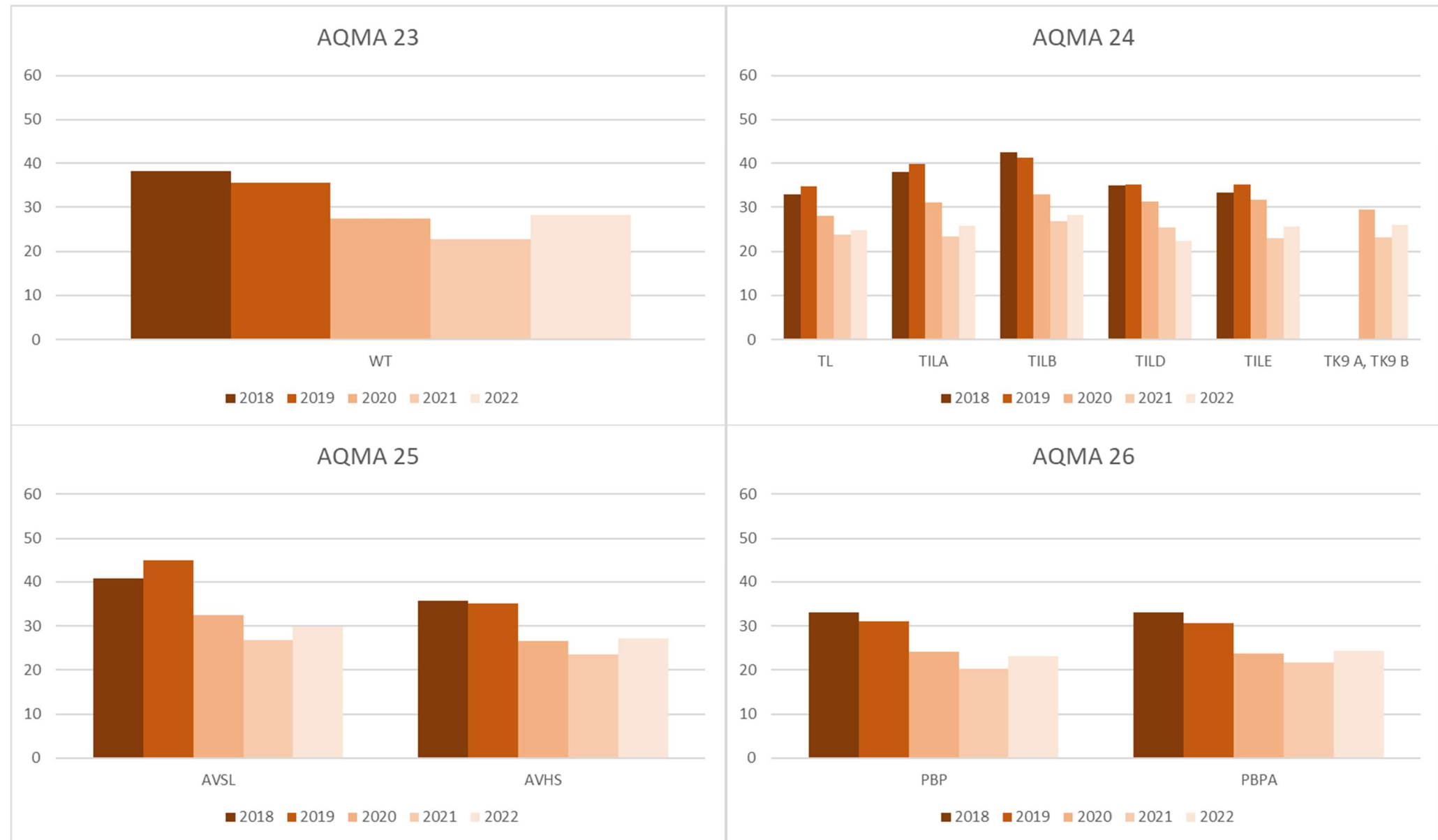


Figure A. 6 – Trends in Annual Mean NO₂ Concentrations – Passive Monitoring Sites outside AQMAs

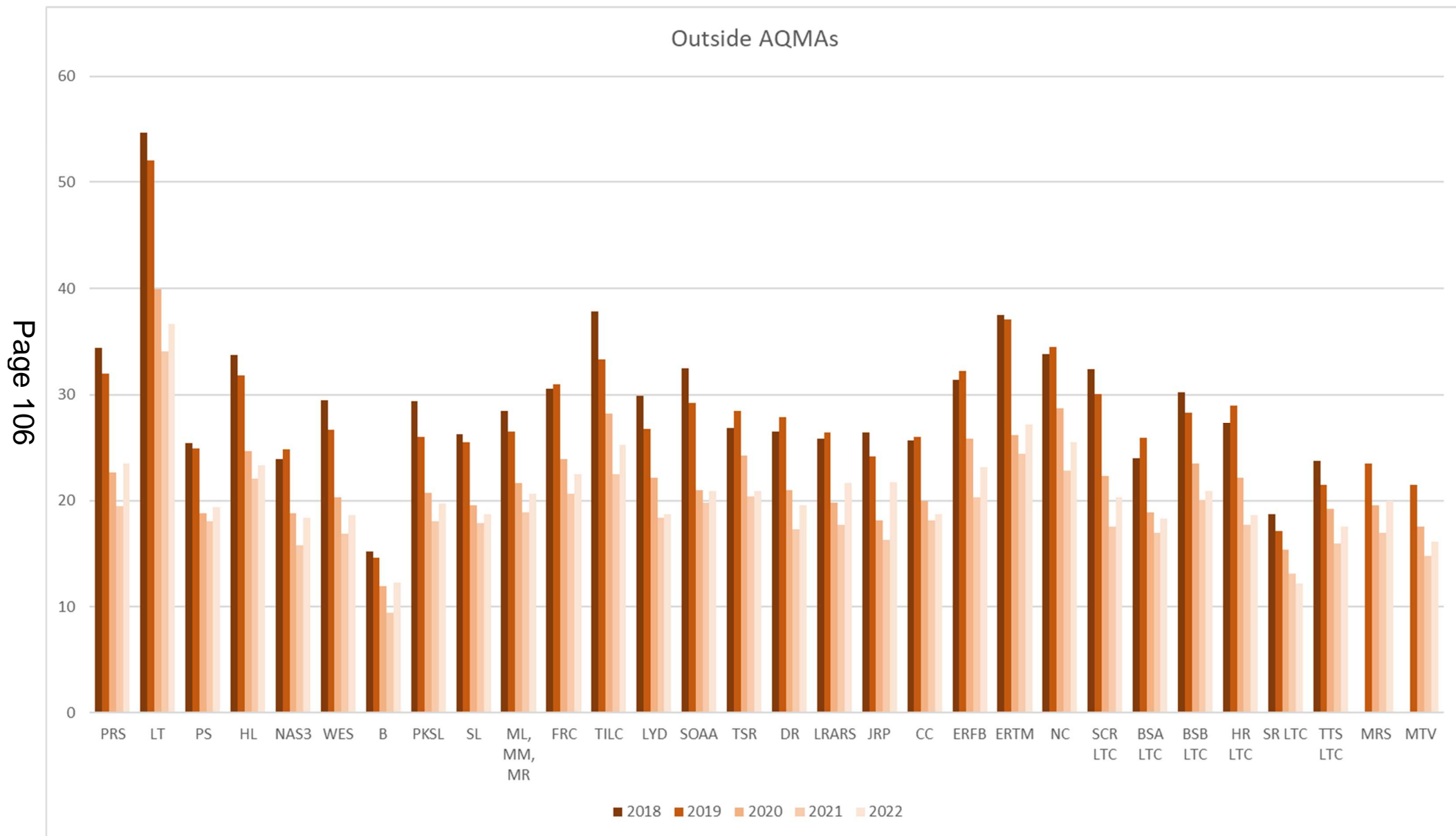


Table A. 5 – 1-Hour Mean NO₂ Monitoring Results, Number of 1-Hour Means > 200µg/m³

Site ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) ⁽¹⁾	Valid Data Capture 2022 (%) ⁽²⁾	2018	2019	2020	2021	2022
Thurrock 1	561066	177894	Urban Background	99.0	99.0	0	0	0	0	0
Thurrock 3	569358	182736	Roadside	94.3	94.3	0	0	0	0	0
Thurrock 8	556701	177932	Roadside	95.5	95.5	0	1	0	0	0
Thurrock 9	563489	176497	Roadside	98.4	98.4	N/A	N/A	N/A	0	1

Notes:

Results are presented as the number of 1-hour periods where concentrations greater than 200µg/m³ have been recorded.

Exceedances of the NO₂ 1-hour mean objective (200µg/m³ not to be exceeded more than 18 times/year) are shown in **bold**.

If the period of valid data is less than 85%, the 99.8th percentile of 1-hour means is provided in brackets.

(1) Data capture for the monitoring period, in cases where monitoring was only carried out for part of the year.

(2) Data capture for the full calendar year (e.g. if monitoring was carried out for 6 months, the maximum data capture for the full calendar year is 50%).

Figure A. 7 – Trends in Number of NO₂ 1-Hour Means > 200µg/m³

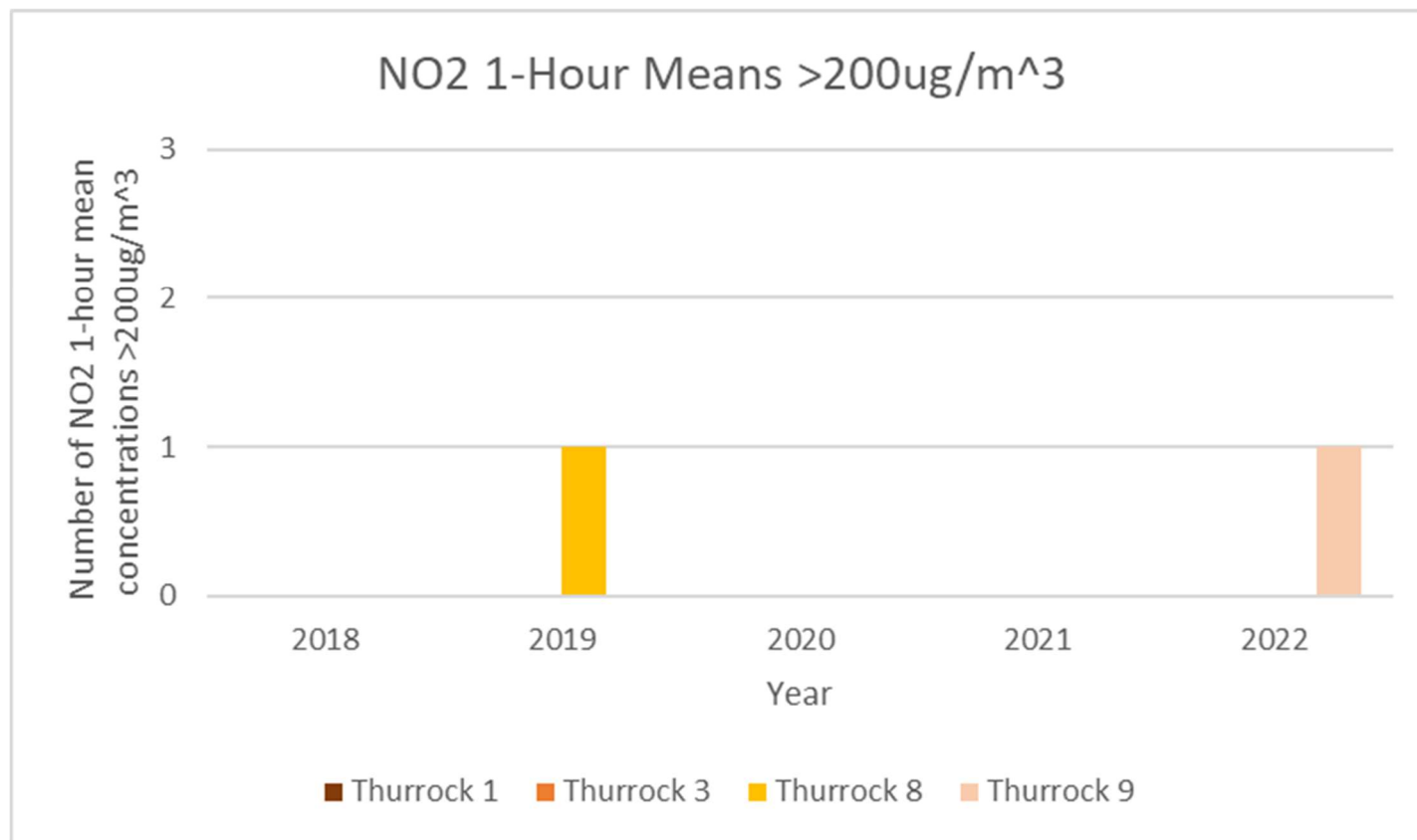


Table A. 6 – Annual Mean PM₁₀ Monitoring Results (µg/m³)

Site ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) ⁽¹⁾	Valid Data Capture 2022 (%) ⁽²⁾	2018	2019	2020	2021	2022
Thurrock 1	561066	177894	Urban Background	91.3	91.3	18.9	20.5	18.6	17.1	17.0
Thurrock 3	569358	182736	Roadside	94.3	94.3	18.4	17.4	16.7	16.8	16.6
Thurrock 8	556701	177932	Roadside	63.1	63.1	26.7	23.2	23.5	22.1	19.1

Annualisation has been conducted where data capture is <75% and >25% in line with LAQM.TG22.

Notes:

The annual mean concentrations are presented as µg/m³.

Exceedances of the PM₁₀ annual mean objective of 40µg/m³ are shown in **bold**.

All means have been “annualised” as per LAQM.TG22 if valid data capture for the full calendar year is less than 75%. See Appendix C for details.

(1) Data capture for the monitoring period, in cases where monitoring was only carried out for part of the year.

(2) Data capture for the full calendar year (e.g. if monitoring was carried out for 6 months, the maximum data capture for the full calendar year is 50%).

Figure A. 8 – Trends in Annual Mean PM₁₀ Concentrations

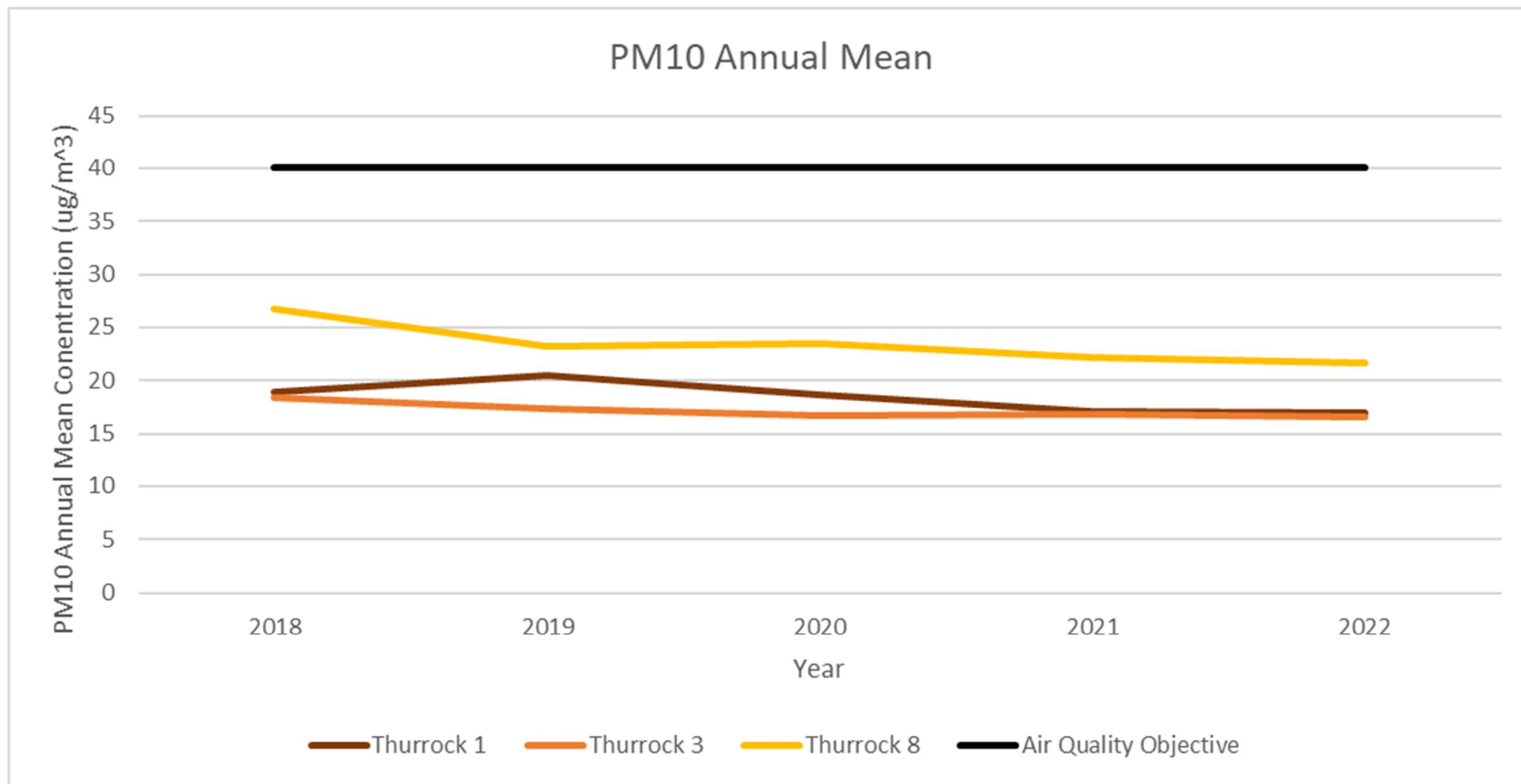


Table A. 7 – 24-Hour Mean PM₁₀ Monitoring Results, Number of PM₁₀ 24-Hour Means > 50µg/m³

Site ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) ⁽¹⁾	Valid Data Capture 2022 (%) ⁽²⁾	2018	2019	2020	2021	2022
Thurrock 1	561066	177894	Urban Background	91.3	91.3	4	14	9	1	3
Thurrock 3	569358	182736	Roadside	94.3	94.3	3 (34)	10	5 (30.4)	2	3
Thurrock 8	556701	177932	Roadside	63.1	63.1	16	15	9	6	1 (35)

Notes:

Results are presented as the number of 24-hour periods where daily mean concentrations greater than 50µg/m³ have been recorded.

Exceedances of the PM₁₀ 24-hour mean objective (50µg/m³ not to be exceeded more than 35 times/year) are shown in **bold**.

If the period of valid data is less than 85%, the 90.4th percentile of 24-hour means is provided in brackets.

(1) Data capture for the monitoring period, in cases where monitoring was only carried out for part of the year.

(2) Data capture for the full calendar year (e.g. if monitoring was carried out for 6 months, the maximum data capture for the full calendar year is 50%).

Figure A. 9 – Trends in Number of 24-Hour Mean PM₁₀ Results > 50µg/m³

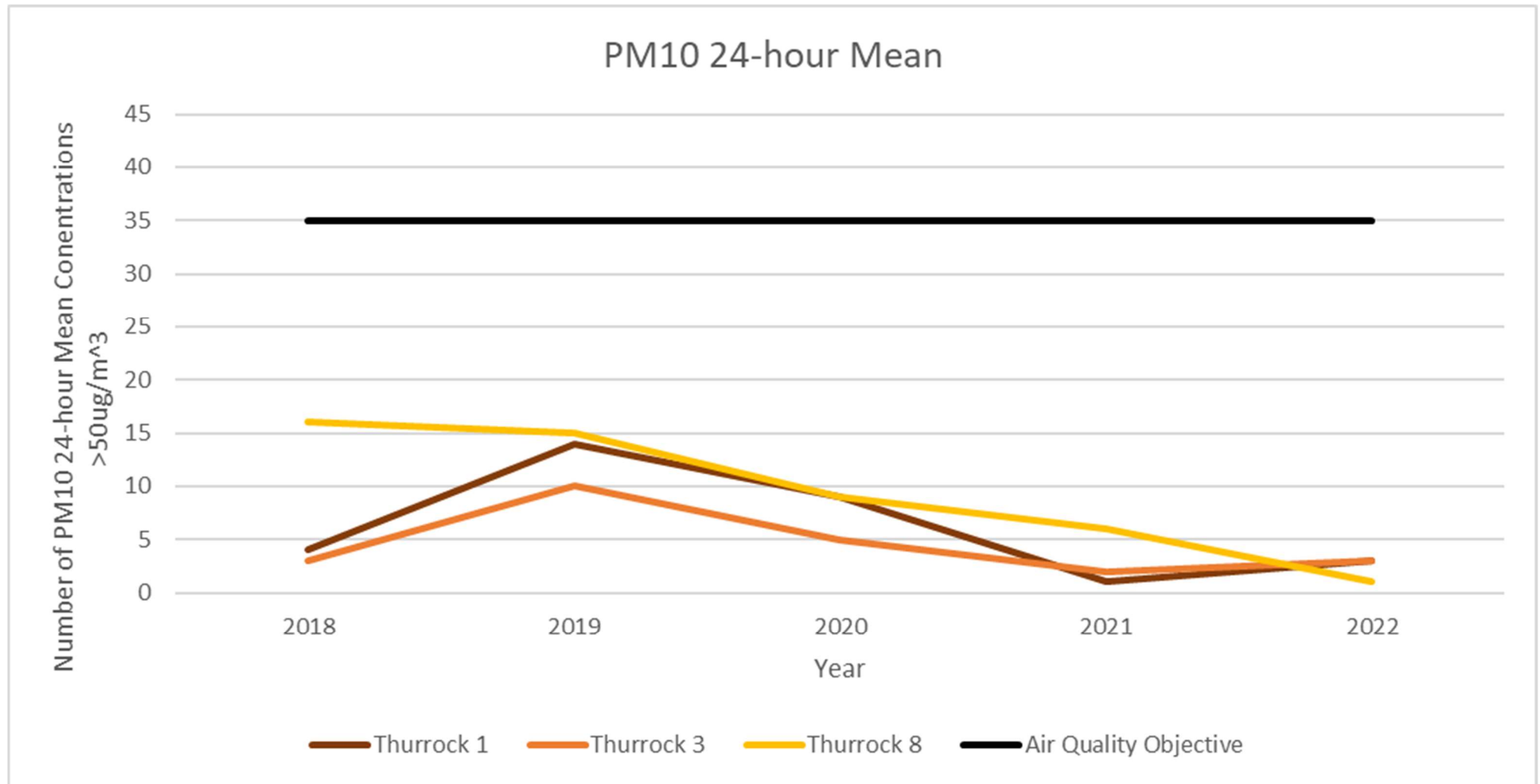


Table A. 8 – Annual Mean PM_{2.5} Monitoring Results (µg/m³)

Site ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) ⁽¹⁾	Valid Data Capture 2022 (%) ⁽²⁾	2018	2019	2020	2021	2022
Thurrock 3	569358	182736	Roadside	84.2	84.2	10.1	11.6	11.6	11.8	11.7
Thurrock 9	563489	176497	Roadside	94.4	94.4	N/A	N/A	N/A	10.8	11.2

Annualisation has been conducted where data capture is <75% and >25% in line with LAQM.TG22.

Notes:

The annual mean concentrations are presented as µg/m³.

All means have been “annualised” as per LAQM.TG22 if valid data capture for the full calendar year is less than 75%. See Appendix C for details.

(1) Data capture for the monitoring period, in cases where monitoring was only carried out for part of the year.

(2) Data capture for the full calendar year (e.g. if monitoring was carried out for 6 months, the maximum data capture for the full calendar year is 50%).

Figure A. 10 – Trends in Annual Mean PM_{2.5} Concentrations

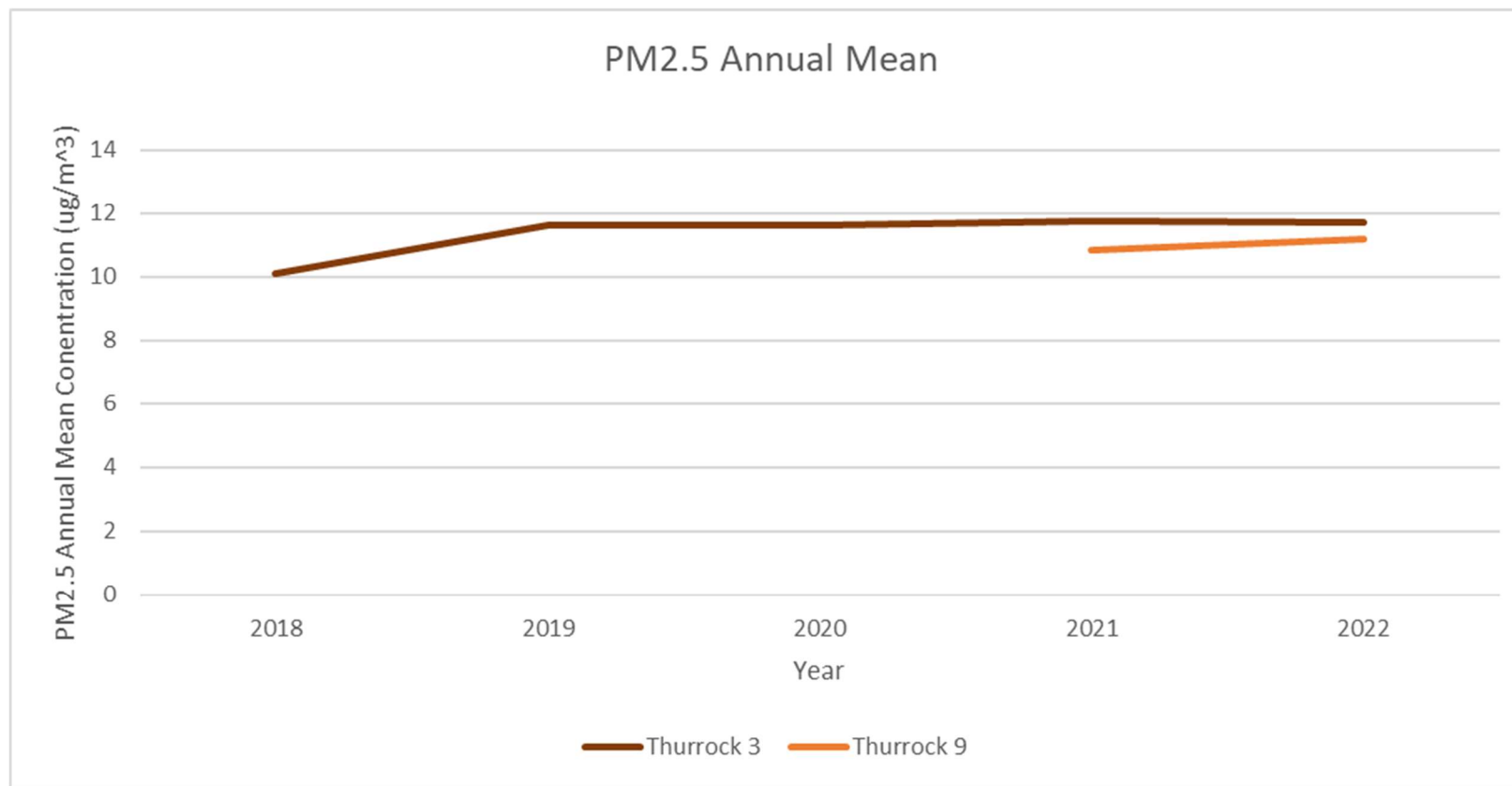


Table A. 9 – SO₂ 2022 Monitoring Results, Number of Relevant Instances

Site ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) ⁽¹⁾	Valid Data Capture 2022 (%) ⁽²⁾	Number of 15-minute Means > 266µg/m ³	Number of 1-hour Means > 350µg/m ³	Number of 24-hour Means > 125µg/m ³
Thurrock 3	569358	182736	Roadside	84.2	84.2	10.1	11.6	11.6
Thurrock 9	563489	176497	Roadside	94.4	94.4	N/A	N/A	N/A

Notes:

Results are presented as the number of instances where monitored concentrations are greater than the objective concentration.

Exceedances of the SO₂ objectives are shown in **bold** (15-min mean = 35 allowed a year, 1-hour mean = 24 allowed a year, 24-hour mean = 3 allowed a year).

If the period of valid data is less than 85%, the relevant percentiles are provided in brackets.

(1) Data capture for the monitoring period, in cases where monitoring was only carried out for part of the year.

(2) Data capture for the full calendar year (e.g. if monitoring was carried out for 6 months, the maximum data capture for the full calendar year is 50%).

Appendix B: Full Monthly Diffusion Tube Results for 2022

Table B. 1 – NO₂ 2022 Diffusion Tube Results (µg/m³)

DT ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Mean: Raw Data	Annual Mean: Annualised and Bias Adjusted <(x.x)>	Annual Mean: Distance Corrected to Nearest Exposure	Comment
B	563855	184772	18.5	14.2	19.3	11.7	11.8	20.9		11.6	11.8	14.1	11.4	18.0	14.8	12.3	-	
CR	561572	178154	36.8	27.3	34.1	25.3	21.1	14.5	14.3	23.5	25.8	28.2	30.5	32.1	26.1	21.7	-	
ER	560954	179535	52.9	38.8	47.0	36.6	21.0	32.9	34.4	36.5	41.4	40.2	42.8	47.0	39.3	32.6	-	
GDSO	557595	181060	28.1	23.4	21.7	17.8	18.6	17.4	32.1	17.6	21.7		24.6	25.4	22.6	18.7	-	
HL	561108	178922	43.2	28.3	36.3	24.4	19.3	19.6	21.2	21.9	28.6	28.7	30.5	34.4	28.0	23.3	-	
HR	559118	179462	37.6	26.4	29.6	24.2	18.7	20.3	19.3	22.2	24.0	25.5	27.9	30.4	25.5	21.2	-	
IBIS	557570	177789	43.7	42.1	40.5	33.3	35.7	40.7	28.5	34.6	31.7	42.2	45.4	44.2	38.5	32.0	-	
JC	556701	177937	50.1	34.0	54.1	40.7	35.4	44.9	23.5	25.0	64.3	44.9	49.0	41.7	42.3	35.1	-	
KCNO	558148	183532	31.0	26.1	22.2	18.1	21.2	18.7	17.0	17.6	21.5	21.1	26.7	28.0	22.4	18.6	-	
LRAR	555301	179438	46.2	43.4	54.2	38.8	31.1	24.7	26.0	25.4	43.9	45.6	29.5	38.1	37.2	30.9	-	
LRG	560624	177811	40.5	32.7	39.6	32.2	24.0	27.9	17.1	37.7	34.6	34.5	36.5	39.4	33.1	27.4	-	
LRSS	559785	177910	40.9	33.8	41.0	30.2	28.4	28.8	16.8	34.8	34.7	32.5	35.8	33.8	32.6	27.1	-	
LT	557981	178700	55.6	42.1	47.3		39.6	39.2	36.4	44.7	44.6	44.3	48.1	44.6	44.2	36.7	25.6	
ML	569357	182737	37.8	25.0	31.6	25.5	19.6	21.0	20.7	23.0	23.2	22.9	26.3	28.3	-	-	-	Triplicate Site with ML, MM and MR - Annual data provided for MR only
MM	569357	182737	37.7	24.3	34.0	24.5	19.6	20.0	20.6	23.0	22.6	23.5	24.9	23.7	-	-	-	Triplicate Site with ML, MM and MR - Annual data provided for MR only
MR	569357	182737	36.6	23.1	31.3	25.5	19.5	10.7	20.6	23.4	22.9	22.1	25.4	28.6	24.8	20.6	-	Triplicate Site with ML, MM and MR - Annual data provided for MR only
PKSL	567781	182400	31.9	21.7	27.8	21.9	20.0	18.4	19.6	21.8	22.7	23.5	26.9	28.4	23.7	19.7	-	
PRS	555389	178145	35.0	23.2	41.8	26.3	19.1	21.5		31.2	27.4	26.4	27.5	31.4	28.3	23.5	-	
PS	561066	177894	28.7	23.6	27.3	20.4	17.8	22.8	22.3		21.1	21.6	25.5	25.9	23.4	19.4	-	
SL	568501	182459	31.1	22.2	26.8	20.0	16.6	20.7	16.5	18.3	21.7	24.1	24.7	27.2	22.5	18.7	-	
SRG	561685	177833	36.0	28.2	37.0	25.4	23.0			25.3		30.0	31.2	35.6	30.2	25.1	-	
TL	563867	176293	39.0	30.2	25.6	27.0	25.7	31.3	28.1	25.1	27.6	32.4	32.8	33.0	29.8	24.7	-	
WC	556314	178765	38.8		45.2	34.1	27.6	21.8	22.4		33.3	27.7		34.7	31.7	26.3	-	
WES	561958	180967	32.6	18.5	27.0	22.0	18.7	19.7	17.7	19.8	21.2	22.2	23.2	26.4	22.4	18.6	-	
WT	558483	177678	42.6	36.7	38.9	32.5	27.9	28.4	33.1	29.8	31.9	33.0	36.6	37.6	34.1	28.3	-	
NAS1	561469	178063	33.6	27.8			23.9	25.3	27.5	26.5	27.8	28.6	30.4	30.7	28.2	23.4	-	

DT ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Mean: Raw Data	Annual Mean: Annualised and Bias Adjusted <(x.x)>	Annual Mean: Distance Corrected to Nearest Exposure	Comment
NAS2	559720	179630	49.7	50.8			23.7	34.3	22.3	36.0	36.4	39.9	45.1	46.1	38.4	31.9	-	
NAS3	561830	179878	32.4	21.3				17.1	25.2	15.1	18.0	20.8	22.2	27.4	22.2	18.4	-	
TILA	563498	176483		35.9	31.7	24.5	23.2	28.8	25.5	25.8	32.6	35.2	41.9	35.1	30.9	25.7	-	
TILB	563645	176348	42.2		43.0	31.8	31.6	32.0	24.9	30.0	28.5	37.3	38.0	36.2	34.1	28.3	-	
TILC	563600	176321	38.7	32.3	34.9	21.7	34.6	27.4	26.1	24.5	27.3	32.4	35.1	29.8	30.4	25.2	-	
TILD	563995	176291	41.7	34.2	34.4	30.2		15.0	13.2		17.5		33.7		27.5	22.4	-	
TILE	563870	176305	43.7	33.9	35.4	29.4	26.9	13.5	25.3	26.2	31.3	33.8	33.7	35.3	30.7	25.5	-	
FRC	559136	179084	37.7	28.1	34.6	25.1	19.2	21.0	21.3	24.3	23.9	28.0	29.9	32.0	27.1	22.5	-	
LRAR N	555286	179501	35.9	29.0	32.9	24.1	22.7	27.9	19.6	32.8	30.2	29.3	27.7	32.4	28.7	23.8	-	
LRAR S	555357	179362	28.6	21.4	24.2	19.1	18.2	36.5	28.7	39.5	15.0	16.3	43.7	20.7	26.0	21.6	-	
PBP	556257	178438	37.6	26.3	33.9	22.6	22.2	23.4	24.4		27.3	27.0	29.9	30.9	27.8	23.1	-	
PBPA	556221	178461	37.6	27.8	37.5	25.2	20.1	24.8		42.5	28.0	21.6	27.3	29.8	29.3	24.3	-	
LYD	560057	179873	31.9	23.9			19.6	20.0	20.1	20.6	17.5	25.3	18.9	27.1	22.5	18.7	-	
AVSL	556713	180167	45.1	27.9	48.9	32.4	30.8	33.8	28.6	32.7	38.1	38.0	37.8	38.9	36.1	29.9	-	
AVHS	556661	180180	35.6	37.0	45.6	27.2	21.1	27.7	39.0	31.5	30.8	32.4	33.7	32.0	32.8	27.2	-	
SOAA	558785	182323	31.6	21.8	29.1	20.7	20.1	23.2	18.6	19.5	24.0	29.1	33.3	31.6	25.2	20.9	-	
TSR	564122	176152	35.6	26.6	29.9	22.5	21.9	28.1	18.2	18.8	19.9	24.8	26.8	28.6	25.1	20.9	-	
DR	560279	178944	29.7	23.4	29.8	19.1	15.4	18.1	32.5	18.3	20.5	23.0	26.3	26.0	23.5	19.5	-	
LRAR MN	555299	179453	40.0	30.1	38.5	30.1	24.7	25.3	27.1	30.4	31.7	33.0	31.9	33.9	31.4	26.1	-	
LRAR MS	555329	179397	37.5	26.4	38.0	28.7	22.1	18.2	28.6		30.5	27.9	33.1	32.7	29.4	24.4	-	
JRP	556384	178001	27.3	20.2	36.1			19.0	39.6		20.9	22.7	24.2	25.4	26.2	21.7	-	
MRS	562413	177747	32.2	20.4	30.9	18.8	15.4		21.0		30.4	22.0	23.3	26.2	24.1	20.0	-	
MTV	562615	177774	13.2	19.1	29.0	17.9	13.0	20.8	14.2	15.6	18.7	19.7	20.6	30.8	19.4	16.1	-	
ACHL	561093	178974	39.3	28.1	37.6	24.9	21.6	21.2	21.8	22.7	28.9	31.2	34.4	37.3	29.1	24.1	-	
CC	560770	179866	31.5	21.5	28.7	22.6	17.6	17.6	18.0	21.4	22.8	20.0	23.4	25.1	22.5	18.7	-	
ERFA	560962	179527	34.4	24.4	27.6	21.8	32.1	21.4	19.9	20.7	24.6	25.5	24.9	30.6	25.7	21.3	-	
ERFB	560963	179558	35.8	25.1	29.1	24.1	24.6	26.8	24.6	24.1	31.1	29.4	29.8	29.8	27.9	23.1	-	
ERTM	560965	179796	43.3	30.2	45.1	33.8	22.3	26.1	28.0	31.9	31.7	28.8	33.1	37.1	32.6	27.1	-	
NC	561077	179912	38.2	33.4	28.6	23.3	23.4	45.2	36.2	19.3	28.4	28.2	30.8	33.0	30.7	25.5	-	
HD	560003	179694	39.0	27.9	33.8	29.1	32.2	23.1	23.0	28.0	25.7	26.7	28.3	33.2	29.2	24.2	-	
GRPL	559551	179547	43.2	29.6	31.9	27.3	21.7	21.1	20.7	24.0	25.7	26.4	28.2	31.1	27.6	22.9	-	
PIH	557299	178802	54.5	52.2	41.5	28.5	21.7	25.9	41.3		28.2	26.3	30.5	28.9	34.5	28.6	-	

DT ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Mean: Raw Data	Annual Mean: Annualised and Bias Adjusted <(x.x)>	Annual Mean: Distance Corrected to Nearest Exposure	Comment
WCF	556290	178749	38.8		70.5		20.4	27.0	26.2	18.4	27.1	31.1	35.4	30.4	32.5	27.0	-	
THA	557386	179065	28.1	23.7	40.7	29.3	21.3	25.8	25.2	24.2	28.6	26.5	30.9	27.4	27.6	22.9	-	
THB	557437	179099	26.9	23.3	44.3	27.1	24.1	26.5	25.4	53.4	24.9	28.0		29.1	30.3	25.1	-	
SCR LTC	562383	181157	34.8	25.6	30.1	16.5	22.5	11.1	20.3	19.7	23.3	29.7	30.4	29.7	24.5	20.3	-	
BSA LTC	563486	181070	31.6	22.1	28.0	17.6	17.0	22.3	16.8	17.7	18.9	24.3	24.4	23.5	22.0	18.3	-	
BSB LTC	563574	180770	34.3	25.5	31.1	24.2	21.0	19.4	22.9	24.6	25.1	24.3	23.7	26.6	25.2	20.9	-	
HR LTC	563785	180157	34.0	23.4	25.4	19.5	16.7	14.7	17.5	19.1	20.5	23.2	27.1	28.0	22.4	18.6	-	
SR LTC	567351	177555	22.5	15.8	19.7	15.3					12.0	14.6	15.7	19.5	16.9	12.2	-	
TTS LTC	563828	179597	28.8	22.7	27.9	19.0	15.3	18.1	14.8	17.1	18.3	21.0	23.6	26.4	21.1	17.5	-	
TK9A	563489	176497	38.5	29.9			28.6	29.1	25.3	24.6	30.1	32.8	36.9	35.3	-	-	-	Duplicate Site with TK9A and TK9B - Annual data provided for TK9B only
TK9B	563489	176497	43.4	33.7			26.5	26.5	23.1	23.0	32.3	33.6	36.9	34.4	31.2	25.9	-	Duplicate Site with TK9A and TK9B - Annual data provided for TK9B only

- All erroneous data has been removed from the NO₂ diffusion tube dataset presented in Table B.1
- Annualisation has been conducted where data capture is <75% and >25% in line with LAQM.TG22.
- Local bias adjustment factor used.
- National bias adjustment factor used.
- Where applicable, data has been distance corrected for relevant exposure in the final column.
- Thurrock Borough Council confirm that all 2022 diffusion tube data has been uploaded to the Diffusion Tube Data Entry System.

Notes:

Exceedances of the NO₂ annual mean objective of 40µg/m³ are shown in **bold**.

NO₂ annual means exceeding 60µg/m³, indicating a potential exceedance of the NO₂ 1-hour mean objective are shown in **bold and underlined**.

See Appendix C for details on bias adjustment and annualisation.

Appendix C: Supporting Technical Information / Air Quality Monitoring Data QA/QC

New or Changed Sources Identified Within Thurrock Council district During 2022

Thurrock Council has not identified any new sources relating to air quality within the reporting year of 2022.

There have been a number of developments over the 2022 reporting year that have required Air Quality Assessments. All have been found to have a “negligible” or “not significant” impacts on air quality after mitigation.

Additional Air Quality Works Undertaken by Thurrock Council During 2022

Thurrock Council has not completed any additional works within the reporting years of 2022.

QA/QC of Diffusion Tube Monitoring

All diffusion tubes during the 2022 reporting year were from Gradko and used a mixture of 20% TEA in water method. Gradko International Ltd is a UKAS accredited laboratory. Gradko participates in the [AIR Proficiency Testing \(PT\) scheme for diffusion tubes](#), operated by LGC Standards and supported by the Health and Safety Laboratory (HSL), which provides a Quality Assurance / Quality Control (QA/QC) framework for local authorities carrying out diffusion tube monitoring as a part of their local air quality management process. The percentage of results submitted by Gradko International Ltd that were subsequently determined to be satisfactory was 100% for tests in AIR-PT rounds 49 and 50 (January to June 2022).

Diffusion tube monitoring has been completed in adherence with the 2022 Diffusion Tube Monitoring Calendar.

Diffusion Tube Annualisation

In 2022, data capture for the majority of diffusion tube sites was greater than 75%, with the exception of Sites TILD and SR LTC.

The data for these sites was therefore annualised using DEFRA's 'Diffusion Tube Data Processing Tool V3.0', in accordance with the methodology stipulated in LAQM.TG22.

The AURN background sites used for annualisation were Thurrock London Road - Grays (Urban Background), and Bexley Belvedere West (Urban Background). Both sites had annual data capture of >85% and were within 50 miles radius of Thurrock.

A summary of the calculation is presented in Table C.1 below.

Table C. 1 – Annualisation Summary (concentrations presented in $\mu\text{g}/\text{m}^3$)

Site ID	Annualisati on Factor TK1	Annualisati on Factor Bexley – Belvedere West	Annualisati on Factor Barking and Dagenham – Scrattons Farm	Annualisati on Factor <Site 4 Name>	Average Annualisati on Factor	Raw Data Annual Mean	Annualised Annual Mean
TILD	0.98	0.98			0.98	27.5	0.98
SR LTC	0.89	0.86			0.87	16.9	0.89
TK8 PM10	0.88		0.88		0.88	21.7	19.1

Diffusion Tube Bias Adjustment Factors

The diffusion tube data presented within the 2023 ASR has been corrected for bias using an adjustment factor. Bias represents the overall tendency of the diffusion tubes to under or over-read relative to the reference chemiluminescence analyser. LAQM.TG22 provides guidance with regard to the application of a bias adjustment factor to correct diffusion tube monitoring. Triplicate co-location studies can be used to determine a local bias factor based on the comparison of diffusion tube results with data taken from NO_x/NO_2 continuous analysers. Alternatively, the national database of diffusion tube co-location surveys provides bias factors for the relevant laboratory and preparation method.

Thurrock Council have applied a national bias adjustment factor of 0.83 to the 2022 monitoring data. A summary of bias adjustment factors used by Thurrock Borough Council over the past five years is presented in Table C. 2. The bias adjustment factor was selected using Defra's Database Diffusion Tube Bias Factors version 02_23.

Table C. 2 – Bias Adjustment Factor

Monitoring Year	Local or National	If National, Version of National Spreadsheet	Adjustment Factor
2022	National	Jun-23	0.83
2021	National	Jun-21	0.84
2020	National	Jun-21	0.81
2019	National	Jun-21	0.91
2018	National	Mar-19	0.93

Table C. 3 – Local Bias Adjustment Calculation

	Local Bias Adjustment Input 1	Local Bias Adjustment Input 2	Local Bias Adjustment Input 3	Local Bias Adjustment Input 4	Local Bias Adjustment Input 5
Periods used to calculate bias	11	10			
Bias Factor A	0.88 (0.79 - 1)	0.94 (0.84 - 1.07)			
Bias Factor B	13% (0% - 27%)	6% (-6% - 19%)			
Diffusion Tube Mean ($\mu\text{g}/\text{m}^3$)	25.5	31.2			
Mean CV (Precision)	2.9%	4.8%			
Automatic Mean ($\mu\text{g}/\text{m}^3$)	22.5	29.3			
Data Capture	94%	99%			
Adjusted Tube Mean ($\mu\text{g}/\text{m}^3$)	22 (20 - 26)	29 (26 - 33)			

Notes:

The local bias adjustment factor was not used to adjust 2022 diffusion tube data in line with the recommendations of Chapter 7 of the LAQM TG22 guidance. Local factors are presented here for information only.

NO₂ Fall-off with Distance from the Road

Wherever possible, monitoring locations are representative of exposure. However, where this is not possible, the NO₂ concentration at the nearest location relevant for exposure has been estimated using the Diffusion Tube Data Processing Tool available on the LAQM Support website. Where appropriate, non-automatic annual mean NO₂ concentrations corrected for distance are presented in Table B. 1. A summary of the Diffusion Tube Data Processing Tool outputs for the only site that required distance correction is presented in Table C. 4. Once corrected for distance, the result at monitoring site LT is well below the annual mean objective meaning that no exceedances of this objective were reported in Thurrock Council during 2022.

Table C. 4 – NO₂ Fall off With Distance Calculations (concentrations presented in µg/m³)

Site ID	Distance (m): Monitoring Site to Kerb	Distance (m): Receptor to Kerb	Monitored Concentration (Annualised and Bias Adjusted)	Background Concentration	Concentration Predicted at Receptor	Comments
LT	1	49	36.7	22.6	25.6	
TK8	2	4.6	39.3	27.8	37.1	Within 10% of objective

QA/QC of Automatic Monitoring

There are a number of different organisations responsible for carrying out QA/QC at various stations and equipment at Thurrock's automatic monitoring sites.

For TK1 & 3, the QA/QC is managed by Bureau Veritas (BV). For TK8 & 9, QA/QC is managed by the Environmental Research Group (ERG) at Imperial College London.

Calibrations for all sites are done every fortnight by Thurrock Council Environmental Health Officers & the Air Quality Officer.

All data can be viewed online via the [LAQN website](#).

PM₁₀ and PM_{2.5} Monitoring Adjustment

PM₁₀ and PM_{2.5} monitoring within Thurrock is carried out using Beta Attenuation Monitors (BAMs).

Automatic Monitoring Annualisation

PM₁₀ data capture at the TK8 automatic monitoring site was well below the required level and as such was annualised using Thurrock London Road – Grays, and Barking and Dagenham – Scrattons Farm. Calculations are summarised in Table C.1. Both sites had >85% valid data capture and were within 50 miles of the relevant sites in Thurrock, as per the requirements for annualisation data laid out in LAQM TG22.

NO₂ Fall-off with Distance from the Road

Wherever possible, monitoring locations are representative of exposure. However, where this is not possible, the NO₂ concentration at the nearest location relevant for exposure has been estimated using the NO₂ fall-off with distance calculator available on the LAQM Support website.

In 2022 only one automatic monitoring site had an annual mean NO₂ reading of >36µg/m³. This was TK8, in Purfleet. Once corrected for distance the annual mean at the nearest receptor was estimated to be 37.1µg/m³, which is compliant with the relevant national air quality objective. Distance correction calculations used Defra's NO₂ Fall Off Calculator and results are presented in Table C. 4.

Appendix D: Map(s) of Monitoring Locations and AQMAs

Figure D. 1 – Map of Monitoring Sites in West Thurrock, AQMAs 7, 8, 9, 10, 12, 13, 23 and 25

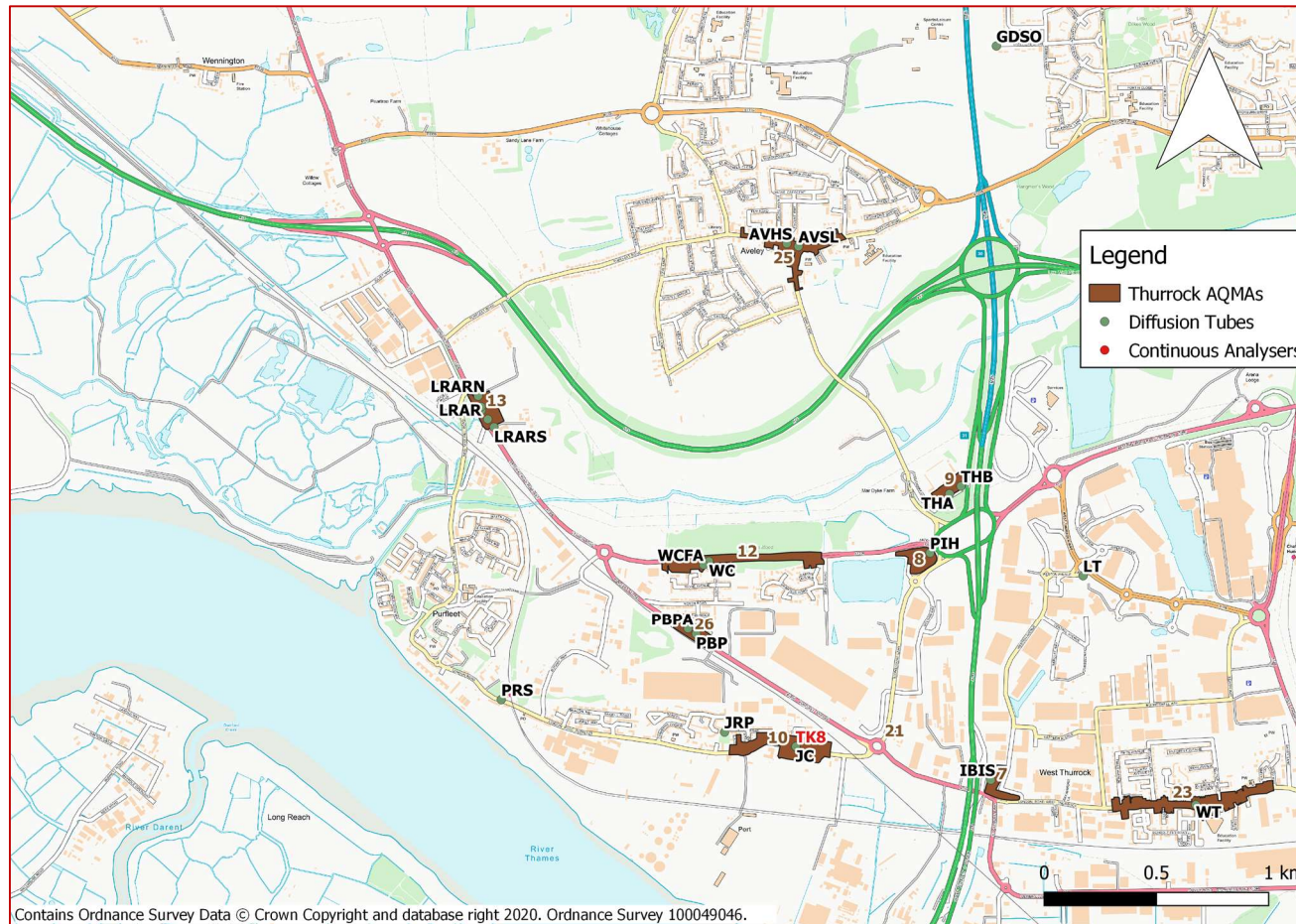


Figure D. 2 – Map of Monitoring Sites in North Thurrock, AQMAs 15 and 16

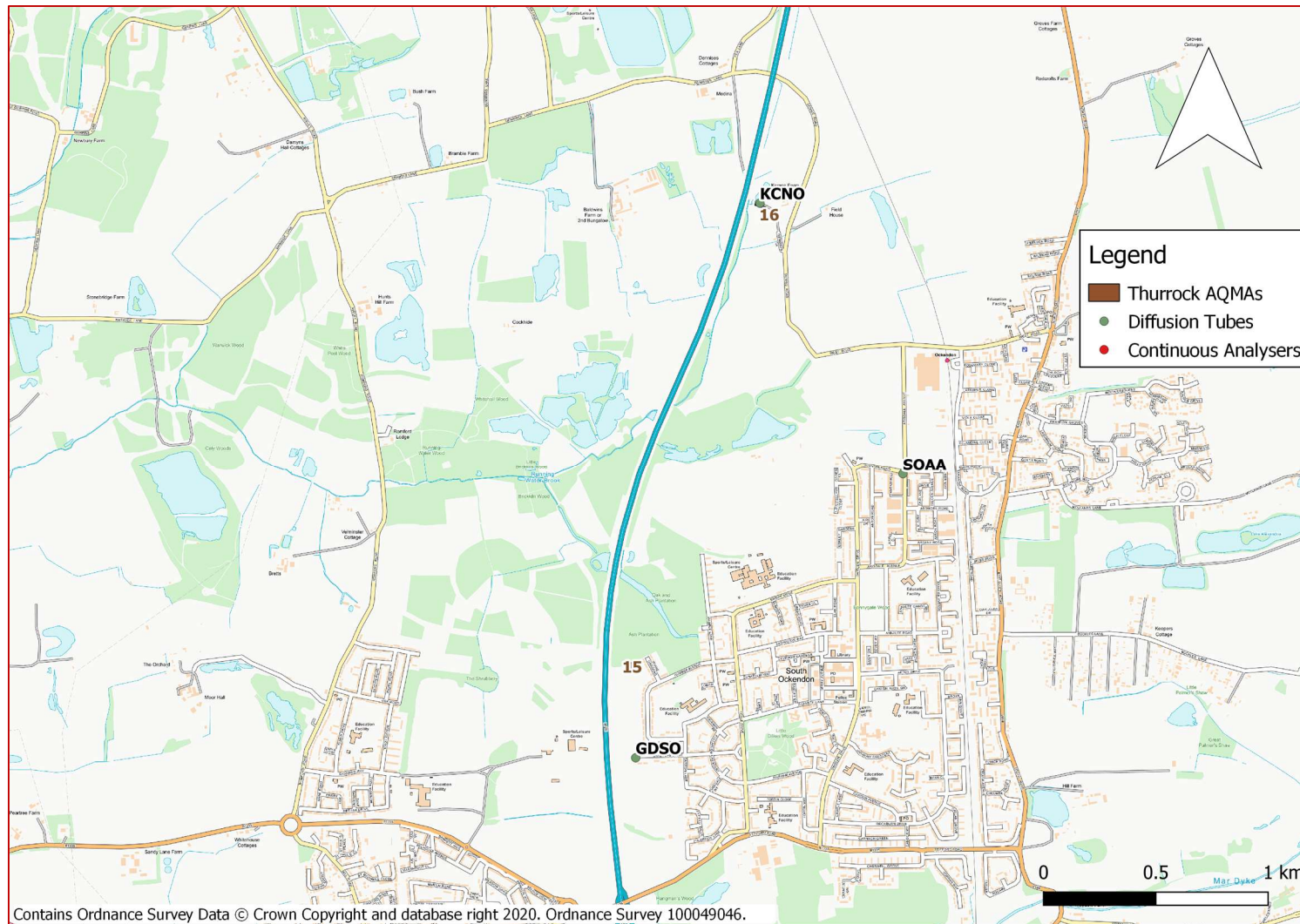
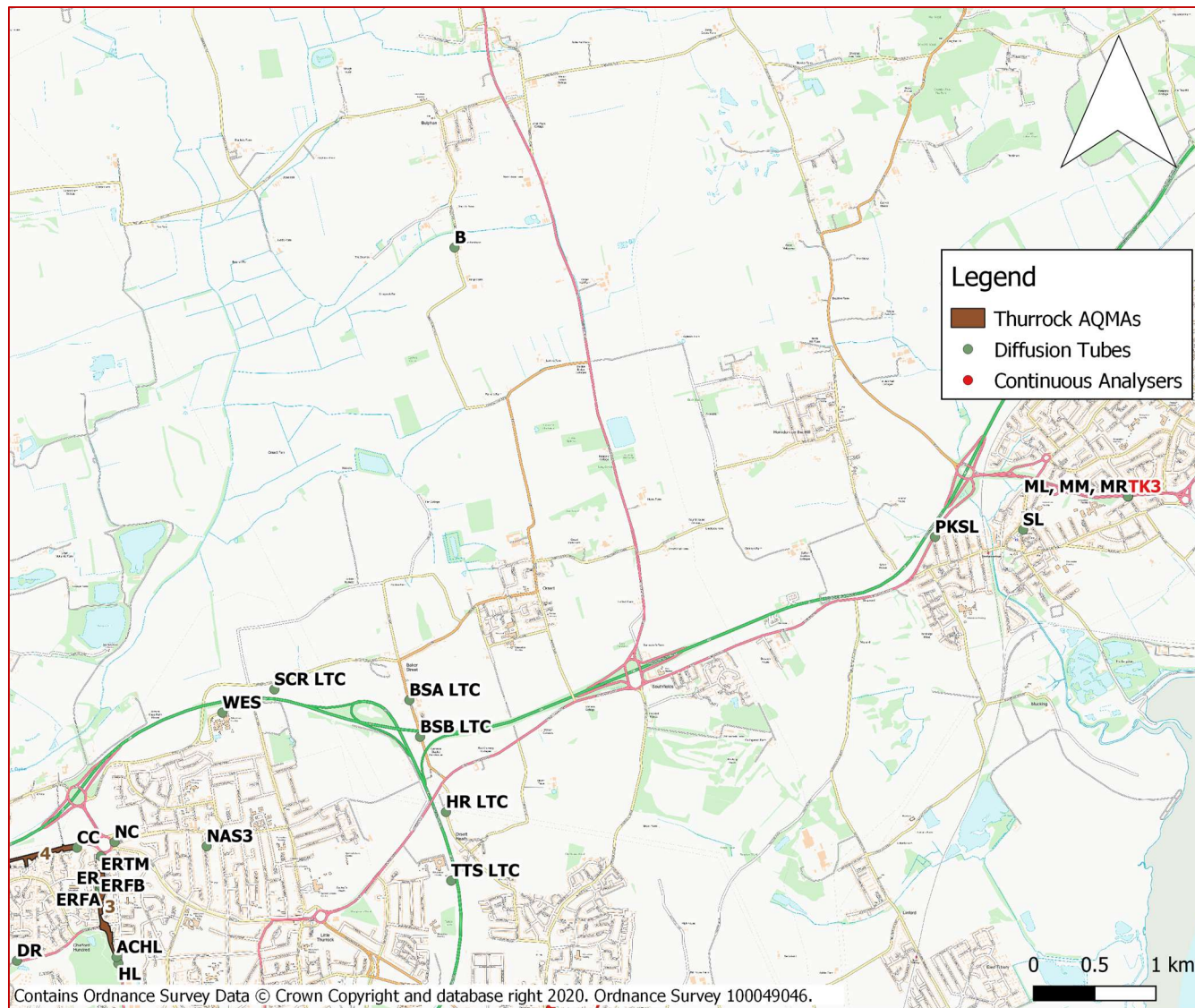


Figure D. 3 – Map of Monitoring Sites in Central Thurrock, AQMAs 1, 2, 3, 4, 5 and 23



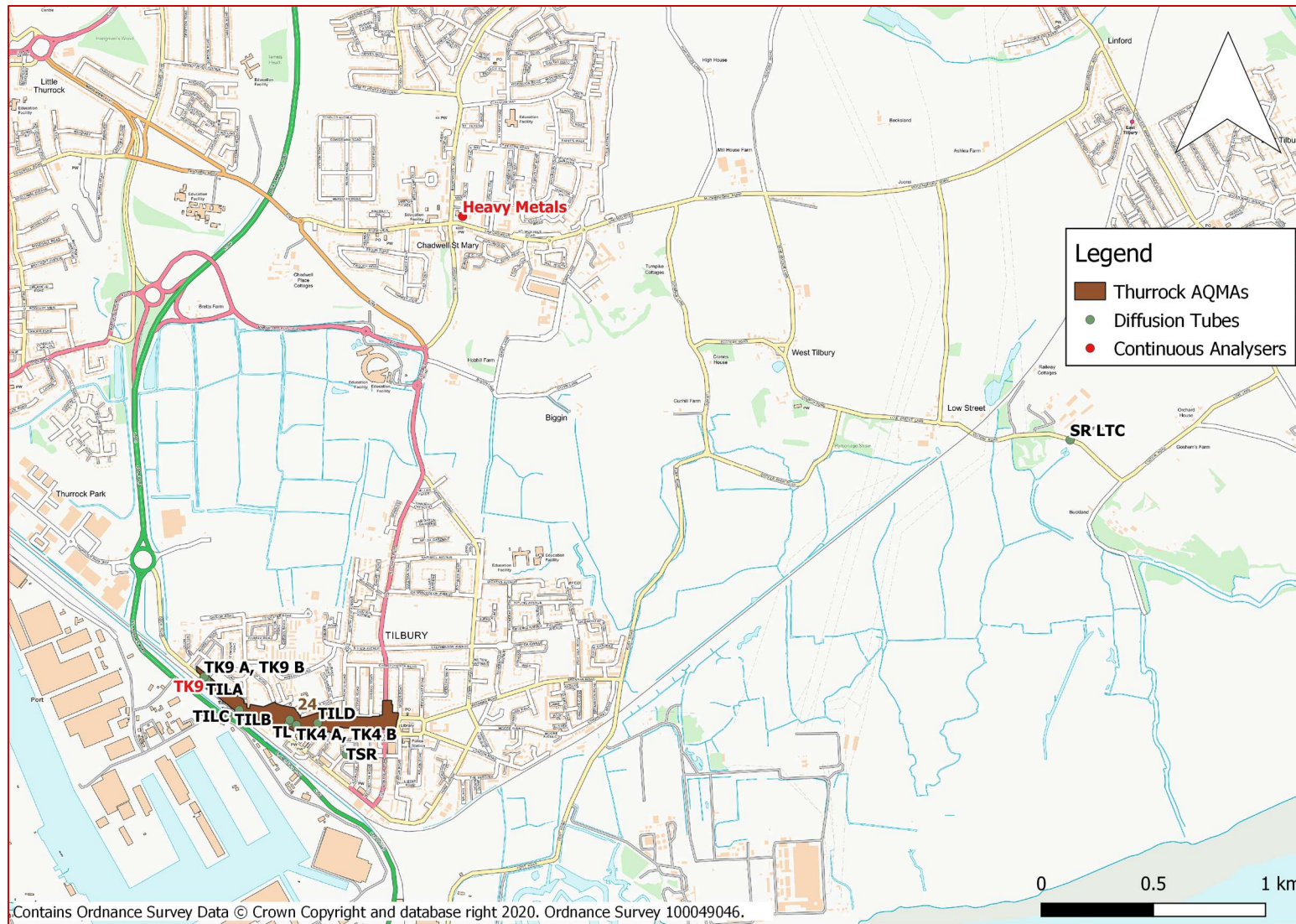
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Figure D. 4 – Map of Monitoring Sites in East Thurrock, AQMA 3 and 4, monitoring sites outside AQMAs



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Figure D. 5 - Map of Monitoring Sites in Tilbury, AQMA 24



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Appendix E: Summary of Air Quality Objectives in England

E. 1 – Air Quality Objectives in England⁷

Pollutant	Air Quality Objective: Concentration	Air Quality Objective: Measured as
Nitrogen Dioxide (NO ₂)	200µg/m ³ not to be exceeded more than 18 times a year	1-hour mean
Nitrogen Dioxide (NO ₂)	40µg/m ³	Annual mean
Particulate Matter (PM ₁₀)	50µg/m ³ , not to be exceeded more than 35 times a year	24-hour mean
Particulate Matter (PM ₁₀)	40µg/m ³	Annual mean
Sulphur Dioxide (SO ₂)	350µg/m ³ , not to be exceeded more than 24 times a year	1-hour mean
Sulphur Dioxide (SO ₂)	125µg/m ³ , not to be exceeded more than 3 times a year	24-hour mean
Sulphur Dioxide (SO ₂)	266µg/m ³ , not to be exceeded more than 35 times a year	15-minute mean

⁷ The units are in microgrammes of pollutant per cubic metre of air (µg/m³).

Glossary of Terms

Abbreviation	Description
AQAP	Air Quality Action Plan - A detailed description of measures, outcomes, achievement dates and implementation methods, showing how the local authority intends to achieve air quality limit values'
AQMA	Air Quality Management Area – An area where air pollutant concentrations exceed / are likely to exceed the relevant air quality objectives. AQMAs are declared for specific pollutants and objectives
ASR	Annual Status Report
Defra	Department for Environment, Food and Rural Affairs
DMRB	Design Manual for Roads and Bridges – Air quality screening tool produced by National Highways
EU	European Union
FDMS	Filter Dynamics Measurement System
LAQM	Local Air Quality Management
NO ₂	Nitrogen Dioxide
NO _x	Nitrogen Oxides
PM ₁₀	Airborne particulate matter with an aerodynamic diameter of 10µm or less
PM _{2.5}	Airborne particulate matter with an aerodynamic diameter of 2.5µm or less
QA/QC	Quality Assurance and Quality Control
SO ₂	Sulphur Dioxide
TEOM	Tapered Element Oscillating Microbalance

References

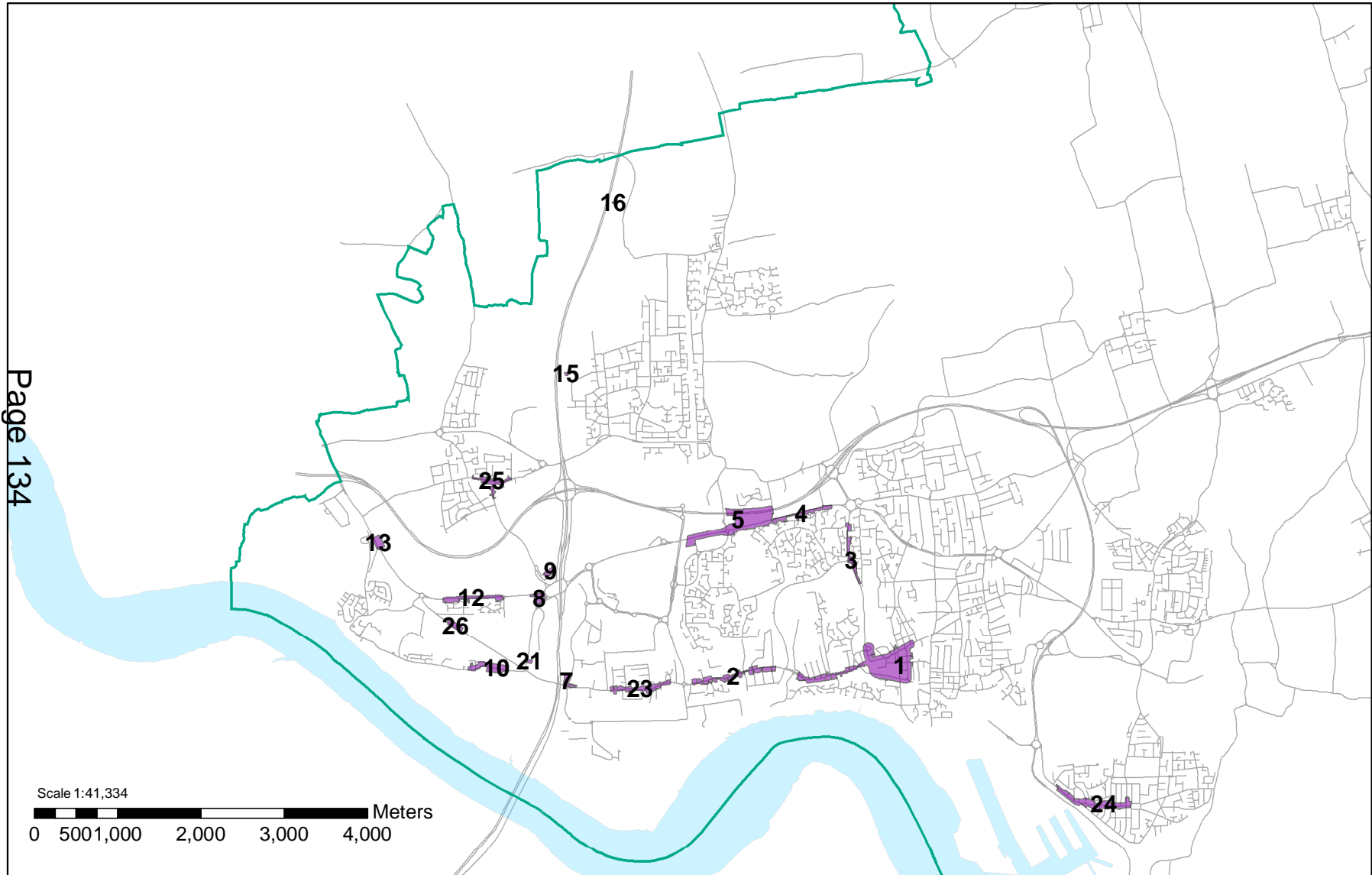
- Local Air Quality Management Technical Guidance LAQM.TG22. August 2022.
Published by Defra in partnership with the Scottish Government, Welsh Assembly Government and Department of the Environment Northern Ireland.
- Local Air Quality Management Policy Guidance LAQM.PG22. August 2022.
Published by Defra in partnership with the Scottish Government, Welsh Assembly Government and Department of the Environment Northern Ireland.

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Thurrock AQMA Summary & Pollutant Declarations

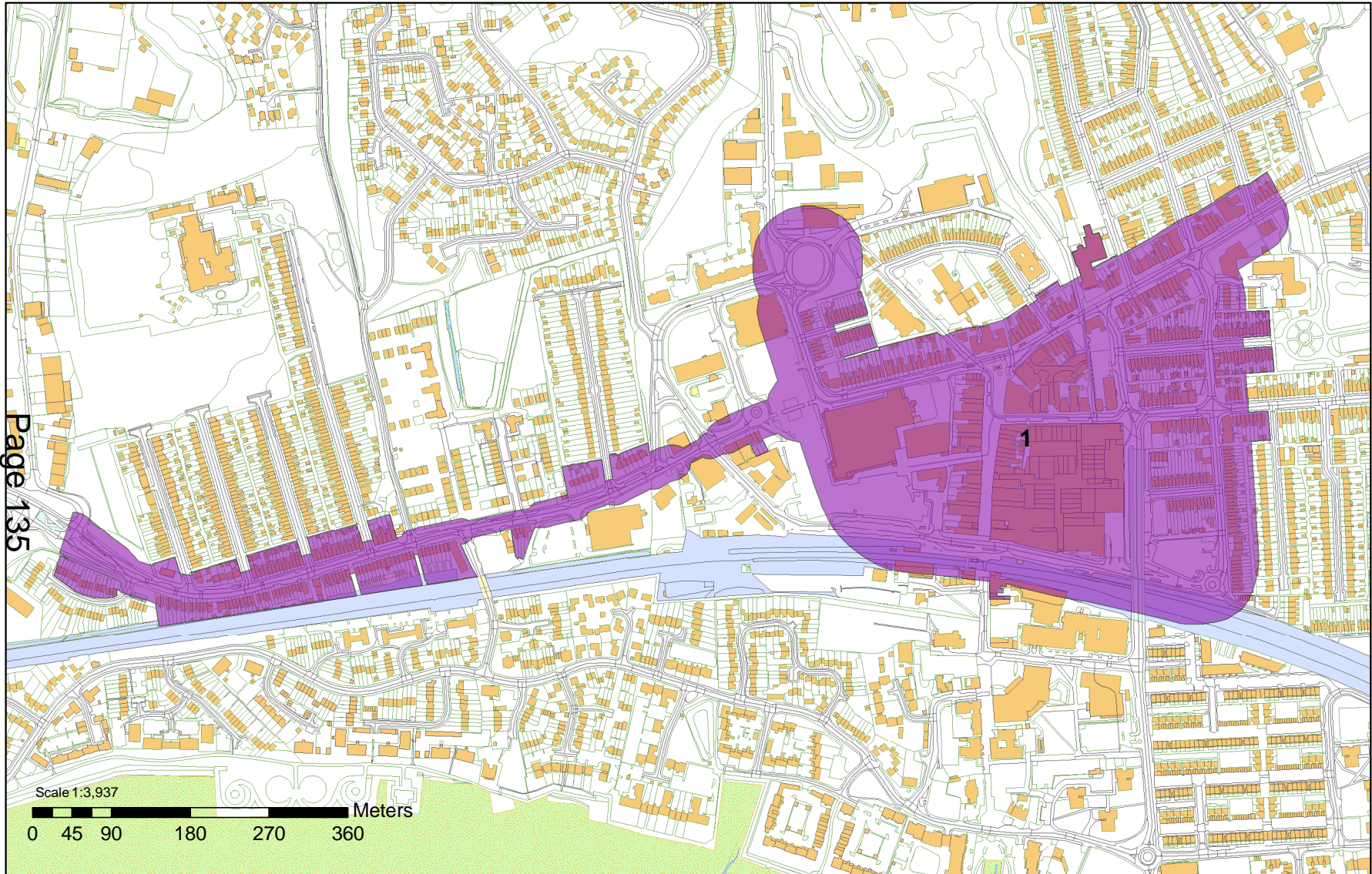
AQMA No.	Pollutant	Description of Air Quality Management Area
1	NO ₂	Grays town centre and London Road Grays
2	NO ₂	London Road South Stifford and adjoining roads
3	NO ₂	East side of Hogg Lane and Elizabeth Road
4	NO ₂	West of Chafford Hundred Visitor Centre
5	NO ₂ and PM10	Warren Terrace, A13 and A1306
7	NO ₂ and PM10	Hotels next to M25
8	NO ₂ and PM10	Hotel next to Junction 31 of the M25
9	NO ₂	Hotel next to Junction 31 of the M25
10	NO ₂ and PM10	London Road Purfleet near to Jarrah Cottages
12	NO ₂	Watts Wood estate next to A1306
13	NO ₂	London Road Aveley next to A1306
15	NO ₂	Near to M25 on edge of Irvine Gardens, South Ockendon
16	NO ₂	Next to M25 off Dennis Road
21	NO ₂	Hotel on Stonehouse Lane
23	NO ₂	London Road West Thurrock
24	NO ₂	Tilbury Calcutta Road, Dock Road & St Chads Road
25	NO ₂	Aveley High Street & Ship Lane
26	NO ₂	Purfleet By-pass

Thurrock AQMA's (Overview of all 18 AQMA's)



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AQMA 1: Grays, Town Centre & London Road Grays



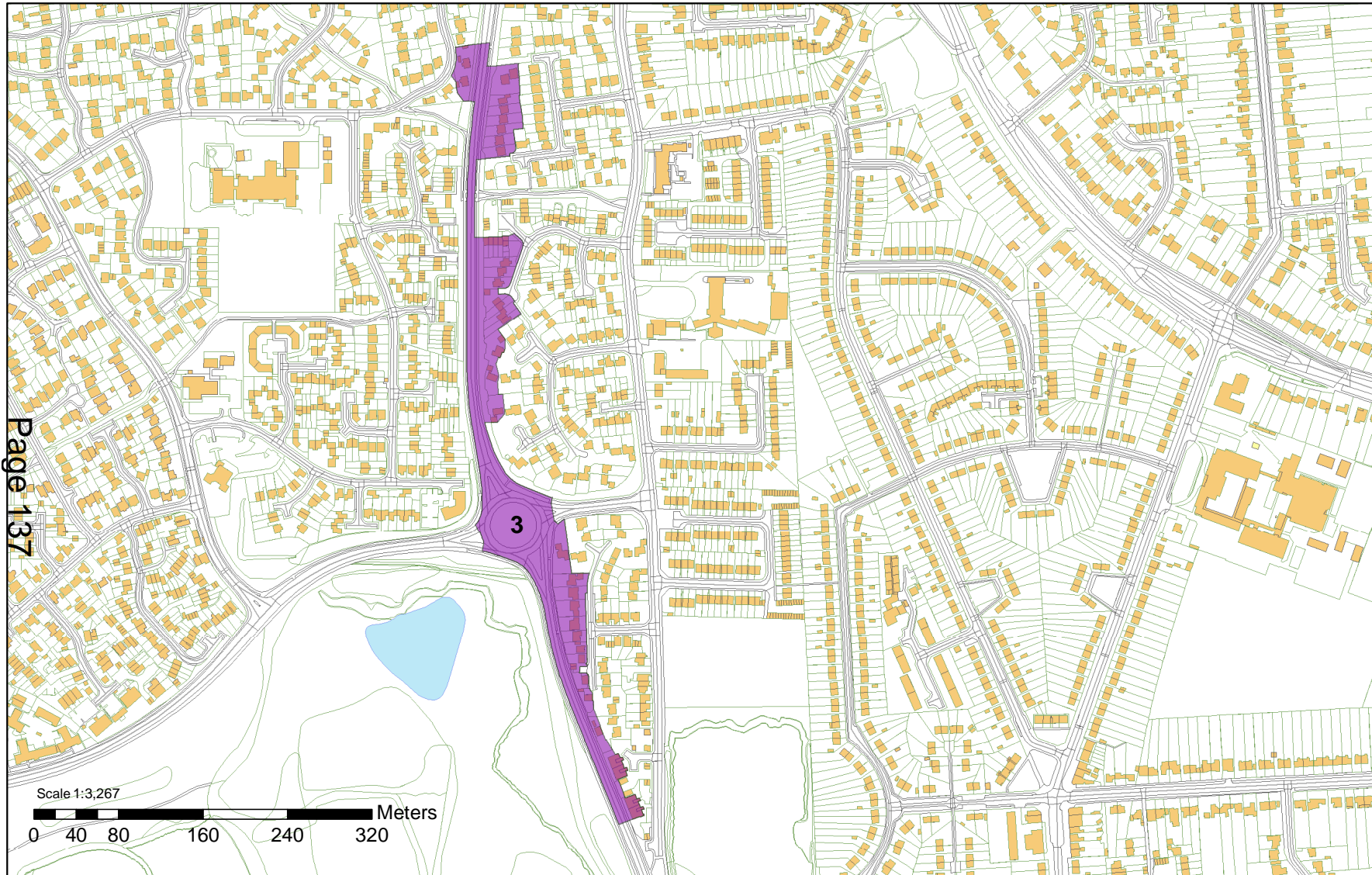
AQMA 2: Grays, South Stifford, London Road



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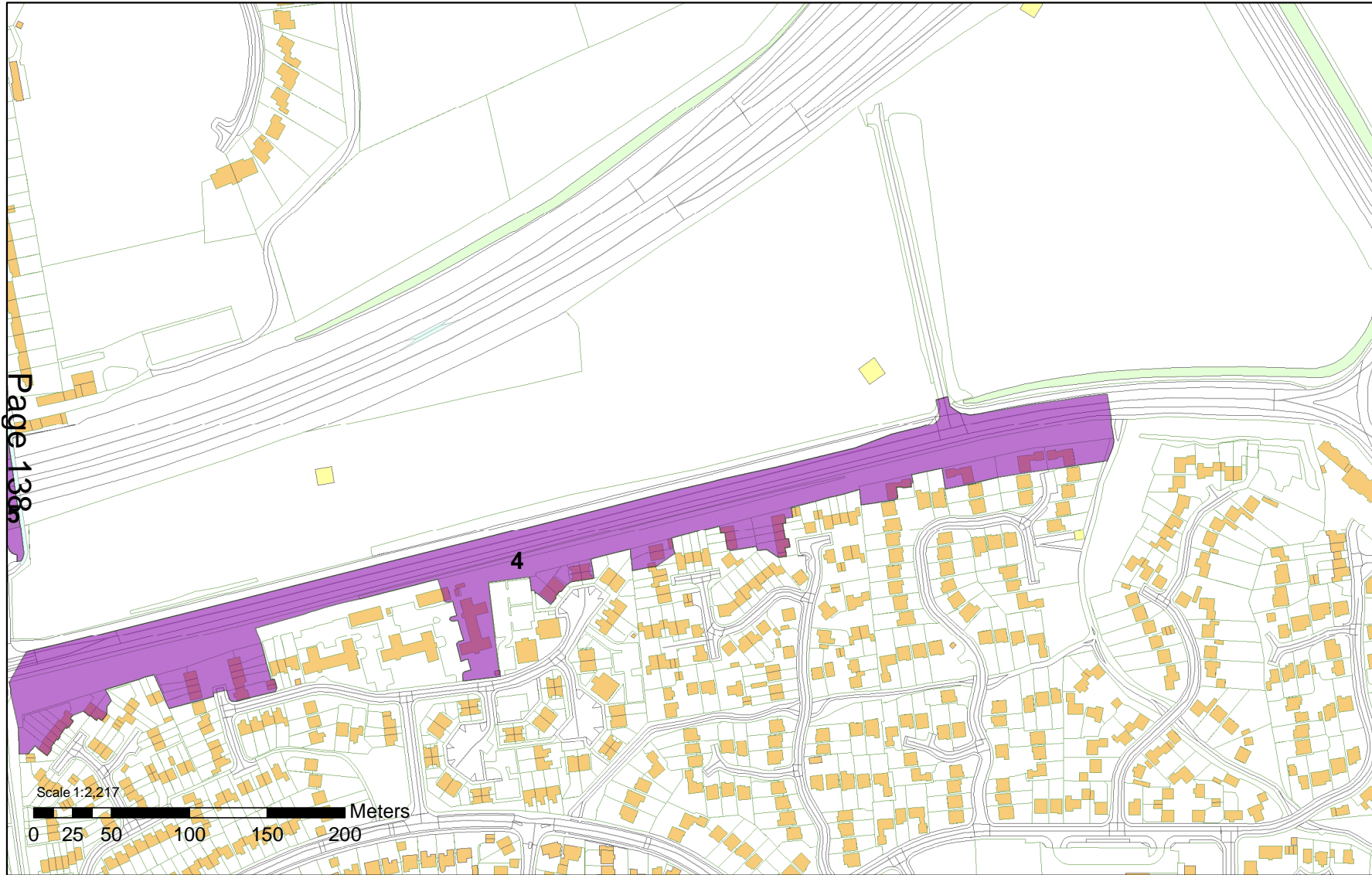
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AQMA 3: Grays, Chafford Hundred, Elizabeth Road & Hogg Lane (A1012)



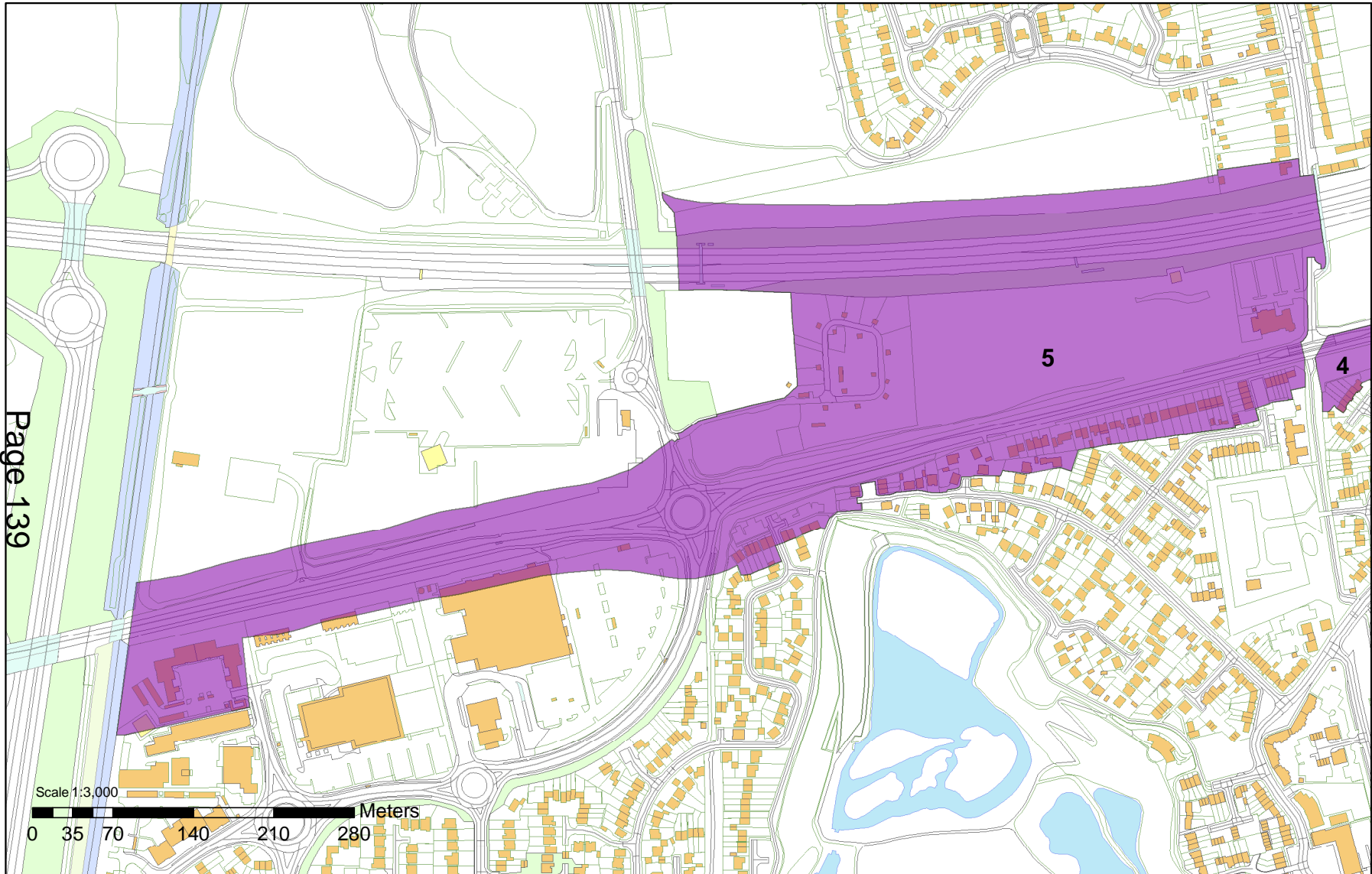
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AQMA 4: Grays, Chafford Hundred, North Stifford, (A1306)



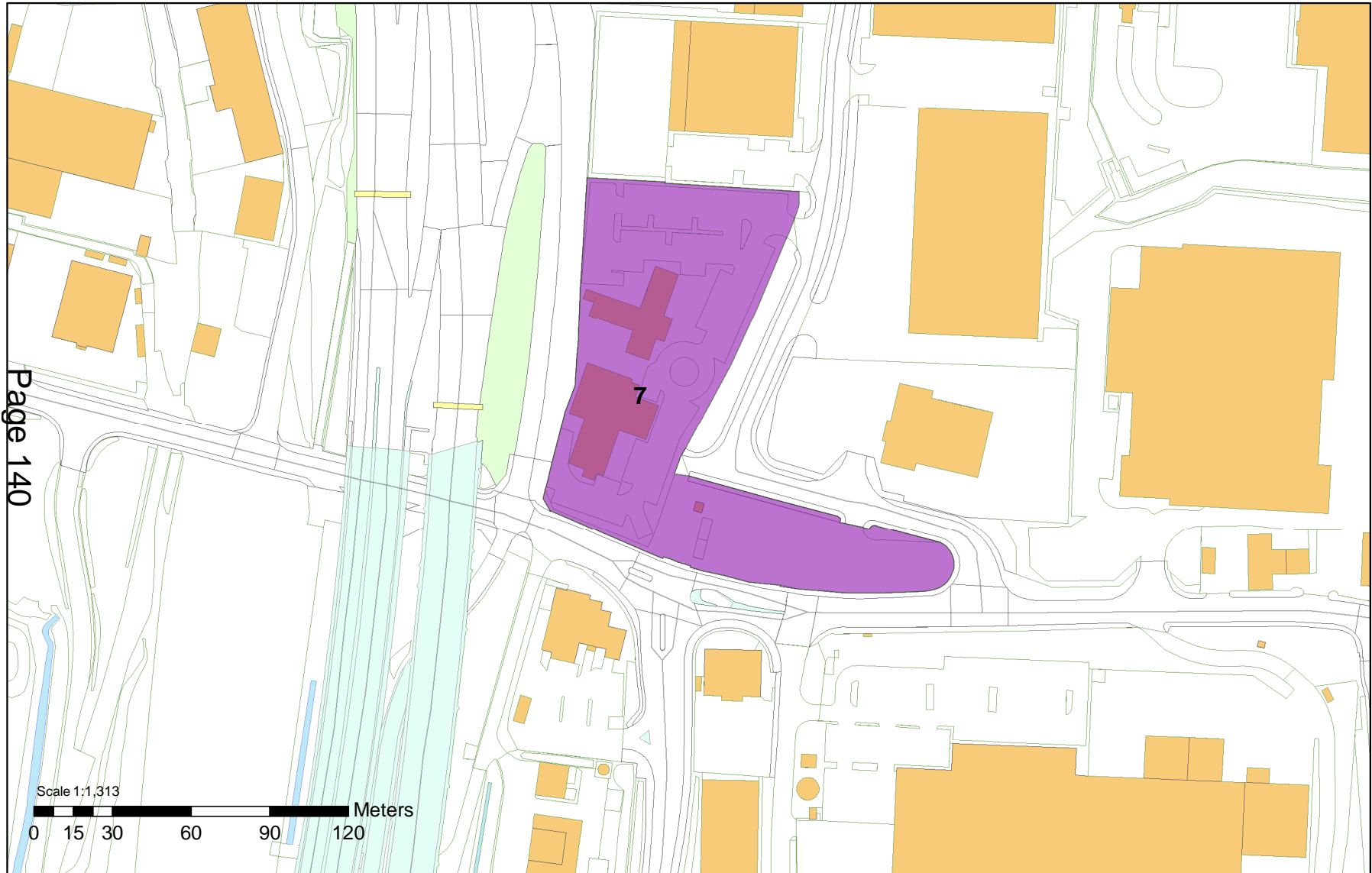
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AQMA 5: Grays, Chafford Hundred, North Stifford, Pilgrims Lane Roundabout, (A1306)



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AQMA 7: West Thurrock, IBIS Hotel (A282 [M25])

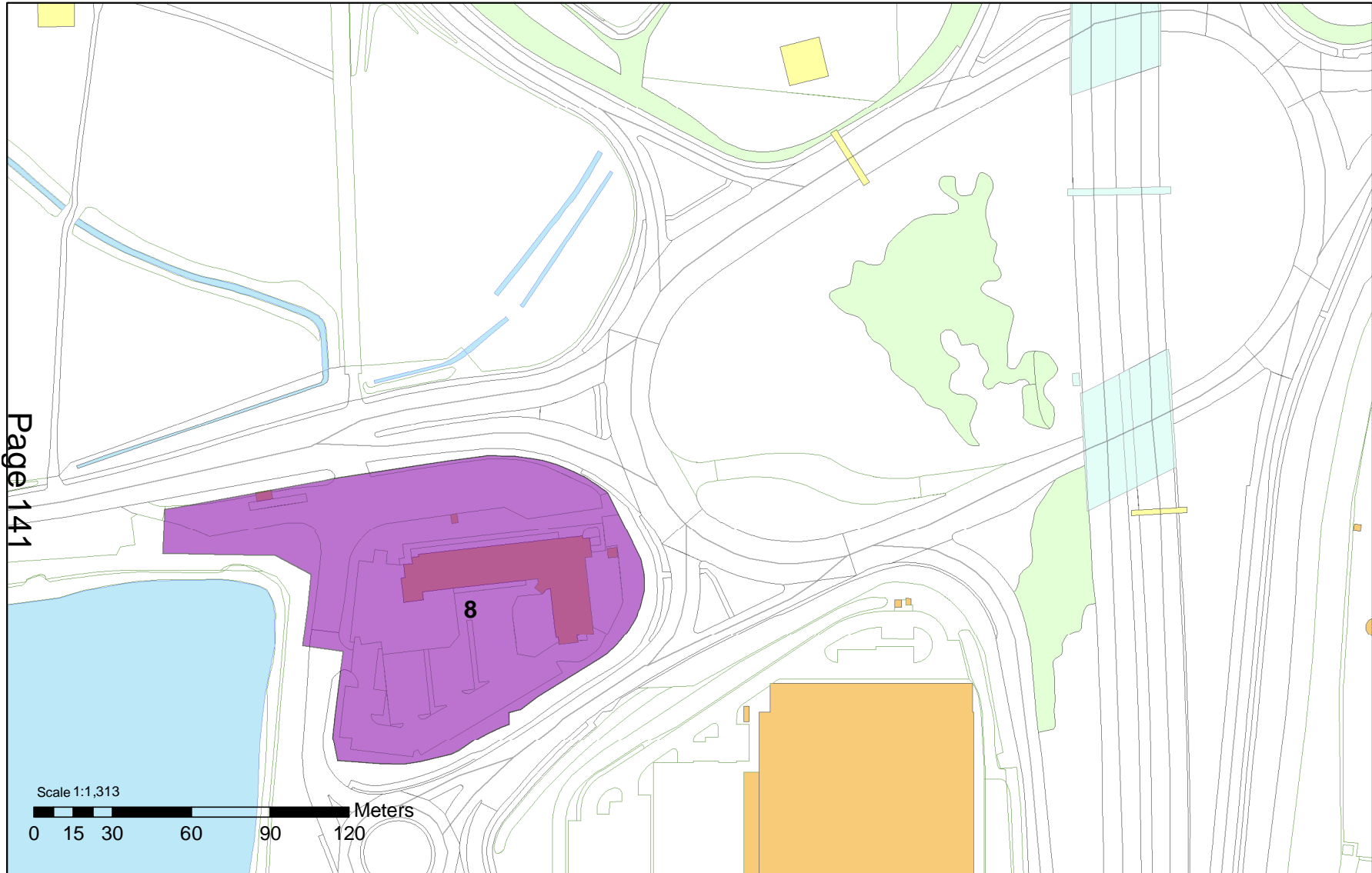


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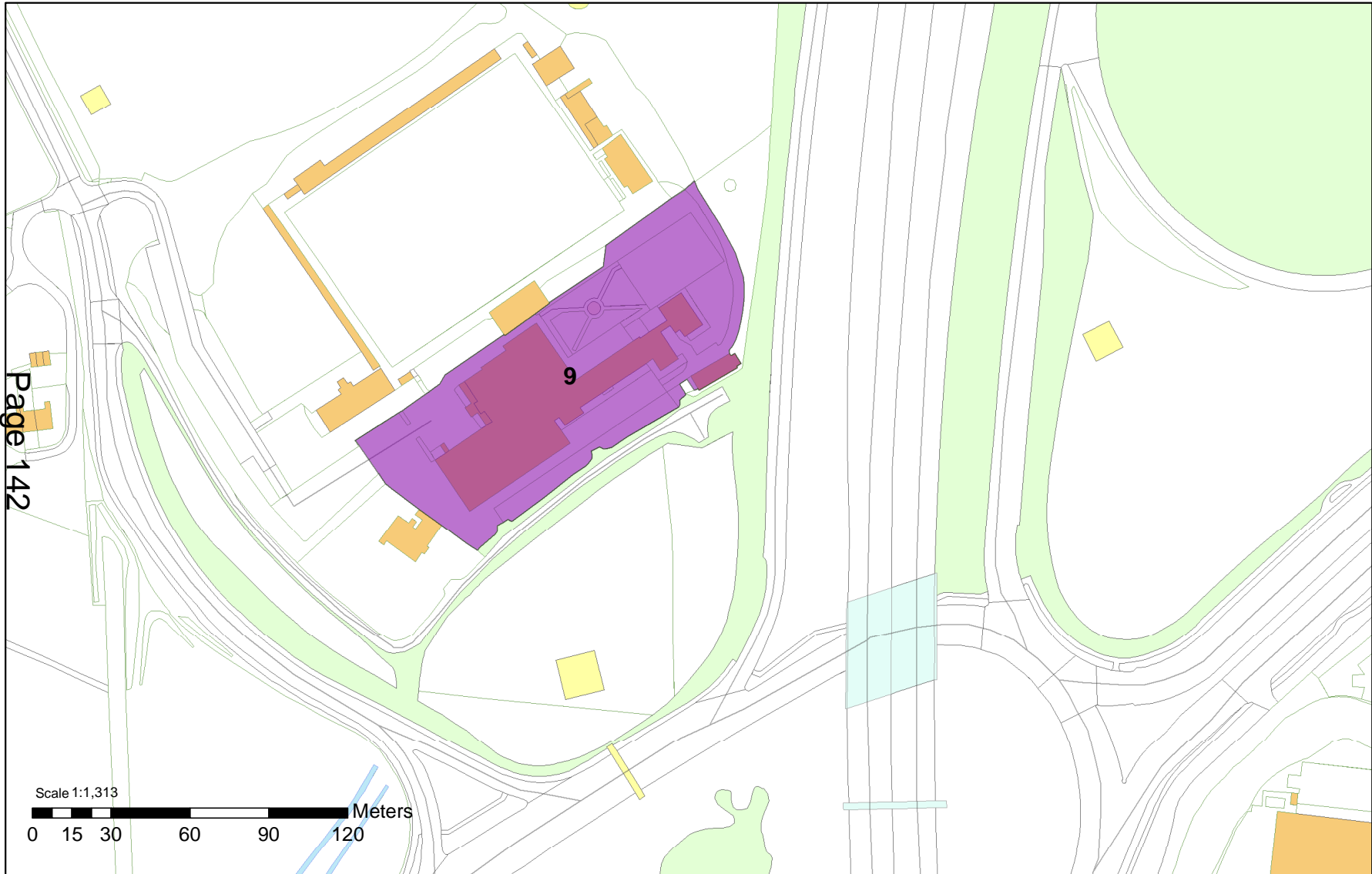
AQMA 8: West Thurrock, Premier Inn Hotel, (Jct 31 of M25)



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Scale 1:1,313
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AQMA 9: West Thurrock, The Thurrock Hotel (Jct 31 of M25)



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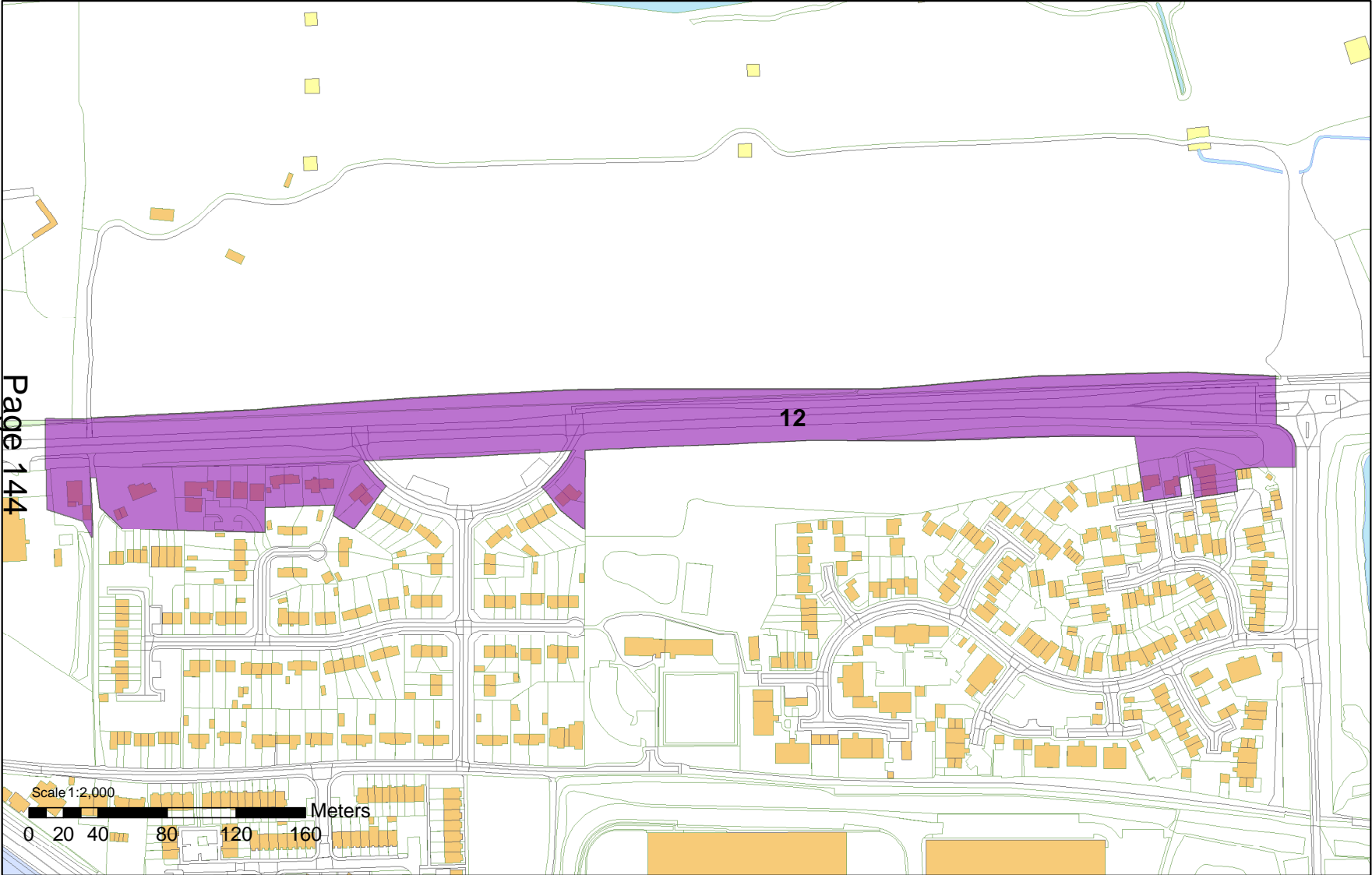
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AQMA 10: Purfleet, London Road Purfleet & Jarrah Cottages



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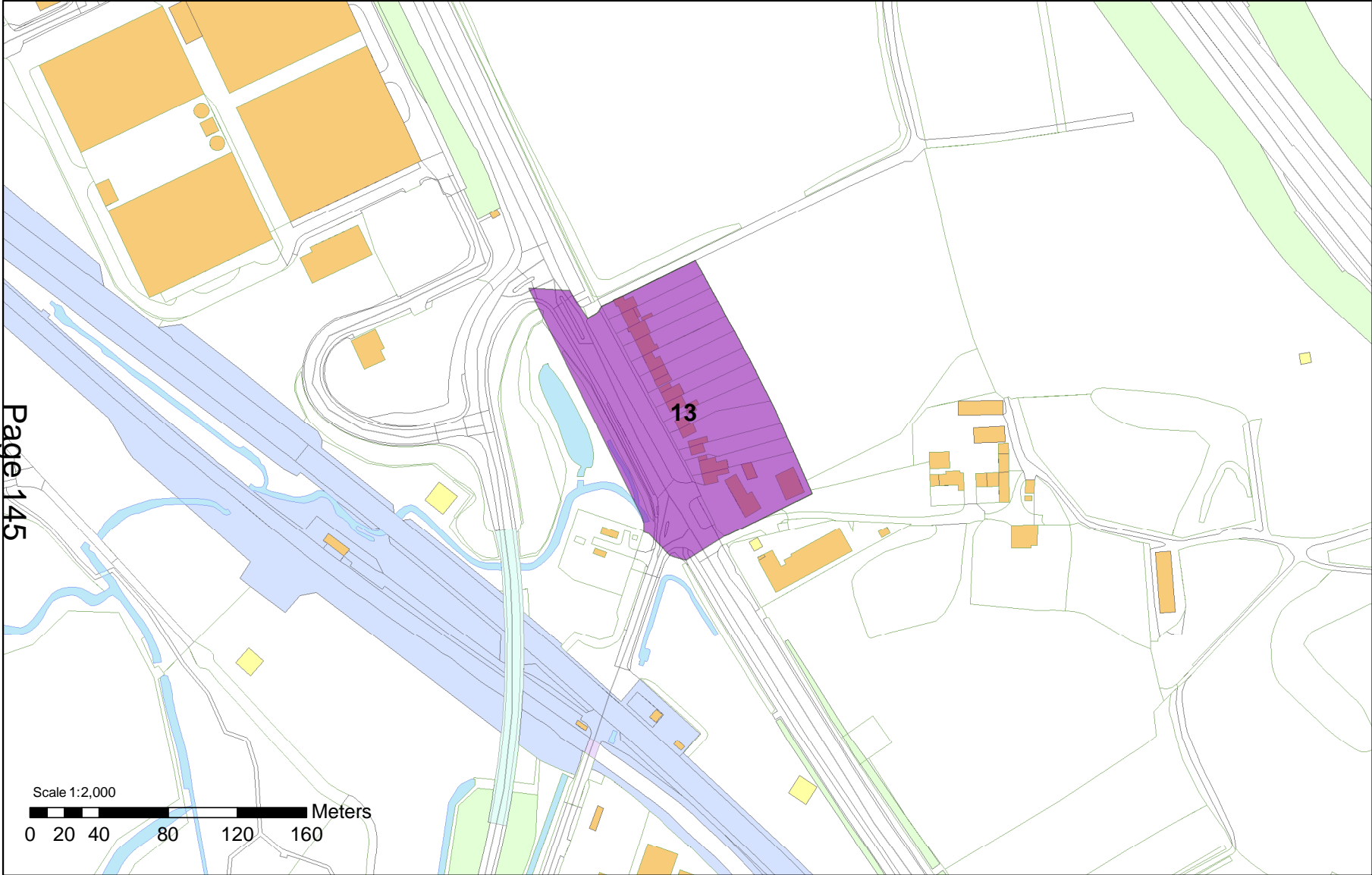
AQMA 12: Purfleet / West Thurrock, Watts Crescent (A1306)



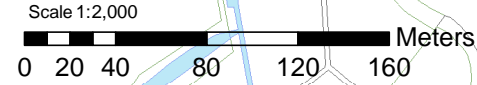
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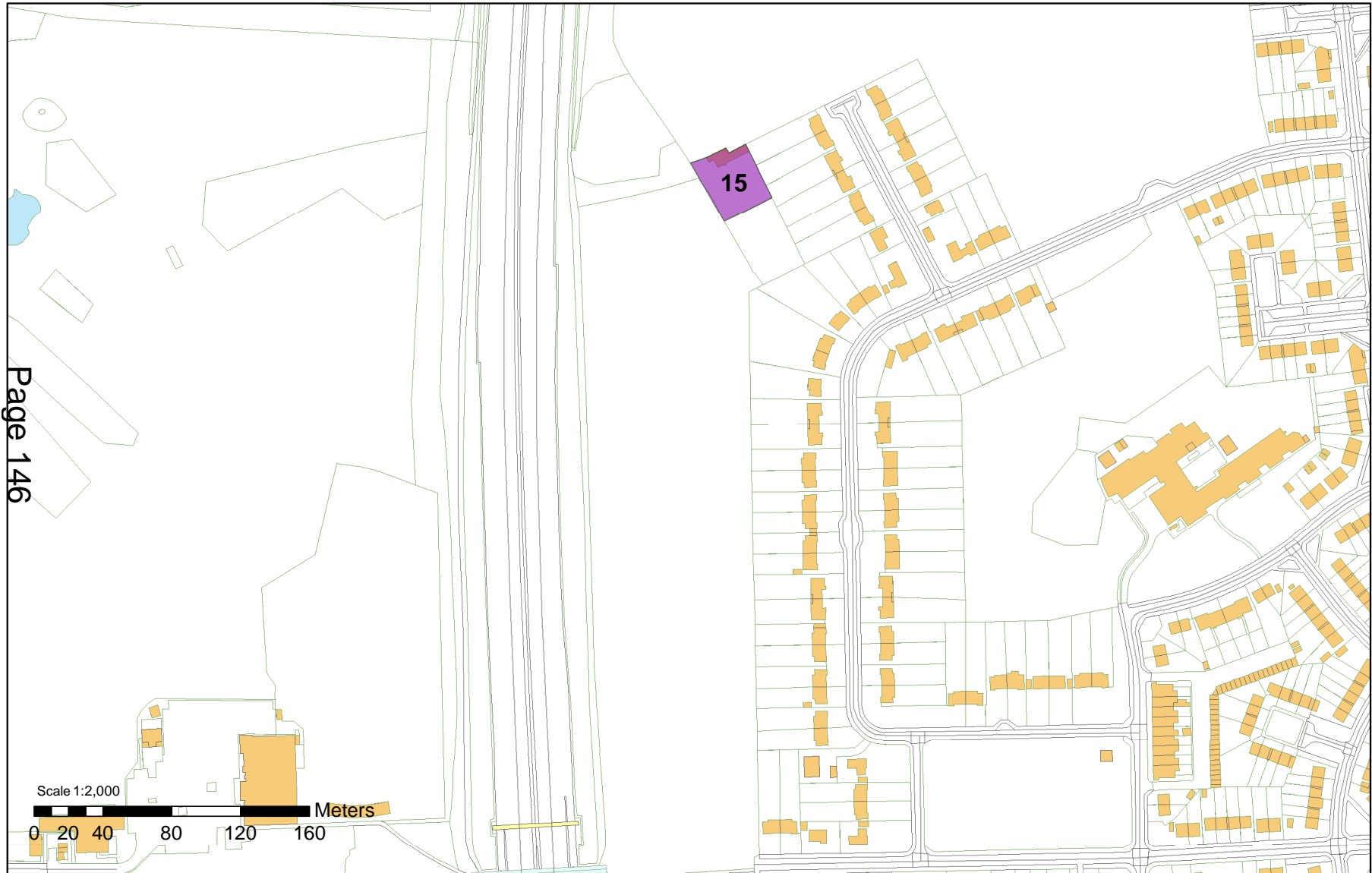
AQMA 13: Purfleet / Aveley, London Road Arterial Road (A1306)



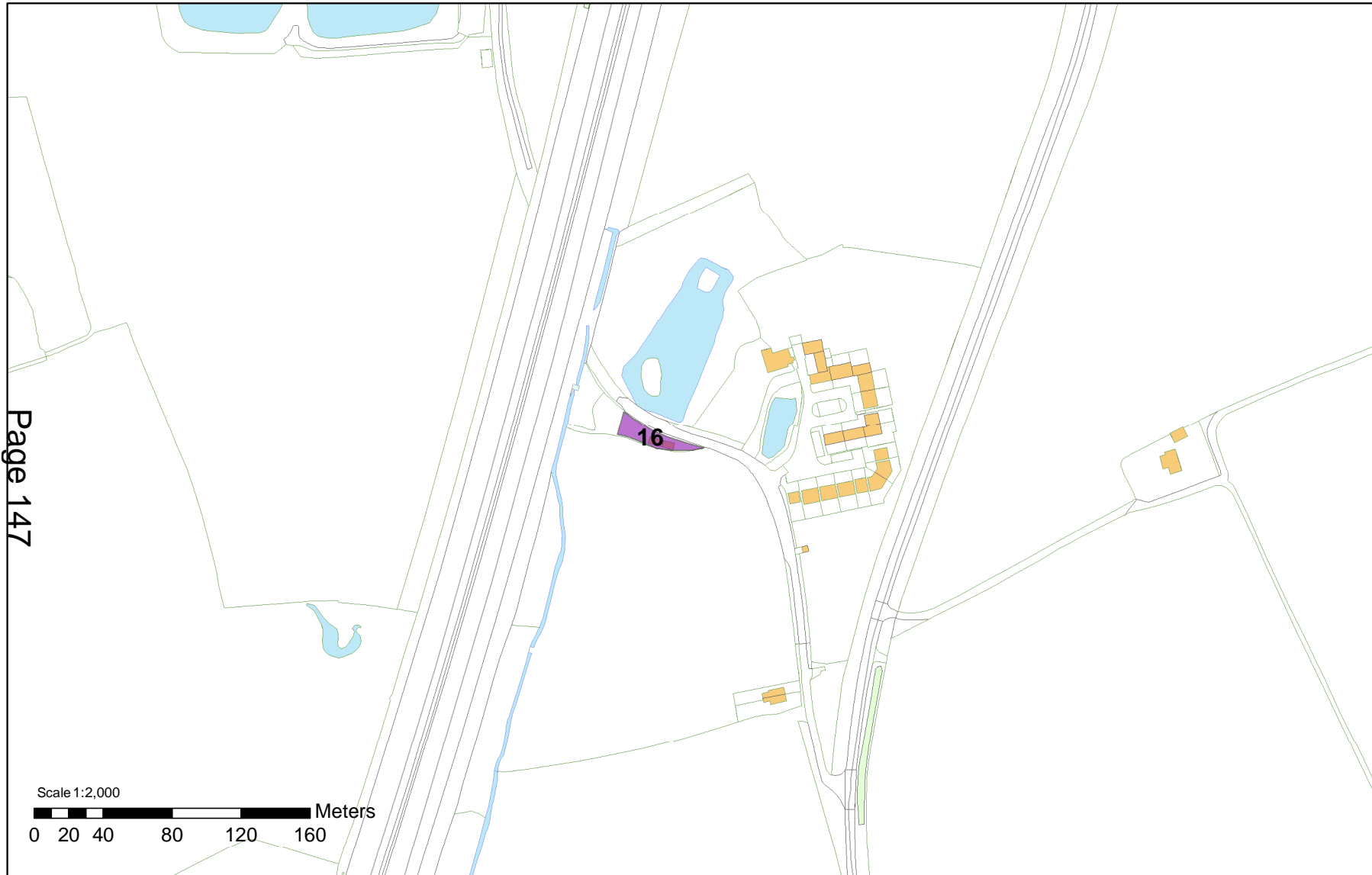
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AQMA 15: South Ockendon, Gatehope Drive



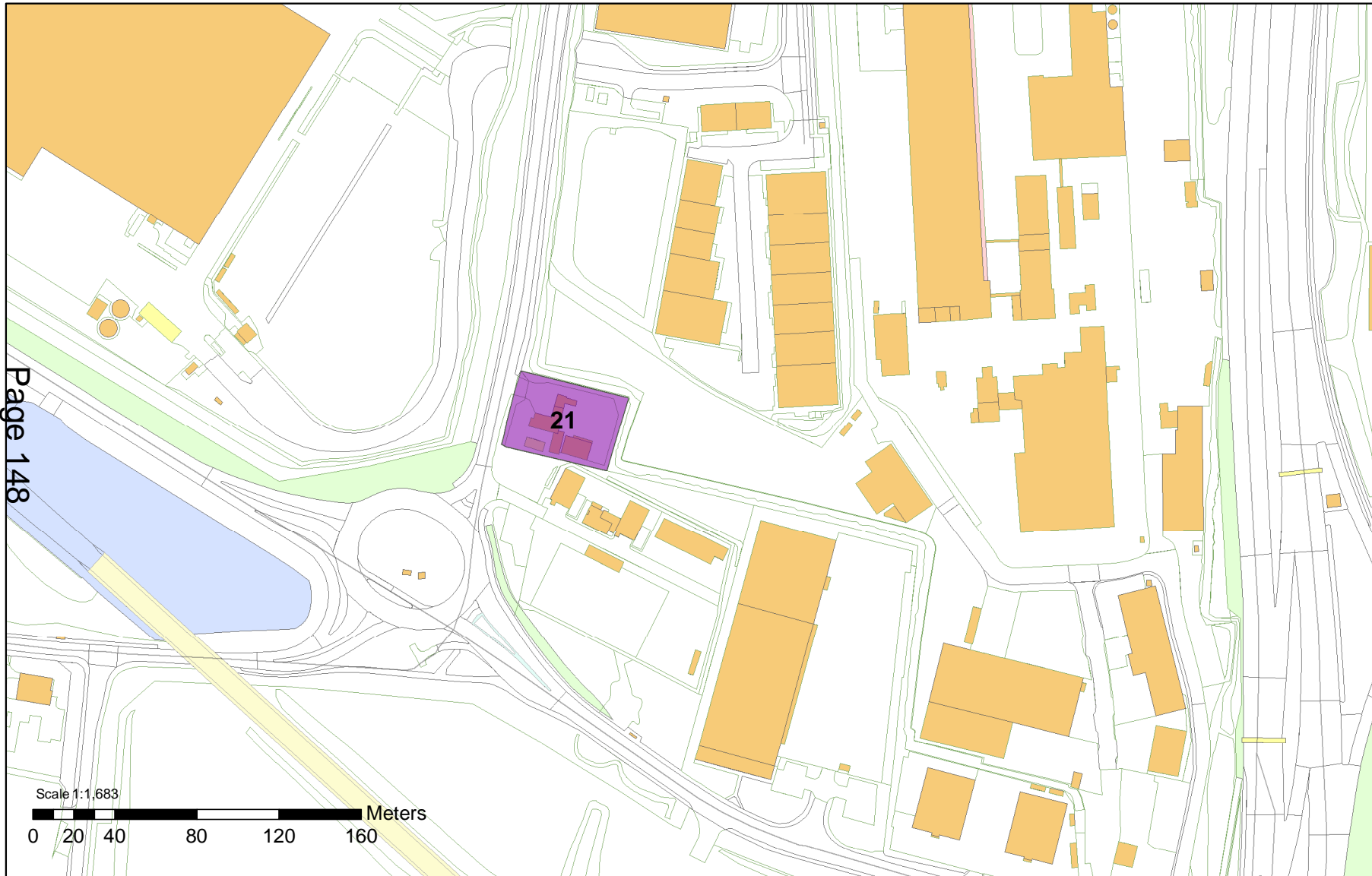
AQMA 16: North Ockendon, Kemps Cottage



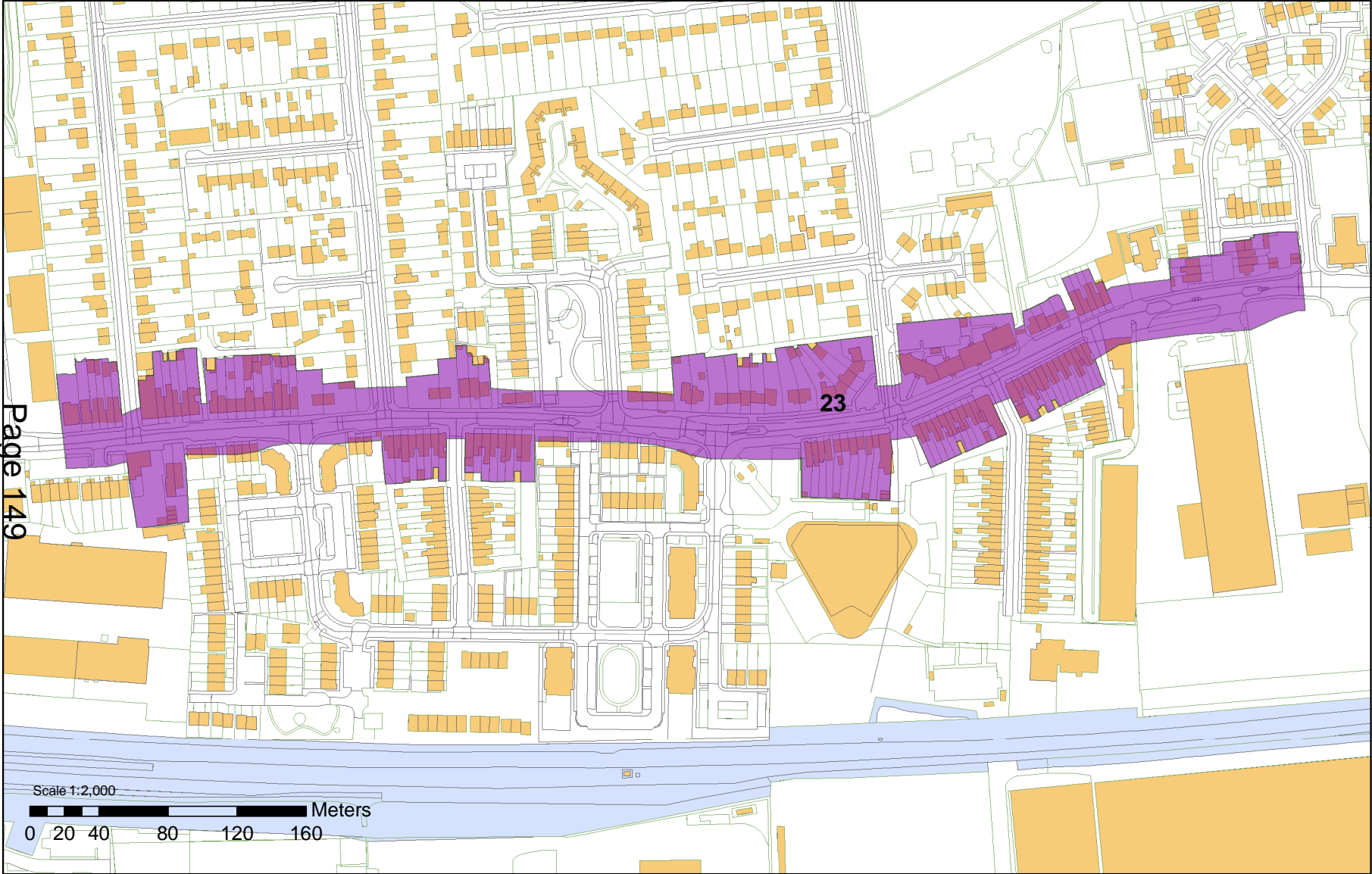
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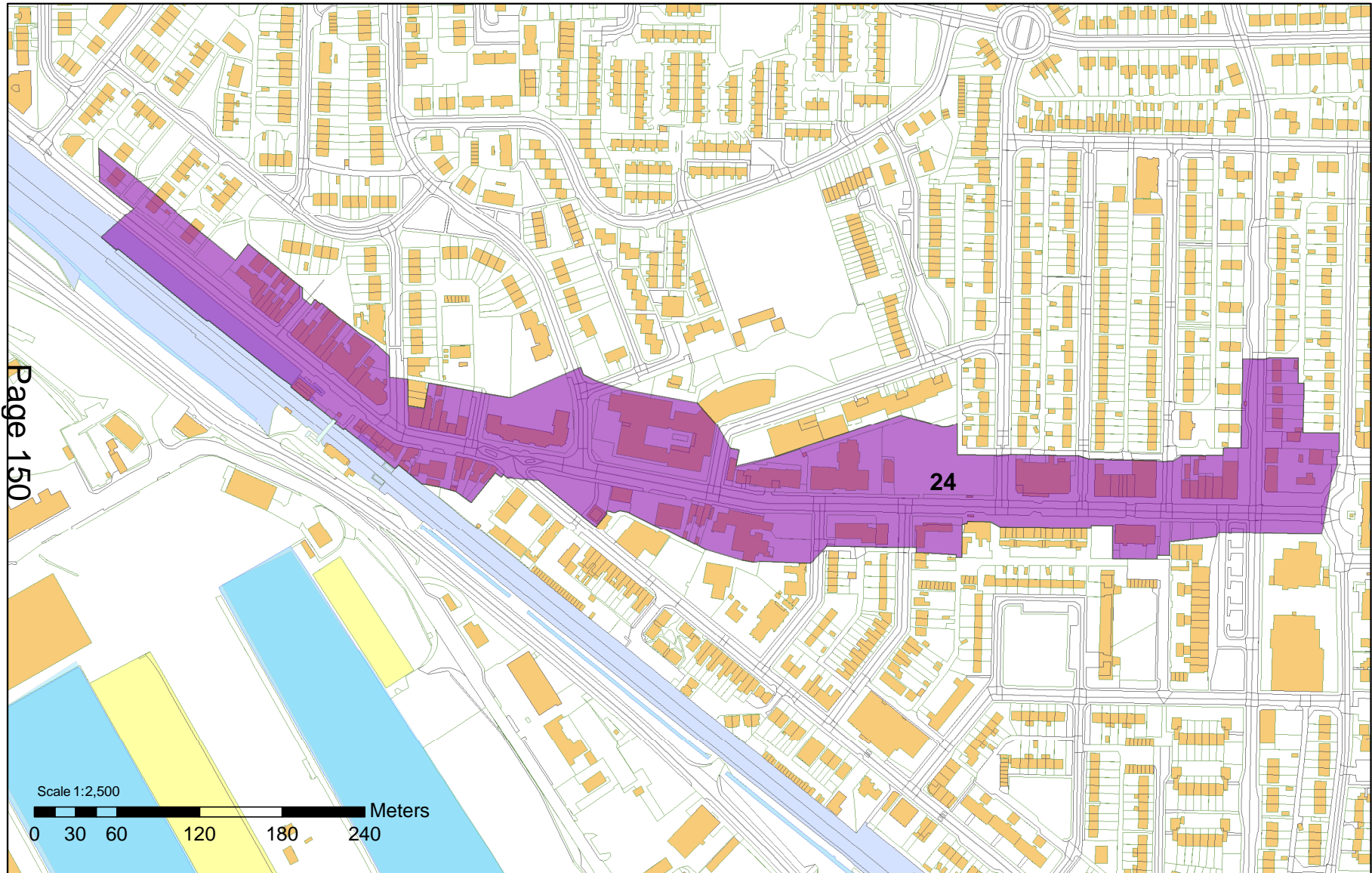
AQMA 21: West Thurrock, Stonehouse Lane



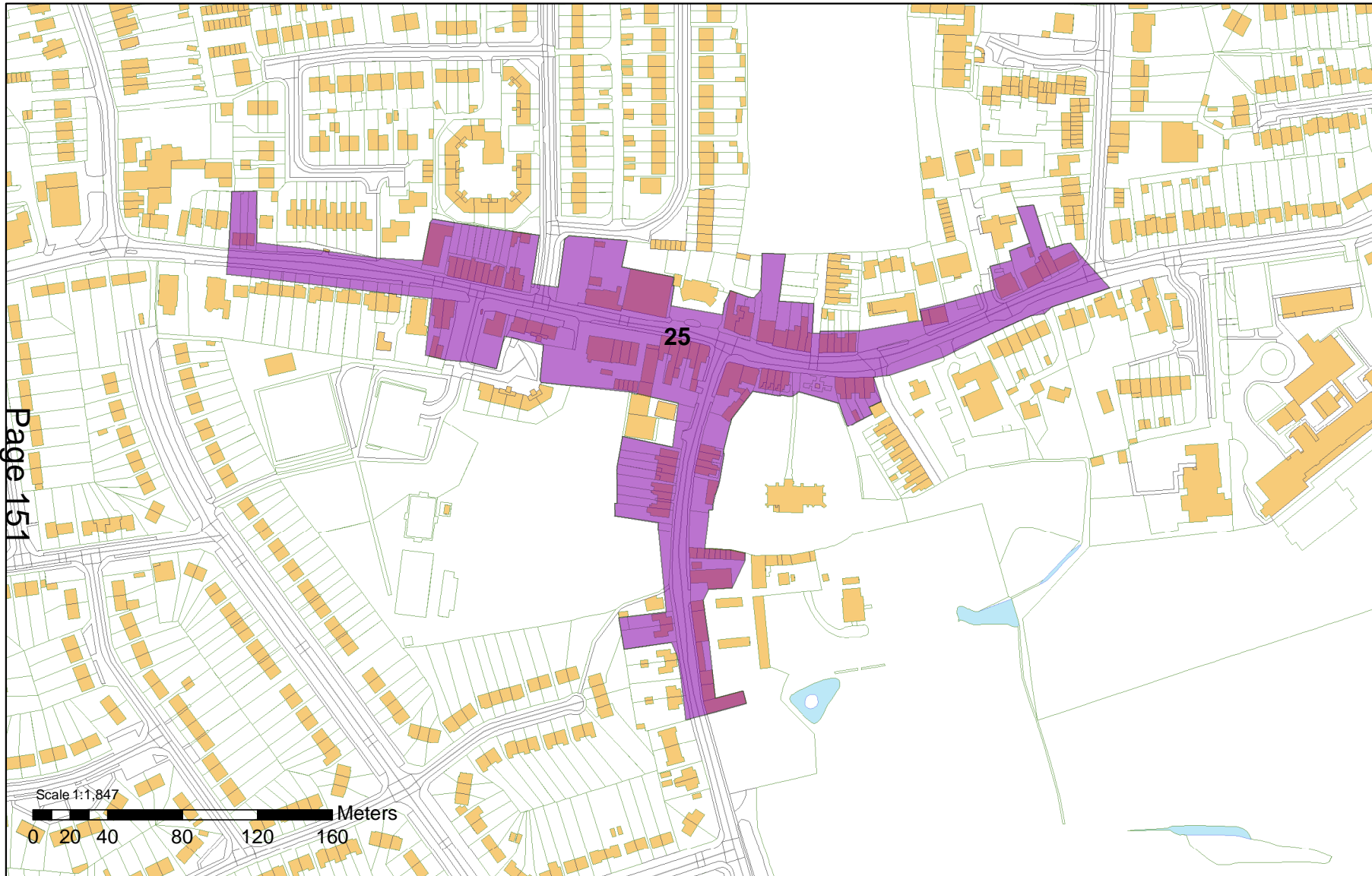
AQMA 23: West Thurrock, London Road



AQMA 24: Tilbury, Dock Road & Calcutta Road



AQMA 25: Aveley, Aveley High Street & Ship Lane



AQMA 26: Purfleet, Purfleet By-Pass

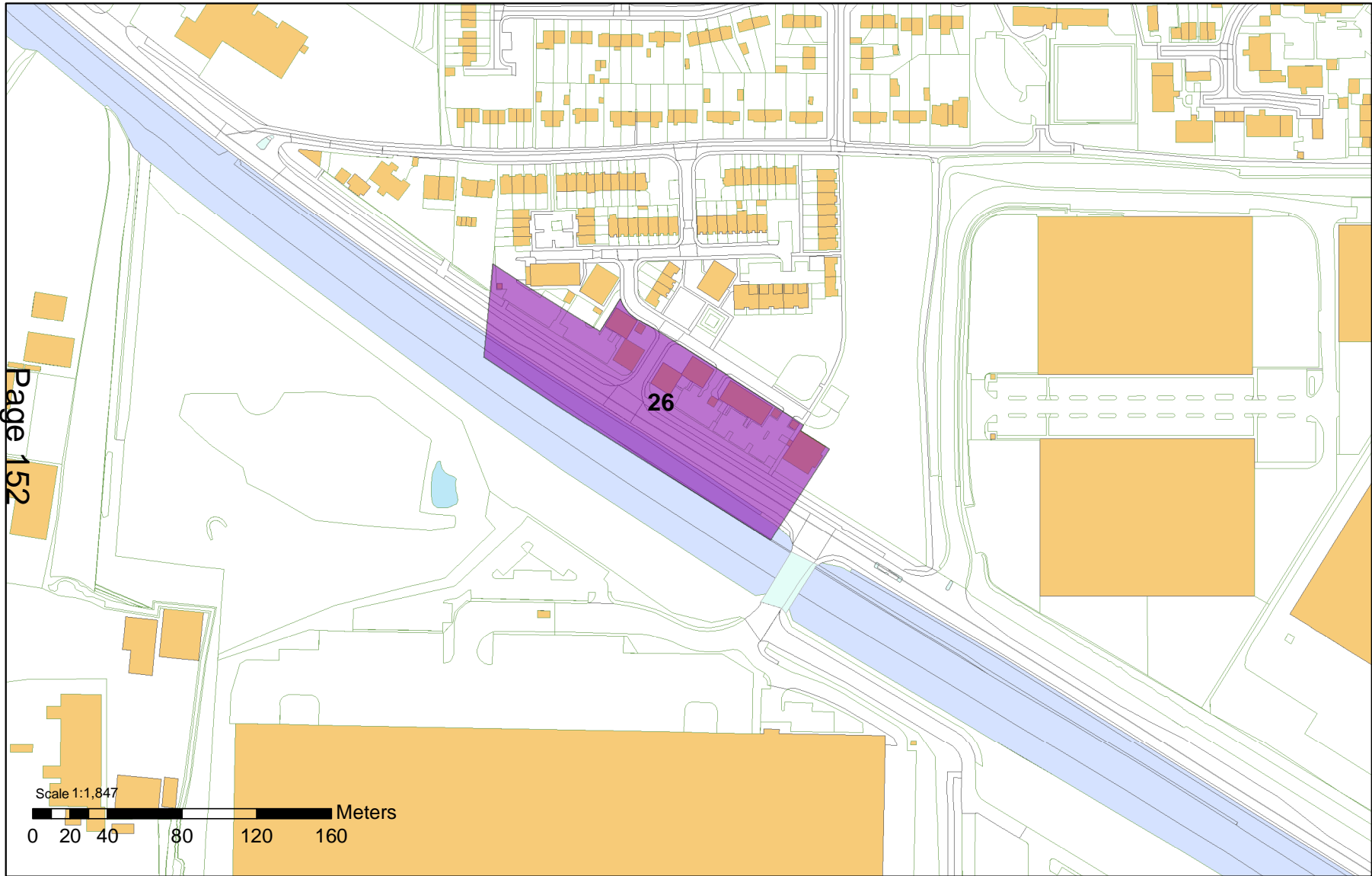


Table 2

National air quality objectives and European Directive limit and target values for the protection of human health							
Pollutant	Applies	Objective	Concentration measured as ¹⁰	Date to be achieved by and maintained thereafter	European obligations	Date to be achieved by and maintained thereafter	New or existing
Particles (PM ₁₀)	UK	50µg.m ⁻³ not to be exceeded more than 35 times a year	24 hour mean	31 December 2004	50µg.m ⁻³ not to be exceeded more than 35 times a year	1 January 2005	Retain existing
	UK	40µg.m ⁻³	annual mean	31 December 2004	40µg.m ⁻³	1 January 2005	
	Indicative 2010 objectives for PM ₁₀ (from the 2000 Strategy and 2003 Addendum) have been replaced by an exposure reduction approach for PM _{2.5} (except in Scotland – see below)						
	Scotland	50µg.m ⁻³ not to be exceeded more than 7 times a year	24 hour mean	31 December 2010			Retain existing
	Scotland	18µg.m ⁻³	annual mean	31 December 2010			
Particles (PM _{2.5}) Exposure Reduction	UK (except Scotland)	25µg.m ⁻³	annual mean	2020	Target value 25µg.m ⁻³ ¹²	2010	New (European obligations still under negotiation)
	Scotland	12µg.m ⁻³		2020	Limit value 25µg.m ⁻³	2015	
	UK urban areas	Target of 15% reduction in concentrations at urban background ¹¹		Between 2010 and 2020	Target of 20% reduction in concentrations at urban background	Between 2010 and 2020	
Nitrogen dioxide	UK	200µg.m ⁻³ not to be exceeded more than 18 times a year	1 hour mean	31 December 2005	200µg.m ⁻³ not to be exceeded more than 18 times a year	1 January 2010	Retain existing
	UK	40µg.m ⁻³	annual mean	31 December 2005	40µg.m ⁻³	1 January 2010	
Ozone	UK	100µg.m ⁻³ not to be exceeded more than 10 times a year	8 hour mean	31 December 2005	Target of 120µg.m ⁻³ not to be exceeded more than 25 times a year averaged over 3 years	31 December 2010	Retain existing

Table 2

National air quality objectives and European Directive limit and target values for the protection of human health							
Pollutant	Applies	Objective	Concentration measured as	Date to be achieved by and maintained thereafter	European obligations	Date to be achieved by and maintained thereafter	New or existing
Sulphur dioxide	UK	266 $\mu\text{g.m}^{-3}$ not to be exceeded more than 35 times a year	15 minute mean	31 December 2005			Retain existing
	UK	350 $\mu\text{g.m}^{-3}$ not to be exceeded more than 24 times a year	1 hour mean	31 December 2004	350 $\mu\text{g.m}^{-3}$ not to be exceeded more than 24 times a year	1 January 2005	
	UK	125 $\mu\text{g.m}^{-3}$ not to be exceeded more than 3 times a year	24 hour mean	31 December 2004	125 $\mu\text{g.m}^{-3}$ not to be exceeded more than 3 times a year	1 January 2005	
Polycyclic aromatic hydrocarbons	UK	0.25 ng.m^{-3} B[a]P	as annual average	31 December 2010	Target of 1 ng.m^{-3}	31 December 2012	Retain existing
Benzene	UK	16.25 $\mu\text{g.m}^{-3}$	running annual mean	31 December 2003			Retain existing
	England and Wales	5 $\mu\text{g.m}^{-3}$	annual average	31 December 2010	5 $\mu\text{g.m}^{-3}$	1 January 2010	
	Scotland, Northern Ireland	3.25 $\mu\text{g.m}^{-3}$	running annual mean	31 December 2010			
1,3- butadiene	UK	2.25 $\mu\text{g.m}^{-3}$	running annual mean	31 December 2003			Retain existing
Carbon monoxide	UK	10 mg.m^{-3}	maximum daily running 8 hour mean/in Scotland as running 8 hour mean	31 December 2003	10 mg.m^{-3}	1 January 2005	Retain existing
Lead	UK	0.5 $\mu\text{g.m}^{-3}$	annual mean	31 December 2004	0.5 $\mu\text{g.m}^{-3}$	1 January 2005	Retain existing
		0.25 $\mu\text{g.m}^{-3}$	annual mean	31 December 2008			

Table 2

National air quality objectives and European Directive limit and target values for the protection of human health							
Pollutant	Applies	Objective	Concentration measured as	Date to be achieved by and maintained thereafter	European obligations	Date to be achieved by and maintained thereafter	New or existing
National air quality objectives and European Directive limit and target values for the protection of vegetation and ecosystems							
Nitrogen oxides	UK	30µg.m ⁻³	annual mean	31 December 2000	30µg.m ⁻³	19 July 2001	Retain existing in accordance with 1 st Daughter Directive
Sulphur dioxide	UK	20µg.m ⁻³	annual mean	31 December 2000	20µg.m ⁻³	19 July 2001	Retain existing in accordance with 1 st Daughter Directive
	UK	20µg.m ⁻³	winter average	31 December 2000	20µg.m ⁻³	19 July 2001	
Ozone: protection of vegetation & ecosystems	UK	Target value of 18,000µg m ⁻³ based on AOT40 to be calculated from 1 hour values from May to July, and to be achieved, so far as possible, by 2010	Average over 5 years	1 January 2010	Target value of 18,000µg m ⁻³ based on AOT40 to be calculated from 1 hour values from May to July, and to be achieved, so far as possible, by 2010	1 January 2010	New EU target

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**Cleaner Greener and Safer Overview & Scrutiny Committee
Work Programme
2023/24**

Dates of Meetings: 13 June 2023, 7 September 2023, 7 November 2023 and 23 January 2024

Topic	Lead Officer	Requested by Officer/Member	Description of Report
13 June 2023			
Terms of Reference	Democratic Services	Officers	
Provision of Tree Surgery Contract	Vince Taylor	Officers	
Annual report on Underage Sales	Charlotte Edwards	Members	
Violence against Women and Girls	Michelle Cunningham	Officers	
Fees and Charges Review 2023/24	Kelly McMillan	Officers	
Waste Report	Susan Reddick	Officers	
Work Programme	Democratic Services	Members	
7 September 2023			
Thurrock Community Safety Partnership Annual Overview	Michelle Cunningham	Officers	
Work Programme	Democratic Services	Members	
7 November 2023			
Financial penalties for the enforcement of consumer protection legislation	Charlotte Edwards	Officers	

relevant to Letting Agents and Landlords			
Overview of responsibilities of Portfolio Holder for Environment, Sports and Leisure	Councillor Jefferies		
Annual Status Report on Air Quality in Thurrock	Gavin Dennett	Members	
Verbal Update on Clean and Green (<i>deferred</i>)	Paul Southall / Vincent Taylor	Members	
Waste Strategy Update (<i>deferred</i>)	Edward Brotherton	Members	
Work Programme	Democratic Services	Members	
23 January 2024			
Work Programme	Democratic Services	Members	
Thurrock Prevent Strategy Refresh	Michelle Cunningham	Officers	