



Insightful

Air Quality

Capability Statement



Who we are

STANTEC IS A TOP TIER GLOBAL CONSULTANCY. WE HAVE BEEN WORKING WITH OUR CLIENTS AND COMMUNITIES IN THE UK FOR OVER 150 YEARS.

We have consistently been at the forefront of planning, design and delivery of infrastructure and development in the UK.

With offices across the UK, Stantec has a strong reputation for its work with public and private sector clients on a diverse range of high-profile infrastructure and development projects.



Stantec in the UK

1700

INFRASTRUCTURE, BUILDINGS,
WATER & ENERGY

40

PLANNING SERVICES

250

ENVIRONMENT &
SUSTAINABILITY SERVICES

200

CIVIL ENGINEERING

160

TRANSPORT PLANNING

95

BUILDING STRUCTURES
& UTILITY SERVICES

How can we help?

GROWING PUBLIC AWARENESS OF THE HEALTH BENEFITS OF CLEANER AIR AND THE CONTRIBUTIONS OUR DAILY LIVES MAKE TO AIR POLLUTION HAS DRAWN INCREASING ATTENTION TO THE ISSUES AROUND AIR QUALITY AND EMISSIONS.

The global lockdown strategy response to COVID-19 has seen urban centres experience improvements to air quality, alongside widely reported health benefits. Preventing the degradation of these gains is likely to be a key aim of a 'green recovery'.

Our holistic approach offers insightful advice on ambient air quality issues, including detailed dispersion modelling of road traffic and industrial emissions, as well as odour, dust monitoring and assessment.

We also advise on 'low emission strategies' and innovative approaches to the mitigation of impacts to allow developments to proceed, such as the London 'Air Quality Positive' ethos.

By collaborating across our teams, opportunities for improvement and enhancement of the environment are delivered at each development stage. We work with the transport strategy and planning teams, environmental planners, climate change specialists, energy modellers, ecologists and our acousticians, whom are often reliant on the same data to achieve similar desired outcomes.

AMBIENT AIR QUALITY

- Specialists in air quality assessments for development projects, including land development, regeneration, energy and infrastructure projects.
- Extensive experience in stand-alone air quality assessments, ES chapters, monitoring programmes, management reports and damage cost calculations, including negotiation with local authorities in relation to mitigation costs.

DUST MANAGEMENT

- Addressing issues with dust, particularly during construction or mineral extraction.
- Development of mitigation/management plans either alongside or as standalone reports.

ODOUR

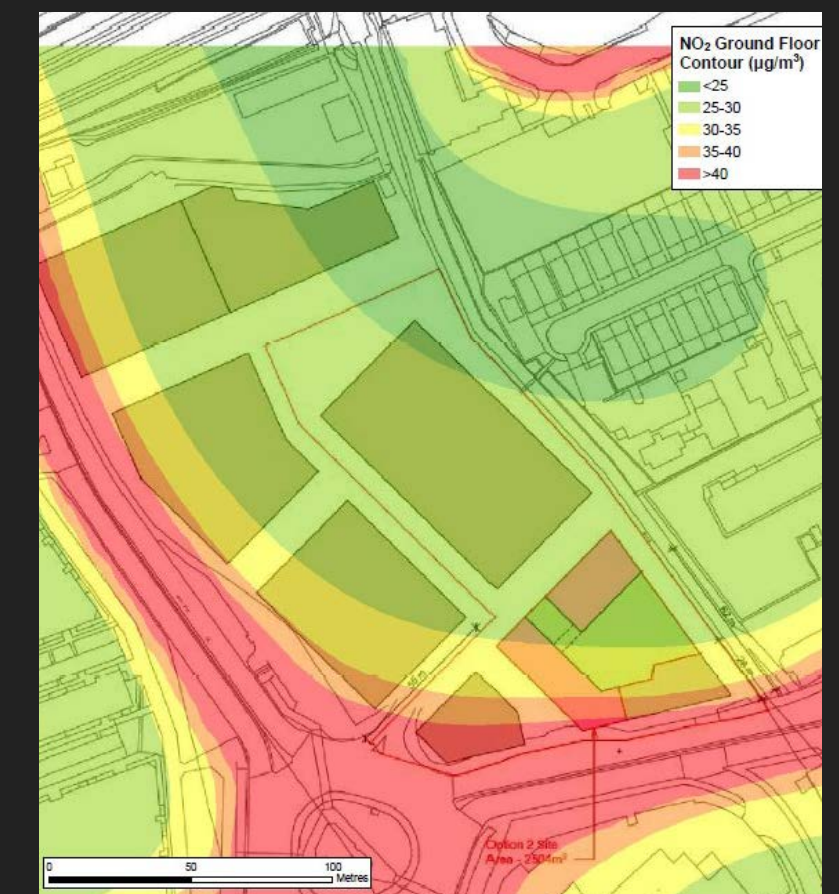
- Odour assessments, including modelling, to identify how close development can be placed to odour sources, such as sewage treatment works.

EXPERT WITNESS

- Where projects are more contentious, we can also perform expert witness services.

LOCAL AUTHORITIES

- Assistance with the identification of possible problem areas.
- Support to the Local Air Quality Management regime and development of plans to improve local air quality.



Project Experience

ALTON ESTATE, ROEHAMPTON

CLIENT: Redbrown
LOCATION: London

The Alton Estate development includes construction of over 1,000 homes, community, retail and employment facilities.

Stantec undertook detailed air quality dispersion modelling to assess the impacts of increased emissions resulting from the development, as well as to determine the suitability of the site for residential use.

'Air Quality Neutral' and construction dust assessments were also carried out.

Extensive liaison between stakeholders and the project team was undertaken throughout the project to ensure successful delivery. Redrow set demanding timescales, and Stantec worked seamlessly with the wider development team to meet those targets.



MILLBROOK POWER STATION

CLIENT: Drax
LOCATION: London

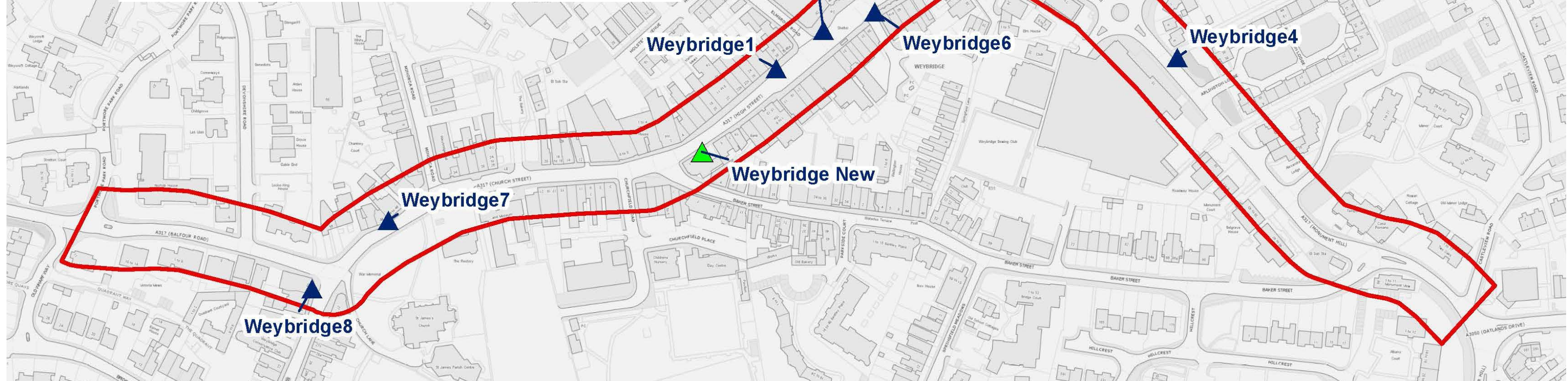
Stantec has supported Drax on Millbrook Power Station since 2015 and successfully delivered a design response addressing local concerns over visual impacts while achieving safe air quality.

An ES chapter assessed the potential air quality impacts due to vehicle emissions and dust generation during construction and decommissioning, and stack emissions during operation.

Our stack height sensitivity study examined differing stack heights at 2.5 m intervals from 15m to 40m, ensuring the adequate dispersion of air emissions whilst maintaining design efficiency.

“This is just to say a HUGE HUGE thank you to you all for your support in getting us to an Outline Permission on our site in Biggleswade in the last few weeks. We couldn’t have done it without you all, and I am very very grateful for your support. You have been wonderful.”

Jackie Sadek, Chief Operating Officer UK Regeneration following securing planning permission for 1,500 homes



- ▲ Relocated Monitoring Sites
- ▲ Existing Monitoring Sites
- AQMA Boundary

ELMBRIDGE LOCAL AIR QUALITY MANAGEMENT

CLIENT: Elmbridge Borough Council

Stantec has provided support to Elmbridge Borough Council for several years preparing their Local Air Quality Management annual reports.

A recent review of the Air Quality Management Area (AQMAs) and monitoring locations and preparation of the Annual Status Report (ASR) identified one of the AQMAs was no longer required.

This challenge to the current position and revocation of the AQMA streamlined the planning process in the area, supporting the Council in delivering its development aspirations.

We assisted in preparing the documents for submission to Defra to revoke the AQMA and our latest ASR was chosen as an example of good practice to be included on their website.



↑
Broadway, Ealing

BROADWAY, EALING

CLIENT: British Land

Taking into consideration the recently introduced requirement of the New London Plan that developments should “consider how local air quality can be improved across the area of the proposal as part of an air quality positive approach”, we informed the feasibility of and identified opportunities for an ‘air quality positive’ design to an office-led mixed-use development in the London Borough of Ealing.

Modelling demonstrated changes in concentrations of nitrogen dioxide within the site and surrounding area due to changes in the presence of street canyons resulting from the introduction of the proposed development.

By decreasing the effect of street canyons the development delivered improvements to dispersion of road vehicle emissions.

Also, by providing an area of publicly accessible space, allowing pedestrians to pass through the development, avoiding main roads and a nearby junction, the development had the potential to reduce public exposure to existing pollution.



HIGH SPEED 2 IMPACTS, CAMDEN

CLIENT: An Independent School Group

Stantec were responsible for an assessment of the implications of the construction of HS2 on an independent school in Camden.

The project included a full review of all relevant HS2 documentation, analysis of an air quality monitoring survey, a detailed modelling assessment of the air quality within the School site, recommending mitigation and monitoring measures and extensive consultation with various stakeholders.

Air quality was a highly emotive issue for many of the stakeholders and a major concern for the school regarding future pupil numbers, however through an in-depth analysis of the potential issues and thorough consultation all concerns were resolved.



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Communities are fundamental. Whether around the corner or across the globe, they provide a foundation, a sense of place and of belonging. That's why at Stantec, we always design with community in mind.

We care about the communities we serve—because they're our communities too. This allows us to assess what's needed and connect our expertise, to appreciate nuances and envision what's never been considered, to bring together diverse perspectives so we can collaborate toward a shared success.

We're designers, engineers, scientists, and project managers, innovating together at the intersection of community, creativity, and client relationships. Balancing these priorities results in projects that advance the quality of life in communities across the globe.

Stantec trades on the TSX and the NYSE under the symbol STN. Visit us at stantec.com or find us on social media.

Design with community in mind