

2661 - 013

35 Dover Street, Reading RG1 6AX

Air Quality Assessment

Impact on Air Quality during Construction Works

- Potential impact from dust from construction traffic
Proposed mitigation: Contractor to provide mitigation e.g. Wheel washing
- Potential impact from dust from loading and unloading of powdered materials
Proposed mitigation: Contractor to provide mitigation e.g. Misting
- Potential impact from dust from cutting and grinding
Proposed mitigation: Contractor to provide mitigation e.g. Misting
- Potential impact from smoke from on-site burning
Proposed mitigation: There will be no on-site burning by the Contractor
- Potential impact from vehicle emissions
Proposed mitigation: Contractor to minimize movements and prohibit idling of vehicle engines
- Potential impact from generator emissions
Proposed mitigation: Contractor to use mains power

Impact on Air Quality in Use

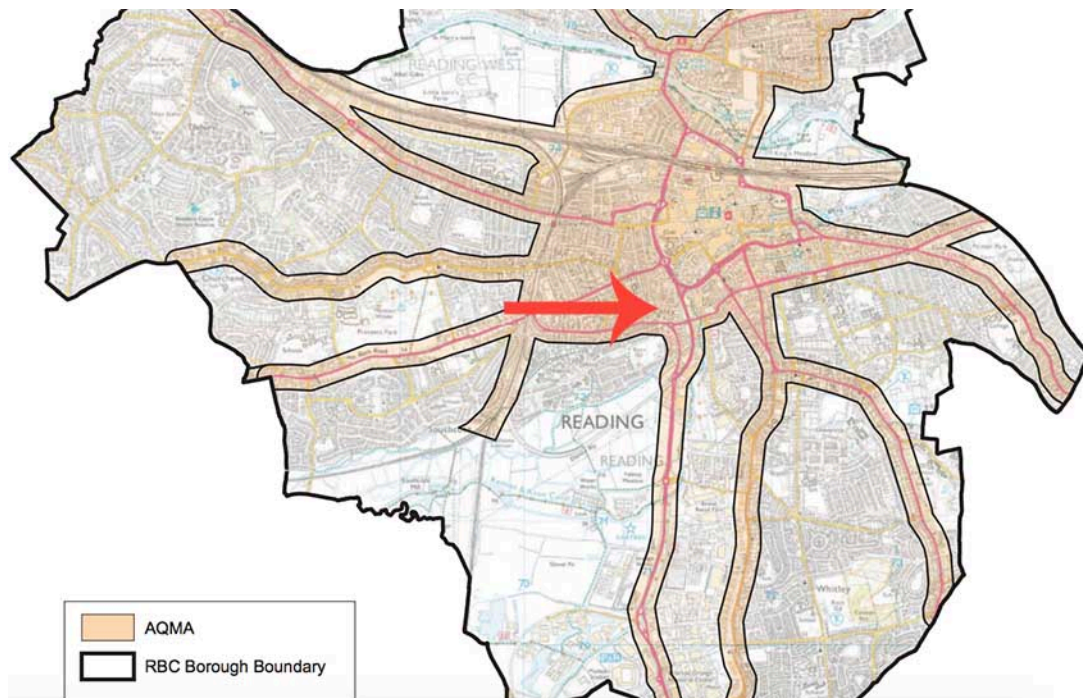
- The proposal would not lead to any increase in congestion or HGV movements.
- There is no proposed increase in car parking.
- There is no process proposed which will lead to emission of dust.
- The proposal does intensify the residential use, which is a sensitive receptor in an area of poor air quality.

Impact of Air Quality on-Building Occupants

- The following maps show that the air quality is not exceptionally bad.
- There is no need for a mitigation strategy other than standard best practice.
- There is no proposed increase in car parking.
- There is no process proposed which will lead to emission of dust.
- The proposal will lead to an increase in the amount of planted areas on site, which will have a beneficial effect on air quality.
- The new flats will be heated by air source heat pumps. This will have a negligible impact on local air quality.
- The proposal does intensify the residential use, which is a sensitive receptor in an area of poor air quality.

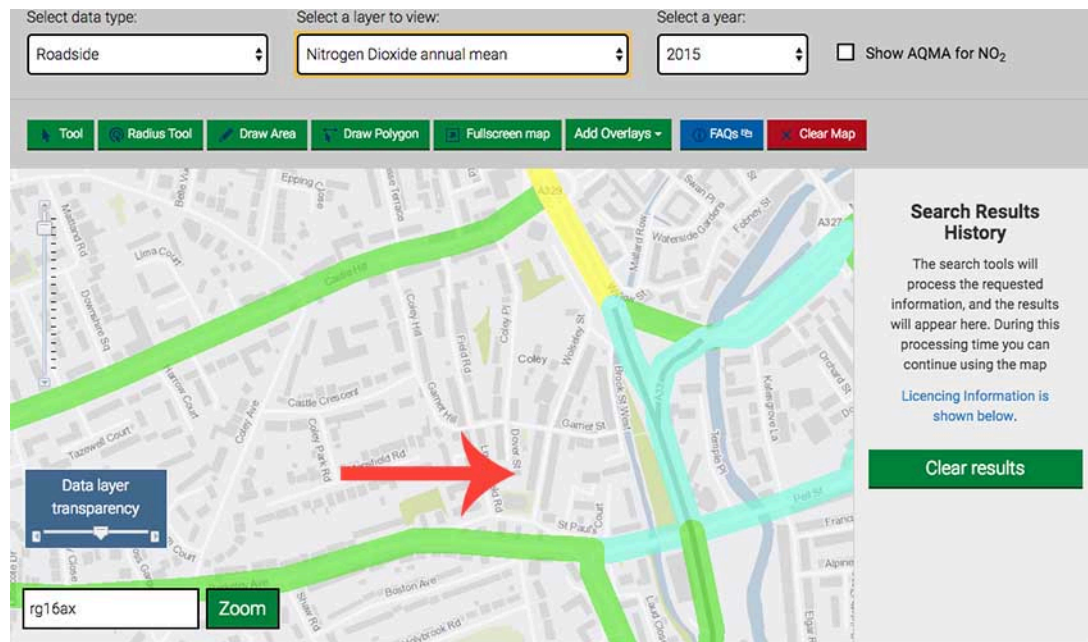
Air Quality at the Site Location

An Air Quality Management Area (AQMA) has been declared along all the main arterial roads in and out of the centre of Reading, and the centre of Reading itself, where the site is indicated with an arrow.



Nitrogen Oxides

The source apportionment studies have identified road traffic as the major source in the Nitrogen Dioxide (NO₂) hotspots.



About this ambient air quality map

This interactive tool allows you to explore ambient air quality concentration data from Defra's national Pollution Climate Mapping modelling.

• [Read guidance on using this GIS tool](#) (PDF - opens in a new window).

Use the toolbar above to switch between different layers and available tools.

This map tool is optimised for fast internet connections and modern web browsers; it may be slow in older browsers

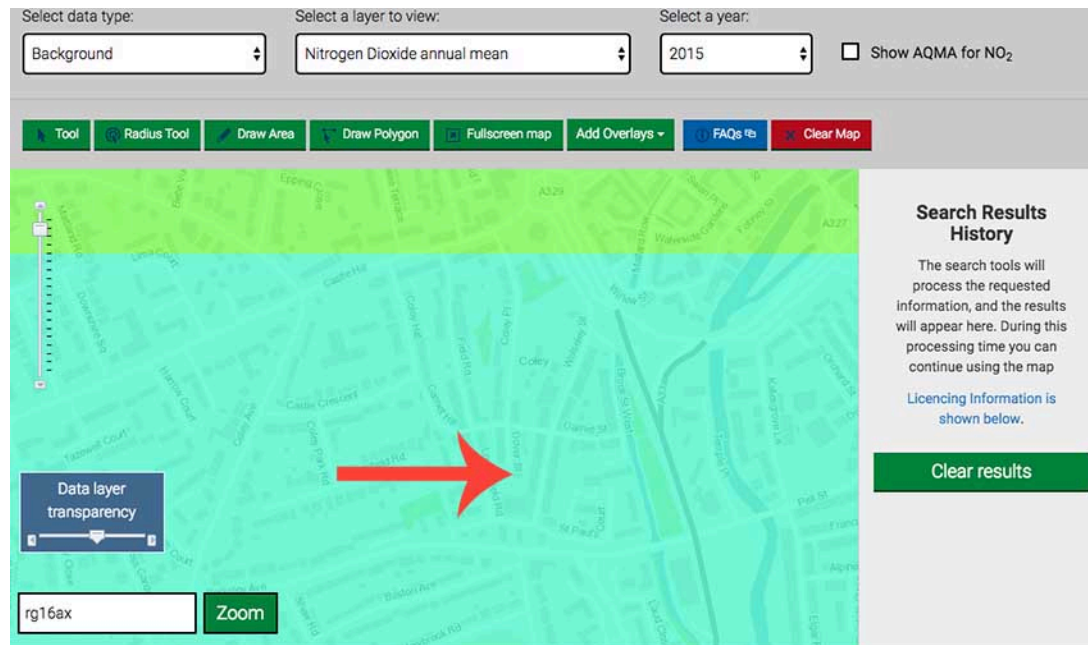
NO₂ roadside concentration

Annual mean ($\mu\text{g m}^{-3}$)



This includes Berkeley Avenue (30-40 micrograms), however it should be noted that the site is some 55m away from the road, and elevated considerably above road level. Furthermore St Saviours Church is located between the road and the new flat, and would reduce pollution levels to the other side of the structure.

In these circumstances the background level (20-30 micrograms) may be a more appropriate measure:



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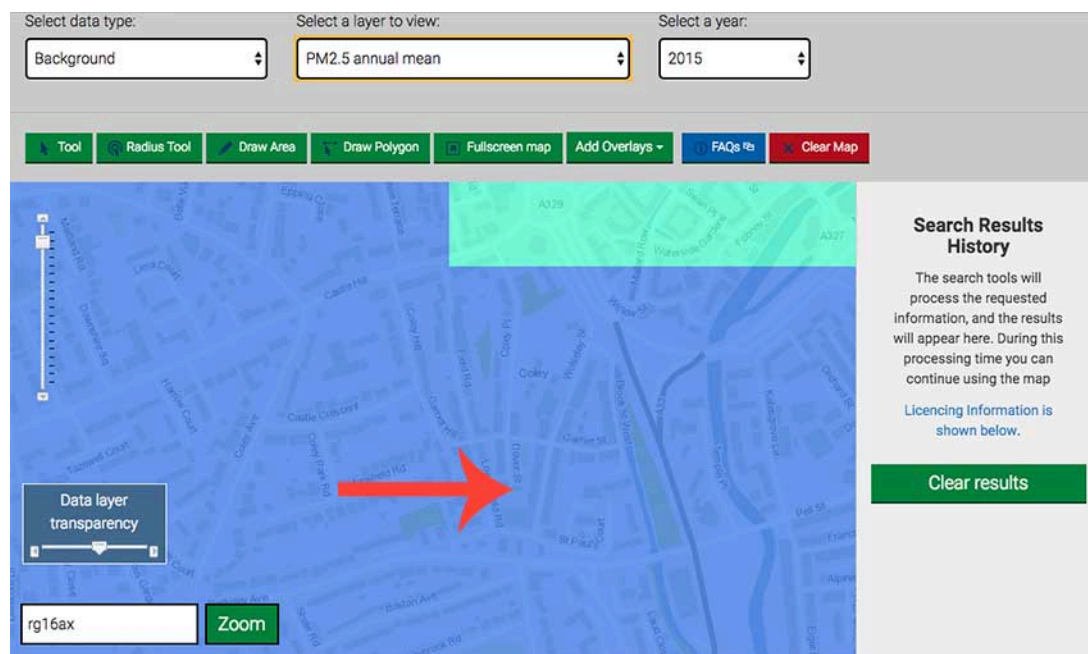
Nitrogen Dioxide background concentration

Annual mean ($\mu\text{g m}^{-3}$)

- < 10
- 10 - 20
- 20 - 30
- 30 - 40
- 40 - 50

Particulates

PM2.5 is understood to have no safe limit for health, it is therefore beneficial to reduce levels at all locations, not just hotspots that break a set limit. The background level is only 5-10 micrograms at the site location.



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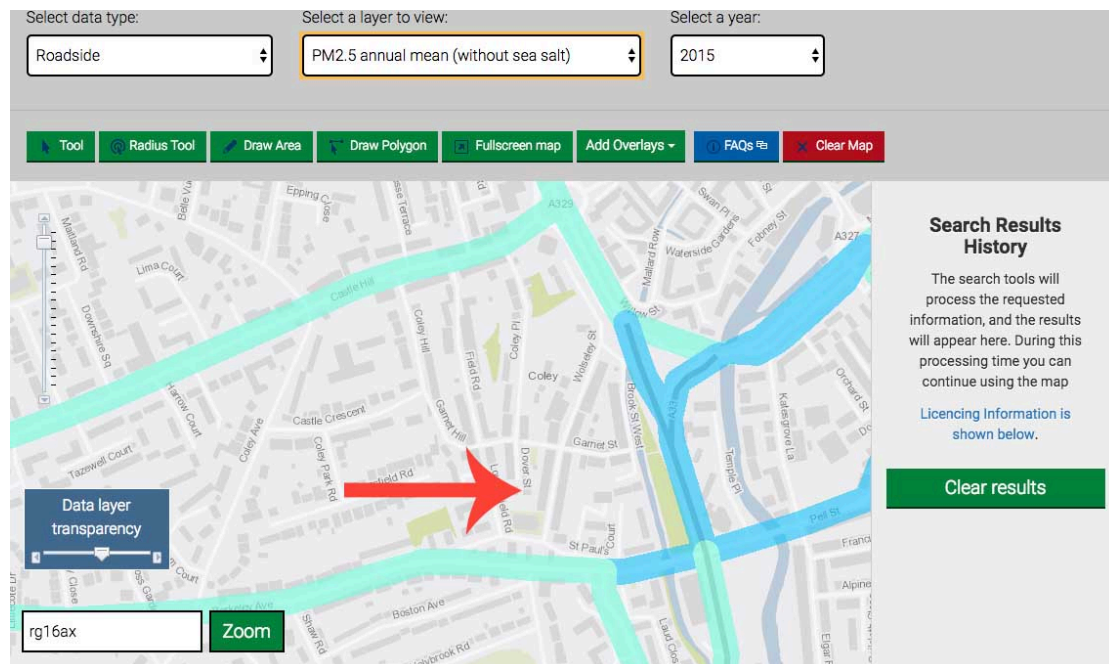
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PM_{2.5} background concentration

Annual mean ($\mu\text{g m}^{-3}$)



The roadside level on Berkeley Avenue is 10-12 micrograms, but this is neither particularly high nor particularly relevant, as noted before.



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PM_{2.5} excluding sea salt roadside concentration

Annual mean ($\mu\text{g m}^{-3}$)



Proposed Mitigation Measures for Benefit of Occupants

- No special measures are needed. Windows will be openable in the normal way, as the background air quality is acceptable.

Proposed Enhancement Measures for Benefit of Wider Public

- No special measures are needed.