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Figure 3.1 Monitoring Sites in Keynsham.

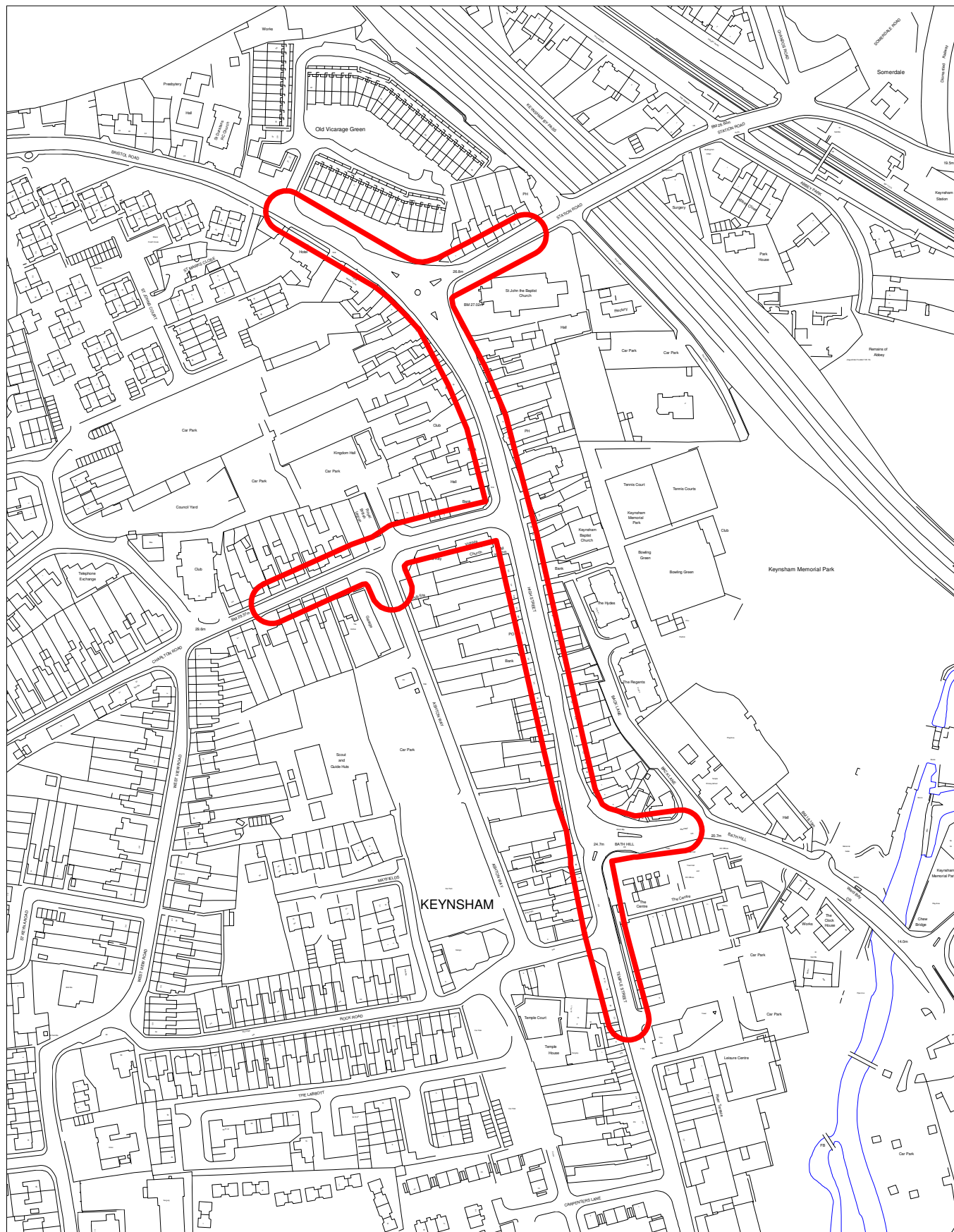
Keynsham High Street Air Quality Management Area

Nitrogen dioxide

Bath & North East Somerset Council
9-10 Bath Street
Bath BA1 1SN
Tel 01225 477000

Compiled by N Courthold on 07 June 2010

Scale 1:3100



Keynsham and Salford

Consultation Draft Air Quality Action Plans

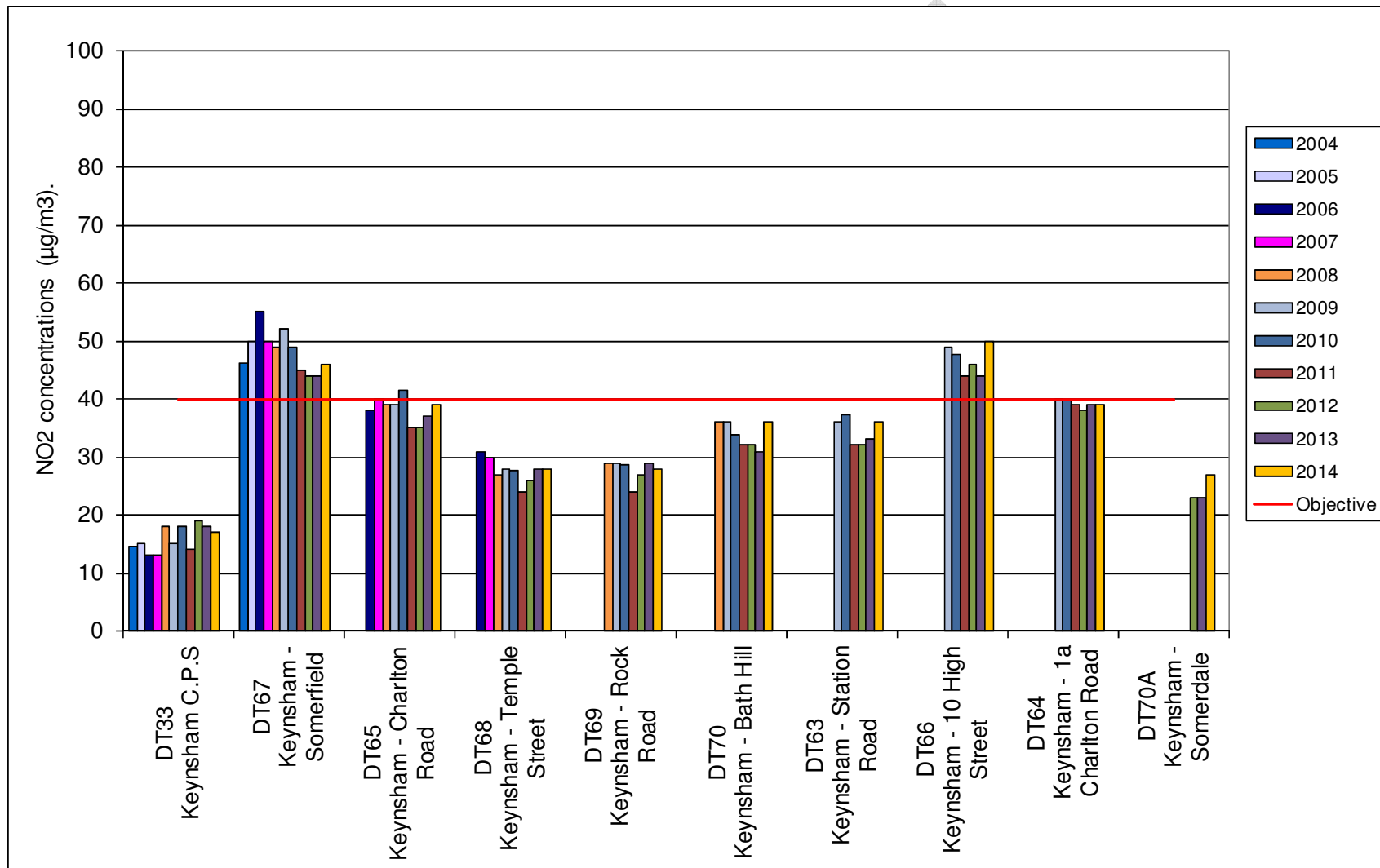


Figure 3.2: Trends in NO₂ Concentrations at Diffusion Tube Sites within Keynsham.

Keynsham and Saltford

Consultation Draft Air Quality Action Plans

DIESEL CARS AND INCREASED NO₂

The high contribution of diesel cars to NO_x emissions and the resulting concentrations of NO₂ is something that has been widely acknowledged and is an unwanted consequence of a greater uptake of diesel cars due, in part, to government incentives in order to reduce emissions of carbon dioxide.

Although NO_x emissions overall have been declining as a result of improved engine technology, primary NO₂ emissions have increased due to technology designed to lower the emissions of particles. This is explained in the scientific article 'Emission reduction versus NO₂ air quality concentrations, a trade-off?' by Peter J Sturm and Stefan Hausberger of Graz University of Technology, Austria

(https://online.tugraz.at/tug_online/voe_main2.getVollText?pDocumentNr=145519&pCurrPk=52228):

'The reasons for increasing NO₂ shares are mainly a catalytic exhaust gas after treatment such as DOC and coated DPF and the increasing EGR rates for modern vehicles. High NO₂ levels at the raw exhaust gas are desired for the passive regeneration of the DPF at lower exhaust gas temperatures. Thus the exhaust gas after treatment to reduce PM emissions is at least partly responsible for the actual NO₂ situation.'

New engine emission standards should thus include stipulations for reducing NO₂ emissions.