

Air Quality

There are currently three Air Quality Management Areas (AQMAs) in Brampton, Huntingdon and Fenstanton resulting from high annual mean concentrations of Nitrogen Dioxide (NO₂) a pollutant that is largely derived from road traffic emissions.

It is likely that the Brown and Blue routes, which include the more westerly option west of the A1 (closer to Brampton Wood), would result in a net reduction in NO₂ concentrations in the western part of Brampton. The Blue Route also passes very close to RAF Brampton and, although this is not currently in an AQMA, this option would lead to an increase in NO₂ concentrations at residential locations and could possibly lead to the declaration of a further AQMA in Brampton. On balance, the more westerly option set out in both the Brown and Blue routes is considered to be best for Brampton in terms of overall air quality impact although it is recognised that detailed air quality modelling may be necessary to determine the extent of the benefit.

Traffic on the current A14 makes a significant contribution to the measured concentrations of NO₂ in Huntingdon. All of the proposed routes are further away from the town than the existing route and therefore the implementation of any of these proposed routes will reduce the concentrations of NO₂ and are likely to lead to the revocation of the AQMA in Huntingdon.

Traffic on the current A14 makes a significant contribution to the measured concentrations of NO₂ in Fenstanton. All of the proposed routes **except Blue Variation 2** are further away from the village than the existing route and therefore the implementation of any of these proposed routes will reduce the concentrations of NO₂ and lead to the revocation of the AQMA in Fenstanton. The Blue Variation 2 route rejoins the existing A14 west of Fenstanton and it is expected that this option would not lead to any significant reduction in the concentrations of NO₂ or to the revocation of the AQMA in the village.

There are currently no AQMAs in Huntingdonshire resulting from exceedences of the fine particulates (PM₁₀) objectives. It is widely anticipated however, that the forthcoming EU Daughter Directive on Air Quality (expected mid 2007) and the revised National Air Quality Strategy (expected Spring 2007) will feature a new approach on PM₁₀; that of 'exposure reduction'. This approach recognises that any increase in PM₁₀ levels has a human health impact and promotes the reduction of population exposure to PM₁₀ overall, regardless of concentrations.

An approach of PM₁₀ exposure reduction would advocate locating trunk roads away from settlements and would therefore favour the more westerly route at Brampton and the Orange or Brown the Route east of the A1.

In summary the favoured routes in terms of air quality are the Brown Route west of the A1 and the Orange or Brown Routes east of the A1.

Noise

In terms of traffic noise exposure there is little to differentiate between the Orange Route and the Brown Route. Both of them would have a relatively small negative impact on a small number of isolated dwellings but would not significantly worsen noise levels for any settlements. The Blue Route and Blue Route Variation 2 both introduce considerably more residential receptors to elevated road traffic noise levels.

Land Contamination

The only significant contamination issue is associated with the Brown Route as it crosses the Buckden Landfills. The consultation document acknowledges that the scale of the issue is almost a complete unknown. Landfills are regulated by the Environment Agency and so under the circumstances it is recommended that note is taken of the Environment Agency's response to the consultation.

On balance, having consideration of air quality, noise and land contamination issues, the preferred option is the Brown route or the Orange route incorporating the westerly option at Brampton west of the A1 (closer to Brampton Wood).