



4<sup>th</sup> February 2015

**Conesby Farm Noise Summary - Post Examination Response**

North Lincolnshire Council have submitted noise-based objections to the Housing and Employment Land Site Allocations DPD inquiry in respect of Conesby Farm which are considered to be based on a sceptical and subjective evaluation as detailed in the responses. A significant amount of noise assessment has been undertaken for the Conesby Farm site, (far more than for most of the allocated sites) which has been used to carefully design in significant noise mitigation, yet the noise assessments undertaken by WYG appear to have been used by the Council to evaluate a site (for which more information is available) to be less appropriate in noise terms than other sites where there is no information available but which are equally likely to need noise mitigation.

*NLC Comments – from schedule*

*Noise issues and proximity to incompatible development*

*There are a number of constraints to residential development that will have a significant impact on the deliverability of the site. These include consideration of contaminated land, pylon positions and possible nuisance relating to local industrial, leisure and commercial activity (noise and potential odour). The cumulative effects of these constraints need to be considered when thinking about a land allocation. The Council is concerned about the impact of these factors on the health and well-being of potential residents at this site.*

*There is also significant concern about the effect of introducing residential properties into an industrial area due to the constraints this will place on existing business and the adverse effect this can have on current and future employment use.*

Applicant Response

It is accepted that there are noise sources near the site, however this has been very much detailed and assessed over the last 3-4 years and the scheme has been specifically designed to account for this. There is sufficient room on the site for significant mitigation and substantial set back. When considering the design and layout of the Conesby Farm, development noise was highlighted as being a potential issue due to the speedway to the north of the site, Normanby Road Industrial Area to the east of the site and industrial premises along Mannaberg Way to the south of the site.

An initial noise survey was undertaken in 2011. Using Cadna noise modelling software the existing ambient noise levels were verified against the monitoring, these results were then assessed against existing noise criteria found below;

- BS 8233:2014 'Guidance on Sound insulation and noise reduction for buildings'
- World Health Organisation: Guidelines on Community Noise

To achieve the above noise levels, noise bunds, enhanced glazing and alternative ventilation and set backs were incorporated into the design and layout of the site even with the following worst case assumptions.

- There is no noise bund to the south of the site (i.e worst case)
- The attenuation from commercial buildings is only incorporated into phase 2 (i.e. in Phase 1 attenuation from existing topography only)



## ATTACHMENT 2

- The dwellings at the boundaries of either phase 1 or phase 2 will not have private amenity spaces (gardens), bedrooms or living rooms facing either the speedway or industrial noise sources to the south.
- No attenuation from garden fences (typically around 10 dB reduction) has been assumed.
- All glazing will be minimum 30 dB Rw.
- Worst case assumption of 10 dB loss through open window assumed.

### NLC Comments

*When specifically considering noise impact, the WYG report dated November 2011 does not provide sufficient information to indicate that noise impact will be acceptable. The November report and subsequent noise modelling plots received by the Council Environmental Health Department have modelled noise levels associated with the Rainham Steel site, Scunthorpe Speedway and local road traffic noise. Other local business noise (e.g. 24/7 distribution business, skip lorry maintenance, food storage/processing etc.) has not been considered. There has been no comprehensive noise assessment submitted address all relevant noise sources likely to impact upon proposed noise-sensitive end use.*

### Applicant Response

There has been a significant amount of work undertaken since the 2011 assessments. This has included consultation with the Speedway and other operators, together with ongoing liaison with North Lincs. Environmental Health. The Speedway noise has been assessed as worst case (regular evening operations) despite recent discussions with the Speedway operators that indicated that the operations are currently making a loss and the future of the use of the track is unknown. As a result of the above comments additional noise surveys were requested for noise sources including the scrapyard of Wybeck Road, extra sources within Foxhills Industrial Estate to the east of the site, and some HGV noise to the north of the site. This survey was undertaken in January 2015 and the results of the survey have been included within the updated model. North Lincolnshire Council also highlighted the need to investigate potential noise from proposed rail cutting/ stitches assembly being introduced at Dragon Sidings to the East of the site. Upon liaison with VTS Track Technology Ltd, this rail cutting activity isn't expected to happen for another 6months, therefore wasn't included within the January 2015 Survey.

Based upon the inclusion of the data from the January 2015 re-survey the conclusions of the report still stand; that it will be possible to achieve BS 8233 target LAeq noise levels inside bedrooms and living rooms across the development site. The results of the updated modelling and surveys will be presented in the Noise Assessment accompanying the planning application.

### NLC Comments

*The Council also has concerns about the noise criteria used with the assessment due to them being higher than the noise levels recommended in BS8233:2014.*

### Applicant Response

This is a misinterpretation of BS8233:2014 which has the same limits as BS8233:2009 albeit the descriptions are different. Indeed the 2014 version of BS8233 allows for more flexibility and justification depending on baseline conditions and need for the development than the more rigid 2009 version. We have confirmed that even the misinterpreted BS8233 Level of (30 dB in living rooms) can be met. However, due to these concerns WYG investigated the areas of the site where noise criteria would and would not be met (with and without the barriers and employment use). By using the above standards and guidelines if the following criteria (which is more onerous than BS8223) was met then the site is considered to be suitable for development during phase 1.

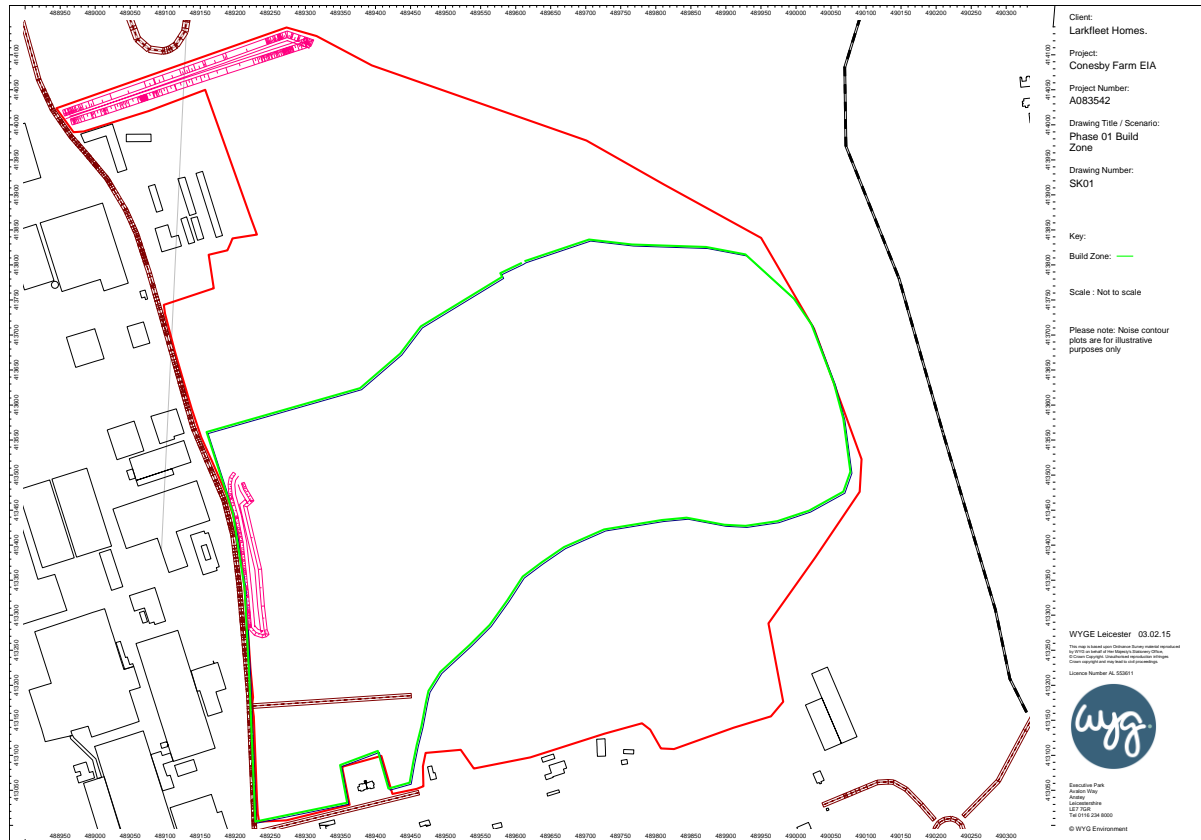
- Worst case (continuous daytime) speedway noise 60 dB LAeq 1 hr [i.e. 30 dB in kitchens / bathrooms with windows closed, 50 dB in kitchens / bathroom with windows open], Due to layout, 50 dB in Gardens (no fences), 40 dB Living rooms.
- Worst case (instantaneous bang, LAmax) industrial noise from top of gantries 65 dB LAmax, 35 dB LAmax kitchens and bathrooms with windows closed, 55 dB LAmax Kitchens and Bathrooms windows open. Due to layout, LAmax in Bedrooms 45 dB LAmax in bedrooms with windows open, 25 dB LAmax in bedrooms with windows closed
- Road traffic noise, 25 dB LAeq(8 hr) night, windows closed.



## ATTACHMENT 2

From the above criteria a plan showing the suitable areas of development for phase 1 in terms of noise was produced see below. This area is 389633m<sup>2</sup> and includes an offset of 538m from the speedway and 273m away from the industrial noise sources to the south of the site. It shows that the area within the green line is suitable to build residential dwellings in terms of noise without the mitigation of the proposed employment areas.

**Figure 1. Build Line Produced in October 2014**



### NLC Comments

*The existing layout proposed in the masterplan of the site relies on people having to keep windows closed to meet noise levels recommended by WHO for the prevention of sleep disturbance.*

### Applicant Response

This is not unacceptable and is common practice for most developments. BS8233:2014 also confirms that this is acceptable (so long as the ventilation requirements are met). Furthermore we have designed the layout of the dwellings and the scheme for this to only apply to kitchens and bathrooms, thus going beyond the usual criteria.

### NLC Comments

In conclusion the information submitted seen to date does not demonstrate that the site can achieve suitable noise levels for the future occupants and that noise impact can be adequately mitigated.

### Applicant Response

This is simply incorrect. North Lincolnshire seem to have a much more precautionary approach to noise levels than other authorities.



## ATTACHMENT 2

The design to any master plan will have to be mitigation led, as the significant constraints influence and affect the proposed design. Views within and out of the site will be dominated by industrial influences including warehouses, Scunthorpe Steelworks and electricity pylons.

### Applicant Response

The above confirms that the constraints are fully understood and noise mitigation has been an integral part of the design process to ensure the nationally accepted noise criteria are not only met, but comfortably achieved even with worst case assumptions. Industrial influences are a major part of Scunthorpe's urban landscape and a number of the allocated sites within the Site Allocations DPD supported by the EHO, abut pylons, railway lines, main roads and existing industrial premises or face towards the Scunthorpe Steelworks.

