



AECOM
6th Floor
One New York Street
Manchester
M1 4HD
United Kingdom
www.aecom.com

+44 (0)161 601 1700 tel
+44 (0)161 601 1799 fax

12 August 2011

FAO John Macholc
Ribble Valley Borough Council
Planning Services
Council Offices
Church Walk
Clitheroe
Lancashire
BB7 2RA

Our Ref:L23553/DJP

Dear Mr Macholc

Fort Vale Masterplan-Noise and Vibration

AECOM Acoustics have been asked to comment on the proposed Fort Vale Masterplan and the requirement for a noise assessment. It is proposed that land to the north of the existing 'S' Building will be developed as a business park, providing accommodation for Class B1, B2 and B8 uses as well as for additional facilities for Fort Vale Engineering. At this stage the final end uses of the proposed buildings are unknown.

AECOM Acoustics undertook a noise assessment (report reference 60161156 October 2010) for the new investment casting foundry at Calder Vale Park, Simonstone (Planning application reference 3/2010/0564) in 2010. As part of the noise assessment a noise survey was undertaken to determine the ambient and background noise levels at four locations representative of the nearest noise sensitive receptors.

The noise monitoring locations and a summary of the results are shown below. Full details of the noise survey can be found in the noise assessment report (report reference 60161156 October 2010)

Location 1 3Railway Terrace, Simonstone Lane.

Location 2 8 Bank Terrace, Simonstone Lane

Location 3 1 River Bank Terrace, Burnley Road

Location 4 Calder Vale Farm. (evening measurements only)

Monitoring location	Date	Start Time (hh:mm)	Duration (minutes)	Noise Levels (dB)			
				$L_{Aeq(T)}$	$L_{A10(T)}$	$L_{A90(T)}$	L_{Amax}
1	12/10/2010	11:14	30	63.2	69.4	38.4	84.9
	30/09/2010	12:46	30	64.8	70.6	44.6	84.1
	30/09/2010	15:13	30	67.6	73.6	46.2	88.5
	11/10/2010	20:23	15	62.2	68.3	38.0	83.3
	12/10/2010	01:12	15	63.5	74.0	35.3	88.5
2	12/10/2010	10:02	53	44.6	49.5	36.0	73.9
	30/09/2010	14:35	30	43.9	47.3	39.1	63
	30/09/2010	16:26	30	47.5	52.7	40.9	70.8
	11/10/2010	20:02	15	46.9	44.5	36.0	83
	12/10/2010	00:51	15	40.9	44.3	32.7	71.2

Monitoring location	Date	Start Time (hh:mm)	Duration (minutes)	Noise Levels (dB)			
				$L_{Aeq(T)}$	$L_{A10(T)}$	$L_{A90(T)}$	L_{Amax}
3	12/10/2010	11:49	30	68.1	74.6	44.0	80.5
	30/09/2010	13:54	25	67.3	73.7	44.5	84.7
	30/09/2010	15:49	30	68.7	74.2	49.2	80.7
	11/10/2010	20:55	15	59.4	65.5	41.5	77.4
	12/10/2010	01:31	15	60.1	69.3	35.0	81.4
4	11/10/2010	21:17	14	45.8	47.8	43.2	68.8

Notes: All values are in dB re 20µPa. Free-field, fast time-weighting

We believe that these results are still representative of the existing ambient and background noise levels as there have not been any significant changes in the area and would be valid for developing the masterplan.

As the end uses of the proposed masterplan buildings are not known at this early stage it is not possible to undertake a full noise impact assessment as the activities, plant or traffic movements are not known. At this stage it would be appropriate to use noise limits to minimise the potential noise impact on nearby residential properties based on the existing background noise levels.

Based on the existing background noise levels it is recommended that the following noise limits should be met at Railway Terrace Bank Terrace and River Bank Terrace:

Day:	45 dB $L_{Aeq, 10hr}$ at Railway Terrace
	42 dB $L_{Aeq, 10hr}$ at the rear of Bank Terrace
	49 dB $L_{Aeq, 10hr}$ at River Bank Terrace
Night	41 dB $L_{Aeq, 9hr 30mins}$ at Railway Terrace
	38 dB $L_{Aeq, 9hr 30mins}$ at the rear of Bank Terrace
	40 dB $L_{Aeq, 9hr 30mins}$ at River Bank Terrace

The time period for the noise limits were based on the length of the proposed shifts at the foundry building.

It is noted that the above limits were originally set for the foundry building, however these limits could be applied to the whole site, and careful management and design will ensure that the cumulative noise from all of the proposed masterplan will achieve the proposed noise limits. For example the proposed layout of units 5 and 9 to 13 will help to screen the remainder of the site from the residential properties on Railway Terrace and Bank Terrace.

The following options could be considered as the masterplan is developed to help minimise the potential noise impact:

- Locate the quieter activities and buildings on the boundary of the site, which are closer to the residential properties
- Have no external plant on the facades of buildings facing residential properties
- Have fencing/ barriers to screen the service yards.

As the masterplan is developed, further detailed noise assessments will be undertake to assess the potential impacts and to develop appropriate mitigation measures.



AECOM
6th Floor
One New York Street
Manchester
M1 4HD
United Kingdom
www.aecom.com

+44 (0)161 601 1700 tel
+44 (0)161 601 1799 fax

In conclusion, due to the lack of detailed information about the specific end uses of buildings within the masterplan, it is not possible to undertake a full noise assessment. Therefore it is recommended that the results of the baseline noise survey undertaken in September/October 2010 for the Fort Vale Foundry building application are used to set noise limits for the cumulative noise from the masterplan development.

Yours sincerely

Debbie Preston
Senior Consultant
D +44 (0)161 602 7588
E debbie.preston@aecom.com