# Agar Grove vibration policy for Demolition works.

## Prevention

Demolition by nature is the period within a construction project with the highest potential to create vibration.

All operations with the potential to cause vibration will be carried out within the stipulated time periods as listed below:

Time of operations and ancillary works which are audible at the site boundary shall normally be carried out between the following hours:

Mondays to Fridays 08.00 - 18.00Saturdays 08.00 - 13.00And at no time Sundays and Bank Holidays.

We will ensure our demolition contractor considers the production of vibration within their demolition method statement, we will ensure they review the methodology of the actual dismantling of each building to minimise vibration during this period.

We will ensure the selection of the demolition plant is the quietest and newest vehicles/plant machinery available as reasonably practicable, all plant will be maintained in good and efficient working order.

We will ensure all plant is operated in such a manner as to minimise vibration.

## **Suppression**

Suppression of vibration during the demolition phase will be carried via a number of methods.

#### Plant attachments:

Where practicable pulveriser or crushing attachments will be use over breakers or hydraulic hammers to minimise vibration.

#### Traffic movements:

All traffic movements on site will be limited to 8MPH to reduce vibration and noise.

- Vehicles will not wait or queue up with engines running on the site or the public highway;
- Vehicles will be properly maintained to comply with noise emissions standards;
- Deliveries will be restricted to be within working hours of the site; and
- Design and routing of access routes will minimise vehicle noise and the need to perform reversing manoeuvres.
- All traffic movements will be carried out on dedicated road ways.
- All traffic movements will be carried out between the agreed working hours.

#### Soft drop zones:

Where reasonably practicable demolition material will be dropped onto a soft ground surface rather than a hard surface to reduce impact sound.

This could one of or a mixture of the following:

- 1. Grassed areas.
- 2. The use of hay bales to prevent impact sound
- 3. Ground protection matting.
- 4. Spoil heaps of sand or other soft aggregate materials.

## **Containment**

Prior to any demolition works commencing and enabling period will take place, this will include the following:

- 1. Installation of fully boarded perimeter fencing.
- 2. Installation or establishing monitoring locations.
- 3. Selection, installation or purchasing of monitoring equipment.
- 4. Notification to surround properties.

The containment of vibration is controlled via the suppression controls, however we need to measure the efficiency of the suppression to ensure the dust is being contained.

Therefore we will establish monitoring point around the boundary to allow measurement to be taken routinely.

### The measurement will be taken via two methods:

The use of handheld device for short periods:

Product description:

The use of live monitoring points for prolonged periods of noisy works.

Product description:

#### Set points:

Background vibration monitoring will take place prior to any works onsite, this will establish a base line for the project. However we limit vibration levels arising from site activities at any residential building between 0800 and 1800 hours weekdays, 0800 to 1300 hours Saturdays to a peak particle velocity of 1.5mm/second in the vertical direction where practicable. Reference should be made to ISO 2631 - Whole Body Vibration and BS6472 - Human Response to Vibration in Buildings.

### In the event of a Breach of set points:

In the event of a breach in the set point levels the live or hand held monitoring system will alert the site manager, who will cease all works and carry out an investigation.

The investigation will seek to answer the following questions:

- 1. What was the source of the breach?
- 2. Were prevention measures in place and being adhered to?
- 3. Were suppression measure in place and were they sufficient?

Once the investigation is carried out the following questions will be asked:

- 1. Can the methodology be changed?
- 2. Can the prevention measure be improved?
- 3. Can the suppression be improved or addition suppression measures put in place?

Once a remedial method, prevention measure and suppression measure has been agreed the works can proceed and will be monitored to ensure an improvement.