
Noise Management Plan

Sheerness Recycling, Cobbs
Wood Transfer Station,
Brunswick Road, Ashford,
Kent.



October 2023

Version 2.0

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1.0 INTRODUCTION

Sheerness Recycling Limited (Sheerness) has prepared this Noise Management Plan for the site at Units 1 & 2 Cobbs Wood Trading Estate, Brunswick Road, Ashford, TN23 1EL (the Site).

This NMP will detail how the noise emissions from the crusher, machinery and other potential noise sources from the site will be minimised.

1.1 Background

1.1.1 2013 Noise Survey

During the original planning variation process in 2013 a noise assessment¹ was carried out to investigate the impact of early morning HGV movements (05:00hrs) on the nearest sensitive receptors – at the time these were considered to be the houses along Godington Road to the north of the site at some 190m distant.

Mainline railways and the Eurostar (now known as HS1) were noted to be located on the intervening land. Early morning (05:00-07:00 hrs) noise levels were recorded over two consecutive days much of which was dominated by birdsong with an average L_{Aeq} value of 52.8 dB. Passing trains were noted at levels of between 65 dB (A) and 75 dB(A).

1.1.2 2021 Noise survey

In 2021 Sheerness Recycling commissioned SLR Consulting Ltd. to undertake a factual noise assessment² during the operation of the site over several days (Friday 23rd and Thursday 29th 2021). This also included a period of time when the crusher on site was in operation on the site to determine the noise levels emanating from all current site activities during a 'normal' operational day.

Since the 2013 noise survey was undertaken further residential development has taken place to the north of the site (on what was once also commercial/light industrial land) the nearest sensitive receptors (NSRs) are now considered to be the properties to the north-east of the site on Atherfield Drive with railway lines again occupying the intervening land. Although the NSRs may have changed slightly between the two noise surveys, the distance from the site are still comparable between the two reports.

The maximum noise level recorded with the crusher operating i.e. when the site operations are most 'noisy' was considered to be 53 dB(A). Passing Trains and aircraft on off site noises recorded L_{AFMax} levels of between 62 and 67 dB albeit intermittently.

¹ Assessment of Noise from proposed early morning waste vehicle movements at a waste transfer station site at Brunswick Road, Ashford. Peter Moore, Report Ref: 130301/1 Dated May 2013.

² Noise Measurements, April 2021, Sheerness Recycling Facility, Ashford. SLR Consulting Ltd. Report Ref: 403.04370.00019, Dated September 2021.

1.2 Noise limits

Whilst no maximum noise levels have been set by the planning permission for the site, it should be noted that for other Sheerness Recycling locations where noise limits have been set these range between 50 dB L_{Aeq} 70 dB. Both with receptors closer than 200m.

The maximum levels recorded at the Ashford site sit within these two parameters.

NB: This Noise Management Plan (NMP) was requested as standalone document as part of the permit variation application for the site to increase the storage/throughput of the site. Although it should be noted that the increase in storage/throughput is considered a regularisation of what is currently happening on site and the frequency/intensity of site activities will not change. The Noise management Plan will form part of the Environmental Management System (EMS) for the site going forwards.

2.0 SITE DESCRIPTION

The site is located to the west of Ashford town centre within an industrial complex known as Cobbs Wood Industrial Estate. Main line railways form the immediate northern and southern boundaries of the site effectively creating a stand-off area between the site and the nearest residential receptors. Residential properties are located to the north and south of the site and Victoria Park open space (and the River Stour) are also located to the south of the site. A footpath runs adjacent to the site's western boundary.

Table 2-1
Surrounding Land Use

Boundary	Description
North	Main line railway forms the immediate northern boundary, Residential properties ~170m north beyond which is the western edge of Ashford Town centre.
East	Railway line Residential properties some 200m east, beyond which is the new cinema complex.
South	Main line railway, then recently constructed/under construction residential properties some 100m. Beyond which is Victoria Park (Green Corridor) and the River Stour.
West	Cobbs Wood Industrial Estate, including concrete batching yard, civic amenity site and numerous other commercial properties.

Potential receptors within 500 m of the site include:

- Residential receptors to the north/northeast. The nearest residence is located 172m northeast of the site.
- Residential receptors to the southeast. A residential development is currently being constructed some 100m southeast of the site. However, the existing site building acts somewhat as a screen for receptors to the south of the site.
- Commercial receptors to the northwest. Commercial properties lie immediately to the northeast of the site.

3.0 OBJECTIVES AND STATUS

NMPs are developed and employed to principally:

- identify and employ '*all appropriate measures*' to minimise the generation and noise and subsequent exposure / impact;
- prevent exposure of people outside the site to levels of noise which would result in complaints; and
- minimise the risk of unplanned '*noisy*' events which have the potential to result in off-site noise complaints.

This NMP details and lists the decision-making process on the choice of controls, general site design, and operational practice. The NMP is considered as a working document with the specific aims of ensuring:

- noise impact is considered as part of the day-to-day operation of the site;
- the reduction in risks of an unplanned '*noisy*' event that could potentially result in off-site complaints;
- noise is primarily controlled at source by good operational practices, the correct use and maintenance of plant, and operator training; and
- '*all appropriate measures*' are taken to prevent or, where that is not reasonably practicable, to minimise noise emanating from the Site.

3.1 Status

This NMP is a controlled document, and forms part of the Environmental Management System (EMS) for the site.

The specification for the periodic review and update of this plan will be set out within the EMS. Updates will also be considered for the following events:

- New plant or equipment being utilised on site;
- New operations being undertaken on site;
- Local Authority or Environment Agency requests;
- Receipt of complaints requiring remedial action over and above that already contained with this NMP.

The Site's management team have overall responsibility for the implementation and administration of this NMP.

3.2 Specific Site Noise Limits

There are not any specific noise limits applicable to the activities carried out at the Site.

4.0 NOISE MANAGEMENT AND CONTROLS

This Section details the management and control measures that will be put in place to minimise noise impact at the locally identified sensitive receptors.

Installations should be operated in such a way that all appropriate preventative measures are taken against pollution, in particular through the application of Best Available Techniques (BAT).

Overall, the Site is operated as practicably as possible in terms of reducing noise emissions, through operational practices, the regular servicing and maintenance of plant and operator training.

Noise is and will be considered as part of all operations and processes, including where future expansion is required and/or where plant is required to be replaced.

4.1 Noise Control Measures

4.1.1 Responsibilities

Within the constraints of efficient site operations and health and safety requirements, the following measures are specifically implemented with respect to the management and control of noise levels within the Site:

- Documented daily plant and site inspections;
- Site manager (or nominated representative) on site every day;
- Daily inspections and checks of all plant and equipment, to ensure that any interim maintenance is identified, and repairs are undertaken soon as possible;
- Routine maintenance of all plant and equipment, including vehicles, will identify equipment operating at elevated noise levels and work will be undertaken to repair the defect; and
- Use of in-house mobile plant fitters and plant workshop for breakdowns and routine maintenance.

These measures are in line with guidance, whereby noise issues are addressed through *“a high level of equipment servicing and maintenance”*.

4.1.2 Specific Site Practices and Management Measures

Within the constraints of efficient site operations and the requirements of the relevant British Standards, the following will be implemented:

- The site layout has been designed, as far as practicable, to provide screening (using stockpiles) between the equipment and the nearest receptors.
- limiting the use of the crusher. The crusher operates occasionally, up to four times per month and not in operation before 09:00. This will not change post permit variation.
- limit the number of plant items in use at any one time;

- plant maintenance operations should be undertaken as far away from noise-sensitive receptors as possible;
- reduce the speed of vehicle movements;
- ensure that tailgates are shut and locked before leaving the tipping area;
- ensure that operations are designed to be undertaken with any directional noise emissions pointing away from noise-sensitive receptors where practicable; and

4.1.3 Training

The Site training Site rules include good working practice instructions for Site staff, managers and contractors to help minimise noise within the Site. All operators are trained and experienced for the plant and equipment they use.

Site staff will be advised of the following in relation to noise:

- the proper use and maintenance of plant and equipment to minimise noise;
- the positioning of any mobile machinery to reduce noise emissions; and
- avoidance of unnecessary noise when operating plant and equipment.

4.1.4 Public Relations

It is essential to maintain good public relations with local residents at nearby noise-sensitive receptor locations:

- endeavour to be good neighbours, i.e.:
 - Get to know the neighbours; be concerned about them and try to understand their problems; encourage them to know the site personnel; listen as well as talk,
 - create a good impression by running a tidy and efficient site,
- ensure there are lines of communication, e.g.:
 - nominate a point of contact for issues relating to the site,
 - support a liaison committee,
 - give advance notice and explanation of activities that might cause complaint,
 - keep systematic records of complaints and the remedial actions taken,
 - follow up complaints with correspondence and action,
- ensure that site staff are environmentally aware and are trained to cope with issues;
- do not rely on the letter of the law where there are obvious problems, but culpability cannot be easily proved;
- be prepared to be flexible, and
- try to co-operate and avoid being adversarial.

5.0 COMPLAINTS PROCEDURE

It is a requirement of the Noise Management Plan to include a procedure with regard to dealing with any noise complaints that are received.

The complaints system will be maintained by the site manager, ensuring that any complaints relating to noise are recorded and investigated appropriately.

If a complaint relating to noise from the Site is received, the site manager will ensure that:

- The complaint is investigated to identify the cause.
- In the event of elevated levels of noise being detected, this will be assessed and, if necessary, preventative action is taken that will prevent a reoccurrence of the same problem. Any action taken will be documented.
- The source of noise is investigated by carrying out checks at the identified source of the elevated levels, if it is found to be originating from within the site. As part of these checks, or if requested by the Local Authority, consider the need for quantitative noise monitoring.
- Ensure management controls are being adhered to and ensure that any improvements required to minimise noise levels are made.
- If operational failings are identified, the retraining of employees will take place to ensure that all employees operate to the required standards. If the failings are identified as part of the operating techniques, then control measures will be reviewed.

Where this involves the investigation of mitigation measures to reduce noise emissions, it will be recorded as a corrective action.

6.0 CONCLUSION

Given the location of the site within a designated commercial/light industrial area and the background levels of noise recorded in the area when the site is not in operation, i.e. break times etc., the operation of the site is considered not significant relative to the surrounding activities.

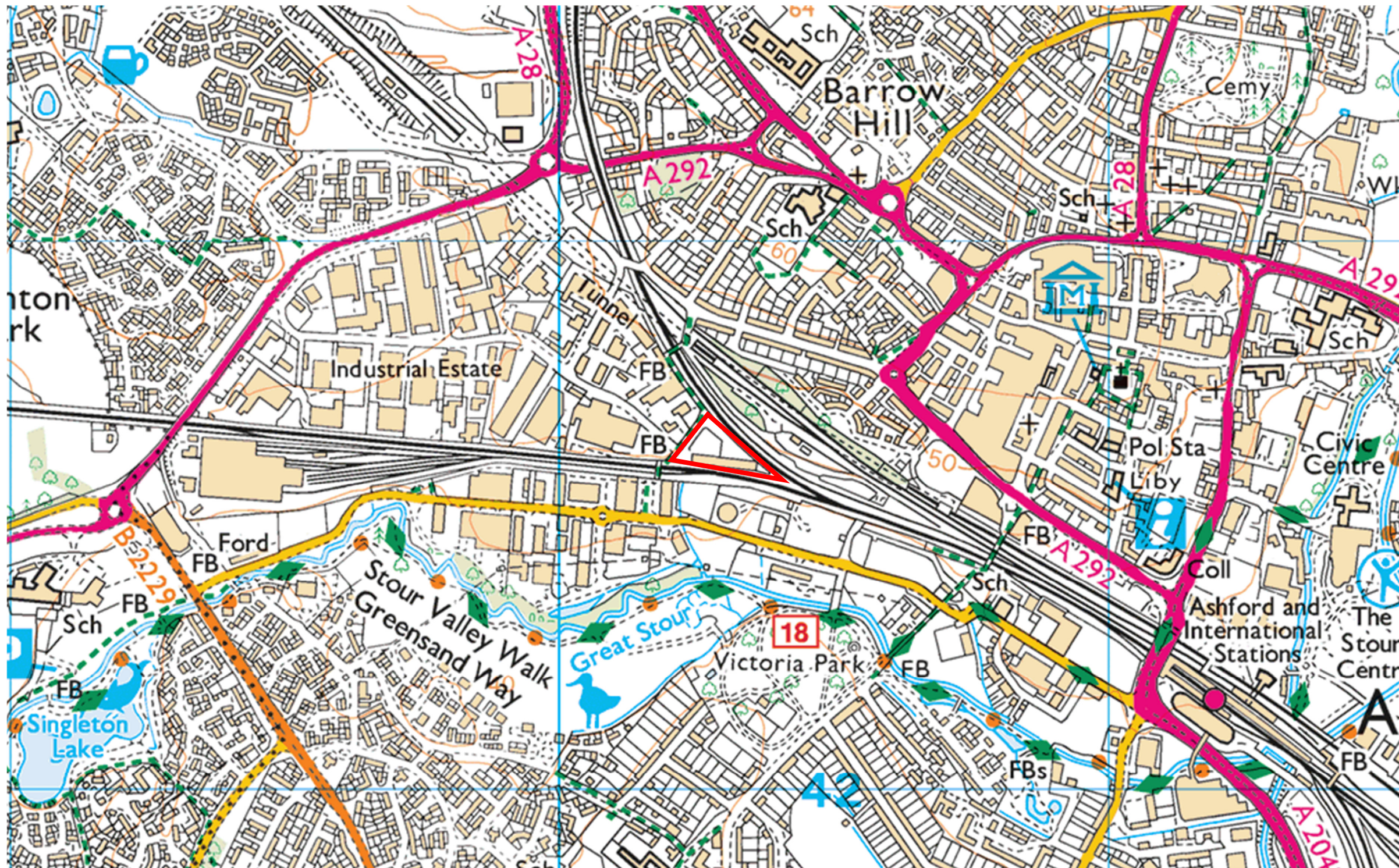
However, this Noise Management Plan details the methods by which noise emissions from the crusher and other noise sources at the Site, will be minimised, to avoid potential adverse impact at noise sensitive receptors.

This Noise Management Plan has detailed the methods by which the Site will assess, reduce and prevent noise emissions from the Site.

Best practice measures for the control of noise levels within the site will be implemented, with the specific aims of ensuring:

- Noise impact is considered as part of all operations;
- The minimisation of the risk of unplanned 'noisy' events that could result in off-site complaints;
- Noise is primarily controlled at source by good operational practices, the correct use and maintenance of plant and operator training; and
- All appropriate measures are taken to prevent or, where this is not reasonably practicable, to minimise noise emanating from the site.

Drawings



SHEERNESS
RECYCLING LTD

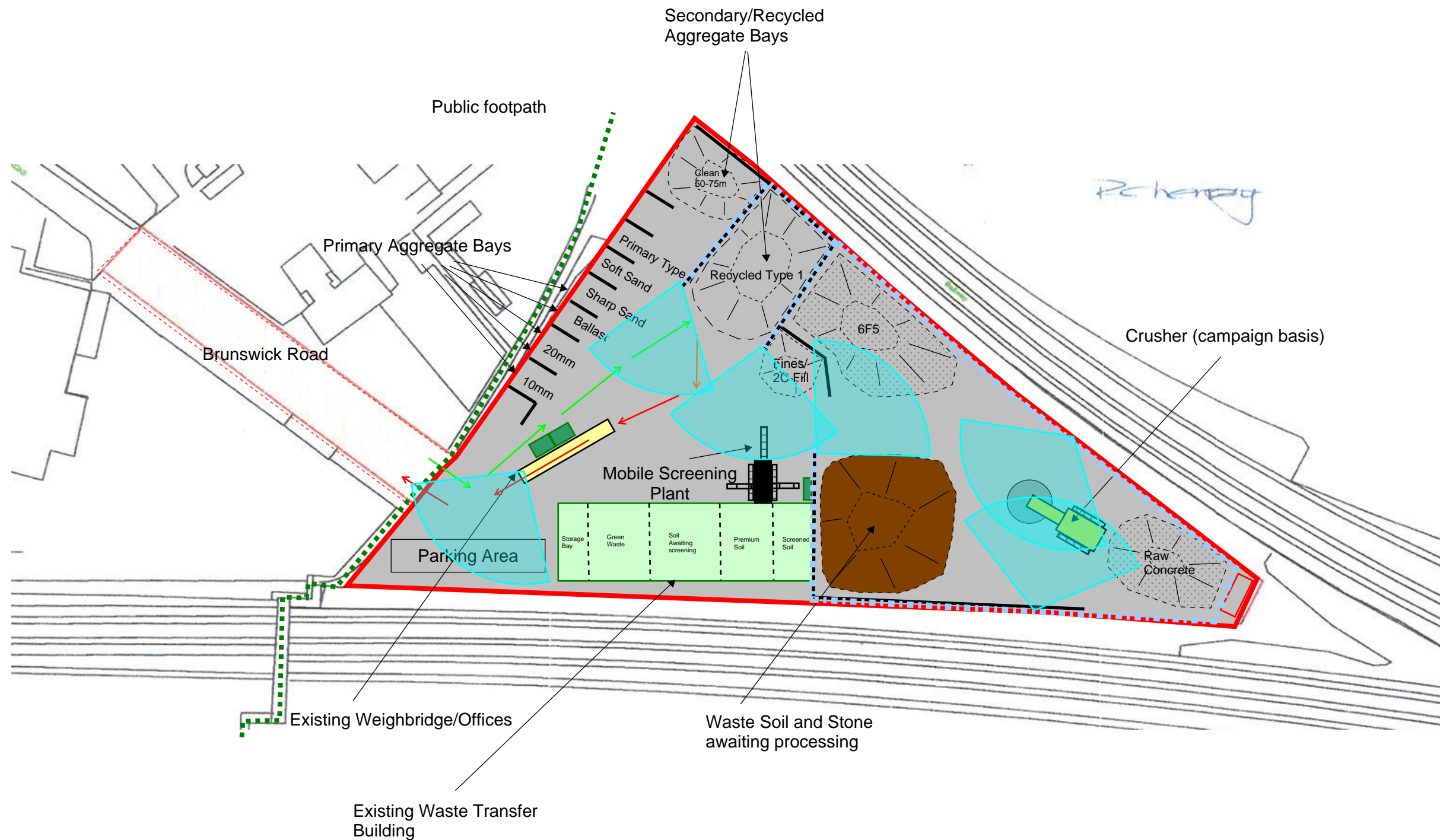
Cobbs Wood Transfer Station,
 Brunswick Road,
 Ashford, Kent


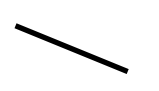

Site Location Plan

Drawing 1

scale NTS

Date July 2020



-  New perimeter water main
-  Concrete block walls
-  Assumed sprinkler location



Platt Industrial Estate
 St Marys Platt
 Borough Green
 Kent
 TN15 8JL

Cobbs Wood, Ashford

Indicative Proposed Operational Site Layout

DWG No. 2

scale NTS	Date January 2021
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Appendices

Appendix A – 2012 Noise Assessment

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Report reference 130301/1

10 May 2013

Assessment of noise
from proposed early morning waste vehicle movements
at a waste transfer site at Brunswick Road, Ashford



Noise and Vibration Consultant

1. INTRODUCTION

- 1.1 Planning permission was granted in 2002 by Kent County Council (reference AS/01/1522) for a waste transfer site at Brunswick Road, Ashford. This included a condition limiting the hours of use of the site, and movement of vehicles to or from the site, to between 0700 and 1900 hours Monday to Friday and between 0700 and 1300 hours on Saturdays, with no working on Sundays or bank holidays.
- 1.2 It is proposed to vary this condition so that five waste collection vehicles can be stationed on the site overnight and be permitted to depart at any time after 0500 hours on Mondays to Saturdays. The vehicles are currently kept overnight on another site near Hollingbourne and are driven to Ashford each morning to commence their work for the day.

2. SITE LOCATION

- 2.1 The waste transfer site is located on a triangular plot at the end of Brunswick Road. It is shown on an Ordnance Survey 1:2500 plan in Figure 1.
- 2.2 The site is bounded on two sides by railway tracks. Other sites in the near vicinity are in industrial use and are not therefore sensitive to any noise that might be caused by early morning waste vehicle movements.
- 2.3 The nearest noise-sensitive properties are the houses on Godinton Road north of the waste transfer site, which have their rear facades facing the site. They are at a distance of 190 metres from the position on the site where the waste vehicles are to be parked. Domestic and Eurostar high speed railway lines run across the intervening land. The location of these houses is shown in Figure 1.

3. NATIONAL PLANNING POLICY

- 3.1 The National Planning Policy Framework describes how noise should be taken into account when determining planning applications.
- 3.2 At paragraph 109 it states “The planning system should contribute to and enhance the natural and local environment by preventing both new and existing development from ... being adversely affected by unacceptable levels of ... noise pollution.”
- 3.3 At paragraph 123 it states: “Planning policies and decisions should aim to:
 - avoid noise from giving rise to significant adverse impacts on health and quality of life as a result of new development;
 - mitigate and reduce to a minimum other adverse impacts on health and quality of life arising from noise from new development, including through the use of conditions;

- recognise that development will often create some noise and existing businesses wanting to develop in continuance of their business should not have unreasonable restrictions put on them because of changes in nearby land uses since they were established; and
- identify and protect areas of tranquillity which have remained relatively undisturbed by noise and are prized for their recreational and amenity value for this reason.”

3.4 For a definition of adverse impacts, the NPPF refers to the 2010 Noise Policy Statement for England. The NPSE utilises two established concepts from toxicology that are currently being applied to noise impacts, for example, by the World Health Organisation. They are:

- NOEL – No Observed Effect Level. Below this level, there is no detectable effect on health and quality of life due to the noise.
- LOAEL – Lowest Observed Adverse Effect Level. This is the level above which adverse effects on health and quality of life can be detected.

3.5 The NPSE extends these to the concept of a

- SOAEL – Significant Observed Adverse Effect Level. This is the level above which significant adverse effects on health and quality of life occur.

3.6 The first aim of the NPSE states that significant adverse effects on health and quality of life should be avoided while also taking into account the guiding principles of sustainable development. The NPSE states that it is not possible to have a single objective noise-based measure that defines SOAEL that is applicable to all sources of noise in all situations. Consequently, the SOAEL is likely to be different for different noise sources, for different receptors and at different times. The NPSE acknowledges that further research is required to increase understanding of what may constitute a significant adverse impact on health and quality of life from noise.

3.7 The second aim of the NPSE refers to the situation where the impact lies somewhere between LOAEL and SOAEL. It requires that all reasonable steps should be taken to mitigate and minimise adverse effects on health and quality of life while also taking into account the guiding principles of sustainable development. This does not mean that such adverse effects cannot occur.

3.8 In 2009, the World Health Organisation (WHO) published guidance on night-time noise levels. It refers to the night noise level averaged over a whole year and states that on this basis 40 dB $L_{Aeq, 8 \text{ hour}}$ is the Lowest Observable Adverse Effect Level LOAEL, and 30 dB $L_{Aeq, 8 \text{ hour}}$ is the No Observable Effect Level (NOEL).

3.9 Earlier guidance from the WHO, published in 1999, looks at noise over shorter averaging periods and sets out guidelines for noise levels outside an open bedroom window to avoid sleep disturbance of 45 dB $L_{Aeq, 8 \text{ hour}}$ averaged over a single night, with intermittent brief noise events not exceeding 60 dB $L_{Amax, fast}$.

4. BRITISH STANDARD BS 4142: 1997

- 4.1 British Standard BS 4142 is a method for rating the likelihood of complaint about noise caused by industrial and commercial premises affecting residential property. It is questionable whether it should be applied to the noise from waste vehicle movements.
- 4.2 Certainly when on the public highway the noise from these vehicles is transportation noise and is not therefore subject to the provisions of BS 4142. The distinction is less clear when the vehicle is operating on industrial land. It becomes a question of the character and perception of the noise, i.e. does it blend in with the general transportation noise of the area, or does it have more of a distinguishable industrial character?
- 4.3 If it is to be assessed as industrial noise under BS 4142, the noise level reaching the residential property is measured in terms of its equivalent continuous noise level over any one hour period during the day, or 5 minute period at night. If the noise has characteristics that make it more noticeable (such as being irregular or distinctive in character) then a 5 dB correction is added to account for this. The resulting "rating level" is then compared with the background noise in the area when the industrial noise is not present, and the difference between the two values determines the risk of complaint.
- 4.4 If the rating level exceeds the background level by 10 dB or more then complaints are likely. If it exceeds the background level by about 5 dB then it is of marginal significance. The rating level needs to be below the background level by a margin of 10 dB or more for complaints to be positively unlikely.

5. NOISE SURVEYS

- 5.1 Surveys of the existing early morning noise levels affecting the rear of the houses on Godinton Road were carried out on Friday 3rd and Saturday 4th May 2013.
- 5.2 The sound level meter was set up on Godinton Lane, which is no longer open to through traffic and is now more akin to a track. It is used by local residents to park their cars and gain access to garages at the end of their back gardens. This measurement position was chosen as the nearest publicly accessible location to the actual rear of the houses. It is marked on the site location plan in Figure 1.
- 5.3 The surveys started at 0500 hours and continued through to 0700 hours, covering the additional period being sought for the vehicle movements. They were attended throughout. Weather conditions on both mornings were dry with negligible wind.
- 5.4 The measured noise levels are listed, at 5 minute intervals, in Table 1 for the survey on the Friday morning and Table 2 for the survey on the Saturday morning.
- 5.5 For much of the time birdsong was dominant, and for many of the 5 minute samples this was the main cause of the measured L_{Aeq} and L_{Amax} values.

- 5.6 A steady level of background noise from distant road traffic sources was noted throughout the surveys, which dictated the measured L_{A90} noise levels.
- 5.7 A number of domestic railway trains passed during the course of the surveys. Those on the furthest tracks south of the waste transfer site (the line to Tonbridge and London Charing Cross) were barely audible. Those on the nearer tracks (the line to Maidstone East and London Victoria) were more apparent. The first trains to pass on the nearer tracks during the surveys were at 0522 on both days.
- 5.8 Domestic high speed trains and Eurostar trains passed during the surveys on the high speed line, which runs across the land between the waste transfer site and the houses. This line is set down in a cutting so the trains are partly obscured from the houses and the noise measurement position.
- 5.9 The Eurostar was the noisiest type of train. One passed during the Friday survey (at 0621) and one during the Saturday survey (at 0646). The noise levels were similar on each of the two occasions: $58.5 L_{Aeq, 5 \text{ mins}} / 72.1 L_{Amax, fast}$ on the Friday and $57.4 L_{Aeq, 5 \text{ mins}} / 70.5 L_{Amax, fast}$ on the Saturday.
- 5.10 The other trains were generally not clearly distinguishable in the measurements from the noise due to other sources, particularly the birdsong which tended to dominate. One of the domestic high speed trains was recorded at a level of $52.9 L_{Aeq, 5 \text{ mins}} / 65.4 L_{Amax, fast}$ during a lull in the birdsong. These trains passed at 30 minute intervals with the first train at 0515 on the Friday and at 0545 on the Saturday.
- 5.11 The L_{Aeq} value over the whole of the measurement period was $52.8 \text{ dB } L_{Aeq, 2 \text{ hour}}$ on both the Friday and the Saturday morning. The background L_{A90} noise levels were slightly different on the two days, varying between 45.4 and $48.2 \text{ dB } L_{A90, 5 \text{ mins}}$ on the Friday and between 41.5 and $44.9 \text{ dB } L_{A90, 5 \text{ mins}}$ on the Saturday.
- 5.12 The instrumentation used for the survey was a Cirrus type CR:811B sound level meter and outdoor measurement kit, serial no. C18910FD. Calibration was checked before and after each measurement with a Bruel & Kjaer type 4231 acoustical calibrator, serial no. 1914710. The instrumentation has annual full calibration checks at a calibration laboratory, traceable to national reference standards.

6. NOISE FROM WASTE COLLECTION VEHICLES

- 6.1 Noise levels of the waste collection vehicles have been measured at their existing location near Hollingbourne. Two types of vehicle were tested, one being a Scania P-series 8x4 FEL (front end loader) and the other a Mercedes Econic 2628 waste dust cart. One FEL and three dust carts are proposed to be moved to the Brunswick Road site, together with a skip lorry. The skip lorry will not be driven during the 0500 to 0700 period so its noise has not been assessed. If it were to be driven, it is likely to cause similar noise levels to the vehicles that have been tested.

- 6.2 The results of these measurements are listed in Table 2. Each of the vehicles was started and run at idle for one measurement, and then driven as if to move off for a second measurement (there was insufficient space at the test site for the lorry to fully move off).
- 6.3 Reference data taken from British Standard BS 5288 for the drive-by noise level of refuse lorries is included in Table 3 for comparison. The reference data is 2 dB(A) higher than was measured at Hollingbourne for the vehicles moving off. The British Standard does not state the speed at which the drive-by noise levels were measured but presumably they were at normal highway speeds rather than the moving-off speed used at the Hollingbourne tests, which would explain the slightly higher noise level.
- 6.4 The noise reaching the rear of the Godinton Road houses, 190 metres away, is calculated from these measurements to be 50 dB(A) when the vehicle is moving off (both types of vehicle having the same noise level). With the vehicle engine idling the noise level is 43 dB(A) for the FEL and 46 dB(A) for the dust cart.
- 6.5 If the reference data from BS 5228 for refuse lorry drive-by noise levels is used, then the noise reaching the rear of the Godinton Road houses is calculated at 52 dB(A).

7. REVERSING ALARMS

- 7.1 It was noted during a daytime visit to the Godinton Road area that reversing alarms from fork lift trucks and other vehicles on the Brunswick Road industrial estate could be quite clearly heard at the rear of the houses. Although no formal assessment of this has been undertaken it is likely that, if such reversing alarms were used in the early morning when residents were sleeping, it could be disturbing.
- 7.2 The waste collection vehicles have a facility in the cab to temporarily disable the reversing alarm, and it is proposed that the operating instructions to drivers will include a requirement that they turn these alarms off while driving their vehicles out of the Brunswick Road site between 0500 and 0700 hours.

8. ASSESSMENT OF NOISE LEVELS

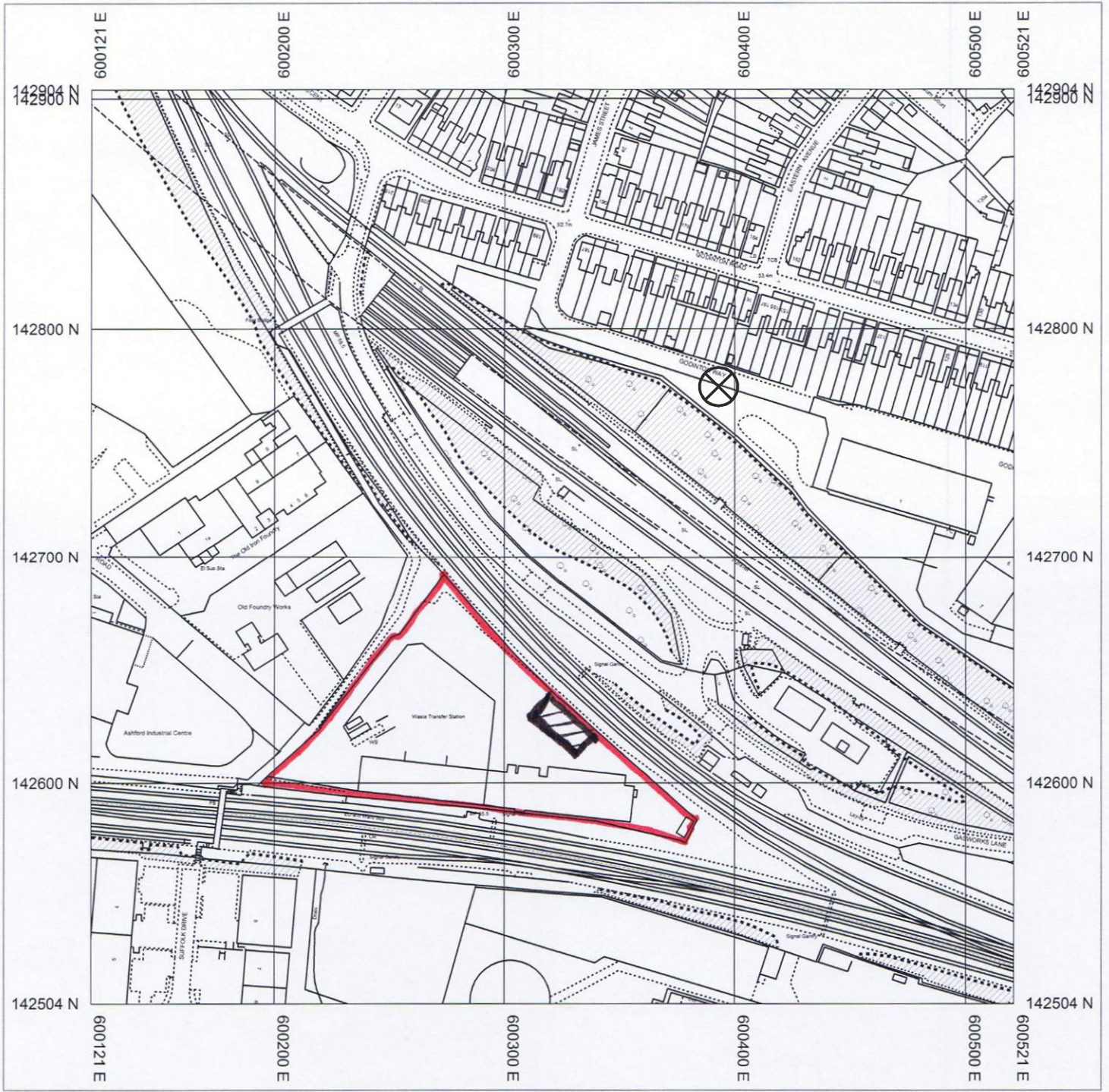
- 8.1 The noise level reaching the rear of the Godinton Road houses from the proposed early morning departure of the waste collection vehicles, at 50 dB(A) based on the measurement data when a lorry is moving off or 52 dB(A) if the BS5228 reference data for a refuse lorry drive-by is relied upon, is well within the 60 dB $L_{Amax,fast}$ criterion recommended by the World Health Organisation for avoiding sleep disturbance in a bedroom with an open window.
- 8.2 This 50 / 52 dB(A) noise from the waste collection vehicles is substantially less than the noise levels currently caused by passing trains during the 0500 to 0700 period, which in the case of the Eurostar is in excess of 70 dB(A) and in the case of the high speed domestic trains is in the region of 65 dB(A).

- 8.3 In order to assess the L_{Aeq} noise levels it is necessary to make assumptions about how long the vehicle engine will be idling, and how long it will take to drive away off the site. For the purposes of this assessment, a 1 minute period of idling followed by 30 seconds to move off the site is considered representative. The calculations based on these assumptions are included in Table 3.
- 8.4 The resulting contribution to the L_{Aeq} noise level averaged over the 8 hours of the night is 28 dB $L_{Aeq, 8 \text{ hour}}$ for the combined total of the FEL and the three dust cart departures. This is insignificant in comparison with the 45 dB $L_{Aeq, 8 \text{ hour}}$ criterion recommended by the World Health Organisation for avoiding sleep disturbance in a bedroom with an open window. It is below the 30 dB $L_{Aeq, 8 \text{ hour}}$ No Observable Effect Level and the 40 dB $L_{Aeq, 8 \text{ hour}}$ No Observable Adverse Effect Level for noise at night.
- 8.5 If comparison is to be made with the BS 4142 assessment method for industrial noise and a worst case is assumed of all four vehicles moving off in the same five minute period then the total noise level (rating level) is 48 dB $L_{Aeq, 5 \text{ minutes}}$. This is 6 dB higher than the lowest background level measured on the Saturday morning and 3 dB higher than the lowest background level on a Friday morning. This worst-case situation therefore gives rise to a marginal situation for complaints according to the standard, which it associates with a rating level that is 5 dB above the background noise. The standard takes no account of how often during the night this situation occurs, so it is relevant to observe that this worst case could at most only happen during one 5-minute period on any night, which would reduce the risk of complaint compared to a similar noise occurring more frequently. It is also relevant to observe that the character of the noise from the waste collection vehicles is that of transportation noise rather than industrial noise, so it is doubtful that BS 4142 is applicable at all.
- 8.6 Taking these various strands of the assessment together, it is clear that there will be no significant adverse effect on the amenity of the local residents, and specifically those living on Godinton Road, due to the proposed departures of waste collection vehicles from the Brunswick Road site in the early morning from 0500 hours Monday to Saturday.

FIGURE 1: Site Location Plan and Noise Measurement Position

Based on the 1:2,500 Ordnance Survey plan.

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-  Noise measurement position
-  Proposed lorry parking area

Table 2: dB(A) noise levels at Godinton Way, Saturday 4th May 2013

Time (hh:mm)	Leq dB	Lmax dB	L1	L10	L50	L90	L95	Lmin	
05:00	50.0	58.7	55.7	53.4	46.7	41.6	40.7	38.0	
05:05	50.3	60.1	55.8	53.2	48.1	42.4	41.2	39.4	
05:10	50.2	57.0	54.8	52.8	48.4	43.8	42.8	38.9	
05:15	49.1	62.6	54.9	50.8	46.9	43.3	42.6	40.2	
05:20	49.3	57.1	54.2	51.4	47.8	44.4	43.5	40.6	
05:25	55.8	68.0	64.2	60.7	48.8	44.3	43.3	40.0	Vehicle movement on Godinton Way
05:30	56.5	81.3	64.2	59.1	48.9	44.0	43.3	40.9	Birdsong
05:35	56.7	80.1	65.9	57.9	49.0	44.7	43.9	41.3	Birdsong
05:40	51.3	63.9	60.5	54.4	46.1	42.9	42.3	39.6	
05:45	48.9	64.5	56.8	50.4	45.8	43.3	42.6	40.7	
05:50	46.6	55.7	50.5	48.0	45.2	42.9	42.3	40.4	
05:55	47.7	61.6	54.2	49.1	45.6	42.8	42.3	40.3	
06:00	46.1	56.6	52.6	47.8	44.0	41.5	40.8	38.6	
06:05	51.5	65.6	60.0	54.9	46.6	42.1	41.5	38.3	
06:10	53.6	74.7	60.7	56.8	49.0	44.1	43.1	40.6	Birdsong
06:15	52.9	65.4	60.5	57.0	47.6	42.6	41.8	40.1	High speed domestic train
06:20	55.9	67.2	64.1	60.7	48.7	44.9	44.2	41.8	Freight train
06:25	50.6	64.2	59.5	53.4	45.8	42.7	41.8	39.8	
06:30	50.1	68.9	57.6	49.6	45.4	42.7	42.1	39.8	
06:35	53.9	68.2	62.6	57.5	45.9	43.5	43.1	41.4	Vehicle movement on Godinton Way
06:40	55.1	71.9	66.0	57.7	46.3	44.2	43.7	41.8	Vehicle movement on Godinton Way
06:45	57.4	70.5	67.9	61.2	48.6	43.7	42.9	41.0	Eurostar train
06:50	47.9	70.5	53.6	48.4	44.8	42.6	42.2	40.5	
06:55	46.6	55.2	51.2	48.2	45.2	42.7	41.8	39.7	
Average	52.8								
Lowest	46.1					41.5			
Highest	57.4					44.9			

Appendix B – 2021 Noise Measurements

NOISE MEASUREMENTS, APRIL 2021

Sheerness Recycling Facility, Ashford

Prepared for: Sheerness Recycling Ltd

Client Ref: 04370

SLR Ref: 403.04370.00019
Version No: Issued
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1.0 Introduction

Sheerness Recycling Ltd has appointed SLR Consulting Limited (SLR) to undertake noise measurements operational activities including crushing at their Sheerness Recycling Facility located at Units 1 & 2 Cobbs Wood Trading Estate, Brunswick Road, Ashford, TN23 1EL (the Site).

This Report is therefore structured as follows:

- A Site description;
- A sound survey to determine the specific sound levels of the Site, and baseline sound levels at the nearest noise sensitive receptors (NSRs);
- Conclusions.

Whilst reasonable effort has been made to make this report easily understandable, it is technical in nature. To assist the reader, a glossary of terminology is included in **Appendix 01**.

2.0 Site Description

The site is located within the Cobbs Wood Trading Estate which comprises a mix of commercial, light industrial and logistic tenants.

The Site is bordered:

- To the North by a wooded corridor with railway lines.
- To the East by a wooded corridor with residential estate.
- To the South by light industrial and railway line.
- To the West by industrial/commercial use.

The Site consists of an operational waste soils recycling centre with various items of plant in operation including a screener, a 360 excavator, loading shovel and heavy goods vehicle (HGV) movements. A crusher also operates on Site for approximately 4-5 days per calendar month. The site has permission to operate from 07:00 Monday to Friday; however, when the crusher is present on the site it only operates from 09:00 onwards.

Figure 2-1 shows the location of the Site.

Figure 2-1
Site Location



The nearest NSRs to the site are the residential properties located to the north-east across the railway lines, on Atherfield Drive.

3.0 Sound Survey

3.1 Survey Date

To determine the audibility of the Site at NSRs on Atherfield Drive, a sound survey was undertaken on Friday 23rd April 2021 and Thursday 29th April 2021.

3.2 Weather Conditions

During the survey, weather conditions were generally suitable for noise monitoring with conditions being generally calm and dry.

3.3 Equipment

The noise survey equipment used during the survey is detailed in Table 3-1. All measurement instrumentation was calibrated before and after the measurements. No significant drift was observed. The calibration chain is traceable via the United Kingdom Accreditation Service to National Standards held at the National Physical Laboratory.

Table 3-1
Survey Equipment

Location	Equipment	Serial Number
Atherfield Drive	Rion NL-52 Type 1 Sound Level Meter	00331823
	Rion NC-74 Acoustic Calibrator	34336013

Sound levels were measured at Atherfield Drive, shown in Figure 3-1.

Figure 3-1
Monitoring and Nearest Receptor Location



3.4 Measurement Protocol

At the survey location the microphone had a windshield and was placed 1.5m above the local ground level in free-field conditions, i.e. at least 3.5m from the nearest vertical, reflecting surface. The following noise level indices were recorded:

- $L_{Aeq,T}$: The A-weighted equivalent continuous noise level over the measurement period.
- $L_{eq,T}$: The linear (un A-weighted) equivalent continuous noise level over the measurement period.
- L_{A90} : The A-weighted noise level exceeded for 90% of the measurement period. This parameter is often used to describe background noise.
- L_{A10} : The A-weighted noise level exceeded for 10% of the measurement period. This parameter is often used to describe road traffic noise.
- L_{Amax} : The maximum A-weighted noise level during the measurement period.

3.5 Operational Sound Level Survey

The operational sound level survey was undertaken on Friday 23rd April between 11:20 and 15:30 hours, and Thursday 29th April between 09:45 and 15:00 hours. During these periods, the crusher was operational for some of the time. Ambient noise levels (the average of the soundscape, including the crusher) were measured while the crusher was operational, and residual (the average of the soundscape without the crusher) and background

(sound levels which were exceeded for 90% of the time) sound levels were measured when the crusher was not operational.

During the survey at the following times the crusher was operating:

- 23rd April, 11:20 to 12:57 hours;
- 23rd April, 14:09 to 14:18 hours;
- 23rd April, 14:30 to 15:30 hours; and
- 29th April, 14:01 to 15:01 hours.

3.6 Operational Sound Level Results

A summary of the survey results to be used in determining the specific sound level of the Site is shown in Table 3-2. The full survey results including observations made regarding the soundscape are included in **Appendix 02**.

Table 3-2
Summary of Measured Sound Levels, free-field, dB

Date	Time	Sound Level with Crusher, dB LAeq,T	Sound Level without Crusher, dB LAeq,T	Background Sound Level, dB LA90,T
Friday 23 rd April	11:20 – 12:57	54	-	-
	12:58 – 13:30	-	45	42
	14:09 – 14:18	53	-	-
	14:19 – 14:29	-	47	43
	14:30 – 15:30	54	-	-
Thursday 29 th April	09:45 – 11:30	-	47	45
	12:02 – 13:32	-	49	44
	14:01 – 15:01	54	-	-
Representative		54	47	43

3.6.1 Specific Sound Level Determination

With all other residual noise sources being equal (for example noise from traffic, train), the specific sound level of the Crusher may be determined by logarithmically deducting the sound level without the crusher operating from the sound level measured during crusher operation.

The resultant level may be considered representative of the specific sound level of the Crusher at Atherfield Drive. The specific sound level of the crusher at Atherfield Drive is therefore **53 dB(A)**.

4.0 Conclusion

Sheerness Recycling Ltd has appointed SLR Consulting Limited (SLR) to undertake noise measurements operational activities including crushing at their Sheerness Recycling Facility located at Units 1 & 2 Cobbs Wood Trading Estate, Brunswick Road, Ashford, TN23 1EL (the Site).

The noise measurements were undertaken whilst the crusher was operating normally and once it had ceased, based on these measurements the specific noise level from the crusher has been calculated at the nearest noise sensitive receptors.

APPENDIX 01

Glossary of Terminology

Glossary of Terminology

In order to assist the understanding of acoustic terminology and the relative change in noise, the following background information is provided.

The human ear can detect a very wide range of pressure fluctuations, which are perceived as sound. In order to express these fluctuations in a manageable way, a logarithmic scale called the decibel, or dB scale is used. The decibel scale typically ranges from 0dB (the threshold of hearing) to over 120dB. An indication of the range of sound levels commonly found in the environment is given in the following table.

Table 01-01
Sound Levels Commonly Found in the Environment

Sound Level	Location
0dB(A)	Threshold of hearing
20 to 30dB(A)	Quiet bedroom at night
30 to 40dB(A)	Living room during the day
40 to 50dB(A)	Typical office
50 to 60dB(A)	Inside a car
60 to 70dB(A)	Typical high street
70 to 90dB(A)	Inside factory
100 to 110dB(A)	Burglar alarm at 1m away
110 to 130dB(A)	Jet aircraft on take off
140dB(A)	Threshold of Pain

Acoustic Terminology

dB (decibel)	The scale on which sound pressure level is expressed. It is defined as 20 times the logarithm of the ratio between the root-mean-square pressure of the sound field and a reference pressure (2×10^{-5} Pa).
dB(A)	A-weighted decibel. This is a measure of the overall level of sound across the audible spectrum with a frequency weighting (i.e. 'A' weighting) to compensate for the varying sensitivity of the human ear to sound at different frequencies.
L_{Aeq}	L_{Aeq} is defined as the notional steady sound level which, over a stated period of time, would contain the same amount of acoustical energy as the A-weighted fluctuating sound measured over that period.
L_{10} & L_{90}	If a non-steady noise is to be described it is necessary to know both its level and the degree of fluctuation. The L_n indices are used for this purpose, and the term refers to the level exceeded for n% of the time. Hence L_{10} is the level exceeded for 10% of the time and as such can be regarded as the 'average maximum level'. Similarly, L_{90} is the 'average minimum level' and is often used to describe the background noise. It is common practice to use the L_{10} index to describe traffic noise.
L_{AFmax}	L_{AFmax} is the maximum A-weighted sound pressure level recorded over the period stated. L_{Amax} is sometimes used in assessing environmental noise where occasional loud noises occur, which may have little effect on the overall L_{Aeq} noise level but will still affect the noise environment. Unless described otherwise, it is measured using the 'fast' sound level meter response.

APPENDIX 02

Atherfield Drive Survey Results and Observations on Soundscape

Appendix 02-01 Survey Results and Observations on Soundscape

Date and Time	L _{Aeq}	L _{AFMax}	Observations on Soundscape
23/04/2021 11:20	51	62	Crusher running
23/04/2021 11:21	53	58	Crusher running
23/04/2021 11:22	53	58	Crusher running
23/04/2021 11:23	54	59	
23/04/2021 11:24	54	58	Plant movements
23/04/2021 11:25	54	62	Plant movements
23/04/2021 11:26	48	51	
23/04/2021 11:27	52	60	Vibrating sound from site
23/04/2021 11:28	53	62	Train
23/04/2021 11:29	54	64	Clanging noise from site
23/04/2021 11:30	56	63	Site noise
23/04/2021 11:31	54	58	Van Drives past monitoring location
23/04/2021 11:32	53	59	
23/04/2021 11:33	51	57	Site noise
23/04/2021 11:34	56	66	Aircraft
23/04/2021 11:35	53	62	Dog barking
23/04/2021 11:36	52	58	Crusher audible
23/04/2021 11:37	54	64	
23/04/2021 11:38	52	62	
23/04/2021 11:39	53	61	Banging noise from
23/04/2021 11:40	56	62	Banging noise from
23/04/2021 11:41	58	66	Banging noise from
23/04/2021 11:42	55	63	
23/04/2021 11:43	53	60	
23/04/2021 11:44	56	65	Squeaking noise from site
23/04/2021 11:45	55	62	Train
23/04/2021 11:46	56	61	Site noise
23/04/2021 11:47	57	63	
23/04/2021 11:48	58	62	Train
23/04/2021 11:49	56	67	Banging noise from Site

Date and Time	L _{Aeq}	L _{AFMax}	Observations on Soundscape
23/04/2021 11:50	56	63	
23/04/2021 11:51	55	60	
23/04/2021 11:52	54	61	
23/04/2021 11:53	54	59	Person on phone near meter
23/04/2021 11:54	54	66	
23/04/2021 11:55	53	61	Crusher still running and audible
23/04/2021 11:56	53	57	
23/04/2021 11:57	53	58	Site activity
23/04/2021 11:58	56	61	Site activity
23/04/2021 11:59	55	65	Site activity
23/04/2021 12:00	54	59	
23/04/2021 12:01	54	57	
23/04/2021 12:02	56	64	Train
23/04/2021 12:03	56	65	Talking near meter
23/04/2021 12:04	58	66	Taking
23/04/2021 12:05	52	59	Siren in distance
23/04/2021 12:06	51	56	
23/04/2021 12:07	52	58	
23/04/2021 12:08	51	54	
23/04/2021 12:09	51	56	
23/04/2021 12:10	53	57	
23/04/2021 12:11	53	58	
23/04/2021 12:12	57	63	Train
23/04/2021 12:13	53	60	
23/04/2021 12:14	55	64	
23/04/2021 12:15	55	61	Crusher still running and audible
23/04/2021 12:16	53	58	
23/04/2021 12:17	52	58	
23/04/2021 12:18	52	57	
23/04/2021 12:19	53	59	
23/04/2021 12:20	54	59	
23/04/2021 12:21	57	63	

Date and Time	L _{Aeq}	L _{AFMax}	Observations on Soundscape
23/04/2021 12:22	54	62	Site activity/bangs
23/04/2021 12:23	53	61	
23/04/2021 12:24	53	57	
23/04/2021 12:25	54	60	
23/04/2021 12:26	56	66	
23/04/2021 12:27	53	58	
23/04/2021 12:28	52	62	Birdsong
23/04/2021 12:29	53	64	
23/04/2021 12:30	53	59	
23/04/2021 12:31	56	61	
23/04/2021 12:32	52	60	
23/04/2021 12:33	54	64	Crusher still audible
23/04/2021 12:34	56	67	Horn blast in distance
23/04/2021 12:35	54	68	Banging noise from site
23/04/2021 12:36	53	58	
23/04/2021 12:37	51	55	
23/04/2021 12:38	53	60	Train
23/04/2021 12:39	54	61	Train
23/04/2021 12:40	55	61	
23/04/2021 12:41	55	64	
23/04/2021 12:42	52	58	
23/04/2021 12:43	53	61	
23/04/2021 12:44	56	67	
23/04/2021 12:45	56	62	Train
23/04/2021 12:46	54	63	Banging from site
23/04/2021 12:47	55	60	
23/04/2021 12:48	51	62	
23/04/2021 12:49	54	62	Train
23/04/2021 12:50	52	65	
23/04/2021 12:51	54	59	
23/04/2021 12:52	53	61	
23/04/2021 12:53	53	59	

Date and Time	L _{Aeq}	L _{AFMax}	Observations on Soundscape
23/04/2021 12:54	53	58	
23/04/2021 12:55	55	61	
23/04/2021 12:56	54	62	Train
23/04/2021 12:57	46	57	Crusher ceased operating until 14:09
23/04/2021 12:58	49	69	Banging from site
23/04/2021 12:59	44	52	
23/04/2021 13:00	42	47	Birdsong
23/04/2021 13:01	44	56	Bang from site
23/04/2021 13:02	44	59	
23/04/2021 13:03	43	49	
23/04/2021 13:04	44	50	
23/04/2021 13:05	45	55	
23/04/2021 13:06	44	55	
23/04/2021 13:07	43	49	
23/04/2021 13:08	44	55	
23/04/2021 13:09	44	47	
23/04/2021 13:10	44	50	
23/04/2021 13:11	45	53	
23/04/2021 13:12	51	62	Train
23/04/2021 13:13	45	55	Train
23/04/2021 13:14	43	54	
23/04/2021 13:15	42	49	
23/04/2021 13:16	45	54	
23/04/2021 13:17	43	49	
23/04/2021 13:18	43	52	
23/04/2021 13:19	43	49	
23/04/2021 13:20	43	50	
23/04/2021 13:21	49	59	
23/04/2021 13:22	43	50	
23/04/2021 13:23	44	56	
23/04/2021 13:24	45	55	Tipping noise, source unknown, distant motorbike
23/04/2021 13:25	43	48	

Date and Time	L _{Aeq}	L _{AFMax}	Observations on Soundscape
23/04/2021 13:26	43	46	
23/04/2021 13:27	44	51	
23/04/2021 13:28	52	61	Train
23/04/2021 13:29	44	49	
23/04/2021 13:30	43	51	
23/04/2021 14:09	53	62	Crusher starts up
23/04/2021 14:10	54	61	
23/04/2021 14:11	52	59	
23/04/2021 14:12	53	61	
23/04/2021 14:13	54	60	Train
23/04/2021 14:14	52	58	
23/04/2021 14:15	51	57	Train
23/04/2021 14:16	54	60	
23/04/2021 14:17	51	62	Car boot shutting near meter
23/04/2021 14:18	51	58	Train
23/04/2021 14:19	48	65	
23/04/2021 14:20	44	57	
23/04/2021 14:21	42	51	
23/04/2021 14:22	48	62	
23/04/2021 14:23	50	59	Bang from site
23/04/2021 14:24	45	56	
23/04/2021 14:25	46	52	
23/04/2021 14:26	46	52	
23/04/2021 14:27	46	54	Crusher stopped but site still audible
23/04/2021 14:28	51	60	Train
23/04/2021 14:29	47	54	
23/04/2021 14:30	50	60	Crusher started again
23/04/2021 14:31	52	61	
23/04/2021 14:32	52	61	
23/04/2021 14:33	53	65	
23/04/2021 14:34	51	56	
23/04/2021 14:35	55	61	Crusher audible

Date and Time	L _{Aeq}	L _{AFMax}	Observations on Soundscape
23/04/2021 14:36	53	58	
23/04/2021 14:37	52	69	
23/04/2021 14:38	54	62	
23/04/2021 14:39	55	61	
23/04/2021 14:40	54	59	
23/04/2021 14:41	52	61	
23/04/2021 14:42	53	59	
23/04/2021 14:43	53	59	
23/04/2021 14:44	52	59	
23/04/2021 14:45	51	56	
23/04/2021 14:46	49	57	
23/04/2021 14:47	53	57	Car doors shutting
23/04/2021 14:48	54	63	Train + children on a motorbike
23/04/2021 14:49	57	68	Revvng engine from motorbike
23/04/2021 14:50	49	54	
23/04/2021 14:51	50	54	
23/04/2021 14:52	53	59	Crusher still running
23/04/2021 14:53	53	60	Motorbike
23/04/2021 14:54	51	57	
23/04/2021 14:55	48	50	
23/04/2021 14:56	47	55	
23/04/2021 14:57	49	52	
23/04/2021 14:58	52	57	Van driving near meter
23/04/2021 14:59	50	60	
23/04/2021 15:00	54	66	Train
23/04/2021 15:01	55	62	Train
23/04/2021 15:02	50	55	
23/04/2021 15:03	50	54	
23/04/2021 15:04	53	61	
23/04/2021 15:05	53	59	
23/04/2021 15:06	52	56	
23/04/2021 15:07	54	61	Crusher still running and audible

Date and Time	L _{Aeq}	L _{AFMax}	Observations on Soundscape
23/04/2021 15:08	54	60	Train
23/04/2021 15:09	57	73	Basketball bounced near noise meter
23/04/2021 15:10	52	60	
23/04/2021 15:11	53	65	
23/04/2021 15:12	51	57	
23/04/2021 15:13	53	60	
23/04/2021 15:14	54	69	Site noise and birdsong
23/04/2021 15:15	55	61	Low altitude aircraft
23/04/2021 15:16	54	63	Car doors slamming
23/04/2021 15:17	52	56	Kids shouting near SLM
23/04/2021 15:18	51	58	
23/04/2021 15:19	66	87	
23/04/2021 15:20	50	57	
23/04/2021 15:21	51	56	
23/04/2021 15:22	49	57	
23/04/2021 15:23	53	63	
23/04/2021 15:24	55	71	Basketball bouncing on footpath
23/04/2021 15:25	56	75	Basketball bouncing on footpath
23/04/2021 15:26	54	67	
23/04/2021 15:27	53	63	
23/04/2021 15:28	59	79	Dogs barking near meter
23/04/2021 15:29	52	57	
29/04/2021 09:45	48	58	Crusher not operating
29/04/2021 09:46	47	57	
29/04/2021 09:47	50	58	
29/04/2021 09:48	47	61	Train
29/04/2021 09:49	46	56	Hammering at nearby house
29/04/2021 09:50	46	55	
29/04/2021 09:51	50	57	Train
29/04/2021 09:52	46	51	Reverse bleepers (source unknown)
29/04/2021 09:53	47	53	Reverse bleepers (source unknown)
29/04/2021 09:54	46	53	

Date and Time	L _{Aeq}	L _{AFMax}	Observations on Soundscape
29/04/2021 09:55	46	51	
29/04/2021 09:56	47	50	
29/04/2021 09:57	46	52	Train (slow pass)
29/04/2021 09:58	45	52	Engine noise stops (possibly screener from Site)
29/04/2021 09:59	46	49	
29/04/2021 10:00	47	53	Reverse beeps
29/04/2021 10:01	46	54	
29/04/2021 10:02	46	52	
29/04/2021 10:03	50	57	
29/04/2021 10:04	45	48	Train
29/04/2021 10:05	47	50	
29/04/2021 10:06	46	51	Impact noise from Site
29/04/2021 10:07	47	56	Site noise
29/04/2021 10:08	46	56	
29/04/2021 10:09	47	54	
29/04/2021 10:10	44	55	Impact noise (not from Site)
29/04/2021 10:11	42	52	
29/04/2021 10:12	48	57	
29/04/2021 10:13	48	63	Train
29/04/2021 10:14	45	50	
29/04/2021 10:15	49	56	
29/04/2021 10:16	49	63	Horn, Train, Crashing noise (ind. Estate)
29/04/2021 10:17	49	59	
29/04/2021 10:18	45	50	
29/04/2021 10:19	44	48	
29/04/2021 10:20	53	73	
29/04/2021 10:21	44	52	Impact noise from Site
29/04/2021 10:22	45	57	
29/04/2021 10:23	44	59	
29/04/2021 10:24	44	55	
29/04/2021 10:25	44	49	
29/04/2021 10:26	46	56	Airplane

Date and Time	L _{Aeq}	L _{AFMax}	Observations on Soundscape
29/04/2021 10:27	46	53	Airplane
29/04/2021 10:28	48	56	Train
29/04/2021 10:29	46	50	
29/04/2021 10:30	45	48	Train
29/04/2021 10:31	45	49	Train
29/04/2021 10:32	46	51	Train and train horn
29/04/2021 10:33	47	54	
29/04/2021 10:34	48	54	Airplane
29/04/2021 10:35	45	48	
29/04/2021 10:36	47	61	
29/04/2021 10:37	49	66	Lawnmower start in nearby garden
29/04/2021 10:38	48	52	Machinery noise from Site
29/04/2021 10:39	48	54	Start of screener operation on Site
29/04/2021 10:40	49	53	Boom noise from Site
29/04/2021 10:41	49	59	Train
29/04/2021 10:42	49	54	Site noise audible
29/04/2021 10:43	49	56	
29/04/2021 10:44	49	57	
29/04/2021 10:45	45	51	Reverse beeper from Site, Lawnmower off
29/04/2021 10:46	48	56	
29/04/2021 10:47	52	59	Site noise audible, Train
29/04/2021 10:48	52	66	Scraping sand from Site
29/04/2021 10:49	48	55	Site noise
29/04/2021 10:50	46	55	
29/04/2021 10:51	45	51	
29/04/2021 10:52	46	51	
29/04/2021 10:53	47	52	
29/04/2021 10:54	49	60	Popping sound from industrial estate
29/04/2021 10:55	50	54	Loading shovel movements audible from Site
29/04/2021 10:56	49	54	
29/04/2021 10:57	48	52	
29/04/2021 10:58	46	51	

Date and Time	L _{Aeq}	L _{AFMax}	Observations on Soundscape
29/04/2021 10:59	46	53	
29/04/2021 11:00	48	63	Children shouting and screaming, Sirens
29/04/2021 11:01	47	52	
29/04/2021 11:02	48	62	Reverse beeps
29/04/2021 11:03	46	50	
29/04/2021 11:04	47	53	
29/04/2021 11:05	50	57	Train
29/04/2021 11:06	44	48	
29/04/2021 11:07	44	50	
29/04/2021 11:08	44	48	
29/04/2021 11:09	49	64	Train
29/04/2021 11:10	44	53	
29/04/2021 11:11	49	60	Site noise audible
29/04/2021 11:12	45	55	Train
29/04/2021 11:13	46	59	
29/04/2021 11:14	46	60	Bang noise from industrial estate
29/04/2021 11:15	46	53	Site noise audible
29/04/2021 11:16	46	53	
29/04/2021 11:17	44	51	
29/04/2021 11:18	46	53	Site noise audible
29/04/2021 11:19	48	55	Grinding sound from nearby property
29/04/2021 11:20	51	61	Train, operational noise from Site
29/04/2021 11:21	48	55	Site noise audible
29/04/2021 11:22	48	57	Grinding noise from nearby property
29/04/2021 11:23	47	55	Site noise – material passing through screener
29/04/2021 11:24	46	56	
29/04/2021 11:25	48	62	Power tool operation at nearby property
29/04/2021 11:26	46	52	
29/04/2021 11:27	49	58	Site noise audible
29/04/2021 11:28	51	58	Train
29/04/2021 11:29	45	54	Train, knocking sound from Site
29/04/2021 11:30	44	46	

Date and Time	L _{Aeq}	L _{AFMax}	Observations on Soundscape
29/04/2021 12:02	49	63	Airplane (low flying)
29/04/2021 12:03	48	55	Site noise audible
29/04/2021 12:04	47	58	Hammering from nearby property
29/04/2021 12:05	46	52	
29/04/2021 12:06	47	55	Site noise audible
29/04/2021 12:07	47	57	
29/04/2021 12:08	47	56	Person talking close to meter
29/04/2021 12:09	46	54	
29/04/2021 12:10	46	57	Power tool operating in nearby property
29/04/2021 12:11	48	59	Bang noise from Site
29/04/2021 12:12	50	59	Train
29/04/2021 12:13	49	58	
29/04/2021 12:14	46	53	
29/04/2021 12:15	47	56	
29/04/2021 12:16	47	58	Grinding noise from industrial estate
29/04/2021 12:17	44	53	
29/04/2021 12:18	49	56	Train
29/04/2021 12:19	47	56	
29/04/2021 12:20	47	58	Site audible
29/04/2021 12:21	44	50	
29/04/2021 12:22	47	61	Noise from industrial estate
29/04/2021 12:23	49	59	
29/04/2021 12:24	47	50	
29/04/2021 12:25	48	58	Garden strimmer noise
29/04/2021 12:26	47	55	Garden strimmer noise
29/04/2021 12:27	47	53	
29/04/2021 12:28	52	69	Train, site noise audible
29/04/2021 12:29	48	58	
29/04/2021 12:30	47	59	Hammering from nearby property
29/04/2021 12:31	46	50	
29/04/2021 12:32	50	65	Noise from industrial estate
29/04/2021 12:33	47	53	

Date and Time	L _{Aeq}	L _{AFMax}	Observations on Soundscape
29/04/2021 12:34	46	57	Tipping sound from Site
29/04/2021 12:35	46	62	Tipping sound from Site
29/04/2021 12:36	47	59	
29/04/2021 12:37	48	55	Garden strimmer, Train
29/04/2021 12:38	48	54	
29/04/2021 12:39	46	52	Boom noise from Site
29/04/2021 12:40	45	50	
29/04/2021 12:41	44	58	
29/04/2021 12:42	50	62	
29/04/2021 12:43	48	59	Power tool from nearby property
29/04/2021 12:44	53	61	Power tool from nearby property, Train
29/04/2021 12:45	51	69	Power tool from nearby property, Airplane
29/04/2021 12:46	48	53	
29/04/2021 12:47	47	54	
29/04/2021 12:48	53	61	Train
29/04/2021 12:49	52	60	2x Airplane (low flying)
29/04/2021 12:50	46	52	
29/04/2021 12:51	46	51	
29/04/2021 12:52	45	50	
29/04/2021 12:53	47	61	Talking by meter
29/04/2021 12:54	48	61	Talking by meter
29/04/2021 12:55	45	56	
29/04/2021 12:56	46	56	Plant operation on Site
29/04/2021 12:57	46	62	Multiple impact noises from Site
29/04/2021 12:58	51	59	Train
29/04/2021 12:59	49	64	Train horn
29/04/2021 13:00	50	55	
29/04/2021 13:01	49	63	Bang noise from industrial estate
29/04/2021 13:02	51	59	Engine noise from Site
29/04/2021 13:03	49	55	
29/04/2021 13:04	48	59	
29/04/2021 13:05	50	64	Garden strimmer noise

Date and Time	L _{Aeq}	L _{AFMax}	Observations on Soundscape
29/04/2021 13:06	53	65	
29/04/2021 13:07	48	55	
29/04/2021 13:08	49	57	
29/04/2021 13:09	48	62	Bang noise from Site
29/04/2021 13:10	48	57	
29/04/2021 13:11	47	58	Power tool operation in nearby garden
29/04/2021 13:12	46	50	
29/04/2021 13:13	49	58	Train
29/04/2021 13:14	47	57	
29/04/2021 13:15	51	60	Airplane (low flying)
29/04/2021 13:16	52	59	Airplane (low flying)
29/04/2021 13:17	59	67	Train
29/04/2021 13:18	49	58	
29/04/2021 13:19	46	52	
29/04/2021 13:20	48	56	Train (distant)
29/04/2021 13:21	50	57	Airplane (low flying)
29/04/2021 13:22	46	55	
29/04/2021 13:23	45	54	
29/04/2021 13:24	48	58	
29/04/2021 13:25	46	54	
29/04/2021 13:26	46	54	
29/04/2021 13:27	46	56	Noise from industrial estate
29/04/2021 13:28	49	57	Power tool operation in nearby Garden
29/04/2021 13:29	49	61	Site noise audible
29/04/2021 13:30	44	50	
29/04/2021 13:31	45	52	
29/04/2021 13:32	44	45	
29/04/2021 14:01	56	63	Crusher Operating On-site
29/04/2021 14:02	57	64	Crusher noise from Site
29/04/2021 14:03	54	61	Crusher noise from Site
29/04/2021 14:04	55	62	Crusher noise from Site
29/04/2021 14:05	57	63	Crusher noise from Site

Date and Time	L _{Aeq}	L _{AFMax}	Observations on Soundscape
29/04/2021 14:06	57	63	Crusher noise from Site
29/04/2021 14:07	54	58	Crusher noise from Site
29/04/2021 14:08	53	59	Crusher noise from Site
29/04/2021 14:09	54	60	Crusher noise from Site
29/04/2021 14:10	54	60	Crusher noise from Site, Airplane (low flying)
29/04/2021 14:11	55	60	Crusher noise from Site
29/04/2021 14:12	56	61	Crusher noise from Site
29/04/2021 14:13	55	62	Crusher noise from Site
29/04/2021 14:14	55	60	Crusher noise from Site
29/04/2021 14:15	56	65	Crusher noise from Site
29/04/2021 14:16	53	61	Crusher noise from Site
29/04/2021 14:17	56	61	Crusher noise from Site
29/04/2021 14:18	55	66	Crusher noise from Site, Train
29/04/2021 14:19	54	61	Crusher noise from Site
29/04/2021 14:20	55	61	Crusher noise from Site
29/04/2021 14:21	53	64	Crusher noise from Site
29/04/2021 14:22	50	56	Crusher noise from Site
29/04/2021 14:23	53	62	Crusher noise from Site
29/04/2021 14:24	52	65	Crusher noise from Site, Impact noises from industrial estate
29/04/2021 14:25	54	61	Crusher noise from Site
29/04/2021 14:26	55	62	Crusher noise from Site
29/04/2021 14:27	53	65	Crusher noise from Site
29/04/2021 14:28	56	62	Crusher noise from Site, Train
29/04/2021 14:29	55	59	Crusher noise from Site, Power tools in nearby garden
29/04/2021 14:30	53	59	Crusher noise from Site
29/04/2021 14:31	53	60	Crusher noise from Site
29/04/2021 14:32	52	58	Crusher noise from Site
29/04/2021 14:33	52	58	Crusher noise from Site, Train
29/04/2021 14:34	53	60	Crusher noise from Site
29/04/2021 14:35	52	56	Crusher noise from Site
29/04/2021 14:36	54	61	Crusher noise from Site
29/04/2021 14:37	54	60	Crusher noise from Site

Date and Time	L _{Aeq}	L _{AFMax}	Observations on Soundscape
29/04/2021 14:38	50	59	Crusher noise from Site
29/04/2021 14:39	52	58	Crusher noise from Site
29/04/2021 14:40	52	60	Crusher noise from Site
29/04/2021 14:41	49	57	Crusher noise from Site
29/04/2021 14:42	54	59	Crusher noise from Site, Airplane flyover (high flying)
29/04/2021 14:43	50	59	Crusher noise from Site
29/04/2021 14:44	50	64	Crusher noise from Site
29/04/2021 14:45	56	72	Crusher noise from Site, Talking and baby crying close to meter
29/04/2021 14:46	52	58	Crusher noise from Site
29/04/2021 14:47	52	59	Crusher noise from Site
29/04/2021 14:48	54	60	Crusher noise from Site, 2x Train
29/04/2021 14:49	53	59	Crusher noise from Site
29/04/2021 14:50	53	60	Crusher noise from Site
29/04/2021 14:51	53	60	Crusher noise from Site
29/04/2021 14:52	50	57	Crusher noise from Site
29/04/2021 14:53	50	60	Crusher noise from Site
29/04/2021 14:54	51	57	Crusher noise from Site
29/04/2021 14:55	52	61	Crusher noise from Site
29/04/2021 14:56	51	58	Crusher noise from Site
29/04/2021 14:57	49	58	Crusher noise from Site
29/04/2021 14:58	53	61	Crusher noise from Site
29/04/2021 14:59	55	62	Crusher noise from Site, Train
29/04/2021 15:00	53	64	Crusher noise from Site
29/04/2021 15:01	52	56	Crusher noise from Site

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