PENINSULAR
ACOUSTICS

Telecycle Europe Limited

Unit One, First Avenue, Wrexham

Noise Impact Assessment



PUBLIC

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1. INTRODUCTION

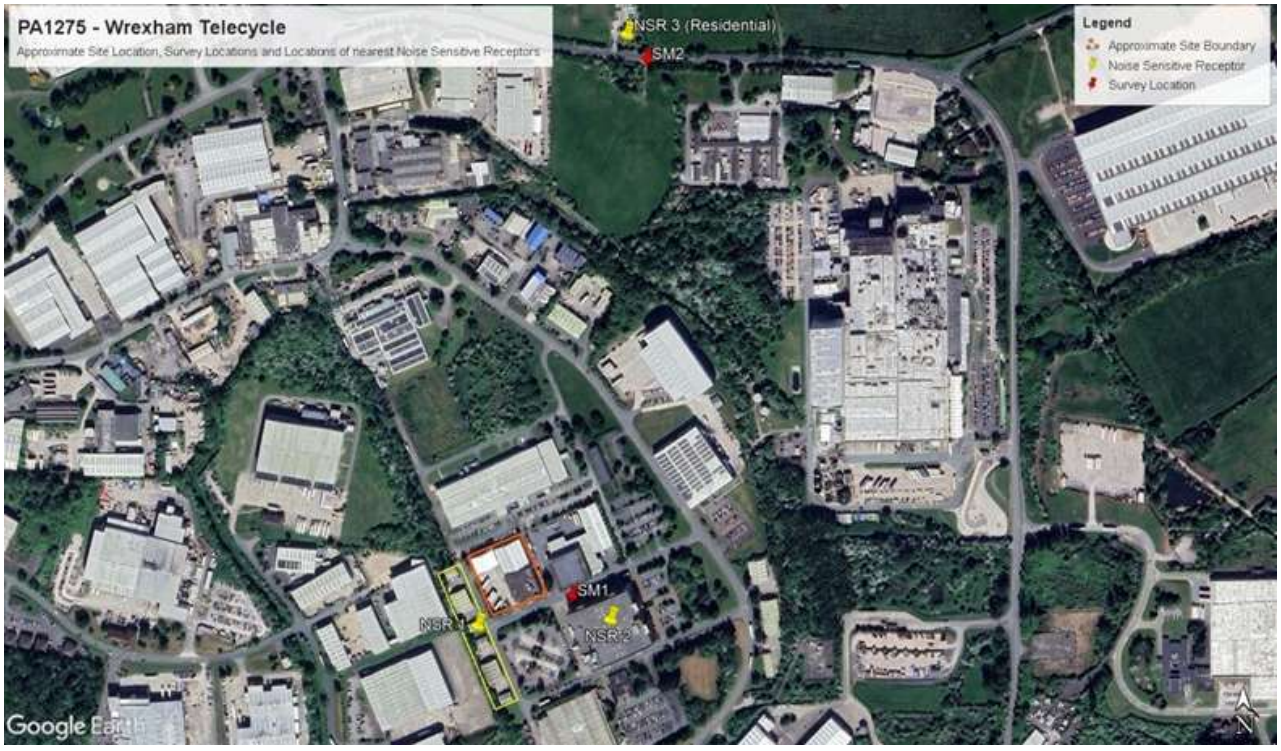
Peninsular Acoustics Ltd, has been commissioned by Telecycle Europe Limited (hereafter referred to as 'the Client') to undertake a Noise Impact Assessment to assess the effect of noise produced by proposed activity at their facility at Unit One, First Avenue, Wrexham (hereafter referred to as 'the Site') on the surrounding area.

This report is necessarily technical in nature and therefore, to assist the reader, an acoustics glossary is provided in Appendix A.

1.1. SITE DESCRIPTION

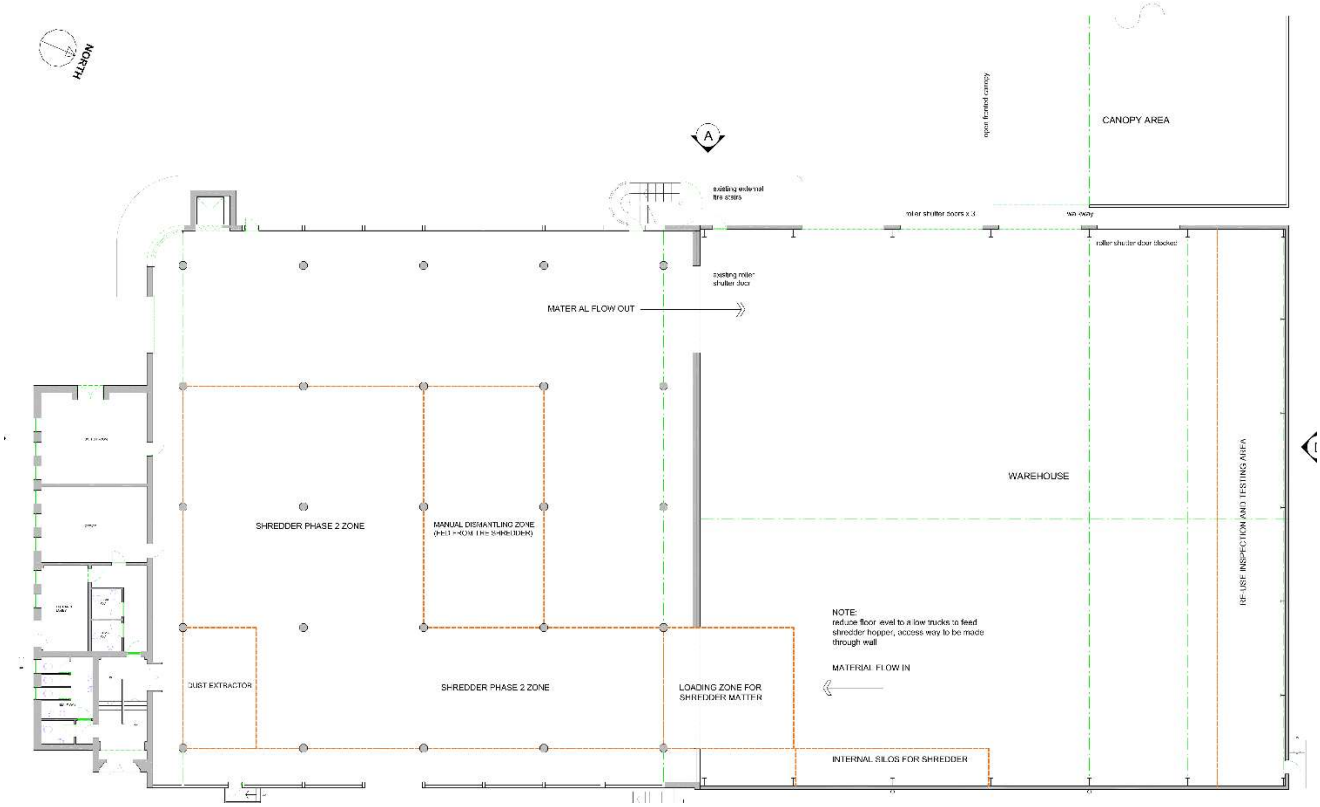
The Site is situated on the crossing between First Avenue and Dutton Road, within the wider Rediwthers industrial estate, and currently operates as a haulage firm. Ownership is in the process of being transferred at the time ofwriting of this report. It is bound on all sides by existing industrial and commercial sites. The nearest residential receptor (NSR3) is located circa. 650m to the north of the Site, situated off Bryn Lane. Figure 1.1 shows a map of the surrounding area including all receptors.

Figure 1.1 Site Plan



Development proposals at the Site are for the conversion from a haulage site to a reclamation centre, with the primary activity at the Site to be shredding of processed and unprocessed metal. Operating hours at the Site further to redevelopment will be between 08:00 and 18:00. Figure 1.2 shows an indicative Site plan provided by the Client, including the location of proposed activities at the Site. The majority of Site activity is proposed to occur internally, and so the internal layout is presented herein.

Figure 1.2 Indicative Site Plan (Client Provided Drawing)



The Site consists of two warehouses, henceforth referred to as the “Shredding Warehouse” (leftmost on the above image) and the “Loading Warehouse”. Operation at the Site will follow the general process of the delivery of material into the loading warehouse, from which point it will be loaded via forklift/shovel lifter into the shredder unit, which will be intermittently active throughout the whole day period.

The shredding warehouse is a two-storey building with walls of a solid concrete construction, and an open-plan office space on the second floor of the building, for intermittent use by employees at the Site. The loading warehouse is a secondary single-storey building, with walls and a roof constructed of corrugated metal. Both warehouses have metal roller doors leading to the external environment, although the shredding warehouse’s roller doors are to be kept sealed at all times further to the change in operation.

There will also be deliveries to an external area of the Site for the receipt of processed and unprocessed metals, to be transported from an external service yard into the internal area of the Site. Entry to the Site for deliveries shall be via the roller doors on the northern portion of the rightmost warehouse shown in Figure 1.2, and deliveries, forklift movements and the occasional tipping of unprocessed metal will occur in the service yard.

1.2. PURPOSE

The Client is seeking planning permission for the proposed use. This report details an assessment in accordance with BS 4142: 2014+A1: 2019 ‘Methods for rating and assessing industrial and commercial sound’, demonstrating that proposed activity at the Site will not have an adverse impact upon nearby receptors.

2. BS 4142 ASSESSMENT APPROACH

BS 4142 describes methods for rating and assessing industrial and/or commercial sound and includes, but is not limited to, the assessment of:

- Sound from industrial and manufacturing processes;
- Sound from fixed installations which comprise mechanical and electrical equipment;
- Sound from the (un)loading of goods and materials at industrial/commercial premises; and
- Sound from mobile plant and vehicles that is an intrinsic part of the overall sound emanating from premises or processes such as that from forklift trucks on or around an industrial and/or commercial site.

The methods described in BS 4142 use outdoor sound levels to assess the likely effects of sound on people who are typically outside residential premises. Although indoor effects can be indicated where the façade composition is known. A summary of the approach set out in BS 4142 is set out below:

Establish or predict the specific sound level of the source(s) by considering both the ambient (includes the source to be assessed) and residual (excludes the source to be assessed but includes all remaining sources) sound level;

- Measure the representative background sound levels, typically by measuring close to the receptor location;
- Rate the specific sound level to account for any distinguishing characteristics (see below);
- Estimate the impact by subtracting the background sound level from the rating level; and
- Consider the initial estimate of impact, as determined above, in the context of the noise and its environment.

The specific sound level is rated to account for distinguishing characteristics by using penalties for tonality, impulsivity, intermittency, and other sound characteristics. The dominant acoustic characteristic should be applied to avoid large penalties which is in accordance with the Institute of Acoustics response to BS 4142.

The character corrections are flexible according to whether the acoustic character is just perceptible at the noise receptor, or is clearly perceptible or highly perceptible, and range from 0 to 6 dB for tonal noise, 3 to 9 dB for impulsive noise, and 3 dB for other non-tonal/impulsive acoustic characteristics.

An initial estimate of impact of the specific sound is obtained by subtracting the background sound level from the rating level. Typically, the greater the difference, the greater the magnitude of impact.

- A difference of around +10 dB or more is likely to be an indication of a significant adverse impact, depending on the context;
- A difference of around +5 dB is likely to be an indication of an adverse impact, depending on the context;
- At differences lower than +5 dB a low impact is likely, depending on the context. The lower the rating level is to the measured background sound level, the less likely it is that the specific sound source will have an impact.

The results of the initial assessment should then be considered in light of all pertinent contextual factors.

3. SURVEY

Site visits were undertaken on both the 18th and 19th September 2025. A Site walkaround was conducted to assess the construction details of the buildings at the Site to be retained. Development proposals at the Site are yet to proceed, and so the survey portion of this report details a measurement of background sound levels at nearby receptors.

3.1. Methodology

Due to security conditions at the Site, as well as noise still at times present from the Site's previous tenants, an unattended environmental sound survey was not possible. In lieu of an unattended survey, multiple attended 30-minute measurements were taken at locations representative of nearby NSRs.

Attended environmental sound survey of the current prevailing sound levels was undertaken at locations adjacent to the Site on the afternoon (16:00-18:00) of Thursday 18th and the morning (09:00-11:00) of Friday 19th September 2025. These times were chosen in order to capture the Site and adjacent area during both high and low periods of traffic.

A sound level meter (SLM) was attended at two locations as follows:

- Sample Measurement 1 (**SM1**): Attended measurements taken adjacent to the Site, adjacent to the façade of NSR 1; and
- **SM2**: Attended measurements taken at the nearest residential receptor, adjacent to NSR 3, circa. 650m north from the Site

The above measurement positions are in Figure 1.1, with images of these positions in-situ shown below.



Near to Site, outside adjacent office building (NSR 2)



Adjacent to nearest residential receptor on Bryn Lane (NSR 3)

For completeness, a full overview of measurements taken around the Site area are included herein. However, it should be understood that for the purposes of this report, impact only to residential receptors has been considered, and so only the measurement results taken from SM2 will be considered for assessment purposes.

3.2. EQUIPMENT

Sound levels were measured using a Class 1 SLM housed in environmental protection apparatus. The SLM was field calibrated before and after the survey using a Class 1 calibrator, with no significant drift in calibration levels recorded (> ± 0.5dB). The equipment was setup in free-field conditions to capture L_{Aeq}, L_{AFmax}, and L_{eq} at a minimum.

Full details of the noise measurement equipment used are available upon request but have been calibrated to traceable standards within the 12 – 24 months prior to the survey being undertaken, and are fully compliant with the measurement procedures outlined in BS 4142.

3.3. OBSERVATIONS

Weather conditions fluctuated during the survey, with there being periods of high wind and rain at times during attendance. Weather conditions were monitored, and the attended measurements were timed such that there was no precipitation or windspeeds greater than 5 m/s during measurement periods.

Stood at SM1, the acoustic environment was typically subjectively quiet, with steady distant road traffic as well as occasional impact from adjacent commercial sites (primarily the movement of HGVs). Intermittent activity was still on occasion audible from the previous tenant at the Site; measurements were taken only when this activity was either not present, or inaudible at the measurement position.

Stood at SM2, the acoustic environment was dominated entirely by busy road traffic off Bryn Lane, as well as occasionally audible sound from nearby industrial premises.

3.4. RESULTS

A summary of the measurement results are presented in Table 3.1.

Table 3.1 Survey Results

Position	Receptor Representative of	Residual Sound $L_{Aeq,30mins}$	Background Sound $L_{A90,30mins}$
SM1	NSRs 1 + 2	54-59 dB	48-50 dB
SM2	NSR 3	65-69 dB	49-55 dB

To provide a robust assessment, the lowest measured background sound value dB $L_{A90,30mins}$ has been used for assessment purposes. Consequently, the a background sound level of 49 dB $L_{A90,T}$ has been assumed.

4. INDUSTRIAL/COMMERCIAL SOUND ASSESSMENT

4.1. ACOUSTIC MODEL

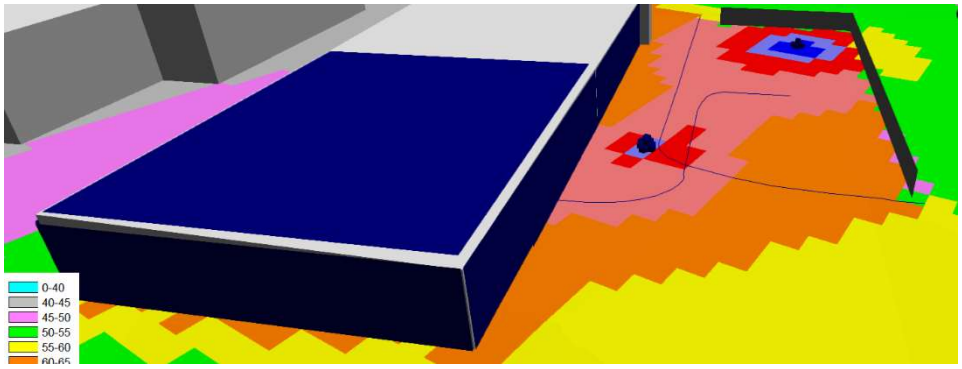
An acoustic model of the Site and environs has been generated in Datakustik CadnaA® modelling software. The model was generated to determine noise levels across the Site and noise source emissions have been informed by survey data.

CadnaA® considers various inputs, including topography, buildings, and road noise sources, and calculates sound levels in accordance with national and international standards; in this case, the relevant UK standards are the procedures set out within ISO 9613-2[1].

The modelling assumptions pertinent to the assessment are as follows:

- ground absorption set to 0 (Hard Ground);
- digital terrain included in the model Environment Agency, 19th September 2025);
- buildings set to reflective with 2nd order reflections considered;
- Point sources, vertical and horizontal area sources, and line sources with resultant sound power levels shown in Table 4.1 below;
- All considered sources in continuous operation with appropriate time corrections applied, in order to account for a worst-case hourly period, in accordance with BS 4142; and
- Shredding warehouse walls assumed to be constructed of a solid concrete providing 50 dB $R_w + C_{tr}$ sound reduction (e.g. 200mm thickness). Loading warehouse walls and roof assumed to be constructed of corrugated metal providing 25 dB $R_w + C_{tr}$ sound reduction. Roller doors at each warehouse assumed to of typical roller shutter door construction providing 18 dB $R_w + C_{tr}$ sound reduction.

Figure 4.1 3D Image of Model[2] (Values shown in dB $L_{Aeq,1hr}$)



[1] ISO 9613-2 *'Acoustics – Attenuation of sound during propagation outdoors – Part 2: General method of calculation.'*
[2] The second floor of the shredding warehouse has not been included in the model; no breakout via the roof of the shredding warehouse has been considered due to the second floor covering the entirety of the space below.

4.2. SOURCE SOUND LEVELS

Table 4.1 shows the sound sources considered in the acoustic model, including how they were modelled and the resultant Sound Power Level (inclusive of any time correction) in the model.

Table 4.1 Source Sound Levels

Activity	Modelled As	Result. Sound Power Level
HGV Arrival + Idling	Point Source	85 dB L_{wA}
HGV Air Breaks + Unloading Activities	Point Source	86 dB L_{wA}
HGV Movement	Line Source	76 dB L_{wA}
Forklift Movement	Line Source	89 dB L_{wA}
Shredding Warehouse External Break-out	Vertical Area Source	85 dB L_{wA}[4]
Loading Warehouse External Break-out[1]	Horizontal/Vertical Area Source[3]	81 dB L_{wA}[4]
Warehouse External Break-out[2]	Vertical Area Source	67 dB L_{wA}
External Metal Tipping	Point Source	100 dB L_{wA}

1: Includes internal operation of shovel loader, as well as the noise break-in to the loading warehouse from operation of the shredding plant.

2: Break-out from the loading warehouse to the external environment whilst a door remains open in order to receive a delivery.

3: Horizontal area source used to model breakout via the loading warehouse's roof.

4: Internal Reverberant Lp, Datakustik CadnaA® modelling software has been used to calculate predicted external breakout based on the assumed SRI of the respective wall construction.

For HGV movements to and from the delivery area, source data has been determined based upon the guidance contained within the Noise Advisory Council (NAC) guide[3] which takes the single event noise exposure level of a typical HGV and provides an L_{Aeq} value accordingly.

[3] A Guide to Measurement and Prediction of the Equivalent Continuous Sound Level, L_{Eq}, Noise Advisory Council, 1978.

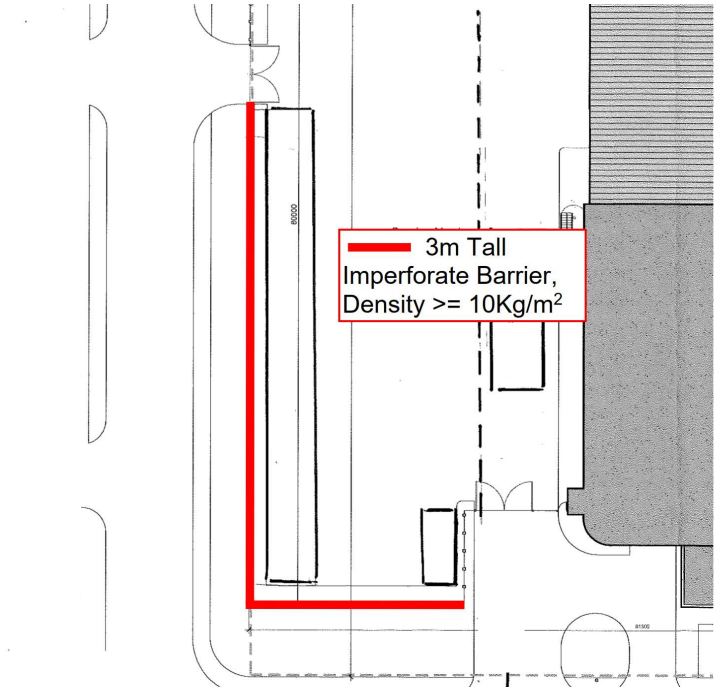
Where possible datasheets provided by the Client or taken from a suitably representative datasheet, or otherwise source sound data has been derived from the data available in Appendix C of BS 5228-1[4]. An upper limit of 85 dB reverberant sound pressure level has been chosen as an indicative sound level for sound in the shredding warehouse, chosen as the maximum value a worker inside the warehouse can be exposed to over eight hours in accordance with Noise at Work Regulations[5], on the assumption that plant will need to be attenuated such that it does not exceed that level.

4.3. EMBEDDED SCHEME MITIGATION

The scheme also assumes a 3m tall imperforate screen to sound as provided by the crates used to hold metals, situated along the south and south-western boundary of the Site.

Figure 4.2 shows the location of this inherent noise barrier.

Figure 4.2 Location of Mitigation

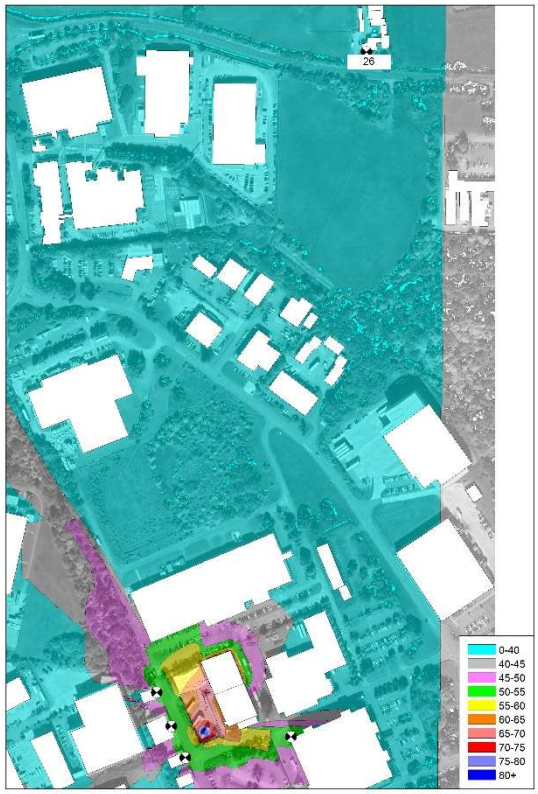


[4] BS 5228-1:2009+A1:2014 – Code of Practice for noise and vibration control on open sites – Part 1: Noise
[5] 2005 No. 1643 Health and Safety - The Control of Noise at Work Regulations 2005

4.4. SPECIFIC SOUND LEVEL

The noise map shown in below shows the predicted specific sound level from sound generated at the Site impacting the nearby area (NSR 3 considered in this report shown at the northernmost receptor on this map).

Figure 4.3 Model Output Noise Map (Values Shown in dB $L_{Aeq,1hr}$)



The relevant results are summarised in the following table.

Table 4.2 Modelled Specific Sound Levels

Receptor	Modelled $L_{Aeq,1h}$ Noise Level
NSR 3	26 dB

4.5. RATING LEVEL

BS 4142 provides guidelines on applying penalties to sound levels should they be determined to be noticeably intermittent, tonal or impulsive, or if there are any other characteristics present that may cause the sound in question to be readily distinctive against the existing acoustic environment. At the time, the sound in question does not exist, and so it cannot be measured to determine if it is objectively tonal or impulsive. Given the very low sound levels, no feature correction has been assumed.

4.6. INITIAL NOISE IMPACT ASSESSMENT

The INIA of industrial sound impact is presented in Table 4.3. Operating hours at the Site are proposed to fall entirely within the daytime (07:00-23:00) period, and so only a daytime assessment is presented herein.

Table 4.3 Initial Noise Impact Assessment (INIA)

Item	NSR 3
Period	Daytime
Reference period	1-hour
Specific Sound Level	26 dB $L_{Aeq,1hr}$
Acoustic Feature Corrections	0 dB
Rating Level	26 dB $L_{Ar,1hr}$
Background Sound Level	49 dB $L_{A90,30mins}$
Excess of Rating Level over Background Sound Level	-23 dB
Assessment Indicates	Low impact
Uncertainty	Minimised

The assessment indicates that the rating level dB $L_{Ar,1hr}$ at the nearest residential receptor is significantly beneath the existing background sound level dB $L_{A90,30mins}$, which is indicative of a low impact.

4.7. SUMMARY

The BS 4142 initial impact assessment considering the existing sound climate has determined, due to the extensive setback distance from the Site, that noise from the Site is predicted to be significantly beneath the existing background sound level dB $L_{A90,30mins,}$ and is thus unlikely to be audible or otherwise represent an adverse impact at the nearest residential receptor.

4.8. UNCERTAINTY

Uncertainty is an unavoidable feature of measurements in the field, which can be subject to many factors; the weather typically being the most significant of which with respect to the measurement of sound. Uncertainty is also unavoidable in the prediction of sound levels, where naturally, before the scenario being considered becomes a reality, a number of assumptions need to be relied upon. There is also the uncertainty of people's reactions, which can be influenced by a number of factors, not just the magnitude or character of the sound in question.

In keeping with the scale of each project, Peninsular Acoustics aims to minimise uncertainty at each stage as far as reasonably practicable. With this is mind, the control measures listed in Appendix B have been followed, which themselves, have been derived from the guidance within BS 4142.

Crucially, measurements have been undertaken by suitably qualified staff, using state of the art, in calibration equipment, over suitable periods and avoiding adverse weather conditions.

The predictions have also been undertaken by suitably qualified staff, and by using a broad spread of source data obtained through archived specific sound level measurements.

Notwithstanding this, naturally some uncertainty remains. Given the sheer number of factors involved, however, it is not feasible to place a numerical value on the level of uncertainty, without resulting in an unhelpful range of possible outcomes.

It is the professional position of Peninsular Acoustics that uncertainty has been kept to a realistic minimum and that the outcome of this assessment is sufficiently representative and robust.

5. CONCLUSIONS

Peninsular Acoustics Limited was commissioned by Telecycle Europe Limited to provide an assessment to investigate the noise impact associated with their proposed reclamation operations at Unit One, First Avenue, Wrexham.

The nearest residential receptor is 650m to the north, a dwelling off Bryn Lane. An attended survey was undertaken of the background sound representative of conditions at this receptor.

Client provided data, manufacturer's datasheets, and library source sound data has been used to create a noise model, which in turn has predicted specific sound levels at the receptor.

An initial noise impact assessment determined due to the setback distance between the Site and the nearest residential receptor, sound from the Site is predicted to be of low impact.

Limitations on the use of this report are contained in Appendix C.

Appendix A

TECHNICAL TERMINOLOGY

Parameter	Description
Sound Pressure	Sound, or sound pressure, is a fluctuation in air pressure over the static ambient pressure.
Sound Pressure Level (Sound Level)	The sound level is the sound pressure relative to a standard reference pressure of 20µPa (20x10-6 Pascals) on a decibel scale.
Decibel (dB)	A scale for comparing the ratios of two quantities, including sound pressure and sound power. The difference in level between two sounds s1 and s2 is given by 20 log10 (s1 / s2). The decibel can also be used to measure absolute quantities by specifying a reference value that fixes one point on the scale. For sound pressure, the reference value is 20µPa.
A-weighting, dB(A)	The unit of sound level, weighted according to the A-scale, which takes into account the increased sensitivity of the human ear at some frequencies.
Noise Level Indices	Noise levels usually fluctuate over time, so it is often necessary to consider an average or statistical noise level. This can be done in several ways, so a number of different noise indices have been defined, according to how the averaging or statistics are carried out.
$L_{eq,T}$	A noise level index called the equivalent continuous noise level over the time period T. This is the level of a notional steady sound that would contain the same amount of sound energy as the actual, possibly fluctuating, sound that was recorded.
$L_{Max,T}$	A noise level index defined as the maximum noise level during the period T. L_{Max} is sometimes used for the assessment of occasional loud noises, which may have little effect on the overall L_{eq} noise level but will still affect the noise environment. Unless described otherwise, it is measured using the 'fast' sound level meter response.
$L_{90,T}$	A noise level index. The noise level exceeded for 90% of the time over the period T. L_{90} can be considered to be the "average minimum" noise level and is often used to describe the background noise.
$L_{10,T}$	A noise level index. The noise level exceeded for 10% of the time over the period T. L_{10} can be considered to be the "average maximum" noise level. Generally used to describe road traffic noise.
$L_{Aeq,Tr}$	Specific noise level. The equivalent continuous A-weighted sound pressure level at the assessment position produced by the specific noise source over a given reference time interval.
$L_{Ar,Tr}$	Rating noise level. The specific noise level plus any adjustments for characteristic features of the noise.
Free-Field	Far from the presence of sound reflecting objects (except the ground), usually taken to mean at least 3.5m.

Parameter	Description
Facade	At a distance of 1m in front of a large sound reflecting object such as a building facade.
Fast/Slow Time Weighting	Averaging times used in sound level meters.
Octave Band	A range of frequencies whose upper limit is twice the frequency of the lower limit
Airborne Sound Insulation	Sound insulation that reduces transmission of airborne sound between buildings or parts of buildings
R_w	The single number quantity, which characterises the airborne sound insulating properties of a material or building element over a range of frequencies.
$D_{nT,w}$	The single number quantity, which characterises the airborne sound insulation between rooms over a range of frequencies, using noise spectrum 2 as defined in BS EN ISO 717-1:1997
C_{tr}	Correction term applied against the sound insulation single-number values (R_w, D_w and $D_{NT,W}$) to provide a weighting against low frequency performance.
Frequency (Hz)	The number of pressure variations (or cycles) per second that gives a sound its distinctive tone. The unit of frequency is the Hertz (Hz).
One-third octave band	A frequency band in which the upper limit is $2^{1/3}$ times the frequency of the lower limit.
Reverberation Time	The time, in seconds, taken for a sound in a room to decay by 60dB after a source has been stopped.
Reverberation Time	The time, in seconds, taken for a sound in a room to decay by 60 dB after a source has been stopped.
Sound Level	Sound, or sound pressure, is a fluctuation in air pressure over the static ambient pressure. The sound level is the sound pressure relative to a standard reference pressure of 20x10-6 Pascals on a decibel scale.

Appendix B

UNCERTAINTY

Uncertainty Control Measures	Applicable?	Adopted?/Comments
Measurement		
Only use in calibration Type/Class 1 equipment and check (and record) calibration level before and after measurements	✓	Yes
Measurements taken using the time and frequency weighting specified by the relevant standard?	✓	Yes
Detailed notes made, including details of the equipment, weather, survey positions (including approximate distances), contributing noise sources, presence of screening etc.?	✓	Yes
Photographs taken and recorded survey locations using GPS?	✓	Yes
Avoided standing waves/interference – listen for effects, taken spatial average from several locations or conducted a sweep	✓	Yes
Taken measurements of source at different distances to establish propagation	×	Not relevant, noise not currently generated, used indicative values
Taken measurements at different heights where relevant	×	Not relevant
Avoided just measuring in the “noisiest” parts of the site, and established how “quiet” it is, too, where relevant to the assessment	✓	Yes
Measured under different source operating conditions relevant to the assessment / adopt worst case if known	×	Not relevant
Measured more than one cycle/event	×	Not relevant
Determined the state of repair of any associated source, where relevant	×	Not relevant
Used a windshield and avoided windy conditions (i.e. gusts regularly exceeding 5 m/s)	✓	Yes
Avoided wet conditions (particularly in terms of rain on the windshield/microphone and on neighbouring surfaces)	✓	Yes
Avoided electrical and electromagnetic interference (such as from power cables and radio transmitters)	✓	Yes
Avoided extreme temperatures? Traffic conditions can be different in freezing conditions, whilst meters can overheat and fail in a case when in direct sunlight during the summer.	✓	Yes
Made measurements during different weather conditions? Particularly relevant in terms of wind direction for sites affected by aircraft movements, but also for sites affected by other distant, but significant, sources of noise, in different directions	-	Not considered necessary for this assessment
Where one source is dominant (such as a main road), have measurements been taken during conditions favourable to propagation (i.e. when wind direction is within +/-45° of the line between the source and receiver or during temperature inversion, such as on clear calm nights)	-	Not considered necessary for this assessment

Uncertainty Control Measures	Applicable?	Adopted?/Comments
Avoided tree/leaf (movement) sound where possible? Ideally take measurements the same distance from sources of such sound as any receptors of interest	✓	Yes – no significant wind present to cause dominant leaf movement
Avoided dawn chorus sound? Ideally take measurements the same distance from trees and bushes as any receptors of interest	✓	Yes
Measured outside the receptor in question where possible? It is worst case typically to measure under free-field conditions and apply +3 dB correction if necessary to convert to "façade" where applicable – for most planning (new residential development) assessments, free-field is preferable	✓	Yes, nearby and used free-field conditions
Avoided atypical traffic conditions (such as during school holidays and road works – road traffic incidents can significantly affect flows, but which can't be predicted and their occurrence can't always be established after the survey – check the data for anomalies)?	✓	Yes, although not relevant and reduced traffic would make assessment more worst-case
Avoided the presence of the engineer and/or the microphone resulting in atypical conditions (e.g. people stopping to talk, workers on site adjusting their way of working, etc.)?	✓	Yes
Data handling		
Was the data downloaded immediately after survey and process promptly whilst details are fresh?	✓	Yes
Were digital transfer methods used and was the data written down too?	✓	Yes
Was the time-history examined (in as fine a resolution as possible) for any unexpected events – preferably with active spectral data (i.e. in dBTRAIT)	×	Attended measurements so no time history
If removing any data (due to an atypical event, for example), was the data saved as a new file, with notes to the data provided within the corresponding Excel file?	✓	Yes, raw data seperate from processed data
Prediction		
Was measurement data used at different distances to verify propagation?	×	Not relevant
Were measurements at different heights used to verify screening effects, where relevant?	×	Not relevant
Were propagation calculation procedures relevant to the source and distance used?	✓	Yes, based on ISO 9613-2
Were detailed traffic flow data applicable to the assessment methodology used?	×	N/A
Were detailed sound source data (including octave-bands levels) used, accounting for size, height and directivity, where known?	×	Not relevant
Were detailed topographical data and base mapping used?	✓	Yes
Were different ground types identified	✓	No ground absorption accounted for
Was an order of reflections of at least one applied?	✓	Yes, two

Uncertainty Control Measures	Applicable?	Adopted?/Comments
Was the 3D view feature of the modelling software used to check the accuracy of the model?	✓	Yes
Were contour plots produced as a further means of identifying any abnormalities or errors in the model?	✓	Yes

Appendix C

REPORT LIMITATIONS

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