

# NOISE IMPACT ASSESSMENT

Stonebrook Way, Longford, Coventry CV6 6LN

Tom White Waste Ltd

<b>Version:</b>	1.1	<b>Date:</b>	10 October 2024		
<b>Doc. Ref:</b>	STONE-3206-A	<b>Author(s):</b>	TB/CP	<b>Checked:</b>	CP
<b>Client No:</b>	3206	<b>Job No:</b>	007		



## Oaktree Environmental Ltd

Waste, Planning & Environmental Consultants



### Document History:

Version	Issue date	Author	Checked	Description
1.0	07/03/2024	TB	CP	Document issue
1.1	10/10/2024	CP	--	EA comments, see sections 1.4.2, 4.5.5, 4.5.6, 5.3 and 5.4.

## CONTENTS

DOCUMENT HISTORY:.....	I
CONTENTS .....	II
LIST OF TABLES AND FIGURES:.....	IV
LIST OF APPENDICES: .....	IV
1 INTRODUCTION .....	1
1.2 RELEVANT QUALIFICATIONS .....	2
1.3 SITE DESCRIPTION AND LOCATION.....	3
1.4 PROPOSED HOURS OF OPERATION.....	4
1.5 ENVIRONMENTAL REGULATION .....	4
2 PLANNING POLICY .....	5
2.1 ENVIRONMENT AGENCY GUIDANCE.....	5
2.2 NOISE POLICY STATEMENT FOR ENGLAND.....	5
2.3 NATIONAL PLANNING POLICY FRAMEWORK .....	6
2.4 PLANNING PRACTICE GUIDANCE – NOISE .....	7
3 NOISE ASSESSMENT CRITERIA .....	8
3.2 BS8233:2014 .....	8
3.3 BS4142:2014 .....	8
3.4 WHO GUIDELINES FOR COMMUNITY NOISE .....	9
4 BACKGROUND NOISE MONITORING .....	11
4.1 PROCEDURE AND MONITORING LOCATIONS .....	11
4.2 EQUIPMENT USED DURING THE SURVEY.....	14
4.3 WEATHER.....	14
4.4 RESULTS.....	14
4.5 EXISTING NOISE CLIMATE.....	15
5 NOISE IMPACT ASSESSMENT .....	18
5.1 INTRODUCTION .....	18
5.2 COMPARISON TO EXISTING SCENARIO.....	18
5.3 PROPOSED NIGHT TIME AND EVENING OPERATIONS .....	20
5.4 PROPOSED WEEKEND OPERATIONS .....	20
5.5 BACKGROUND LEVELS .....	20
5.6 BS4142: ASSESSMENT .....	21
5.7 CONTROL OF UNCERTAINTY .....	35
6 CONCLUSION .....	36
6.1 SUMMARY & RECOMMENDATIONS .....	36



## List of Tables and Figures:

Table 3.1 - BS8233:2014 Internal Criteria.....	8
Table 3.2 - BS4142:2014 Corrections and Penalties.....	9
Figure 4.1 - Site location and noise monitoring positions.....	11
Figure 4.2 - Site location and noise monitoring positions.....	12
Table 5.1 – Existing vs Proposed Activities – Longford 1.....	18
Table 5.2 – Existing vs Proposed Activities – Longford 2.....	19
Table 5.3 – Existing vs Proposed Activities – Longford 3.....	19
Table 5.4 – Measured levels of activities Longford 2- Existing.....	24
Figure 5.5 – Calculated noise levels (LAeq) associated with the typical existing operations of the site.....	31
Figure 5.6 – Calculated noise levels (LAeq) associated with the site and closest noise sensitive receptors for the proposed layout.....	32
Table 5.7 – Assessment of typical noise sources associated with the site (existing) as per BS4142:2014.....	33
Table 5.8 – Assessment of typical noise sources associated with the site (Proposed) as per BS4142:2014.....	33

## List of Appendices:

<b>Appendix I</b>	<b>- Drawings</b>
-------------------	-------------------

# **1 Introduction**

1.1.1 Tom White Waste Ltd is the permit holder and currently operate two sites which are subject to this proposed permit variation and consolidation, the permit references and site locations are shown below:

- EPR/AB3906CT (SR2008No3) - Longford No2, Stonebrook Way, Longford, Coventry, West Midlands, CV6 6LN – issued 16/12/2013
- EPR/KP3698CX (A11) - Stonebrook Way Transfer Station, Stonebrook Way, Coventry, West Midlands, CV6 6LN - 13/12/2005

1.1.2 Oaktree Environmental have been commissioned by Tom White Waste Ltd to undertake a Noise Impact Assessment (NIA) for their waste management site at Stonebrook Way, Longford, Coventry CV6 6LN.

1.1.3 The purpose of this document is to accompany an application to consolidate the above Environmental Permits (EPs) into one permit. In addition to this, other proposals comprise the following:

- i) Add a Section 5.4 (a)(iii) and b(ii) non-hazardous waste installation to the permit. This will involve the primary acceptance residual waste under EWC codes 19 12 10 and 19 12 12 from other waste transfer stations to produce a solid recovery fuel (SRF) which will be sent for incineration. The reason for this addition is because the site is proposing a recovery or a mix of recovery and disposal of non-hazardous waste with a capacity exceeding 75 tonnes per day involving pre-treatment of waste for incineration or co-incineration.
- ii) Acceptance of the following waste types into the site, this has been split based on the A11 and the proposed Section 5.4 activity.

1.1.4 The permit boundary will essentially comprise three sites:

- i) Longford 1 (currently operated as EPR/KP3698CX (A11) will continue to be used as an HCl waste transfer station with treatment

- ii) Longford 2 (currently operated as EPR/AB3906CT (SR2008No3) will be used as an A11 and also comprise the Section 5.4 (a)(iii) and b(ii) activity
- iii) Longford 3 (not currently permitted) will become part of the A11 HCI waste transfer station with treatment

## 1.2 **Relevant qualifications**

### **THOMAS BENSON**

- 1.2.1 The author of the report is Thomas Benson (Tom), a Principal Consultant at Oaktree Environmental Limited, with 9+ years experience in the environmental sector, having graduated in Summer 2013. Tom is a full member of the Institute of Environmental Sciences as well as being an Associate Member of the Institute of Acoustics.
- 1.2.2 Tom has worked in the area of acoustics in both the private and public sector, Tom was previously employed as a regulator on behalf of Salford City Council from May 2016 to August 2017 having worked as a planning consultee, primarily commenting with regards to noise and contaminated land issues. This involved the review of Noise Impact Assessments, Noise Management Plans and Verification documents submitted as part of the planning process, design of bespoke noise related planning conditions as well as the provision advice to colleagues in the planning department.
- 1.2.3 It was during this time that Tom gained the Certificate of Competence in Environmental Noise Measurement from the University of Liverpool by October 2016 having initially undergone internal training.
- 1.2.4 Since January 2018, Tom has worked for Oaktree Environmental, providing Noise Impact Assessments, Noise Management Plans in support of planning and permitting applications, as well providing general acoustic advice to clients, for example in response to complaints, site design etc.
- 1.2.5 Tom has also acted as expert witness in several planning hearings and appeals.

- 1.2.6 Copies of IOA certificates or IOA membership can be provided upon request.

### **NOVA ACOUSTICS**

- 1.2.7 A suitable noise consultant (NOVA Acoustics Ltd) was commissioned by Oaktree to obtain unattended background noise monitoring for 3.no days between 4<sup>th</sup> and 7<sup>th</sup> of August 2023 to be used for this NIA. This information accompanies the NIA and available for the EA to review.
- 1.2.8 The personnel from NOVA included the setup engineer (Tom Smith BA), under the guidance of Adam Martin MSc, MIOA and Tom Watkin MSc, MIOA. All personnel of NOVA Acoustics Ltd are suitably qualified. Further credentials can be provided if necessary/

## **1.3 Site Description and Location**

- 1.3.1 The site is located on Land at Stonebrook Way, Longford, Coventry CV6 6LN. The national grid reference for the site is SP 34695 83254. The surrounding land uses include mainly industrial/commercial uses with some residential properties that are along Longford Road bordering the site. The industrial estate is down Blackburn Road just off Longford Road which borders the River Sowe. The Coventry Canal borders the site to the south west.
- 1.3.2 The nearest noise sensitive receptors comprise of a number of residential areas surrounding the site all approximately 10m-130m from the boundary, the residential areas chosen to monitor include houses associated with Longford Road on the south-east side, houses associated with Vinecote Road north of the site.



## 1.4 **Proposed hours of Operation**

1.4.1 The site proposes to operate the site in accordance with the following hours:

### **WASTE RECEPTION AND REMOVAL OF WASTE**

Monday to Saturday                      24 hours a day

Sundays, Bank/Public holidays      Closed

### **WASTE PROCESSING (INTERNALLY INSIDE LONGFORD 2 ONLY)**

Monday to Sunday                      24 hours a day

Bank/Public holidays                  24 hours a day

### **WASTE PROCESSING (EXTERNALLY)**

Monday to Saturday                      06:00 – 18:00

Sundays, Bank/Public holidays      Closed

1.4.2 Reference should also be made to Sections 5.2.3 and 5.2.4 of this assessment.

## 1.5 **Environmental Regulation**

1.5.1 An Environmental Permit (EP) will be required to be in place for the site, with day-to-day operations regulated by the Environment Agency (EA). Potential impacts on air, land and water will be fully controlled and regulated under the EP.

## **2 Planning Policy**

### **2.1 Environment Agency Guidance**

2.1.1 This document has been produced in accordance with the EA's guidance "Noise and vibration management: environmental permits" updated 31 January 2022.

### **2.2 Noise Policy Statement for England**

2.2.1 The Noise Policy Statement for England (NPSE), March 2010, sets out the Government's long-term noise policy, the aims of which are:

*"Through the effective management and control of environmental, neighbour and neighbourhood noise within the context of Government policy on sustainable development:*

- *Avoid significant adverse effects on health and quality of life;*
- *Mitigate and minimise adverse effects on health and quality of life;*
- *Where possible, contribute to the improvement of health and quality of life."*

2.2.2 The first aim of the NPSE is to avoid significant adverse effects, considering the shared UK principles of sustainable development.

2.2.3 The second aim provides guidance on the scenario when the potential noise impact falls between the LOAEL (Lowest Observed Adverse Effect Level) and the SOAEL (Significant Observed Adverse Effect Level), in which case it is stated, *"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"*. However, it is also stated, *"This does not mean that such adverse effects cannot occur"*.

2.2.4 With regards to the SOAEL, the document states, *"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"*, thus acknowledging that this is very much dependent on the noise source, the receptor, and the time of day. Therefore, the NPSE provides the necessary policy flexibility until further guidance / evidence is available.

2.2.5 Other guidance will need to be taken into account when applying the principles of the NPSE, as well the nature of the proposed development and its specific circumstances.

## 2.3 **National Planning Policy Framework**

2.3.1 The NPPF, revised in July 2021, states that Planning policies and decisions should also ensure that new development is appropriate for its location, taking into account the likely effects (including cumulative effects) of pollution on health, living conditions and the natural environment, as well as the potential sensitivity of the site or the wider area to impacts that could arise from the development. In doing so they should:

- Mitigate and reduce to a minimum potential adverse impact resulting from noise from new development – and avoid noise giving rise to significant adverse impacts on health and the quality of life;
- Identify and protect tranquil areas which have remained relatively undisturbed by noise and are prized for their recreational and amenity value for this reason.

2.3.2 Planning policies and decisions should ensure that new development can be integrated effectively with existing businesses and community facilities (such as places of worship, pubs, music venues and sports clubs). Existing businesses and facilities should not have unreasonable restrictions placed on them as a result of development permitted after they were established. Where the operation of an existing business or community facility could have a significant adverse effect on new development (including changes of use) in its vicinity, the applicant (or 'agent of change') should be required to provide suitable mitigation before the development has been completed.

2.3.3 The revised document also makes reference to the Noise Policy Statement for England.

## 2.4 **Planning Practice Guidance – Noise**

2.4.1 Further to the guidance set out in the NPPF, Planning Practice Guidance for Noise advises that the Local Authority should consider the following when decision making:

- Whether or not a significant adverse effect is occurring or likely to occur.
- Whether or not an adverse effect is occurring or likely to occur.
- Whether or not a good standard of amenity can be achieved.

2.4.2 As previously discussed within the NPSE, the guidance discusses the LOAEL and SOAEL and provides scenarios that could be expected for the perception level of noise, plus the associated activities that may be required to bring about the desired outcome. Again, as with the NPSE, no objective noise levels are provided for LOAEL or SOAEL.

2.4.3 It is stated that “the subjective nature of noise means that there is not a simple relationship between noise levels and the impact on those affected. This will depend on how various factors combine in any particular situation”. These factors include:

- The absolute noise level of the source and the time of day it occurs.
- Where the noise is non-continuous (intermittent), the number of noise events along with any patterns of occurrence.
- The frequency of content and acoustic characteristics (tonality etc.) of the noise.
- The effects of noise on the surrounding wildlife.
- The acoustic environment of external amenity areas provided as an intrinsic part of the overall design.
- The impact of noise from certain commercial developments such as night clubs and pubs where activities are often at their peak during the evening and night.

### **3 Noise Assessment Criteria**

3.1 In order to assess the impacts of existing road traffic and industrial noise from the proposed development, the following documents have been used:

- BS8233:2014
- BS4142:2014
- World Health Organisation (WHO) Guidelines on Community Noise

#### **3.2 BS8233:2014**

3.2.1 This document provides guidance on the relevant level of sound insulation required by a variety of building types affected by general environmental noise and provides recommendations for appropriate internal ambient noise level criteria for a variety of different situations including residential dwellings. The table below includes the proposed noise criteria within BS8233:2014 with regards to residential properties:

**Table 3.1 - BS8233:2014 Internal Criteria**

<b>Activity</b>	<b>Location</b>	<b>07:00 – 23:00</b>	<b>23:00 – 7:00</b>
Resting	Living rooms	35 LAeq, 16hour	-
Dining	Dining room	40 LAeq, 16hour	-
Sleeping	Bedroom	35 LAeq, 16hour	30 LAeq, 16hour

#### **3.3 BS4142:2014**

3.3.1 BS4142:2014 provides a method for “assessing and rating industrial sound” of an industrial/commercial nature. The method described in the standard uses the rating level from a noise source and the existing background noise level to assess the potential effects of sound on the residential premises upon which sound is incident.

3.3.2 Using this method, the background sound level is subtracted from the rating level. The resulting figure is assessed using the following guidance from the document:

- The greater the difference between the background sound level and the rating level, the greater the impact on the receptor.
- An exceedance of the background level of around 10dB, or more, is likely to be an indication of a significant adverse impact, dependent on the context.
- An exceedance of the background level of around 5dB is likely to be an indication of an adverse impact, dependent on the context.
- The lower the rating level compared to the existing background level, the less likely an adverse impact, or a significant adverse impact. Where the rating level does not exceed the background level, this is indicative of a low impact, dependent on context.

3.3.3 The document introduces a requirement to consider and report the uncertainty in the data as well as also including guidance for applying a correction/penalty for certain adverse acoustic features such as tonality, impulsivity or intermittency. The following table summarises the corrections based on the subjective assessment of the noise.

**Table 3.2 - BS4142:2014 Corrections and Penalties**

	<b>Tonality</b>	<b>Impulsivity</b>	<b>Other characteristics</b>
Just perceptible	+ 2dB	+ 3dB	
Clearly perceptible	+ 4dB	+ 6dB	
Highly perceptible	+ 6dB	+ 9dB	
Readily Distinctive against Residual Environment			+ 3Db

### 3.4 **WHO Guidelines for Community Noise**

3.4.1 The WHO Guidelines (1999) recommends indoor night-time guidelines in order to avoid sleep disturbance, the document states these to be 30 dB (LAeq) and 45 dB (LA<sub>fmax</sub>) for continuous and individual noise events respectively.

- 3.4.2 The document states that the number of noise events should also be considered and that individual noise events should not exceed 45 dB ( $LA_{fmax}$ ) more than 10 – 15 times per night.
- 3.4.3 The WHO document also recommends that steady, continuous noise levels should not exceed 55 dB (LAeq) for outdoor living areas (balconies, terraces etc.). However, in order to protect the majority of individuals from moderate annoyance, external noise levels should not exceed 50 dB (LAeq).

## 4 Background Noise Monitoring

### 4.1 Procedure and Monitoring Locations

4.1.1 A background noise survey was completed on the 25<sup>th</sup> July 2023 in accordance with BS 7445-1: 2003 by Thomas Benson of Oaktree Environmental Ltd. This was to attain all existing noise/plant levels on site

4.1.2 A further noise survey was conducted by NOVA Acoustics Limited in order to retrieve more longer-term data which involved fixing a tripod approximately 1.5m from the ground within a small courtyard area for the duration of 3.no days between the 4<sup>th</sup> of August 2023 to the 7<sup>th</sup>. Set up shown below in Figure 4.1.

**Figure 4.1 - Site location and noise monitoring positions**



4.1.3 To ensure that the background monitoring survey is representative of the existing noise climate in the vicinity of the noise sensitive receptors. It was agreed with site management that waste related activities would cease for several hourlong periods whilst monitoring was undertaken. Or times of monitoring were chosen at times of least activity on site.



4.1.4 Figure 4.2 below shows the site and the location of the monitoring positions labelled NMP 1 and NMP 2 shown by a pin. With NOVA Acoustics monitoring location labelled MP1.

**Figure 4.2 - Site location and noise monitoring positions**



- 4.1.5 Locations chosen were chosen to be representative of the nearest noise sensitive receptors.
- 4.1.6 NMP 1 is located just off Longford Road down a side road with residential housing either side to the southeast of the site, approximately 5m from the south façade of the nearest residential buildings. This is bordering the site and backs on to housing on Ellerman Gardens.
- 4.1.7 NMP 2 was located within Vinecote Road to the Northeast of the site approximately 130m from the boundary. Which is separated by some public access park land area.
- 4.1.8 NOVA MP1 was located just north of NMP 1 just off Longford drive approximately 5m away from the nearest residential building façade.
- 4.1.9 Considering the nature of the background noise survey (i.e. during pre-agreed shutdowns of an already existing facility), unattended measurements were taken in order to gather longer duration data. With combined attended measurements to allow for a significant level of observation to be made. As previously discussed, BS4142:2014 provides significant weight to context when determining the level of impact.
- 4.1.10 Whilst most of the sites operations does not operate on the weekends or public holidays, the building shown in STONE/3206/03, is a building that is concrete cladded with the opening for HGVs facing in towards the site. Considering the in activity on the weekends for the rest of the site's activities externally, no attended background monitoring was undertaken during the weekend hours. This is discussed further within Section 5.0.

## 4.2 Equipment Used During the Survey

4.2.1 Details of the equipment used during the survey are shown in Table 4.1 below:

**Table 4.1- Survey Equipment**

Description	Model	Manufacturer	Serial No.	Calibration Date
<i>Precision Sound Analyser</i>	NOR 145	Norsonic AS	14530082	May 2023
Microphone	Nor1227	Norsonic	527239	May 2023
Pre amplifier	Nor1209	Norsonic	23775	May 2023

4.2.2 Details of NOVA Acoustics equipment used are detailed below in Table 4.2.

**Table 4.2- Survey Equipment**

Equipment	Manufacturer	Model	Serial No.	Pre Calibration	Post Calibration
SLM	Svantek	971A	87159	113.9	114
Calibrator	Svantek	SV33	125774		

## 4.3 Weather

4.3.1 The weather during the background surveys is summarised in Table 4.3 below:

**Table 4.3 – Weather Conditions during noise monitoring**

Date	Wind Speed (max)	Cloud Cover	Temperature	Precipitation
Thursday 27/07/2023	Max gusts of 5m/s	0-50%	15°C-24°C	None recorded whilst onsite.

## 4.4 Results

4.4.1 The results of the attended background noise monitoring survey are tabulated below in Tables 4.4-4.5. These results utilise the 15 minute breakdown of the LA90 results showing the range in brackets. The results for the NOVA Acoustics are tabulated in Tables 4.6 and 4.7 for weekday and weekend respectively. Commentary on the background level and

survey is included further on in Section 4.5. The range of LA90 levels used from NOVA acoustics were times of inactivity at the site and therefor between 16:00-23:45, for weekday.

**Table 4.4 -Weekday background monitoring results for NMP 1 Ellerman Gardens**

Measurement Time	LA <sub>eq</sub>	LA <sub>max</sub>	LA <sub>90</sub>	LA <sub>10</sub>
12:34-13:34	50.5	85.9	45.5 (Range 44.9/47.1)	50.4

**Table 4.5 -Weekday background monitoring results for NMP 2 Vinecote Road**

Measurement Time	LA <sub>eq</sub>	LA <sub>max</sub>	LA <sub>90</sub>	LA <sub>10</sub>
11:17-12:17	51	72.0	47.0 (Range:46.2/48.2)	52.0

**Table 4.6 – Weekday Median 15 minute LA90 figures for each relevant period for NOVA MP1 weekday.**

Period	Location	Median LA90	Range of LA90 figures
Weekday 16:00-23:45	MP1	44.45	42-47.3

**Table 4.7 – Weekend Median 15 minute LA90 figures for each relevant period for NOVA MP1 weekend.**

Period	Location	Median LA90	Range of LA90 figures
Saturday 00:00-23:45	MP1	44	28.9-64.9
Sunday 00:00-23:45	MP1	40.8	37.1-47.3

## 4.5 Existing Noise Climate

4.5.1 During the monitoring survey undertaken, it was observed that the main contributors to the existing noise climate comprised primarily;

- The neighbouring business which include A&M Metals & Waste Limited, Express Asphalt,
- Road traffic with associated houses down Longford Road,
- Distant HGVs ,

- Bird song from the Longford Community Nature Park.

- 4.5.2 Occasionally distant commercial noise was audible in the form of distant bangs/crashes (engines revving etc.). However, the contribution of these is relatively minor.
- 4.5.3 During the monitoring survey undertaken at NMP 1 bordering the site to the southeast the main contributors to the noise climate were much the same as above except this specific area there were residents outside housing and additional noise from the cross roads between Windmill Road and Longford Road.
- 4.5.4 During the monitoring survey undertaken at NMP 2 which was northeast of the site approximately 130m away down Vinecote Road. The main contributors to the noise climate were much like NMP 1 and those mentioned above, however more specifically the Nature Reserve noise from birds was more prevalent combined with noise from people using the flats adjacent.
- 4.5.5 During the monitoring conducted by NOVA Acoustics between the 4<sup>th</sup> and the 7<sup>th</sup> of August 2023 for Monitoring Point (MP1) held in Appendix II. The main contributors to background noise as described by NOVA include the following: “Consistent loud noise from recycling facility/warehouse to *where recycling is being broken down and processed. This noise is reflecting off the façade of the cardboard recycling warehouse to the south in the direction of NSRs to East.*”. The general description of background noise as described by NOVA includes heavy vehicle movements audible on site, reversing warnings. Loud impulsive crashes from waste recycling being emptied into large skips. Occasional metallic hammering coming from within cardboard recycling warehouse to the south. Only the weekday results at times of little to no activity were used in the assessment as this is the best representation of the background noise levels.
- 4.5.6 The facility was operational as during the environmental noise survey (background monitoring). However, it was not operational from Friday (04/08/2024) after 16:00pm during Saturday and Sunday (05/08/2024 – 06/08/2024) and before 07:00am on Monday (07/08/2024). The operator also confirmed Longford 1 will have shutdown on Monday at 13:00pm for a minimum of 30 minutes. Therefore, the background sound levels as

recorded during these periods have been used to determine the typical background sound levels at all measurement positions as this data does not include any noise from the facility (i.e. true background sound level in BS4142 terms).

- 4.5.7 Should It be required, photographs and videos can be provided, along with the noise measurement files in order to corroborate the above observations. These are available upon request by the EA.

## 5 Noise Impact Assessment

### 5.1 Introduction

5.1.1 It is considered the most significant noise sources associated with the development are:

- The Crushing/screening activity by mechanical screening plant and equipment.
- Wood processing/ shredding
- Baling (by using appropriate plant and equipment)
- Blending (by loading shovel/ 360® tracked excavator and trommel)
- Cutting (using hand-held equipment)

### 5.2 Comparison to existing scenario

5.2.1 The model has also been prepared for the existing scenario, the output of which is provided within the NIA.

5.2.2 The model is based upon the previous use of the permitted areas prior to the variation. The tables below and overleaf detail existing vs proposed activities for Longford 1, Longford 2 and Longford 3.

**Table 5.1 – Existing vs Proposed Activities – Longford 1**

<b>Existing (as shown on permit)</b>	<b>Proposed (to be included onto the permit)</b>
Throughput of 74,999 tonnes per annum and vehicle movements	Keep
Unloading and loading of waste into HGVs/mechanical treatment plant using mobile plant (internal and external)	Keep
Sorting and/or separation	Keep
Compaction	Keep
Screening	Keep
Crushing	Keep
Washing	Keep
Shredding	Keep
Baling	Remove baling activities

**Table 5.2 – Existing vs Proposed Activities – Longford 2**

<b>Existing (as shown on permit)</b>	<b>Proposed (to be included onto the permit)</b>
Throughput of 75,000 tonnes per annum and vehicle movements	Increase to 150,000 tonnes per annum
Unloading and loading of waste into HGVs/mechanical treatment plant using mobile plant (internal only)	Keep
Sorting and/or separation	Keep
Compaction	Keep
Screening	Keep
Crushing	Remove
Washing	Keep
Shredding	Keep
Baling	Keep
Addition of new mechanical treatment line for the production of SRF/RDF – comprising conveyors, disk spreader, eddy current separator, optical sorter, RDF/SRF scanner, secondary shredder and dust extraction unit	Add

**Table 5.3 – Existing vs Proposed Activities – Longford 3**

<b>Existing (under exemptions and non-waste uses)</b>	<b>Proposed (to be included onto the permit)</b>
Workshop including cutting and mix of mechanical hand tools for maintenance	Keep
Acceptance of waste into site using HGVs	Keep
Unloading and loading of waste into HGVs using mobile plant	Keep
Deposit of pre-sorted waste into bays	Keep
Sorting and/or separation of waste using mobile plant	Add
Compaction	Keep



### 5.3 **Proposed night time and evening operations**

5.3.1 To summarise the information in tables 5.1 – 5.3, above, the processes which will occur on site during the night time period (23:00 – 07:00) and in the evenings (18:00 – 23:00) are as follows:

- Longford 1 = Unloading and loading of HGVs (tipping waste into bays) and use of 360° to unload/load waste into HGVs including their access and egress to/from the site.
- Longford 2 = All operations inside the building as shown on Drawing No. STONE/3206/03 with the roller shutter doors closed (other than when plant/HGVs are accessing/egressing the building. No operations externally other than HGVs accessing/egressing the site.
- Longford 3 = Refer to Longford 1.

### 5.4 **Proposed weekend operations**

5.4.1 Weekend operations will be the same as night time and evening operations shown in Section 5.3.1 above.

### 5.5 **Background Levels**

5.5.1 With regards to background levels, BS4142:2014 states that *“the objective is not simply to ascertain a lowest measured background sound level, but to quantify what is typical during particular time periods”* and *“In practice there is no “single” background sound level as this is a fluctuating parameter. However, the level for the assessment should be representative of the period being assessed”*.

5.5.2 With this in mind, the assessment will utilise the range of levels from Tables 4.3-4.4.

## 5.6 **BS4142: Assessment**

- 5.6.1 The CadnaA noise models were constructed using OS mapping Opendata and Google Earth satellite imagery, whilst topographical data was downloaded from DEFRA in the form of a digital terrain model.

5.6.2 The following assumptions/parameters are made within the models:

- The intervening land between the site boundary and residential properties was modelled with  $G = 0.0$  as it was considered that the land is predominantly acoustically reflective.
- Buildings were set as acoustically reflective, with a reflection loss of 3 dB.
- Noise levels were determined at residential properties representing the nearest residential facades using the building evaluation tool.
- In addition, the predicted grid noise levels were also calculated as free-field, A-weighted, sound pressure levels. The noise contours generated within the model are also at a height of 2.0 m, assumed to be the worst-case scenario for amenity areas.
- Surrounding residential properties were modelled at a height of between 4.0m for all residential dwellings whilst surrounding commercial/industrial buildings were modelled at 4.0m.
- Barrier heights and waste storage bays have also been modelled based on onsite observations. These have been modelled as being hard and reflective (i.e. brick) and are between 3.0-4.0m in height.
- Situated between the back of the houses off Longford road there is additional screening that includes 2.4m palisade fencing with 3.5m high close wooden board fence in front.

5.6.3 Additional screening and many intervening structures associated with the surrounding industrial land uses have not been included within the model due to their construction and potentially transient nature. These have been excluded in order to ensure a robust assessment.

5.6.4 Table 5.1, overleaf, includes the measured noise levels for the plant activities that were present at the time of monitoring, which have been measured by Oaktree Environmental Ltd. It should be noted that octave bands will be utilised within the model. The table also includes relevant data from the CadnaA model (geometry, “on-times” etc.).

- 5.6.5 Tables 5.1,5.2,5.3, overleaf, includes the measured noise levels for the plant activities that include the existing operations, which have been monitored by Oaktree Environmental Ltd. It should be noted that Octave bands will be utilised within the model for external and internal operations. Each table displays the internal and external operations that are present at Longford 1-3, with some measured by Oaktree at a similar site and some measured by Oaktree at the time of monitoring on site. Existing site plans for Longford 2 are shown in Drawing No. LF2/3206/03, with existing Longford 1 plans shown in Drawing No. LF1/3206/03.
- 5.6.6 Tables 5.4,5.5, 5.6, overleaf, includes the measured noise levels for the plant activities across Longford 1-3. Which have been measured by Oaktree at a similar site or on site. Octave bands will be utilised within the model for external and internal operations. Proposed site plans for Longford 1-3 are presented in Drawing No. STONE/3206/03.

**Table 5.4 – Measured levels of activities Longford 2- Existing**

Activity	Noise Level (LAeq)	Source/comments
Shredding of waste internally.	84.0 at 4.8m	<p>The shredding activities are modelled internally Longford 2. The assumptions with regards to the shredding are detailed in Section 5.4.2.</p> <p>It is assumed that the plants activities internally will be operating for approximately 18 hours for the day which will be spread across the operational hours of 24/7, assuming there will be maintenance and breaks throughout.</p>
Trommel Internal	78.5 at 4.3m	<p>The measurement was taken adjacent to the trommel however there maybe some interference with the louder shredding activities as this was located close to where the shredding takes place.</p> <p>Modelled as a point source 4m high.</p> <p>It is assumed that the plants activities internally will be operating for approximately 18 hours for the day which will be spread across the operational hours of 24/7, assuming there will be maintenance and breaks throughout.</p>
Blowers/Fans (these were located on the main processing plant line 1) Internal	82.5 at 2.4m	<p>The activity is located within the building on site. The assumptions with regards to this structure are detailed within Section 5.4.2.</p> <p>The activity here was taken at one of the many fans that were part of the plant.</p> <p>It is assumed that the plants activities internally will be operating for approximately 18 hours for the day which will be spread across the operational hours of 24/7, assuming there will be maintenance and breaks throughout.</p>
Baler Internal	76.2 at 3.3m	<p>There is only one baler located in the main building Longford 2 which is located in the opposite corner of the shredder this is typically baling cardboard and paper only.</p> <p>Modelled as a point source 3.0m high.</p>

		It is assumed that the plants activities internally will be operating for approximately 18 hours for the day which will be spread across the operational hours of 24/7, assuming there will be maintenance and breaks throughout.
Another trommel however located in between collection bay and fines screen Internal	82 at 10.4m	This measurement was taken from between various pieces of the plants machinery was in between a few blowers/fans and located on top of heavies and fines conveyors.  Modelled as a point source 2.0m high.  It is assumed that the plants activities internally will be operating for approximately 18 hours for the day which will be spread across the operational hours of 24/7, assuming there will be maintenance and breaks throughout.
HGV movements External	76.4 at 1.5m (Octave Bands utilised for this measurement)	This measurement is taken from BS5228 and modelled at a height of 1.5m. This is modelled as a line source with operating times based on the throughput of the site. The existing throughput of the site is 150,00 tonnes per annum, which has been split into two 75,00 tonnes per annum separated into Longford 2 and Longford 1 and 3. Which equates to 30 HGV movements throughout the day. 15 in and 15 out. The on times for these are modelled at 10 minutes per movement.

**Table 5.2 – Measured levels of activities Longford 1- Existing**

<b>Activity</b>	<b>Noise Level (LAeq)</b>	<b>Source/comments</b>
Tracked excavator sorting of waste External	81.1 at 4m	The manual sorting of waste has been modelled at a height of 2.0m. The assumed-on times for this is 180 minutes throughout daytime hours between 6am-6pm. Modelled as a point source.
Trommel Internal	78.5 at 4.3m	The measurement is the same as the trommel inside the Longford 2 building.  It is assumed that the plants activities internally at Longford 1 will be operating between the hours of 6am-6pm Monday-Saturday. It is assumed that this will be operating for 540 minutes a day between these hours.

HGV movements External	76.4 at 1.5m (Octave Bands utilised for this measurement)	This measurement is taken from BS5228 and modelled at a height of 1.5m. This is modelled as a line source with operating times based on the throughput of the site. The existing throughput of the site is 150,00 tonnes per annum, which has been split into two 75,00 tonnes per annum separated into Longford 2 and Longford 1 and 3. Which equates to 30 HGV movements throughout the day. 15 in and 15 out. The on times for these are modelled at 10 minutes per movement.
Shredding. External	84.7 at 3.5m	Modelled as a point source at a height at 2.0m. The on times are for 180 minutes spanning across the hours of 6am-6pm. Between Monday-Saturday. The on times for crushing, screening, and shredding are not all on at the same time.  This is located externally to the Longford 1 building.

**Table 5.3 – Measured levels of activities Longford 3- Existing**

<b>Activity</b>	<b>Noise Level (LAeq)</b>	<b>Source/comments</b>
Loading of HGVs	76.4 at 3m	This is modelled as point source at the loading/tipping bay just north of the Longford 3 building.
Operation of Stihl saw and welding. Internal	87.3 at 3.5m	This has been modelled inside the Longford 3 building. As part of the workshop.

**Table 5.4 – Measured levels of activities Longford 2- Proposed**

<b>Activity</b>	<b>Noise Level (LAeq)</b>	<b>Source/comments</b>
Shredding of waste internally.	84.0 at 4.8m	The shredding activities are modelled internally Longford 2. The assumptions with regards to the shredding are detailed in Section 5.4.2.  There is two shredders inside the Longford 2 building. It is assumed that the plants activities internally will be operating for approximately 18 hours for the day which will be spread across the

		operational hours of 24/7, assuming there will be maintenance and breaks throughout.
Trommel Internal	78.5 at 4.3m	<p>The measurement was taken adjacent to the trommel however there maybe some interference with the louder shredding activities as this was located close to where the shredding is located.</p> <p>It is assumed that the plants activities internally will be operating for approximately 18 hours for the day which will be spread across the operational hours of 24/7, assuming there will be maintenance and breaks throughout.</p>
Blowers/Fans (these were located on the main processing plant line 2) Internal	82.5 at 2.4m	<p>The activity is located within the Longford building on site. The assumptions with regards to this structure are detailed within Section 5.4.2.</p> <p>The activity here was taken at one of the many fans that were part of the plant. Located above the second shredder.</p> <p>It is assumed that the plants activities internally will be operating for approximately 18 hours for the day which will be spread across the operational hours of 24/7, assuming there will be maintenance and breaks throughout.</p>
Picking lines	74.5 at 1m	<p>There is two picking lines added to the model located inside the Longford 2 building,.</p> <p>It is assumed that the plants activities internally will be operating for approximately 18 hours for the day which will be spread across the operational hours of 24/7, assuming there will be maintenance and breaks throughout.</p>
Optical sorter. Internal	87.7 at 7m	<p>Located on the plastics line inside the Longford 2 building.</p> <p>It is assumed that the plants activities internally will be operating for approximately 18 hours for the day which will be spread across the operational hours of 24/7, assuming there will be maintenance breaks throughout.</p>



Ballistic fines separator/ disk spreader. Internal	88.5 at 1m	<p>Located adjacent to the two way density separator.</p> <p>It is assumed that the plants activities internally will be operating for approximately 18 hours for the day which will be spread across the operational hours of 24/7, assuming there will be maintenance breaks throughout.</p>
Eddy separator Over band Magnet. Internal	75.1 at 5m	<p>This is located adjacent to Area 15 as part of the SRF production process.</p> <p>It is assumed that the plants activities internally will be operating for approximately 18 hours for the day which will be spread across the operational hours of 24/7, assuming there will be maintenance breaks throughout.</p>
Loading Shovel Internal	85.7 at 6m	<p>This is modelled inside Longford 2 building as part of Area 1 and Area 20 moving material for the tipping and inspection area into quarantine area.</p> <p>It is assumed that the plants activities internally will be operating for approximately 18 hours for the day which will be spread across the operational hours of 24/7, assuming there will be maintenance and breaks throughout.</p>
Another trommel however located in between collection bay and fines screen. Internal	82 at 10.4m	<p>This measurement was taken from between various pieces of the plants machinery was in between a few blowers/fans and located on top of heavies and fines conveyors.</p> <p>Modelled as a point source 2.0m high.</p> <p>It is assumed that the plants activities internally will be operating for approximately 18 hours for the day which will be spread across the operational hours of 24/7, assuming there will be maintenance and breaks throughout.</p>
HGV movements External	76.4 at 1.5m (Octave Bands utilised for this measurement)	<p>This measurement is taken from BS5228 and modelled at a height of 1.5m. This is modelled as a line source with operating times based on the throughput of the site. The existing throughput of the site is 150,00 tonnes per annum, which has been split into two 75,00 tonnes per annum separated into Longford 2 and Longford 1 and 3. Which equates to 30</p>

		HGV movements throughout the day. 15 in and 15 out. The on times for these are modelled at 10 minutes per movement.
--	--	---

**Table 5.5 – Measured levels of activities Longford 1- Proposed**

<b>Activity</b>	<b>Noise Level (LAeq)</b>	<b>Source/comments</b>
Tracked excavator sorting of waste External	81.1 at 4m	The manual sorting of waste has been modelled at a height of 2.0m. The assumed-on times for this is 180 minutes throughout daytime hours between 6am-6pm. Modelled as a point source.
Trommel Internal	78.5 at 4.3m	The measurement is the same as the trommel inside the Longford 2 building.  It is assumed that the plants activities internally at Longford 1 will be operating between the hours of 6am-6pm Monday-Saturday. It is assumed that this will be operating for 540 minutes a day between these hours.
HGV movements External	76.4 at 1.5m (Octave Bands utilised for this measurement)	This measurement is taken from BS5228 and modelled at a height of 1.5m. This is modelled as a line source with operating times based on the throughput of the site. The existing throughput of the site is 150,00 tonnes per annum, which has been split into two 75,00 tonnes per annum separated into Longford 2 and Longford 1 and 3. Which equates to 30 HGV movements throughout the day. 15 in and 15 out. The on times for these are modelled at 10 minutes per movement.
Crushing. External	92.1 at 2.5m	Modelled as a point source at a height at 2.0m. The on times are for 180 minutes spanning across the hours of 6am-6pm. Between Monday-Saturday. The on times for Crushing, screening and shredding are not all on at the same time.  These are located externally to the Longford 1 building.
Screening. External	88.2 at 3.5m	Modelled as a point source at a height at 2.0m. The on times are for 180 minutes spanning across the hours of 6am-6pm. Between Monday-Saturday. The on times for crushing,

		screening and shredding are not all on at the same time.  This is located externally to the Longford 1 building.
Shredding. External	84.7 at 3.5m	Modelled as a point source at a height at 2.0m. The on times are for 180 minutes spanning across the hours of 6am-6pm. Between Monday-Saturday. The on times for crushing, screening, and shredding are not all on at the same time.  This is located externally to the Longford 1 building.

**Table 5.6 – Measured levels of activities Longford 3- Proposed**

<b>Activity</b>	<b>Noise Level (LAeq)</b>	<b>Source/comments</b>
Loading of HGVs	76.4 at 3m	This is modelled as point source at the loading/tipping bay just north of the Longford 3 building.
Operation of Stihl saw and welding. Internal	87.3 at 3.5m	This has been modelled inside the Longford 3 building. As part of the workshop.
Baler	76.2 at 3.3m	The Baling that took place in the exiting Longford 2 building has been moved into the Longford 3 building. Only processes card and paper.  The assumed modelled on times for the baling is 540 minutes throughout the daytime hours of 6am-6pm.

5.6.7 Tables 5.5 and 5.6 below compares the calculated noise levels to the LA90 range for the background levels. Table 5.5 compares the existing calculated noise levels to the background levels. Table 5.6 compares the proposed calculated noise levels to the relevant background levels. These results are based on the modelling provided overleaf in Figures 5.2-5.3. The comparison utilises NOVA Acoustics monitoring location in replacement of NMP 1 as this has a larger range of LA90 results. With the location at Vinecote Road utilising the range of LA90 results shown in Table 4.5 in section 4.4.

Figure 5.5 – Calculated noise levels (LAeq) associated with the typical existing operations of the site



Figure 5.6 – Calculated noise levels (LAeq) associated with the site and closest noise sensitive receptors for the proposed layout.



5.6.8 With regards to impulsive and tonal penalties as per BS4142:2014, some occasional bangs/crashes are associated with the operation of the site’s loader and excavator (scraping on the floor, reversing alarms, falling material etc.) are likely to be audible. However, considering the existing noise climate and setting of the site, as well as the intervening screening and distance, the impact of such events is likely to have a tonal and impulse element and therefore a 5dB penalty has been applied. Figures 5.2 shows the existing model with the extension of the current barrier to the south east, excluding external operations located on Longford 1.

**Table 5.7 – Assessment of typical noise sources associated with the site (existing) as per BS4142:2014**

	Calculated noise level down Vinecote Road (NMP 2)	Calculated noise level at residential dwellings on Ellerman Gardens (MP 1)	Comments
Calculated noise level as per figure 5.2	31.9	48.4	As per Figure 5.2.
Addition of relevant penalties as per BS4142:2014	+5=36.9	+5=53.4	As per Section 5.3.6
Comparison to weekday background levels	36.9-46.2/48.2= 9.3 to 11.3 below	53.4-42/47.3=11.4 to 6.1 above	Low impact as per BS4142:2014

**Table 5.8 – Assessment of typical noise sources associated with the site (Proposed) as per BS4142:2014**

	Calculated noise level down Vinecote Road (NMP 2)	Calculated noise level at residential dwellings on Ellerman Gardens (MP 1)	Comments
Calculated noise level as per figure 5.3	35.6	48.9	As per Figure 5.3.
Addition of relevant penalties as per BS4142:2014	+5=40.6	+5=53.9	As per Section 5.3.6
Comparison to weekday background levels	40.6-46.2/48.2=5.6 to 7.6 below	53.9-42/47.3= 11.9 above to 6.6 above	Adverse impact as per BS4142:2014

- 5.6.9 In comparison of Existing vs Proposed at the worst case for existing being +11.4 above that of the background levels at monitoring location MP1. The worst case for the proposed levels is +11.9 above and therefore there a difference of +0.5dB (A) between the proposed and existing operations, at the worst case scenario at the closet sensitive receptor. With the difference being only +0.5dB A this is classed as being low impact.
- 5.6.10 It should be noted that at weekend periods that background is likely to be higher than that of weekday therefore the affects are likely to be less during weekend periods.
- 5.6.11 It should be noted that during the modelling of the site all of the buildings and adjacent garages were not included and therefore this assumes the worst case.
- 5.6.12 Considering the contextual factors such as the site setting (All 24/7 operations are within Longford 2 the building), sensitivity, nature of the existing noise climate, lack of weekend operations and seasonal nature of the activity as well as the fact that the model likely overestimates noise levels at the receptors, the overall impact is considered to be acceptable.
- 5.6.13 It was decided to collect more background data, collected by NOVA (a sub-contractors of Oaktree Environmental) NOVA work by monitoring for 24/7 monitoring at MP1 located close to NMP 1 shown on Figure 4.2 above. The monitoring conducted by NOVA spanned over the course of 3no. days from the 4<sup>th</sup> of August to the 7<sup>th</sup> of August. In the conclusion of this monitoring, it was noted that the average of the weekend background monitoring was higher than that in the weekday which with speaking to site management they were not operating any on site activities at this time between the 5<sup>th</sup> and 6<sup>th</sup> of August. This suggests that the operations associated with onsite activities are not the main noise contributor to the background noise for weekend measurements. For monitoring the background noise levels for weekday, with speaking to site management for the times of inactivity it was noted that on the 4<sup>th</sup> of August 2023 on a Friday after 4pm that's when there is little to no activities on site and therefore post 4pm was included when calculating median LA90 result.

## 5.7 **Control of Uncertainty**

5.7.1 Uncertainty in this assessment was controlled via the following precautions/procedures:

- Both the sound level meter and calibrator have a traceable laboratory calibration and the meter was field-calibrated both before and after the measurements.
- The calibration for NOVA acoustics equipment involves taking the calibrated noise value and testing this on the end of the sound analyser before the monitoring and after the monitoring. This is to see if the value has drifted during the monitoring.
- The measurement locations are considered representative of the existing noise climate outside the nearest residential dwellings to the proposed development.
- Worst-case assumptions have been made with regards to modelling factors such as; ground absorption and intervening screens/structures.
- Background monitoring was undertaken during favourable weather conditions (e.g. dry and under 5m/s wind speed).



## **6 Conclusion**

### **6.1 Summary & Recommendations**

- 6.1.1 Oaktree Environmental Limited have undertaken a Noise Impact Assessment for the operation of a waste transfer station at Stonebrook Way, Longford, Coventry CV6 6LN.
- 6.1.2 The site has been assessed with regards to BS4142:2014 and it is considered that the impacts associated with the proposed operation of the site are acceptable based on the comparison of the calculated rating level to the proposed background levels and the comparison between the existing and proposed operations.
- 6.1.3 As this NIA is subject to plant/equipment which has yet to be installed, in particular for operations associated with Longford 2, it is considered to provide additional noise monitoring information to the EA for approval and then ongoing monitoring for a period of 12 months as part of any permit conditions.
- 6.1.4 In addition, noise emissions will be controlled and regulated via the sites Noise Management Plan Document. STON-3206-GB.
- 6.1.5 Therefore, based on the above, noise levels associated with the proposed development are acceptable and it should be considered that no further mitigations or assessment is required at this time.

# **APPENDIX I**

# **DRAWINGS**



**NOTES**  
 Drawing for indication only. Reproduced with the permission of the controller of H.M.S.O. Crown copyright licence No. 100022432. This drawing is copyright and property of Oaktree Environmental Ltd.

**REVISION HISTORY**

Rev	Date	Int	Description
-	10.11.23	CP	Initial draft
A	17.11.23	CP	Application copy

- Key**
- Proposed permit boundary
  - Waste storage areas
  - Non-waste storage areas
  - Hazardous waste storage areas
  - Non-waste fuels, oils and other liquids storage
  - Temporary waste storage areas (clear prior to shutdown)
  - Waste recycling / storage buildings (impermeable concrete floor)
  - Other buildings i.e. workshops/offices
  - Impermeable concrete surfaces
  - Covered canopy (impermeable concrete beneath)
  - Tarmac/hardstanding areas - used for car parking only
  - Grass / landscaped area
  - Dust / mist & odour suppression concrete (indicative)
  - Dust extraction hoods (no discharge to air, filtered / emptied)
  - Surface water drainage fall direction
  - Foul drainage
  - Surface and mains water drainage
  - Surface gully
  - Clean and foul manholes (yellow denotes penstocks)
  - Quarantine areas
  - Hoist reels (indicative location)
  - Fire fighting equipment / extinguishers (indicative locations)
  - Plant/Electrical shut-off points (indicative location)
  - Manual fire alarms (breast gas / horns) - indicative location
  - Spill kits (indicative location)
  - Access route for emergency services
  - Fire hydrants
  - Fire assembly points
  - Out-of-hours plant storage
  - Pan, tilt and zoom cameras with 360° 50m coverage
  - Infra-red pan, tilt and zoom cameras with 360° 50m coverage
  - 0.15m wide concrete fire walls (height varies throughout)
  - 0.3m wide concrete fire walls (height varies throughout)
  - 0.8m wide concrete fire walls (height varies throughout)

**Waste Storage Area Details - Longford 1 - PILE SIZES BASED ON AREA OF STOCKPILE ON SITE PLAN NOT LENGTH X WIDTH**

Plan Ref	Description	Storage type	Containment	Height / width of freestill (m)	Max width (m)	Max length (m)	Height (m)	Max area (m <sup>2</sup> )	Conversion factor used	Volume (m <sup>3</sup> )	Tonnage (approx)	Maximum storage duration
AREA 1	Waste reception (tipping, inspection and sorting area (clear out-of-hours))	Free-standing / unprocessed	N/A	N/A	15	10	2	150	0.333	100	50	<2 hours
AREA 1 (I)	Short term quarantined waste	Hand sorted arising from tipping area (AREA 1)	Free-standing against concrete interlocking block fire wall with 0.3m wide concrete wall behind	1.0/0.8/5/0.3	6	3	0.5	18	0.5	5	2	<48 hours
AREA 2 (II)	Pre-sorted metals	As above	Open topped, movable 8 cubic yard roll on roll skip	N/A	1.68	3.66	1.22	6.1488	1	8	8	<48 hours
AREA 3	Non-recyclable waste - sorted but will contain mixture of different wastes	As above	Free-standing against	5/0.3	10	5	0.5	50	0.5	13	6	<48 hours
AREA 4	Mixed H&C waste - primary shredder	Partly hand sorted arising from shredder (AREA 4)	Free-standing against concrete interlocking block fire wall	4/0.8	12	9	3	108	0.75	243	182	<48 hours
AREA 5	Mixed waste (prior to processing - also acts as holding bay feeding the plant)	Partly hand sorted arising from shredder (AREA 4)	Free-standing against concrete interlocking block fire wall	4/0.8	12	9	3	108	0.75	243	182	<48 hours
AREA 6	Plastics	Sorted (mechanical recycling line)	Free-standing and partly contained inside a three-sided concrete panel wall	10/0.18	5	5	2	25	0.75	38	19	<48 hours
AREA 7	Heavies	Sorted (mechanical recycling line)	As above	10/0.18	5	5	2	25	0.75	38	19	<48 hours
AREA 8	Ferrous metal	Sorted (mechanical recycling line) and by overband magnet	Open topped, movable 20 cubic yard roll on roll skip	N/A	6.1	3.44	1.4	14.884	1	21	21	<48 hours
AREA 9	<10mm screened fines	Sorted (mechanical recycling line)	Free-standing and partly contained inside a three-sided concrete panel wall	10/0.18	10	5.5	2	55	0.75	83	83	<48 hours
AREA 10	10mm - 40mm heavies	As above	As above	10/0.18	10	5.5	2	55	0.75	58	51	<48 hours
AREA 11	10mm - 40mm heavies	As above	As above	10/0.18	10	4.5	2	45	0.75	48	48	<48 hours
AREA 12	>150mm heavies	As above	As above	10/0.18	5	5	2	25	0.75	38	38	<48 hours
AREA 13	40mm - 150mm heavies	As above	As above	10/0.18	5	5	2	25	0.75	38	38	<48 hours
AREA 14	40mm - 300mm heavies (SRF)	Articulated walk on floor trailer	As above	N/A	16.5	2.5	41.25	1	103	34	48	<48 hours
AREA 15	Metals	Sorted by overband magnet	Free-standing and partly contained inside a three-sided concrete panel wall	10/0.18	7	5.5	2	38.5	0.75	58	58	<48 hours
AREA 16	Plastics	Sorted (mechanical recycling line)	As above	10/0.18	3.7	4.5	2	16.65	0.75	25	12	<48 hours
AREA 17	PVC	Sorted (mechanical recycling line)	As above	10/0.18	3.7	4.5	2	16.65	0.75	25	12	<48 hours
AREA 18 & 19	Manual waste	Sorted (mechanical recycling line) and hand sorted by picking line	As above	10/0.18	3.7	4.5	2	16.65	0.75	25	12	<48 hours
AREA 20	<40mm SRF	Sorted (mechanical recycling line)	Free-standing against concrete interlocking block fire wall	4/0.8	10	12	3	120	0.75	270	90	<48 hours
AREA 21	Overflow bay (see AREAS 14, 20 & 22)	Sorted (mechanical recycling line)	Free-standing against concrete interlocking block fire wall	4/0.8	10	12	3	120	0.75	270	90	<48 hours
AREA 22	Waste containing POPs or waste shown in AREAS 14 and 21	Sorted (mechanical recycling line)	Free-standing inside sealed storage bunker	3/0.5	30	2.5	3	75	1	225	75	<48 hours

**Waste Storage Area Details - Longford 1 - PILE SIZES BASED ON AREA OF STOCKPILE ON SITE PLAN NOT LENGTH X WIDTH**

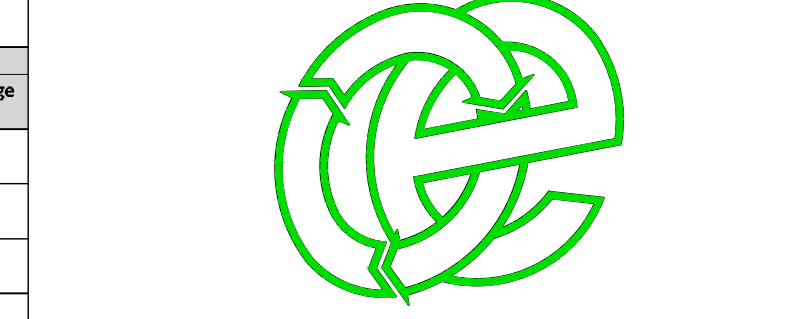
Plan Ref	Description	Storage type	Containment	Height / width of freestill (m)	Max width (m)	Max length (m)	Height (m)	Max area (m <sup>2</sup> )	Conversion factor used	Volume (m <sup>3</sup> )	Tonnage (approx)	Maximum storage duration
AREA 1A	Mixed C&D reception and sorting (clear out-of-hours)	Free-standing / unprocessed	N/A	N/A	7	2	2	49	0.333	13	24	<2 hours
AREA 2A	Bulky wastes	Hand sorted arising from tipping area (AREA 1A)	Free-standing against 0.3m wide concrete wall	4/0.3	8.5	6.5	1	55.25	0.5	83	83	<48 hours
AREA 3A	Mixed C&D in pile (80% inert) and non-combustible	Free-standing / hand sorted	Free-standing against 0.3m wide concrete wall	4/0.3	10	7	2	70	0.5	70	53	<2 hours
AREA 4A	<40mm C&D fines (non-combustible)	Free-standing / processed by trommel	N/A	N/A	7	7	2	49	0.333	13	33	<2 hours
AREA 5A	Various containers of sorted waste (pallet based on largest container)	Containers / hand sorted	Open topped, movable 40 cubic yard skip	N/A	2.5	6.11	2.62	15.235	1	40	40	<48 hours
AREA 6A	Waste storage bins beneath picking station (contents in each bin will vary)	Sorted (mechanical recycling line)	As above	10/0.18	3.2	5.5	2	17.6	0.75	26	20	<48 hours
AREA 7A	Hardcore	Sorted (mechanical recycling line)	As above	10/0.18	3.2	5.5	2	17.6	0.75	26	20	<48 hours
AREA 8A	Storage area for wood, soils or hazardous gas or processing	Pre-sorted / mechanically sorted from other areas of the site	Free-standing against 0.3m wide concrete wall	4/0.3	11	11	1	121	0.5	182	182	<48 hours
AREA 9A	Short term quarantined waste	Hand sorted arising from tipping area (AREA 1A)	Free-standing against concrete interlocking block fire wall	3/0.8 & 0.3	5	5	2	25	0.5	25	13	<48 hours
AREA 10A	Short term quarantined waste	Hand sorted arising from tipping area (AREA 1A)	Free-standing against concrete interlocking block fire wall	0.8/3	5	5	2	25	0.5	25	25	<48 hours

**Waste Storage Area Details - Longford 1 - PILE SIZES BASED ON AREA OF STOCKPILE ON SITE PLAN NOT LENGTH X WIDTH**

Plan Ref	Description	Storage type	Containment	Height / width of freestill (m)	Max width (m)	Max length (m)	Height (m)	Max area (m <sup>2</sup> )	Conversion factor used	Volume (m <sup>3</sup> )	Tonnage (approx)	Maximum storage duration
AREA 18 - 7B	Waste storage bays for bulking and transfer - also acting as overflow from bays from other waste stored at the site (contents in each bay will vary)	Mixture of processed and unprocessed	Free-standing against concrete interlocking block fire wall	0.8/4	6.6	6.6	3	43.56	1	131	131	<48 hours
AREA 8B	Loose paper & card	Partly hand sorted arising from tipping area (AREA 1A)	Free-standing against 0.3m wide concrete wall	5/0.3	10	6	3	60	0.75	135	45	<48 hours
AREA 9B	Baled paper & card	Baled in stacks (max 3 in length) in 3 high	Free-standing stack against 0.3m wide concrete wall	5/0.3	4	8	3	82	1	96	96	<48 hours
AREA 10B & 11B	Baled paper & card	Baled in stacks (max 3 in length) in 3 high	Free-standing stack against 0.3m wide concrete wall	4/0.3	5	7	3	35	1	105	105	<48 hours

**Oaktree Environmental Ltd**  
 Waste, Planning and Environmental Consultants



**DRAWING TITLE**  
 SITE LAYOUT & FIRE PLAN

**CLIENT**  
 Tom White Waste Ltd

**PROJECT/SITE**  
 Stonebrook Way, Longford, Coventry CV6 6LN

**SCALE** 3:40  
**CLIENT NO** 3206  
**JOB NO** 007

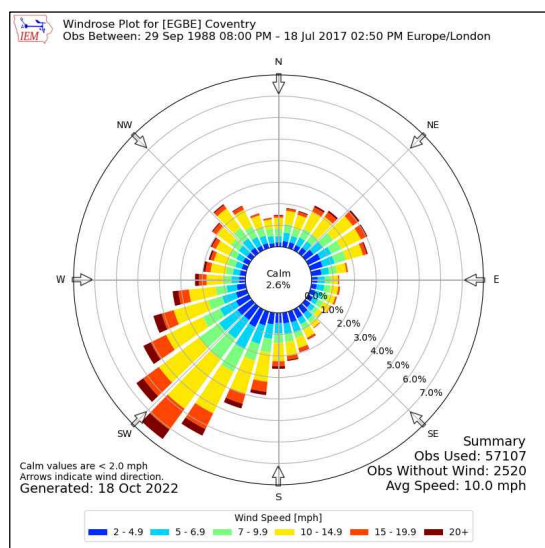
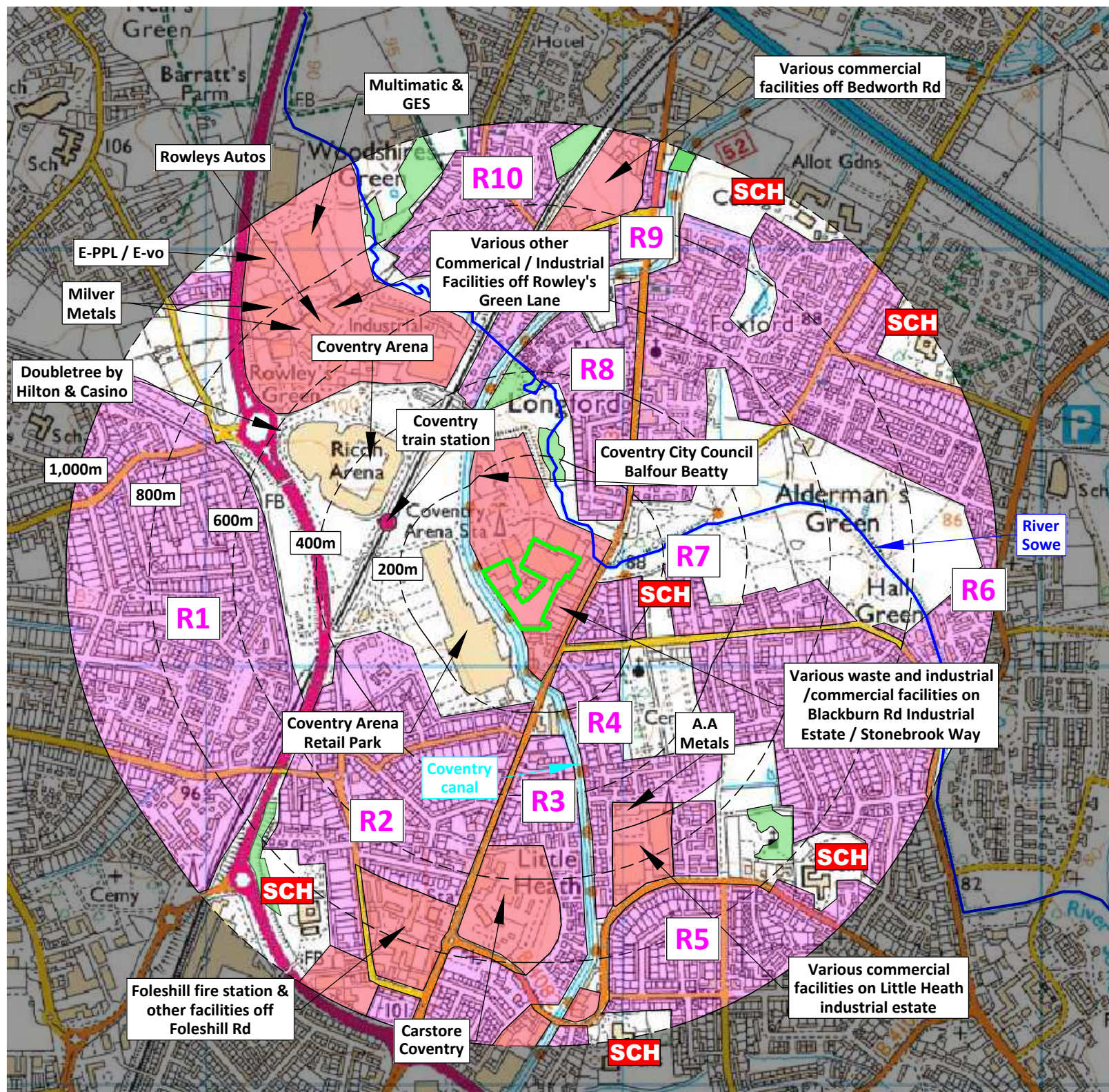
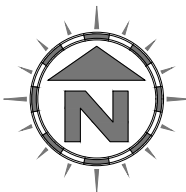
**DRAWING NUMBER** STONE/3206/03  
**REV** A  
**STATUS** Issued

**DRAWN BY** CP  
**CHECKED** MT  
**DATE** 17.11.23

Line House, Road Two, Winford, Cheshire, CW7 3QZ  
 t: 01606 588833 | e: sales@oaktree-environmental.co.uk

**KEY:**

- Permit boundary
- Main river
- Residential receptor blocks (may include small retail/leisure also)
- Surface water body (river / stream / pond / pool / lake)
- Workplaces (includes agriculture industry, commerce and retail)
- Areas with mix of industrial, retail, manufacturing and commercial properties
- Class A roads
- Class B roads
- Class C roads
- Railway line
- SCH School
- Woodland areas (not protected)
- Priority Habitat (deciduous woodland)



Compass Wind Rose for (EGBE) Coventry  
Period 1988-2017  
- source: Iowa State University

Scale Bar (1:12,500)

0 km 500 m 1 km

**NOTES**

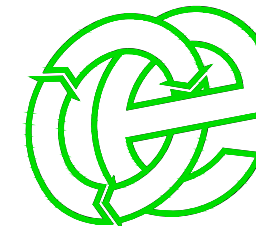
1. Boundaries are shown indicatively.
2. Wind rose data shows the prevailing wind direction to be Southerly.

Drawing for indication only. Reproduced with the permission of the controller of H.M.S.O. Crown copyright licence No. 100022432. This drawing is copyright and property of Oaktree Environmental Ltd.

**REVISION HISTORY**

Rev:	Date:	Init:	Description:
-	14.11.23	JH	Initial drawing

**Oaktree Environmental Ltd**  
Waste, Planning and Environmental Consultants



**DRAWING TITLE**  
RECEPTOR PLAN - 1,000m

**CLIENT**  
Tom White Waste Ltd

**PROJECT/SITE**  
Building adjacent to Shawn Dream Cars, Off Longford Road, Coventry CV6 6LN

SCALE @ A3	CLIENT NO	JOB NO
1:12,500	3206	007

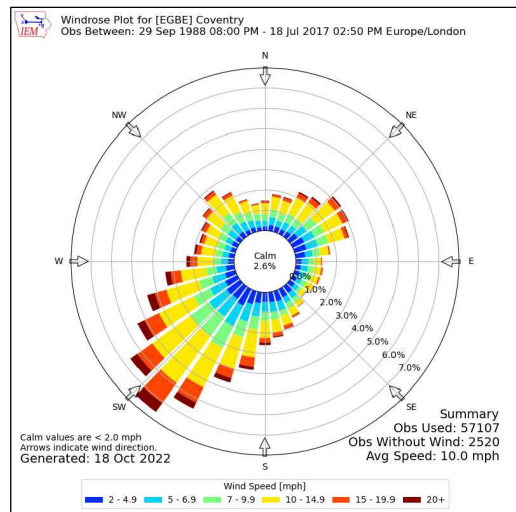
DRAWING NUMBER	REV	STATUS
STONE/3206/04A	-	Issued

DRAWN BY	CHECKED	DATE
JH	RS	14.11.23

Lime House, Road Two, Winsford, Cheshire, CW7 3QZ  
t: 01606 558833 | e: sales@oaktree-environmental.co.uk

**KEY:**

— Permit boundary



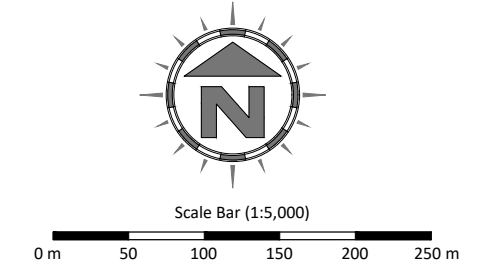
Compass Wind Rose for (EGBE) Coventry Period 1988-2017  
- source: Iowa State University

**NOTES**  
 1. Boundaries are shown indicatively.  
 2. Wind rose data shows the prevailing wind direction to be Southerly.

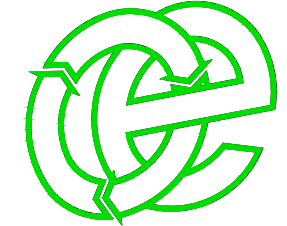
Drawing for indication only. Reproduced with the permission of the controller of H.M.S.O. Crown copyright licence No. 100022432. This drawing is copyright and property of Oaktree Environmental Ltd.

**REVISION HISTORY**

Rev:	Date:	Init:	Description:
-	14.11.23	JH	Initial drawing



**Oaktree Environmental Ltd**  
 Waste, Planning and Environmental Consultants



**DRAWING TITLE**  
 RECEPTOR PLAN- 500m

**CLIENT**  
 Tom White Waste Ltd

**PROJECT/SITE**  
 Building adjacent to Shawn Dream Cars, Off Longford Road, Coventry CV6 6LN

SCALE @ A3	CLIENT NO	JOB NO
1:5,000	3206	007

DRAWING NUMBER	REV	STATUS
STONE/3206/04B	-	Issued

DRAWN BY	CHECKED	DATE
JH	RS	14.11.23

Lime House, Road Two, Winsford, Cheshire, CW7 3QZ  
 t: 01606 558833 | e: sales@oaktree-environmental.co.uk