Caulmert Limited

Engineering, Environmental & Planning Consultancy Services

Proposed Corbriggs Wood Processing Facility

Silva Recycling Limited

Bespoke Environmental Permit Application

Dust & Emissions Management Plan

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APPROVAL RECORD

Site: Proposed Corbriggs Wood Processing Facility

Client: Silva Recycling Limited

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Dust & Emissions Management Plan

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1.0 INTRODUCTION

1.1 Overview

1.1.1 Silva Recycling Limited ('the operator') have appointed Caulmert Limited to prepare a Dust & Emissions Management Plan (DEMP) as part of a bespoke environmental permit application for Corbriggs Wood Processing Facility ('the site').

1.1.2 The operator proposes to develop a new wood processing facility at an existing industrial site and the proposed activities will include the reception, screening, separating, shredding and storage of non-hazardous wood wastes prior to removal off-site, for manufacturing into chip-board based products.

1.1.3 The site will treat up to 75,000 tonnes per year of non-hazardous wood waste as a recovery activity, with the temporary storage of up to 6,000 tonnes of non-hazardous waste at any one time.

1.2 Objectives

1.2.1 This Dust & Emissions Management Plan (DEMP) will provide thorough detail of appropriate measures that are required for effective dust and other particulate emissions management at the site and will outline control measures for any increase in visual dust or other particulate emissions.

1.2.2 This DEMP has the aim of ensuring that potential dust and other particulate emission sources are identified and controlled at source where possible. The DEMP aims to minimise the risk of dust and other particulate emissions impact on receptors outside of the site boundary. As a minimum this DEMP will consider the following elements:

- An assessment of the risks of dust and other particulate emissions at the site;
- Identify the appropriate controls to manage the identified risks;
- Visual monitoring to confirm effectiveness of control measures;
- Complaints handling;
- Identify actions, contingencies, and responsibilities when dust or other particulate emissions arise; and,
- Regular review of the effectiveness of the dust and other particulate emissions control measures.

1.2.3 A copy of this DEMP should be kept in the Site Office at all times and is intended for use by site operatives and managers for the control of dust and particulate emissions at the site. This is a live document and should be reviewed regularly and updated if changes are made to site activities. Electronic copies will also be held on the company's database system.

1.2.4 In addition to this DEMP, an 'Amenity and Accidents Risk Assessment' has been produced as part of this permit application, which considers any potential risks (including dust) associated with the proposed operations, under document ref. 5448-CAU-XX-XX-RP-V-0303.

1.3 Site Location

1.3.1 The site is located in an industrial estate on the eastern side of Mansfield Road, at Corbriggs, southeast Chesterfield, at postcode S41 0JW and National Grid Reference SK 41002 68251.

1.3.2 The closest residential properties to the site are within the Corbriggs area, located approximately 30m west (a traveller's site), 45m to the southwest and 75m south of the site boundary. The nearest watercourse is Calow Brook, located 110m to the southeast of the site. The site location is shown below in Figure 1.

1.3.3 The surrounding area is predominantly agricultural land to the north and east, with South Chesterfield Golf Club located 30m to the southwest and Grassmoor Country Park 130m to the south. In between the site and the fields to the north is the A617 dual carriageway. The settlement of Temple Normanton is located approximately 940m to the southeast and Grassmoor is located 910m to the southwest of the site.

Figure 1 – Site Location (source: Google Earth 2022)

1.4 Sensitive Receptors

1.4.1 An assessment of the potentially sensitive receptors to dust and particulates within 1000m (1km) of the site is presented below, with all distances measured from the proposed permit boundary. The locations of the sensitive receptors are provided on attached drawing ref. 5448-CAU-XX-XX-DR-V-1800 and the proposed site layouts for the different operational stages of the site are shown in drawings referenced '12800_004 Phase 1' and '12800_004 Phase 2'.

1.4.2 Sensitive receptors include human receptors, ecological receptors, agricultural land and surface waters, which could be affected by dust and particulate matter from the proposed activities. Human receptors can be further broken down into residential, recreational, commercial and industrial. Ecological receptors including flora and fauna can be sensitive to smothering by dust and surface waters can be sensitive to pollution by contaminated dust entering water.

1.4.3 The site is surrounded by agricultural land, with the closest residential receptors to the site (a traveller's site) is located 30m west of the site on Mansfield Road. A residential property is also located approximately 45m to the southwest of the site and another row of houses is located 75m to the south. There are no schools or hospitals within 1km of the site.

1.4.4 The Environment Agency Nature and Heritage Conservation Screen provided as part of the Basic Pre-Application Advice has identified two Local Wildlife Sites (LWSs) within 200m of the site. The closest is Corbriggs Marsh, located approximately 100m southeast of the site. And the second is Grassmoor Country Park located 130m to the south of the site.

1.4.5 A search of the surrounding area using the DEFRA Magic Maps[1] and Wildlife Trusts[2] websites has also identified that within 2km of the site is The Avenue Washlands LWS approximately 1.6km to the southwest of the site, and Williamthorpe Local Nature Reserve (LNR) approximately 1.8km to the southeast of the site. There are no LNRs within 1km of the site.

1.4.6 There are no Sites of Scientific Interest (SSSI), Special Areas of Conservation (SACs), Special Protection Areas (SPAs), National Nature Reserves (NNRs), Ramsar sites or Areas of Outstanding Natural Beauty (AONBs) within 2km of the site boundary. There are no Ancient Woodlands within 1km of the site boundary.

1.4.7 The site is not within a Source Protection Zone (SPZ), with the closest, a Zone III, located over 11km to the southeast. The site is situated on the Pennine Middle Coal Measures bedrock which is designated a Secondary A Aquifer, defined as 'permeable layers capable of supporting water supplies at a local rather than strategic scale'. Groundwater, however, is not considered to be sensitive to dust and particulate emissions from the site.

1.4.8 There are no Air Quality Management Areas (AQMAs) within 2 km of the site, with the closest located over 5.3km to the north-northwest of the site on Church Street in Brimington.

[1] DEFRA Magic Maps website, 2022: https://magic.defra.gov.uk/MagicMap.aspx
[2] The Wildlife Trusts website, 2022: https://www.wildlifetrusts.org/

1.4.9 A summary of the identified sensitive receptors is detailed in Table 1 below:

Table 1 – Summary of Sensitive Receptors within 1000m of the Site Boundary

Receptor	Receptor Type	Distance/Direction
Residences	Residential	30m W
South Chesterfield Golf Club	Recreational	30m SW
Construction Equipment Supplier	Industrial/Commercial	30m E
Residential Properties	Residential	45m SW
Plant & Machinery Hire Site	Industrial/Commercial	60m SE
Residential Properties	Residential	75m S
Winsick/Milehill residential area	Residential	90m NW
Corbriggs Marsh LWS	Habitat	100m SE
Calow Brook	Surface Water	110m SE
Grassmoor Country Park LWS	Habitat	130m S
Swimming Pool/Leisure Centre	Recreational	135m NW
Users of A617	Public Road	140m NE
Industrial Site/Scrap Yard	Industrial	150m W
Residential Properties	Residential	170m SE
Agricultural Fields	Agricultural	170m NNE, 180m E, 200m W
Garage/MOT Centre	Industrial/Commercial	220m NW
Maris Pumps Plant & Machinery Hire	Industrial/Commercial	440m E
Shed and Garden Centre	Industrial/Commercial	450m NW
Tableware Manufacturer	Industrial/Commercial	460m SE
Wynnholme residence	Residential	580m E
Solar Panel Farm	Industrial	700m E
Allotments	Recreational	740m ESE
Old Manor Park	Recreational	780m SE
Residences off Hassocky Lane	Residential	810m NE
Farm residence	Residential	870m SW
Hasland residential area	Residential	910m NW
Grassmoor residential area	Residential	910m SW
Groundworks Contractors Yard	Industrial/Commercial	920m SE
Commercial/Industrial Units	Industrial/Commercial	920m SW
Temple Normanton residential area	Residential	940m SE
Residence with stables	Residential	980m SSE

1.5 Meteorological Setting

1.5.1 Fugitive emissions of dust and particulates from the site are likely to be affected by local weather conditions, in particular by wind direction and strength.

1.5.2 The closest meteorological station to the site actively recording wind statistics is Selston weather station, located over 15km to the southeast of the site. Wind statistics from this weather station are considered to be representative of the typical conditions at the site (see Figure 2 below).

1.5.3 A review of the data recorded daily between April 2013 and October 2022 on the Windfinder.com website[3] indicates that the most dominant wind direction is from the west-southwest towards the east-northeast. The sensitive receptor plan shows that predominant wind conditions are likely to blow from the wood processing facility away from most of the nearest sensitive receptors towards the A617 and agricultural fields to the northeast.

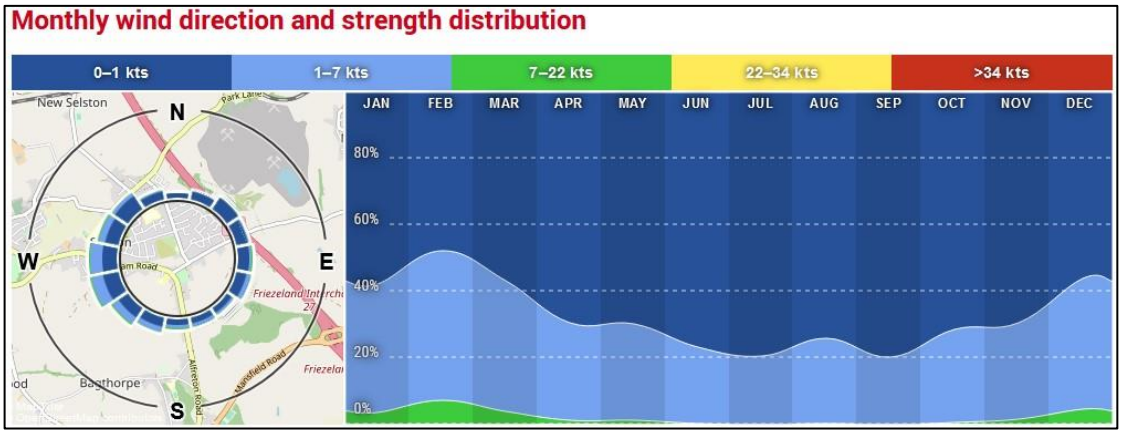


Figure 2 – Selston wind statistics – average wind direction & strength 2013 to 2022.

1.6 Off-Site Dust Sources

1.6.1 The closest off-site dust sources are in the adjoining industrial sites off Mansfield Road, which include a Construction Equipment Supplier located 30m east of the site and a Plant & Machinery Hire Site located 60m southeast of the site. There is the potential for site operations and associated vehicle movements at these sites to give rise to dust emissions.

1.6.2 The site is predominantly surrounded by arable agricultural land, and so the associated farming activities (ploughing, harrowing, agitation of the soil by farm vehicles) could give rise to dust emissions, particularly in dry, windy conditions.

1.6.3 The local off-site potential contributors of dust and particulate matter emissions within 1km are listed below in Table 2 and their approximate locations also shown in Figure 3:

[3] Windfinder website 2022, found here: https://www.windfinder.com/windstatistics/selston

Table 2 – Potential Off-Site Sources of Dust

Ref.	Name	Type	Distance/Direction
1	Construction Equipment Supplier	Industrial	30m E
2	Plant & Machinery Hire Site	Industrial	60m SE
3	Traffic on A617	Major Public Road	140m NE
4	Industrial Site/Scrap Yard	Industrial	150m W
5	Arable Agricultural Land / Farming Activities	Agricultural	170m NNE, 180m E, 200m W
6	Garage/MOT Centre	Industrial/Commercial	220m NW
7	Maris Pumps Plant & Machinery Hire	Industrial/Commercial	440m E
8	Shed and Garden Centre	Industrial/Commercial	450m NW
9	Tableware Manufacturer	Industrial/Commercial	460m SE
10	Groundworks Contractors Yard	Industrial/Commercial	920m SE

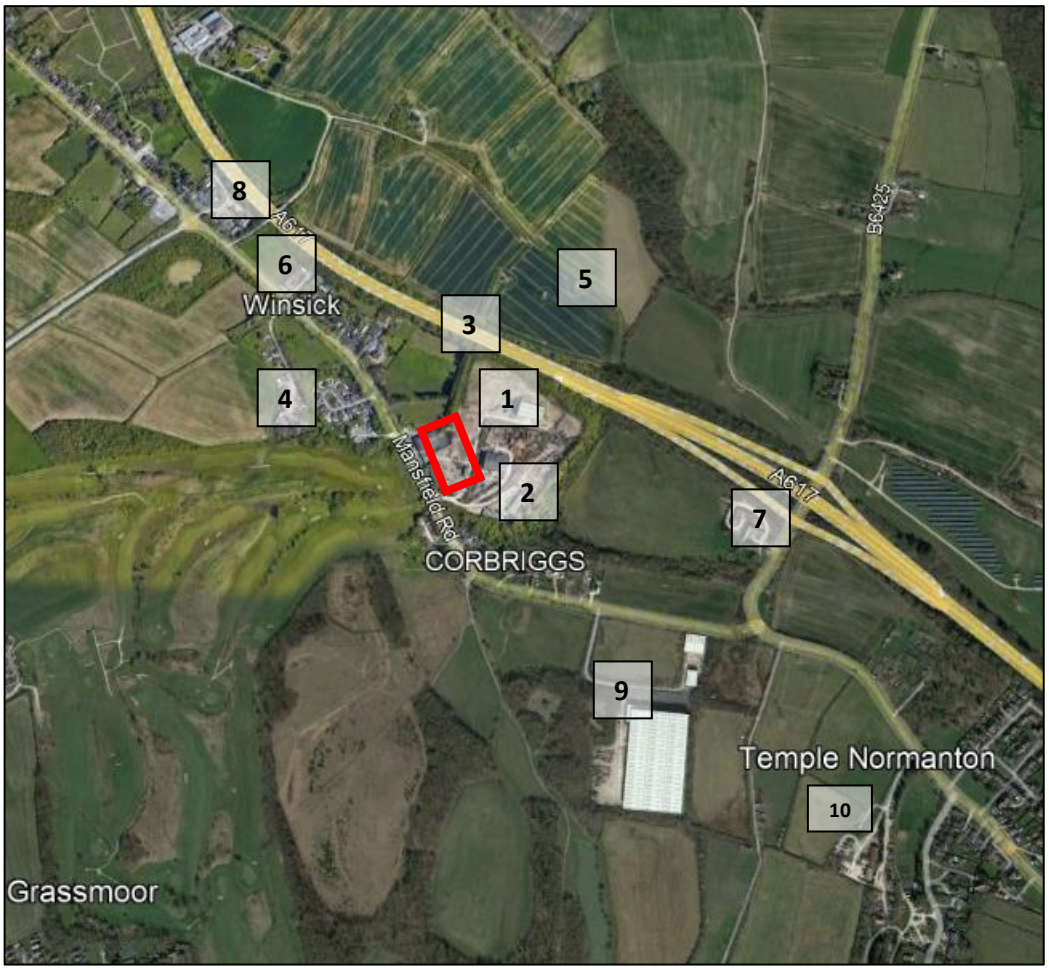


Figure 3 - Map (source: Google Earth, 2022) showing locations of Off-Site Sources of Dust from Table 3 (approx. site boundary in red)

2.0 OPERATIONS AT CORBRIGGS WOOD PROCESSING FACILITY

2.1 Overview

2.1.1 The operator proposes to develop a new wood processing facility at an existing industrial site and the proposed activities will include the reception, shredding, screening, separating and storage of non-hazardous wood wastes prior to removal off-site for manufacturing into chip-board based products.

2.1.2 The site will accept and treat up to 75,000 tonnes per year of non-hazardous wood waste as a recovery activity, with the temporary storage of up to 6,000 tonnes wood at any one time.

2.2 Waste Deliveries at Corbriggs Wood Processing Facility

2.2.1 All vehicles delivering waste must first report to the weighbridge/site office to record and inspect the waste and to check documentation. The vehicle can then proceed to enter the site and will be directed to the appropriate unloading area to offload their waste, taking care to reduce drop-heights of wastes with the potential to create dust emissions where possible. The waste will then be visually inspected by site operatives to confirm the waste type. Any non-conforming waste types, including any excessively dusty wastes will be rejected from site.

2.3 Overview of Waste Processing & Storage

2.3.1 The proposed activities to be carried out at the site are as follows:

- Delivery and reception of wood wastes with strict Waste Acceptance Procedures. Non-conforming or excessively dusty wastes will be rejected from site. Incoming loads where deemed necessary will arrive sheeted and will be dampened down if required. Where non-conforming loads have already been deposited at the site and cannot be sent off-site immediately, the wastes will be moved to the Quarantine Area and dampened down or covered if needed.

- Temporary storage outside of unprocessed wood wastes will be to a maximum of 4m high, within designated storage bays constructed of 5m high modular movable concrete walls, allowing a 1m freeboard above stockpile. Wood wastes delivered to site are expected to predominantly bulky items of wood not inherently dusty. Initial sorting of unprocessed wastes is to segregate loads with a high content of MDF chipboard into a separate storage bay for later processing.

- Shredding of wood wastes and removal of ferrous metals – unprocessed wood waste is fed into the shredder(s) with overband magnets. Ferrous metal output into a storage bay or skip awaiting removal off-site. The shredders will be fitted with dust suppression (misting) systems, or, where not possible, a water cannon will be utilised. The waste metals will not be likely to produce dust emissions.

- Screening of waste wood to remove fines– shredded wood is sent through Screener Plant. The Screener Plant will be fitted with a dust suppression system (misting spray). Fines are ejected from the screener into a designated concrete storage bay for removal off-site. The stockpiles are monitored to ensure dust emissions are kept to a minimum and dampened down if necessary.

- Removal of non-ferrous metals using Eddy Current Separator – this removes non-ferrous metals on a conveyor belt using a powerful magnetic field, with final good quality wood chip output sent to a designated concrete storage bay pending removal off-site. Non-ferrous metals output is into a separate concrete storage bay or skip awaiting removal off-site. The Eddy Current Separator also benefits from a dust suppression system. The segregated metals will not be likely to produce dust emissions.

- Storage of good quality woodchip will be in designated 5m high concrete bays pending collection for manufacturing off-site into chipboard. Stockpiles are to be no more than 4m high, allowing a 1m freeboard between tops of stockpiles and tops of walls.

- The processing area where the Shredders, Screener Plant and Eddy Current Separator are to be located (when operationally required) will have a smooth, easy to maintain impermeable yard surface, which will be routinely inspected for wear and tear during daily site inspections and kept in a clean and tidy condition to prevent fugitive dust and particulate emissions. Surface water run-off from the site surface will be collected by the site drainage system with interceptor on-site before discharging to surface water (Calow Brook).

2.3.2 Once waste acceptance checks are completed, the accepted wastes will then be transported by mobile plant to the unprocessed wood waste storage bays, awaiting processing (shredding, separating and screening) in the external processing area. The storage bays have high concrete walls which shelter stored wastes from wind and weather, helping to reduce fugitive dust or particulate emissions that may arise from the storage of wastes from leaving the site. Unprocessed wood wastes will be predominantly large fractions which have a low dust generation potential.

2.3.3 Due to their nature, it is not anticipated that waste metals will produce dust emissions and are considered an unlikely source of dust. The shredded wood materials and stockpiled fines will therefore be the primary potential source of dust and particulates on site. Site operatives will be trained in keeping dust emissions to a minimum during handling and transit around site and between the processing area and storage bays/containers. The handling and processing of materials on site will be well controlled to prevent excessive agitation, double handling and creating dust emissions. Good housekeeping of site surfaces, storage bays and processing areas will ensure the site is maintained in a clean and tidy condition. The storage bays will be used as temporary holding bunkers for the unprocessed waste prior to treatment and then for temporary storage of processed waste streams after treatment. It is anticipated

the processed woodchip and fines will have short-residence times on site, with a high turnover during operational periods.

2.3.4 The sorting, shredding, screening and temporary storage of unprocessed and processed waste wood and incidental contamination and production wastes will take place outside within the processing areas and storage bays on site. The site will be operated in a phased approach, with the initial site plan operated as the layout shown in drawing ref. '12800_004 Phase 1'. This will be for the pre-shredding of wood and limited storage of wood wastes prior to transfer off-site for recycling. Once the site is processing at a greater capacity and the temporary storage of larger volumes of wood waste is required, the operator proposes to use the site layout plan as shown in the drawing ref. '12800_004 Phase 2'. Both plans show the proposed locations of the weighbridge, processing area, quarantine area, storage bays, site entrances, parking areas and other site infrastructure at each operational stage.

2.3.5 The processing of waste wood will be undertaken outside by a shredder plant initially in Phase 1, with small amounts of stored of materials. When volumes of waste wood coming to site increase and the need for further processing occurs, the shredded wood will be fed through a screener to remove wood fines and then an Eddy Current Separator may be used to remove non-ferrous metals (Phase 2) there will be a requirement for greater storage capacity, all of which will be located outside in the yard, installed with impermeable surfacing, drainage system and interceptor. The temporary storage of unprocessed and processed wood and the resulting recovered by-products such as metals from the processing will also be outside in designated bays or skips. Incidental contamination and production wastes such as plastics and litter will be stored in a skip, awaiting removal from site.

2.3.6 Stockpiles of unprocessed and processed wood will be up to 4 metres high, with movable modular concrete storage bay walls up to 5 metres high. By-product waste streams from the processing of the waste wood will be small amounts of ferrous and non-ferrous metals, wood fines and incidental contamination and production wastes (litter, plastics etc.).

2.3.7 The impermeable site surface will be installed with drainage and interceptor. The site will be inspected daily and subject to regular cleaning and maintenance, with remedial actions required to be fully documented in the site diary, which is to be kept at all times in the Site offices.

2.4 Mobile Plant & Equipment

2.4.1 Site operations will only be within site operational hours, as stipulated in planning permission. Site operations involving the use of mobile plant and other equipment for the movement and handling of waste will not be carried out outside of permitted operational hours.

2.4.2 All mobile plant and equipment are maintained in accordance with manufacturers specifications and are serviced at least annually or in accordance with recommended maintenance schedule for that plant or equipment, to ensure the smooth and effective running of the plant and to detect and fix any faults or defects which may increase noxious exhaust emissions.

2.4.3 Mobile plant and equipment are checked daily as part of daily site inspections. Replacement plant and equipment that is purchased/hired to continue site operations is selected to achieve the lowest emission standard possible, whilst still being operationally effective and finically viable.

2.4.4 An anti-idling policy is enforced on-site to ensure no mobile plant, equipment or site/visitor/delivery vehicles that have internal combustion engines are left running when stationary and/or not in active use.

2.4.5 Plant and machinery are selected to meet all legislation and statutory guidance on emissions and to minimise emissions from selected equipment.

3.0 DUST & PARTICULATE MANAGEMENT

3.1 Responsibility for Implementation of this Plan

3.1.1 It is the responsibility of the Site Manager to implement this Plan and ensure that dust control measures are being implemented across the site. It is also the responsibility of all site personnel to maintain a visual awareness of dust emissions during the working day as part of continual proactive environmental monitoring and to ensure dust control measures are implemented and any dust emissions identified are reported immediately to site management.

3.1.2 A copy of this DEMP should be kept in the Site Office at all times and is intended for use by site operatives and managers for the control of dust and particulate emissions at the site. This is a live document and should be reviewed regularly and at least annually, and updated if changes are made to site activities. Electronic copies will also be held on the company's database system.

3.2 Staff Training

3.2.1 The designated person or Site Manager will be responsible for ensuring staff receive proper and adequate training in respect of dust and emissions management.

3.2.2 Site staff will undergo training to ensure that they understand how their actions and the site operations can affect airborne emissions. Staff will be instructed to not operate unless the site controls are operational and to alert site management at times when the site could potentially cause a dust/emissions nuisance. Staff will be trained to apply dust suppression on operations when conditions require and trained to visually inspect for airborne dust emissions. Staff will be instructed to report fugitive dust emissions to the designated person or the Site Manager with immediate effect.

3.2.3 Staff training records will also be updated and stored within the Site Office.

3.3 Sources of Dust at Corbriggs Wood Processing Facility

3.3.1 Fugitive dust could result in visible dust being observed crossing the site boundary and nuisance can be caused by dust deposition on surfaces at sensitive receptors. Shredding, screening, separating and temporary storage activities will be undertaken on-site in the external yards and storage bays around site. Site operations will be designed in such a way that any emissions released will have the minimum impact on the environment and local people.

3.3.2 Dust and particulates can be generated from dry materials, site surfaces, vehicles, dried mud and other dry materials. Dry wastes and other materials may give rise to dust when processed or handled (unloaded or loaded, shredded, moved etc.), particularly in dry or windy conditions outside.

3.3.3 The potential dust sources as a result of site operations have been identified at the site and these are detailed below:

- Delivery of wood wastes to site;
- Loading and unloading of waste materials and stockpiles;
- Vehicle movements;
- Processing of wastes including shredding, separating, screening and storage;
- General handling of wastes;
- Windblown action across site and external stockpiles of waste.

3.3.4 Wood wastes delivered to site are expected to be predominantly bulky items of wood, which will not be inherently dusty. Table 4 below includes a list of the types of waste accepted and restrictions:

Table 4 – Types of Waste Accepted and Restrictions

Waste code:	Description:	Restrictions
02	**WASTES FROM AGRICULTURE, HORTICULTURE, AQUACULTURE, FORESTRY, HUNTING AND FISHING, FOOD PREPARATION AND PROCESSING**	
02 01	**Wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing**	
02 01 03	Plant-tissue waste	Restricted to woody material only.
03	**WASTES FROM WOOD PROCESSING AND THE PRODUCTION OF PANELS AND FURNITURE, PULP, PAPER AND CARDBOARD**	
03 01	**Wastes from wood processing and the production of panels and furniture**	
03 01 01	Waste bark and cork	
03 01 05	Sawdust, shavings, cuttings, wood, particle board and veneer other than those mentioned in 03 01 04	
03 03	**Wastes from pulp, paper and cardboard production and processing**	
03 03 01	Waste bark and wood	
15	**WASTE PACKAGING, ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED**	
15 01	**Packaging (including separately collected municipal packaging waste)**	
15 01 03	Wooden packaging	
15 01 06	Mixed packaging	Restricted to mixed wood and metal only.
16	**WASTES NOT OTHERWISE SPECIFIED IN THE LIST**	

Waste code:	Description:	Restrictions
16 01	**End-of-life vehicles from different means of transport (including off-road machinery) and wastes from dismantling of end-of-life vehicles and vehicle maintenance (except 13, 14, 16 06 and 16 08)**	
16 01 22	Components not otherwise specified	Restricted to mixed wood and metal only.
17	**CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)**	
17 02	**Wood, glass and plastic**	
17 02 01	Wood	
17 09	**Other construction and demolition wastes**	
17 09 04	Mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03	Restricted to mixed wood and metal only.
19	**WASTES FROM WASTE MANAGEMENT FACILITIES, OFF-SITE WASTE WATER TREATMENT PLANTS AND THE PREPARATION OF WATER INTENDED FOR HUMAN CONSUMPTION AND WATER FOR INDUSTRIAL USE**	
19 12	**Wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified**	
19 12 07	Wood other than that mentioned in 19 12 06	
19 12 12	Other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11	Restricted to mixed wood and metal only.
20	**MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELKY COLLECTED FRACTIONS**	
20 01	**Separately collection fractions (except 15 01)**	
20 01 38	Wood other than that mentioned in 20 01 37	Restricted to mixed wood only.
20 02	**Garden and park wastes (including cemetery waste)**	
20 02 01	Biodegradable waste	Restricted to woody material only.
20 03	**Other municipal wastes**	
20 03 07	Bulky waste	Restricted to mixed wood and metal only.

3.4 Airborne Pathways

3.4.1 It is considered the potential pathways for dust and particulate emissions to impact on receptors is via airborne transmission. Factors affecting dust and particulate emissions include:

- Quantity of wastes or stockpile heights;
- Types of wastes;
- Dry weather;
- Wind direction, exposure and speed; and,
- Exposure/distance of sensitive receptors to site operations/dust source.

3.5 Source-Pathway-Receptor Model

3.5.1 The linkages between the sources, pathways and receptors are outlined in Table 5 below:

Table 5 – Dust Emissions Risk Assessment

What do you do that can harm and what could be harmed			Managing the risk	Assessing the risk		
Hazard	**Receptor**	**Pathway**	**Risk management**	**Probability of exposure**	**Consequence**	**What is the overall risk?**
What has the potential to cause harm?	**What is at risk? What do I wish to protect?**	**How can the hazard get to the receptor?**	**What measures will you take to reduce the risk? If it occurs – who is responsible for what?**	**How likely is this contact?**	**What is the harm that can be caused?**	**What is the risk that still remains? The balance of probability and consequence**
To Air						
Dust from delivery, off-loading and reloading/export of wastes at the site.	Human population in nearby residential properties located off Mansfield Road. Workers and patrons of nearby commercial/industrial premises immediately to SE. Wildlife and visitors to local habitats Corbriggs Marsh LWS 100m SE and Grassmoor Country Park LWS 130m S. Flora and fauna in local habitats.	Through air – wind borne.	There is the potential for dust emissions to be generated at the site during the delivery, off-loading and reloading of the non-hazardous wood wastes and by-products of the processing at the site. Typically, the site accepts wood waste for sorting, screening, separating and shredding. Products resulting from this process i.e. woodchip, metals, fines/small wood grades, litter/rejects, are exported from site. Preventative measures will include: • Wastes will arrive at site in covered or contained loads and waste transfer notes checked. • Strict waste acceptance procedures at the site will assess wastes upon receipt to ensure they comply with the permit (non-hazardous waste types listed in the permit only), and if waste loads are found to be excessively dusty, they will be dampened down and covered, or where required, rejected from site. • Trained staff will assess if wastes are suitable to be sent onto site for processing, or if they	**Unlikely –** risk of dust deposition at closest residential receptors deemed low wood wastes not inherently dusty. The predominant wind direction is from the WSW towards the ENE towards the A617 and agricultural	Dust may cause annoyance to people and on cars and buildings nearby. Potential smothering of flora and fauna inhibiting photosynthesis.	**Low – if control measures implemented.**

What do you do that can harm and what could be harmed			Managing the risk	Assessing the risk		
Hazard	**Receptor**	**Pathway**	**Risk management**	**Probability of exposure**	**Consequence**	**What is the overall risk?**
What has the potential to cause harm?	**What is at risk? What do I wish to protect?**	**How can the hazard get to the receptor?**	**What measures will you take to reduce the risk? If it occurs – who is responsible for what?**	**How likely is this contact?**	**What is the harm that can be caused?**	**What is the risk that still remains? The balance of probability and consequence**
	Users of public and domestic roads and footpaths nearby.		should be held in quarantine area and rejected from site as soon as possible. • Visual dust monitoring across site and at permit boundary will be carried out by trained staff as part of daily site inspections. • Drop heights will be minimised when loading and unloading waste materials. • All site staff and visitors given a Site Induction covering dust awareness, minimisation and reporting of dust emissions. • Dusty waste, including in stockpiles, will be dampened down or covered where necessary on extremely dry and windy days. • Off-loading to take place within designated area which will limit dust emissions and stockpiles of wood waste, processed waste and by product wastes will be kept in bays sheltered from the wind. • The newly constructed site surface will be kept cleaned and maintained, to prevent build-up of waste residue that could give rise to dust emissions. Where necessary, if delivery vehicles and machinery create dust by tracking across site surface, the surface will be cleaned and/or	fields to the northeast.		

What do you do that can harm and what could be harmed			Managing the risk	Assessing the risk		
Hazard	**Receptor**	**Pathway**	**Risk management**	**Probability of exposure**	**Consequence**	**What is the overall risk?**
What has the potential to cause harm?	**What is at risk? What do I wish to protect?**	**How can the hazard get to the receptor?**	**What measures will you take to reduce the risk? If it occurs – who is responsible for what?**	**How likely is this contact?**	**What is the harm that can be caused?**	**What is the risk that still remains? The balance of probability and consequence**
			dust suppression will be carried out i.e. sprayed with water from a bowser to reduce dust emissions. • If dust emissions are detected beyond the site boundary, the site manager will be informed immediately, and a record made of the incident and actions taken. Depending on the dust source, the site manager will decide the best course of actions, which may include dust suppression by spraying water on stockpiles, site surfaces or machinery, cleaning and tidying site, minimising activities on site that give rise to dust emissions, particularly on windy days, reducing drop heights of wastes when loading/offloading, and covering or containing dusty wastes.			
Dust windblown from waste wood stockpiles (unprocessed and processed) and rejects, metals, fines.	Human population in nearby residential properties located off Mansfield Road. Workers and patrons of nearby commercial/industrial	Through air – wind borne.	There is the potential for dust emissions to be generated by windblow action across stockpiles at the site during the temporary storage of wastes pre- and post-processing stages. Wastes include the unprocessed wood wastes, the processed woodchip product, and the by-products as a result of sorting and separating (metal fractions,	**Unlikely –** risk of dust deposition at closest residential receptors deemed low. The	Dust may cause annoyance to people and on cars and buildings nearby.	**Low – if control measures implemented**

What do you do that can harm and what could be harmed			Managing the risk	Assessing the risk		
Hazard	**Receptor**	**Pathway**	**Risk management**	**Probability of exposure**	**Consequence**	**What is the overall risk?**
What has the potential to cause harm?	**What is at risk? What do I wish to protect?**	**How can the hazard get to the receptor?**	**What measures will you take to reduce the risk? If it occurs – who is responsible for what?**	**How likely is this contact?**	**What is the harm that can be caused?**	**What is the risk that still remains? The balance of probability and consequence**
	premises immediately to SE. Wildlife and visitors to local habitats Corbriggs Marsh LWS 100m SE and Grassmoor Country Park LWS 130m S. Flora and fauna in local habitats. Users of public and domestic roads and footpaths nearby.		fines/small wood grades, litter and any other rejects). Preventative measures will include: • Temporarily stockpiled unprocessed (mixed wood waste), processed waste (woodchip) and fines/small grade chip will be outside within concrete storage bays to shelter from the wind, capable of holding up to 1,500m^3 of material. • Concrete bay walls will be movable modular blocks able to be repositioned to adjust for more protection from prevailing winds if required. This will minimise windblow action across stockpile surfaces. • Stockpiles of materials will have relatively short residence times, with a high turnover of wastes at the site. • Storage bays on newly constructed impermeable surfaced yard, allowing easy maintenance and cleaning of storage bays. • Storage of waste metals (ferrous and non-ferrous stored separately) prior to sending of site will be in storage bays or skips, however these are unlikely to be a source of dust.	predominant wind direction is from the WSW towards the ENE towards the A617 and agricultural fields to the northeast.	Potential smothering of flora and fauna inhibiting photosynthesis.	

What do you do that can harm and what could be harmed			Managing the risk	Assessing the risk		
Hazard	**Receptor**	**Pathway**	**Risk management**	**Probability of exposure**	**Consequence**	**What is the overall risk?**
What has the potential to cause harm?	**What is at risk? What do I wish to protect?**	**How can the hazard get to the receptor?**	**What measures will you take to reduce the risk? If it occurs – who is responsible for what?**	**How likely is this contact?**	**What is the harm that can be caused?**	**What is the risk that still remains? The balance of probability and consequence**
			• Storage of litter or other rejects in a skip to protect from windblow action. • In general, good housekeeping with regular sweeping and clearing of waste areas is encouraged (floors and machinery) to reduce a build-up of fine material that could generate dust. • All site staff and visitors given a Site Induction covering dust awareness and reporting of dust emissions. • Visual dust monitoring is done as part of daily site inspections. • Drop heights will be minimised when moving waste materials into bays. • In the event of dust emissions escaping beyond the site boundary being detected, the incident must be reported to the site manager and a record must be made of the incident and actions taken. Waste storage procedures should be reviewed, and additional control measures implemented as necessary by the site manager. Depending on the source, additional controls may include additional site sweeping and cleaning, or dampening down of surfaces or			

What do you do that can harm and what could be harmed			Managing the risk	Assessing the risk		
Hazard	**Receptor**	**Pathway**	**Risk management**	**Probability of exposure**	**Consequence**	**What is the overall risk?**
What has the potential to cause harm?	**What is at risk? What do I wish to protect?**	**How can the hazard get to the receptor?**	**What measures will you take to reduce the risk? If it occurs – who is responsible for what?**	**How likely is this contact?**	**What is the harm that can be caused?**	**What is the risk that still remains? The balance of probability and consequence**
			waste. Dusty wastes may require further containment/covering and drop heights should be reduced when loading and unloading materials. • All operations involving moving or agitating wastes to be undertaken by supervised trained site operatives. • In windy conditions, if appropriate, consider covering or dampening stockpiles to reduce dust emissions. • Match machinery and vehicle heights when loading/offloading to reduce drop heights. • Meteorological conditions should be considered before activities moving materials across site. These activities should be minimised during unfavourable wind conditions.			
Dust from waste treatment (sorting, separating, screening,	Human population in nearby residential properties located off Mansfield Road. Workers and patrons of nearby	Through air – wind borne.	There is the potential for dust emissions to be generated at the site during the agitation of waste as part of the processing of the non-hazardous waste streams accepted at site. Processing includes screening, separating, shredding and then off-loading into stockpiles. Preventative measures will include:	**Unlikely –** risk of dust deposition at closest residential receptors	Dust may cause annoyance to people and on cars and buildings nearby.	**Low – if control measures are implemented**

What do you do that can harm and what could be harmed			Managing the risk	Assessing the risk		
Hazard	**Receptor**	**Pathway**	**Risk management**	**Probability of exposure**	**Consequence**	**What is the overall risk?**
What has the potential to cause harm?	**What is at risk? What do I wish to protect?**	**How can the hazard get to the receptor?**	**What measures will you take to reduce the risk? If it occurs – who is responsible for what?**	**How likely is this contact?**	**What is the harm that can be caused?**	**What is the risk that still remains? The balance of probability and consequence**
shredding) and handling.	commercial/industrial premises immediately to SE. Wildlife and visitors to local habitats Corbriggs Marsh LWS 100m SE and Grassmoor Country Park LWS 130m S. Flora and fauna in local habitats. Users of public and domestic roads and footpaths nearby.		• Processing operations to take place within the processing area only, on newly constructed yard surface, easy to keep clean and free of debris likely to generate dust. • The shredder, screener and Eddy Current Separator plant will be fitted with dust suppression systems/misting systems to reduce dust emissions. Where this is not possible, misting cannons at the site will be used to reduce dust. • Good housekeeping will be maintained with regular sweeping and clearing of wastes. Housekeeping and cleaning regimes will pay particular attention to cleanliness of the site surfacing to reduce a build-up of fine material that could generate dust. • Visual dust monitoring carried out as part of daily site inspections. • Drop heights will be minimised when loading and unloading waste materials into and out of plant. • All site staff and visitors given a Site Induction covering dust awareness and reporting of dust emissions.	deemed low. The predominant wind direction is from the WSW towards the ENE towards the A617 and agricultural fields to the northeast.	Potential smothering of flora and fauna inhibiting photosynthesis.	

What do you do that can harm and what could be harmed			Managing the risk	Assessing the risk		
Hazard	**Receptor**	**Pathway**	**Risk management**	**Probability of exposure**	**Consequence**	**What is the overall risk?**
What has the potential to cause harm?	**What is at risk? What do I wish to protect?**	**How can the hazard get to the receptor?**	**What measures will you take to reduce the risk? If it occurs – who is responsible for what?**	**How likely is this contact?**	**What is the harm that can be caused?**	**What is the risk that still remains? The balance of probability and consequence**
			• A water bowser or hose shall be made available to apply sprayed water to dampen material, particularly in warm, dry or windy conditions. • All operations involving mechanical agitations (such as shredding, loading/offloading, screening, separating) to be undertaken by supervised trained personnel. • Match machinery and vehicle heights when loading/offloading to reduce drop heights. • Meteorological conditions should be considered before activities such as shredding, transfer and screening of materials. These activities should be minimised during unfavourable wind conditions. • In the event of dust emissions escaping beyond the site boundary, the incident must be reported to the site manager and a record must be made of the incident and actions taken. Waste storage and treatment procedures will be reviewed, and additional control measures implemented as necessary by the site manager. Depending on the source, additional controls may include additional site sweeping and cleaning, or dampening down of surfaces or			

What do you do that can harm and what could be harmed			Managing the risk	Assessing the risk		
Hazard	**Receptor**	**Pathway**	**Risk management**	**Probability of exposure**	**Consequence**	**What is the overall risk?**
What has the potential to cause harm?	**What is at risk? What do I wish to protect?**	**How can the hazard get to the receptor?**	**What measures will you take to reduce the risk? If it occurs – who is responsible for what?**	**How likely is this contact?**	**What is the harm that can be caused?**	**What is the risk that still remains? The balance of probability and consequence**
			waste. Dusty wastes may require further containment/covering and drop heights will be reduced when loading and unloading materials.			

3.6 Dust Control Measures

3.6.1 This section details the control measures that will be undertaken on site to mitigate dust and particulate emissions from site activities. The abatement of dust and particulate emissions will be based on best management practices.

Waste Acceptance

3.6.2 Waste carriers will report to the weighbridge and waste transfer notes inspected for their load, and if in order, the waste carrier will then be sent to the appropriate unloading area within the site and site operatives will visually inspect the waste load, including for dust emissions or excessive debris. Any non-conforming wastes will be rejected from site.

3.6.3 Drop heights will be minimised during the loading and unloading of materials to reduce the likelihood of dispersion of dust as a consequence of agitation. The weighbridge will conduct assessments of waste inputs and impose controls and restrictions on wastes with the potential to create dust emissions. If required, the surface of the material will be dampened down prior to entering site.

Site Traffic and Movement of Vehicles

3.6.4 All site traffic will be kept to designated haul routes within the local area. The surface of internal haul routes will be inspected daily and swept at regular intervals with any defects made-good.

3.6.5 All new drivers to site, contractors and visitors will be fully inducted on traffic movements and their responsibility to minimise dust emissions from vehicle movements. In the event of materials being entrained on the underside of vehicles and site plant, wash-down and cleaning facilities are made available to reduce the build-up of materials which could be further tracked and released as airborne dust.

3.6.6 During extended dry periods of weather, the movement of any vehicle can generate a substantial amount of dust and particulates which can cause nuisance to nearby receptors. In order to minimise the generation and entrainment of dust onto public highways, it is a site requirement that all vehicles entering and carrying loads with the potential to create dust emissions are covered or sheeted.

3.6.7 Further standard good practices for site traffic on site will include:

- Setting appropriate site speed limits;
- Supervised loading of vehicles to avoid spillages;
- Ensuring even road surfacing and potholes filled;
- Regular removal of spilled material from site haul routes; and,
- Dust suppression by regular spraying in dry conditions.

3.6.8 A road sweeper will be deployed promptly to remove any debris or other deposits on internal roads to prevent drag out onto the public highway.

3.6.9 Good general housekeeping on site will be maintained by site operatives and checked by the Site Manager daily, with any spillages of wastes with the potential to create dust emissions on site roads cleared as soon as possible and vehicles leaving site checked for any tracked mud or debris that could be stuck to wheels and removed prior to exiting the site.

3.6.10 On-site vehicle speed limits enforced to ensure vehicle movements do not generate excessive dust. An Anti-idling policy will be in place for vehicles to reduce emissions including noxious gases, particulates and dust.

3.6.11 In line with manufacture's specifications, all mobile plant and machinery shall be maintained as per the minimum requirements specified by the manufacturer, to ensure they are running smoothly and cleanly.

3.6.12 Any malfunction or breakdown leading to abnormal emissions will be dealt with promptly and operations will be modified or suspended until normal working conditions can be restored.

Loading and Tipping Operations

3.6.13 All wastes handled on site shall be done so in a controlled manner, with consideration given to the potential for dust generation at all times. Loading and tipping heights will be minimised to avoid uncontrolled dust emissions.

3.6.14 Suppression equipment will be available (e.g. hoses or bowser) to dampen down dusty loads. Where necessary, delivery and collection vehicles will be sheeted when entering and leaving the site.

Materials Storage and Processing

3.6.15 The shredding, screening and separating of waste wood will be undertaken by shredders, a Screener Plant and Eddy Current Separator Plant fitted with dust suppression systems, consisting of a fine water sprayer, to minimise dust emissions.

3.6.16 Good housekeeping on site will include regular checks by site staff in all processing, waste handling and storage areas for any build-up of loose debris from the processing plant on site and movement of wastes across site. Movement of wastes will be undertaken for the shortest distances possible across site to their destination to reduce potential entrainment of dusts into the air. Site management will be notified if excessive loose debris or dust is present and appropriate sweeping and collection of debris and dampening of dust will be undertaken.

3.6.17 The movement of waste materials across the site, by site vehicles and plant, will be limited where possible to suitable weather conditions, avoiding excessively windy, or dry conditions that could release dust and debris. Particular care will be taken when moving shredded wood wastes (chips) and fines to minimise potential dust emissions.

3.6.18 Stockpiles of metals will be stored externally in storage bays or skips and are unlikely to be significant source of dust emissions due to the nature of the material not being inherently dusty, unless unintentionally contaminated by dusty fractions/wood particles. Site management will monitor waste levels in stockpile bays to ensure they are not exceeding capacity (ensuring the required freeboard in storage bays) and to prevent potential for wind blow action across tops of piles.

3.6.19 Dust controls will include dampening down of the waste within the storage bays, using existing water supplies on-site or limiting the quantity of wastes stored in bays during dusty conditions.

3.6.20 All movement of materials outside will be conducted during the normal site operational hours.

3.6.21 Daily and weekly inspection of the site will be undertaken and recorded in accordance with standard operating procedures. Any issues identified during inspection shall be reported to the Site Manager and remedial actions instigated. The daily inspections will include visual inspections for dust, as well as housekeeping of site surfacing and machinery.

3.6.22 As an overriding requirement, if winds which carry visible dust off-site towards any sensitive site receptor are observed by site operatives, then the site operations giving rise to the dust in that part of the site will be modified, or suspended where necessary, until more suitable conditions pertain, or until effective dust control measures are implemented.

Dust Suppression and Equipment

3.6.23 The equipment used for dust suppression will be inspected weekly and any maintenance requirements implemented and recorded by site operatives. Where necessary the equipment used for the processing and movement of materials around site shall be regularly inspected and cleaned to remove excess debris which could generate dust around site. Site operatives will be adequately trained in the safe and appropriate use and maintenance of dust suppression equipment.

3.6.24 An adequate water supply for dust suppression will be maintained at the site using either mains water, a water bowser or the on-site water storage tank. It is anticipated only small amounts of water will be used, higher in summer if prolonged hot dry conditions. The use of additives in the water used for dust suppression is not proposed.

3.6.25 Excessive water usage in dust suppression will be avoided by continuous monitoring of the site conditions by site operatives during active dust suppression using water, and checking the site is not becoming flooded or excessive standing water is present. The site has dedicated surface water drainage to allow excess surface water to drain away. The site's surface water run-off will be directed by the site's drainage system via an oil/water interceptor into the local surface watercourse (the Calow Brook). Only in exceptional incidents, such as uncontrolled spillages on site or in the event of a fire where firewater is generated, would potentially contaminated waters be temporarily contained on site by the installed stop valves, attenuation tank/sump and bunded areas, before either being discharged to sewer (subject to meeting discharge consent parameters) or pumped and tankered off-site for disposal.

3.6.26 Suitable road cleaning equipment will be kept available to ensure that areas are kept clear and tidy and trafficked areas kept routinely dampened in dry, windy conditions to reduce the risk of airborne dust emissions.

3.6.27 A road sweeper will be deployed promptly to remove any debris or other deposits from adjacent highways if debris is tracked off-site by vehicles.

3.6.28 In the event of drought or water supply issues from mains supplies, then on-site clean water supplies could be used for dust suppression.

Site Management

3.6.29 Site management shall be responsible for the satisfactory working of the whole site and operations ensuring full compliance with the dust emissions management plan. Site management will be responsible for checking the meteorological conditions for that day and for ensuring the appropriate dust control measures are in place. Site management may impose restrictions, where deemed necessary, on operations that may give rise to dust to reduce the impact of dust and particulate emissions.

3.6.30 In line with waste acceptance procedures, wastes consisting solely or mainly of dusts will be excluded from site.

3.6.31 As part of the company management system, staff will receive the necessary training and instruction in their duties relating to all operations and the potential sources of dust emissions. Emphasis will be given to plant and equipment malfunctions and abnormal conditions.

3.6.32 Site management shall ensure that all personnel working at the site or visiting are aware of the need to comply with this Dust and Emissions Management Plan.

3.6.33 Any persons on site failing to comply with the requirements of the Dust and Emissions Management Plan and site procedures will be re-trained as necessary. External hauliers failing to abide by site rules in respect of vehicle operations will be reported and if required, asked to leave site.

3.7 Enclosure of Waste Processing & Storage Areas

3.7.1 It is not proposed to enclose or cover areas of the site where processing or storage of waste is undertaken, as this is not considered necessary or proportional to the risk of dust from the proposed activities. The dust control measures in place at the site will ensure dust is visually monitored and dust suppression carried out where required. The site is not located within 2km of an Air Quality Management Area (AQMA) and the predominant wind direction is from the WSW towards the ENE, which is towards the A617 and agricultural fields to the northeast, and away from nearby residential receptors to the west and south, and Local Wildlife Sites to the southeast and south (Corbriggs Marsh and Grassmoor Country Park).

3.7.2 The following control measures will ensure excessively dusty wastes are not accepted at the site and that waste is covered or dampened down when needed to ensure dust suppression:

- Wastes will arrive at site in covered or contained loads and waste transfer notes checked. Strict waste acceptance procedures at the site will assess wastes upon receipt to ensure they comply with the permit (non-hazardous waste types listed in the permit only), and if waste loads are found to be excessively dusty, they will be dampened down and covered, or where required rejected from site.

- Where non-conforming loads have already been deposited at the site and cannot be sent off-site immediately, the wastes will be moved to the Quarantine Area and dampened down or covered if needed.

- Wastes on-site that are identified as dusty pre- or post-processing, including in stockpiles, will be dampened down or covered where necessary on extremely dry and windy days.

- Wastes on-site that are identified as generating dust emissions may require further containment/covering and drop heights will be reduced when loading and unloading materials.

4.0 VISUAL DUST & PARTICULATE MATTER MONITORING

4.1 Overview

4.1.1 Visual routine on-site dust monitoring will be undertaken daily by trained site staff as part of site inspections, in order to assess operational management and mitigating control measures at site and to identify if necessary, whether dust is causing a potential nuisance. Monitoring will also ensure that appropriate remediation measures are adopted early, as a pro-active approach to the Operator ensuring dust emissions do not become an issue at the site. In addition, a visual awareness of dust is made and recorded daily logged in the 'F001 – Daily Site Inspection Form' (Appendix 1).

4.1.2 Monitoring will be undertaken by designated staff who will be fully trained by site management. All site personnel will be responsible for reporting any problem dust emissions identified during their day to day operations. Monitoring at the site will consist of the following as shown in Table 6 below:

Table 6 – Monitoring Overview

Parameter	Monitoring Technique	Frequency
Meteorological Monitoring	Using weather station app or website.	Manually checked at start of each working day.
Dust Monitoring	Dust monitoring as part of daily site inspections. On-site checks and off-site checks in response to an issue being identified.	Daily on site checks (or more frequently following dust complaints, or during prolonged dry or windy conditions).
Complaints Monitoring	Logged in site diary in accordance with complaint procedure.	Ad-Hoc.

4.2 Meteorological Monitoring

4.2.1 In the event of dust complaints, the weather data enables complaints to be assessed against the meteorological conditions for the relevant period. Meteorological information will also be recorded in the 'F003 – Amenity Complaint Form' (Appendix 2).

4.3 Dust and Particulate Emissions Monitoring

4.3.1 Site staff will visually monitor the operations likely to cause airborne emissions. The frequency of these inspections will be risk-based but will occur daily as a minimum. Inspections will be increased in response to adverse weather conditions, and the activities undertaken on site. Inspections will be increased when the following situations are encountered (this list is for guidance only and is not exhaustive):

- Increases in wind speed;
- Intensity of wind;
- Changes in wind direction towards sensitive receptors;
- Periods of hot, dry weather; and,
- Any unscheduled activity with the potential to create dust (e.g. dealing with an emergency).

4.3.2 As part of the daily inspections, appropriately trained and experienced site personnel will carry out an on-site inspection to monitor dust and particulate emissions, which will be recorded on the 'F001 - Daily Site Inspection Form' (Appendix 1). The records of the site daily inspections will be made available to the Environment Agency on request.

4.3.3 In the case of an emission, the below information will be recorded in the Site Diary:

- Date and time of dust/particulate emission;
- Meteorological conditions;
- Potential source of dust emissions/operations during the observation;
- Any complaints received and remedial actions to be taken to minimise or eliminate dust emissions.

4.3.4 It is the responsibility of all site personnel to maintain a visual awareness of dust emissions during the working day. Any significant dust emission occurring during the working day with the potential to travel beyond the site boundary will be reported to site management and a record made in the Site Diary. Site Management will be responsible for investigating the cause and taking immediate action to minimise further emissions. If necessary, site operations will be halted until appropriate remedial action(s) is completed.

4.3.5 Dust and particulate matter monitoring will include observing the movement of vehicles, stockpiling and movement of materials, to establish if such operations are giving rise to dust emissions and the size and frequency of these releases. Daily monitoring will also check for evidence of dust escaping beyond the site boundary or surfaces are becoming soiled (e.g. trees/vegetation and cars).

4.3.6 In the event that dust emissions are observed to be crossing the site boundary or surfaces are becoming soiled, the site management will be informed immediately and the approximate location and extent of the dust, or deposition, assessed and site operations reviewed and remediated. This may include additional dust monitoring on-site and if required dust monitoring off-site to determine the extent of the dust emission. The procedures in Section 5.0 will be followed.

4.3.7 In the event of a dust complaint or a number of dust complaints are received by the site, then the procedures in Section 6.0 will be followed.

4.3.8 Where additional monitoring or control measures fail to reduce or stop dust emissions from leaving the site, then all site operations will be temporarily stopped until the cause of the dust can be determined.

4.3.9 Additional dust and particulate monitoring, as deemed necessary by site management, will be undertaken by trained site operatives during particularly dusty activities such as shredding of wastes when these are operational, or during periods of particularly dry or windy weather.

4.3.10 There are no operations undertaken out of hours when the site is closed, with no agitation of stored material or operation of equipment and so no dust or particulate emissions are anticipated. The unprocessed and processed wastes will be stored within the concrete storage bays sheltered from the wind and within the secure site compound surrounded by security fencing. The site will have locked security gates out of hours and CCTV to prevent unauthorised access.

4.4 Dust Monitoring Locations

4.4.1 All site personnel will be responsible for reporting any problem dust emissions identified at any location on-site during their day-to-day operations. As part of the daily site inspections, dust monitoring will be undertaken across the site during the site walkover, however specific monitoring locations to target may include:

- At the weighbridge/waste reception area;
- Storage bays of unprocessed waste;
- Storage bays of processed waste;
- In the waste processing area.

5.0 ACTIONS WHEN ALARM IS TRIGGERED

5.1 Overview

5.1.1 In the event that site monitoring identifies that there are visible airborne dust and/or particulate emissions that have, or are likely to be, transported beyond the site boundary and cause an unacceptable dust impact at a nearby sensitive receptor, immediate action shall be taken to stop the material handling/treatment operations giving rise to the emissions.

5.2 Dust Emissions Event Procedures

5.2.1 The following actions will be undertaken as part of the Action Plan should dust and/or particulate emissions be detected:

- Additional visual monitoring to identify the extent of the impact and potential cause and source;
- Examination of the operational activities at site at the time of the complaint or identification of an impact;
- Examination of the meteorological conditions at the time of the complaint or identification of an impact;
- Carry out a review of the operational procedure and controls and instigate any control measures immediately following identification of the problem;
- Further monitoring will be carried out to ensure the issue has been addressed and to monitor the effectiveness of any control measures undertaken.

5.2.2 In the event that dust emissions are observed to be crossing the site boundary or surfaces (such as trees/vegetation and cars) are becoming soiled, the site management will be informed immediately and the approximate location and extent of the dust, or deposition, assessed and site operations reviewed and remediated.

5.2.3 The rate of dust suppression will be adjusted to suit the conditions observed, ensuring water coverage is sufficient to prevent fugitive emissions to air. In extreme circumstances, if there is evidence of significant amounts of dust, all site activities will be suspended until the affected area has been dampened with sufficient water preventing emissions to air.

5.2.4 If airborne emissions are the result of equipment failure, faulty items of plant will be repaired/replaced as required. As part of plant maintenance, records will be made of repairs or replacement parts.

5.2.5 Operations that were halted due to adverse wind conditions will only resume when the wind conditions are deemed suitable. Suitable conditions will be determined by the Site Management and will comprise conditions where dust emissions and particulates are not

carried by the wind from the source to cause significant visible dust emissions that have the potential to leave the site boundary into the surrounding area.

5.2.6 If unacceptable airborne emissions have been observed, appropriate remediation measures will be put in place with immediate effect. The frequency of inspections will only be reduced once the issue has been fully resolved.

5.2.7 A record must be made of any dust emission incidents and actions taken. A review of the operational procedure and process controls will be initiated.

5.2.8 Waste storage and processing procedures should be reviewed, and additional controls imposed as deemed necessary by the Site Manager.

6.0 REPORTING AND COMPLAINTS RESPONSE

6.1 Engagement with the Community

6.1.1 As part of this Dust & Emissions Management Plan, engagement with the local community will be undertaken.

6.1.2 Typically, any complaints received at the site are likely to be through the Environment Agency or Local Authority although the operator is willing to deal directly with the complainants and where necessary the following can be implemented:

- Information can be provided to the local community (via the Local Authority) regarding the point and method of contact for the site in the event that fugitive dust has been detected or they want to discuss any activities at the site;
- Complainants can be advised that any complaints/concerns will be addressed immediately following identification/notification and contingency action measures implemented;
- Complainants can be advised of any corrective action and a follow up call carried out by the Site Manager if required.

6.1.3 The primary point of contact at the site for complaints and liaison with the local community is the Site Manager, who will ensure that the recording, investigation and close-out of any complaints is undertaken as described as below and in accordance with company management procedures. Typically feedback for dust complaints will be provided to the complainant by the Site within 48 hours of receiving the complaint.

6.2 Reporting of Complaints

6.2.1 In the event of a dust complaint being received by the Local Authority the complaint is passed to the Operator for investigation. Every complaint will be recorded as per the company's Complaint Reporting Procedure, an 'Amenity Complaint Form' (Appendix 2) will be completed and an entry made in the 'F002 - Site Diary' (Appendix 3) to include the following information:

- Date and time of complaint;
- Extent of complaint;
- Meteorological conditions at time of complaint;
- The complainant's contact details including name and contact telephone;
- Name of person filling out Amenity Complaint Form/Site Diary;
- Action taken to resolve complaint or investigate complaint further;
- Depending on the severity, the complaint can be escalated to senior management for even further investigation if necessary.

6.2.2 Any complaints received directly by the site or via the regulatory bodies, will be recorded on the 'F003 – Amenity Complaint Form' (Appendix 2) and will instigate dust monitoring at the location of the complaint and on site to determine the extent and location of the plume and the source of the dust will be identified. If necessary, monitoring will also be carried out at the nearest sensitive receptors to the site and the monitoring results recorded.

6.2.3 If a number of complaints are received at the site for dust, then the matter will be escalated and a further review of the site operations, cause of the dust and remedial actions will be undertaken by Site Management or nominated deputy. If necessary, site operations will be stopped, where appropriate, in order to allow for dust emissions to cease and possible causes to be identified. All complainants will be informed of actions taken and whether this has improved the situation.

6.3 Management Responsibilities

6.3.1 Any significant dust emissions occurring with the potential to travel beyond the site boundary will be reported to the Site Manager/designated person who will be responsible for investigating the cause and taking immediate action to minimise further emissions.

6.3.2 Site management (or designated persons) will also be responsible for daily visual checks which will be carried out as part of their normal operational procedures monitoring of dust levels and conditions associated with the potential for fugitive emissions of dust. In particular, this is in relation to:

- Dry surfaces where dust or debris is present;
- Any part of the site where movement of vehicles may generate dust;
- Any part of the site where dust may be generated by wind;
- Storage areas of material; and,
- Transport and handling of material on-site.

6.3.3 The site boundary will be checked weekly to ensure that there are no waste materials or debris being blown off site which has the potential to cause nuisance. If a complaint regarding such an emission is received, the company 'Amenity Complaint Form' will be completed. Any corrective and preventative actions will be recorded.

6.3.4 Complaints will be handled by the Site Manager, who will ensure that the recording, investigation and close-out of any complaints is undertaken as described above and in accordance with company management procedures.

6.4 Dust & Emissions Management Plan Review

6.4.1 This DEMP has the aim of ensuring that potential dust and other particulate emission sources are identified and controlled at source where possible. The DEMP aims to minimise the risk of dust and other particulate emissions impact on receptors outside of the site boundary

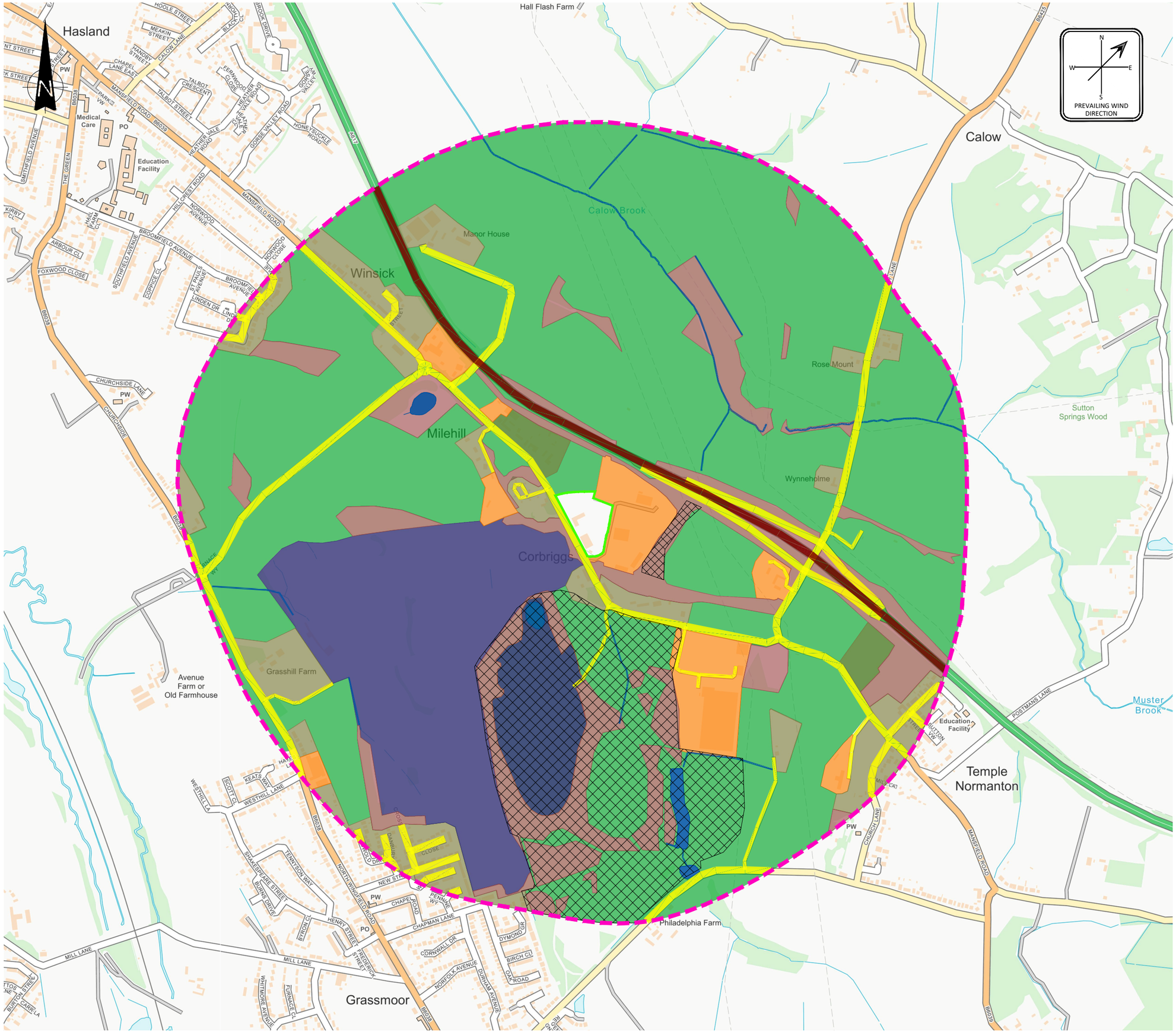
6.4.2 This Dust & Emissions Management Plan (DEMP) will be reviewed by Site Management on a regular basis and at least annually, to ensure that the controls described are effective and reflect best available techniques. The management plan will also be reviewed following a number of complaints at the site or if there are relevant changes in the site operations or procedures.

6.5 Record Keeping

6.5.1 The 'Amenity Complaint Form' (Appendix 2) will be completed, and notes made in the Site Diary of records made. Daily site inspections will be recorded on the 'F001 – Daily Site Inspection Form' (Appendix 1). The forms will be maintained free from damage and kept within the Site office and will be made available to the regulating authorities on request. The record keeping will form part of the site's Management System.

DRAWINGS

5448-CAU-XX-XX-DR-V-1800 Sensitive Receptor Plan
12800_004 Phase 1 Site Layout Plan
12800_004 Phase 2 Site Layout Plan



LEGEND

- PROPOSED PERMIT BOUNDARY
- 1000m OFFSET
- SURFACE WATER
- WOODLAND / SCRUBLAND
- RECREATIONAL
- COMMERCIAL / INDUSTRIAL
- RESIDENTIAL
- MAJOR ROAD
- MINOR ROAD
- RAIL
- AGRICULTURAL
- LOCAL WILDLIFE SITES

REV	MODIFICATIONS	BY	RE	AP	DATE
P03	CLIENT COMMENTS INCORPORATED	EJD	SH	SH	02.12.22
P02	BOUNDARY UPDATED	EJD	SH	SH	09.11.22
P01	ISSUED FOR INFORMATION	EJD	SH	SH	01.11.22

PURPOSE OF ISSUE: FOR INFORMATION

STATUS: S2

CLIENT: SILVA RECYCLING LTD

PROJECT: CORBRIGGS WOOD PROCESSING FACILITY

TITLE: SENSITIVE RECEPTORS PLAN

DESIGNED BY	DRAWN BY	REVIEWED BY	AUTHORISED BY
EJD	EJD	SH	SH

DATE	SCALE @ A3	JOB REF:	REVISION
01.11.2022	1:10,000	5448	P03

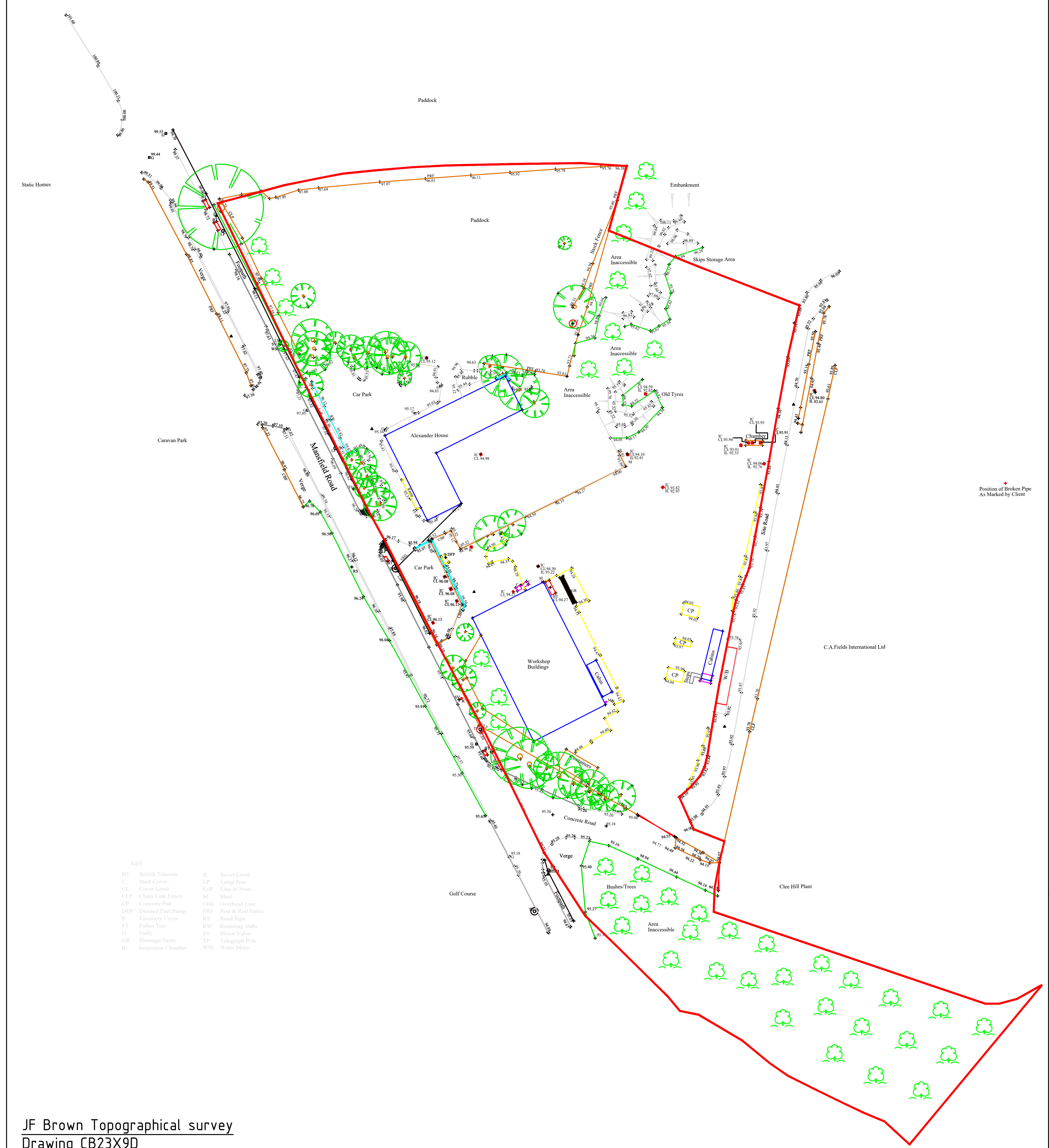
DRAWING NUMBER: 5448-CAU-XX-XX-DR-V-1800

Caulmert
engineering environmental planning

WWW.CAULMERT.COM

Registered Office: InTec, Parc Menai, Bangor, Gwynedd, LL57 4FG Company Registered No: 06716319

Proposed site layout



JF Brown Topographical survey
Drawing CB23X9D

Legend

- Perimeter fence - Linear: 557m; Area : 16,450m²
- Purchased land boundary
- Quarantine area & overnight parking for HGV & mobile plant
- Processing plant
- Overnight parking for HGV & mobile plant

PHASE 1

KRONOSPAN STATUS
Date 13.10.2022

STATUS		WAITED COMMENTS	
By	KRONOSPAN	Deadline	YYYY-MM-DD
Date	YYYY-MM-DD	By	.....
By		By	.....
		By	.....
DISTRIBUTION		WAITED APPROVAL	
Date	YYYY-MM-DD	Deadline	YYYY-MM-DD
Attn	#####	By	
Cc1		By	
Cc2		By	....
Cc3		WARNING	
Cc4		Not receving comments and / or approval within above deadlines, the drawing is intended as "APPROVED" under full resposibility of the listed commenters and / or approvers.	
Cc5			
Cc6	....		
CERTIFIED		Date	YYYY-MM-DD

Index	Modification	Date	Name
D	Stock pile layout	17.10.2022	A. Hilditch
C	Boundary update	10.10.2022	A. Hilditch
B	Boundary update	06.10.2022	A. Hilditch
A	Electrical box	03.10.2022	A. Hilditch

	Date	Name
Project leader	31.05.2022	J. Arkley
Drawn	31.05.2022	A. Hilditch
Checked	30.09.2022	C. Emery

Status

Size: A1 — Scale: 1:200 1:100 — origin — Norm: ISO

Confidentiality
This drawing is the property of Kronoplus Technical AG. Unauthorised distribution or utilisation without prior written authorisation is forbidden and may be unlawful.

Xylo Technologies AG
Rütihofstrasse 1
CH-9052 Niederteufen
Schweiz

Technology
Kronospan Ltd
Maesgwyn Farm
LL14 5NT Chirk, Wrexham
United Kingdom

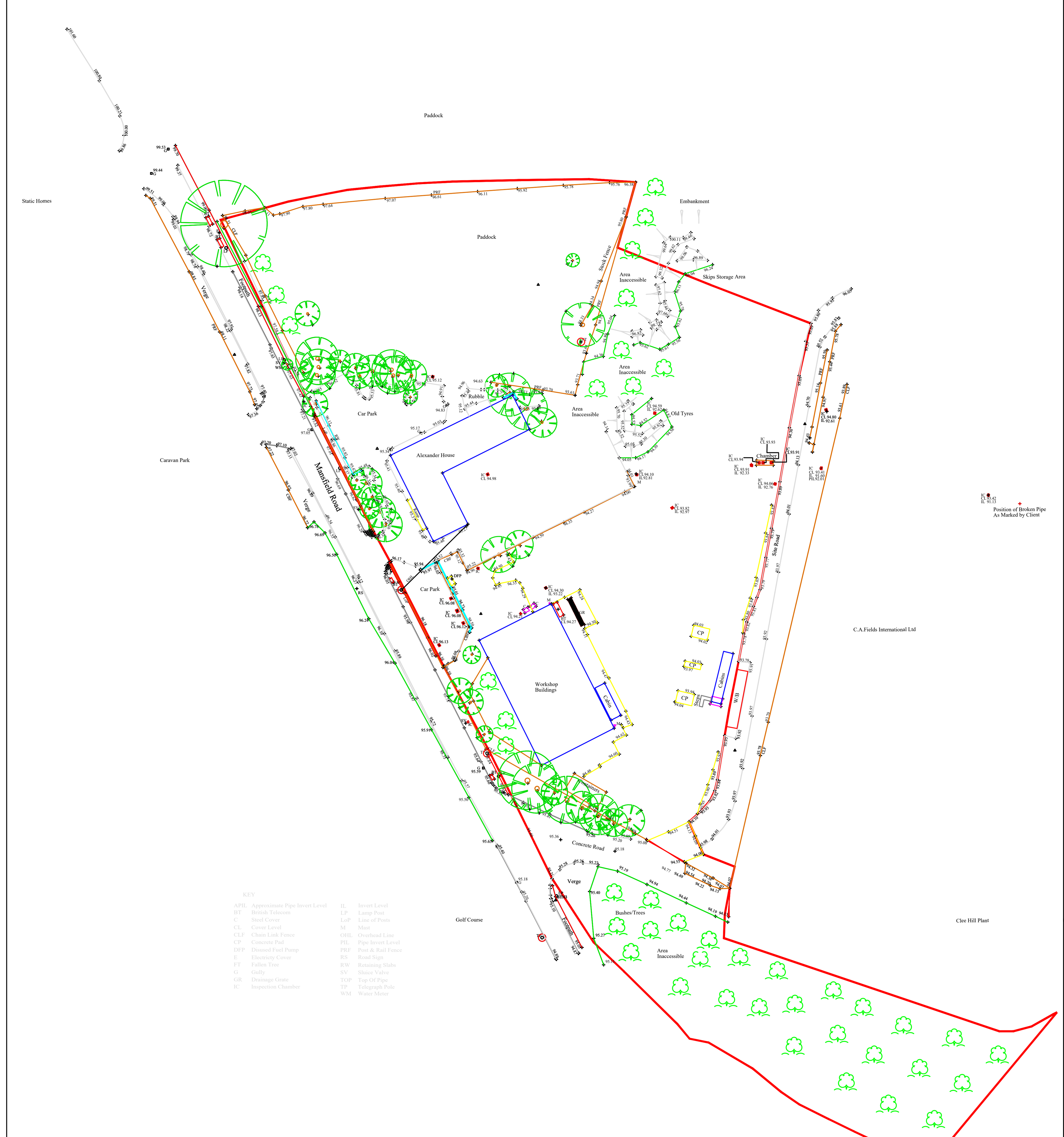
Project number — Project name

Description
G.A. Stock piles
Recycling Centre, Corbriggs

Drawing number: 12800_004 — Index: D — Sheet/Number: 1/2

Sub Category . Division .
Process . Subprocess .

Proposed site layout



JF Brown Topographical survey
Drawing CB23X9D

Legend

- Perimeter fence - Linear: 557m Area : 16,450m²
- Purchased land boundary
- Quarantine area & overnight parking for HGV & mobile plant
- Processing plant
- Overnight parking for HGV & mobile plant

PHASE 2

KRONOSPAN STATUS
Date 17.10.2022

STATUS		WAITED COMMENTS	
By	KRONOSPAN	Deadline	YYYY-MM-DD
Date	YYYY-MM-DD	By	.....
By		By	.....
		By	.....

DISTRIBUTION		WAITED APPROVAL	
Date	YYYY-MM-DD	Deadline	YYYY-MM-DD
Attn	#####	By	
Cc1		By	
Cc2		By	....
Cc3		WARNING	
Cc4		Not receving comments and / or approval within above deadlines, the drawing is intended as "APPROVED" under full resposibility of the listed commenters and / or approvers.	
Cc5			
Cc6	....		

CERTIFIED Date YYYY-MM-DD

Index	Modification	Date	Name
E	Stock pile layout	17.10.2022	A. Hilditch
D	Purchase land boundary updated	10.10.2022	A. Hilditch
C	Position of purchase land boundary updated.	07.10.2022	M. Welch
B	Paddock concrete wall amendment	06.10.2022	A. Hilditch
A	Paddock concrete wall amendment	03.10.2022	A. Hilditch

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Status

Xylo Technologies AG
Rütihofstrasse 1
CH-9052 Niederteufen
Schweiz

Technology
Kronospan Ltd
Maesgwyn Farm
LL14 5NT Chirk, Wrexham
United Kingdom

	Date	Name
Project leader	31.05.2022	J. Arkley
Drawn	31.05.2022	A. Hilditch
Checked	30.09.2022	C. Emery

Size: A1
origin
Scale: 1:200 1:100
Norm: ISO

Project number
Project name

Description
G.A. Stock piles
Recycling Centre, Corbriggs

Drawing number: 12800_004
Index: E
Sheet/Number: 1/2

Sub Category .
Division .
Process .
Subprocess .

APPENDIX 1

F001 – Daily Site Inspection Form

DAILY SITE INSPECTION FORM

WEEK STARTING:	

DAILY SITE INSPECTION		DAY							NOTES / REFERENCE
		M	Tu	W	Th	F	Sa	Su	
SITE ENTRANCE / NOTICE BOARD									
SECURITY - PERIMETER FENCING & GATES									
SECURITY - PORTACABINS & STORES									
EXTERIOR CONDITION - PORTACABINS & STORES									
INTERIOR CONDITION - OFFICES									
INTERIOR CONDITION - STORES									
INTERIOR CONDITION - WELFARE FACILITIES									
WEIGHBRIDGE									
GENERAL HOUSEKEEPING									
FUEL TANK / BUND									
SITE ROADS / SURFACES									
DRAINAGE (CATCH PIT & INTERCEPTOR)									
WASTE STORAGE									
WASTE TYPES: - QUANTITY - QUALITY	Unprocessed Wood								
	Woodchip								
	Wood Fines								
	Ferrous Metal								
	Non Ferrous Metal								
	General Waste								
	Quarantine Area								
AMENITY CHECKS:	Debris / Litter								
	Dust								
	Noise / Vibration								
	Odour								
	Pests / Vermin								
SPILL KITS									
FIRE EXTINGUISHERS (Weekly)									
FIRE ALARM SYSTEM TEST (Weekly)									(All radios working)
FIRST AID KITS									
OTHER									
INSPECTION CARRIED OUT BY:									
FIREWATCH COMPLETED BY:									

NOTES / ACTIONS (CONTINUE ON A SEPARATE SHEET IF NECESSARY):

CHECKED BY:		SIGNATURE:	
POSITION:		DATE:	
Sheet		*of*	

DAILY SITE INSPECTION FORM	**WEEK STARTING:**	

NOTES/ACTIONS (CONTINUATION SHEET):

CHECKED BY:		SIGNATURE:	
POSITION:		DATE:	
Sheet		*of*	

APPENDIX 2

F003 – Amenity Complaint Form

AMENITY COMPLAINT FORM

REFERENCE NUMBER:

DATE & TIME REPORTED TO SITE:		
PERSON REPORTING	NAME	
	ADDRESS	
	TELEPHONE	
	EMAIL	
DATE & TIME COMPLAINT RECEIVED:		(If different to above)
PERSON MAKING COMPLAINT	NAME	(If different to above)
	ADDRESS	(If different to above)
	TELEPHONE	(If different to above)
	EMAIL	(If different to above)
NATURE OF COMPLAINT:		(eg. debris, dust, litter, noise, odour, pests, vibration)
DATE & TIME OF INCIDENT:		
WEATHER DURING INCIDENT	GENERAL CONDITIONS	
	WIND SPEED & DIRECTION	
ROOT CAUSE IDENTIFIED?		Y / N | Reference (if applicable)
REMEDIAL ACTIONS:		

NOTES / CONTINUATION:

COMPLAINT RECEIVED BY:	
COMPLAINT ACTIONED BY:	
COMPLAINT ESCALATED TO:	(If applicable)

APPENDIX 3

F002 – Site Diary

SITE DIARY

DAY: Weekday
DATE: DD / MM / YYYY

WEATHER:	TIME		
	GENERAL CONDITIONS		
	WIND SPEED & DIRECTION		
OVERVIEW OF SITE ACTIVITIES:			
ACTIONS RESULTING FROM INSPECTIONS:			
FUGITIVE EMISSION IDENTIFIED?		Y / N	Time & duration, source
			Remedial actions taken / arranged
COMPLAINTS RECEIVED?		Y / N	Reference (if applicable)

WEATHER FORECAST: (TOMORROW)	GENERAL CONDITIONS	
	WIND SPEED & DIRECTION	
	PRE-EMPTIVE MEASURES	

DIARY COMPLETED BY:	
TCM:	

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Caulmert
engineering environmental planning

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