Dust Management Plan

MW Surfacing Limited

Owl Barn,
Norwich Rd,
Besthorpe,
Attleborough
NR17 2LA

PROVIDING SOLUTIONS, ENSURING COMPLIANCE

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Contents

1. Introduction 1
2. Relevant legislation 2
3. Site location and sensitive receptors 3
4. Operations at the Site 6
5. Dust management and mitigation 8
6. Cessation of Operations for Dust Mitigation 17
7. Monitoring 19
8. Actions when an alarm is triggered 20
9. Reporting and complaints response 21

Figures

Figure 3.1 Wind rose from Hepworth Weather Station 3

Tables

Table 3.1: Sensitive Receptors within 1km of the Site boundary 4
Table 4.1: Potential of waste types to produce dust emissions 7
Table 5.0.1: Source-pathway-receptor routes 9
Table 5.0.2: Mitigation Measures 11
Table 6.1 Estimating the magnitude of risk 17
Table 6.2 Temperature 17
Table 6.3 Risk matrix for warm weather 17
Table 6.4 Risk matrix for cool weather 18
Table 6.5: Action required for each level of risk 18

Drawings

Permit Boundary Plan	Drawing No.	23/019d 001
Sensitive Receptors Plan	Drawing No.	23/019d 002
Site Layout Plan	Drawing No.	23/019d 003

Appendices

Appendix 1	Inspection Checklists
Appendix 2	Complaints Form

1. Introduction

1.1. Westbury Environmental Limited has prepared this Dust Management Plan on behalf of MW Surfacing Limited (the Operator) in relation to waste operations.

1.2. The waste treatment activities include the handpicking, separation, screening, crushing, washing and blending of waste at Owl Barn, Norwich Rd, Besthorpe, Attleborough, NR17 2LA (Site).

1.3. The Site extends to an area of approximately 1.3 hectares. The location and extent of the Site is shown in the Permit Boundary Plan, Drawing No. 23/019b 001.

1.4. This Dust Management Plan provides information on the sources, risks and mitigation measures related to the potential of dust from the proposed changes to waste operations on the Site.

Content of the Dust Management Plan

1.5. This Dust Management Plan will form part of the Environmental Management System (EMS) for the Site. Procedures and Forms referenced within this Dust Management Plan will be included within the EMS. Completed forms (records) will be kept, as required by conditions included in an Environmental Permit.

1.6. This Dust Management Plan is structured as follows:

- Section 2 provides a summary of the relevant legislation and guidelines.
- Section 3 provides information relating to the Site setting, including the location of the Site and nearby sensitive receptors.
- Section 4 provides a summary of the operations carried out on the Site and the delivery of material to the Site.
- Section 5 provides information on the site management and the mitigation measures employed at the Site.
- Section 6 provides a risk matrix for the cessation of dust generating activities.
- Section 7 provides information on how dust emissions are monitored at the Site.
- Section 8 provides a summary of what happens when an alarm is triggered.
- Section 9 provides a description of how complaints can be made and how they are addressed by the site management.

2. Relevant legislation

2.1. The Air Quality Strategy (AQS) for England, Scotland, Wales and Northern Ireland fulfils the requirement under Part IV of the Environment Act 1995 for a national air quality strategy which sets out policies for improving ambient air quality and keeping these under review. The first strategy, the National Air Quality Strategy (NAQS), was published in March 1997. In January 1999, proposals to amend the strategy were put out for consultation and a consultation document was produced. Following consultation, a revised version of the strategy was published in January 2000. This was further revised in 2007 and has not been revised since this date.

2.2. The AQS provides a framework for air quality control through air quality management and air quality standards and objectives for different pollutants (including particulate matter). These air quality standards and objectives were transposed into English Law by the Air Quality (Standards) Regulations 2010.

Air Quality Management Area (AQMA)

2.3. The system of local air quality management (LAQM) was introduced under the Environment Act 1995. LAQM requires local authorities to periodically review and assess the current and future quality of air in their areas. Where it is determined that an air quality objective is not likely to be met within the relevant period, the authority must designate an AQMA.

2.4. The Site is located within Breckland Council AQMA that monitors Nitrogen Dioxide emissions.

Low Emission Zone (LEZ)

2.5. A LEZ is an area that has restrictions on the type and age of vehicles permitted in it, therefore, vehicles emitting high levels of pollution can be prevented from entering and operating within the zone.

2.6. The Site is not located within a LEZ.

3. Site location and sensitive receptors

Site Location

3.1. The Site is located next to the Attleborough Bypass (A11), with agricultural land to its west, residential properties to the north and east and the A11 runs parallel to the southern boundary, see Drawing No. 23/019b 001 Permit Boundary Plan.

3.2. The Site is located at National Grid Reference TM 06636 96965, approximately 900 metres north east of Attleborough.

3.3. The Site extends to an area of approximately 1.3 hectares.

Meteorology

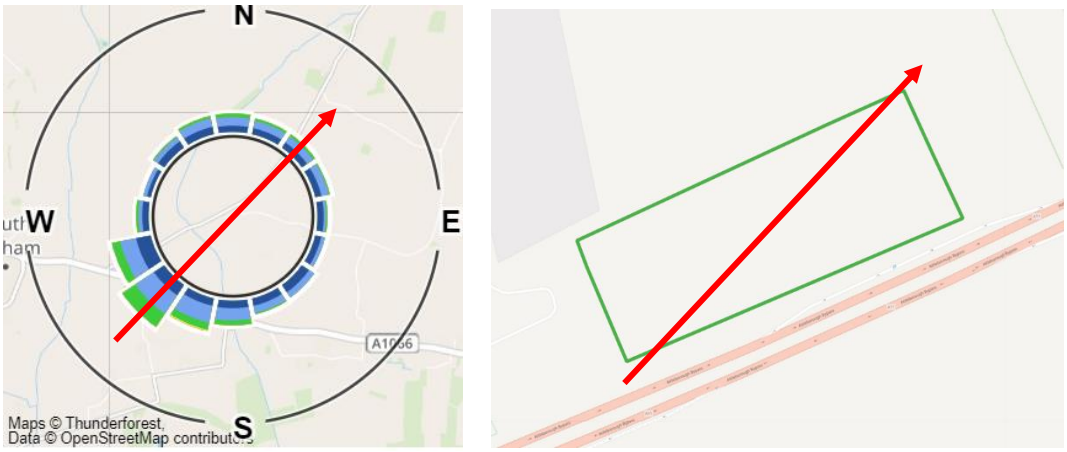
3.4. Unlike many other atmospheric pollutants, the generation of dust is particularly dependent upon weather conditions.

3.5. The prevailing meteorological conditions at any site will be dependent upon many factors, including its location in relation to macroclimatic conditions as well as more site specific, microclimatic conditions. The most significant meteorological factor is the predominant wind direction and wind speeds, and consequently data has been collected regarding the predominant wind speeds and directions appropriate to the Site.

3.6. Wind speed and direction data have been obtained from Hepworth weather station for the period from April 2013 to August 2023. Hepworth weather station is located approximately 20km southwest of the Site. This observing station has wind speed and direction data appropriate for characterisation of the wind climate at the Site, see **Error! Reference source not found.**. The referenced data shows that the predominant wind direction is from the south, and southwest.

Figure 3.1 Wind rose from Hepworth Weather Station

Arrow indicates predominant wind direction



Sensitive Receptors

3.7. This Dust Management Plan identifies all types of receptors within 1km of the Site that may be sensitive to dust emissions.

3.8. Locations with a high sensitivity to dust for this Dust Management Plan include City or Cambridge brewery located north east

3.9. The distance from the Site boundary to the sensitive receptor plays an important role in the potential impact experienced from airborne dust. Concentrations of airborne dust reduce significantly further away from the source.

3.10. Due to the nature of the materials being handled on this Site the particle size of the dust emitted is of intermediate to large particles. Therefore, it can be concluded that these particles are highly likely to be deposited within 250m of the source.

3.11. The direction and distances from the boundary of the Site to the boundary of sensitive receptors are provided in Table 3.1, see Sensitive Receptors Plan, Drawing No. 23/019b 001.

Table 3.1: Sensitive Receptors within 1km of the Site boundary

Ref	Receptor	Description	Direction from Site	Approximate Distance from Site Boundary to receptor boundary (m)
1	Deciduous woodland	Woodland	North	0
2	Residential Properties	Residential	North west	5
3	A11 Attleborough Bypass	Infrastructure	South	25
4	Residential Properties	Residential	North	100
5	Walnut Farm Fisheries	Commercial	South East	100
6	Residential Properties	Residential	North East	200
7	City of Cambridge Brewery	Commercial	North East	210
8	Besthorpe Plant Centre	Commercial	North	220
9	A11 services (westbound)	Commercial	East	240
10	Besthorpe Motocross Track	Recreational	South West	260
11	A11 services (eastbound)	Commercial	East	300
12	Moated site and earthworks	Scheduled Monument	South	480
13	Oakleigh Court	Residential	South West	890

3.12. The Site is located within a predominantly rural location, with residential receptors to the north/north east and agricultural land to the west and south.

3.13. The site is screened by mature trees and vegetation along its northern, eastern and southern boundary.

3.14. Due to the predominant wind direction from the south-southwest, it is considered that receptors located north-northeast of the Site are at greater risk of experiencing nuisance from dust emissions from the Site. Receptors to the north-northeast of the Site include residential and commercial properties.

3.15. A three metre high bund runs along the northern boundary of the Site. This will act as a barrier to dust emissions, reducing dust particles that reach nearby receptors.

3.16. The closest residential properties (5m north) of the Site are less likely to experience nuisance from dust due to the predominant wind direction likely to transport dust emissions away from these receptors.

3.17. The mitigation measures discussed in Section 5 of this Dust Management Plan will limit the likelihood of dust emissions reaching these sensitive receptors.

Other Dust Sources

3.18. The Site is partially surrounded by agricultural land which could be a potential source of dust emissions at certain times of the year when work is being carried out on the fields.

3.19. Besthorpe Motor Cross track is likely to produce dust during dry periods when it is in use.

4. Operations at the Site

4.1. Waste will be delivered onto the Site by Heavy Good Vehicles (HGV's) or Road Sweeper Vehicles.

4.2. The majority of waste being brought on to Site will come from road sweeper vehicles, the wet nature of this waste will significantly reduce the risk of dust generation.

4.3. Waste will either be deposited in stockpiles or bays on Site depending on the waste type, prior to waste being processed.

4.4. Construction and demolition waste will be stored in a central stockpile within the Site boundary on hardstanding.

4.5. Waste material brought onto Site by road sweeper vehicles will be stored on an impermeable surface. Waste water and sediment will be emptied into an impermeable pit adjacent to the wash plant and the solid waste will be stored in a stockpile contained by concrete Lego blocks, see Drawing No. 23/019b 003 Site Layout Plan.

Overview of Waste Operations

4.6. Specific operations to be carried out on the Site are listed below with further information regarding the potential for these activities to cause dust emissions:

- Vehicle Movements
    - The movement of vehicles within the Site has the potential to cause dust emissions, particularly in dry and windy conditions.
    - Mud could be tracked out of the Site by vehicles potentially causing dust emissions from the road surface.
- Waste Treatment Activities
    - Screening
    - Crushing
    - Handpicking
    - Washing
- Waste and Aggregate Storage
    - Waste and recycled aggregate products will be stored in stockpiles within the Site.
    - Waste and aggregate stockpiles have the potential to cause dust emissions from wind whipping.

Site Layout

4.7. The proposed layout of the Site is shown on the Site Layout Plan, Drawing No. 23/019b 003.

4.8. Incoming waste will be tipped off directly on to the ground within the waste storage area of the Site. The waste storage area on the site is located in the northeast area of the proposed permit boundary, see Drawing No. 23/019b 003 Site Layout Plan.

4.9. Waste (except road sweeping waste) will be stored in a stockpiles within the waste storage area on hardstanding, see Drawing No. 23/019b 003 Site Layout Plan. Incoming wastes may be separated into different stockpiles depending on the nature of the waste. Road sweeping waste will be stored as a stockpile on an impermeable surface with sealed drainage.

4.10. Road sweeping waste will be contained within a bay constructed from concrete Lego blocks.

4.11. Recycled aggregates will be also stored in stockpiles within the waste storage area. Stockpiles of recycled aggregates will be stored separately to the waste to ensure no cross contamination.

4.12. There are two wheel wash facilities located on the Site, one at entrance/exit where all vehicles exiting the Site can safely access it and one near the wash plant. The wheel wash facilities on Site consists of pressure washers manually operated by drivers when exiting the Site.

Plant and Equipment

4.13. The following equipment will be used on the Site for the waste operations:

- Screener,
- Crusher,
- Excavator,
- Wash Plant

4.14. All the plant and equipment used on the Site will be subject to maintenance checks in accordance with the procedures within the EMS.

4.15. All plant will be operated in a proper manner with respect to minimising emissions, for example, switching off plant when not in use and no needless revving of engines etc. The Operator will implement a policy of replacing older machinery with new, lower emission machinery as it becomes available and as the business development allows.

Waste - Dust Potential

4.16. The waste types to be accepted at the Site that have a significant potential to cause dust have been identified in the table below. These have been assigned a “low”, “medium” or “high” risk level for the potential to generate dust emissions.

Table 4.1: Potential of waste types to produce dust emissions

Waste types	Processes waste type subjected to	Dust potential
Concrete, bricks, tiles, , etc.	Storage	Low
	Handling and treatment	Medium
Soils (silty, sandy, clayey), residual waste from screening processes.	Storage	Medium
	Handling and treatment	High
Glass	Storage	Low
	Handling and treatment	Low
Sweeper residues	Storage	Low
	Handling and treatment	Low

5. Dust management and mitigation

Responsibility for Implementation of the Dust Management Plan

5.1. The Site Manager is responsible for the implementation of the requirements of the Dust Management Plan and for ensuring that the mitigation strategies in place are adhered to. When the Site Manager is unavailable to oversee the implementation of dust suppression measures, a suitably experienced Site Operative is delegated responsibility by the Site Manager.

5.2. This Dust Management Plan will be reviewed every four years or when a change in operations is deemed to have a potential effect on increasing dust emissions. The review process will amend any mitigation measures that have been identified as areas for improvement in reducing dust emissions on Site.

5.3. All staff members have received the necessary training to deliver dust suppression measures detailed within this Dust Management Plan. All staff will be given training on the EMS for the Site, which includes a Dust Procedure. All staff on the Site will be trained on the Dust Procedure which includes details regarding mitigation measures and monitoring/recording visual inspections. Where new dust suppression measures are to be implemented, training will be provided to ensure staff remain competent.

Sources and Control of Fugitive Dust Emissions

5.4. Table 5.0.1 details the potential sources of dust on the Site and which mitigation measures are implemented in order to break the source-pathway-receptor routes for dust emissions.

5.5. Table 5.0.2 lists the mitigation measures to control dust emissions at the Site.

Table 5.0.1: Source-pathway-receptor routes

Source	Pathway	Receptor	Type of Impact	Where relationship can be interrupted
Mud/Litter	Transportation of mud on wheels and vehicles, then mud dropping off wheels/vehicles when dry. Litter falling off vehicles entering and leaving the Site.	Norwich Road and other public highways.	Mud on Norwich Road and other local roads. Resuspension of mud as airborne particulates.	Site is dampened down by hoses connected to road sweeping vehicles when overly dry or dusty conditions present. The Site is subject to checks in accordance with the Inspection Checklists. If it is observed that mud is building up on the surface of the Site access road then this will be cleared using a road sweeper, or similar equipment, to prevent mud being tracked out onto the highway. The local highways are subject to regular inspections in accordance with the inspection Checklists. If mud is observed to have been tracked off site on to the local highways, then a road sweeper will be deployed to clean the affected road. A road sweeping vehicle is available and deployed when necessary to ensure no build-up of mud on the public highways and minimise the generation of dust. The wheel wash facility will be used by all vehicles exiting the Site to avoid mud being tracked out of the site. Vehicles delivering waste are sheeted. The waste imported does not contain significant amounts of litter / debris. The Site access road, see Drawing No. 23/019b 003 Site Layout Plan, will be swept regularly to prevent mud being tracked off Site.
Vehicle / Plant movements	Atmospheric dispersion	Surrounding sensitive receptors including residential properties.	Airborne particulates and build-up of dust on surfaces of site and local roads.	The Site is subject to regular housekeeping, see Appendix 1 Inspection Checklist. The wheel wash facility will be used by all vehicles exiting the Site. The access roads will be regularly checked and cleared.

				Site surfacing will be dampened down when necessary to reduce dust emissions.
Conveyor belts on the crusher, screener and wash plant.	Atmospheric dispersion of dust produced by movement of materials within equipment.	Surrounding sensitive receptors.	Airborne particulates and build of dust.	Spray bars are integrated on the waste treatment equipment used on Site (crushing). These spray bars are located over the top of conveyors to reduce the risk of dust emissions. Dust emissions from the wash plant are expected to be low given the wet nature of the activity. Water sprays will be used to dampen down the surface of the waste treatment and storage area to minimise dust emissions. Mobile bowsers will be used to supply this water. Waste will be dampened down prior to treatment when necessary to minimise dust generation.
Tipping, treatment, and storage of wastes. Stored waste (outside of operational hours)	Atmospheric dispersion	Surrounding sensitive receptors	Airborne particulates and build of dust.	When moving materials, drop heights from equipment and vehicles will be kept to a minimum at all times to minimise the risk of wind entrapment causing dust emissions. Operations may be temporarily ceased in accordance with the Risk Matrix presented in Section 6. The height of waste stockpiles will be kept below the height of the perimeter bund located along the northern boundary of the Site, see Drawing No. 23/019b 003 Site Layout Plan To minimise the risk of wind whipping of waste stockpiles causing dust emissions outside of operational hours, weather conditions will be assessed at the end of the day to identify if stockpiles need to be sprayed down before operatives leave the Site. Road sweepers will be used to dampen down waste storage stockpiles.

Table 5.0.2: Mitigation Measures

Mitigation Measure	Description / Effect	Use on Site	Trigger for implementation	How is it implemented?	Further mitigation if not effective
Preventative Measures					
Site speed limit, 'no idling' policy and minimisation of vehicle movements on Site.	Reducing vehicle movements reduces dust emissions from the Site. Enforcement of the speed limit and limiting movements will reduce the chance and amount of re-suspension of dust by vehicle wheels.	There is a no-idling policy in place on the site for vehicles. Vehicle movements will be minimised by ensuring that the double handling of materials is avoided where possible. A 5mph speed limit is enforced on the entire Site.	5mph speed limit signage. Enforcement of speed limit by Site Manager and frequent reminders by Site operatives.	These measures will be implemented by staff training on the EMS and speed limit signs on the Site.	If excessive dust emissions are continued to be observed leaving the Site boundary, then the further mitigation measure(s) will be triggered. If there is mud on the public highway, then a road sweeper will be available and deployed to clean the surface. If excessive dust emissions from vehicle movements continue after these measures, then operations shall cease. The Site access road, see Drawing No. 23/019b 003 Site Layout Plan, will be swept regularly to prevent mud being tracked off Site.
Minimising drop heights for waste.	Minimising the height at which waste is dropped should reduce the distance over which dust could be blown and dispersed by winds and reduces the chance of dust cloud generation from the depositing material.	The EMS will require that the handling of waste material on Site should be minimised by avoiding double handling where possible. Staff will be trained with regard to minimising drop heights.	This measure will be implemented whenever the Site is operational i.e. whenever material is being moved.	By plant operators lowering buckets, shovels, conveyors etc. on the equipment being used to move potentially dusty materials.	Hoses will be available on Site to dampen surfaces and stockpiles to reduce dust generation. If excessive dust emissions continue after these measures,

Mitigation Measure	Description / Effect	Use on Site	Trigger for implementation	How is it implemented?	Further mitigation if not effective
					then operations shall cease.
Good housekeeping	Having a consistent, regular housekeeping regime that is supported by management, will ensure the Site is regularly checked and issues remedied to prevent and remove dust build up.	The EMS implemented on the Site will have a specific procedure for enforcing good housekeeping. On-site litter will be collected and disposed of daily by a Site Operative to keep the Site tidy. Due to the presence of hedging/trees around the perimeter of the Site there is little risk of litter from the waste operations leaving the Site.	These measures will be implemented whenever the Site is operational.	Good housekeeping is implemented by following the housekeeping procedure within the EMS and by carrying out site inspections. Details of housekeeping checks are included in the Inspection Checklists, see Appendix 1 Inspection Checklists. Completed Maintenance Checklists are reviewed by the Site Manager on the day that they are completed.	If excessive dust emissions are continued to be observed leaving the Site boundary, then the further mitigation measure(s) will be triggered e.g., dampening down of surfaces and stockpiles, temporarily ceasing certain operations.
Wheel washing facility	Vehicles exiting the Site will use the wheel wash to minimise the tracking of mud out on to the access road and local highway.	All vehicles exiting the Site will be required to use the wheel wash facility. The wheel wash facility is located on the access road so can be safely accessed by all vehicles.	All drivers will ensure vehicles are cleaned prior to leaving the Site.	All exiting vehicles will be directed to the wheel wash facility.	If the wheel wash is ineffective, road sweepers will be deployed to clear the access track and local highway of any mud.
Sheeting of vehicles	Prevents the escape of debris, dust and particulates from vehicles as they travel.	The EMS will state that all vehicles entering / exiting the Site must be sheeted to minimise the likelihood of dust emissions. Excessively dusty loads will not be accepted onto the Site.	Loading of potentially dusty materials on to a vehicle will be followed by closing of the sheet covers on that vehicle. Visual observation of incoming vehicles will take place. All vehicles carrying waste to the site will be sheeted at all times unless being loaded or unloaded.	The sheeting equipment will be activated and checked to ensure proper coverage before the vehicle is allowed to leave the site. Incoming vehicles that are not sheeted will be rejected from the site or sheeted immediately.	If excessive dust emissions are continued to be observed leaving the Site boundary, then the further mitigation measure(s) will be triggered. Materials may be dampened to minimise dust emissions.
Ceasing operations	Mobilisation of dust and particulates is likely to be	During exceptionally dry and/or windy conditions, if any operations /	If excessive dust is being generated by the	The Site Manager makes the decision to cease	N/A

Mitigation Measure	Description / Effect	Use on Site	Trigger for implementation	How is it implemented?	Further mitigation if not effective
during high winds and/or exceptionally dry conditions.	greater during periods of strong winds or exceptionally dry conditions and hence ceasing operation at these times may reduce peak pollution events.	Site movements cause or are likely to cause visible dust emissions beyond the Site boundary, or if abnormal dust emissions are observed within the Site, site waste operations may be suspended to avoid further dust emissions. The weather conditions at the Site will be considered and recorded at the start of each working day so that the day's work may be planned to take in regard any potential dust emissions. If the wind speed and direction are likely to increase the risk of nuisance to neighbouring receptors, then operations may be temporarily stopped. There is no specific wind speed limit and/or no specific criteria for this to occur, as dust is dependent on other conditions such as rain. The Site Manager will decide whether to cease operations as a result of weather conditions. This decision is based on a combination of factors, including those mentioned above. The conditions are recorded on the Inspection Checklists. The record includes an overall description of the weather conditions including, but not limited to, wind strength (e.g. windy, not windy), wind direction (e.g. towards northern boundary) and rain.	operations, then the Site Manager will notify staff and operations may be temporarily ceased. Operations commence once the wind has subsided and/or the area is dampened down. Prevailing weather condition monitoring (Visual observation) including wind strength, wind direction and rainfall. This monitoring will be recorded on the Inspection Checklists.	activities that are causing the dust emissions.	
Suppression using water	Mobile water bowser and road sweeper vehicles with hoses attached will be used to transport water to the	Hoses, attached to a water supply, will be in use at the Site to dampen surfaces and material to prevent dust emissions. The condition and	When materials are being moved / treated water/hoses and spray equipment will be	Hoses are attached to a water source (mobile bowser/road sweeper vehicle) by Site Operatives.	If excessive dust emissions are continued to be observed leaving the

Mitigation Measure	Description / Effect	Use on Site	Trigger for implementation	How is it implemented?	Further mitigation if not effective
	location where dust suppression is required. This measure can remove particles from the air and dampen down dry / dusty materials.	integrity of the hoses/sprays will be checked as part of the Inspection Checklists in Appendix 1. Mobile water bowsers may be used to allow water to be available at all locations around the Site. Road sweeper vehicles	available for use to ensure that dust emissions are prevented. When significant dust emissions are observed to be leaving the Site boundary. Visual observation will be carried out by all employees on the Site. Findings from the visual observations will be recorded on Inspection Checklists. Use of water hoses on the Site are used to minimise dust emissions unless the Site is not operational or there is wet weather.	The tap is then switched on to allow water out of the hose. Water sprays will be used to avoid / suppress dust emissions when waste is tipped off from vehicles and when this material is moved to the waste storage stockpile. Water sprays will also be used when waste is removed from the stockpile to be loaded into the crushing, screening and wash plant.	Site boundary, then the further mitigation measure(s) is triggered. Cease operations causing the dust emission.
Remedial Measures					
Road sweeper	Removes mud/debris from Norwich Road and other public highways, reducing the potential for dust emissions from vehicle movements in the area.	A road sweeping vehicle is available to remove mud from local roads and minimise the generation of dust when appropriate. The road sweeper will be maintained in accordance with the manufacturer's specifications. Appendix 1 Inspection Checklists will be populated with items on the Site that are required to be maintained on a scheduled basis, such as the wheel wash.	Visual observation of the state of the local roads - findings recorded on the Inspection Checklists in Appendix 1. This identifies the need for the use of the road sweeper. Constant observation by all operatives on the Site. The Site Manager will check on the state of the road at least once	The road sweeper would be deployed to clean the local roads. Site management instructs a suitably trained Site Operative to carry out the road sweeping. The Site will be swept as required.	N/A

Mitigation Measure	Description / Effect	Use on Site	Trigger for implementation	How is it implemented?	Further mitigation if not effective
		The cleanliness of roads in the vicinity of the Site entrance are checked as part of the Inspection Checklists. If the Inspection Checklist identifies a requirement for the road sweeper to be used, then a road sweeper will be deployed and operated by a suitably trained member of staff.	daily and if mud is visible on the road, that has been tracked out from the Site, then a road sweeper will be deployed.		

Other considerations:

Water availability

5.6. There is a mains water supply within the Site as well as a borehole and settlement pools, which can be used to provide water necessary for dust suppression equipment used on the site.

5.7. To prevent dust generation, site surfacing and waste may be dampened down using water from hoses attached to the mains water supply or mobile water bowsers.

5.8. Dust suppression equipment includes mobile water bowsers as well as mobile plant that can be used to dampen down stockpiles throughout the Site.

5.9. In this way, water can be supplied to all areas of the site, including the access road. Hoses and spray attachments are used to dampen materials and surfaces and to control any dust emissions.

In the event of a drought

5.10. During exceptionally dry and/or windy conditions, if any operations / site movements cause or are likely to cause visible dust emissions beyond the Site boundary, or if abnormally high dust emissions are observed within the Site, operations may be suspended to avoid further dust emissions. This will be decided by the Site Manager.

5.11. Depending on the severity of the drought conditions, restrictions may be in place on the amount of water available for use on Site from the supplier (mains water supply). The presence of an onsite borehole and settlement ponds should limit the impact of restrictions placed on mains water supply.

6. Cessation of Operations for Dust Mitigation

6.1. The following section details the assessment process to be taken when determining if activities on Site should stop to prevent significant dust emissions.

6.2. Weather conditions are monitored each working day as part of the daily inspection checklist. See Appendix 1: Inspection checklists.

Estimating Magnitude of Risk

6.3. Table 6.1 provides a matrix for estimating the magnitude of risk from a potential hazard, considering both the probability and consequences of the hazard occurring.

6.4. The magnitude of risk determines the level of management required to reduce the probability of the hazard occurring.

6.5. In this management plan, the hazard is considered to be the significant emission of dust from the Site such that it could cause nuisance to local sensitive receptors. Table 6.1 describes this Risk Matrix applied to this assessment of risk.

Table 6.1 Estimating the magnitude of risk

	Magnitude of Risk	Consequence			
		High	Medium	Low	Negligible
Probability	High	Very high	High	Medium/Low	Very low
	Medium	High	Medium	Low	Very low
	Low	High/Medium	Medium/Low	Low	Very low
	Negligible	High/Medium/Low	Medium/Low	Low	Negligible

6.6. An assessment of the most common weather conditions and their potential to generate significant nuisance dust emissions from the activities on Site has been undertaken and is presented in Table 6.2 to Table 6.4.

6.7. The risk assessment is separated into 2 sections. In table 6.2 the operator must record the temperature and then proceed to the corresponding table. Tables 6.2 and 6.4 contain all common weather conditions and their risk magnitude. Actions required for each risk category are detailed in table 6.5.

Table 6.2 Temperature

Temperature	Action
Warm (Above 18°C)	Go to table 6.3
Cool (Below 18°C)	Go to table 6.4

Table 6.3 Risk matrix for warm weather

Conditions	Probability	Consequence	Risk magnitude
Wet, low wind (<3 Beaufort)	Medium	Negligible	Very Low
Wet, medium wind (>4 Beaufort)	Medium	Low	Low
Wet, high wind (>8 Beaufort)	Low	Medium	Medium/low
Dry, low wind(<3 Beaufort)	Medium	Low	Low
Dry, medium wind (>4 Beaufort)	Medium	Medium	Medium
Dry, high wind (>8 Beaufort)	Low	High	High

Table 6.4 Risk matrix for cool weather

Conditions	Probability	Consequence	Risk magnitude
Wet, low wind (<3 Beaufort)	Medium	Low	Low
Wet, medium wind (>4 Beaufort)	Medium	Low	Low
Wet, high wind (>8 Beaufort)	Low	Medium	Medium/low
Dry, low wind(<3 Beaufort)	Medium	Low	Low
Dry, medium wind (>4 Beaufort)	Medium	Low	Low
Dry, high wind (>8 Beaufort)	Low	Medium	Medium

6.8. The action required for each level is risk is provided in Table 6.5: Action required for each level of risk.

Table 6.5: Action required for each level of risk

Risk Magnitude	Action
Low	Continued implementation of preventative mitigation measures.
Medium	Continued implementation of preventative mitigation measures. Dust emissions are likely therefore remedial measures to be employed. Relevant activities* temporarily cease if preventative and remedial measures are not proving effective in controlling the dust emission. Relevant waste activity can resume upon implementation of additional mitigation if measures are effective. Relevant waste activity can resume when the conditions no longer apply/ additional remedial mitigation is implemented and there are no significant dust emissions.
High	Continued implementation of preventative mitigation measures. Dust emissions are likely therefore remedial measures to be employed. Relevant waste activity may not be undertaken or will be temporarily ceased. Relevant waste activity can resume when the conditions no longer apply / additional remedial mitigation is effectively implemented and there are no significant dust emissions.

**Relevant activities: Activities identified as generating significant dust emissions or having the potential to generate significant dust emissions in such conditions.*

7. Monitoring

Visual Dust Monitoring

7.1. Dust emissions at the Site will be monitored by visual observation. This monitoring will take place along the northern boundary of the Site.

7.2. Visual monitoring will be undertaken during operational hours. It is expected that staff members will also check for dust emissions as they approach and leave the Site.

7.3. It will be the responsibility of every member of staff to monitor the dust emissions on the Site as they undertake their daily tasks.

7.4. Reports will be made to the Site Manager regarding dust emissions when dust is observed leaving, or about to leave, the Site boundary.

7.5. If excessive dust emissions (dust clouds) are observed, then the Site Manager will establish what is causing the excessive dust emission to be generated and take remedial action. The results of the investigation and what action was taken will be recorded and retained.

7.6. Visual monitoring checks will be carried out by a Site Operative, who will have been trained in accordance with the procedures within the EMS. Any remedial actions required will be specified and identified on the Inspection Checklists.

7.7. Visual monitoring will be undertaken at least twice a day, for a minimum of five minutes each time. They will take place at the beginning of the working day and when operations with the highest potential to produce dust are taking place. This is considered to the be the most beneficial methods to ensure that mitigation measures on Site are effective.

8. Actions when an alarm is triggered

8.1. Monitoring will be carried by visual observation and assessing whether dust emissions are excessive i.e. leaving the Site boundary.

8.2. The staff member who identified the dust generation/ emission will raise the alarm by notifying the Site Manager.

8.3. If the Site Manager confirms that dust is being generated and causing dust emissions from the Site that have the potential to cause nuisance, they will take remedial action.

8.4. Remedial measures are stated in Table 5.0.2: Mitigation Measures.

9. Reporting and complaints response

9.1. The EMS on the Site will have a procedure for responding and dealing with complaints. A complaints form will be available on Site and must be filled in and kept on file whenever a complaint is received in accordance with the EMS complaints procedure.

Engagement with the Community

9.2. The Site Notice Board will be placed at the entrance of the Site with the following information:

- The Permit holder's name (MW Surfacing Limited).
- An emergency contact name and telephone number.
- A statement that the Site is permitted by the Environment Agency
- The Environmental Permit reference.
- The Environment Agency national numbers, 03708 506506 and 0800 807060 (incident hotline).

9.3. The provision of the above information will ensure that members of the community can contact the Operator should they be concerned by dust emissions or wish to make a complaint. This also applies to any events that may happen when the Site is unmanned / not operational.

Reporting of Complaints

9.4. Should a complaint regarding dust be received by the Site, the complaint will be recorded on the Complaints Form in the EMS and investigated in accordance with the Complaints Procedure within the EMS. The Complaints Form will record who made the complaint, what the complaint was about and what has been done to resolve the issue and make sure this does not happen again. A copy of the Complaints Form is included as Appendix 2.

9.5. The Site Manager will identify what caused the excessive dust emission to be generated. This generation may have been caused by failure of site machinery or dust procedures. If the excessive dust emission has been caused by a procedure not being carried out properly, then staff will receive further training on the dust procedures and site management. If the excessive dust emission has been caused by plant failure, then the plant will be repaired as soon as possible.

9.6. All complaints will be acknowledged and investigated, with resultant actions reported to the complaint. Any complaints received by the Environment Agency relating to dust emissions from the site are dealt with on the same day.

Out of Hours Arrangements

9.7. In the event of an out-of-hours complaint or incident occurring at the Site related to dust emissions, then a Director can be contacted via phone call.

9.8. The Director can attend the Site or instruct a relevantly trained Site Operative to attend the Site in their absence. On arrival at the Site, the cause of the dust emission will be identified, and the most suitable corrective measure will be instigated.

9.9. Outside of operational hours the only potential source of nuisance dust will be wind whipped from stockpiles and the site surface. This risk of this causing a nuisance to local sensitive receptors is minimised through the waste being stored within a quarry where it is naturally screened by the quarry boundary.

9.10. At the end of each working day weather conditions are to be assessed to determine if additional spraying of stockpiles is required. These conditions include prolonged hot, dry weather (>20 degrees) and windy conditions (Beaufort scale >4). If these weather conditions present a significant risk, then waste stockpiles will be dampened prior to the site closing.

Management Responsibilities

9.11. Site staff will be responsible for dust management issues and detecting/reporting dust emissions. All members of staff will be given training on the EMS for the Site, which will include a Dust Procedure. All staff on the Site will be trained on the Dust Procedure which will include details regarding mitigation measures and monitoring/recording visual inspections.

9.12. On receipt of a complaint the Site Manager will investigate and establish the cause. The most effective corrective or preventative action must then be determined to prevent future emissions occurring. Where additional time is required in order to implement the appropriate corrective or preventative action the complainant will be contacted with details of the actions to be implemented and the estimated timescales for completion. The maximum response time for investigating the cause of the complaint and contacting a complainant will be two working days.

9.13. Should numerous complaints be received at the Site regarding the same issue, the cause of the complaint(s) will be investigated in accordance with the Accidents, Incidents & Complaints Procedure within the EMS. Operations on the Site will cease, should excessive dust emissions be seen leaving the boundary following the implementation of additional mitigation measures or when instruction from the Environment Agency to cease operations has been received.

Drawings

Permit Boundary Plan	Drawing No.	23/019d 001
Sensitive Receptors Plan	Drawing No.	23/019d 002
Site Layout Plan	Drawing No.	23/019d 003

MW Surfacing Limited

Permit Boundary Plan

Reference: 23/019b 001

Owl Barn
Norwich Road
Besthorpe
Attleborough
NR17 2LA

Scale: 1:2000

07/11/2023

Created by: JC
Checked by: TW

WESTBURY ENVIRONMENTAL

T 01952 879705 E info@westburyenv.co.uk

A Agriculture House, Southwater Way
Telford, Shropshire, TF3 4NR

W www.westburyenv.co.uk

MW Surfacing Ltd

Sensitive Receptors Plan

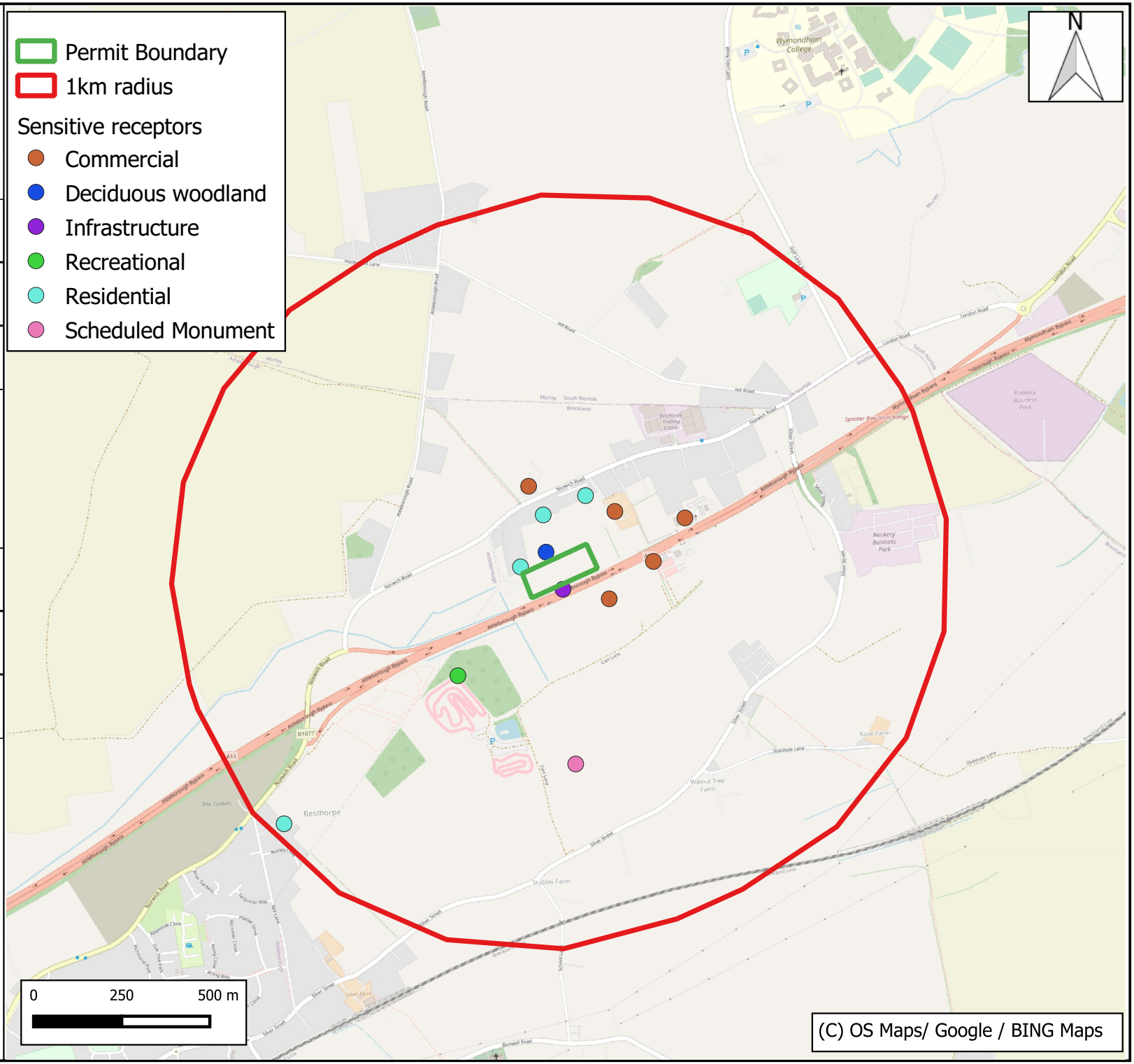
Reference: 23/019d 002

Owl Barn
Norwich Rd
Besthorpe
Attleborough
NR17 2LA

Scale: 1:15,000

06/10/2023

Created by: JC
Checked by: TW



T 01952 879705 E info@westburyenv.co.uk

A Agriculture House, Southwater Way
Telford, Shropshire, TF3 4NR

W www.westburyenv.co.uk

MW Surfacing Limited

Site Layout Plan

Reference: 23/019b 003

Owl Barn
Norwich Road
Besthorpe
Attleborough
NR17 2LA

Scale: Not to scale

25/01/2024

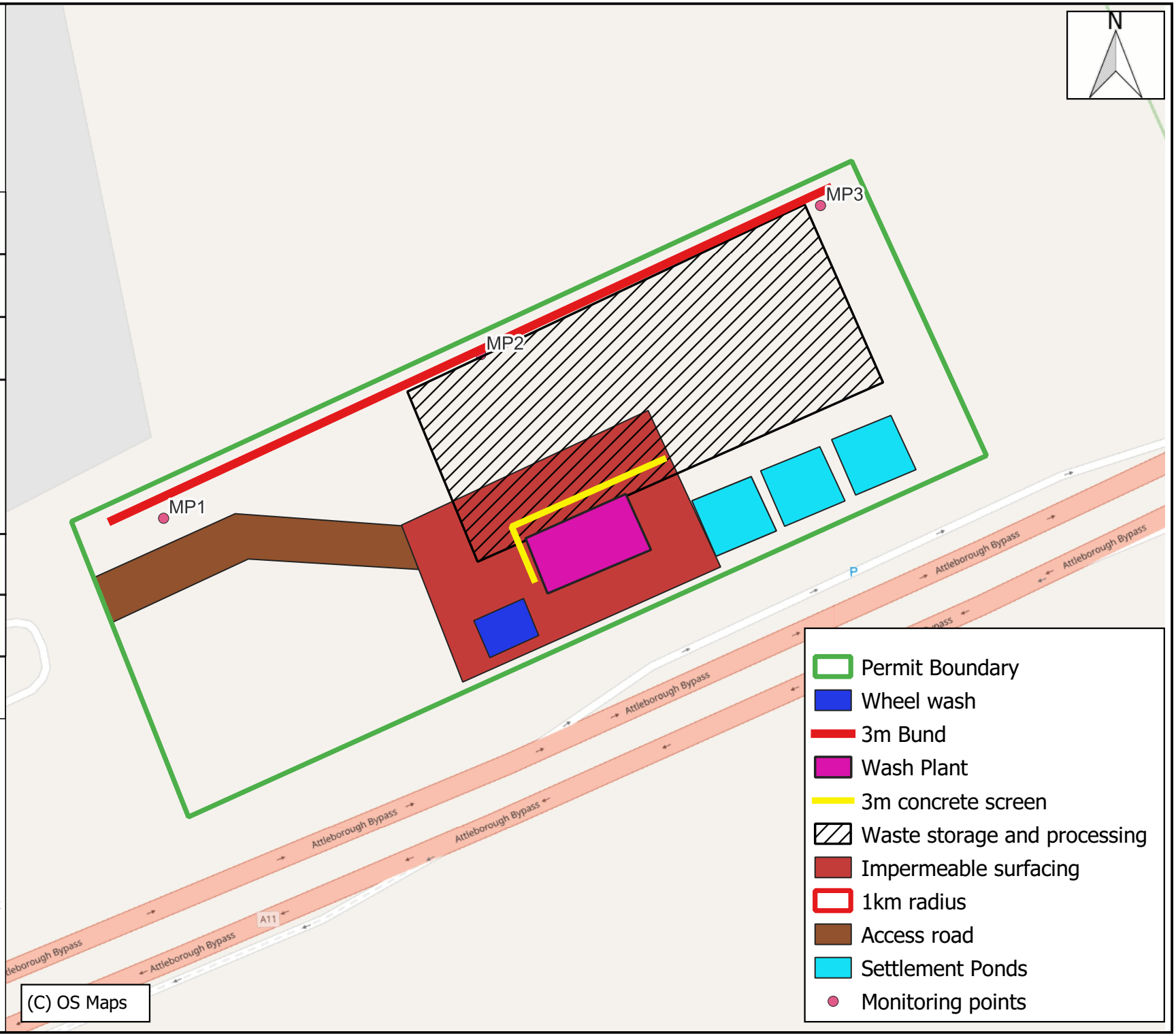
Created by: JC
Checked by: TW

WESTBURY ENVIRONMENTAL

T 01952 879705 E info@westburyenv.co.uk

A Agriculture House, Southwater Way
Telford, Shropshire, TF3 4NR

W www.westburyenv.co.uk



Appendix 1

Inspection Checklists

Daily Checklist **V.1 Sep 2023**

Item	Aspects	Checked ✓ / ✗	Comment	Remedial Action (if required)	Action Form ✓ / ✗	
					Required	Completed
Litter	Within waste operation area					
	Along Site boundaries					
	Immediately outside Site entrance and exits					
Toilet	Cleanliness and good housekeeping					
Signage	Adequate and clear					
Roads	Public highway clear of mud and debris					
Dust Emissions	No excessive dust emissions should be escaping the boundary of the Site					
Plant / Equipment	Cleanliness and good housekeeping after use					
Housekeeping inspection	Access road and Site surface clear of mud and debris.					
Weather	Absence of adverse weather conditions -wind >Beaufort scale 4 -prolonged dry and hot (20 deg) weather. (if not, follow tables 6.2a-6.2c in the dust management plan.)					
Wheel Wash	In working order					

Date: _____ Time of Check: _____ Completed by: _____ Signature: _____

Weekly Checklist

V.1 Sep 2023

Item	**Aspects**	**Checked** ✓ / ✖	**Comment**	**Remedial Action** (if required)	**Action Form** ✓ / ✖	
					Required	**Completed**
Site Security	Locks on gates working and no holes in gate.					
	No damage to boundary hedging					
Mobile bowsers/water hoses	Hoses in good condition					

Date: _____ Completed by: _____ Signature: _____

Annual Checklist

V.1 Sep 2023

Item	**Aspects**	**Checked** ✓ / ✗	**Comment**	**Remedial Action** (if required)	**Action Form** ✓ / ✗	
					Required	**Completed**
Access Road on Site	In good condition, no potholes/damage					

Date: _____ Completed by: _____ Signature: _____

Appendix 2

Complaints Form

Complaints Form **V.1 Sep 2023**

Who made the complaint? Name:	
Address:	
Phone No.:	
Date and time they made the complaint:	
What happened? What was it about?	
Was anyone else aware of this – other neighbours or your staff? If so, who?	
Did the complaint relate to your site? If so, what happened? What went wrong?	
What have you done to make sure that it does not happen again?	
Was there any significant pollution – for example: dust, odour or noise outside the site or spillage of polluting liquids onto the ground, into a drain or a watercourse?	
If there was, then you must notify the Environment Agency on 0800 807060 and any other relevant regulators. Have you done so? Yes ☐ No ☐	At what time did you phone?
You must also write or send an email to confirm this to your local Environment Agency office. Have you done so? Yes ☐ No ☐	What date did you contact?
Please print and sign our name:	