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WASTE RESOURCE MANAGEMENT



**VALENCIA WASTE MANAGEMENT LTD**

**FOXHALL LANDFILL, SUFFOLK - APPLICATION TO VARY PERMIT NUMBER  
EPR/BW2943IG**

**DUST MANAGEMENT PLAN**

**OCTOBER 2023**

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**VALENCIA WASTE MANAGEMENT LTD**

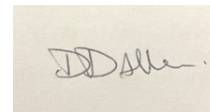
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**OCTOBER 2023**

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## DRAWINGS

FOX-MRF001	Materials Recycling Facility Layout	1:500 @ A3
ST20399-002	Foxhall MRF Receptor Plan	1:10,000 @ A3

## Document Control

Issue Date	Version	Prepared By	Key Changes
September 2023	1	DDA (Wardell Armstrong)	Original

## **1 INTRODUCTION**

### **1.1 General**

- 1.1.1 Wardell Armstrong have been instructed to prepare an application to vary the permit for Foxhall Landfill near Brightwell, Suffolk. The site is operated by Valencia Waste Management Ltd (Valencia) under permit number EPR/BW2943IG/V004.
- 1.1.2 This Dust Management Plan has been prepared as part of the variation application, to show that any dust arising from the new activities to be introduced at the site will be appropriately controlled.
- 1.1.3 This plan will be used in conjunction with other documents that form part of Valencia's Environmental Management System to ensure that the new activities are managed in a way that prevents or at least minimises pollution.
- 1.1.4 A copy of this document will be held in the site office and will be available to site staff as needed. All staff will receive training so that they are aware of the contents of the plan and of their obligations in preventing pollution caused by dust from the site.

### **1.2 Activities at the Site**

- 1.2.1 The existing landfill is permitted to accept non-hazardous commercial, industrial and household waste.
- 1.2.2 Valencia is seeking to move waste up the waste hierarchy by treating mixed non-hazardous waste arriving at the landfill to recover metals and wood for recycling. The separated metals will be taken from site to be recycled at a suitable facility. The residual waste will be placed in landfill.
- 1.2.3 This Dust Management Plan (DMP) applies to the new Material Recycling Facility (MRF). Waste treatment within the MRF will comprise of a picking line, where metals and wood will be picked out and segregated from the rest of the waste.
- 1.2.4 The waste will be unloaded, stored and treated inside a building to minimise emissions.
- 1.2.5 The site layout is shown on drawing FOX-MRF001 Material Recycling Facility Layout.

### **1.3 Air Quality Management Areas**

1.3.1 Available Air Quality Management Area (AQMA) data<sup>1</sup> shows that the Site is not within an Air Quality Management Area.

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<sup>1</sup> [https://uk-air.defra.gov.uk/aqma/details?aqma\\_ref=1569](https://uk-air.defra.gov.uk/aqma/details?aqma_ref=1569)  
ST20399/FINAL  
OCTOBER 2023

## 2 SENSITIVE RECEPTORS

- 2.1.1 The Site is not considered to be located in a particularly sensitive location in terms of proximity to residential receptors. The landfill lies to the east of the site, and the access road to the MRF runs across the north of the landfill.
- 2.1.2 The Site is situated in open countryside 8km to the east of Ipswich Town Centre. The Site is bounded to the southeast by the A12 dual carriage way and to the north by Foxhall Road. To the western side of the site is woodland and to the south of the Site the land slopes down into the Mill River Valley.
- 2.1.3 Airfield climate data available from the Met Office<sup>2</sup> indicates the predominant wind direction at the closest airfield, Stanstead, is from the southwest.
- 2.1.4 The closest residential receptor is a property which lies 370m to the northeast. Beyond that lies Sheep Drift Farm and Sheep Drift Cottage, some 610m from the Site. The closest commercial and industrial receptor is Brightwell Corner Agricultural Store and Storage Barns, located 160m to the east of the Site.
- 2.1.5 The closest protected habitat is Ipswich Heaths SSSI, the closes point is approximately 950m northwest from the Site.
- 2.1.6 The sensitive receptors are listed in Table 3.1 below. The receptors are also shown on drawing ST20399-002 Receptor Plan.

Table 3.1: Sensitive Receptors within 2km of the Site		
Receptor	Receptor Type	Distance/Direction
Brightwell Storage/ Brightwell Corner Agricultural Store	Commercial	175m, east
Brightwell Hill Plantation	Environmental	260m, southeast
Deciduous woodland	Protected species	260m, southeast
Pond	Environmental	370m, south
Residential property	Residential	370m, northeast
St John The Baptist's Church	Leisure	470m, southeast

<sup>2</sup> [Airfield Climate Statistics - Met Office](#)

Table 3.1: Sensitive Receptors within 2km of the Site		
Receptor	Receptor Type	Distance/Direction
Openreach Telecommunications school	School/Commercial	512m north
Mill River	Environmental	540m, south
Sheep Drift Farm House	Residential	610m, northeast
Martlesham Heath Residential area	Residential	610m, north
Martlesham Heath Residential area	Residential	610m, north
Foxhall Recycling Centre	Commercial	630m, west
Street Farm Cottage	Residential	660m, southwest
Dukes' Hill Wood	Environmental	700m, west
Ipswich Packaging Services	Commercial	700m, north east
A2-M Ltd. Fence contractor	Commercial	725m, north east
Tillio Race Prep Ltd, Car body shop	Commercial	750m northeast
Sheep Drift Cottage	Residential	860m, northeast
Lewis Cottage	Residential	940m, southwest
Ipswich Heaths SSSI	Protected habitat	950m, northwest
The Stables Coffee Shop and Sandwich Bar	Commercial	960m, north east
Birchwood Primary School	School	1.3km, north
Nursery cottages	Residential	1.3km, northwest
Hall cottage	Residential	1.4km, west
Playing field	Leisure	1.5km, northwest
Foxhall Hall	Residential	1.5km, west

Table 3.1: Sensitive Receptors within 2km of the Site		
Receptor	Receptor Type	Distance/Direction
Foxhall Court	Care home	1.7km, northwest
Newbourn Springs SSSI	Protected habitat	1.7km, east
Waldringfield Pout SSSI	Protected habitat	1.8km, northeast

- 2.1.7 The majority of sensitive receptors are located more than 200m away, and it is likely that most dust would settle before reaching them and dust is not expected to cause a nuisance.
- 2.1.8 Nevertheless, controls measures will be in place to ensure that any potential emissions from dust a minimised as far as possible.



### **3 ON SITE SOURCES OF DUST AND CONTROL MEASURES**

#### **3.1 Waste Deliveries**

- 3.1.1 Dust may be generated from the waste, either entrained in the wind or released during tipping off. Dust may also be disturbed from site roads by vehicle movements and particulates may also be present in vehicle exhausts.
- 3.1.2 Wastes will be delivered in enclosed or sheeted vehicles to minimise emissions in transit. After checking in at the weighbridge, vehicles will be directed to the MRF building.
- 3.1.3 The entrance road to the MRF will be provided with suitable surfacing which can be swept clean. Site roads will be properly maintained and roads will be swept as necessary to limit any build-up of dust.
- 3.1.4 Vehicles will be unloaded inside the building with the door closed.
- 3.1.5 Drop heights will be minimised to avoid raising dust.
- 3.1.6 A speed limit of 10 miles per hour on site is imposed to minimise dust being raised.
- 3.1.7 It will not be possible to manage exhaust emissions from all vehicles using the site, which may be owned and operated by third parties. Valencia has a preventative maintenance programme and will ensure that their own vehicles are regularly serviced.
- 3.1.8 The fleet will be managed to ensure that as far as possible vehicles with lower emissions are selected.

#### **3.2 Waste Types**

- 3.2.1 Wastes consisting of powders or dust are not accepted at the MRF. The purpose of the MRF is to separate mixed construction and demolition waste and mixed commercial or industrial waste.
- 3.2.2 Some dust will be present in these materials and may be released during tipping and treatment.
- 3.2.3 The site will receive and treat up to 350 tonnes of waste per day.

### **3.3 Fixed Plant**

- 3.3.1 Dust may be generated during waste treatment, particularly between transfer points and during sorting.
- 3.3.2 The fixed plant on site comprises a picking line with conveyor, as shown on drawing FOX-MRF001.
- 3.3.3 Currently there are no plans for an air extraction system. The building will be naturally ventilated and the walls and roof will provide containment for any dust arising.
- 3.3.4 As far as possible the doors will be kept closed to contain dust. The building will be equipped with fast action roller shutter doors, which will be opened to allow vehicular access. Loading and unloading will take place inside the building with the door closed.
- 3.3.5 Regular visual inspections will be made throughout the day to ensure that no significant dust is leaving the building, particularly whilst waste sorting equipment are in operation.
- 3.3.6 Plant will be switched off when not in use to minimise emissions. All plant will be included in the Preventative Maintenance Schedule and will be serviced in line with the manufacturer's recommendations.
- 3.3.7 Waste is sorted by hand so the equipment consists of conveyors and has limited potential to raise dust.

### **3.4 Mobile Plant**

- 3.4.1 Plant will be used within the MRF building to transfer waste into the picking line and for loading/unloading.
- 3.4.2 Plant will be switched off when not in use and will not be allowed to idle.
- 3.4.3 All mobile plant will be included in the preventative maintenance schedule and will be serviced in accordance with the manufacturer's recommendations to avoid excessive emissions.
- 3.4.4 Where plant is replaced, the lowest emission models will be selected where they are equally effective and the cost is not excessive.

### **3.5 Outloading**

- 3.5.1 Wastes will be loaded onto vehicles inside the building with the door closed and drop heights will be minimised.

- 3.5.2 Vehicles will be checked before leaving the site and will be cleaned as necessary to minimise dust, mud or debris being tracked onto nearby roads.
- 3.5.3 A wheel wash is available and will be used as necessary to ensure that mud, dust and debris are not tracked out of the site.
- 3.5.4 The entrance road to the MRF will be provided with suitable surfacing which can be swept clean. Site roads will be properly maintained and roads will be swept as necessary to limit any build-up of dust.
- 3.5.5 A speed limit of 20 miles per hour will be enforced on site to minimise dust being raised.

## **4 DUST AND PARTICULATE MANAGEMENT**

### **4.1 Implementation of the Dust Management Plan**

- 4.1.1 Implementation of the Dust Management Plan will be the responsibility of the site manager. The Dust Management Plan will form part of the Environmental Management System for the site. Compliance will be audited on an annual basis.
- 4.1.2 This will entail of not only a spot check but records of incidents will be reviewed and the plan will be updated to address any issues.
- 4.1.3 The plan will also be reviewed if an ongoing problem is noted with dust, that is, if breaches are regular or frequent.
- 4.1.4 All staff will be made aware of the Dust Management Plan and their responsibilities to ensure compliance. Refresher training will be given as necessary.

### **4.2 Sources and Control of Fugitive Dust/Particulate Emissions**

- 4.2.1 Table 4.1 below sets out the potential sources of dust on site and shows the measures in place to break the source/pathway/receptor linkage and minimise the impact of dust.
- 4.2.2 The main method of control is the enclosure of all MRF operations within a building, providing a barrier which breaks the link between the source and the receptor.
- 4.2.3 Water may be used to clean vehicles and for damping down if required, for example in hot dry weather. The site has a mains water supply.
- 4.2.4 To control water usage, water in the wheel wash will be recirculated. Consideration is to be given to collecting and using roof water to minimise the use of mains water.

**Table 4.1: Breaking the Source-Pathway-Receptor Linkage for Dust**

Source	Pathway	Receptor	Type of impact	Where relationship can be interrupted
Mud on site roads	Tracking dust on wheels and vehicles, then mud dropping off wheels/vehicles when dry	Mud tracked onto on Foxhall Road, potential impact on local amenity	Loss of local amenity, also consequent resuspension as airborne particulates	Remove mud from vehicles before they leave the site. Entrance road to and from the MRF to the site entrance off Foxhall Road is over 600m long. Road to be swept as necessary to prevent materials tracking out of the site. Wheel wash is available. Speed limit (20mph) in force to avoid raising dust. Damping down with water if needed, e.g. in hot dry weather, using a hose or bowser.
Debris from waste in transit	Falling off lorries	Mud tracked onto on Foxhall Road, potential impact on local amenity	Loss of local amenity, also consequent resuspension as airborne particulates	Properly surfaced road provided between MRF and site entrance. Wheel wash available. Entrance road swept as necessary to prevent materials tracking out of site. All vehicles enclosed or sheeted to prevent escape of waste.
Tipping storage and sorting of waste inside building	Escape from buildings and subsequent atmospheric dispersion	Potential impact on local amenity, local businesses and closest residential and wildlife receptors	Loss of local amenity, airborne particulates	Containment maximised with doors open only for entry/exit of vehicles. Doors directed towards landfill, away from sensitive receptors. Drop heights minimised. Damping down with water from hose, if needed, e.g. in hot dry weather.
Vehicle exhaust emissions	Atmospheric dispersion	Potential impact on local businesses and closest residential and wildlife receptors	Airborne particulates	Vehicles properly maintained and switched off when not in immediate use. Models with lower emissions to be considered when replacing vehicles.
On site plant and machinery	Atmospheric dispersion	Potential impact on local businesses and	Airborne particulates	Compliance with standards for non-road machinery regulations. Plant properly maintained and switched off when not in use.

**Table 4.1: Breaking the Source-Pathway-Receptor Linkage for Dust**

Source	Pathway	Receptor	Type of impact	Where relationship can be interrupted
exhaust emissions		closest residential and wildlife receptors		Models with lower emission to be considered when replacing plant.
Waste treatment	Escape of dust from building and subsequent atmospheric dispersion	Potential impact on local businesses and closest residential and wildlife receptors	Loss of amenity and airborne particulates	All operations take place within an enclosed building. The doors are to be kept closed as far as practicable. Drop heights minimised. Plant layout designed to keep dust operations away from the doors. Manual sorting only. Damping down with water from hose, if necessary, during hot dry weather.
Build-up of dust around the site	Escape of dust from building and subsequent atmospheric dispersion	Potential impact on local businesses and closest residential and wildlife receptors	Loss of amenity and airborne particulates	Bays emptied on a regular basis. Good housekeeping with plant, machinery, bays and other surfaces cleaned as necessary to prevent major build up of dust.

## **5 VISUAL DUST MONITORING**

- 5.1.1 Dust monitoring will be undertaken throughout the day with staff aware of the need to report any excessive dust so that the cause can be identified and resolved.
- 5.1.2 Formal monitoring will take place at least once a day with an inspection being made around the outside of the building along the site road and at the site entrance. The finding of this inspection will be recorded in the site log.
- 5.1.3 Where dust is noted leaving the site or escaping from the MRF building this will be recorded and immediately reported to the site manager. Steps will be taken to confirm the source of the dust and take remedial action.
- 5.1.4 The majority of receptors are more than 200m from the MRF, and because all activities will take place inside a building, there are currently no plans for quantitative particulate monitoring.

## **6 REPORTING AND COMPLAINTS REPONSE**

### **6.1 Recording Complaints**

6.1.1 Should a complaint be received, either from a member of the public or one of the Regulators, this will be recorded on a form prepared for that purpose.

6.1.2 The following information will be recorded when available:

- Contact details of complainant;
- Date and time of the incident;
- Nature of the incident;
- Weather conditions at the time (including wind strength and direction, any precipitation, temperature).

6.1.3 The information will be passed to the site manager or their designated deputy for action.

6.1.4 An investigation will be carried out to determine the activities taking place on site at the time of the incident and the likely cause of the dust emissions.

6.1.5 The site manager, or their deputy, will determine the measures required to prevent further significant emissions and will implement action to resolve the issue.

6.1.6 The complainant will be informed of the outcome of the investigation, the remedial measures proposed and the likely time scale for implementation (unless they have indicated that they do not wish to be contacted).

6.1.7 A record of the complaint and the actions taken will be retained on site and these records will be made available to the Environment Agency upon request.

### **6.2 Engagement with the Community**

6.2.1 Contact details for the site will be made available via the site noticeboard and the Company website. All complaints will be taken seriously and will be properly recorded and investigated.

6.2.2 The public are offered the opportunity of a liaison group and meetings are held at a frequency led by the local community.

### **6.3 Reporting of Complaints**



- 6.3.1 The responsible person receiving the complaint at the site will initially record the key details on Valencia's Incident Management System (IMS) in accordance with Valencia's Complaints, Feedback and Requests Procedure. Key information will be recorded at this time in order to facilitate further suitable investigation.
- 6.3.2 Site Management will be informed of the complaint as soon as possible, including the location, time and date of the complaint being lodged (where available).
- 6.3.3 Where there are consistent complaints regarding dust from the site of where there is a major incident and pollution is known to have occurred or to be likely to occur, the Environment Agency will be informed as soon as possible by telephone.
- 6.3.4 Written reports will subsequently be provided to the Environment Agency in line with the permit conditions.
- 6.3.5 The complaint log will be reviewed on an annual basis to assess any trends or common issues. Where necessary the Dust Management Plan will be updated as a result, and targets for improvement will be put in place.
- 6.3.6 A date will be set for when corrective action should be completed and actions will be reviewed and recorded to demonstrate that improvements have been implemented as required.

## **7 SUMMARY**

- 7.1.1 To summarise, a copy of the Dust Management Plan will be retained on site and will be made available as required to site staff.
- 7.1.2 The site manager will take responsibility for the implementation of the plan and will ensure that staff receive initial training and refresher training as required to ensure compliance. The site manager will also review the plan on an annual basis and ensure it is revised as and when required.
- 7.1.3 The MRF does not have sensitive receptors in close proximity and all activities are to be carried out inside the MRF building. For that reason, no specific abatement has been installed and no quantitative monitoring is proposed. This will be kept under review and may change if any dust related issues occur.
- 7.1.4 The main control for dust is that all operations take place inside a building, and as far as possible the door will be kept closed to limit the opportunity for fugitive emissions.
- 7.1.5 Vehicles entering or leaving the site must be sheeted or enclosed and should make use of the wheel wash available when required.
- 7.1.6 Good housekeeping measures will be in place with site roads properly maintained and swept as needed. The building and plant will be cleaned where necessary to prevent a build-up of dust.
- 7.1.7 All plant and equipment will be properly maintained to minimise emissions.
- 7.1.8 Daily visual monitoring will take place around the site to ensure that there are no visible emissions of dust.
- 7.1.9 Where significant dust emissions are noted by site staff or where a complaint is received the cause will be investigated and resolved.

## **DRAWINGS**



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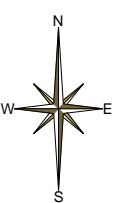
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DRAWING NUMBER <b>FOX-MRF001</b>	
TASK NUMBER 21485	
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O/DRN R.L.Meaden	R/DRN
O/DATE 03.08.2023	R/DATE
Q/APP L.Edmonds	R/APP
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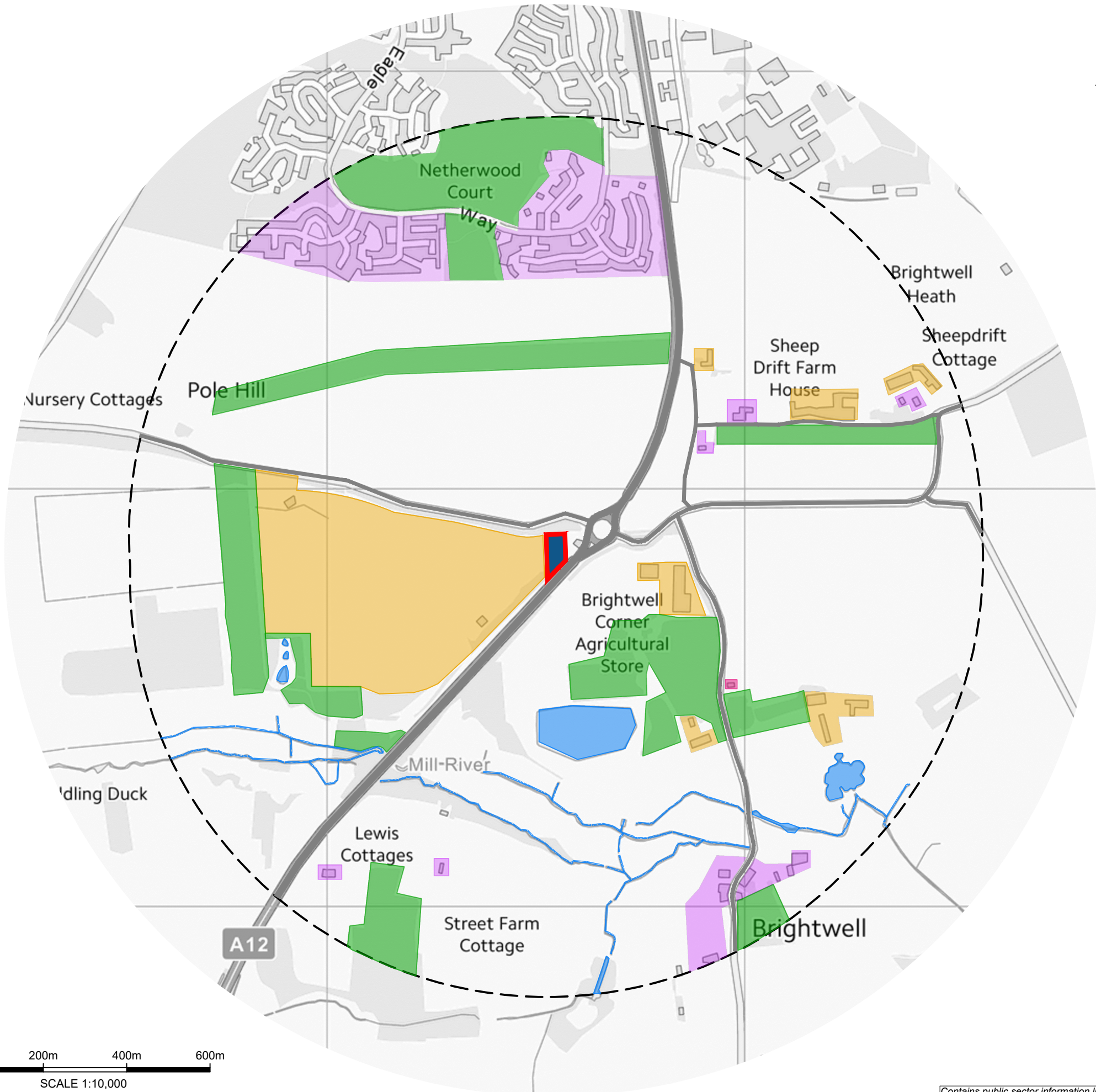
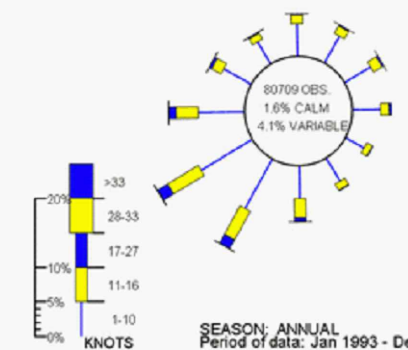


DO NOT SCALE FROM THIS DRAWING

REFERENCE

- SITE BOUNDARY
- 1KM BOUNDARY OFFSET FROM SITE
- COMMERCIAL / INDUSTRIAL RECEPTORS
- RESIDENTIAL RECEPTORS
- DECIDUOUS WOODLAND (PRIORITY HABITAT)
- LEISURE
- SURFACE WATERS
- MAJOR ROAD

WIND ROSE FOR NORWICH AIRPORT  
N.G.R: 6221E 3138N ALTITUDE: 36 metres a.m.s.l.



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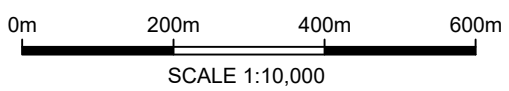
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CLIENT  
**VALENCIA WASTE MANAGEMENT LTD**

PROJECT  
**MRF AT FOXHALL, SUFFOLK**

DRAWING TITLE  
**FOXHALL MRF RECEPTOR PLAN**

DRG No.	ST20399-002	REV	A	SUIT. CODE
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DRAWN BY	DR	CHECKED BY	DD	APPROVED BY
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