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## **ENVIRONMENTAL RISK ASSESSMENT**

for

**INERT WASTE RECYCLING CENTRE  
SANDHAM HOUSE, LEYLAND**

**Report No 103/01**

**October 2023**

For

**HURT**  
**Plant Hire**

# DOCUMENT CONTROL

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- Appendix A - Drawings
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- Appendix C - Conservation Screening Report

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- Drawing No 103/01 – Site Location Plan
- Drawing No 103/02 – Proposed Site Layout Plan
- Drawing No 103/03 – Receptors
- Drawing No C-1056-03 - Drainage plan

## 1. INTRODUCTION

### 1.1 Report Context

1.1.1 Starling Environmental Limited (SEL) has been commissioned by Hurt Plant Hire Limited (the operator) to prepare an environmental permit variation application for the waste transfer station located at Sandham House, off Redrose Drive, Leyland, Lancashire, PR26 6TJ. The site is regulated under environmental permit EPR/NB3094EE.

1.1.2 The site currently operates under Standard Rules permit SR2009 No 6 'inert and excavation waste transfer station with treatment'. This standard rules set is being withdrawn and the replacement standard rules on offer do not meet the existing requirements. To continue treatment under a standard rules permit would require a reduction in throughput from the current allowance of 250,000 tonnes per annum to 75,000 tonnes, which would not serve the business needs. Therefore, the operator wishes to vary the permit to a bespoke permit to enable continuation of operations.

1.1.3 Changes to the permit include:

- Retention of the 250,000 tonnes per year annual throughput
- Addition of waste codes for storage and bulking
- Addition of dewatering of street sweepings (EWC 20 03 03) in an enclosed container

1.1.4 This report assesses the risks of the proposed changes and has been prepared following guidance available on the gov.uk website, particularly:

- Risk Assessment for your Environmental Permit
- Non-hazardous and inert waste: Appropriate measures for permitted facilities
- Control & Monitor Emissions for your Environmental Permit

1.1.5 Risks identified in Sections 4 and 5 will be controlled through mitigation, as detailed in Section 6. Mitigation will be incorporated into the Environmental Management System.

1.1.6 All drawings referenced are contained in Appendix A.



## **1.2 Site Details and Surrounding Area**

- 1.2.1 The site is located off Redrose Drive within an industrial area of Leyland. The national grid reference for the site is SD 54041 24071. The location of the site is shown on Drawing No 103/01.
- 1.2.2 The site is located approximately 1.4 km north of the centre of the town of Leyland and some 5 km to the south of Preston, Lancashire.
- 1.2.3 The site is situated within an industrial estate (Enterprise Business Park) and is surrounded by industrial land use, including:
- Leyland Trucks to the north and east
  - Warehousing to the south
  - Lancashire County Council waste transfer station to the west

## **1.3 Layout**

- 1.3.1 The site area is approximately 17,000 m<sup>2</sup> and is securely fenced with palisade fencing approximately 2 m high. The entrance is via lockable gates off Redrose Drive.
- 1.3.2 Site features include a large office building (Sandham House), car parking, weighbridge, workshop, waste processing building, wheel wash and a large yard area. Crushing and screening operations are carried out in the waste processing building and processed material is stored in the aggregate storage yard.
- 1.3.3 The site is surfaced with concrete and is served by two surface water drainage networks. The far eastern side of the site, which includes the aggregates storage yard, drains via surface channels into a hydrobrake and off site to the north. The western part of the site drains into an interceptor which is fitted with a high level alarm. From the interceptor water is discharged at the southern boundary. Both the northern and southern discharges join the surface water drainage system of the wider industrial estate.
- 1.3.4 The waste processing building is approximately 36m x 30m and 10.5m high. The building is fitted with lockable roller shutter doors. The base of the building comprises a reinforced concrete pavement.
- 1.3.5 A CCTV system is in use at the site to provide additional security.
- 1.3.6 Site features are shown on the Site Layout Plan, Drawing No 103/02.

## 2. CURRENT ACTIVITIES

- 2.1 Construction, demolition and excavation waste is imported to site and deposited in the waste processing building. Permitted waste codes are listed in Table 1.

Waste Code	Description
<b>17 01</b>	<b>Concrete bricks, tiles and ceramics</b>
17 01 01	Concrete
17 01 02	Bricks
17 01 03	Tiles and ceramics
17 01 07	Mixtures of concrete, bricks, tiles and ceramics
<b>17 02</b>	<b>Wood, glass and plastic</b>
17 02 02	Glass
<b>17 03</b>	<b>Bituminous mixtures, coal tars and tarred products</b>
17 03 02	Bituminous mixtures other than those mentioned in 17 03 01
<b>17 05</b>	<b>Soil (including excavated soil from contaminated sites) stones and dredging spoil</b>
17 05 04	Soil and stones
17 05 08	Track ballast, soil and stones other than those containing dangerous substances
<b>20 02</b>	<b>Garden and park waste (including cemetery waste)</b>
20 02 02	Soil and stones

**Table 1: Permitted Waste Types**

- 2.2 Treatment consists of manual sorting and separation, crushing, screening and blending. Recycled aggregate products produced include 6F2, 6F5 and Type 1 MOT. Products are manufactured according to a Quality Protocol<sup>1</sup> and tested in accordance with end of waste requirements as per the WRAP quality protocol.
- 2.3 Screened soil is dispatched as waste to permitted sites, to either deposit for recovery or landfill sites.
- 2.4 The annual permitted throughput for the site is 250,000 tonnes per annum.

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<sup>1</sup> Wrap Factory Production Plan & Quality Protocol – Aggregate Recovery Facility. Hurt Plant Hire, Sandham House. June 2022

### 3. PROPOSED CHANGES

#### 3.1 Annual Throughput

3.1.1 It is proposed to retain the current annual throughput allowance of 250,000 tonnes per annum.

#### 3.2 Additional Waste Types

##### 3.2.1 Aggregate Production

3.2.1.1 It is proposed to extend the list of waste codes for aggregate processing to match those included under the WRAP quality protocol document 'Aggregates from inert waste: End of waste criteria for the production of aggregates from inert waste'. This will enable a wider range of materials to be recycled into aggregates if they arise in the marketplace. Proposed additional waste types are listed in Table 2.

Waste Code	Description
17 05 06	Dredging spoil
17 09 04	mixed construction and demolition waste other than those mentioned in 17 09 01, 17 09 02 and 17 09 03
19 12 05	Glass
19 12 09	Minerals (for example sand and stones)
20 21 02	Glass

**Table 2: Proposed Additional Waste Codes for Aggregate Production**

##### 3.2.2 Storage and Bulking of Wood

3.2.2.1 It is proposed to carry out storage and bulking up of waste wood. This will allow any tree roots in excavation waste or wood in demolition waste to be segregated and stored on site. It is not proposed to treat the wood, only store in 40 yd<sup>3</sup> containers before removal from site when full to a third party recycler. The proposed waste codes are listed in Table 3 below.

3.2.2.2 Although whole loads of these waste types would not be accepted, the inclusion on the permit will allow the wood to be segregated and stored under these codes before dispatch. There is currently no allowance for such accumulation and storage and any wood must be removed immediately from site. This is not effective for the business, nor is it a sustainable method of working as it involves numerous vehicle movements for small amounts of wood.

Waste Code	Description
02 01 07	Waste from forestry
17 02 01	Wood from construction and demolition
20 02 01	Biodegradable waste from parks and gardens

**Table 3: Wood Waste Codes for Bulking and Storage**

### 3.2.3 Temporary Overnight Storage for HWRC Collections

3.2.3.1 Hurt Plant Hire operates as part of the Fox Group of Companies. Part of the remit of the Fox Group is to provide waste haulage services for Lancashire County Council. This involves collection of containers of segregated waste streams from Household Waste Recycling Centres (HWRC) and transport to permitted sites for disposal or recovery. Containers collected include the following segregated waste streams:

- Comingled cans and plastic bottles
- Comingled cans, plastic bottles, glass bottles and cans
- Cardboard
- Paper
- Paper/cardboard
- Glass bottles and jars
- Green garden waste
- Hard plastic
- Inert waste
- Mattresses
- Non-recyclable
- POPs
- Scrap metal (ferrous)

3.2.3.2 Occasionally, the loads cannot be deposited at the permitted site before it closes for the day, due to traffic problems or early closures, and the load cannot be returned to its point of collection. Its not acceptable to park the vehicle on the public highway so on these occasions the operator would like to be able to park the vehicle securely within the site. The container would not be uncovered or removed from the vehicle, it will remain enclosed on the vehicle overnight and will continue to its original destination the following working day.

3.2.3.3 Any of the transported waste codes may require temporary storage. The applicable waste codes are listed in table 4 below.

HWRC Waste Stream	EWC	EWC Description
Paper	20 01 01	Paper and cardboard
Mixed paper and cardboard		
Cardboard		
Scrap metal (ferrous)	20 01 40	Metals
Cans/plastic bottles	20 01 40	Metals
Garden green waste	20 02 01	Biodegradable waste
Non-recyclable residual	20 03 01	Mixed municipal waste
Comingled cans, plastic bottles, glass bottles and cans	20 03 01	Mixed municipal waste
Glass bottles mixed	20 01 02	Glass
Hard plastic	20 01 39	Plastics
Inert waste	17 09 04	Mixed construction and demolition waste
Mattresses	20 03 07	Bulky waste
Non-recyclable	20 03 01	Mixed municipal waste
Paper/cardboard	20 01 01	Paper and cardboard
Paper		
Cardboard		
POPs	20 03 07	Bulky waste
	20 03 01	Mixed municipal waste

**Table 4: Waste codes for temporary overnight storage in containers**

### 3.3 Addition of Street Sweeping Dewatering Activity

3.3.1 Hurt Plant Hire and the Fox Group of companies operate street sweepers as part of their wider business. It is proposed to site a dewatering container on site to enable physical treatment of the sweeper waste. An example container and specification is contained in Appendix B.

3.3.2 The dewatering kit is housed within a Ro-Ro container and includes self contained filtration and compaction functions. The filtration unit separates solids from liquids so that the liquid can be discharged to sewer. The solids are compacted within the unit and when full the container will be mounted onto a vehicle and taken to a disposal site to tip, then returned to site.

3.3.3 It is proposed that to add the EWC 20 03 03 street cleaning residues for this physical treatment activity.

3.3.4 A trade effluent discharge application is under preparation to enable discharge of the liquid waste to sewer.

3.3.5 It is proposed that no more than 50 tonnes per day of this waste stream will be treated for disposal. The typical capacity of the unit is 15 m<sup>3</sup> so the operating capacity will be well below the 50 ton threshold applicable for treatment for disposal as a waste operation.

3.3.6 The liquid effluent will be piped to foul sewer as shown on the site layout plan. The discharge will not be allowed to run across the surface of the yard. The container will be sited in the western yard which is concrete surfaced and drains to an interceptor. A shut off valve will be fitted to the interceptor to stop water from discharging from the interceptor in case of a major spillage.

### **3.4 Non-Permit Related Changes**

3.4.1 Areas of the site will be used for concrete batching and asphalt production. These activities will take place within the environmental permit boundary but they will not be regulated by the environmental permit.

3.4.2 These activities require a local authority Part B permit and will be regulated by South Ribble Borough Council.

3.4.3 The location of these activities is shown on the site layout plan, Drawing No 103/02.

## 4. IDENTIFICATION OF RISKS

### 4.1 Receptors

4.1.1 The location of the site in relation to potential receptors is shown on Drawing No 103/03. This illustrates the position of identified receptors within 1 km of the site. These are also listed in Table 5 below.

Ref	Receptor	Direction from	Approximate Distance from (m)
<b>Domestic Dwellings</b>			
1	Closest residences in Farrington	W	410 - 630
	Farms; Smith's Farm, Nock Nalling, Model Farm	NW	460
	Closest residences in Leyland	S	600
	Farms; Nook Farm, Yew Tree Farm	E	440 - 490
<b>Industrial/Commercial Premises</b>			
2	FDC Leyland on Lancashire Business Park	SW	30
	Warehouse on Lancashire Business Park	S	40
	Amazon Couriers on Lancashire Business Park	SE	40
	Leyland Trucks on Lancashire Business Park	N	70 - 150
	Industrial Operators in Leyland Business Park	E	370
	Industrial Operators in Centurion Industrial Estate	SE	540
	Industrial Operators in Hazelmere Industrial Estate	SW	770
	K Motors Independent Jaguar Land Rover	S	750
<b>Water Features</b>			
3	Drains	N, E, S, W	150 – 1km
	River Lostock	S, W, N, NE	390 – 1km
	Ephemeral ponds	N,NW,W,SE	190 - 830
<b>Amenity/Recreation</b>			
4	Recreation Grounds	SE	780 - 885
<b>Highway/Major Road or Transport Link</b>			
5	Northern Rail Link	E	290
	Centurion Way	S	400
	Farrington Road (A582)	N	580
<b>Hospitals/Care Homes</b>			
6	Chorley House Care Home	S	285
<b>Public Rights of Way</b>			
7	Footpaths and Tracks	N,E,W,S	300 – 1km
<b>Designated Sites/ Ecological Receptors</b>			
8	Priority Habitat Deciduous Woodland	N,E,W,S	195 – 1km
<b>Schools/Colleges</b>			
-	None Identified	-	-

**Table 5: Potential Receptors Within 1 km**

4.1.2 The closest residential properties are just over 400 m to the west of the site in Farrington.

4.1.3 The site is accessed off Redrose Drive within the Enterprise Business Park. Roads within the access route also include Enterprise Drive and Centurion Way.

## Surface Water

- 4.1.4 The closest surface water course is the River Lostock approximately 390 m to the west. The EA's Data Catchment Explorer website shows the site to be within the Lostock US Farington Weir Water Body<sup>2</sup>, which is reported as having moderate ecological status.

## Groundwater

- 4.1.5 The underlying bedrock is designated as a 'secondary B aquifer', which is described by the EA as consisting of "predominantly lower permeability strata which may in part have the ability to store and yield limited amounts of groundwater by virtue of localised features such as fissures, thin permeable horizons and weathering". The underlying groundwater vulnerability is listed as 'medium-low'.
- 4.1.6 The site is not within a groundwater source protection zone.

## Ecological Receptors

- 4.1.7 A conservation screening report was provided by the EA through pre-application advice. This reported on nature and heritage conservation sites and/or protected species that must be considered in the application and is contained in Appendix C. The screening report identified just one feature, the River Lostock, which is a migratory route for the protected species European Eel.
- 4.1.8 Searches using the DEFRA Magic map tool identified five Sites of Special Scientific Interest within 10 km of the facility. The closest is Beeston Brook pasture at 6.4 km. There is one local nature reserve (LNR) within 2 km of the facility, Preston Junction, 2 km to the north-east. These are summarised in Table 6 below.

Site	Designation	Distance & Direction
Preston Junction	LNR	2 km NE
Beeston Brook pasture	SSSI	6.4 km NE
Derwent River Section	SSSI	8.2 km NE
West Pennine Moors	SSSI	9.2 km SE
Alt and Ribble Estuary	Ramsar SSSI NNR	8.3 km W
Newton Marsh	SSSI	9.5 km NW

**Table 6: Ecological Sites**

LNR = local nature reserve

SSSI = site of special scientific interest

Ramsar = internationally important wetland

NNR = national nature reserve

<sup>2</sup> <https://environment.data.gov.uk/catchment-planning/WaterBody/GB112070064911>



4.1.9 There is no priority habitat within 50 m of the site.

4.1.10 A habitats assessment is not required as there are no European sites within 2 km of the site.

## 4.2 Baseline Conditions

### Wind Direction

4.2.1 Figure 1 shows a wind rose for data collected at Blackpool Airport which is the closest recording station at approximately 23 km to the north-west.

4.2.2 The wind rose shows that the prevailing wind direction is from the west with wind speeds most frequently between 10 – 20 knots, ie moderate to fresh breeze on the Beaufort scale. The strongest winds typically come from the west-southwest and are recorded at speeds greater than 20 knots, ie strong breeze and above. Winds from the east are typically lower in strength and most frequently recorded at speeds less than 15 knots.

4.2.3 With reference to the data it is considered that wind direction at Sandham House will be variable but with a prevalence towards the north-east, east and south-east.

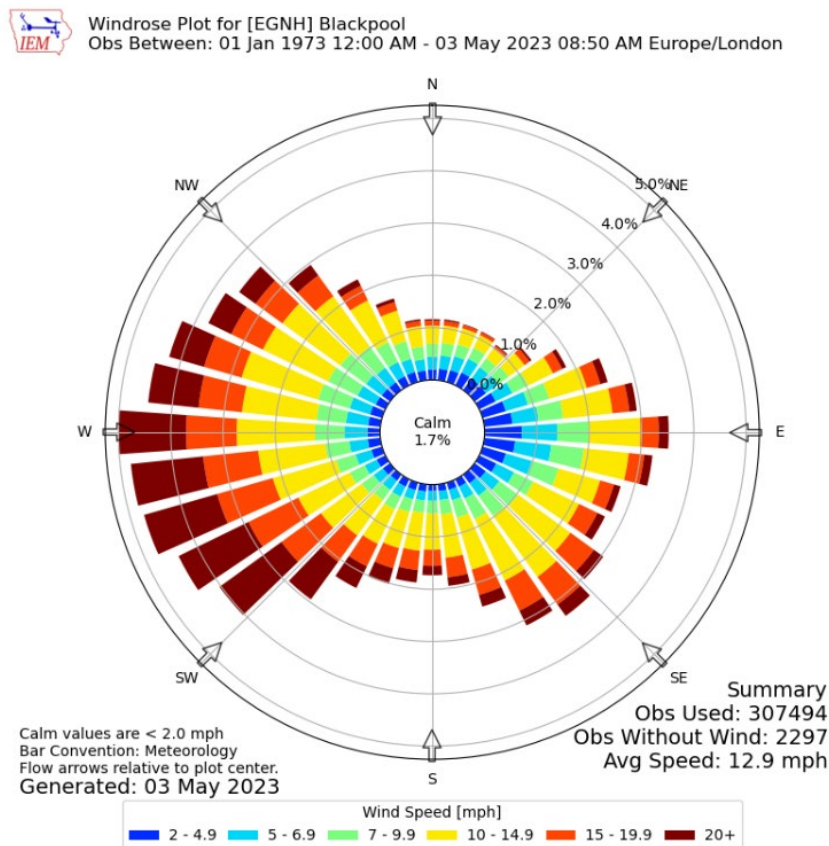


Figure 1: Wind Rose

## **Rainfall**

4.2.4 Reference has been made to Met Office data for Myerscough available on the met office website<sup>3</sup>, the nearest climate recording station to the site at approximately 16 km due North. Total average annual rainfall during the period 1991 to 2020 was 1058 mm. The number of days of rainfall greater than or equal to 1 mm was 157 days on average each year.

## **Air Quality**

4.2.5 According to the DEFRA interactive map tool<sup>4</sup> the site is not located within an Air Quality Management Area (AQMA).

## **Potential for Flooding**

4.2.6 According to the 'Flood map for planning' tool on the gov.uk website, the site is situated in Flood Zone 1, an area with a low probability of flooding.

## **4.3 Compliance History**

4.3.1 The site has a very good compliance history and no history of complaints from neighbours. The site is located within an industrial estate and surrounded by industrial operators, including a large waste transfer station to the west.

4.3.2 The industrial estate is operational 24 hours per day and the setting is appropriate for a waste management activity.

## **4.4 Identification of Hazards**

4.4.1 Potential hazards from the proposed changes to activities have been identified as:

- Noise and Vibration –processing plant carrying out crushing and screening as existing activities
- Dust – generated in dry conditions from processing operations, stockpiles and site roads
- Mud on the road – deposited on the public highway by outgoing vehicles
- Uncontained run-off – surface water run-off which may contain suspended solids from stockpiled waste and site roads;
- Odour from temporary storage of waste

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<sup>3</sup> <https://www.metoffice.gov.uk/research/climate/maps-and-data/uk-climate-averages/gcw435f21>

<sup>4</sup> <https://uk-air.defra.gov.uk/aqma/maps/>

- Pests attracted by temporary storage of waste
- Accidents (fire, acceptance of contaminated material, spillage of fuel/oil or escape of water from the dewatering container)

4.4.2 The wastes accepted for treatment at the site do not generate odour or litter or attract pests, however an assessment of these risks has been carried out for the proposed temporary storage of HWRC waste.

4.4.3 The operation is not considered to pose a risk to air (excepting fugitive dust) due to the nature of waste materials that are accepted and activities carried out. There are no additional emissions from proposed operations which would contribute global warming gases other than vehicle exhaust emissions.

4.4.4 Risks from dust and emissions are addressed in an emissions management plan, Report No 103/2.

4.4.5 The addition of storage and bulking of waste wood will result in stockpiles of combustible waste, therefore a fire prevention plan has been prepared to address this risk, Report No 103/3.

4.4.6 It is not considered that a noise impact assessment is required. EA guidance<sup>5</sup> states:

*If noise is audible at any of the following types of locations, they will regard it as 'possibly causing an impact':*

*residential properties  
schools  
hospitals  
offices  
public recreation areas  
other NSRs  
noise sensitive habitats*

*Where noise is possibly causing an impact, the operator must carry out an assessment.*

4.4.7 There are no noise sensitive receptors within the vicinity of the site. The closest residential receptors are over 400 m away. There are no offices in the vicinity, just industrial and warehousing land uses, and none of the other noise sensitive receptors listed.

4.4.8 In addition, waste processing is not carried out externally, only within the building. This has been ongoing for 11 years since the issue of the permit in 2012 without issue. There are no changes proposed for this activity, just a continuation of that which has been carried out since 2012.

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<sup>5</sup> <https://www.gov.uk/government/publications/noise-and-vibration-management-environmental-permits/noise-and-vibration-management-environmental-permits#when-a-noise-assessment-is-needed>

## **5. RISK ASSESSMENT**

### **5.1 Methodology**

5.1.1 Overall risk is a combination of the severity of an event and the likelihood that it will occur. Probability of occurrence is designated as:

- Probable – expected to occur based on previous occurrences
- Likely – expected to occur due to proposed changes
- Possible – this may occur, it may or may not have happened occasionally in the past
- Unlikely – not expected to occur
- Very Unlikely – has never and is not expected to occur.

5.1.2 The magnitude of risk is determined by the probability of exposure and the severity of the consequences, whereby:

- High – severe and long lasting environmental effects to the wider locality
- Medium – effects to the local environment and community
- Low - minor, short lived effects just beyond the site boundary
- Negligible – no discernible effect beyond the site boundary

5.1.3 An event could have a high probability of occurring but have minor environmental consequences; therefore it will be designated as a low risk. Likewise a risk with severe consequences could be unlikely to occur and will be designated as a low risk. A high risk designation would be assigned to an event that has severe consequences and is expected to occur.

### **5.2 Assessment**

5.2.1 The risks associated with the identified hazards have been assessed and are presented in Tables 7 to 11, including mitigation and control measures.

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Hazard	Receptor	Pathway	Consequence	Probability of Exposure	Risk	Risk Management	Mitigated Risk
Noise from incoming and outgoing vehicles (full & empty)	Surrounding industrial operators	Air (noise) Vibration (ground)	Nuisance noise from delivery vehicles	Very unlikely: the site is within an industrial estate with 24 hour operations and noise will not impact the surrounding operators.  There are no noise sensitive receptors in the vicinity of the site and the closest residents are over 400 m away	Low	<ul style="list-style-type: none"> <li>Crushing and screening is carried out inside a building</li> <li>Site is concrete surfaced and maintained to prevent pot-holes and minimise noise generated by vehicles;</li> <li>Vehicle drivers to adhere to 10 mph speed limit</li> <li>All machinery &amp; plant maintained as per manufacturer's specifications for efficient running;</li> <li>Noise only during daytime working hours, no night time operations;</li> <li>No history of noise complaints</li> <li>The dewatering operation is not a significant noise generating activity</li> </ul>	Low
Noise from aggregate processing (engine noise, reversing warning noise, material handling, crushing, & screening)			Nuisance noise detected beyond the site boundary from processing operations during daytime working hours		Low		Low
Noise from dewatering operation					Low		Low

**Table 7: Assessment of Risks from Noise and Vibration**

Hazard	Receptor	Pathway	Consequence	Probability of Exposure	Risk	Risk Management	Mitigated Risk
Mud on the road	Public highway (Redrose Drive, Enterprise Drive, Centurion Way)	Material carried on vehicle wheels and axles on leaving the site.	Mud carried onto public highway which could be a skid hazard for motorists.	Possible	Medium	<ul style="list-style-type: none"> <li>A wheel wash is in place for vehicles exiting the site</li> <li>Concreted site surface regularly swept with a road sweeper;</li> <li>Redrose Drive and Enterprise Drive also swept with road sweeper</li> </ul>	Low

**Table 8: Assessment of Risks from Mud on the Road**

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Hazard	Receptor	Pathway	Consequence	Probability of Exposure	Risk	Risk Management	Mitigated Risk
Surface water run-off carrying sediment from stockpiled waste and products and site surface	River Lostock via surface water sewer. The River Lostock is a migratory route for the European Eel which is a protected species	Flow into site surface water drainage system, into industrial estate drainage system and eventually into the river	Increased sediment load reducing water quality; potential effects on protected species European Eel	Unlikely as the river is nearly 400 m from site and any sediment would drop out in the extensive drainage network before reaching the river	Low	<ul style="list-style-type: none"> <li>On the eastern side, sediment settles out in surface channels and water flows off site into the estates drainage system.</li> <li>On the western side surface water drains to an interceptor which traps any oil and settles particulates before leaving site.</li> <li>Interceptor is cleaned out annually and is fitted with a high level alarm to alert in case of blockages.</li> <li>Interceptor will be fitted with an isolation valve to prevent flow off site in case of a major spillage</li> </ul>	Low

**Table 9: Assessment of Risk from Uncontained Run-off**

Hazard	Receptor	Pathway	Consequence	Probability of Exposure	Risk	Risk Management	Overall Risk
Non-compliant waste types, eg hazardous dust from importation & processing of contaminated material	Site staff and neighbouring employees	Air	Inhalation of contaminated dust	Unlikely as hazardous material not included on permit but may accidentally be imported	Medium	<ul style="list-style-type: none"> <li>Permit conditions preclude acceptance of hazardous materials</li> <li>Waste acceptance controls &amp; pre-acceptance procedures will prevent acceptance of non-compliant waste types</li> <li>In the event that non-conforming waste is unloaded the waste will be consigned to a quarantine area to await re-loading &amp; removal off-site</li> </ul>	Low
	Surface water	Uncontrolled Run-off	Contamination of controlled waters				

**Table 10 (continued overleaf): Assessment of Risk from Accidents**

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Sandham House, Leyland: Environmental Risk Assessment

Hazard	Receptor	Pathway	Consequence	Probability of Exposure	Risk	Risk Management	Overall Risk
Spillage or leakage of fuel, oils & coolants Minor (< 5 litres) Major (> 5 litres)	Surface water	Oil or fuel seeps enters site drainage system	Contamination of River Lostock	Possible	Medium	<ul style="list-style-type: none"> <li>• Site is concrete surfaced and drains to an interceptor which separates oil from the discharge</li> <li>• Interceptor will be fitted with a shut off valve so it can be isolated in case of a major spillage</li> <li>• Fuel stored in bunded tanks</li> <li>• Tank inspection procedure</li> <li>• Oil stored in bunded area in workshop</li> <li>• Spillage procedure detailed in the EMS</li> </ul>	Low
	Underlying ground and groundwater	No pathway – site is concrete surfaced	-	-	-		
Spillage of sludge/wastewater from dewatering container	River Lostock vis surface water sewer	Spillage or misconnection causes wastewater or sludge to enter the surface water drainage system instead of the foul sewer	Increased sediment load in the river; reduction in water quality	Possible	Medium	<ul style="list-style-type: none"> <li>• Wastewater will be discharged to foul sewer under a trade effluent discharge consent, not into the surface water drainage system</li> <li>• Container will be sited close to the sewer connection to minimise distance for pipework/hoses</li> <li>• Container will be sited on a concrete surface with spill kit nearby so any minor spillages can be cleaned up</li> <li>• If a major spillage occurs the interceptor can be isolated by the proposed shut off valve to prevent discharge of waste water into the surface water system</li> </ul>	Low
	Underlying ground and groundwater	No pathway – site is concrete surfaced	-	-	-		

**Table 10 (continued overleaf): Assessment of Risk from Accidents**

Report No 103/1 – October 2023  
Sandham House, Leyland: Environmental Risk Assessment

Hazard	Receptor	Pathway	Consequence	Probability of Exposure	Risk	Risk Management	Overall Risk
Fire and firewater	Closest residents and neighbouring businesses	Overland flow of firewater; Increased airborne particulates from smoke	Contaminated firewater flows off site; Smoke causes nuisance and respiratory effects to local residents	Unlikely: (i) the risk of fire is very low as the material processed is mainly non-combustible. Combustible material proposed for storage is short term, small scale and self-contained by storage in containers (ii) Firewater would collect on site	Low	<ul style="list-style-type: none"> <li>Permitted activities do not allow flammable materials to be accepted on site and burning of waste not allowed on site.</li> <li>The site has a no-smoking policy</li> <li>A fire prevention plan has been produced for the combustible waste (wood and temporary storage of vehicles)</li> </ul>	Low
Flooding		Site floods and waste is washed off-site, adding sediment to the water environment	Waste material may be washed out of the site	Unlikely: The site is in Flood Zone 1 (low probability)	Very Low	n/a	Very Low

**Table 10 continued: Assessment of Risk from Accidents**

Hazard	Receptor	Pathway	Consequence	Probability of Exposure	Risk	Risk Management	Overall Risk
Odour generation	Closest residents and neighbouring businesses	Airborne odours from e.g., green waste or comingled jars/cans/bottles with food waste residues	Reduction in amenity of the area  Nuisance to local residents and businesses	Unlikely for residents as the closest are over 400m away.  Neighbouring industrial sites would expect a lesser degree of amenity than residents and there is a large scale waste transfer station across the road from the site	Low	<ul style="list-style-type: none"> <li>the waste will be stored infrequently for short periods of time</li> <li>the waste will remain in covered containers on the vehicle</li> <li>containers will not be offloaded or uncovered</li> </ul>	Very Low
Pests		Pests attracted to food waste residues on comingled jars/cans/bottles, particularly flies			Low		Very low
Litter		Windblown litter			Low		Very low

**Table 11: Risks from temporary overnight storage of HWRC waste**



## **6. MITIGATION AND CONTROL**

6.0.1 Risks assessed as medium or high will require mitigation and control. Proposed measures are outlined below and have been incorporated into the EMS.

### **6.1 Noise and Vibration**

6.1.1 Noise and vibration risks associated with operations have been determined as low because of the lack of noise sensitive receptors, distance to residential receptors and screening provided by the processing building.

6.1.2 EA guidance 'Control & Monitor Emissions for your Environmental Permit' states:

*You must write a noise and vibration management plan explaining how you'll prevent or minimise noise and vibration. You must do this if your risk assessment shows that your operation could cause pollution from noise or vibration beyond your site boundary.*

6.1.3 A noise management plan has not been prepared as it is not considered that the proposed operation will cause noise pollution beyond the site boundary.

### **6.2 Mud on the Road**

6.2.1 Risks associated with mud on road have been determined as medium. Existing controls include use of a wheel wash for all exiting HGVs and employment of a road sweeper to clean the site surface and access road.

6.2.2 The wheel wash is periodically desilted and topped up with clean water.

6.2.3 Inspections for mud and debris on the roads are carried out as part of the daily site checks.

6.2.4 These existing controls have sufficiently reduced the risk from mud on the road during existing operations and will continue to be sufficient for the proposed changes.

### **6.3 Control of Run-off**

6.3.1 Risks associated with uncontrolled run off were assessed as low. Existing controls include a drainage system whereby the yard surfaces are concreted and drain via a combination of silt traps and interceptor. The stockpile storage area does not drain to the interceptor but suspended solids are settled out in surface channels and the hydrobrake. Solids are periodically cleaned out from the channels.

6.3.2 From the interceptor the water is released to surface water sewer. The interceptor will be fitted with a shut off valve so it can be isolated to stop water flowing off site. Suspended solids are trapped by baffles within the interceptor and settle out before discharge. The drainage layout is shown on Drawing No C-1056-03. The existing controls sufficiently trap suspended solids on site.

6.3.3 The western area of site is drained via the interceptor which can trap any oil or fuel carried on the surface. This area includes the fuel store, truck parking, combustible waste and dewatering container. The addition of the shut off valve to the interceptor will enable containment of large scale spillages and firewater, which is discussed further in sections 6.5 to 6.7 below.

## **6.4 Waste Acceptance**

6.4.1 The risks associated with accepting contaminated material were assessed as medium. The primary method of preventing contaminated material reaching site is through waste acceptance controls. Material is accepted to site with the purpose of producing recycled aggregate products in line with the end of waste WRAP quality protocol. The protocol stipulates that waste must have no chemical contamination.

6.4.2 The waste acceptance procedure includes assessment of waste enquiries at the pre-application stage by a technical assessor. Material which is considered contaminated is rejected.

6.4.3 When the material arrives on site it is checked by the weighbridge operator and again by the site foreman on tipping. It is visually inspected for conformity and any non-conforming material will be rejected.

6.4.4 This process has been sufficient to control the risks for existing operations and will continue to be appropriate for the proposed changes.

## **6.5 Spillage of Oil and Fuel**

6.5.1 Risks associated with accidental spillage of oil and fuel were assessed as medium.

6.5.2 Existing controls to prevent spillage of oil and fuel include:

- Regular servicing & maintenance of vehicles
- Use of drip trays during servicing & maintenance of vehicles
- Storage of fuel/oil within bunded areas with capacity to hold 110% of the contained volume.

6.5.3 In the event of a small scale spillage suitable action includes application of absorbent granules using a spill kit which are located as shown on the site layout plan. For a large scale spillage (more than 5 litres) the shut off valve on the interceptor will be closed to prevent the spillage leaving site whilst clean up is carried out. This action has been added to the EMS.

## **6.6 Spillage from Dewatering of Street Sweepings**

6.6.1 Risks associated with accidental spillage of wastewater were assessed as medium.

6.6.2 To control spillages from the dewatering operation, the following measures will be undertaken:

- The container will be sited close to the connection point for discharge to foul sewer to minimise pipework runs
- Pipes and hoses will be checked before operation to ensure that fittings are correctly connected and secure
- A spill kit will be located close to the container to clean up any small scale spillages
- In the event of a major spillage the interceptor will be isolated to prevent discharge

6.6.3 These additional measures will reduce the risk of spillage from dewatering from medium to low. These actions have been added to the EMS.

## **6.7 Fire**

6.7.1 The risk from fire was assessed as low due to the small quantities and short duration of combustible waste storage. A fire prevention plan (FPP) has been produced to show how these wastes will be stored in accordance with FPP guidelines.

## **6.8 Temporary Overnight Storage of HWRC Collections**

6.8.1 Risks from temporary storage of HWRC collections were assessed as low and do not require any mitigation. The operation will be infrequent and waste will not be deposited or processed, it will remain on the vehicle in sealed containers.

6.8.2 There were no discernible risks identified from this proposed change.

## **7. CONCLUSIONS**

- 7.1 Operation of the site under the existing permit has been in compliance with permit conditions with no record of complaints or incidents. The site should continue to be allowed to operate with the existing annual throughput and activities. The environmental risks of the continued operation along with the proposed changes have been assessed and, where required, mitigation and control measures have been identified to reduce the risks to an acceptably low level.
- 7.2 The risk of mud to local roads will be controlled by use of a wheelwash and a road sweeper.
- 7.3 Dust control measures will be implemented via an Emissions Management Plan.
- 7.4 Noise arising from the proposed changes will not result in a significant impact due to the lack of noise sensitive receptors. Control measures include processing inside a building, daytime only operation and regular maintenance of plant and equipment.
- 7.5 Risks from surface water run-off will be minimised by the drainage system, silt traps and interceptor.
- 7.6 Risks from accepting contaminated material are controlled through the waste acceptance procedures to prevent the importation of contaminated waste.
- 7.7 Risks to prevent accidental spillages are controlled through bunded fuel and oil stores, the proposed shut off valve on the interceptor and discharge of trade effluent to sewer.
- 7.8 Risks from temporary storage of HWRC waste overnight are negligible.
- 7.9 In conclusion, it has been demonstrated that the mitigated risks posed by the proposed activities will not have a significant impact on the surrounding environment.

## APPENDIX A

### Drawings





ORDNANCE SURVEY © CROWN COPYRIGHT 2023. ALL RIGHTS RESERVED. LICENCE NUMBER 100022432.

**LEGEND** — SITE LOCATION

STARLING ENVIRONMENTAL LIMITED  
 67 Chorley Old Road, Bolton,  
 Greater Manchester, BL1 3AJ  
 www: [starlingenvironmental.co.uk](http://starlingenvironmental.co.uk)  
 email: [claire@starlingenvironmental.co.uk](mailto:claire@starlingenvironmental.co.uk)  
 Tel: 07989 673122

CLIENT  
 HURT PLANT HIRE LIMITED

JOB TITLE.  
 SANDHAM HOUSE, LEYLAND

DRAWING TITLE.  
 SITE LOCATION PLAN

DRAWN BY.  
 M.Y.B

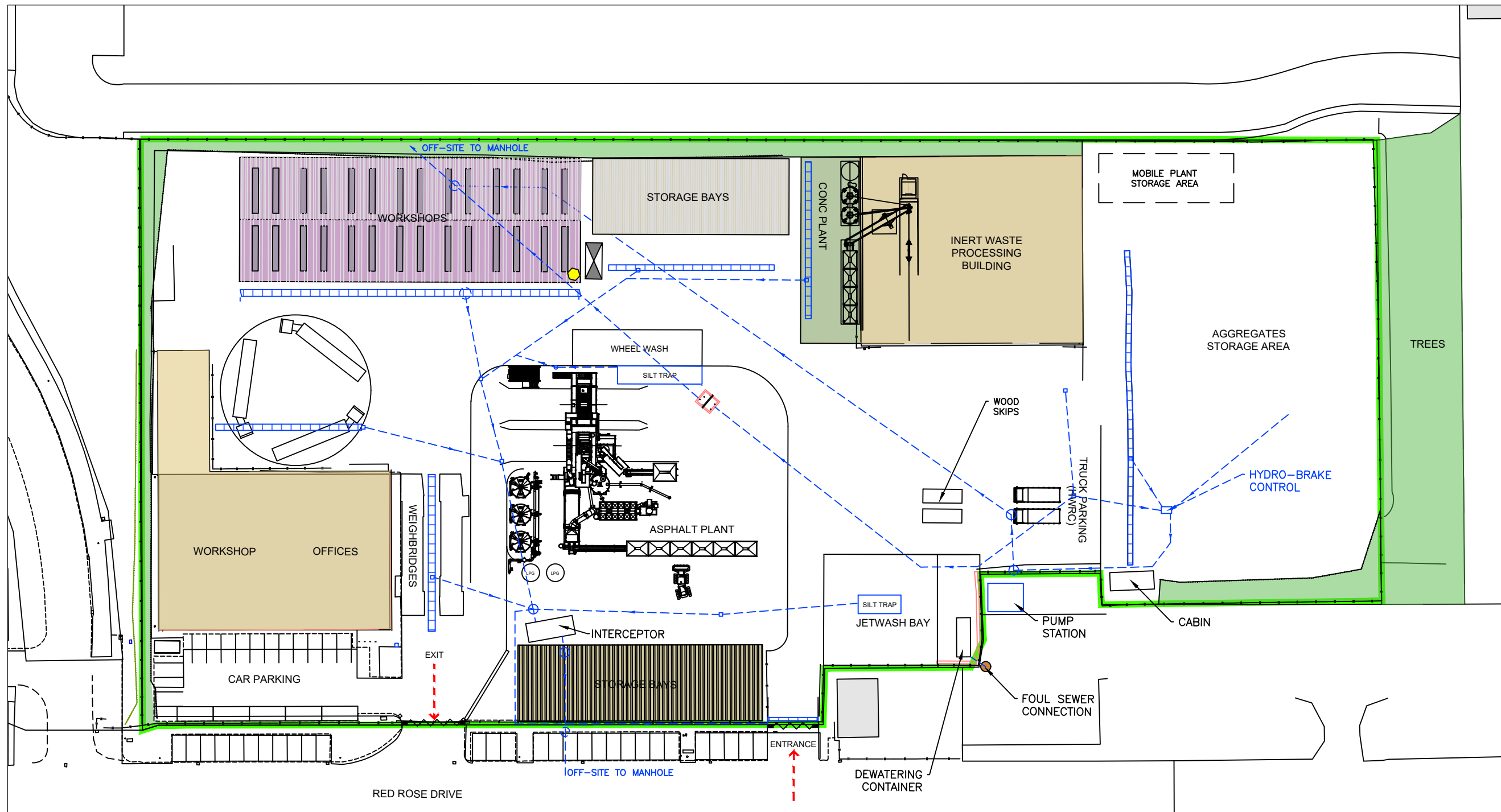
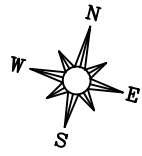
DATE.  
 08/09/23

SCALE © A4.  
 1:50,000

APPROVED BY.  
 C.G

DRAWING No.  
 103/01





**LEGEND**

- PERMIT BOUNDARY
- - - DRAINS
- ◆ SPILL KIT
- ~ ~ ~ LOCKABLE GATES
- FUEL/OIL STORAGE
- - - CATCH DRAIN
- FUEL/OILS

**STARLING ENVIRONMENTAL LIMITED**

67 Chorley Old Road, Bolton, Greater Manchester, BL1 3AJ

www: [starlingenvironmental.co.uk](http://starlingenvironmental.co.uk)

email: [claire@starlingenvironmental.co.uk](mailto:claire@starlingenvironmental.co.uk)

Tel: 07989 673122

CLIENT

HURT PLANT HIRE LIMITED

JOB TITLE.

SANDHAM HOUSE, LEYLAND

DRAWING TITLE.

INDICATIVE SITE LAYOUT PLAN

DRAWN BY.

M.Y.B

DATE.

04/09/23

SCALE @ A3.

1:800

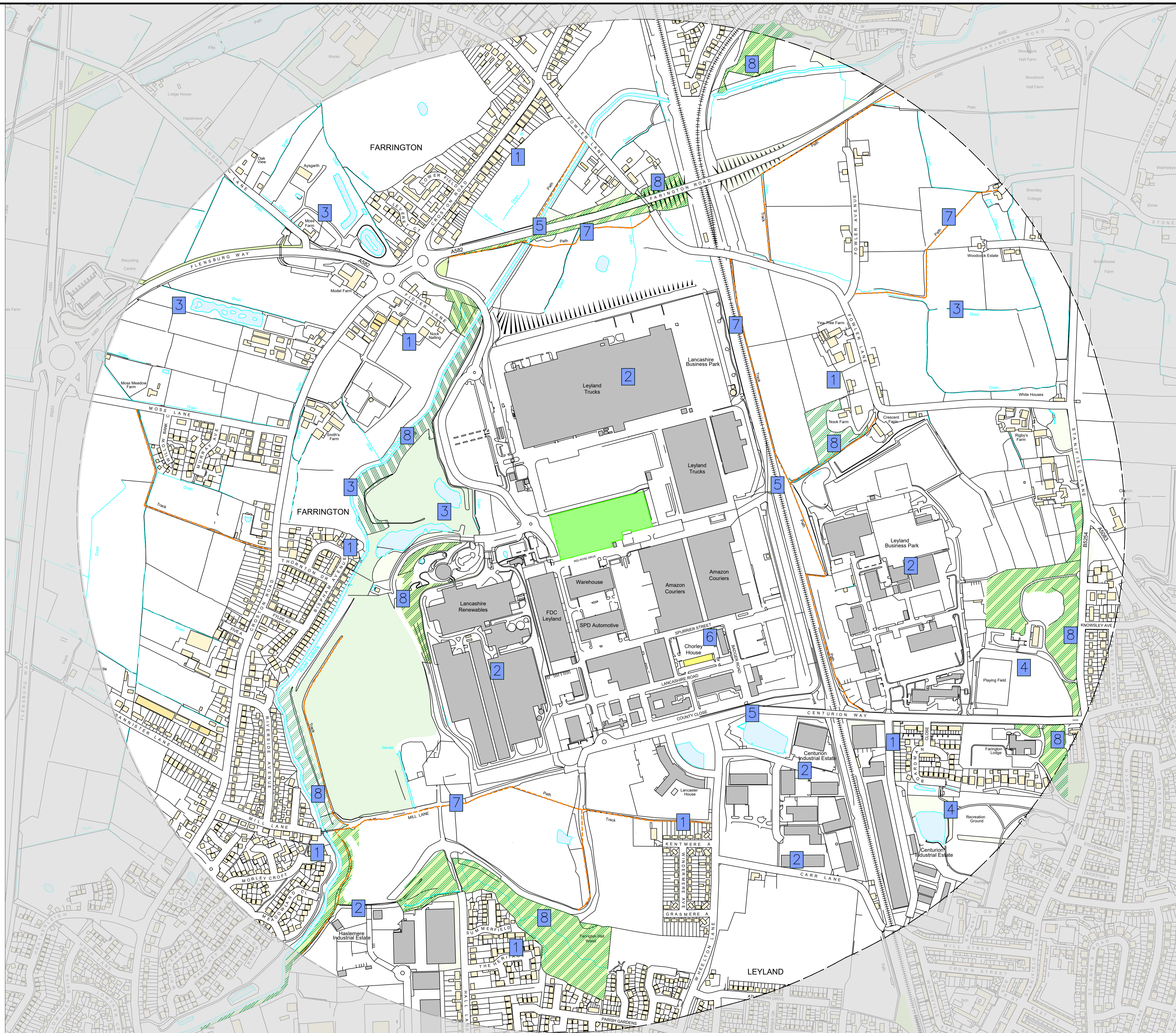
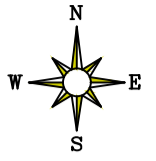
APPROVED BY.

C.G

DRAWING No.

103/02





- LEGEND**
- PERMIT AREA
  - 1 KM RECEPTOR BOUNDARY
  - FOOTPATHS
  - RESIDENTIAL AREA
  - INDUSTRIAL/COMMERCIAL AREA
  - WOODLAND
  - WATERBODIES/WATERWAYS
  - 1 RECEPTOR REFERENCE (SEE REPORTS 103/2 AND 103/3)



PREVAILING WIND DIRECTION (FROM THE WEST)

REV.	DESCRIPTION	DATE	BY

**STARLING ENVIRONMENTAL LIMITED**  
 67 Chorley Old Road, Bolton,  
 Greater Manchester, BL1 3AJ  
 www: [starlingenvironmental.co.uk](http://starlingenvironmental.co.uk)  
 email: [claire@starlingenvironmental.co.uk](mailto:claire@starlingenvironmental.co.uk)  
 Tel: 07989 673122

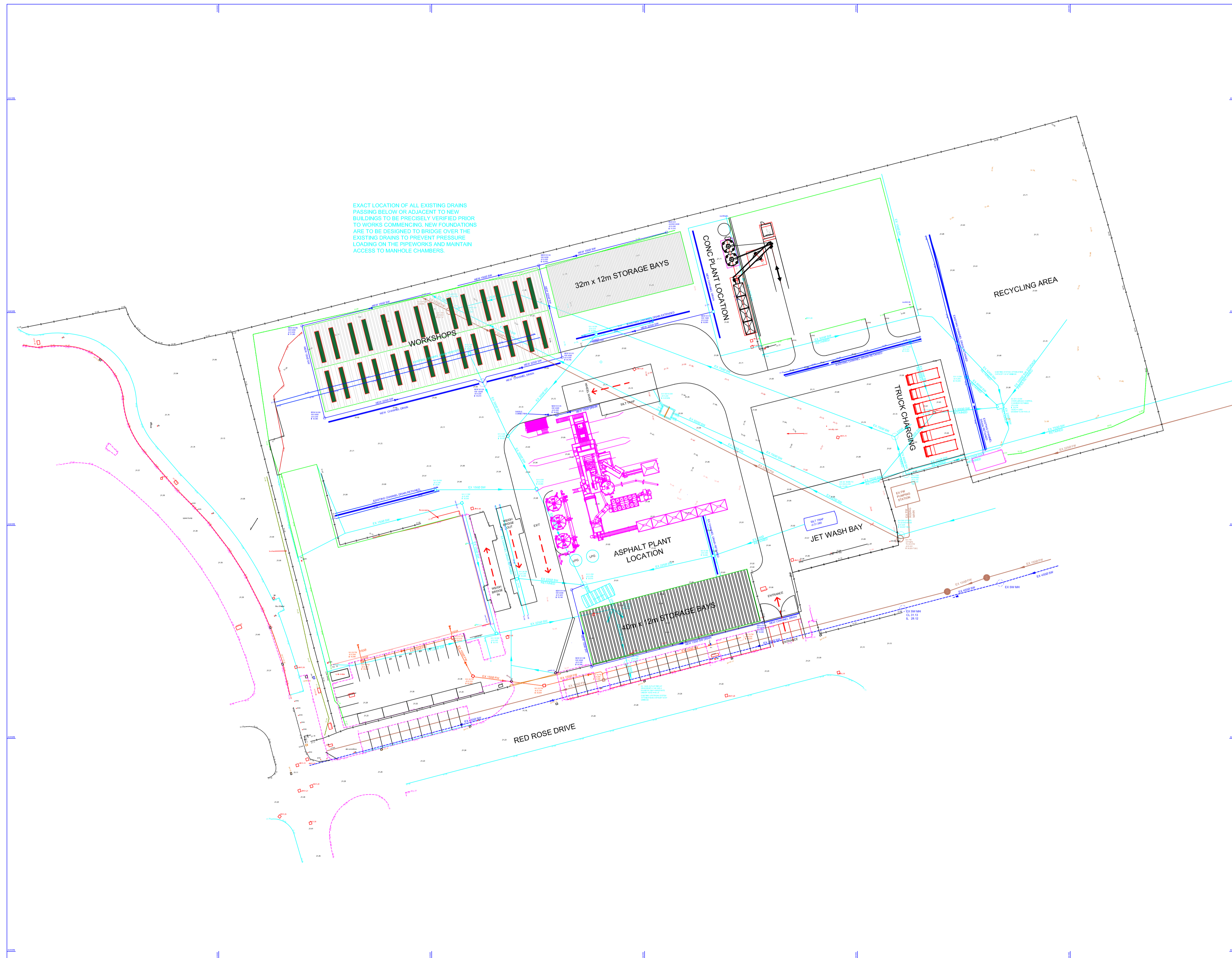
CLIENT:  
**HURT PLANT  
 HIRE LIMITED**

JOB TITLE:  
**SANDHAM HOUSE,  
 LEYLAND**

DRAWING TITLE:  
**RECEPTORS  
 WITHIN 1 KM**

DRAWN BY: M.Y.B	APPROVED BY: C.G	DRAWING No: 103/03
DATE: 05/9/23	SCALE: $\phi$ A1: 1:4000	





Rev	Details	By	Date

**Hamilton Technical Services**  
 Civil & Environmental Engineering Consultants  
 1 Chiltern Ave.,  
 Euxton, Chorley,  
 Lancs., PR7 6NU  
 Tel:- 01257 278938  
 Mob:- 07977 680913  
 email:- hamiltoncsers@gmail.com

Client	HURT PLANT HIRE
Project	SITE SERVICES SURVEY AND RECORDING
Title	PROPOSED DRAINAGE LAYOUT

## **APPENDIX B**

### **Dewatering Container Specification**

# Dexter Watson

## DEWATERING CONTAINER



### Overview

- 15m<sup>3</sup> watertight volume
- 3" anti syphon inlet, easy coupling height
- 3" butterfly decant valve s
- Process sampling point
- Heavy duty bushed rollers c/w greased axle
- Fully blasted painted in your colour with durable 2k topcoat
- Internal epoxy coating for exceptional corrosion resistance
- Bi-directional roll tarp covering

### FILTER SCREENS

- Side screens and centre tunnel for full dewatering
- Used in conjunction with our polymer dosing unit
- High quality, heavy duty filter screens

**NEW FOR 2021  
DWC**



**SAFE OPERATION  
FROM  
GROUND LEVEL**

### Rear Door

- Full width opening
- Heavy duty watertight seal
- Remotely operated hydraulic locks
- Hold open brace to enable safe access



01904 735 346

[info@dexterwatson.com](mailto:info@dexterwatson.com)

[www.dexterwatson.com](http://www.dexterwatson.com)

## **APPENDIX C**

### **Conservation Screening Report**

# Nature and Heritage Conservation

## Screening Report: Bespoke Waste

Reference	EPR/NP3094EE/P001
NGR	SD 54041 24071
Buffer (m)	100
Date report produced	11/09/23
Number of maps enclosed	1

The nature and heritage conservation sites and/or protected species and habitats identified in the table below must be considered in your application.

Protected Species	Screening distance (m)	Further Information
European eel	up to 500m	<a href="#">Natural England</a>
European eel migratory route		<a href="#">Appropriate Local Record Centre (LRC)</a> Environment Agency. Dial 03708 506 506 for your local Fisheries and Biodiversity team

Unfortunately we cannot provide you with the details of all protected species. This is because we either have not been given permission by the owner of the species data, or they have asked us not to identify the species as they are vulnerable. In these instances you must contact the relevant organisation listed above. A small administration charge may be incurred for this service.

Where protected species are present, a licence may be required from [Natural England](#) to handle the species or undertake the proposed works.

**Please note** we have screened this application for protected and priority sites, habitats and species for which we have information. It is however your responsibility to comply with all environmental and planning legislation, this information does not imply that no other checks or permissions will be required.

**Please note** the nature and heritage screening we have conducted as part of this report is subject to change as it is based on data we hold at the time it is generated. We cannot guarantee there will be no changes to our screening data between the date of this report and the submission of the permit application, which could result in the return of an application or requesting further information.

customer service line  
03708 506 506

incident hotline  
0800 80 70 60

floodline  
0845 988 1188





[www.environment-agency.gov.uk](http://www.environment-agency.gov.uk)

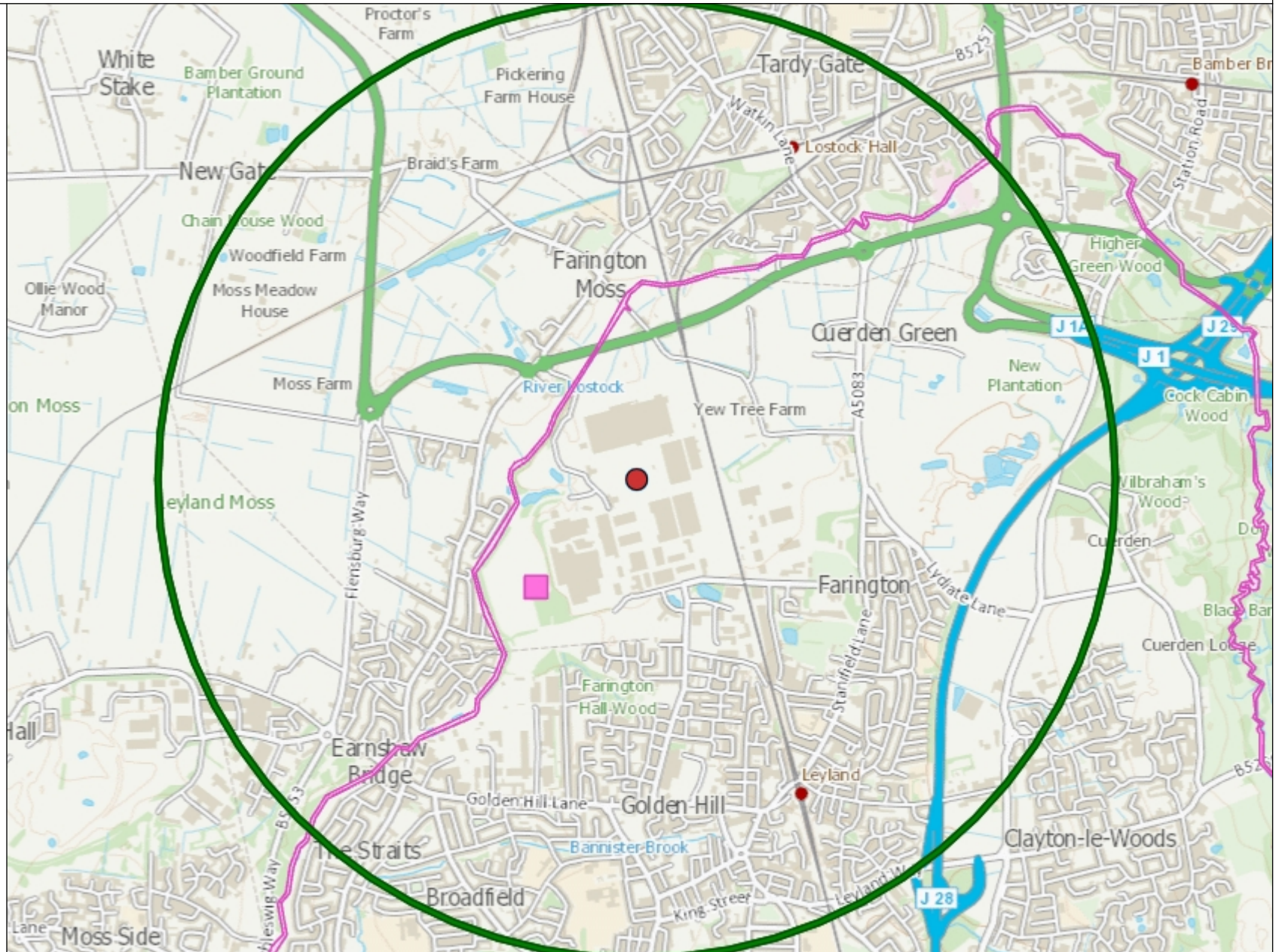


# Protected Species

## Legend

Protected species screened for Env Permits - complete set

-  Protected species, non fish
-  Protected fish
-  Protected fish migratory route
-  Fish migratory routes screened for Environmental Permits



1: 25,000

0 625

Metres





**Starling  
Environmental  
Limited**