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**VOLUME 1**

**NON TECHNICAL SUMMARY**

**ENVIRONMENTAL IMPACT ASSESSMENT REPORT**

**STARRUS ECO HOLDINGS LTD**

**MATERIALS RECOVERY FACILITY**

**MILLENNIUM BUSINESS PARK**

**BALLYCOOLIN**

**DUBLIN 11**

**Prepared For: -**

Starrus Eco Holdings Ltd  
Millennium Business Park  
Ballycoolin  
Dublin 11

**Prepared By: -**

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**March 2023**

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## **1. INTRODUCTION**

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This Non-Technical Summary provides an overview of the proposed development, the scope of the environmental assessment completed, the impacts associated with the development, the prevention and mitigation and monitoring measures that will be applied to prevent and/or minimise impacts, and an evaluation of the residual impacts. It uses, in so far as possible, non-technical language and is for information purposes only to guide readers to the sections of the Environmental Impact Assessment Report (EIAR) that contain the detailed assessments of the impacts of the proposed development.

### **1.1 Development Overview**

Starrus Eco Holdings Ltd (SEHL), trading as Greenstar (Greenstar) and Panda is part of the Beuparc Group, which is the largest waste management company in Ireland. It operates its waste management facility in Millennium Business Park under planning permission granted by Fingal County Council and an Industrial Emissions licence granted by the Environmental Protection Agency (EPA) that approve the acceptance and processing of 270,000 tonnes of non-hazardous waste annually.

To meet the demands for increased waste recycling and recovery from its customers and to provide contingency treatment capacity in the event of disruption to other waste management companies SEHL proposes to increase the annual waste intake to 450,000 tonnes. Normally the annual waste intake will be 400,000 tonnes and the 450,000 tonne limit will only be reached in emergency situations.

The existing buildings, plant and equipment have the capacity to accommodate the additional waste processing, with the exception of a new odour control system. There will be no construction works, with the exception of the assembly of a prefabricated odour control system, no new waste types, no alterations to the drainage systems and no significant change to the nature and duration of any emissions.

### **1.2 Need for Environmental Impact Assessment**

The need for EIA derives from European Union (EU) Directive 85/337/EEC on the assessment of the effects of certain public and private projects on the environment, commonly referred to as the EIA Directive. The objective of the EIA Directive is to ensure that developments that are likely to have 'significant effects' on the environment are assessed for their likely impacts.

An initial check is required to establish if a proposed development is listed in Annexes I and II of the EIA Directive, as transposed into Irish law by Parts 1 and 2 of Schedule 5 of the Planning and Development Regulations 2001. If a development is listed in Part 1 then an EIA is required. If it is listed in Part 2, but is one where the need for EIA is based on a threshold, then it must be checked against the thresholds specified in Part 2 of Schedule 5. If the proposed development exceeds the threshold, an EIA is mandatory.

If the development is below the relevant threshold an EIA is not mandatory, however regard must be had to the Directive's 'wide scope and broad purpose' and an EIA may be required for a development, for example based on the site location and associated impacts.

The proposed development is not listed in Part I of the Schedule 5, but it is listed in Part 2 of the Schedule 'Facilities for the disposal of waste with an annual intake of more than 25,000 tonnes'. For the purposes of the EIA Directive the term 'disposal' included recycling.

The development will be located entirely within the boundary of the existing facility that is already permitted to accept 270,000 tonnes of waste annually and for which an EIA was completed. Therefore the relevant type is Class 13 (a)(ii) of Part 2 of Schedule 2, which states: Any change or extension of development already authorised which would result in an increase in size greater than 25%, or an amount equal to 50% of the appropriate threshold. The proposed development will result in the acceptance of an additional 130,000 tonnes, which is more than 50% of the threshold (12,500 tonnes) and therefore an EIA is required.

### **1.3 Purpose of an Environmental Impact Assessment Report (EIAR)**

An EIAR is report of the effects a proposed development will have on the environment and it must include the information specified in the EIA Directive. An EIAR is prepared by the developer and is submitted to a planning authority with an application for planning permission.

The planning authority uses the information in the EIAR to assess the environmental effects of the development and the EIAR is also used by other bodies and members of the public to evaluate the effects of the development and to form the basis of submissions to the planning authority. Article 5 of the EIA Directive requires the information to at least include:

- A description of the project comprising information on the site, design, size and other relevant features, for example emissions to air and water
- A description of the likely significant effects of the project on the environment;
- A description of the measures to avoid, prevent or reduce and, if possible, offset likely significant adverse effects on the environment;
- A description of the reasonable alternatives relevant to the proposed development and an indication of the reasons for the chosen design, and
- A Non-Technical Summary of the information referred to above.

### **1.4 EIA Scoping**

The objective of scoping is to identify the range of information to be provided in EIAR and way this information will be compiled and assessed so that the EIAR addresses a development's likely significant effects on the following:

- Population and human health;
- Biodiversity, including protected species and habitats (Natura 2000 Sites);
- Land & Geology,
- Water;
- Air;
- Climate;
- Material Assets (for example roads and electricity and water supplies)

- Archaeological & Cultural Heritage
- Landscape, and
- The interaction between the topics listed above.

The EIA must also address the vulnerability of the proposed development to risks of major accidents and/or natural disasters.

O’Callaghan Moran & Associates (OCM) completed a scoping exercise based on the nature of the proposed development, the available baseline information on site, and the outcome of a pre-application meeting held with An Bord Pleanála (Board).

### **1.5 Methodology**

The approach took into consideration the guidance on EIA issued by the European Commission, the Irish Government and the EPA, including EPA Guidelines on the Information to be contained in Environmental Impact Assessment Reports issued in May 2022.

The assessment of the effects on climate and water included the implications for climate change. The assessment of impacts on biodiversity included an evaluation of the significance of effects on Natura 2000 Sites. The effects on population and human health took into consideration the likely effects of traffic, noise, emissions to air, major accidents and/or natural disasters and existing local amenities.

The EIA Directive do not generally require assessment of the need for a proposed development, land-use planning, demographic issues and detailed socio-economic analysis and the EPA Guidance (2022) states that this should be avoided in an EIAR, unless issues such as economic or settlement patterns give rise directly to specific new developments and associated effects. Given the nature of the proposed development these aspects have only been considered where they affect population and human health.

### **1.6 Anticipation, Preventing, Avoiding and Mitigating Significant Effects**

The anticipation of impacts is the most effective means of avoiding adverse effects at the preliminary design stage. This involves forming preliminary opinions on the approximate significance, magnitude, character, duration and type of the likely effects and using these opinions to identify appropriate mitigation measure that are progressively included into the design.

### **1.7 Cumulation of Effects**

Cumulative assessment provides the baseline for full environmental assessment of the potential effects of a proposed development in combination with other relevant developments. The cumulative assessment considered the existing land use patterns, population, local infrastructure, environmental setting and developments in the vicinity of the site for which planning permission has been granted but have not yet been built.

### **1.8 Assessment of Effects**

Effects were assessed in terms of the likely changes to the environment either directly, or indirectly from the proposed development. Effects are, where possible, described in terms of quality, significance, extent & context, probability, duration and type as listed in the EPA 2022 Guidelines.



## **1.9 Residual Impacts**

It is not always either possible, or practical to mitigate all adverse effects and the residual impacts are the final effects that occur after the mitigation measures have been implemented.

## **1.10 Consultation**

A pre-application meeting was held with the Board on 6<sup>th</sup> October 2022.

## **1.11 Project Team**

OCM were the prime consultants. OCM has twenty three years' experience in the completion of environmental impact assessments for large scale waste management and industrial developments and has particular expertise in waste management policy, air, climate, geology, hydrogeology, hydrology, land use, socio-economics and environmental risk assessment. ORS Consulting Engineers were responsible for the Traffic and Transport Assessment. Damian Brosnan Acoustics completed the noise assessment surveys. Katestone carried out odour dispersion modelling and an assessment of impact on Air and Climate.

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## **2. EXISTING SITE DESCRIPTION**

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### **2.1 Site Location**

The site is in the east of the Millennium Business Park, Ballycoolin, Dublin 15, as shown on Figure 2.1. Millennium Business Park is accessed via the Cappagh Road and the site entrance is off an internal road within the Park.

The surrounding land use is shown on Figure 2.2. The site is in the east of an area that has been extensively developed for commercial and industrial use. The lots to the west in the Business Park are occupied by commercial units and warehousing. To east and north is Huntstown Quarry. The SEHL Panda Cappagh Road MRF is approximately 400 m to the south. The nearest occupied dwelling is approximately 1km to the south.

### **2.2 Site History**

Millennium Business Park was developed in the late 1990s. In 2003 Celtic Waste, (subsequently rebranded as Greenstar and then acquired by SEHL.) was granted planning permission for the development of a waste management facility comprising a materials recovery building and a composting building and in the same year the EPA issued a Waste licence (W0183-01).

The materials recovery building was constructed in the south of the site and operations began in 2006. The composting building was not constructed. In 2008, permission was granted for a vehicle maintenance building. In 2015, the EPA amended the licence to bring it into compliance with the Industrial Emission Directive. In 2018, a new waste recycling building was constructed in the north of the site

### **2.3 Site Layout**

The site layout is shown on Drawing No 211\_066-ORS-ZZ-00-DR-AR-210. It occupies 4.43ha and comprises the waste recovery and transfer building (4,388m<sup>2</sup>), recycling building (4,700m<sup>2</sup>), administration building/staff amenity (625m<sup>2</sup>), maintenance building (286m<sup>2</sup>), two weighbridges and associated control rooms, fuel tanks and bund walls, paved open yards, skip storage, vehicle parking and a vehicle wash..

### **2.4 Site Services**

The site has connections to the main electricity supply, national gas grid, Uisce Eireann mains water supply and foul sewer and telecoms systems.

### **2.5 Waste Activities**

The facility has permission to accept and process 270,000 tonnes of non-hazardous, household, including kerbside collected, residual waste (black bin) and food waste (brown bin), commercial and industrial waste and construction and demolition wastes. Hazardous wastes and liquid waste are not accepted. It operates 24 hours a day, 7 days a week.

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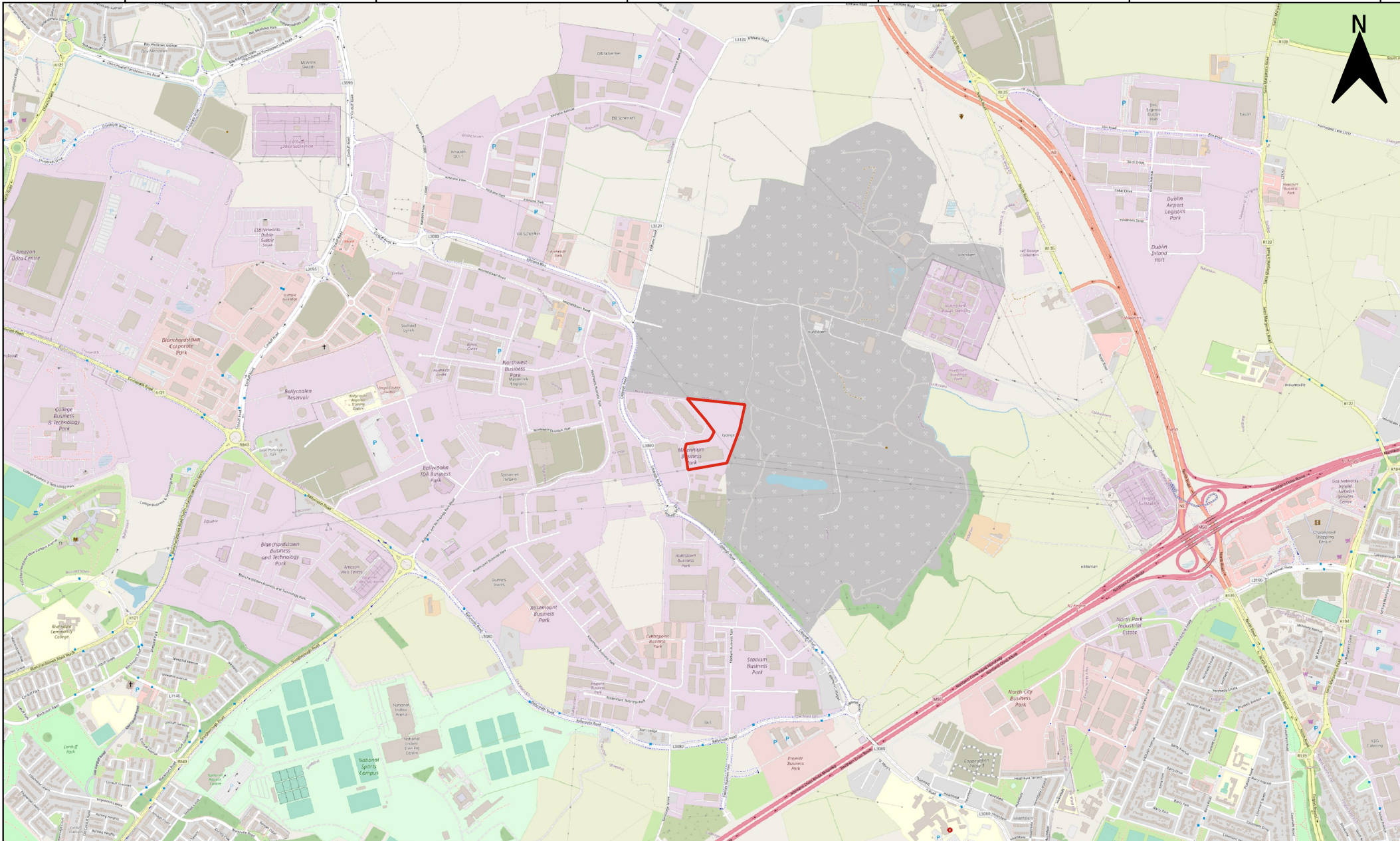
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CLIENT

Starrus Eco Holdings Ltd

TITLE

Site Location

DETAILS

 Site Boundary

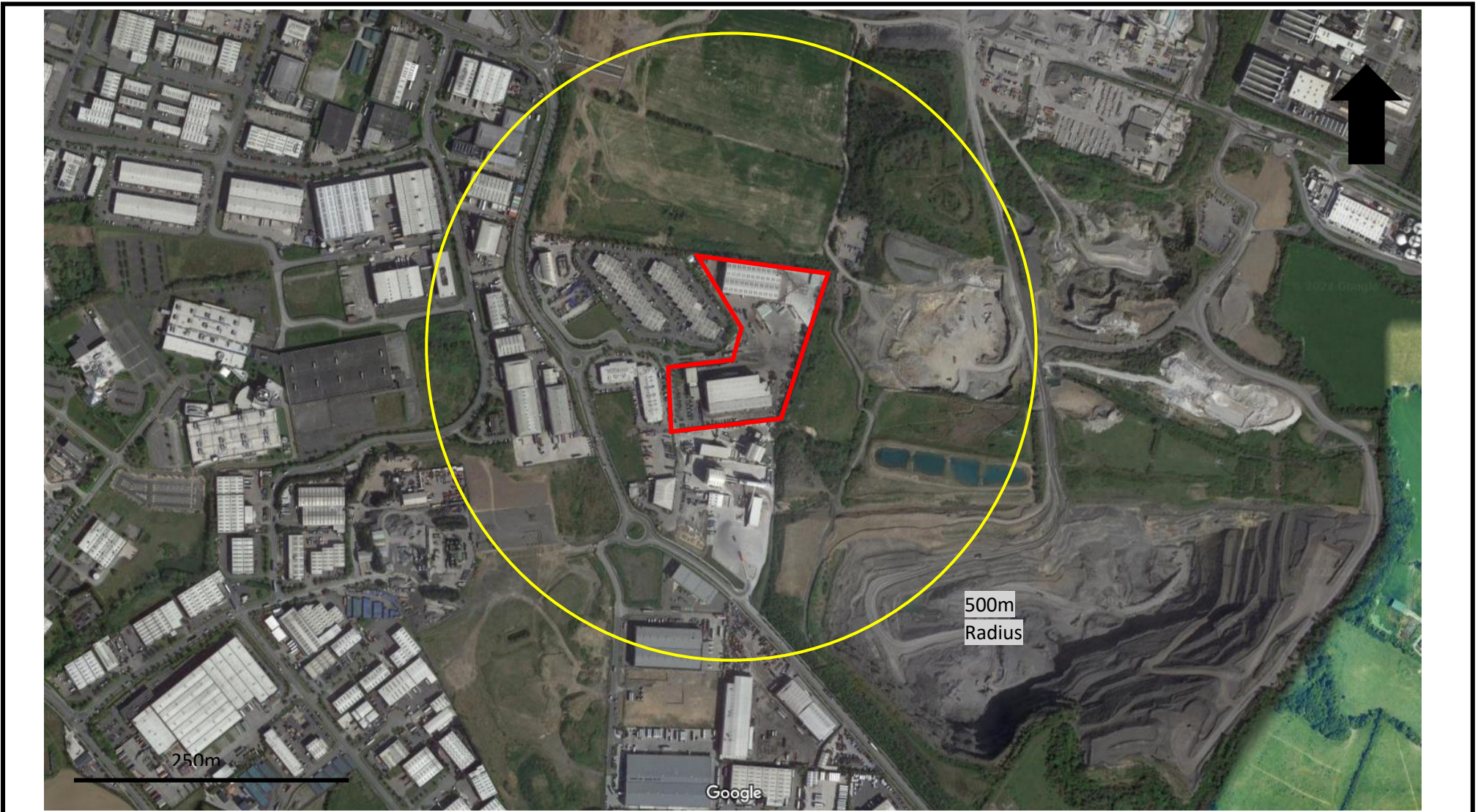
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FIGURE 2.1

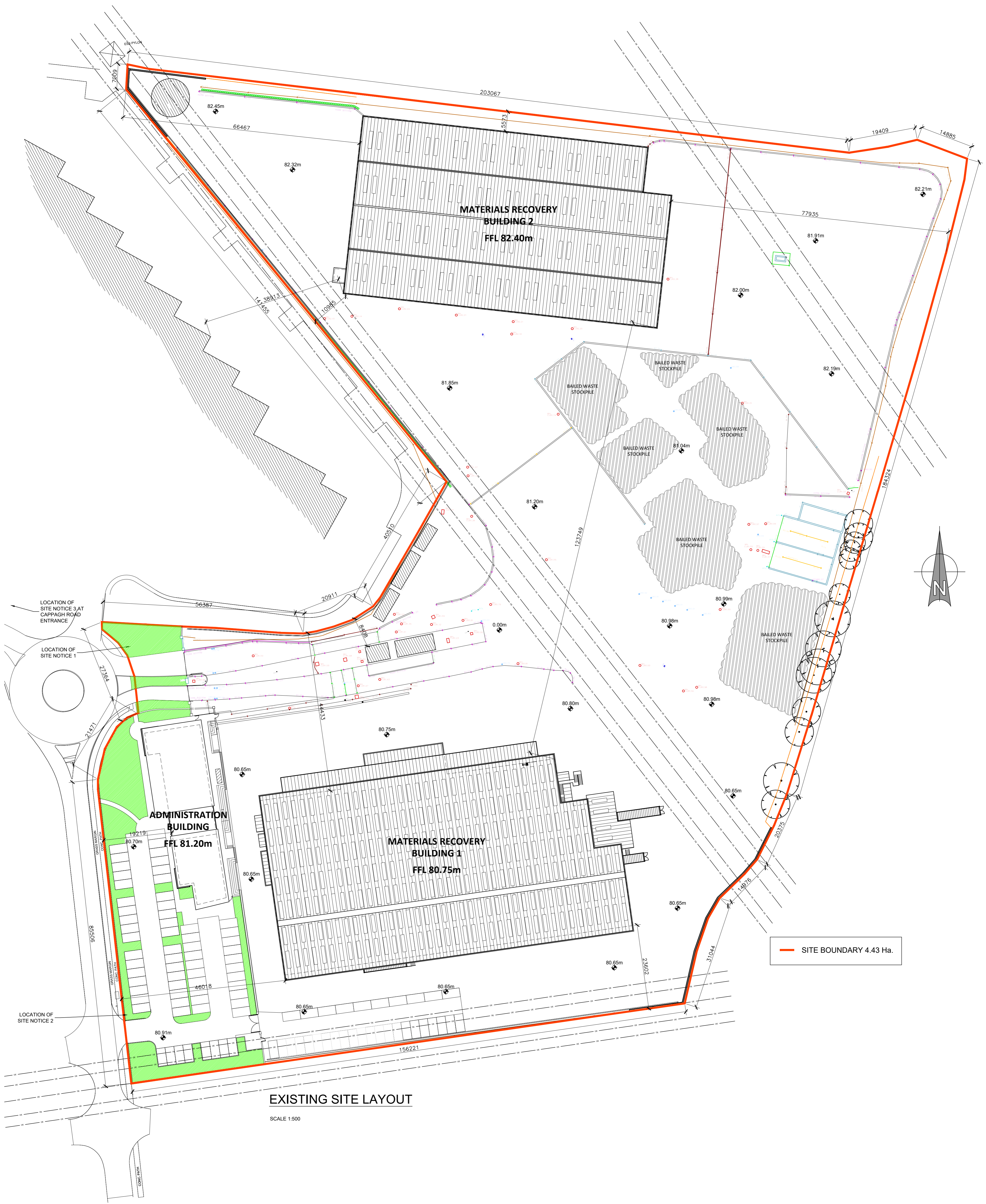
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 <p>O'Callaghan Moran &amp; Associates  <small>environmental management for business</small>  <a href="http://www.ocallaghanmoran.com">www.ocallaghanmoran.com</a></p>	<p>O'Callaghan Moran &amp; Associates,          Unit 15 Melbourne Business Park,          Model Farm Road, Cork.          Tel. (021) 4345366          Email: <a href="mailto:info@ocallaghanmoran.com">info@ocallaghanmoran.com</a></p>	<p><b>Title:</b>          Figure 2.2 Surrounding Landuse</p>	<p><b>Legend</b>   -Site Location</p>
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REV NO.	DATE	REVISION NOTE	DWN BY:	CKD BY:
P01	21/02/2023	ISSUED FOR COMMENT	CB	CB
P02	03/03/2023	ISSUED FOR PLANNING	CB	CB

CLIENT:	STARRUS ECO HOLDINGS LIMITED (SEHL) TRADING AS GREENSTAR		
PROJECT:	PROPOSED ODOUR ABATEMENT SYSTEM MILLENNIUM BUSINESS PK, CAPPAGH ROAD, TOWNLAND OF GRANGE, BALLYCOOLIN, DUBLIN 11		
TITLE:	EXISTING SITE LAYOUT		
DRAWN:	CHECKED:	APPROVED:	JOB NO:
CB	CB	OD	211_066
DATE:	SCALE:	DRAWING NO:	REV:
03/03/2023	1:500	211_066-ORS-ZZ-00-DR-AR-210	P02

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The wastes are delivered to and removed from the facility in heavy goods vehicles. All the wastes are weighed at the on-site weighbridge and then are off-loaded inside the buildings, where they are processed to separate the recyclable materials (paper, cardboard, plastic, metal, wood) from the non-recyclables. The processing involves the use of bag shredders, mechanical screens, conveyors, magnets, compactors, mechanical grabs, loading shovels, fork lifts and wrappers.

The recyclables are sent to recycling plants. The non-recyclables are used to produce what is called solid recovered fuel which is sent to incinerators in Ireland and overseas and is also a replacement for fossil fuels in cement kilns. The solid recovered fuel that is exported are formed into bales that are wrapped in plastic sheeting and these are stored in the open yard. The food waste is transferred to biological treatment plants e.g. compost and anaerobic digestion plants.

## **2.5 Environmental Emissions and Controls**

Emissions include vehicle exhausts, dust, noise and odours, washwater from the truck wash, sanitary wastewater from the staff toilets and rainwater run-off. The EPA licence sets out the control measures that must be applied to ensure these emissions do not cause pollution. The licence also requires surface water, foul water, dust deposition and noise monitoring at specified monitoring locations and sets emission limits that must not be exceeded.

## **2.6 Safety and Hazard Control**

SEHL has prepared an Accident Prevention Policy to minimise the risk of accidents occurring and an Emergency Response Procedure that specifies roles, responsibilities and actions required to deal quickly and efficiently with all foreseeable major incidents and to minimise their associated environmental impacts.

## **2.7 Accidents & Emergencies**

SEHL has, in accordance with the requirements of the EPA licence, completed an Environmental Liability Risk Assessment that identifies the likely accidents that could occur, assessed the associated environmental effects and the required actions to remedy those effects. Based on the types of waste that are and will be accepted and the activities carried out, the only accident that presents a significant risk of environmental pollution is a fire.

## **2.8 Decommissioning**

SEHL has, as required by the EPA licence, prepared a Decommissioning Plan that identifies the actions that will be taken in the event of the closure of the facility. These include the removal of all wastes and materials, clean out of the processing buildings, office and maintenance garage, cleaning of storm sewers and oil interceptors and disconnection of services and the submission of an application to the EPA to surrender the licence. SEHL has also, as required by the EPA licence, agreed a financial provision with the EPA to finance the decommissioning works.

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### 3. PROJECT CHARACTERISTICS

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There is a demand for the expansion of waste recycling and recovery capacity in response to population growth, ambitious national recycling and recovery targets and to meet 'circular economy' initiatives.

SEHL proposes to increase the annual waste intake to a maximum of 450,000 tonnes/year, but there will be no change to the types of waste accepted. Normally the annual intake will be 400,000 tonnes and the additional 50,000 tonnes will only be accepted at times when there is a disruption to the national waste management capacity, for example the unexpected closure of other large scale waste treatment plants either in Ireland or overseas.

The existing buildings, processing equipment and storage areas have the capacity to accommodate the increased through put and so construction works are not and no additional processing equipment is needed. Similarly, there will be no increase in staffing levels.

The existing emission controls can also manage the increased through put, however as a precautionary measure a new odour control system will be installed in the building where the odorous wastes (black and brown bin) are handled. The system will involve the extraction of odorous air from the building and passing it through a dust filter and a carbon filter that will reduce the odours to levels that will not cause an off-site nuisance. The design, installation and operation of the system requires approval of the EPA.

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## **4. ALTERNATIVES**

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The facility is a permitted waste management operation with the capacity to accommodate the increased annual throughput without construction works. All of SHEL's other facilities in the Greater Dublin Region are operating at maximum capacity and cannot accommodate additional wastes. The only alternative to the proposed development is to acquire a new site, construct and fit out new waste processing buildings and procure obtain a new licence from the EPA. This offers no better environmental benefits to the proposed development.

### **4.1 Do Nothing**

If the development does not proceed the facility will continue to operate at an annual intake of 270,000 tonnes/year. There will be no expansion of waste treatment capacity to meet the projected demands of SEHL's customers in the Dublin region and no contribution to meeting national recycling targets and the national contingency waste treatment capacity.



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## 5. CLIMATE

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### 5.1 Methodology

The assessment was based on Ireland's commitments to tackle climate change by reducing greenhouse gas emissions; information on Ireland's current and predicted greenhouse gas emissions and the emissions from the increased processing and the additional traffic.

### 5.2 Proposed Development

The development involves increasing the amount of waste accepted and processed at the site. It does not require any construction works or the provision of new processing equipment. The aspects relating to climate are the impacts of the greenhouse gas emissions from the increased processing and from the additional traffic, and the potential effects of climate change on the development in the future.

### 5.3 Receiving Environment

The EPA is responsible for tracking and reporting on Ireland's progress towards meeting its climate change objectives, which includes achieving its emission reduction targets for 2030 set out in the European Union Emissions Sharing Regulations (ESR) and the Emissions Trading System (ETS). The ETS applies to large greenhouse gas producers like power stations. Other activities, which include the proposed development, belong to what is called the Non-ETS Sector.

The EPA predicts that Ireland can meet its 2030 Non-ETS Sector targets if the measures set out in the current national Climate Action Plan (2021) are implemented; however the more ambitious targets required by Ireland's Climate Act (2021) will require additional and as yet unidentified measures.

The binding annual greenhouse gas emission target for Ireland is a reduction of 30% in emissions by 2030 compared to 2005 levels. In 2005 the annual greenhouse gas emissions for the non-ETS sector were 47.30 million tonnes of carbon dioxide and the 2030 target is 33.58 million tonnes. The EPA predicts that non ETS greenhouse gas emissions in 2024 will range from 40.04 to 42.9 million tonnes of carbon dioxide.

In addition to the impact of the proposed development on climate change, its vulnerability to the impacts of climate change is assessed.

### 5.4 Impacts

As the development does not involve any construction works, there will be no construction stage impacts. In the operational stage there will be a negative impact linked to the additional greenhouse gas emissions from the processing, off-site electricity generation and the extra waste transport vehicle movements. However processing the residual waste to remove recyclables and avoid incineration has a positive impact.

The net impact is determined by the greenhouse gas emissions generated minus the reduction due to the diversion of material from incineration. Overall the processing of the additional amounts of residual waste will have a positive impact on greenhouse gas emissions compared to incineration.

The site is not in an area at risk of flooding taking into consideration the effects of climate change.

## **5.5 Baseline Scenario**

If the development does not proceed there will be no additional greenhouse gas emissions and no increase in the greenhouse gas emission offsets.

## **5.6 Prevention & Mitigation Measures**

### **5.6.1 Design Stage**

The most energy efficient electrically powered fans will be included in the odour control unit to minimise indirect emissions from off-site electricity generation.

### **5.6.2 Construction Stage**

As the development does not involve any construction works, apart from the assembly of the odour control system, construction stage measures are not required,

### **5.6.3 Operational Stage**

SEHL conducts regular reviews of energy efficiencies and engage with plant and equipment suppliers to ensure that only the most energy efficient are procured. There is a preventative maintenance programme for all fixed and mobile plant to ensure they remain energy efficient. SEHL has begun replacing its diesel fuelled collection and transport vehicles to ones powered by compressed natural gas and electricity. The installation of the roof solar panels will reduce demand on the national electricity grid.

## **5.7 Monitoring**

Electricity consumption is monitored and the energy usage of the plant items assessed in the energy reviews is recorded.

## **5.8 Cumulative Effects**

The assessment of cumulative effects took into consideration Ireland's legally binding obligations on greenhouse gas emission reduction and the impacts of traffic associated with the proposed development and the surrounding area.

## **5.9 Residual Impacts**

The impacts will be negative, imperceptible, at a national level, likely to occur and long term. The implications of Climate Change for the development will be negative, imperceptible, local, likely to occur and long term

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## **6. LAND AND SOIL**

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### **6.1 Methodology**

The assessment was based on a review of information obtained from Geological Survey of Ireland, the EPA and Teagasc and the findings of a site investigation carried out during the development of the Business Park. It took account of the Institute of Geologists of Ireland Guidelines for the Preparation of Soils Geology and Hydrogeology Chapters of Environmental Impact Statements' and the EIA guidelines described in the Introduction.

### **6.2 Proposed Development**

The development involves increasing the annual amount of waste accepted and processed. This does not require any encroachment into agricultural or amenity lands (land take), ground disturbance or construction works and will not result in any emissions to ground.

### **6.3 Receiving Environment**

The site is entirely covered by buildings and paved areas, with landscaped areas along the site boundary and at the entrance. The subsoils beneath the site are between 1.3 and 8.45 m thick and comprise sandy gravelly boulder clays. The bedrock is a shale, limestone.

### **6.4 Impacts**

The development does not involve any land take into agricultural or recreational areas, does not require ground disturbance and construction works and will not result in any new emission to ground. There will be no impacts on land and the bedrock. In the operational stage the development, along with the currently authorised activities, has the potential to impact on the soils as a result of the infiltration to ground through damaged paving of contaminants from the ground surface and leaks from the sewers.

### **6.5 Baseline Scenario**

If the development does not proceed current operations will continue, with no change to the potential impact on land and soil.

### **6.6 Prevention & Mitigation Measures**

#### **6.6.1 Design Stage**

As the development does not require any ground disturbance or construction works, design stage measures are not required.

#### **6.6.2 Construction Stage**

As there will not be any construction works, apart from the assembly of the odour control system, construction stage measures are not required.

### 6.6.3 Operational Stage

The EPA licence specifies the prevention and mitigation measures that must be applied to avoid/prevent impact on land and geology, which include;

- Provision of impermeable paving across all operational areas;
- The routine inspection and repair of paved areas,
- Regular integrity tests of storage containment areas and drainage systems;
- The adoption of an emergency response procedure, and
- Staff training on appropriate spill response actions.

### 6.7 Monitoring

Monitoring is not required.

### 6.8 Cumulative Effects

As the development does not involve any land take for excavation of the soils and bedrock it will not have any cumulative effects

### 6.9 Residual Impacts

Under normal operations the development will have a neutral, imperceptible, local, unlikely and long term impact. There is the potential for the accidental leak/spill of oil to ground as and if a fire occurs firewater will be generated. These contaminants could infiltrate to the soils through damaged paving.

SEHL has completed an Environmental Liability Risk Assessment (ELRA) for the facility that looks at the 'worst case' impacts on soils associated with a fire and identifies the measures required to effectively remediate those impacts. The ELRA has been approved by the EPA. Following the completion of the remedial works the residual impacts will be negative, imperceptible, local, likely and long term.

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## **7. WATER**

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### **7.1 Methodology**

The assessment was based on a review of information obtained from Geological Survey of Ireland, the EPA, the Office of Public Works, the River Basin Management Plan and the findings of a site investigation carried out during the development of the Business Park. It took account of the Institute of Geologists of Ireland Guidelines for the Preparation of Soils Geology and Hydrogeology Chapters of Environmental Impact Statements' and the EIA guidelines described in the Introduction.

### **7.2 Proposed Development**

The development involves increasing the annual amount of waste accepted and processed. This does not require any changes to the drainage layout and will not result in any change to the volume and quality of the sanitary wastewater, vehicle washwater and storm water run-off and will not give rise to any new emissions to surface water and groundwater.

### **7.3 Receiving Environment**

The site lies within the catchment of the Tolka River, which is approximately 2.5 kilometres to the south west. There are no streams or water courses either on site, or in the surrounding area. The Tolka River is part of the Liffey Water Management Unit, as designated by the Eastern River Basin District Management Plan. The overall status of the river is 'Moderate', and it is considered 'At Risk' of not achieving its restoration objective of at least 'Good' status by 2027.

The bedrock is a locally important (Lm) aquifer that is productive in local zones. The aquifer vulnerability to pollution from the ground surface ranges from High to Moderate across the Business Park. The aquifer is part of the Dublin Area Groundwater Body, which is categorised as being of 'Good' status.

### **7.4 Impacts**

Sanitary wastewater, washwater from the vehicle wash and rainwater run-off from the paved open areas where wastes are stored discharge to the foul sewer that serves the Business Park. Rainwater run-off from the building roofs and paved areas where wastes are not stored used to discharge to the storm sewer serving the Business Park; however due to damage to the storm sewer outside the site boundary, which was not caused by SEHL, the stormwater discharge has been diverted to the foul sewer pending the repair of the storm sewer system by the Business Park management company.

The proposed development will not increase the impermeable area of the site, does not require any alteration to the existing foul and surface water drainage layout, will not result in any change to either the quality or quantity of the discharge and does not involve any new emission to surface water or groundwater.

### **7.5 Baseline Scenario**

If the proposed development does not proceed current operations will continue, with no change to the potential impact on water.

## **7.6 Prevention & Mitigation Measures**

### **7.6.1 Design Stage**

As the development does not require any alterations to the drainage systems and will not result in any new emission to waters, design stage measures are not required.

### **7.6.2 Construction Stage**

As there will not be any construction works, apart from the assembly of the odour control system, construction stage measures are not required.

The EPA licence specifies the prevention and mitigation measures that are required to avoid/prevent negative impacts on waters. These include;

- The provision of oil interceptors on the surface water drains that collects run-off from the yard and weighbridge and on the drain that discharges washwater from the vehicle wash to the foul sewer;
- Specifying quality limits on the discharge to the foul sewer;
- Installation of shut off valves on the drainage system that can be closed to prevent the entry of contaminated water to the sewers;
- Provision of impermeable paving across all operational areas;
- The routine inspection and repair of paved areas,
- Regular integrity tests of storage containment areas and drainage systems;
- The adoption of an emergency response procedure, and
- Staff training on appropriate spill response actions.

## **7.7 Monitoring**

The EPA licence requires monitoring of the quality of the discharges to both the storm and foul sewers, with the results reported to the EPA. SEHL regularly inspects the oil interceptors to confirm they are functioning properly.

## **7.8 Cumulative Effects**

As the development will not result in any change to the volume and quality of the discharge to the sewers and will not give rise to any new emissions to surface water and groundwater it will have no cumulative impact on water.

## **7.9 Residual Impacts**

Under normal operations the development will have a neutral, imperceptible, local, unlikely and long term impact. There is the potential for the accidental leak/spill of oil to ground as and if a fire occurs

firewater will be generated. These contaminants could enter the sewers and infiltrate to groundwater through damaged paving.

SEHL has completed an ELRA for the facility that looks at the 'worst case' impacts on water associated with a fire and identifies the measures required to effectively remediate those impacts. The ELRA has been approved by the EPA. Following the completion of the remedial works the residual impacts will be negative, imperceptible, local, likely and long term.

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## **8. BIODIVERSITY**

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### **8.1 Methodology**

The assessment was based on desk top study and a site walkover. Habitats were assessed using the classification scheme described in the Heritage Council publication A Guide to Habitats in Ireland and following the guidelines contained in Best Practice Guidance for Habitat Survey and Mapping.

### **8.2 Proposed Development**

The development involves increasing the annual amount of waste accepted and processed. This does not require any land take and construction works and will not result in any change to the volume and quality of the sanitary wastewater, vehicle washwater and storm water run-off and will not give rise to any new emissions to ground, surface water and groundwater. There will be additional emissions to air from the diesel fuelled processing plant and the vehicles transporting the wastes to and from the site.

### **8.3 Receiving Environment**

The site is almost completely covered by concrete paving and buildings, with hedgerows along the eastern and northern boundary and landscaping (grassed areas and shrubs) around the buildings at the entrance and the staff car park. The site operates 24/7 with vehicle movements occurring throughout that period and area lighting in the hours of darkness meaning that all fauna in the vicinity of the site are habituated to this type of disturbance.

The habitat in the operational area is classified as 'Buildings and artificial surfaces'. This type of habitat is typically not species diverse and the likelihood of protected species within the site boundary is very low. The hedgerows along the eastern and northern boundaries were part of the original field boundaries retained when the facility was developed and are dominated by hawthorn, with occasional ash trees and an understorey of ivy and bramble enhanced with additional planting of birch, wild cherry and hornbeam.

The site is not in a Special Area of Conservation (SAC), or a Special Protection Area (SPA) and the closest such sites are all more than 9 kilometres from the site.

### **8.4 Impacts**

The proposed development does not involve any land take, ground disturbance or construction works and will not result in the loss of any habitats either inside, or outside the site boundary. It will not result in any impacts on surface water or groundwater. There will be no changes to the emissions associated with the waste operations, with the exception of the new odour control system, or the operational hours and therefore no potential for disturbance of birds and mammals in the surrounding habitats. The increase in vehicle exhaust emissions have the potential to adversely impact on air quality, however given the separation distances this will have no impact on ecological sensitive sites

### **8.5 Baseline Scenario**

If the proposed development does not proceed the current activities will continue with no change to the impacts on biodiversity.



## **8.6 Prevention & Mitigation Measures**

### **8.6.1 Design Stage**

As the development will not have any impact on biodiversity either inside or outside the site boundaries and will have no impact on any designated sites, design stage prevention and mitigation measures are not required.

### **8.6.2 Construction Stage**

As the development does not involve any construction works, apart from the assembly of the odour control system, construction stage measures are not required.

### **8.6.3 Operational Stage.**

The prevention and mitigation measures already in place to protect soil and water and avoid off-site nuisance equally apply to mitigating impacts on off-site ecological receptors and therefore additional operational stage prevention and mitigation measures are not required.

## **8.7 Monitoring**

The EPA licence requires an annual review of the landscape measures and improvements if considered necessary. The annual review will continue.

## **8.8 Cumulative Effects**

As the proposed development will have no impact on habitats, flora and fauna and designated ecological sites it will have no cumulative effects on biodiversity.

## **8.9 Residual Impacts**

Under normal conditions the proposed development will have no residual impact on biodiversity. In the event of a fire there may be damage to the landscape areas and trees inside the site boundary; however these are low ecological value habitats and readily replaced. Following the completion of the remedial works the residual impact on biodiversity will be neutral, imperceptible, local, likely and short term.

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## **9. AIR**

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### **9.1 Methodology**

The assessment was based on information on air quality obtained from EPA databases, dust deposition monitoring carried out at the facility by SEHL, meteorological data from the closest Met Eireann station at Dublin Airport, and the traffic and transport assessment completed by ORS Consulting Engineers. The traffic impacts were assessed in accordance with the Highways England Design Manual for Roads and Bridges.

### **9.2 Proposed Development**

The development involves increasing the annual amount of waste accepted and processed. There will be additional emissions to air from the odour control system, the diesel fuelled processing plant and the vehicles transporting the wastes to and from the site.

### **9.3 Receiving Environment**

The site is in an area that has been extensively developed for industrial and commercial use and mineral extraction. The site is bounded to the north and east by a quarry operated by Roadstone Wood and to the west and south by other business premises within Millennium Business Park. The nearest occupied dwelling is ca 1km to the south. The ambient air quality, based on the results of continuous monitoring conducted by the EPA in Finglas, is good. The dust deposition monitoring carried out by SEHL, which is reported to the EPA, confirms that current operations are not a source of nuisance dusts.

### **9.4 Impacts**

The potential impacts on air are emissions (dust and odours) from the waste activities and emissions from processing plant and the waste vehicle transport movements (exhaust gases and dusts).

### **9.5 Baseline Scenario**

If the proposed development does not proceed the facility will continue to operate as is, and there will be no change to the potential impacts on air quality.

### **9.6 Prevention & Mitigation Measures**

#### **9.6.1 Design Stage**

An odour control system will be installed in the section of the recovery and transfer building where the odorous wastes (black and brown bin) are processed and stored. The system will involve the abstraction of the air and its treatment in a dust filter to remove dusts and carbon filter to reduce odour levels before it is emitted to the air via a stack. The system will be designed to meet the most stringent odour limit value specified by the EPA. The design, installation and operation of the system will require the EPA's prior approval.

### 9.6.2 Construction Stage

As the development does not involve any construction works, apart from the assembly of the odour control system, construction stage prevention and mitigation measures are not required.

### 9.6.3 Operational Stage

In addition to the new odour control system, the control measures specified in the EPA licence to ensure waste activities do not give rise to negative impacts on air quality will continue to be applied. These measures include the acceptance and processing of waste inside Recovery and Recycling buildings; minimising door openings in areas where odorous wastes are handled, and damping down paved yards in dry weather to prevent dust emissions from moving vehicles. The trucks that transport the wastes are fitted with nitrous oxides reduction systems and it is SEHL policy not to allow engine idling.

## 9.7 Monitoring

The dust deposition monitoring required by the EPA licence will continue. The emission of treated air from the odour control system and the operation of the system itself will be monitored to confirm it is functioning properly

## 9.8 Cumulative Effect

The baseline air quality assessment considered the air quality at the facility and in the surrounding area, while the air quality impact assessment considered the effects of traffic linked to the proposed development and the existing commercial activities in the area, including the SEHL MRF at Cappagh Road.

## 9.9 Residual Impacts

Under normal circumstances the proposed development will have a negative, imperceptible, likely, local and long term impact. In the event of a fire smoke emissions will have a negative, imperceptible, likely, local and brief impact.

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## **10. POPULATION & HUMAN HEALTH**

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### **10.1 Methodology**

The assessment was based the land use in the vicinity of the site including, settlement patterns, data from the Central Statistics Office the results of the dust deposition and noise monitoring surveys conducted by SEHL and the findings of the assessment of impacts on human health associated with emissions to air (Chapter 9).

### **10.2 Proposed Development**

The development involves increasing the annual amount of waste accepted and processed. This does not result in any change to the current operational hours or the provision of additional processing equipment. There will not be any new sources of noise emissions. There will be additional emissions to air from the diesel fuelled processing plant and the vehicles transporting the wastes to and from the site.

### **10.3 Receiving Environment**

Fingal's population is 329,218, which is 22.6% of the total population of Dublin. Fingal's share of the Dublin population has risen steadily since 1986, when it was just 14% and is projected to further increase.

The facility is in an area that that has been extensively developed for industrial and commercial use and mineral extraction and is not at risk of major natural disasters (e.g. earth quakes, landslides and flooding). The site is bounded to the north and east by a quarry operated by Roadstone Wood and to the west and south by other business premises within Millennium Business Park. The nearest occupied dwelling is ca 1 kilometre to the south. There are no recreational areas, schools or health care facilities within 1 kilometre of the site.

The ambient air quality is good and noise monitoring carried out by SEHL has established that noise emissions from the site comply with the statutory emission levels at noise sensitive locations.

### **10.4 Impacts**

In the absence of mitigation waste processing activities have the potential to impact on air quality, which can affect human health; however the air quality assessment has established that the development will not have a significant impact on air quality.

Contaminated rainwater and process wastewater from waste activities have the potential to impact on surface water and groundwater quality, with consequences for water supply abstractions and human health; however the assessment of the impact on water had concluded the development will have no impact.

Waste processing can also be a source of off-site nuisance linked to traffic, noise, dust, and odour emissions, traffic, litter and vermin. The traffic assessment has determined that the local road network can accommodate the increased traffic linked to the development without causing significant congestion. While odours, noise and dusts do not present a direct risk to health, they can be a significant nuisance and cause of discomfort that indirectly affect human health.

In the event of a fire there will be smoke emissions to air that may require the temporary evacuation of occupants of nearby commercial operations.

## **10.5 Baseline Scenario**

If the development does not proceed, the facility will continue to operate in its current configuration with no change to the potential impacts on population and human health.

## **10.6 Prevention & Mitigation Measures**

### **10.6.1 Design Stage**

An odour control system designed to achieve the most stringent odour emission levels specified by the EPA will be installed in the building where odorous wastes are processed and stored.

### **10.6.2 Construction Stage**

As the development does not involve any construction works, apart from the assembly of the odour control system, construction stage prevention and mitigation measures are not required.

### **10.6.3 Operational Stage**

SEHL implements the control measures specified in the EPA licence, as referred to earlier, to ensure waste activities will not negatively impact on air and water quality and will not be a source of nuisance outside the facility boundary.

SEHL has prepared an Accident Prevention Policy to minimise the risk of accidents occurring and has completed a Fire Risk Assessment that identifies all of the potential sources of fire and assesses the current prevention, detection and suppression controls.

SEHL has prepared an Emergency Response Procedure that describes the actions taken in the event of a fire outbreak to ensure it is contained and extinguished as soon as is practical. SEHL has also prepared an ELRA that identifies the likely impacts of a fire and sets out the remedial measures that will be implemented to effectively mitigate those impacts.

## **10.7 Monitoring**

The EPA licence requires monitoring of surface water, foul water, emissions to air and noise and the submission of the results to the EPA. Any exceedance of an emission limit value specified in the licence is considered to be an incident that must be investigated to identify the cause and the appropriate corrective actions implemented.

## **10.8 Cumulative Impacts**

The proposed development will result in an increase in emissions to air however the assessment of the impact on air quality (Chapter 9) has established that this will not have a cumulative negative impact.

## **10.9 Residual Impacts**

Under normal circumstances the proposed development will have a negative, imperceptible, likely, local and long term impact. In the event of a fire smoke emissions will have a negative, imperceptible, likely, local and brief impact on population and human health.

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## **11. LANDSCAPE & VISUAL IMPACT**

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### **1.1 Methodology**

The assessment followed the Guidelines for Landscape and Visual Impact Assessment (Landscape Institute & Institute of Environmental Management & Assessment). It took into consideration the requirements of the Fingal County Development Plan. The site and the surrounding area was visited to establish the views of the area and the landscape character.

### **11.2 Proposed Development**

The proposed development does not involve any change to the appearance of the buildings, the site layout and external materials storage areas, with the exception of the installation of the odour control unit at the north eastern elevation of the recovery and transfer building.

### **11.3 Receiving Environment**

The facility is an area where the land cover use is industrial/commercial in an established and extensively developed industrial zone. It is not in an area designated as highly sensitive and is not overlooked by any designated views or prospect areas. The shape and mass of the existing buildings are similar to those of other commercial and industrial operators in the Business Park.

Due to a combination of the layout of the Business Park and its internal landscaping, full views of the site are limited to the approach roads to the main entrance, where there are views of the western and eastern elevations of the office and the waste recovery and transfer building, with limited views of the upper sections of these building and the recycling building from the other Business Park access roads. Apart from the site entrance and the staff carpark there are no public views of the internal operational area from within the Business Park.

### **11.4 Impacts**

The proposed development does not involve any change to the appearance of the buildings or the site layout, with the exception of the provision of the odour control unit at the north-eastern side of the waste recovery and transfer building.

### **11.5 Baseline Scenario**

If the development does not proceed the facility will continue to operate in its current layout, with no change to the external appearance of the facility.

### **11.6 Prevention & Mitigation Measures**

#### **11.6.1 Design Stage**

The location of the odour control unit was selected so that it will substantially screened from public view by the building, with only the top of the stack visible. The height of the stack is determined by the odour dispersion modelling (Chapter 9) and is the lowest that can achieve the dispersion required to mitigate odour impacts.

### 11.6.2 Construction Stage

As the development does not involve any construction works, apart from the assembly of the odour control system, construction stage prevention and mitigation measures are not required.

### 11.6.3 Operational Stage

The landscape maintenance programme required by the EPA licence will continue and additional mitigation measures are not required.

## 11.7 Monitoring

The landscape maintenance programme required by the EPA licence will continue.

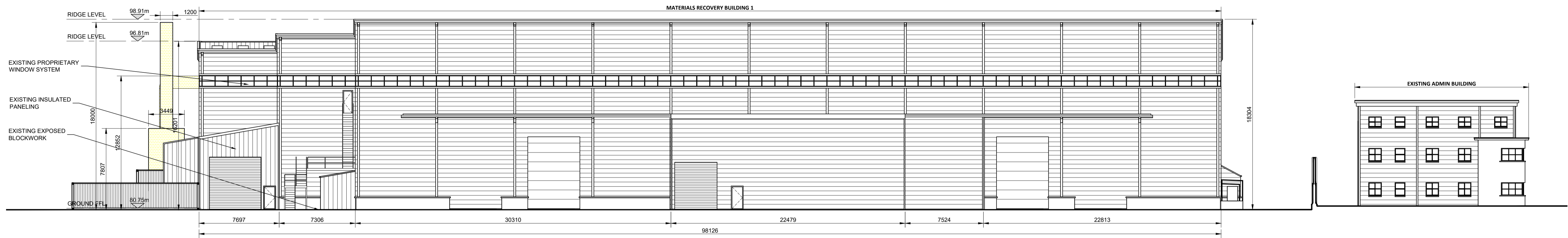
## 11.8 Cumulative Effects

The only change to the external appearance will be the top of the odour control stack. Given the location and the surrounding land use the proposed development will have no significant cumulative impacts on the landscape.

## 11.9 Residual Impacts

While the top of the stack will be visible from public viewing points within the Business Park (Drawing No211\_066-ORS-ZZ-00-DR-AR-217) it will not be obtrusive and will be similar to other external air handling and telecommunication masts across the Business Park. The proposed development will have a neutral, imperceptible, local, likely and long term impact.

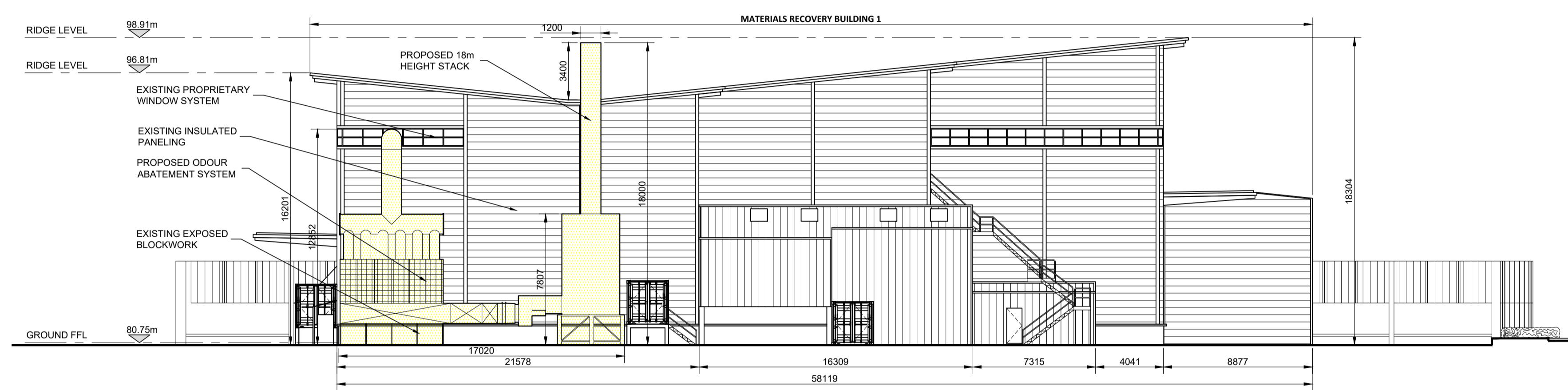




**PROPOSED NORTH ELEVATION MATERIALS RECOVERY BUILDING 1**

SCALE 1:200

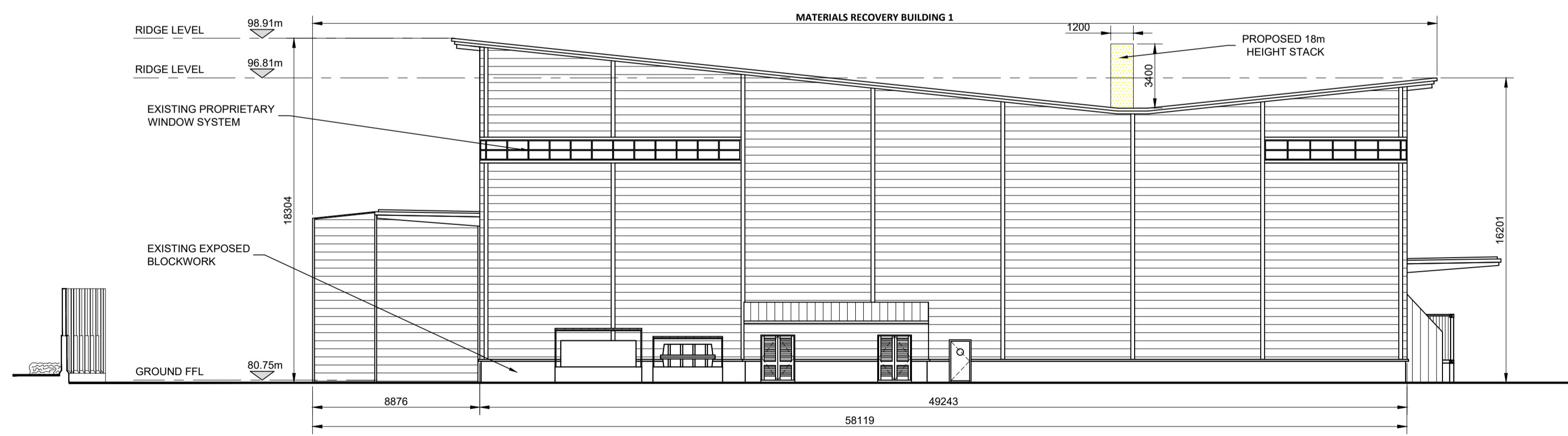
PROPOSED ODOUR ABATEMENT SYSTEM AND ASSOCIATED DUCTWORK



**PROPOSED EAST ELEVATION MATERIALS RECOVERY BUILDING 1**

SCALE 1:200

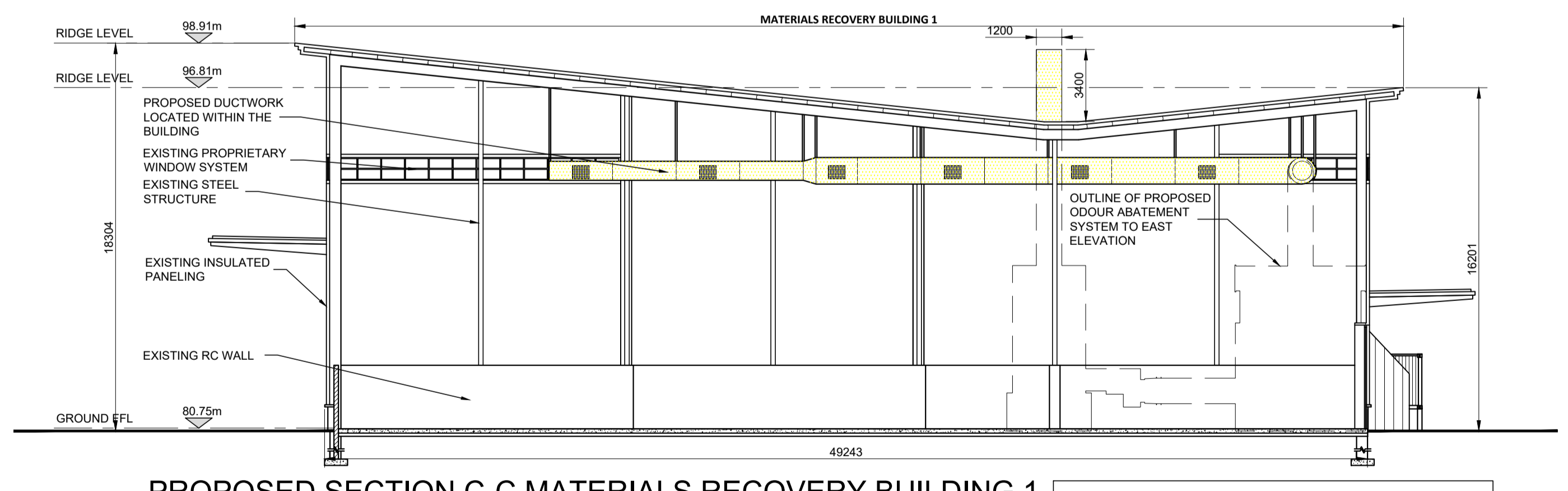
PROPOSED ODOUR ABATEMENT SYSTEM AND ASSOCIATED DUCTWORK



**PROPOSED WEST ELEVATION MATERIALS RECOVERY BUILDING 1**

SCALE 1:200

PROPOSED ODOUR ABATEMENT SYSTEM AND ASSOCIATED DUCTWORK



**PROPOSED SECTION C-C MATERIALS RECOVERY BUILDING 1**

SCALE 1:200

PROPOSED ODOUR ABATEMENT SYSTEM AND ASSOCIATED DUCTWORK

**INFORMATION**

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REV NO.	DATE	REVISION NOTE	DWN BY:	CKD BY:
P01	21/02/2023	ISSUED FOR COMMENT	CB	CB
P02	03/03/2023	ISSUED FOR PLANNING	CB	CB

CLIENT:	STARRUS ECO HOLDINGS LIMITED (SEHL) TRADING AS GREENSTAR		
PROJECT:	ODOUR ABATEMENT SYSTEM MILLENNIUM BUSINESS PK, CAPPAGH ROAD, TOWNLAND OF GRANGE, BALLYCOOLIN, DUBLIN 11		
TITLE:	PROPOSED ELEVATIONS AND SECTION C-C OF MATERIALS RECOVERY BUILDING 1		
DRAWN:	CHECKED:	APPROVED:	JOB NO:
CB	CB	OD	211_066
DATE:	SCALE:	DRAWING NO:	REV:
03/03/2023	1:200	211_066-ORS-Z1-ZZ-DR-AR-217	P02

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## **12. CULTURAL HERITAGE**

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### **12.1 Methodology**

As the proposed development does not involve any ground disturbance the assessment was based on a review of the original Environmental Impact Statement (2003), a desk study of Records of Monuments and Places published by the Department of Arts, Heritage & Gaeltacht, and information contained in the Fingal County Development Plan.

### **12.2 Proposed Development**

The development involves increasing the annual amount of waste accepted and processed. This does not require any land take, ground disturbance or construction works.

### **12.3 Receiving Environment**

The site is almost completely covered by concrete paving and buildings, with hedgerows along the eastern and northern boundary and landscaping (grassed areas and shrubs) around the buildings at the entrance and the staff car park. There is no record of any archaeological or cultural heritage features within the site boundary and it is not in a designated Architectural Conservation Area.

### **12.2 Impacts**

The proposed development will not involve any ground disturbance and therefore there is no risk of impacting on any unidentified archaeological features.

### **12.3 Baseline Scenario**

If the development does not proceed the facility will continue to operate and the potential for impacts on the cultural heritage will remain unchanged.

### **12.4 Prevention & Mitigation Measures**

As the proposed development will not have any impact on any archaeological, architectural and cultural heritage feature, design, construction and operational stage prevention and mitigation measures are not required.

### **12.5 Monitoring**

Monitoring is not required.

### **12.6 Cumulative Effects**

The development will have no cumulative effects on cultural heritage.

### **12.7 Residual Impacts**

The development will have no residual impacts on cultural heritage.

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## **13. MATERIAL ASSETS: BUILT SERVICES**

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### **13.1 Methodology**

The assessment was based on information derived from the current Fingal County Development Plan and the Eastern Midland Region Waste Management Plan, Uisce Eireann databases, services drawings and SEHL's records of natural resource consumption.

### **13.2 Proposed Development**

The development involves increasing the annual amount of waste accepted and processed. This does not require any changes to the drainage layout, will not result in any change to the volume and quality of the sanitary wastewater, vehicle washwater and storm water run-off and will not give rise to any new emissions to surface water and groundwater. An odour control system will be installed in the area where odorous wastes are handled.

### **13.3 Receiving Environment**

The site has connections to the Uisce Eireann mains supply and foul sewer, electricity supply, national gas grid and telecoms systems. Storm water run-off from the site discharges to an attenuation system serving the Business Park. Planning permission has been granted for the installation of a stormwater attenuation system in the north of the site where the recycling building was constructed in 2018.

Efforts to decouple waste generation from economic growth have not yet been successful and the economic recovery that started in 2014, in conjunction with population growth, has resulted in a continuing increase in the quantities of waste arising, both nationally and in the Greater Dublin Area.

### **13.4 Impacts**

There will be an increase in electricity consumption linked to the additional processing. The development will have no impact on the storm water and foul water drainage systems, the mains water supply and the natural gas supply. The development will expand the waste recycling and recovery capacity in the Greater Dublin Area and provide for contingency treatment in the event of a disruption to the existing waste treatment capacity.

### **13.5 Baseline Scenario**

If the proposed development does not proceed, there will be no increase in electricity consumption and no expansion of recycling and recovery capacities and no contribution to contingency waste treatment capacity.

### **13.6 Prevention & Mitigation Measures**

#### **13.6.1 Design Stage**

The design of the odour control system will involve an assessment of the energy efficiency of the extraction fans to minimise electricity usage when operating.

### 13.6.2 Construction Stage

As the development does not involve any construction works, apart from the assembly of the odour control system, construction stage prevention and mitigation measures are not required.

### 13.6.3 Operational Stage

SEHL regularly reviews energy efficiency at the facility and engages with plant and equipment suppliers to ensure that only the most energy efficient are procured. SEHL implements a preventative maintenance programme for all equipment to ensure their energy efficiency is optimised. To minimise demand on the mains water supply rainwater run-off from the building roof is used as 'grey water' in the staff toilets and the water used in dust suppression is obtained from an on-site well. The installation of the roof mounted solar panels will reduce demand on the national grid.

## 13.7 Monitoring

Energy and water usage will continue to be monitored annually and additional monitoring measures are not required.

## 13.8 Cumulative Effects

The development will contribute to the cumulative natural resource consumption in the Greater Dublin Area. The installation of the permitted roof mounted solar panels on the processing buildings will reduce reliance on non-renewable energy sources.

## 13.9 Residual Impacts

The development will have no impact on the water supply and storm water and foul water drainage systems. It will have a negative, slight, likely, national and long term impact on electricity supply as a result of increased usage. It will have a positive, slight, likely, national and long term impact on waste management capacity.

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## **14. TRAFFIC & TRANSPORT**

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### **14.1 Methodology**

The assessment was completed in accordance with Transport Infrastructure Ireland's Traffic and Transport Assessment Guidelines and the Traffic and Transport Assessment completed by ORS Consulting Engineers.

### **14.2 Proposed Development**

The development involves increasing the annual amount of waste accepted and processed from 270,000 tonnes to 450,000 tonnes, which will increase the number of vehicle movements transporting wastes to and from the site. There will be no increase in staff numbers.

### **14.3 Receiving Environment**

The site is located with the Millennium Business Park which is one of a number of industrial estates accessed off Cappagh Road. An assessment of the traffic associated with the current operation was based on a 24 hour manual classified traffic count completed on 20<sup>th</sup> November 2022 at six junctions agreed in advance with Fingal County Council, which are:

Greenstar facility access road junction (1)

Millennium Business Park – Cappagh Road roundabout junction (2)

Huntstown Business Park – Cappagh Road roundabout junction (3)

Panda facility access road junction (4)

Cappagh Road – Mitchelstown Road roundabout junction (5)

Cappagh Road – Ballycoolin Road roundabout junction (6)

The peak morning traffic at the Greenstar facility access road junction is between 9am and 10am. At all other junction the peak occurred between 8am and 9am. The peak evening traffic occurs between 5pm and 6pm at all junctions.

#### **14.3.1 Planned Public Transport**

It is an objective (CM02) of the Draft Fingal Development Plan to transition to more sustainable modes including walking, cycling and public transport during the life time of the Plan.

The Draft Greater Dublin Area Cycle Network Plan (2021) involves the expansion of the urban cycle network to provide new connections including a cycle lane along the Ballycoolin Road, to the south of the development site that will provide a safe and attractive cycling route linking the development site to its surroundings.

BusConnects Dublin is a major investment programme to improve public transport through the overhaul of the current bus system to provide a more efficient network with high-frequency spines, new orbital routes and increased services.

The Greater Dublin Area Transport Strategy 2022-2024 includes two major rail transport developments –the MetroLink and the DART+West. The MetroLink will connect Swords to the city centre in 25 minutes and will have the capacity to move 20,000 passengers per hour. The DART +West will significantly increase the rail capacity on the Maynooth and M3 Parkway city centre rail corridors, with an increase in hourly passenger movements from 5,000 to 13,200.

#### **14.4 Impacts**

The proposed development will result in an increase in the number of trucks accessing the facility. The majority of the access roads are and will continue to operate below capacity should the development proceed. The roundabout between the Cappagh Road and Mitchelstown Road to the north of the Panda facility is already under pressure from existing traffic flows, and will be above capacity in future regardless of the development.

#### **14.5 Baseline Scenario**

If the development does not go ahead, the junctions will continue to operate as currently and the roundabout at the Cappagh Road-Mitchelstown Road will remain under pressure and reach capacity in the near future.

#### **14.6 Prevention & Mitigation Measures**

##### **14.6.1 Design Stage**

As the proposed development will have no significant adverse impacts on the local road network, design prevention and mitigation measures are not required.

##### **14.6.2 Construction Stage**

As the development does not involve any construction works, apart from the assembly of the odour control system, construction stage prevention and mitigation measures are not required.

##### **14.6.3 Operational Stage**

The planned future public transport initiatives (Section 14.5.4), in addition to the increasing move towards flexible and remote working hours, will reduce private vehicle movements in the vicinity of the site in the peak periods in future years

#### **14.7 Monitoring**

The EPA licence requires that all transport vehicles delivery and removing waste from the facility be recorded on the on-site weighbridge and records maintained. No additional monitoring is required

#### **14.8 Cumulative Impacts**

The assessment took into consideration the proposed expansion of the annual waste acceptance rate at the nearby SEHL waste management facility at Cappagh Road.

All six junctions were modelled. At the Panda facility access road the maximum capacity occurs at the midday peak in 2035. Junctions 1, 2, 3 and 6 will operate well below capacity for design years tested. Junction 5 is already under significant pressure and the proposed development will exceed its capacity; however even if the development does not proceed the junction will approach the recommended capacity by 2025 and reach full capacity by 2035.

#### **14.9 Residual Impacts**

The proposed development have a negative, slight, likely, local and long term impact on the local road network.

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## **15. INTERACTION OF THE FOREGOING**

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### 15.1 Population & Health/Air/ Material Assets -Traffic

The proposed development has the potential to impact on human beings by effects on air quality and traffic movements. The local road network has the capacity to accommodate the additional traffic without causing significant congestion and the air quality assessment has established that the development will not result in any breaches of ambient air quality limits.

### 15.2 Traffic/Climate/Materials Assets

The development will impact on Climate as a result of increased direct and indirect greenhouse gas emissions from the additional traffic and the increase in electric and diesel consumption during waste processing.